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# Inflation Report


December 2008

Volume 10 – Number 4

BANCO CENTRAL DO BRASIL

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# Inflation Report

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**Statistical Conventions:**

**...** data not available.
**-** nil or non-existence of the event considered.
**0** ou **0.0** less than half the final digit shown on the right.
***** preliminary data.

Hiphen between years indicates the years covered, including the first and the last year.
A bar (/) between years (1970/1975) indicates the average of the years covered, including the first and the last year or even crop or agreement year, when mentioned in the text.

Occasional discrepancies between constituent figures and totals as well as percentage changes are due to rounding.

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# Contents

# Foreword

*Inflation Report* is a quarterly publication of the Banco Central do Brasil with the objective of evaluating the performance of the inflation targeting system and providing a prospective scenario for inflation. The national and international economic conditions underlying decisions taken by the Monetary Policy Committee (Copom) concerning the monetary policy management are presented.

The *Report* is divided into six chapters: Activity level; Prices; Credit, monetary and fiscal policies; International economy; Foreign sector and Prospects for inflation. With regard to the activity level, growth in retail sales, inventories, output, labor market and investments are investigated. In the following chapter, price analysis focuses on the results obtained in the quarter as a consequence of monetary policy decisions and the real conditions of the economy outside the realm of government action. The chapter referring to the credit, monetary and fiscal policies, the analysis is centered on the behavior of credit, financial and budget operations. In the chapter dealing with the international economy, the *Report* presents an analysis of the world's major economies and seeks to identify those conditions capable of impacting the Brazilian balance of payments. Insofar as the foreign sector chapter is concerned, analysis is targeted at economic-financial relations with the international community, with emphasis on trade results and foreign financing conditions. Finally, prospects on inflation growth are analyzed.

# Executive summary

International financial markets have been experiencing strong pressure since September, as evidenced by the serious and widespread appreciation of the U.S. dollar against the currencies of major mature economies – except Japan – and emerging markets. In this respect, no less significant were the losses recorded in the indices of major stock exchanges and the sharp rise in risk aversion, that reflected in the historically high levels of bank credit spreads.

At September's quarter end, the pace of economic activity was strong, driven mainly by dynamism of the domestic demand. However, within this current environment characterized by the prospect of substantially reducing the growth of the global economy, the maintenance of sound macro-economic fundamentals in the Brazilian economy are not sufficient conditions to prevent the unfolding international crisis from spreading internally, for example, with repercussions on balance of payments and activity. Surely, the impact on the Brazilian economy will be smaller than what had been observed in other large economies, yet the prospects for the level of activity in the final quarters of 2008 and 2009 have been less favorable. This assessment is supported, for example, by reduced levels of confidence for consumers and businesses, and initial results from the fourth quarter, which show a cooling in industrial production and investment.

The sharp contraction of liquidity on a global scale has resulted in restricted access to external credit lines for banks and domestic companies, which in turn has led to a tightening of liquidity in the foreign currency market. This fact, boosted by growing risk aversion, contributed to a subsequent reduction of operations in the domestic inter-bank market. In this environment, the Central Bank has adopted several measures aiming to provide foreign currency liquidity at the time it promoted changes in the rules on reserve requirements and provided incentives to the trading of assets between financial institutions, aiming at a normalization of the domestic money market.

In this context, the strong credit expansion seen in recent quarters tends to an accommodation. This process must be led by a slowdown, already begun, in operations with individual borrowers, especially those related to payroll loans and car sales, that have been recording the most significant expansion in recent years. The cooling of these operations reflects a greater selectivity in concessions in the supply side and high interest rates and shorter terms in the demand side, along with a reduction in consumer optimism. Credit operations in the corporate segment, in turn, showed an increase in demand for funds from the banking system and have maintained robust growth, partly reflecting the scarcity of external funding and the loss of potency in the domestic capital market.

Tax revenues of federal and regional governments developed in line with the performance of the activity, and provided primary surpluses accumulated for the year and twelve-month period compatible with the target set for this year. By the other side, the prospect of slower growth next year and its impact on government revenues cannot be neglected, as much as the possible increase of expenditure on items such as unemployment insurance. The re-estimation of revenue and expenditure for next year, aimed at preserving the primary surplus, indicates the issue of coping, while maintaining fiscal responsibility and the goals of reducing the ratio of Net Public Sector Debt (DLSP) and Gross Domestic Product (GDP). Furthermore, it is plain that the composition of net public sector debt is comfortable compared to those reported in previous situations of stress in the international market, partly due to the significant volume of credits tied to the net exchange.

The performance of external accounts in the first ten months of the year suggests no difficulties in financing the balance of payments in 2008. In fact, net flows of Foreign Direct Investment (FDI) should exceed those recorded in 2007 and the rollover of private debt should remain above 100%. For 2009, restrictions on foreign credit and the reduced pace of international economic activity may determine the result of a worsening balance of payments. It should prevail, however, suitable conditions for their financing, which will still be favored by the level of international reserves and an anticipation of contracting made by the National Treasury. It is evident, however, that the private sector will face the most adverse conditions for the renewal of loans compared to those experienced in the last five years, with negative impacts on the time and cost of contracting.

The result of the current account in 2009 will be influenced, under the trade balance, by a possible reduction in exports – the extension will be linked to the behavior of prices of commodities and the magnitude and duration of the downturn in economic activity in the main markets for Brazilian products – as well as in imports, which should respond to the increase in prices resulting from currency depreciation and a slowdown in domestic economic activity. In relation to the services account, the deficit in transportation is likely to fall in line with the reduction of external trade, and the negative balance in international travel is expecting an expressive decline, mainly reflecting the depreciation of the exchange rate. Net income expenses will certainly be affected by the declining profitability of companies, the effects of a more depreciated exchange rate and a loss of foreign investors in equities, which will result in a reduction of inventory investments.

Inflation measured by the variation of the National Broad Consumer Price Index (IPCA) reached 5.61% for the year up to November, compared to 3.69% for the same period of 2007. Also, since January the cumulative rate has been positioned above the target center. In fact, twelve- month inflation through November stood at 6.39% versus 4.19% in November 2007. Moreover, also in the twelve-month period, both the prices of tradable goods as well as non-tradable items accelerated. This dynamic was largely due to the mismatch between the pace of domestic supply and demand. It is plausible that this imbalance is smoothed in this and the coming quarters, largely because of the unfolding international financial crisis and the lagged effects of monetary policy actions implemented in 2008. Still, it hasn't consolidated the process of reversing the trend away from inflation towards the target path, which had been observed since the end of 2007.

The central forecast linked to the benchmark scenario indicates inflation of 6.2% in 2008, a level 0.1 percentage points higher than projected in the *Report* in September, and markedly higher than the 4.5% target center set by the National Monetary Council (CMN). For 2009, the projection for the twelve-month inflation starts at 6.3% in the first quarter and reaches 4.7% in the last. For the fourth quarter of 2010, the projection is 4.2%. It should be noted that the decline in inflation forecast throughout 2009 and 2010 in the benchmark scenario, reflects mainly the effects of the increase in the Selic rate determined in 2008 and the fact that inflation expectations for 2009 and 2010 are expected to be at lower levels than expectations for 2008.

In the market scenario, the forecast of 6.2% for inflation in 2008 exceeds by 0.2 percentage points the one in the last *Report* and coincides with that associated with the benchmark scenario. The twelve-month inflation forecast falls to 6.1% in the first quarter of 2009, and continuing that trend, closes the year at 4.5%, matching the central value for the target set by the CMN. This trend partly reflects the expectations of appreciation of the exchange rate over 2009. Also, according to the market scenario, the projection for twelve-month inflation reaches 4.3% in the last quarter of 2010.

According to the benchmark scenario, GDP growth in 2008 rose to 5.6%, 0.6 p.p. higher than projected in September's *Inflation Report* and the forecast for 2009 is 3.2%.

# 1 Economic activity

The analysis of the real sector of the Brazilian economy, as presented in the last Inflation Report, indicates that the robust performance, of both the industrial activity and the retail trade sales and of GDP, did not suggest, even in an environment of greater rigidity in the monetary policy management, the occurrence, in the following months, of a sharp downturn in the pace of growth of the activity level.

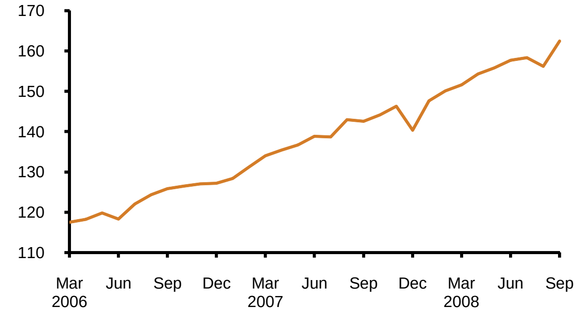
The worsening, since mid-September, of the international financial crisis initiated in the American subprime market, in 2007, incorporated a significant rate of uncertainty concerning the outlook for world's economy growth, expressed in evident signs of recession in mature economies and of downturn in the emerging economies' expansion rate. In this environment, in which the maintenance of the macroeconomic solid foundations observed in the Brazilian economy does not provide a strong basis to prevent the global crisis effects from expanding, even if such a process lessened the prospects related to the evolution of the activity level in the final quarter of 2008 and, in 2009, appear less favorable, enabling, in line with the already observed reductions in optimism levels both of consumers and entrepreneurs, a relative slackening in the pace of industrial growth, retail sales and employment indicators.

One should underscore that, taking into account the period analyzed in this report, the growth of some variables should mirror the new economic environment, only partially, and do not incorporate any possible reversal in its trajectory.

## 1.1 Retail trade

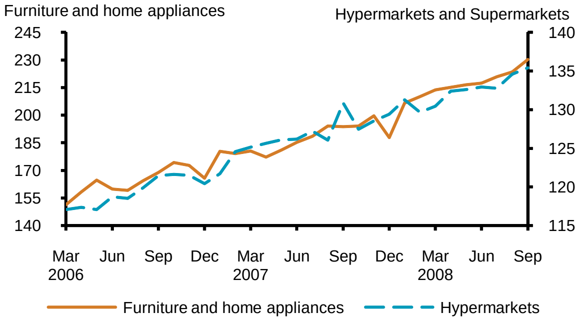
Sales on the retail trade remained, up to the end of the third quarter, in an expansionist trajectory registered in the first quarter of the year, an evolution consistent both with favorable conditions of the credit and labor market, and with the high level of the consumer confidence indices. The first results available for the fourth quarter suggest,

**Figure 1.1 – Extended retail sales**
Seasonally adjusted data
2003 = 100



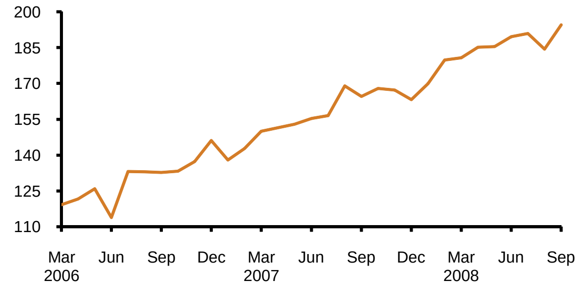

Source: IBGE

**Figure 1.2 – Retail sales**
Seasonally adjusted data
2003 = 100



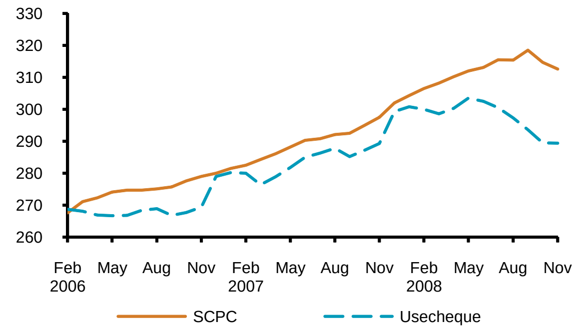

Source: IBGE

**Figure 1.3 – Retail sales (automobiles, motorcycles, parts and spares)**
Seasonally adjusted data
2003 = 100




Source: IBGE

**Figure 1.4 – Retail sales indicators**
Seasonally adjusted data – Quarterly moving average
1992 = 100




Source: ACSP

however, that retail indicators have settled. In this sense, the automotive sector's sales registered strong cutback in October and December, a tendency associated to the credit restriction due to the worsening of the international financial crisis, while consumer expectation indicators, though still on an comfortable level, started to mirror the new phase experienced by the world economy.

According to the Monthly Retail Trade Survey (PMC), released by the Brazilian Institute of Geography and Statistics (IBGE), the volume of sales on the expanded retail trade grew by 2% in the quarter ended in September, in relation to the one ended in June, considering seasonally adjusted data. That result s corresponds to the sixteenth positive result in a row, using this basis of comparison. One should highlight, in the period, increases in the sales of all retail segments, except for the cutback of 0.9% in fabrics, apparel and footwear, with emphasis on the upturn in the equipment and office material sectors, 11.6%; other articles of personal and domestic use, 5.1%; pharmaceutical, medical, and orthopedic items and perfumes, 4.2%; furniture and home appliances, 3.9%; and construction materials, 2.6%. Sales related to hypermarkets, supermarkets, foodstuffs, beverage and tobacco, weighting about 30% of the survey, grew 1.2% in the period, a performance partly explained by the increase in food prices.

The expanded retail trade sales increased 13.8% in the first nine months of the year, as compared to the corresponding period of 2007. This performance mirrored the occurrence of expansion in all the country's regions, with emphasis on the increases registered in the Center West region, 15.7%; Southwest, 14.8%; and South, 14.4%. The retail sales considered by the Federation's units, equally registered an overall expansion in the period, with emphasis to the results observed in São Paulo, 13.9%; Rio Grande do Norte, 13.2%; Paraíba, 12.9%; Rondônia, 12.9%; and Mato Grosso, 12.3%.

The expanded retail trade's nominal revenue, accumulated in the first nine months of 2008, grew by 19% as compared to the same period of the previous year, in view of increases of 13.8% in the sales volume and 4.6% on prices. One should highlight that all the ten surveyed segments showed growth rates of the normal revenue higher than the growth of 4.4% registered by the Extendend National Consumer Price Index (IPCA) in the same period. One should underscore the expansion in the normal revenues related to articles of personal and domestic use, 25.9%; vehicles, motorcycles, parts and spares, 23.8%; construction materials, 20.5%, and hypermarket and supermarkets, foodstuffs, beverage

**Table 1.1 – Retail sales**

| | 2008 | | | |
|---|---|---|---|---|
| % change | Jun | Jul | Aug | Sep |
| In the month[1/] | | | | |
| Retail sector | 1.1 | 0.1 | 1.1 | 1.2 |
| Fuel and lubricants | 1.8 | 0.3 | 0.2 | 0.1 |
| Supermarkets | 0.3 | -0.1 | 1.4 | 0.6 |
| Fabrics, apparel and footwear | 1.6 | -3.0 | 0.8 | 2.8 |
| Furniture and home appliances | 0.4 | 1.5 | 1.2 | 3.1 |
| Pharmac., medical, orthop. and perfumery articles | 1.1 | 1.4 | 1.1 | 2.9 |
| Books, newspaper, magazines, | 1.6 | -0.5 | -0.6 | 2.2 |
| Office, comp./comunic. equip. | 2.0 | 3.1 | 3.9 | 6.9 |
| Other art. of personal use | -0.7 | 4.0 | -1.0 | 1.9 |
| Broad retail sector | 1.2 | 0.4 | -1.3 | 4.0 |
| Building materials | 1.5 | 1.3 | -0.8 | 1.0 |
| Automobiles, motorcycles, parts and spares | 2.2 | 0.8 | -3.4 | 5.5 |
| 3-Month Period/Previous 3-Month Period[1/] | | | | |
| Retail sector | 2.3 | 2.7 | 2.5 | 2.4 |
| Fuel and lubricants | 4.4 | 4.0 | 3.5 | 2.3 |
| Supermarkets | 1.7 | 1.5 | 1.2 | 1.2 |
| Fabrics, apparel and footwear | 3.0 | 1.5 | -0.6 | -0.9 |
| Furniture and home appliances | 3.0 | 2.5 | 2.5 | 3.9 |
| Pharmac., medical, orthop. and perfumery articles | 3.8 | 4.7 | 3.9 | 4.2 |
| Books, newspaper, magazines, | 3.0 | 2.3 | 1.9 | 1.1 |
| Office, comp./comunic. equip. | 9.2 | 8.7 | 10.6 | 11.6 |
| Other art. of personal use | 1.0 | 4.6 | 4.5 | 5.1 |
| Broad retail sector | 4.1 | 3.5 | 2.3 | 2.0 |
| Building materials | 4.6 | 3.8 | 3.4 | 2.6 |
| Automobiles, motorcycles, parts and spares | 5.6 | 3.7 | 2.5 | 1.7 |
| In the year | | | | |
| Retail sector | 10.6 | 10.7 | 10.6 | 10.4 |
| Fuel and lubricants | 8.2 | 9.2 | 9.6 | 10.0 |
| Supermarkets | 5.9 | 5.8 | 6.1 | 5.5 |
| Fabrics, apparel and footwear | 11.6 | 11.1 | 10.2 | 10.1 |
| Furniture and home appliances | 18.5 | 18.6 | 17.9 | 18.3 |
| Pharmac., medical, orthop. and perfumery articles | 12.7 | 13.1 | 12.5 | 12.9 |
| Books, newspaper, magazines, | 11.5 | 11.3 | 10.6 | 10.8 |
| Office, comp./comunic. equip. | 30.9 | 30.9 | 31.3 | 33.7 |
| Other art. of personal use | 21.5 | 21.6 | 20.7 | 20.3 |
| Broad retail sector | 14.3 | 14.6 | 13.5 | 13.8 |
| Building materials | 11.2 | 12.5 | 11.2 | 11.5 |
| Automobiles, motorcycles, parts and spares | 22.3 | 22.7 | 19.7 | 20.7 |

Source: IBGE

1/ Seasonally adjusted data.

and tobacco, 17.4%; noting that the expansion in this last segment mirrored, especially, the growth of 11.3% observed in prices, the greatest among the ten segments.

The automobile trade sales showed, at the beginning of the fourth quarter, a change in the growth tendency in 2008. In this sense, statistics of the National Federation of Automotive Vehicle Distribution (Fenabrave) revealed that the automobile and vans and had a cutback of 26.3% in November, as compared to the corresponding period of 2007, while, according to the National Association of Automotive Vehicle Manufacturers (Anfavea), the sales of national automotive vehicles in the domestic market decreased by 28%, on the same basis of comparison. Despite greater caution by consumers regarding the worsening current scenario of the international financial crisis, the recent decrease in interest rates carried out by the automakers in consumer loans should favor the segment sales' reaction at the end of 2008 and beginning of 2009.

The São Paulo trade indicators also showed the sales downturn in activity at the end of the third quarter and beginning of the fourth quarter. According to the São Paulo Trade Association (ACSP), the number of consultations to the Credit Protection Service Center (SCPC), an indicator related to the sales of durable goods, fell by 0.9% in the quarter ended in November, as compared to the one ended in August, after showing respective variations of -0.3% and 1.7% in the quarters ended in October and September. The consultations to the Usecheque, an indicator of cash purchases and related more directly to nondurable goods, fell by 2.6% in the period, showing the fifth negative result on this basis of comparison.

Default indicators, repeating the performance outlined in previous reports, remained at a level compatible with the level of retail sales and showed stability in relation to the same period of 2007. The ratio between the number of returned cheques due to the lack of funds and the overall total of cheques cleared reached 6%, on average, in the ten months of the year, against 6.3% in the corresponding period of 2007. The highest rates continue occurring in the North, 9.2%, and Northeast, 9.1%; followed by those related to the Central West, 6.8%; South, 5.7%; and Southeast, 5.5%.

The ACSP statistics, referring to São Paulo, indicate that the default in the state reached, about 6.8%, in the early eleven months of the year, against 6.1% in the corresponding period of 2007.

**Table 1.2 – Retail sales**
2008, September

| | % accumulated growth in 2008 | | |
|---|---|---|---|
| | Nominal revenue | Volume | Price |
| Retail sector | 16.3 | 10.4 | 5.3 |
| Fuel and lubricants | 9.8 | 10.0 | -0.2 |
| Supermarkets | 17.4 | 5.5 | 11.3 |
| Fabrics, apparel and footwear | 15.6 | 10.1 | 5.0 |
| Furniture and home appliances | 13.7 | 18.3 | -3.9 |
| Pharmac., medical, orthop. and perfumery articles | 15.4 | 12.9 | 2.2 |
| Office, comp./comunic. equip. | 12.7 | 10.8 | 1.7 |
| Books, newspaper, magazines | 15.8 | 33.7 | -13.4 |
| Other art. of personal use | 25.9 | 20.3 | 4.7 |
| Broad retail sector | 19.0 | 13.8 | 4.6 |
| Automobiles, motorcycles, parts and spares | 23.8 | 20.7 | 2.6 |
| Building materials | 20.5 | 11.5 | 8.1 |

Source: IBGE

**Table 1.3 – Default rates**

%

| Itemization | 2008 | | | | | | |
|---|---|---|---|---|---|---|---|
| | Jun | Jul | Aug | Sep | Oct | Nov | Year[1/] |
| Returned checks[2/] | | | | | | | |
| Brasil | 5.6 | 5.8 | 5.6 | 5.6 | 6.5 | ... | 6.0 |
| Northern region | 8.4 | 8.7 | 8.4 | 9.1 | 10.4 | ... | 9.2 |
| Northeast region | 8.5 | 8.9 | 8.5 | 8.4 | 10.4 | ... | 9.1 |
| Southeast region | 5.1 | 5.4 | 5.1 | 5.0 | 5.7 | ... | 5.5 |
| Center-western region | 6.1 | 6.4 | 6.4 | 6.5 | 7.7 | ... | 6.8 |
| Southern region | 5.2 | 5.4 | 5.4 | 5.4 | 6.3 | ... | 5.7 |
| SCPC (SP)[3/] | 5.7 | 6.3 | 6.7 | 5.9 | 6.4 | 6.4 | 6.8 |

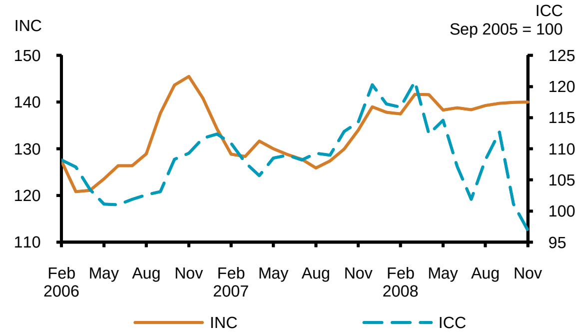
Source: Banco Central do Brasil and ACSP

1/ Annual average.

2/ Returned checks/cleared checks.

3/ [New registrations (-) registrations cancelled]/[consultations (t-3)].

**Figure 1.5 – National Consumer Confidence (ACSP) and Consumer Confidence Index (FGV)**




Source: ACSP and FGV

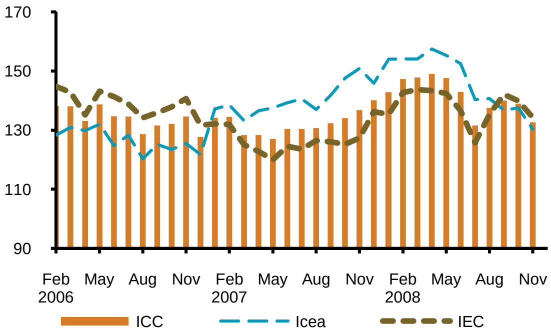
In November, the Consumer Confidence Index (ICC), of the Getulio Vargas Foundation (FGV), reached the lowest level in the historic series, initiated in September 2005, registering falls of 4.2% in relation to the previous month and of 15.2% in November 2007. The monthly result was due to cutbacks of 3.3% in the Expectations Index (EI) and 5.7% in the Current Situation Index (CSI), with emphasis on the deterioration of the local economy situation's component.

The National Confidence Index (INC), measured by the Ipsos Public Affairs (Ipsos), for the ACSP, with interviews carried out between November 20 and 30, reached 139.8 points in November, as compared to 139.9 points in October and 134 points in the corresponding month in 2007. The analysis of the indicator's components shows a downturn in short-term indicators, both in the economic situation at the consumer's household level and in relation to the personal financial situation. By region, the annual result showed the greater optimism by consumers from the South – record high of 18.3% – and a 5.4% decrease in the indicator related to the Southeast.

The National Consumer Expectations Index (Inec), issued on a quarterly basis, released by the National Confederation of Industry (CNI), based on survey carried out between September 19 and 22, increased 5.3% in the quarter ended in September, as compared to the one ended in July, and 4.1% as compared to the same period of 2007. Taking this result into account, the Inec reached the second biggest value of the historical series, initiated in 2001, remaining close to the record observed in September 2006. The quarterly result mirrored growths in all the index's components, with emphasis on the improved expectations concerning inflation and unemployment. One should mention that in this indicator, taking into account the period in which the survey was carried out, did not mirror, however, the effects of the crisis' aggravation on the international financial markets.

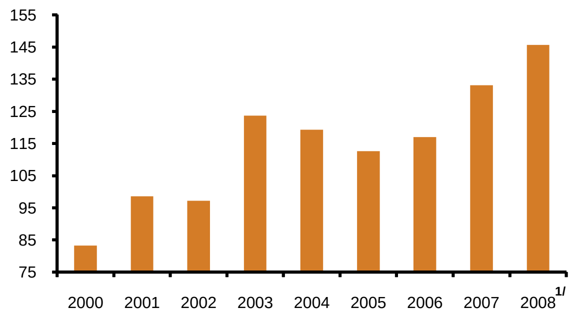
The ICC, released by the Trade Federation of the State of São Paulo (Fecomercio) and the register to the metropolitan region of São Paulo, showed, in November, decreases of 4.5% in to October and of 3% against the same month of the previous year, still remaining at an optimistic level. The monthly result showed the cutbacks registered in the Consumer Expectation Index (IEC), 4%, a component which represented 60% of the general index, and in the Current Economic Conditions Index (Icea), 5.3%. Even though it had showed retraction in relation to October, the ICC still stands at an optimistic level.

**Figure 1.6 – Consumer Confidence Index**




Source: Fecomercio SP

**Figure 1.7 – Grain production**
In million tons




Source: IBGE
1/ Estimate.

**Table 1.4 – Farm production**

In 1,000 tons

| | Production | | % change |
|---|---|---|---|
| | 2007 | 2008 1/ | 2008/2007 |
| Grain production | 133 101 | 145 656 | 9.4 |
| Cotton (seed) | 2 498 | 2 437 | -2.4 |
| Rice | 11 048 | 12 122 | 9.7 |
| Beans | 3 245 | 3 455 | 6.5 |
| Corn | 51 831 | 58 698 | 13.3 |
| Soybean | 57 952 | 59 920 | 3.4 |
| Wheat | 4 089 | 5 865 | 43.4 |
| Others | 2 438 | 3 159 | 29.6 |

Source: IBGE
1/ Estimate.

## 1.2 Production

### Crop and livestock

According to the Quarterly National Accounts released by the IBGE, the farming sector's production grew by 6.7% in the first nine months of the year, in relation to the same period of 2007, favored by the robust performance of the crops of rice, corn, beans, soybean, wheat, coffee beans and sugar cane. The livestock, mirroring the lowest exports' dynamics, did not repeat the results registered in 2007.

### Crop

According to the Systematic Farm Production Survey (LSPA) carried out by the IBGE, in collaboration with the National Supply Company (Conab), the grain harvest should reach the record of 145.7 million tons in 2008, increasing 9.4% in relation to the previous year, resulting in expansion of 5.1% in the average productivity and 4.1% in the planted area.

The soybean production estimated at 59.9 million tons, 3.4% higher than the one observed in the previous year, when it had grown 10.7%, an expansion linked, exclusively, to the expansion of the planted area.

Corn crop totaled 58.7 million tons. The annual growth of 13.3% translated increases of 8.7% in the average income, in line with the weather conditions favorable to the planting period, and of 4.1% in the cultivated area.

Rice crop should sum 12.1 million tons, registering growth of 9.7% in relation to the previous year. This result, in a reduction scenario of 1.1% on the harvest, evinced the growth if 11% observed in the average crop yield.

Beans harvest increased 6.5% in the year, totaling 3.5 million tons, a result of 7.8% growth in the average yield and a cutback of 1.3% in the area harvested.

The herbaceous cottonseed crop topped 2.4 million tons, decreasing 2.4% in relation to 2007. The planted area fell 5.2% and the average yield grew by 3% in the period.

The wheat harvest is estimated at 5.9 million tons. The annual growth of 43.4% was linked to the expansions in the planted area, 29.6%, and in the average yield, 10.7%. The investments carried out and the greater occupation of arable areas by the plantation translated both the high demand for grain, especially, in the domestic market, and in the high level of the international prices observed during the cultivation period.

Coffee beans production, evincing a growth of 26.6%, in the average yield, linked to a positive biannual cycle of the crop plantation, showed growth of 24.3% against 2007, totaling 2.8 million tons.

The sugar cane harvest reached 651.5 million tons. The annual expansion of 18.9% mirrored increases of 16.2% in the harvested area and 2.3% in the average yield.

According to the second prognosis, carried out by the IBGE in November, the grain crop should total 140.2 million tons in 2009. The annual reduction, forecasted at 3.8% will be conditioned, especially, by the expected contraction of 4.6% in the average yield, counterbalanced, somewhat, by the growth of 0.9% in the planted area. One should highlight that it is forecasted favorable results for crops more intensely directed to the domestic market, contrasting with the less favorable prospects with regard to those directed, especially, to the external market.

**Table 1.5 – Livestock production**
Total slaughters

% accumulated growth in the year

| Itemization | 2007 | 2008 | | | | | |
|---|---|---|---|---|---|---|---|
| | | Jan | Feb | Mar | Apr | May | Jun |
| Cattle | 2.4 | -6.6 | -6.2 | -10.3 | -7.0 | -7.2 | -6.2 |
| Swine | 7.9 | 1.6 | 3.9 | 1.5 | 4.6 | 3.6 | 4.3 |
| Poultry | 10.1 | 19.0 | 21.7 | 17.5 | 19.5 | 16.9 | 16.4 |

Source: IBGE

## Livestock

According to the Quarterly Survey on Animal Slaughter, released by the IBGE, bovine production reached 1.7 million tons in the second quarter of the year, decreasing 2% in relation to the same period of the previous year. On the same base of comparison, poultry and swine production reached 2.6 million and 0.7 million tons, showing respective increases of 15.4% and 7%.

The exports of bovine and swine meat summed up, in the order, 904.6 thousand and 419.3 thousand tons in the first ten months of 2008, decreasing 18.6% and 5.9%, respectively, in relation to the same period of 2007, while those related to poultry meat grew by 13.9% in the period, standing at 2.8 million tons.

**Table 1.6 – Industrial production**

% change

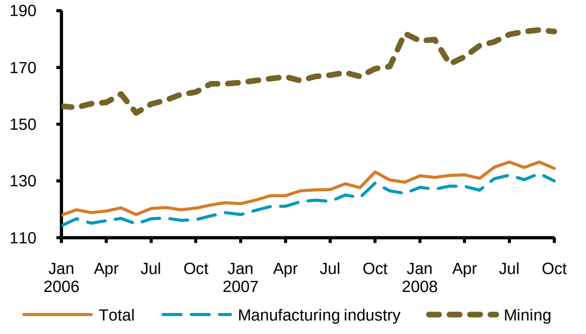
| | 2008 | | | |
|---|---|---|---|---|
| | Jul | Ago | Set | Out |
| Industry (total) | | | | |
| In the month[1/] | 1.4 | -1.5 | 1.5 | -1.7 |
| 3-Month Period/Previous 3-Month Period[1/] | 1.8 | 2.8 | 2.6 | 0.8 |
| Same month of the previous year | 8.8 | 1.9 | 9.6 | 0.8 |
| Accumulated in the year | 6.7 | 6.0 | 6.4 | 5.8 |
| Accumulated in 12 months | 6.9 | 6.4 | 6.8 | 5.9 |
| Manufacturing industry | | | | |
| In the month[1/] | 1.0 | -1.3 | 1.7 | -2.0 |
| 3-Month Period/Previous 3-Month Period[1/] | 1.6 | 2.7 | 2.5 | 0.9 |
| Same month of the previous year | 8.8 | 1.6 | 9.6 | 0.4 |
| Accumulated in the year | 6.7 | 6.0 | 6.4 | 5.7 |
| Accumulated in 12 months | 6.9 | 6.4 | 6.8 | 5.8 |
| Mining | | | | |
| In the month[1/] | 1.4 | 0.6 | 0.3 | -0.3 |
| 3-Month Period/Previous 3-Month Period[1/] | 2.6 | 4.0 | 3.2 | 1.9 |
| Same month of the previous year | 8.5 | 8.5 | 9.7 | 7.2 |
| Accumulated in the year | 6.9 | 7.1 | 7.4 | 7.4 |
| Accumulated in 12 months | 6.4 | 6.6 | 7.0 | 7.3 |

Source: IBGE
1/ Seasonally adjusted data.

## Industrial production

The industrial activity, though showing relative downturn, continued to grow in the quarter ended in October. The expectations index, however, signaled that the deceleration of industrial activity growth should continue in the following months. Contrasting with this environment, the production of

**Figure 1.8 – Industrial production**
Seasonally adjusted data
2000 = 100




Source: IBGE

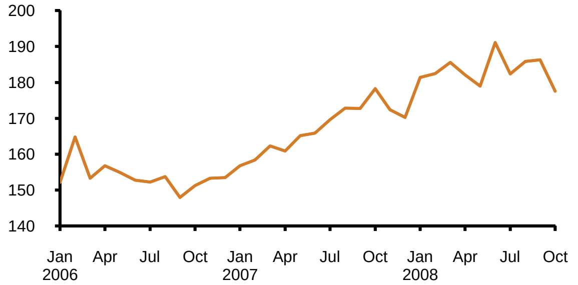
**Table 1.7 – Industrial production by category of use**

% change

| | 2008 | | | |
|---|---|---|---|---|
| | Jul | Ago | Set | Out |
| In the month[1/] | | | | |
| Industrial production | 1.4 | -1.5 | 1.5 | -1.7 |
| Capital goods | 1.5 | -0.5 | 3.3 | -0.5 |
| Intermediate goods | 1.5 | -2.6 | -0.5 | -3.0 |
| Consumer goods | -0.2 | 0.0 | 2.2 | -2.8 |
| Durables | -4.6 | 1.9 | 0.3 | -4.7 |
| Semi and nondurables | 0.1 | -0.4 | 1.7 | -2.2 |
| Quarter/previous quarter[1/] | | | | |
| Industrial production | 1.8 | 2.8 | 2.6 | 0.8 |
| Capital goods | 1.8 | 6.0 | 6.0 | 5.4 |
| Intermediate goods | 2.2 | 2.9 | 1.4 | -2.1 |
| Consumer goods | 1.9 | 1.8 | 1.9 | 1.1 |
| Durables | 0.4 | 2.3 | 0.4 | -0.5 |
| Semi and nondurables | 2.5 | 1.8 | 1.7 | 0.5 |
| In the year | | | | |
| Industrial production | 6.7 | 6.0 | 6.4 | 5.8 |
| Capital goods | 19.1 | 17.9 | 18.8 | 18.4 |
| Intermediate goods | 5.6 | 5.0 | 5.2 | 4.4 |
| Consumer goods | 4.8 | 4.1 | 4.6 | 4.1 |
| Durables | 13.3 | 11.8 | 12.1 | 10.5 |
| Semi and nondurables | 2.2 | 1.7 | 2.3 | 2.1 |

Source: IBGE
1/ Seasonally adjusted data.

**Figure 1.9 – Industrial production**
Consumer goods
Seasonally adjusted data
2000 = 100




Source: IBGE

capital goods, especially those directed to farming, continued showing a strong upturn in activity.

According to seasonally adjusted data of the Monthly Industrial Survey – Physical Production (PIM-PF), released by the IBGE, the industrial production grew 0.8% in the quarter ended in October, in relation to the one ended in July, when it grew 1.8% on the same basis of comparison, registering expansion of 1.9% in the extractive industry and 0.9% in the manufacturing one. Considering data observed, industrial production grew 5.8% in the first ten months of the year, in relation to the corresponding period of 2007.

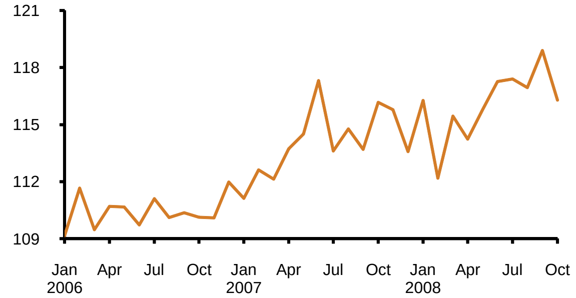
The quarterly result mirrored increases in the production of fourteen out of the twenty-seven activities included in the IBGE's survey, with emphasis on the upturn in activity of the sectors of optical hospital-medical instrumentation equipment and others, 12.3%; pharmaceutical, 8.9%; and machinery and equipment, 6.9%, contrasted with cutbacks observed in the segments of other chemical products, 9%; office and informatics equipment, 4.9%; wood, 4.7%; and petroleum and alcohol refining, 4.3%.

An industrial production breakdown by use categories indicates that the expansion registered in the quarter ended in October, in relation to the one ended in July, mirrored, especially, the increase of 5.4% observed in the category of capital goods. The production of durable consumer durables and semi and nondurable consumer goods registered respective increases of -0.5% and 0.5%, while the one of intermediate goods showed cutback of 2.1% in the period, against expansion of 2.2% in the quarter ended in July.

The segmented analysis of the capital goods production revealed the prevalence of the segments associated to goods channeled to agriculture, construction and transportation equipment, of which growth rates reached 11.6%, 11.6% and 12.2%, respectively, in the quarter ended in October, after posting a significant rise in the quarter ended in July. In the opposite sense, the output of spare farm machinery parts and capital goods for mixed use showed respectively decreases of 8% and 2.4% in the period.

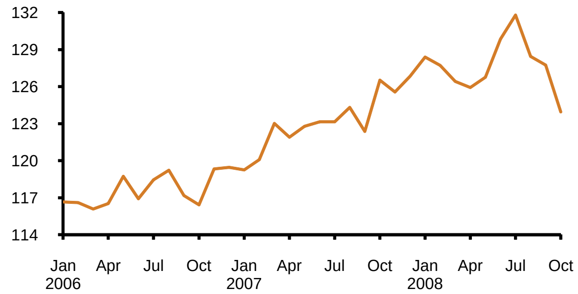
The production of typical inputs for the construction industry, evincing the sector's relative cooling off, grew 0.6% in the quarter ended in October, in sequence to the expansion of 4% in the quarter ended in July, compared to the one ended in April.

**Figure 1.10 – Industrial production**
Semi and nondurable goods
Seasonally adjusted data
2000 = 100



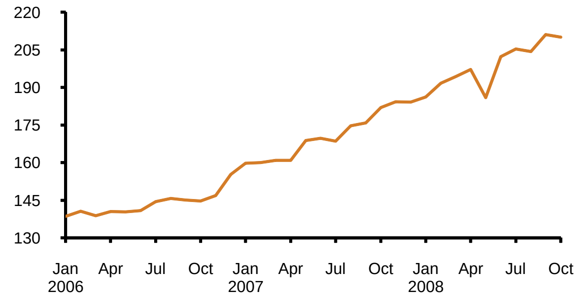

Source: IBGE

**Figure 1.11 – Industrial production**
Intermediate goods
Seasonally adjusted data
2000 = 100



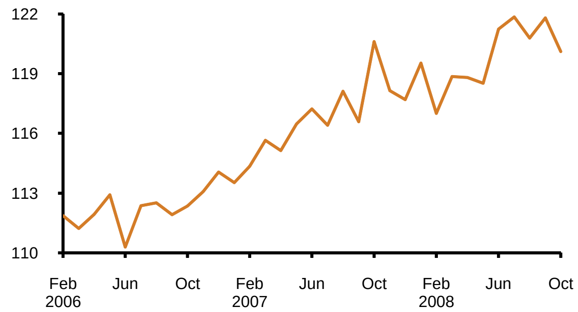

Source: IBGE

**Figure 1.12 – Industrial production**
Capital goods
Seasonally adjusted data
2000 = 100




Source: IBGE

**Figure 1.13 – Labor productivity**
Seasonally adjusted data
2002 = 100




Source: IBGE

The evolution of the industry's physical production by federative unit reveals growth, in the quarter ended in October, compared to the one ended in July, in eight out of the thirteen federation units surveyed, considering seasonally adjusted data. The most significant results occurred in Amazonas, 3.7%; Pará, 3.3%; and Rio Grande do Sul, 3.3%; contrasting wit the cutbacks in Goiás, 3.8%; Espírito Santo, 3.2%; and Paraná, 1.4%.

The automotive vehicles production showed a cutback of 13.9% in the quarter ended in November, in relation to the one ended in August, when it grew 0.9%, on the same basis of comparison, considering seasonally adjusted data. This reversal translated the negative result registered in the segment of automobiles and free trade, in which the production of trucks, buses, and tractors continued to grow.

The growth pace of hiring showed a downturn in the quarter ended in October, when the index of occupied personnel in the industrial sector increased 0.6% in relation to the quarter ended in July, when it had registered growth of 0.3%, on this basis of comparison. The number of hours paid by the industry, however, increased 0.5% in the period, against a cutback of 0.2% in the quarter ended in July.

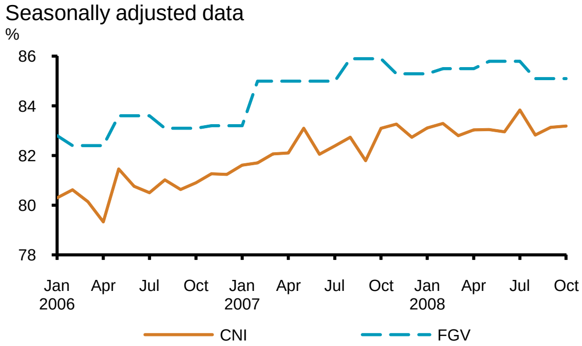
Labor productivity – a ratio between the indices of physical production and the number of hours paid – grew 0.3% in the quarter ended in October, as compared to the one ended in July, when it grew 2%, on the same basis of comparison. The industry's unit labor cost (ULC), estimated by the ratio between the nominal payroll and physical production, has shown a growth trajectory compatible with consumer inflation. In this sense, the average ULC related to the quarter ended in October grew 8.7% compared to the corresponding period of 2007, following the respective increases, on this basis of comparison, of 4% and 7.1%, in the quarters ended in April and July.

The Level of Utilization of Installed Capacity (Nuci), remaining at a high level, reached 85.3% in October, according to seasonally adjusted data released by the FGV, highlighting records registered in the segments of construction materials, 90.4% and consumer goods, 86.2%. Considering observed data, the Nuci reached 85.2% in November, 2 percentage points (p.p.) lower than the one observed in the corresponding period of 2007.

According to seasonally adjusted data released by the CNI, the Nuci of the manufacturing industry showed stability, at a high level, in October, standing at 83.2%.

The Industrial Confidence Index (ICI) topped 104.4 points in October, against 117.9 points in July, according to seasonally adjusted data of the Manufacturing Industry Survey carried out by the FGV. The cutback registered by the indicator translated the reduction linked to both their components, reaching 14.2 points in the ISA and 12.8 points in the EI. Segmented by use categories, the ICI related to the construction materials industry showed both the highest value, 121.2 points and the strongest quarterly cutback, 27.2 points.

**Figure 1.14 – Utilization of installed capacity in the manufacturing industry**
Seasonally adjusted data




Source: CNI and FGV

The ISA evolution was linked, to a large extent, to the cutback of 18.3 points in the global demand's level, impact by the respective cutbacks of 23.7 points and 31.2 points reached by the indices in the sectors of construction materials and intermediate goods, respectively.

The EI component performance was impacted, especially, by the negative evolution of the item unemployment level, while the heading of forecasted production volume, though showing relative cutback in July, continued at a high level, sustained by the performance of indices related to the categories of capital goods and construction materials, the most sensitive to the greater credit restriction environment.

**Table 1.8 – Industry Confidence Index[1/]**

| | 2007 | 2008 | | | |
|---|---|---|---|---|---|
| | Oct | Ago | Apr | Jul | Oct |
| Industry Confidence Index | 119.8 | 119.2 | 115.0 | 104.4 | 84.1 |
| By component: | | | | | |
| Current Situation Index | 123.7 | 122.6 | 118.8 | 109.7 | 85.3 |
| Global demand level | 120.2 | 126.6 | 116.6 | 105.4 | 75.2 |
| Inventory level | 100.9 | 100.1 | 98.5 | 95.0 | 84.3 |
| Business situation | 135.5 | 126.0 | 126.9 | 115.1 | 84.5 |
| Expectations Index | 115.9 | 115.8 | 111.3 | 99.2 | 82.8 |
| Business situation | 154.6 | 156.0 | 151.8 | 127.1 | 95.6 |
| Employment | 123.6 | 121.9 | 115.1 | 108.9 | 96.6 |
| Physical production | 138.7 | 138.8 | 134.2 | 119.5 | 102.7 |

Source: FGV

1/ The average of the last ten years is equal to one hundred. Values above one hundred indicate industrial activity expansion.

The industry confidence indices, evincing the impact of the international financial crisis worsening on the textile activity, showed strong deterioration in November. The ICI decreased by 20.3 points in relation to October, the biggest monthly decline since the beginning of the 0seasonally adjusted series, in April 1995, standing at 84.1 points, the second lowest value of the past ten years. All the indicator's components moved to the negative side, below 100 points, with the exception of those which evaluates the volume of forecasted physical production, which topped 102.7 points. The Business Situation Indicator for a six-month period registered 95.6 points, coming close to its lowest level, of 92.1 points.

The international financial crisis should exert heterogeneous impacts on the Brazilian industry performance in 2009. Uncertainties inherent in this process and the credit supply contraction should impact more sharply, in the short term, the categories of consumer durables and capital goods, which had, in the recent past, benefited from the scenario of expansion of the planning horizon and improving credit conditions. One should highlight that these effects may be attenuated, however, by the sustained pace propitiated by the demand for vehicles and by the housing sector arising from the introduction of specific sectoral lines of credit. The categories of intermediate goods and semi and nondurable consumer goods, less vulnerable to credit, must continue benefiting from the employment and income conditions.

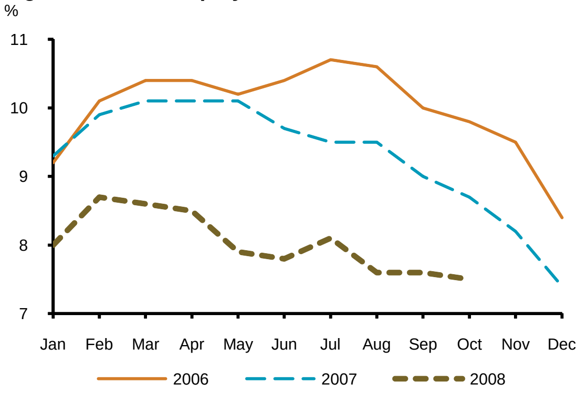
## 1.3 Labor market

### Employment

Labor market conditions do not significantly evince, up to October, the crisis deepening effects on the international financial markets; the reduction trajectories of unemployment rate, substitution of informal jobs with formal ones and the continuity of real gains incorporation to the earnings persist.

According to the Monthly Employment Survey (PME), released by the IBGE, which covers six metropolitan regions, employment rate remained, in the whole year, at the lowest level of the historic series, initiated in March 2002. The rate reached, on average, 7.6% in the quarter ended in October, decreasing 0.4 p.p. as compared to the one ended in July and 1.5 p.p. against the same period of 2007.

**Figure 1.15 – Unemployment rate**




The unemployment rate registered a cutback of 1.6 p.p. in the first ten months of the year, compared to the same period of 2007, reflecting expansion of 3.9% in the occupation level and 2.2% in the Overall Labor Force (PEA), indicating a cutback of 14.5% in the unemployment rate.

Growth in formal jobs, even showing relative decline in the year, topped 6.4% in the quarter ended in October, against expansion of 3.5% in the informal segment. The number of formal workers grew 8.1% in the first ten months of the year, compared to the corresponding period of 2007 and the proportion of unregistered workers in the private sector remained stable. In this scenario, the job formalization, defined as the ratio between the number of registered workers in the private sector and the total number of the working population, reached 44.4% in October, the highest percentage of the series initiated in March 2002.

**Table 1.9 – Formal employment**

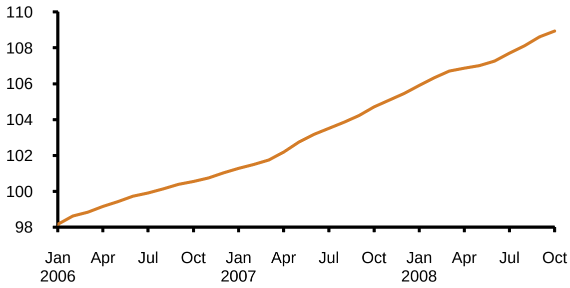
| | 2008 | | | | |
|---|---|---|---|---|---|
| | Jan/Mar | Apr/Jun | Jul/Sep | Oct | Year |
| Total | 554.4 | 806.9 | 725.2 | 61.4 | 2 148.0 |
| Manufacturing industry | 146.2 | 171.7 | 206.1 | 8.7 | 532.7 |
| Commerce | 19.3 | 112.9 | 132.7 | 54.6 | 319.4 |
| Services | 212.6 | 226.2 | 251.1 | 36.1 | 726.1 |
| Building | 99.7 | 97.5 | 103.7 | 2.1 | 303.0 |
| Crop and livestock | 48.7 | 178.3 | 14.6 | -38.4 | 203.2 |
| Public utilities | 4.1 | 3.2 | 3.3 | -0.7 | 9.9 |
| Others 1/ | 23.9 | 17.2 | 13.6 | -1.1 | 53.6 |

Source: MTE

1/ Includes mining, public administration and others.

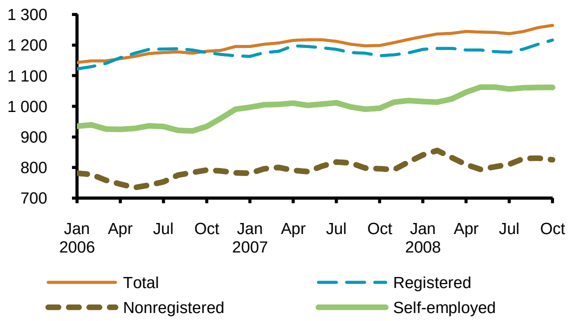
The labor market's formality is ratified by the statistics of the General File of Employed and Unemployed Persons (Caged), released by the Ministry of Labor and Employment (MTE), which registered growth of 6.5% in the formal employment level in the first ten months of the year, as compared to the corresponding period of the previous year. In the year, 2.148 thousand formal job positions were created, a record 18.5% higher than the one registered in the same period of 2007, when 726.1 thousand in the services sector;

**Figure 1.16 – Employment in the manufacturing industry – Quarterly moving average**
Seasonally adjusted data
2003 = 100




Source: CNI

**Figure 1.17 – Average real regular earnings**[1/]
In R$ of October 2008, deflated by INPC




Source: IBGE
1/ Quarterly moving average.

532.7 thousand in the manufacturing industry; 319.4 thousand in the commerce; and 303 thousand in the construction industry. One should note that 61.4 thousand jobs were created in October, the worst result for the period since 2002, against monthly average of 231.8 thousand positions in the first nine months of the year, evincing the adoption of a cautious posture by the employers against the international financial crisis intensification.

CNI statistics, related to twelve states of the federation, showed that the working population in the industrial sector grew 4.3% in the first ten months of the year, in relation to the corresponding period of 2007, while the analysis at the margin, suggesting these movement's continuity, registered expansion of 1.1% in employment in the quarter ended in October, as compared to the one ended in July.

### Earnings

The real average earnings usually received by the working population in the six metropolitan regions covered by the PME increased 5.5% in the quarter ended in October, in relation to the same period of 2007, consolidating the trajectory of real gains accumulation observed since the middle of last year.

The overall real wages, product of the real average income usually received by the number of employed persons, increased 9.4% in the same period, showing a upward trend in relation to the results registered in previous quarters. One should underscore that this evolution, linked, especially, to the growth in wages, still did not mirror the potential effects of the downturn registered in the world economy in the labor market in the country and should contribute to sustain the aggregated outlay in the months ahead.

**Table 1.10 – Gross Domestic Product at market prices**

% growth

| | 2007 | | 2008 | | |
|---|---|---|---|---|---|
| | III Q | IV Q | I Q | II Q | III Q |
| Accumulated in the year | 5.5 | 5.7 | 6.1 | 6.2 | 6.4 |
| Accumulated in 4 quarters | 5.3 | 5.7 | 5.9 | 6.0 | 6.3 |
| Quarter/same quarter | | | | | |
| of the previous year | 5.4 | 6.1 | 6.1 | 6.2 | 6.8 |
| Quarter/previous quarter[1/] | 1.2 | 1.7 | 1.7 | 1.6 | 1.8 |
| Crop and livestock | 7.3 | 1.3 | -0.7 | 3.4 | 1.5 |
| Industry | 1.3 | 0.7 | 2.7 | 1.1 | 2.6 |
| Services | 0.8 | 1.8 | 1.6 | 1.1 | 1.4 |

Source: IBGE
1/ Seasonally adjusted data.

## 1.4 Gross Domestic Product

According to the Quarterly National Accounts released by the IBGE, the GDP grew by 6.4% in the first nine months of the year, in relation to the corresponding period of 2007. The result showed to be, once more, generalized among the product components, while from the demand's viewpoint, the contribution of 8.1 p.p. of the domestic demand pitted against the negative impact of 2.5 p.p. caused by the external sector.

The importance of the domestic demand for sustaining the economic activity growth continues, mirroring the

**Table 1.11 – Gross Domestic Product**

| | 2007 | | 2008 | | |
|---|---|---|---|---|---|
| % growth | III Q | IV Q | I Q | II Q | III Q |
| GDP at market prices | 5.5 | 5.7 | 6.1 | 6.2 | 6.4 |
| Households consumption | 6.0 | 6.3 | 6.3 | 6.1 | 6.5 |
| Government consumption | 5.2 | 4.7 | 6.5 | 5.3 | 5.7 |
| Gross fixed capital formation | 12.6 | 13.5 | 15.4 | 16.0 | 17.3 |
| Exports | 6.9 | 6.7 | -2.3 | 1.4 | 1.6 |
| Imports | 19.8 | 20.8 | 18.8 | 22.5 | 22.6 |

Source: IBGE
1/ Estimated.

**Table 1.12 – Gross Domestic Product**

| | 2007 | | 2008 | | |
|---|---|---|---|---|---|
| % growth | III Q | IV Q | I Q | II Q | III Q |
| Crop and livestock | 4.9 | 5.9 | 3.8 | 6.7 | 6.7 |
| Industry | 5.1 | 4.7 | 6.9 | 6.2 | 6.5 |
| Mining | 3.7 | 2.8 | 3.6 | 4.5 | 5.6 |
| Manufacturing | 5.3 | 4.7 | 7.4 | 6.2 | 6.1 |
| Construction | 4.6 | 5.0 | 8.9 | 9.3 | 10.2 |
| Public utilities | 5.8 | 5.9 | 5.4 | 4.6 | 4.9 |
| Services | 5.2 | 5.4 | 5.2 | 5.3 | 5.5 |
| Commerce | 6.5 | 7.1 | 7.9 | 8.1 | 8.6 |
| Transportation | 5.2 | 5.3 | 4.3 | 4.7 | 5.0 |
| Communications | 6.5 | 7.0 | 8.0 | 8.1 | 8.8 |
| Financial institutions | 11.8 | 14.5 | 13.2 | 11.7 | 10.7 |
| Other services | 3.5 | 2.7 | 3.3 | 4.1 | 4.7 |
| Rents | 4.4 | 4.1 | 3.8 | 3.5 | 3.3 |
| Public administration | 2.5 | 2.4 | 1.4 | 1.7 | 2.0 |
| Value added at basic prices | 5.1 | 5.2 | 5.6 | 5.8 | 5.9 |
| Taxes on products | 8.0 | 8.4 | 9.1 | 8.6 | 9.1 |
| GDP at market prices | 5.5 | 5.7 | 6.1 | 6.2 | 6.4 |

Source: IBGE

improvements in credit conditions, the recovery of real earnings and employment, as well as the governmental transfer growth. In this scenario, household consumption grew 6.5% in the first nine months of 2008, compared to the corresponding period of the previous year, representing the nineteenth positive result when considered accumulated flows in the years t and t-1. The Gross Fixed Capital Formation (GFCF) increased by 17.3% in the period, the most expressive result, on this basis of comparison, since 1995, while the government consumption grew by 5.7%.

The external sector's accumulated result in the year, a negative contribution to GDP, translated the significant growth of 22.6% experienced by imports, against growth of 1.6% in imports, determining the respective impacts of -2.7 p.p. and 0.2 p.p. in the aggregate. One should highlight that the imports, carried out at a moment the foreign exchange rate level stimulated the intensification of productive investments, were chiefly targeted,, to build the Brazilian industrial base.

Considering the production's viewpoint, GDP's accumulated growth in 2008, up to September, was particularly sustained by the expansion of 6.7% experienced by the farm sector, in relation to the corresponding period of 2007, followed by the results of the sectors of industry, 6.5%, and services, 5.5%.

The industrial performance mirrored, to a large extent, the 6.1% expansion registered by the manufacturing industry, accounting for about 62% of the sector's production. In this same sense, the construction industry grew 10.2% in the year, a result consistent with the greater destination of resources to real estate financing and with the intensification of infrastructure works in the context of the Growth Incentive Program (PAC), while the segment of production and electricity distribution, water and gas reached a 4.9 % Growth. The mineral extractive production grew by 5.6%, with emphasis on the 19.3% growth in natural gas production.

The growth registered in services translated, just as observed in the industry, the across the board expansion in all subsectors, with emphasis on increases related to the segments financial intermediation, insurance, complementary social security and relative services, 10.7%, information services, 8.8%; trade, 8.6%; transportation, storage and post, 5%.

The farming sector's production increased by 6.7% in relation to the first nine months of 2007, sustained by the grain production's performance, which, according to the LSPA released by the IBGE, should grow 9.4% in 2008.

**Table 1.13 – Gross Domestic Product**
**Quarter/previous quarter**
Seasonally adjusted

% growth

| | 2007 | | 2008 | | |
|---|---|---|---|---|---|
| | III Q | IV Q | I Q | II Q | III Q |
| GDP at market prices | 1.2 | 1.7 | 1.7 | 1.6 | 1.8 |
| Crop and livestock | 7.3 | 1.3 | -0.7 | 3.4 | 1.5 |
| Industry | 1.3 | 0.7 | 2.7 | 1.1 | 2.6 |
| Services | 0.8 | 1.8 | 1.6 | 1.1 | 1.4 |
| Households consumption | 1.0 | 2.4 | 1.5 | 0.4 | 2.8 |
| Government consumption | -0.5 | 0.6 | 4.2 | -0.2 | 1.5 |
| Gross fixed capital formation | 3.7 | 3.2 | 3.5 | 5.4 | 6.7 |
| Exports | 0.7 | 2.0 | -4.3 | 5.3 | -0.6 |
| Imports | 8.4 | 5.5 | 1.3 | 8.6 | 6.4 |

Source: IBGE

The livestock, however, highlighting the lower upturn in activity of beef exports, did not repeat the results displayed in previous periods.

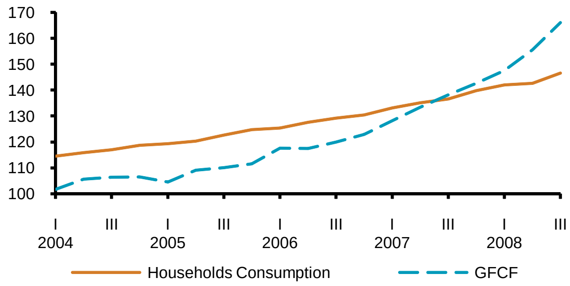
The analysis on the margin, considering seasonally adjusted data, shows that GDP increased 1.8% in the quarter ended in September, in relation to the one ended in July, being the twelfth sequential positive result on this basis of comparison. From an output's viewpoint, GDP's industrial performance, 2.6%; farming, 1.5%; and services, 1.4%, while the analysis of the demand's components ratifies the domestic demand's upturn in activity, expressed in 6.7% expansion on the GFCF, the ninth consecutive quarterly growth; of 2.8% on the household consumption, and of 1.5% in government outlays. Additionally, exports fell by 0.6% and imports grew by 6.4%, in the period.

Prospects related to the GDP growth in the final quarter of the year and in 2009 are detailed in the box GDP Forecasts in 2008 and 2009, in the page 25 of this report.

## 1.5 Investments

According to the IBGE's Quarterly National Accounts, investments, when stock growth is excluded, increased by 17.3% in the first nine months of 2008, compared to the corresponding period in 2007, representing, just as observed with household consumption, the nineteenth consecutive positive result, when considering the accumulated flows in subsequent years. On the margin, GFCF increased by 6.7% in the quarter ended in September, in relation to the one ended in June, according to seasonally adjusted data.

**Figure 1.18 – Households Consumption and Gross Fixed Capital Formation1/**
1995 = 100




Source: IBGE
1/ Seasonally adjusted data.

Investment performance in the year had been anticipated by the evolution of GFCF monthly indicators. The production of inputs to the building industry, in line with the upturn in activity showed by the sector in the latest quarters, increased 10.9% in the first nine months of the year, in comparison to the corresponding period of 2007, while the production, imports and exports of capital goods posted respective increases of 18.8%, 40.2% and 7.3%, determining growth of 22.2% for these in the absorption of these categories of goods.

One should highlight that growth in the production of capital goods translated overall increases in this industry's segments, with emphasis on the performance of goods directed to the agricultural sector, 43.2%; transportation equipment, 29.6%; and non-serial industrial goods, 19.2%. Besides that, the industry of goods channeled to the sectors of electric

## GDP – Revised forecasts for 2008 and forecasts for 2009

Brazilian Gross Domestic Product (GDP) growth estimate for 2008 was revised from 5%, as contained in the last "Inflation Report", to 5.6%, summed up to results of the third quarter, of the revision carried out by the Brazilian Institute of Geography and Statistics (IBGE) to data of the first half-year and of expectations related to its evolution in the fourth quarter. One should mention that the significant result shown in the third quarter of the year did not mirror the impacts of the aggravating crisis in the financial market on the credit conditions and on the businesses and consumers' skepticism level, an environment which should indicate the economic activity deceleration in the last quarter of the year.

The farming sector should grow by 6.7% in 2008, a forecast 1.2% higher than the one contained in the September Inflation Report. This adjustment, which represented the highest, when viewing the production side, mirrors, mainly, the revision, from 5.2% to 6.7%, carried out by the IBGE, of the sector's growth in the first half of the year.

The industrial sector annual growth forecast fell from 5.5% to 5.4%. This sector's production, which grasps the variations inherent to the economic cycles more intense way, should be stronger impacted in the fourth quarter.

The service sector forecasts grew from 4.5% to 5%, in line with its performance in the third quarter, more positive than the previous forecast, and with the prospect of a smaller downturn in the fourth quarter than the one registered by the industrial sector. Such a a perspective is consistent with the dynamics of the sector's adjustment, which is slower than the one observed in other sectors.

The reassessment of the GDP annual growth rate in 2008, considering the demand viewpoint, evinces the importance of domestic outlays in sustaining the activity level. In this sense, the domestic demand contribution to annual GDP growth rate in 2008 topped 7.9 p.p., as compared to the previous estimate of 7.2 p.p., an increase consistent with the evolution of the Gross Formation of Fixed Capital (GFCF) and of household's and government's consumption, in the third quarter. The forecast related to the external sector's negative contribution remained relatively stable, reaching 2.3 p.p., against 2.2 p.p. as stated in the previous report, in a scenario of declining external trade flows.

The forecast for GDP growth in 2009 reached 3.2%, a performance which should be sustained, for the fourth consecutive year, only by domestic demand. The forecast for GDP annual expansion considers the occurrence of positive developments in all the economy's sectors, but for an outlook of generalized slowdown of the respective growth rates, in relation to 2008 and 2007.

The farm sector's annual growth rate is forecasted at 0.2%, interrupting the growth trajectory registered in the triennium 2006-2008, when the sector grew, on average, 5.74%.This decrease is consistent with a declining world demand for farm commodities, in line with the income and world trade downturn, as well as with the slump forecasted to important crops, affected by weather diversity, especially in the South Region, and by the negative biannual cycle of the coffee crop. In this scenario, according to the IBGE, the decrease of 3.7% expected in the grain production in 2009 will be linked to a drop in the crops of wheat, 12.9%; maize, 2.6%, and soybean, 0.2%, while the rice and beans crops have forecasted growths of 5.6% and 1.3%, respectively.

In 2009, growth in industrial production was estimated at 3.6%, sustained by the dynamics of the mineral extraction industries, 5.2%; and the construction industry, 4.3%, favored by the new real estate credit lines and investments, especially by the government, in the context of the Growth Incentive Program (PAC). The manufacturing industry and the public utility industrial services should register respective growth rates of 3.1% and of 3.8%, in the year, showing a stronger recovery in the second half.

The deceleration registered in the services sector should be weaker than in other sectors. The annual growth for this segment, forecasted at 3.1%, incorporates favorable performances, especially, in the subsectors of financial institutions, trade and transportation.

The domestic demand's performance will continue in 2009, as observed from 2006 to 2008, sustaining the economic activity level, forecasting that its contribution to GDP growth, in the year, reaches 3.7 p.p., corresponding to expansions of 4.4% in the GFCF, of 3.9% in household consumption, and of 2.2% in the government consumption.

The external sector's contribution, although negative, will be less intense than in 2008, standing at 0.5 p.p. This reduction mirrors the adjustment prospect in external trade flows in 2009, showing a 1.8% falloff in exports and 2.3% growth in imports.

