# 6 Inflation outlook

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 March 2015. The chapter also presents the analysis of the inflation prospects up to the second quarter of 2017 and of the Gross Domestic Product (GDP) growth up to the first quarter of 2016. 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 13.75% per year, which is the level set by the Copom at its most recent meeting on June 2 and 3, and that the exchange rate will remain at R$3.10 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 June 12, 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 8.47% in May, 2.10 p.p. higher than the value recorded up to May 2014. On one hand, market prices have accumulated a twelve-month change of 6.82% (7.07% until May 2014). On the other hand, regulated and monitored prices increased 14.09% (4.08% up to May 2014). Within the set of market prices, the increase of non-tradable goods reached 7.79% in twelve months (7.42% up to May 2014), and of tradable goods amounted to 5.71% (6.67% up to May 2014). Twelve-month inflation in the food and beverage group was 8.80% (7.67% up to May 2014) and in the services sector – around one-third of the consumption basket of IPCA – was 8.23% (8.70% up to May 2014) and remains above the market prices inflation.

The average monthly changes of the measures of underlying inflation calculated by the Central Bank changed from 0.70% in April to 0.59% in May, reaching 7.22% in twelve months (0.70 p.p. higher than the rate recorded in May 2014). Specifically, the core that excludes the prices of monitored goods and food at home changed from 0.61% in April to 0.31% in May; the smoothed trimmed mean core, from 0.70% to 0.62; the exclusion core – which excludes ten items from the groups food at home and fuels – changed from 0.75% to 0.62% and the double weighted core changed from 0.74% to 0.66%. On its turn, the smoothed trimmed mean core changed from 0.72% to 0.75%. The IPCA diffusion index reached 70.2% in May (3.5 p.p. higher than May 2014), and 71.6%, in the three-month average (2.3 p.p. above the average observed from March 2014 to May 2014).

Broader inflation, measured by the General Price Index (IGP-DI) and characterized by higher volatility when compared to the IPCA, was 0.92% in April and 0.40% in May. Accordingly, the twelve-month inflation reached 4.83% (7.26% until May 2014). The main component of the IGP-DI, the IPA, registered a variation of 3.29% in twelve months up to May, as the result of 2.75% inflation in the agricultural sector and of 3.50% in the industrial sector. In turn, the change in the IPC, which is the second most important component of the IGP-DI, reached 8.63% in twelve months (6.57% up to May 2014). The INCC, the price index with the smallest weight in the IGP-DI, increased 5.74% in twelve months (7.75% up to May 2014), due to the change of 5.59% in labor cost and of 5.90% 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 1.07% in March, compared to the previous month, considering seasonally adjusted series. Therefore, the IBC-Br growth rate has shifted to -1.26% in the last twelve months. In turn, the PMI for Brazil shifted from 44.2 in April to 42.9 in May, pointing to a sharp fall of private sector activity.

The Industry Confidence Index (ICI), the Consumer Confidence Index (ICC) and the Services Sector Confidence Index (ICS), computed by FGV, decreased 1.6%, 0.6% and 1.6% in May, respectively.

According to the seasonally adjusted data of IBGE, the industrial production decreased 1.2% in April, after decreasing 0.8% in March, and build up in twelve months a negative change of 4.8%. Considering non-seasonally adjusted series, the industrial production decreased 7.6% in April, relative to the same month of the previous year, with negative results in the four end-use categories and in 23 of the 26 surveyed activities. Among the end-use categories and comparing the industrial production of April and March based on seasonally adjusted series, the capital goods sectors showed the strongest reduction (-5.1%), followed by the semi and non-durable consumer goods (-2.2%), by the durable consumer goods (-1.8%) and by the intermediate goods sector (-0.2%). Comparing the industrial production of April with the one for the same month of 2014, production decreased in the four categories: capital goods (-24.0%), consumer durables (-17.1%), semi and non-durable goods (-9.3%) and intermediate goods (-3.2%). According to seasonally adjusted data from the National Confederation of Industry (CNI), the real revenue of the manufacturing industry decreased 6.4% from March to April of 2015 and it is at a level 10.3% lower than the one observed in April 2014.

