1.1 Introduction

In the first half of 2016, the global economy recovery remained fragile, with the presence of deflationary risks in important major economies. In this context, the European Central Bank (BCE) and the Bank of Japan (BoJ) strengthened the expansionary stance of their monetary policies, while the Federal Reserve (Fed), of the United States, kept the Fed Funds rate unchanged. In the financial markets there was strong increase in the volatility up to the middle of February, due to uncertainties regarding the transition in the Chinese economy, successive reductions in the expectations of global growth, fast retreat in oil prices and concerns relative to the European banking system. In the end of the semester, the risk aversion intensified after the UK decision to exit the European Union (Brexit), which negatively affected the expectations of economic growth in Europe and, specially, in that country, increasing the prospect for the maintenance of the monetary policy accommodative stance in the main developed economies. In this environment, the long-term interest rate in these economies reached the lowest values of the historical series, with the ten-year German and Japanese bonds presenting negative yields at the end of the semester.

In the emerging markets, measures of incentives to investment in infrastructure and of monetary easing announced by the Chinese government, the partial recovery in the commodity prices, started in the middle of February, and the maintenance of the global monetary policy expansionary bias allowed the reduction of the sovereign risk premium in important economies, as well as the appreciation of their currencies against the US dollar.

In Brazil, the retreat in the activity level continues to reflect the ongoing macroeconomic adjustment and the consumers’ and businessmen confidence at
still low levels. The external scenario contributed positively, with elevation in exports and contraction in imports. Prospectively, signs of accommodation in the contractionary trajectory and of the activity level gradual recovery emerge. Together with the prospects of progressive retreat of inflation, more favorable trajectories for the employment and income levels tend to contribute for the domestic demand recovery.

In the domestic front, in environment of high slack in the production factors and of credit contraction, the uncertainties regarding the process of implementation of the necessary adjustments in the economy prevailed. From March on, with the improvement in the external scenario and the BRL appreciation, the Banco Central do Brasil (BCB) significantly reduced the FX swap outstanding. In the conduction of the monetary policy, in light of the still elevated inflation expectations, the Monetary Policy Committee (Copom) maintained the Selic target unchanged, and, in the future market, the interest rates presented a downward trend, particularly in the longer terms.

1.2 International macroeconomic environment

The global economic recovery remained fragile, with successive revision downwards in the 2016 growth expectations. According to the International Monetary Fund (IMF), the global economy should grow by 3.1% in 2016, identical change to the one registered in 2015, with expected expansions of 1.8% for advanced economies and 4.1% for the emerging ones. The changes in the consumer price indices remained at very low levels in the main advanced economies, with risk of deflation in the Euro Area and Japan, associated to the low figures for commodities prices, mainly oil.

The Gross Domestic Product (GDP) in the United States grew 2.6% in 2015, with expectation of 2.2% for 2016. In the first two quarters of the year, the economy grew at respective annualized rates of 0.8% and 1.2%, a pace lower than the expected by the market. The labor market

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2/ The WEO reports contemplated successive revisions downwards in its estimates for the 2016 global growth, from 3.8%, at the October 2015 report, to 3.1%, in the last update (July).
3/ The last WEO update already contemplates the Brexit.
5/ The median of GDP estimates in the 2nd quarter of 2016 stood at 2.5%, according to Bloomberg.
evolved favorably, with the unemployment retreating to 4.9% in June, despite the volatility in the job generation. In a scenario of still low inflation, the Federal Open Market Committee (FOMC) signaled that it remains waiting for more consistent signs of recovery before starting the monetary policy normalization.

In the Euro Area, GDP grew 1.7% in 2015, with expectation of 1.6% for 2016. The deflation risk remains, after retreats of the consumer price index in February, April and May, and increase of 0.1% in June. The risks for the economic growth in the region were reinforced by the uncertainties generated after the Brexit. In this scenario, the BCE deepened the accommodative stance of the monetary policy, by reducing the deposit rate to -0.40% p.y. and broadening the assets purchases program. The effects of the monetary policy contributed for retreats in the long-term interest rates and for the devaluation of the euro.