**Table 1 – Gross Domestic Product**

| | 2006 | 2007 | | 2008 | | | | 2009[1/] |
|---|---|---|---|---|---|---|---|---|
| | Weights | III Q | IV Q | I Q | II Q | III Q | IV Q[1/] | |
| Crop and livestock | 5.1 | 4.9 | 5.9 | 3.8 | 6.7 | 6.7 | 6.7 | 0.2 |
| Industry | 24.0 | 5.1 | 4.7 | 6.9 | 6.2 | 6.5 | 5.4 | 3.6 |
| Mineral extraction | 1.9 | 3.7 | 2.8 | 3.6 | 4.5 | 5.6 | 5.8 | 5.2 |
| Manufacturing | 14.9 | 5.3 | 4.7 | 7.4 | 6.2 | 6.1 | 4.4 | 3.1 |
| Construction | 4.1 | 4.6 | 5.0 | 8.9 | 9.3 | 10.2 | 9.2 | 4.3 |
| Public utilities | 3.1 | 5.8 | 5.9 | 5.4 | 4.6 | 4.9 | 5.1 | 3.8 |
| Services | 56.5 | 5.2 | 5.4 | 5.2 | 5.3 | 5.5 | 5.0 | 3.1 |
| Commerce | 9.9 | 6.5 | 7.1 | 7.9 | 8.1 | 8.6 | 7.5 | 4.2 |
| Transportation | 4.5 | 5.2 | 5.3 | 4.3 | 4.7 | 5.0 | 4.1 | 3.1 |
| Communications | 3.0 | 6.5 | 7.0 | 8.0 | 8.1 | 8.8 | 8.4 | 5.3 |
| Financial institutions[2/] | 6.7 | 11.8 | 14.5 | 13.2 | 11.7 | 10.7 | 9.1 | 4.1 |
| Other services | 12.1 | 3.5 | 2.7 | 3.3 | 4.1 | 4.7 | 4.6 | 2.8 |
| Rents | 7.4 | 4.4 | 4.1 | 3.8 | 3.5 | 3.3 | 3.0 | 2.2 |
| Public administration | 12.9 | 2.5 | 2.4 | 1.4 | 1.7 | 2.0 | 2.1 | 1.8 |
| Value added at basic prices | 85.6 | 5.1 | 5.2 | 5.6 | 5.8 | 5.9 | 5.2 | 3.0 |
| Taxes on products | 14.4 | 8.0 | 8.4 | 9.1 | 8.6 | 9.1 | 7.8 | 3.9 |
| GDP at market prices | 100.0 | 5.5 | 5.7 | 6.1 | 6.2 | 6.4 | 5.6 | 3.2 |

Source: IBGE and Banco Central
1/ Estimated.
2/ Includes insurance, complementary social security and related services.

**Table 2 – Gross Domestic Product – Demand side**

%

| Period | GDP at market price | Private consumption | Government consumption | Total consumption | Gross Fixed Capital Formation | Exports | Imports |
|---|---|---|---|---|---|---|---|
| **2002** | 2.7 | 1.9 | 4.7 | 2.6 | -5.2 | 7.4 | -11.8 |
| **2003** | 1.1 | -0.8 | 1.2 | -0.3 | -4.6 | 10.4 | -1.6 |
| **2004** | 5.7 | 3.8 | 4.1 | 3.9 | 9.1 | 15.3 | 13.3 |
| **2005** | 3.2 | 4.5 | 2.3 | 3.9 | 3.6 | 9.3 | 8.5 |
| **2006** | 4.0 | 5.2 | 2.6 | 4.5 | 9.8 | 5.0 | 18.4 |
| Contribution (p.p.) | | 3.1 | 0.5 | 3.6 | 1.6 | 0.8 | -2.1 |
| **2007** | 5.7 | 6.3 | 4.7 | 5.9 | 13.5 | 6.7 | 20.8 |
| Contribution (p.p.) | | 3.8 | 0.9 | 4.7 | 2.2 | 1.0 | -2.4 |
| **2008 (estimated)** | 5.6 | 6.2 | 5.1 | 5.9 | 16.2 | 1.1 | 20.4 |
| Contribution (p.p.) | | 3.8 | 1.0 | 4.8 | 2.8 | 0.1 | -2.5 |
| **2009 (estimated)** | 3.2 | 3.9 | 2.2 | 3.5 | 4.4 | -1.8 | 2.3 |
| Contribution (p.p.) | | 2.4 | 0.4 | 2.8 | 0.8 | -0.2 | -0.3 |

Source: IBGE and Banco Central

energy and capital goods of mixed use registered respective expansions of 14.7% and 11%, during the period.

Leading indicators suggest, however, a relative accommodation of the industry's expansion in the coming quarters. In this sense, the construction industry's input production grew by 7.7% in October, in relation to the same period of the previous year. On the same basis of comparison, there were increases of 11.4% in April and 15.1% in July; while the domestic inflow of capital goods grew 26.7% in the period, against expansion of 31.9% in April and 29.3% in July. This expansion reflected respective increases of 15.7%, 41.2% and -7.6% in production, imports and exports of these goods. In this sense, according to statistics released by Anfavea, the production of farming machines, trucks, and buses showed respective annual increases of 18.5%, 14.8% and -8.5% in November, results lower than the ones observed, on this basis of comparison, in recent months.

The disbursements of the National Bank of Economic and Social Development (BNDES) system summed up R$70.2 billion in the first ten months of the year, increasing 43.7% in relation to the corresponding period of 2007. Thus, the highlights were the increases in the resources channeled to the trade and service, 48.6%; manufacturing industry, 32.4%; and farming, 8.6%.

## 1.6 Conclusion

The growth in economic activity remained at a high level in the quarter ended in September, sustained by the upturn in domestic demand, an evolution expressed by the indicators linked to the output level, as well as those demonstrating the demand behavior, such as retail sales. In this environment, where expectations remained equally at a high level, employment indictors continued pointing to the quantitative and qualitative improvements registered in the labor market.

The first results related to the fourth quarter, capturing, partially, the impacts of the new international environment on domestic economy, started to show a downturn in industrial production, in investment levels and, with lower intensity, in labor market indicators, which respond to stress situation with greater delay.

This trajectory, consistent with the uncertain moments experienced by the world economy, characterized by the marked growth of wariness to risk and consequent credit restriction, will be associated to the extension and intensity of the crisis in the international financial markets. This should impact with greater intensity the segments most sensitive to credit conditions and the levels of the foreign exchange rate. On the other hand, activities more sensitive to the market and employment income evolution, as well as to the public sector transfers, should demonstrate greater resilience.

# Prices

2

The performance of consumer and wholesale inflation rates, after leveling off in August and September in line with falling international prices of commodities, returned to record growth in October, a move associated with the growth pace of domestic demand, as indicated by increases in the prices of services, and the initial effects of recent exchange rate depreciation on prices of consumer goods and important items in the supply chain.

In November, despite the path of the exchange rate, consumer prices and especially wholesale, recorded new leveling off reflecting the sharp deterioration in analysts' expectations, reporting significant declines in international commodity prices with the demand for goods by sectors more dependent on the conditions of the credit market.

## 2.1 General indices

**Table 2.1 – General price indices**

Monthly % change

| | 2008 | | | | |
|---|---|---|---|---|---|
| | Jul | Aug | Sep | Oct | Nov |
| IGP-DI | 1.12 | -0.38 | 0.36 | 1.09 | 0.07 |
| IPA | 1.28 | -0.80 | 0.44 | 1.36 | -0.17 |
| IPC-Br | 0.53 | 0.14 | -0.09 | 0.47 | 0.56 |
| INCC | 1.46 | 1.18 | 0.95 | 0.77 | 0.50 |

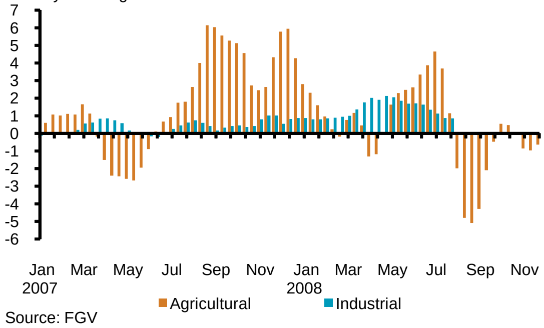
Source: FGV

The changes in FGV general price indices slowed in the quarter ended in November in relation to August quarter end. The level of the General Price Index (IGP-DI) was 1.53%, dropping 1.11 percentage points in the period, the result of widespread reductions in some of its components.

The Wholesale Price Index – (IPA-DI) rose 1.63% in the quarter ended in November, compared to 2.78% at the end of August. This deceleration reflected, in particular, a major falloff in farm prices, showing a decline in international prices of commodities, ranging -1.13% against -0.28% in the quarter ended in August. The emphasis in reductions came from the prices of corn, wheat, soybean, fresh milk, eggs, milk and cattle.

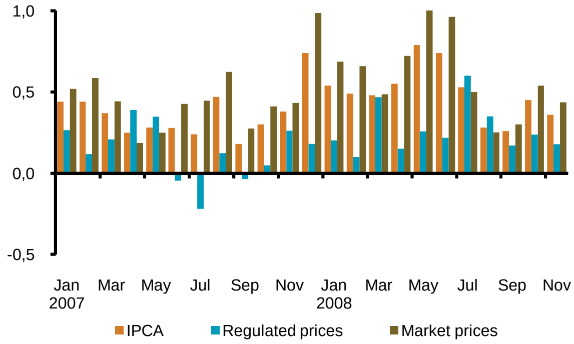
After showing monthly variations in excess of 0.75% throughout the year, industrial prices remained stable in November, rising 2.63% in the quarter ending this month, compared to 3.94% in August, with an accumulated annual

**Figure 2.1 – IPA-10, IPA-M and IPA-DI – Agricultural and industrial prices**
Monthly % change



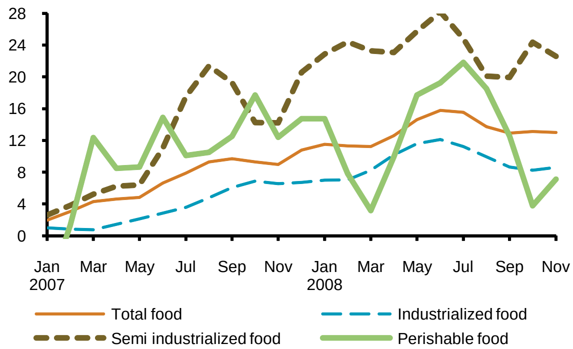

Source: FGV

**Figure 2.2 – IPCA growth**
Monthly % change



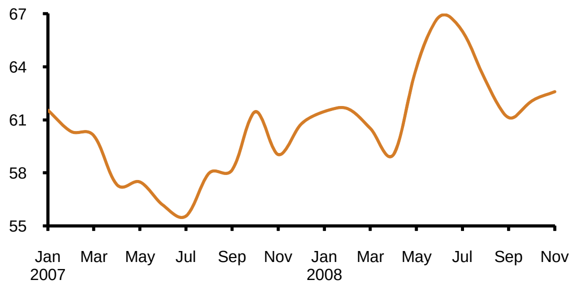

Source: IBGE

**Figure 2.3 – IPCA – Food**
12-month % change




Source: IBGE

**Figure 2.4 – IPCA – Diffusion index**
% of items with increase[1/]
Quarterly moving average
%




Sources: IBGE and Bacen
1/ IPCA is formed by 384 subitems.

growth of 13.80% against 3.39% in the same period in 2007. The performance of the indicator for the quarter was associated, in large part, to price increases recorded in the metallic minerals, apparel, pulp, chemicals and nonmetallic minerals sectors.

The Consumer Price Index – Brazil (IPC-Br) showed an increase of 0.94% in the quarter ended in November, compared to 1.45% for August, consistent with the price trajectory in food prices. Additionally, the National Cost of Construction Index (INCC) grew 2.24% in the quarter from 4.63% in the period from June to August, showing the exhaustion of the impact of labor disputes involving civil construction workers.

## 2.2 Consumer Price Indices

### Broad National Consumer Price Index (IPCA)

The IPCA rose 1.07% in the quarter ended in November, compared to 1.56% that ended in August, reflecting reductions in the variations from 1.72% to 1.28% in market prices and, from 1.17% to 0.59% in regulated prices. The change in the indicator in the quarter resulted from expansions of 0.26% monthly in September, the lowest of the year and of 0.45% in October and 0.36% in November.

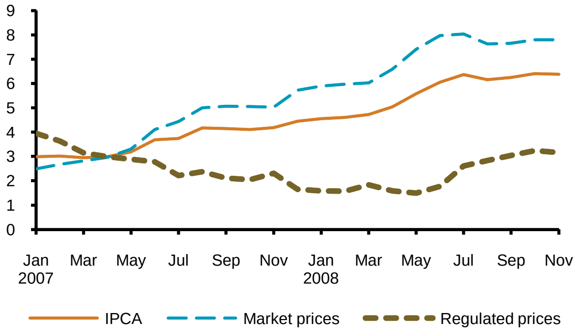
The deceleration seen in quarterly market prices was associated with the behavior of food prices which grew 1.03%, compared to 3.00% during June to August, reflecting reductions in the price increases of semi-prepared, industrial and natural foods. On the other hand, the variation of market prices, excluding the food group, reached 1.40% in the quarter ended in November, when compared to that ended in August 1.12%, increasing the evidence of the importance of demand pressures on the behavior of prices in this segment. Also noteworthy in this period are the price variation increases in the household items group from 0.41% to 1.46%, apparel from 0.78% to 2.70% and personal expenses from 1.79% to 1.99%.

The IPCA showed an increase of 6.39% in the twelve-month period ending in November, reaching 5.61% on the year resulting from increases of 2.97% in the prices of regulated goods and services and 6.75% for market prices compared to the January November 2007 result of 4.69%.

The diffusion index, an indicator which shows the proportion of the components of the IPCA that went through positive

**Figure 2.5 – IPCA – Separate groups**

12-month % change




Sources: IBGE and Bacen

**Table 2.2 – IPCA**

% change

| | Weights | 2008 | | | | | |
|---|---|---|---|---|---|---|---|
| | | Jul | Aug | Sep | Oct | Nov | Year |
| IPCA | 100.00 | 0.53 | 0.28 | 0.26 | 0.45 | 0.36 | 5.61 |
| Market prices | 70.38 | 0.50 | 0.25 | 0.30 | 0.54 | 0.44 | 6.75 |
| Regulated prices | 29.62 | 0.60 | 0.35 | 0.17 | 0.24 | 0.18 | 2.97 |
| Main items | | | | | | | |
| Electricity | 3.28 | 0.93 | 1.03 | -0.46 | 0.44 | 0.16 | 0.97 |
| Water and sewage | 1.64 | 0.79 | 1.57 | 0.96 | 0.77 | 0.00 | 7.09 |
| Urban bus | 3.67 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 2.16 |
| Air ticket | 0.29 | 0.13 | 0.22 | 0.93 | 1.23 | 0.73 | 10.73 |
| Gasoline | 4.22 | 0.59 | -0.25 | 0.69 | -0.18 | 0.21 | -0.17 |
| Bottled cooking gas | 1.12 | 0.15 | -0.02 | 0.12 | 0.20 | 0.23 | 2.61 |
| Medicine | 2.84 | 0.37 | -0.41 | 0.30 | 0.13 | 0.15 | 4.09 |
| Health plans | 3.37 | 0.49 | 0.48 | 0.48 | 0.48 | 0.48 | 5.66 |

Source: IBGE

**Table 2.3 – Consumer prices and core inflation**

Monthly % change

| | 2008 | | | | |
|---|---|---|---|---|---|
| | Jul | Aug | Sep | Oct | Nov |
| IPCA | 0.53 | 0.28 | 0.26 | 0.45 | 0.36 |
| Exclusion | 0.39 | 0.50 | 0.62 | 0.51 | 0.36 |
| Trimmed means | | | | | |
| Smoothed | 0.36 | 0.36 | 0.45 | 0.37 | 0.35 |
| Non smoothed | 0.43 | 0.42 | 0.41 | 0.32 | 0.28 |
| IPC-Br | 0.53 | 0.14 | -0.09 | 0.47 | 0.56 |
| Core IPC-Br | 0.30 | 0.30 | 0.22 | 0.31 | 0.45 |

Source: IBGE, Bacen and FGV

growth in a determined period presented an average of 62.59% in the quarter that ended in November, compared to 63.19% in August and finished at 59.03% in the same period in 2007.

## 2.3 Regulated prices

Regulated Prices increased 0.59% in the quarter ending in November compared to 1.17% in the quarter ending in August, corresponding to 0.17 p.p. of the IPCA variation during the period. The slowdown in the quarter particularly reflected the smaller increases in charges for water and sewer, telephone, and electricity, which grew 1.74%, 0.36% and 0.14% respectively compared to variations of 3.12%, 2.90% and 0.93% for the quarter ending in August. This is also related to the effect of an increase of 0.72% in gasoline prices, which grew 0.26% in the quarter ending in August.

The variation in regulated market prices grew 2.97% in the first eleven months of the year and 3.16% in the twelve-month period ended in November remaining, at a level below market prices since May 2007, using the same basis of comparison

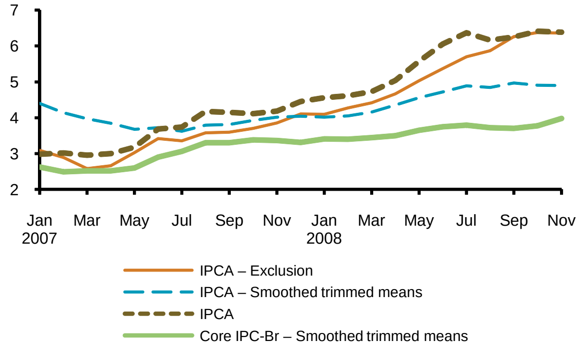
## 2.4 Inflation core

Considering the three measures of IPCA core inflation calculated by the Central Bank, the variation of the core by exclusion, reflecting the heated domestic demand and, more recently, the initial effects of the depreciation of the exchange rate was at a level above that registered by the IPCA for the quarter ended November, recording an increase over the quarter ended in August. For the period, variations in the core IPCA calculated by the method of smoothed and non-smoothed trimmed means recorded deceleration and change similar to the full index.

The variation of the exclusion core reached 1.50% in the quarter ended in November, compared to 1.44% in the quarter ended in August, rising in the 12 month period from 5.87% in August to 6.37% in November considering the 12-month period, during which the IPCA accumulated growth of 6.39%.

The core IPCA calculated by the method of trimmed means with and without smoothing showed variations of 1.18% and 1.02% for the quarter ended in November, compared to the same order, increases of 1.21% and 1.34% the quarter ending

**Figure 2.6 – Inflation core**
12-month % change




Source: IBGE, Bacen and FGV

**Figure 2.7 – IPCA**
Median

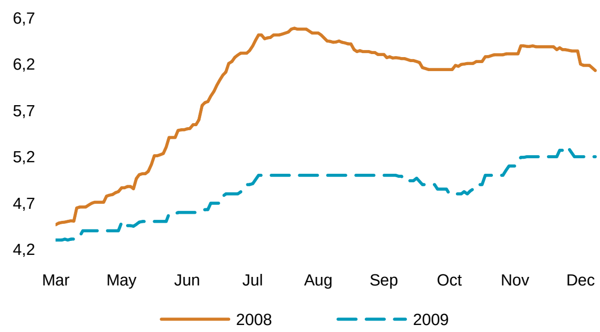
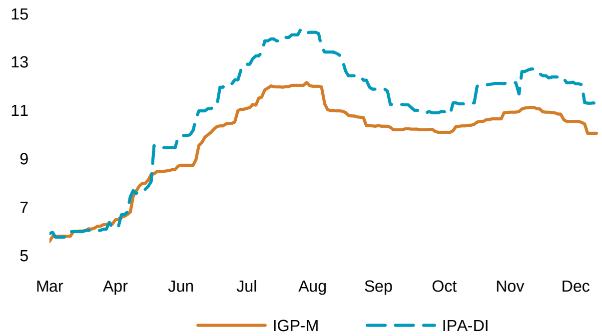



**Figure 2.8 – IGP-M e IPA-DI**
Median 2008




in August. These indicators accumulated, in 12-month period ending in November, variations of 4.90% and 5.05%, compared to the respective expansions of 4.85% and 4.92% in August using the same period of comparison.

Core inflation for the IPC-Br, calculated by the FGV, using the method of smoothed trimmed means, accumulated a variation of 3.98% during the twelve months ending in November. The index rose 0.98% in the quarter ending this month, compared to a 1.04% that closed in August.

## 2.5 Market expectations

According to the bulletin – "Focus market report" of December 12, the median of expectations for the IPCA collected by the Investors Relations Group (Gerin) in 2008 rose from 6.14% in late September, to 6.13%, while that related to the 2009 increase from 4.85% to 5.20% in the period. The projections are inconsistent with the goal of 4.50% but within the tolerance margin of two percentage points above or below, established for the IPCA by the CMN. Expectations for inflation in the twelve months ahead – smoothed – reached 5.21% compared to 5.15% in late September.

Median related to variances in the General Price Index – Market (IGP-M) and IPA-DI for 2008 reached 10.06% and 11.25% respectively on December 12, in view of, 10, 10% and 10.91% respectively at the end of September. For 2009, the median of those projections were increased by 5.37% and 5.60%, respectively, and 5.64% and 6.03%.

The median of expectations related to the evolution of regulated prices for 2008 decreased 3.7% in late September to 3.5% on December 12, while 2009's moved from 5.1% to 5.3% for the period.

With the deepening of the current international financial crisis after the bankruptcy of Lehman Brothers investment bank on September 15, the market forecasts for the exchange rate was revised upward substantially. The median of the exchange rate average and at the end-of-period for 2008 increased from R$1.70/US$ and R$1.75 per US$, respectively at the end of September to R$1.82/US$ and R$2.30/US$ , in the latest Bulletin Focus – Market Report. Similarly, projections concerning these rates for 2009 from R$1.77/US$ and R$1.80 US$, respectively, as well as R$2.20 per US$ in the period.

**Figure 2.9 – Exchange**

Median 2008

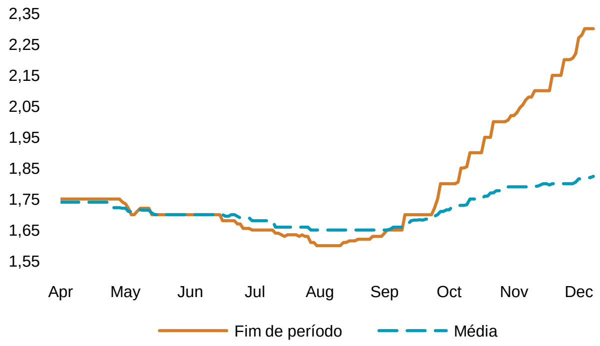



**Table 2.4 – Summary of market expectations**

| | 6.30.2008 | | 9.30.2008 | | 12.12.2008 | |
|---|---|---|---|---|---|---|
| | 2008 | 2009 | 2008 | 2009 | 2008 | 2009 |
| IPCA | 6.3 | 4.8 | 6.1 | 4.9 | 6.1 | 5.2 |
| IGP-M | 11.0 | 5.1 | 10.1 | 5.4 | 10.1 | 5.6 |
| IPA-DI | 12.7 | 5.2 | 10.9 | 5.6 | 11.3 | 6.0 |
| Regulated Prices | 3.8 | 4.9 | 3.7 | 5.1 | 3.5 | 5.3 |
| Selic (end-of-period)* | 14.3 | 13.5 | 14.8 | 13.8 | 13.8 | 13.0 |
| Selic (average)* | 12.6 | 13.6 | 12.8 | 14.2 | 12.6 | 13.4 |
| Exchange rate (end-of-period) | 1.65 | 1.76 | 1.75 | 1.80 | 2.30 | 2.20 |
| Exchange rate (average) | 1.69 | 1.74 | 1.70 | 1.77 | 1.82 | 2.20 |
| GDP growth | 4.8 | 4.0 | 5.2 | 3.5 | 5.6 | 2.5 |

*last available data for 2008 as of December 5

The Selic rate median at the end of 2008 declined from 14.75% per year (p.a.) at the end of September to 13.75% p.a. on December 5. For 2009, the median of expectations fell from 13.75% p.a. at the end of September, to 13% p.a. on December 12, while the median of forecasts for the GDP growth rate in 2008 increased 5.2% to 5.59%, and decreased 3.5% to 2.5% in the period relative to 2009.

The medians referring to changes in the IGP-M and the IPA-DI for 2008 reached 10.90% and 12.40% respectively in the latest bulletin "Focus- Market Report" in view of 10.20% and 10.90% for the end of September in that same order. For 2009, the medians of those projections were increased from respective 5.40% and 5.60% as well as 6.00% in the period.

The median of expectations related to growth in regulated prices stayed at 3.70% for 2008, whereas in 2009 it rose from 5.10% at the end of September to 5.30%.

The medians regarding the Selic rate at the end of 2008 and 2009 dropped from 14.75% p.a. and 13.75% p.a. at the end of September, to 13.75% p.a. and 13.31% p.a., respectively, in the latest bulletin "Focus-Market Report", while the median of forecasts for the GDP growth rate in 2008 closed at 5.2% and the relative performance of the Brazilian economy in 2009 decreased from 3.6 % to 2.8% in that period.

## 2.6 Conclusion

The IPCA cumulative variation over the last 12 months, heading upward since early 2007, always remained above the annual target of 4.5% set by the CMN for 2008. The performance of inflation had been translating, particularly during the first half of the year, the of the vigor of the external environment on the evolution of international commodities prices, both agricultural and mineral, and the pace of domestic demand growth, as suggested by the increases recorded in several core indicators.

As of September, the prospects of a reduction in global economic growth, in line with the significant shut off experienced by credit channels, dramatically impacted the prices of major commodities, while the higher risk aversion, amid significant losses in the financial markets, set the stage for a sharp depreciation in the currencies of major emerging economies as well as the developed economies – except for Japan – against the U.S. dollar.

In this scenario, in that the reduction of the pace of growth of the world economy and domestically, the qualitative and quantitative restrictions to credit, and the shrinking of consumer confidence managed to reduce the risks of underlying demand pressures on the evolution of prices, should be considered, especially in the short-term, the increased risks inherent to the impacts of exchange rate depreciation.

# Credit, monetary and fiscal policies

3

## 3.1 Credit

**Table 3.1 – Credit operations**

R$ billion

| Itemization | 2008 | | | | % growth | |
|---|---|---|---|---|---|---|
| | Jul | Aug | Sep | Oct | 3 months | 12 months |
| Total | 1 085.9 | 1 110.3 | 1 152.8 | 1 186.6 | 9.3 | 34.6 |
| Nonearmarked | 778.4 | 798.4 | 829.2 | 850.3 | 9.2 | 37.3 |
| Earmarked | 307.5 | 311.9 | 323.6 | 336.3 | 9.3 | 28.2 |
| **% participation:** | | | | | | |
| Total/ GDP | 37.1 | 38.0 | 39.2 | 40.2 | | |
| Nonearmarked/GDP | 26.6 | 27.3 | 28.2 | 28.8 | | |
| Earmarked/GDP | 10.5 | 10.7 | 11.0 | 11.4 | | |

**Figure 3.1 – Credit by capital control of financial institutions**

% of balance

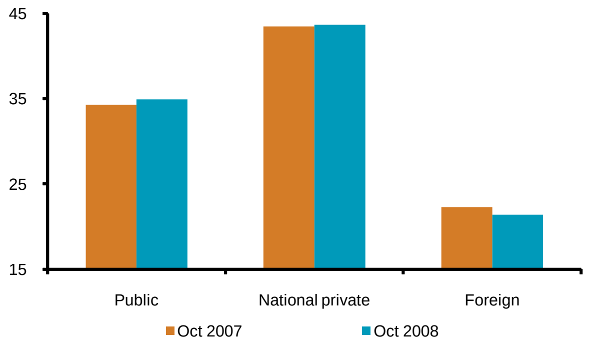
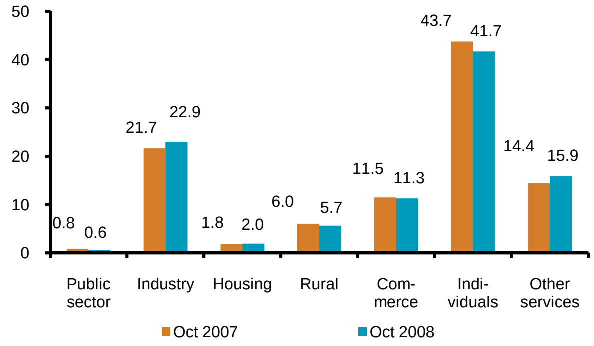



**Figure 3.2 – Credit by borrower's economic activity – National private institutions**

%




The National Financial System credit operations, though remaining at a high level, showed relative downturn in the quarter ended in October, an evolution consistent with the worsening crisis in the international financial markets. In the domestic scenario, increasing uncertainty and risk aversion by the economic agents is translated, especially, in the increased selectivity in credit grants, expressed both in the reduction of maximum contracting terms and in the requirement for greater resources contribution by the borrowers, as observed in the segments of and vehicle leasing and rentals to individuals.

In this environment, the federal government, aiming at ensuring the operational normalcy in the credit market, which had been an important element for the maintenance of the economic activity's dynamics, adopted a set of measures to expand the financial system liquidity. These measures incorporated both the sale of foreign currency to financial institutions, so as to enable them to finance the external trade, and release of reserve requirements, as an incentive to the negotiation of assets among financial institutions, with the objective of stimulating financial transactions in the interbank market.

In this context, the total volume of credit operations carried out with nonearmarked and channeled resources topped R$1.187 billion in October, registering growth of 9.3% in the quarter and 34.6% in twelve months, a period in which the ratio credit/GDP grew 6.6 p.p., to 40.2%.

The public bank's relative participation in the financial system total loans from increased from 34.4%, in July, to 34.9% in October, boosted by the purchase of credit portfolios from other institutions. At the same time, the participation of loans granted by the national private institutions decreased from 44.3% to 43.7% and the one related to foreign banks remained, basically, stable, growing from 21.3% to 21.4%.

**Figure 3.3 – Credit by borrower's economic activity – Public institutions**

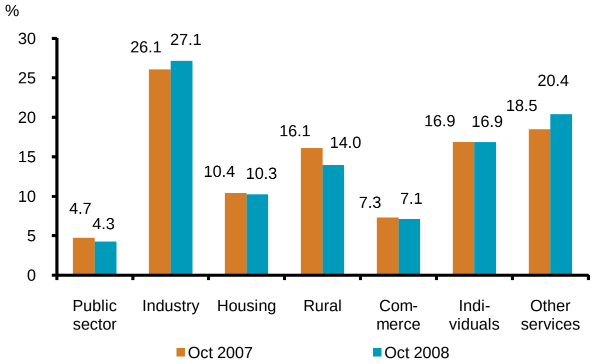



**Figure 3.4 – Credit by borrower's economic activity – Foreign institutions**

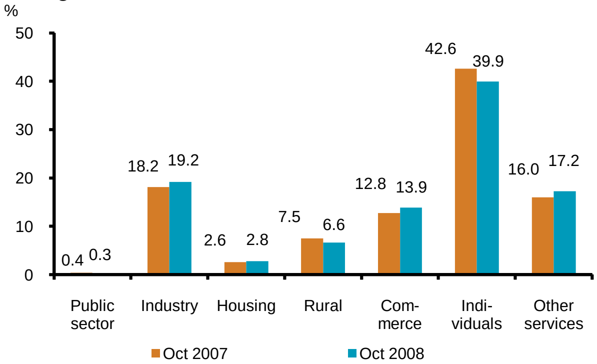



**Figure 3.5 – Provisions of total financial system credit**

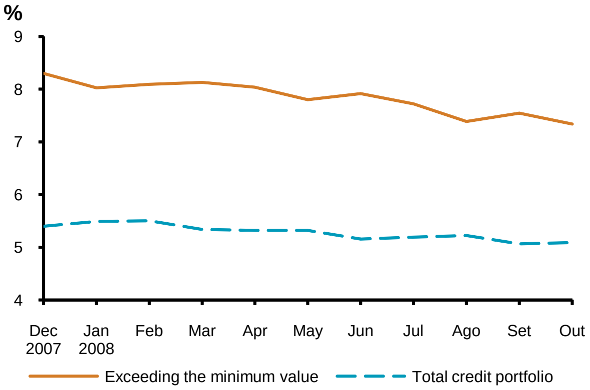



**Table 3.2 – Earmarked credit operations**

R$ billion

| | 2008 | | | | % growth | |
|---|---|---|---|---|---|---|
| | Jul | Ago | Set | Out | 3 months | 12 months |
| Total | 307.5 | 311.9 | 323.6 | 336.3 | 9.3 | 28.2 |
| BNDES | 176.1 | 177.8 | 185.1 | 195.1 | 10.8 | 28.3 |
| Direct | 84.1 | 86.9 | 91.3 | 98.2 | 16.7 | 34.5 |
| Onlendings | 91.9 | 90.8 | 93.8 | 96.9 | 5.4 | 22.6 |
| Rural | 72.4 | 73.1 | 75.3 | 76.1 | 5.2 | 23.9 |
| Banks and agencies | 68.5 | 69.0 | 70.5 | 71.0 | 3.8 | 22.1 |
| Credit unions | 3.9 | 4.1 | 4.8 | 5.1 | 29.8 | 54.2 |
| Housing | 51.2 | 53.0 | 55.0 | 56.5 | 10.4 | 36.0 |
| Others | 7.9 | 8.1 | 8.2 | 8.6 | 8.6 | 19.1 |

The balance of operations directed to the private sector reached R$1,165 billion in October, growing 9.2% in relation to July. The operations contracted with the industrial sector increased 12.7% in the quarter, to R$280 billion, with emphasis to the demand from the sectors agribusiness, energy, chemical and petrochemical. The expansion of 12.7% in credit to the segment other services, which summed up R$210.6 billion, was linked to the disbursements to the sectors telecommunication, transportation and vehicles. Loans channeled to the trade sector grew 9.1% in the period, while those granted to individuals, excluding housing loans with earmarked resources, increased 6%, totaling R$387.4 billion. The funding granted to the public sector summed up R$21.7 billion in October, increasing 11.3% compared July.

The balance of provisions set aside by the financial institutions represented 5.2% of the total credit portfolio in October, remaining stable in the quarter, while the default rate reached 2.9%, decreasing 0.1 p.p., in the period.

## Credit operations with earmarked resources

The balance of loans in the segment of earmarked resources reached R$336.3 billion at the end of October, registering expansions of 9.3% in relation to July and 28.2% in twelve months. The quarterly growth mirrored, somewhat, the expansion of 10.8% observed in the BNDES financing, which totaled R$195.1 billion, corresponding to 58% to the earmarked credits.

The BNDES disbursements summed up R$70.2 billion in the first ten months of 2008, increasing 40.8% compared to the corresponding period of 2007. Resources granted directly to the trade and services segment grew 47.9%, totaling R$36.9 billion, concentrated on the activities of land transportation, electricity and gas and telecommunications. Loans to industry reached R$28.9 billion, highlighting the relevance of operations involving the sectors of food and vehicles, while credits to micro, small, and medium companies, representing 25.4% of the BNDES total disbursements in the year, totaled R$17.8 billion, for growth of 36.4%.

Farm loans with earmarked resources topped R$76.1 billion in October, representing 73% of the segment's total portfolio. The quarterly growth of 5.2% translated increases in grants directed to trade, 7%; current expenditures, 3.7%; and investments, 0.7%, which represented, in the order, 41.1%, 9.4% and 49.5% of the farming credits, in the period.

**Table 3.3 – BNDES disbursements**

R$ million

| Itemization | Jan-Oct 2007 | Jan-Oct 2008 | % growth |
|---|---|---|---|
| Total | 49 818 | 70 164 | 40.8 |
| Industry | 20 896 | 28 942 | 38.5 |
| Mining | 788 | 2 177 | 176.3 |
| Food products | 3 812 | 7 309 | 91.7 |
| Vehicle, towing truch and wagon | 2 069 | 3 697 | 78.7 |
| Petroleum and alcohol refining | 1 415 | 2 371 | 67.6 |
| Commerce/Services | 24 937 | 36 892 | 47.9 |
| Overland transportation | 9 337 | 14 647 | 56.9 |
| Electricity and gas | 4 273 | 6 765 | 58.3 |
| Construction | 2 231 | 3 079 | 38.0 |
| Telecommunication | 3 031 | 5 220 | 72.2 |
| Crop and livestock | 3 985 | 4 329 | 8.6 |

Source: BNDES

**Figure 3.6 – Credit to housing with resources from saving deposits – January-September**

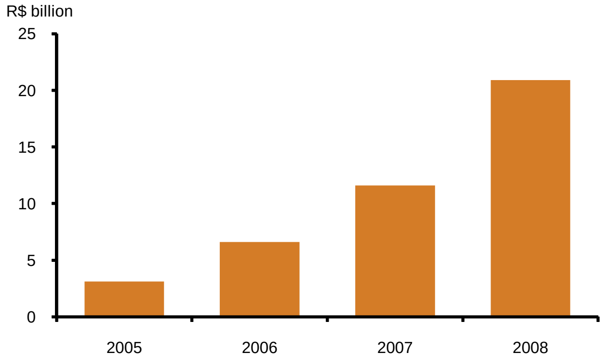



**Table 3.4 – Nonearmarked credit operations**

R$ billion

| Itemization | 2008 Jul | Aug | Sep | Oct | % growth 3 months | 12 months |
|---|---|---|---|---|---|---|
| Total | 778.4 | 798.4 | 829.2 | 850.3 | 9.2 | 37.3 |
| Corporations | 408.9 | 423.2 | 444.8 | 458.4 | 12.1 | 45.9 |
| Reference credit1/ | 338.8 | 349.3 | 368.5 | 379.1 | 11.9 | 46.2 |
| Domestic funding | 265.8 | 274.7 | 284.5 | 290.9 | 9.5 | 49.6 |
| External funding | 73.0 | 74.6 | 84.0 | 88.2 | 20.8 | 36.1 |
| Leasing2/ | 48.0 | 50.8 | 53.7 | 54.4 | 13.3 | 71.9 |
| Rural2/ | 2.3 | 2.5 | 2.8 | 3.2 | 37.4 | 70.3 |
| Others2/ | 19.8 | 20.5 | 19.8 | 21.7 | 9.8 | 1.6 |
| Individuals | 369.5 | 375.2 | 384.3 | 391.9 | 6.1 | 28.4 |
| Reference credit1/ | 266.2 | 268.5 | 270.5 | 273.4 | 2.7 | 16.5 |
| Credit unions | 14.8 | 15.4 | 16.0 | 16.5 | 11.6 | 37.5 |
| Leasing | 49.0 | 51.3 | 54.3 | 55.7 | 13.6 | 116.3 |
| Others | 39.4 | 40.1 | 43.5 | 46.3 | 17.4 | 41.3 |

1/ Interest rate reference credit, defined according to Circular n. 2,957 dated 12.30.1999.

2/ Operations backed by domestic resources.

Aiming to ensure the resources earmarked for the current harvest, the CMN increased from 25% to 30% the demand resources' share of financial institutions to be mandatorily directed to investment on rural credit. Additionally, the CMN rose from 65% to 70% the requirement for investment of savings resources from the rural savings account in credit operations to benefit farming, while it decreased, from 20% to 15%, the reserve requirements related to these deposits. Both measures will remain in force in the period from November 1, 2008 to June 30, 2009.

Housing loans granted to individuals and housing cooperatives summed up R$56.5 billion in October, rising 10.4% in relation to July, the accumulated disbursements with the savings accounts' resources totaled R$20.9 billion in the first nine months of this year, rising 80.3% compared to the corresponding period of 2007, with 87.2% contracted in the context of the Housing Financial System and 12.8% of interest rates freely contracted.

## Credit Operations with nonearmarked resources

Loans granted with nonearmarked resources – responded, as observed in July, for 71.7% of the financing system's credit, totaling R$850.3 billion in October, increasing 9.2% in the quarter and 37.3% in twelve months. Loans to companies, R$458.4 billion, maintained a vigorous performance, expressed in expansions of 12.1% in the quarter and 45.9% in twelve months, with emphasis to the respective expansions of 10.2% and 48.4% experienced by the loans referenced in domestic resources, which totaled R$370.2 billion. Credit operations to individuals reached R$391.9 billion, registering expansions of 6.1% in the quarter and 28.4% in twelve months.

With regard to interest rate reference credit, loans for working capital continue registering a strong upturn evincing increases of 13.6% in the quarter and 83.8% in twelve months. The performance of this modality, besides continuing to mirror the evolution of the activity level, has been boosted by the restriction to external credit lines and in the domestic capital market, which constitute an alternative mechanism to finance productive activities.

Loans to corporate entities backed in external funding totaled R$88.2 billion in October, for a 20.8% growth in relation to July and 36.1% in twelve months. One should highlight that the quarterly growth was linked fundamentally linked to the exchange depreciation in the period.

**Figure 3.7 – Interest rates on nonearmarked credit**

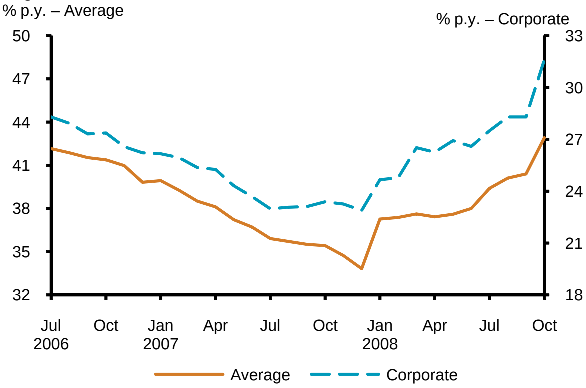



**Figure 3.8 – Interest rates on fixed rate credit – Individuals**

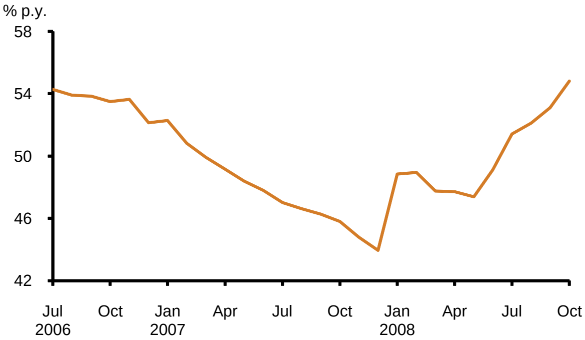



**Figure 3.9 – Average spread on nonearmarked credit**

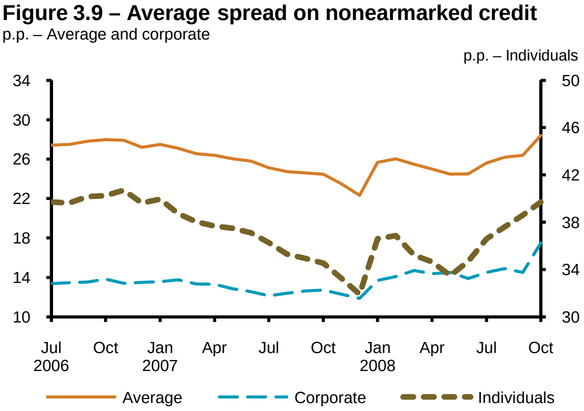
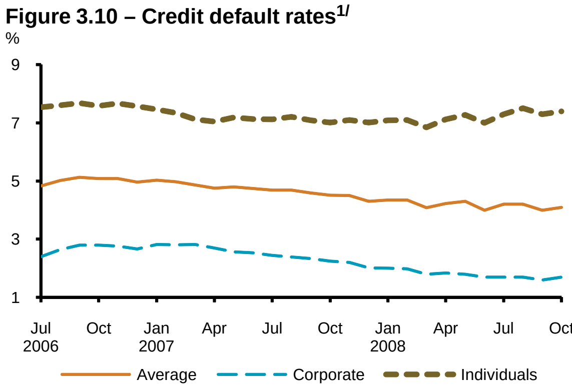



**Figure 3.10 – Credit default rates[1/]**




1/ Nonearmarked credit in arrears of more than ninety days.

The Central Bank, aiming to ensure an adequate flow of resources in the credit lines directed to export activities, carried out operations of foreign exchange swap and auctions of foreign currencies to promote the necessary liquidity to the banking system. Additionally, the CMN established criteria for loan granting in foreign currency by the Central Bank to banking institutions. Therefore, export and import financing operations were admitted as guaranties among others, with the Central Bank determining that resources obtained by the banks be used, totally or partially, to new external trade operations Besides, as an incentive measure to carry out loans with external resources, the Presidential Decree 6,613, in force since October 23, 2008, decreased from 0.38% to zero the rate of the Financial Operations Tax (IOF) which prevailed since last March levied on foreign exchange operations related to external funding to loans and financing.

Regarding the segment to individuals, the balance of loans granted in the personal credit modality reached R$125.7 billion in October, registering expansions of 5.8% in the quarter and 27.2% in twelve months, of which R$77.9 billion referring to payroll-deducted loans, whose representation in the mode decreased from 55.8% in July, to 55.3%.

Financing to vehicle acquisition summed up R$81.4 billion in October, dropping 3% in the quarter and increasing 4.4% in twelve months. The downturn in the credit channeled to the vehicle trade has been offset by the expansion of leasing operations to individuals, which registered respective increases of 13.6% and 116.3%, on the same basis of comparison, topping R$55.7 billions.

The average interest rate of reference credit operations closed at 42.9% p.y. in October, increasing 3.5 p.p. in the quarter, a result of expansions of 4.1 p.p., to 31.6% p.y. in the segment of corporate entities, and 3.4 p.p., to 54.8%, in that related to individuals. The expansion in the corporate segment led to the respective increases of 5.6 p.p. and 5.3 p.p. observed in the fixed rate and inflation-indexed charges At the same time, in the segment of individuals the most representative increases occurred in the overdraft cheque's segment, 8.1 p.p., and personal credit, 3.8 p.p.

The banking spread related to reference credit operations topped 28.4 p.p. in October. The quarterly growth of 2.8 p.p. is explained by a most conservative stance taken by financial institutions when grating credit, in a moment of strong wariness to risk.

**Figure 3.11 – Average term for credit operations – Calendar day**

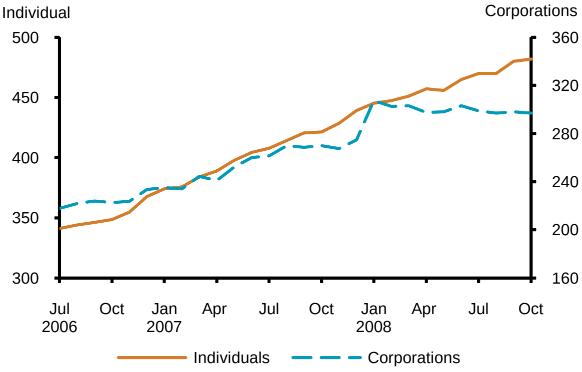



**Figure 3.12 – Monetary base and M1 – Average daily balances**

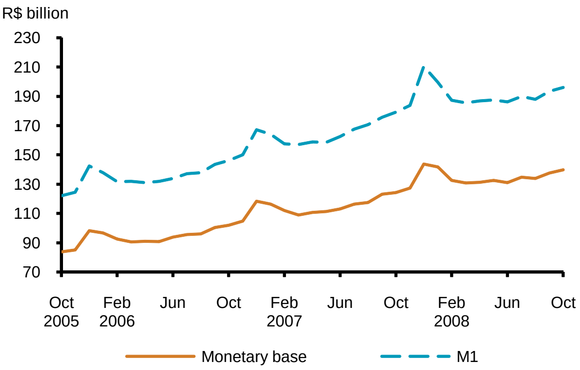
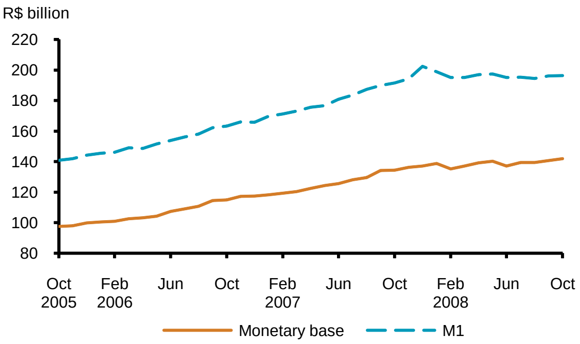



**Figure 3.13 – Monetary base and M1 at October 2008 prices seasonally adjusted[1/]**




1/ Deflated by: IPCA.

The default of the reference credit portfolio, considering arrears of over ninety days, reached 4.1% in October. The quarterly decrease of 0.1 p.p. translated identical evolution in the individuals segment, where the default reached 7.4%, while in the corporate segment remained stable at 1.7%.

The average term of loans concerning the reference credit modality posted stability in the quarter ended in October, as compared to the one ended in July, standing at 374 days. This result mirrored the increase of 12 days registered in the average term of the individuals' portfolio, which reached 482 days, highlighting growth of 24 days in the personal credit mode and the decrease of 12 days in the financing directed to vehicle purchase. On the other hand, the average term of operations with corporate entities fell 2 days, in the quarter.

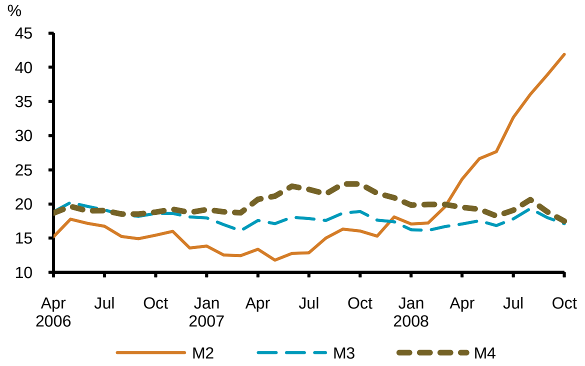
## 3.2 Monetary aggregate

The restricted money supply (M1), considering the average daily balance, reached R$196 billion in October, registering growth of 1.3% in the month and 9.3% in twelve months, on the annual comparison, the declining trend observed since June was maintained. The average balances of currency outside banks and of demand deposits grew 17.6% and 4.2%, respectively, in twelve months. Considering seasonally adjusted and deflated data, the M1 grew 0.5% in the quarter ended in October, compared to that ended in July, mirroring the monetary aggregate stable behavior throughout the second half of the year.

The monetary base average daily balance stood at R$139.8 billion in October, with an increase of 12.4% in twelve months, corresponding to expansions of 17.7% in the currency's average balance and of 1.2% in the banking reserves.

With reference to the sources of primary currency issue, the releases related to the additional requirements on deposits totaled R$23.6 billion, mirroring both the reduction, from 8% to 5%, as of October, of the rates levied upon demand and time deposits as to the increase from R$300 million to R$1 billion, of the share to be deducted over these refunds. Such releases, linked to net redemptions of R$35.2 billion of the National Treasury's securities, contributed to the expansion of R$3.7 billion of the monetary base in the quarter. In the opposite direction, the contractionist effects linked to the National Treasury's operations, to net sales of foreign currency by the Central Bank on the interbank market of foreign exchange, and to the adjustments in

**Figure 3.14 – Broad money supply 12-month growth**



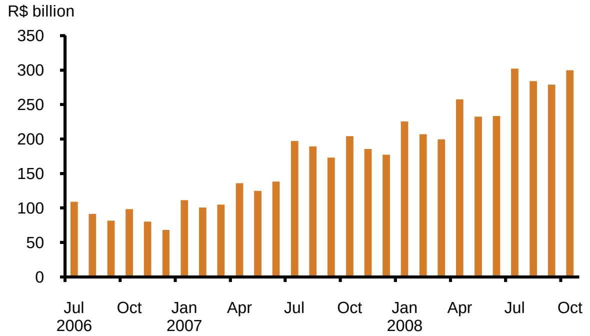

the operations with derivatives summed up, in that order, R$26 billion, R$16 billion, and R$12.2 billion.

Money supply in the M2 concept, which aggregates the savings deposits, deposits and securities issued by financial institutions to the M1, summed up R$1.02 trillion in October, increasing 13.2% in relation to July and 41.9% in twelve months.

The M3 concept aggregates the investment fund quotas and public federal securities backing up the net financing position in repo operations to M2. Its total closed at R$1.8 trillion in October, a4.2% increase compared to July, even considering the respective decreases of 11.7% and 4.6%, in the volume of committed operations and on investment fund quotas. The M4, which encompass the sum of M3 plus public securities of nonfinancial holders, totaled R$2.2 trillion in October, with expansions of 3.3% in the quarter and of 17.4% in twelve months.

## Federal public securities and Central Bank open market operations

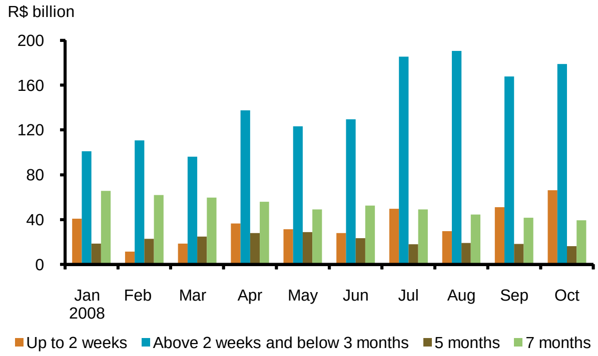
**Figure 3.15 – Net financing position of the federal public securities – Daily average**




Primary operations with federal securities carried by the National Treasury provided an expansionist impact of R$13.5 billion in the quarter ended in October, a result of placements of R$41.1 billion, maturities of R$51.1 billion and purchases and anticipated redemptions of R$3.5 billion. Swap operations reached R$9.3 billion.

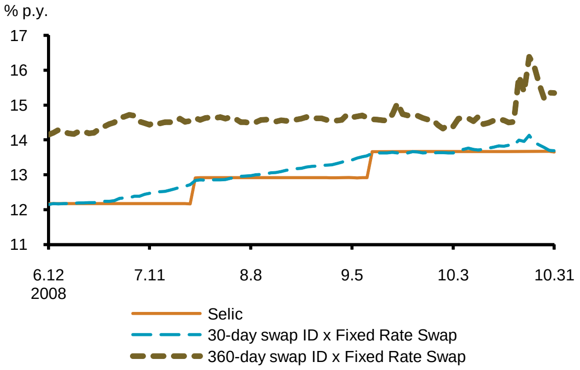
The average daily balance of the Central Bank's financing net position in the open market summed up R$299.7 billion in October, against R$302.1 billion in July.

**Figure 3.16 – Central Bank repo operations – Maturity – Aveage daily balances**




The Central Bank's financing and go-around operations, carried out with the aim of adjusting the financial system´s liquidity conditions, showed greater concentration, in October, of the participation of very-short term transfers, which totaled R$66.1 billion, against R$49.6 billion in July. On the other hand, cutbacks were registered in operations of two weeks to three months, from R$185.5 billion to R$178.8 billion; five months, from R$17.9 billion to R$16.2 billion; and seven months, from R$49.1 billion to R$39.3 billion.

**Figure 3.17 – Interest rate**




Source: BM&FBOVESPA

**Figure 3.18 – Ex-ante real interest rate – Deflated by 12-month IPCA expectations**

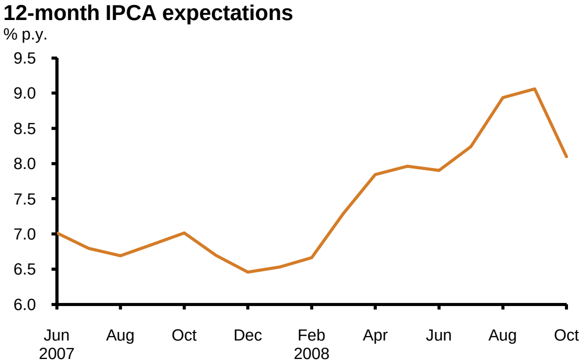
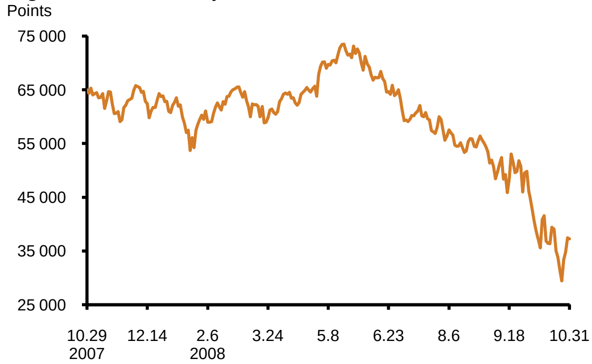
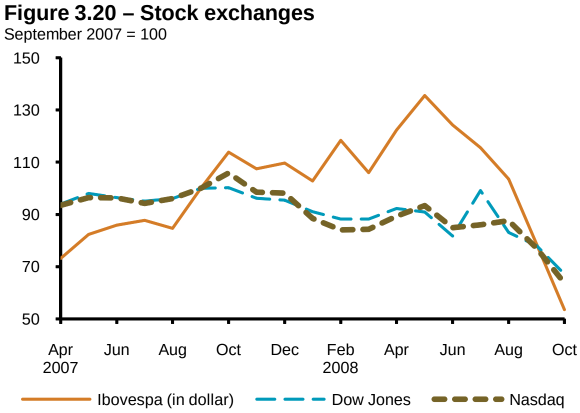



**Figure 3.19 – Ibovespa**




Source: BM&FBOVESPA

**Figure 3.20 – Stock exchanges**




## Real interest rates and market expectations

The future yield curve – ID x fixed-rate swap contracts showed, in the quarter ended in October, a upward trend in all the vertices, highlighting, in line with the increased uncertainty in the international financial markets, the movement in the vertices with terms higher than on year. The 360-day swap DI x pre suffered increase of 69 b.p. in the quarter, reaching 15.3% p.y up to the end of October, after reaching 16.5% p.y. in October 24, the highest rate since December 2005.

The real ex-ante Special System of Clearance and Custody (Selic) rate for the next twelve months, calculated based on survey by the Market Survey Report of October 31, carried out by the Central Bank, reached 8.1% p.y. as compared to 8.2%p.y.in July and 9.1% p.y., in late September. The monthly cutback translated the combination of effects of accommodation of expectations of the 12-month Selic rate, from 15.6% p.y. to 13.9% p.y., and the increased IPCA growth expectations, from 5.1% p.y. to 5.3% p.y.

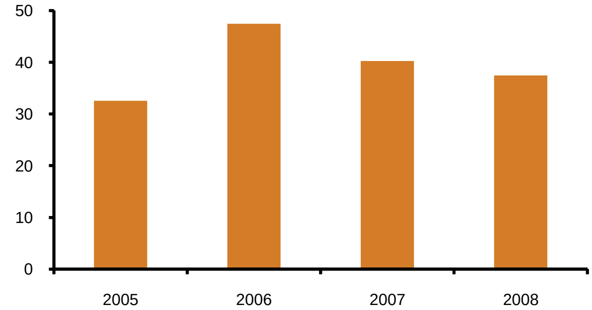
## Capital market

Following the tendency of the main stock markets of mature and emerging economies, the São Paulo Stock Exchange Index (Ibovespa), indicating greater investors wariness to risk, experienced sharp losses, in an environment of strong volatility, during the quarter ended in October. The Index fell 37.4% in the quarter, reaching 37.256 points in the period, while the market average value of the companies listed in the index declined 35.6%, standing at R$1.4 trillion, level of October 2006. The average daily volume transferred in the quarter showed cutback of 17.2% compared to the one registered in the quarter ended in July.

In dollar terms, the Ibovespa showed an even stronger cutback, 53.6%, evincing the process of foreign exchange depreciation observed in the period, while the Dow Jones and Nasdaq Indices fell, in the order, by 32.3% and 26%, the same level of 2003.

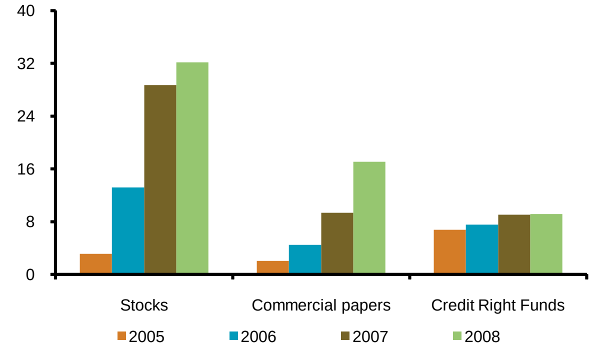
The companies' borrowings from the capital markets, through issues of securities, debentures, promissory notes and placement of crdit rights receivables reached R$95.8 billion in the early ten months of 2008. The primary issues of securities totaled R$32.1 billion, against R$28.7 billion, in the corresponding period of 2007. One should underscore the growth of 83% in promissory notes issue, which topped R$17 billion in 2008.

**Figure 3.21 – Debenture primary issues in the capital market**
R$ billion – Accumulated through October



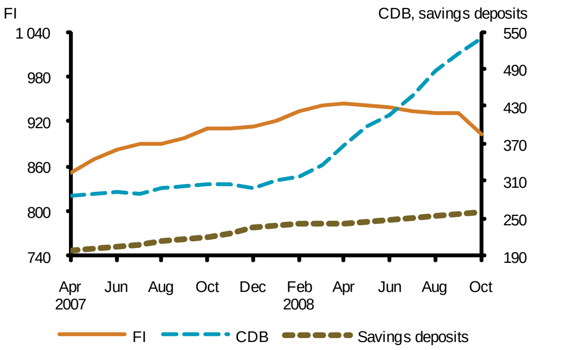

Source: CVM

**Figure 3.22 – Primary issues in the capital market**
R$ billion – Accumulated through October



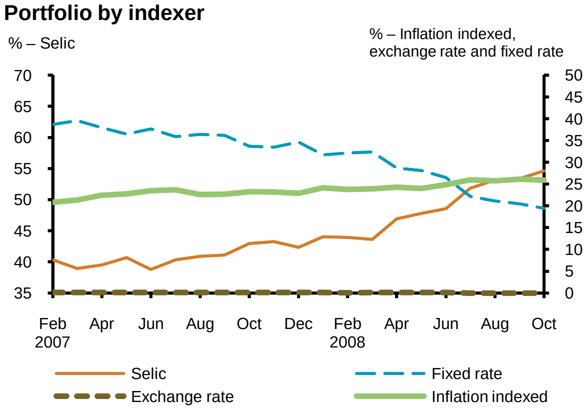

Source: CVM

**Figure 3.23 – CDB, FI[1/] and savings deposits**
R$ billion




1/ Excludes investment funds in stocks and in external debt.

**Figure 3.24 – Public securities in investment funds – Portfolio by indexer**




## Financial investments

Investment funds, time deposits and saving accounts totaled R$1.7 trillion in the period ended in October, registering growths of 1% in the quarter and 12.5% in twelve months.

The investment funds' net worth, considering foreign exchange, short-term, fixed income, multimarket and referenced funds, grew by 2.5% in the quarter ended in October, standing at R$974.8 billion, in line with the occurrence of net withdrawals of R$45 billion. One should highlight that among the mentioned modalities, only the referenced funds, registered a positive net inflow, R$713.9 million. The extramarket investment funds' net worth, which manages resources belonging to the indirect federal administration entities, reached R$32.9 billion, registering quarterly net inflows of R$2.2 billion.

The variable-income funds, mirroring the Ibovespa performance, totaled R$119 billion up to the end of October, showing decreases of 25.5% in the quarter and 18.4% in twelve months.

The savings accounts' balance grew by 3.2% in the quarter ended in October, standing at R$259 billion, registering net inflows of R$3 billion. Time deposits reached R$540.1 billion, showing increases of 21.1% in the quarter and 76.4% in twelve months.

# 3.3 Fiscal policy

The National Congress approved, in October, Law 11,793, which authorizes the Federal Government to transfer R$3.3 billion to states and municipalities, in the 2008 fiscal year, aiming at promoting exports. With this measure, transfers, as forecasted by the Complementary Law no115 dated December 26, 2002, should reach R$4.6 billion up to the end of the fiscal year, against R$3.9 billion observed in 2007.

Performing in the sense of promoting greater market liquidity, the publishing of Provisional Measure 447, in November, expanded in 10 days the term for the collection of the Industrialized Products Tax (IPI), of the Income Tax Withholdings (IRRF) and of the pension paid by the companies, and, in five days, the term for the collection of the Social Integration Program (PIS) and of the Contribution to Social Security Financing (Cofins). One should note that these procedures should be observed in relation to

# Central Bank Measures Aimed at Expanding Liquidity in National Currency

Restrictive liquidity conditions on international financial markets coupled with obstruction of the credit flows used by national banks to grant advances on exports have provoked interbank market contraction.

With the aim of ensuring adequate liquidity conditions in the system, the Central Bank adopted measures targeted at generating liquidity in foreign currency (see box International Financial Crisis – Brazilian Government Measures to Strengthen Liquidity in Foreign Currency, page 98) and in national currency. These measures are summarized in Table 1 of this box. The principal initiatives taken to provide national currency liquidity took the form of alterations in the rules governing reserve requirements maintained at the Central Bank by financial institutions. These rules are considered a traditional monetary policy instrument and play a fundamental role in stabilizing short-term liquidity in the economy.

Reserve requirements are calculated by applying rates to the principal deposit modalities: demand deposits, savings deposits and time deposits and, as of January 2008, to interbank deposits contracted with leasing companies. These resources, which also encompass additional reserves on demand resources, time deposits and savings deposits are deposited in cash or maintained in the form of federal public bonds in the Special System of Settlement and Custody (Selic). The Brazilian model divides reserve requirements maintained at the Central Bank into those bearing earnings and those that do not bear earnings, thus making it possible to adjust liquidity through alterations in the opportunity costs of financial institutions.

The recent alterations introduced by the Central Bank and National Monetary Council (CMN) consisted of reductions in rates, increases in the amounts to be deducted from callable reserves, changes in earnings on reserve requirements, together with discounts on amounts to be deposited as an incentive to negotiation of assets among financial institutions. Viewed as a whole, these alterations resulted in effective release of R$93.9 billion out of the total balance of these deposits in the period extending from September 24 to December 2.

The first alteration in that period occurred on September 24 with issue of Circular n. 3,405. This instrument postponed the schedule for raising reserve requirement rates on interbank deposits contracted with leasing companies. Circular n. 3,412, dated October 13, permitted deduction of the amounts of foreign currency acquisitions with Central Bank buyback commitments from callable reserves on interbank deposits. This measure resulted in release of as much as R$18.6 billion into the banking system, as of the date of its publication. Of this amount, R$8 billion were released by December 2.

Circular n. 3,405 also raised the value to be deducted from additional reserves on demand deposits, time resources and savings deposits from R$100 million to R$300 million, resulting in additional releases of R$5.3 billion as of September 29. The deduction limit was raised once again, this time to R$1 billion by Circular n. 3,410, dated October 13, resulting in injection of approximately R$8.1 billion. With issue of Circular n. 3419 on November 13, as of December 1 deposits related to additional requirements were no longer made in cash with earnings at the Selic rate, but rather by setting aside federal public bonds in Selic.