The Installed Capacity Utilization Level (Nuci) in the manufacturing sector, computed and seasonally adjusted by FGV, reached 79.0% in May. In terms of sectoral distribution, capacity utilization is more intense in the materials for construction sector (82.8% according to seasonally adjusted data), and less strong in the capital goods sector (72.1%). With regard to inventories, the indicator for the manufacturing sector, calculated and seasonally adjusted by FGV, decreased since the release of the previous Report. In May, 16.8% of the surveyed establishments had excessive inventories (14.5% in April), and 1.8% had insufficient inventories (1.8% in April), 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 0.4% in March, compared to the same month of the previous year, while the broader retail trade contracted 0.7% in the same basis of comparison (the monthly rates were -0.9% and -1.6%, respectively, considering seasonally adjusted series). Accordingly, the twelve-month growth rate was 1.0% for the restricted retail trade and -3.4% for the broader retail trade. In March, retail volume contracted in seven of the ten segments surveyed by IBGE, taking into account the seasonally adjusted index.

The Brazilian GDP at market prices decreased 0.2% in the first quarter of 2015 compared to the previous quarter (after increasing 0.3% in the last quarter of 2014), according to seasonally adjusted IBGE data. Compared to the same quarter of 2014, there was a reduction of 1.6% (reduction of 0.2% in the last quarter of 2014 under the same comparison basis). Brazilian economy fell 0.9% in the last four quarters (contraction of 0.7% in the value added and of 1.9% in direct taxes). In terms of components, the production in the agricultural sector changed 0.6% in four quarters; in the industrial sector, -2.5%; and in the services sector, -0.2%.

From a demand side perspective, household consumption – the largest component of aggregate demand – decreased 1.5% in comparison to previous quarter, according to seasonally adjusted data, and 0.9% compared to the same quarter of 2014. Government consumption decreased 1.3% at the margin and 1.5% with respect to the same quarter of 2014. The Gross Fixed Capital Formation (GFCF) decreased 1.3% when compared to the previous quarter and 7.8% when compared to the first quarter of 2014. With respect to the foreign trade sector, exports and imports of goods and services increased 5.7% and 1.2%, respectively, in comparison to the previous quarter and according to seasonally adjusted data. On a year-to-year basis, the contribution was positive for GDP growth, with 3.2% growth of exports and 4.7% decline in imports.

According to the Continuous National Household Sample Survey (PNADC) of IBGE, the estimated unemployment rate was 8.0% in the moving quarter that ended in April 2015, which is 0.9 p.p. higher than in the same period of the previous year. According to the Monthly Employment Survey (PME) of IBGE, which covers six metropolitan regions, the unemployment rate was 6.4% in April, 0.2 p.p. higher than in the previous month and 1.5 p.p. higher than in April 2014. Still according to the PME, the average habitual real labor income decreased 0.5% in April in comparison to March and 2.9% in relation to the same month of the previous year. With respect to formal employment, according to the data released by the Ministry of Labor and Employment (MTE), 97.8 thousand jobs were closed in April and 137.0 thousand in the first four months of the year. In short, available data confirm the beginning of a process of distension in the labor market.

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, which has already been noticed. Total credit to households reached R$1,446.7 billion in April, with 12.1% nominal growth relative to April 2014. In particular, housing loans for households, whose operations consist mainly on earmarked resources, increased 26.3% and reached R$460.4 billion, which is equivalent to 8.2% 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$1,614.3 billion in April (9.0% higher than registered in April 2014) and the average interest rate reached 18.5% (1.9 p.p. higher than the average rate observed in April 2014). In particular, loans and financing to corporations with resources provided by the National Bank of Economic and Social Development (BNDES) amounted to R$605.4 billion – an increase of 14.1% relative to April 2014.

Regarding the capital market, the volume of primary issues of shares registered in the Securities and Exchange Commission of Brazil (CVM) reached R$16.2 billion in twelve months up to April 2015 (R$17.2 billion up to April 2014). In turn, debenture issues, excluding the issuance of leasing companies, totaled R$43.6 billion in twelve months up to April 2015 (R$67.1 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$95.3 billion in twelve months up to April 2015 (R$115.8 billion in the same period of 2014).

With regard to the trade balance, the twelve-month deficit reached US$1.5 billion in May (compared to US$2.9 billion superavit in May 2014). This result stemmed from US$209.7 billion in exports and US$211.2 billion in imports, which represented decreases of 12.2% and 10.5%, respectively, in relation to the twelve-month period that ended in May 2014. Considering the twelve months up to April, the exported volume decreased 1.7% and the average price of exports decreased 9.7%, while the imported volume decreased 4.3% and the average price of imports diminished 4.5%.

