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 December 2014. The chapter also presents the analysis of the inflation prospects up to the first quarter of 2017 and of the Gross Domestic Product (GDP) growth up to the fourth quarter of 2015. Inflation projections are presented in two major scenarios. The first scenario, called the baseline scenario, assumes that the Selic rate will remain unchanged over the forecasting horizon at 12.75% per year, which is the level set by the Copom at its most recent meeting on March 3 and 4, and that the exchange rate will remain at R$3.15 per US dollar. The second scenario, named the market scenario, employs the expected paths for the policy interest rate and for the exchange rate drawn from the survey carried out by the Banco Central do Brasil's Investor Relations and Special Studies Department (Gerin) among independent analysts. It is important to stress that these scenarios are used only as support for monetary policy decisions and that their assumptions should not be viewed as Copom forecasts about the future behavior of interest and exchange rates. The projections released here are based on the information set available up to the cutoff date March 13, 2015.

The projections for inflation and for GDP growth released in this Report are not point estimates. They consist of probability intervals that embody the degree of uncertainty existing at the above mentioned cutoff date. Inflation projections depend not only on assumptions about the interest and exchange rates, but also on a set of assumptions about the behavior of exogenous variables. The most likely set of assumptions considered by the Copom is used to build the scenarios to which the Committee attaches the greatest weight on making its interest rate decisions. On setting out these assumptions, the Copom seeks to foster transparency to monetary policy, thereby contributing to the effectiveness of policy decisions in controlling inflation, which is its primary objective.

6.1 Inflation determinants

The twelve-month inflation measured by the change in the Broad National Consumer Price Index (IPCA) reached 7.70% in February, 2.02 p.p. higher than the value recorded up to February 2014. On one hand, market prices have accumulated a twelve-month change of 7.12% (6.28% until February 2014). On the other hand, regulated and monitored prices increased 9.66% (3.71% up to February 2014). Within the set of market prices, the increase of non-tradable goods reached 8.17% in twelve months (7.19% up to February 2014), and of tradable goods amounted to 5.92% (5.25% up to February 2014). Twelve-month inflation in the food and beverage group was 8.99% (6.31% up to February 2014) and in the services sector – around one-third of the consumption basket of IPCA – was 8.58% (8.20% up to February 2014) and remains above the market prices inflation.

The average monthly changes of the measures of underlying inflation calculated by the Central Bank remained at 0.83% in January and February, reaching 6.78% in twelve months (0.60 p.p. higher than the rate recorded in February 2014). Specifically, the core that excludes the prices of monitored goods and food at home rose from 0.64% in January to 0.91% in February; and the smoothed trimmed mean core, from 0.74% to 0.77%. The non-smoothed trimmed mean core changed from 0.79% to 0.73%; and the exclusion core – which excludes ten items from the groups food at home and fuels – changed from 1.16% to 0.90%. The double weighted core continued at 0.83%. The IPCA diffusion index reached 68.1% in February (3.8 p.p. higher than that of February 2014), and 68.5%, in the three-month average (0.1 p.p. below the average observed from December 2013 to February 2014).

Broader inflation, measured by the General Price Index (IGP-DI) and characterized by higher volatility when compared to the IPCA, was 0.53% in February and 0.67% in January. Accordingly, the twelve-month inflation reached 3.73% (6.31% until February 2014). The main component of the IGP-DI, the IPA, registered a variation of 1.68% in twelve months up to February, as the result of 6.18% inflation in the agricultural sector and of 0.00% in the industrial sector. In turn, the change in the IPC, which is the second most important component of the IGP-DI, reached 7.98% in the twelve months to February (5.96% up to February 2014). The INCC, the price index with the smallest weight in the IGP-DI, increased 6.97% in twelve months (8.04% up to February 2014), due to the change of 8.31% in labor cost and of 5.53% in the cost of materials, equipment and services.

The high frequency coincident indicator of economic activity, IBC-Br, which provides monthly production estimates for the three sectors of the economy, decreased 0.55% in December, compared to the previous month, considering seasonally adjusted series. Therefore, the IBC-Br growth rate has shifted to 0.65% in the last twelve months. In turn, the PMI for Brazil shifted from 49.2 in January to 51.3 in February, surpassing the 50.0 level for the first time since September 2014.

The Industry Confidence Index (ICI), the Consumer Confidence Index (ICC) and the Services Sector Confidence Index (ICS), computed by FGV, decreased in February. The ICI decreased 3.4%. The 4.9% fall of the ICC and the 5.4% decline of the ICS caused these indicators to reach their lowest values in their historical series, which began, respectively, in September 2005 and June 2008.