Acquisitions of the assets of small and medium financial institutions were stimulated by the provision in Circular n. 3,407, dated October 2, later altered by Circulars n. 3,411, dated October 13, and 3,414, dated October 15, which allowed institutions that acquire assets from banks with base capital of up to R$7 billion, to deduct the value of acquisitions of credit operations, bonds and fixed yield securities from investment fund portfolios, credit rights originating in leasing operations or FIDC quotas from Credit Rights Investment Fund (FIDC) portfolios and investments in interbank deposits guarantied by credit and leasing operations or fixed yield securities, up to a limit of 70% of reserve requirements on time resources. This measure made it possible to release an amount of up to R$29.5 billion in reserve requirements to financial institutions. The incentive to interbank acquisitions of financial assets was further reinforced by Circular n. 3,417, dated October 30, which included interbank deposits of institutions not related one to another among the assets apt for deduction and determined that 70% of deposits related to time resources must be maintained in cash without earnings – up to that time, compliance was limited exclusively to bonds. The new rule on the composition of these requirements went into effect on November 14. Circular n. 3,421, dated November 25, excluded BNDES from the base capital limitation, allowing banks to deduct acquisitions and investments with that institution from reserve requirements on time resources. In effective terms, the release of resources resulting from interbank acquisitions of assets totaled R$27.1 billion through December 2.

Reserve requirements on time resources were also altered by Circulars n. 3,408, dated October 8, and n. 3,410, dated October 13, which raised the value to be deducted from these requirements in two stages from R$300 million to R$2 billion. The resulting release added up to R$18.6 billion.

The rate on demand resources was cut from 45% to 42% by Circular n. 3,413, dated October 14, resulting in release of R$3.6 billion as of the 29th day of that month. Aside from this, Circular n. 3,416, dated October 24, determined that the value of voluntary anticipated payments to the Credit Guaranty Fund (FGC) could be deducted from reserve requirements, in an amount corresponding to 60 times the value of the ordinary contribution for the month of August 2008. These voluntary anticipations added up to R$5.4 billion.

Compulsory reserve on savings deposits in the framework of the SBPE remained subject to the 20% rate. Parallel to this, Resolution n. 3,625, dated October 30, reduced the rate on rural savings to 15%, representing an additional release of resources totaling approximately R$2.6 billion as of November 10.

Aside from alterations in the reserve requirement rules, measures were adopted with the aim of channeling credit to specific sectors of economic activity. In this context, targeting of demand deposit and rural savings resources to farm credits was increased from approximately 25% to 30%, by Resolution n. 3,623, dated October 14, and from 65% to 70%, by Resolution n. 3,625, dated October 30. In both cases, the alterations will remain in effect from November 2008 to June 2009.

In another initiative aimed at expanding banking system access to liquidity, Resolution n. 3,622, dated October 9, defined criteria and special conditions for Central Bank evaluation and acceptance of assets in discount window operations in national currency. These operations can be carried out in the form of asset sales with buyback commitments by the financial institutions.

**Table 1 –Timetable of Alterations**

| Norms | Assets | Adjustment (as of) | Alteration |
|---|---|---|---|
| Circular n. 3,413, 10.14.2008 | Demand deposits | 10.29.2008 | Lowers the rate from 45% to 42%. |
| Circular n. 3,416, 10.24.2008 | | 10.24.2008 | Deducts the voluntarily anticipated instalments of the ordinary contribution to the FGC. |
| Resolution n.3,623, 10.14.2008 | | 10.14.2008 | Increases the rural credit channeling from 25% to 30%. |
| Circular n. 3,407, 10.2.2008 | Time deposits | 10.10.2008 | Deducts from the payment on time resources in purchases of credit portfolios from financial institutions. |
| Circular n.3,408, 10.8.2008 | | 10.10.2008 | Raises the instalment to be deducted from payments on time resources from R$300 million to R$700 million. |
| Circular n. 3,410, 10.13.2008 | | 10.17.2008 | Raises from R$700 million to R$2 billion the value of the instalment to be deducted from payments on time resources. |
| Circular n. 3,411,10.13.2008 | | 10.17.2008 | Alters Circular n.3,407 (assets and eligible institutions). |
| Circular n. 3,414,10.15.2008 | | 10.15.2008 | Alters Circular n. 3,407 (included interbank deposits, advances and other credits among eligible assets.) |
| Circular n. 3,417, 10.30.2008 | | 11.14.2008 | Compliance with the requirements for payments shall be 30% in federal public securities and 70% in cash. |
| Circular n. 3,421, 11.25.2008 | | 11.25.2008 | Alteration of Circular n. 3,407 (BNDES assets included among those eligible) |
| Circular n. 3,405, 9.24.2008 | Additional requirements | 9.29.2008 | Raises the instalment to be deducted from payments of additional requirements from R$100 million to R$300 million. |
| Circular n. 3,408, de 10.8.2008 | | 10.13.2008 | Lowers the rate of the additional requirement on demand and time resources from 8% to 5%. |
| Circular n. 3,410, 10.13.2008 | | 10.13.2008 | Increase from R$300 million to R$1 billion in the amount to be deducted from payments referring to additional claims. |
| Circular n. 3,419, 11.13.2008 and Resolution n. 3,634, | | 12.1.2008 | Complying with the additional requirements shall be in federal public securities. |
| Circular n. 3,405, 9.24.2008 | Interbank deposits | 1.16.2009 and 3.13.2009 | Alters the timetable for a gradual rate increase. |
| Circular n. 3,412, 10.13.2008 | | 10.13.2008 | Allows to reduce the amount of foreign currency acquisition with resale commitment from payments. |
| Resolution n. 3,625, 30.10.2008 | Rural savings | 11.10.2008 | Raises the channeling of resources to the rural credit from 65% to 70% and reduces the rate of payments from 20% to 15%. |

**Figure 3.25 – Net inflow – Savings deposits and time deposits**

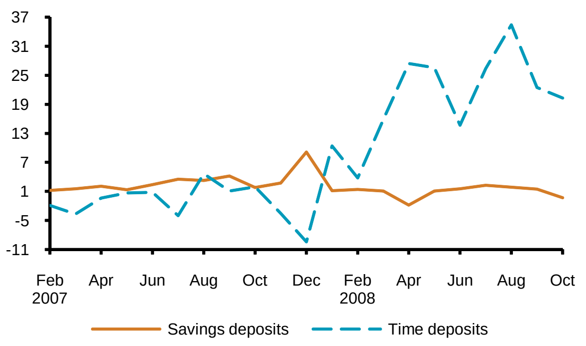
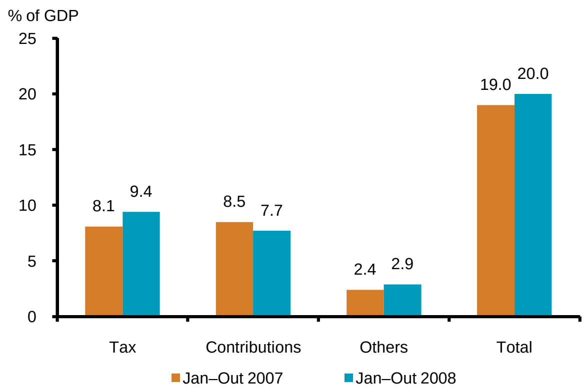



**Table 3.5 – Public sector borrowing requirements – Primary result – January-October**

| Segment | 2006 | | 2007 | | 2008 | |
|---|---|---|---|---|---|---|
| | R$ billion | % GDP | R$ billion | % GDP | R$ billion | % GDP |
| Central Government | -57.2 | -3.0 | -63.3 | -3.0 | -95.3 | -4.0 |
| Sub-national governments | -19.2 | -1.0 | -28.6 | -1.4 | -29.0 | -1.2 |
| State companies | -14.6 | -0.8 | -14.6 | -0.7 | -8.6 | -0.4 |
| Total | -91.0 | -4.8 | -106.6 | -5.1 | -132.9 | -5.6 |

**Figure 3.26 – National Treasury gross revenue**




the underlying facts occurred since November 1, and that these must not impact the estimations of federal revenue collections in the year.

Aiming at adjusting the Federal government's budget proposal for 2009, submitted to the National Congress in August, to the new environment experienced by the world economy, the government reduced the budget revenue estimate by R$15 billion. Evincing the reduction forecasted for expenditures, without jeopardizing social expenditures or investments estimated on the PAC, the target for the primary surplus remained at the level previously defined.

## Public sector borrowing requirements

The consolidated public sector's primary surplus totaled R$132.9 billion in the ten early months of the year, increasing 0.54 p.p. of GDP as compared to the corresponding period of 2007. This evolution mirrored the growth of 1.01 p.p. in the Central Government's result, while the regional governments and state owned companies' surpluses showed respective cutbacks of 0.14 p.p. and 0.33 p.p., in the period.

The improvement in the Central Government's result mirrored the growth of the federal government's surplus and the reduction of the Social Security's deficit, having contributed, in both cases, to the higher increase in revenues as compared to expenditures, in line with the economy's favorable performance in the period.

The Central Government's revenues, excluding the transfers to states and municipalities, grew by 17.6% in relation to the first ten months of 2007, while the expenditures increased 11%.

The National Treasury's revenues increased 19.1%, to R$463.7 billion, standing 0.7 p.p. of the GDP above the level from January to October in the previous year. This evolution was connected to both positive impacts related to the upturn in activity shown by the economy in the period, and to the administrative measures carried out by the Secretariat of the Federal Revenue and by the General Attorney of the National Treasury aiming at the recovery of defaulting debts, which enabled a 26% growth in the collection of penalties and interests.

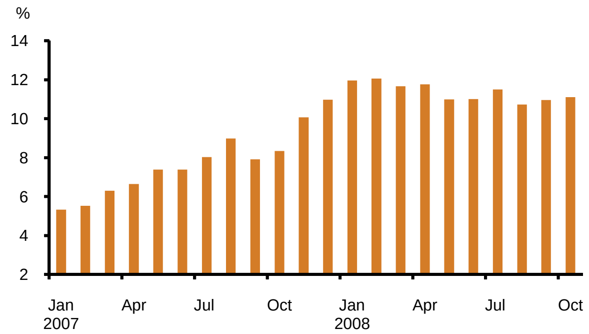
The collection of the Corporate Income Tax (IRPJ) increased 30.2% and that linked to Cofins, 20.2%, results consistent with the higher earnings evidenced by companies, especially in the sectors of financial services, fuels, automotive vehicle manufacturing, wholesale trade, metallurgy and the construction industry.

Confirming the repercussions of the improvements' in the labor market on the growth of overall wages, the difference of generating facts between the months of January 2008 and 2007, the increase in the volume of resources distributed as equity ownership on profits and business results, linked, especially, to greater earnings of the financial sector's companies, the IRRF inflow grew 20.2% in the period.

The industry's favorable performance in the sectors of vehicles, metallurgy and non-metallic minerals contributed so that the growth of IPI collection to reach 20.6%, evolution impelled, still, by the growth of the tax share linked to imports, in line with the growth trajectory of external purchases and with growth of 0.03% in the tax effective average rate.

The 164.6% growth in the IOF, in the initial ten months of 2008, mirrored both the increase on its rate, registered in the beginning of the year, and the upturn in credit operations and judicial deposits' atypical collection related to previous periods.

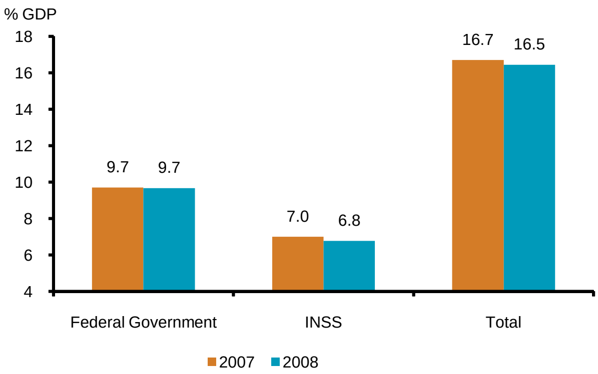
**Figure 3.27 – 12-month real growth rate of Treasury revenues[1/]**




1/ Updated by IPCA.

The other National Treasury revenues expanded 39.4% in the period, with emphasis on those related to granting, 312%, boosted by the collection related to the bid of exploratory blocks of petroleum and natural gas, and of licenses for exploration of the third generation band of cellular phone service companies, both without correspondence in the equivalent period of 2007; to the dividends paid debt by state-owned companies, 94.9%; and to the participation-quota from financial clearances, 51.8%, in view of the increase in the international petroleum.

**Figure 3.28 – Central Government expenditures**




The real twelve-month growth of the National Treasury total revenues continued robust in October, though at a level lower than the one registered, on the same basis of comparison, in the first months of the year. This trajectory, taking into account the accentuated correlation among the levels of the revenue and of the domestic economic activity, will be impacted, in the following months, by the effects of the financial crisis on the real sector of the Brazilian economy.

The Central Government's expenditures totaled R$392.1 billion in the first ten months of 2008, dropping 0.26 p.p. of GDP in relation to the corresponding period of 2007, the first cutback registered on this basis of comparison

**Table 3.6 – National Treasury Expenditures**
January-October

| Itemization | 2007 | | 2008 | |
|---|---|---|---|---|
| | R$ million | % GDP | R$ million | % GDP |
| Total | 289 018 | 20.0 | 333 995 | 20.5 |
| Transfers to states and municipalities | 84 588 | 5.8 | 104 298 | 6.4 |
| Personnel and payroll charges | 93 107 | 6.4 | 102 513 | 6.3 |
| Capital and current expenditures | 110 997 | 7.7 | 126 393 | 7.8 |
| Workers Support Fund | 15 084 | 1.0 | 17 737 | 1.1 |
| Subsidies and economic subventions | 5 948 | 0.4 | 3 977 | 0.2 |
| Loas/RMV | 11 183 | 0.8 | 13 266 | 0.8 |
| Investment | 14 249 | 1.0 | 20 032 | 1.2 |
| Other capital expenditures | 64 533 | 4.5 | 71 383 | 4.4 |
| National Treasury transfers to the Central Bank | 326 | 0.0 | 791 | 0.0 |

Source: Minifaz/STN

**Figure 3.29 – Federal Government: investment expenditures paid**

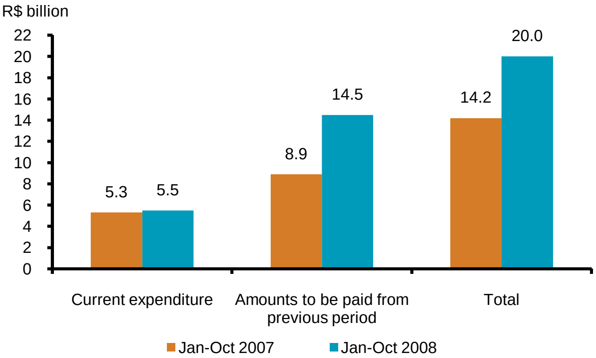
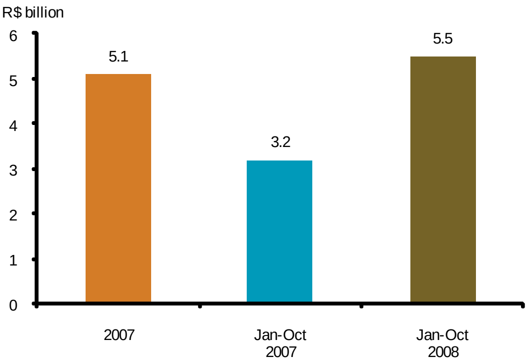



**Figure 3.30 – Basic Investment Plan (PPI) expenditures**




since 2003. This result translated decreases of 0.03 p.p. of GDP in the National Treasury's expenditures and of 0.23 p.p. of GDP in Social Security's expenditures, while the ones related to the Central Bank showed stability.

The cutback in the National Treasury expenditures was linked to the decrease of 0.1 p.p. of GDP, in the expenditures with personnel and social charges.

On the other hand, expenditures with current expenditures and capital increased 0.06 p.p. of GDP in the first ten months of the year. The expenditures related to the Worker Support Fund (FAT), which include wage bonus and unemployment insurance, and the ones related to the Social Assistance Law (Loas) and to the Lifetime Monthly Income (RMV) increased, in the period, in line with the increases to the minimum wage and in the number of beneficiaries assisted.

Expenditures with subsidies and grants decreased in 0.11 p.p. of GDP, result of the increase in net returns in the context of the National Development Fund (FND) and of the expenditures reduction with the programs of Farming Current Expenditures, Federal Government Acquisitions (AGF) and Price Support.

The other current and capital expenditures increased 0.11 p.p. of GDP, impelled by the growth of 40.6% of the Federal Government's total investments, with emphasis on the 73.9% increase in investments included in the Pilot Investment Project (PPI), eligible for deduction from the primary surplus target.

The Social Security's primary deficit decreased 0.41 p.p. of GDP in relation to the first ten months of 2007, result of the growth of 0.18 p.p. of GDP in the net collection, impelled by the growth in overall wages in the period, and a cutback of 0.23 p.p. of GDP on paid benefits.

The average value of the paid security benefits grew by 7%, an evolution compatible both with the minimum wage increases and of payments higher than the minimum wage value, and with growth of 2.6% in the monthly average amount of benefits, resulting in growth of 3.9% in retirements and cutback of 9.1% in the number of benefits granted.

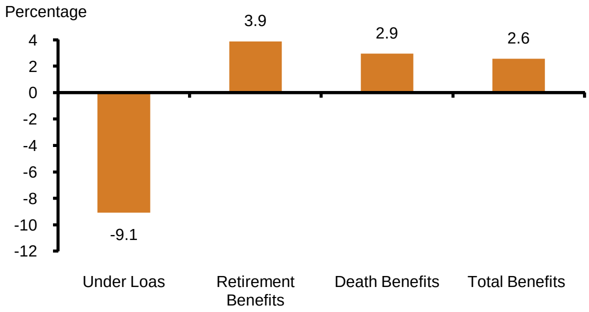
The total transfers to regional governments increased 23.3% in the first ten months of 2008, in relation to the corresponding period of the previous year, an evolution consistent with the increases registered in collections related to the Income Tax and to the IPI, taxes which form the basis of the states and municipalities revenue sharing fund, and

**Table 3.7 – Social security primary result**
January-October

R$ billion

| Itemization | 2007 | 2008 | Var. % |
|---|---|---|---|
| Gross inflow | 120.5 | 141.3 | 17.3 |
| Cash refunds | -0.4 | -0.4 | 0.0 |
| Transfers to third parties | -11.3 | -14.1 | 24.8 |
| Net inflow | 108.8 | 126.8 | 17.2 |
| Social Security benefits | 147.3 | 160.5 | 9.0 |
| Primary result | -38.5 | -33.7 | -12.5 |
| Net inflow/GDP | 5.17% | 5.35% | |
| Social Security benefits/GDP | 7.00% | 6.77% | |
| Primary result/GDP | -1.83% | -1.42% | |

**Figure 3.31 – Growth in the number of benefits issued by Social Security (Jan-Oct 2008 average/Jan-Oct 2007 average)**




Source: STN

**Figure 3.32 – Transfers to states and municipalities**

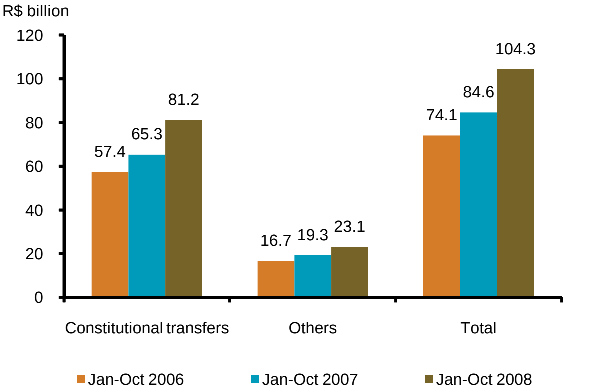
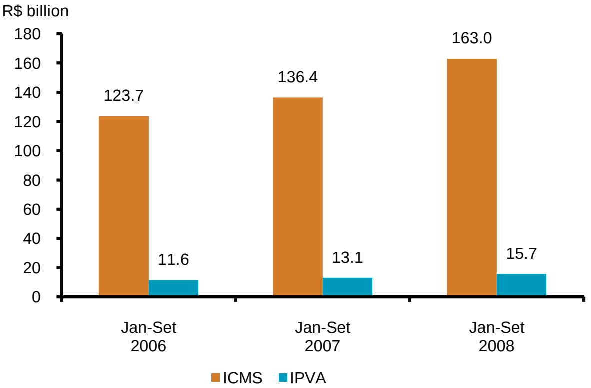



**Figure 3.33 – ICMS and IPVA inflow**




in the international prices of petroleum, with growth in the volume of royalties and of special participation by the petroleum and natural gas exploitation.

The collection of Tax on the Circulation of Merchandise and Services (ICMS), tax collected by the state and shared with municipalities, grew by 19.5% in the first nine months of the year, in relation to the corresponding period of 2007, while the ones related to the Tax on Ownership of Automotive Vehicles (IPVA), state tax also shared with governments municipalities, grew 20.1%.

The growth in regional revenues, in view of increases of the directly collected tax and of the federal government's transfers, did not prevent the ratio between the subnational government's primary surplus and the GDP from decreasing in the initial ten months of 2008, compared to the same period of 2007, suggesting significant growth in expenditures in the year. One should highlight that the subnational government's surplus level accumulated in twelve months continues compatible with the average in recent years, at the same time that their net debt, expressed as a percentage of the GDP, remains on a downward trend, evincing the favorable impact of the debts refinancing agreements negotiated between the subnational governments and the Federal government at the end of the last decade, linking regional revenues' share to the payment of debts.

The state-owned companies surplus, particularly reflecting the result in the federal level, dropped 0.33 p.p. of GDP in the early ten months of the year when compared to the same period in 2007. This reduction involved mostly the rise in investment expenditures, in accordance to PAC guidelines.

The appropriation of nominal interests on an accrual basis totaled R$134.7 billion in the first ten months of the year, 5.68% of GDP, fell 0.75 p.p. in relation to the same period of 2007, a cutback linked to the reversal of the result of the exchange swap operations, which moved from a financial loss of R$8.9 billion, to a gain of R$6.3 billion, in the period.

The public sector's nominal debt, evincing the primary surplus growth and the lower interest appropriation, decreased from R$28.7 billion, 1.36% of the GDP, in the first ten months of 2007, to R$1.8 billion, 0.08% of the GDP, in the corresponding period of 2008, the best result of the series initiated in 1991. This nominal debt was financed with expansion of the securities debt, partially offset by net reductions of the banking debt, of external financing, and of other domestic financing sources, which include the monetary base.

**Figure 3.34 – Regional governments: Cumulative 12-month primary surplus and net debt**

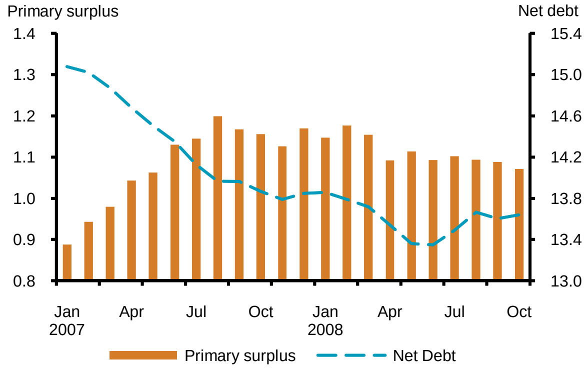
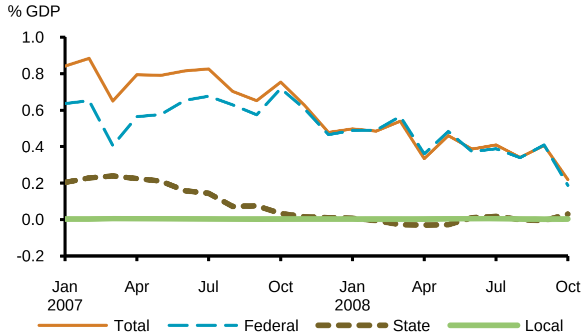



**Figure 3.35 – Primary surplus of public enterprises**
12-month cumulative data




(+) Surplus (-) Deficit

**Figure 3.36 – Nominal interest**

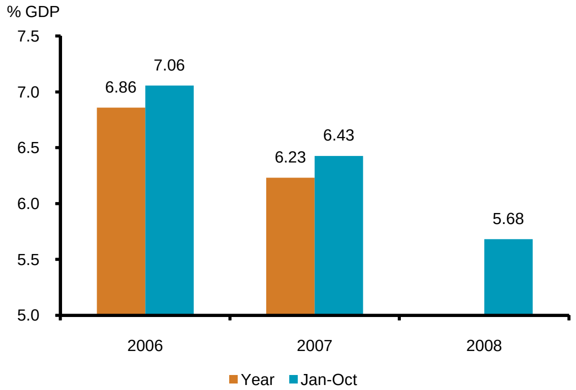
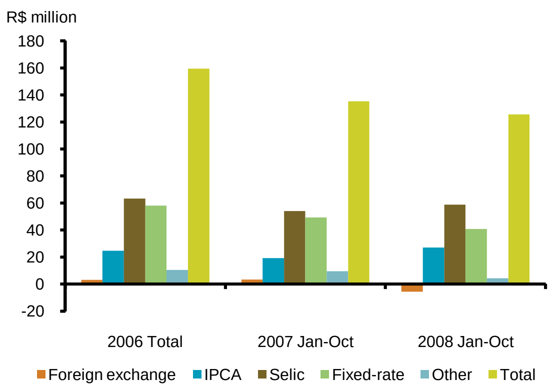



**Figure 3.37 – Nominal interest by indexing factor**




## Federal securities debt

The federal securities debt, assessed by the portfolio position, totaled 41.3% of GDP in October, registering an increase of 0.1 p.p. in relation to July and decreasing 4.2 p.p. of GDP as compared to December 2007. The quarterly growth mirrored contractive impacts related to the occurrence of net redemptions carried out in the primary market and the expansionist effects related to the foreign exchange decline of 35% and to the nominal interest incorporation, of the order of R$38.4 billion, observed in the quarter.

The participation of foreign exchange, price indices and fixed-rate securities in the overall federal securities debt, grew from 0.6%, 23.6% and 24.7%, in July, in the same order, to 0.8% 23.9% and 25.3%, in October. The participation of securities linked to the over/Selic rate and to the reference rate dropped from 29.5% and 1.6%, respectively, to 29.2% and 1.2%. The resources borrowed by the Central Bank through open market operations decreased by 0.4 p.p., reaching 19.5%.

The Annual Financing Plan (PAF) 2008, aiming to minimize the funding costs of the long-term federal public debt and ensure prudent risk levels, had initially defined, as the target for the year, the maintenance of the fixed-rate securities participation between 35% and 40% of the debt's total composition, and that of the securities indexed to the over/Selic rate, between 25% and 30%. Later, in line with the worsening international financial crisis, these floating lines were respectively modified, to 29% to 32%, and 31% to 34%. In October, these participations reached, in the order, 25.3% and 29.2%, lower, however, than the newly established parameters.

Repo operations carried out in the open market, which represented short-term financing, reached R$321.7 billion in October, against R$323.5 billion in July, evincing net purchases of R$11.5 billion and interest incorporations of R$9.7 billion.

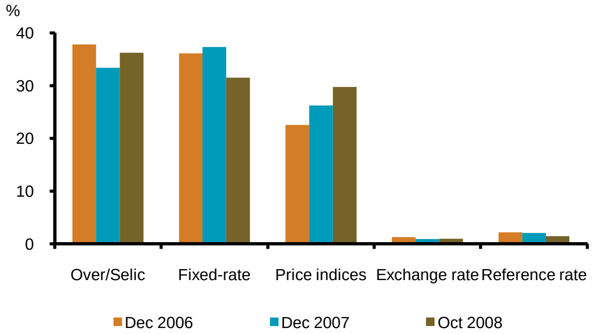
The amortization schedule of the securities debt in the market, except financing operations, registered, in October, 2.4% of the maturities in 2008; 23.8% in 2009; and 73.8% since January 2010, evincing expansion of the debt's maturity term which, in the same period of 2007, showed respective maturities of 2.7%, 27.3% and 70%.

The securities debt structure, in October, indicates that 22.9% of the securities showed maturation in up to 12 months,

**Table 3.8 – Public sector borrowing requirements – January-October**

| Itemization | 2007 | | 2008 | |
|---|---|---|---|---|
| | R$ billion | % GDP | R$ billion | % GDP |
| Uses | 28.7 | 1.4 | 1.8 | 0.1 |
| Primary | -106.6 | -5.1 | -132.9 | -5.6 |
| Interest | 135.2 | 6.4 | 134.7 | 5.7 |
| Sources | 28.7 | 1.4 | 1.8 | 0.1 |
| Domestic financing | 221.4 | 10.5 | 56.9 | 2.4 |
| Securities financing | 238.7 | 11.3 | 132.4 | 5.6 |
| Bank financing | -22.0 | -1.0 | -63.7 | -2.7 |
| Others | 4.8 | 0.2 | -11.8 | -0.5 |
| External financing | -192.7 | -9.2 | -55.1 | -2.3 |

**Figure 3.38 – Federal securities debt structure by indexing factor[1/]**




1/ It does not include swap.

**Table 3.9 – Repo operations – Open market**
Balances and percentage share

R$ million

| Period | | Up to 1 month | | More than 1 month | | Total |
|---|---|---|---|---|---|---|
| | | Balance | % | Balance | % | Balance |
| 2003 | Dec | 43 742 | 78.5 | 11 975 | 21.5 | 55 717 |
| 2004 | Dec | 7 797 | 16.5 | 39 410 | 83.5 | 47 207 |
| 2005 | Dec | -24 430 | -106.9 | 47 286 | 206.9 | 22 856 |
| 2006 | Dec | 5 800 | 9.7 | 54 231 | 90.3 | 60 030 |
| 2007 | Mar | 41 656 | 39.3 | 64 281 | 60.7 | 105 937 |
| | Jun | 10 198 | 7.5 | 126 562 | 92.5 | 136 760 |
| | Sep | 7 561 | 4.3 | 168 525 | 95.7 | 176 086 |
| | Dec | -1 460 | -0.9 | 167 274 | 100.9 | 165 813 |
| 2008 | Mar | 37 349 | 18.2 | 167 643 | 81.8 | 204 991 |
| | Jun | 42 818 | 18.4 | 190 311 | 81.6 | 233 129 |
| | Sep | 87 261 | 30.9 | 195 107 | 69.1 | 282 368 |
| | Oct | 109 571 | 36.8 | 188 156 | 63.2 | 297 727 |

while the average term of the debt's maturation stood at 40.2 months, against respective limits of 27% and 42 months established in the PAF 2008.

The foreign exchange swap operations reached R$4.1 billion positive, in October, comparatively to R$40 billion negative, in the previous month, an evolution consistent with the Central Bank performance on the significant corporate demand for foreign exchange hedge in the period.

In the quarter, considering the cash basis, the result of the exchange swap operations, defined as the difference between the Interbank Deposits' (DI) profitability and the exchange variation plus coupon, was favorable to the Central Bank by R$12.2 billion. The result accumulated since 2002, when these operations began, is favorable to the Central Bank by R$5.5 billion.

## Gross and net debt

The PSND totaled R$1,088.6 billion in October, 36.6% of GDP, decreased in 6 p.p. of GDP in relation to December 2007. By segments, the net debts of the Central Government, regional governments and state owned companies registered respective reductions of 5.3 p.p., 0.2 p.p. and 0.5 p.p. of GDP, in the period. The primary surplus forecasted for the year and the appropriated interest performance, which continued decreasing when compared to GDP, indicated a new reduction in the ratio PSND/GDP up to the end of 2008, representing the fifth consecutive positive result in the year.

The behavior of the ratio PSND/GDP in 2008 translated the effects of the primary surplus, of valuated GDP growth and of adjustments derived from the exchange depreciation of 19.4% registered in the period. In that case, the positive impacts proved to be more intense than that provided by the incorporation of appropriated nominal interests. One should highlight that the exchange decrease registered in the ten first months of the year responded for 2.1 p.p. of the fall experienced by the PSND/GDP ratio, in the period.

The PSND composition in the year mirrored, especially, the growth in net issues of securities indexed to the IPCA and to the Selic rate, which started to represent, in the order 26.2% and 64.6% of the debt, against, 20.4% and 48.7% up to the end of 2007. The participation of fixed-rate securities dropped from 40.6% to 35.5%, in the same period, evincing the deterioration of inflationary expectations.

Figure 3.39 – Profile of maturities of the securities debt

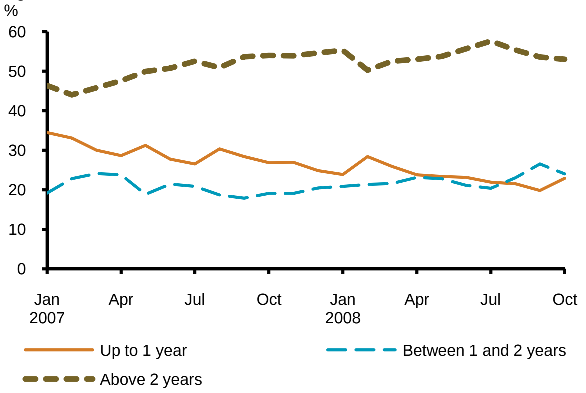



Figure 3.40 – Swap and open market position

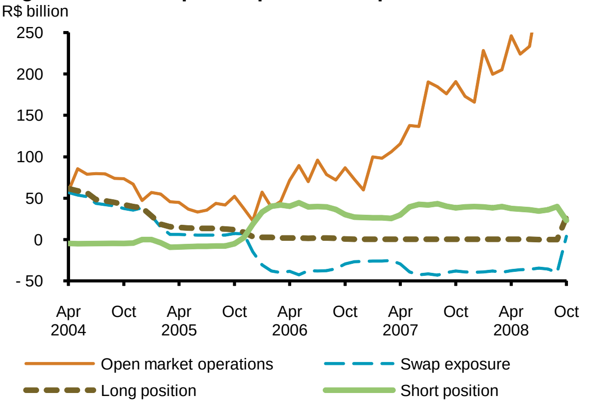
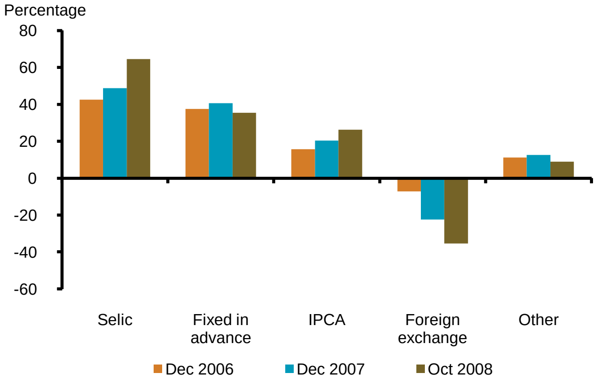



Figure 3.41 – NPSD – Percentage share of indexator




The General Government Gross Debt (GGGD), which includes the federal government, the National Social Security Institute and the regional governments, also showed reduction in 2008, when expressed as a percentage of GDP. The decline, from 57.2% to 56.7%, in the year, mirrored the overall impact of net redemptions carried out in the period and of the valued GDP growth effect, which surpassed the effect related to the nominal interest incorporation and to the adjustment due to exchange depreciation. Upon levying upon the gross indebtedness, the exchange depreciation contributed to an increase in the debt stock, resulting in an opposite effect in relation to that observed in the PSND. In that case, the exchange-indexed component of the debt is a creditor one.

## 3.4 Conclusion

The aggravation of the crisis in the international financial markets caused a sharp liquidity contraction on a global scale, reflected in restrictions to external credit lines access by banks and national companies, as well as in reduced operations in the domestic interbank market in an environment of growing risk aversion. In this scenario, the Central Bank adopted measures aimed at promoting liquidity in foreign currency, at the same time it carried out alterations in the rules governingreserve requirements, even including incentives to asset negotiations among financial institutions.

In this context, the expansionary trajectory of credit, although still at a high level, started to show a downward trend, with emphasis on the deceleration registered in operations with individuals related to the credit modalities of payroll-deducted loans and vehicle financing, which had been registering more significant expansion in recent years. One should note that the cooling off effect in these operations mirrors, on the supply side, greater selectivity in grants.

On the demand side, conditioned by the increased interest rates and shortening of terms, one must also include the impact of reduced consumers' optimism over their decision about an income commitment. In the corporate segment, credit operations while disclosing an increased demand for resources with the banking system, still maintained a robust growth, in line with the evolution of the economic activity level.

Growth in the activity level had a positive result on the federal and regional governments' tax inflow, permitting the primary surplus accumulated in the year and in twelve

**Table 3.10 – Net debt growth**
Conditioning factors

| Itemization | 2006 | | 2007 | | Oct 2008 | |
|---|---|---|---|---|---|---|
| | R$ million | % GDP | R$ million | % GDP | R$ million | % GDP |
| Total net debt – Balance | 1067 363 | 44.7 | 1150 357 | 42.7 | 1088 606 | 36.6 |
| **Flows** | **Accumulated in the year** | | | | | |
| Net debt – Growth | 64 879 | -1.8 | 82 994 | -2.0 | -61 752 | -6.0 |
| Conditioning factors | 64 879 | 2.7 | 82 994 | 3.1 | -61 752 | -2.1 |
| PSBR | 69 883 | 2.9 | 57 926 | 2.1 | 1 835 | 0.1 |
| Primary | -90 144 | -3.8 | -101 606 | -3.8 | -132 886 | -4.5 |
| Interest | 160 027 | 6.7 | 159 532 | 5.9 | 134 721 | 4.5 |
| Exchange adjustment | -4 881 | -0.2 | 29 268 | 1.1 | -60 959 | -2.1 |
| Domestic securities debt[1/] | -2 222 | -0.1 | -2 432 | -0.1 | 1 910 | 0.1 |
| External debt | -2 659 | -0.1 | 31 701 | 1.2 | -62 869 | -2.1 |
| Others[2/] | 2 302 | 0.1 | -2 305 | -0.1 | -4 105 | -0.1 |
| Skeletons | - 375 | 0.0 | - 630 | 0.0 | 1 477 | 0.0 |
| Privatizations | -2049 | -0.1 | -1265 | 0.0 | 0 | 0.0 |
| GDP growth effect | | -4.5 | | -5.1 | | -4.0 |

1/ Domestic dollar – Indexed securities.
2/ Parity of the basket of currencies in the net external debt.

**Table 3.11 – General government gross debt**
Conditioning factors

| Itemization | 2006 | | 2007 | | Oct 2008 | |
|---|---|---|---|---|---|---|
| | R$ million | % GDP | R$ million | % GDP | R$ million | % GDP |
| GGGD - Balance | 1336 645 | 56.0 | 1542 852 | 57.2 | 1684 285 | 56.7 |
| **Flows** | **Accumulated in the year** | | | | | |
| GGGD – Growth | 125 532 | -0.1 | 206 207 | 1.2 | 141 434 | -0.6 |
| Conditioning factors | 125 532 | 5.3 | 206 207 | 7.6 | 141 434 | 4.8 |
| GGGD borrowing requirements | 136 733 | 5.7 | 222 097 | 8.2 | 118 186 | 4.0 |
| GGGD net issues | -35 042 | -1.5 | 42 958 | 1.6 | -48 152 | -1.6 |
| Interest | 171 775 | 7.2 | 179 139 | 6.6 | 166 339 | 5.6 |
| Exchange adjustment | -17 905 | -0.8 | -27 462 | -1.0 | 23 502 | 0.8 |
| Indexed internal securities debt[1/] | -1 666 | -0.1 | -2 432 | -0.1 | 1 910 | 0.1 |
| External debt | -16 240 | -0.7 | -25 029 | -0.9 | 21 592 | 0.7 |
| Others[2/] | 6 130 | 0.3 | 7 123 | 0.3 | -1 469 | 0.0 |
| Skeletons | 1 158 | 0.0 | 4 448 | 0.2 | 1 214 | 0.0 |
| Privatizations | -583 | 0.0 | 0 | 0.0 | 0 | 0.0 |
| GDP growth effect | | -5.4 | | -6.4 | | -5.3 |

1/ Domestic dollar – Indexed securities.
2/ Parity of the basket of currencies in the external debt.

months to remain at levels compatible with the targets set for 2008. With the prospects of lower growth next year, the impact on public revenues cannot be despised, as well as the possible impact on social expenditures which should arise from increased demands such as the unemployment insurance.

In this sense, the reassessment of revenues and expenditures for the next year, aiming at maintaining the primary surplus, implies confronting the question with the maintenance of the fiscal responsibility and compliance with the targets of reduction of the PSND/GDP ratio. On the other hand, a breakdown of the public sector's indebtedness shows a comfortable situation in comparison with previous ones of international market stress, having in view the significant volume of net credits tied to foreign exchange.

# International economy

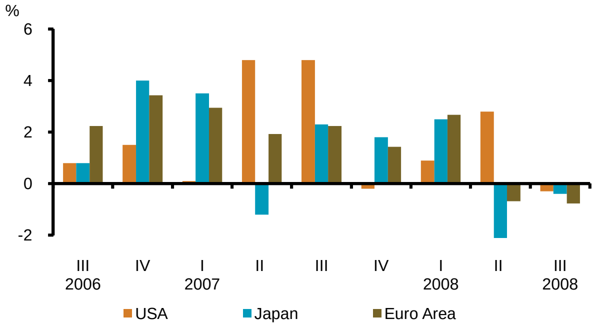
4

The deterioration of the world's economic scenario, consequent upon the worsening of a crisis that, by contrast with the episodes that characterized the last decades, stemmed from the North-American financial market instead of specific problems in the emerging market economies, consolidated the prospects of an accentuated global economic slowdown. This is justified by the impact of the crisis on the financial markets of other mature economies, in a scenario where the economic activity level had already shown signs of recession in leading developed economies and of deceleration in most emerging economies.

As of September, financial markets were highly pressured by both the accentuated and generalized appreciation of the North-American dollar in relation to the currencies of the leading mature and emerging economies (except the Yen) and the significant losses registered in the levels of major stock exchanges coupled with increased wariness to risk, expressed in high levels of both corporate and sovereign banking credit spreads. In this scenario, stock and foreign currency markets started to operate with sharp volatility.

Once the central banks and governments identified the signs of the systemic crisis and recognized the potential implications of the persistent obstruction of the domestic and international credit channels on the evolution of the real sector of their economies, they implemented or expanded, in a coordinated manner, the scope and intensity of actions aimed at combating the instability in their financial systems and mitigating their effects on the level of economic activity.

**Figure 4.1 – USA, Euro Area and Japan – GDP[1/]**




Sources: Bureau of Economic Analysis, Economic and Social Research Institute
1/ Quarterly growth. Seasonally adjusted annualized rates.

## 4.1 Economic activity

In the third quarter of the year, the evolution of the global activity level reflected the simultaneous contraction of the leading developed economies and the deceleration observed in the emerging countries, particularly in China. This contraction became more accentuated in view of the

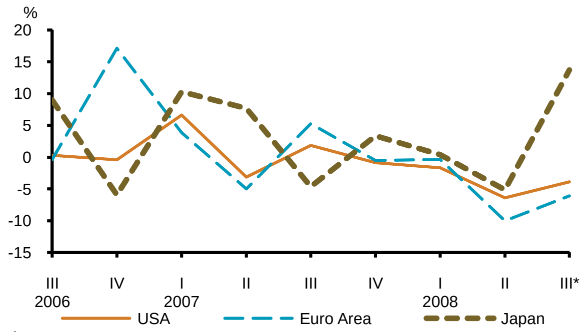
**Table 4.1 – Major developed countries**
**GDP components and other indicators**

% rate anualised

| | 2007 | | | | 2008 | | |
|---|---|---|---|---|---|---|---|
| | I | II | III | IV | I | II | III |
| Household consumption | | | | | | | |
| United States | 3.8 | 2.0 | 2.0 | 1.0 | 0.9 | 1.2 | - 3.1 |
| Euro Area | - 0.0 | 2.7 | 1.7 | 0.7 | - 0.2 | - 0.8 | n.d. |
| Japan | 2.0 | 2.0 | 0.8 | 0.8 | 2.4 | - 2.4 | 1.0 |
| Non-residencial investment | | | | | | | |
| United States | 3.4 | 10.3 | 8.7 | 3.4 | 2.4 | 2.5 | - 1.0 |
| Euro Area | 3.6 | 0.9 | 3.8 | 4.5 | 5.9 | - 3.9 | n.d. |
| Japan | - | - 10.0 | 7.4 | 2.0 | - 1.2 | - 5.5 | - 6.7 |
| Residencial investment | | | | | | | |
| United States | - 16.2 | - 11.5 | - 20.6 | - 27.0 | - 25.1 | - 13.3 | - 19.1 |
| Euro Area | 1.8 | - 1.8 | 0.1 | - 1.5 | 3.8 | - 10.5 | - 2.9 |
| Japan | - 6.6 | - 18.3 | - 32.6 | - 45.3 | 22.0 | - 13.0 | 17.0 |
| Industrial production | | | | | | | |
| United States | 2.9 | 3.0 | 2.0 | 1.4 | 0.4 | - 1.9 | - 8.0 |
| Euro Area | 3.1 | 2.3 | 6.6 | - | 0.7 | - 2.6 | - 3.5 |
| Japan | - 1.7 | 2.4 | 6.8 | 3.6 | - 2.8 | - 3.4 | - 5.2 |
| Unemployment rate | | | | | | | |
| United States | 4.4 | 4.6 | 4.7 | 5.0 | 5.1 | 5.5 | 6.1 |
| Euro Area | 7.6 | 7.4 | 7.3 | 7.2 | 7.2 | 7.4 | 7.5 |
| Japan | 4.0 | 3.7 | 4.0 | 3.8 | 3.8 | 4.1 | 4.0 |

Source: BEA, Cabinet Office, Eurostat
1/ Includes residencial and public investment expenditures.
2/ Total construction expediture.
3/ End of the quarter rate.

**Figure 4.2 – G-3 – Real imports of goods**
**T /T-1 annual rate**




* Área do Euro – July
Source: Thomson

worsening of the financial crisis in major international financial centers that followed the bankruptcy of the Lehman Brothers bank.

The United States' GDP registered an annualized downturn of 0.3% in the third quarter, the first cutback observed in the year. It should be highlighted the negative contribution of 2.2 p.p. of household consumption, as a consequence of the extinction of the effects of fiscal incentives that had favored these expenditures as well as the progressive deterioration of employment market scenario.

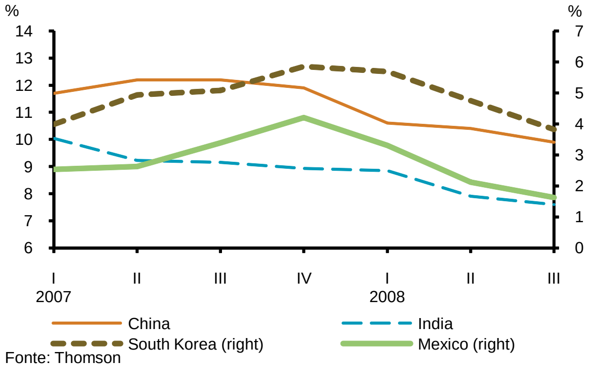
Euro Area and Japan GDP turned in respective annualized cutbacks of 0.8% and 0.4% in the third quarter, representing, in both economies, the second consecutive negative result on this type of comparison. It should be highlighted that in Japan, differently from the USA, consumption expenditures posted annualized growth of 1%, in comparison to a 2.4% contraction observed in the second quarter of the year. In the Euro Area, according to preliminary data without demand components, the recovery observed in retail sales suggests a favorable consumption performance in the third quarter of 2008. The United Kingdom's GDP, after registering stability in the second quarter, fell by 2% in the third quarter, the first contraction in annualized terms registered since the second quarter of 1992.

The recession in the leading developed economies had some elements in common in the third quarter. Business investments accentuated the downward trajectory observed in the two previous quarters in Japan and contracted in the USA for the first time since the last quarter of 2006. In the Euro Area, annualized reductions of 3.9% and of 12.2% in the production of capital goods signal that the region might have registered the second consecutive quarter of contraction in the gross fixed capital formation.

In comparison to the second quarter, while the retraction of industrial production accentuated in the USA, in the Euro Area and in Japan, labor market indicators deteriorated, especially in the USA, where the unemployment rate rose 0.6 p.p. in the quarter ended in September, following an additional monthly increase of 0.4 p.p. in October.

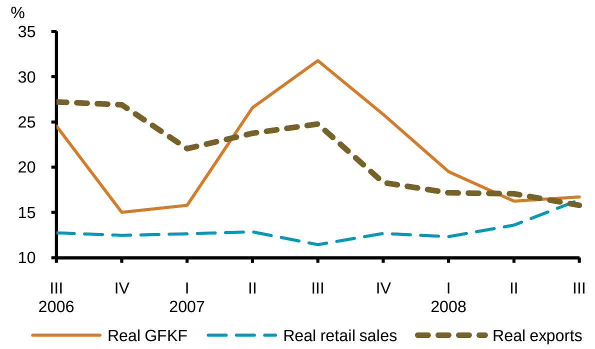
The reduction in the activity level of developed economies reinforced the tendency of deceleration of international trade growth, thus affecting the emerging economies, in particular those with a higher degree of openness. In this sense, the economic deceleration observed in China since the third quarter of 2007, in line with the deceleration of exports to

**Figure 4.3 – Emerging Markets – GDP[1/]**



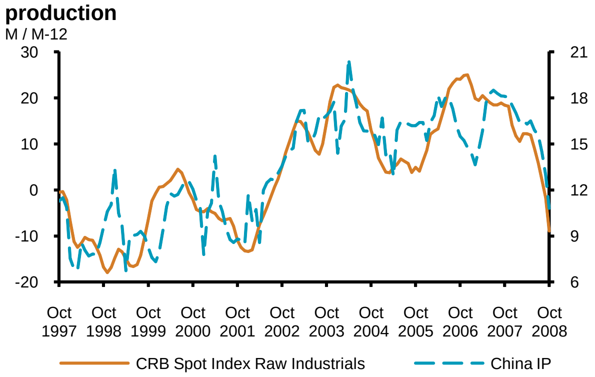

Fonte: Thomson
1/ Q/Q-4.

**Figure 4.4 – China – Selected indicators[1/]**



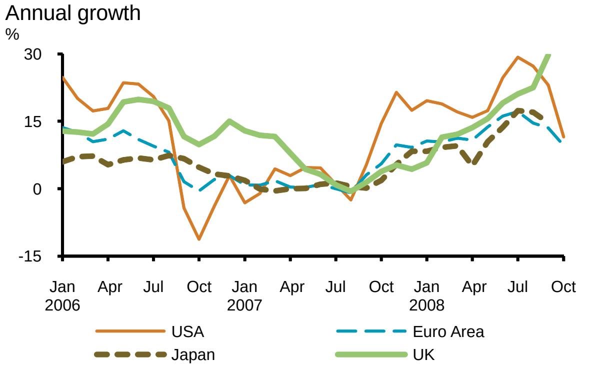

Source: Thomson
1/ T/T-4

**Figure 4.5 – Commodities prices x China's Industrial production**




Source: Bloomberg

**Figure 4.6 – Energy inflation**
Annual growth




Source: Thomson

the US and with the implementation of restrictive economic policies, intensified in the third quarter of 2008, evincing the retraction of the bilateral trade with the European Union.

In this environment, China's GDP grew by 9% in the third quarter, compared to the same period of the previous year, 1.1 p.p. below the level registered in the quarter ended in June, on the same basis of comparison. This retraction was associated to the expressive deceleration, from 15.9% to 13.1%, in the growth rate of the country's industrial production, partly offset by the 2.8 p.p. increase in the real retail sales. The expansion of the gross fixed capital formation remained relatively stable in the period.

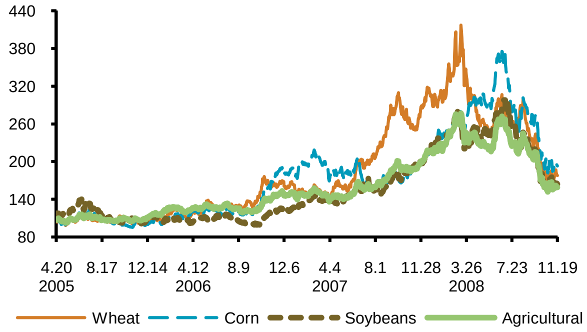
The synchrony between the recessive processes in developed countries and the deceleration of Chinese industrial production, besides contributing to the deceleration of other emerging economies, such as Mexico, South Korea and India, resulted in the first negative shock, since 2002, on the trade terms of those countries that are net exporters of commodities.

Since the end of September, central banks and governments of several developed and emerging countries, either by recognizing the additional risks to the sustainment of economic activity or in response to the evidence of its materialization, implemented reductions in the basic interest rates and introduced credit and consumption fiscal incentives, raising public investment expenditures, particularly in China, where the government acknowledged the importance of the process of economic deceleration.

## 4.2 Monetary policy and inflation

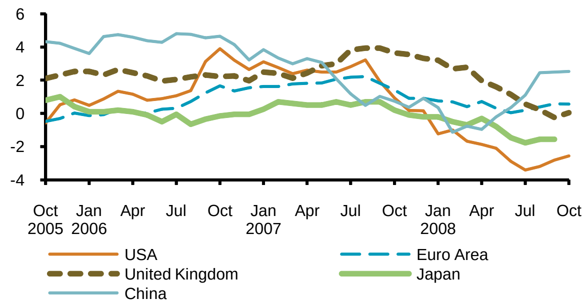
During the second half of the year, the reduction of the global demand for commodities and the expansion of agricultural crops led to the inflection of inflation rates, particularly in the Asian mature and emerging economies. In this scenario, coupled with the high volatility and restricted liquidity in financial markets, the central banks of the G3 economies, the United Kingdom, Sweden, Switzerland, Australia, China, India and Czech Republic, among others, intensified the accommodating posture of their monetary policies, at the same time that they injected a sharp volume of resources in the financial system with the aim to stimulate the credit channels, restore the banking systems' confidence and limit the effects of the financial crisis on the real economy.

**Figure 4.7 – Agricultural Index**
12.31.2004 = 100




Source: Thomson

**Figure 4.8 – Real interest rates**
Annual rates – Deflated by CPI
%




Source: Fed, BCE, BoJ, BoE, BPC, BLS, Eurostat, ONS e Bloomberg.

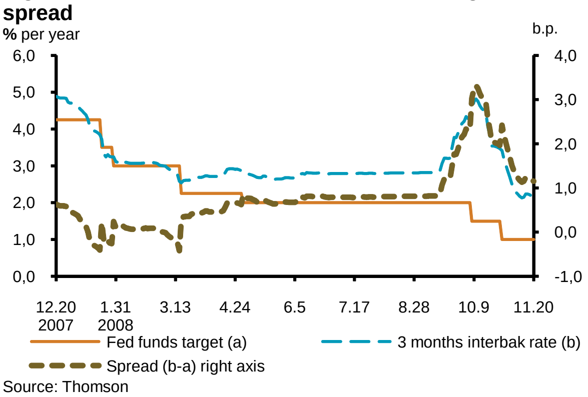
The economic authorities of Mexico, Chile, Peru, Colombia and Brazil, where inflationary pressures seemed to be less sensitive to the downturn in the prices of energy and foodstuffs, maintained a more restrictive posture, expressed in the increase of basic interest rates in the quarter ended in September. Similarly, in November, the central bank of Russia, responding to the assaults to the country's currency and to potential inflationary repercussions arising out of the foreign trade channel, decided to increase the basic interest rate in spite of the country's economic weakness.

In the USA, the falloff in the prices of foodstuffs and energy was the major factor underlying the reduction of the 12-month consumer inflation from 5.6% in July – the highest rate observed in seventeen years – to 3.7% in October. The similar trajectory observed for the prices received by producers, the persistent dollar appreciation and the perspective for deceleration in the pace of economic activity for the next quarters reinforce the perspective of a persistent downward price trajectory throughout 2009, and the possibility of a period of deflation in that economy is not unlikely. In this scenario, the Federal Reserve (Fed) reduced, at the end of October, the target for the Fed funds to 1% p.y.

In order to cope with the financial market turbulences, the Fed decided to expand its liquidity assistance programs. As regards the Primary Dealer Credit Facility (PDCF) and the Term Securities Lending Facility (TSLF), the list of eligible collaterals was broadened, while, in the framework of the TSLF, the total value of available resources was expanded. Also, the Fed announced the setting up of a plan for repurchasing short-term liabilities issued by the Agencies Freddie Mac and Fannie Mae with primary dealers and introduced facilities for the purchase of high-quality assets backed in commercial papers (ABCP) with mutual funds of monetary markets. In October, the Fed implemented a program for refinancing mortgages and announced the establishment of a credit line for the purchase of commercial papers, the so-called Commercial Paper Funding Facility (CPFF), which effectively reduced the distortions in that market. In the same direction, the Fed announced the creation of the Program for Financing of Monetary Market Investor (MMIFF), an instrument with which it began to offer guarantees for the purchase of certificates of deposit and commercial papers issued by institutions with a high-risk classification.

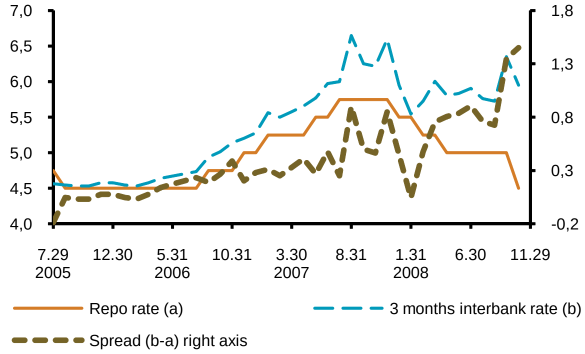
In another line of action, with the aim to expand the offer of dollars, the Fed increased the volume of resources available

**Figure 4.9 – USA: Interbank and Fed funds target spread**




Source: Thomson

**Figure 4.10 – UK: Interbank and repo rate spread**



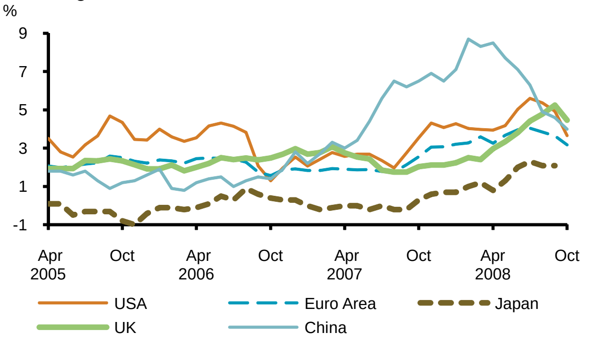

Source: Thomson

by means of auctions named Term Auction Facility (TAF). Summing up US$900 billion as of November, even though the TAF auctions have favored the reduction of the interbank spread, final credit has not shown signs of expansion yet. Similarly, in coordination with other central banks, the Fed expanded its offer of dollars offshore by launching new lines of currency swap or by increasing the limits of already available credit lines. Since October, the central banks of Europe (ECB), England (BoE), Switzerland (SNB), and Japan (BoJ) made available an unlimited offer of dollars. More recently, in addition to the central banks of Sweden, Norway, Denmark, Canada and Australia, the central banks of New Zealand, Brazil, Mexico, South Korea and Singapore were included in the network of central banks that have swap lines available up to April 30, 2009.

With the approval of the Emergency Law on Economic Stabilization and the Trouble Asset Relief Program (TARP), of nearly US$700 billion, the Treasury started to carry out purchases of the so-called rotten assets and recapitalize the banks. In the TARP framework, US$125 billion was made available for the acquisition of participations in the Goldman Sachs Group, Morgan Stanley, J.P. Morgan Chase and Bank of America, among others. The same legal instrument authorized the Fed to remunerate the compulsory deposits and the voluntary reserves maintained in that institution. Since November, the institution receives, respectively, the average of the Fed funds during the period of investment and the lowest of the Fed funds rate during the referred period.

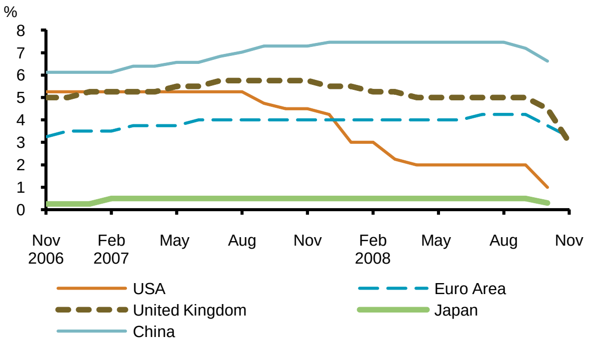
In the United Kingdom, in a scenario of deepened financial crisis and rising of interbank spreads, the Financial Services Authority, aiming to increase the credibility of the banking system, rose from £35,000 to £50,000 the value of deposit guarantee, while the Treasury announced the adoption of a program for recapitalizing the system that includes £50 billion for the purchase of preferential shares of institutions that adhere to the program. The program also foresees the utilization of £250 billion to expand the Special Liquidity Scheme (SLS) that makes it feasible to exchange mortgage-backed papers with Treasury bonds. With the aim of reducing the effective overnight rate and expanding the market liquidity, the BoE injected a significant volume of resources in the financial system, expanded the list of collaterals accepted in the repo operations and, more recently, announced the creation of a new line of overnight and a new rediscount window to replace the SLS, of which the maturity date expires in January 2009. All these actions have favored the recent drop of the interbank spread. Finally, in the attempt to expand the offer of dollars, the Fed and

**Figure 4.11 – Consumer inflation**
Annual growth




Source: BLS, Eurostat, Bloomberg and ONS

**Figure 4.12 – Official interest rates**
Annual rates




Source: Fed, ECB, BoJ, Bank of England and The People`s Bank of China

the BoE turned unlimited, up to the end of April 2009, their respective swap line of currencies.

In England, in spite of the 4.5% consumer inflation accumulated in 12 months up to October, the BoE, in view of the strong downturn in inflation expectations and of its own inflation forecasts over the medium term, reduced the basic interest rates to 3% p.y. in November, the lowest level in the last fifty years.

In the Euro Area, the 12-month cumulative variation of the consumer price index reached 3.2% in October, against the record of 4% registered in July, a drop favored especially by the respective reductions of 7.5 p.p. and 3 p.p. registered in the prices of energy and foodstuffs. In this scenario of decreasing inflationary expectations, downward economic activity level and more restrictive credit conditions, the ECB conducted, in the October-November period, a cutoff of 100 basis points (b.p.) in the basic interest rate, setting it at 3.25% p.y. With a view to reducing the liquidity shortage and strengthening the local financial system, the ECB injected a significant volume of resources in the banking system, expanded the list of collaterals accepted in refinancing operations and established rules for harmonizing the fiscal incentive packages to be adopted by its member-countries. In addition, the European Union countries expanded the level of guarantee for deposits carried out by individuals, and the ECB extended the accessibility to liquidity adjustment operations in overnight to small-scale banks; and, in coordination with the Fed, turned unlimited the offer of dollars in the European market.

In Japan, 12-month cumulative consumer inflation reached 2.1% in September, against 2.3% in July – the lowest rate since the middle of the 90's, a movement observed, equally, in the measurements of the inflation core, which began to capture the retraction in the prices of commodities. However, the drop of inflation rates has been followed by an accentuated retraction of the internal absorption and exports, and this led the BoJ, even in a scenario of negative real interest rates, to reduce the target for the overnight call rate to 0.3% in October, the first cut in the last six years.

In order to reduce the effective overnight rate, the BoJ carried out several injections of resources in the system and introduced, in coordination with the Fed, a currency swap line, initially at the value of US$60 billion. In October, this line became unlimited, up to the end of April 2009, with the announcement of a plan to reinforce exchange and monetary markets, including facilities for the repurchase of shares and permission for the BoJ to inject resources into regional banks. Two weeks later, a fiscal package, estimated at ¥27 trillion, was introduced, incorporating the reduction of income tax, exemption of tax on capital earnings and dividends, assistance to small-scale businesses and increase in resources for the recapitalization of banks.

In China, the economic activity slowdown has been followed by a systematic reduction of consumer inflation. Thus, evincing the performance of food prices, 12-month accumulated inflation closed at 4% in October. In this scenario, the government implemented actions to stimulate growth, expressed in a fiscal incentive plan valued at US$586 billion. At the same time, with the purpose of increasing the liquidity of the local financial system, the People's Bank of China (PBC) reduced its basic interest rates, set at 6.63% p.y. since October, and the rate of compulsory deposits.

## 4.3 International financial markets

Since July 2007, banks, security companies, insurance companies and the so-called Government Sponsored Companies (GSE) have announced losses and accounting write-offs in the order of US$955 billion[1] During the same period, these companies, which belong to the financial sector, raised US$824 billion in new capital, of which US$374 billion were obtained from October 1st to November 13th, 2008, with the intensification of expansionist actions of leading economies governments and central banks. Even if the losses and accounting write-offs were not restricted to banks, this segment, which also includes the security companies, concentrate 74% of losses and 86% of new resources.

In addition to the persistent reduction in the prices of real estate, the losses associated to the stock market and the deterioration of the labor market in the USA and in Europe continued to justify the deterioration of the credit quality, no longer restricted to the subprime market. Since the last inflation report, the average premiums of Credit default swap (CDS) – which measure the cost of guarantee against default – of five important North-American banks and of five important European banks have maintained the upward trend began in mid-2007. Thus, the premiums moved from 136 and 87 b.p., at the end of August, to 176 and 101 b.p., on November 14, respectively, after reaching 328 b.p. and

**Table 4.2 – Bank writedowns & credit losses x capital raised**

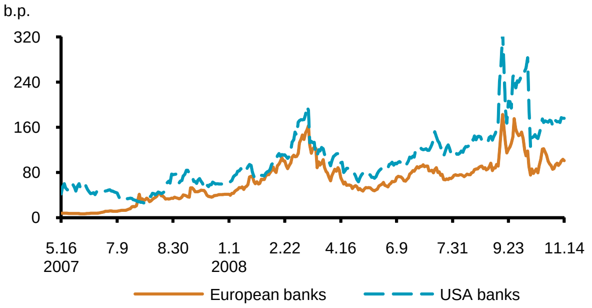
US$ billion

| | Accumulated since 2007 | | 2008 - 2nd half[1/] | |
|---|---|---|---|---|
| | Writedowns & credit losses | Capital raised | Writedowns & credit losses | Capital raised |
| Worldwide | 955.3 | 824.5 | 288.5 | 469 |
| Banks | 708.6 | 711.9 | 232.5 | 417.3 |
| Insurers | 150 | 90.0 | 35.4 | 51.8 |
| GSEs [2/] | 96.6 | 22.6 | 20.5 | - |
| Americas | 648.9 | 482.9 | 238.6 | 266.9 |
| Banks | 428.4 | 376.9 | 186.8 | 216.1 |
| Insurers | 123.9 | 83.5 | 31.2 | 50.8 |
| GSEs [2/] | 96.6 | 22.6 | 20.5 | - |
| Europe | 277.3 | 300.6 | 48.1 | 178.2 |
| Banks | 252.7 | 294.0 | 43.9 | 177.3 |
| Insurers | 24.7 | 6.5 | 4.2 | 0.9 |
| Asia | 29 | 41.0 | 1.8 | 23.9 |
| Banks | 27.5 | 41.0 | 1.8 | 23.9 |
| Insurers | 1.5 | - | - | - |

Source: Bloomberg
1/ Updated on November 10th, 2008.
2/ Government Sponsored Enterprises – Fannie Mae and Freddie Mac.