The twelve-month current account deficit reached US$100.2 billion in April 2015, which is equivalent to 4.5% of GDP. The remittances of profits and dividends totaled US$22.6 billion in liquid terms (US$25.5 billion in April 2014) and the expenses under the item called "operational leasing services", which are mainly meant to oil and minerals exploitation, reached US$23.3 billion (US$19.9 billion in April 2014). It is also worth noting that imports of oil and oil derivatives reached US$30.6 billion in twelve months up to April (US$34.6 billion up to April 2014), while export revenues of these products shifted from US$23.4 billion to US$24.0 billion.

Foreign direct investments, which have been the main financing source of the balance of payments, totaled US$86.1 billion in twelve months up to April, equivalent to 3.9% 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, in spite of weaker than anticipated data for the first quarter, there is a consolidated view regarding the sustainability of economic recovery observed in the last quarters. In emerging economies, the pace of economic activity has been revised down.

Brent oil prices, since the release of the previous Report, increased to a level close to US$64. 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 increased 0.47% and agricultural prices increased 5.52%.

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

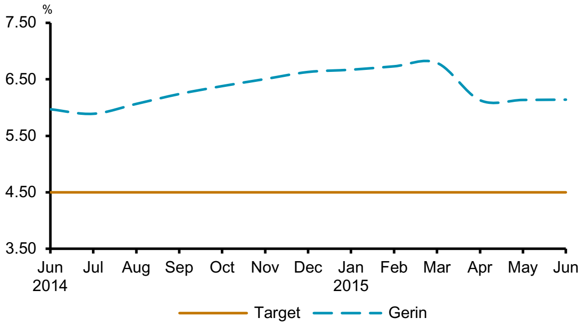
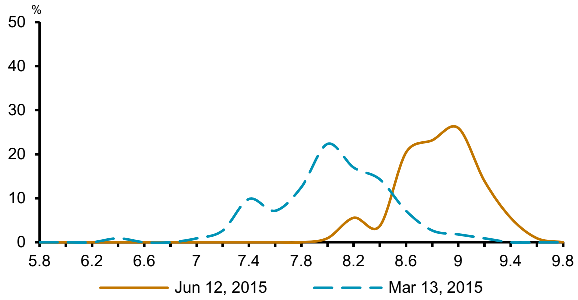



**Figure 6.2 – Dispersion of inflation expectations for 2015**

Relative frequency




At the cutoff date of June 12, the price index based on 22 commodities, published by the Commodity Research Bureau (CRB), increased 2.31% in relation to the cutoff date of the March 2015 Report.

Median expectations of market analysts for the GDP growth rate in 2015 moved from -0.78% to -1.35% between March 13th, cutoff date of the previous Report, and June 12th. For 2016, the growth rate shifted from 1.30% to 0.90%. In the same period, the median of inflation expectations, as measured by the IPCA, went from 7.93% to 8.79% for 2015; and from 5.60% to 5.50% for 2016. The projected inflation for the next twelve months decreased from 6.58% to 6.10%, as illustrated in Figure 6.1. Since the release of the March 2015 Report, the dispersion around the central tendency of inflation expectations for 2015 showed some reduction, as shown in Figure 6.2. The standard deviation of these projections decreased from 0.44% to 0.30%.

