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 December 2015. The chapter also presents the analysis of the inflation prospects up to the first quarter of 2018 and of the Gross Domestic Product (GDP) growth up to the fourth 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 14.25% per year, which is the level set by the Copom at its most recent meeting on March 1st and 2nd, and that the exchange rate will remain at R$3.70 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 on March 18, 2016.

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 inflation measured by the change in the Broad National Consumer Price Index (IPCA) reached 1.27% in January and 0.90% in February. In this way, the twelve-month inflation reached 10.36% in February, 2.65 p.p. higher than the value recorded up to February 2015. On the one hand, market prices have accumulated a twelve-month change of 8.97% (7.12% until February 2015). On the other hand, regulated and monitored prices increased 14.94% (9.66% up to February 2015). Within the set of market prices, the increase of non-tradable goods reached 8.54% in twelve months (8.17% up to February 2015), and of tradable goods amounted to 9.45% (5.92% up to February 2015). Twelve-month inflation in the food and beverage group was 13.17% (8.99% up to February 2015) and in the services sector – around one-third of the consumption basket of IPCA – was 7.85% (8.58% up to February 2015).

The average monthly changes of the measures of underlying inflation calculated by the Central Bank changed from 0.82% in January to 0.81% in February, reaching 8.45% in twelve months (1.67 p.p. higher than the rate recorded in February 2015). Specifically, the non-smoothed trimmed mean core changed from 0.87% to 0.69%. The exclusion core – which excludes ten items from the groups food at home and fuels – changed from 0.93% to 0.86%; the double weighted core changed from 0.86% to 0.78%. The smoothed trimmed mean core changed from 0.84% to 0.73%.The core that excludes the prices of monitored goods and food at home changed from 0.62% in January to 1.00% in February. The IPCA diffusion index reached 77.2% in February (9.1 p.p. higher than February 2015), and 76.5%, in the three-month average (8.0 p.p. above the average observed from December 2014 to February 2015).

Broader inflation, measured by the General Price Index (IGP-DI) and characterized by higher volatility when compared to the IPCA, was 1.53% in January and 0.79% in February. Accordingly, the twelve-month inflation reached 11.93% (3.74% until February 2015). The main component of the IGP-DI, the IPA, registered a variation of 13.35% in twelve months up to February, as the result of 18.83% inflation in the agricultural sector and of 11.20% in the industrial sector. In turn, the change in the IPC, which is the second most important component of the IGP-DI, reached 10.37% in twelve months (7.99% up to February 2015). The INCC, the price index with the smallest weight in the IGP-DI, increased 7.17% in twelve months (6.98% up to February 2015), due to the change of 7.84% in labor cost and of 6.41% 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 0.61% in January, compared to the previous month, considering seasonally adjusted series. Therefore, the IBC-Br growth rate was -4.48% in the last twelve months. In turn, the PMI for Brazil showed a record low value of 39.0 in February, pointing to a more pronounced contraction of the private sector activity (45.1 in January).

The Industry Confidence Index (ICI) and the Services Sector Confidence Index (ICS), computed by FGV, decreased 2.0% and 1.0%, respectively, in February. The Consumer Confidence Index (ICC) increased 3.2% in the same period.

According to the seasonally adjusted data of IBGE, the industrial production increased 0.4% in January, and build up in twelve months a negative change of 9.0%. Considering non-seasonally adjusted series, the industrial production decreased 13.8% in January, relative to the same month of 2015, with negative results in four end-use categories and in 23 of the 26 surveyed activities. Among the end-use categories and comparing the industrial production of January and December based on seasonally adjusted series, the durable consumer goods sector showed reduction (-2.4%), while the capital goods sector (1.3%), the intermediate goods sector (0.8%) and the semi and non-durable consumer goods sector (0.3%) showed small recoveries. Comparing the industrial production of January with the one for the same month of 2015, there was reduction in the four categories: capital goods (-35.9%), durable consumer goods (-28.2%), intermediate goods (-11.9%) and semi and non-durable consumer goods (-7.2%). According to seasonally adjusted data from the National Confederation of Industry (CNI), the real revenue of the manufacturing industry increased 1.0% in December of 2015 to January 2016 and it is at a level 13.9% lower than the one observed in January 2015.

The Installed Capacity Utilization Level (Nuci) in the manufacturing sector, computed and seasonally adjusted by FGV, reached 73.6% in February. In terms of sectorial distribution, capacity utilization is more intense in the consumption goods (76.5% according to seasonally adjusted data), and less strong in the capital goods sector (63.1%). With regard to inventories, the indicator for the manufacturing sector, calculated and seasonally adjusted by FGV, decreased since previous Report. In February, 17.7% of the surveyed establishments had excessive inventories (20.0% in November), and 5.7% had insufficient inventories (3.7% in November), according to seasonally adjusted data. Still regarding the FGV survey, inventories remain at high levels, in particular, in the non-durable consumer goods sectors.