Among the major developed economies, the United Kingdom was the one that grew the most in the first half of 2016, with GDP annualized quarterly expansions of 1.8% and 2.4%, in the first and second quarters. The decision to exit from the European Union affected the confidence indicators and the growth expectations, which retreated from 1.9% to 1.7% for 2016 and from 2.2% to 1.3% for 2017, according to the IMF. In this context, the Bank of England signaled new measures of monetary easing and the pound reached the lowest value in the last thirty years, against the US dollar.

The Japanese economy grew 0.5% in 2015 and should decelerate to 0.3% in 2016, in a deflationary environment. In this context, the Bank of Japan initiated, in January, the Quantitative and Qualitative Monetary Easing Program (QQE), with negative interest rate. It bears still highlighting that, despite the accommodative monetary policy, the yen recorded significant valuation, imposing challenges to the exporter sector and to the conduction of the economic policy.

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6/ Broadening of €20 billion, to €80 billion/month up to March 2017 or longer, if necessary. Additionally, in June, there was the start of purchases of private bonds of companies in the region, the Corporate Sector Purchase Program (CSPP).
7/ In 2015, the United Kingdom GDP increased 2.2%, decelerating from 3.1% in 2014.
8/ Difference between the WEO expectations released in April and July 2016.
9/ WEO Update, July 2016.
China continued the transition from an investment-intensive and exports-oriented growth model, to another pattern, based on the domestic demand and on consumption. As the reduction in investments and the deceleration of industrial activity is not totally compensated by the increase in the domestic demand, the economy continues to fade, recording expansions of 6.9% in 2015, the lowest rate since 1990, and of 6.7%, year-over-year, in each of the first two quarters of 2016. For the year, the estimate is of 6.5% increase. The government has sought to stimulate the economy, with investments in infrastructure, credit expansion and maintenance of the accommodative monetary stance. However, the fast credit growth and the excess of industrial capacity present risks in the medium term, adding uncertainties to the global growth, and, in particular, to the commodities prices.

Among the other emerging economies, additional retreats in the commodities prices and the normalization of the monetary policy in the US remain as main source of risks. In Latin America, GDP in the region should contract 0.4% in 2016, after null growth in 2015, reflecting, mainly, the evolution of the activity level in Brazil. In Russia, despite the recovery in the oil prices since February, the economy should retreat 1.2% in 2016, after contraction of 3.7% in 2015. India maintains the highest growth rate among the main global economies, with expectation for expansion of 7.4% in the year.

1.3 Domestic macroeconomic environment

In the first half of 2016, the Brazilian economy maintained the trajectory of contraction, still mirroring the impacts of the ongoing macroeconomic adjustment in the Country, with repercussions over the labor and credit markets, and of the unfavorable scenario of economic agents’ confidence, with effects over the consumption and investment decisions.

In this context, in the first quarter of 2016, GDP retreated 0.3% relatively to the fourth quarter of 2015, when it retreated 1.3%, according to the same comparison basis. The first quarter result was the fifth consecutive quarter-over-quarter decrease, which was due, according to the supply side, to the contraction of the industrial and services output, and according to the demand side, to

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the retreat in investments and household consumption. The external component continues to contribute positively, reflecting the recent performance of the domestic consumption and the lagged effects of the BRL depreciation in 2015, which implied significant imports contraction.

The GDP contraction in the first quarter of 2016 in a less intense pace than the recorded in the four previous quarters and the relatively favorable evolution of several indicators in the second quarter, including the industrial production, suggest accommodation of the decline trajectory. In the medium term, positive signs for the evolution of the economic activity emerge, among which, the gradual reversion of the negative trend of the consumers’ and businessmen confidence indicators, which, among other factors, reflect the improvement in the perception associated to the implementation of adjustments in the macroeconomic policy. The inventories’ adjustment, still in course in the industrial sector, and the low level of installed capacity utilization evidence the absence of restrictions, from the supply side, for the industrial activity pick-up.