## 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 in 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 points 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 and fixed income 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, in spite of a less vigorous economic expansion in the first quarter of 2015, when compared to the last quarter of 2014, 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 aimed to increase economic expansion rate and avoid the risk of a deflationary spiral. In the Euro area, economic activity remains weak and uneven and there is still a certain skepticism regarding the soundness of the banking system in some economies in the area. These factors are reflected in the fragility of credit market, employment and investments. Nonetheless, the ECB's monetary expansion program, the decline of oil prices and the devaluation of the euro contribute, in general, for better growth prospects for this year and the following one in the Euro area, despite a few remaining risks. Regarding risks for global activity, it is worth mentioning the ones 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, the main emerging economies, in general, have shown decline in momentum, in spite of the resilience of domestic demand. Additionally, recent indicators suggest that growth rates for the group of emerging economies tend to remain relatively high, though with uneven 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 relatively 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 some sovereigns – in particular, of European periphery economies – have maintained a high level through this quarter, at the same time that stock markets of important emerging economies showed an 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 recovered, compared to values recorded during the period from March to May this year, notably in the energy sector. Nevertheless, this recovery was not sufficient to regain the price levels observed in the end of 2014. 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 restates that the available indicators of domestic absorption and GDP growth rates have lined up and the pace of growth in domestic activity in 2015 will be below potential. In particular, investment has decreased mainly influenced by non-economic events and private consumption shows signs of moderation. Nevertheless, the Committee believes that, after a necessary period of adjustments, 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 intensification in the pace of global growth, 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 industry and agriculture. The services sector, in turn, 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 GDP growth rate and potential growth rate 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, as anticipated in the previous Report, the Copom considers that the low idle margin in the labor market has eased and some data have confirmed the beginning of a distension process in this market. However, the Committee observes that a larger observation horizon should be considered and that a significant risk, particularly related to the possibility of real wage increases not compatible with productivity growth, with negative impacts on the inflation dynamics, still prevails. 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, as well as real wage gains 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, the twelve-month investment rate of the economy, calculated from the current National Accounts methodology of IBGE, fell for the fourth consecutive quarter in the beginning of 2015. Specifically in the business segment, three factors could be associated with the poor performance of the fixed capital formation: the low confidence of entrepreneurs, the evidence of narrowing profit margins and the volatility in currency markets. Still on the capital factor, one should note that the capacity utilization decreased again in the quarter ending in April – getting close to the levels observed during the acute phase of the 2008-2009 crisis – with maintenance of the high heterogeneity degree of sectoral utilization that is consistent with what was observed in the previous Inflation Report.

In terms of the set of idleness indicators for the whole economy, the Copom points out that, in general, conventional measures of output gap are at a disinflationary zone, aligned with economic activity growth rates observed recently – smaller than the estimates of the potential economic growth. 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 (structural primary surplus) tends to maintain some stability in the relevant horizon for monetary policy, with an inclination to move to the neutrality zone. Therefore, the Committee considers that the emergence of fiscal impulses (the change in the structural primary surplus between two periods) are 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 strengthen the perception of public sector accounts sustainability will contribute to create a positive perception of the macroeconomic environment in the medium and long runs, therefore, decreasing the cost of financing the public debt. Moreover, a more restricted fiscal policy will have favorable implications for the cost of capital in general, which, in turn, will stimulate private investment in the medium and long runs. Specifically on the issue of inflation control, the Committee highlights that the literature and the international best practices 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. One should note that the systematic mismatch between wages and prices increases, the high inflation diffusion and the price rises of goods and services frequently purchased – such as food and public service goods – constitute signs that perceived inflation may be higher than actual inflation. Still regarding inflation expectations, the Committee observes that inflation expectations are near or at the 4.5% p.a. target in the medium and in the long run. However, the Committee stresses that, despite the reduction, inflation expectations for the end of 2016 still shows relevant differences in relation to target. This improvement, when compared with the levels observed in the Inflation Report of March, despite the significant increase in the inflation expectations for the current year, constitutes an important signal about the current strategy of monetary policy effects.

The Copom highlights that the central scenario envisages moderate credit expansion, which has already been noticed. In this regard, after a cycle of strong expansion, the credit market directed toward consumption is undergoing a natural period of moderation, leading in the last quarters, on the one hand, to lesser exposure of banks and, on the other hand, to household deleveraging. Taken together, therefore, one concludes that risks have been mitigated in the consumer credit segment. In another dimension, following recently implemented actions, the Committee considers appropriate to reinforce initiatives aiming to moderate the concession of subsidies through credit operations.

The Copom highlights that, since the previous Report, the prices of domestic assets developed according to risk aversion changes in international financial markets.

Moreover, in the relevant horizon for monetary policy, the Committee evaluates that risk aversion and volatility of international financial markets 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. It is worth noting, additionally, that eventual rises in risk aversion and volatility in international markets tend to be transmitted, yet partially and in response to the perception of macroeconomic and financial soundness, to domestic assets.

Specifically about the transmission process, some elements contribute to reduce the effects of the exchange rate devaluation on domestic prices, such as: the variation of the effective exchange rate lower than the variation of the R$/US$ bilateral rate; the economic performance of 2015 weaker than anticipated; the international prices of commodities with a more benign behavior; and the more restrictive monetary policy position.