The retail volume for the restricted retail trade decreased 10.3% in January, compared to the same month of the previous year, while the broader retail trade contracted 13.3% in the same basis of comparison (the monthly rates were -1.5% and -1.6%, respectively, considering seasonally adjusted series). Accordingly, the twelve-month growth rate was -5.2% for the restricted retail trade and -9.3% for the broader retail trade. In January, retail volume decreased in eight of the ten segments surveyed by IBGE, taking into account the seasonally adjusted index.

The Brazilian GDP at market prices decreased 1.4% in the fourth quarter of 2015 compared to the previous quarter (after decreasing 1.7% in the third quarter), according to seasonally adjusted IBGE data. Compared to the same quarter of 2014, there was a reduction of 5.9% (reduction of 4.5% in the third quarter under the same comparison basis). Brazilian economy fell 3.8% in the last four quarters (contraction of 3.3% in the value added and of 7.3% in direct taxes). In terms of supply components, the production in the agricultural sector increased 1.8% in four quarters; in the services sector decreased 2.7%; and in the industrial sector decreased 6.2%.

From a demand side perspective, household consumption – the largest component of the aggregate demand – decreased 1.3% in comparison to previous quarter, according to seasonally adjusted data, and 6.8% compared to the same quarter of 2014. Government consumption decreased 2.9% at the margin and decreased 2.9% with respect to the same quarter of 2015. The Gross Fixed Capital Formation (GFCF) decreased 4.9% when compared to the previous quarter and 18.5% when compared to the fourth quarter of 2014. With respect to the foreign trade sector, exports of goods and services decreased 0.4%, whereas imports decreased 5.9%, in comparison to the third quarter of 2015 and according to seasonally adjusted data. On a year-to-year basis, exports increased 12.6%, while imports decreased 20.1%, both influenced by the depreciation of the Brazilian Real during the period.

According to the Continuous National Household Sample Survey (PNADC) of IBGE, the estimated unemployment rate was 9.0% in the moving quarter that ended in December 2015, which is 2.5 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 7.6% in January 2016, and increased 0.7 p.p. in relation to December 2015 and 2.3 p.p. in relation to January 2015. Still according to the PME, the average habitual real labor income decreased 1.3% in January compared to December and decreased 7.4% with respect to January of the previous year. With respect to formal employment, according to the data released by the Ministry of Labor and Social Security (MTPS), 99.7 thousand jobs closed in January 2016 and 1.6 million closed in twelve months. In short, available data confirm the acceleration of a process of distension in the labor market.

Total credit to households reached R$1,513.9 billion in January, with 6.3% nominal growth relative to January 2015. In particular, housing loans for households whose operations consist on earmarked resources increased 14.1% and reached R$501.7 billion, which is equivalent to 8.4% of GDP. In general, 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$1,685.3 billion in January (6.1% higher than registered in January 2015) and the average interest rate reached 22.7% (5.3 p.p. higher than the average rate observed in January 2015). In particular, loans and financing to corporations with resources provided by the National Bank of Economic and Social Development (BNDES) amounted to R$632.8 billion – an increase of 6.4% relative to January 2015.

Regarding the capital market, the volume of primary issues of shares registered in the Securities and Exchange Commission of Brazil (CVM) and made public by Anbima reached R$16.7 billion in twelve months up to February 2016 (R$15.4 billion up to February 2015). In turn, debenture issues, excluding the issuance of leasing companies, totaled R$58.9 billion in twelve months up to February 2016 (R$42.8 billion in the same period of the previous year). Total corporate financing from issuances of shares, debentures, commercial papers and receivables in credit rights reached R$93.8 billion in twelve months up to February 2016 (R$94.6 billion in the same period of 2015).

With regard to foreign trade, data from the Ministry of Development, Industry and Foreign Trade of Brazil (MDIC) shows that the twelve-month trade surplus reached US$29.6 billion in February (compared to US$3.9 billion deficit in February 2015). This result stemmed from US$189.9 billion in exports and US$160.3 billion in imports, which represented decreases of 13.2% and 28.1%, respectively, in relation to the twelve-month period that ended in February 2015. Considering the twelve months up to January of 2016, exports volume increased 8.3% and the average price of exports decreased 21.9%, while imports volume decreased 16.7% and the average price of imports reduced 12.4%.

