# 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 June 2014. The chapter also presents the analysis of the inflation prospects up to the third quarter of 2016 and of the Gross Domestic Product (GDP) growth up to the second quarter of 2015. Inflation projections are presented in two major scenarios. The first scenario, called the baseline scenario, assumes that the Selic rate will remain unchanged at 11.00% per year over the forecasting horizon, the level set by Copom at its most recent meeting on September 2 and 3, and the exchange rate will remain at R$2.25 per US dollar. The second scenario, named the market scenario, is based on 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 their assumptions should not be viewed as Copom forecasts of the future behavior of interest and exchange rates. The projections released here are based on the information set available up to the cutoff date of September 5, 2014.

The projections for inflation and for GDP growth released in this Report are not point estimates. They consist of probability intervals which embody the degree of uncertainty that was present 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 on 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 the 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 6.51% in August, 0.42 percentage points (p.p.) higher than the value recorded until August 2013. On one hand, there was a slight moderation in market prices, which in twelve months accumulated variation of 6.95% (7.64% until August 2013); on the other hand, acceleration of regulated and monitored prices, ranging 5.07% (1.27% until August 2013). Within the set of market prices, the increase of non-tradable goods reached 7.07% in twelve months, and tradable goods amounted to 6.81%. Twelve-month accumulated inflation in the food and beverage group declined to 7.53% (10.45% until August 2013) and the services sector inflation – around one-third of the consumption basket of IPCA – has reached 8.44% (8.60% until August 2013), and remains in levels above the market prices inflation.

The average monthly change of the measures of underlying inflation calculated by the Central Bank shifted from 0.19% in July to 0.41% in August, reaching 6.67% in twelve months (0.43 p.p. higher than the rate recorded in August 2013). Specifically, the core that excludes the prices of monitored goods and food at home changed from 0.01% in July to 0.38% in August; the smoothed trimmed mean core changed from 0.35% to 0.40%; the non-smoothed trimmed mean core changed from 0.17% to 0.41%; the exclusion core – which excludes ten items from the groups food at home and fuels – changed from 0.19% to 0.42%; and the double weighted core changed from 0.21% to 0.44%. The IPCA diffusion index fell for the fifth consecutive month and reached 55.0% in August (3.7 p.p. lower than that of August 2013) and 58.4% on the three-month average (2.1 p.p. above the average observed from June to August 2013).

Broader inflation – measured by the General Price Index (IGP-DI) – which is characterized by higher volatility when compared to IPCA, increased 0.06% in August, after a 0.55% decrease in July. Therefore, the index cumulates change of 4.63% in twelve months to August (5.25% until August 2013). The major component of the IGP-DI, the IPA, changed 3.41% in the twelve months to August, due to the 1.31% inflation in the agricultural sector and to the 3.97% increase in the industrial sector prices. The IPC, the second most important component of the IGP-DI, reached 6.76% in the twelve months to August (5.54% up to August 2013). The INCC, the smallest weight component of the IGP-DI, increased 7.26% in twelve months (7.86% up to

August 2013), due to the change of 8.48% in the labor cost and of 5.93% 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 1.48% in June, compared to the previous month, according to the seasonally adjusted series. Therefore, the IBC-Br growth rate has shifted to 1.50% in the last twelve months. The PMI for Brazil showed a marginal decline in production in July, when the reduction in the production of the industrial sector was partially offset by growth in the service sector.

The Consumer Confidence Index (ICC), the Industry Confidence Index (ICI), the Services Sector Confidence Index (ICS) and the Commerce Confidence Index (ICOM), computed by FGV, have all decreased in August. The ICC shifted to the lowest level since April 2009 and remained under its historical average, reflecting a worse perception with respect to the current scenario. The ICI and the ICS fell for the eighth consecutive month in August and are at the lowest level since April 2009. The decline of the ICI reflected a worse perception with respect to the current scenario; and the decline of the ICS was determined by deterioration in businessmen expectations for the following months. Finally, the ICOM recorded the new lowest quarter average index in the historical series beginning in March 2010, influenced by a worse perception with respect to the current scenario.

The industrial production increased 0.7% in July, the first increase since January, with favorable results in three of the four major economic categories and in 20 of the 24 surveyed activities, according to the seasonally adjusted industrial production data of IBGE. Despite the monthly increase, the overall production was 3.6% lower than July 2013 and decreased 1.2% in twelve months. In this basis of comparison, there was a decrease in the production of durable consumer goods (5.1%), intermediate goods (1.8%) and capital goods (0.1%); but, on the other hand, the production of semi and non-durable consumer goods increased (0.6%). According to seasonally adjusted data from the National Confederation of Industry (CNI), the real revenue of the manufacturing industry increased 1.2% in July after four months in retraction; and the number of hours worked was 2.6% higher. Nevertheless, compared to July 2013, real revenues and the number of hours worked were lower by 5.1% and 2.3%, respectively.