The Copom highlights that, in market economies and in the long run, prices tend to show relatively similar growth rates. In this sense, in line with projections reported in the next section, the Copom reiterates the effects of a realignment process between regulated and market prices. From another point of view, the Committee points out that the Real depreciated during the last three years against currencies of important Brazilian trade partners and then, also reiterates a realignment process between domestic and international prices. Prospectively, the Committee reaffirms that one of the monetary policy functions is to make these realignment effects over inflation restricted to the short run, with no transmission into longer horizons.

From the viewpoint of the Copom, the fact that inflation currently stands at high levels reflects, in a large part, the two-aforementioned significant and necessary relative price adjustment processes in the economy.

In this context, as the projections presented in the next section show, the Committee points out, as previously anticipated, that these adjustments cause inflation to rise in the short run and to remain high in 2015, which requires determination and perseverance in order to hinder inflation transmission to longer terms. By recognizing the direct impacts of these relative price adjustments over inflation, the Copom reaffirms the view that the monetary policy can and should restrain the second order effects derived from them in a way to keep them restricted to 2015.

In this context, the Copom decided, by unanimity, to increase the Selic rate in 0.50 p.p. to 13.25% p.a., without bias, in the April meeting; and in 0.50 p.p., to 13.75% p.a., without bias, in the June meeting.

In April and in June, voted for the decision of increasing the Selic rate at 13.25% p.a. and at 13.75% p.a., respectively, the following Copom members: Alexandre Antonio Tombini (Governor), Aldo Luiz Mendes, Altamir Lopes, Anthero de Moraes Meirelles, Luiz Awazu Pereira da Silva, Luiz Edson Feltrim, Otávio Ribeiro Damaso, Sidnei Corrêa Marques and Tony Volpon.

The Copom evaluates that the aggregate demand tends to remain moderate in the relevant horizon for the monetary policy. On one hand, household consumption tend to stabilize, due to factors such as employment, income and credit; on the other hand, real-estate financing, public-service concession and expansion of agricultural income, among other factors, 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 market developments and, in this year, the dynamic of recomposition of monitored prices are important factors for the set-up in which the future monetary policy decisions will be taken with the objective of ensuring inflation convergence to the 4.5% target, established by the National Monetary Council (CMN)¸ in the end of 2016

On this subject, the Copom evaluates that the scenario of inflation convergence to 4.5% in the end of 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. In this context, the Copom reaffirms that the monetary policy should remain vigilant.

## 6.3 Assumptions and inflation forecast

According to traditional procedures, and taking into account the available information set, up to the cutoff date of June 12, 2015, the baseline scenario assumes that the exchange rate remains unchanged over the forecast horizon at R$3.10/US$, and the target for the Selic rate at 13.75%

p.a. – the level set by the June 2015 Copom meeting – against R$3.15/US$ and 12.75% p.a. considered in the March 2015 Inflation Report.

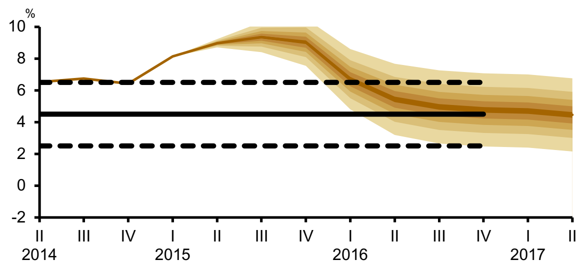
The market scenario, in turn, incorporates data from the expectations survey carried out by Gerin with a representative group of institutions up to the cutoff date. In this scenario, average exchange rate expectations increased compared to the values released in the previous Inflation Report. For the last quarter of 2015, the average rate moved from R$3.09/US$ to R$3.19/US$. For the end of 2016, the average exchange rate moved from R$3.11/US$ to R$3.30/US$. For the end of 2017, market participants project an average exchange rate of R$3.40/US$, compared to R$3.10/US$ in the previous Inflation Report.

Regarding the evolution of the average Selic rate, the expectations for the fourth quarter of 2015 increased from 13.00% p.a. to 14.00% p.a. and, for the end of 2016, shifted from 11.50% p.a. to 12.00% p.a. For the end of 2017, the expectations moved from 10.50% p.a. to 11.00% p.a. This trajectory of the average Selic rate is consistent with 360 days pre-DI swap spreads of 2 b.p., and -164 b.p., with respect to the current target for the Selic rate (13.75% 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 13.7% for 2015, compared to 11.0% considered in the last Report. This projection is based on the variations occurred, up to February, in gasoline (9.3%) and bottled gas (4.3%) prices, as on the assumptions for the accumulated over 2015, of reduction of 3.0% in landline telephone rates and increase of 43.4% 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, the same compared to the one in the last Report.

