



# **Inflation Outlook**

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**Inflation Report**

**September 24, 2015**

**I. Main Message**

**II. International Environment**

**III. Financial Conditions**

**IV. Activity**

**V. Inflation Developments**

# I. Main Message (1)

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**The balance of risks has deteriorated**, with recent elevations of the risk premia, which reflect in the asset prices. The monetary policy strategy reaffirms the **objective of the Central Bank to set inflation at 4.5% a.a. at the end of 2016**, defining the necessary and sufficient conditions to reach it:

- 1. the maintenance of the current level of the Selic rate, for a sufficiently long period;**

but, as it is not possible to be sure if the recent risk premia elevations are temporary or permanent,

- 2. this demands that the monetary policy, on the one hand, observe with attention the causes of volatility and, and on the other hand, keep vigilant in case of significant deviations of the Copom inflation projections from the target.**

# I. Main Message (2)

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In addition to our adjustment process (with its external, monetary and fiscal components), **there is an ongoing series of non-economic events** that affect the confidence and increase the markets' volatility in Brazil

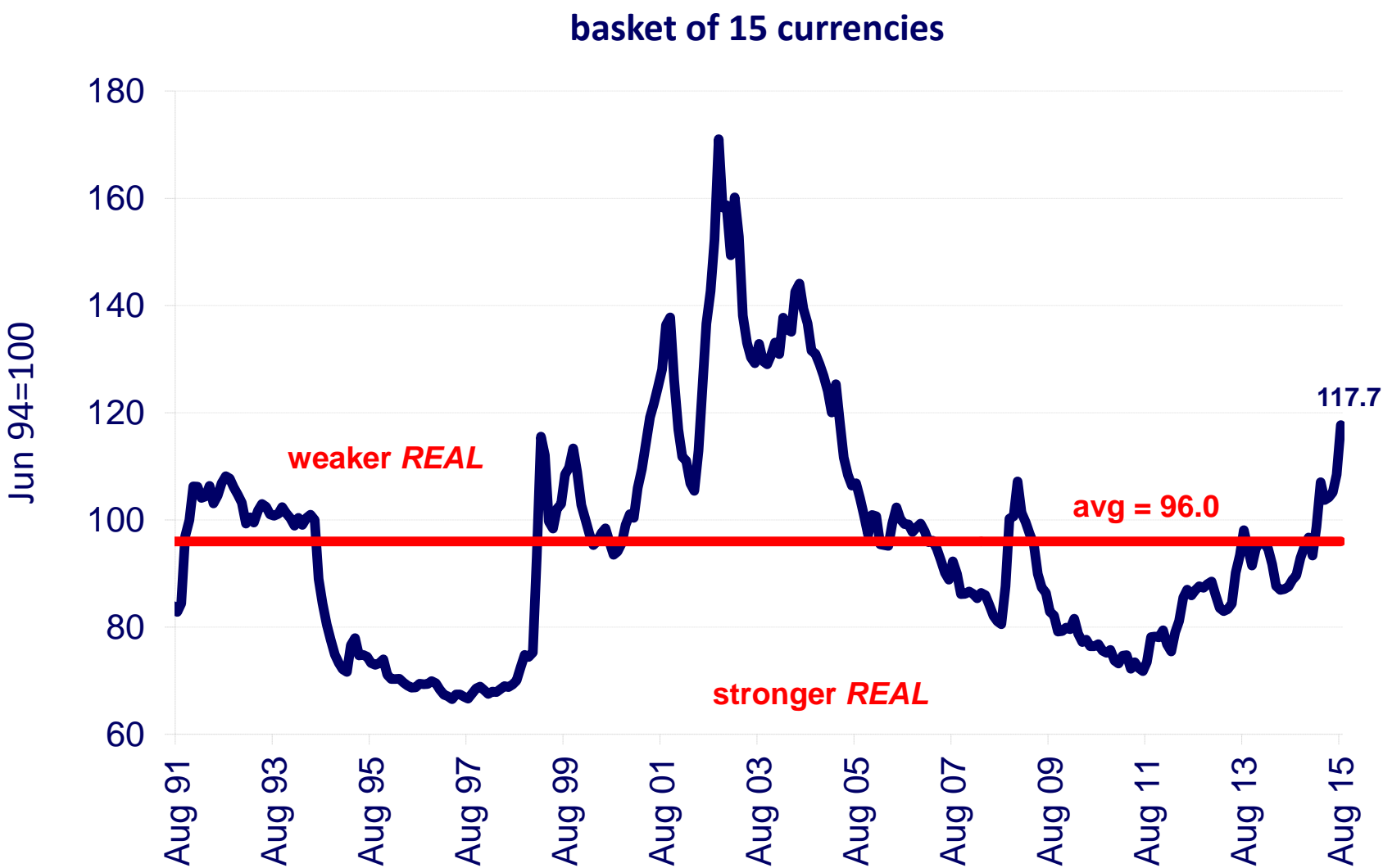
**The recent communication of monetary authorities of advanced countries** has not been sufficiently clear to guide the global markets and disperse uncertainties regarding the global growth; these uncertainties have increased the volatility in the assets prices of emerging countries in general, intensifying local negative perceptions in specific cases, as Brazil

**In this context, it is necessary to have calm and analytic wisdom and to avoid excessive reaction;** it is necessary to proceed with the announced policies, to separate the causes of volatility, to give direction to the market and to preserve its functionality

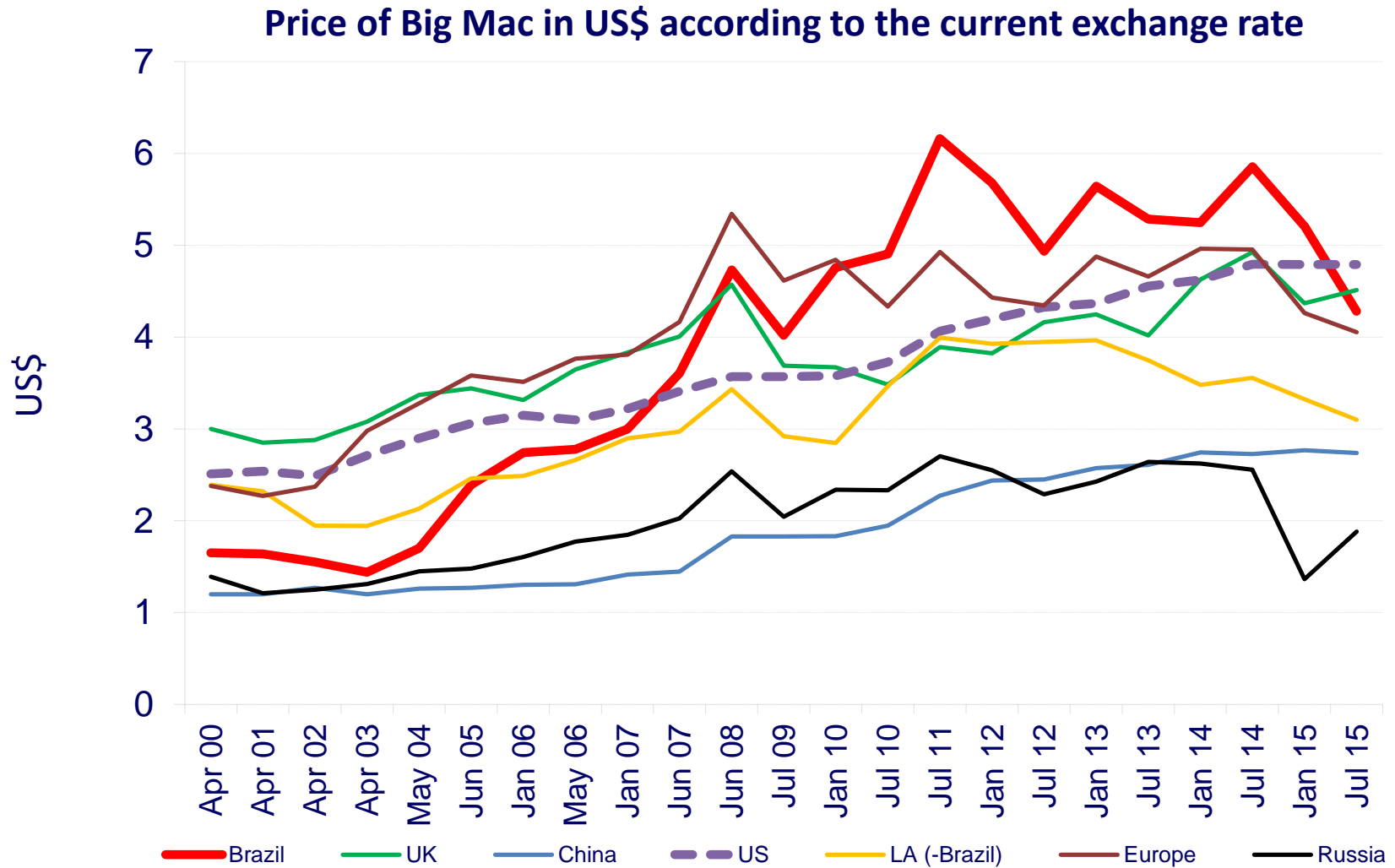
# First Results of the Adjustment in 2015

- Process of ongoing macroeconomic adjustment is standard, relevant and necessary; adjustment with three components (external, monetary and fiscal); and two phases (quantity, price)
- Adjustment is producing expected results in two components (external and monetary, e.g., improvement of the external accounts, strong disinflation in 2016, market expectations 9.3% → 5.7% or around 360bps); but this needs to be consolidated in the fiscal component that is affecting the risk premia and might de-anchor inflation expectations
- We need to strengthen the economic policy and fundamentals; reinforce the preparation for the external normalization; and build a solid base for a new cycle of sustainable growth

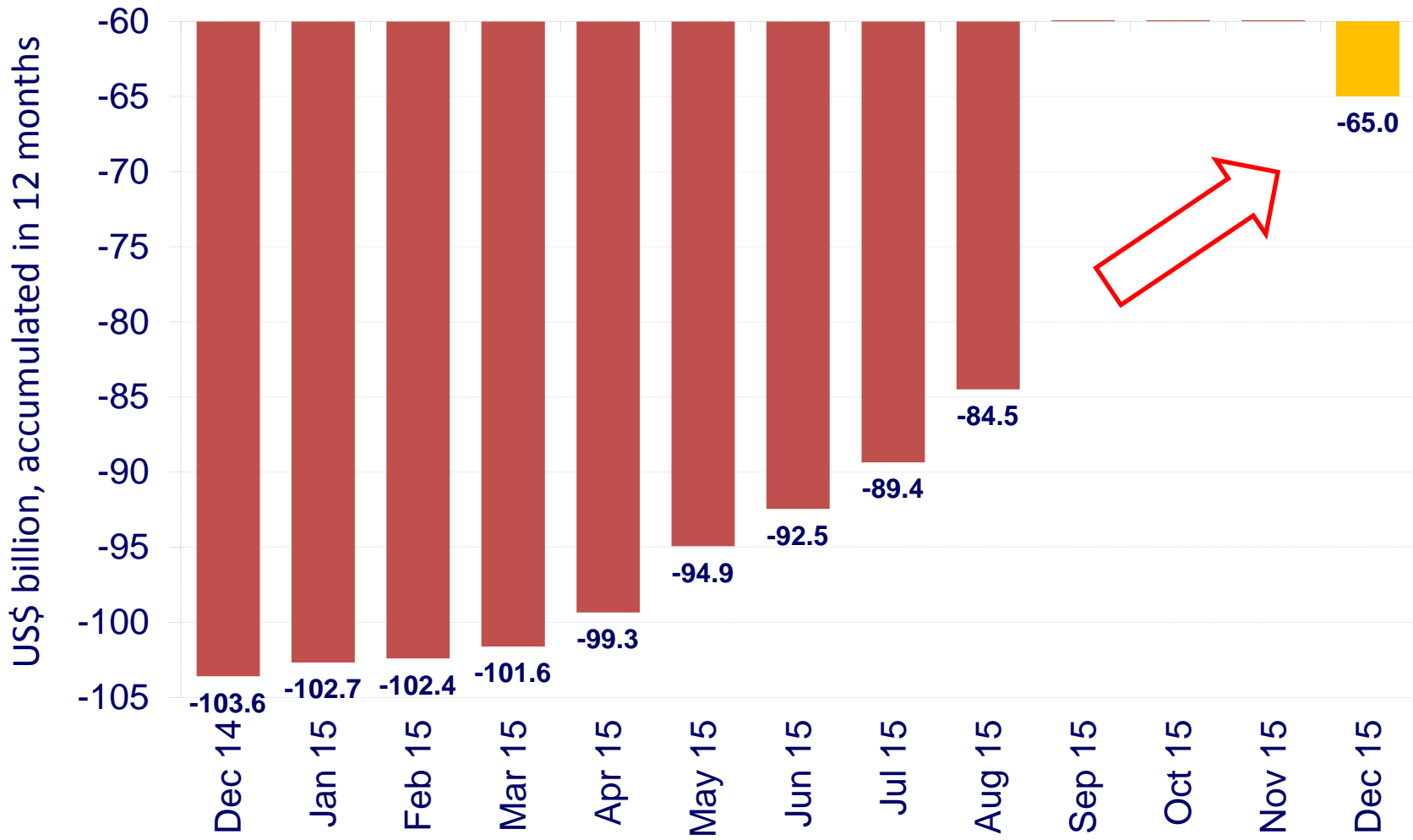
# Adjusting the Real Effective Exchange Rate (REER)



# A Well Known Example: Big Mac Index



# External Sector Adjusting: Projection –US\$65 bi in 2015



Source: BCB

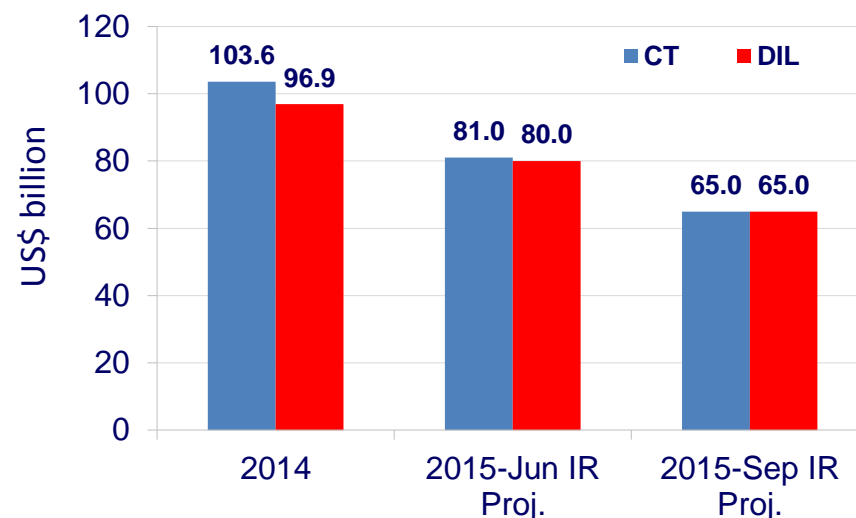


# Box: Balance of Payments Projections

## Revision for 2015 shows intensification in the *deficit* reduction:

- Estimate of the current account deficit from US\$81 billion to US\$65 billion (3.7% of GDP) for 2015.
  - higher trade surplus, from US\$3 billion to US\$12 billion (*deficit* of US\$6 billion in 2014) ;
  - retreat of US\$3 billion in the net expenses of profits and dividends, reaching US\$18 billion
- The estimate of net inflows of direct investment liabilities (DIL) was reduced from US\$80 billion to US\$65 billion, totally financing the current transactions (CT)
- A net inflow of US\$31 billion in stocks and securities in the country (denominated in BRL) is forecast, a reduction of US\$10.5 billion relative to the previous estimate
- The rollover rate for securities and long-term loans, abroad, was maintained at 100%

## Current Transactions and Direct Investment Liabilities (DIL)

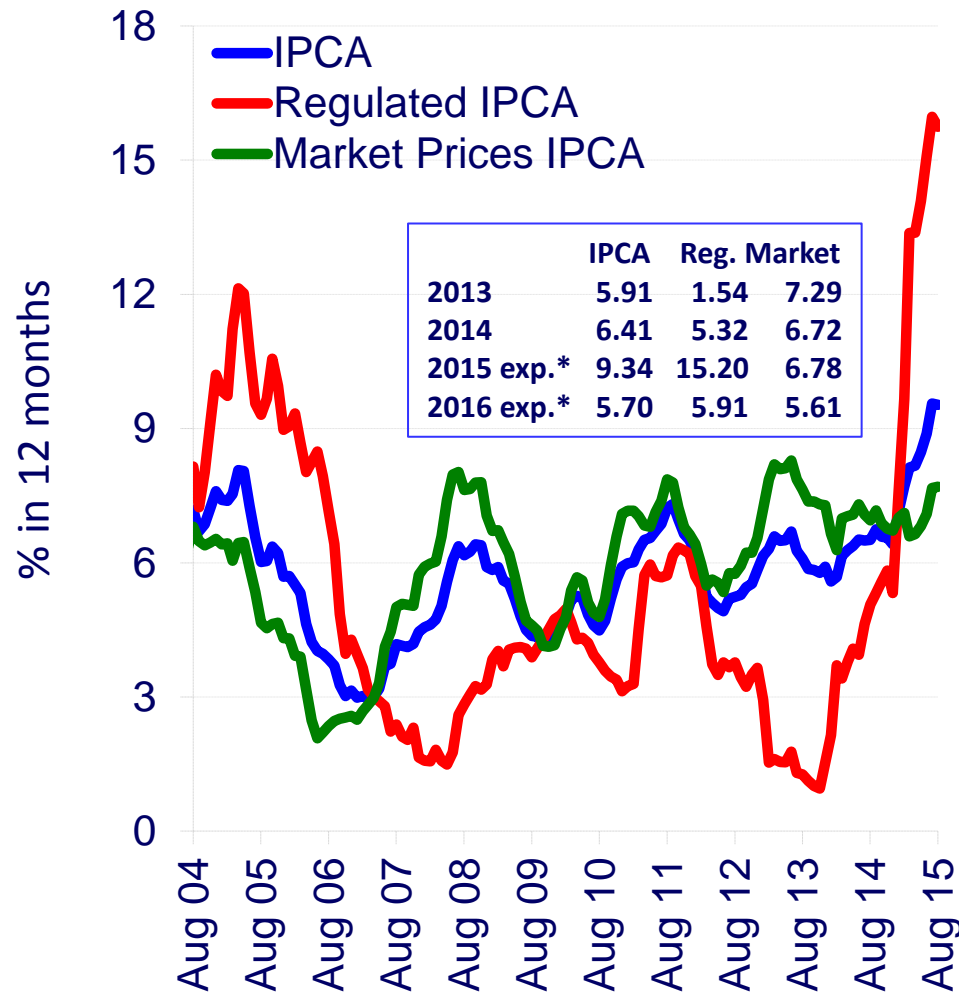


2014: DIL financed **94%** of the *deficit*

2015: DIL should finance **99%** of the *deficit* (according to the Jun-IR projection)

2015: DIL should finance **100%** of the *deficit* (according to the Sep-IR projection)

# Adjustment of Relative Prices: Regulated x Market Prices



- Regulated prices adjustment (15.75% in 12 months) is part of the fiscal adjustment (e.g., electricity tariffs, CIDE, etc.)
- Reduction of subsidies leads to the improvement of the public debt profile and of the allocation of resources in the economy (increase of the TJLP – long term interest rate, reduction in the loans to BNDES; PSI, etc.)