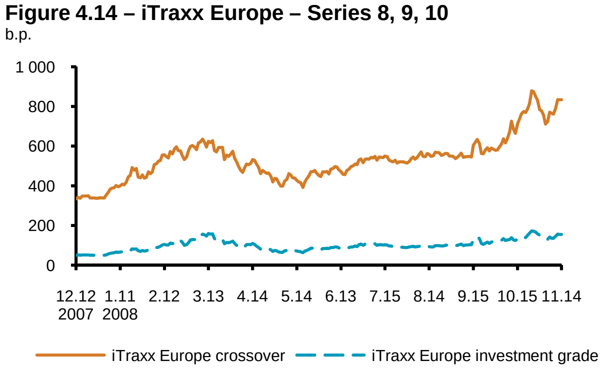
1/ According to Bloomberg data surveyed on November 13, 2008

**Figure 4.13 – 5 year CDS premiums of major banks**[1/]



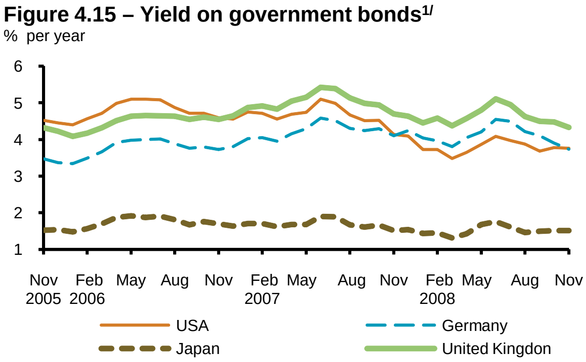

Source: Thomson
1/ Aritmethic average of 5-year CDS premiums for major European and USA banks. Since it's not a random sample, it may not reflect the behavior of the financial system as a whole.

**Figure 4.14 – iTraxx Europe – Series 8, 9, 10**



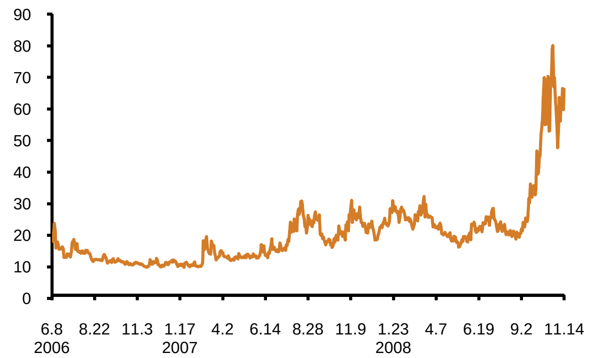

Source: Thomson

**Figure 4.15 – Yield on government bonds**[1/]




Source: Bloomberg
1/ Monthly average of nominal yields on 10-year bonds, up to November 14, 2008.

**Figure 4.16 – VIX**




Source: Thomson

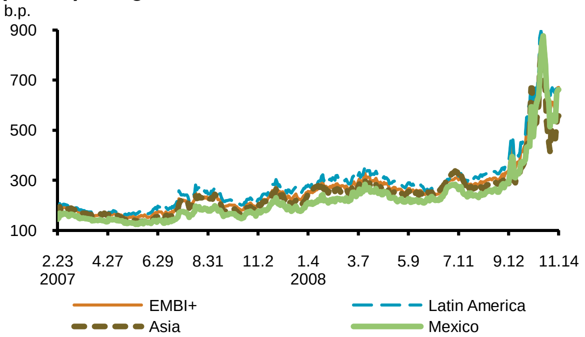
183 b.p. on September 17, following the bankruptcy of the Lehman Brothers Bank and the Fed's assistance to the AIG insurance company. One should highlight that only after October 13, with the announcement of several financial system assistance programs, the banks' CDS premiums returned to the previous level of September 17, maintaining, however, an upward trajectory.

Corporate credit, not only as a consequence of prospects of profit reductions associated to the recessive environment spread out in the economies of the USA, Euro Area and Japan and the deceleration of emerging economies, but also due to the greater selectivity of banks for granting new loans, continues to be restricted in response to the numberless losses already accounted for and still to be considered in their balance sheets. In Europe, the iTraxx Crossover, which represents the premium required to guarantee loans to companies classified as high risk, rose from 550 b.p., on August 31, to 835 b.p., on November 14, while the iTraxx IG, which represents the premium required for companies classified as investment grade, rose from 100 b.p. to 155 b.p.

Evidence that the economies from the leading countries are effectively in recession and that the duration of this cycle may be longer than previously foreseen resulted in a more aggressive posture of the leading central banks in relation to the adoption of measures to regularize the credit channel. The implementation of expressive reductions in basic interest rates, the voluminous allocations of resources to the financial sector and the flight to quality movement had an accentuated impact on the earnings on long-term USA papers and, in particular, Germany's and United Kingdom's. In the order, the earnings dropped from 4.18% and 4.48%, at the end of August, to 3.67% and 4.07% on November 14. In the USA, the preference for liquidity and the expectation of growth in the supply of long-term Treasury bonds as a consequence of the Emergency Law on Economic Stabilization contributed to attenuate the reduction of annual earnings on long-term papers, which moved from 3.81% to 3.73% in the period. The annual income on 10-year papers from Japan, where the banking system was less affected in comparison to the other G3 countries, increased from 1.42% to 1.5% in the period.

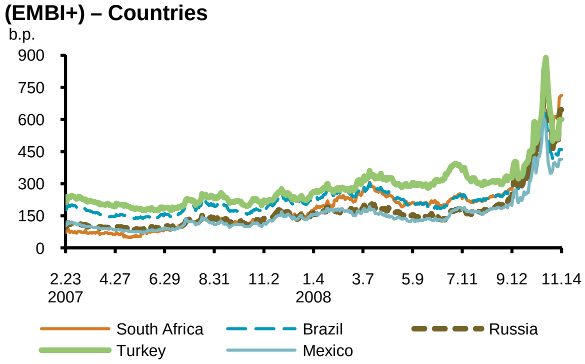
The Chicago Board Options Exchange (VIX) index, which measures the short-term implicit volatility of the Standard and Poor's (S&P 500), reflected the recent increase in wariness to risk by investors. This indicator registered an average of 48.2 points in the period from the end of August to November 14, surpassing the previous record of 45.7 points registered in October 1998, following the crisis associated

**Figure 4.17 – Emerging Markets Bond Index Plus (EMBI+) – Regions**



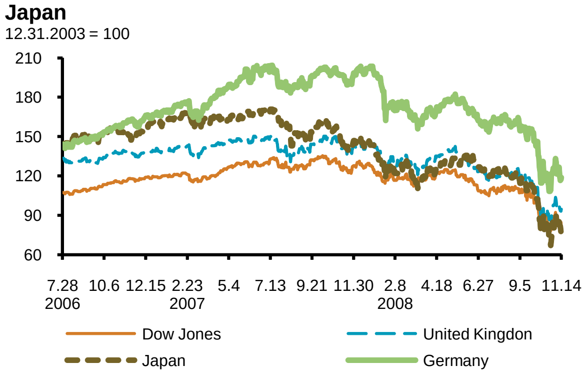

Source: Thomson

**Figure 4.18 – Emerging Markets Bond Index Plus (EMBI+) – Countries**




Source: Bloomberg

**Figure 4.19 – Stock exchanges: USA, Europe and Japan**




Source: Bloomberg

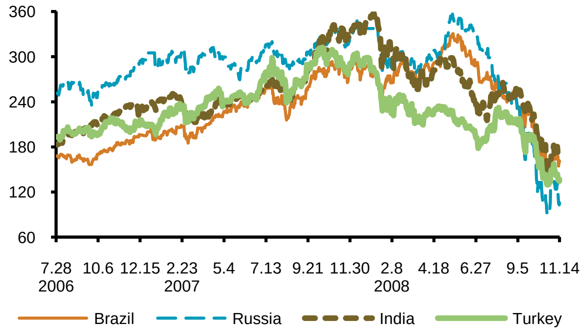
to the Russia default and to the collapse of the Long-Term Capital Management (LTCM) fund. The index rose from 20.7 points, at the end of August, to 66.3 points on November 14, after reaching 80 points – the highest value of closure of the entire series – on October 27.

Although the foundations of most emerging economies have improved significantly since the tensions observed in these markets in the period from 1997 to 1999, the current financial crisis impacted the Emerging Market Bond Index Plus (Embi+), though with less intensity than in that period. Thus, the index rose from 300 b.p., at the end of August, to 670 b.p. on November 14, after reaching 865 b.p. on October 24, the greatest value observed since the end of 2002. The evolution of the Embi+ reflected, especially, the increase from 409 b.p. registered in the indicator for Europe, a movement impacted by the greater vulnerability of those economies to the deterioration of global economic conditions, expressed in high current account deficits and greater representativeness of the short-term external debt. The Embi+ associated to Asia and to Latin America registered respective increases of 273 b.p. and 374 b.p. in the period.

In Latin America, the indicators associated to Argentina and Venezuela registered significant highs of 1,294 b.p. and 887 b.p., respectively, while those related to Mexico, Brazil and Chile expanded, in the order, 230 b.p., 220 b.p. and 199 b.p. The Embi+ of Russia, evincing the country's high level of short-term external indebtedness, the banking system's external dependency and the great probability of occurrence of current account fiscal deficits in 2009, rose 451 b.p. from the end of August till November 14. In the same period, the indicators related to Turkey and South Africa, in view of a high current account deficit scenario, deceleration of economic growth and inflation above the target, increased respectively by 303 b.p. and 471 b.p. On November 14, the Embi+ associated to Brazil, Russia, Turkey and South Africa closed, in the order, at 460 b.p., 647 b.p., 660 b.p., and 713 b.p.

The stock markets of mature economies experienced sharp losses since the end of August. On October 27, the British Financial Times Securities Exchange Index (FTSE 100) and the American Dow Jones reached the lowest values of the last five years, while the German Deutscher Aktienindex (DAX) dropped to the level of three years ago, and the Japanese Nikkei went back to the level of 1982. In the year, up to November 14, these indicators accumulated respective losses of 34%, 36%, 42%, and 45%, concentrated between the end of August and November 14, a period in which respective falloffs of 25%, 26%, 27%, and 35% were registered.

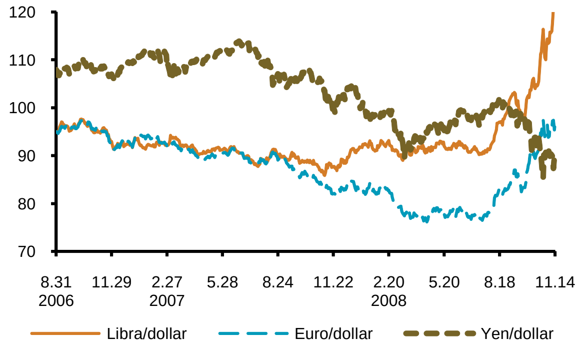
**Figure 4.20 – Stock exchanges: Emerging markets**
12.31.2003 = 100




Source: Bloomberg

The losses registered by the stock exchanges of emerging economies have been even more accentuated, evincing their greater sensitivity to variations of commodity prices and the movements associated to increased wariness to risk and the need for repatriate capital by foreign investors. Between the end of August and November 14, the indices Ibovespa of Brazil, Bombay Stock Exchange Sensitive Index (Sensex) of India, and Istanbul Stock Exchange National 100 Index (XU100) of Turkey dropped, equally, 36%, while the Russian Trading System Index (RTSI), of Russia, dropped 57%. In the year, Ibovespa accumulated losses of 44%. Sensex and XU100 dropped, equally, 54%, while the RTSI shrank by 69%.

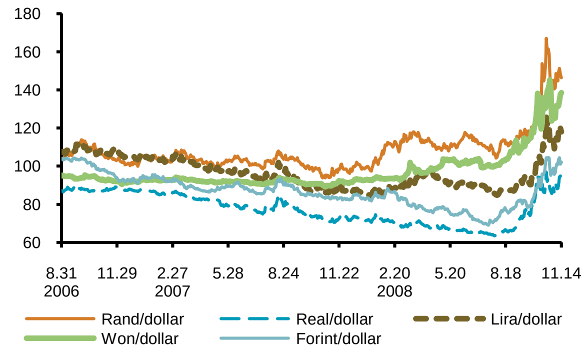
**Figure 4.21 – Dollar exchange rates**
6.1. 2005 = 100




Source: Bloomberg

The worsening of the international financial markets crisis has been sustaining the dollar appreciation against the other currencies, except for the Japanese yen. The quotations for the pound sterling continue to be impacted by the prospects of relaxation of the BoE's monetary policy because of the lesser demand for government papers of the United Kingdom. The evolution of the euro, particularly conditioned, up to November, by concerns inherent to the solvency of financial institutions and by the apparent lack of regional coordination regarding the policies adopted by the member-countries, which was later resolved, also reflects the perspective of additional cutbacks in the basic interest rates by the ECB. The impact of the volatility registered in the stock exchanges and on the foreign exchange markets continues to raise the wariness to risk on the part of investors, favoring the process of dismantling of carry operations and, consequently, the appreciation of the yen against the dollar. Between the end of August and November 14, the dollar appreciated 16.4% against the euro and 23.5% against the pound sterling, but depreciated 10.7% against the yen. In the year, up to November 14, the dollar appreciated 35% against the pound and 16% against the euro, while it depreciated 13% against the yen.

**Figure 4.22 – Emerging markets currencies**
6.1 2005 = 100



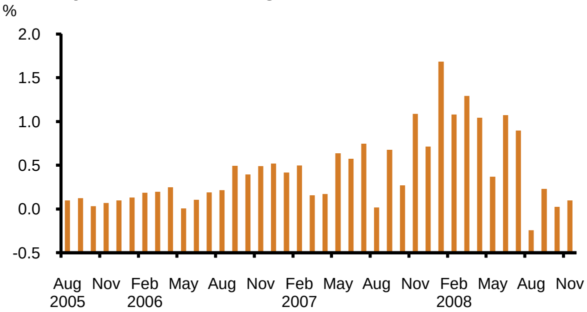

Source: Bloomberg

The evolution of the parity of emerging economies' currencies against the dollar followed the pattern registered by the stock exchanges. In this sense, between the end of August and November 14, the dollar appreciated against the won, 29%; the South-African rand, 31%; the Hungarian forint, 32%; the Turkish lira, 36%; and the real, 37%, accumulating, in the year, respective appreciations of 50%, 48%, 23%, 37% and 26%. One should highlight that the major factors that conditioned the depreciation of the forint and of the won, in a scenario of restricted liquidity, were the unfavorable evolution of the current account results and the short-term external debts observed in both Hungarian and South-Korean economies. At the end of October, the implementation of a

US$25 billion program led by the IMF aiming to provide liquidity to the Hungarian financial system alleviated the pressures over the forint. Nonetheless, the Hungarian currency continued to register an accentuated volatility. In the same direction, the announcement of a swap line with the Fed and the adoption of domestic measures to mitigate the pressure over the won enabled an immediate support to the South-Korean currency, which, just as occurred with the forint, registered strong volatility up to mid-November.

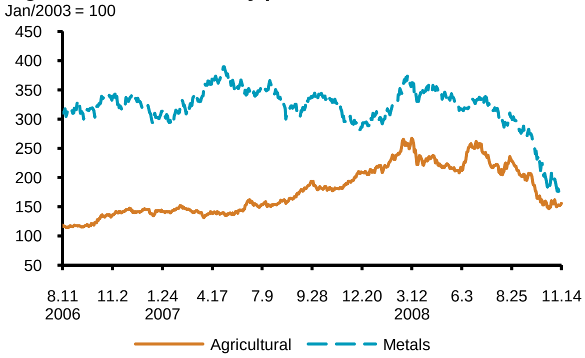
In China, the renmimbi, which had followed a trajectory of gradual appreciation up to July, started to register reduced volatility, accumulating, from August 31 to November 14, an appreciation of 0.2%.

**Figure 4.23 – Renminbi/dollar exchange rate**
**Monthly valuation – average**[1/]




Source: Bloomberg
1/ Up to November 14, 2008.

**Figure 4.24 – Commodity price index**
Jan/2003 = 100




Source: Standard and Poors (S&P) – Goldman Sachs Commodity Index (GSCI)

## 4.4 Commodities

The international quotations of commodities, which had initiated a process of generalized reduction in July, intensified the losses as of the end of August, evincing the prospects of significant reduction in the activity level of both mature and emerging economies. The movement, led by investments funds, of dismantling positions in the futures markets of commodities, revealed itself a supplementary component of the downward trajectory of those quotations.

The prices of agricultural commodities have also been impacted by the favorable forecasts in relation to world's farming production in 2009, in view of improved climatic conditions. The quotations in this segment declined by 29% between the end of August and November 14, with emphasis on the falloffs observed on the following items: cotton, 39.1%; soybean, 32.3%; maize, 32.1%; cocoa, 31.8%; and wheat, 28.3%. The quotations of sugar and coffee beans registered less accentuated drops in the period, of 8.7% and 20.8%, respectively.

More consistent signs of economic activity deceleration in China, the country responsible for the greatest expansion of the global demand for metallic commodities, reduced the quotations on this segment by an average of 40% in the period. Highlights were the reductions registered in the prices of aluminum, 28.7%; zinc, 33.8%; nickel, 45.7%; and copper, 49.5%, the stocks of which increased significantly over the last months.

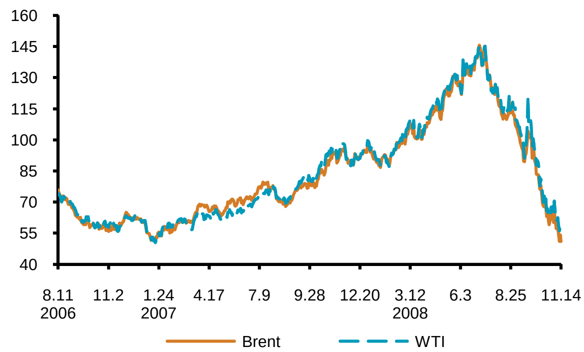
In the iron ore market, the announcement of cutbacks of up to 35% in overall production by major iron and steel plants of the world, evincing the cooling off of demand for this commodity, should result in lower prices in contractual negotiations during 2009, the first observed in the last seven years. In this context, various mining industries announced production reduction, among which the Companhia Vale do Rio Doce (Vale), which will cut 9.2% of its annual production of iron ore.

The Commodity Research Bureau (CRB) index showed reduction of 18.9% in the 12-month period ended on November 14, as a result of cutbacks in the quotations of agricultural commodities, 14.6%, and metallic commodities, 45%.

### 4.4.1 Petroleum

In line with the expected slowdown in world economic activity, the quotation of the barrel of Brent-type oil decreased by 50% between the end of August and November 14, reaching US$51. This trajectory, initiated in July, has been maintained despite the cutback of 1.5 million barrels in daily production, announced in October and implemented as of November 1st by the Organization of Petroleum Exporting Countries (Opec), together with statements by representatives of the cartel that new reductions could be adopted in case the prices of petroleum do not increase.

**Figure 4.25 – Oil – Spot market**
US$ per barrel




Source: Bloomberg

The November International Energy Agency (IEA) report, reflecting the current outlook for the world's petroleum market, incorporates reductions in the agency's forecast for the expansion of demand for this commodity in 2008 and 2009. In this sense, estimates for expansions of 0.5% and 0.8%, expressed in the previous report, were reduced to 0.1% and 0.4%, respectively, highlighting that the forecast for 2009 takes into account the drop from 6% to 3.7% in the consumption growth of Chinese economy. According to the report, the global supply of this commodity grew little more than 2% in October, closing at 86.9 million barrels per day.

It should highlighted that the current scenario of credit shortage and low prices affected the capacity of extraction and refining of this commodity, possibly impacting the long-term oil market balance. According to IEA's estimates, even if the world demand for petroleum should remain stable up to 2030, it would be necessary that the production capacity increased by 45 million barrels per day, in view of the estimated reduction in productivity under the current productive structure. In this context, the increase in the volume of investments in the sector observed recently is not sufficient to provide for the mentioned increase in capacity. This gap, taken into account the recent postponement of projects, is expected to increase when the level of activity of the world's economy start a new expansionist cycle.

Despite the difficulties for expanding the supply of metallic and energetic commodities in the short-term and the low levels of agricultural stocks represent potential rising pressures over the quotations of these products, the behavior of the commodity prices over the next quarters should be primarily determined by the intensity and duration of the world economy recession. As regards the segment of agricultural commodities, one should highlight that, in addition to the direct effects of economic activity downturn on the demand for these products, the slowdown of world economic activity, by pressuring downward the quotations of petroleum, will diminish the costs of production and reduce the urgency for increasing the production of biofuels based on products such as maize.

## 4.5 Conclusion

After a long maturation period, economic activity indicators of the leading mature and emerging economies started to incorporate the impacts of the financial crisis originated in the North-American subprime market. As long as this scenario persists, the wariness to risk will tend to remain at a high level, contributing to maintain the process of reduced leverage in the financial and real sectors of world economy. Hard to be evaluated, the effect of the financial crisis on the activity level will depend on the success of policies implemented, especially those aimed at regularizing the credit channel.

Despite the relative success of the measures adopted by the most affected developed countries to combat the crisis and, more recently, to improve the operating conditions of interbank markets, credit markets are still troublesome, thus increasing the risks of a global economic activity slowdown. In general, the systemic risk and the environment of greater wariness to risk persist in a scenario of high volatility in the financial markets, affecting the volume and costs of new financing.

In the context of emerging countries, the understanding of regional peculiarities is fundamental to assess the potential impacts of the international crisis on each economy. In general, in emerging Asia countries, the main impact of the crisis is associated to the reduction of the region's exports to the USA, Euro Area and Japan. In Latin America, the reduction in the prices of commodities affects the region's economies, which depend, on a large scale, on the exporting sector. In emerging Europe, the vulnerability is particularly associated to need for financing the high current account deficits. Finally, the reduced accessibility to external resources led to the revival of IMF operations aimed at providing some countries with funds targeted at financing their balance of payments.

## International Financial Crisis: government response

The perception that the market's self-regulation represents the most efficient way to manage resources has gained ground during the last decades, together with the increasing deregulation of the financial sector verified in the period. This environment, which does not incorporate some segments where failures have been recognized, translated in the unification of market niches, in the broad securitization of debts, in the agile development of financial innovations and in the major mobility of capital, therefore generating an expressive growth in the global credit markets.

In this outlook the sharp liquidity characterized by the unrestrained financial institutions' leveraging, utilizing complex financial instruments and the inadequate assessment of risks underlying credit operations, conditions were put in place to the crisis outbreak in the sub-prime market, in August 2007, and to its dissemination throughout the international financial markets and in the activity level of the main mature and emerging economies, since September 2008. Given this situation, in the recent G20 meeting, it became evident the need for introduction of a new regulatory framework, capable of minimizing dysfunctions such as the ones currently experienced by the market, and the adoption of emergency actions, being in mind the lagging effects of such measures and the proportion of the current crisis, which has been estimated to reach incentives valued at US$3 trillion until the beginning of December.

The Central Banks' role in mature economies, aiming at restoring confidence in the banking system and at limiting the effects of global deleveraging upon the real economy, included the granting of currency supply by means of discount window facilities, intensification of loose monetary policies, and injection of resources in order to unblock credit channels. The emerging economies of Asia and Europe, for instance China, South Korea, India and the Czech Republic, changed their monetary policy stance in response to the progressive impacts of the financial crisis on their respective economies, reflected in the depreciation of their currencies and in the effects of the recessive process on trade flows occurring in mature economies. It should be stressed that the monetary authorities of the Latin American major economies adopted a more conservative stance, in response to the persistent inflationary risks in the region.

In general, the attempts to adjust liquidity have been carried out through reduction of the basic[1] interest rate, of reserve requirements[2], in the easing of the rules for access to lending of last resort, a measure especially adopted by mature economies. A summary of the measures adopted by the governments and central banks of the main economies can be found in Table 1 – Chronological Interventions in the financial markets.

In the context of monetary measures, the Federal Reserve (FED) increased the supply of resources, by the progressive extension of the Term Auction Facility (TAF), by the launching of two auctions, totaling US$40 Billion, in December 2007, to various other auctions, which now total US$900 billion, and by the creation and expansion of dollar denominated credit lines offered in currency swap to monetary authorities considered relevant to the stability of financial systems[3]. Besides the increasing volume of dollars offered, there has been expansion of maturity terms of loans granted to commercial banks and the extension of the collateral panel accepted, representing a significant increase of the supply of funding to banks in the United States of America (USA) and one fundamental action in the recovery of the dollar financing conditions in the offshore markets. It should be noted that lines of swap similar to the ones included by the FED were set up between

1/ Since September, there has been a reduction on benchmark interest rates by the central banks of the USA(from 2% to 1%); Europe (from 4.25% to 2.50%); Sweden (from 4.5% to 2%); New Zealand (from 8% to 5%); Australia (from 7.25% to 4.25%); China (from 7.47% to 5.58%); South Korea (from5.25% to 4%); India (from 9% to 7.5%); Hong Kong (from 3.5% to 1.5%), among others.

2/ In Russia (from 5.5% to 1.5%; in India (from 9% to 7.5%), and in China (from 17.5% to 14%).

3/ The central banks of Europe (ECB), England (BoE), Switzerland (SNB) and Japan (BoJ) have an unlimited supply of dollars while the central banks of Australia, New Zealand, Canada, Sweden, Denmark, Norway, Brazil, South Korea and Singapore were supplied with credit lines of US$15 billion and US$30 billion.

the European Central Bank (BCE) and the Central Banks of Hungary, Switzerland and Denmark, in line with the scarcity of Euro in the respective markets.

The aggravation and geographical extension of the global financial crisis, as expressed by the deterioration of expectations concerning the growth pace in 2009, led to the introduction countless plans aiming at the recovery of the solidity and stability of the financial systems. On the 3rd October, was approved, in the USA, the Troubled Asset Relief Program (TARP), an instrument that authorized the Treasury to purchase up to US$700 billion of assets without underlying value from financial institutions, which begin to incorporate the Fed balance sheet, representing an effort to recapitalize the sector, lessening the concerns about the system's feasibility and encouraging it to resume its role as a lender. Also, TARP anticipates earnings over reserve requirements, the creation of a program for mitigating foreclosures, the lengthening of the deadlines for tax exemption, setting up restrictions on payments of benefits to bank´s executives, limitless access of the Federal Deposit Insurance Corporation (FDIC) to resources of the Treasury, increase in banking account´s insurance, from US$100 thousand to US$250 thousand, and the creation of a Council of Financial Stability to supervise the entire program.

Parallel to the implementation of the TARP, relevant complementary measures were created aiming at the normalization of the financial markets. It is noteworthy, in this sense, the extension of the non-recourse loans – loans in which payments are made with the profit obtained from investments – to depositing institutions and bank holdings aiming at financing the purchase of high quality assets backed by commercial papers money market mutual funds, the introduction of a credit line for the acquisition of commercial papers, the creation of programs of the Treasury Supplementary Financing programs, with the objective to help bringing equilibrium to the Fed´s balance sheet, providing it with means to give continuity to the actions providing liquidity to the monetary markets; Hope for Homeowners – which enables the refinancing of mortgages for borrowers with one only residence; and for the financing of Monetary Markets' Investors – whereby the Fed grants warranties for the purchase of certificates of deposit (CD) and commercial papers, with maximum maturity of 90 days, in which eligible investors are basically mutual funds.

To these set of measures adopted by the USA, similar initiatives followed in the United Kingdom, Japan, Germany, France, Spain, Holland, Sweden, Iceland, Russia, Australia Mexico, South Korea, Chile and China, among other nations.

The British Government announced on October 8th, that it will be placing up to £50 billion to reinforce the financial institutions' capital, through the purchase of preferred shares; that it will be providing guarantee to bonds issued by banks; it will supply with additional liquidity of £250 billion by means of a BoE Special Liquidity Line.

From the British initiative, plans to rescue banks and insurance companies, whose general principles were coordinated, in mid-October, to avoid distortions in the regional banking market, began to be announced by other member countries of the European Union (EU). These plans encompass temporary State financing originating in each country's budget, extension of deposit guarantees in the financial system, alterations in liquidity operations with an increase in the amount of resources, extended deadlines to settle the loans and the list of bonds which can be offered as collateral in rediscount window operations, expansion of the banking base having access to operations of fine overnight liquidity adjustments, possibility of replacing executives of banks facing problems, and restriction to payment of benefits to executives leaving financial institutions. This coordinated campaign to rescue the financial systems should represent an inflow of resources in the order of €1.7 trillion.

Aside from financial system rescue programs, many countries such as the United States of America, South Korea, China, Germany, France, Spain and Chile, have introduced fiscal measures aiming at attenuating recessive processes or a cutback in the activity level in their respective economies. In China, where the economic growth rate is slowing down, a domestic demand stimulus program of up to US$586 billion was laid down.

Although the introduction of programs aiming at restoring the proper functioning of the financial markets have proved to be efficient to hold back the intensity of the crisis that has spread out in the global economy, the risks persist regarding the amount necessary recover liquidity conditions and growth prospects of the major economies, both mature and emerging. Within this environment of uncertainties, which reflects the accentuated volatility registered in the markets and the increasing risk aversion by investors, and which defines the degree of contagion of the crisis that began in the US, over the emerging economies, already partially affected by the external credit channels and foreign trade, it is premature to draw conclusions about the global economy´s dynamics in the short term, with remaining evidence that the channeling of resources will be insufficient to stop the process of recession in the mature economies and the deceleration in the emerging economies.

**Table 1 – Chronological Interventions in the financial markets**
(August/2007 to December/2008)

| Date | Country Central Bank | Volume of Resources | Characteristics |
|---|---|---|---|
| 9-10.8.2007 | Fed, BCE, BoJ and RBA | US$300 billion. | Global injection of resources via repurchase agreements. |
| 8.17.2007 | Fed | - | In an extraordinary meeting, reduction of the rate of rediscount to 5.75% and extension of operations to 30 days. |
| 9.18.2007 | Fed | - | Reduction of Fed funds and the rate of rediscount to 4.75% and 5.25%. |
| 10.31.2007 | Fed | - | Reduction of Fed funds and the rate of rediscount to 4.50% and 5.00%. |
| 12.12.2007 | Fed, BCE, BoE, BoC e BNS | US$40 billion | Injection of resources by means of term auctions, which in the USA are known as TAF (Term Auction Facility). These auctions accepted a large range of collateral and extended their terms of maturity. |
| 12.12.2007 | Fed, BCE e BNS | US$24 billions | Creation of lines of swap Fed-BCE (US$20 billion) and Fed-BNS (US$4 billion). |
| 12.12 2007 | Fed, BoC e BoE | - | Reduction of basic interest rates, in the case of BoE for the first time in two years. |
| 1.4.2008 | Fed | US$20 billion | Extension of the TAF to US$30 billion each. |
| 1.22.2008 | Fed | - | In an extraordinary meeting, cutback of Fed funds and the rate of rediscount by 75b.p. (3.5% and 4%). |
| 1.22.2008 | BoC | - | Reduction of the basic interest by 25 b.p.b.p. to 4%. |
| 1.30.2008 | Fed | - | Reduction of the Fed funds and the rate of rediscount to 3% and 3.5%. |
| 2.7.2008 | BoE | - | Reduction of the repo rate by 25 b.p.p. to 5.25%. |
| 4.3.2008 | BoC | - | Reduction by 50 b.p.b.p. of basic interest to 3.5%. |
| 3.7.2008 | Fed | US$40 billion | Extension of the validity of TAF auctions (Sept/2008) and their value (US$50 billion, each). |
| 3.7.2008 | Fed | US$100 billion | Offer of including resources without agreement of re-purchase to the primary dealers, with acceptance of including mortgage bonds. |
| 3.11.2008 | Fed | US$200 billion | Creation of the Term Securities Lending Facility (TSLF), an instrument that consists of term exchange papers to the primary dealers, with broad acceptance of bonds, including non-federal mortgage bonds. |
| 3.11.2008 | Fed, BCE e BNS | US 12 billion | Extension by 50% of the lines of swap (Fed-BCE – US$30 billion and Fed-BNS – US$6 billion) and extension of their term of validity until Sept/2008. |

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| Date | Country Central Bank | Volume of Resources | Characteristics |
|---|---|---|---|
| 3.11.2008 | BoE | £10 billion | Extension of the volume and the list of the collateral guaranties accepted in the three-month repo operations. |
| 3.11.2008 | BoC | C$4 billion | Renewal of the Term Purchase and Resale Agreements (TPRA) |
| 3.15.2008 | Fed | - | Fed intervention in the acquisitions of the Bear Stearns by the JPMorgan |
| 3.16.2008 | Fed | - | Establishment of the Primary Dealer Credit Facility (PDCF), overnight loan facility to primary dealers. |
| 3.16.2008 | Fed | - | Extension of the maximum maturity term of rediscount. This time, from 30 to 90 days. |
| 3.16.2008 | Fed | - | In extraordinary session, Reduction of the spread between the rediscount and the fed funds to 25 b.p. |
| 3.18.2008 | Fed | - | New Reduction by 75 b.p in the basic rate and of rediscount (2.25% & 2.50%). |
| 3.31.2008 | EUA | - | Release of the Paulson plan in order to modernize and expand the regulatory functions of the FED. |
| March and April/2009 | Fed | - | Active participation in the purchase of Bear Stearns by JP Morgan. |
| As of April | Fed | - | On-site monitoring of the financial conditions of the major investment banks. |
| 4.10.2008 | BoE | - | Reduction by 25 b.p. of the basic rates (repo rate) to 5%. |
| 4.21.2008 | BoE | £5 billion | Extension from £10 billion, value that prevailed since January/2008, to £15 billion with a three-month credit supply. |
| 4.21.2008 | BoE | £50 billion | Release of the Special Liquidity Scheme (Special Liquidity Scheme) by means of which the banks are able to change the Residential Mortgage-Backed Security (RMBS) triple A, effective until Dec/07, by new Treasury securities. |
| 4.22.2008 | BoC | | Reduction by 50 b.p. of basic interest to 3.0%. |
| 4.30.2008 | Fed | | Reduction by 25 b.p. In the basic rates and of rediscount (2% e 2.25%). |
| 5.2.2008 | Fed | US$50 billion | Increase in the volume of TAF auctions to US$75 billion, each. |
| 5.2.2008 | Fed | - | Inclusion of Asset Backed Security (ABS) triple A in the list of collateral accepted in the TSLF auctions. |
| 5.2.2008 | Fed, BCE e BNS | US$26 billion | Extension of the lines of currency swap: Fed/BCE, from US$30 billion to US$50 bi, and Fed/BNS, from US$6 billion to US$12 billion. |
| 5.7.2008 | RBNZ | - | Extension from 1 to 30 days the term of bond repurchase operations and the extension of the set of collateral, which began to include those securities backed by residential mortgages. |
| 7.9.2008 | BCE | - | Increase by 25 b.p. of the basic interest to 4.25% |
| 7.4.2008 | RBNZ | - | Reduction by 25 b.p. of the basic interest to 8%. |
| 7.30.2008 | Fed | - | Extension to 1.30.2009 of the term of validity of the TSLF and PDCF. |
| 7.30.2008 | Fed | US$50 billion | Creation of option auctions under the TSFL. |
| 7.30.2008 | Fed | - | Implementation of the 84-day term, with alternative to 28 days, of the TAF auctions. |
| 7.30.2008 | Fed, BCE and BNS | - | Extension to 1.30.2009 the validity term of the currency swaps. |
| 7.30.2008 | Fed and BCE | US$5 billion | Temporary extension of US$50 billion to US$55 billion in the swap agreement. |
| 9.2.2008 | RBA | - | Reduction. of basic interests by 25 b.p to 7%. |
| 9.11.2008 | RBNZ | - | Reduction by 50 b.p. of basic interest to 7.5%. |
| 9.14.2008 | Fed | - | Extension of the collateral list accepted in the framework of the Primary Dealer Credit Facility (PDCF) program that is not limited to investment-grade debt securities, extending also to the ones accepted in the circuit of the three-party repo systems of the major clearing banks. |
| 9.14.2008 | Fed | - | Extension of the collateral list accepted in the framework of the line of Term Securities Lending Facility (TSLF), which now accepts any type of investment-grade debt securities, no longer only specific types of papers regarded as investment grade. |
| 9.14.2008 | Fed | US$25 billion | Increase in both the total value of resources available in the sphere of TSLF, from US$175 billion to US$200 billion, and of the frequency in which the auctions are done every week, starting from now and no longer every two weeks. |

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| Date | Country Central Bank | Volume of Resources | Characteristics |
|---|---|---|---|
| 9.14.2008 | Fed | - | Creation of one temporary exception to the limitations imposed in the section 23A of the norm that governs itsoperations, the Federal Reserve Act. Till the end of January 2009, the depository institutions close to the FED could provide liquidity for their affiliate institutions, against collateral guaranties accepted by the tri-party repo market. |
| 9.15.2008 | Fed | US$50 billion | Injection of resources in the short-term market, under strong stress (Effective Fed funds reached a 5.25% against 2%, FED´s target value) after the petition for bankruptcy of Lehman Brothers and the purchase of the Merrill Lynch by the Bank of America. |
| 9.15.2008 | BCE, BoE, BNS and RBA | US$44 billion | Coordinated injection of resources before the narrowing of the short-term credit: BCE (€30 billion= US$42.6 bi); BoE (£5 billion= US$9 bi); BNS (CHF 3 billion= US$2.6 bi); and RBA (AUD 1.3 billion = US$1 bi). |
| 9.15.2008 | CPB | - | Reduction of basic interest in 27 b.p. to 7.2% p.a., and Reduction of the interest reserve requirements by 100 b.p. to 16.5%. It is the first reduction of interests since 2002 and of the reserve requirements since 2006. |
| 9.16.2008 | Fed | US$85 billion | Announcement of the liquidity supply to the insurance company AIG. The loans will be collateralized by all the insurance company's assets. |
| 9.16.2008 | Fed, BCE, BoE, BNS, BoJ and RBA | US$209 billion | Aiming at reducing the effective overnight rate, occurrence of a new injection of resources in the short-term markets: Fed (US$50 bi); ECB (€70 billion= US$99 bi); BoE (£20 billion= US$35); BoJ (¥ 2.5 trillion = US$24 bi); RBA (AUD 1.3 billion= US$1 bi), besides the BNS, that also continues monitoring the short-term market. |
| 9.17.2008 | BoJ, RBA | US$33 billion | New inflow of resources in order to maintain the domestic liquidity before the shock coming from Wall Street: BoJ (¥ 3 trillion = US$28.4 bi); e RBA (AUD 4.3 bi). |
| 9.17.2008 | BoE | - | Extension of the term to bank's access to the Special Liquidity Scheme, from 21/10/2008 to 30/01/2009. |
| 9.17.2008 | USA | - | Announcement of Supplementary Financing Program – SFP of the Treasury to adjust the balance of the FED and to provide cash on hand so that it may follow with their programs of expansion of the financial liquidity both locally and globally. |
| 9.17.2008 | Russian Central Bank | - | Announcement of the reduction of the rate of compulsory deposits in rubles from 5,5% to 1,5%. |
| 9.18.2008 | Fed, BoC, BoE, BCE, BoJ and BNS | US$230 billion | Coordinated action of resource inflows in the global currency market. US$50 billion in the US market and US$180 billion in offshore markets. This resources, available till the end of January 2009, distributed through the extension of swap lines Fed/BCE (of US$55 billion to US$110 billion, of which US$40 billion are channeled to the overnight) and Fed/BNS (of US$12 billion to US$27 billion, with US$10 billion to overnight operations) and the creation of new lines of swap: Fed/BoJ (US$60 billion); Fed/BoC (US$10 billion); and Fed/BoE (US$40 billion). |
| 9.19.2008 | Fed | - | Announcement of the plans for repurchase from the primary dealers of short-term obligations issued by the Freddie Mac, Fannie Mae agencies and the Federal Home Loan Banks from the primary dealers. |
| 9.19.2008 | Fed | US$50 billion | Extension of the non-recourse loans (Loans without payment liability – the payment is done with the profitability arising from investments) for the depositing institutions and bank holdings aiming at financing the assets purchase of high quality assets backed by Asset-backed commercial papers (ABCP) with the mutual funds of the currency markets (money market mutual funds). The resources will have origin in the Exchange Stabilization Treasury Fund. |
| 9.23.2008 | Russia | US$100 billion | Announcement of a bailout of the financial market that aims, through liquidity injections, at containing what appears to be the beginning of the financial turmoil in the country. |
| 9.24.2008 | Fed, SRB, RBA and Central Bank of Denmark, Norway | US$30 billion | Creation of new currency swap lines US$10 billion with both the Sveriges Riks Bank (SRB) and with the Reserve Bank of Australia (RBA) and US$5 billion to the Central Banks of Norway and Denmark. |

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| Date | Country<br>Central Bank | Volume of<br>Resources | Characteristics |
|---|---|---|---|
| 9.26.2008 | Fed, ECB and BNS | US$13 billion | Increased resources available for both currency swap with the ECB ($10 billion) and the SNB (US$3 billion). |
| 9.29.2008 | Fed, ECB, BoE, BoJ, BoC, SNB, RBA, SRB and the Central Banks from Denmark and Norway | US$330 billion | Increased volumes supplied by the lines of the currency swap with other central banks: over US$120 billion to the ECB, US$60 billion for the BoJ, US$40 billion for the BoE, US$30 billion to the SNB, US$20 billion to BoC, SRB and RBA; each, and US$10 billion to the BC's in Denmark and Norway each. With this new injection of funds, the Fed now has a total of $620 billion made available on the swap: US$240 billion with the ECB, US$120 billion with the BoJ, US$80 billion with the BoE, US$60 billion with the SNB; US$30 billion to the banks of Canada, Sweden and Australia, each, and US$15 billion to the banks of Norway and Denmark each. |
| 9.29.2008 | Fed | US$100 billion | Increased volumes supplied by TAF auctions. Auctions of 84-days passed from US$25 billion toUS$75 billion. |
| 9.29.2008 | ECB | Not informed | Release of a special operation refinancing term of maturing for 07/11/2008. |
| 9.29.2008 | ECB and BoE | US$40 billion | Employment of resources of the lines of currency swap with the FED to the injection of resources overnight: US$30 billion (ECB) and US$10 billion (BoE). |
| 9.29.2008 | BoE | £40 billion | First of the special and weekly operations of repurchase for three months. |
| 9.29.2008 | RBA | AUD6 billion | Injection of funds in the money market |
| 9.29.2008 | BoJ | ¥1 trillion | Injection of funds in the money market |
| 9.29.2008 | Iceland | €0,6 billion | The government nationalized the Glitnir hf, the third major bank of the country when he acquired 75% of the participation in the bank. |
| 10.1.2008 | USA | - | Approval by the Senate of the Emergency Economic Stabilization Act, which includes a financial system rescue package (Trouble Asset Relieve Program) – TARP. Among a series of details, the law allows the FED to pay interest on compulsory deposits, provides for the creation of a foreclosure relief program, extends the term for the tax cuts, imposes limits to the payment of Bank´s executive benefits, permits unlimited access to the Treasury resources of the Federal Deposit Insurance Corporation (FDIC), increases till the end of 2009, from US$100.000 to US$250.000 the insurance for the banking accounts and creates a Council of Financial Stability in order to supervise the entire program. |
| 10.1.2008 | EUA | - | Creation of a 3–year program entitled Hope for Homeowners that enables the repurchase of mortgages to borrowers with a single residence, acquired before 2008, and for which the value of payment was more than 31% of the family gross income in March of the current year. |
| 10.3.2008 | EUA | US$700 billion | With approval by the Chamber, comes into force the Emergency Economic Stabilization Act, a major intervention of the government to the financial sector since the 1929 crisis. The law allows the Treasury to buy up to US$700 billion of “bad assets” through TARP. The first US$250 billion should be made available immediately, meanwhile the US$100 billion still depend on the presidential for itsrelease. The other US$350 billion remain dependent on the presidential requirement to the Congress. The Treasury may use the resources up to the end of 2009. |
| 10.3.2008 | United Kingdom | - | The Financial Services Authority (FSA) raised the £35.000 to £50.000 the guarantee value for deposits. The decision comes into force as of 7/10/2008. |
| 10.3.2008 | BoE | - | Extension of the list of collateral accepted in the three-month repo operations. The measure includes the acceptance of papers backed by triple A assets of certain companies, besides the papers backed by higher rated commercial papers. |
| 10.3.2008 | BCE | - | Extension of available access to fine tuning of overnight liquidity operations to smaller banks. Up to the end of September, only 140 banking institutions had this prerogative. |
| 10.5.2008 | Germany | Unlimited | Announcement of unlimited guarantee to the private savings deposits. |

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| Date | Country Central Bank | Volume of Resources | Characteristics |
|---|---|---|---|
| 10.5.2008 | Germany | €35 billion | Government guarantees €35 billion, meanwhile a pool of banks guarantees more €15 billion to make possible a rescue plan to the mortgage agency Hypo Real Estate Holding AG. |
| 10.6.2008 | USA/Fed | Unknown | In order to maintain Fed funds closer to the established goal Fed will remunerate the compulsory deposits. The rate paid must eliminate the opportunity cost of the withheld resources, will be the average during the period of reserve withholdings minus 10 b.p. |
| 10.6.2008 | USA/Fed | Extension of TAF to US$600 billion | The four auctions, two of 28 days and two 84 days, are increased in volume to US$150 billion each. |
| 10.6.2008 | USA/Fed | US$300 billion | Announcement of two extraordinary auctions in November, under the TAF program worth US$150 billion each. With this measure, TAF will reach US$900 billion at the end of the year. |
| 10.6.2008 | RBI | US$6 billion | Announcement of the Reduction of the compulsory deposits from 9% to 8,5%. |
| 10.6.2008 | Chile | US$1 billion | Injection of government dollar resources to the major local banks (Banco del Estado, Banco de Chile, Banco Santander Chile, e BCI Bank). |
| 10.6.2008 | Sweden | - | The government doubles the value of the offered guarantees to bank deposits of US$70.000 to US$100.000. |
| 10.7.2008 | USA/Fed | Not released | To avoid malfunctioning of commercial papers markets, and under the financial support of the Treasury, the FED announced the establishment of a credit line for the acquisition of these papers. THE CPFF (Commercial Paper Funding Facility) allows the purchase of 3-month papers issued without guarantee, but with a tax retention, or backed by assets from the issuers. |
| 10.7.2008 | European Union | | Increase in the level of guaranties for deposits of individuals from €20.000 to €100.000. |
| 10.7.2008 | ECB | | Increase of the value offered in 28-day auctions, from €25 billion to €40 billion, and in the auctions of 84 days, from €15 billion to €20 billion. |
| 10.7.2008 | Fed, ECB, BoE, BoJ, BoC e SNB | Not released | Coordinated action of extension of swap lines for the supplying of dollars in the offshore markets during the four quarters in 2008. |
| 10.7.2008 | Russia | US$36 billion | Announcement of the supply of resources to the country's major banks for a term of up to 5 years, between them the Sberbank, the Bank VTB and the Russian Agricultural Bank. |
| 10.7.2008 | Spain | €30 billion | Announcement of the creation of a support fund for banking loans, and the increase of €20.000 to €100.000 of guarantees for banking deposits. |
| 10.7.2008 | Belgium | - | Announcement of the increase of €20.000 to €100.000 of guarantees for banking deposits. |
| 10.7.2008 | RBA | - | Reduction of 100 b.p. in cash rate, the basic rate of interest to 6% a.a. |
| 10.8.2008 | Austria | - | The government announced the guarantee of 100% of the banking deposits. |
| 10.8.2008 | Iceland | Not released | The regulating body of the Icelandic financial system took control of the second biggest bank of the country, the Landsbank Island Hf. |
| 10.8.2008 | BoE | £500 billion | Announcement of the recapitalization package of the banking system: £50 billion to purchase preferential shares. £25 billion will be invested in the Royal Bank of Scotland (RBS), Barclays, HBOS, Lloyds, Abbey, Nationwide Building Society, Standard Chartered and HSBC. The same amount is available for other institutions, if necessary. Besides this kind of aid, more £250 billion will be used to give guarantee to the middle-term bonds to be emitted by the banks to refinance maturing debts, and £200 billion to expand the Special Liquidity Scheme – SLS, that allows the exchange of mortgage-backed papers for Treasury bonds. |
| 10.8.2008 | United Kingdom | - | The government announced that it will guarantee the deposits in the Icelandic bank, Icesave, which is subsidiary of Landsbanki Islands, which in turn is a subsidiary of the Landsbanki Islands, under the control of the Icelandic Government since7.10.2008, which had announced that the impediment of withdrawals from the United Kingdom account holders. |

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| Date | Country<br>Central Bank | Volume of<br>Resources | Characteristics |
|---|---|---|---|
| 10.8.2008 | Fed, BCE, BoE, BNS, BoC e SRB | - | Facing the downturn of the economic activity, announcement of an action coordinated of Reduction by 50b.p. in the respective basic rates of interest. The goal for the Fed funds retracted from 2% to 1.5%p.a., while the rediscount rediscount rate in the USA was reduced to 1.75%. The reference rate of the ECB dropped to 3.75%; the repo rate in the United Kingdom dropped to 4.5%p.a.; the rate in Switzerland moved to 2.5%; the Canadian rate decreased to 2.5%; and the Swedish basic rate dropped to 4.25%. |
| 10.8.2008 | BPC | - | Reduction of the basic rate of interest in 27 b.p., to 6.93%; |
| 10.8.2008 | Fed | US$38 billion | Announcement of the additional supplyof liquidity to the AIG insurance company. |
| 10.8.2008 | BPC (China) | - | Reduction of the rate of reserve requirement to 16%. |
| 10.8.2008 | Chile | | Announcement of reserve repatriation to hold the rising value of the American dollar. |
| 10.9.2008 | Iceland | - | The regulating organ, of the Icelandic financial system took the control of the Kauptung bank, the biggest bank in the country, guaranteed the domestic deposits and announced the creation of a new bank which will even incorporate the credit portfolio of the Landsbanki Island. |
| Between 06 and 10.10.2009 | Bank of Mexico | US$6 billion | Extraordinary auctions of resources in dollars to alleviate the tensions on the exchange rate. |
| 10.9.2008 | Korea | - | Reduction of basic interest rate in 25 b.p. to 5% a.a. |
| 10.10.2008 | RBI (Índia) | US$12 billion | Announcement of reduction in the reserve requirements from 8.5% to 7.5%. |
| 10.10.2008 | Belgium | Not released | Announcement of a temporary guarantee plan to support the refinancing in the inter-bank market. |
| 10.10.2008 | Denmark | €4 billion | The Parliament has approved the creation of a fund to back financial institutions and guarantee 100% of banking deposits. |
| 10.13.2008 | United Kingdom | £37 billion | Acquisition of a majority stake in the Royal Bank of Scotland (RBS) and approximately 40% of the merged group of Lloyds Trustee Savings Bank (TSB) and Halifax Bank of Scotland (HBOS). |
| 10.13.2008 | Norway | US$55 billion | Government Bonds issue in exchange for the mortgage debt in the hands of the banks. Announcement that the Norwegian branch of the Icelandic Bank Kaupthing will have public administration, after its nationalization in Iceland. |
| 10.13.2008 | Spain | €100 billion | Lines to guarantee the issue of banking bonuses in 2008, expiring in up to 5 years, and to buy banks' assets. |
| 10.13.2008 | Portugal | €20 billion | Line of financing, up to the 12.31.2009, targeted to any credit institution based in the country. |
| 10.13.2008 | Germany | - | Announcement of a stimulus package to the interbank credit market and restore trust in the financial system, injection of up to €80 billion for recapitalization and up to €400 billion in guarantees for loans. Measures which are valid up to the end of 2009. The forecast is that the national budget be impacted until 2011. |
| 10.13.2008 | France | €360 billion | Announcement of a €320 billion package to government´s guarantee of the inter-bank deposits contracted until the end of 2009 and with maturity of up to 5 years, and €40 billion for stockholdings purchase (recapitalization) in the banking system. |
| 10.13.2008 | Holland | €200 billion | Guaranties to interbank credit operations. |
| 10.13.2008 | Itály | Not released | State guaranties for banking debts of up to 5 years, issued till the end of 2009; swap of the central bank for bank refinancing, support for banks to finance private companies, and the publication of a decree that authorizes the governmental purchase of preferential assets of banks in difficulty. |
| 10.13.2008 | Austria | €100 billion | Government's guarantee to refinance likely capital inflows in the acquisition of bank equity holdings, besides the complete guarantee for individual's deposits. |
| 10.13.2008 | Russia | US$50 billion | Law that allows local banks to borrow, without any guaranties for a 6-month period. |
| 10.13.2008 | Australia | US$458 billion | 3-year guaranty in banking deposits, against a premium of insurance to be paid by the banks. |
| | | | Guarantee to the international loans taken by the local banks. Duplicating of mortgage guaranty funds for a total amount of US$5 billion. |

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| Date | Country Central Bank | Volume of Resources | Characteristics |
|---|---|---|---|
| 10.13.2008 | New Zealand | Not released | Guaranty of two years to banking deposits, to be agreed upon bilaterally between financial institutions involved and the government. |
| 10.13.2008 | Chile | US$0.7 billion | Supply of resources via CDBs, which adds up to US$1 billion placed in the banking system last month. |
| 10.13.2008 | Saudi Arabia | US$40 billion | Resources supplied to the banking system. |
| 10.13.2008 | United Arab Emirates | Not released | Savings and deposits guaranteed by the National Banks, besides the supply of total guaranties in the interbank market. |
| 10.13.2008 | Fed, ECB, BoE and SNB | Unlimited | Unlimited financing in dollars to the European Banks by the terms of 7, 28 e 84 days. The collateral guaranties will be judged adequate in each jurisdiction. The validity of the lines of swap was extended until 4.30.2009. |
| 10.13.2008 | Qatar | - | Announcement of a likely acquisition of up to 20% of the local bank's capital. |
| 10.14.2008 | USA | - | The Treasury authorized the FDIC Federal Deposit Insurance Corp. to guarantee, exceptionally, the debts with priority payment (senior) of all the insured institutions, as well as the account deposits that do not earn interest. |
| 10.14.2008 | USA | US$250 billion | With the assistance of TARP, the first US$250 billion will be made available to the equity acquisition in nine institutions (Goldman Sachs Group; Morgan Stanley; JPMorgan Chase; Bank of America; Merrill Lynch; Citigroup; Wells Fargo; Bank of New York Mellon; e State Street). Other banks have up to 14/11/2008 to join the program that implies restrictions to the payment of salaries to their executives, but does not limit the distribution of dividends to shareholders. |
| 10.14.2008 | Fed and BoJ | Unlimited | Extension, up to 30/04/2009, of the currency-swap line for supplying dollars offshore. |
| 10.14.2008 | Japan | - | Announcement of a plan to reinforce the stock and money markets, including the easying of stock repurchase conditions and permission to the BoJ carry out injections of resources in regional banks. |
| 10.14.2008 | United Arab Emirates | US$19 billion | Additional injection of AED70 billion dirhans (US$19 billion), that add up to 50 billion dirhans of the credit line released last month that aims to expand the liquidity in the interbank market. |
| 10.14.2008 | Australia | AUD 10 billion | Announcement of an stimulus fiscal package mostly targeted to retired and low-income wage-earners. Through this measure, it is expected that resources will come quickly in circulation. |
| 10.15.2008 | BCE | - | Extension of the list of collateral accepted in refinancing operations, including the acceptance of syndicated loans, besides de acceptance of instruments of negotiable debt nominated in other currencies than the US dollar, Euro, Pound, and Yen, provided that they are issued in the Euro area, but with an additional discount of 8%. Also there will be a reduction in the minimum limit of assessment of the assets accepted, from A to BBB-, subject to an additional discount of 5%. The validity of these alterations expire at the end of 2009. |
| 10.15.2008 | Chile | US$850 million | Disclosure of a package to provide credit to exporters and to smallbusinesses. |
| 10.15.2008 | BCE | Unlimited | Announcement that the long-term refinancing auctions will meet all the requests. |
| 10.15.2008 | BCE and BNS | Not released | Announcement of the creation of a swap line euro/Swiss franc, starting on 20/10/2008. The operations term is of 7 days and the agreement will be kept at least until the end of 2009. |
| 10.15.2008 | Greece | €28 billion | Announcement of a support package for local banks: guarantee of €15 billion in issue of 3-5 years bonds by the banks, injection of €8 billion injection of government bonds in the banks, and the possibility of purchase of €5 billion in hybrid securities from the banks. |
| 10.16.2008 | BCE and BC from Hungary | €5 billion | Announcement of the creation of a swap line euro/Hungarian forint. |
| 10.16.2008 | BoE | Not released | Announcement of the creation of a new line of overnight, starting on the10.22.2008, and a rediscount window, replacing the SLS that expires on January 2009. This will permit the exchange of illiquid assets for government bonds in a 30-day term. |

(Continues)

(continued)

| Date | Country<br>Central Bank | Volume of<br>Resources | Characteristics |
|---|---|---|---|
| 10.16.2008 | European Union | - | The European Parliament approved a set of new measures on the financial system structural reforms of the block aiming at the Reduction of the volatility in the value of the companies and the regulation of the bank executive’s earnings, as well as their judicial responsibility in case of accounting and administrative mistakes. The new rules are already in use to the analysis of the balances from the third quarter of 2008. |
| 10.16.2008 | Bank of Italy | €2 billion | Availability of 1/5 of the available amount for the exchange of government bonds against illiquid assets with financial institutions. The operation implies a 1% rate p.a., but it permits the institutions to apply the federal bonds for refinancing at the BCE. |
| 10.16.2008 | Switzer land and SNB | CHF 6 billion | Injection of resources in UBS and the assumption of US$60 billion of said “Toxic” assets against a 9% holdings in the respective bank. |
| 10.16.2008 | Poland Central Bank | - | The monetary authority informed that it will begin to carry out foreign exchange swaps as of 10.17.2010 to alleviate the financial tensions in the local market. |
| 10.17.2008 | Germany | €500 billion | The German Parliament approved a €480 billion plan announced on 10.13.2010 by the prime minister Merkel, to which was added more €20 billion in allowances for losses suffered by financial institutions. |
| 10.19.2008 | Korea | US$100 billion | Government announces a package to guarantee up to US$100 billion of banking debts incurred abroad, from this date up to6.30.2009. |
| 10.20.2008 | Sweden | US$206 billion<br>US$21billion | Proposal of a financial stability plan in which resources are supplied as banking guarantees. The plan foresees the creation of a US$21 billion fund to deal with solvency problems, where resources are supplied by the government and by the financial institutions. |
| 10.20.2008 | Holland | €10 billion | Announcement that the government will inject resources in the ING Group. However, the government will have two seats at the group’s board, will receive interest of 8,5% p.a. and impose restrictions to the payment of dividends in 2008 and interdiction of bonus payment to the group’s executives. |
| 10.20.2008 | Belgium | €1,5 billion | Announcement of the allocation of federal resources in the insured Ethias by means of the increase of capital. |
| 10.20.2008 | RBI | - | Cut of interest of 100 b.p. to 8%p.a. |
| 10.21.2008 | BoC | - | Cut of 25 b.p. of basic interest to 2,25%p.a. |
| 10.21.2008 | Fed | US$540 billion | Announcement of the creation of the Money Market Investor Funding Facility – (MMIFF). By this instrument, the Fed starts to guarantee to the purchase of deposits and commercial paper´s certificate, with validity of 90 days maximum, issued by institutions with a higher risk classification. The eligible investors are basically the mutual funds. |
| 10.22.2008 | Fed | - | Announcement of the rise in interests paid on reserve requirements: basic interests minus 75 b.p. to basic interest minus 35 b.p. |
| 10.23.2008 | SRB | - | Cut of 50 b.p. Of basic interests to 3,75%p.a. |
| 10.23.2008 | RBNZ | - | Cut of 100 b.p. of basic interests to 6,5%p.a. |
| 10.24.2008 | Korea, China, Japan and | US$80billion | East Asian countries announced the creation of a fund, until mid 2009, to fight the crisis. |
| 10.27.2008 | China | US$292 billion | Announcement of a stimulus fiscal package to the activity of rail construction. |
| 10.27.2008 | ECB e Central Bank of Denmark | €12 billion | Creation of a swap currency line between the respective central banks. |
| 10.27.2008 | BoK | - | The Central Bank of Korea, announced once again a cutback in the basic interest rate, of 5% a.a. to 4,25% a.a. The institution also announced that the purchase of bonds issued by local banks and, not only expanded the limits of loans to exporters, but also announced a grace period for businesses affected by the devaluation of the Won against the dollar and the Yen. |
| 10.28.2008 | Spain | €100 billion | Announcement that the government will guarantee up to €100 billion in the bonus issue by the country's banks in 2009, same quantity of 2008. |
| 10.28.2008 | Fed e RBNZ | US$15 billion | Creation of a line of currency swap, valid until 4.30.2008. |
| 10.29.2008 | Fed | - | Reduction of the basic interest, the goal for the Fed funds, to 1% a.a. |

(Continues)

(continued)

| Date | Country Central Bank | Volume of Resources | Characteristics |
|---|---|---|---|
| 10.29.2008 | Fed, BCB, Banxico, BoK and Singapore Mon.Aut. | US$120 billion | Announcement of the creation of lines of swap of currency in the value of US$30 billion each with central banks from Brazil, Mexico and Korea and the Monetary Authority of Singapore. The lines are valid till 4.30.2009. |
| 10.29.2008 | BPC | - | Reduction by 27 b.p. In the annual basic interest, from 6.93% to 6.66%. |
| 10.30.2008 | Japan | ¥ 27 trillion | Announcement of a new stimulus package to the economy that include the reduction of the income tax, exemption of taxes on capital earnings and dividends, aid to small businesses and resources for the recapitalization of banks. |
| 10.31.2008 | BoJ | - | Reduction by 20 b.p. In the annual basic interest, of 0.5% to 0.3%. |
| 11.1.2008 | RBI | - | Reduction by 25 b.p. In the yearly basic interest of 7.75% to 7.5%. |
| 11.4.2008 | RBA | | Reduction by 75 b.p. In the yearly basic interest of 6% to 5,25%. |
| 11.4.2008 | Chile | US$1,3 billion | Announcement of a package that aims the injection of US$500 million in the State Financial Institution BancoEstado, to increase the granting of mortgages to families of low or middle income, and of US$800 million by which the development agency Corfo, will facilitate the credit for small and medium businesses. |
| 11.5.2008 | Switzerland | - | Increase the government guarantee of deposits, CHF 30.000 to CHF 100.000. |
| 11.5.2008 | Fed | | Announcement of a new alteration in the remuneration of the compulsory deposits. By the new formulas, for the obligatory deposits, the rate passes the media of Fed funds during the period in question minus 10 b.p. to the average of Fed funds during the period. For the excess reserves, the rate moves from the minor rate of the Fed Funds during the period less 35 base-points to a minor rate during the term. |
| 11.6.2008 | BoE | - | Reduction by 150 b.p. In the annual basic interest from 4.5% to 3%. |
| 11.6.2008 | BCE | - | Reduction by 50 b.p. In the annual basic interest from 3.75% to 3.25%. |
| 11.6.2008 | BNS | - | Reduction by 50 b.p. In the annual basic interest from 2.5% to 2%. |
| 11.6.2008 | Czech Central Bank. | - | Reduction by 75 b.p. In the annual basic interests from 3.5% to 2.75%. |
| 11.6.2008 | DNB | - | Reduction by 50 b.p. In the annual basic interests from 4.5% to 4%. |
| 11.7.2008 | BoK | - | Reduction by 25 b.p. In the annual basic interest from 4.25% to 4%. |
| 11.10.2008 | USA/Fed | US$27 billion | Announcement of the restructuring of the aid agreement to the insurance American International Group (AIG). The Treasury will purchase US$40 billion of preferential assets from AIG in the sphere of Trouble Asset Relief Program. Besides the financial resources AIG will count with two new Fed lines of credit that totaling more than US$50 billion. In total values, the aid to AIG will surpass from US$123 billion to US$150 billion. |
| 11.10.2008 | China | US$586 billion | Approval of a package of economic stimulus until 2010 to boost the domestic demand. The resources will be concentrated in investments of infrastructure and welfare state, besides the financing to small and medium businesses. The package also includes the reduction of taxes on businesses in 120 billion yuan per year. |
| 11.11.2008 | USA | - | Announcement by the Treasury and by the Federal Agency of Estate finances of a plan to aid the borrowers for renegotiation mortgage conditions in a trial to avoid more foreclosures. |
| 11.11.2008 | CBR | - | To protect the currency and reduce inflationary pressure, a new interest rate rise was annouced. The benchmark rate raises from 11% to 12% p.a. |
| 11.20.2008 | SNB | - | Reduction by 100 b.p. the annual basic interests from 2 % to 1%. |
| 11.21.2008 | USA | - | The FDIC announced alterations in its program of guarantees of the bank debts. The rule of single tax of 75 base-points was relaxed. Institutions will obey a scheduling of rates for short-term debts. |
| 11.23.2008 | USA | US$306 billion | Announcement of a package of protection to large losses with assets kept in portfolio, including mortgage-backed securities, offered to the Citigroup that also received an injection of US$20 billion, in the TARP framework. |
| 11.24.2008 | UK | US$30 billion | Announced a fiscal stimulus package to boost domestic demand, once that the plan includes the Tax reduction for the middle-class and an increase in the tax for the wealthier and over business' profit. The package is about 1% the British GDP. |

(Continues)

(concluded)

| Date | Country Central Bank | Volume of Resources | Characteristics |
|---|---|---|---|
| 11.25.2008 | Fed | US$200 billion | Announcement of the creation of a program to boost the consumer credit and stimulate the level of economic activity, called Term Asset-Backed Securities Loan Facility (TALF). The Fed will grant loans of non-recourse (in case of default, the creditor is limited to receiving the collateral) for banks holding of AAA-ABS collateralized by student credits, credits for the acquisition of automobiles, credit for the holder of small businesses and credit provided via credit cards. |
| 11.25.2008 | USA | US$20 billion | The Treasury will use TARP resources to allocate resources to the FED, as an aid to the TALF line. |
| 11.25.2008 | Fed | US$600 billion | Aiming at the reduction of the cost and the extension of real estate credits, there was the announcement of a program for the direct purchase of GSE liabilities (Fannie Mae, Freddie Mac and Federal Home Loan Banks), US$100 billion, and the purchase of mortgage-backed securities, MBS (US$500 billion). |
| 11.26.2008 | PBC | - | Aiming at giving a new stimulus to the economic growth, the BPC made new reductions of the basic interest from 6,66% to 5,58% and the rate of reserve requirements, from 1% to major banks and of 2% for the others. |
| 28.11.2008 | Italy | €80 billion | Announcement of a fiscal package to fight recession. The package is proportionally more modest than the ones released in France and Germany due to the great Italian public debt. Among the measures taken are the financial aid to low income families, exemption of taxes to businesses and up to €12 billion to the Italian Banks, that will be distributed by means of the purchase of hybrid debts from the financial institutions by the government. |
| 2.12.2008 | RBA | - | Reduction by 100 b.p. in the annual basic interest of 5,25% to 4,25%. |
| 3.12.2008 | BoJ | - | Announcement of the reduction of A to BBB- of the minimum requirement for the acceptance of corporate bonus as collateral of loans. |
| 4.12.2008 | ECB | - | Reduction by 75 b.p. In the annual basic interests, from 3.25% to 2.5%. |
| 4.11.2008 | BoE | - | Reduction by 100 b.p. In the annual basic interests of 3% to 2%. |
| 11/4/2008 | SRB | | Cut of 75 b.p. of basic interest to 2%p.a. |
| 12/4/2008 | RBNZ | - | Cut of150 b.p. of basic interests to 5%p.a. |
| 4.12.2008 | Argentina | R$9,6 billion | Announcement of a fiscal package to stimulate production, investments and consumption, with the reduction of taxes on exports (withholdings). |

# External sector

5

Current transactions, after five consecutive surpluses, once again registered a deficit in 2008. The reversal of the positive results, initiated in mid-2007, evidenced the impact of the Brazilian economy's recent trajectory of expansion over the growth rates of imports, which have been maintained at a level significantly higher than exports, and the expansion in net remittances of services and incomes, especially those related to profits and dividends.