The structural primary surplus that derives from the primary surplus trajectories of R$ 66.3 billion in 2015 and 2.0% of GDP for 2016 is considered as the fiscal indicator. For a certain period, the fiscal impulse is equivalent to the change of structural surplus, compared to the previous period.

**Figure 6.3 – Projected IPCA-inflation with interest rate constant at 13.75% p.a. (Baseline scenario)**
Inflation fan chart




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

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

| Year | Q | Probability Interval 50% | Probability Interval 30% | Probability Interval 10% | | | | Central projection |
|---|---|---|---|---|---|---|---|---|
| 2015 | 2 | 8.9 | 8.9 | 8.9 | 9.0 | 9.0 | 9.1 | 9.0 |
| 2015 | 3 | 9.0 | 9.1 | 9.3 | 9.4 | 9.6 | 9.7 | 9.3 |
| 2015 | 4 | 8.4 | 8.7 | 8.9 | 9.1 | 9.4 | 9.6 | 9.0 |
| 2016 | 1 | 5.9 | 6.3 | 6.6 | 6.8 | 7.1 | 7.5 | 6.7 |
| 2016 | 2 | 4.5 | 4.9 | 5.3 | 5.6 | 6.0 | 6.3 | 5.4 |
| 2016 | 3 | 4.0 | 4.4 | 4.8 | 5.1 | 5.5 | 5.9 | 5.0 |
| 2016 | 4 | 3.8 | 4.2 | 4.6 | 4.9 | 5.3 | 5.7 | 4.8 |
| 2017 | 1 | 3.8 | 4.2 | 4.5 | 4.9 | 5.2 | 5.6 | 4.7 |
| 2017 | 2 | 3.5 | 3.9 | 4.3 | 4.6 | 5.0 | 5.4 | 4.5 |

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

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 9.0% in 2015, 1.1 p.p. above the projection informed in the Report of March of 2015, and also above the central target level of 4.5% determined by the CMN. As can be seen in the Figure 6.3 and in the Table 6.1, in the baseline scenario, the projection in the second quarter of 2015 is at 9.0%, changes to 9.3% in the third quarter, and reduces to 9.0% in the end of the year. In 2016, the projection reduces to 6.7% in the first quarter, 5.4% and 5.0% in the second and third quarters, respectively, and ends the year in 4.8%. In the first quarter of 2017, the projection is at 4.7% and reduces to 4.5% in the second quarter of 2017.

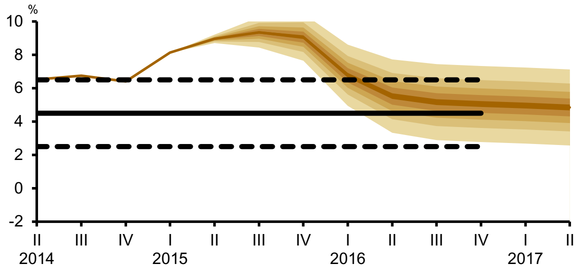
Still in the baseline scenario, the estimated probability that inflation will breach the upper tolerance level of the target in 2015 stays around 99% and, in 2016, around 11%.

In the market scenario, the projection indicates inflation of 9.1% in 2015, 0.1 p.p. above the value of the baseline scenario and 1.2 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 in the second quarter of 2015 is at 9.0%, changes to 9.3% in the third quarter, and reduces to 9.1% in the end of the year. For the first quarter of 2016, the projection is 6.8%, reduces to 5.5% and 5.2% in the second and third quarters, ending the year at 5.1%. In the first quarter of 2017, the projection is at 5.0%, reducing to 4.8% in the second quarter.

In the market scenario, the estimated probability that inflation will breach the upper tolerance level of the target in 2015 is around 99%, and in 2016, around 15%.