However, the more consistent recovery of the economic activity remains conditioned to the improvement of the labor market conditions. According to the Continuous National Household Sample Survey (Continuous PNAD), the unemployment rate stood at 11.2% in the second quarter of 2016, the highest level of the historical series started in 2012, and the payroll contracted 0.3% in the twelve-month period ended in June. Despite the gradual pick-up of economic activity, the labor market reaction should happen with lags, with the unemployment rate remaining at a high level. The extended payroll, however, should maintain stable trajectory in the upcoming year, influenced by the expected increase for the minimum wage and by its effects over social benefits. In this context, the gradual pick-up in activity and the continuity of the ongoing disinflationary process should contribute to the moderate recovery of household consumption, favoring the domestic demand, paramount factor underpinning the activity recovery.

1.4 International financial environment

The financial markets recorded volatility episodes in the first half of 2016. Uncertainties related to the growth in China and the retreat in oil prices provoked swings
in the financial markets and strong retreat in the stocks markets at the start of the year. The uncertainty relative to the European banking system and to its capacity to honor the payments associated to the so-called Contingent Convertible Bonds (CoCo bonds) triggered sales of bonds issued by the banking sector. Bonds of the energy sector retreated significantly, in line with oil prices. Since mid-February, the energy sector presented recovery, but the bonds of the banking sector, mainly in Europe, showed lower dynamism, reflecting the moderate economic activity and the negative interest rates. The Brexit was followed by a new risk aversion movement, with higher intensity in Europe, but the signaling of additional monetary stimuli in some jurisdictions brought accommodation to the financial markets.

In the first half, the Dollar Index (Major)\(^\text{12}\) declined 2.5%, after three consecutive semesters of positive growth, recording retreats in relation to the main currencies, with highlights for the depreciations relative to the BRL, to the yen, to the Russian ruble and to the euro\(^\text{13}\). In opposed sense, the US dollar strengthened in relation to the Argentine peso, to the pound sterling and to the renminbi\(^\text{14}\).

In expansionary environment, with intensification of the risk aversion, ten-year-bond annual yields of the advanced economies strongly compressed in the period, reaching the lowest values in the respective historical series. At the end of the semester, the annual yields of the US and United Kingdom bonds stood at 1.47% and 0.87%, respectively, while the bonds yields in German and Japan remained at negative levels.

However, the emerging economies, mainly the commodity exporters, were benefited by the partial recovery of those prices from mid-February on, which contributed for the reduction of the sovereign risk premium and for the strengthening of the domestic currencies.

In this scenario, the risks to the financial stability remained relevant. The excessive compression of the advanced economies’ bonds yields produces systemic consequences with potential difficulties for the financial system and for the insurance companies, banks and pension funds with portfolios more exposed to these

\(^{12/}\text{The Dollar Index Major, released by the Fed, reflects the price of the US dollar weighted in relation to seven currencies traded in high liquidity markets: euro, Canadian dollar, yen, pound sterling, Swiss franc, Australian dollar and Swedish krona.}

\(^{13/}\text{In the order, 17.8%, 14.2%, 11.9% and 2.2%.}

\(^{14/}\text{Respectively, 16.3%, 10.7% and 2.4%.}
bonds, in addition to producing distortions in the allocation of assets and incentive to excessive leveraging.

In the United States, despite the recent signaling, high degree of uncertainty related to the normalization of the monetary policy remains, which can cause new volatility episodes in the financial markets. In Europe, the uncertainties related to the profitability of the banking sector have increased, against the backdrop of negative interest rates and low economic growth environment. The intensification of the political risks associated to the Brexit composes the scenario, with concerns regarding the permanence of other countries in the European Union.

In the emerging markets, the foreign currency indebtedness of the corporate sector can bring difficulties under a scenario of higher volatility in the FX markets. Moreover, the commodities prices remain conditioned to the uncertainties that restrict the global demand.