The twelve-month current account deficit reached US$51.6 billion in January 2016, which is equivalent to 2.9% of GDP. Net profits and dividends remittances amounted to US$16.5 billion (US$25.7 billion in January 2015) and "operational leasing services" expenses, which are mostly related to oil and minerals exploitation, reached US$21.9 billion (US$22.7 billion in January 2015). It is also worth noting that imports of oil and its derivatives reached US$16.1 billion in twelve months up to January 2016 (US$33.9 billion up to January 2015), while export revenues with these products fell to US$16.2 billion in twelve months up to January 2016, from US$25.5 billion in January 2015.

Foreign direct investment, which has been the main financing source of the balance of payments, amounted to US$74.8 billion in twelve months up to January 2016, or 4.3% of GDP.

Regarding global activity, the prospects are of moderated growth in the relevant horizon for monetary policy, according to leading indicators. In Europe, investment and growth continue to be restrained by high unemployment rates, along with fiscal consolidation and political uncertainties. In the United States, economy tends to recover, although in a slower pace. In emerging economies, the activity pace has been constantly revised downwards, among uncertainties related to the loss of momentum of China and its implications to global economy. Inflation rates remain low in mature economies and relatively high in emerging markets.

Brent oil prices increased since the release of the previous Report to levels close to US$40/barrel. The geopolitical complexity that surrounds the oil sector tends to boost volatility in prices, which also reflects the low predictability of some global demand and supply components. Regarding the other commodities, prices of metal commodities increased 17.53% and agricultural prices increased 1.29%. In this context the price index based on 22 commodities, published by the Commodity Research Bureau (CRB), increased 6.01% at the cutoff date of March 18 in relation to the cutoff date of the December 2015 Report.

Median expectations of market analysts for GDP growth in 2016 deteriorated to -3.60% from -2.80% between December 18, cutoff date of the previous Report and March 18. For

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

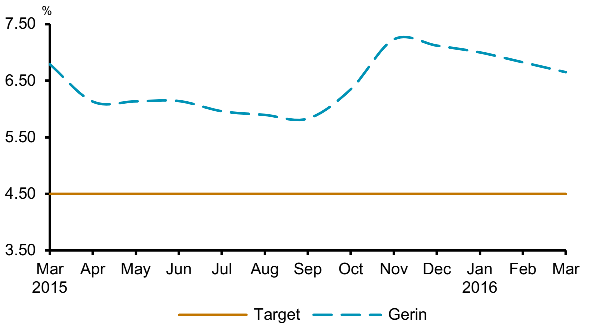
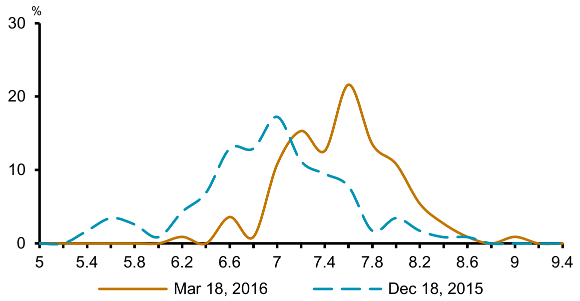


Figure 6.2 – Dispersion of inflation expectations for 2016

Relative frequency



2017, the growth rate deteriorated to 0.44% from 1.00%. In the same period, the median inflation expectations for the IPCA increased to 7.43% from 6.87% for 2016; and to 6.00% from 5.17% for 2017. The projected inflation for the next twelve months decreased 0.47 p.p., to reach 6.65% from 7.12%, as illustrated in Figure 6.1. Since the release of the December 2015 Report, the dispersion around the central inflation expectations trend for 2016 decreased, as shown in Figure 6.2. The standard deviation of these projections decreased to 0.46% from 0.62%.

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, underpin the main prospective scenario based on which the Committee makes policy decisions.

International evidence, which is confirmed by the Brazilian experience, suggests that high inflation rates generate distortions that elevate risks and depress investment. These distortions manifest, for instance, in the shortening of households, businesses and governments planning horizons as well as in the deterioration of business confidence. The Committee also emphasizes that high inflation rates reduce the purchasing power of wages and income transfers, with negative repercussions on household confidence and consumption. Therefore, high inflation rates reduce the growth potential of the economy as well as of jobs and income generation.

In view of this, the Copom appraises that monetary policy should contribute to consolidate favorable macroeconomic conditions in longer horizons. Along these lines, the Copom stresses that, under the inflation targeting regime, the Committee guides its decisions according to inflation projections made by the Banco Central do Brasil and based on the analysis of alternative scenarios for the evolution of main economic variables that determine price dynamics. The Committee also understands that low risks associated with core inflation in the short term tend to reduce uncertainties with respect to the future behavior of full inflation, help the monetary authority appraise scenarios, as well as contribute to the expectations-coordination process of economic agents, in particular of price-setters. In addition, it is noteworthy that low risks associated with core inflation in the short term tend to enhance the effects of monetary policy actions, causing them to affect full-inflation dynamics more lastingly in the future. Even though the Copom acknowledges that other macroeconomic policy actions might influence price trajectory, it restates its view that monetary policy must remain vigilant, so as to ensure that pressures observed in shorter horizons should not propagate to longer horizons.