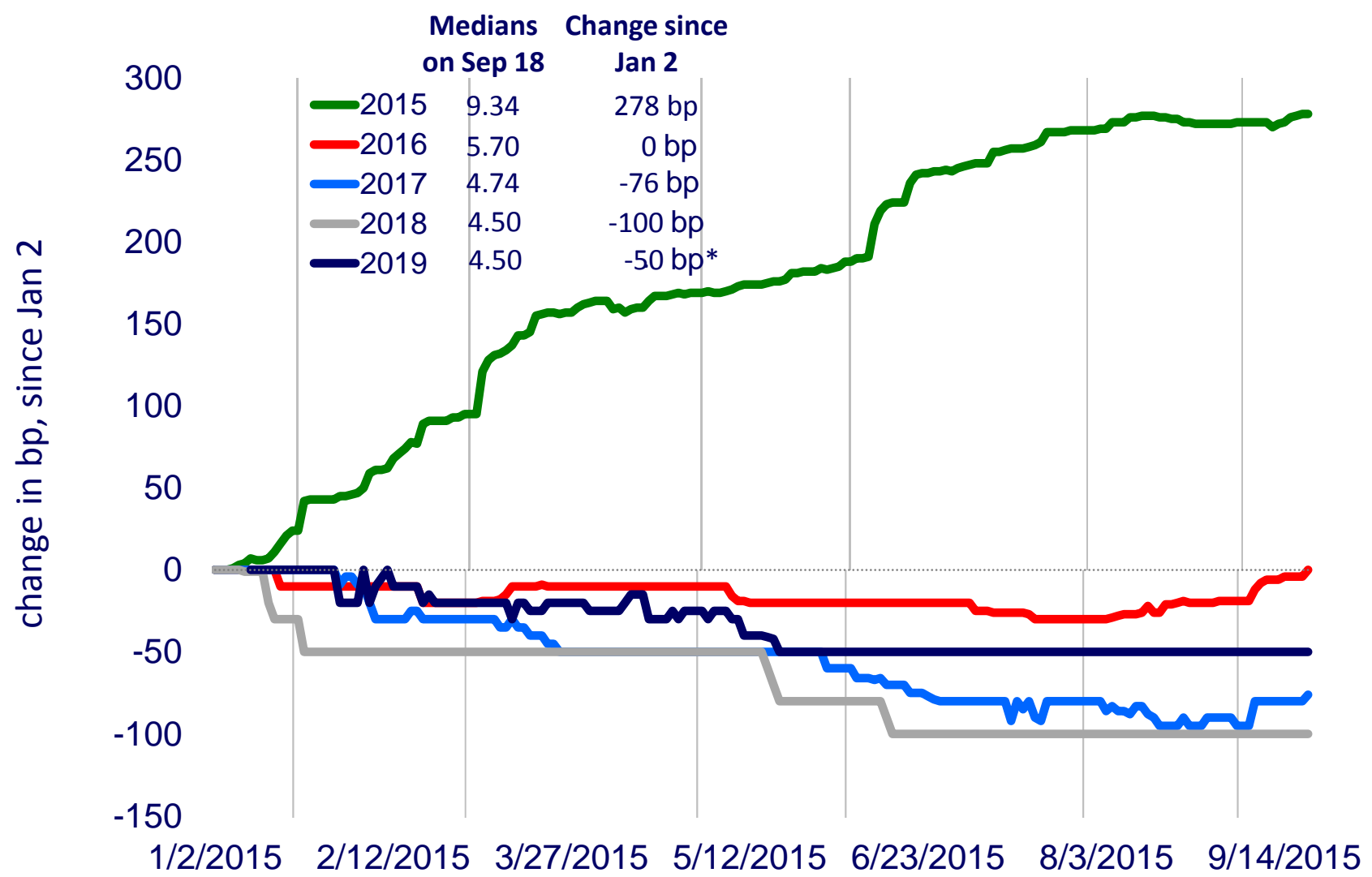
\*median of expectations on Sep 18<sup>th</sup>

# Prices Adjustments Impact Inflation, Current Account

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- The double adjustment of relative prices (regulated and external) impacts inflation in 2015, elevating 12-month accumulated inflation, and contributes for the improvement of the external account
- It is objective of the monetary policy to curb the transmission of this inflationary impact for 2016 and for longer terms
- The monetary policy can, should and is containing the second-order effects, to circumscribe them to 2015
- As a consequence, it should remain vigilant to ensure the convergence of inflation to the 4.5% target at the end of 2016

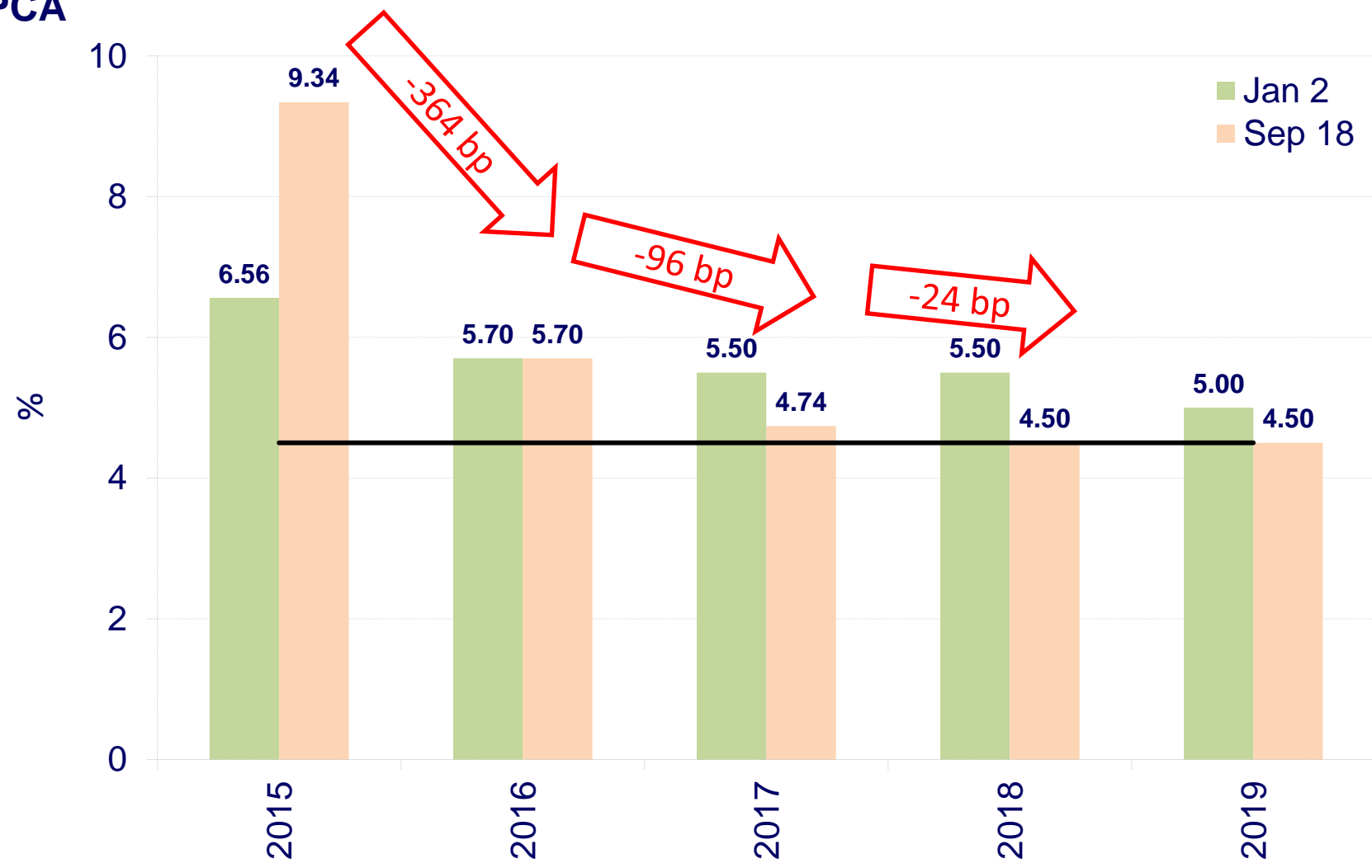
# Expectations Anchored at the Medium Term (1)



vertical lines: Copom meetings, data through Sep 18<sup>th</sup> \*for 2019, change since Jan 12<sup>th</sup>, 2015

# Expectations Anchored in the Medium Term (2)

IPCA



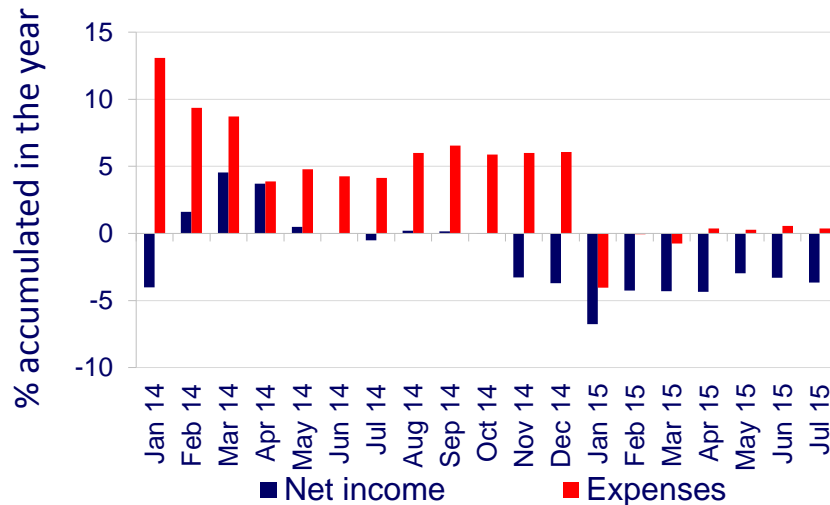
\*for 2019, expectation on Jan 12<sup>th</sup>, 2015

# Uncertainties of the Fiscal Adjustment Impact Risk Premia

- The ongoing fiscal adjustment has already addressed several problems, such as the correction of regulated prices, expenses cuts and reduction of subsidies
- The earmarked credit and the implicit subsidies associated to it have been significantly reduced
- However, loss of strength in the economy, partially related to non-economic events, took to the frustration of incomes and deterioration of the fiscal scenario programmed for 2015
- Change in the parameters for the targets and PLOA (Yearly Budget Draft Law) were not in line with expectations and reflected in risk
- Therefore, **the Monetary Policy needs fiscal anchorage** to ensure the convergence of inflation to the 4.5% target at the end of 2016

# Fiscal Policy in Transition, Quasi-Fiscal Adjusting

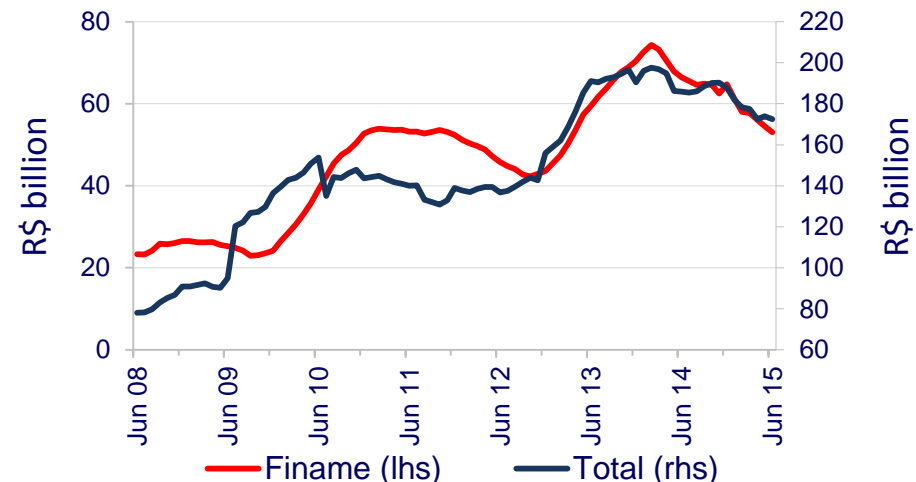
## Real Growth (IPCA), Central Government



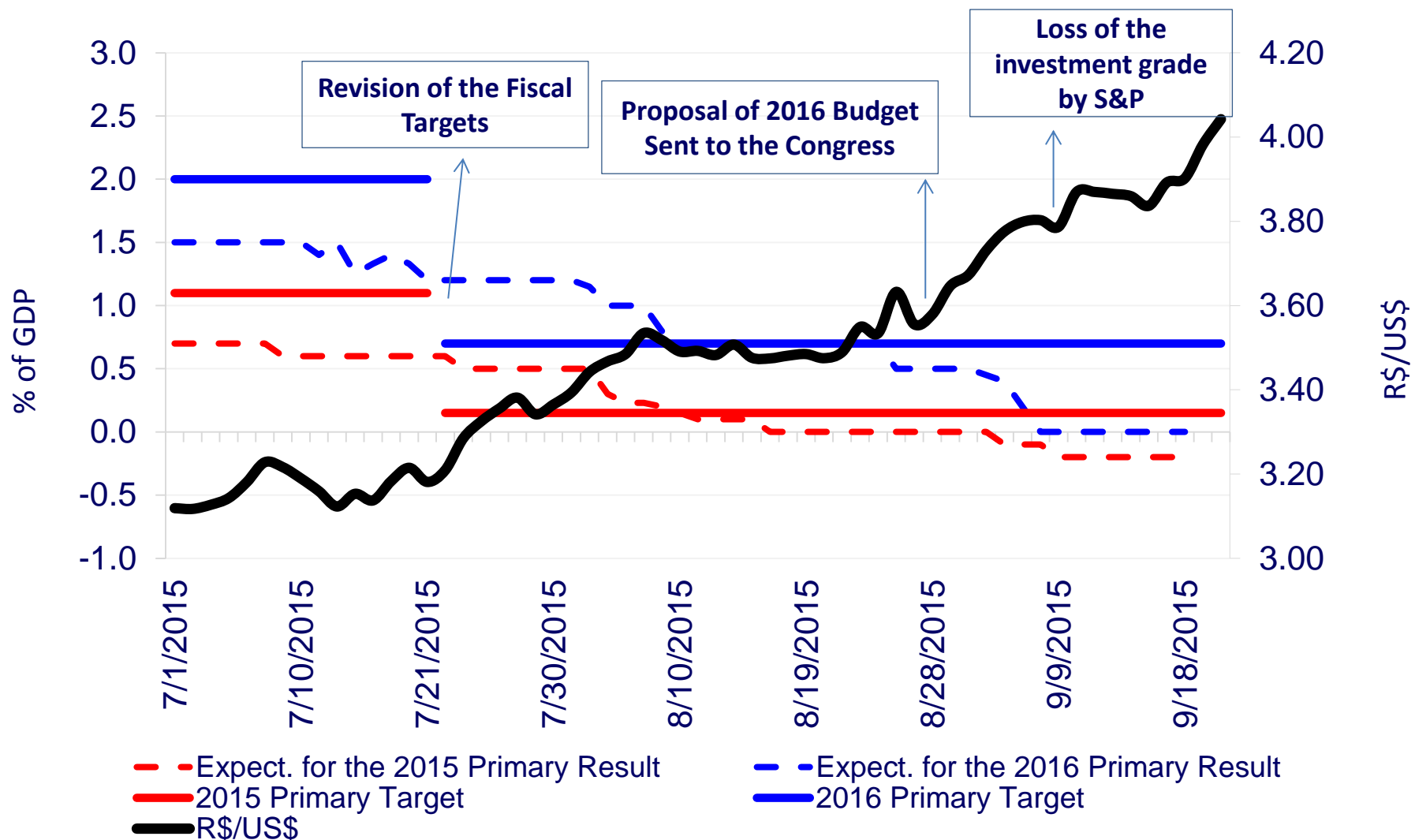
- Reduction of BNDES disbursements since the end of 2014