According to the seasonally adjusted data of IBGE, the industrial production grew 2.0% in January after decreasing 3.2% in December, but build up in twelve months a negative change of 3.5%. Considering non-seasonally adjusted series, the industrial production decreased 5.2% in January, relative to the same month of the previous year, with negative results in 20 of the 26 surveyed activities. Among the end-use categories and comparing the industrial production of December 2014 and January 2015 based on seasonally adjusted series, the capital goods sectors showed the strongest expansion (9.1%), followed by the intermediate goods sector (0.7%). On the other hand, durable consumer goods (-1.4%) and semi and non-durable consumer goods (-0.3%) registered a decline in production. Comparing the industrial production of January 2015 with the one for the same month of 2014, production decreased in the four categories: capital goods (-16.4%), consumer durables (-13.9%), semi and non-durable goods (-5.3%) and intermediate goods (-2.4%). According to seasonally adjusted data from the National Confederation of Industry (CNI), the real revenue of the manufacturing industry decreased 2.6% from December to January and it is at a level 8.4% lower than the one observed in January 2014.

The Installed Capacity Utilization Level (Nuci) in the manufacturing sector, computed and seasonally adjusted by FGV, reached 81.6% in February. In terms of sectoral distribution, capacity utilization is more intense in the materials for construction sector (87.9% according to seasonally adjusted data), and less strong in the consumer goods sector (77.6%). With regard to inventories, the indicator for the manufacturing sector, calculated and seasonally adjusted by FGV, increased since the release of the previous Report. In February, 10.8% of the surveyed establishments had excessive inventories (11.3% in January), and 0.6% had insufficient inventories (0.8% in January), according to seasonally adjusted data. Still regarding the Manufacturing Industry Conjuncture Survey, conducted by FGV, inventories remain at high levels, in particular, in the capital goods and durable consumer goods sectors.

The retail volume for the restricted retail trade increased 0.6% in January, compared to January 2014, while the broader retail trade contracted 4.9% in the same basis of comparison (the monthly rates were 0.8% and 0.6%, respectively, considering seasonally adjusted series). Accordingly, the twelve-month growth rate was 1.8% for the restricted retail trade and -2.4% for the broader retail trade. In January, retail volume contracted in four of the ten segments surveyed by IBGE, taking into account the seasonally adjusted index. In the next months, sales will continue to be influenced by government transfers, by payroll real growth and by moderate credit expansion.

The IBGE reported the January results of the Continuous National Household Sample Survey (PNADC), which produces information about the population's participation in the labor market. According to the survey, the estimated unemployment rate was 6.8% in the moving quarter that ended in January 2015, which is 0.4 p.p. higher than in the same period of the previous year. Furthermore, in accordance with the results from the Monthly Employment Survey (PME), which is also conducted by IBGE and covers six metropolitan regions, the unemployment rate reached 5.3% in January, 1.0 p.p. higher than in the previous month. It is worth noting that the lower expansion of the labor supply in recent years – as indicated by the lower growth rate of the working-age population (PIA) – has contributed significantly to keep the unemployment rates at historically low levels. However, at the margin, the employment level decreased (0.5 p.p. in relation to the previous month and 0.9 p.p. in relation to January 2014), which is consistent with the registered rise in the unemployment rate. Still according to the PME, the average habitual real labor income increased 0.4% in January in comparison to December 2014 and rose 1.7% in relation to the same month of the previous year. Formal employment shows moderation in the pace of jobs creation. According to the data released by the Ministry of Labor and Employment (MTE), 41 thousand jobs were created in twelve months up to January 2015 (731 thousand up to January 2014).

In addition to rising payrolls, credit availability – largely determined by macroeconomic stability, improvement in financial system infrastructure and institutional reforms in recent years – has been an important driving force behind growth of household consumption. Regarding credit availability, the Committee emphasizes that the central scenario considers a moderate credit expansion. Total credit to households reached R$1,425.3 billion in January, with 13.2% nominal growth relative to January 2014. In particular, housing loans for households, whose operations consist mainly on earmarked resources, increased 27.9% and reached R$439.6 billion, which is equivalent to 8.5% of GDP. Delinquency rates have shown stability at the margin, at levels consistent with the phase of the cycle.

The volume of credit to corporations totaled R$1,587.6 billion in January (9.2% higher than registered in January 2014) and the average interest rate reached 17.4% (0.9 p.p. higher than the average rate observed in January 2014). In particular, loans and financing to corporations with resources provided by the National Bank of Economic and Social Development (BNDES) amounted to R$593.9 billion – an increase of 13.7% relative to January 2014.

Regarding the capital market, the volume of primary issues of shares registered in the Securities and Exchange Commission of Brazil (CVM) reached R$15.1 billion in twelve months up to December 2014 (R$7.2 billion up to December 2013). In turn, debenture issues, excluding the issuance of leasing companies, totaled R$66.6 billion in twelve months up to December 2014 (R$68.9 billion in the same period of the previous year). In total, firms financing from capital markets by means of issues of shares, debentures, commercial papers and receivables in credit rights reached R$118.3 billion in twelve months up to December 2014 (R$102.0 billion in the same period of 2013).