1.5 National financial market

In the first half of 2016, Copom has maintained the target for the interest rate at 14.25%, the same since July 2015\(^\text{15}\). Despite the disinflation process, in June\(^\text{16}\), both the accumulated inflation in 12 months and the expectation for inflation were still above the 4.5% target set by the National Monetary Council (CMN)\(^\text{17}\). Throughout the semester, the Committee reassured it would seek to maintain inflation into the limits set by the CMN in 2016 and would take the necessary measures to ensure the convergence of inflation to the target of 4.5% in 2017.

Reversing the previous semester movement in the interest rates future market, rates, particularly longer-term ones, showed a mostly downward trend. The yield curve initially presented positive slope but since March it became negatively sloped (Chart 1.5.1). This loss in the yield curve steepness was due to external and internal factors. In the international arena, the adoption

\(^{15}\) From April 2013 to July 2015, Copom implemented a monetary tightening cycle, which raised the target for Selic rate to 14.25% from 7.25%.

\(^{16}\) The median of inflation expectations (IPCA) for the next twelve months (smoothed) decreased monotonically throughout the semester (to 5.89% at the end of June 2016 from 6.94% at the end of December 2015). The IPCA accumulated in 12 months fell to 8.84% in June from 10.67% in December.

\(^{17}\) Resolution No. 4.345 of June 25\(^\text{th}\), 2014, set the target for inflation in 2016 at 4.5% (Broad Consumer Price Index - IPCA), and the tolerance interval on 2.0 percentage points (p.p.) below and above the goal. Resolutions No. 4.419, of June 25\(^\text{th}\), 2015, and No. 4.499, of June 30\(^\text{th}\), 2016, fixed the inflation target for 2017 and 2018, respectively, at 4.5%, with a tolerance interval of 1.5 p.p. below and above the target.
of expansionary monetary policy measures by central banks of major economies prevailed; domestically, the expectations of economic agents were higher, regarding the overcoming of obstacles to the adoption of measures that would allow the recovery of the economy.

Earlier this year, the uncertainties brought about by the turbulence in FX and stock markets in China triggered a risk aversion movement around the world and a more cautious attitude on monetary policy by central banks of major economies. In this scenario, the Federal Reserve (Fed), after long preparation to unlock the monetary policy normalization process and effectively implement the first rise of interest rate in December 2015, began to indicate greater gradualism and kept its base rate unchanged throughout the first half of 2016.

Until the Copom meeting in January, interest rates in future markets pointed to the possibility of resumption of a contractionary cycle of monetary policy that eventually did not happen. The minutes of that meeting highlighted potentially external deflationary factors and an increase in idle capacity in the domestic labor market, which, together with the change in the monetary policy of the BoJ, led to a sudden revision of expectations on domestic interest rates path.

From mid-February, internal factors, economic and political, became more relevant. Parri passu to the deepening of the recession, the decrease in revenues worsened fiscal performance\(^\text{18}\). This fact, enhanced by non-economic uncertainties, has led to further downgrades of Brazilian sovereign rating\(^\text{19}\) and occasionally led to the rise of interest rates in longer-maturity contracts. Nevertheless, the effects of lower risk aversion on the international scene and of an appreciation of the real against the dollar prevailed and were particularly pronounced in March, which contributed to the decline of interest rates in the future markets. Shorter-term rates presented greater stability, as the monetary authority

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\(^{18}\) The announcements, in February, that the temporary cuts in 2016 Government Budget was postponed to the following month and that the government would send a bill to Congress easing the fiscal target of the year, ended up, in March, with the revision of the primary deficit to R$ 96 billion in 2016. In May, the forecast for the deficit was raised, once again, to R$ 170.5 billion.