- Real reduction of the expenses since the end of 2014
- But growth below the real incomes' cycle

## BNDES Disbursements in 12 Months



# Evolution of the Exchange Rate under the Effect of Expectations for the Primary Result



expectations through Sep 18, other data through Sep 22<sup>nd</sup>



# BRL/US\$ Exchange Rate (Sep 23) Reflects Risk Premium

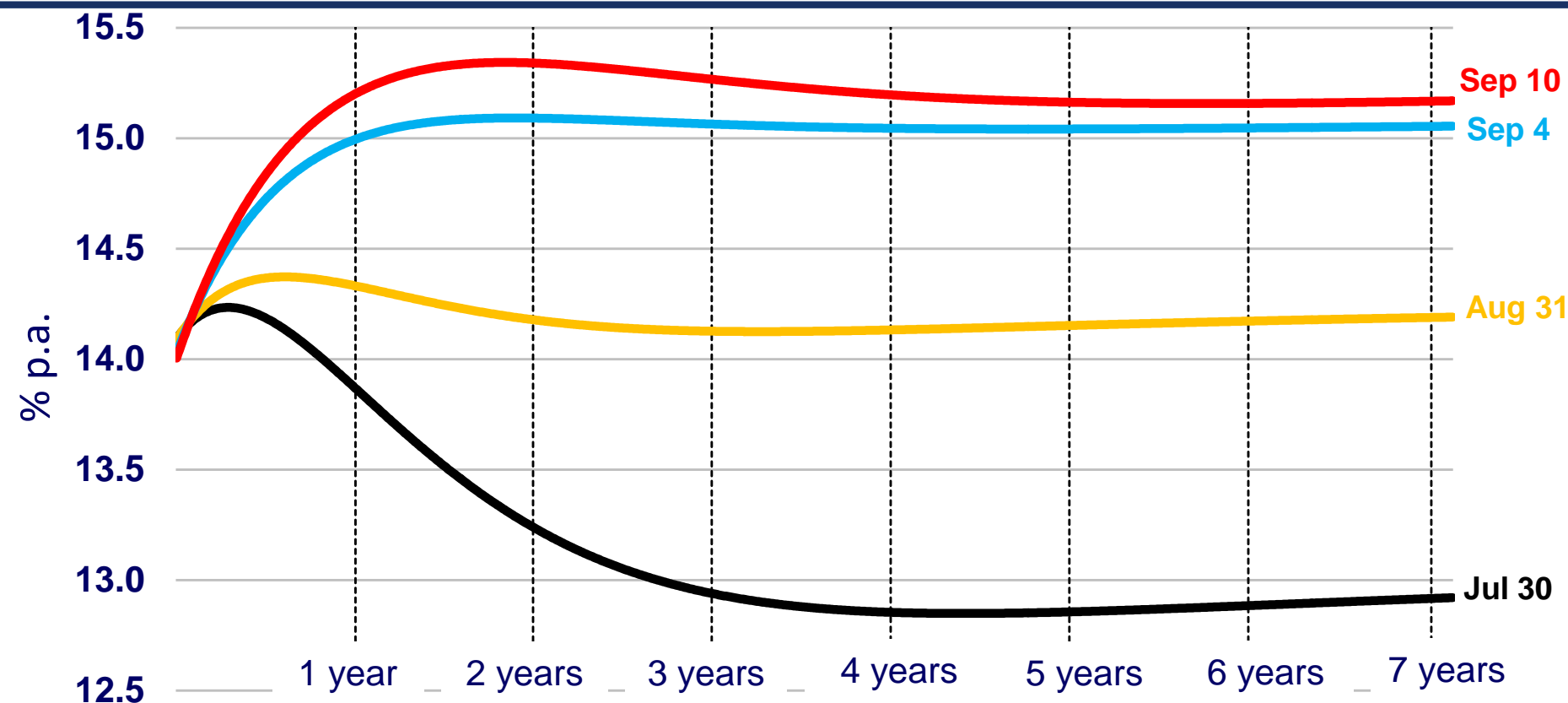
Annual



Last 5 days



# Yield Curve – Future DI, with Selic at 14.25%



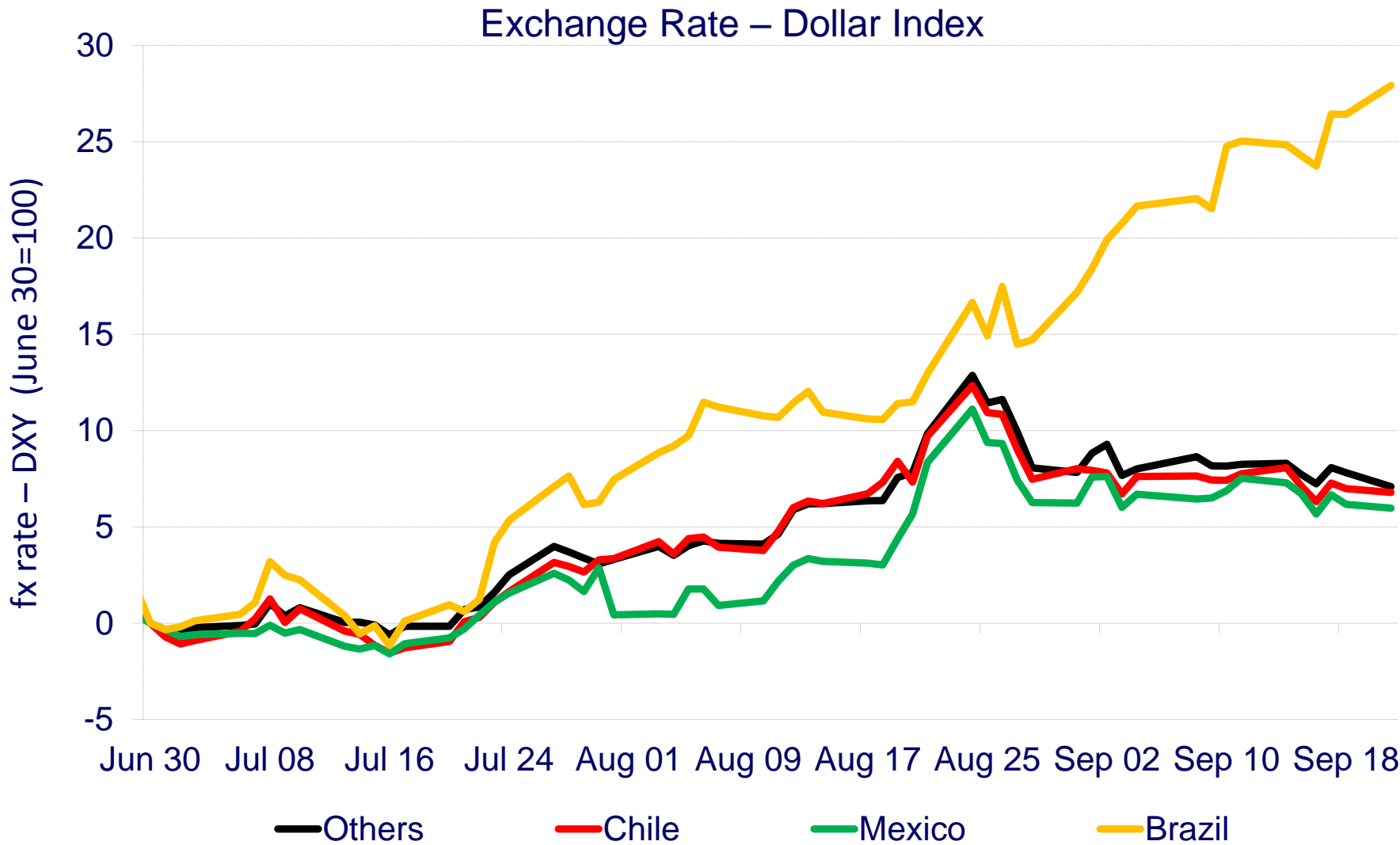
Jul 30 – Decision of the Copom and respective communiqué with “maintenance of interest rate level for a sufficiently long period”

Aug 31 – Proposal of 2016 Budget Sent to the Congress

Sep 4 – Perception of the risks’ market associated to the fiscal adjustment

Sep 10 – Brazil sovereign debt loses the investment grade by the risk agency Standard & Poor’s

# Exchange Rate (US\$) in LA above the Dollar Index

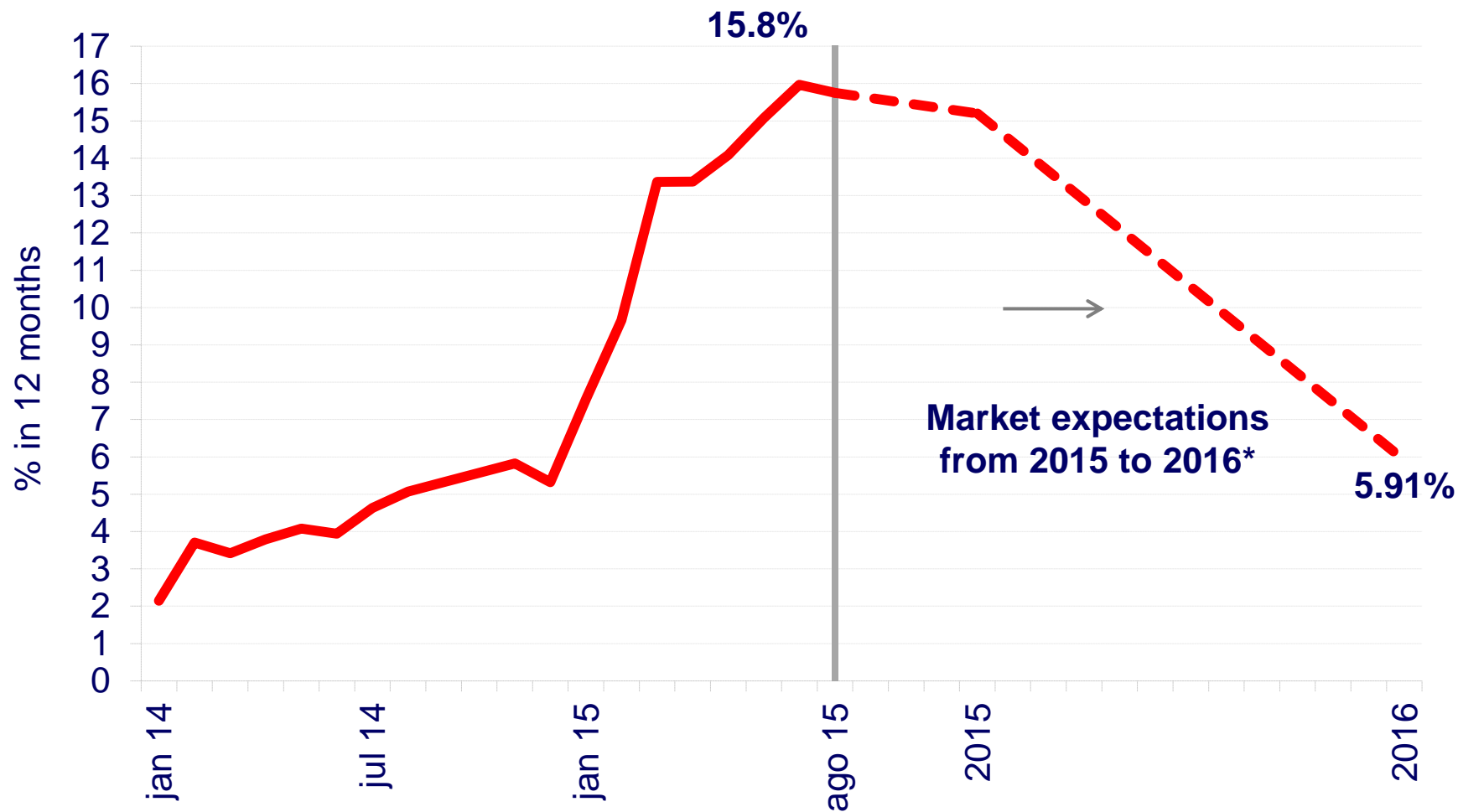


others = avg. (Argentina, Peru, Colombia and Uruguay), data through Sep 21<sup>st</sup>

# Balance of Risks for the 2016 Inflation

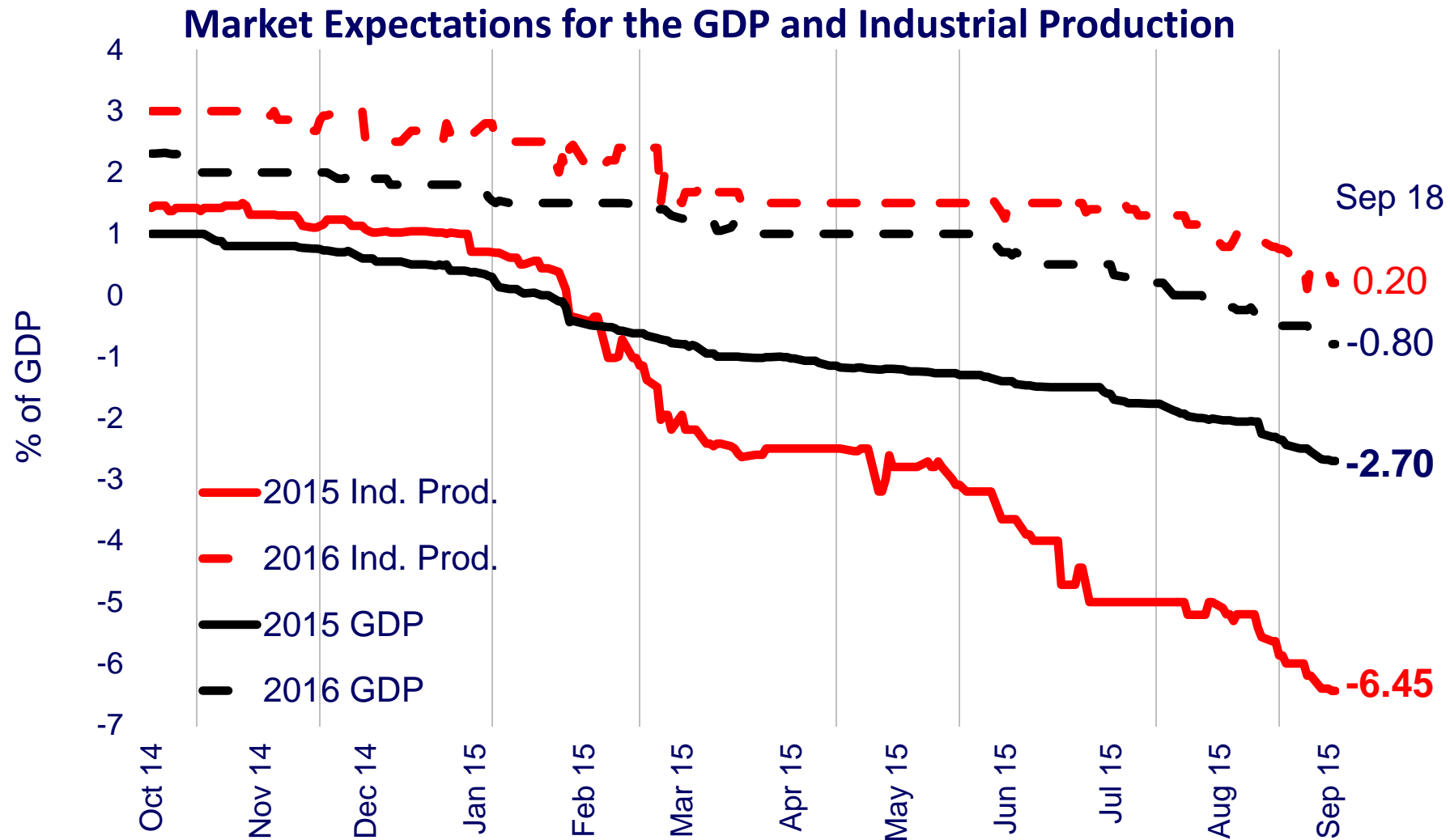
- Context: prices' realignments circumscribed to 2015; the trajectory of 12-month accumulated inflation will have significant discard effect in 1Q2016; lagged and cumulative effect of the Monetary Policy action
- Factor 1: Sharp fall in the activity, non-economic events. Transmission of the relative prices' adjustment occurs with process of labor market distension; decrease in the intensity of prices' adjustments pass-through (including exchange rate *pass-through*) in the current phase of the cycle
- Factor 2: More recent elevation of the risk premmia in the FX and interest markets; uncertainties about the intensity and promptness of the fiscal adjustment feed volatility