With regard to the trade balance, the twelve-month deficit reached US$3.8 billion in February (compared to US$1.4 billion superavit in February 2014). This result stemmed from US$218.9 billion in exports and US$222.7 billion in imports, which represented decreases of 9.7% and 7.6%, respectively, in relation to the twelve-month period that ended in February 2014. Considering the twelve months up to February 2014, the exported volume decreased 1.8% and the average price of exports decreased 6.4%, while the imported volume decreased 3.7% and the average price of imports diminished 2.2%.

The twelve-month current account deficit reached US$90.4 billion in January 2015, which is equivalent to 4.2% of GDP.

The remittances of profits and dividends totaled US$25.7 billion in liquid terms (US$26.5 billion in January 2014) and the expenses under the item called “operational leasing services”, which are mainly meant to oil and minerals exploitation, reached US$22.5 billion (US$19.1 billion up to January 2014). It is also worth noting that imports of oil and oil derivatives reached US$33.9 billion in twelve months up to January (US$35.4 billion up to January 2014), while export revenues of these products shifted from US$23.6 billion to US$25.4 billion.

Foreign direct investments, which have been the main financing source of the balance of payments, totaled US$61.4 billion in twelve months up to January that is equivalent to 2.8% of GDP.

Regarding global activity, since the previous Report, leading indicators point to a scenario of economic activity recovery in some mature economies and of strengthening of the growth pace in others, in the relevant horizon for monetary policy. In Europe, despite recent improvements, high unemployment rates, along with fiscal consolidation and political uncertainties still constitute elements of investment and growth restraint. In the United States, there is a more consolidated view regarding the sustainability of economic recovery observed in the last quarters. In emerging economies, the pace of economic activity has not met expectations, despite some resilience of domestic demand.

Brent oil prices, since the release of the previous Report, decreased to a level close to US$47 in January, but bounced back and rose to a level close to US$55. The geopolitical complexity that surrounds the oil sector tends to boost the volatile behavior of prices, which also reflects the low predictability of some global demand and supply components. Regarding other commodities, metal commodities prices decreased 15.0% and agricultural prices fell 10.0%. At the cutoff date of March 13, the price index based on 22 commodities, published by the Commodity Research Bureau (CRB), decreased 8.4% in relation to the cutoff date of the December 2014 Report.

Median expectations of market analysts for the GDP growth rate in 2015 moved from 0.73% to -0.78% between December 5, cutoff date of the previous Report, and March 13. For 2016, the growth rate shifted from 2.00% to 1.30%. In the same period, the median of inflation expectations, as measured by the IPCA, went from 6.50% to 7.93% for 2015; and from 5.70% to 5.60% for 2016. The projected inflation for the next twelve months increased from 6.63% to 6.58%,

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

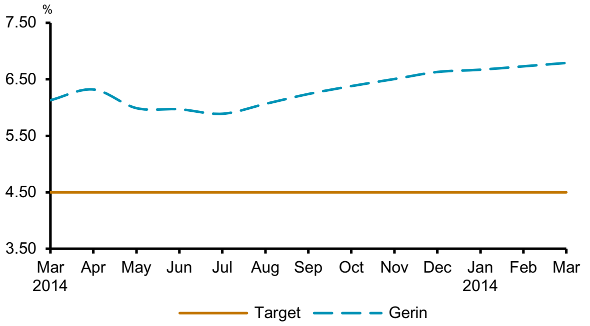
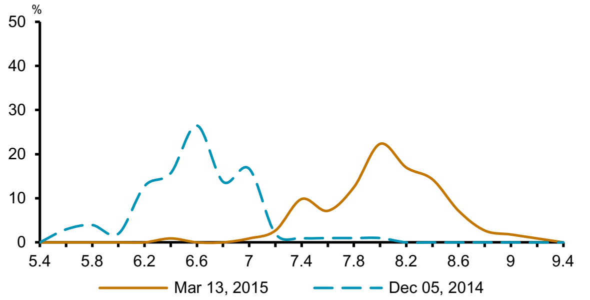


Figure 6.2 – Dispersion of inflation expectations for 2015

Relative frequency



as illustrated in Figure 6.1. Since the release of the December 2014 Report, the dispersion around the central tendency of inflation expectations for 2015 remained stable, as shown in Figure 6.2. The standard deviation of these projections increased from 0.43% to 0.44%.

6.2 Associated risks and monetary policy implementation

The projections used by the Copom are based on a set of assumptions about the behavior of the main macroeconomic variables. This set of assumptions, as well as, the risks associated with them make up the main prospective scenario on which the Committee makes policy decisions.

International evidence, which is ratified by the Brazilian experience, shows that high inflation rates generate distortions that lead to higher risks and depress investments. These distortions are manifested, for example, in shortening the planning horizons of households, businesses and governments, as well as the deterioration of businessmen's confidence. The Committee also emphasizes that high inflation rates subtract the purchasing power of wages and transfers, with negative repercussions over household's confidence and consumption. Therefore, high inflation rates reduce the growth potential of the economy, as well as of jobs and income generation.