The Installed Capacity Utilization Level (Nuci) in the manufacturing sector, computed and seasonally adjusted by FGV, reached 83.2% in August. In terms of sectoral distribution, capacity utilization appears more intense in the materials for construction sector (88.2%, according to seasonally adjusted data), and less on capital goods (81.2%). With regard to inventories, the indicator for the manufacturing sector, seasonally adjusted and calculated by FGV, recorded undesired increase in inventories since the release of the Report of June 2014. In August, 14.4% of establishments had excessive inventories (11.2% in June), and 1.7%, had insufficient inventories (2.6% in June), according to the seasonally adjusted data. Still regarding the Manufacturing Industry Conjuncture Survey, conducted by FGV, inventories remained at high levels in the capital goods and durable consumer goods sectors.

The retail volume for the restricted retail trade increased 0.8% in June, compared to June 2013. The broader retail trade contracted 6.1% in the same basis of comparison. The monthly rates were -0.7% and -3.6%, respectively, according to seasonally adjusted series. The growth rate for the last 12 months was, therefore, 4.9% for the restricted retail trade and 1.9% for the broader retail trade. There was contraction of retail volume in nine of the ten segments surveyed by IBGE, considering the seasonally adjusted index. In the next months, sales will continue to be influenced by government transfers, by payroll growth and by the moderate credit expansion.

The Brazilian GDP at market prices decreased 0.6% in the second quarter of 2014, after decreasing 0.2% in the previous quarter, according to seasonally adjusted IBGE data. Compared to the same quarter of 2013, there was a change of -0.9% in the second quarter (1.9% in the first quarter). Therefore, Brazilian economy grew 1.4% in the last four quarters, with expansion of 1.3% in the value added and of 1.9% in direct taxes. In terms of components, the production in the agricultural sector increased 1.1% in four quarters; in the industrial sector, 0.5%; and in the services sector, 1.6%.

From a demand side perspective, household consumption – the largest component of aggregate demand – increased 0.3% in the second quarter of 2014, in comparison to previous quarter, according to seasonally adjusted data, and 1.2% compared to the same quarter of 2013. In turn, government consumption decreased 0.7% at the margin and increased 0.9% with respect to the same quarter of 2013. The Gross Fixed Capital Formation (GFCF) decreased

5.3% when compared to the previous quarter and 11.2% when compared to the same quarter of 2013. The foreign trade sector contributed positively to the GDP growth rate in the second quarter of 2014, with exports increasing 2.8%, in comparison to previous quarter, and imports decreasing 2.1%, according to seasonally adjusted data. Comparing to the first quarter of 2013, this contribution was also positive, with 1.9% growth of exports and 2.4% decline in imports.

The IBGE reported the results of the Monthly Labor Survey (PME) of July 2014 for only four of the six metropolitan regions usually surveyed, due to a strike: data about the labor market in Salvador and Porto Alegre will be released later. The unemployment rate remained stable in the other regions, with respect to the previous month. Compared to July 2013, the rate decreased 1.1 p.p. in Rio de Janeiro, 1.0 p.p. in Recife, 0.9 p.p. in São Paulo and 0.2 p.p. in Belo Horizonte. It is worth noting that the lesser expansion in the labor supply in recent years – as indicated by the lower growth rate of the working-age population (PIA) – has contributed significantly to keep the unemployment rates at historically lower levels. Still according to the PME, the average habitual real income of workers in Recife and Rio de Janeiro increased in both comparisons; in Belo Horizonte it remained stable in the monthly and decreased in the yearly comparison; and in São Paulo, it decreased in the monthly and increased in the yearly comparison. Formal employment remains expanding, albeit moderation in the job creation occurred. According to the data released by the Ministry of Labor and Employment (MTE), 537 thousand jobs were created in twelve months up to July 2014 (566 thousand up to July 2013).

In addition to rising payrolls, credit availability – largely determined by macroeconomic stability, improvement in financial system infrastructure and institutional reforms in recent years – was an important driving force behind growth of household consumption. Total credit to households reached R$1,331.1 billion in July, a 13.5% nominal growth relative to July 2013. In particular, housing loans for households, whose operations are mainly based on earmarked resources, grew by 28.2%, reaching R$393.0 billion, which corresponds to 7.8% 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$1,504.3 billion in July (9.6% higher than in July 2013), with an average interest rate of 16.0% (1.6 p.p. higher than the average rate observed in July 2013). In particular, loans and financing to corporations with resources provided by the National Bank of Economic and Social Development (BNDES) reached R$540.6 billion – an increase of 11.4% in twelve months up to July. Regarding the capital market, the volume of primary issues of shares registered in the Securities and Exchange Commission of Brazil (CVM) reached R$16.3 billion in 12 months up to July 2014 (R$9.6 billion up to July 2013). In turn, debenture issues, excluding the issuance of leasing companies, totaled R$65.1 billion in twelve months up to July 2014 (R$81.9 billion in the same period of the previous year). In total, firms financing from capital markets by issues of shares, debentures, commercial papers and receivables in credit rights reached R$107.0 billion in twelve months up to July 2014 (R$114.5 billion observed in the same period of 2013).