# Context: Cumulative Regulated IPCA and Projected up to 2016



\*position of Sep 18<sup>th</sup>

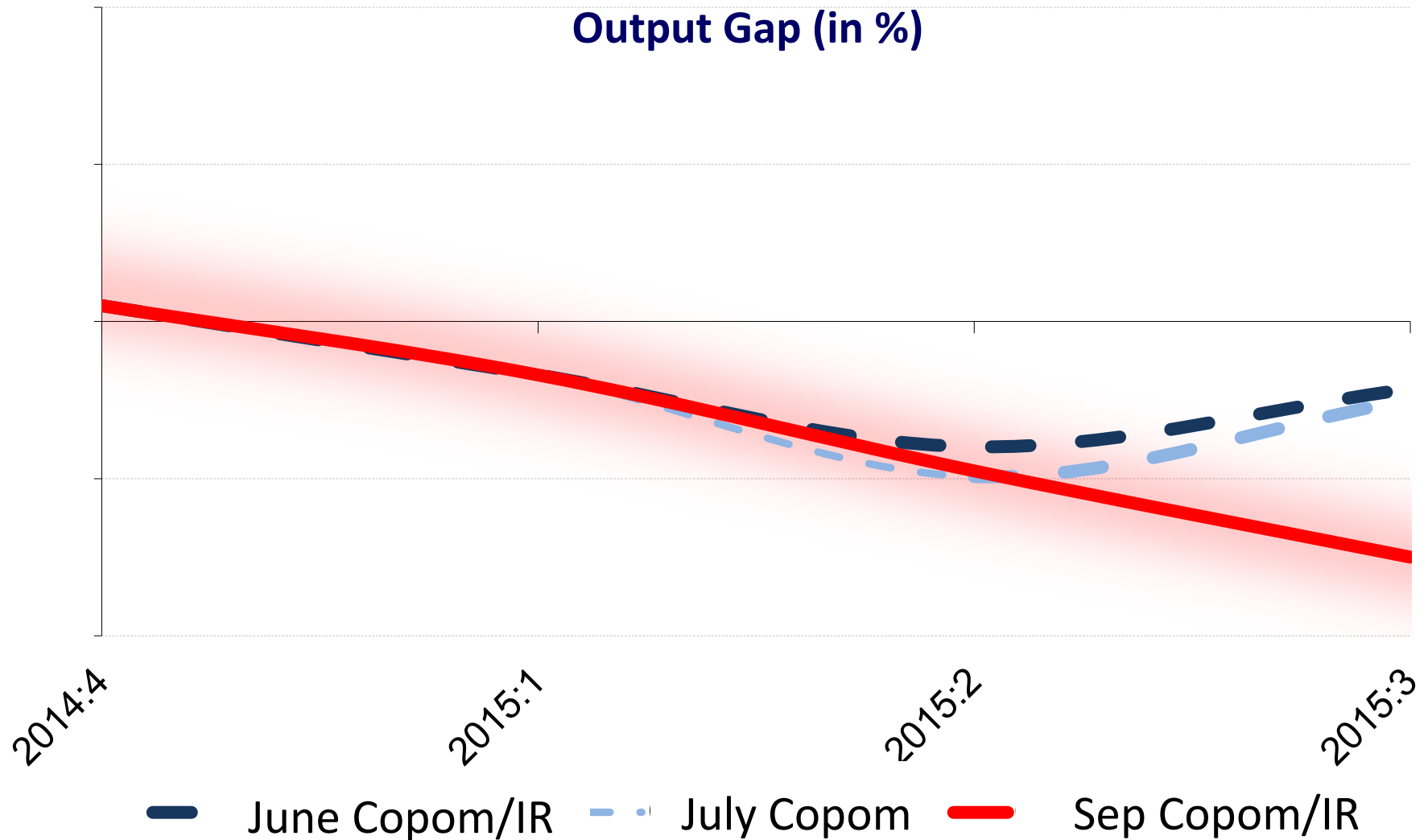
# Factor 1: Strong Deceleration of the Activity (GDP and Industrial Production)



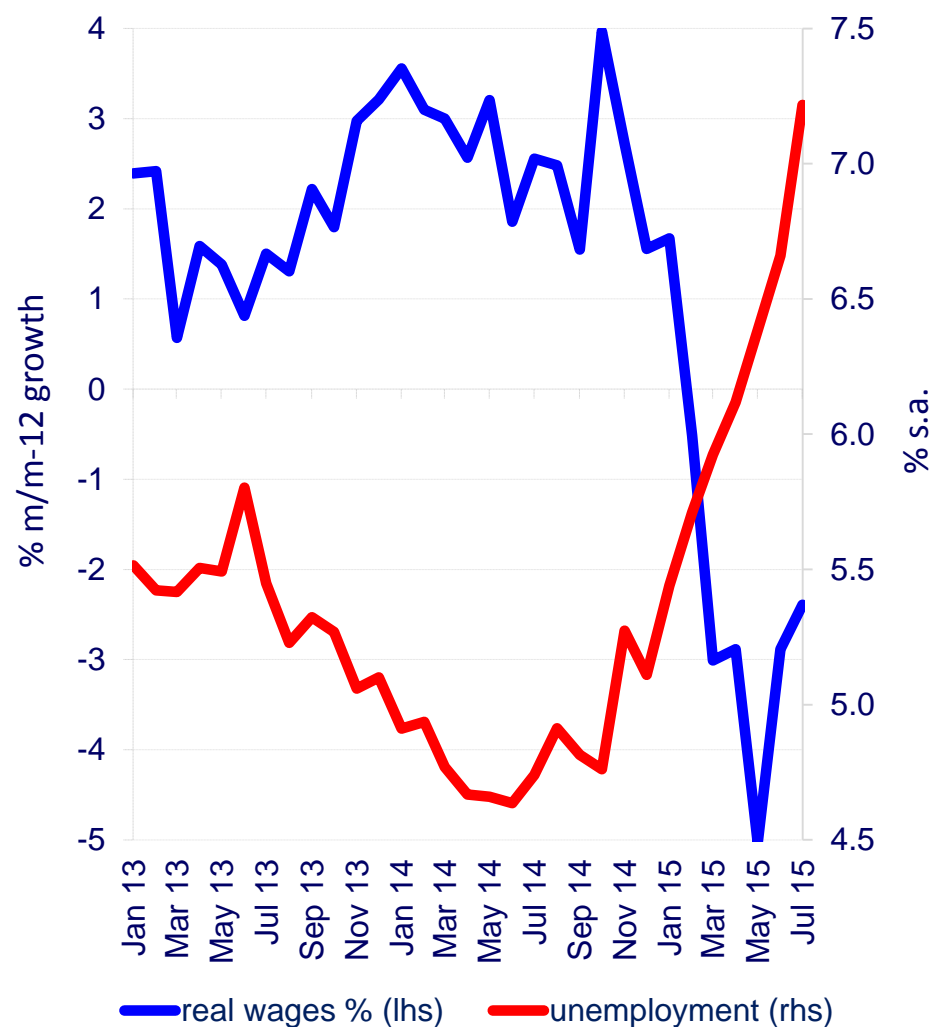
vertical lines: Copom meetings

# Factor 1: Effect of Activity in the wider Output Gap

Significant Changes between June and September in the Widening of the Output Gap (in %)



# Factor 1: Ongoing Distension in the Labor Market (1)

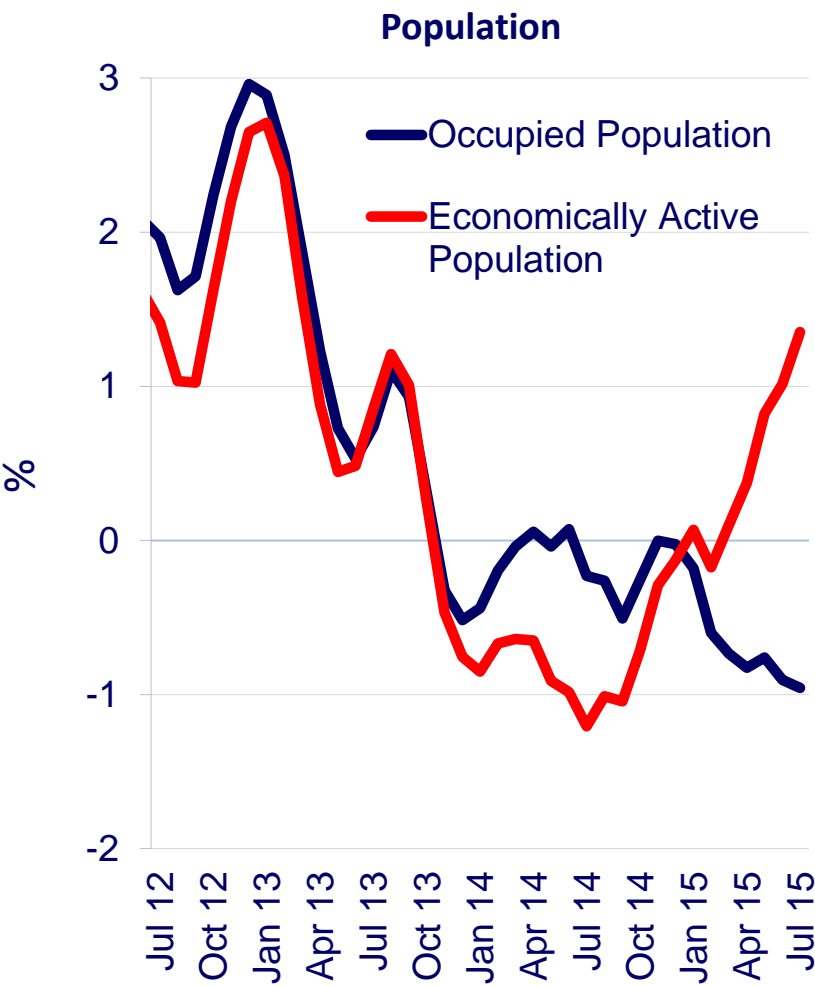


- Ongoing process accelerated; adjustments can occur as a combination of volume and price
- Return of young and elderly tend to contribute to the increase of productivity in the services sector
- Greater competition can benefit the adequacy between wages and productivity; greater return regarding “years of education” creates incentives for improving human capital and productivity



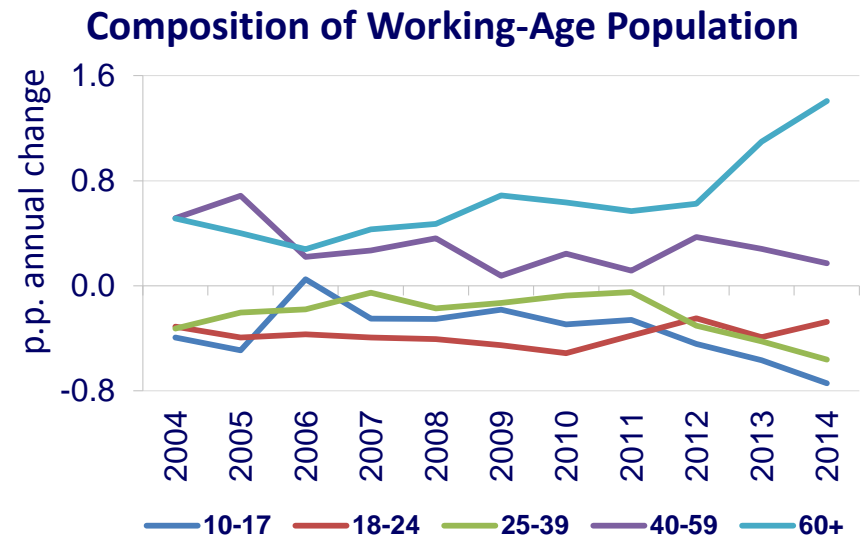
# Factor 1: Ongoing Distension in the Labor Market (2)

Interannual change of the 3 Month-Moving Average

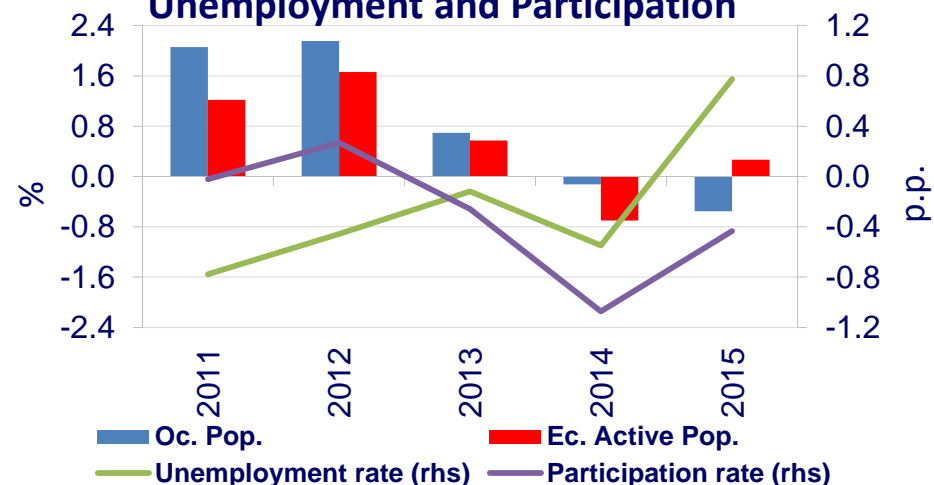


# Box: Effect of the Demography over the Participation Rate

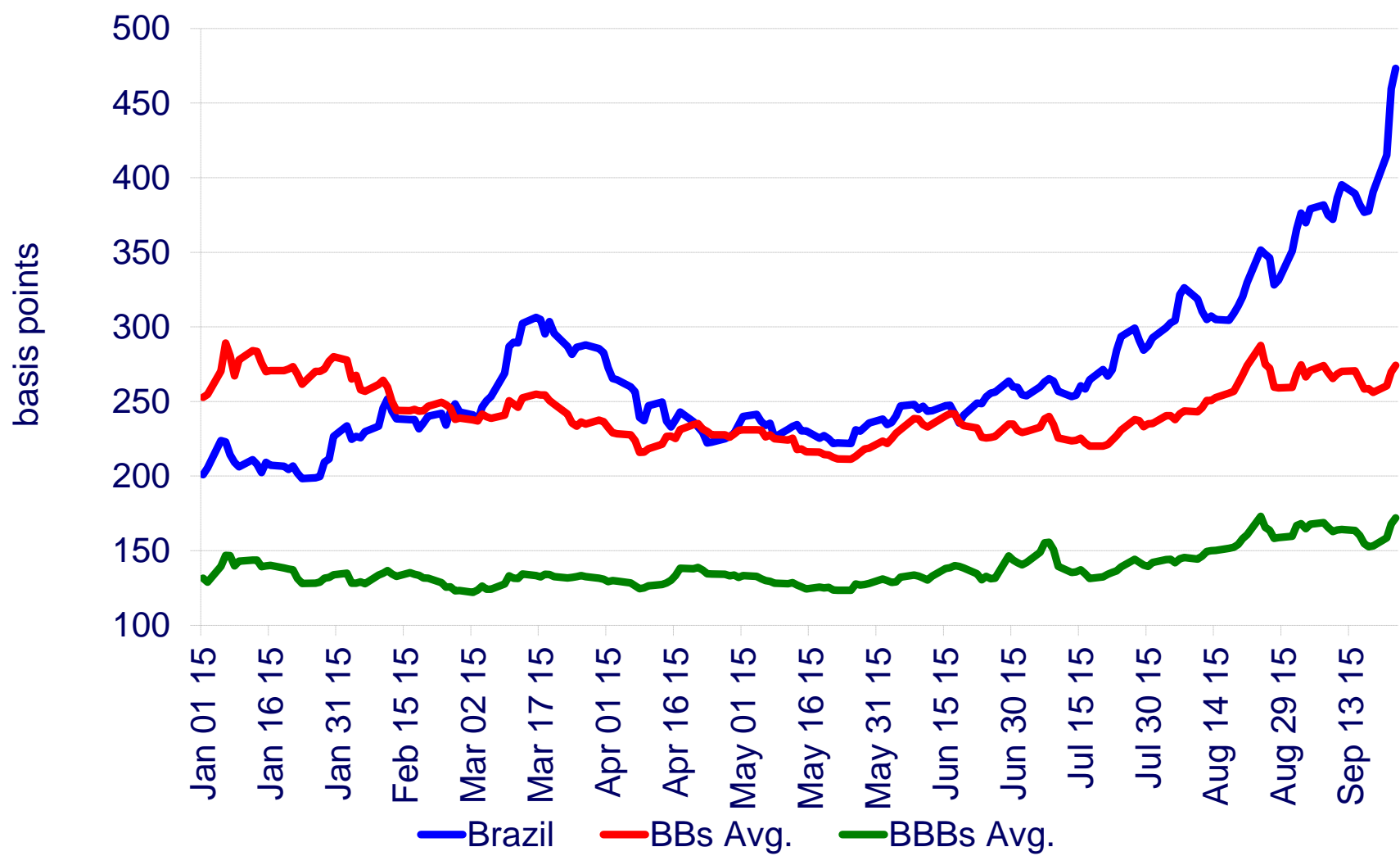
- Demographic evolution influenced several recent changes in the participation rate
- The box evidences that approximately one third of the retreat in the participation rate observed between the end of 2012 and the end of 2014 was due to the change in the composition of working-age population - PIA
- In 2015, the participation rates of young and elderly increased, with important impact in the total participation rate, which contributed to the acceleration in the growth pace of the unemployment rate.