On the external front and since the previous Report, global activity has shown a trend for greater moderation through the relevant horizon for monetary policy. In this regard, evidence points to more modest growth rates and below potential growth in mature economies. Also important are the uncertainties related to the loss of momentum of China and its implications to the global economy. In international markets, prospects point to moderation in the dynamics of commodity prices. On the domestic front, the central scenario envisages a still elevated inflation, due to the realignment of relative prices observed in 2015, as well as to the process of tax revenues recovery observed at the federal and the state level in the beginning of this year, combined with a pace of activity expansion lower than expected. In addition, the impact on asset prices due to uncertainties regarding the recovery process of fiscal results and their composition, especially after a new downgrading, in February, of the country's sovereign rating by a rating agency, is a relevant aspect on the domestic front.

On the international front, the prospects are of modest recovery of activity in mature economies. In the United States, although growth dynamics is expected to slow down in some level, recent data on economic growth in the third quarter confirms the trend for economic recovery reflected particularly in the labor market, in an environment of 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 at increasing the pace of economic expansion and at avoiding the risk of a deflationary spiral, even adopting negative nominal interest rates. In the euro area, the ECB initiated a new round of the monetary expansion program in order to reduce the risks of deflation and to stimulate economic activity.

The Copom assesses that the developments in mature economies are transmitted to emerging economies aggregate demand with an intensity proportional to trade and capital flows, among other factors. In this sense, recent events – on one hand, the gradual improvement in the pace of economic activity in important trade partners; and, on the other hand, volatility spots in 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. The Committee also notices that important emerging economies experience a transition period. In this context of a slower pace of activity, it's important to highlight the continuous concern with Chinese economy and its effects on other economies.

In short, the Committee assesses that, in the relevant horizon, the scenario is that of moderate global growth, combined with the depreciation of the Real against important commercial partners currencies, which contributes to render the external demand more favorable to the growth of the Brazilian economy.

The Copom considers that the external environment remains especially complex. However, even considering episodes of greater volatility affecting important emerging economies, the Committee still assigns low probability for the occurrence of extreme events in international financial markets.

Aggregate commodity price indices measured in US Dollars showed marginal recovery, after a drop trend started in the second semester of 2014. Regarding oil prices, the Committee points out that, regardless of the behavior of domestic gasoline prices, the evolution of international prices tends to transmit into the domestic economy both through the productive chains, such as the petrochemical, and through inflation expectations. It's also important to note the increase in uncertainties caused by low oil prices and its implication to companies in the oil sector and oil-producing countries, as well as to financial markets in general, with risks to financial global stability.

On the domestic front, the Committee restates that, aligned with the ongoing macroeconomic adjustment, the available indicators show that domestic absorption and GDP growth rates continue to adjust, indicating that the pace of domestic activity growth in 2016 will be lower than previously expected. This process has been specially intensified by uncertainties originating in noneconomic events. In particular, investment retracted mainly influenced by these events and private consumption also contracted in line with recent data on credit, employment and income. Nevertheless, the Committee considers that, after a necessary period of adjustments that has been more intense and longer than anticipated, to the extent that the confidence of firms and households strengthens, the pace of economic activity tends to increase. In addition, the Committee assesses that, in the medium term, important changes should occur in the composition of aggregate demand and supply. Consumption tends to grow at a moderate pace and investment tends to gain momentum. Regarding the external component of aggregate demand, the depreciation of the Real, tends to favor growth of the Brazilian economy. On the supply side, the Committee evaluates that, in longer horizons, prospects become more favorable for the competitiveness of the Brazilian 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, combined to other changes underway, anticipate a composition of the aggregate demand growth more in favor of potential growth in the medium term. In this context, the Committee understands that, in longer horizons, there is ground for expansion of the investment rate, for a more efficient allocation of production factors and, consequently, for actual and potential GDP growth to return to higher rates. Notwithstanding, the Committee highlights that the speed at which the above mentioned changes take place and the gains derived from them depend, fundamentally, on a path of primary surpluses that strengthens the perception of sustainability of the public sector balance and on the reduction of uncertainties that involve the domestic and the international environment. It is worth noting the importance to persist in promoting structural reforms in a way to guarantee fiscal consolidation in longer terms.