With regard to the trade balance, the twelve-month result reached US$6.4 billion in August (US$2.5 billion in August 2013). This result stemmed from US$239.4 billion in exports and US$233.0 billion in imports, which represented variations of 0.3% and -1.3%, respectively, compared to the twelve-month period ended in August 2013. Considering the twelve months ended in August, the exported volume increased 4.4% and the average price of exports decreased 3.9%, while the imported volume increased 0.9% and the average price of imports diminished 1.3%.

The twelve-month current account deficit reached US$78.4 billion in July, equivalent to 3.5% of GDP. The remittances of profits and dividends totaled US$24.8 billion in liquid terms (US$27.7 billion in July 2013), and the expenses under the item called "operational leasing services" which are, in a great part, meant to oil and minerals exploitation, reached US$21.5 billion (US$18.1 billion up to July 2013). It is also worth noting that imports of oil and derivatives reached, during the same period, US$34.1 billion (US$34.3 billion up to July 2013), while exports revenue shifted from US$24.4 billion to US$26.4 billion.

Foreign direct investments – which have been the main financing source of the balance of payments – totaled US$64.0 billion in the twelve months up to July, equivalent to 2.8% of GDP.

Regarding global activity, since the previous Report, leading indicators point to heterogeneous growth prospects in mature economies (low and below potential growth rates, considering the whole group). In Europe, despite recent improvements, high unemployment rates, along with fiscal consolidation and political uncertainties still constitute elements of investments and growth restraint. In emerging economies, the pace of activity has not corresponded to expectations, despite the resilience of domestic demand.

Brent oil prices, since the release of the previous Report, remained at a level close to US$105. The geopolitical complexity which surrounds the oil sector tends to boost the volatile behavior of prices, which also reflects the low predictability of some global demand components and the fact that the supply growth depends on highly risky long term maturity investments. Regarding other commodities, there was an increase of 2.1% in metal commodities prices and a decrease of 4.0% in agricultural prices. At the cutoff date of September 5, the price index based on twenty two commodities, published by the Commodity Research Bureau (CRB), decreased 2.6% against the value registered at the cutoff date of the Report of June 2014.

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

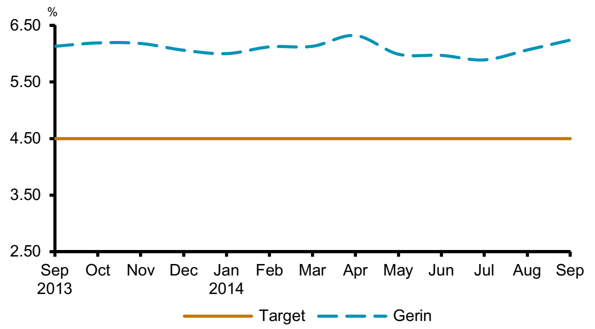
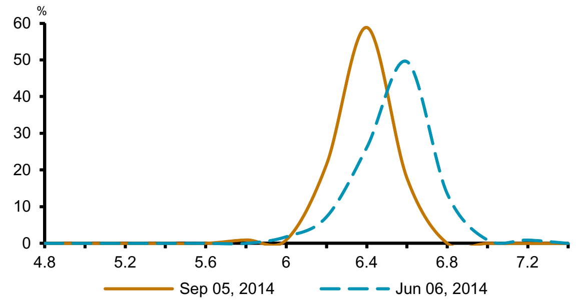



**Figure 6.2 – Dispersion of inflation expectations for 2014**

Relative frequency




The median of market expectations for the GDP growth rate for 2014 moved from 1.44% to 0.48%, between June 6, the cutoff date of the previous Report, and September 5. For 2015, the projected growth rate decreased from 1.80% to 1.10%. During this period, the median expectation for inflation, measured by the variation in IPCA, moved from 6.47% to 6.29% for 2014; and from 6.03% to 6.29%, for 2015. The twelve-month ahead inflation expectations moved from 5.97% to 6.24%, as shown in Figure 6.1. Since the release of the June 2014 Report, there was a reduction in the dispersion around the central tendency measures of inflation expectations for 2014, as illustrated in Figure 6.2. The standard deviation of these projections fell to 0.14%.