## Occupied Population, Economically Active Population, Unemployment and Participation



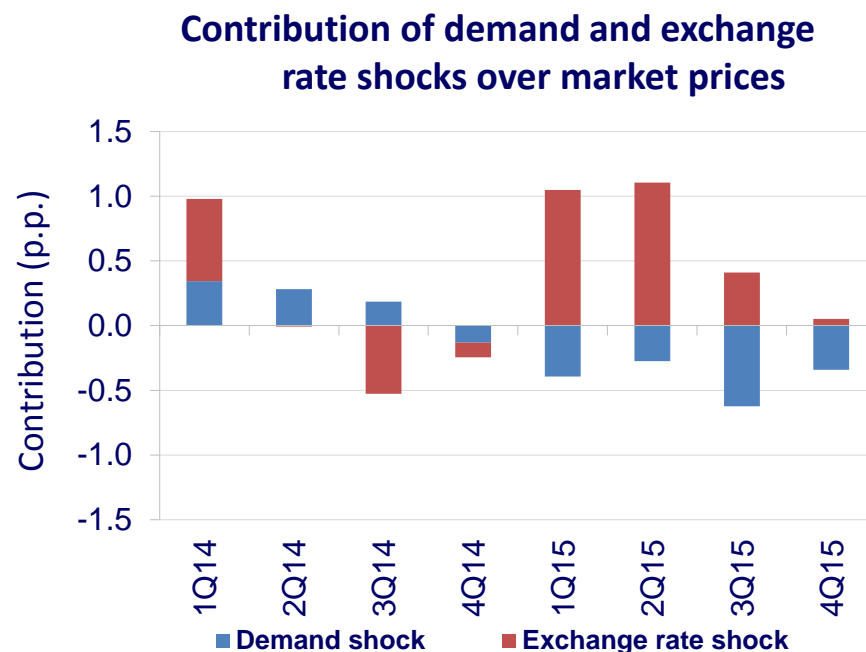
# Factor 2: Risk Premium, Brazil 5y CDS, BBBs and BBs



\*through Sep 23<sup>rd</sup>

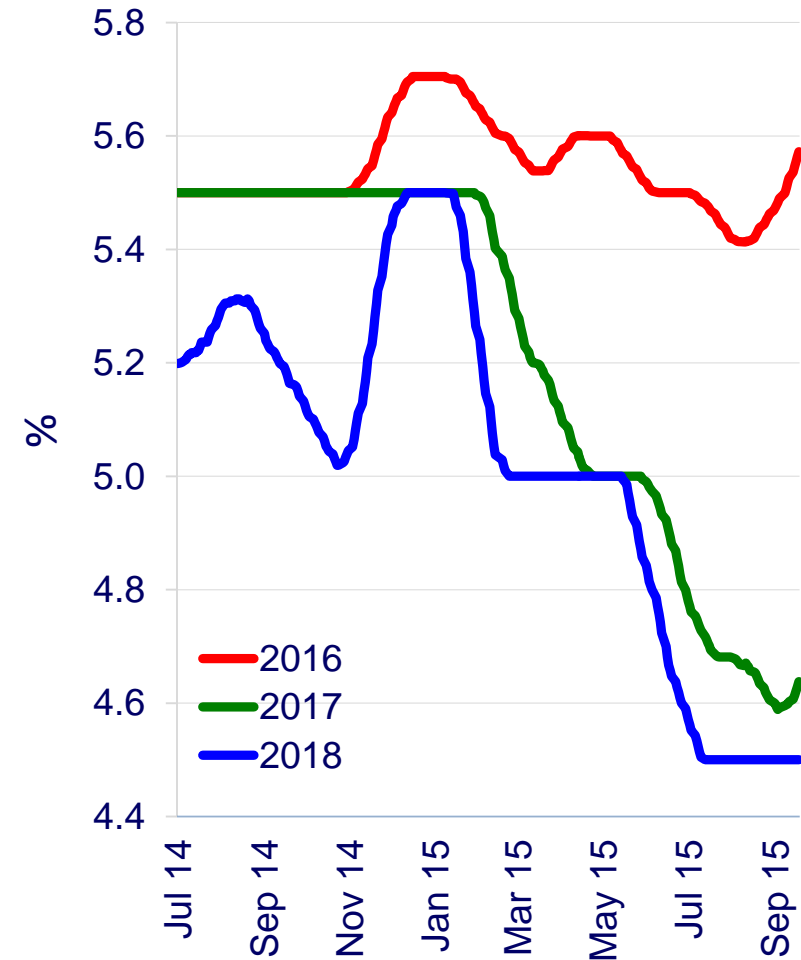
## Box: Impact of Activity and Exchange Rate over Market Prices Inflation

- This box aims, specifically, at verifying how the cooling of the economic activity has contributed to offset the effects of the BRL depreciation over market prices inflation
- Demand shocks contributed negatively for the trajectory of market prices inflation, as opposed to the exchange rate shocks
- In net terms, the positive contribution of the exchange rate was higher than the negative contribution of the demand in around 1.5 p.p. in the first half (from a change of 4.50% of inflation in the same period)



# Debate and Box: Inflationary Inertia and Inflation Expectations

- This box evaluates the impact of the inertia and expectations components over the inflationary dynamics in Brazil
- The estimates suggest that the current inflation depends significantly on the past inflation
- In relation to the expectations term, the agents forecasts, for shorter terms, are strongly dependent on recent developments, mainly on inflation and on the exchange rate. For longer terms, the monetary stance and the inflation target gain importance.



# Current Situation demands Attention: Observe to Correct

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- Adjustment in 2015 was occurring with improvement of fundamentals and perception: convergence to the inflation target, improvement of the external scenario, stable assets' prices, improvement in the agents' confidence
- Recent deterioration affected perceptions, increased risk premia and there was the downgrading of the sovereign grade; it is necessary to revert to the July 2015 scenario and to implement the proposed and debated additional adjustment fiscal program; essential condition for the success of the other components of the adjustment
- As a consequence, robust domestic market with low hanging fruits, investment opportunities that continue present
- Best contribution for the monetary policy to reduce volatility and to favor growth is to set inflation at the 4.5% target at the end of 2016 and anchor expectations in the medium and long terms

# Final Balance of Risks Sep 2015:

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- Upward risks with the increase of risk and exchange rate premia
- Downward risks in terms of activity (e.g., acceleration in the process of distension in the labor market, moderation of demand and credit)
- Monetary Policy acted to address inflation, positioning the economy to face the normalization of the FED; in the current stress, it is necessary to have **wisdom and calm to avoid excessive reaction**; proceed with the already announced monetary policy, identifying possible excess in certain risk premia and remaining cautious regarding the implementation of the commitments relative to the fiscal component of the adjustment process

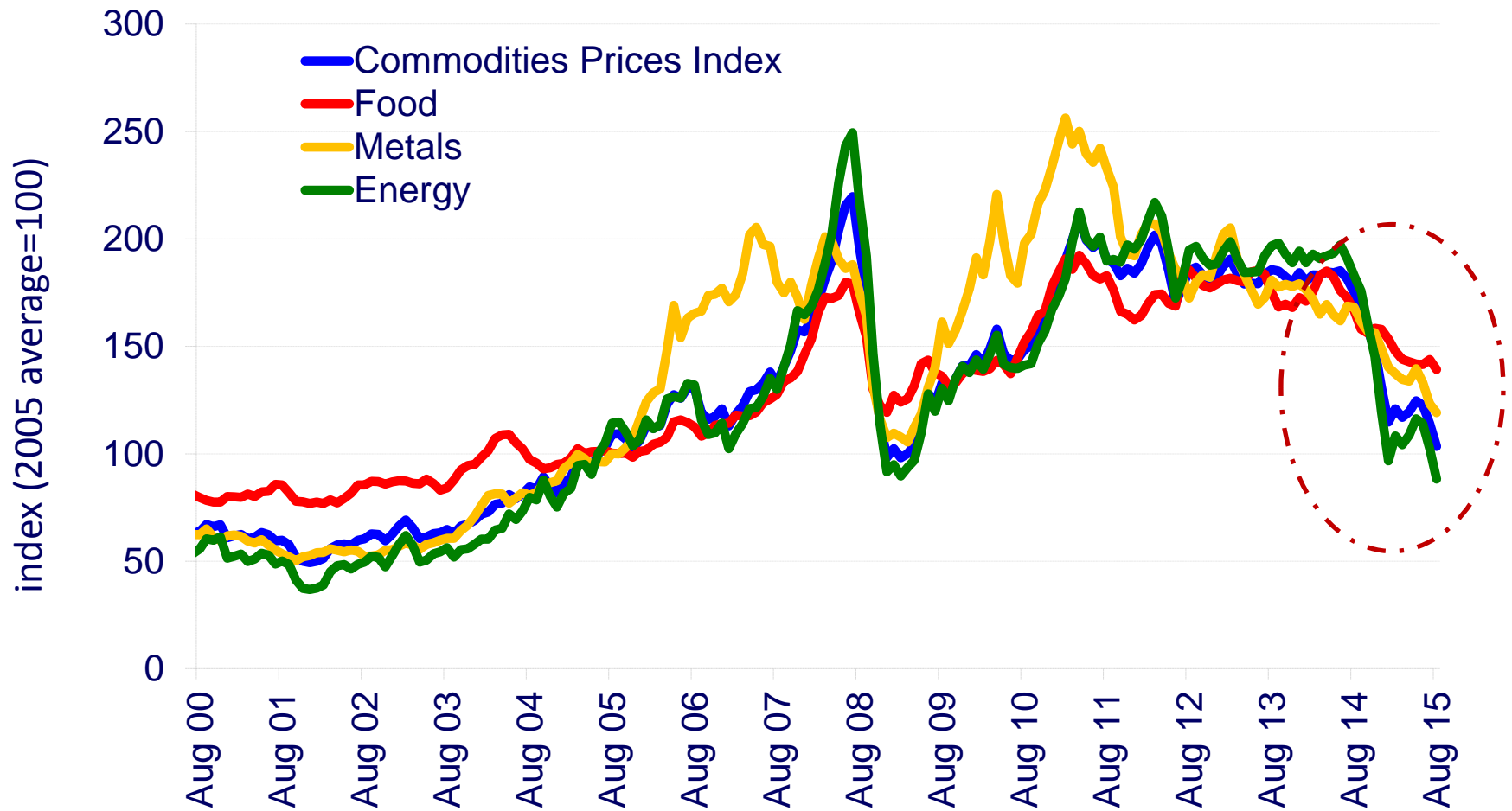
# II. International Environment

- Despite the signs of recovery in some advanced economies, the decision about the normalization of the interest rates by the Fed shows more complex, opposing data that justify wait-and-see *vis-à-vis* risks to stay behind the curve
- Uncertainty and greater China factor (structural deceleration) can be adding higher volatility to the financial markets
- Ongoing moderation in the prices of commodities signals end of the hawkish super-cycle
- This context favors volatility, the strengthening of the US dollar relative to emerging markets' currencies, questions the financial stability of emerging countries and suggests a process of adjustment in the exchange rate, monetary and fiscal areas; some net importing countries improve; the majority of them do not; Brazil is advanced in its homework

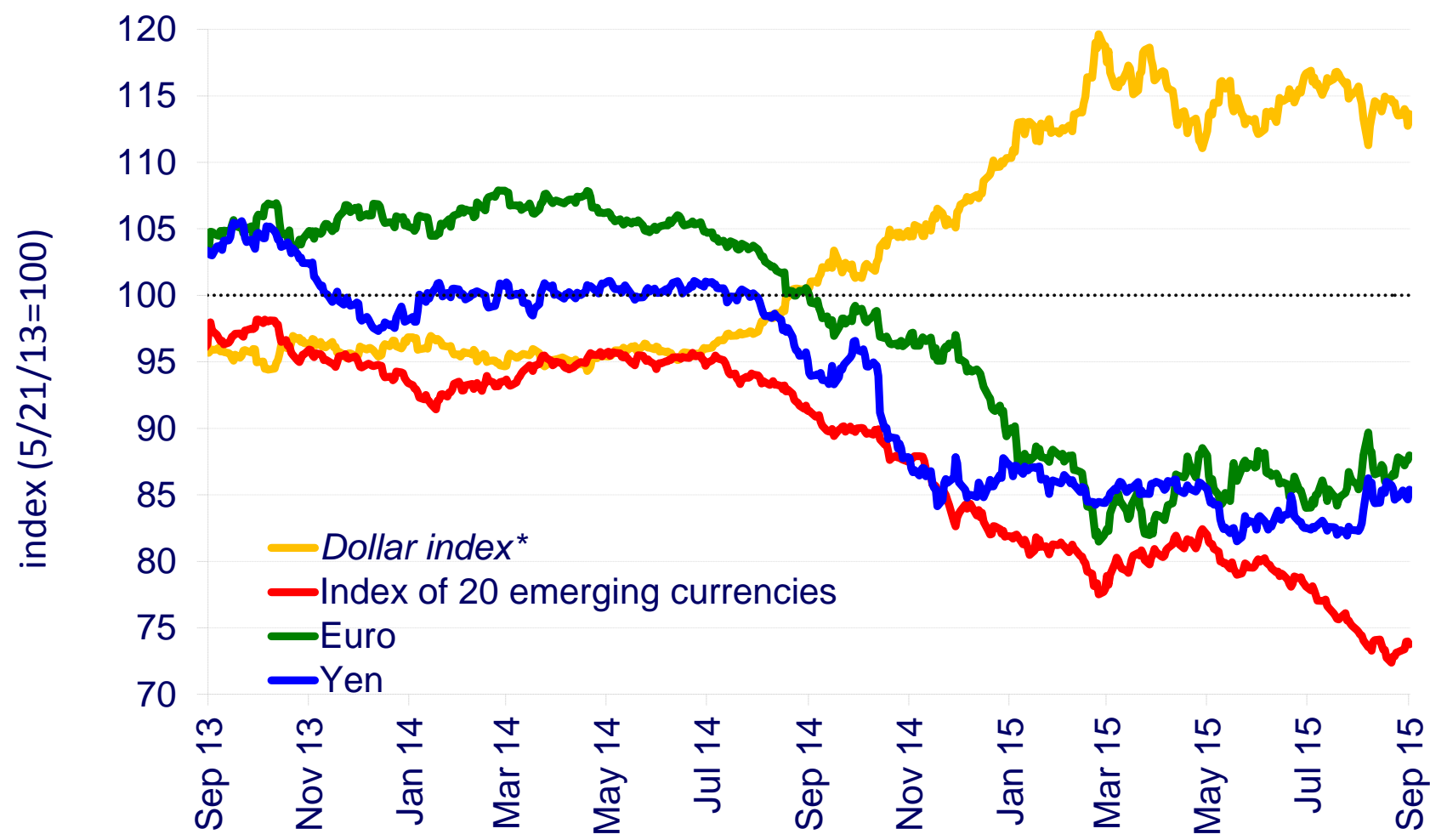


# Falling Commodities Prices

Commodities Index and subindices calculated by the IMF



# US Dollar *Vis-à-Vis* Some Currencies



Data through Sep 18<sup>th</sup>; \*dollar index: measures the international value of the dollar against basket of the six main reserve currencies in the world (Swiss franc, Canadian dollar, Japanese yen, pound sterling, euro and Swedish kron)