The performance of the balance of payments' financial account continues translating a considerable FDI net inflows, which should reach a record volume in 2008, in contrast with recent outflows of external capitals related to portfolio investments, especially securities; short-term loans; and low rollover rate of the medium- and long-term external debt. In this context, the permanence of the current external scenario should turn the balance of payments financing conditions more adverse in the medium-term.

In this environment of increasing risk aversion, the forecasts related to the country's balance of payments for 2009 – see box Forecasts for the Balance of Payment on page 114 of this Report – started to incorporate the prospects for a reduction in the world economic activity, a scenario for exchange rate depreciation, the return of foreign portfolio investments, growth in country-risk indicators, shortening of financing terms, and, also, the tightening of credit supply. Additionally, for 2008 the results that took place up to November were incorporated, including the interventions by the Central Bank in the domestic foreign exchange market, as well as in the new September external indebtedness position.

One should highlight that, as of September, in response to the new conditions of the international financial market, the Central Bank has acted in order to maintain on adequate levels the liquidity in foreign currency in the country and the supply of credit line to exporters. The details of such measures can be found in the box International Financial

Crisis – Brazilian Government's Response in the Supply of Foreign Currency Liquidity, page 98 of this report.

## 5.1 Exchange

**Table 5.1 – Foreign exchange flows**

US& billion

| Itemization | 2007 | | | 2008 | |
|---|---|---|---|---|---|
| | Nov | Jan-Nov | Year | Nov | Jan-Nov |
| Trade operations | 7.3 | 73.5 | 76.7 | 3.1 | 48.0 |
| Exports | 17.2 | 170.7 | 184.8 | 13.5 | 176.6 |
| Imports | 9.9 | 97.3 | 108.0 | 10.4 | 128.6 |
| Financial operations1/ | -2.0 | 8.6 | 10.7 | -10.3 | -42.6 |
| Purchases | 32.3 | 306.7 | 348.3 | 18.7 | 385.9 |
| Sales | 34.3 | 298.1 | 337.6 | 29.0 | 428.5 |
| Net flows | 5.3 | 82.1 | 87.5 | -7.2 | 5.4 |

1/ Excluding interbank operations and Central Bank foreign operations.

Foreign exchange operations turned in a surplus of US$5.4 billion in the first eleven months of the year, against US$82.1 billion in the corresponding period of 2007, a downturn resulting from the effects of the international financial turmoil on international investors' risk aversion and to the increased contracting of import operations. Net inflows in the trade segment fell 34.6%, to US$48 billion, in the period, while net flows in the financial segment showed inflow reversal, from UR$8.6 billion, in the first eleven months of 2007, to outflows of US$42.6 billion. The result of the trade segment is consistent with expansions of 3.4% in the contracting export operations and 32.2% in those related to imports. At the same time, the financial segment showed expansions of 25.8% in purchases and 43.7% in sales of foreign currency.

The exchange surplus accumulated in the first eleven months of 2008 made possible Central Bank net purchases of US$12.4 billion on the spot market, against US$76.3 billion in the corresponding period of 2007. The bank's long position reached US$2.5 billion, up to the end of November 2008, against US$7.3 billion at the end of 2007.

## 5.2 Trade in goods

**Table 5.2 – Trade balance – FOB**

US$ million

| Period | | Exports | Imports | Balance | Total trade |
|---|---|---|---|---|---|
| Jan-Nov | 2008 | 184 125 | 161 667 | 22 458 | 345 792 |
| Jan-Nov | 2007 | 146 418 | 110 023 | 36 396 | 256 441 |
| % change | | 25.8 | 46.9 | -38.3 | 34.8 |

Source: MDIC/Secex

In November, exports summed up US$14.8 billion and imports, US$13.1 billion, in November, record values for that month, turning in a US$1.6 billion surplus and a trade flow of US$27.9 billion. External sales reached US$184 billion in the first eleven months of the year, increasing 25.8% in relation to the corresponding period of 2007, while external purchases expanded 46.9%, to US$162 billion, causing a cutback of 38.3% in the trade surplus, which totaled US$22.5 billion.

The exports' daily average increased 25.2% in the first eleven months of 2008, in relation to the corresponding period of 2007. The shipments of basic products, whose participation in the total exported grew from 31.9% to 37.1% in the period, increased 45.5% with emphasis on the growth of petroleum sales, 63.2%; soybeans, 62.3%; iron ore and iron ore concentrates, 60.8%; soybean, 53.1%, chicken meat, 43.2%; accounting for altogether for 70.5% of the category's exports

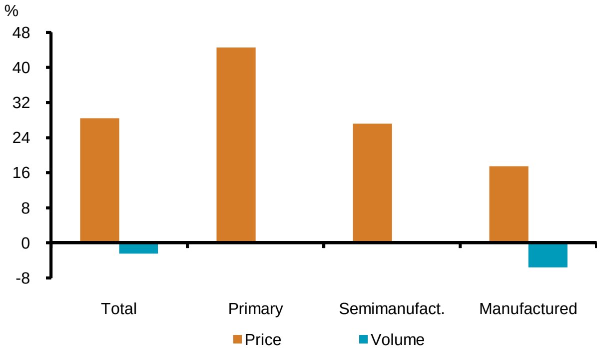
**Table 5.3 – Exports by aggregate factor – FOB**
Daily average – January-November

US$ million

| Itemization | 2007 | 2008 | % change |
|---|---|---|---|
| Total | 636.6 | 797.1 | 25.2 |
| Primary products | 203.1 | 295.6 | 45.5 |
| Industrial products | 420.6 | 480.3 | 14.2 |
| Semimanufactured goods | 87.0 | 110.5 | 27.0 |
| Manufactured goods | 333.6 | 369.8 | 10.9 |
| Special operations | 12.9 | 21.2 | 64.0 |

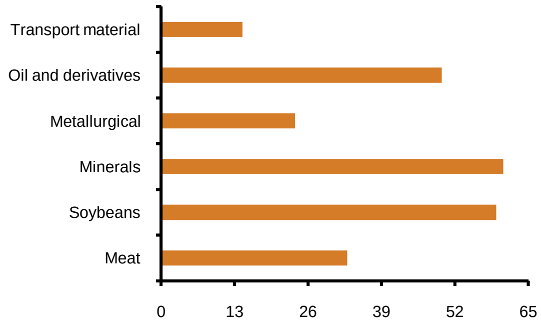
Source: MDIC/Secex

**Figure 5.1 – Exports – Price and volume index**
January-November – 2008/2007




Source: Funcex

**Figure 5.2 – Main exports**
January-November – 2008/2007 – % growth




Source: MDIC/Secex

**Table 5.4 – Imports by end-use category – FOB**
Daily average – January-November

US$ million

| Itemization | 2007 | 2008 | % change |
|---|---|---|---|
| Total | 478.4 | 699.9 | 46.3 |
| Capital goods | 99.5 | 143.7 | 44.4 |
| Raw materials | 236.6 | 338.3 | 43.0 |
| Naphtha | 7.7 | 9.6 | 24.9 |
| Consumer goods | 63.5 | 90.2 | 42.1 |
| Durable | 32.6 | 51.3 | 57.3 |
| Passenger vehicles | 12.0 | 21.6 | 79.5 |
| Nondurable | 30.9 | 38.9 | 26.1 |
| Fuels | 78.8 | 127.7 | 62.0 |
| Crude oil | 46.9 | 67.5 | 43.9 |

Source: MDIC/Secex

during the period. One should note that the performance of sales of basic products was linked, especially, to the price rise. One should note that the coming into force, since April, of the iron ore price increases already negotiated since the beginning of the year. Additionally, the petroleum exported quantity fell 4.5% in the period.

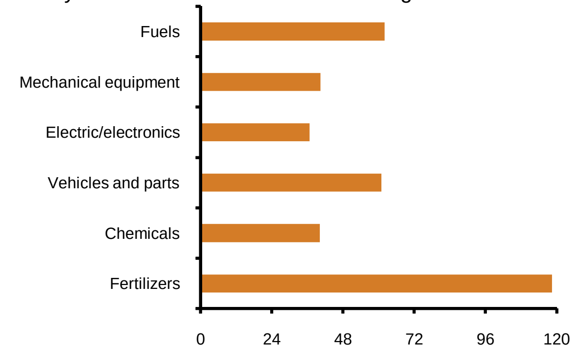
The exports daily average of semi-manufactured products increased by 27% in the first eleven months of the year, representing 13.9% of the total exported, against 13.7% in the corresponding period of 2007. One should note that the expansions registered in the exports of cast iron and Spiegel iron, 79.2%; semi-manufactured products of iron or steel, 77.7%; iron alloys, 70%; cellulose, 34.9%; and raw sugar cane, gross, 10.5%, representing altogether 62.9% of the category's sales.

The average exports of manufactured items, which showed generalized growth in prices, represented 46.4% of the external sales in the first eleven months of the year, increasing 10.9% in relation to the corresponding period of 2007. One should highlight growth in the sales of ethyl alcohol, 60.6%; tractors, 26.5%;engines, generators, and electric transformers, 26.1%; fuel oils, 23.7%; and aircraft, 14.3%, responsible, altogether, for 15.9% of the category's sales. One should emphasize, in the period, reduction in the shipped volume of the majority of this group's relevant products, except for the expansions linked to the items, ethyl alcohol, 44.4%, and aircraft, 7.6%.

Statistics of the Foreign Trade Studies Center Foundation (Funcex) show that the export prices grew 28.4% from January to November 2008, in relation to the corresponding period of 2007, while the exported amount dropped 2.5%. The prices of basic products increased 44.5%, followed by those related to semi-manufactured, 27.2%, and manufactured, 17.5%. The performance of the exported *quantum* translated retractions of 5.6% in the category of manufactured items, while the exported *quantum* of basic and semi-manufactured products, showed stability, in the period.

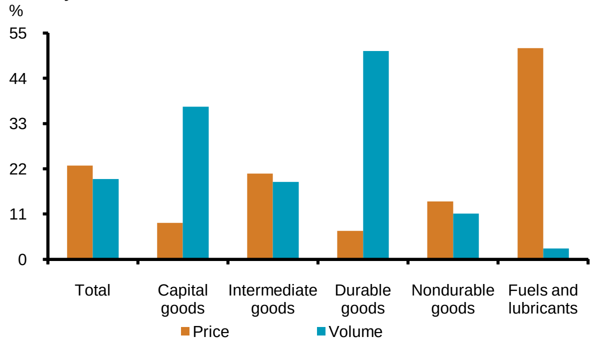
The analysis of the average external sales in the first eleven months of the year, considering the industrial sectors, shows a generalized expansion in comparison to the corresponding period of 2007, except for the reduction observed in the segments, wood, 16.1%, and leather and footwear, 5.7%. The six most representative sectors of the country's export agenda accounted for, taken together, 61.3% of the exports, with emphasis to the growth of 60.5% linked to the sales of ores, followed by the ones related to soybean, 59.3%; petroleum

Figure 5.3 – Imports by main products
January-November – 2008/2007 – % change



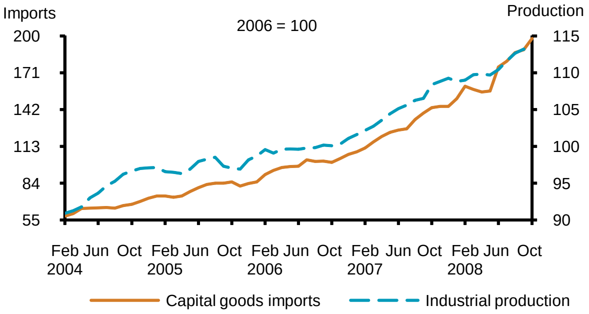

Source: MDIC/Secex

Figure 5.4 – Imports – Price and volume index
January-November – 2008/2007




Source: Funcex

Figure 5.5 – Capital goods imports x industrial production – 3-month moving average
Seasonally adjusted indices




Source: Funcex and IBGE

and derivatives, 49.6%; meat, 32.9%; metallurgical products, 23.7%; and transportation material, 14.4%.

The exports daily average grew 46.3% in the first eleven months of the year, as compared to the corresponding period of 2007, impelled, somewhat, by expansions, in the purchases of fuels and lubricants, 62%, reflecting the high level of petroleum prices in the first three quarters of the year; and 57.3% in the ones related to durable consumer goods, in line with the 79.5% growth in vehicle acquisitions.

Daily average imports of capital goods grew 44.4% in the period, with emphasis on the expansion of 76.3% experienced by the segment mobile equipments for transportation, evincing purchases of high unit value, of engines and aircraft. At the same time, one should highlight increased purchases of industrial machines, 51.5%; parts and spares of capital inputs for the industrial sector 31.8%; as well as office machines and scientific services equipment, 31.7%.

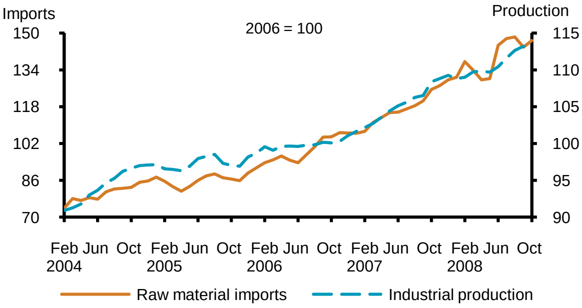
Purchases of raw materials and intermediate products, representing 48.3% of the total imported, increased 43% in the year, impelled by the purchase of raw materials for farming, 109%, a segment which includes fertilizers; and of construction materials, 62.1%. Exports of nondurable consumer goods expanded 26.1%, in the period, with highlights to the increases in the item foodstuffs, 37.3%, and textiles, 29.7%.

According to the Funcex, the amount and prices of imports registered respective growth of 22.8% and 19.5% in the first eleven months of the year, as compared to the same period of the previous year. Import growth in durable and capital goods mirrored, especially, the expansion of 50.6% and 37.1%, observed in the respective categories' volume, against increases, in the same order, of 6.9% and 8.9% in prices.

The purchases of nondurable consumer goods reflected increases of 11.1% in the imported volume and 14% in prices, while acquisitions of raw materials and intermediate products mirrored respective expansion rates of 18.8% and 20.9%. Additionally, the trajectory of purchases of fuels and lubricants derived from the 51.3% expansion in prices and 2.6% growth in the imported volume.

The sector analysis shows the across-the-board growth of the external purchases' daily averages in the first eleven months of the year, compared to the same period of the previous year. One should highlight the performance of the segments fertilizers, 118%; fuels and lubricants, 62%; automotive

**Figure 5.6 – Raw material imports x industrial production – 3-month moving average**
Seasonally adjusted indices




Source: Funcex and IBGE

**Table 5.5 – Exports and imports by area – FOB**
Daily average – January-November

US$ million

| Itemization | Exports | | | Imports | | | Balance | |
|---|---|---|---|---|---|---|---|---|
| | 2007 | 2008 | % change | 2007 | 2008 | % change | 2007 | 2008 |
| Total | 637 | 797 | 25 | 478 | 700 | 46 | 158 | 97 |
| Laia | 144 | 173 | 20 | 81 | 110 | 36 | 63 | 63 |
| Mercosur | 69 | 89 | 29 | 45 | 60 | 33 | 23 | 28 |
| Argentina | 57 | 72 | 26 | 41 | 54 | 32 | 17 | 19 |
| Other | 12 | 16 | 41 | 5 | 7 | 40 | 7 | 10 |
| Other | 75 | 84 | 12 | 35 | 50 | 41 | 40 | 35 |
| USA[1/] | 100 | 112 | 12 | 76 | 103 | 36 | 25 | 9 |
| EU | 160 | 187 | 17 | 107 | 146 | 37 | 53 | 41 |
| E. Europe | 17 | 23 | 36 | 11 | 22 | 102 | 6 | 1 |
| Asia | 101 | 152 | 51 | 122 | 191 | 57 | -22 | -39 |
| China | 44 | 68 | 55 | 50 | 81 | 62 | -6 | -13 |
| Other | 57 | 84 | 48 | 72 | 111 | 53 | -15 | -26 |
| Others | 115 | 150 | 30 | 82 | 128 | 55 | 33 | 22 |

Source: MDIC/Secex

1/ Includes Puerto Rico.

vehicles and parts, 60.9%; mechanic equipment, 40.4%; organic and inorganic chemicals, 40.2%; and electric and electronic appliances, 36.7%.

The country's external trade flow with the main blocs and regions increased in the first eleven months of 2008, against the same period of the 2007, while the cutback of 38.6% registered in trade surplus, for a daily average of US$97 million, mirroring the occurrence of an overall reduction in the trade balances, with the exception of 21% growth in the surplus with the Southern Common Market (Mercosul).

The European Union and the Latin American Integration Association (Aladi) were the main destinations of Brazilian products, observing, in the order, 23.5% and 21.7% of the country's exports. At the same time, the United States participation, our main individual importer, followed a downward trajectory and remained at 14.1%, dropping 1.7 p.p. as compared to what happened in the first eleven months of 2007. The daily average sales to China grew 55% in the period, increasing its market-share in 1.6 p.p., to 8.5% only 0.5 p.p. lower than Argentina's, the second largest buyer. Using the same basis of comparison, the average daily exports to Asia and Aladi grew 51.3% and 20.1%, respectively, with emphasis on the 28.6% expansion in sales targeted to the Mercosul.

A breakdown of the Brazilian imports by country and region evinces an ongoing process of concentration of purchases originating in Asia, the main supplier region to the country, whose participation increased 1.8 p.p. in the first eleven months of the year, accounting for 27.4% of the total imports total, with emphasis to the increase of 61.8% in purchases from China, responsible for 11.6% of the purchases carried out by the country. One should still highlight, the expansion of 36% in the imports from Aladi member countries, a result of increases of 32.5% in the imports coming from the Mercosul member countries and of 40.1% in those coming from countries that are not part of this bloc. Imports coming from West Europe grew 102% in the year, representing 3.1% of the total.

## 5.3 Services and income

The deficit in current transactions accumulated in twelve months reached US$26.3 billion in November, 1.67% of GDP, against surplus of US$2.6 billion, 0.20% of GDP, in the corresponding period of 2007, a reversal linked to the

**Table 5.6 – Current account**

US$ billion

| Itemization | 2007 | | | 2008 | | | 2009 |
|---|---|---|---|---|---|---|---|
| | Nov | Jan-Nov | Year | Nov | Jan-Nov | Year[1/] | Year[1/] |
| Current account | -1.3 | 2.2 | 1.7 | -1.0 | -25.8 | -29.6 | -25.0 |
| Trade balance | 2.0 | 36.4 | 40.0 | 1.6 | 22.5 | 23.5 | 14.0 |
| Exports | 14.1 | 146.4 | 160.6 | 14.8 | 184.1 | 200.0 | 193.0 |
| Imports | 12.0 | 110.0 | 120.6 | 13.1 | 161.7 | 176.5 | 179.0 |
| Services | -1.2 | -11.9 | -13.1 | -1.3 | -15.3 | -16.4 | -13.0 |
| Transportation | -0.4 | -3.9 | -4.2 | -0.4 | -5.0 | -5.5 | -7.0 |
| International travel | -0.4 | -2.9 | -3.3 | -0.1 | -5.1 | -5.2 | -1.5 |
| Computer and informat. | -0.1 | -1.9 | -2.1 | -0.1 | -2.4 | -2.5 | -2.7 |
| Operational leasing | -0.6 | -5.3 | -5.8 | -0.8 | -6.6 | -7.1 | -6.8 |
| Other | 0.2 | 2.1 | 2.3 | 0.2 | 3.7 | 3.9 | 5.0 |
| Income | -2.4 | -25.9 | -29.3 | -1.8 | -36.7 | -40.9 | -28.5 |
| Interest | -0.3 | -7.0 | -7.3 | -0.5 | -6.5 | -7.6 | -9.0 |
| Profits and dividends | -2.1 | -19.3 | -22.4 | -1.4 | -30.7 | -33.7 | -20.0 |
| Compensation of employees | 0.0 | 0.4 | 0.4 | 0.1 | 0.5 | 0.5 | 0.5 |
| Current transfers | 0.3 | 3.6 | 4.0 | 0.4 | 3.8 | 4.1 | 2.5 |

1/ Forecast.

balance of trade reduction processes and to the acceleration of deficit in services and income accounts, in an environment of net remittances of profits and dividends.

Considering the first eleven months of the year, the deficit reached US$25.8 billion, against surplus of US$2.2 billion in the corresponding period of 2007, a result due to the cutback of 38.3% in the trade surplus and to respective expansions of 28.6% and 41.9% in net remittances of services and income, which summed up, in the order, US$15.3 billion and US$36.7 billion, from January to November 2008.

Revenues from international travel reached US$5.3 billion and expenditures, US$10.3 billion, showing respective expansions of 17.2% and 39% when compared to the first eleven months of the year. Net expenditures totaled US$5.1 billion, a US$2.1 billion increase during the period, a development consistent with growth in available income and with the downward trajectory of the exchange rate until the international crisis intensified. Considering twelve months, up to November, the account registered net outflows of US$5.4 billion, 76.2% higher than the ones registered in the corresponding period of 2007. This result corresponded to a 17.1% growth in revenues and 39.9% in expenditures, which reached, in the same order, US$5.7 billion and US$11.1 billion.

In the year, up to November, an acceleration in net remittances of profits and dividends and a reduction in interest net expenditures were observed. In relation to the first ones, there was a net outflow of US$30.7 billion, representing growth of 59.1% as compared to the same period in 2007, with emphasis on the respective expansions of 55% and 61.9% in gross expenditures with foreign direct and portfolio investments. Considering the twelve-month period ended in November, net revenues of profits and dividends totaled US$33.8 billion, with FDI gross outflows reaching US$26.4 billion, boosted by revenues in the segment. These outflows were directly affected by periods of low profitability in the parent companies abroad or by turmoil in the international financial markets. The remittances in the segments of automotive vehicles, metallurgy and financial services were the more significant and summed up, taken together, US$11.5 billion, representing approximately 50% of outflows from FDI profits and dividends in the first eleven months of 2008.

Net expenditures with interests, consistent with the trajectory of the external indebtedness and with the volume of international reserves, summed up US$6.5 billion in the first eleven months of the year, dropping 7.1% in relation to the corresponding period of 2007. Gross revenues with interests increased 4.2% on the same basis of comparison, a volume compatible with the expansion of Brazilian assets abroad, particularly with regard to growth in international reserves. In that case, earnings grew by 16.7% in the period, reaching US$6.6 billion, while gross payment of interests remained stable. Net expenditures on interests totaled US$6.8 billion in the twelve months ended in November, decreasing 14.6% in relation to the same period of 2007. This result was particularly due to the earnings of US$7.3 billion in international reserves, 21.6% higher than those registered in the corresponding period of 2007.

Net unilateral transfers totaled US$3.8 billion in the first eleven months of the year, increasing 5.5% in relation to the same period of 2007. While considered the twelve months ended in November, these net inflows grew by 7.6%. One should underscore, on the same basis of comparison, the respective decreases of 3.8% and 5.5% observed on the remittances for residents maintenance, accumulating, in order, US$2.1 billion and US$2.2 billion.

## 5.4 Financial account

**Table 5.7 – Financial account**

US$ billion

| Itemization | 2007 | | | 2008 | | | 2009 |
|---|---|---|---|---|---|---|---|
| | Nov | Jan-Nov | Year | Nov | Jan-Nov | Year[1/] | Year[1/] |
| Capital account | 8.1 | 84.4 | 88.2 | -6.0 | 34.9 | 35.1 | 42.3 |
| Direct investments | 0.1 | 30.4 | 27.5 | 0.5 | 19.6 | 23.4 | 30.0 |
| Abroad | -2.4 | -3.3 | -7.1 | -1.7 | -17.3 | -17.0 | 0.0 |
| In Brazil | 2.5 | 33.7 | 34.6 | 2.2 | 36.9 | 40.0 | 30.0 |
| Equity capital | 2.3 | 24.8 | 26.1 | 1.4 | 24.1 | 26.7 | 30.0 |
| Intercompany loans | 0.2 | 8.9 | 8.5 | 0.8 | 12.8 | 13.7 | 0.0 |
| Portfolio investments | -1.2 | 39.7 | 48.4 | -4.2 | 5.4 | 0.1 | -7.9 |
| Assets | -0.2 | -1.2 | 0.3 | 0.3 | 0.8 | 0.0 | 0.0 |
| Liabilities | -1.0 | 40.9 | 48.1 | -4.5 | 4.6 | 0.1 | -7.9 |
| Derivatives | -0.1 | -0.5 | -0.7 | 0.0 | -0.3 | 0.0 | 0.0 |
| Other investments | 9.3 | 14.8 | 13.0 | -2.3 | 10.2 | 11.6 | 20.3 |
| Assets | 3.6 | -19.8 | -18.6 | 0.0 | -11.4 | -6.3 | 16.0 |
| Liabilities | 5.7 | 34.7 | 31.5 | -2.3 | 21.6 | 17.0 | 4.2 |

1/ Forecast.

The balance of payments financial account showed deficit of US$6 billion in November, accumulating surplus of US$34.9 billion in the year. The direct Brazilian investments abroad, evincing the continuity of the Brazilian companies' internationalization process, showed net outflows of US$17.3 billion in the first eleven months of the year, of which US$10.9 billion relates to equity ownership +and US$6.4 billion net granting of intercompany loans.

FDI net inflows summed up US$36.9 billion in the first eleven months of the year, registering net inflows in the capital participation of US$24.1 billion and intercompany loans of US$12.8 billion. FDI net inflows accumulated in twelve months topped US$37.8 billion in November, equivalent to 2.41% of GDP.

In line with the deepening world economic crisis and the consequent mounting uncertainties and risk aversion in the international financial markets, foreign portfolio investments had a deficit of US$4.5 billion in November, totaling net inflows of US$4.6 billion in the first eleven months of the year. From this total foreign investments in stocks of Brazilian companies accounted for net outflows of US$9.9 billion, negotiated in the country. Such investments, after

**Table 5.8 – BP financing sources**
Selected items

US$ billion

| Itemization | 2007 | | | 2008 | | | 2009 |
|---|---|---|---|---|---|---|---|
| | Nov | Jan-Nov | Year | Nov | Jan-Nov | Year[1/] | Year[1/] |
| Medium and long-term funds | 1.0 | 22.5 | 24.3 | 0.5 | 12.4 | 13.2 | 10.7 |
| Public bonds | 0.0 | 2.9 | 2.9 | 0.0 | 0.5 | 0.5 | 0.0 |
| Private debt securities | 0.7 | 14.1 | 15.4 | 0.3 | 6.7 | 7.3 | 6.2 |
| Direct loans | 0.4 | 5.5 | 6.0 | 0.2 | 5.2 | 5.4 | 4.6 |
| Short-term loans (net)[2/] | 2.2 | 17.4 | 13.8 | -2.7 | 2.1 | 2.0 | 0.0 |
| Short-term sec. (net) | 0.0 | 4.6 | 3.7 | -1.2 | -0.8 | -0.9 | 0.0 |
| Portfolio (net) | -0.5 | 35.9 | 45.1 | -2.1 | 4.9 | 2.7 | -3.0 |
| Roll-over rates (%) | | | | | | | |
| Private sector: | 211% | 114% | 109% | 22% | 129% | 100% | 75% |
| Debt securit. | 187% | 233% | 186% | 21% | 106% | 79% | 75% |
| Direct loans | 273% | 49% | 52% | 25% | 180% | 154% | 75% |

1/ Forecast.
2/ Includes direct loans and trade credits transferred by banks.

**Table 5.9 – Statement of international reserves**

US$ billion

| Itemization | 2007 | | 2008 | | 2009 |
|---|---|---|---|---|---|
| | Jan-Nov | Year | Jan-Nov | Year[1/] | Year[1/] |
| Reserve position in previous period | 85.8 | 85.8 | 180.3 | 180.3 | 194.1 |
| Net Banco Central purchases | 76.3 | 78.6 | 0.7 | -0.3 | 12.7 |
| Spot | 76.3 | 78.6 | 12.4 | 12.4 | - |
| Repo lines of credit | - | - | -10.2 | -7.8 | 7.8 |
| Foreign currency loans | - | - | -1.5 | -4.9 | 4.9 |
| Debt servicing (net) | -8.4 | -7.8 | -0.9 | -0.5 | -0.9 |
| Interest | 0.9 | 1.5 | 2.3 | 2.7 | 1.0 |
| Credit | 5.7 | 6.3 | 6.6 | 7.1 | 5.2 |
| Debit | -4.8 | -4.9 | -4.3 | -4.4 | -4.2 |
| Amortization | -9.2 | -9.3 | -3.2 | -3.2 | -1.9 |
| Disbursements | 2.9 | 2.9 | 1.3 | 1.3 | - |
| Multilateral organizations | - | - | 0.8 | 0.8 | - |
| Sovereign bonds | 2.9 | 2.9 | 0.5 | 0.5 | - |
| Others[2/] | 6.6 | 6.9 | 5.7 | 5.7 | - |
| Treasury's purchases | 13.9 | 14.0 | 7.5 | 7.6 | 6.0 |
| Change in assets | 91.2 | 94.5 | 14.3 | 13.8 | 17.9 |
| Gross reserve position | 177.1 | 180.3 | 194.7 | 194.1 | 212.0 |
| Repo lines of credit position | - | - | 10.2 | 7.8 | - |
| Foreign currency loans position | - | - | 1.5 | 4.9 | - |
| Reserves position - liquidity | 177.1 | 180.3 | 206.4 | 206.8 | 212.0 |

1/ Forecast.
2/ Includes payments/receipts in the framework of the Reciprocal Credits and Payments Agreement (CCR), fluctuations in prices of securities, exchange parities and price of gold, discounts and premiums, duty fees and release of collaterals.

registering significant net inflows from March to May, have been showing net remittances since June. The net revenues in the segment of fixed- income securities negotiated in the country topped US$14.8 billion in the year. One should note that these flows, evincing the financial markets deterioration, showed net outflows of US$1.7 billion in October and of US$300 million in November.

Foreign investments on fixed-income securities, negotiated abroad, showed net amortizations of US$3.6 billion in the first eleven months of 2008. With regard to the National Treasury repurchase program, the medium- and long-term bonds, net amortizations totaled $3.5 billion, of which US$3.2 billion refer to face value of securities, and US$290 million to premiums of these operations.

Net amortizations of medium- and long-term private bonds reached US$1.2 billion in November, accumulating net disbursements of US$138 million in the first eleven months of the year, a period in which the short-term securities showed net amortizations of US$756 million.

Other Brazilian investments registered net outflows of US$8 million, in November, for an increase of assets abroad of US$11.4 billion, in the year, a result of the constitution of deposits of Brazilian banks abroad, US$4 billion, and deposits of other sectors abroad, US$4.9 billion, besides the net granting of US$3.9 billion of medium- and long-term loans to nonresidents.

Other foreign investments showed net outflows of US$2.3 billion in November, accumulating net inflows of US$21.6 billion in the year. When braking down this result, the short-term trade credit accounted for net inflows of US$807 million in the month and US$8.3 billion in the first eleven months of the year. Medium and long-term loans summed up net amortizations of US$389 million in November and net disbursements of US$12.2 billion in the year, while short-term loans registered net outflows of US$2.7 billion and net disbursements of US$2.1 billion in the year.

The impact of the reversal in the international economic outlook on the credit channels led the Central Bank to act on the exchange market aiming at adjusting the liquidity conditions in foreign currency. In this context, sales intervention on the spot market totaled US$1.7 billion in November. However, there was no sign of any modification in the monetary authority stance of not acting upon the trajectory nor defining floors or ceilings for the nominal

# International Financial Crisis – Brazilian government's performance in the provision of liquidity in foreign currency

In mid-September, with the bankruptcy of Lehman Brothers bank, the worsening of the international financial crisis impacted significantly the supply of international financing lines, as well as the costs and terms of the remaining credit lines. In this scenario, coupled with an increased wariness to risk and the need by foreign investors in the country to offset losses in their head offices, expressive net outflows in the domestic foreign exchange market were registered in October and November, affecting both the level and volatility of the exchange rate.

In this environment, as of September 18, the Central Bank, looking to highlight the temporary nature of the measures and reaffirm its commitment with the floating exchange rate, began to intervene in the exchange market, by announcing auctions of repurchase lines. On October 10, the Central Bank, in order to make it clear that the provision of liquidity in foreign currency aimed at normalizing the domestic market, informed that there were no previously limits fixed for its intervention.

Among the measures implemented to meet the liquidity needs in foreign currency are the return of sale interventions on the foreign exchange spot market; the aforementioned repurchase lines, which can be described as auctions for FX sales with repurchase commitment, and the creation of the FX loans modality, guaranteed by sovereign bonds negotiated on the international market or by export operations, the resources of which must be targeted to the financing of exports.

Table 1 summarizes the operations effectively carried out up to December 1st. Figures 1 and 2 describe the daily values of the measures contracted, by modality,

**Table 1 – Supply of foreign currency liquidity**

Up to 12.1.2008

| | US$ million |
|---|---:|
| **Forex liquidity measures** | |
| Spot market interventions | 6 698 |
| Repurchase lines | 10 690 |
| Forex loans – Global | 1 519 |
| Forex loans – ACC/ACE | 0 |
| **Total** | **18 907** |
| **Amount repurchased** | |
| Repurchase lines | -500 |
| Forex loans – Global | 0 |
| Forex loans – ACC/ACE | 0 |
| **Repurchase total** | **-500** |
| **Net total** | **18 407** |

and accumulated values in the period. The measures announced as well as their details are enumerated in the sequence.

### 1) FX loans

On October 6, Provisional Measure n. 442, which authorizes the National Monetary Council (CMN) to establish special criteria and conditions for the assessment and acceptance of assets by the Central Bank as guarantee in FX loan operations. According to the Provisional Measure n. 442, these guarantees should be denominated and referenced in the same currency as in which the loan is granted and that, in a complementary nature, these guarantees could be alienated through public offer, with the Central Bank incorporating the result to its balance sheet.

**Figure 1 – Measures aiming at Forex Liquity**

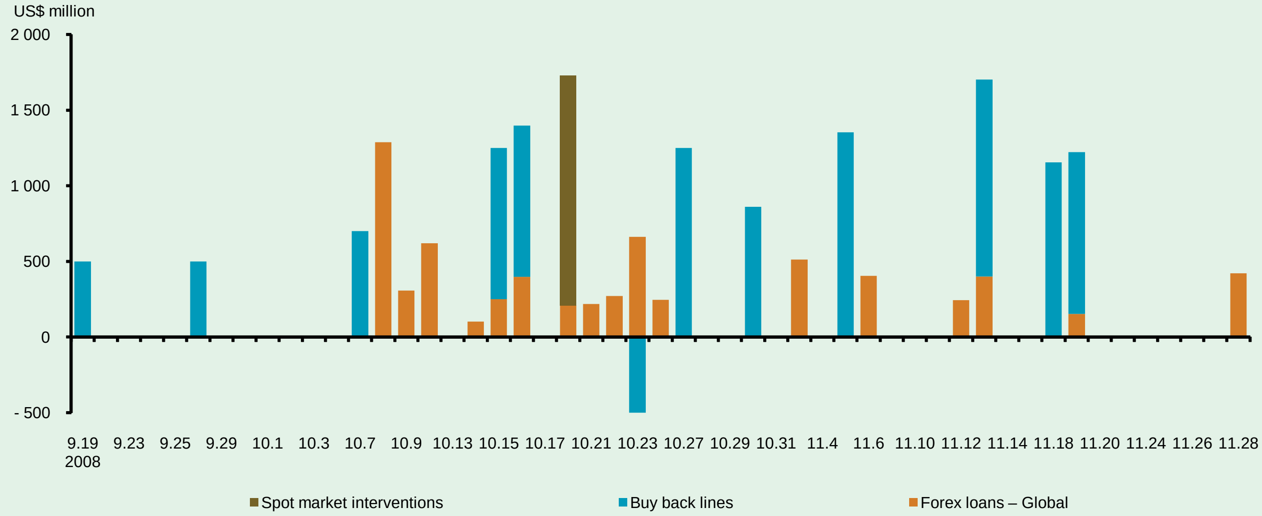
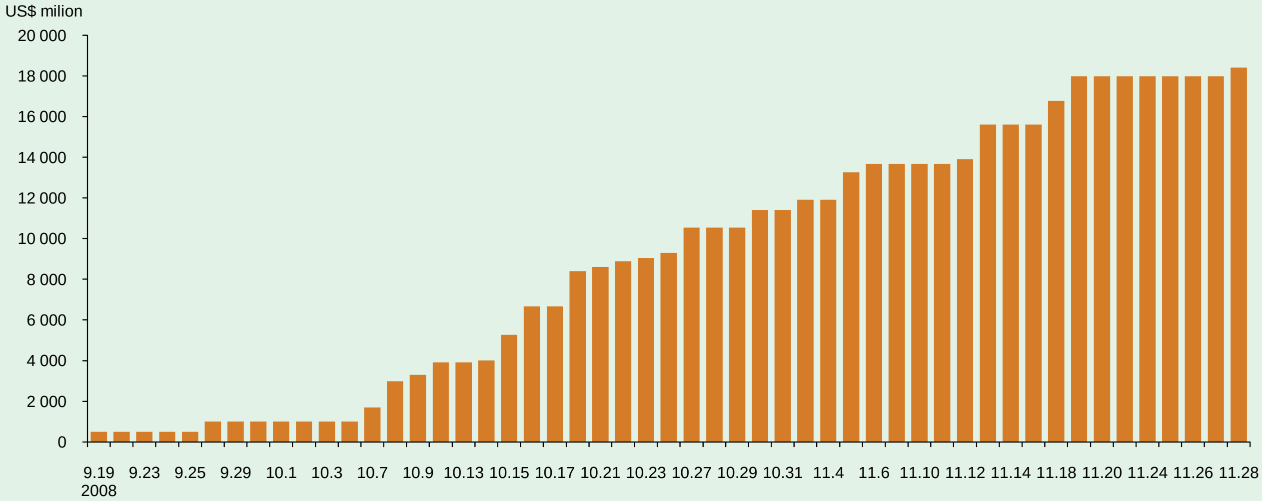



**Figure 2 – Measures aiming at Forex Liquity (cumulative)**



On October 9, the National Monetary Committee published Resolution n. 3,622, regulating the FX loans. These loans were limited to 360 days, including renewals, at the Libor cost added with a percentage fixed by the Central Bank according to market conditions. The guarantees were defined in two modalities, namely: i) sovereign bonds denominated in dollars issued by Brazil and countries with rating equal or above A and ii) Advances on Exchange Contracts (ACC), Advances on Exchange Deliveries (ACE), and other external financing modalities. Later, through Resolution n. 3,624, dated October, 16, the CMN determined that the Central Bank should decide whether the resources are to be directed, total or partially, to foreign trade operations.

Until December 1st, one auction of FX loan backed in Brazilian sovereign bonds (Globals) and three backed in ACC/ACE were carried out. With regard to the latter, the auction's operational guideline foresees that repurchase line operations be carried out with a term of approximately 30 days. During this period, as the banks are responsible for funding ACC/ACE operations, the effective amount received in the form of FX loan will, in this case, be equal to the foreign trade operations effectively offered by the bank. Total amounts offered reached US$5.3 billion, of which US$1.5 billion in the Globals auction and US$3.8 billion in the ACC/ACE auctions. One should highlight that the latter refers to the auctions results, since these loans will be granted only on December 8, 17 and 19, respectively.

**Table 2 – Foreign exchange loans – Globals**

| Auction date | Settlement | | | Cut rate | Accepted | Value |
|---|---|---|---|---|---|---|
| | Loan | Amortization | | | bids | US$ million |
| 10.20.2008 | 10.27.2008 | 4.20.2009 | 175 | Libor+0,11% | 2 | 1 000 |
| 10.20.2008 | 10.28.2008 | 4.20.2009 | 174 | Libor+0,11% | 1 | 500 |
| 10.20.2008 | 11.4.2008 | 4.20.2009 | 167 | Libor+0,11% | 1 | 19 |
| **TOTAL** | | | | | **4** | **1 519** |

**Table 3 – Foreign exchange loans – ACC/ACE**

| Auction date | Settlement | | | Cut rate | Accepted | Value |
|---|---|---|---|---|---|---|
| | Loan | Amortization | | | bids | US$ million |
| 11.5.2008 | 12.8.2008 | 5.8.2009 | 151 | Libor+1% | 18 | ... |
| 11.13.2008 | 12.17.2008 | 11.12.2009 | 330 | Libor+1,5% | 12 | ... |
| 11.18.2008 | 12.19.2008 | 11.13.2009 | 329 | Libor+1,1% | 9 | ... |
| **TOTAL** | | | | | **39** | **0** |

## 2) Repurchase lines

On September 18, the Central Bank Governor announced that the Institution would resume the USD sale on the spot market by means of auctions to dealers, with repurchase commitment. Operationally, once the auction result is released, of which the purchase is limited to 25% of the total per dealer, sale and purchase exchange contracts are formalized, in the same values, with settlements for D+2 (sale) and established date (purchase). One should highlight that, after the release of Circular n. 3,412, dated October 13, the bank that purchases FX will be exempt from the compulsory collection due on Interfinancial Leasing Deposits in the amount of the equivalent in BRL and for the term of the operation, if carried out as of that date, neutral in relation to liquidity in national currency. Auctions, which totaled US$10.7 billion, are detailed on Table 4. It should be noted that there was already repurchase of the US$500 million related to the first auction and that the auctions dated October 5, 13 and 18 were those of FX loans against ACC/ACE, the first phase of which foresees the carrying out of repurchase lines.

**Table 4 – Repurchase line**

| Auction date | Settlement | | | Value |
|---|---|---|---|---|
| | Sale | Purchase | | US$ million |
| 9.19.2008 | 9.23.2008 | 10.23.2008 | 30 | 500 |
| 9.26.2008 | 9.30.2008 | 12.19.2008 | 80 | 500 |
| 10.7.2008 | 10.9.2008 | 1.7.2009 | 90 | 700 |
| 10.15.2008 | 10.17.2008 | 1.15.2009 | 90 | 1 000 |
| 10.16.2008 | 10.20.2008 | 4.20.2009 | 182 | 1 000 |
| 10.27.2008 | 10.29.2008 | 1.2.2009 | 65 | 750 |
| 10.27.2008 | 10.29.2008 | 2.2.2009 | 96 | 500 |
| 10.30.2008 | 11.3.2008 | 2.2.2009 | 91 | 860 |
| 11.5.2008 | 11.7.2008 | 12.8.2008 | 31 | 1 353 |
| 11.13.2008 | 11.17.2008 | 12.17.2008 | 30 | 1 302 |
| 11.18.2008 | 11.20.2008 | 12.19.2008 | 29 | 1 155 |
| 11.19.2008 | 11.21.2008 | 1.2.2009 | 42 | 110 |
| 11.19.2008 | 11.21.2008 | 2.2.2009 | 73 | 130 |
| 11.19.2008 | 11.21.2008 | 3.2.2009 | 101 | 830 |
| **TOTAL** | | | | **10 690** |

## 3) Sale interventions

In addition, the Central Bank carried out auctions for USD sales on the spot market. These operations look

**Table 5 – Spot market sale intervention**

| Auction date | Settlement | Value<br>US$ million |
|---|---|---|
| 10.8.2008 | 10.10.2008 | 1 287 |
| 10.9.2008 | 10.14.2008 | 307 |
| 10.10.2008 | 10.15.2008 | 620 |
| 10.14.2008 | 10.16.2008 | 102 |
| 10.15.2008 | 10.17.2008 | 250 |
| 10.16.2008 | 10.20.2008 | 398 |
| 10.20.2008 | 10.22.2008 | 210 |
| 10.21.2008 | 10.23.2008 | 218 |
| 10.22.2008 | 10.24.2008 | 270 |
| 10.23.2008 | 10.27.2008 | 662 |
| 10.24.2008 | 10.28.2008 | 245 |
| 11.3.2008 | 11.5.2008 | 511 |
| 11.6.2008 | 11.10.2008 | 403 |
| 11.12.2008 | 11.14.2008 | 243 |
| 11.13.2008 | 11.17.2008 | 400 |
| 11.19.2008 | 11.21.2008 | 152 |
| 11.28.2008 | 12.2.2008 | 421 |
| **TOTAL** | | **6 698** |

to provide liquidity at critical moments in which the domestic financial markets face significant shortage of foreign currency, following the principles of not interfering with the trajectory of the exchange rate, not setting floors or ceilings for this rate, and not adding volatility to the market. Obviously, these operations contract the liquidity in national currency in the amount equivalent to the expanded liquidity in foreign currency. Up to that date, these operations totaled US$6.7 billion.

## 4) Swap of currencies with the Federal Reserve

On October 29, the Central Bank and the Fed released an agreement for swap of currencies in the total amount equivalent up to US$30 billion, with term up to the end of April 2009. This swap, which the Fed had already established with diverse central banks of developed countries, aimed to offer external USD lines to countries in which financial markets experience scarcity of international financing lines termed in that currency. On the same date, terms and amounts, the Fed also agreed upon equivalent procedures with the central banks of Mexico, South Korea, and Singapore. It is relevant to highlight that this measure are targeted to countries deemed systemically important and with consistent macroeconomic policies, and that the measure does not imply a conditioning factor for the domestic economic policy. The Brazilian Central Bank has not yet made use of these resources.

**Table Summary of the recent government measures aimed at providing liquidity in foreign currency (FX)**

| Date | Normative | Summary description | Impact actual/estimated |
|---|---|---|---|
| October 6, 2008 | MP 442 | Enables the CMN to establish criteria for the acceptance of assets by the Central Bank as guarantee for FX loans<br>In the operations of FX loans, the Central bank is authorized to release the value of the operation in the same FX in which the assets received as guarantee were denominated or referenced in.<br>As a complementary measure, other guarantees may be accepted.<br>In case of delinquency, the Central Bank may alienate the assets through public offer, and the result should be incorporated to its balance sheet.<br>Exempts from the requirements of fiscal regularity, except for social security (CF art. 195, § 3º) for one year. | There are no fixed limits for the intervention in the FX markets (according to press release dated September 18) |
| October 9, 2008 | Circ. 3,622 | Defines the criteria for acceptance of assets by the Central Bank as guarantee for FX loans.<br>Operations will be carried out exclusively with banks, upon request and at the sole discretion of the Central Bank.<br>The term of the operations, including renewals, will be of 360 days.<br>In the FX loan operations, the cost will be Libor rate plus a percentage set by Central Bank.<br>The guarantees for these loans are:<br>- Global Bonds or sovereign bonds in dollars from countries rated at least A, in the amount of 105% of the loan value;<br>- ACC, ACE, import financing and transfers (Res. 2,770), in the percentages of 120%, 130% and 140% for clients rated, respectively, AA, A and B.<br>FX loans imply assuming an irretraceable commitment of sale of the assets given as guarantee in case of delinquency. | |
| October 13, 2008 | Circ. 3,412 | Banks will be allowed to deduct compulsory collections over DI Leasing in the value of the FX acquisitions with resale commitment, for the operations terms. | Total balance of this modality reached R$20.1 billion on Oct.10 |
| October 16, 2008 | Circ. 3,624 | The Central Bank may determine that the resources granted in FX may be directed, partial or totally, to foreign trade operations. | |
| October 16, 2008 | Circ. 3,415 | Deals with FX loan operations (MP 442, Res. 3,622 and Res. 3,624)<br>FX loan operations will be carried out through auctions by banks authorized to operate in foreign exchange, which will define, inclusively, the spread over Libor rate.<br>In case of maturity expiration of assets given as guarantee during the period of the operation, the bank may complement the guarantee or pay off the corresponding value.<br>The bank may be held responsible for the management of assets given as guarantee. | |
| October 21, 2008 | MP 443 | Authorizes the Central Bank to carry out swap operations with other central banks within the limits set by the CMN. | |
| October 22, 2008 | Decree 6,613 | Reduced from 0.38% to zero the IOF rate levied upon the foreign exchange operations related to foreign loans and from 1.5% to zero upon investments of resources on the financial and capital markets. | |
| October 30, 2008 | Res. 3,631 | Limited to US$30 billion the maximum value of operations derived from swap currency contracts formalized between the Central Bank and the Federal Reserve Bank of New York (Fed).<br>Defined that such operations may be carried out up to April 30, 2009.<br>BRL received by the Fed shall be credited in a Central Bank account and the dollars received by the Central Bank shall be credited on an account maintained at the Fed.<br>Exchange rate for purchasing USD and selling BRL shall be the same as that for future resale and repurchase.<br>These operations are not constrained by any conditioning factors of political-economic nature or other interests. | Up to US$30 billion |
| November 3, 2008 | Res. 3,633 | It modified Resolution 3,622, dated October 3, 2008. In FX loan operations, the amounts of guarantees were altered in the following manner:<br>- reduced from 105% to 100% for Global bonds or sovereign bonds in dollars from countries with long-term rating equivalent at least to grade A;<br>- for ACC, ACE, import financing and transfers (Res. 2,770), the percentages were reduced from 120%, 130% and 140% for clients rated, respectively, AA, A e B, to 100%. In addition, the Resolution allowed the Central Bank to require supplementation of previous guarantees with federal public securities or other assets denominated in national currency, up to the limit of 140% of the loan value.<br>It refers to loan operations in foreign currency (Res. 3,622) with guarantees represented by ACC and ACE operations. | |
| November, 4, 2008 | Circ. 3,418 | The formalization of this loan will be conditioned to the granting of ACC and ACE by utilizing the resources obtained in the operation of repurchase lines. | |
| November 26, 2008 | Res. 3,641 | Revoked Res. 3,547, dated March 12, 2008, which obligated the contracting of FX simultaneous operations in the internal migrations of investments by non-residents originally carried in variable income toward investment in fixed income or in derivatives with fixed earnings. | |

(Continues)

**Table Summary of the recent government measures aimed at providing liquidity in foreign currency (FX)**

(concluded)

| | | | |
|---|---|---|---|
| | Repurchase lines | On September 18, the Central Bank Governor announced that the Central Bank would resume the sale of dollars on the spot market through auctions to dealers with repurchase commitment.<br>Auctions of FX loans guaranteed by ACC/ACE, of which the operational guidelines foresee, initially, the carrying out of repurchase lines reached US$3.8 billion. | US$10.7 billion, of which US$3.8 billion related to FX loans with guarantees in ACC/ACE (actual) |
| | Sale Interventions | As of October 8, the Central Bank carried out 17 auctions for USD sale on the spot market. | US$6.7 billion (actual) |
| | FX loans in guaranteed by Globals | One auction of such modality was carried on October 10. Four proposals were accepted and the cut-off rate was defined at 0.11% above the Libor.<br>Amortization will occur on April 20, 2009. | US$1.5 billion. (actual) |
| | Foreign Exchange Swap | As of October 6, resumption of FX swaps offered to the market. | US$37.1 billion, including US$1.5 billion in non-rolled over FX swaps (actual) |

foreign rate of exchange. Besides, new credit modalities were announced in particular those involved in offering new credit lines to the banking sector. The Central Bank started to sell dollars with repurchase commitment, a modality which summed up amortizations of US$1 billion in September, US$3.5 billion in October and US$5.7 billion in November. Additionally, foreign currency loans were granted against guaranties. In that case, resources should be fully targeted to export financing. The first auction, backed by Brazilian sovereign bondses, topped US$1.5 billion. In November, there were three auctions, in which loan granting guaranteed by external trade operations, which totaled net US$3.4 billion, in December.

With regard to the stock of the previously described new operations, the international reserves, in the liquidity concept, grew US$26 billion in the period from January to November 2008, totaling US$206.4 billion. The Central Bank carried out net purchases of US$691 million in the foreign exchange domestic market. Among the external operations, it should be highlighted the US$525 million disbursements in Republic bonds and US$766 million from the International Bank for Reconstruction and Development (Bird), besides US$3.2 billion amortizations of sovereign bonds, including, in the latter case, US$1.1 billion related to operations to repurchase external debt’s securities by the National Treasury. The expenditures with bonds interests summed up US$4.3 billion, while the revenue with the reserves’ earnings reached US$6.6 billion, turning in interest-related net revenues of US$2.3 billion. The National Treasury’s purchases amortizations totaled US$7.5 billion, while other operations resulted in revenues of US$5.7 billion.

At the closing of 2008, international reserves stock, in the liquidity concept, are estimated at US$206.8 billion, with an annual growth of US$26.5 billion. Regarding the events from January to November, payments related to the external debt service are forecasted at US$0.5 billion, besides disbursements of US$766 million already fully settled with organizations, and of those related to sovereign bonds, US$525 million. Also, it is estimated, Central Bank’ sale settlements of US$308 million and the National Treasury purchases of US$7.8 billion of the, on the foreign exchange domestic market.

International reserves in the cash concept, which excludes operations with repurchase lines and foreign currency loans, should close 2008 at US$194.1 billion, rising US$13.8 billion as compared to the end of 2007. The difference between the reserves value in the two concepts indicates the end-of-period stocks of repurchase lines, US$7.8 billion, and foreign currency loans, US$4.9 billion, included in the liquidity concept.

For 2009, a stock of international reserves is estimated, in the liquidity concept, at US$212 billion, with annual growth of US$17.9 billion. Net expenditures are anticipated at US$858 million with the external debt service, comprising US$1 billion in net interest 0revenues and US$1.9 billion in amortization expenditures. Still in 2009, purchase amortizations by the National Treasury on the foreign exchange domestic market, are forecasted at US$6 billion. It important to stress that the repurchase of the credit lines available to the market and foreign currency loan maturities will enable the reserves in both cash and liquidity concepts to reach a balanced position by end of 2009.

## 5.5 External sustainability indicators

**Table 5.10 – Sustainability indicators[1/]**

US$ billion

| Itemization | 2006 | 2007 | 2008 | | | |
|---|---|---|---|---|---|---|
| | Dec | Dec | Jun | Sep | Oct[2/] | Nov[2/] |
| Exports of goods | 137.8 | 160.6 | 178.1 | 194.9 | 197.7 | 198.4 |
| Exports of goods and services | 157.3 | 184.5 | 205.0 | 224.2 | 227.7 | 228.4 |
| Debt service | 56.9 | 52.0 | 40.5 | 38.9 | 36.4 | 37.4 |
| Total external debt | 172.6 | 193.2 | 205.5 | 211.4 | 214.3 | 206.6 |
| Net external debt | 74.8 | -11.9 | -19.2 | -20.6 | -13.4 | -25.2 |
| International reserves | | | | | | |
| Cash concept | 85.8 | 180.3 | 200.8 | 206.5 | 197.2 | 194.7 |
| Liquidity concept | 85.8 | 180.3 | 200.8 | 206.5 | 203.2 | 206.4 |
| GDP | 1 089 | 1 334 | 1 461 | 1 530 | 1 550 | 1 569 |
| Indicators | | | | | | |
| Total external debt/GDP (%) | 15.8 | 14.5 | 14.1 | 13.8 | 13.8 | 13.2 |
| Net external debt/GDP (%) | 6.9 | -0.9 | -1.3 | -1.3 | -0.9 | -1.6 |
| Total external debt/exports | 1.3 | 1.2 | 1.2 | 1.1 | 1.1 | 1.0 |
| Total external debt/exports of goods and services | 1.1 | 1.0 | 1.0 | 0.9 | 0.9 | 0.9 |
| Net external debt/exports | 0.5 | -0.1 | -0.1 | -0.1 | -0.1 | -0.1 |
| Net external debt/exports of goods and services | 0.5 | -0.1 | -0.1 | -0.1 | -0.1 | -0.1 |
| Debt service/exports (%) | 41.3 | 32.4 | 22.8 | 19.9 | 18.4 | 18.8 |
| Debt service/exports of goods and services (%) | 36.2 | 28.2 | 19.8 | 17.3 | 16.0 | 16.4 |
| Reserves – cash concept/ total external debt (%) | 49.7 | 93.3 | 97.7 | 97.7 | 92.0 | 94.2 |
| Reserves – liquidity concept/ total external debt (%) | 49.7 | 93.3 | 97.7 | 97.7 | 94.8 | 99.9 |

1/ Excludes stock of principal, amortizations and interests concerning intercompany loans.
2/ Estimated data.

Despite the reversal in the international outlook initiated halfway through the second half-year, the majority of the external sustainability indicators turned in a a positive trajectory, when considering the estimated external debt positions for November and December 2007. This movement indicated both growth in exports, dollar denominated nominal GDP and international reserves, and the reduction of the external debt service, as well as improved surplus positions of the total net external debt. In that case the effects have proved to be more significant than that derived from the expansion of the external debt.

In the period under analysis, the participation of the debt service in exports dropped from 32.4% to 18.8%, indicating a cutback of US$14.7 billion in the debt service and an increase of US$37.7 billion in sales to other countries.

The total external debt increased 6.9% from December 2007 to November 2008, while the total surplus position of the net external debt grew US$13.3 billion, to –US$25.2 billion. Taking into account the growth of 18% observed in the estimated GDP in dollars during the period, the ratios between the total debt/GDP, and the total net debt /GDP decreased from 14.5% to 13.2% and from 0.9% to -1.6% in that order.

The indicator showing the ratio between the total debt and exports decreased from 1.2 to 1, while that which indicates the proportion between the net total debt and the exports

## Recent Changes in Brazil’s External Liabilities

The country’s external accounts registered a sequence of five years of surplus in current transactions between 2003 and 2007, enabling the occurrence of strong expansion of Brazilian assets abroad, which increased from US$112.9 billion, up to the end of 2002, to US$369.7 billion in 2007 and to an estimated US$418.2 billion, in October 2008. Contrary to the expectations of reduced net external liabilities as counterpart to the current account results, an increase was observed in the period, in line with the price trajectory of the external liabilities and the foreign exchange rate. This box analyzes the evolution and modifications to the Brazilian external liabilities in the latest years, in a context of non-resident investments’ expansion, both in portfolio and direct; reduction of the external debt’s relative participation; and greater adherence of this new liabilities composition to the domestic economic cycle.

The country’s gross external liabilities posted a steady growth from 2003 to June 2008, in a backdrop of faster economic growth sustained by domestic demand, increase of the corporate profitability, and the capital market’s favorable development. These factors contributed to an increasing capital inflow in the period.

Up to the end of 2008, the International Investment Position (IIP) liabilities reached the highest value of US$1,060 billion, representing an increase of 208.7% as compared to December 2002. The foreign direct investments (FDI), which turned in a growing inflow during the period, registered an annual record of US$34.6 billion in 2007, a value which should be surpassed in 2008, despite the international economic crisis. In view of the behavior of net flows and nominal foreign exchange, taking into account that the stocks of FDI-equity participation in the country are measured in Reais, the FDI forecasted position for June 2008 topped US$381.2 billion, which is 36% of the IIP total liabilities.

**Table 1 – International Investment position – Liabilities**

US$ million

| Itemization | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | |
|---|---|---|---|---|---|---|---|---|---|
| | Dec | Dec | Dec | Dec | Dec | Dec | Dec | Jun | Oct |
| **Liabilities (B)** | **372 061** | **343 432** | **406 716** | **446 145** | **499 268** | **623 300** | **939 071** | **1 060 019** | **755 668** |
| Foreign direct investment | 121 948 | 100 863 | 132 818 | 161 259 | 195 562 | 236 186 | 328 455 | 381 184 | 317 595 |
| Equity capital | 105 815 | 83 884 | 112 334 | 142 451 | 177 024 | 209 403 | 281 179 | 324 291 | 254 179 |
| Intercompany loans | 16 133 | 16 978 | 20 484 | 18 808 | 18 537 | 26 783 | 47 276 | 56 893 | 63 416 |
| Portfolio investiments | 151 741 | 137 355 | 166 095 | 184 758 | 232 627 | 303 583 | 509 648 | 565 018 | 313 847 |
| Stock investiments | 36 910 | 27 249 | 53 138 | 77 261 | 125 532 | 191 513 | 363 999 | 402 069 | 172 871 |
| In the reporting company | 13 386 | 8 394 | 17 828 | 27 118 | 50 394 | 82 994 | 165 708 | 194 214 | 76 064 |
| Abroad | 23 524 | 18 855 | 35 310 | 50 143 | 75 138 | 108 520 | 198 291 | 207 855 | 96 807 |
| Fixed-rate securities | 114 831 | 110 106 | 112 957 | 107 497 | 107 096 | 112 070 | 145 650 | 162 949 | 140 977 |
| Bonuses and notes | 114 831 | 110 106 | 112 957 | 107 497 | 107 096 | 112 070 | 145 650 | 162 949 | 140 977 |
| In the reporting company | 1 642 | 2 492 | 2 867 | 2 982 | 5 147 | 18 163 | 46 631 | 63 552 | 44 601 |
| Abroad | 113 189 | 107 614 | 110 090 | 104 515 | 101 949 | 93 907 | 99 018 | 99 397 | 96 376 |
| Medium- and long-term | 111 989 | 106 614 | 108 476 | 104 271 | 101 047 | 92 119 | 93 079 | 93 348 | 89 332 |
| Short-term | 1 200 | 1 000 | 1 614 | 244 | 901 | 1 788 | 5 939 | 6 050 | 7 043 |
| Derivatives | 45 | 250 | 125 | 320 | 219 | 445 | 1 771 | 2 510 | 3 425 |
| Other investments | 98 327 | 104 965 | 107 678 | 99 809 | 70 859 | 83 087 | 99 197 | 111 307 | 120 800 |
| Commercial credit (suppliers') | 6 025 | 5 919 | 5 465 | 4 728 | 4 772 | 5 216 | 5 197 | 6 373 | 6 323 |
| Medim- and long-term | 5 398 | 4 896 | 5 037 | 4 414 | 4 424 | 4 869 | 5 063 | 6 161 | 5 964 |
| Short-term | 628 | 1 023 | 428 | 314 | 349 | 347 | 134 | 213 | 359 |
| Loans | 90 720 | 97 178 | 99 374 | 92 133 | 62 729 | 73 466 | 89 003 | 99 766 | 109 462 |
| Monetary authority | 9 130 | 21 457 | 28 795 | 25 394 | 301 | 157 | 14 | 12 | 9 |
| IMF | 8 346 | 20 793 | 28 255 | 24 946 | - | - | - | - | - |
| Other long-term loans | 784 | 664 | 540 | 448 | 301 | 157 | 14 | 12 | 9 |
| Short-term | - | - | - | - | - | - | - | - | - |
| Other sectors | 81 590 | 75 721 | 70 579 | 66 739 | 62 428 | 73 309 | 88 989 | 99 754 | 109 453 |
| Medium- and long-term | 55 759 | 54 348 | 52 427 | 48 553 | 44 902 | 55 121 | 56 162 | 64 740 | 68 454 |
| Organizations | 22 440 | 24 377 | 23 433 | 22 241 | 21 779 | 25 148 | 26 981 | 28 335 | 29 419 |
| Offices | 12 418 | 12 731 | 12 856 | 10 970 | 8 614 | 6 259 | 6 482 | 6 505 | 6 486 |
| Buyer's credit | 8 362 | 6 317 | 6 542 | 4 984 | 4 059 | 3 707 | 8 232 | 12 748 | 15 098 |
| Direct loans | 12 539 | 10 924 | 9 596 | 10 358 | 10 449 | 20 007 | 14 467 | 17 152 | 17 451 |
| Short-term | 25 831 | 21 373 | 18 152 | 18 186 | 17 527 | 18 188 | 32 827 | 35 014 | 40 999 |
| Currency and deposits | 1 582 | 1 867 | 2 839 | 2 948 | 3 358 | 4 405 | 4 996 | 5 168 | 5 014 |
| Monetray Authority | 129 | 237 | 108 | 100 | 111 | 83 | 73 | 54 | 67 |
| Banks | 1 453 | 1 630 | 2 731 | 2 848 | 3 246 | 4 321 | 4 923 | 5 114 | 4 947 |
| Other liabilities | - | - | - | - | - | - | - | - | - |

In relation to foreign portfolio investments, one should highlight the growth of investments on securities and on the country's fixed-income securities. The inflows in securities, considering both the participation of non-resident investors in the Bovespa, and the issue of receipts of Brazilian companies' shares on the international market, reaching a stock of US$402.1 billion, in June 2008, which corresponds to 37.9% of total liabilities, an evolution impacted by net inflows, by appreciation of papers and by the evolution of foreign exchange rate. As to foreign investments in fixed-income bonds negotiated in the country, one should highlight the exemption of income tax, instituted by Provisional Measure 281, of February 15, 2006, later turned into Law 11.312. This measure accelerated the net inflows, resulting in stock of US$63.6 billion, in June 2008.