In terms of factor markets, as anticipated, the Copom considers that the idle margin in the labor market is high, with data confirming the strengthening of an expected distension process in this market. However, the Committee ponders that a significant risk still prevails, particularly, related to the possibility of high nominal wage increases, not compatible with productivity growth, with negative impact over inflation and over the perception regarding the sustainability of consolidated public sector accounts. At this point, it is worth noting that economic theory – which is endorsed by international experience – instructs that wage moderation is a key element to achieve a macroeconomic environment with price stability.

Still regarding the labor market, the Copom understands that there are risks stemming from the presence of mechanisms in the Brazilian economy that favor inflation persistence, derived from the possibility that wage bargaining give excessive weight to past inflation in detriment to future inflation. In this context, despite real wage changes more consistent with estimates of labor productivity gains and notwithstanding the current distension process in the labor market, the Committee evaluates that the wage dynamics continues to originate inflationary cost pressures.

Concerning the capital factor, the twelve-month investment rate of the economy, calculated from National Accounts of IBGE, fell for the seventh consecutive quarter in the fourth quarter of 2015. In annual terms, 2015 was the second consecutive year that the investment rate decreased. Specifically in the corporate segment, several factors might be associated with the poor performance of the gross fixed capital formation, among which is the low businessmen confidence, intensified by uncertainties about non-economic events and about the recovery process of fiscal results and their composition, the evidence of narrowing profit margins and the volatility in the currency markets. Still related to the capital factor, one should note that capacity utilization, published by the National Confederation of Industry (CNI), continued to drop in the quarter ending in January, positioned – on a seasonally adjusted basis – in levels significantly below those observed during the acute phase of the 2008-2009 crisis. This process occurred together with the rise in sectorial utilization heterogeneity, in the comparison with the levels observed in the previous Inflation Report.

In terms of the set of idleness indicators for the economy, the Copom points out that conventional measures of the output gap are in a disinflationary zone, in line with recent economic activity growth rates – smaller than the estimates of potential economic growth and lower than initially anticipated. Considering the growth prospects (according to Section 6.3), the Committee assesses that in the next quarters these output gap measures tend to remain in the disinflationary region.

Regarding fiscal policy, the Copom reiterates that the materialization of the paths and the expectations about the recovery process of the fiscal results and their composition affect the baseline scenario for inflation. The Copom notes that uncertainties and significant changes either in the path or in the composition of the primary results generation, impact the working assumptions underlying inflation projections contributing to create a negative assessment about the macroeconomic environment, and also influencing negatively the inflation expectations.

In this regard, the Copom understands that the generation of primary surpluses that strengthen the perception of public sector balance sustainability contributes to create a positive perception about the macroeconomic environment in the medium and long run, therefore decreasing the cost of public debt financing. Moreover, a more constrained 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. Given that the recovery process of the fiscal balances has occurred at a lower speed than initially predicted, it is essential to keep the commitment to resume primary surplus results that gradually reach a level sufficient to stabilize and, later, shift down the path of public debt as a share of GDP. Since the fiscal adjustment also has its own lags between the discussion and adoption of the measures and their outcomes, the more timely the implementation of the ongoing process is, the faster is the resumption of a favorable trajectory for the public debt and for household and corporate confidence. 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 inflation risk lies on the behavior of inflation expectations, affected negatively by the high level of current inflation, by the dispersion of price increases, by the residual effects of the process of relative price adjustment observed in 2015 and, mainly, by the uncertainties about the recovery process regarding fiscal outcomes and their composition. Still regarding inflation expectations, the Committee observes that market forecasts for 2017 and 2018 were also affected, albeit with lower intensity, by these same factors. These facts are a clear and important signal of the recent worsening of the economy's balance of risks and they demand monitoring in order to define the next steps in the monetary policy strategy.

The Copom highlights that the main scenario envisages moderate credit expansion, which has already been noticed, and tends to persist. In this regard, it is worth mentioning that after years of strong expansion, the credit market oriented to consumption underwent moderation, so that, in the last quarters, there were, on one hand, a decline in bank exposure and, on the other hand, household deleveraging. Therefore, in the aggregate, one may infer that risks in the consumer credit segment have been mitigated. In another dimension, in line with instances of 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 evolved in line with changes in the perception of risk of the Brazilian economy. Even in a scenario of increasing global risk aversion that reflects uncertainties associated to changes in the Chinese exchange rate policy and in the pace of global economic activity, the domestic risk premium fluctuated mainly in line with domestic developments. In the relevant horizon for monetary policy, the Committee points out that uncertainties related to the recovery process of fiscal balances and to the development of noneconomic events influence and will continue to influence the prices of financial assets. As such, it is important to emphasize, once again, that eventual rises in the volatility and risk aversion in international markets tend to be transmitted to domestic assets, in a discrete and incremental fashion, but can possibly be amplified as a result from the perception of domestic macroeconomic and financial soundness. Specifically on the dynamics of this transmission, it is noteworthy that the effects of the recent currency valuation over domestic prices depend essentially on the perception about the perennial nature of this movement.