# Retrospective – Abroad (since 2Q2015)

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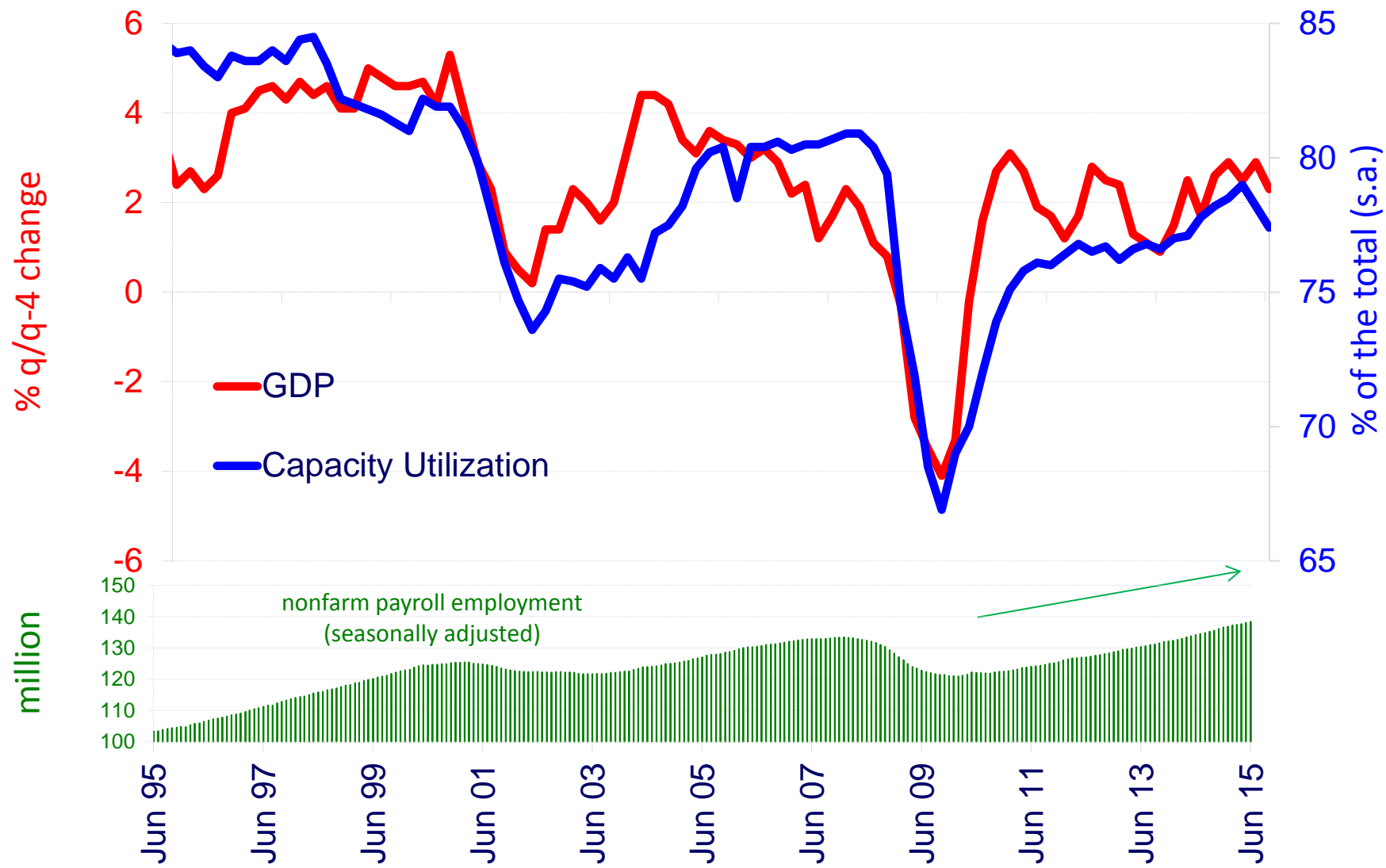
- Since 2Q2015, the risk aversion increased due to:
  - difficulties in the negotiations with Greece;
  - retreat in the Chinese stocks markets and floating of the local currency;
  - retreat in the commodities prices; and
  - uncertainties regarding the liftoff in the US
- This context includes:
  - heterogeneous economic recovery in G3;
  - devaluation of emerging economies' and commodities exporters' currencies.

# Prospects – Abroad 2015-2016

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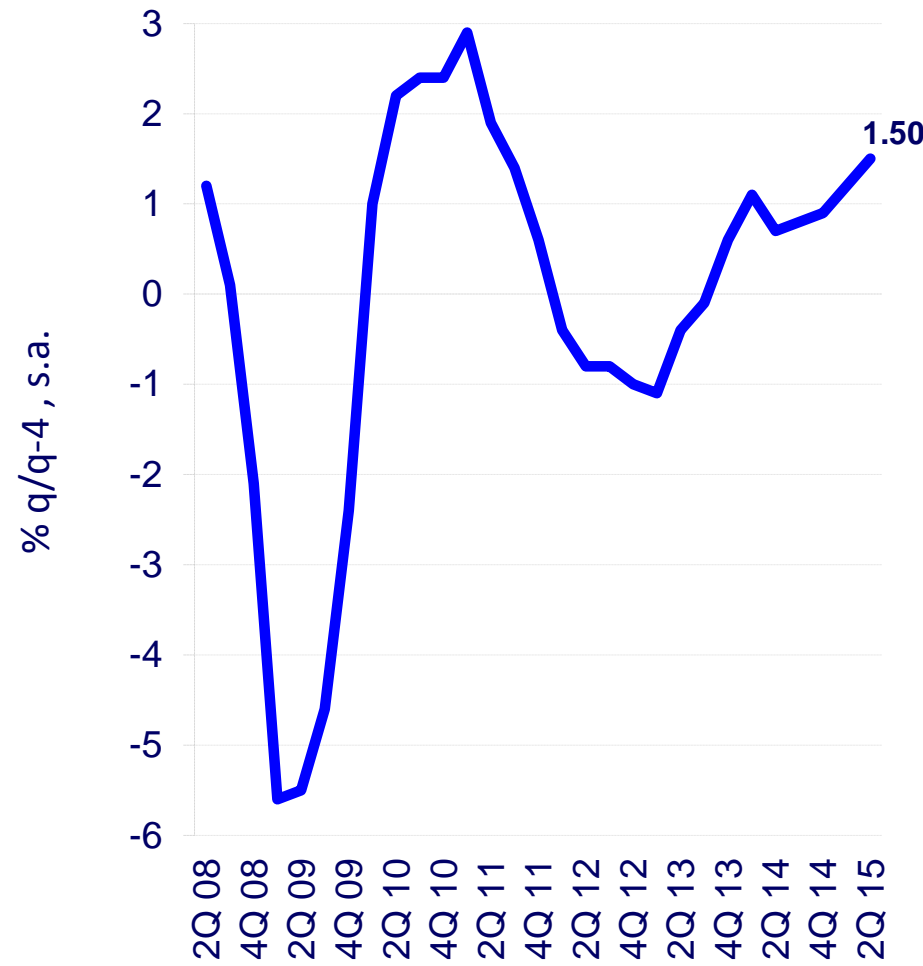
- Throughout the relevant horizon for the monetary policy, prospects for asymmetric growth inside the G3 (e.g., improvement in the US, QE in Europe and in Japan), and low growth in the emerging economies.
- More rigid funding conditions for the majority of the emerging economies.

# Economic Recovery in the US

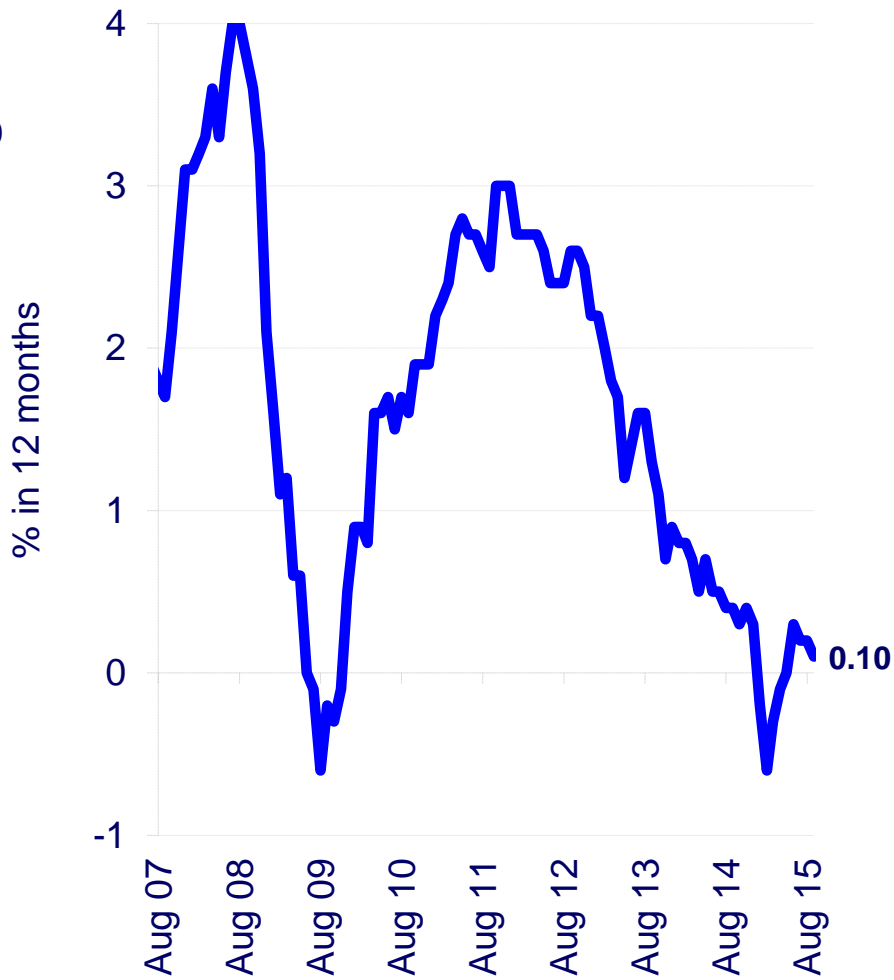


# Europe – Growth and Inflation

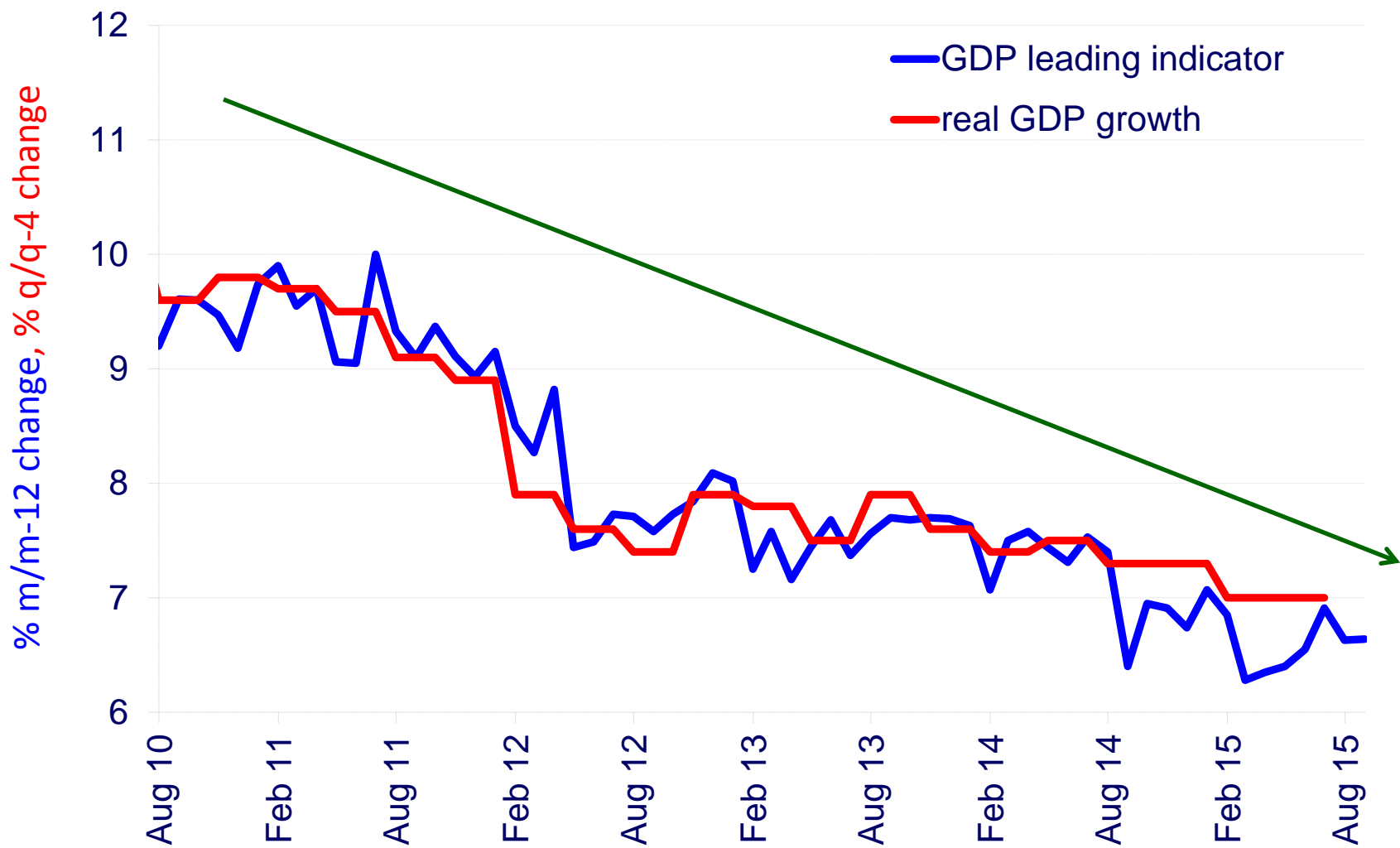
GDP Growth – Euro Area



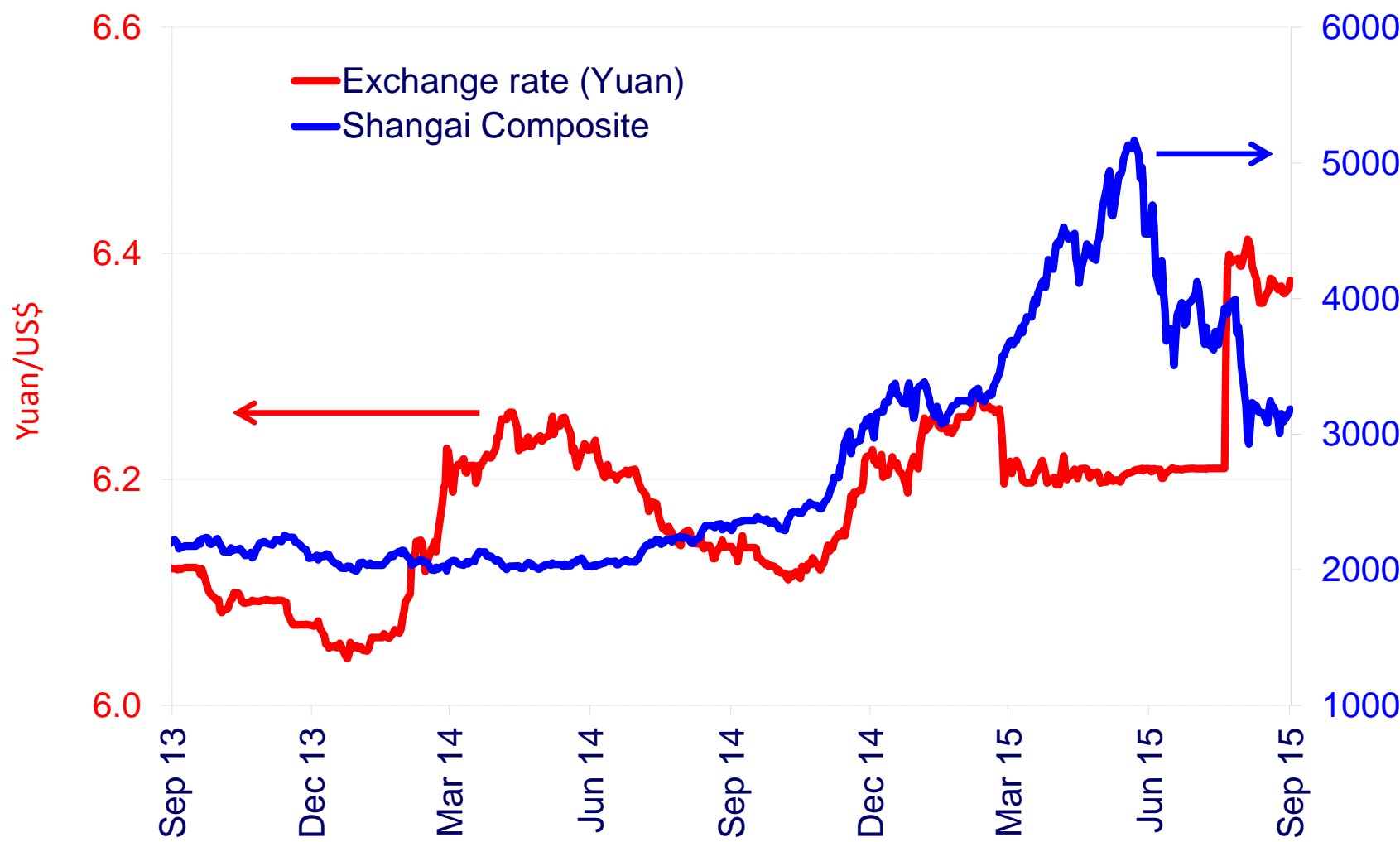
Consumer Inflation – Euro Area



# China – Gradual Deceleration



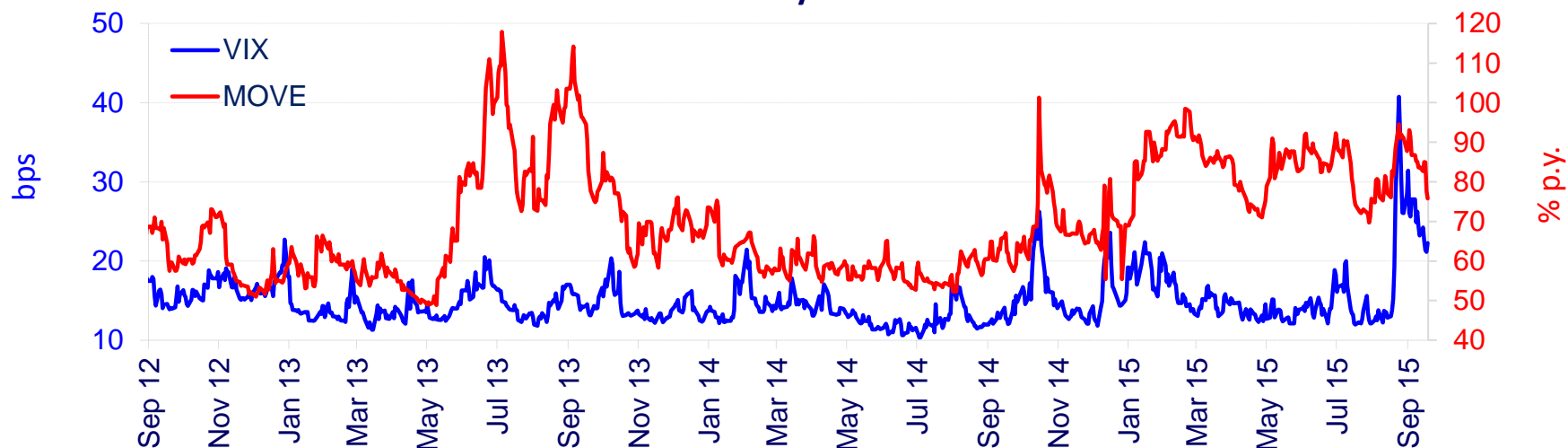
# China: Stock Market and Change of Exchange Rate Regime