On the other hand, the liabilities items which represented the external debt, mainly papers negotiated in the international market and borrowings, showed nominal reduction of 2.5% during the period from December 2002 to June 2008, which totaled US$205.5 billion. In this way, its relative participation in the total IIP liabilities reduced from 61.4% to 19.4%, in the period.

With the modification in the profile of the Brazilian external liabilities, not only the stock of liabilities, but also its revenues started to show a behavior more associated to the economic cycle. This modification mirrored the replacement of contractual debts, which has its stocks calculated in nominal values and whose payment conditions are preset, by investments, for which both the stock valuation and its remuneration (earnings and dividends) are estimated at market prices.

This change in the external liabilities' behavior may be better assessed when compared to the stocks of last June, prior to the intensification of the international financial crisis, with the estimates made for this position in October. The position of liabilities of the IIP at the end of this month, as compared to the one observed in June; fell by 28.7% to US$755.7 billion. In that same period, there were differentiated trajectories among investments, with reduction in stocks of FDI- equity participation, securities and fixed-income securities negotiated in the country, and external indebtedness, with expansion of its stock.

The main factor responsible for the contraction in liabilities was the stock reduction of by foreign investors in stock in the country, which, according

**Table 2 – Stocks in the country**

| | US$ million |
|---|---|
| Stock in 6.30.2008 | 194 214 |
| Balance of payment's cumulative net flows | |
| from July to October | -13 351 |
| Ibovespa variation from 6.30.2008 to 10.31.2008 | -66 100 |
| Exchange rate variation from 6.30.2008 to 10.31.2009 | -30 700 |
| Remainder | -7 999 |
| Stock in 10.31.2008 | 76 064 |

to the Securities and Exchange Commission (CVM), topped US$76.1 billion in October, falling no less than 60.8% as against June. Analyzing the factors responsible for this trajectory, it was observed, in the period, net outflows of US$13.4 billion and reduction in market value (price) and in the value of this stock in dollars (parities). The assessment of price reduction was made using as a parameter the São Paulo Stock Exchange Index (Ibovespa) which, in the period, decreased 42.7% causing an estimated reduction in the stock of US$66.1 billion. The expression of these liabilities in dollars is directly impacted by the nominal foreign exchange rate, of which the depreciation of 32.9% in the four-month-period under analysis caused an estimated decrease of US$30.7 billion in the total liabilities. The difference of US$8 billion derives from changes of the foreign investor’s instrument in the country and from the difference between the real portfolio of these investors and the utilization of the Ibovespa as proxy.

Growth in FDI-equity participation in the capital and of fixed-income securities negotiated in the country, whose positions are calculated in nominal values and in reais, is conditioned by net flows of the balance of payments and, similar to the way previously described, by the variation of the foreign exchange rate.

The external liabilities cyclical component should also be highlighted when incomes derived thereof are analyzed, especially gross remittances of profits and dividends. As analyzed in the box “Remittances of Profits and Dividends’’ of the September 2008 Inflation Report, these remittances show close relation to the stock of foreign investors, both in participation in the capital and securities, and with these companies’ earnings, which may be understood as proxy to the domestic activity level. Consequently, the stock reduction, analyzed in this box, should provide, in the next year, retraction in the remittances of profits and dividends, a trajectory stimulated by a lower level of economic activity and by the maintenance of the foreign interest rate at a more depreciated level than the one observed during this year. This analysis strengthens the forecast of significant decrease in net outflows of profits and dividends in 2009, which consists in an important move towards limiting the current transactions deficit next year.

In the same way, the drop of 60.8% in total investments in securities owned by non-residents represents an important limiting factor for portfolio net remittances in the balance of payments' financial account next year, even if the adverse international scenario is maintained.

remained at -0.1. Both equally represented the most positive results registered since the beginning of the series, in 1970.

In the liquidity concept, the international reserves, increased by US$26 billion from December 2007 to November 2008, reaching US$206.4 billion, while in the cash concept, the expansion totaled US$14.3 billion, up to US$194.7 billion. The expansion of the international reserves in the liquidity concept, higher than the amount of US$13.4 billion registered in the total external debt, favored its representation in the total external debt from 6.6 p.p., to 99.9%. At the same time, those concerning the reserves in the cash concept reached 94.2%, increasing 0.9 p.p., in the period.

The the total net debt/GDP ratio rose to 1.6%, in November, against the creditor position of 0.9% in December 2007, and still recorded a 0.7 p.p. growth when compared to the previous month. The indicator monthly growth represented an increase from US$11.8 billion, to US$25.2 billion, registered in the creditor position of the total net external debt. This was a result of a US$3.2 billion growth in international reserves, in the liquidity concept, and of US$1 billion in commercial banks' assets abroad, as well as the US$7.7 billion decline in the external debt.

## 5.6 Conclusion

Uncertainties regarding the international financial market's performance, in parallel to the recession prospects for the world economy, particularly in the industrialized countries, the developments in the trajectory of international trade and commodity international prices are major conditioning factors of the growing country's external accounts.

The performance of the external accounts in the initial eleven months of the year suggests that the balance of payments' financing will take place with no difficulty in 2008. This result has been favored by the FDI net inflows, which should surpass the ones registered in 2007, and by the rollover of the private debt, which, in view of what occurred from January to November, should remain above 100%.

Forecasts for 2009 consider that the external credit restriction and the downturn in the pace of international economic activity should cause the deterioration of the balance of payments' result. Satisfactory conditions, however, should persist, for its financing, favored by the level of international reserves and by the advances on contracts made by the National Treasury, which significantly reduce risks concerning amortization of the external debt service. The private sector will face more adverse conditions for the renegotiation of loans in relation to those existing in the latest five years, with negative impacts on the contracting terms and costs.

The reversal recorded in the balance of payments financing need in 2008, was conditioned by the current transactions performance in the year. For 2009, in an environment of slowing world economic activity and greater restriction to credit granting, the current result will be impacted, in the context of the balance of trade by a likely decrease in exports and imports. In the case of exports, the reach will be dependent on the behavior of commodity prices and on the magnitude and extension of the economic downturn in the major markets of destination of Brazilian products. In the case of imports, they evince both price increases underlying the depreciation of the real, and a slowdown in domestic activity. Concerning the service account, the debt under transportation should drop, in line with the reduction in the trade flow; the negative balance in international travel should register a significant decline, mirroring both foreign exchange trade trajectory and the wealth effect on these expenditures. Net expenses on earnings will be affected by the expected decline in net remittances of profits and dividends and by the combined effects of a depreciated foreign exchange rate, lower profitability of companies and foreign investors losses in variable income, which indicate a reduced stock of investments.

# Balance of Payments Forecasts

The balance of payments forecasts for 2008 and 2009 were revised in relation to those in the September Inflation Report. This was due to the repercussions of a deepening crisis of the financial markets both in terms of world economic activity level, impacting the balance of payments result, and of liquidity conditions, affecting the prospects concerning its financing conditions. Besides incorporating the new international outlook, revised forecasts mirror the external results observed in the latest months and the modifications in the external debt service compatible with its stock in September. Additionally, Central Bank interventions in the foreign exchange market and repurchases of sovereign external debt by the National Treasury, carried out up to November.

The current transactions deficit in 2008 was revised upward from US$28.8 billion, in the previous “Inflation Report”, to US$29.6 billion. One should also highlight the revision of the trade surplus forecast, from US$25 billion to US$23.5 billion. Additionally, the forecasts for net expenditures with interest and international travel were reduced.

Forecasts for the debt in current transactions in 2009 were reduced from US$33.1 billion to US$25 billion.

The balance of trade surplus reflected a 3.5% decrease in exports and a 1.4% growth in imports, dropping from US$23.5 billion, in 2008, to US$14 billion, a forecast US$3 billion lower than that indicated in the previous report and consistent with the expectations of recession in mature economies, reduction in commodity prices and decline in the Gross Domestic Product (GDP).

Forecasts for net interest expenditures next year expanded from US$6.7 billion, in the previous

**Table 1 – Uses and sources**

US$ billion

| | 2007 | | | 2008 | | | 2009 |
|---|---|---|---|---|---|---|---|
| | Nov | Jan-Nov | Year | Nov | Jan-Nov | Year[1/] | Year[1/] |
| Uses | -3.3 | -33.1 | -36.6 | -3.9 | -45.1 | -53.0 | -51.9 |
| Current account | -1.3 | 1.9 | 1.5 | -1.0 | -25.8 | -29.6 | -25.0 |
| Amortizations ML-term[2/] | -2.0 | -35.0 | -38.1 | -2.9 | -19.3 | -23.3 | -26.9 |
| Securities | -1.1 | -18.1 | -20.6 | -1.6 | -10.0 | -12.8 | -11.1 |
| Paid | -1.1 | -17.6 | -19.9 | -1.6 | -10.0 | -12.8 | -11.1 |
| FDI conversions | 0.0 | -0.5 | -0.7 | 0.0 | 0.0 | 0.0 | 0.0 |
| Suppliers' credits | -0.2 | -1.3 | -1.5 | -0.2 | -1.6 | -1.7 | -3.1 |
| Direct loans[3/] | -0.7 | -15.5 | -16.1 | -1.1 | -7.7 | -8.8 | -12.7 |
| Sources | 3.3 | 33.1 | 36.6 | 3.9 | 45.1 | 53.0 | 51.9 |
| Capital account | 0.1 | 0.7 | 0.8 | 0.1 | 1.0 | 1.1 | 1.0 |
| FDI | 2.5 | 33.7 | 34.6 | 2.2 | 36.9 | 40.0 | 30.0 |
| Domestic securities[4/] | -0.5 | 31.0 | 39.8 | -2.0 | 6.8 | 5.5 | -3.0 |
| ML-term disbursem.[5/] | 3.8 | 32.9 | 36.0 | 1.2 | 29.2 | 30.8 | 26.5 |
| Securities | 0.7 | 17.0 | 18.3 | 0.3 | 7.2 | 7.8 | 6.2 |
| Supliers' credits | 0.2 | 1.4 | 1.6 | 0.1 | 2.1 | 2.4 | 4.1 |
| Loans[6/] | 2.9 | 14.5 | 16.1 | 0.7 | 19.9 | 20.5 | 16.3 |
| Brazilian assets abroad | 0.9 | -24.3 | -25.4 | -1.3 | -27.7 | -22.9 | 15.2 |
| Other[7/] | 2.9 | 43.4 | 38.4 | -3.1 | 7.3 | 6.1 | 0.0 |
| Reserve assets | -6.4 | -84.4 | -87.5 | 6.8 | -8.5 | -7.5 | -17.9 |

1/ Forecast.
2/ Registers amortization of medium and long-term suppliers' credit, loans and securities placed abroad minus refinancing and discounts. Excludes amortization referring to loans to IMF and intercompany loans.
3/ Registers amortizations of loans from foreign banks, buyers, bilateral agencies and multilateral organizations.
4/ Includes foreign investment in equity and debt securities traded in the domestic market.
5/ Excludes disbursements of intercompany loans.
6/ Includes multilateral and bilateral financing and buyers' credits.
7/ Registers net values of bond swaps, short-term securities, short-term trade credit, financial derivatives, deposits of non-residents, other liabilites and errors & omissions.

report, to US$9 billion, mirroring the decrease, from US$9.1 billion to US$7.1 billion – of which US$5.2 billion refer to interest earning on the country's international reserves, on interest revenues over Brazilian assets abroad, a decrease that evinces the decline in the international interest rates and the reduction of these assets. The expenditures, translating the debt stock position in September, fell from US$17.6 billion to US$16.1 billion.

Forecasts for the result in current transactions for 2009 considers the revision, from US$30 billion to US$20 billion, in the estimate concerning net remittances of profits and dividends, a drop consistent with the scenario of depreciation of the real, reduction of companies' profitability and strong losses experienced by foreign portfolio investors, which are mirrored in the reduction of the investment stock. In this context, one should mention that the position of foreign investors at the São Paulo Stock Exchange Index (Ibovespa) fell from US$200.1 billion in May to US$70.6 billion at the end of November. The unilateral transfers for 2009 were lowered from US$4 billion, forecasted in September, to US$2.5 billion, as a result of the recession in mature economies, main suppliers of these resources.

The performance of the financial account in the next year mirrors a scenario which considers reduction of the net inflows of Foreign Direct Investments (FDI). Additionally, it is forecasted net remittances of foreign portfolio investments in 2009. Also significant to these scenarios the assumption of 75% rollover rate of the medium- and long-term private sector external indebtedness leading to a net amortization of the external debt.

The internationalization process of the Brazilian companies should be impacted by the international crisis's effects. In this context, there will not be net remittances of Brazilian direct investments abroad, and after registering the record level of US$28.2 billion, in 2006, the stock should remain stable in 2009. Foreign direct investments should total US$40 billion in 2008; a record for annual values. For 2009, the forecast was reduced to US$30 billion.

The external debt amortizations of medium- and long-term in 2008 were reduced from US$25.7 billion

**Table 2 – Balance of payments – Market**

US$ billion

| Itemization | 2007 Oct | 2007 Jan-Oct | 2007 Year | 2008 Oct | 2008 Jan-Oct | 2008 Year[1/] | 2009 Year[1/] |
|---|---|---|---|---|---|---|---|
| Current account | -1.9 | -2.7 | -4.6 | -1.6 | -32.4 | -36.1 | -30.2 |
| Capital (net) | 5.7 | 89.6 | 93.9 | -6.6 | 37.0 | 32.2 | 26.8 |
| Foreign direct investment | 2.5 | 33.7 | 34.6 | 2.2 | 36.9 | 40.0 | 30.0 |
| Portfolio investment | -0.5 | 31.0 | 39.8 | -2.0 | 6.8 | 5.5 | -3.0 |
| Med. and long term loans | 0.4 | -9.2 | -9.9 | -1.8 | 2.7 | -0.7 | -4.9 |
| Trade credits – Short, medium and long term | 5.2 | 39.4 | 35.8 | -1.8 | 17.1 | 16.9 | 4.6 |
| Banks | 3.5 | 21.7 | 18.6 | -2.6 | 8.2 | 11.7 | 3.6 |
| Other | 1.8 | 17.8 | 17.2 | 0.7 | 8.8 | 5.2 | 1.0 |
| Brazilian invest. abroad | -1.0 | -14.4 | -14.7 | -2.0 | -23.7 | -26.5 | -0.9 |
| Other | -1.1 | 9.1 | 8.3 | -1.2 | -2.7 | -3.0 | 1.0 |
| Financial gap | 3.8 | 86.2 | 89.3 | -8.2 | 4.6 | -3.9 | -3.4 |
| Banco Central net interv. | -5.7 | -76.3 | -78.6 | 7.5 | -0.7 | 0.3 | -12.7 |
| Bank deposits | 1.9 | -9.9 | -10.7 | 0.7 | -4.0 | 3.6 | 16.1 |

1/ Forecast.

to US$23.3 billion. For 2009, the forecast was revised to US$26.9 billion. Additionally, the assumption of rollover rates for the external indebtedness was reduced from 100% to, as already mentioned, 75%, showing net amortization of external loans.

The forecast for 2008, related to foreign investment net inflows of medium- and long-term domestic securities was reduced, significantly, from US$22 billion, in the September Inflation Report, to US$5.5 billion, in line with the results recently registered and with the assumption of maintenance of the financial stress scenario. For 2009, in line with the prospects of persistent risk aversion and of maintenance of the other macroeconomic conditions, these net flows were revised from net inflow of US$15 billon to net outflow of US$3 billion.

The banking sector's assets abroad should decrease by US$3.6 billion in 2008, against US$0.6 billion forecasted in the September Inflation Report, having as forecasted, for 2009, returns of US$16.1 billion, as compared to US$7.4 billion in the previous forecast. The reduction of the banking sector's assets abroad shows the behavior of the foreign direct and portfolio investments and of the forecasted balance for the current transactions, evincing the banking sector's performance as foreign currency supplier to the non-financial private sector.

Regarding the international reserves, considering the liquidity concept, their position up to the end of 2008 should show growth of US$26.5 billion as compared to the previous year, topping US$206.8 billion. For 2009, it is forecasted an additional expansion of US$5.2 billion as a result of the reserve earnings, with additional interventions not being forecasted. Considering the international reserves, in the cash concept, which incorporates the effects of the recent measures adopted by the Central Bank to supply liquidity in foreign currency, the reserves continue to turn in expansion in the year. The forecast presented in this Inflation Report shows the international reserves, in the cash concept, at US$194.1 billion, to the end of 2008, expansion of US$13.8 billion in relation to 2007. Towards the end of the following year, already repurchased all the lines and foreign currency loans, both concepts will even, reaching US$212 billion.

# Inflation outlook

# 6

This chapter of the *Inflation Report* presents the Monetary Policy Committee's (Copom) assessment of the behavior of the Brazilian economy and of the international scenario since the release of the previous *Report* in June 2008, as well as the analysis of the inflation prospects up to the third quarter of 2010 and of the Gross Domestic Product (GDP) growth up to the end of 2008. One should highlight that since the March 2008 *Inflation Report*, Copom starts to systematically release inflation forecasts for a period of two years, starting from the first month after the *Report* release, a procedure similar to the one previously adopted in the case of *Reports* released in each December. Thus, *Reports* published in March, June and September, which used to consider inflation forecasts for the current year and the next, henceforth they will contain forecasts for a two-year span. Inflation projections are presented in two major scenarios. The first scenario, called the baseline scenario, assumes that the Selic rate will remain unchanged at 13.75% per year, over the forecasting horizon a value decided by Copom in its last meeting, on September 9 and 10, and that the foreign exchange rate will remain at R$1,80 per US dollar. The second, named market scenario is based on the expected paths for Selic rate and for the foreign exchange rate drawn from the survey carried out by Central Bank's Gerin with private sector analysts. The projections released here utilize the set of information available up to cut-off date of September 12, 2008. It is important to stress that these scenarios are used as support for monetary policy decisions and should not be viewed as Copom forecasts of the future behavior of interest and exchange rates.

The projections for Inflation and GDP growth released in this Report are not point estimates. They consist of probability intervals which embody the degree of uncertainty present in the above mentioned cut-off date. Inflation forecasts depend not only on assumptions over interest and exchange rates, but also on a set of assumptions on the behaviour of the external variables. The most likely set of assumptions considered by Copom is used to build up the scenarios to which the Committee attaches the greatest weigh on making its interest rate decision. On setting out these assumptions, the Copom seeks to foster transparency to the monetary policy, thereby contributing to the effectiveness of policy decisions in controlling inflation, which is its primary objective.

## 6.1 Inflation determinants

The inflation measured by the IPCA growth reached 4.48% over the year up to August, against 2.8% in the same period of 2007. Since January, the twelve-month inflation rate stands higher than the center of the target, with an increasing gap since then. Actually, twelve-month inflation up to August stood at 6.17% (against 6.37% in July and 4.18% in August 2007). This upturn in inflation – initiated in the first half of 2007 – is largely due to the mismatch between the expansion pace of demand and supply, in a context of pressure – observed on a global scale – on the prices of agricultural commodities, namely beef, milk and dairy products, which started to increase with higher intensity last year, and which, notwithstanding the downturn registered in the latest weeks, still remain on historically high levels. These increases are due to structural factors which tend to persist such as the higher demand by big Asian countries – China and India – and the displacement of some crops, such as corn, for biofuel production.

Additionally, transitory factors, such as weather conditions, also put pressure on food prices, as well as tariff and nontariff barriers to the trade of specific products by several countries in the latest months. Mainly in the first quarter, a more intensive increase of oil prices – significantly decreased since the last *Inflation Report*, though still remains at levels higher than the average prices observed in previous years – and high readjustments on prices of some nonagricultural commodities, for example, iron ore – though the metal commodities also had shown decreases in their costs since the last *Inflation Report* – joined up with the above factors. Another important difference in the inflation upturn comes from the behavior of the regulated and monitored prices which, in 2007, for the first time since the inception of the Inflation Targeting System in 1999, increases lower than the market prices, a trend which persists in 2008, but it is not expected for next year. Actually, while, over the year up to August market prices grew by 5.4%, and the regulated prices grew by 2.37%. On the other hand, sharp general prices increase and with the end of the tariff revision cycle in the electricity sector anticipate a higher pressure the administered prices in the next quarters. The behavior of nontradable prices indicates that the demand pressure continues to have a relevant impact on inflation dynamics. Therefore, among the set of market prices, nontradables prices increased 8.41% in twelve months up to August, and the increase in prices of nontradable goods, although smaller (6.82%), also stood higher than the upper limit of the inflation target.

According to IBGE-seasonally adjusted data, GDP at market prices grew by 6.1% in the second quarter of 2008 compared to the same quarter of the previous year and by 1.6%, against the first quarter. From the production viewpoint, the agricultural sector grew by 7.1%, compared to the same period of the previous year, while the industry and the services sector reached 5.7% and 5.5%, respectively. Regarding demand, Gross Fixed Capital Formation (GFCF) expanded 16.2%, against the same quarter of the previous year, followed by household and government spending, which grew by 6.7% and by 5.3% respectively. Just as it has been occurring since the first quarter of 2006, growth was exclusively due to domestic market. Actually, domestic demand contributed with 8.6 p.p. in the GDP expansion of 6.1% of in the second quarter, while the external sector contributed with -2.5 p.p. Copom considers that, even with the prospects of weakening of global economy compared to the situation at the time of release of the last *Report*, the upturn in domestic demand activity should continue, with some moderation, in the next months, favored by several sustaining factors that still impact on economic activity, such as credit and employment expansion. Taking into account, additionally, the narrowing of the factor market observed in the latest quarters, the Copom assesses that the pace of demand expansion continues to dominate the risk balance for inflation.

At a moment when global growth cools off more rapidly than was expected some months ago, and that expectations of world economy expansion continues deteriorating, private spending has been contributing, in an important way, to sustain domestic demand. In fact, in the first quarter of 2008, household spending grew 6.7% in relation to the same period of the previous year. This robust performance can also be seen, and anticipated through retail data. The seasonally adjusted series of expanded retail sales registered increase of 1% in July 2008, as compared to the previous month, after increases of 1.3% in June, 1.1% in May, 1.5% in April and 1.3% in March. As a consequence, the average of the quarter ended in July registered growth of 3.8% as compared to the quarter ended in April. In comparison with the previous month, there was growth of 16.5%, compounding 14.6% over the year and 14.2% in twelve months. Over the year, there were increases in all surveyed segments, with emphasis to “office equipment, informatics and communications”, 29.2%; and “automotive, motorcycles, parts and spares”, 22.9%; “other articles of personal and domestic use”, 21.5%; “furniture and home appliances”, 18.6%. The segment that registered the lowest growth in the period (5.8%) was that of “supermarkets, food, beverages and tobacco”.

The growth in economic activity has been producing steady improvements in the labor market. In July, according to PME, the working population increased by 4% as compared to the same month of the previous year, and 3.6% in twelve months. The average nominal earnings of the working population rose by 10.5% in July, on the interannual comparison, the highest since December 2005, led by the increase in the public sector wages. On the other hand, the real average earnings fell by 3% compared to July 2007, causing a 7.2% increase in the real overall wages on the same basis of comparison and 5.9% in twelve months. The employment level in the manufacturing industry registered, in July, growth of 4.4% in relation to the same months of 2007 according to CNI data. In relation to CLT formal employment, data released by MTE indicates that respective growth intensified in 2008, with the creation of 1.8 million job positions up to August, a number higher than that registered in 2007, when it registered the highest annual balance of Caged’s historical series. In percentage terms, formal employment expansion in 2008, up to August, was led by the civil construction (17.7%), followed by commerce (6.7%), manufacturing (6.2%) and services (5.9%). The favorable developments in the labor market strengthen the perception, expressed by Copom in previous *Reports*, that the wage bill will continue to be one of the sustaining pillars of aggregated demand. One should mention that the favorable performance of the labor market has contributed to maintain consumer confidence indices at high levels.

Credit availability to households, favored by macroeconomic stability and institutional advancements, despite the increase in the resource acquisition cost by financial institutions, has been another important boosting component of private spending. In twelve months up to July, the financial system credit (with earmarked resources) to households grew 30.7%, with emphasis on the expansion of leasing operations (141.7%). One should mention that this credit expansion has been followed both by the average term lengthening and by the relative stability of default. Concerning the prospective scenario, market analysts and banking sector representatives expect that the credit will continue expanding in 2008, especially in some segments like the real estate, although with some moderation on the margin, due to the lagged effects of monetary policy and, also, of some repercussions of tightening financial conditions on a global scale.

On the other hand, investment has been shown as the most dynamic component of domestic demand. After an increase of 10% in 2006 and 13.4% in 2007, the GFCF increased, in real terms, 15.7% in the first semester of 2008, as compared to the same period of the previous year. As GDP share, the GFCF increased from 17.5% in the second half of 2007 to 18.7% in the second quarter of 2008, the highest value since the beginning of the series, in 2000. The behavior of the investment reflects heated activity in an environment of economic stability, increased companies' earnings, reduction in import costs and improved financial conditions.

In fact, there is evidence that credit expansion has been helping to sustain investment expansion. Credit with earmarked resources to corporate entities grew by 41% in twelve months up to July, and 19.1% this year. However, loans disbursements and financings through BNDES system resources increased 42.8% up to July 2008 in relation to the same period of the previous year. Besides, on the capital market, the volume of initial public offerings of shares (R$31.7 billion up to August) as well as debenture issuances (R$5.7 billion up to August, excluding the issuances carried out by leasing companies) contributed to financing investments in practically all sectors. On the one hand, the strengthening of the real also had importantly favored investment growth, since the cost of importing capital goods was reduced. On the other hand, the deepening of the PAC implementation process should expand public investments on infrastructure. In summary, even in the context of a greater than anticipated world economy deceleration, in the next year, and of higher volatility in the global markets since mid-2007, the combination of profitability and high confidence, coupled with favorable financing conditions, should contribute to the continuity a benign performance, despite the volatility which characterizes the investment series.

According to IBGE, government spending grew 5.3% in the second quarter of 2008, in relation to the same period of 2007, a development which was accompanied by strong increase of public revenues. In spite of not counting anymore on tax revenues from the Provisional Contribution on Financial Operations (CPMF), the Central Government's revenues increased 17.7% over the year up to July, compared to the same period of the previous year. On the other hand, the ICMS revenues, the main state tax, increased 18.9% up to June, against the same period of the previous year. In the face of budgetary conditioning, currently prevailing in the country´s public policy guidelines, it is expected that the growth in government spending remains robust in the next quarters.

Concerning the foreign sector, after registering a US$40 billion surplus in 2007, the trade balance registered US$16.9 billion in the first eight months of 2008, a value 38.4% lower than that observed in the same period of the previous year. The result of trade balance is due to exports of US$130.8 billion and imports of US$113.9 billion. Despite the relative loss of dynamism in exports, one should mention that the results of the beginning of the year were negatively affected by specific factors linked with the Federal Revenue officers' strike, the delay of the grains harvest and the lockout of rural producers in Argentine. In fact, despite the relevant reduction in the results of the trade balance compared to the previous year, this difference has been falling for five consecutive months. Part of this relative recovery also reflects significant price adjustments of important export products, such as iron ore.

Concerning exports, after an observed growth of 5.5% in 2007 (against 3.3% in the previous year), a cutback of 0.7% was verified in the first seven months of the year, the first cutback on this basis of comparison since 2003, partly reflecting the effects of foreign demand deceleration and reallocation to domestic market of part of production previously directed to the external market. On the one hand, after growing 22% in 2007 (against 16% in 2006), the imports registered growth of 23% in the first seven months of the year. It is important to highlight that the cutback in exports volume was partially offset by the increase in the exports prices, which, even after increasing 12.6% in 2006 and 10.6% in 2007, showed a significant rise of 27.2% in the first seven months of 2008. On the other hand, import prices, which grew 8.1% in 2007 (against 7% in 2006), also showed an expressive growth in the period (23.5%). In this way, despite evidence pointing to an important reduction in the trade balance in 2008, Copom does not foresee an abrupt reversal in the trade balance in the short term.

One should stress that the high volume of imports reflects, in a good extent, the significant growth of external purchases of capital goods, after growing 32.1% in 2007, the highest rate since 1998, it still accelerate on the margin. In fact, the growth observed in the first seven months of the year topped 38.9%. In part, reflecting these developments, the net exports contribution to the aggregated demand growth was negative by 2.5 p.p. in the second quarter of 2008, just as it occurred in the latest years (-1.4 p.p. in 2006 and 2007). The evolution of net exports is due to the effects of the acceleration of domestic demand activity vis-à-vis the situation of our trade partners. Copom assesses that net exports has become less effective as auxiliary instrument to maintain price stability. The recent behavior of prices of Brazilian assets, especially foreign exchange rate, corroborates this. Concerning current transfers, Copom works with the assumption of deficit in 2008. In fact, in the latest twelve months, the deficit reached US$19.5 billion, 1.4% of GDP, while the net inflow of direct foreign investments totaled US$30.1 billion, corresponding to 2.2% of the GDP.

The external scenario showed relevant changes since the last *Inflation Report*. After more than one year since its outbreak, the subprime crisis, which not only affected the real state market, but also the North-American financial and credit market before having effects on the financial system of other countries – especially on the main European economies – continue far from a solution. Some signs indicate that there will be strong impacts on the global economy. The losses declared by the financial institutions up to the moment reach high numbers, and significant new losses are expected. After a period when the crisis apparently showed signs that it had reached an inflexion point, it is plausible to assume that the expectations for global economy deteriorated even further since the release of the last *Inflation Report*. Europe, whose real sector seems to be, at a first moment, showing some resilience to adverse developments of the financial system, appears to be suffering the cumulative effects of the exchange terms deterioration, of the deterioration in the financial conditions, of the higher risk aversion and of more pessimistic prospects for world growth in 2008 and 2009. Therefore, the European Central Bank, which had increased the interest rate in a context of lower tolerance to inflation, interrupted the contractive movement and started to observe the economic deceleration with greater attention.

In fact, although the subprime mortgage crisis had originated in the USA, are signs, up to the moment, that the European economy would be even more strongly affected than the American economy. One should note that the USA economy displayed a non negligible growth in the first half year, after having grown in 2007. Notwithstanding the effects of the expansionary fiscal package implemented at the beginning of the year seem to have vanished, expectations of recession in a near future gains momentum. Stronger indication seems to come from the labor market, which clearly reflect the lower economic activity level, with sharp increase of the unemployment rate, worsening even more consumer confidence, and importantly contributing to reduce spending. Besides, Japan, which did not seem to have been strongly affected by the financial crisis – especially due to the intensive trade with other countries of the region – experienced strong downturn in the second quarter.

One should mention that, in the case of the USA and, more importantly, of Europe and Japan, the worsening terms of trade caused by the increase in the commodity prices had contractionary effects on disposable income; on corporate earnings and on household and business confidence. Thus, the reduced prices of primary products must contribute toward easing the tendency for economic slowdown in these regions.

On the other hand, the crisis impacts on emerging economies are still limited. One should highlight, therefore, the raising of some signs, still incipient, of deceleration in China. It is not clear, however, if they stemmed from specific factors, associated, for example, to weather events or to the Olympics, or it really anticipated a tendency. Additionally, the recent decrease in commodity prices may contribute to mitigate the monetary policy dilemma faced by several central banks, especially in countries which import raw materials, where inflation and economic activity have been moving in opposite directions. In this sense, one should mention that raw materials, not negotiated on the stock market, such as iron ore, continue with their prices quite under pressure, suggesting that the recent fall in commodity prices may have been exaggerated by the movement of closing positions by financial investors and, therefore, overestimating the deceleration condition.

As consequence of the above scenario, the growth prospects of the world economy became worse since the last *Report* as well as the risk balance, which started to present a clearly negative bias to the activity. The dominant scenario seems to indicated a more consistent recovery only in 2009 or even in 2010. On the other hand, the commodity price decrease, especially of oil, seems to indicate that world inflation – which continues quite high – would have already reached its peak.

Regarding the aggregate supply, the three economic sectors showed quite robust performance in the second quarter of 2008. The level of activity in manufacturing grew by 5.7% (6.9% in 2007) as compared to the same period of 2007. The services also presented strong growth, expanding 5.5%, compared to the same period of the previous year (4.5% in 2007). The best performance was shown by agriculture, which grew 7.1%, recovering from the bad performance observed in the previous quarter (3%), and showing strong acceleration, as compared to the same period of 2007 (1.1%). One should highlight that the weak result in agriculture, in the first quarter, was due adverse specific factors, such as delays of harvests of some important crops. In this way, the performance in the second quarter only recovers the strong growth tendency initiated in the third quarter of the previous year. In fact, the expansion of this sector in the latest two quarters of 2007, on this basis of comparison, was quite significant (9.7% and 8.6%, respectively).

After expressive increase of 6% in 2007 – the highest rate in the latest three years and the second since 2001 – industrial production accelerated and presented expansion of 6.6% in the first seven months of 2008. In this period, manufacturing expanded 6.5%, while mining increased 6.8%. Consequently, after a growth rate lower than manufacturing in 2007 – not the usual dynamics over the years – the mineral extractive industry returned to grow more than the manufacturing industry. Data already released concerning the latest months, pointed the continuity of the industrial growth cycle, even with a pace conditioned by possible limitations to supply expansion and by effects of monetary policy actions.

While from the supply viewpoint, GDP grew 6.1% in the second quarter, compared to the same period of the previous year, from the demand viewpoint – excluding inventory adjustments – expansion topped 5.6%. In this regard, considering only the manufacturing, FGV's Economic Outlook Survey August data shows that, since October 2007, the inventory indicator remained for the sixth consecutive month higher than 100 – a level higher than the number of companies that considers the inventories as not sufficient surpasses the ones which considers that their inventories are excessive – but returned to fluctuate around 100 since February, which suggests that the inventories have been maintained close to the levels planned by the surveyed companies. On the other hand, according to the CNI, at the end of June, the final inventories remained at a level higher than the one registered in the corresponding period of the previous year. Besides, the difference between planned and effective inventories, which had been posed lower than 50 in the last quarter of 2007 – a level which indicates effective demand higher than anticipated – returned to stand higher than 50 since that time, which from this viewpoint may suggest some moderation, on the margin, of the mismatch between supply and demand.

On the other hand, the Nuci reached 83.7% in July, showing increase against the rate of 83.1% registered in June, according to the CNI seasonal adjusted data released by the Central Bank. The CNI seasonally adjusted data, which had decreased in May, returned to increase in June and July, reaching in this last month the record level of 83.5%. Considering the series without seasonal adjustment, in July, the Nuci stood 1.47 p.p. higher the level registered in the same month of 2007. As a result, the average rate of the first seven months of the year was 1 p.p. higher than the one observed in the corresponding period of 2007. Additionally, the monthly non seasonal adjusted Nuci calculated by the FGV, reached 86.5% in August, 0.8 p.p. higher than the level observed in the same month of 2007.

Generally, the high level of capacity use mirrors economic activity deceleration and it is manifested in several sectors, notwithstanding the substantial growth of investment volume. The FGV´s Economic Outlook Survey on the manufacturing industry shows that, between April and July, there was growth of 1 p.p., in the number of companies considering that there will be limitation in their production increase. Nevertheless, when the figures of July and January are compared, it is verified an increase of 2 p.p. (38% against 36%, respectively). As concerns the expansion capacity, the absorption of capital goods, which had been showing high growth rates (5.1% in 2005, 13.9% in 2006 and 19.6% in 2007), remains robust in 2008, and registers expansion of 19.6% up to July, compared to the same period of the previous year. This performance reflects not only the strong growth of capital goods imports (39% in volume up to July), but also in the production of these goods (19.9%). One should highlight the growth of 10.5% in the construction inputs, the highest growth on this basis of comparison since April 1995. On the other hand, taking into account the recent behavior of the capacity utilization rates, the timely maturation of investment projects is a crucial factor to avoid the deepening of the important mismatch verified between the growth in supply and aggregated demand in the latest quarters, which has exacerbated the inflation.

The National Cost of Construction Index – Domestic Availability (INCC – DI) shows an increase in production costs associated to this sector. The INCC growth over the year up to August reached 9.24% against 4.09% registered in the previous year. On one hand, growth in the latest twelve months topped 11.4% in August, a value 6.4 p.p. higher than the one verified in the same period of 2007. This development has been raising concerns regarding possible supply restrictions in this segment which, given its production structure, would hardly be relieved by imports. Besides, the construction industry seems to face cost pressures given the apparent scarcity of specialized labor. The worries about the price evolution in the construction industry are reinforced by the prospects of aggregated demand expansion in an environment where financial conditions remain favorable.

Upon overcoming the "courage" effect, typical of the initial phases of expansion cycles, the economically active population (PEA) growth has been decelerating. In twelve months up to July expansion reached 2%, against 2.8%, compared to the same period of the previous year. This dynamics coupled with the accelerated pace of economic activity and to the consequent expansion of labor demand, contributed to faster downfalls in unemployment rates. Actually, unemployment rate stood at 8.1% in July against 9.5% and 10.7%, respectively in the same months of 2007 and 2006. Consequently, the average rate of unemployment in the year up to July (8.2%) stood 1.6 p.p. lower than the one verified in the same period of the previous year. On analyzing the average rate in twelve months, it is verified that July registered the eighteenth consecutive cutback on this basis of comparison. With the strong upturn in labor demand, the PEA tendencies were maintained, and unemployment rates may decline over next months, which might lead to pressure for stronger wages increases possibly higher than the growth in labor productivity.

The oil price, a systematic source of uncertainty of the international scenario, has fallen since the latest *Inflation Report* release, but it continues quite volatile, suggesting caution in the interpretation of its recent dynamics. This behavior has not only reflected the lower demand by developed countries, in a context of economic deceleration, but, especially, worries of stronger global deceleration in the next quarters. One should highlight that the impact of international prices of oil on domestic inflation is not exclusively transferred through fuel prices, but also, for example, through the production chain of the petrochemical sector and through consumer and entrepreneurs' expectations. The price volatility of other imported commodities continues equally high, although, likewise oil, prices had been falling with some intensity since the last *Report*, due to the greater uncertainties concerning the prospects of world demand growth, as well as the greater turbulence in the global financial markets.

After more than doubling in 2007 (7.89%, against 3.79% in 2006), broad inflation – measured by IGP-DI – continued to increase in 2008. Up to August, IGP-DI rose by 7.93% against 3.23% in the same period of the previous year and, in twelve months, 12.8%, a percentage 7.61 p.p. higher than that for the same period of 2007. The strong acceleration of the index was essentially due to the behavior of IPA-DI which expanded 15.7% in the latest twelve months, against 5.49% in 2006. On the other hand, on the same basis of comparison, the IPC-Br and the INCC increased, respectively, 5.93% and 11.4%, against 4.47% and 5.04% observed in the same period of the previous year. Still about the Wholesale Price Index (IPA), one should note that the industrial price acceleration, the process initiated in the second half of 2007 and was intensified in the latest quarters. In fact, the industrial price inflation in twelve months up to August (13.37%) remained 10.72 p.p. higher than the value registered in the same period of the previous year, and the agriculture prices (22.51%), 7.64 p.p. Nevertheless, one should mention that the agriculture prices growth reached, in twelve months up to August, a level markedly higher than that registered by industrial prices. As highlighted in previous *Reports*, Copom assesses that the effects of wholesale prices on consumer inflation will depend on current and prospective conditions associated to demand and price-setters expectations regarding the path of future inflation.

The benign scenario for consumer prices which materialized in 2006, started to revert by mid-2007 and showed higher deterioration since the beginning of the current year. These developments were considered in thee risk balance posed by the Committee in previous *Reports*, which anticipated that twelve-month inflation could accelerate this year. Similarly to what occurred in 2007, this year the market prices grew markedly more than the regulated and monitored prices, with latter reducing the IPCA acceleration. While market prices grew 5.4% in the first eight months of the year (7.64% in twelve months), regulated prices only increased 2.37% (2.84% in twelve months). In the set of market prices, the price of nontradable goods increased 5.53% up to August (8.41% in twelve months), while the price of tradable goods grew 5.27% (6.82% in twelve months).

The three measures of core inflation calculated by the Central Bank registered, up to August, values higher than the ones verified in the same period of the previous year. Besides, the twelve-month inflation remained higher than the center of the target in all the cases. Actually, over the year up to August, the core that excludes monitored prices and food at home prices registers inflations of 4.18% (2.45% in the period in 2007), the smoothed trimmed mean core stands at 3.26% (2.47% in the same period of 2007) and the non-smoothed trimmed mean core shows inflation of 3.52% (2.24% in the same period of 2007). In twelve months the values are 5.87%, 4.85% and 4.92%, respectively.

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

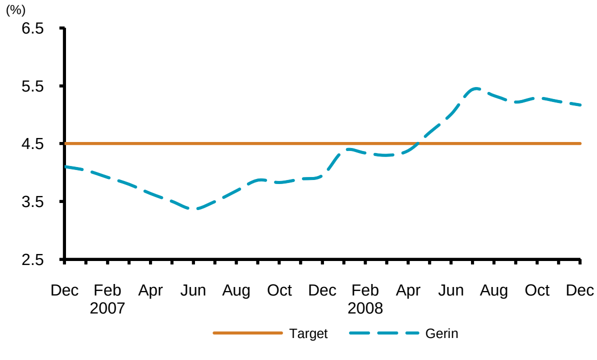
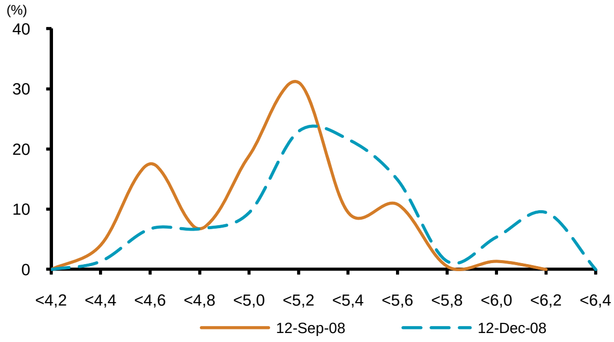


**Figure 6.2 – Dispersion of inflation expectations for 2009**

Relative frequency




As mentioned in the last *Inflation Report*, inflation expectations for 2008 has continued rising, in some moments even higher than the center of the target (6.5%), actually standing at 6.26%, against 5.8% in July. For 2009, expectations have also deteriorated, increasing from 4.63% in June, to 4.99%, influencing the prospective scenario posed by Copom. For 2010, expectations have stood at 4.5%. In the Copom assessment, these developments, as well as the inflation acceleration in 2007 and 2008, indicate that the inflation convergence to the target in 2009, even facing activity deceleration scenario on a global scale, requires the timely actions by the monetary authorities through adjusting the basic interest rate.

## 6.2 Main scenario: associated risks and monetary policy implementation

The projections used by Copom are based on a set of assumptions about the behaviour of the main macroeconomic variables. This set of assumptions, as well as the risks associated with it, make up the main prospective scenario based on which the Committee makes policy decisions. In general terms, the prospective scenario – whose corresponding projections are presented in the following section – considers intensification of the global crisis compared with the assessment of the previous *Inflation Report*, with the continuity of turbulences in the financial markets, on the external side, and slowing down of the economic activity, on the domestic side. More importantly, however, the main scenario contemplates high uncertainty. In particular, from the viewpoint of the balance of risks related to the inflation prospects, even though the materialization of a scenario in which inflation diverges from its target became less probable, there remain both offsetting and reinforcing factors.

There are three main risks associated with the main scenario: those related to the duration and magnitude of the global crisis; the risks associated with the exchange rate pass-through due to the strong depreciation of the domestic currency; and those related to the pace of the domestic economic activity.

Compared with the previous *Inflation Report*, the main scenario considers a stronger contraction of the economic activity worldwide and, in particular, the effects of the worsening global crisis on the emerging market economies. After a period in which the effects of the global crisis over the emerging markets were expected to be – and in fact they were – less pronounced due to the robust growth of commodity prices, in the latest months these economies began to suffer more strongly the impacts of the crisis. The increase in risk aversion since mid-September has led the authorities of the US, Europe, Asia and Oceania to implement unprecedented intervention in their financial systems using a wide range of instruments in order to ensure the minimum conditions for the functioning and liquidity of money markets. Despite the perception that the systemic risk has decreased, interbank markets are still pressured by the fact that financial institutions will starting closing their balance sheets soon as the end of the year approaches. The worldwide liquidity contraction continued to help fund managers to deleverage their positions, which has put further downward pressure on asset prices. In such an environment, in which risk aversion is high and capital flows are reduced, the currencies of the emerging market economies are still under pressure.

On the global macroeconomic scenario, the dominant view still points to a modest expansion of the world economy in 2009, but data released in the latest weeks indicate an intense and widespread weakening of the economic activity in mature economies as well as in important emerging market economies. There is evidence that the more pronounced fragility of the economic activity in Europe and in parts of Asia was due, to a large extent, to the negative terms of trade shock caused by the rise of commodity prices, which may be already reverting. On the other hand, the problems affecting the international financial system have been aggravating by a cyclical deterioration of credit quality, which tends to reinforce the deterioration of financial conditions and thus the economic downturn itself. The US economy got into a recession at the end of 2007 and continues suffering the impact of the crisis in the real estate sector. Both the weakening of the labour market due to the recession and the negative wealth effects associated with the fall of asset prices, have negatively affected consumers' confidence and contributed to depress aggregate spending in the US. The predominant assessment is that economic activity in Europe and in Japan will keep slowing down in the coming months. In mature economies, where inflation expectations are better anchored and economic activity has been weakening considerably, inflationary pressures have decreased rapidly. In emerging economies, where the second-round effects of the rise in the prices of raw materials over consumer prices and the pressures from excess demand had been more intense, inflationary pressures have shown some persistence. In this context, while monetary policies in mature economies have been strongly expansionary, the policies adopted in emerging economies have been heterogeneous due to the above-mentioned factors and because of the exchange rate depreciation. Note, however, that policy-makers of mature economies have been announcing important fiscal stimuli aiming at a gradual economic recovery in these regions. One should highlight that the severity and persistence of the economic downturn in mature economies will depend to a great extent on the behaviour and resilience of the labour market.

As a matter of fact, the previous *Inflation Reports* already pointed to the risks associated with a scenario in which the world economic downturn would be more intense and widespread. However, as highlighted in those documents, the effects on the domestic inflation are ambiguous. On one hand, both the deceleration of the aggregate demand due to the reduction in exports and the fall of commodity prices contribute to mitigate domestic inflationary pressures. On the other hand, greater risk aversion and capital outflows have reduced the demand for assets from emerging economies, leading to sharp depreciation of local currencies that ultimately may translate into higher domestic prices. In such a context, even though the Brazilian economy has become more resilient to sudden changes in the mood of international financial markets, the Brazilian external sector may no longer be able to help to mitigate inflationary risks.

In the previous *Inflation Report*, it was highlighted that the net effect would depend, among other factors, on the relative importance of the financial component. Since then, the growth prospects of mature economies have worsened with negative consequences for the Brazilian exports. Despite this fact, the financial component has been dominant during this period, which would tend to fuel the domestic inflation. However, the world crisis is affecting the domestic economic activity not only through the fall of external demand but also through the reduction of external financing sources. Additionally, there are the indirect negative effects on the domestic financial conditions, as well as rising uncertainty leading agents to postpone consumption and investment decisions. As a consequence, this transmission channel may become particularly relevant for restraining the domestic inflation.

The scenario for commodity prices became more benign than that at the time of the release of the previous *Inflation Report*. Oil prices remain highly volatile, but they fell significantly since then. The prices of the other commodities also decreased significantly, reacting both to the greater pessimism with the prospects regarding world economic growth and to the turbulence in the global financial markets.

Such dynamics of commodity prices contributes to a more benign scenario for the domestic inflation. However, as mentioned above, the analysis of downward inflationary effects due to the recent trend in the prices of raw materials cannot be decoupled from the analysis of the effects that these exert over Brazilian asset prices, and the consequent impact on the domestic inflation.

A more in-depth analysis of the possible effects of the exchange rate depreciation observed during the quarter is required, focusing on the pass-through to consumer price indices (see the box *Exchange Rate Pass-Through to Prices*, in this chapter). First, the consolidation of the monetary and fiscal institutions, in particular the inflation targeting regime, may help to reduce the pass-through. It is important to highlight that the current context is quite different from that in 2002, when agents even considered a change of the monetary regime, which exacerbated inflation expectations and so the pass-through. A second aspect refers to the fall of commodity prices in foreign currency, which partially offsets the impact of the exchange rate depreciation and so reduces the effects that these prices might have in local currency. On the other hand, it is worth recognizing that commodities represent a small share of the basket of imported goods. A third factor is the deceleration of the domestic economic activity and its implication for the behaviour of the exchange rate pass-through. There is evidence showing that the magnitude of the pass-through depends on the economic cycle, being more intense during upturns. A fourth factor refers to the initial conditions for the level of inflation and the effective real rate of exchange. When inflation rates are low – which is certainly not the case now – the pass-through tends to be smaller. Similarly, when changes in the nominal exchange reflect adjustments of the real exchange rate the pass-through also tends to be smaller. In the Brazilian case, some price adjustment due to the currency depreciation was expected given the growing current account deficits and the deterioration of the terms of trade because of the slower growth of commodity prices. It is also possible that the exchange rate appreciation occurred previously may have created some buffer in the price levels that is now helping to absorb part of the exchange rate depreciation.

There are arguments favouring a larger exchange rate pass-through. First, the economy experienced a relatively long period of strong growth. Therefore, if price adjustments take into account the recent demand or, in the case of many sectors, the current demand conditions, the pass-through would be higher. Nonetheless, spending decisions based on expected – for now weak – economic conditions may have the opposite effect on the pass-through. Second, even considering a low exchange rate pass-through, the magnitude of the current exchange depreciation is large enough to yield potentially significant inflationary effects.

The behaviour of domestic prices has not yet shown signs of significant exchange rate pass-through. However, it is important to highlight that there exist lags between the changes in the exchange rate and their effect over consumer prices. This is because there is a whole chain going from imports priced in local currency at the dock to the distribution sector and then to final consumers. Secondly, agents may be waiting for a clearer picture for adjusting prices, in face of the high volatility of the exchange rate in the latest months and thus of the uncertainty about its level over the relevant horizon. In principle, the latest changes of wholesale prices have pointed to mild exchange rate pass-through in the short run. However, if agents perceive that the recent changes in the exchange rate are rather permanent than transitory it is likely that the pass-through becomes more intense. It is quite possible that a scenario materializes in which economic growth is weak and the exchange rate pass-through is low, but still the corresponding inflationary effects are non-negligible. In such a scenario, inflation may rise in the short run but fall in the medium run because the transmission mechanism from the exchange rate to prices operates faster than that of the output gap. Under this circumstance, monetary policy must prevent price movements caused by the exchange rate depreciation from contaminating inflation expectations or translating into second-round effects due to adjustments in wage and price to levels prevailing before the depreciation.

The growth prospects of the Brazilian economy pose another risk to the inflation outlook. Up to the third quarter of the current year, the economy was expanding fast, led by strong growth of the domestic demand. However, despite greater resiliency of the Brazilian economy to external shocks, there are signs that the global crisis is affecting the domestic economic activity more intensively than anticipated. There are several factors pointing to the slower pace of the economic activity: consumption and investment decisions are postponed due to the higher uncertainty brought about by the crisis, more restrictive credit conditions in both the external and the domestic credit markets (higher interest rates, shorter maturity and tighter lending standards), fall of the world demand, and exchange rate depreciation which is raising the cost of imported investment goods. In fact, both leading and coincident indicators of economic activity, such as sales and production of manufactured goods, confidence indices, rate of capacity utilization and vacation shutdown in some companies, already signal the downturn.

However, assessing the magnitude of the downturn is still subject to a lot of uncertainty and so are the inflation projections. As mentioned before, one problem is that the transmission mechanism of the output gap to prices tends to occur with time lags normally higher than those of the exchange rate. The assessment is further aggravated by the fact that the economy is coming from a strong expansion, with high level of resource utilization. As a consequence, there could still be some inflationary pressures coming from price adjustments based on previous or current demand conditions.

On the fiscal side, there is still uncertainty about the effects of the fiscal stimuli announced recently on consumption. Uncertainty also involves the very details of the fiscal stimuli, as well as their final impact on the overall economic activity.

The assessment is also aggravated by the fact that the international financial crisis should have heterogeneous effects on the economic sectors. The sectors most sensitive to credit conditions tend to be more affected, at least initially. Among these sectors, it is worth mentioning the ones that produce goods whose purchase requires a greater commitment of the household's income, either in terms of installments or in terms of the number of installment periods. On the other hand, the still high levels of employment and the good prospects about the minimum wage should work as buffers against the short-run effects of external turbulences on the domestic economic activity.

In the medium term, however, the initial effects may be amplified since consumption and investment decisions are postponed due to the restrictive credit conditions and greater uncertainty. On the other hand, as the trough of the international financial crisis is overcome and domestic agents realize that is no longer justified to act too conservatively in face of the strong domestic fundamentals, then the economy will gradually resume its expansion.

One should also notice that the expected fall of crop production in 2009 adds further uncertainty to the prospective scenario. The crop problem would tend to slow down the expansion of income and activity in regions such as the country's Midwest and South but at the same time the smaller food supply could put upward pressure on food prices.

The Committee assesses that the strong fundaments of the Brazilian economy will help to cope with the global crisis without any disruption or change of the policy regime such as that occurred in early 1999. The basic economic policy framework founded on inflation targeting, fiscal adjustment and floating exchange rate, proved to be mature, combining resilience and flexibility. Besides, the solid external financial position – as portrayed by large international reserves, trade surpluses and external financing based mainly on direct investment – reinforce the view that the ongoing turbulences in the international scenario could be overcome without any disruptions.

The domestic economy downturn should also be analyzed taking into account the current conditions regarding external financing. Actually, the expansion of the Brazilian economy up to the third quarter was partially sustained by a growing world demand for exports and by a boom in commodity prices, which made possible to increase imports and in this way attenuate inflationary pressures coming from imbalances between the domestic demand and supply. In fact, in the last ten years the external sector has helped to maintain the inflation around the targets established by the CMN. The external sector has helped to discipline the prices of tradable goods and expand the domestic investment. Nonetheless, now the domestic absorption should adjust itself to the reversal of external conditions – as reflected by the fall in the world demand for exports and a significant reduction of commodity prices.

Breaking down the IPCA into market and regulated prices reveals that the latter will no longer play the role of cooling off inflationary pressures as they did in the last two years. In fact, for 2009, the main scenario considers that the regulated price inflation will be higher than the inflation target. Specialists are particularly concerned about the impact that the changes in general price indices observed this year may have on regulated prices in the next year. Despite the fall of commodity prices, the strong exchange rate depreciation in the latest months may indeed put upward pressure on the general price indices. However, even if regulated prices are influenced by changes in general price indices, the direct effect is relatively small. In any case, it is reasonable to expect that at some point in time the inflation of regulated prices would converge to the inflation of market prices, thereby ceasing to mitigate inflationary pressures.

Up to the third quarter of this year, the employment expansion – in part sustained by the macroeconomic stability – exerted a strong positive effect on real wages. Most likely, the labor market will cool down in the next months, thereby helping to intensify the initial downturn in the domestic demand and cool off inflationary pressures stemming from the exchange rate depreciation.

Credit growth was an important element for sustaining the previous expansion of aggregated demand, and now is also playing a key role in the economic downturn. Higher bank interest rate spreads, shorter maturity of new loan contracts and tighter lending standards all contribute to further deceleration of the domestic demand. In fact, tighter credit conditions may even amplify the effects of past monetary policy decisions on activity.

The possibility that changes in the inflation dynamics may have long-lasting effects on agents' inflation expectations – even when perceived as transitory in preliminary assessments – constitutes a perennial risk for monetary policy implementation and, therefore, must be monitored continuously. Given the past behavior of the Brazilian inflation, the Committee considers significant the probability that localized inflationary pressures still pose risks to the domestic inflation dynamics. Therefore, monetary policy must remain especially vigilant in order to avoid deterioration of the prospective scenario. In particular, short-run inflationary pressures due to the exchange rate depreciation may lead to the dissemination of second-round effects. This happens because large changes in relative prices that result in large inflation rates are followed by agents' desire to restore their real income which in turn feeds back into the inflationary process. The international experience, as well as the own history of inflation in Brazil, recommends that the monetary authority remains cautions in order to fight potential second-order effects.

Compared to the previous *Inflation Report*, the Committee considers that the risk of a less benign scenario for inflation has decreased but remains relevant. The Committee highlights that the main challenge to monetary policy in the current context is to ensure that the favorable results obtained in the past years are preserved. Especially, monetary policy must prevent that the deterioration of the inflation dynamics in 2008 becomes persistent. Additionally, the Committee assesses that monetary policy must act cautiously and timely in order to ensure that the inflation in Brazil converges to its target already in 2009.

For the short term, the Committee assesses that the main risk to the inflation dynamics stems from the behavior of Brazilian asset prices in face of tighter external financing conditions. Given the developments observed since the Committee's last meeting, the domestic demand may no longer be a threat to price dynamics, thereby limiting the impact of the balance-of-payment adjustment on inflation. The speed in the reduction of the imbalances between demand and supply that were relevant until the third quarter of 2008 still remains a key factor for the monetary policy assessment.

The Committee has taken into account the information available since the previous *Inflation Report* pointing to the slower pace of the economic activity: indicators of manufacturing production, labor market data, measures of capacity utilization in the manufacturing sector, consumers' and entrepreneurs' confidence indices, as well as inflation expectations. Given this information, the Committee assesses that the risks to a benign scenario for inflation – in which IPCA would consistently converge to its target – remain relevant but less significant. As a matter of fact, the likelihood of such a prospective scenario is already manifested in the inflation projections considered by the Committee. The Committee also considers smaller the probability that the imbalances between aggregate demand and supply will persist overtime. Under these circumstances, monetary policy must remain cautious in order to ensure convergence of inflation to its target.

The strategy adopted by Copom aims to bring inflation back to its target of 4.5% already in 2009. Such strategy – whose results will be evident overtime – takes into account the lags in the transmission mechanism and is the most appropriate way to deal with the uncertainty inherent to the process of formulating and implementing monetary policy.

In the light of these considerations, and taking into account a macroeconomic environment surrounded by high uncertainty, the Committee decided to maintain the Selic rate at 13.75% p.a. in its October and November meetings.

## 6.3 Inflation forecasts

According to the traditionally adopted procedures, and taking into account the available information up to December 12, 2008 (cutoff date), the baseline scenario assumes the exchange rate remains unchanged over the forecast horizon at R$2.40/US$, and the target for the Selic rate stays at 13.75% p.a. – the level set by the December Copom meeting – against R$1.80/US$ and 13.75% considered in the *Inflation Report* of September. In the baseline scenario, the projection for the change, in 2008, of the set of regulated and monitored prices was reduced to 3.5% from the 4.0% level considered in the last *Report*. This projection for 2008 is based on the hypotheses of stable prices for gasoline; 2.6% in bottled gas prices; against null variation in both cases as considered in last *Report*; 1.1% in electricity rates; and of 3.6% in fixed telephone rates, against 3.5% of last *Report*. Regarding the items for which information is available, price changes were estimated individually. For the others, the projections are based on models of endogenous determination of regulated prices, which consider seasonal components, exchange rate variations, market price inflation and General Price Index (IGP) inflation, among others. According to those models, the projection of the regulated and administered prices for 2009 was modified from 4.8%, in the last *Report*, to 5.5%; and for 2010, from 4.5% to 4.8%.

The market scenario, on the other hand, incorporates data from the expectations survey carried out by Gerin with a representative group of institutions up to the cutoff date. In this scenario, average exchange rate expectations considerably expanded in comparison to the values released in the September *Inflation Report*. For the last quarter of this year, these expectations moved from R$1.65/US$ to R$2.25/US$ and, for the last quarter of 2009, from R$1.75/US$ to R$2.20/US$. This is also the level expected for the last quarter of 2010. The average expectations about the Selic rate dropped, when compared to values contained in the last *Inflation Report*. For the last quarter of 2008, it moved from 14.13% to 13.68%, and for the last quarter of 2009, it decreased from 14.07% to 13%. For the fourth quarter of 2010, the projection for the average Selic rate is 11.83%. In the market scenario, the trajectory of the Selic rate is consistent with a pre-DI swap of twelve months spread, with respect to the current target for the Selic rate, of 180 b.p., 30 b.p., and -103 b.p., in the last quarters of 2008, 2009 and 2010, respectively. Additionally, the market scenario assumes changes of 3.5% for the group of regulated prices in 2008, of 5.1% in 2009 and of 4.6% in 2010.

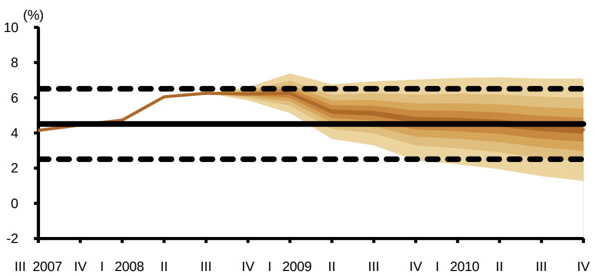
With regard to fiscal policy, the projections presented in this *Report* are based on the working hypothesis of a primary surplus of 3.8% of GDP in 2008 and 2009, augmented by 0.5 p.p.

Based on the above assumptions and using the information set up to the cutoff date, projections were constructed for the IPCA inflation accumulated over four quarters, consistent with the baseline and market scenarios interest and exchange rate paths.

The central projection associated with the baseline scenario indicates inflation of 6.2% in 2008, an increase of 0.1 p.p. in comparison to the projection presented in the September *Report*, therefore, higher than the central value

**Figure 6.3 – Forecasted IPCA-inflation with interest rate constant at 13.75% p.a. (Benchmark scenario)**

Inflation fan chart




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

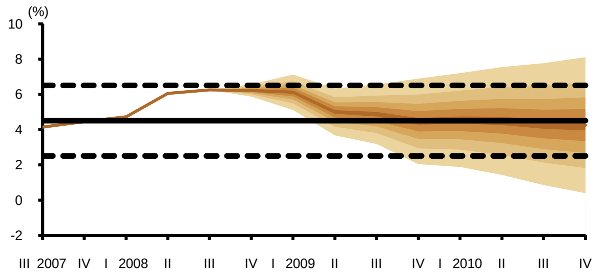
**Table 6.1 – IPCA-inflation with interest rate constant at 13.75% p.a.**
(Benchmark scenario)

| Year | Q | Confidence interval | | | | | | Central projection |
|---|---|---|---|---|---|---|---|---|
| | | 50% | | | | | | |
| | | | 30% | | | | | |
| | | | | 10% | | | | |
| 2008 | 4 | 6.1 | 6.1 | 6.2 | 6.2 | 6.3 | 6.4 | 6.2 |
| 2009 | 1 | 5.8 | 6.0 | 6.2 | 6.3 | 6.5 | 6.7 | 6.3 |
| 2009 | 2 | 4.6 | 4.8 | 5.1 | 5.3 | 5.6 | 5.8 | 5.2 |
| 2009 | 3 | 4.4 | 4.7 | 5.0 | 5.3 | 5.5 | 5.9 | 5.1 |
| 2009 | 4 | 3.8 | 4.2 | 4.6 | 4.9 | 5.3 | 5.7 | 4.7 |
| 2010 | 1 | 3.7 | 4.1 | 4.5 | 4.9 | 5.2 | 5.7 | 4.7 |
| 2010 | 2 | 3.5 | 3.9 | 4.3 | 4.7 | 5.2 | 5.6 | 4.5 |
| 2010 | 3 | 3.2 | 3.7 | 4.1 | 4.5 | 5.0 | 5.5 | 4.3 |
| 2010 | 4 | 3.0 | 3.5 | 4.0 | 4.4 | 4.9 | 5.4 | 4.2 |

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

**Figure 6.4 – Forecasted IPCA-inflation with market expected interest and exchange rates**

Inflation fan chart




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 |
|---|---|---|---|---|---|---|---|---|
| | | 50% | | | | | | |
| | | | 30% | | | | | |
| | | | | 10% | | | | |
| 2008 | 4 | 6.1 | 6.1 | 6.2 | 6.2 | 6.3 | 6.4 | 6.2 |
| 2009 | 1 | 5.7 | 5.9 | 6.0 | 6.2 | 6.4 | 6.5 | 6.1 |
| 2009 | 2 | 4.5 | 4.7 | 4.9 | 5.1 | 5.3 | 5.5 | 5.0 |
| 2009 | 3 | 4.2 | 4.5 | 4.7 | 5.0 | 5.3 | 5.6 | 4.9 |
| 2009 | 4 | 3.5 | 3.9 | 4.3 | 4.7 | 5.0 | 5.5 | 4.5 |
| 2010 | 1 | 3.5 | 3.9 | 4.3 | 4.7 | 5.2 | 5.6 | 4.5 |
| 2010 | 2 | 3.2 | 3.8 | 4.3 | 4.7 | 5.2 | 5.7 | 4.5 |
| 2010 | 3 | 2.9 | 3.5 | 4.0 | 4.6 | 5.1 | 5.7 | 4.3 |
| 2010 | 4 | 2.7 | 3.3 | 4.0 | 4.5 | 5.2 | 5.8 | 4.3 |

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

of 4.5% for the target established by the National Monetary Council (CMN). For 2009, the projection for the inflation accumulated in twelve months moves from 6.3% in the first quarter to 4.7% in the last one. For the last quarter of 2010, the projection is of 4.2%. In this way, as illustrated in Figure 6.3, in the projection horizon, the accumulated twelve-month inflation tends to approach the inflation target's central value established by the CMN.

Data on Table 6.1 indicates a slight growth of the inflation accumulated in twelve months in the first quarter of 2009, to 6.3%, with a decrease of 1.1 p.p. in the second quarter of 2009. This movement reflects a lower projection for the market prices inflation in the second quarter of 2009, when compared to the occurred inflation in the corresponding period of 2008, which is enough to offset the effects of a projection for the inflation of the set of regulated and monitored prices higher than the one registered in the second quarter of 2008. In the third quarter the projection remains relatively stable and decreases by 0.4 p.p. in the last quarter, in part caused by a lower value of the inflation expectations for 2010 (4.5%), against 5.2% for 2009. According to the confidence interval illustrated on Table 6.1, in the baseline scenario, the estimated probability that inflation for 2008 will breach the upper tolerance level of the target (6.5%) is close to 11%.