On the external side, in general, since the previous report, the prospects of stronger pace of global activity have remained unchanged in the relevant horizon for monetary policy. In this regard, evidence point to relatively more homogeneous growth rates in mature economies, although low and below potential growth, notably in the euro area. In international markets, prospects point to moderation in the dynamics of commodities' prices, as well as the occurrence of volatility spots in currency markets. On the domestic side, the central scenario envisages a pace of activity lower than potential, though it tends to increase with the strengthening of the confidence of firms and households. Changes in the composition of aggregate demand and supply, labor market dynamics and two important processes of relative price adjustments underway and already cited in previous Reports – realignment of domestic relative to international prices and of monitored relative to market prices – are also relevant aspects of the domestic context.

On the external front, despite remaining limited the space for monetary policy and prevailing a scenario of fiscal restriction, prospects indicate recovery of activity in some mature economies and strengthening in the pace of growth in others. In the United States, the trend for improvement in the labor market continues, in an environment that combines moderate levels of inflation, favored, in great part, by the fall in the prices of energy commodities. In Japan, the central bank maintains the monetary stimulus program and signaled with the possibility of deepening the program. In the Euro area, uncertainties about the effectiveness and duration of recent initiatives of the ECB, although smaller, combined with a certain skepticism regarding the soundness of the banking system in some economies in the area, are reflected in the fragility of credit market, employment and investments. Nonetheless, prospects point to a slight improvement in growth this year and the following one in the Euro area, with smaller asymmetry among member countries. Regarding risks for global activity, it is worth mentioning the ones derived from geopolitical tensions and, perhaps more relevant, those deriving from the start of the normalization process of monetary conditions in important mature economies.

The Copom evaluates that the developments in mature economies are transmitted to emerging economies' aggregate demand at an intensity that is proportional to, among other factors, trade and capital flows. In this sense, recent events – on one hand, the improvement, even though gradual, in the activity pace of significant trade partners; and, on the other hand, changes in the slope of the yield curve in important financial centers and volatility spots in the international financial markets – are opposing forces. The Committee also highlights the importance of the transmission through the expectations channel, which affects investment, in the case of entrepreneurs, and consumption, in the case of households. In this context, the Committee notices that despite improvements in important mature economies, in the main emerging economies the pace of activity has not been corresponding to the expectations, in spite of the resilience of domestic demand. In this context, recent indicators suggest that growth rates for the group of emerging economies tend to remain relatively high, though with different distribution and in lower levels than recorded in recent years.

In short, the Committee assesses that, in the relevant horizon, the scenario of higher global growth – despite the disparity of its distribution –, combined with the depreciation of the Real relative to important commercial partners' currencies, move toward making the external demand more favorable to the growth of the Brazilian economy.

The Copom considers that, since the last Report, risks for global financial stability remained high, in particular the ones derived from changes in the slope of the yield curve in important mature economies. These risks translate, for instance, into the partial reversion of the process of compression of risk premia and increase of asset prices. In fact, the prices of credit default swaps (CDS) of banks and sovereigns – in particular, of emerging and European periphery economies – have maintained an upward trend through this quarter, at the same time that stock markets of important emerging economies presented a small increase since last Report. Despite identifying low probability of occurring extreme events in international financial markets, the Committee assesses that the external environment remains complex.

Aggregate commodity prices indexes measured in United States dollars have decreased, compared to values recorded in December 2014 and in February this year. Nevertheless, there was some recovery in January and February in the energy segment. After the stability observed in the last quarter of 2014, the Commodities Brazil Index (IC-Br) returned to decline earlier this year when measured in dollars, mainly influenced by the behavior of agricultural and metal groups. The Committee highlights that, notwithstanding the volatility observed in the markets, prospects indicate a moderate dynamics for commodities prices. Specifically regarding oil prices, the Committee stresses that their influence on domestic inflation does not materialize exclusively through the local price of gasoline, but also via the petrochemical production chain and the expectations channel of consumers and entrepreneurs.

On the internal side, the Committee considers that the growth rates of domestic absorption and GDP lined up and the pace of growth in domestic activity in 2015 will be below potential. For the Committee, the pace of activity tends to increase to the extent that the confidence of firms and households strengthen. In addition, the Committee believes that, in the medium term, major changes must occur in the composition of aggregate demand and supply. Consumption tends to grow at a moderate pace and investments tend to gain momentum. Regarding the external component of aggregate demand, the scenario of recovery in some mature economies and of intensification in the pace of growth in other economies, combined with the depreciation of the Real, tends to favor the growth of the Brazilian economy. On the supply side, the Committee evaluates that, over longer periods, prospects are more favorable for the competitiveness of the sectors directly involved in commercial transactions with the rest of the world – that is, industry and agriculture – while the services sector tends to grow at lower rates than those recorded in recent years.