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 second quarter of 2015 and the first quarter of 2016. It is partly due to higher projections for regulated and monitored prices and to actual inflation higher than previously projected. In the last quarter 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 first

**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% | | 30% | 50% | Central projection |
|---|---|---|---|---|---|---|---|---|
| 2015 | 2 | 8.9 | 8.9 | 8.9 | 9.0 | 9.0 | 9.1 | 9.0 |
| 2015 | 3 | 9.0 | 9.1 | 9.3 | 9.4 | 9.6 | 9.7 | 9.3 |
| 2015 | 4 | 8.5 | 8.7 | 9.0 | 9.2 | 9.4 | 9.6 | 9.1 |
| 2016 | 1 | 6.0 | 6.3 | 6.6 | 6.9 | 7.2 | 7.5 | 6.8 |
| 2016 | 2 | 4.6 | 5.0 | 5.4 | 5.7 | 6.0 | 6.4 | 5.5 |
| 2016 | 3 | 4.2 | 4.6 | 5.0 | 5.3 | 5.7 | 6.1 | 5.2 |
| 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 | 5.0 |
| 2017 | 2 | 3.9 | 4.3 | 4.7 | 5.0 | 5.4 | 5.8 | 4.8 |

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

**Table 6.3 – March 2015 Inflation Report projections**

| Period | Baseline scenario | Market scenario |
|---|---|---|
| 2015 I | 8.1 | 8.1 |
| 2015 II | 8.0 | 8.0 |
| 2015 III | 8.2 | 8.1 |
| 2015 IV | 7.9 | 7.9 |
| 2016 I | 5.9 | 5.8 |
| 2016 II | 5.4 | 5.3 |
| 2016 III | 5.0 | 5.0 |
| 2016 IV | 4.9 | 5.1 |
| 2017 I | 4.7 | 4.9 |

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

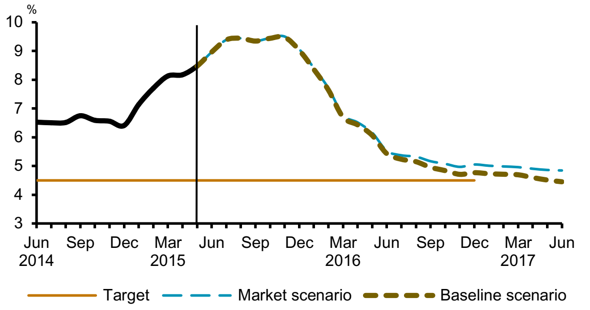
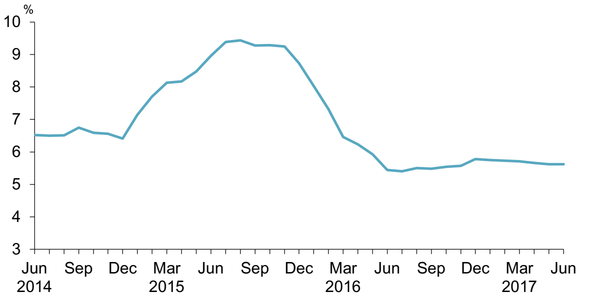
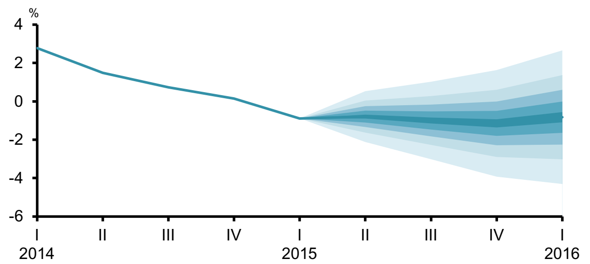



Figure 6.6 – Inflation forecast: VAR models




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

Figure 6.7 – Projected GDP growth with interest rate constant at 13.75% p.a. (Baseline scenario)
Output fan chart




quarter of 2016. In the second and third quarters of 2016, the projection of the market scenario is above the ones presented in previous Inflation Report, but at the end of the year is at the same level as the projection considered in March. For the first quarter of 2017, the projections are at the same level as those presented in the previous Inflation Report in the baseline scenario and above in the market scenario.

Figure 6.5 shows the path of the twelve-month inflation, according to the baseline and the market scenarios, up to the second quarter of 2017, as well as the inflation target path. Up to May 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, in the end of this year, should enter in a long declining path.

The average forecast generated by the Vector Autoregressive (VAR) models, for the twelve-month inflation is presented in Figure 6.6. Up to May 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 September, 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 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 -1.1% in 2015 (0.6 p.p. lower than the one considered in the previous Report), and -0.8% for four quarters accumulated up to the first quarter of 2016.