\(^{19}\) In February, S & P downgraded Brazil’s sovereign credit rating to BB with negative outlook from BB\(^+\); and Moody’s, which until then maintained the classification as investment grade, downgraded it two levels, to Ba2 with negative outlook from Baa3. In May, Fitch downgraded it to BB with negative outlook from BB\(^+\).
indicated that the monetary policy course\textsuperscript{20} would be kept, which also influenced a reduction in rates in the medium and long terms.

By the end of April, the effects on the interest rates of the methodological review of IPCA, which raised inflation expectations for the year, were partially offset by an increase in labor market slack\textsuperscript{21}. Market participants also mentioned developments in the political arena as factors that have influenced the behavior of rates in the interest rates future market. During the semester, the rates showed a downward trend, only interrupted on May 18 with the release of FOMC minutes. These minutes brought a positive assessment of the US economy and resulted in an increase in the Treasuries yields and in the probability that Fed would increase interest rates in June. By the end of May, the speech of Fed Chairman’s reinforced that expectation.

In June, the rates resumed their downward trend due to the lower risk associated with the processing of measures for fiscal rebalancing\textsuperscript{22} and with the reversal of expectations that, in the short term, Fed would raise its basic rate. This reversal was due to the weak developments in the US labor market (May payroll) and to the proximity of the June 23 Great Britain’s popular consultation on the permanence in the European Union (EU). The Treasuries rates fell, reflecting the increasingly lower probability of the Fed promoting an interest increase further in 2016. The surprise with the victory of the output of the UK from EU (Brexit) led to risk repricing in global financial markets. The possibility of central banks of major economies adopting more accommodative policies led to the perception that Brazil could attract greater capital.

\textsuperscript{20} On March 22, speaking to the Senate, the Governor of the BCB reassured he would not work with the hypothesis of an easing on monetary conditions. April’s Copom minutes corroborated his speech, mentioning that there would be no room for a drop in interest rate before a significant reduction of inflation in 12 months and in future expectations. The second quarter Inflation Report further corroborated it, as it indicated that the central scenario would not work well with the hypothesis of an easing on monetary policy.

\textsuperscript{21} The National Household Sample Survey (PNAD) Continuous, conducted by the Brazilian Institute of Geography and Statistics (IBGE), showed an increase in unemployment rate throughout the semester until April. By the end of 2015, the quarter rate ended in December was in 9.0% and gradually rose to 11.3% in June (quarter rate ended in June).

\textsuperscript{22} The Special Committee of the House of Representatives approved the Constitutional Amendment Project (PEC) extending the untying of Union Revenues (DRU) until 2023. In mid-June, the new Minister of Finance presented tax measures, including one proposal to limit public spending growth for twenty years, which might be revised only after 9 years. In 2017, the total expenditure amount would already be equal to the 2016 total expenditure adjusted by inflation (IPCA). The Ministry of Finance and governors signed a renegotiation agreement of States debt with the federal government.
inflows, limiting any negative reaction in the domestic interest rate market soon after the vote and subsequently reducing long-term future rates.

Interest rates volatility was lower than in the previous semester. Nevertheless, for medium and long term there was a surge in volatility, especially in March and April, declining afterwards to the level of last December. The short-term volatility, except for a spike in January, continued on a downward trajectory, gradually returning to the beginning of July 2015 level (Chart 1.5.2).

For the longer term, the significant decrease in interest rates, the changes in Fed’s signaling regarding the pace of the normalization of its monetary policy and the prevalence of domestic political factors have led to an increase in volatility. The expectations of the financial market and consequently the prices of financial assets reacted to the possibility of change in economic policy direction with the reformulation of government support in Congress in March and April. When the President of Brazil was temporarily absent and the Vice President assumed the position on an interim basis on 12 May, the market responded analogously.

The real depreciated 6.0% until January 21, when it reached R$ 4.16/US$. Since then it presented an appreciation trend. In the semester, the exchange rate fell 17.8% in dollars and 16.7% in euros, ending at R$ 3.21/US$ and R$ 3.54/Euro (Chart 1.5.3).