The Copom highlights that, in market economies, in the long run, prices tend to show relatively similar growth rates. In this sense and in line with projections reported in the next section, the Copom reiterates the effects of a realignment process between regulated and market prices, mainly, in 2015. From another perspective, the Committee observes that, despite the recent appreciation, the Real depreciated during the last three years against the currencies of important Brazilian trade partners and hence, reiterates the effects of a realignment process between domestic and international prices. Prospectively, the Committee reaffirms that one of the monetary policy roles is to restrain the effects of these realignments on inflation to the short run, so that they do not transmit to longer horizons.

In this context, as the projections presented in the next section show, the Committee considers, as previously anticipated, that the still high inflation level reflects the relative price adjustment processes that took place in 2015, as well as, the process of reconstitution of tax revenues observed in the state and federal spheres, in the beginning of this year, and which make inflation more resilient. While recognizing that these processes have direct impacts on inflation, the Copom reaffirms the view that monetary policy can, should and is effectively restraining the second order effects resulting from them.

In this context, the Copom decided, by six votes in favor and two votes for increasing the Selic rate by 0.50 p.p., to maintain the rate at 14.25% p.a., without bias, at the January and the March meetings.

Evaluating the macroeconomic outlook and the inflation prospects, the Copom considers that uncertainties related to the balance of risks remain, mainly regarding the process of improving fiscal results and their composition, the behavior of current inflation and inflation expectations. In addition, uncertainties remain in relation to the external scenario, especially the concern with the performance of the Chinese economy and its developments and the evolution of prices in the oil market. At the meetings of January and March, part of its members argued that it would be appropriate to adjust immediately monetary conditions in order to reduce the risk of failure to meet the objectives of the inflation target regime, to strengthen the process of anchoring inflation expectations and to contribute to halt the rise in inflation forecasts. However, most of the Copom members considered that the domestic and especially external uncertainties, justified to continue monitoring the evolution of the macroeconomic scenario so to, then, define the next steps in its monetary policy strategy. For these members, it was necessary to continue monitoring the developments in the domestic and external environments and their impacts on the balance of risks for inflation, which, combined with the adjustments already implemented in monetary policy, could strengthen the inflation convergence scenario to the target of 4.5% in 2017.

In January and March, the following Copom members voted for the decision of keeping the Selic rate at 14.25% p.a.: Alexandre Antonio Tombini (Governor), Aldo Luiz Mendes, Altamir Lopes, Anthero de Moraes Meirelles, Luiz Edson Feltrim and Otávio Ribeiro Damaso. The following Copom members voted for the decision of increasing the Selic rate to 14.75% p.a.: Sidnei Corrêa Marques and Tony Volpon.

The Copom reaffirms that the aggregate demand will remain moderate in the relevant horizon for monetary policy. On one hand, household consumption tends to be influenced by factors such as employment, income and credit; on the other hand, public-service concession and the expansion of agricultural income tend to favor investments. Net exports, in turn, present a better performance, either through export growth, benefiting from the Real depreciation, or through the ongoing import substitution process. For the Copom, the joint effects of these elements, in addition to the fiscal, parafiscal and the asset market developments, and, in this year, the dynamics of monitored prices and an output gap more disinflationary than originally anticipated are important factors for the context in which the future monetary policy decisions will be made with the objective of ensuring inflation convergence to the 4.5% target established by the National Monetary Council (CMN) for 2017.

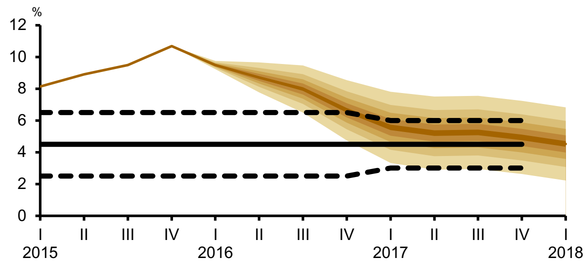
The Committee highlights that there are uncertainties related to the balance of risks, mainly, regarding the recent behavior of the expected inflation and of the observed actual inflation, combined with the presence of indexation mechanisms in the Brazilian economy, and regarding the process of fiscal results recovery and their composition. Moreover, the relative price adjustment process has taken longer and has been more intense than the anticipated. Additionally, uncertainties regarding the behavior of the global economy remain. In this context, the Committee reiterates that these conditions do not allow to consider the hypothesis of monetary easing, and the Committee will adopt the necessary actions to ensure the compliance with the objectives of the inflation targeting regime, i.e. to circumscribe the inflation into the limits established by the CMN, in 2016, and to make the convergence of the inflation to the target of 4.5%, in 2017.