According to the Copom’s view, the changes mentioned in the previous paragraph anticipate a growth composition in the medium term more favorable to the potential growth. Also point in this direction, improvements in the workforce qualification and the program of public services concessions. In this context, in longer terms, the Committee understands that there is ground for expansion of the investment rates, for a more efficient allocation of the factors of production and, consequently, for growth rates of GDP and potential growth to return to higher levels. The Committee highlights, however, that the speed with which the above mentioned changes and the gains derived from them will be achieved depends, on the domestic side, on the confidence strengthening of firms and households, on the solution of uncertainties from the aggregate supply side and on the materialization of the assumed path for fiscal variables; on the external side, it depends on the solution of uncertainties that are now present, for instance in monetary policy of important mature economies.

In terms of factor markets, the Copom considers that an important source of risk to inflation comes from the labor market, which shows low idle margin, despite some signs of slowdown at the margin. The Committee reaffirms that a crucial aspect under these circumstances is the possibility of real wage increases not compatible with productivity growth, causing negative impacts on the inflation dynamics. At this point, it is worth noting that, according to the theory, which is endorsed by the international experience, wage moderation is a key element to the achievement of a macroeconomic environment with price stability.

Still regarding the labor market, the Copom understands that there are risks, due to the presence of mechanisms in the Brazilian economy that favor the persistence of inflation, derived from the possibility that wage bargaining gives excessive weight to past inflation at the expense of future inflation. In this context, despite the lower raise in the minimum wage this year than in previous years, as well as real wage gains in the last quarters near to the levels consistent with estimates of productivity gains, the Committee evaluates that the wage dynamics remains originating inflationary cost pressures.

Concerning the capital factor, preliminary evidence suggests further reduction of the economy investment rate in the fourth quarter of 2014, calculated from the current National Accounts methodology of IBGE. Specifically in the business segment, three factors could be associated with poor performance of the fixed capital formation: the low confidence of entrepreneurs, the evidence of narrowing profit margins and volatility in the currency markets. Still on the capital factor, one should note that the capacity utilization decreased again over the last quarter of 2014, with increase of the heterogeneity between sectors in comparison with what was observed in the previous Inflation Report.

In terms of idleness indicators for the whole economy, the Copom notes that, in general, conventional measures of output gap have moved toward the disinflationary direction. In fact, at the margin, the economic activity growth rates have been smaller than the estimates of the potential economic growth. Moreover, considering the growth prospects (according to Section 6.3), the Committee evaluates that in the next quarters the output gap measures tend to remain disinflationary.

Regarding fiscal policy, the Copom observes that the main scenario for inflation takes into account the materialization of the trajectories regarding fiscal variables. In this sense, it considers that the fiscal indicator used in the inflation forecasts (the structural primary surplus) tends to maintain some stability in the relevant horizon for monetary policy, therefore leading to fiscal impulses (the change in the structural primary surplus between two periods) of negligible size. The Copom, however, ponders that it cannot discard the migration of fiscal policy to the contentious zone.

In this regard, the Copom understands that the generation of primary surpluses that increase the perception of public accounts sustainability will contribute to create a positive perception of the macroeconomic environment in the medium and long run, therefore, decreasing the cost of financing the public debt. Moreover, a more contained fiscal policy will have favorable implications for the cost of capital in general, what, on its turn, would stimulate private investment in the medium and long run. Specifically on controlling inflation, the Committee points out that the literature and the international best practice recommend a consistent and sustainable fiscal policy design in order to allow monetary policy actions to be fully transmitted to prices.

The Copom understands that a source of risk for inflation lies on the behavior of inflation expectations, negatively affected in the last months by the high level of current inflation, by the dispersion of price increases, by current relative price adjustment processes, among other factors. Moreover, it is worth noting that the systematic mismatch between wage and price increases, the high inflation diffusion and the increase in the prices of frequently bought goods and services – such as food and public service goods – constitute signs that perceived inflation may be higher than actual inflation.

The Copom highlights that the central scenario envisages moderate expansion of credit. In this regard, note that, after years of strong expansion, the credit market aimed to consumption showed moderation, leading, in the last quarters, on the one hand, to lesser exposure of banks, and, on the other hand, to household deleveraging. In an aggregate view, therefore, the mitigation of the risks associated to credit market aimed to consumption can be inferred. In other dimension, and considering the recent actions recently taken, the Copom considers necessary the initiatives towards moderation in subsidies allowances via credit transactions.

The Copom highlights that, since last Report, the prices of domestic assets have had an important correction, partly due to the increase in the risk aversion in international financial markets. Moreover, in the relevant horizon for monetary policy, the Committee evaluates that the risk aversion and the international financial market volatility tend to react to the publication of new indicators and/or to the signaling made by authorities that suggest the beginning of the normalization process of the monetary conditions in big economic blocs, particularly in the United States. Another potential source of disturbance are geopolitical events. It is worth noting, additionally, that eventual rises in volatility and in international markets risk aversion tend to be transmitted, yet partially, to domestic assets.