In the market scenario, the projection of 6.2% for the inflation of 2008 is 0.2 p.p. higher than that contained in the last *Report* and coincides with the one associated to the baseline scenario. According to Figure 6.4 and Table 6.2, the projection for inflation accumulated in twelve months drops to 6.1% in the first quarter of 2009, continues in the same tendency in the following quarters and ends the year at 4.5%, therefore, reaching the central value for the target established by the CMN. This movement somewhat reflects the expectations of an appreciation of the Brazilian real in relation to the U.S. dollar in 2009. Still according to the market scenario, the projection for the inflation accumulated in twelve months reaches 4.3% in the last quarter 2010. According to the confidence interval illustrated on Table 6.2, in the market scenario, the estimated probability that inflation for 2008 will breach the upper tolerance level of the target is close to 9%.

Comparing the trajectories shown in this *Report* with those released in the last *Report*, whose projections are illustrated on Table 6.3, it is apparent that there was a slight increase of the projections for 2008, both according to the baseline scenario (0.1 p.p.) and to the market scenario (0.2 p.p.) On

**Table 6.3 – September 2008 *Inflation Report* forecasts**

| Period | Benchmark scenario | Market scenario |
|---|---|---|
| 2008 III | 6.3 | 6.3 |
| 2008 IV | 6.1 | 6.0 |
| 2009 I | 5.7 | 5.6 |
| 2009 II | 4.8 | 4.6 |
| 2009 III | 4.9 | 4.7 |
| 2009 IV | 4.8 | 4.7 |
| 2010 I | 4.7 | 4.7 |
| 2010 II | 4.6 | 4.6 |
| 2010 III | 4.6 | 4.6 |

**Figure 6.5 – Forecasts and target path for twelve-month cummulative inflation**

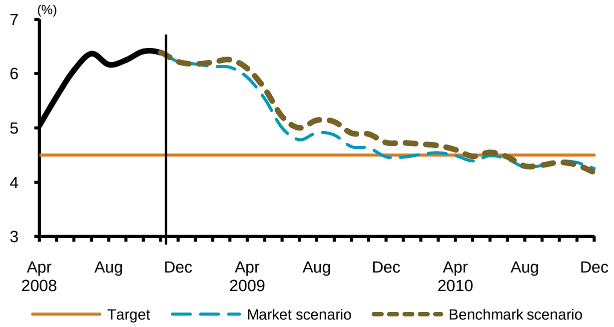
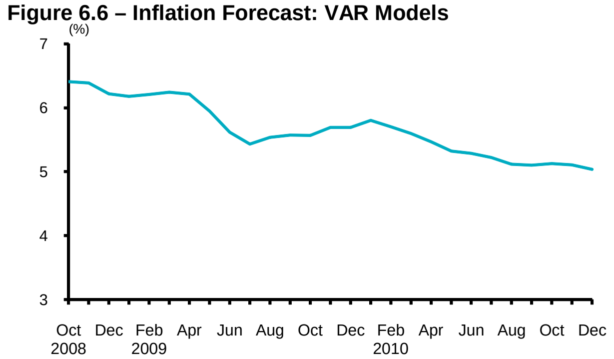



**Figure 6.6 – Inflation Forecast: VAR Models**

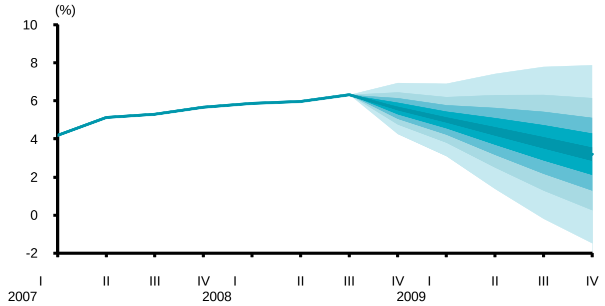



Note: accumulated inflation in 12 month (% p.a.).

Average forecast generated by the VAR models.

**Figure 6.7 – GDP growth with interest rate constant at 13.75% p.a. Benchmark scenario**

Output fan chart




the other hand, for 2009, it is worth noting a decrease of 0.1 p.p. in the baseline scenario projection and of 0.2 p.p. in the market scenario one.

Figure 6.5 shows the path of the twelve-month accumulated inflation, according to the baseline and market scenarios, up to the end of 2010, as well as the target trajectory. The figures are actual twelve-month inflation until November 2008, and, from December on, projections according to the two scenarios. The projection in the baseline scenario slightly increases in the first quarter of 2009, occurring the opposite in the market scenario. In the second quarter of 2009, the projections changed levels and assume a downward tendency, remaining, up to June 2010, slightly above the central value of 4.5% for the target, in the case of the baseline scenario, and around this value, in the case of the market scenario. As of mid-2010, the projections show to be relatively stable in both scenarios and remain slightly lower than the central target up to the end of the considered horizon.

The average forecast generated by the Vector Autoregression models (VAR) for twelve-month accumulated inflation is shown on Figure 6.6. Up to November 2008, the values are inflation occurred in twelve months and, as of December, refer to the average forecast of the VAR models. As observed, the models indicate inflation maintenance in the actual levels up to the second quarter of 2009, when it moves to a lower level, but still higher than the target's central value (4.5%) up to the end of the forecast horizon. It is worth noting that the average forecast generated by the VAR models increased in relation to the one showed in the last *Report*.

Figure 6.7 shows the output growth fan chart built under baseline scenario assumptions. Considering that the model which generates GDP growth projections uses two variables that are not directly observable, potential output and the output gap, the forecast errors associated to these projections are considerably higher than the errors related to the inflation projections. According to this scenario, the GDP growth projected for 2008 moved to 5.6%, which is 0.6 p.p. higher than the projection presented in the September *Inflation Report*, due to the output growth pace verified in the third quarter, which has surpassed the respective projection. The GDP growth projected for 2009 is 3.2%.

## Exchange Rate Pass-through to Prices

The recent international financial turbulence, intensified since September, has been causing significant exchange rate movements. The American dollar increased, between the end of August and the end of November, 16% as compared to the Euro, 18% against the Sterling Pound, 31% against the Australian dollar and 41% as compared to the Real. The increase in the risk aversion and the capital repatriation has also been strengthening the Japanese Yen, which grew 12% as compared to the American dollar and 24% when compared to the Euro, in the same period. In this context, it is natural that monetary authorities worry about the possibility of pass-through of the exchange rate change to prices. Given the relevance of the present subject, this box aims at showing a summary of the recent literature on this topic.

Monacelli (2008) identifies three different layers of pass-through, according to the degree of sensitivity of domestic prices to international prices. The pass-through to the prices of imported products at the dock or in the border would be high, but not complete (not unity). In the case of economies of the Organization for Economic Co-operation and Development (OECD), Campa and Goldberg (2005) estimate an average pass-through, in this layer, of 0.46 p.p. in the short term (a quarter) and of 0.64 p.p. in the long term. The pass-through to imported products prices in retail would be low, as the pass-through to consumer price index, which would depend on the participation of imported goods in the consumption basket and on the elasticity of substitution.

Mishkin (2008) emphasizes the role played by better monetary systems in the latest decades as a factor of reduction of the exchange rate pass-through. In contexts of more stable and predictable monetary policies, with anchored inflation expectations, the pass-through would tend to be smaller. He presents some reasons for an incomplete pass-through even at the dock: the pricing-to-market practice (importers would adjust the coefficient of pass-through in markets regarded as strategic); local currency pricing (firms define the price in the currency of the countries to which they are exporting); price rigidity (incomplete pass-through in the short term, but complete in the long term); and international production (when different phases of production occur in different countries, the cost of the product will comprise variations of diverse currencies).

Besides, one should underscore that part of the distribution costs is domestic, which contributes to a smaller pass-through. However, referring to imported goods which are used in the production process, the pass-through depends on the degree of substitutability among imported inputs and domestically produced inputs (Engel, 2002).

Generally, literature points to the reduction of the exchange rate pass-through in the latest decades. Gagnon and Ihrig (2004), for example, estimated pass-through coefficients for a broad set of mature economies from 1971 to 2002, and found an average pass-through of about 0.2 p.p. However, when re-estimate the coefficient based on samples that include only periods of more stable monetary policy, initiated in the 1980s in most of the countries, they found an average value of 0.05 p.p.

Several explanations have been offered for the reduction of the pass-through coefficients. Campa and Goldberg (2005) found evidence that the main factor in the reduction of the pass-through import prices in developed countries was the change in the composition of imports, with an increase of the share of manufactured goods, whose prices tend to have a lower pass-through, and corresponding reduction of the share of raw materials. Other explanations emphasize the role played by the price rigidity of differentiated goods. Mishkin (2008), as mentioned above, highlights the improvement of the monetary policy quality, which would be responsible for the strengthening of inflation expectations anchoring, as a fundamental factor:

> "*...a stable monetary policy – supported by an institutional framework that allows the central bank to pursue a policy independent of fiscal considerations and political pressures – effectively removes an important potential source of high pass-through of exchange rate changes to consumer prices… an important corollary is that low exchange rate pass-through will persist only so long as the monetary authorities continue to ratify the public's expectations that they will continue to respond aggressively to shocks that have potentially persistent adverse effects on inflation*"

Empirical works have been seeking to identify factors which impacted the foreign exchange pass-through. Goldfajn and Werland (2000) used a sample of 71 countries, in the period between 1980 and 1998, to assess to which extent different macroeconomic factors would explain the pass-through magnitude. The statistically more robust results point to the degree of initial valuation of the real exchange rate and the initial level of inflation as the main determinants. In this sense, the greater the initial valuation, against average or equilibrium rates, the smaller the pass-through. The justification is that, if the growth of the nominal exchange rate is only correcting a great disarray of the real exchange rate, the pressure for pass-through to prices will be lower. On the other hand, the greater the initial inflation the greater the pass-through will be, because a higher inflation is accompanied by a higher degree of inflation persistence. Taylor's (2000) explanation is based on the expectation of greater persistence of changes in costs and prices. Besides, in case of emerging market economies, a hypothesis would be the still high indexation level. Among the factors statistically less robust, the text in question highlights the output gap and the economy's degree of openness: the greater the gap (when the economy is heated), the greater the pass-through; the greater the openness, the greater the pass-through.

Correa and Minella (2006) investigated the presence of non-linear mechanisms of the exchange rate pass-through in Brazil, using a Phillips curve with threshold, for the period from the first quarter of 1995 to the fourth quarter of 2005. The estimates point to a greater pass-through to the market prices when the economy is more heated and when the exchange rate depreciation is higher than a certain value, than in episodes of modest depreciation or of exchange rate appreciation. Estimates updated with a sample that goes up to the end of the second quarter of 2008 do not show significant changes in the previous results.

One should note that, in this estimation, the exchange pass-through occurs with a lag of one quarter, and the output gap affects inflation with a lag of two quarters. The result is in line with the view that there are lags in the transmission mechanisms to inflation and that the exchange rate operates with a lower lag than the output gap. In this sense, see, for example, the box "Monetary Policy and Transmission Mechanism Lags" contained in the "Inflation Report" of September 2007. In this respect, one should note that estimates of vector autoregressive (VAR) and semi-structural models, on a monthly basis, to the Brazilian Economy, indicate that the impact on market prices is concentrated in the first three months, with slight predominance of the second one; from the fourth to the sixth month the impact would be slightly lower; and, in the two classes of models, after twelve months, the effect is practically over. We should consider, however, that the pass-through lag to the Broad National Consumer Price Index (IPCA) can be longer, taking into account that the monitored items respond with delay to the effect of exchange rate changes on the reference price index.

Burstein, Eichenbaum and Rebelo (2005) studied five episodes of significant exchange rate depreciation (including Brazil in 1999), which are accompanied by great decreases of the real exchange rate. The text traces a parallel between the role played by the price of non-tradable items and that of pure tradable items, which would have a greater change. According to these authors, generally, the literature makes a mistake when divides the price indices simply into prices of non-tradables and of tradables. The reason is that the prices of tradable goods have two non-tradable important components: distribution costs (retail and wholesale services, marketing and publicity, and local distribution services) and local goods (defined as goods which are produced only to the domestic market).

In summary, in the prospective evaluation of the pass-through magnitude, we should take into account several factors, such as the inflation initial level, the current and expected degree of utilization of the production factors, the behavior of international inflation and the initial degree of real exchange rate appreciation. Furthermore, the literature strongly suggests that the degree of final pass-through depends, importantly, on the agents' perception of the monetary policy stance.

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## Inflationary Persistence

For the monetary policy makers, one of the most relevant characteristics of the inflation dynamics is its degree of persistence. Monetary Policy acts in the sense of decreasing it. One way of doing this is by anchoring expectations. This is because the more anchored the expectations the less persistent will be inflation. In the last years, both mature and emerging economies have experienced important changes in the persistence degrees of their inflations. Besides making a little summary of relevant literature, this box aims to analyze the inflationary persistence from 1995 up to the present in some mature and emerging economies[1].

According to the Cechetti et al. (2007), both volatility and inflation's persistence have been decreasing in the last years in mature economies. In these economies, the decades of 1960's and 1970's were marked by monetary policies not so active in combating inflation. On the other hand, the most recent decades (1990's and 2000's) are distinguished by active monetary policies and levels of moderate inflation. In the United States of America, in particular, the decade of the 1990's is known as the period of great moderation, with growing output and decreasing inflation[2].

Unlike the mature economies, the emerging markets lived for much longer with high levels of inflation. Some countries – such as Brazil, Argentine and Turkey – experienced long periods of hyperinflation in the last 40 years. Only recently, inflation rates in these countries started falling. To some extent, this may be attributed to important modifications in the

1/ The sample of emerging countries is composed by Brazil and Chile, while Germany, Canada, United States of America, French, Italy and United Kingdom make up the sample of mature economies.

2/ See Stock and Watson (2003) for a short analysis of the monetary policy in mature economies in recent years.

conduct of their macroeconomic policies[3]. Even so, it is not clear if the reduction of the inflationary levels in these countries was accompanied by the reduction in the persistence of their respective inflations.

In the specific case of Brazil, there are two aspects especially linked to inflation's persistence. First, taking into account the extremely high levels of inflation, which the country experienced during decades, the inflationary memory is perhaps still relevant. Besides, to a large extent the Brazilian inflation linked to prices of goods contract-administered and monitored services are still formally indexed in view of contractual clauses. Even in the set of market prices, there are some items, such as rental and condominium tariffs, which suggest indexation practices.

The literature on the subject is diversified. For example, Stock and Watson (2007) show that the inflation upturn in the USA is well described by the sum of latent factors, cycle and tendency, the former being a stationary process and the latter a non-stationary process. The authors sustain that inflation's persistence, represented by the tendency, has decreased considerably in the latest years. These results are confirmed by Mishkin (2007).

Cechettti et al. (2007) also used the Stock and Watson (2007) methodology to study inflation behavior in the countries of the G7[4] in the last 30 years, and obtained similar results.

The semi-structural models, such as the neo-Keynesian Phillips' curve, also evaluate persistence. For example, Rudd and Whelan (2007) use a neo-Keynesian Phillips' hybrid curve (with inflation lags) and conclude that the North-American inflation is much more forward-looking than backward-looking, suggesting that inflationary persistence has been decreasing.

Now returning to this box's main target, that is, compare the inflation persistence in emerging and mature economies, the following approaches were selected: the auto-regressive model with p lags to

3/ It can be mentioned as examples, the introduction of the inflation targeting system, the reduction of budgetary deficits, the adoption of floating foreign exchange regimes and trade opening, among others.

4/ United States, England, French, Japan, Italy, Germany and Canada.

the inflation, AR(p); a AR(P) including the lags of the output gap[5]; and neo-Keynesian Phillips' hybrid curve[6]. In all cases, the dependent variable is represented by headline consumer inflation in each economy. In the auto-regressive models, lags were chosen aiming to eliminate serial autocorrelation. In the case of the new hybrid Keynesian curve, autoregressive terms and a lag of the output gap were added. The sample considering the estimations to countries out of Europe comprise quarterly information for the period which goes from the second quarter of 1995 to the second quarter of 2008 (1995T2-2008T2), while to European countries, the period is shorter, from 1999T1 to 2008T2[7]. The persistence measure is given by the sum of the inflation's lagged coefficients in all the estimation process. In order to analyze the persistence's timely evolution, we have resorted to the technique of recursive minimum squares.

**Figure 1 – Sum of autoregressive coefficients**

AR(p) model

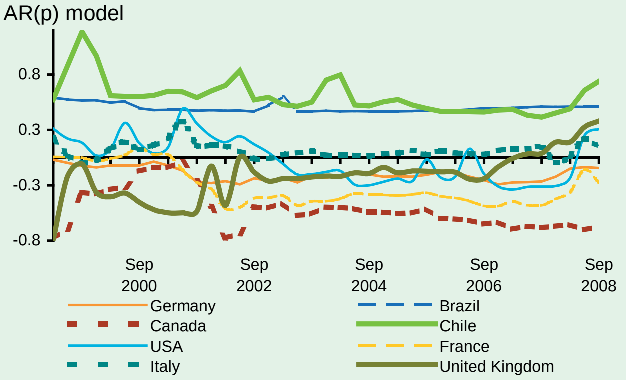



**Figure 2 – Sum of autoregressive coefficients**

AR(p) model with output gap

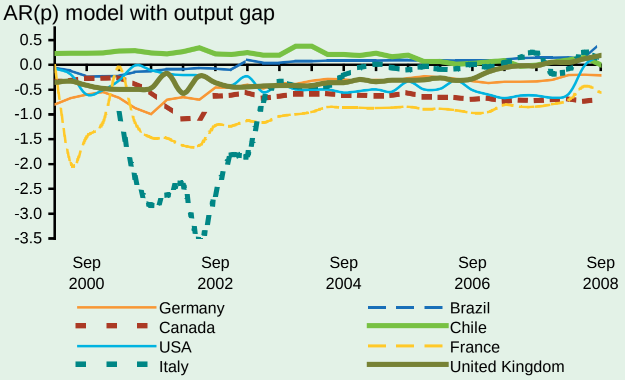



Figure 1 shows the results obtained by AR(p) models. One should note that, in Brazil and Chile, the inflationary persistence is greater than in the other countries. We observe greater stability of the Brazilian inflation persistence after adopting the inflation targeting system in 1999, except in the period of confidence crisis (the end of 2002 and the beginning of 2003). We can see that mature economies, except Italy, showed persistent negative measures, indicating that the inflation reverts to the mean in a few quarters. Finally, in a recent past these countries' inflation showed a greater degree of persistence.

According to Figure 2, which reproduces the results created by AR(p) models with lags of the output gap, the inflation's reversal to the mean is a pattern behavior. Brazil and Chile continue with the highest level of inflationary persistence, when compared to other economies.

The results obtained with the estimation of a hybrid Phillips' curve (Figure 3) show that Brazil presents

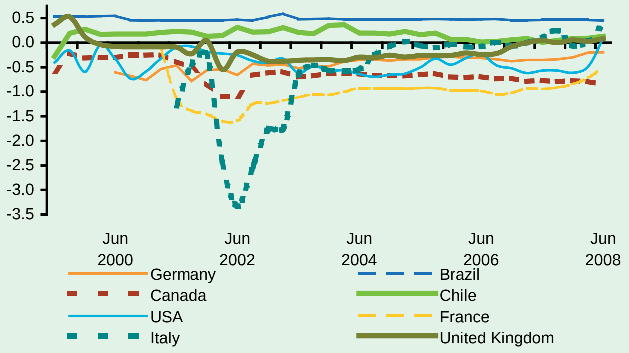
5/ The output's gap is calculated by the difference between the seasonally adjusted Gross Domestic Product (GDP) and the GDP potential, calculated with Hodrick-Prescott's filter.

6/ The Phillips' curves are without the foreign exchange rate and include inflation's lagged terms.

7/ The inflation of consumer data and the GDP of Germany, Brazil, Canada, Chile, United States, French, Italy and United Kingdom were obtained in the International Financial Statistics of the International Monetary Fund (IFS-IMF)

**Figure 3 – Sum of autoregressive coefficients**

Hybrid Phillips curve




the consumer inflation most persistent among other analyzed countries, basically during the entire sample, followed by Chile, however in some other countries, such as the United States and the United Kingdom, inflation has showed greater persistence recently.

In general terms, we can conclude that, despite that in emerging countries the analyzed sample – Brazil and Chile – had reduced its inflationary persistence level in the last years, they still show levels of inflation persistence higher than those observed in mature economies.

Notwithstanding the recent efforts by Brazilian and Chilean monetary authorities in anchoring the inflationary expectations, it seems that decades of high inflation rates in these economies cause the preservation of formal and informal mechanisms of indexation, which is manifested in higher degree of inflationary persistence, in comparison to the ones observed in mature economies.

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# Observed Inflation and Inflation Target: international experience and Brazil

This box follows the same line of the text published in the *Inflation Report* of December 2006 and, based on an updated information set, it analyses the evolution of observed inflation in relation to established targets, taking into account the respective tolerance intervals, to a sample of countries which adopted the inflation targeting regime. For each country, the analyzed period goes from the quarter in which the targeting regime was adopted up to the third quarter of 2008. It compares four-quarter accumulated inflation with established values, also for the four-quarter cumulative, of the targets and tolerance intervals, making interpolations when necessary.

Table 1 shows, country by country, the frequencies associated to different observed inflation situations in relation to the established target. The sample was divided between emerging economies – historically more sensitive to external shocks – and industrialized economies. The analyses carried out appearing on Table 1, infers that, for both groups, the frequency with which the observed inflation remained out of the tolerance interval was high: 40% in the industrialized economies and 49% in emerging economies. In the periods in which inflation was out of the tolerance interval in emerging economies, there was, approximately, equilibrium between the frequency in which remained below or above the inferior and superior limits; and, in the case of emerging economies, the frequency in which inflation was above the tolerance interval was quite higher.

**Table 1 – Inflation target quarterly fulfillment in selected countries**

| Country | Adoption year of Inflation Targeting | $\pi$ < lower bound of the target | lower bound of the target < $\pi$ < central value of the target | central value < $\pi$ < upper bound of the target | upper bound of the target < $\pi$ | $\pi$ < central value | $\pi$ > central value | $\pi$ = central value |
|---|---|---|---|---|---|---|---|---|
| Emerging | | (A) | (B) | (C) | (D) | (A + B) | (C + D) | |
| South Africa | 2000 | 0% | 30% | 26% | 44% | 30% | 70% | 0% |
| Chile | 1991 | 14% | 31% | 37% | 15% | 45% | 52% | 3% |
| Hungary | 2001 | 3% | 26% | 16% | 52% | 29% | 68% | 3% |
| Mexico | 2001 | 0% | 19% | 32% | 45% | 19% | 77% | 4% |
| Peru | 1994 | 37% | 27% | 12% | 19% | 64% | 31% | 5% |
| Poland | 1999 | 46% | 13% | 5% | 33% | 59% | 38% | 3% |
| Weighted mean | | 19% | 25% | 22% | 30% | 45% | 52% | 3% |
| Developed | | | | | | | | |
| Australia | 1993 | 32% | 13% | 17% | 32% | 44% | 49% | 7% |
| Canada | 1991 | 24% | 25% | 34% | 14% | 49% | 48% | 3% |
| England | 1992 | 3% | 34% | 51% | 7% | 37% | 58% | 5% |
| Norway | 2001 | 39% | 32% | 16% | 13% | 71% | 29% | 0% |
| New Zealand | 1990 | 4% | 24% | 39% | 32% | 28% | 71% | 1% |
| Sweden | 1995 | 38% | 35% | 20% | 7% | 73% | 27% | 0% |
| Weighted mean | | 21% | 27% | 31% | 19% | 47% | 50% | 3% |
| Brazil | 1999 | 0% | 24% | 43% | 27% | 24% | 70% | 6% |

*$\pi$ denotes four-quarter accumulated inflation.

In only 3% of the considered quarters, both to emerging and industrialized economies, on average, inflation matched with the central value. The data show also that, for the sample of industrialized economies, inflation was lower than the target center in 48% of the time (44% in the case of the emerging ones). In the industrialized economies, in 27% of the quarters inflation was positioned between the inferior limit of the tolerance interval and the target center (25% in the emerging ones); and in 31%, between the inferior limit of the tolerance interval and the target center (22% in the emerging ones). In the industrialized economies, in 19% of the occasions the interval superior limit was surpassed (30% in the emerging ones). That is, in the considered period, to remain above the central value was, in the industrialized economies group, more associated to remain within the tolerance interval, and, in the emerging group, to stay above the superior limit of the tolerance interval.

As in other economies, also in Brazil, the central value of the tolerance interval was rarely reached.

In only 6% of the cases – which corresponds to two observations, last quarter of 2000 and last quarter of 2007 – the observed inflation coincided with the target central value. The total frequency in which inflation remained out of the tolerance interval (27%) was lower than the one observed, on average, both in the emerging (49%) and industrialized (40%) groups. However, unlike the occurred in most of the other economies, in Brazil the observed inflation never remained lower than the inflation interval inferior limit. In this sense, as verified in Mexico and South Africa, inflation out of the tolerance interval corresponded, always, to inflation above this interval superior limit.

In relation to the inflation distribution in the tolerance interval, the Brazilian experience diverges from the pattern observed in the sample average. In Brazil, when the inflation remained in the tolerance interval, the frequency in which it was positioned above the central value surpassed with extensive margin the frequency in which remained below, a distribution which gets distant from the other economies average, emerging or industrialized. One should also note that, differently from what was observed in most of the countries, it was verified in Brazil a low frequency of cases in which the inflation was lower than the target central value, only 24%, against 44% in the emerging group and 48% in the industrialized one.

When the recent behaviour is analyzed, Brazilian inflation remained lower than the target central value from the second quarter of 2006 to the last of 2007 and higher since the first quarter of 2008. The inflation rate growth in 2008 was not restricted to the Brazilian economy. Table 2 shows, country by country, the difference between the realized inflation and the target ceiling, for 2007 and for the first three quarters of 2008. While only two emerging countries (Hungary and Mexico) and one industrialized (England) showed inflation above the target ceiling in the first quarter of 2007, all the sampled countries – industrialized and emerging (Brazil is the only exception) – showed inflation higher than the target ceiling in the third quarter of 2008.

In summary, the evidence presented in this box, based on data of various countries which use the

**Table 2 – Inflation deviations from the upper bound of the target**

| Country | 2008 | | | | 2009 | | |
|---|---|---|---|---|---|---|---|
| | I | II | III | IV | I | II | III |
| Emerging | | | | | | | |
| South Africa | -0.5 | 0.4 | 0.7 | 2.6 | 4.1 | 5.6 | 7.0 |
| Chile | -1.4 | -0.8 | 1.8 | 3.8 | 4.5 | 5.5 | 5.2 |
| Hungary | 4.6 | 4.3 | 2.3 | 3.4 | 2.7 | 2.7 | 1.7 |
| Mexico | 0.2 | 0.0 | -0.2 | -0.2 | 0.3 | 1.3 | 1.5 |
| Peru | -2.7 | -1.4 | -0.2 | 0.9 | 2.6 | 2.7 | 3.2 |
| Poland | -1.0 | -0.9 | -1.2 | 0.5 | 0.6 | 1.1 | 1.0 |
| Mean | -0.1 | 0.3 | 0.5 | 1.8 | 2.5 | 3.2 | 3.3 |
| Developed | | | | | | | |
| Australia | -0.6 | -0.9 | -1.1 | 0.0 | 1.2 | 1.5 | 2.0 |
| Canada | -0.7 | -0.8 | -0.5 | -0.6 | -1.6 | 0.1 | 0.4 |
| England | 0.1 | -0.6 | -1.2 | -0.9 | -0.5 | 0.8 | 2.2 |
| Norway | -2.4 | -3.1 | -3.8 | -0.7 | -0.3 | -0.1 | 1.8 |
| New Zealand | -0.5 | -1.0 | -1.2 | 0.2 | 0.4 | 1.0 | 2.1 |
| Sweden | -1.1 | -1.1 | -0.8 | 0.5 | 0.4 | 1.2 | 1.4 |
| Mean | -0.9 | -1.3 | -1.4 | -0.3 | -0.1 | 0.8 | 1.7 |
| Brazil | -3.5 | -2.8 | -2.4 | -2.0 | -1.8 | -0.4 | -0.2 |

*Refers to four-quarter accumulated inflation.

inflation targeting as a framework for the monetary policy conduction, shows that it cannot be expected that inflation gets systematically observed below or above the central value of the tolerance interval. It is natural, and consistent with the international experience, that effectively observed inflation rate fluctuates around the central value of the tolerance interval, rarely reaching this central point. It is also not uncommon, according to the patterm identified in other economies that, observed inflation, when fluctuating around the central value of the target, breaks through the superior or inferior limit of the tolerance interval.

# Annex

## Minutes of the 138th Meeting of the Monetary Policy Committee (Copom)

**Date**: October 28th, from 6:10PM to 8:05PM, and October 29th, from 5:40PM to 7:50PM
**Place:** BCB Headquarters meeting rooms – 8th floor on October 28th and 20th floor on October 29th – Brasília – DF

**In attendance:**
**Members of the Committee**
Henrique de Campos Meirelles – Governor
Alexandre Antonio Tombini
Alvir Alberto Hoffmann
Anthero de Moraes Meirelles
Antonio Gustavo Matos do Vale
Maria Celina Berardinelli Arraes
Mário Gomes Torós
Mário Magalhães Carvalho Mesquita

**Department Heads (present on October 28th)**
Altamir Lopes – Economic Department
Carlos Hamilton Vasconcelos Araújo – Research Department (also present on October 29th)
João Henrique de Paula Freitas Simão – Open Market Operations Department
José Antônio Marciano – Department of Banking Operations and Payments System
Márcio Barreira de Ayrosa Moreira – International Reserves Operations Department
Renato Jansson Rosek – Investor Relations Group

**Other participants (present on October 28th)**
Alexandre Pinheiro de Moraes Rego – Press Secretary
Alexandre Pundek Rocha – Advisor to the Board
Eduardo José Araújo Lima – Advisor to the Research Department
Flávio Pinheiro de Melo – Advisor to the Board

The members of the Monetary Policy Committee analyzed the recent performance of and prospects for the Brazilian economy under the monetary policy framework, which is designed to comply with the inflation targets established by the government, and also the recent performance of and prospects for the international economy.

### Recent economic developments

1. IPCA inflation retreated in September, to 0.26%, down from 0.28% in August and 0.53% in July. As a consequence, inflation reached 4.76% in the first nine months of 2008 – the highest change in the period since 2004 – up from 2.99% in the same period of 2007. Twelve-month trailing inflation increased 6.25% in September, up from 6.17% in August (4.15% in September 2007), resuming acceleration. Under this comparison basis, the acceleration of consumer price inflation mirrors the behavior of both regulated prices and market prices. Indeed, market prices and regulated prices increased 7.66% and 3.05%, respectively, in the twelve months through September, up from 5.07% and 2.12% in the twelve months through September 2007. Moreover, despite the BRL appreciation observed until then, the prices of tradable goods accelerated, reaching 6.78% (compared to 4.92% in September 2007), according to the same comparison basis. Regarding the prices of non-tradable goods, greatly pressured by the behavior of perishable food and services prices, twelve-month trailing inflation

was even higher (8.49%), evidencing the influence of domestic factors over inflationary dynamics. For instance, the price of services increased 6.27% in September 2008, up from 5.19% in December and 4.79% in September 2007, according to the same comparison basis. Preliminary data for October point to consumer inflation index above that observed in September. In short, the reversal of the progressive divergence trend of inflation from the targets path, which had been observed since the end of 2007, hasn't consolidated yet.

2. The three main underlying inflation measures calculated by the BCB have evolved differently from the headline index. The core inflation by exclusion of household food items and regulated prices and the smoothed trimmed means core inflation measures increased from 0.50% and 0.36% in August to 0.62% and 0.43% in September, respectively, while the non-smoothed trimmed means core inflation measure increased 0.41% down from 0.42% in August. Similarly to the headline inflation, the three core inflation measures accelerated remarkably in the first nine months of the year, compared to the same period of 2007, with increases from 2.70%, 2.81% and 2.43% to 4.83%, 3.71% and 3.94% for the core inflation by exclusion, smoothed and non-smoothed trimmed means core inflation, respectively. On a twelve-month trailing basis, the core inflation by exclusion of household food items and regulated prices continues to record substantial increase, rising from 5.70% in July to 5.87% in August and 6.26% in September. The smoothed and non-smoothed trimmed means core inflation also accelerated, despite at a lower degree, under this criterion, in the last months. The smoothed trimmed means core inflation changed from 4.89% in July to 4.85% in August and 4.94% in September, whereas the non-smoothed trimmed means core inflation changed from 4.92% in July to 4.91% in August and 5.15% in September. As a consequence, all core inflation measures stand above the central value for the inflation target. Moreover, it bears emphasizing that the behavior of the IPCA diffusion index, whose average is the highest recorded since 2004, continues to suggest an inflationary process relatively disseminated, confirming the analysis present in previous Copom Minutes.

3. The General Price Index (IGP-DI) inflation changed from 1.12% in July to –0.38% in August and 0.36% in September. On a twelve-month trailing basis, IGP-DI inflation decreased to 11.90% in September, down from 12.80% in August and 14.81% in July, compared to 6.16% in September 2007. In the twelve months through September, the IGP-DI increase reflected the behavior of the three main components. The Consumer Price Index-Brazil (IPC-Br) increased 5.60% (4.50% in September 2007), while the Wholesale Price Index (IPA-DI) totaled 14.33% (6.92% in September 2007). According to the same comparison basis, the Civil Construction National Index (INCC) increased 11.88% (5.46% in September 2007). Regarding the agricultural IPA, inflation reached 15.84% (19.50% in the twelve months through September 2007). It also bears highlighting the continuity of upward pressures over wholesale industrial prices, a process that began in the second half of 2007 and does not show consistent signs of accommodation. In the first nine months of the year, wholesale industrial price inflation increased 11.72%, up from 2.54% in the same period of 2007. In addition, in the last twelve months, wholesale industrial price inflation increased 13.78% in September, up from 4.42% in December 2007. As mentioned in previous Copom Minutes, the Copom evaluates that the effects of wholesale prices over consumer price inflation will depend on current and prospective demand conditions and price-setters' expectations for the future inflation path.

4. On a three-month moving average basis, according to data seasonally adjusted by the IBGE, industrial output increased 1.0% in August, after growing by 1.1% in the previous month. Still considering the seasonally adjusted series, after the 1.4% expansion observed in July, industrial output retreated by 1.3% in August, month-on-month, partially reflecting the unusual working day distribution observed this year. It bears noticing that general industrial output grew 6.0% in the year through August, with respective increases of 6.0% and 7.1% in manufacturing and in mining output. On a year-over-year basis, industrial output expanded by 2.0% in August (with one less working day), with respective growth of 1.6% and 8.5% in manufacturing and extraction industries, respectively.

The data already released for the last months point, in short, to the continuity of the industrial production expansion cycle, despite some accommodation at the margin may occur, due to restrictions to supply expansion in some sectors, as well as to the effects of the monetary policy change in Brazil and to the international financial turmoil.

5. Among the use categories, according to data seasonally adjusted by the IBGE, durable consumer goods production increased 2.1% in August. Regarding the other use categories, intermediate goods production decreased 2.7%, semi-durable consumer goods production retreated by 0.3%, while the production of capital goods production remained stable. In the year, capital goods production leads the expansion, with an 18.1% increase, followed by the 11.8% elevation in durable consumer goods production. The strength of capital goods production until August has reflected the consolidation of favorable prospects for the continuity of macroeconomic stability. On its turn, the expansion of durable goods production reflects, predominantly, credit conditions, which remained, until recently, more favorable than historical patterns.

6. Labor market continues to present quite favorable performance. The unemployment rate in the six metropolitan regions covered by the Monthly Labor Survey (PME) retreated from 8.1% in July to 7.6% in August, the same level reached in September, down from 9% in September 2007. As a result, the average unemployment rate in the first nine months of the year was 1.6 p.p. below that observed in the same period of 2007. According to data seasonally adjusted by the BCB, the unemployment rate changed from 7.4% in August to 7.6% in September, showing stability in historically low levels in the last months. The nominal average earnings increased 13.0% in August, year-over-year, and accelerated to 13.7% in September. In August, real average earnings increased 2.1% month-on-month and 5.7% year-over-year. In September it grew 0.9% month-on-month and 6.4% year-over-year (the highest level of the series since July 2006), behavior that evidences the labor market tightening. In the first nine months of 2008, real average earnings increased 3.2%, while employment grew 3.9%. As a consequence, real payrolls expanded by 7.3% (10.0% growth in September in year-over-year terms), continuing to constitute a key driver for domestic demand growth. According to the National Industry Confederation (CNI) data seasonally adjusted by the BCB, manufacturing employment increased by 0.1% in August (compared to 0.6% in July and 0.5% in June). In year-over-year terms, employment grew 4%, totaling 4.4% growth in the last twelve months. According to data seasonally adjusted by the IBGE, manufacturing employment decreased by 0.1% in August (compared to increases of 0.7% in July and 0.6% in June). In year-over-year terms, manufacturing employment grew 2.5%, totaling 2.9% growth in the last twelve months. Still regarding employment, data from the Ministry of Labor and Employment (MTE) indicate the continuity of strong expansion in formal employment this year, with the creation of 239.1 thousand jobs in August and 282.8 thousand jobs in September, a record high for the monthly, year-to-date and twelve-month historical series. In the first nine months of the year, employment reached a record high of 2,086.6 thousand hires, 25% above the previous record high observed for the historical series in 2004, an evidence of the robust demand for work. Formal employment grew by 0.6% in September, seasonally adjusted, and observed data point to a 6.3% expansion in the last twelve months. Manufacturing industry recorded the highest hiring rate in September, with the creation of 114.0 thousand new jobs, followed by the services sector (104.7 thousand new jobs) and by the retail sector (53.3 thousand new jobs). On the other hand, the agricultural sector, due to seasonal factors related to the inter-harvest observed in the Middle-Southern part of the country, was the only sector recording employment retreat (extinction of 25.3 thousand jobs).

7. According to data seasonally adjusted by the IBGE, expanded retail sales decreased by 1.6% in August, after increasing 0.3% in July and 1.1% in June, and grew by 7.0% year-over-year in August and 13.5% in 2008 through August. Expanded retail sales three-month moving average decreased 0.1% in August, month-on-month, interrupting the sequence of 27 consecutive monthly increases in this indicator. According to seasonally adjusted data, on a month-on-month basis, it bears emphasizing the expansion in the sales of "books, newspapers, magazines and stationary" (3.2%), followed by "supermarket, food products, beverages and tobacco" (1.1%) and

"furniture and domestic appliances" (1.0%). In the year through August, cumulative growth was more significant in "books, newspapers, magazines and stationary" (31.3%), "other personal and domestic articles" (20.6%) and "vehicles, motorcycles, parts and pieces" (19.8%). The decrease in expanded retail sales was already expected, due to the decrease of 11.1% in vehicles sales in August, according to data seasonally adjusted by the National Federation of Distribution of Automotive Vehicles – Fenabrave. Expanded retail sales should resume growth in September, reflecting the positive performance of vehicles sales, which grew 8.6% month-on-month, according to data seasonally adjusted by the Fenabrave. The steady growth of retail sales had been reflecting, in short, the performance of both the sectors more sensitive to income and employment expansions and those more sensitive to credit conditions. For the next quarters, the retail sales trajectory will continue to be favored by fiscal transfers, as well as by employment and income growth, but it also will be affected, in case of persistence, by the changes in the access to credit supply, which cannot be fully associated to the monetary policy stance, and by the deterioration of consumer confidence.

8. The installed capacity utilization rate (Nuci) in the manufacturing industry reached 83.1% in August, similarly to the level observed in June, after the increase to 83.7% in July, according to CNI data seasonally adjusted by the BCB. According to data seasonally adjusted by CNI, the Nuci in the manufacturing industry showed a slight upward trend, reaching 83.5% in August, a record high for the series since 2003. Without the seasonal adjustment, the Nuci stood 0.4 p.p. above the level registered in August 2007. As a consequence, the average rate in the first eight months of 2008 was 0.9 p.p. above the level observed in the same period of 2007. The monthly Nuci calculated by Fundação Getúlio Vargas (FGV) reached 86.4% in September, standing 0.3 p.p. above the level registered in the same month of 2007. The elevation in the Nuci in September 2008, year-over-year, is also observed in the production of civil construction inputs (5.4 p.p.), of consumer goods (3.5 p.p.) and of capital goods (1.9 p.p.). For the intermediate goods sector, the Nuci stood 1.5 p.p. below the level observed in September 2007. The maintenance of installed capacity utilization rates at historically high levels occurs in several sectors (records highs for consumer goods sector and civil construction inputs sector were observed in September) despite investments made in the last twelve months. In fact, recent data about the absorption of capital goods was still inconclusive about an inflexion in the investment expansion trend. The absorption of capital goods increased 1.3% in August, according to seasonally adjusted data, accumulating a 19.7% expansion in 2008, in observed terms, compared to -1.3% and 20.9% in July, respectively, according to the same comparison bases. On the other hand, the production of civil construction inputs showed stability at the margin in August, after increasing by 2.4% in July, maintaining the 10.5% growth in 2008. In short, evidences suggest that, although investment has been importantly contributing to soften the increasing trend of capacity utilization rates, the maturation of investment projects has not been sufficient, so far, to significantly limit the existing mismatches regarding the evolution of supply and domestic demand. As stressed in previous Copom Minutes, the inflation trajectory is closely linked to current and prospective developments related to the expansion of supply of goods and services, to adequately meet demand conditions.

9. The trade balance continues to register deceleration at the margin, an already anticipated trend, and which is in line with assessments present in previous Inflation Reports and Copom Minutes. In the last twelve months through September the trade surplus reached US$28.7 billion (33.5% below September 2007). Exports and imports totaled US$194.9 billion and US$166.2 billion, equivalent to 27.0% and 50.7% growth, respectively, according to the same comparison basis. As highlighted in previous Copom Minutes, imports have been growing faster than exports, both due to the strengthening of the BRL and to the robust expansion of domestic absorption, notwithstanding the elevated price levels of several commodities included in the Brazilian export basket (this supporting factor for the exports value can moderate in case of persistence of recent trends in the prices of raw materials). The decrease in trade surplus contributed to the US$25.2 billion current account deficit registered in the twelve months through September 2008, equivalent to

1.6% of GDP. Foreign direct investment reached US$37.4 billion in the twelve months through September, equivalent to 2.4% of GDP.

10. The period since the last Copom meeting was marked by the intensification of severe intensification of stress on international financial markets, which originated in the US and Europe, but whose impact on emerging economies has become more significant. The increased risk aversion, observed since mid-September, after the bankruptcy of an important US financial institution, led the authorities in the US, Europe and Oceania to intervene in an unprecedentedly way in their financial systems, using wide range of instruments, in order to ensure minimum conditions of operation and liquidity in money markets. Although systemic risk perception is still high, such initiatives, accompanied by programs to reinforce the capital base of relevant financial institutions, seem to have managed to restore the functioning of the interbank markets. The international liquidity contraction contributed to a deleverage process by asset managers, which in turn has been pressuring down the prices of financial assets. In the environment of increased risk aversion and shortage of capital flows, pressures on emerging economies' currencies have intensified. In this context, the recent announcement of the currency swap agreements between the US Federal Reserve and the Central Bank of Brazil, as well as with the Monetary Authority of Singapore, the Bank of Korea and the Bank of Mexico, should contribute to mitigate – without, however eliminate – the impacts of international financial turmoil on emerging markets.

11. Regarding the global macroeconomic scenario, the contraction trends seem to be gradually prevailing over the inflationary pressures, which, however, are still present. The dominant view still points to the expansion, at a moderate pace, of global economic activity in 2008 and 2009, but data released in the last weeks indicate a more intense and generalized cooling of activity in mature economies. There are evidences that the deeper weakening of economic activity in Europe and parts of Asia was predominantly due to the negative shock in the terms of trade caused by the elevation of commodities prices, which could be reversing. On the other hand, the problems in the financial system have been aggravated by a cyclical deterioration in credit quality, which may reinforce the contraction in financial conditions and, as a consequence, the risk of intensification of deceleration. The US economy, specifically, started to decelerate in the last quarter of 2007 and it still continues to suffer the impacts of the housing sector crisis, with spillover effects on the labor market, whose weakening, together with the negative wealth effect associated to the fall in the prices of financial assets, has affected the consumer's confidence, significantly contributing for depressing expenditure. The prevailing interpretation is that the activity in Europe and Japan may continue to lose dynamism in the next months. In mature economies, where inflation expectations are better anchored and economic activity is decelerating considerably, inflationary pressures have reduced relatively fast. On the other hand, in emerging economies, where the secondary effects of raw materials price increases over consumer prices and the heated demand pressures over the supply expansion capacity had been more intense, the inflationary pressures have been more persistent. In this context, the monetary policy stance is mainly expansionist in mature economies, whereas in emerging economies, which have been affected by the exchange rate depreciation trend, in addition to the facts mentioned above, the situation seems to be more heterogeneous.

12. Oil prices remain highly volatile, but reduced considerably since the last Copom meeting. Future markets have followed the prices of oil in the spot market. However, uncertainty concerning oil prices is remarkably high, as the prospective scenario depends on the evolution of demand, especially in emerging countries, on the supply's reaction to stimuli derived from previous changes on relative prices, in addition to geopolitical issues that affect the price of this commodity. Nonetheless, despite the great uncertainty inherent to the projections of oil prices' trajectory, the main scenario adopted by the Copom, which assumes unchanged gasoline prices in 2008, remains plausible. However, it bears highlighting that, regardless of the behavior of domestic gasoline prices, the reduction of international oil prices can affect domestic prices both through productive chains, such as the petrochemical, as well as through the potential effect over inflation expectations. The prices of other commodities also showed important

reductions since the last Copom meeting, reacting both to the greater pessimism about the prospects for global economic growth and to the intensification of the global financial markets turmoil.

## Assessment of inflation trends

13. The identified shocks and their impacts were reassessed according to newly available information. The scenario considered in the simulations was based in the following assumptions:

a) the projected adjustments for gasoline and bottled gas prices were maintained at 0% for 2008;

b) the projections adjustments for electricity prices and fixed telephone prices were maintained unchanged at 1.1% and 3.5%, respectively, for 2008;

c) the projection for regulated prices inflation in 2008, based on individual items, was altered to 3.8%, down from the 4.0% considered in the September meeting. This set of prices, according to data released by the IGBE, corresponded to 29.71% of the total September IPCA;

d) the projection for regulated prices inflation in 2009 was altered to 5.5% up from 4.8%. This projection is based on the endogenous determination model for regulated prices, which computes seasonal components, foreign exchange rate changes, market prices inflation and the IGP (General Price Index) variation;

e) the projection for the spreads over the Selic rate, on the benchmark scenario, based on the 360-day swap rates estimates a 147 bps spread in the fourth quarter of 2008 and 85 bps in the last quarter of 2009. The identified shocks and their impacts were reassessed according to newly available information.

14. Regarding fiscal policy, the projections assume the achievement of the public sector primary surplus target of 3.8% of GDP in 2008 and 2009, increased by 0.5 p.p. The related assumptions considered in the previous meeting were maintained.

15. Since the September Copom meeting, according to the median IPCA inflation expectations compiled by the BCB's Investor Relations Group (Gerin), the 2008 IPCA variation remained relatively stable, increasing from 6.27% to 6.29%. Twelve-month-ahead inflation expectations also increased slightly, from 5.22% to 5.29%, considering the medians of expected monthly rates. Inflation expectations for 2009 remained at 5.00%.

16. Considering the hypotheses under the benchmark scenario – which assumes the maintenance of the exchange rate at R$2,25/US$1.00 and the Selic rate at 13.75% during the forecast period – the projection for the 2008 IPCA inflation increased relative to the figure considered at the September Copom meeting, and remained above the 4.5% target established by the National Monetary Council (CMN). According to the forecast based on the market scenario – which incorporates the consensus exchange and Selic rates trajectories collected by Gerin on the eve of the Copom meeting – IPCA inflation forecast for 2008 also increased compared to the figure considered at the previous Copom meeting, and remained, therefore, above the central target for the year. Regarding 2009, projections based on the benchmark scenario increased in relation to the figure forecast at the September meeting and the projections based on the market scenario showed a slight decrease, but, in both cases, remained above the 4.5% central target for that year.

## Monetary policy decision

17. The Copom evaluates that the monetary policy should contribute for the consolidation of a favorable long-term macroeconomic environment. Economic activity data indicate that the pace of domestic demand expansion continues quite robust, and it is at least partially responsible for the inflationary acceleration trend, despite strong imports growth and the favorable investment performance. Additionally, the increase in risk aversion and the unprecedentedly constraints observed in liquidity conditions in the international markets impose some adjustment in the balance of payments which, despite the increase in Brazilian economy external resilience, can increase the inflationary pressures, especially in the short run. In general terms, the influence of the external scenario on the future trajectory of Brazilian inflation continues to be subject to contradictory effects, which can act with distinct intensity throughout

time and surrounded by significant uncertainties. On the one hand, more generalized deceleration of global economic activity in the upcoming quarters points to an accommodation of both commodities prices and external demand, therefore influencing negatively the local financial conditions. On the other hand, the trend of economic cooling has caused an increase in risk aversion, impacting the demand for Brazilian assets, and consequently, depreciating their prices. In this scenario, the additional reduction of net exports can occur, with similar effects over the behavior in the prices of certain Brazilian assets. Moreover, the recent trajectory of price indices still evidences the existence of significant inflationary risks, in several economies, despite the remarkably lower intensity compared to the middle of 2008. In light of the deterioration of inflation prospects occurred in the last months, in a more uncertain environment, the Committee evaluates that the risk of materialization of a less benign scenario is still high. The Copom emphasizes that the main challenge of monetary policy in this context is to guarantee the maintenance of favorable results achieved in the last years. Particularly, monetary policy should act so that initially limited impacts on price indices do not cause persistent deterioration of inflation dynamics due to the worsening of expectations.

18. The Copom reaffirms that is still high the probability that initially localized inflationary pressures may cause risks to domestic inflation trajectory. The heating of domestic demand and markets of factors, despite under higher uncertainty, as well as the possibility of emergence of supply restrictions in some sectors, may facilitate the pass-through of wholesale prices to consumer price inflation. The Committee evaluates that the materialization of this pass-through and the generalization of pressures initially localized on consumer price indices depend critically on inflation expectations, which remain in levels incompatible with the inflation targets path and continue to be carefully monitored. Additionally, it is worth pointing that although the external sector had been imposing some discipline on tradable goods inflation, the heating of domestic demand has pressured the prices of non-tradable items, as services. In this context, the Copom will act to ensure the gains obtained in inflation control in recent years become permanent. Doing so, the Copom will carefully monitor the evolution of inflation and the several core inflation measures, as well as of inflation expectations within the forecast period, being ready to promptly adjust the monetary policy stance in order to avoid the consolidation of a scenario in which one-off price readjustments become persistent or generalized.

19. The maintenance of inflation rates in line with the targets path and the consequent consolidation of a long-term stable macroeconomic environment will contribute for the progressive reduction of macroeconomic risk perception. The Copom thinks that the persistence of a cautious and timely monetary policy stance is essential to increase the probability that inflation in Brazil evolves once again according to the targets path in 2009. For this higher probability to continue to materialize, however, it is necessary that forward-looking inflation indicators, particularly the expected dynamic of aggregate supply and demand, converge throughout the relevant period for the monetary policy.

20. The Copom emphasizes, once again, that there are important time lags between the implementation of monetary policy and its effects on economic activity and inflation. Therefore, the evaluation of alternative options for monetary policy should necessarily focus on the forward-looking inflation scenario and its risks, instead of current inflation indices. This viewpoint is even more important in periods of higher uncertainty.

21. The prospects for the evolution of economic activity became more uncertain since the last Copom meeting. In particular, the effects of the international crisis on the domestic financial conditions indicate that the contribution of credit to support domestic demand may decline more intensively than the magnitude of what would happen exclusively by the monetary policy effects. Additionally, the intensification of international crisis seems to have caused a negative effect on consumers' and businesses' confidence. If this situation persists, the strength of economic activity would increasingly depend on real payroll expansion and the effects of governmental transfers expected for this and the next quarters. These considerations become even more relevant considering the signs of still heated

domestic demand at the end of the third quarter, the dissemination of pressures derived from relative prices adjustments, including the labor market, and the fact that the monetary policy decisions will have concentrated impacts in 2009.

22. The Copom recognizes the important contribution of investment to expand productive capacity. Moreover, it bears noticing that the accommodation of commodities prices, whose consistent signs emerged last weeks, could contribute to avoid even more intense inflationary pressures. However, the Copom evaluates that the pace of domestic demand expansion continues to present important risks to the inflationary dynamics, to which may be added, particularly in the short run, the risks derived from the trajectory of Brazilian assets prices, in a process of decreasing external funding. In this context, the prompt and consistent reduction of the mismatch between the growth of aggregate demand and supply of goods and services continues to be crucial to the assessment of different possibilities for the monetary policy stance.

23. International evidence, as well as the Brazilian experience, indicates that high inflation rates lead to higher risk premium, to shorter planning horizons and, consequently, to lower potential economic growth, besides having regressive effects on income distribution. Moreover, in the current circumstances, there is the risk that economic agents start to attribute higher probability that inflation acceleration become persistent, reducing the efficacy of monetary policy. Therefore, the Copom's strategy aims to bring inflation rates timely back to the 4.5% midpoint target established by CMN already in 2009. This strategy, which will have its results evidenced throughout time, takes into account the time lags in the transmission mechanism and is the most adequate to deal with uncertainties inherent to the process of monetary policy formulation and implementation.

24. The Copom evaluates that, in light of the economic heating signs regarding, for instance, labor market available data and the industry capacity utilization rates, and the behavior of inflation expectations, the risks for the materialization of a benign inflation scenario, in which IPCA would resume evolution in line with the targets path, continue relevant. Indeed, an unfavorable forward-looking scenario is still present in the inflation projections considered by the Committee. The Copom also thinks that the persistence of a significant mismatch between the growth paces of aggregate supply and demand continues to represent risk for the inflationary dynamics, but evaluates that the expected trajectories of domestic consumption and investment have become more uncertain. Under these circumstances, monetary policy should act according to the requirements of the balance of risks of the inflationary dynamics, through the adjustment of the basic interest rate, although not necessarily in a continuous way, aiming, on the one hand, to reduce that mismatch and, on the other hand, to avoid that inflationary pressures initially restricted to some prices indices lead to a persistent deterioration of expectations and of the inflation forward-looking scenario. Finally, the Committee thinks that the consolidation of more restrictive financial conditions could intensify the effects of monetary policy over aggregate demand and, throughout time, over inflation.

25. In such context, evaluating the prospective scenario and the balance of risks for inflation in a more uncertain environment, the Copom unanimously decided, at this moment, to keep unchanged the Selic rate at 13.75% p.a., without bias.

26. Under the inflation-targeting regime, the Copom guides its decisions according to the projected inflation, the analysis of several alternative scenarios for the evolution of the main variables that determine the forward-looking prices dynamics and the balance of risks associated to their projections. Domestic demand continues to increase vigorously, supporting the economic activity strength, including sectors less exposed to external competition, at a moment when the effects of stimuli factors, such as income growth, are still influencing the Brazilian economy. In addition, the contribution of the external sector to a favorable inflationary scenario, in light of the strong depreciation in the prices of Brazilian assets and the apparent reduction in the country's capacity to import, has become less effective, at a moment when the effects of investment on the economy's productive potential still need to consolidate. In this context, the monetary policy should act so to bring inflation back to the targets path already in 2009, in order to avoid that the higher uncertainty detected

in shorter-term horizons disseminate to longer-term periods. Evidently, if the risk profile changes in a way that implies shifts in the basic prospective scenario for inflation considered by the Committee in this meeting, the monetary policy stance will be promptly adjusted to the circumstances.

27. At the end of the meeting, it was announced that the Copom would reconvene on December 9th 2008, for technical presentations, and on the following day, to discuss the monetary policy decision, as established in Comuniqué 16,051 of September 3rd, 2007.

## Summary of data analyzed by the Copom

### Inflation

28. IPCA reached 0.26% in September, repeating IPCA-15, compared to 0.28% in August. For the second consecutive month, the prices of food and beverages decreased (-0.27% in September, after -0.25% in August) and contributed -0.06 p.p. to the September IPCA. Market prices increased 0.30% in September, up from 0.25% in the previous month, with price elevations of 0.22% for tradable and 0.36% for non-tradable goods. Regulated prices increased 0.17%, up from 0.35% in August. The diffusion index reached 60.94% in September, down from 63.02% in August, reaching a 63.05% average in 2008. On a twelve-month trailing basis, IPCA increased 6.25%, up from 6.17% in August, mainly due to the increases on market prices (7.66%) and regulated prices (3.05%).

29. IPCA core inflation indices increased in the last twelve months through September, while the core inflation by exclusion and the smoothed trimmed means core inflation measures accelerated over the same period. Core excluding household food items and regulated prices increased 0.62% in September, up from 0.50% in August, totaling 6.27% in the last twelve months, compared to 5.87% in the previous month. The non-smoothed trimmed means core increased from 0.42% in August to 0.41% in September, while on a twelve-month basis, it increased from 4.91% to 5.15%. The smoothed trimmed mean core inflation reached 0.43% in September, up from 0.36% in August, reaching 4.94% over the last twelve months, compared to 4.85% in the previous period.

30. IGP-DI increased 0.36% in September, after a 0.38% decrease in August, reaching 11.90% over the last twelve months. Within the index components, only IPA accelerated, with a 0.44% increase in comparison to a 0.80% decrease in August, reaching a 14.33% increase over the last twelve months. IPC-Br decreased 0.09% after increasing by 0.14% in August, reaching 5.60% over the last twelve months. INCC increased 0.95% in September (1.18% in August) and 11.88% in the last twelve months.

31. The milder variation of IPC-Br in September reflected the persistent decrease in the prices of food and beverages and deceleration in the prices of the remaining components of the index, except for clothing. IPC-Br core increased 0.22% in September, down from 0.30% in August, reaching a 3.71% increase over the last twelve months.

32. The September IPA result reflected the less sharpen fall in agricultural prices, while industrial prices showed deceleration. Agricultural-IPA decreased 0.46% in September, in comparison to a 5.09% decrease in August, reaching 15.84% over the last twelve months. Industrial-IPA grew 0.77%, down from 0.86% in the previous month, reaching 13.78% over the last twelve months. By stages of processing, IPA decelerated regarding the prices of intermediate goods prices, increasing 0.95% in September, down from 1.35% in August, while the prices of final goods decreased 0,29%, after a 0.07% slight increase in the previous month. The prices of raw material increased 0.51%, reverting the August result (-4.84%). In the last twelve months IPA by stages of processing registered 17.41%, 8.13% and 17.89% growth, respectively.

33. Partial indexes on October inflation show acceleration relative to September results for both wholesale and consumer price inflation. IPCA-15 grew 0.30%, reflecting the hike on clothing and the reversal in the fall of food and beverages prices. As for wholesale, according to IGP-M results for the second ten-day period of October, agricultural and industrial prices indicate stronger growth than on the previous month.

## Economic activity

34. According to seasonally adjusted data from the IBGE's monthly survey (PMC), expanded retail sales, which include construction material and vehicles and motorcycles, parts and pieces, decreased 1.6% in August, month-on-month. Despite the retreat in the expanded index, six out of the ten segments surveyed by the IBGE increased, with highlights to the 3.2% elevation in the sales of office materials and equipment. The sales of vehicles, motorcycles, parts and pieces decreased 3.7% in the month.

35. Comparing equivalent periods of 2008 and 2007, sales grew 7% in August and 13.5% in 2008, considering the expanded retail sales. According to these two comparison basis, there was generalized growth in all segments, with highlights for office material and equipment; other personal and domestic outlays; and furniture and home appliances. Vehicles, motorcycles, parts and pieces strongly decelerated in August, growing by 2.9% year-over-year, despite the strong growth observed in the year (19.8%).

36. According to São Paulo Trade Association (ACSP) data, related to the city of São Paulo and seasonally adjusted by the BCB, database consultations for credit sales (SCPC) increased 3.7% in September, month-on-month, while consultations to the Usecheque system decreased by 0.2%, according to the same comparison basis. In the year through September, these indicators increased 8.3% and 5.6%, respectively, compared to the same period of 2007.

37. Regarding investment indicators, domestic production of capital goods and construction typical inputs remained relatively stable month-on-month in August, seasonally adjusted, while on a year-over-year basis, these indicators grew 12.1% and 9.4%, respectively. In the year through August, compared to the same period of 2007, the production of capital goods grew 18.1%, while the production of construction typical inputs grew 10.5%.

38. Capital goods imports increased 3.7% in September month-on-month. The quantum capital goods imports grew 19.7% month-on-month, according to data from Fundação Centro de Estudos do Comércio Exterior (Funcex), seasonally adjusted by the BCB. The September indicator expanded by 41.3%, year-over-year, higher than the twelve-month growth result (39%) and 2008 through September result (40%), reflecting the recent dynamism of capital goods imports and its contribution to the current cycle of investments in the Brazilian economy.

39. CNI indicators show a stable industrial activity pace in August, with a 0.6% increase in hours worked in industrial production, in contrast with a 0.7% reduction in installed capacity utilization, considering seasonally adjusted data. The strong fall (6.8%) in month-on-month seasonally adjusted real revenues in August came after increase over the two previous months, resulting in 4% growth in the quarter ended in August, quarter-on-quarter. In comparison to the same periods in 2007, real revenues grew 0.8% in August and 8.2% in the year through August, while hours worked in industrial production increased 3% and 5.7%, according to the same comparison basis. Installed capacity utilization (Nuci) reached 83.1% in August, 0.6 p.p. below the July level, considering seasonally adjusted data.

40. According to IBGE's Monthly Industrial Survey (PIM), industrial production decreased 1.3% in August month-on-month, seasonally adjusted. Fifteen out of the twenty-seven activities surveyed recorded production decrease in the month, with highlights to the negative performance in the production of chemical products (-5.5%), oil refine and ethanol production (-4.1%), influenced by the technical interruption in one of the refineries. It is also noteworthy the decline in the production of food products (-3.1%). Considering to the use categories in the seasonally adjusted series, the unfavorable industrial performance reflected mainly the retraction in intermediate goods production (2.7%), comparing to July, the sharpest fall since October 2001. Durable goods production expanded by 2.1%, while the production of semi- and non-durable consumer goods registered a slight retreat of 0.3%.

41. Comparing to August 2007, industrial production increased 2%, a percentage significantly lower than the ones observed in the previous months. Except for

the production of semi- and non-durable consumer goods, which registered a 1.1% retreat due to pressures stemming from the food and beverages sector elaborated for household consumption, all categories showed expansion, with highlights to the production of capital goods, which increased 12.1%. By segments, twelve sectors registered growth, with remarkable increases in vehicles (9.9%), pharmaceuticals (16.3%) and mining (8.6%). In the year through August, the increase in industrial production reached 6%, with highlights to the expansion in both capital goods and durable consumer goods: 18.1% and 11.8%, respectively. In the same period, the growth in the production of intermediate goods and of semi- and non-durable consumer goods reached 5% and 1.7%, respectively. The twelve-month increase in industrial activity totaled 6.8% in July and 6.5% in August, indicating a deceleration at the margin.

42. Vehicles production reached 298.4 thousand units in September, according to Anfavea, increasing 18.2% year-over-year. Considering seasonally adjusted data, the production of vehicles fell 1.5% in September month-on-month. In the year through September, the production of vehicles and agricultural machinery increased 20% and 32.6%, respectively, compared to the same period of 2007. According to the same comparison basis, domestic vehicles sales increased 26%, while vehicles exports decreased 4.6%.

43. According to the LSPA survey carried out by the IBGE in September, the planted area should grow by 4.6% in 2008, year-over-year. The grains harvest was estimated in 145.3 million tons, a 9.1% increase over 2007. This result encompasses increases of 9.2%, 13% and 3.4% in the production of rice, corn and soybean, respectively, which are responsible for 90% of total grains production. The survey also estimated a 13.7% increase in the production of sugar cane, and a 28.3% increase in the production of coffee.

**Surveys and expectations**

44. The Fecomercio-SP survey showed a 0.7% month-on-month decrease in the Consumer Confidence Index (ICC) in October, month-on-month, reflecting both a 1.5% retraction in the Consumer Expectations Index (IEC) and a 0.5% expansion in the Current Economic Conditions Index (Icea). The ICC grew by 3.6% year-over-year.

45. According to the FGV survey, the ICC decreased 10% in October, month-on-month, having the index reached its lowest level since June 2006. Both current situation and the expectations for 6-month ahead expectations assessments deteriorated relative to the previous month, decreasing by 12.7% in the Current Situations Index (ISA) and by 8.5% in the Expectations Index (IE). Relative to October 2007, the survey also registered decreases of 10.1%, 2.3% and 14% in the ICC, ISA, and IE, respectively.

46. Still according to the FGV, the Industry Confidence Index (ICI) stayed on high levels after reaching 120.3 points in September, compared to 123 in August. The indicator stood 2.3 p.p. below the level registered in the same month of 2007, reflecting the retractions of 3.2 p.p. in the ISA and 1.3 p.p. in the IE. Among the components related to the Current Situation, the levels of both global demand and current business situation remained high. Regarding the activity sectors, the segment of construction material was the only one that showed effective growth, 3.3% month-on-month and 8.8% year-over-year. Regarding manufacturing employment, despite being more cautious than they had been in the same period of last year, 32% of the managers projected an increase in labor force hiring in the next three months.

47. The monthly Nuci calculated by Fundação Getúlio Vargas (FGV) reached 86.4% in September, a result 0.2 p.p. lower than the August figure and 0.3 p.p. higher than the level registered in the same month of 2007. In September new records highs were registered in two categories: consumer goods, which totaled 88.1%, exceeding by 3.5 p.p. the September 2007 level; and civil construction inputs, which reached 92.1%, recording a 5.4 p.p. increase year-over-year.

**Labor market**

48. According to the Ministry of Labor and Employment, 282.8 thousand new formal jobs were created in September 2008, a record high for the historical series for any period, considering month-on-month, year-to-date or twelve-month periods. In

the first nine months of the year, employment reached 2,086.6 thousand new jobs. Employment level increased by 0.6% month-on-month in seasonally adjusted terms expanding in all sectors, with highlights to the 1.5% expansion in the construction sector, and the creation of 114 thousand new jobs in the manufacturing industry sector. Considering the observed series, there were increases in year-to-date terms (6.5%) and on a twelve-month basis (6.3%).