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 18, 2016, the baseline scenario assumes that the exchange rate remains unchanged over the forecast horizon at R$3.70/US$, and the target for the Selic rate at 14.25% p.a. – the level set by the March 2016 Copom meeting – in place of R$3.90/US$ and 14.25% p.a. considered in the December 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 decreased for 2016 and increased for 2017, compared to the values released in the previous Inflation Report. For the last quarter of 2016, the average rate moved from R$4.20/US$ to R$4.15/US$. For the end of 2017, market participants project an average exchange rate of R$4.30/US$, compared to R$4.20/US$ in the previous Inflation Report. For the end of 2018, market participants project an exchange rate of R$4.30/US$.

Figure 6.3 – Projected IPCA-inflation with interest rate constant at 14.25% p.a. (Baseline scenario)
Inflation fan chart



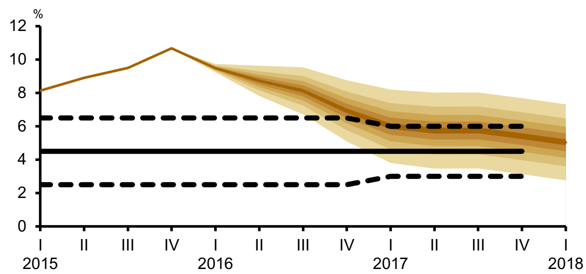
Note: accumulated inflation in 12 months (% p.a.).

Table 6.1 – Projected IPCA-inflation with interest rate constant at 14.25% p.a.
(Baseline scenario)

Year	Q	Probability Interval						Central
		50%						
			30%					
				10%				projection
2016	1	9.4	9.4	9.5	9.5	9.5	9.6	9.5
2016	2	8.3	8.5	8.6	8.8	8.9	9.1	8.7
2016	3	7.4	7.6	7.9	8.1	8.3	8.6	8.0
2016	4	5.9	6.2	6.5	6.8	7.1	7.4	6.6
2017	1	4.6	5.0	5.4	5.7	6.1	6.5	5.6
2017	2	4.3	4.7	5.0	5.4	5.7	6.1	5.2
2017	3	4.3	4.7	5.1	5.4	5.8	6.2	5.2
2017	4	4.0	4.4	4.8	5.1	5.5	5.9	4.9
2018	1	3.6	4.0	4.3	4.7	5.1	5.5	4.5

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.).

Regarding the evolution of the average Selic rate, the expectations for the fourth quarter of 2016 decreased from 15.08% p.a. to 14.25% p.a. For the end of 2017, the market expectations shifted from 12.25% p.a. to 12.50% p.a. For the end of 2018, expectations indicate Selic rate of 11.50% p.a. This trajectory of the average Selic rate is consistent with 360 days pre-DI swap spreads of 29 b.p. and -153 b.p. with respect to the current target for the Selic rate (14.25% p.a.), in the fourth quarters of 2016 and 2017, respectively.

The projection for the change in the set of regulated and monitored prices, in both scenarios, is 6.1% for 2016, compared to 5.9% considered in the last Report. Among other factors, this projection considers, for the cumulative 2016, an average increase of 9.9% in urban bus fares and a 3.5% decrease in electricity prices, considering the changes announced regarding tariff bands. For 2017, a variation of 5.0% is considered, the same value considered in the previous report. It should be highlighted that, 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.

The structural primary result that derives from the primary *superavit* of 0.50% of GDP in 2016 and of 1.30% of GDP for 2017 is considered as the fiscal indicator. Therefore, for a given period, the fiscal impulse is equivalent to the change of structural result, compared to the previous period. It is noteworthy also that the uncertainties and significant changes in the primary outcomes trajectories impact the inflation projections, in particular for longer terms.

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 6.6% in 2016, 0.4 p.p. above the projection informed in the Report of December 2015 and above the central target level of 4.5% determined by the CMN. In 2016, as can be seen in the Figure 6.3 and in the Table 6.1, in the baseline scenario, the projection for the first quarter of 2016 is at 9.5%. For the second quarter of 2016, projection reduces to 8.7%, continues to decline to 8.0% in the third quarter, and ends the year in 6.6%. In 2017, the projection for the first quarter is 5.6%, reduces to 5.2% in the second and third quarters, and ends the year in 4.9%. In the first quarter of 2018, the projection is 4.5%.