Specifically on this transmission, it is important to highlight that some elements contribute to reduce the effects of the exchange rate devaluation on the domestic prices: the lower variation of the effective exchange rate when compared to the R$/US$ bilateral rate; the weaker economic performance in 2015 when compared to previous expectations; the more favorable international commodities prices behavior; and the more restrictive monetary policy position[21].

The Copom highlights that, in market economies and in long run, prices tend to show relatively similar growth rates. In this sense, in line with projections reported in the next section, the Copom identifies a realignment process between regulated and market prices. From other point of view, the

21/ About this subject, see the boxes “The Influence of Commodity Prices on the Exchange Rate Pass-through” and “Exchange Rate Pass-through to Prices”, published in this report.

committee notes Real depreciated during the last three years against currencies of important Brazilian trade partners and then, also identifies a realignment process between domestic and international prices. Prospectively, the Committee anticipates that the effects on inflation of these ongoing price realignments tend to be restricted to the short run and to be strongly mitigated in 2016.

From the view of the Copom, the fact that inflation currently stands in high levels in a large part reflects the intensification of the two aforementioned relative price adjustment processes in the economy.

In this context, as the projections presented in the next section show, the Committee notes, as previous anticipated, the increase of inflation in the short run and that inflation tends to remain high in 2015. By recognizing the direct impacts of the relative price adjustment over inflation, the Copom reaffirms the view that the monetary policy can and should restrain the second order effects that derive from them.

In this context, the Copom decided, by unanimity, to increase the Selic rate in 0.50 p.p. to 12.25% p.a., without bias, in the January meeting; and in 0.50 p.p., to 12.75% p.a., without bias, in the March meeting.

In January, voted for the decision of increasing the Selic rate at 12.25% p.a. the following Copom members: Alexandre Antonio Tombini (Governor), Aldo Luiz Mendes, Altamir Lopes, Anthero de Moraes Meirelles, Carlos Hamilton Vasconcelos Araújo, Luiz Awazu Pereira da Silva, Luiz Edson Feltrim e Sidnei Corrêa Marques. In March, voted for the decision of increasing the Selic rate at 12.75% p.a., the following members of the Committee: Alexandre Antonio Tombini (Governor), Aldo Luiz Mendes, Altamir Lopes, Anthero de Moraes Meirelles, Luiz Awazu Pereira da Silva, Luiz Edson Feltrim e Sidnei Corrêa Marques.

The Copom highlights that the aggregate demand tend to remain moderate in the relevant horizon for the monetary policy. From one hand, household consumption tend to stabilize, due to factors such as income and credit growth; on the other hand, relative favorable financial conditions, especially in the real-estate market, public service concession, expansion of agricultural income, among others, tend to favor investments. Exports, in turn, should benefit from the scenario of higher growth of important trade partners and from the Real depreciation. For the Copom, the joint effects from these elements, the fiscal and the asset markets developments, and, in this year, the dynamic of re-composition of monitored prices, are important factors of the set-up to be considered in the future monetary policy decisions. Decisions to be taken with the objective of ensure, during the next year, the convergence of the inflation to the target of 4.5% established by the National Monetary Council (CMN).

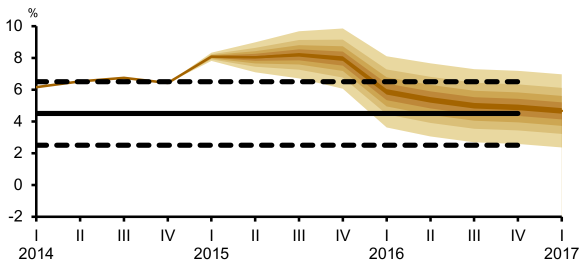
On this subject, the Copom evaluates that the scenario of inflation convergence to 4.5% in 2016 has strengthened. However, for the Copom, the achievements regarding the inflation control – such as favorable signs from medium and long-term expectations indicators – are not yet sufficient.

6.3 Assumptions and inflation forecast

According to traditional procedures, and taking into account the available information set, up to the cutoff date of March 13, 2015, the baseline scenario assumes that the exchange rate remains unchanged over the forecast horizon at R$3.15/US$, and the target for the Selic rate at 12.75% p.a. – the level set by the March 2015 Copom meeting – against R$2.55/US$ and 11.75% p.a. considered in the December 2014 Inflation Report.

The market scenario, in turn, 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 increased compared to the values released in the December 2014 Inflation Report. For the last quarter of 2015, the average rate moved from R$2.68/US$ to R$3.09/US$. For the end of 2016, the average Exchange rate moved from R$2.70/US$ to R$3.11/US$. For the end of 2017, market participants project an average exchange rate of R$3.10/US$.