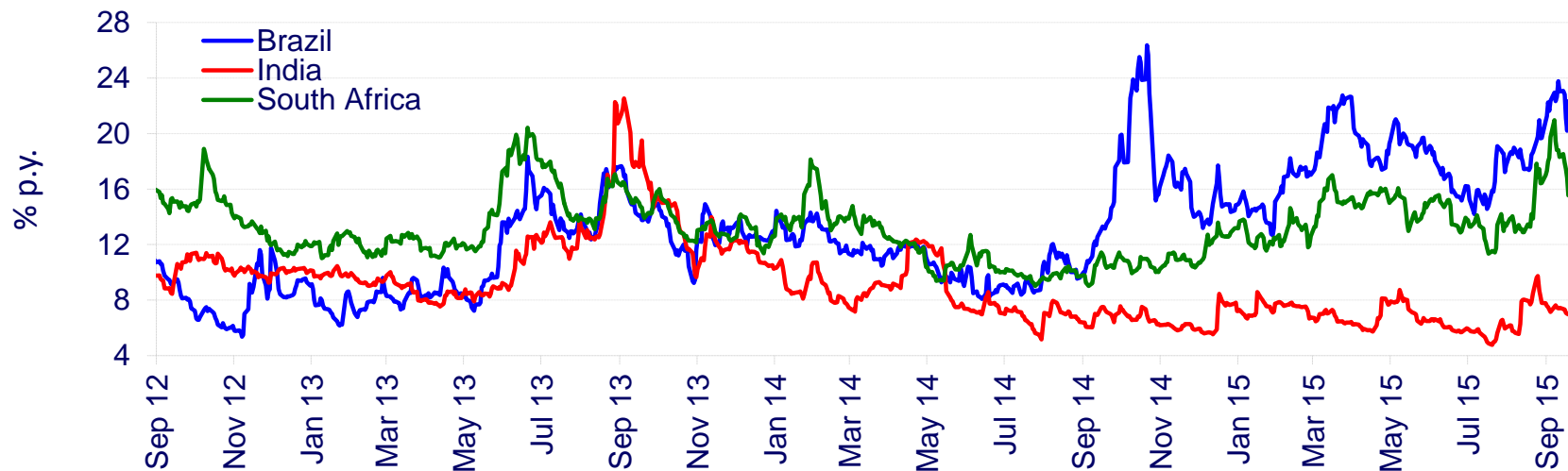


# Volatility

## VIX and Volatility in Securities Markets



## Currency Volatility



data up to Sep 18<sup>th</sup>

# III. Financial Conditions

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- Moderation in the pace of credit concession consistent with the adjustment process and position of the economy in the cycle
- Robustness and soundness of the National Financial System (e.g., capital, provisions and liquidity) remain and ensure financial stability
- Stability of the credit growth has not brought higher delinquency level

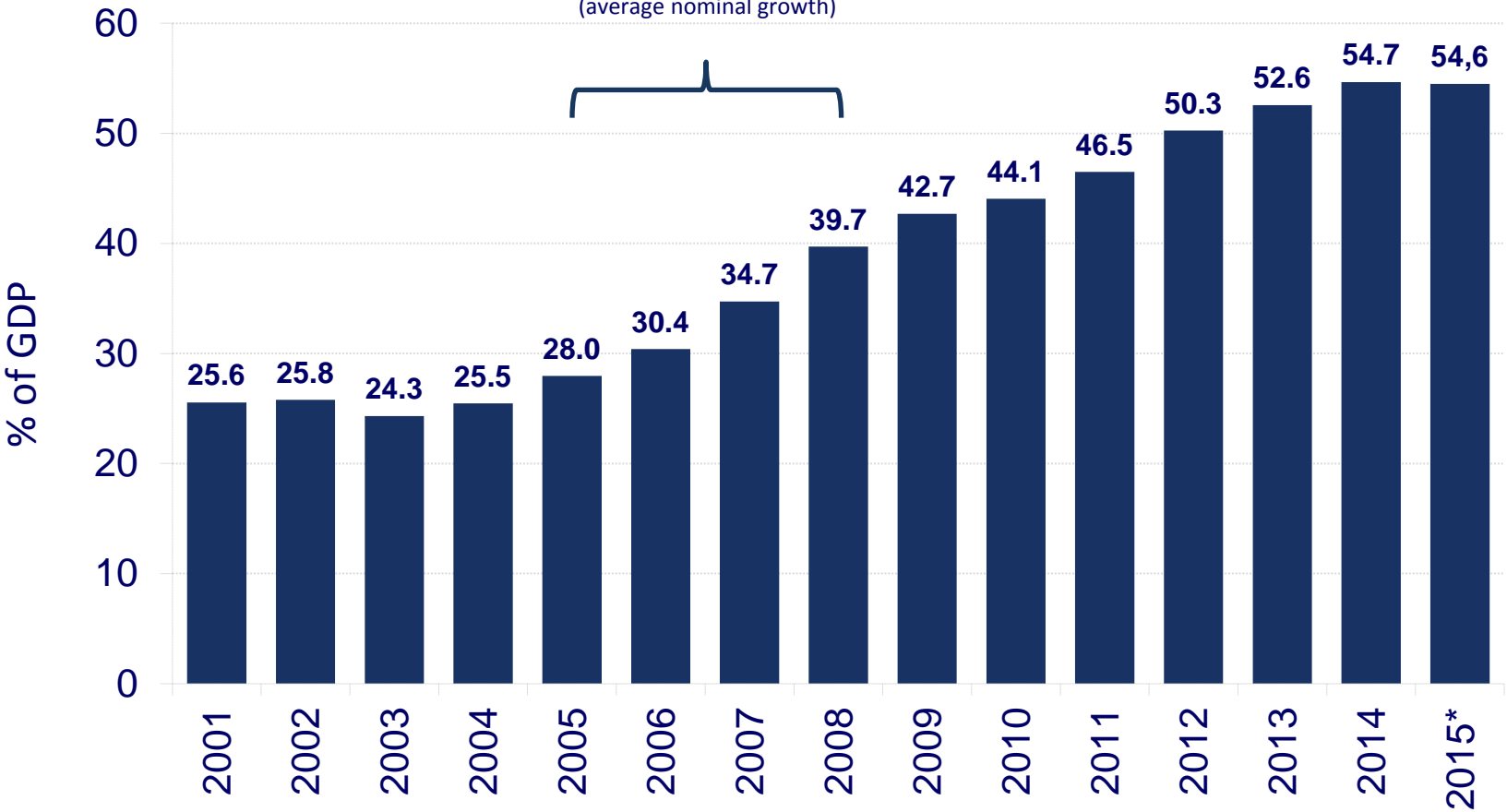
# Credit/GDP Ratio

2009-2014: 16.1%

(average nominal growth)

2005-2008: 25.4%

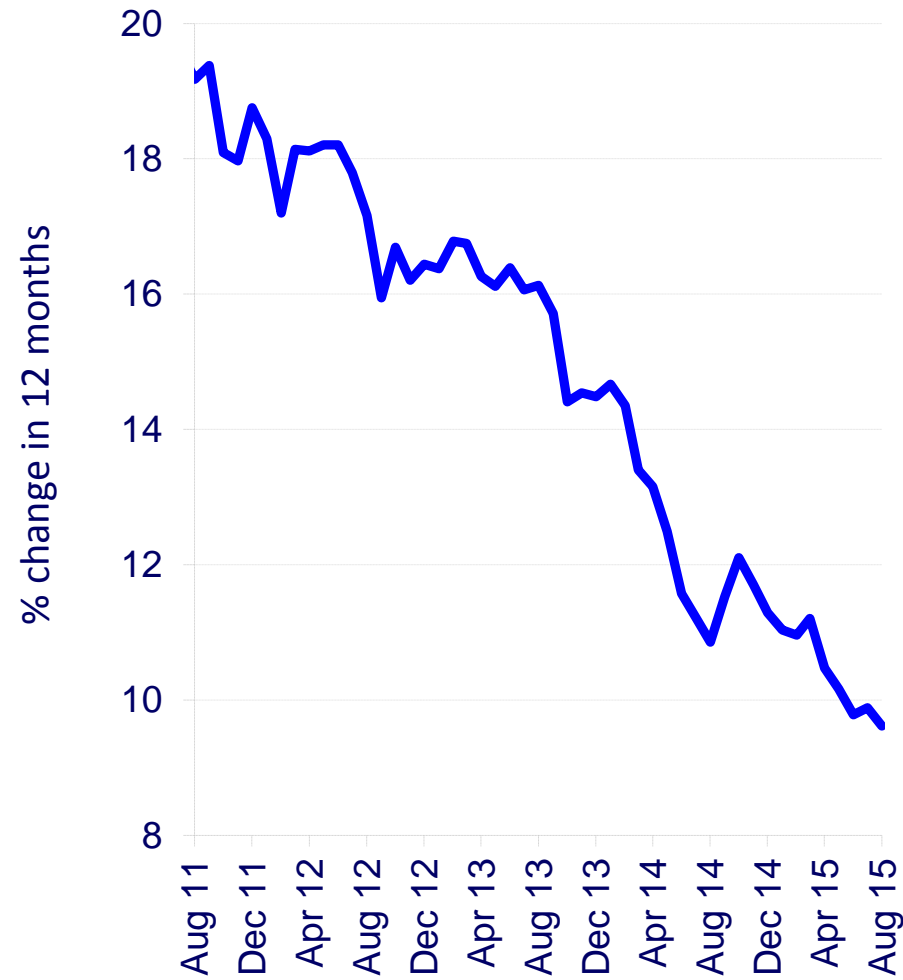
(average nominal growth)