49. According to the IBGE employment survey (PME) carried out in the six main metropolitan areas of the country, the unemployment rate stayed at 7.6% of economically active population (PEA) in September recording stability relative to August. Compared to September 2007, unemployment declined 1.4 p.p. The survey also showed that the number of unemployed remained stable in the six main metropolitan regions. Year-over-year, employment grew 3.4%, while PEA increased 1.9%. Considering the number of employed by activity sectors, the total of workers in the private sector increased 0.9% in September, month-on-month, representing 112 thousand jobs, mainly reflecting the creation of 104 thousand formal jobs. The number of self-employed workers decreased 0.4%, while the number of employers increased 4.7%. Year-over-year, formal workers in the private sector led occupation growth (6% increase), the number of employers and informal workers increased 0.2% and 3.2%, respectively, while the number of self-employed workers decreased by 0.1%. Still in year-over-year terms, the number of employed workers in the public sector increased 5.1%.

50. The same survey showed that average real earnings of occupied workers increased 0.9% in September, month-on-month, and 6.4% year-over-year. Real payrolls increased 1.7% in September, month-on-month, and 10% year-over-year.

51. According to CNI data seasonally adjusted by the BCB, employment in manufacturing industry was stable in August, after increasing 0.6% in July, resulting in a 1.1% increase in the quarter ended in August, quarter-on-quarter. Year-over-year, employment in the manufacturing industry and industrial real payroll increased 4% and 3.6%, respectively, in August. In the first eight months of 2008, the same indicators increased by 4.4% and 5.1%, respectively, year-over-year.

**Credit and delinquency rates**

52. Outstanding credit in the financial system reached R$1,149 billion in September, setting a new volume-to-GDP ratio record high, 39.1%. Credit operations in the financial system expanded by 3.5% in September, totaling 34% expansion on a twelve-month trailing basis. According to the same comparison bases, non-earmarked credit operations increased 3.5% and 37.1%, respectively, while earmarked credit operations elevated 3.4% and 26.6%, respectively. Among the non-earmarked operations, leasing operations remained strong, with expansions of 148.5% and 61.9% for credit to individuals and to corporate, respectively, in the last twelve months. Regarding earmarked credit, it bears highlighting the 34.4% and 27.4% increases in operations related to housing and the agricultural sector, respectively, according to the same comparison basis. Considering other sectors, loans to industry increased 5.4% month-on-month in September and 40.1% in twelve months.

53. The average interest rate on non-earmarked credit operations, used as reference for interest rates, reached 40.4% p.a. in September, up from 40.1% p.a. in August and 35.5% p.a. in September 2007. The average rate on credit for individuals increased 1 p.p. in September, reaching 53.1% p.a., while the average rate on corporate credit was stable in September, at 28.3% p.a., In September 2007, the average rate on credit to individuals and credit to corporate stood at 46.3% p.a. and 23.1% p.a., respectively.

54. The average tenure on non-earmarked credit operations, used as reference for interest rates for individuals reached 378 days in September, compared to 372 days in August and 341 days in September 2007. The average tenure of corporate credit operations reached 303 days, while the average tenure for credit operations to individuals totaled 480 days, compared to 269 days and 420 days, respectively, in September 2007.

55. Delinquency rates in the financial system (non-earmarked loans, used as reference for interest

rates, in arrears for more than ninety days) stood at 4% in September, a 0.6 p.p. decrease year-over-year. Delinquency rates for credit operations with corporate and individuals reached 1.6% and 7.3%, respectively, compared to 2.3% and 7.1% in September 2007.

56. Net delinquency rate for retail credit, measured by the ACSP, reached 5.9% in September, up from 5.2% in the same month of 2007. In the year trough September, the average delinquency rate stood at 6.8%, up from 6.2% in the same month of the previous year.

**External environment**

57. After Lehman Brothers declared insolvent, instability increased in the international financial markets, once risk aversion and lack of liquidity affected more decisively real economy funding, mainly in the US. The financial crisis assumed more generalized aspect world wide, spreading geographically. Credit channels were obstructed by uncertainty and liquidity and solvency problems that emerged subsequently. In addition to that, the exchange rate depreciation movement, simultaneous in various economies, found international trade in contraction, or, in the best hypothesis, in a situation of important deceleration.

58. Due to the deterioration of the international financial crisis and the widening of global recession risk, governments and central banks of developed economies committed themselves to an aggressive movement in defense of the soundness of their respective financial systems. In this sense, they increased the deposits guarantees, expanding the government guarantees on interbank operations and committed to support all the banks considered systemically important, even encompassing capitalization. Moreover, central banks increased their actuation through liquidity operations (wider acceptance of collaterals, larger volume in interventions and extended tenures to pay the loans).

59. The adoption of stability and financial system soundness plans started with the approval of the US Troubled Asset Relief Program (TARP), instrument that allowed the treasury to buy up to US$700 billion of bad assets of financial institutions, in an effort to recapitalize the sector, minimize the concerns regarding the system viability and foster the recovery of its lending function.

60. In Europe, rescue plans aiming to recapitalize banks and defreeze the credit market are being approved. It is important to highlight that the resources will be provided from each respective country's budget and there isn't forecast of creation of any single fund. Regarding single measures, only uniformed intervention rules were adopted, which intend to avoid distortions in the regional banking market.

61. Recent data point to the reduction of inflationary pressures in the global economy. With the substantial fall in the prices of oil and agricultural commodities, and the increase of unemployment, the inflationary process already records turning points in the majority of mature economies. In the US, this behavior is intensified by the dollar appreciation. In UK, inflation is still pressured by the prices of food and services, and in Norway, expectations point to inflationary peek in September, as well as in Australia and New Zealand (3rd quarter). In China, despite the increase in domestic energy prices, inflation cooling is confirmed.

**Foreign trade and international reserves**

62. Brazilian trade surplus reached US$2.8 billion in September, totaling surpluses of US$19.6 billion in the year and US$28.7 billion in the last twelve months. In the year through September, exports reached US$150.9 billion, and imports, US$131.2 billion, growing by 29.4% and 53.2%, respectively, year-over-year. Total external trade recorded a US$282.1 billion in the first nine months of 2008, totaling US$361.1 billion in twelve months.

63. In September, exports totaled US$20 billion, reaching a US$909.9 million daily average, a 22% growth year-over-year. Imports totaled US$17.3 billion in the month, with a US$784.7 million daily average, a 39.5% increase year-over-year.

64. International reserves totaled US$207.5 billion in September, with increases of US$2.4 billion in the month and US$27.2 billion relative to the end of 2007.

**Money market and open market operations**

65. In the period between the September and the October Copom meetings, the future yield curve shifted sharply upwards, with increase in the slope. The period was characterized by high volatility and increased risk aversion in the international markets, as a result of the development of the financial crises in the US and in Europe and of the fear of global economy deceleration. The risk aversion boosted the generalized reduction of the leveraged positions in several markets, generating high losses in the international stock exchanges and the dollar appreciation. Under this scenario, the future interest rate in domestic markets recorded sharp increase, intensified by the BRL depreciation against the dollar. At the end of the period, the central bank operations in the FX market and the selling/ purchase auctions of fixed-income securities carried out by the Treasury contributed to smooth this movement. Between September 8 and October 27, one-, three-, and six-month rates increased by 47 bps, 38 bps and 72 bps, respectively. Moreover, one-, two- and three-year rates increased by 146 bps, 268 bps, and 359 bps, respectively. Real interest rates, measured by the differential between the one-year forward nominal interest rate and the smoothed twelve-month ahead inflation expectations, increased to 10.33% on October 27, up from 8.96% on September 8.

66. On September 29, the BCB carried out reverse FX swap auction, with the rollover of the redemption of October 1. This operation amounted US$0.5 billion, or 26% of the total redemptions. From October 6, the BCB offered traditional FX swap auctions on a daily basis, in which assumes a long position in domestic interest rate and a short position in FX. In the month through October 27, these operations totaled US$19.1 billion.

67. In its open market operations, the BCB carried out, from September 9 to October 27, weekly five- and seven-month fixed rate repo operations, borrowing. The average daily balance of these operations reached R$57.9 billion, of which R$40.3 billion were seven-month operations. In the same period, the BCB conducted 36 overnight repo operations, borrowing. The BCB also conducted daily, at the end of day, one- and two-working-day-tenure liquidity management operations. Operations with tenors less than thirty days, including daily liquidity management operations, averaged R$60.5 billion, on a daily basis, borrowing. In addition, on September 11, 15, 22 and 29, and on October 1 and 6, the BCB conducted borrowing operations with tenures from 10 to 28 working days, totaling R$20.0 billion, R$7.0 billion, R$5.7 billion, R$4.7 billion, R$2.7 billion, R$38.9 billion and R$2.2 billion, respectively. Moreover, the BCB also conducted, on September 11, a borrowing operation with tenure of 35 working days amounting R$127.3 billion. These operations averaged R$172.0 billion, on a daily basis.

68. Between September 9 and October 27, the National Treasury raised a total of R$12.2 billion, of which R$7.5 billion in fixed-rate securities: R$5.9 billion via issuance of LTNs maturing in 2009, 2010 and 2011, and R$1.6 billion in NTN-Fs maturing in 2012 and 2017. Issuance of LFTs totaled R$2.8 billion, for securities maturing in 2012 and 2014. Issuance of inflation-linked NTN-Bs reached R$1.9 billion, for securities maturing in 2011, 2013, 2017, 2024, 2035 and 2045.

69. In the same period, the Treasury conducted auctions to sell LTNs maturing in July and October 2009 and bought LTNs maturing in October 2008 and January 2009, totaling R$2.1 billion. Issuance of inflation-linked NTN-Bs for securities maturing in 2011, 2013, 2017, 2024, 2035 and 2045, settled in other National Treasury securities, totaled R$2.1 billion. The Treasury also conducted purchase auctions of LTNs and NTN-Bs totaling R$1.0 billion and R$0.1 billion, respectively.

70. On October 23, 24 and 27, the Treasury conducted simultaneous purchase/ selling auctions of NTN-F maturing in 2012, 2014 and 2017. The purchase totaled R$1.6 billion, while the selling amounted R$0.1 billion.

# Minutes of the 139th Meeting of the Monetary Policy Committee (Copom)

**Date**: December 9th, from 4:35PM to 6:40PM, and December 10th, from 5:10PM to 9:15PM
**Place:** BCB Headquarters meeting rooms – 8th floor on December 9th and 20th floor on December 10th – Brasília – DF

**In attendance:**
**Members of the Committee**
Henrique de Campos Meirelles – Governor
Alexandre Antonio Tombini
Alvir Alberto Hoffmann
Anthero de Moraes Meirelles
Antonio Gustavo Matos do Vale
Maria Celina Berardinelli Arraes
Mário Gomes Torós
Mário Magalhães Carvalho Mesquita

**Department Heads (present on December 9th)**
Altamir Lopes – Economic Department
Carlos Hamilton Vasconcelos Araújo – Research Department (also present on December 10th)
João Henrique de Paula Freitas Simão – Open Market Operations Department
José Antônio Marciano – Department of Banking Operations and Payments System
Márcio Barreira de Ayrosa Moreira – International Reserves Operations Department
Renato Jansson Rosek – Investor Relations Group

**Other participants (present on December 9th)**
Alexandre Pinheiro de Moraes Rego – Press Secretary
Alexandre Pundek Rocha – Advisor to the Board
Eduardo José Araújo Lima – Advisor to the Research Department
Flávio Pinheiro de Melo – Advisor to the Board
Katherine Hennings – Advisor to the Board
Sergio Almeida de Souza Lima – Executive Secretary

The members of the Monetary Policy Committee analyzed the recent performance of and prospects for the Brazilian economy under the monetary policy framework, which is designed to comply with the inflation targets established by the government, and also the recent performance of and prospects for the international economy.

## Recent economic developments

1. IPCA inflation changed from 0.26% in September to 0.45% in October and 0.36% in November. As a consequence, inflation reached 5.61% in the first eleven months of 2008 – the highest change in the period since 2004 – up from 3.69% in the same period of 2007. Twelve-month trailing inflation changed from 6.25% in September to 6.41% in October and 6.39% in November (4.19% in November 2007). Under this comparison basis, the acceleration of consumer price inflation mirrors the behavior of both regulated prices and market prices. Indeed, market prices and regulated prices increased 7.80% and 3.16%, respectively, in the twelve months through November, up from 5.03% and 2.31% in the twelve months through November 2007. Moreover, both prices of tradable goods and non-tradable goods accelerated, reaching 7.87% and 7.74% in twelve months, respectively (compared to 4.13 and 5.88% in November 2007). The price of services, whose dynamics tends to show more persistence than the prices of goods, increased 6.48% in the twelve months through November 2008, up from 6.36% in October, 6.27% in September and 4.89% in November 2007, an evolution that reflects the influence of domestic factors over the inflationary dynamics. Preliminary data for December point to consumer inflation index above that observed in November. In short, the reversal of the divergence trend of inflation from the targets path, which had been observed since the end of 2007, hasn't consolidated yet, although the risk of an even higher deterioration of the inflationary dynamics has been reducing.

2. The three main underlying inflation measures calculated by the BCB have reduced in the margin, in the last months. The core inflation by exclusion of household food items and regulated prices and the smoothed and non-smoothed trimmed means core

inflation measures decreased from 0.62%, 0.45% and 0.41% in September, to 0.51%, 0.37% and 0.32% in October, and to 0.36, 0.35% and 0.28% in November, respectively. Similarly to the headline inflation, the three core inflation measures accelerated remarkably in the first eleven months of the year, compared to the same period of 2007, with increases from 3.50%, 3.62% and 3.16% to 5.74%, 4.48% and 4.57% for the core inflation by exclusion, smoothed and non-smoothed trimmed means core inflation, respectively. On a twelve-month trailing basis, the core inflation by exclusion of household food items and regulated prices rose from 6.26% in September to 6.38% in October and reduced to 6.36% in November. The smoothed and non-smoothed trimmed means core inflation slightly reduced, under this criterion, in the last months. The smoothed trimmed means core inflation changed from 4.97% in September to 4.91% in October and 4.90% in November, whereas the non-smoothed trimmed means core inflation fell from 5.15% in September to 5.11% in October and 5.04% in November. Despite the reduction observed in November, all core inflation measures remain above the central value for the inflation target. Moreover, it bears emphasizing that the behavior of the IPCA diffusion index, whose average in the year through November is the highest recorded since 2004, showed substantial increase in November, and continues to point to an inflationary process relatively disseminated, confirming the analysis present in previous Copom Minutes.

3. The General Price Index (IGP-DI) inflation changed from 1.09% in October to 0.07% in November. On a twelve-month trailing basis, IGP-DI inflation decreased to 11.20% in November, from 12.29% in October, compared to 6.60% in November 2007. In the twelve months through November, the IGP-DI increase reflected the behavior of its three main components. The Consumer Price Index-Brazil (IPC-Br) increased 6.27% (4.53% in November 2007), while the Wholesale Price Index (IPA-DI) totaled 12.88% (7.51% in November 2007). According to the same comparison basis, the Civil Construction National Index (INCC) increased 12.34% (5.92% in November 2007). Regarding IPA-DI, the inflationary acceleration, under this comparison basis, derives basically from the behavior of industrial prices. The agricultural IPA changed 7.38% (18.92% in November 2007), while the elevation of wholesale industrial prices reached 14.93% (3.76% in November 2007). In fact, despite the cooling in November, wholesale industrial prices increased 13.80% in the first eleven months of the year, up from 3.39% in the same period of 2007. As mentioned in previous Copom Minutes, the Copom evaluates that the effects of wholesale prices over consumer price inflation will depend on current and prospective demand conditions and price-setters' expectations for the future inflation path.

4. The IBGE released data for 2008 third quarter GDP. Data still show robust growth rates, both for accumulated results in the year (6.4% up from 6.2% in the previous quarter), and for year-over-year results (6.8% as against 6.2% in the previous quarter). On the aggregate demand side, gross fixed capital formation continued to post strong figures, growing by 19.7% in the third quarter of 2008, year-over-year. Household consumption grew by 7.3%, according to the same comparison basis, influenced by the expansions of credit and real payroll. The contribution of domestic absorption to GDP growth reached 9.3 p.p., overweighing the 2.5 p.p. negative impact stemming from the external sector. On the aggregate supply side, it bears emphasizing the increase in industrial production (7.1%), followed by the agricultural sector (6.4% growth) and by the services sector (5.9%), on a year-over-year basis. Regarding industrial activity, it bears highlighting the civil construction industry (11.7% expansion), benefited by public works and by the increase in credit to housing. The GDP deflator at market prices increased from 6.1% in the second quarter of the year, year-over-year, to 6.8% in the third quarter.

5. On a three-month moving average basis, according to data seasonally adjusted by the IBGE, industrial output decreased 0.6% in October, after growing by 0.5% in the previous month. Still considering the seasonally adjusted series, after the 1.5% expansion observed in September, industrial output retreated by 1.7% in October, month-on-month, partially reflecting the programmed interruption in the petrochemical industry. Moreover, it bears noticing that general industrial output grew 5.8% in the year through October, with respective increases of 5.7% and 7.4% in manufacturing and in

mining output. On a year-over-year basis, industrial output expanded by 0.8% in October (with one more working day), with respective growths of 7.2% and 0.4% in mining and manufacturing industries, respectively. The data already released for the last months point, in short, to the interruption of the industrial production expansion cycle, mainly due to the deterioration of global economic prospects and its effects over the Brazilian economy.

6. Among the use categories, according to data seasonally adjusted by the IBGE, the production of capital goods decreased by 0.5% in October. Regarding the other use categories, intermediate goods production decreased 3.0%, semi-durable consumer goods production retreated by 2.2%, while the production of durable goods production reduced by 4.7%. In the year, capital goods production leads the expansion, with an 18.4% increase, followed by the 10.5% elevation in durable consumer goods production. The recent slowdown in capital goods production has been reflecting the intensification of the international financial turmoil and its consequences over business confidence. On its turn, the cooling in the pace of expansion of durable goods production reflects, predominantly, tighter credit conditions and the deterioration of consumer expectations.

7. Labor market continues to present favorable performance, but with signs of accommodation in the generation of formal employment. The unemployment rate in the six metropolitan regions covered by the Monthly Labor Survey (PME) retreated from 7.6% in August and September, to 7.5% in October, down from 8.7% in October 2007. The October monthly result is the second lowest rate for the series, above only December last year, which stood at 7.4%. As a result, the average unemployment rate in the first ten months of the year was 1.6 p.p. below that observed in the same period of 2007. According to data seasonally adjusted by the BCB, the unemployment rate stood at 7.6%, the same rate recorded in September, at a historically low level. Nominal average earnings increased 12.0% in October, year-over-year, decelerating from the 13.7% rate observed in September, but maintained a robust pace. In October, average real earnings fell 1.3% month-on-month (4.5% expansion relative to October 2007). In the first ten months of the year, average real earnings increased 3.3%, while the number of occupied workers grew 3.9%. As a consequence, real payroll increased 7.4% (8.6% expansion in October, in year-over-year terms), continuing to constitute a key driver for domestic demand growth. According to the National Industry Confederation (CNI) data seasonally adjusted by the BCB, manufacturing employment increased by 0.1% in October (compared to 0.7% in September and 0.1% in August). In year-over-year terms, employment grew 3.9%, totaling 4.3% growth in the last twelve months. According to data seasonally adjusted by the IBGE, manufacturing employment increased by 0.1% in September (compared to a 0.1% fall in August and a 0.7% increase in July), totaling increases of 2.9% in the last twelve months and 2.2% year-over-year. Still regarding employment, data from the Ministry of Labor and Employment (MTE) indicate loss of dynamism in the generation of formal employment in the margin, with the creation of 61.4 thousand jobs (compared to 282.8 thousand jobs in September this year and 205.3 thousand jobs in October 2007), as a result of the probable reassessment of businessmen regarding the effects of worsening of global difficulties. However, in the first ten months of the year, employment reached 2,148.0 thousand hires, 18.5% above the same period of the previous year, an evidence of the robust demand for work in the period. Formal employment grew by 0.2% in October, seasonally adjusted, and observed data point to a 6.4% expansion in the last twelve months. The retail sector recorded the highest hiring rate in October, with the creation of 54.6 thousand new jobs, followed by the services sector (36.1 thousand new jobs), by the manufacturing industry (8.7 thousand new jobs) and by civil construction (2.1 thousand new jobs). On the other hand, the agricultural sector, due to seasonal factors related to the inter-harvest observed in the Middle-Southern part of the country, was the only sector recording employment retreat (extinction of 38.4 thousand jobs).

8. According to data seasonally adjusted by the IBGE, expanded retail sales increased by 4.0% in September, after decreasing 1.3% in August, and grew by 15.9% year-over-year in September and 13.8% in 2008 through September. Expanded retail sales three-month moving average increased 1.0% in September, month-on-month seasonally adjusted,

after increasing by 0.1% in August and 0.9% in July. According to seasonally adjusted data, on a month-on-month basis, it bears emphasizing the expansion in the sales of “office material and equipment” (6.9%), followed by “vehicles and motorcycles, part and pieces” (5.5%) and “furniture and domestic appliances” (3.1%). In the year through September, cumulative growth was more significant in “office material and equipment” (33.7%), “vehicles and motorcycles, part and pieces” (20.7%) and “other personal and domestic articles” (20.3%). In October and November, expanded retail sales data should evidence the effects of credit supply restrictions and the deterioration of consumer confidence over vehicle sales, already captured by the data from the National Federation of Distribution of Automotive Vehicles – Fenabrave for these months. The steady growth of retail sales had been reflecting, in short, the performance of both the sectors more sensitive to income and employment expansions and those more sensitive to credit conditions. For the next quarters, the retail sales trajectory will continue to be favored by fiscal transfers, as well as by employment and income growth, but it will also be affected, in case of persistence, by the changes in the access to credit supply, and by the deterioration of consumer confidence.

9. The installed capacity utilization rate (Nuci) in the manufacturing industry reached 83.2% in October, slightly above the level observed in September, according to CNI data seasonally adjusted by the BCB. According to data seasonally adjusted by CNI, the Nuci in the manufacturing industry showed reduction, reaching 82.9% in October, down from 83.4% in September. Without the seasonal adjustment, the Nuci stood 0.1 p.p. above the level registered in October 2007, a record high for the series. As a consequence, the average rate in the first ten months of 2008 was 0.9 p.p. above the level observed in the same period of 2007. The monthly Nuci calculated by Fundação Getúlio Vargas (FGV) reached 85.2% in November, standing 2.0 p.p. below the level registered in the same month of 2007. The reduction in the Nuci in November 2008, year-over-year, is also observed in the production of consumer goods (-1.2 p.p.) and of intermediate goods (-2.7 p.p.). For the capital goods sector, the Nuci showed stability compared to the level observed in November 2007 while for the production of civil construction inputs the Nuci presented a 1.9 p.p. increase. The reduction on Nuci calculated by FGV seems to be a result of a combination between investment projects maturity with softening on economic activity, which should point to a start of less pressure over the idle capacity level. Recent data about the absorption of capital goods still show a strong expansion compared to the same periods of 2007. The absorption of capital goods decreased 1.0% in October, according to seasonally adjusted data, accumulating a 22.7% expansion in 2008, in observed terms, compared to 3.9% and 22.2% in September, respectively, according to the same comparison bases. On the other hand, the production of civil construction inputs showed stability at the margin in October, after decreasing by 1.5% in September, accumulating a 10.5% growth in 2008 (10.9% growth in 2008 through September). Although not widespread, evidences so far suggest to an ongoing process of reduction in the mismatches regarding the evolution of supply and domestic demand. As stressed in previous Copom Minutes, the inflation trajectory is closely linked to current and prospective developments related to the expansion of supply of goods and services, to adequately meet demand conditions.

10. The trade balance continues to register deceleration at the margin, an already anticipated trend, and which is in line with assessments present in previous Inflation Reports and Copom Minutes. In the last twelve months through November the trade surplus reached US$26.1 billion (37% below November 2007). In the same period, exports and imports totaled US$198.4 billion and US$172.3 billion, equivalent to 25.0% and 46.9% growth, respectively, year-over-year. The reversal on the strengthening trend of the BRL and the softening on the pace of expansion of domestic demand may contribute to a recover on the trade surplus, notwithstanding the reduction on price levels of exports acting on the opposite direction. The decrease in trade surplus contributed to the US$26.6 billion current account deficit registered in the twelve months through October 2008, equivalent to 1.7% of GDP. Foreign direct investment reached US$38.2 billion in the twelve months through October, equivalent to 2.5% of GDP.

11. The period since the last Copom meeting was marked by the continuity of stress on international financial markets, which originated in the US and Europe, but whose impact on emerging economies has become more significant. The increased risk aversion, observed since mid-September, after the bankruptcy of an important US financial institution, led the authorities in the US, Europe and Oceania to intervene in an unprecedentedly way in their financial systems, using wide range of instruments, in order to ensure minimum conditions of operation and liquidity in money markets. Although systemic risk perception has showed moderation, pressures on the functioning of the interbank markets came back resulting from the nearness of the end of the year and the closing of the balance sheets of financial institutions. The international liquidity contraction has been contributing to a deleverage process by asset managers, which in turn has been pressuring down the prices of financial assets. In an environment of increased risk aversion and shortage of capital flows, pressures on emerging economies' currencies have been kept.

12. Regarding the global macroeconomic scenario, at least in the short term the contraction trends prevail over the inflationary pressures. The dominant view still points to the expansion, at a modest pace, of global economic activity in 2009, but data released in the last weeks indicate a more intense and generalized cooling of activity in mature economies and also in some emerging economies. There are evidences that the deeper weakening of economic activity in Europe and parts of Asia was predominantly due to the negative shock in the terms of trade caused by the elevation of commodities prices, which could be reversing. On the other hand, the problems in the financial system have been aggravated by a cyclical deterioration in credit quality, which may reinforce the contraction in financial conditions and, as a consequence, the risk of intensification of deceleration. The US economy, in particular, entered into recession at the end of 2007 and still continues to suffer the impacts of the housing sector crisis, with spillover effects on the labor market, whose weakening, together with the negative wealth effect associated to the fall in the prices of financial assets, has affected the consumers' confidence, significantly contributing for depressing expenditure. The prevailing interpretation is that the activity in Europe and Japan may continue to lose dynamism in the next months. In mature economies, where inflation expectations are better anchored and economic activity is decelerating considerably, inflationary pressures have reduced fast. On the other hand, in emerging economies, where the secondary effects of raw materials price increases over consumer prices and the heated demand pressures over the supply expansion capacity had been more intense, the inflationary pressures have been more persistent. In this context, the monetary policy stance is mainly expansionist in mature economies, whereas in emerging economies, which have been affected by the exchange rate depreciation trend, in addition to the facts already mentioned, the reaction seems to be more heterogeneous. It is worth pointing that, particularly in mature economies, the authorities are announcing a series of initiatives aimed at sustaining the economic activity, particularly through fiscal incentives, which could contribute to a gradual economic recovery.

13. Oil prices remain highly volatile, but reduced considerably since the last Copom meeting. Future markets have followed, in general, the prices of oil in the spot market. However, uncertainty concerning oil prices is remarkably high, as the prospective scenario depends on the evolution of demand, especially in emerging countries, on the supply's reaction to stimuli derived from previous changes on relative prices, in addition to geopolitical issues that affect the price of this commodity. Nonetheless, despite the great uncertainty inherent to the projections of oil prices' trajectory, the main scenario adopted by the Copom, which assumes unchanged gasoline prices in 2008, remains plausible but with the persistence of the current framework of the oil market, it does not seem prudent to completely disregard the hypothesis that price reductions for oil can occur in 2009. However, it bears highlighting that, regardless of the behavior of domestic gasoline prices, the reduction of international oil prices can affect domestic prices both through productive chains, such as the petrochemical, as well as through the potential effect over inflation expectations. The prices of other commodities also showed important reductions since the last Copom

meeting, reacting both to the greater pessimism about the prospects for global economic growth and to the continuity of the global financial markets turmoil.

## Assessment of inflation trends

14. The identified shocks and their impacts were reassessed according to newly available information. The scenario considered in the simulations was based in the following assumptions:

a) compared to the values considered in the October Copom meeting, the projected adjustment for 2008 for gasoline prices was maintained at 0%, whereas for bottled gas price was revised to 2.6%;

b) compared to the values considered in the October Copom meeting, the projected adjustment for 2008 for fixed telephone price was revised to 3.6% from 3.5%, while for electricity prices was maintained unchanged at 1.1%;

c) the projection for regulated prices inflation in 2008, based on individual items, was altered to 3.5%, down from the 3.8% considered in the October meeting. This set of prices, according to data released by the IGBE, corresponded to 29.62% of the total November IPCA;

d) the projection for regulated prices inflation in 2009 was maintained unchanged at 5.5%. This projection is based on the endogenous determination model for regulated prices, which computes seasonal components, foreign exchange rate changes, market prices inflation and the IGP (General Price Index) variation;

e) the projection for the spreads over the Selic rate, on the benchmark scenario, based on the 360-day swap rates, estimates a 180 bps spread in the fourth quarter of 2008 and 102 bps in the last quarter of 2009. The identified shocks and their impacts were reassessed according to newly available information.

15. Regarding fiscal policy, the projections assume the achievement of the public sector primary surplus target of 3.8% of GDP in 2008 and 2009, increased by 0.5 p.p. The related assumptions considered in the previous meeting were maintained.

16. Since the last Copom meeting, according to the median IPCA inflation expectations compiled by the BCB's Investor Relations Group (Gerin), the 2008 IPCA variation showed reduction to 6.20% from 6.29%. Twelve-month ahead inflation expectations increased slightly to 5.34%, from 5.29%, considering the medians of expected monthly rates. Inflation expectations for 2009 increased to 5.20%, from 5.00%.

17. Considering the hypotheses under the benchmark scenario – which assumes the maintenance of the exchange rate at R$2,40/US$1.00 and the Selic rate at 13.75% during the forecast period – the projection for the 2008 IPCA inflation slightly decreased relative to the figure considered in the October Copom meeting, but remained above the 4.5% target established by the National Monetary Council (CMN). According to the forecast based on the market scenario – which incorporates the consensus exchange and Selic rates trajectories collected by Gerin on the eve of the Copom meeting – IPCA inflation forecast for 2008 also decreased compared to the figure considered in the previous Copom meeting, but remained, therefore, above the central target for the year. Regarding 2009, both projections based on the benchmark scenario and on the market scenario showed a decrease, in relation to the figures forecast in the previous Copom meeting, but are above the 4.5% central target for that year (benchmark scenario) and around this value (market scenario).

## Monetary policy decision

18. The Copom evaluates that the monetary policy should contribute for the consolidation of a favorable long-term macroeconomic environment. Economic activity data indicate that the pace of domestic demand expansion continued quite robust until the third quarter, and it is at least partially responsible for the inflationary acceleration trend, despite strong imports growth and the favorable investment performance in line with assessments present in previous Copom Minutes. Additionally, the increase in risk aversion and the unprecedentedly constraints observed in liquidity conditions in the international markets impose adjustments in the balance of payments which, despite the increase in Brazilian economy external resilience, can increase the inflationary

pressures, especially in the short run. In general terms, the influence of the external scenario on the future trajectory of Brazilian inflation continues to be subject to contradictory effects, which can act with distinct intensity throughout time and surrounded by significant uncertainties. On the one hand, more generalized deceleration of global economic activity in the upcoming quarters points to a cooling of both commodities prices and external demand, therefore influencing negatively the local financial conditions. On the other hand, the economic cooling has caused an increase in risk aversion, impacting the demand for Brazilian assets, and consequently, depreciating their prices. Moreover, the recent trajectory of price indices evidences the reduction of inflationary external pressures, especially in mature economies, but also in emerging economies, with important implications on domestic inflationary trajectory. The Committee evaluates that the risk of materialization of a less benign scenario retreated when compared to the risk prevailing months ago, but is still relevant. The Copom emphasizes that the main challenge of monetary policy in this context is to guarantee the maintenance of favorable results achieved in the last years. Particularly, monetary policy should act to avoid that the deterioration of inflation dynamics observed in 2008 become persistent.

19. The Copom evaluates that the probability that initially localized inflationary pressures may cause risks to domestic inflation trajectory could be lowering. The evidences of cooling of domestic demand, and more incipient, of accommodation of pressures on the market of factors, despite under uncertainty, may mitigate the pass- through of wholesale prices pressures to consumer price inflation. The Committee evaluates that the materialization of this pass-through and the generalization of pressures initially localized on consumer prices depend critically on inflation expectations, which still remain in levels above the inflation targets path and continue to be carefully monitored. Additionally, it is worth pointing that, according to recent data and the indicators available so far, the heating of domestic demand was still pressuring the prices of non-tradable items, as services. In this context, the Copom will act to ensure that the gains obtained in inflation control in recent years become permanent.

20. The maintenance of inflation rates in line with the targets path and the consequent consolidation of a long-term stable macroeconomic environment will contribute for the progressive reduction of macroeconomic risk perception. The Copom evaluates that the persistence of a cautious and timely monetary policy stance is essential to increase the probability that inflation in Brazil evolve once again according to the targets path in 2009. For this higher probability to continue to materialize, however, it is necessary that forward-looking inflation indicators, particularly the expected dynamics of aggregate supply and demand, converge throughout the relevant period for the monetary policy.

21. The Copom emphasizes, once again, that there are important time lags between the implementation of monetary policy and its effects on economic activity and inflation. Therefore, the evaluation of alternative options for monetary policy should necessarily focus on the forward-looking inflation scenario and its risks, instead of current inflation indices. This viewpoint is even more important in periods of higher uncertainty.

22. The prospects for the evolution of economic activity deteriorated since the last Copom meeting. In particular, the effects of the international crisis on the domestic financial conditions indicate that the contribution of credit to support domestic demand may decline more intensively and, possibly, more persistently than the magnitude of what would happen exclusively by the monetary policy lagged effects. Additionally, the intensification of international crisis has caused a negative effect on consumers' and businesses' confidence. If this situation persists, the strength of economic activity would increasingly depend on real payroll expansion and the effects of governmental transfers expected for this and the next quarters. These considerations become even more relevant considering the fact that the monetary policy decisions will have concentrated impacts in 2009.

23. The Copom highlights the important contribution of investment to expand productive capacity. Moreover, it bears noticing that the accommodation of commodities prices could contribute to restrain inflationary pressures. However, the Copom

evaluates that, particularly in the short run, the main risk to the inflationary dynamics derives from the trajectory of Brazilian asset prices, in a process of decreasing external funding. If trends observed since the last Copom meeting prevail, the pace of domestic demand expansion could not present important risks to prices dynamics anymore, which would contribute to limit the inflationary impact of balance of payments adjustment. In this context, the pace of reduction of the mismatch between the growth of aggregate demand and supply of goods and services, relevant up to the third quarter, continues to be crucial to the assessment of different possibilities for the monetary policy stance.

24. International evidence, as well as the Brazilian experience, indicates that high inflation rates lead to higher risk premia, to shorter planning horizons and, consequently, to lower potential economic growth, besides having regressive effects on income distribution. Moreover, in the current circumstances, there is the risk that economic agents start to attribute higher probability to the fact that inflation acceleration become persistent, reducing the efficacy of monetary policy. On the other hand, the shortage of financing conditions in the economy amplifies monetary policy effects, contributing to promote inflation convergence to the targets path. Therefore, Copom's strategy aims to bring inflation rates in 2009 timely back to the 4.5% midpoint target established by CMN. This strategy, which will have its results evidenced throughout time, takes into account the time lags in the transmission mechanism and is the most adequate to deal with uncertainties inherent to the process of monetary policy formulation and implementation.

25. The Copom evaluates that, in light of signs, evidenced after the last meeting, of economic activity slowdown (relative among others to industrial production indicators, some data on the labor market and industrial capacity utilization rates, as well as confidence of consumers and businessmen), as well as inflation expectations behavior, risks against the materialization of a benign inflation scenario, in which IPCA would resume evolution in line with the targets path, are less influential but still relevant. Indeed, prospective scenario evolution has started to reflect on inflation projections considered by the Committee. The Copom also understands that the probability of persistence of mismatch between growth pace of aggregate supply and demand, that continues to represent risk for inflation dynamics, has diminished. Under these circumstances, monetary policy should be cautiously conducted, aiming to assure inflation convergence to the targets path.

26. The Copom believes that the consolidation of restrictive financial conditions for a longer period could significantly intensify monetary policy effects over demand and, throughout time, over inflation. Under these circumstances, the majority of the Committee members, taking into account the balance of risks for economic activity, and therefore for the inflation scenario in 2009, debated the possibility of a 25 bps reduction of the Selic rate. However, the understanding that inflation central prospective path would still justify the maintenance of the Selic rate unchanged has prevailed.

27. Other Copom members considered that the still remaining risks for inflationary dynamics, resulting from the possible persistence of inflation increases in 2008 and consequences of the adjusting process of balance of payments are still predominantly conditioning the various alternatives for monetary policy.

28. In such context, having the majority of Committee members discussed the possibility of reducing the Selic rate at this meeting, in a macroeconomic environment surrounded by severe uncertainty, the Copom unanimously decided, at this moment, to keep unchanged the Selic rate at 13.75% p.a., without bias. The Copom will closely monitor the prospective scenario evolution for inflation in order to timely define the next steps for its monetary policy strategy.

29. Under the inflation-targeting regime, the Copom guides its decisions according to the projected inflation, the analysis of several alternative scenarios for the evolution of the main variables that determine the forward-looking prices dynamics and the balance of risks associated to their projections. There are signs that domestic demand expansion rhythm, which remained expanding at high rates in the third quarter, would be currently contributing less intensely for the economic activity dynamics, in spite of persistence of

stimulus factors such as income growth influencing the economy. On the other hand, the contribution of the external sector to a favorable inflationary scenario, in light of the strong depreciation in the prices of Brazilian assets and the apparent reduction in the country's capacity to import, has become less effective. In such environment, the monetary policy should act so to bring inflation back to the targets path already in 2009, in order to avoid that the higher uncertainty detected in shorter-term horizons disseminate to longer-term periods, thus favoring a sustained recovery of economic activity. Evidently, if the risk profile changes in a way that implies shifts in the basic prospective scenario for inflation considered by the Committee in this meeting, the monetary policy stance will be promptly adjusted to the circumstances.

30. At the end of the meeting, it was announced that the Committee would reconvene on January 20th 2009, for technical presentations, and on the following day, to discuss the monetary policy decision, as established in Communiqué 17,327 of August 27th, 2008.

## Summary of data analyzed by the Copom

### Inflation

31. IPCA reached 0.36% in November, below market expectations and indicating inflation decrease taking into account IPCA-15 figures in November (0.49%) and October (0.45%). Market prices increased 0.44% in November, down from 0.54% in October, with increases of 0.60% for tradable and 0.28% for non-tradable goods. Regulated prices increased 0.18%, down from 0.24% in October. The diffusion index has remained above 60% since July, reaching 64.58% in November and a 62.93% average in 2008. On a twelve months trailing basis, IPCA increased 6.39% in November, down from 6.41% in October, reflecting the increase on market prices (7.80%) and regulated prices (3.16%).

32. In November, twelve month trailing basis and monthly IPCA core inflation have shown generalized deceleration for the first time since July 2007. Core excluding household food items and regulated prices increased 0.36% in November down from 0.51% in October, totaling 6.36% in the last twelve months, compared to 6.38% in the previous month. The smoothed trimmed means core decreased to 0.35% in November down from 0.37% in October, reaching 4.90% over the last twelve months, compared to 4.91% in the previous month. The non-smoothed trimmed means core decreased to 0.28% in November down from 0.32% in October, reaching 5.04% over the last twelve months, compared to 5.11% in the previous month.

33. IGP-DI increased 0.07% in November after a 1.09% increase in October, reaching 11.20% over the last twelve months, in comparison to 12.29% in October. Wholesale prices index (IPA) went down 0.17%, influenced by the fourth decrease in a row of agricultural prices (-0.64%) together with the decrease of industrial prices (-0.01%). Over the last twelve months, IPA increased 12.88%, down from 14.72% in October. IPC-Br accelerated, reaching 0.56% in November, in comparison to 0.47% in October, totaling 6.27% over the last twelve months. INCC increased 0.50% in November, down from 0.77% in October, reaching 12.34% over the last twelve months. IPC-Br core increased 0.45% (0.31% in October) reaching 3.98% over the last twelve months.

34. Among IPA components, the simultaneous fall of agricultural and industrial prices had not been registered since March 2006. Agricultural-IPA decreased 0.64%, in comparison to a 0.02% decrease in October, reaching 7.40% over the last twelve months. Industrial-IPA was stable in comparison to the 1.86% increase observed in the previous month, reaching 14.93% over the last twelve months. By stages of processing, IPA decreased in November in both final goods – from 0.93% in October to -0.15% in November – and intermediate goods – from 1.38% to -0.47%. Raw material prices increased 0.26% in comparison to 1.82% in the previous month. In the last twelve months, IPA by stages of processing registered 6.38%, 17.56% and 14.03% increases, respectively.

35. Weekly Consumer Price Index (IPC-S) variation accelerated from 0.56% over the last week of November to 0.73% over the first week of December.

## Economic activity

36. According to seasonally adjusted data from IBGE's monthly survey (PMC), expanded retail sales, which include construction material and vehicles and motorcycles, parts and pieces, increased 4% in September, month-on-month. All ten segments surveyed by the IBGE increased, with highlights for the 6.9% growth of office material and equipment, and the 5.5% growth on sales of vehicles, motorcycles, parts and pieces, the latter partially resulting from the weak performance in the previous month.

37. Comparing equivalent periods of 2008 and 2007, expanded retail sales grew 15.9% in September and 13.8% in 2008. According to these two comparison basis, there was generalized growth in all segments, with highlights for office material and equipment; vehicles, motorcycles, parts and pieces; other personal and domestic outlays; and furniture and home appliances. Vehicles, motorcycles, parts and pieces presented significant growth on a year-over-year comparison (28.8%) after a weak performance in August (2.4% growth over August 2007).

38. According to São Paulo Trade Association (ACSP) data, related to the city of São Paulo and seasonally adjusted by the BCB, database consultations for credit sales (SCPC) decreased 0.3% in November month-on-month while consultations to Usecheque system expanded 2.7% according to the same comparison basis. In the year through November these indicators increased 7.3% and 4.2% respectively, compared to the same period of 2007.

39. Regarding investment indicators, domestic production of capital goods decreased 0.5% while production of construction typical inputs remained stable in October, month-on-month, seasonally adjusted. Within capital goods production, it bears highlighting the 4.9% increase for transport equipment, softening the fall in all remaining segments. Production of capital goods increased 15.7% in October, compared to October 2007, while production of construction typical inputs grew 7.7%. In the year, through October these indicators increased 18.4% and 10.5%, respectively, compared to the same period of 2007.

40. Capital goods imports declined 4.9% in October, month-on-month, according to the quantum indices of Fundação Centro de Estudos do Comércio Exterior (Funcex), seasonally adjusted by the BCB. The October indicator expanded by 41.2%, year-over-year, higher than the 2008 through October and the twelve-month growth results (40.1% and 39.5%, respectively), sustaining the recent dynamism of capital goods imports.

41. CNI indicators showed a relatively stable industrial activity pace in October, with a 0.1% increase in both employment and installed capacity utilization and a 0.5% reduction in worked hours, according to seasonally adjusted data by the BCB. Real revenues increased 0.7% compared to September, with a 0.2% growth in the quarter ended in October, quarter-on-quarter, seasonally adjusted. In comparison to the same periods in 2007, real revenues expanded 6.9% in October and 8% in the year through October, while worked hours in industrial production increased 4.9% and 6%, in the same comparison basis. Installed capacity utilization (Nuci) reached 83.2 in October, 0.04 above the level of September, in seasonally adjusted terms.

42. According to IBGE's Monthly Industrial Survey (PIM), industrial production decreased 1.7% in October, month-on-month, seasonally adjusted, after a 1.5% variation in the previous month. Durable consumer goods production, a category of use more responsive to credit conditions and consumers' confidence, was the most affected, with a 4.7% decline, partially reflecting the collective vacations in most automotive sector plants. Intermediate goods production decreased 3% in the same comparison basis, influenced by the falls of production of other chemical products (11.6%) and oil refine and ethanol production (9%), the latter partially caused by a technical interruption in one of the refineries.

43. Industrial production grew 0.8% in October compared to October 2007, an increase significantly lower than the ones observed in previous months. Eleven out of the twenty-six activities surveyed showed expansion in October in the same comparison basis, in the observed series, with highlights to the production of other transportation equipment, which increased 63%. It should also be noticed the

variations of 28.2%, 24.3% and 10.5% registered respectively in the production of pharmaceuticals, medical equipment and non-metallic minerals. In the same comparison basis, the segments with more significant declines were office machines and IT equipment (-18%), other chemical products (-15.9%) and wood (-13.3%).

44. Considering the use categories, production of intermediate goods and durable consumer goods declined 2.4% and 1.5% in comparison to October 2007, respectively, while production of capital goods and semi- and non-durable consumer goods expanded 15.7% and 0.6%, respectively. In the year through October, industrial production growth reached 5.8%, with highlights to the expansions of capital goods (18.4%) and durable consumer goods (10.5%). In the same period, the growth of production of intermediate and semi- and non-durable consumer goods reached 4.4% and 2.1%, respectively. The twelve-month increase in industrial activity totaled 6.8% in September and 5.9% in October, indicating a significant deceleration at the margin.

45. Vehicles production reached 194.9 thousand units in November, according to Anfavea, decreasing 28.2% year-over-year. Considering seasonally adjusted data, the production of vehicles fell 31% in November, month-on-month. In the year through November, production of vehicles and agricultural machinery increased by 13.2% and 31.5%, respectively, compared to the same period of 2007. According to the same comparison basis, domestic vehicles sales increased 16.9%, while vehicles exports decreased 6.4%.

46. According to the LSPA survey carried out by the IBGE in November, the increase in the grains harvest in 2008 was confirmed, with an estimated production of 145.7 million tons, a 9.4% increase over 2007. For 2009, the second estimate for the grains harvest points to a 3.8% fall in production, which should reach 140.2 million tons. One expects declines of 7.4% and 0.2% in the production of corn and soybean, respectively.

**Surveys and expectations**

47. According to the Fecomercio-SP survey, the Consumer Confidence Index (ICC) decreased 4.5% in November, month-on-month, reflecting the reductions of 4.1% in the Consumer Expectations Index (CEI) and 5.3% in the Current Economic Conditions Index (ICEA). The ICC declined 3% year-over-year.

48. According to the FGV survey, the ICC decreased 4.2% in November, month-on-month, reaching the lowest historic level in the series started in September 2005. Both current situation and 6-month ahead expectations assessments deteriorated relative to the previous month, decreasing by 5.7% in the Current Situation Index (ISA) and by 3.3% in the Expectations Index (IE). Relative to November 2007, the survey also registered decreases of 1.52% in the ICC, 11.9% in the ISA and 17% in the IE.

49. Still according to the FGV, businessmen confidence declined in November, as in October. The Industry Confidence Index (ICI) reached 84.1 points in November, seasonally adjusted, down 20.3 points month-on-month and 35.1 points in comparison to the August-October quarter. The index reached the lowest level since July 2003 and fell below 100 points, indicating expectations of declining industrial activity. Among its components, and also in seasonally adjusted terms, the Current Situation Index (ISA) leveled at 85.3 points, 24.4 points below the October outcome. The Expectations Index (IE) declined more moderately, 16.4 points, reaching 82.8 points. Considering use categories, all indicators stood below 100 points. Consumer goods, that registered the higher confidence level in the observed series, 90.1 points, had a 46 points reduction in comparison to November 2007. In the same comparison basis, construction material had the smallest fall, 33.1 points, while capital goods registered the biggest one, 51.9 points, leveling at 76.3 points.

50. In accordance with the FGV Manufacturing Industry Survey, installed capacity utilization (Nuci) reached 85.2% in November, 2 p.p. below November 2007, and 84% in the seasonally adjusted series, 1.3 p.p. below the previous month. In November 2008, only construction materials registered a year-over-year positive change (1.9 p.p.). Considering industrial segments, pharmaceuticals and textiles, should be highlighted in the same comparison bases, with 2.8 p.p. and 2.2 p.p. increases, respectively.

**Labor market**

51. According to the Ministry of Labor and Employment (MTE), 61.4 thousand new formal jobs were created in October 2008, the worst outcome for the month since 2002, reflecting a significant deceleration in comparison to the previous months. In the year through October, 2,148 thousand new jobs were registered, with an 18.5% increase in comparison to the same period of 2007. Employment level increased by 0.2% month-on-month in seasonally adjusted terms, expanding in all sectors but in the manufacturing industry, in which it remained stable; one should highlight the 0.6% increase in the construction sector and the 54.6 thousand new jobs in retail sector. Considering the observed series, there were increases year-to-date terms (6.5%) and on a twelve-month basis (6.4%).

52. According to the IBGE employment survey (PME), carried out in the six main metropolitan areas of the country, the unemployment rate stood at 7.5% of the economically active population (PEA) in October, remaining relatively stable in comparison to the 7.6% registered in the two previous months. Compared to October 2007, unemployment declined 1.2 pp, corresponding to the second smallest rate of all series, just below the 7.4% registered in December 2007. In seasonally adjusted terms, unemployment reached 7.6%, leveling with September's outcome. The relative stability of the unemployment rate in September and October, in the observed series, reflected the 143 thousand people growth in the PEA and 176 thousand new jobs. Compared to October 2007, occupation increased 4%, sustaining the pace of new jobs creation, which had a 3.9% increase in the ten first months of 2008. The PEA expanded 2.6% year-over-year, and 2.2% in the year through October. The number of formal workers increased 1.9% in October, month-on-month, corresponding to 186 thousand jobs; the total of informal workers reduced by 42 thousand jobs (-1.4%), while the number of self-employed workers remained stable. In the year through October, formal workers in the private sector led occupation growth (8.1% increase), followed by the 3.7% increase in public sector employees; jobs for informal workers had the worst performance in the period, with a 0.1% expansion.

53. The same survey pointed that average real earnings of occupied workers reduced by 1.3% in October, month-on-month, and increased 4.5% year-over-year, with a deceleration in relation to the two previous months, when they showed 5.7% and 6.4% expansions, respectively. Real payrolls decreased 0.5% in October, month-on-month, but still show an 8.6% increase year-over-year. In the year through October, real payrolls expanded 7.4%, with highlights for the 9.4% and 8% increases in private and public sectors, respectively.

54. In October, the PME survey shows that the aggravation of the international crisis did not affect yet the labor market in the country's main metropolitan areas. In a first moment, the adjustment should happen through the reduction of work shifts and adoption of collective vacations, impacting real earnings, while layoffs will become an option if the crisis lasts for a longer period.

55. According to the CNI data seasonally adjusted by the BCB, employment in manufacturing industry grew 0.1% in October, after a 0.7% expansion in September, resulting in a 1.1% elevation in the quarter ended in October, quarter-on-quarter. Year-over-year, employment in the manufacturing industry and industrial real payroll increased 3.9% and 3.8%, respectively, in October. In the first ten months of 2008, the same indicators increased by 4.3% and 5.2%, respectively, year-over-year.

**Credit and delinquency rates**

56. Outstanding credit in the financial system reached R$1,187 billion in October, an expansion of 2.9% in monthly terms, and of 34% on a twelve-month trailing basis. This volume corresponded to 40.2% of GDP, compared to the figures of September (39.2%) and October/2007 (33.6%). According to the same comparison basis, non-earmarked credit operations increased 2.6% and 37.3%, respectively. Among the non-earmarked operations, leasing operations remained dynamic, with a share of 71.7% in the total of financial system, with expansions of 116.3% and 71.9% for credit to individuals and to corporate, respectively, in the last twelve months. Credit to agricultural sector expanded 11.8% in

the month, 37.4% in the quarter, and 70.3% in the last twelve months. Regarding earmarked credit, operations increased 3.9% month-on-month 28.2% on a twelve-month trailing basis. This monthly result was basically due to the 5.4% increase in credit operations performed by the BNDES (Brazilian Development Bank). Considering the segmentation by economic activity, loans to industry increased 3.8% in October month-on-month and 41.8% in the last twelve months.

57. The average interest rate on non-earmarked credit operations, used as reference for interest rates, reached 42.9% p.a. in October, up from 40.4% p.a. in September and 35.4% p.a. in October 2007. The average rate on credit for individuals increased 1.7 p.p. in October, month-on-month, reaching 54.8% p.a., while the average rate on corporate credit showed expansion of 3.3 p.p. also on monthly terms, reaching 31.6% p.a. In October 2007, the average rate on credit to individuals and credit to corporate stood at 45.8% p.a. and 23.4% p.a., respectively.

58. The average tenure on non-earmarked credit operations, used as reference for interest rates for individuals reached 374 days in October, compared to 375 days in September and 342 days in October 2007. The average tenure of corporate credit operations reached 297 days, while the average tenure for credit operations to individuals totaled 482 days, compared to 270 days and 421 days, respectively, in October 2007.

59. Delinquency rates in the financial system (non-earmarked loans, used as reference for interest rates, in arrears for more than ninety days) stood at 4.1% in October, a 0.4 p.p. decrease year-over-year. Delinquency rates for credit operations with corporate and individuals reached 1.7% and 7.4%, respectively, compared to 2.3% and 7.0% in October 2007.

60. Net delinquency rate for retail credit, measured by the ACSP, reached 6.4% in November, up from 5.5% in the same month of 2007. In the year through November, the average delinquency rate stood at 6.8%, up from 6.1% in the same month of the previous year.

**External environment**

61. Global economy and particularly, advanced countries face severe deceleration, and there are clear evidences of recession in many of these countries. Overall, forecasts for 2009 show contractions of both real GDP growth and inflation indexes.

62. Global financial crisis has affected both consumer and businessmen confidences. Data from previous weeks have shown that businessmen confidence has suffered sharply deterioration in many countries. This situation reflects particularly a generalized decrease in services and manufacturing PMIs recently published. It is also evident in emerging economies, where the levels of businessmen and consumer confidence have also fallen sharply, giving additional evidences that these countries will suffer the impact of the recession that hits the developed economies.

63. In the fourth quarter of 2008, global demand retraction sharpened, installed capacity utilization lowered and unemployment increased. In the U.S., numbers of November showed the most significant job cuts since the 70s, bringing the unemployment rate to reach the highest level in fifteen years (6.7%). In the other developed economies, labor market conditions also show deterioration.

64. Price behavior confirms the trend of disinflation started in the third quarter of this year. This pattern is more evident in economies that present lower level of activity and quicker falls in commodities prices, particularly reflecting the sharp reduction in oil prices. In the United States, this pattern is reinforced by the dollar appreciation. However, in some emerging countries, exchange-rate depreciation prevents further price reductions and limits the actions of their central banks.

65. In this context, the majority of central banks started or intensified monetary easing procedures, based not only on the broadening of the risks of recession, but also on fears of deflation. In emerging economies from Southeast Asia, that are more dependent upon exports, local central banks have performed cuts in their policy rates in an attempt to mitigate the impact that the negative expectations about the worldwide economy have over their

local industrial production. In China, besides the US$ 586 billion fiscal package, the People's Bank of China implemented the most drastic rate reduction since October 2007 (the fourth since September 2008) from 6.66% to 5.58%. The deterioration in global macroeconomic conditions may increase the number of emerging countries to perform rate cuts in the near future.

## Foreign trade and international reserves

66. Brazilian trade surplus reached US$1.6 billion in November, totaling surpluses of US$22.4 billion in the year and US$26.1 billion in the last twelve months. In the year through November, exports reached US$184.1 billion, and imports, US$161.7 billion, growing by 25.2% and 46.3%, respectively, year-over-year. Total external trade recorded a US$345.8 billion from January to November, totaling US$370.6 billion in twelve months.

67. In November, exports totaled US$14.8 billion, reaching a US$737.7 million daily average, a 5% growth year-over-year. Imports totaled US$13.1 billion in the month, with a US$657 million daily average, a 9.2% increase year-over-year.

68. Based on the liquidity concept, international reserves totaled US$206.4 billion in November, with increases of US$3.2 billion in the month and US$26 billion relative to the end of 2007. Under the cash concept, international reserves totaled US$194.7 billion, a US$2.6 billion decrease month-on-month and a US$14.3 billion increase year-over-year.

## Money market and open market operations

69. Immediately after the last Copom decision in October, the future yield curve experienced an upward parallel shifting. The interruption of the tightening monetary cycle and the expectation of a higher inflation in the near term were decisive factors for this movement. From November on, however, the behavior of the yield curve changed and the interest rates began to show a falling trajectory, mainly influenced by the release of both inflation data below market expectations, and economic data showing a retreat in the economic activity level. In the beginning of December, the fall in interest rates became more intense especially in the long-term segment. Between October 27 and December 8, one-, three-, and six-month rates decreased by 50 bps, 78 bps and 168 bps, respectively. Moreover, one-, two- and three-year rates decreased by 299 bps, 376 bps, and 430 bps, respectively. Real interest rates, measured by the differential between the one-year forward nominal interest rate and the smoothed twelve-month ahead inflation expectation, decreased from 10.33% on October 27, to 7.38% on December 8.

70. In the period between October 28 and December 8, the BCB carried out traditional FX swap auctions, in which assumes a long position in domestic interest rate and a short position in FX. These operations totaled US$18.1 billion, US$5.1billion of them rolling contracts due on December 1.

71. In its open market operations, the BCB carried out, from October 28 to December 8, weekly five- and seven-month fixed rate repo operations, borrowing. The average daily balance of these operations reached R$45.1 billion, of which R$31.8 billion were seven-month operations. In the same period, the BCB borrowed money through 32 overnight repo operations. The BCB also conducted daily, at the end of day, two-working-day-tenure liquidity management operations. Operations with tenors less than thirty days, including daily liquidity management operations, averaged R$93.6 billion, on a daily basis, borrowing. In addition, the BCB conducted borrowing operations with tenures of 12 and 30 working days on October 30; of 10 and 29 working days on October 31; and of 23 working days on November 7. These operations draw from the market the following amounts: R$139.5 billion, R$13.1 billion, R$15 million, R$1.3 billion, and R$4.4 billion, respectively. These operations averaged R$151.9 billion, on a daily basis.

72. Between October 28 and December 8, the National Treasury raised a total of R$19.1 billion: R$6.9 billion via issuance of LTNs maturing in 2009 and 2011; R$11.5 billion LFTs maturing in 2010, 2011, and 2012; and R$0.7 billion in NTN-Bs maturing in 2013, 2017, 2035, and 2045.

73. In the same period, the Treasury conducted auctions to sell LTNs maturing in July and October

2009 and bought LTNs maturing in January 2009, totaling R$1.5 billion; and conducted auctions to sell LFTs maturing in March and December 2011 against the purchase of LFTs maturing in December 2008, totaling R$2.7 billion. The sales of NTN-Bs settled in other National Treasury securities maturing 2017, 2024, 2035 and 2045 totaled R$0.9 billion. The Treasury also conducted purchase auctions of LTNs and NTN-Bs totaling R$2.0 billion and R$0.1 billion, respectively.

74. On October 29, the Treasury conducted simultaneous purchase/selling auctions of NTN-F maturing in 2012, 2014 and 2017. The purchase totaled R$0.3 billion, while the selling amounted R$74 thousand.

# Appendix

## Banco Central do Brasil Management

## Members of the Monetary Policy Committee

# Banco Central do Brasil Management

## Board

**Henrique de Campos Meirelles**
Governor

**Alexandre Antonio Tombini**
Deputy Governor

**Alvir Alberto Hoffmann**
Deputy Governor

**Anthero de Moraes Meirelles**
Deputy Governor

**Antonio Gustavo Matos do Vale**
Deputy Governor

**Maria Celina Berardinelli Arraes**
Deputy Governor

**Mario Gomes Torós**
Deputy Governor

**Mário Magalhães Carvalho Mesquita**
Deputy Governor

# Members of the Monetary Policy Committee

## Voting members

**Henrique de Campos Meirelles**
Governor

**Alexandre Antonio Tombini**
Deputy Governor

**Alvir Alberto Hoffmann**
Deputy Governor

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Deputy Governor

**Maria Celina Berardinelli Arraes**
Deputy Governor

**Mario Gomes Torós**
Deputy Governor

**Mário Magalhães Carvalho Mesquita**
Deputy Governor

## Non-voting members

**Altamir Lopes**
Head of the Departament of Economics (Depec)

**Carlos Hamilton Vasconcelos Araújo**
Head of the Research Departament (Depep)

**João Henrique de Paula Freitas Simão**
Head of the Departament of Open Market Operations (Demab)

**José Antônio Marciano**
Head of the Departament of Banking Operations and Payments System (Deban)

**Márcio Barreira de Ayrosa Moreira**
Head of the Departament of International Reserve Operations (Depin)

**Renato Jansson Rosek**
Head of the Investor Relations Group (Gerin)

# Acronyms

| | |
|---|---|
| **ABCP** | Asset-backed commercial papers |
| **ABS** | Asset Backed Security |
| **ACC** | Advance on Exchange Contracts |
| **ACE** | Advance of Exchange Delivered |
| **ACSP** | São Paulo Trade Association |
| **AGF** | Federal Government Acquisitions Program |
| **AIG** | American Internacional Group |
| **Aladi** | Latin American Integration Association |
| **Anfavea** | National Association of Automotive Vehicle Manufacturers |
| **b.p.** | Basis point |
| **BNDES** | National Bank of Economic and Social Development |
| **BoE** | Bank of England |
| **BoJ** | Bank of Japan |
| **Caged** | General File of Employed and Unemployed Persons |
| **CDS** | Distribution Centers |
| **CMN** | National Monetary Council |
| **CNI** | National Confederation of Industry |
| **Cofins** | Contribution to Social Security Financing |
| **Conab** | National Supply Company |
| **Copom** | Monetary Policy Committee |
| **Corfo** | Corporación de Fomento de la Producción |
| **CPFF** | Commercial Paper Funding Facility |
| **CRB** | Commodity Research Bureau |
| **CSI** | Current Situation Index |
| **DAX** | Deutscher Aktienindex |
| **ECB** | European Central Bank |
| **EI** | Eligible Interest Bonds |
| **Embi+** | Emerging Markets Bond Index Plus |
| **EU** | European Union |
| **FAT** | Worker Support Fund |
| **FDI** | Foreign Direct Investments |
| **FDIC** | Federal Deposit Insurance Corporation |
| **Fecomercio SP** | Trade Federation of the State of São Paulo |
| **Fed** | Federal Reserve |
| **Fenabrave** | National Federation of Automotive Vehicle Distribution |
| **FGC** | Credit Guaranty Fund |
| **FGV** | Getulio Vargas Foundation |
| **FIDC** | Receivables-backed Investment Funds |
| **FND** | National Development Fund |

| | |
|---|---|
| **FTSE 100** | Financial Times Securities Exchange Index |
| **Funcex** | Foreign Trade Studies Center Foundation |
| **GDP** | Gross Domestic Product |
| **Gerin** | Executive Investor Relations Group |
| **GFCF** | Gross Fixed Capital Formation |
| **GGGD** | Gross General Government Debt |
| **GSE** | Government sponsored enterprises |
| **HBOS** | Halifax Bank of Scotland |
| **IBGE** | Brazilian Institute of Geography and Statistics |
| **Ibovespa** | São Paulo Stock Exchange Index/ Bovespa Index |
| **ICC** | Consumer Confidence Index |
| **Icea** | Current Economic Conditions Index |
| **ICI** | Industrial Confidence Index |
| **ICMS** | Tax on the Circulation of Merchandise and Services |
| **ID** | Interbank Deposit |
| **IEA** | International Energy Agency |
| **IEC** | Consumer Expectations Index |
| **IGP-DI** | General Price Index – Domestic Supply |
| **IGP-M** | General Price Index – Market |
| **IMF** | International Monetary Fund |
| **INC** | National Confidence Index |
| **INCC** | National Cost of Construction Index |
| **INCC-DI** | National Cost of Construction Index – Domestic Supply |
| **Inec** | National Consumer Expectations Index |
| **IOF** | Financial Operations Tax |
| **IPA-DI** | Wholesale Price Index |
| **IPCA** | Extended National Consumer Price Index |
| **IPC-Br** | Consumer Price Index – Brazil |
| **IPI** | lndustrialized Products Tax |
| **Ipsos** | Ipsos Public Affairs |
| **IPVA** | Tax on Automotive Vehicle Proprietorship |
| **IRPJ** | Corporate Income Tax |
| **IRRF** | Income Withholding Tax |
| **Loas** | Social Assistance Law |
| **LSPA** | Systematic Farm Production Survey |
| **LTCM** | Long-Term Capital Management |
| **MBS** | Mortgage-Backed Security |
| **Mercosur** | Southern Common Market |
| **MMIFF** | Money Market Investor Funding Facility |
| **MP** | Provisional Measure |
| **MTE** | Ministry of Labor and Employment |
| **Nuci** | Installed Capacity Utilization Level |
| **OECD** | Organisation for Economic Co-operation and Development |
| **Opec** | Organization of Petroleum Exporting Countries |
| **p.p.** | Percentage points |
| **p.y.** | Per year |
| **PAC** | Growth Incentive Program |
| **PAF** | Annual Financing Plan |
| **PBC** | People's Bank of China |
| **PDCF** | Primary Dealer Credit Facility |

| | |
|---|---|
| **PEA** | Overall Labor Force |
| **PIM-PF** | Monthly Industrial Survey – Physical Production |
| **PIS** | Social Integration Program |
| **PMC** | Monthly Retail Trade Survey |
| **PME** | Monthly Employment Survey |
| **PPI** | Pilot Investment Project |
| **PSND** | Public Sector Net Debt |
| **RBA** | Reserve Bank of Australia |
| **RMBS** | Residential Mortgage-Backed Security |
| **RMV** | Lifetime Monthly Income |
| **RTSI** | Russian Trading System Index |
| **S&P 500** | Standard and Poor's 500 |
| **SCIT** | Manufacturing Industry Survey |
| **SCPC** | Credit Protection Service Center |
| **Selic** | Special System of Clearance and Custody |
| **Sensex** | Bombay Stock Exchange Sensitive Index |
| **SFP** | Supplementary Financing Program |
| **SLS** | Special Liquidity Scheme |
| **SNB** | Swiss National Bank |
| **SRB** | Sveriges Riksbank |
| **TAF** | Term Auction Facility |
| **TALF** | Term Asset-Backed Securities Loan Facility |
| **TARP** | Trouble Asset Relief Program |
| **TN** | National Treasury |
| **TPRA** | Term Purchase and Resale Agreements |
| **TSB** | Trustee Savings Bank |
| **TSLF** | Term Securities Lending Facility |
| **ULC** | Unit Labor Cost |
| **USA** | United States of America |
| **Vale** | Companhia Vale do Rio Doce |
| **VAR** | Autoregressive Vector |
| **VIX** | Chicago Board Options Exchange Volatility Index |
| **XU100** | Istanbul Stock Exchange National 100 Index |