Figure 6.3 – Projected IPCA-inflation with interest rate constant at 12.75% p.a. (Baseline scenario)
Inflation fan chart



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

Regarding the evolution of the average Selic rate, the expectations for the fourth quarter of 2015 increased from 12.50% p.a. to 13.00% p.a. and, for the end of 2016, shifted from 11.25% p.a. to 11.50% p.a. For the end of 2017, the expectations point to the Selic rate at 10.50% p.a. This trajectory of the average Selic rate is consistent with 360 days pre-DI swap spreads of 12 b.p., and -114 b.p., with respect to the current target for the Selic rate (12.75% p.a.), in the fourth quarters of 2015 and 2016, respectively.

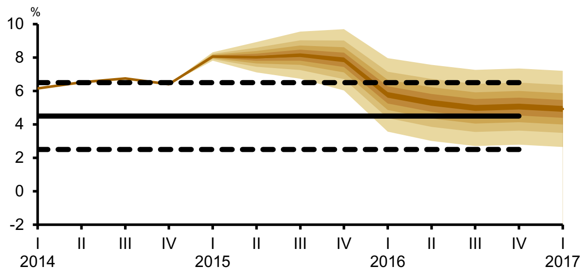
The projection for the change in the set of regulated and monitored prices, in both scenarios, is 11.0% for 2015,

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

Year	Q	Probability Interval 50%	30%	10%	10%	30%	50%	Central projection
2015	1	8.0	8.0	8.0	8.1	8.1	8.2	8.1
2015	2	7.6	7.8	8.0	8.1	8.3	8.4	8.0
2015	3	7.6	7.8	8.1	8.3	8.5	8.8	8.2
2015	4	7.2	7.5	7.8	8.1	8.4	8.7	7.9
2016	1	4.9	5.3	5.7	6.0	6.4	6.8	5.9
2016	2	4.4	4.8	5.2	5.5	5.9	6.3	5.4
2016	3	4.0	4.4	4.8	5.2	5.5	5.9	5.0
2016	4	3.9	4.3	4.7	5.1	5.4	5.8	4.9
2017	1	3.7	4.1	4.5	4.8	5.2	5.6	4.7

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

Figure 6.4 – Projected IPCA-inflation with market interest and exchange rates expectations
Inflation fan chart



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

Table 6.2 – Projected IPCA-inflation with market interest and exchange rates expectations [1/]

Year Q	Probability Interval 50%	30%	10%	10%	30%	50%	Central projection
2015 1	8.0	8.0	8.0	8.1	8.1	8.2	8.1
2015 2	7.6	7.8	8.0	8.1	8.2	8.4	8.0
2015 3	7.6	7.8	8.0	8.3	8.5	8.7	8.1
2015 4	7.1	7.4	7.7	8.0	8.3	8.6	7.9
2016 1	4.9	5.3	5.6	5.9	6.3	6.7	5.8
2016 2	4.4	4.8	5.1	5.5	5.8	6.2	5.3
2016 3	4.0	4.5	4.8	5.2	5.5	5.9	5.0
2016 4	4.1	4.5	4.9	5.2	5.6	6.0	5.1
2017 1	4.0	4.4	4.8	5.1	5.5	5.9	4.9

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

compared to 6.2% considered in the last Report. This projection is based on the variations occurred, up to February, in gasoline (8.4%) and bottled gas (1.2%) prices, as on the assumptions for the accumulated over 2015, of reduction of 4.1% in landline telephone rates and increase of 38.3% in electricity rates. Regarding items for which more information is available, price changes were estimated individually. For the remaining items, the projections are based on models of endogenous determination of regulated prices, which consider, among other variables, seasonal components, market price inflation and General Price Index (IGP) inflation. According to these models, the projected adjustment in the set of regulated and monitored prices in both scenarios is 5.3% in 2016, compared to 5.2% considered in the last Report.

The structural primary surplus that derives from the primary surplus trajectories of 1.2% of GDP for 2015 and 2.0% of GDP for 2016 is considered as the fiscal indicator. For a certain period of time, the fiscal impulse is equivalent to the change of structural surplus, compared to the previous period.

Based on the above assumptions and using the information set available until the cutoff date, projections were constructed for the four-quarter IPCA inflation, consistent with the interest rate and exchange rate paths that characterize the baseline and market scenarios.

The central projection associated with the baseline scenario indicates inflation of 7.9% in 2015, 1.8 p.p. above the projection informed in the Report of December of 2014, and also above the central target level of 4.5% determined by the National Monetary Council (CMN). As can be seen in the Figure 6.3 and in the Table 6.1, in the baseline scenario, the projection starts 2015 at 8.1%, change to 8.0% in the second quarter, to 8.2% in the third, and reduce to 7.9% in the end of the year. In 2016, the projection reduces to 5.9% in the first quarter, again to 5.4% and to 5.0% in the second and third quarters, respectively, and ends the year in 4.9%. In the first quarter of 2017, the projection is at 4.7%.

Still in the baseline scenario, the estimated probability that inflation will breach the upper tolerance level of the target in 2015 stays around 90% and, in 2016, around 12%.