## 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.

On the external side, in general, since the last Report, the prospects of stronger global activity have remained unchanged in the relevant horizon for monetary policy. Nevertheless, evidences still point to heterogeneous growth rates in mature economies, with low and below potential growth in some of them for this year. In international markets, prospects point to moderation in the dynamics of commodities' prices, as well as the occurrence of tension and volatility spots in the currency markets. On the domestic side, the main scenario envisages a less intense pace of economic activity this year, when compared to 2013. Other important aspects of the domestic environment are the historically low levels of confidence of consumers and entrepreneurs, the labor market dynamics and two important ongoing processes of relative prices adjustments – the domestic prices realignment relative to the international ones and the realignment of regulated and monitored prices relative to market prices.

On the external front, despite remaining limited the space for monetary policy and prevailing, albeit with less intensity than in recent years, a scenario of fiscal restriction, the prospects indicate recovery of economic activity in some mature economies and strengthening in the pace of growth for others. In the United States, there is still a trend for improvement in the labor market and for recovery in the real estate market, in an environment that combines moderate levels of inflation. In the Euro area, despite recent initiatives announced by the ECB, uncertainties about the effectiveness of these actions, combined with a certain skepticism regarding the soundness of the banking system in some economies in the area, are still reflected in the fragility of credit market, employment and investments. Accordingly, prospects point to moderate growth this year in the Euro area, with asymmetric distribution among member countries. Regarding risks for global activity, it is worth mentioning the ones derived from geopolitical tensions and, perhaps more relevant, those deriving from the strategy of withdrawing, by the Federal Reserve, of monetary incentives introduced by conventional and unconventional policy actions in the aftermath of the 2008 crisis.

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 pace of global activity; and, on the other hand, changes in the slope of the yield curve in important economies 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 the global scenario, in particular in mature economies, there has been lower than expected growth in the main emerging market economies, in spite of the resilience of domestic demand. However, recent indicators suggest that growth rates for the group of emerging economies tend to remain relatively high, though with different distribution and in lower levels than recorded in recent years.

In short, the Committee assesses that, in the relevant horizon, the scenario of higher global growth – although recently released data have shown a less positive picture than anticipated –, combined with the depreciation of the Real relative to important commercial partners' currencies, militates in making the dynamics of 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 perception that risk premia are compressed and asset prices are too high. In fact, in the recent period, credit default swaps (CDS) of banks and sovereigns – in particular, of emerging and European periphery economies — kept declining and, in specific cases, moved to levels below those observed in the beginning of 2010. In turn, stock markets of emerging and mature economies (except Europe) have, in general, increased in value since last Report. However, it is not clear that these movements are reflecting appropriately economic fundamentals. An alternative hypothesis is that they result essentially from the implementation of unconventional monetary policy in important economic blocs. Despite identifying low probability of occurring extreme events, the Committee assesses that the international financial markets environment remains complex.

Aggregate commodity prices indexes measured in United States dollars have shown a slight decline when compared to last quarter figures. In this context, the Commodities Brazil Index (IC-BR), returned to levels near those registered in February of this year. In this context, the IC-BR for metals, after a long period of stability, increased since the last Report. On the other hand, the IC-BR for energy decreased, possibly due, at least in part, to the increase in the production of shale oil in the United States. In turn, the IC-BR for agriculture kept decreasing. The Committee highlights that, in spite of circumscribed pressures, perspectives 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.

The Copom considers that purchases of external goods tend to contribute to the weakening of domestic inflationary pressures through two channels. Firstly, these products compete with goods that are domestically produced, imposing greater discipline to the price setting process. Secondly, imports reduce the demand for domestic input, contributing to the weakening of cost pressures and, by consequence, of its eventual pass-through to consumer prices. In this respect, it is worth adding that factor cost pressures not offset by efficiency gains contribute to the reduction in the competitiveness of domestic firms in the international market for goods and services, in a global environment in which still prevails excess of spare capacity.

On the internal side, the Copom considers that the growth rates of domestic absorption and of the GDP have converged and that the pace of economic activity growth tends to be less strong this year, compared to 2013. In the medium-term, the Committee evaluates that significant changes should occur in the composition of aggregate demand and supply. Notwithstanding being aware that high frequency data may eventually point to a different direction, in terms of domestic absorption, the aggregate consumption (household consumption plus government consumption) tends to keep expanding at a more moderate pace than observed in recent years and the investments tend to gain momentum. Regarding the external component of aggregate demand, the scenario of higher global growth, combined with a depreciation of the Real, tends to benefit the Brazilian economy growth. On the supply side, the Committee evaluates that, in longer terms, more favorable prospects emerge for the competitiveness of those sectors more directly involved in commercial transactions with the rest of the world – i.e., industrial sector and agriculture and cattle raising sector. Meanwhile, the services sector tends to grow at lower rates than the ones registered in recent years.