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

Year	Q	Probability Interval						Central
		50%						
			30%					
				10%				projection
2016	1	9.4	9.4	9.5	9.5	9.5	9.6	9.5
2016	2	8.4	8.5	8.7	8.8	8.9	9.1	8.7
2016	3	7.5	7.8	8.0	8.2	8.5	8.7	8.1
2016	4	6.2	6.5	6.8	7.1	7.4	7.7	6.9
2017	1	5.1	5.5	5.8	6.2	6.5	6.9	6.0
2017	2	4.8	5.2	5.6	5.9	6.3	6.7	5.7
2017	3	4.8	5.2	5.6	5.9	6.3	6.7	5.7
2017	4	4.5	4.9	5.2	5.6	5.9	6.3	5.4
2018	1	4.1	4.5	4.9	5.2	5.6	6.0	5.0

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

Still in the baseline scenario, the estimated probability that inflation will breach the upper tolerance level of the target in 2016 stays around 55% and, in 2017, around 22%.

In the market scenario, the projection indicates inflation of 6.9% in 2016, 0.3 p.p. above the value projected in the baseline scenario and 0.6 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 first quarter of 2016 is 9.5%. For the second and third quarters of 2016, the projection reduces to 8.7% and 8.1%, respectively, ending the year at 6.9%. In 2017, the projection reduces to 6.0%, in the first quarter, shifts to 5.7% in the second and third quarters, and ends the year at 5.4%. In the first quarter of 2018, the projection is 5.0%.

Still in the market scenario, the estimated probability that inflation will breach the upper tolerance level of the target in 2016 stays around 65% and, in 2017, around 33%.

Table 6.3 – December 2015 Inflation Report projections

Period	Baseline scenario	Market scenario
2015 IV	10.8	10.8
2016 I	9.2	9.2
2016 II	8.1	8.2
2016 III	7.5	7.6
2016 IV	6.2	6.3
2017 I	5.5	5.6
2017 II	5.4	5.5
2017 III	5.3	5.4
2017 IV	4.8	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 in the four quarters of 2016 and in the first and fourth quarters of 2017. This is due, in part, to a higher actual inflation in the period than that projected in the previous Report. In the market scenario, the comparison of trajectories follows a similar pattern to the reference scenario up to the first quarter of 2017. In the remaining quarters of 2017, the projection in the market scenario is above that considered in the previous Inflation Report, partly due to the lower level of the Selic rate in 2016 and to the higher exchange rate depreciation in 2017 considered in this scenario.

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

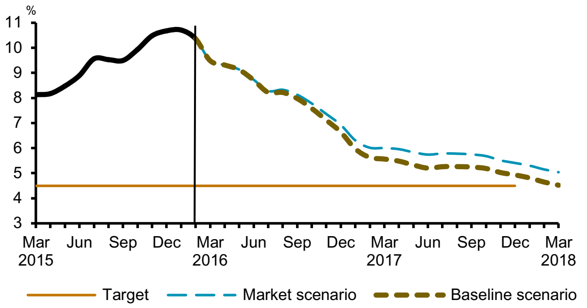
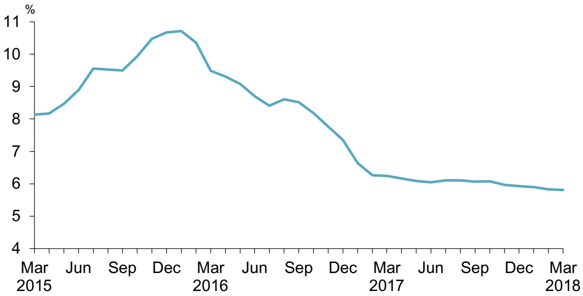


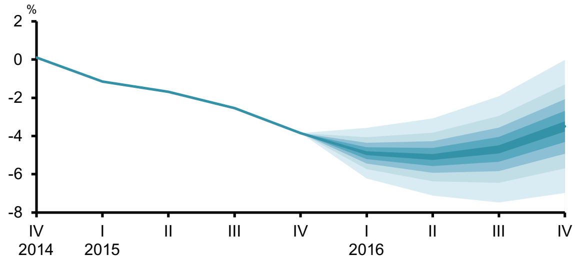
Figure 6.5 shows the path of the twelve-month inflation, according to the baseline and the market scenarios, up to the first quarter of 2018, as well as the inflation target path up to 2017. The values refer to actual inflation up to February 2016 and, since then; the trajectories consider projections associated with the respective scenarios for the construction of the accumulated values. In both scenarios, projections indicate that twelve-month inflation, yet in the first quarter of 2016, enters a period of decline over 2016 and 2017.

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 14.25% p.a. (Baseline scenario)
Output fan chart



The average forecast generated by the Vector Autoregressive (VAR) models, for the twelve-month inflation is presented in Figure 6.6. Up to February 2016, the values refer to actual inflation and, from then on, to forecasts. According to these models, the inflation projection presents descending trend in the course of 2016, converging to a value close 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 -3.5% for 2016, 1.6 p.p. lower than the estimation considered in the previous Inflation Report.