In the market scenario, the projection indicates inflation of 7.9% in 2015, same value of the baseline scenario and 1.9 p.p. above the projection informed in the last Report. As may be seen in Figure 6.4 and Table 6.2, the projection for the twelve-month inflation rate starts 2015 at 8.1%, change to 8.0% in the second quarter of 2015, to 8.1% in the third, and reduces to 7.9% in the end of the year. For the first quarter of 2016, the projection remains at 5.8%, reduces to 5.3% and 5.0% in the second and third quarters, ending the year at 5.1%. In the first quarter of 2017, the projection is at 4.9%.

In the market scenario, the estimated probability that inflation will breach the upper tolerance level of the target in 2015 stays around 89%, and in 2016, around 15%.

Table 6.3 – December 2014 Inflation Report projections

Period	Baseline scenario	Market scenario
2014 IV	6.4	6.4
2015 I	6.4	6.4
2015 II	6.1	6.2
2015 III	6.1	6.1
2015 IV	6.1	6.0
2016 I	5.5	5.5
2016 II	5.2	5.2
2016 III	5.1	5.0
2016 IV	5.0	4.9

The comparison of the trajectories presented in this Report with those released in the previous one – the latter shown in Table 6.3 –, in the baseline scenario, shows increase in inflation projections between the first quarter of 2015 and the second quarter of 2016. It is partly due to higher projections for regulated and monitored prices and to the exchange rate depreciation considered. In the last two quarters of 2016, projections were reduced, closing 2016 in a lower level than the one considered in the previous Report. In the market scenario, the comparison of the trajectories presents similar movements to the baseline scenario until the second quarter of 2016. In the third and in the fourth quarter of 2016, the projection of the market scenario is at, respectively, in the same level and above of the considered in the last Report.

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

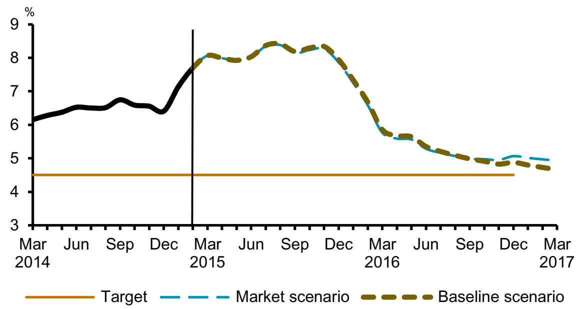
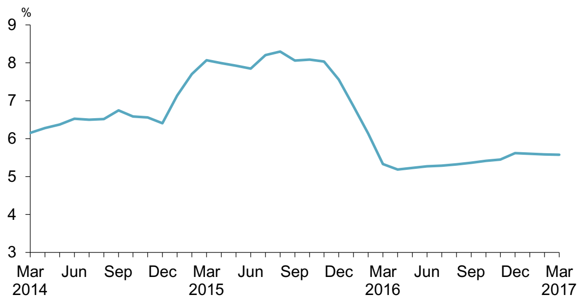


Figure 6.6 – Inflation forecast: VAR models



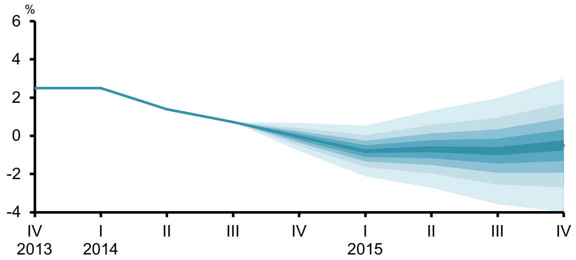
Note: Accumulated inflation in 12 months (% p.a.).
Average forecast generated by the VAR models.

Figure 6.5 shows the path of the twelve-month inflation, according to the baseline and the market scenarios, up to the first quarter of 2017, as well as the inflation target path. Up to February of 2015, the figures are actual inflation and, from then on, projections corresponding to the respective scenarios are used to compose the twelve-month values. In both scenarios, projections indicate that twelve-month inflation tends to remain high in 2015, but should enter in a long declining path still in the end of this year.

The average forecast generated by the Vector Autoregressive (VAR) models, for the twelve-month inflation is presented in Figure 6.6. Up to February of 2015, the values refer to actual inflation and, from then on, to forecasts. According to these models, the inflation projection increases in the first quarter of 2015, remains around this level up to November, and then starts to decline, converging to the unconditional mean at the end of the forecast horizon.

Figure 6.7 illustrates the output growth fan chart built under baseline scenario assumptions. Considering that the GDP growth projection process uses two variables that are not directly observable – potential output and

Figure 6.7 – Projected GDP growth with interest rate constant at 12.75% p.a. (Baseline scenario)
Output fan chart



output gap –, the forecast errors associated with these projections are considerably higher than the errors related to inflation projections. According to this scenario, the projected four-quarter GDP growth is -0.1% in 2014 (0.3 p.p. lower than the one considered in the previous Report), and -0.5% for 2015.