According to the Copom's view, the changes mentioned in the previous paragraph anticipate a medium term growth composition more favorable to the potential growth. Improvements in the workforce qualification and the program of public services concessions also point in this direction. In this context, the Committee understands that, in longer terms, a ground would emerge for the expansion of the investment growth rates, for a more effective allocation of production factors and, consequently, for GDP growth rates to return to higher levels and even for the potential growth to increase. 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 confidence strengthening of firms and households.

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

Still regarding the labor market, the Copom understands that there are risks, due to the presence of mechanisms in the Brazilian economy that favor the persistence of inflation, derived from the possibility that wage bargaining gives excessive weight to past inflation at the expense of future inflation. In this context, despite the lower raise in the minimum wage this year than in previous years, as well as real wage gains in the last quarters near to the levels consistent with estimates of productivity gains, the Committee evaluates that the wage dynamics remains originating inflationary cost pressures. However, in the relevant horizon for monetary policy, the Committee anticipates events that tend to contribute to lower the risks associated to the wage dynamics, such as lower projected raises in the minimum wage and in the public servants salaries. Indeed, these developments tend to smooth the wage dynamics in general, with consequences to production costs, especially in labor intensive segments.

Regarding the capital factor, the National Accounts data related to the first quarter show that the investment rate reduced for the third consecutive quarter, moving to 17.4% of the GDP in the twelve-month rate. Specifically in the corporate segment, two factors could be associated with the unsatisfying performance of the fixed capital formation: low business confidence and evidence of narrowing of profit margins. Still on the capital factor, the capacity utilization declined in the last quarter, with lesser heterogeneity degree among the sectors in comparison with that observed in the previous Inflation Report.

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

Regarding fiscal policy, the Copom reaffirms that its prospective scenario for inflation is conditioned on the materialization of the trajectories regarding fiscal variables. For the Committee, the generation of primary surpluses in line with the working hypotheses considered for inflation projections would contribute to create a positive perception regarding the macroeconomic environment in the medium and long terms. Accordingly, the fiscal indicator used in the inflation forecasts (the structural primary surplus) would, therefore, tend to maintain some stability, with fiscal impulses (the change in the structural primary surplus between two periods) being of negligible size. Regarding the impacts over aggregate demand, the Committee evaluates that the conditions are established for the public sector balance to shift to the neutrality zone in the relevant horizon for monetary policy.

The Copom considers that nowadays primary surpluses of large magnitudes are not so necessary as opposed to the time when the public sector solvency was a matter for concern. For the Committee, however, primary surpluses of magnitude close to the average levels registered in more recent years are necessary to maintain the public debt at a sustainable path. Given this condition, the Committee understands that the financing cost of the public debt would decrease, with favorable implications for the cost of capital in general that would stimulate private investment in the medium and long run.

The Copom understands that a relevant source of risk for inflation lies on the behavior of inflation expectations that were negatively impacted, in the last months, by the high level of current inflation, by the dispersion of price increases and mainly by the uncertainties related to the path of prices in segments with great visibility, such as gasoline, and some public services fares (for example, electricity and urban buses).

The Committee highlights that moderate credit expansion is considered in the main scenario. Important to note that moderation in the consumption credit market followed years of a significant expansion, contained by macro prudential measures placed in the end of 2010. During the last quarters, on one hand, banks' exposures were reduced, and on the other hand, households reduced their leverage. As a result, risks in the consumption credit market have being mitigated.

Still on the credit market, the Copom considers appropriate the actions on moderating subsidies allowances via credit transactions.

The Copom highlights the reasonable stability of domestic asset prices observed since the previous report. However, considering the relevant horizon for the monetary policy, the Committee evaluates that the risk aversion and the international financial market volatility may react to the publication of new indicators and/or to the signaling made by monetary authorities that suggest the beginning or the deepening of the normalization process of the monetary conditions in big economic blocs, particularly in the United States. Geopolitical events are other sources of disturbance. Therefore, it is natural to expect that eventual rises in both volatility and international markets risk aversion may be partially transmitted to the domestic asset market.

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 identifies a realignment process between regulated/monitored and market prices. From other point of view, the committee notes Real (BRL) depreciated against currencies of important Brazilian trade partners and then, also identifies a realignment process between domestic and international prices.