The depreciation of the real at the beginning of the year was due to an unfavorable external environment that led to increased risk aversion and, internally, to a worsening of the fiscal situation and higher political uncertainties. Since then, the real showed significant appreciation as it was expected that the Fed would not change interest rates, which favored a higher propensity to risk in global markets. Internally, financial market participants

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23/ On April 19, the House of Representatives approved the admissibility of the process of impeachment of the President of the Republic and sent it to the Senate, which approved initiation of impeachment proceedings on May 12, determining the removal of the President from office by up to 180 days for the trial. Interim President formed, then, a new ministry with a new configuration of supporting parties.


25/ In May, there was a stronger dollar appreciation mainly due to FOMC minutes, which brought a positive assessment of the US economy. As a result, the likelihood of a rising in interest rates by the Fed in June increased. However, as this scenario did not happen, the real was brought back to its downward trend.
were more optimistic about the implementation of the necessary adjustments in the economy and believed that uncertainties in the domestic scene would gradually fade away. By the end of June, the expectation for the approval of measures favorable to the fiscal adjustment by Congress and the perception that the effect of the output of the UK from EU in keeping interest rates in developed economies at low levels would be long lasting boosted an appreciation of the real.

In the first two months of the year, the BCB maintained the strategy of full rollover of FX swap redemptions. Over March, however, due to more favorable market conditions\(^\text{26}\), the BCB began to reduce the volume offered to rollover the FX swaps maturing on April until, in the last ten days, returned to make reverse FX swap auctions\(^\text{27}\), which had not been offered since March 2013. These auctions were held until mid-May, and reduced FX swap stock at $ 43.7 billion. In the first half of the year, the BCB carried out traditional FX swap auctions\(^\text{28}\) in the notional amount equivalent to US$ 29.3 billion (referring only to the rollover of redemptions), and reverse FX swap auctions in the notional amount equivalent to US$ 42.8 billion. By the end of the semester BCB short net position (swap) in foreign exchange has been reduced to US$ 62.1 billion, from US$ 108.1 billion in December.

The balance of the FX transactions showed an outflow of US$ 10.4 billion in the first half of 2016 and resulted from inflows of US$ 25.4 billion in trade and outflows of US $ 35.8 billion in financial. The net volume of direct investment in the country (IDP) was US $ 33.8 billion from January to June. At the end of June, International reserves were at US$ 364.2 billion, a 2.2% increase since the end of 2015.

In the stock market, the Bovespa Index of BM&FBovespa (Ibovespa) rose 18.9% in the semester (Chart 1.5.4). For most of January, however, its trajectory was downward, accumulating 13.5% losses by January 26. This was mainly due to falling oil prices and the slowdown of Chinese economy. Since then, the partial recovery of oil prices, the increasing appetite for global risk and, domestically, political developments, led to the reversal of Ibovespa\(^\text{29}\) trajectory. In the first half of the year, the

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\(^{26}\) In March, for example, the real appreciated 11.8% against the dollar.  
\(^{27}\) FX swap operation in which the BCB assumes a long position on FX plus interest and short position in the domestic interest rate (Selic).  
\(^{28}\) FX swap operation in which the BCB assumes a short position on FX plus interest and long position in the domestic interest rate (Selic).  
\(^{29}\) In this context, Petrobras returned to the international market and issued in May US$ 6.8 billion in bonds maturing in five and ten years.
net inflow of foreign investment was R$ 12.6 billion, concentrated in March, when there was an inflow of R$ 8.4 billion.

Throughout the semester, externally, the process of monetary policy normalization by the Fed was limited to the uncertainties in the international arena. Domestically, despite the confidence level downward trend reversal and the disinflation process in progress, inflation expectations remained high. In response to the challenges for inflation convergence, Copom maintained the target for the Selic rate unchanged throughout the semester. Interest rates in future market reacted positively to the improvement of domestic and international scenarios, especially in the intermediate and long terms, showing downward trend over the period. Due to lower uncertainties in the domestic and international fronts, the real appreciated, and the Ibovespa rose by the end of the semester.