The Copom reminds that Selic rate was increased by 375 basis points (b.p.) and the transmission of monetary policy actions to inflation occurs with lags. In this process, several channels – for instance, demand, credit, exchange rate and expectations – are involved and not necessarily operate with the same intensity and in a simultaneous way. In this regard, the Committee notes that, before reaching prices, monetary policy actions interfere in the consumption and investment decision-making process of households and firms. Taking that into consideration, as well as the Brazilian experience during the Inflation Targeting regime, the Committee assesses that the economy's response to the recent cycle of the Selic rate adjustment, along with the prospects for the coming quarters, is aligned with what could be anticipated.

In other words, the available information suggests that the monetary impulses introduced in the economy throughout 2013 and 2014 have propagated normally through the main transmission channels and that this process will remain in the next quarters.

The current high inflation level reflects, in part, the occurrence of two already mentioned process of relative price adjustment – the realignment between domestic and international prices and the realignment between monitored/administered and market prices. The Committee recognizes that these relative price adjustments have a direct impact on inflation and reaffirms its view that monetary policy can and should restrain the second order effects that derive from them. In order to oppose these and other price pressures, the Copom highlights that monetary conditions have been tightened and that the effects of the increase in the Selic rate on inflation are, partly, still to materialize. Moreover, in the presence of relatively modest confidence levels, the effects of monetary policy actions on inflation tend to be magnified.

In this context, assessing the evolution of the macroeconomic scenario and the inflation perspectives, the Copom decided unanimously to keep the Selic rate at 11.00% p.a., without bias, in both July and September meetings.

The following members of the Committee voted for the decision of keeping the Selic rate at 11.00% p.a., in both July and September meetings: Alexandre Antonio Tombini (Governor), Aldo Luiz Mendes, Altamir Lopes, Anthero de Moraes Meirelles, Carlos Hamilton Vasconcelos Araújo, Luiz Awazu Pereira da Silva, Luiz Edson Feltrim e Sidnei Corrêa Marques.

The Copom emphasizes that the 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 the businessmen's confidence. The Committee also emphasizes that high inflation rates subtract the purchasing power of wages and transfers, with negative repercussions over households' confidence and consumption. Therefore, high inflation rates reduce the growth potential of the economy, as well as of jobs and income generation.

Although inflation is still at a high level, the Copom evaluates that the current inflationary pressures – such as the ones derived from the realignment of prices mentioned earlier and from the wage gains incompatible with productivity gains – tend to decrease, or even disappear, throughout the relevant horizon of monetary policy. In shorter horizons, this is added to the shifting of the output gap to the disinflationary side. In this context, the Committee reaffirms the view that, with unchanged monetary conditions, i.e. considering the strategy which not contemplates the reduction of the monetary policy instrument, the inflation tends to converge to the target in the final quarters of the projection horizon.

The Copom still highlights that, in moments such as the current one, the monetary policy should remain vigilant, in order to minimize risks that high inflation rates, such as the ones observed in the last twelve months, persist in the relevant horizon of monetary policy.

## 6.3 Assumptions and Inflation Forecast

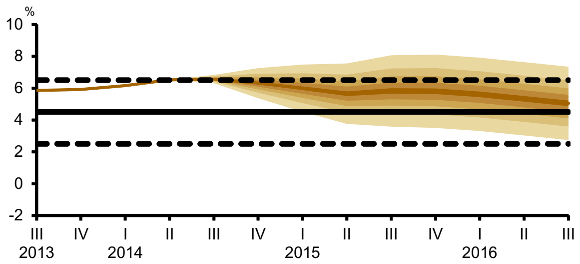
According to traditional procedures, and taking into account the available information set, up to the cutoff date of September 05, 2014, the baseline scenario assumes that the exchange rate remains unchanged over the forecast horizon at R$2.25/US$, and the target for the Selic rate at 11.00% p.a. – the level set by the September 2014 Copom meeting – same values considered in the inflation report of June 2014.

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 2014 while remained unchanged for 2015, compared to the values released in the June 2014 Inflation Report. For the last quarter of 2014, the average rate moved from R$2.39/US$ to R$2.31/US$. For the fourth quarter of 2015, market participants project an average exchange rate of R$2.48/US$, same value considered in the previous Report. For 2016, market participants project an average exchange rate of R$2.56/US$.

Regarding the evolution of the average Selic rate, the expectations for the fourth quarter of 2014 remained at 11.00% p.a. and, to the fourth quarter of 2015, shifted from 12.08% p.a. to 11.65% p.a. For 2016, the expected average Selic rate is 10.75% p.a. This trajectory of the Selic rate is consistent with twelve-month pre-DI swap spreads of 53

**Figure 6.3 – Projected IPCA-inflation with interest rate constant at 11.00% p.a. (Baseline scenario)**

Inflation fan chart




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

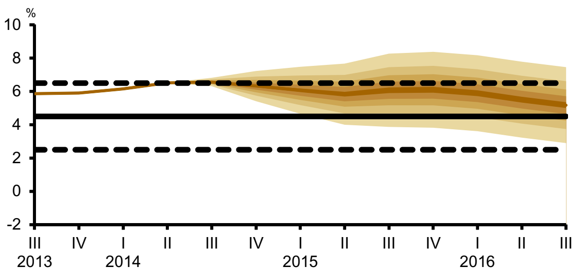
**Table 6.1 – Projected IPCA-inflation with interest rate constant at 11.00% p.a.**
(Baseline scenario)

| Year | Q | Probability Interval 50% | 30% | 10% | | 30% | 50% | Central projection |
|---|---|---|---|---|---|---|---|---|
| 2014 | 3 | 6.5 | 6.5 | 6.5 | 6.6 | 6.6 | 6.7 | 6.6 |
| 2014 | 4 | 5.9 | 6.1 | 6.2 | 6.4 | 6.5 | 6.7 | 6.3 |
| 2015 | 1 | 5.4 | 5.6 | 5.9 | 6.1 | 6.3 | 6.6 | 6.0 |
| 2015 | 2 | 4.9 | 5.2 | 5.5 | 5.8 | 6.1 | 6.4 | 5.6 |
| 2015 | 3 | 4.9 | 5.3 | 5.6 | 6.0 | 6.3 | 6.7 | 5.8 |
| 2015 | 4 | 4.9 | 5.3 | 5.6 | 6.0 | 6.3 | 6.7 | 5.8 |
| 2016 | 1 | 4.7 | 5.1 | 5.4 | 5.8 | 6.1 | 6.5 | 5.6 |
| 2016 | 2 | 4.4 | 4.8 | 5.1 | 5.5 | 5.9 | 6.3 | 5.3 |
| 2016 | 3 | 4.1 | 4.5 | 4.9 | 5.2 | 5.6 | 6.0 | 5.0 |

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.).

b.p. and of 59 b.p., with respect to the current target for the Selic rate (11.00% p.a.), in the fourth quarter of 2014 and 2015, respectively.

The projection for the change in the set of regulated and monitored prices, in both scenarios, is 5.0%, for 2014, same value considered in the last Report. This projection is based on the variations occurred, up to August, in gasoline (0.2%) and bottled gas (0.3%) prices, as on the assumptions for the accumulated over 2014, of reduction of 6.3% in landline telephone rates and increase of 16.8% 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 6.0% in 2015, same value considered in the last Report, and 4.9% in 2016, compared to 4.5% considered in the June 214 Report.

The structural primary surplus that derives from the primary surplus trajectories for 2014 and 2015 is considered as the fiscal indicator, according to the parameters set out in the Budget Guidelines Law (LDO)/2014 and the Budget Guidelines Project Law (PLDO)/2015, respectively. As highlighted in previous Reports, for a certain period of time, the fiscal impulse is equivalent to the change of structural surplus, compared to the previous period.

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

The central projection associated with the baseline scenario indicates inflation of 6.3% in 2014, 0.1 p.p. lower than the value presented in the June 214 Report, above the central target level of 4.5% determined by the National Monetary Council (CMN). As can be seen in Figure 6.3 and in Table 6.1, the projection starts at 6.6% in the third quarter of 2014; and ends the year at 6.3%. For the first quarter of 2015, the projection reduces to 6.0%; it moves to 5.6% and 5.8% in the second and third quarters of 2015, respectively; and ends the year at 5.8%. In the first, second and third quarters of 2016, the projection is 5.6%, 5.3% and 5.0%, respectively.

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

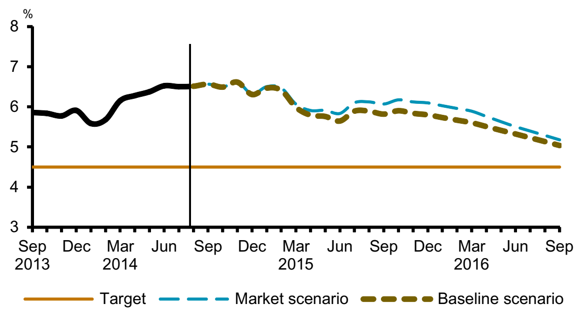
| Year | Q | Probability Interval 50% | 30% | 10% | 10% | 30% | 50% | Central projection |
|---|---|---|---|---|---|---|---|---|
| 2014 | 3 | 6.5 | 6.5 | 6.5 | 6.6 | 6.6 | 6.7 | 6.6 |
| 2014 | 4 | 5.9 | 6.1 | 6.2 | 6.4 | 6.5 | 6.7 | 6.3 |
| 2015 | 1 | 5.5 | 5.7 | 6.0 | 6.2 | 6.4 | 6.6 | 6.1 |
| 2015 | 2 | 5.1 | 5.4 | 5.7 | 6.0 | 6.3 | 6.6 | 5.8 |
| 2015 | 3 | 5.2 | 5.6 | 5.9 | 6.2 | 6.6 | 7.0 | 6.1 |
| 2015 | 4 | 5.2 | 5.6 | 5.9 | 6.3 | 6.6 | 7.0 | 6.1 |
| 2016 | 1 | 5.0 | 5.4 | 5.7 | 6.1 | 6.4 | 6.8 | 5.9 |
| 2016 | 2 | 4.6 | 5.0 | 5.3 | 5.7 | 6.0 | 6.4 | 5.5 |
| 2016 | 3 | 4.2 | 4.6 | 5.0 | 5.4 | 5.7 | 6.1 | 5.2 |

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

**Table 6.3 – June 2014 Inflation Report projections**

| Period | Baseline scenario | Market scenario |
|---|---|---|
| 2014 II | 6.5 | 6.5 |
| 2014 III | 6.6 | 6.6 |
| 2014 IV | 6.4 | 6.4 |
| 2015 I | 6.1 | 6.3 |
| 2015 II | 5.9 | 6.2 |
| 2015 III | 6.0 | 6.3 |
| 2015 IV | 5.7 | 6.0 |
| 2016 I | 5.4 | 5.5 |
| 2016 II | 5.1 | 5.0 |

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




Still in the baseline scenario, the estimated probability that inflation will breach the upper tolerance level of the target in 2014 stays around 37% and, in 2015, around 31%

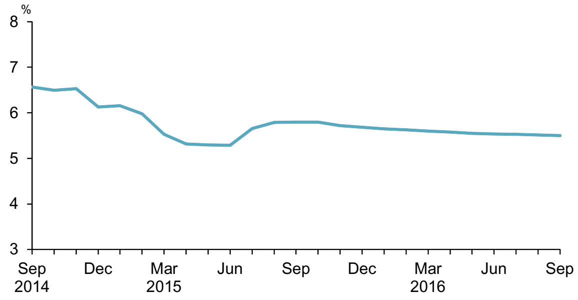
In the market scenario, the inflation projection for 2014 stays in 6.3%, same value projected in the baseline scenario and 0.1 p.p. lower than the value presented in the last Report. As it can be seen in Figure 6.4 and Table 6.2, the projection for twelve-month inflation, as in the baseline scenario, ends the year above the central target. Specifically, the projection starts at 6.6% in the third quarter of 2014; and ends the year at 6.3%. The projection is 6.1% in the first quarter of 2015; moves to 5.8% and 6.1% in the second and third quarters of 2015, respectively; and ends the year at 6.1%. In the first, second and third quarters of 2016, the projection stays at 5.9%, 5.5% and 5.2%, respectively.

In the market scenario, the estimated probability that inflation will breach the upper tolerance level of the target in 2014 stays around 37%, and in 2015, around 39%.

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 stability for the third quarter of 2014 and a decrease in the inflation projection between the third quarter of 2014 and the third quarter of 2015. For the following three quarters, the inflation projection increases. The reduction for 2014 and 2015 is partly due to the inflation rates in recent months, in general, lower than the projections that prevailed during the time of the previous Report publication; while the increase in projection for 2016 is due to higher projections for regulated and monitored prices. In the market scenario, the comparison of the trajectories presents similar movements, reflecting, to some extent, the same factors.

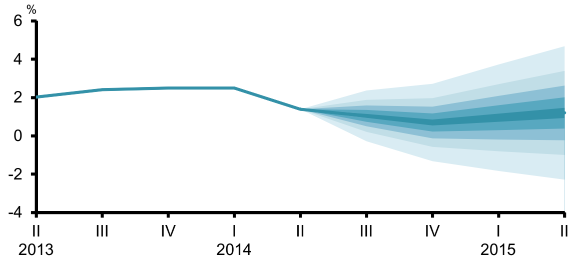
Figure 6.5 shows the path of the twelve-month inflation, according to the baseline and the market scenarios, up to the third quarter of 2016, as well as the inflation target path. The figures are actual twelve-month inflation until August 2014 and, from then on, projections corresponding to the respective scenarios are used to compose the twelve-month values. In both scenarios, projections indicate twelve-month inflation starting above the central target level, with a declining trend beginning in the fourth quarter of 2014. Although above the central target, projections show a convergent path for inflation at the end of the forecast horizon.

**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 11.00% 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 August 2014, the values refer to actual twelve-month inflation and, from then on, to forecasts. According to these models, the inflation projection presents a declining path up to June 2015, 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 0.7% in 2014 (0.9 p.p. lower than the one considered in the previous Report), and 1.2% in the four-quarter period ending in the second quarter of 2015.