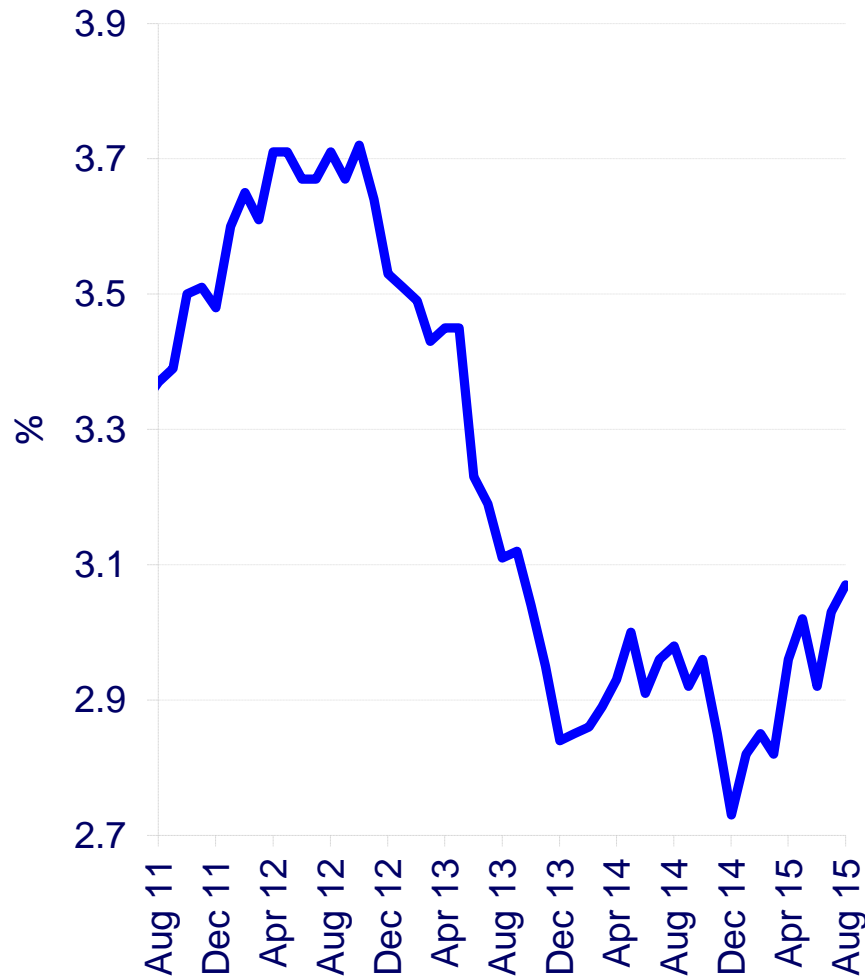
new methodology as of 2011; \*Aug 15

# Credit and Delinquency

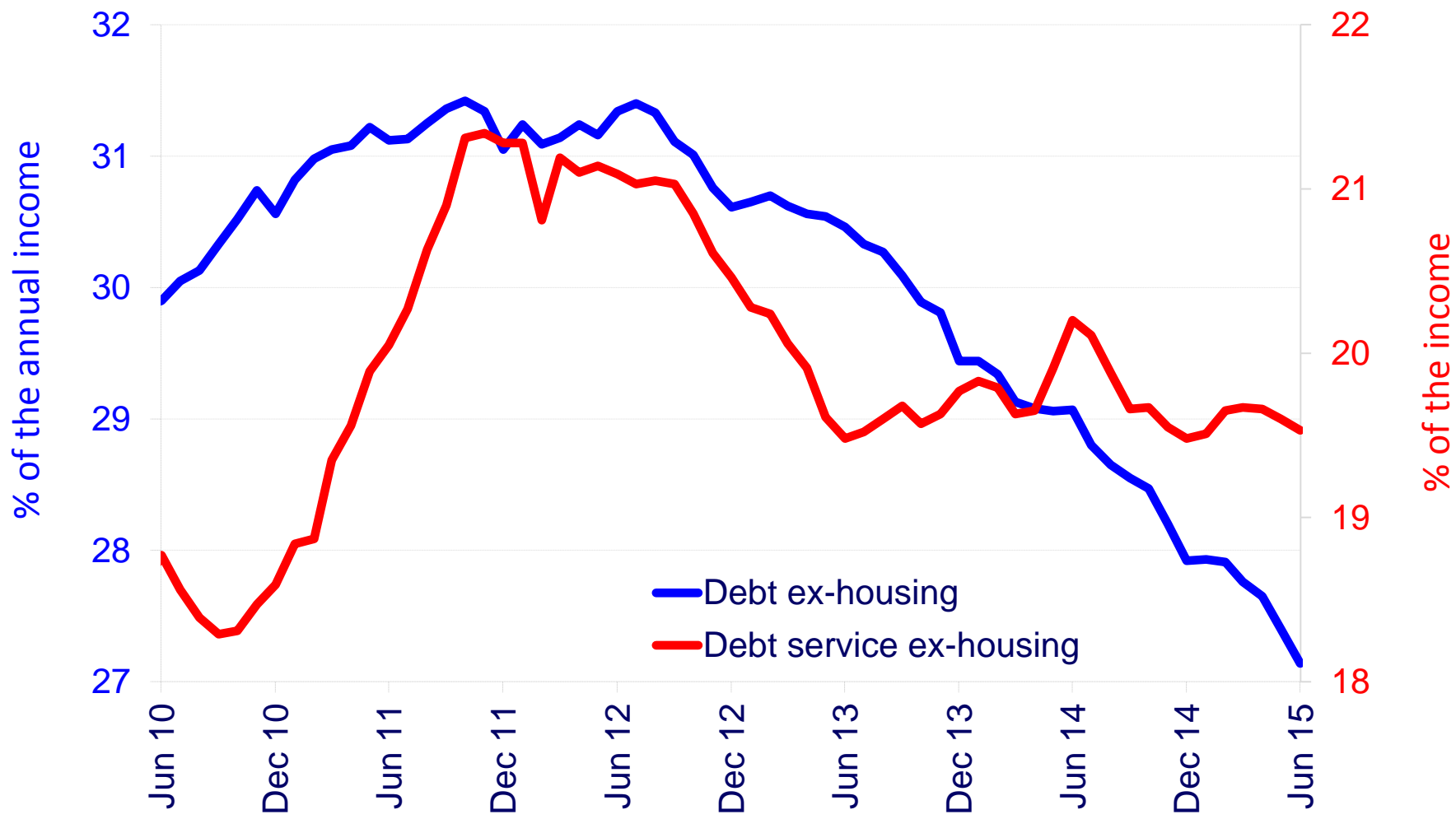
Expansion of Credit Outstanding



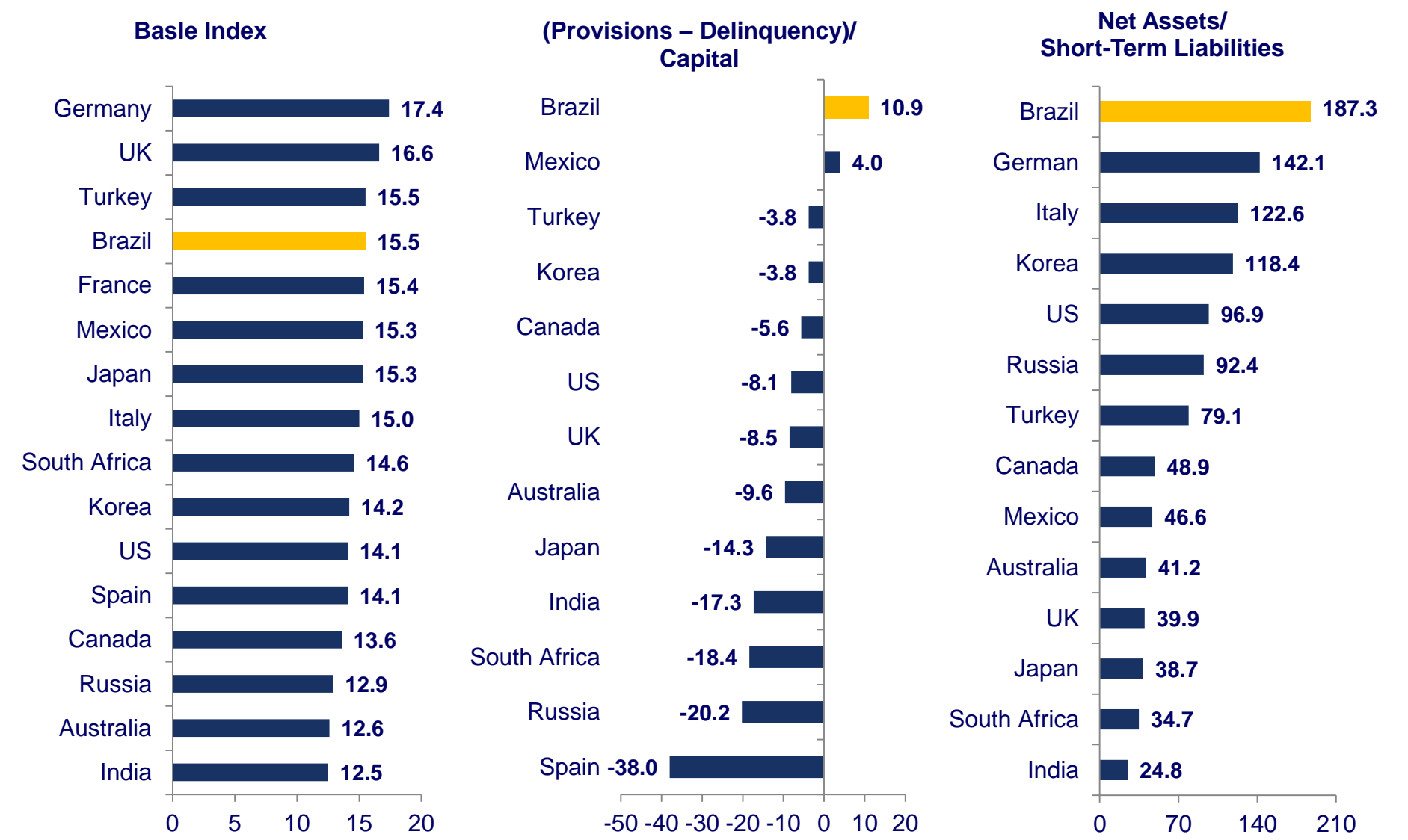
Delinquency



# Declining Household's Debt



# Financial Soundness Indicators



Source: IMF (FSI – last available data)

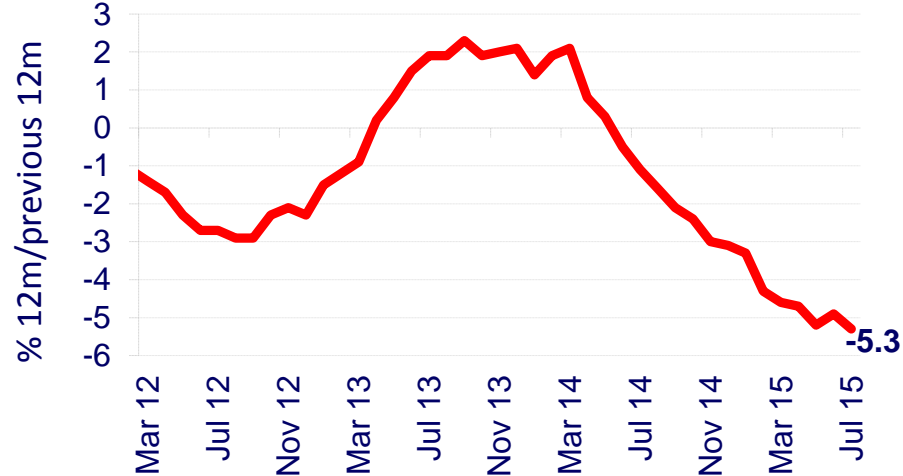
# IV. Activity

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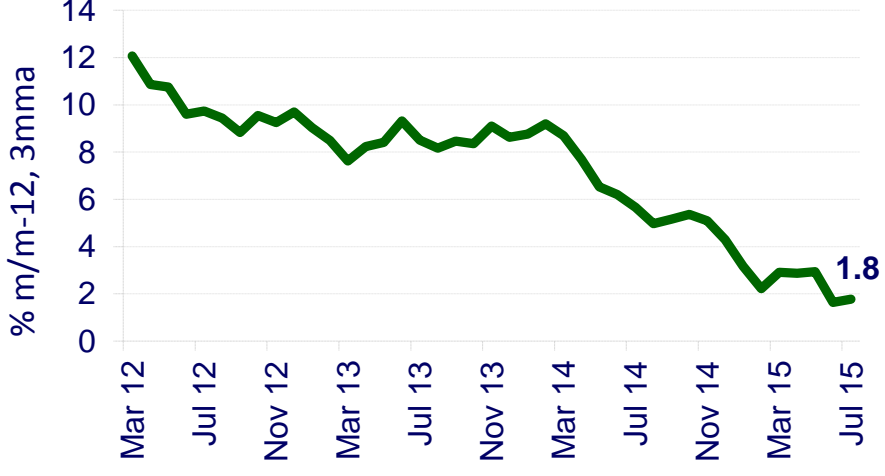
- 2015 is a year of adjustment, with impact on the activity and growth rates that tend to be low (below potential); reduction in the private consumption is additional factor of contraction
- Non-economic events are added to the contraction cycle and contribute to additional fall of investment; differences among projections are explained through different methods to evaluate these events
- Recovery will happen only as confidence improves

# Supply: Low Dynamism

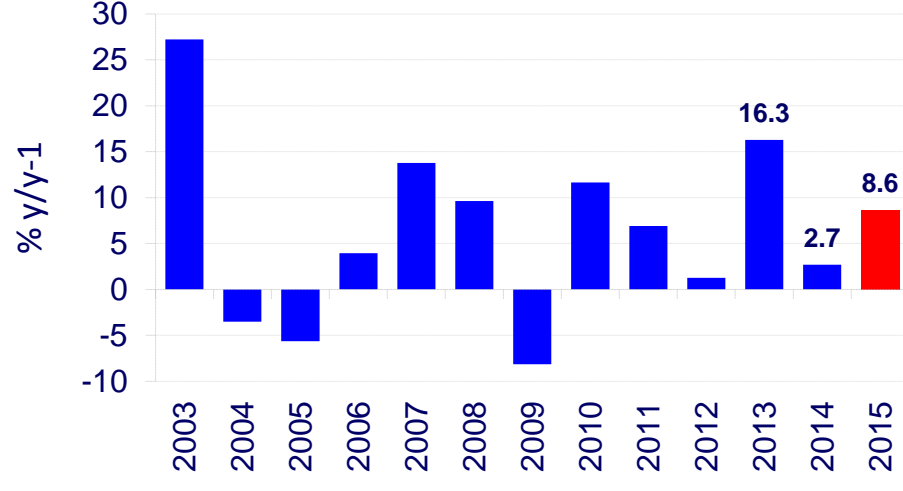
Industrial Production



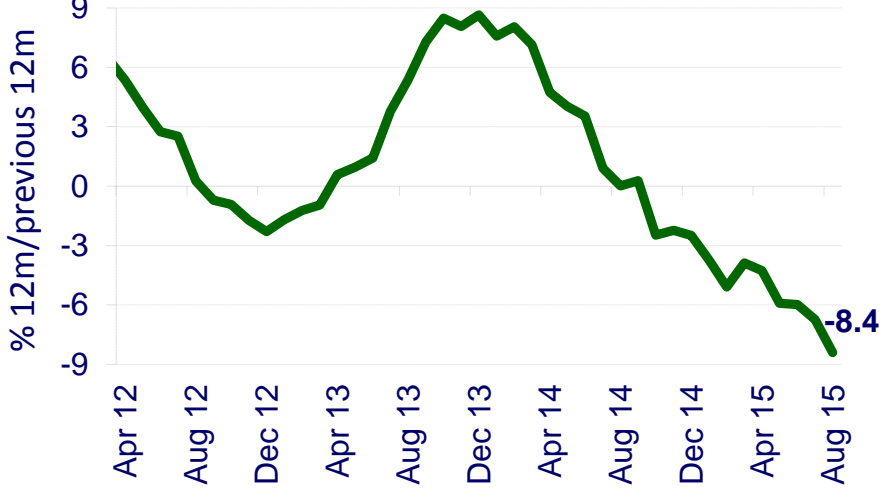
Services Nominal Income



Crop Harvest



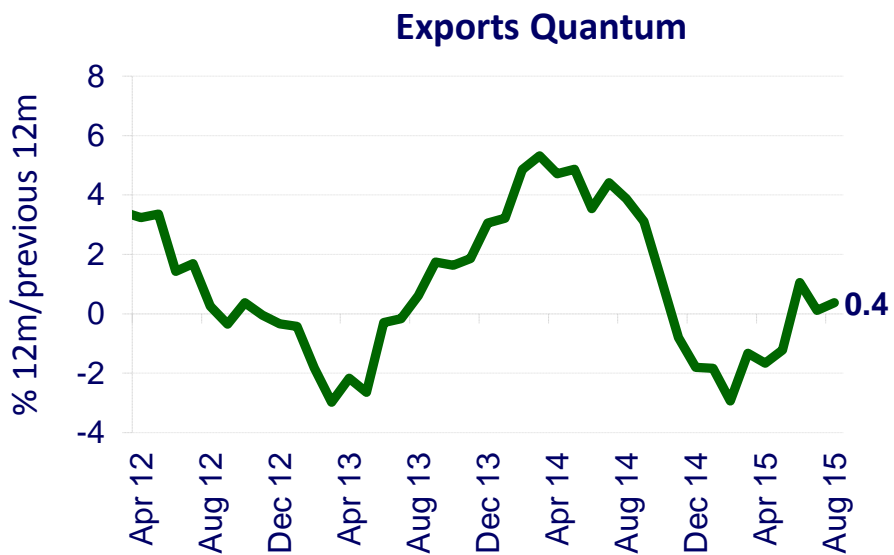
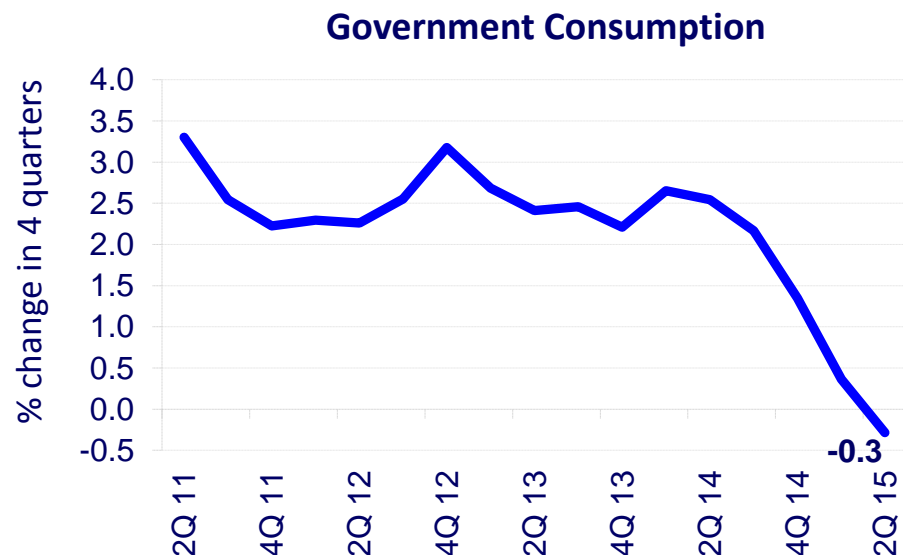
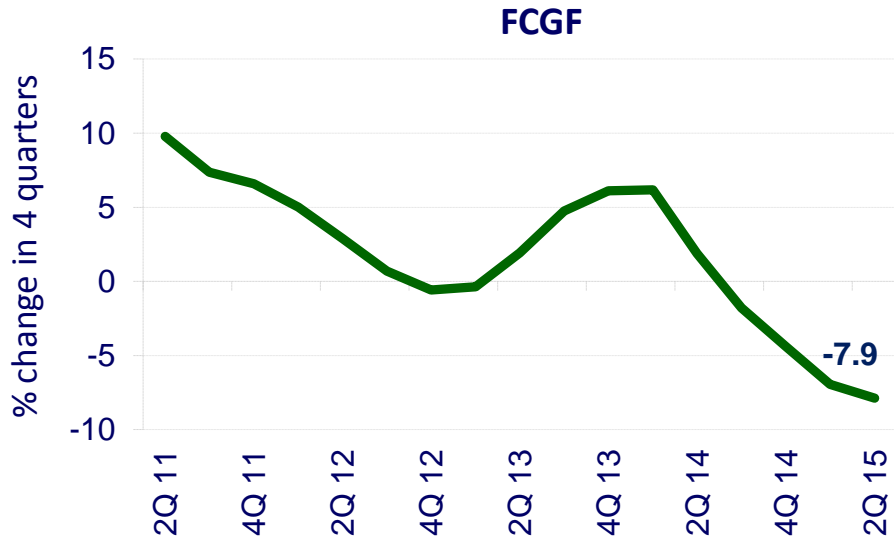
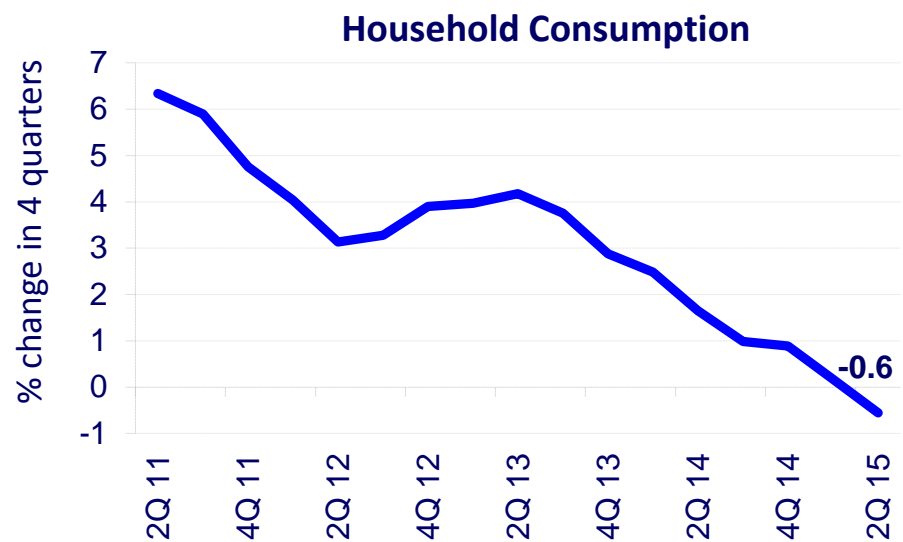
Imports Quantum



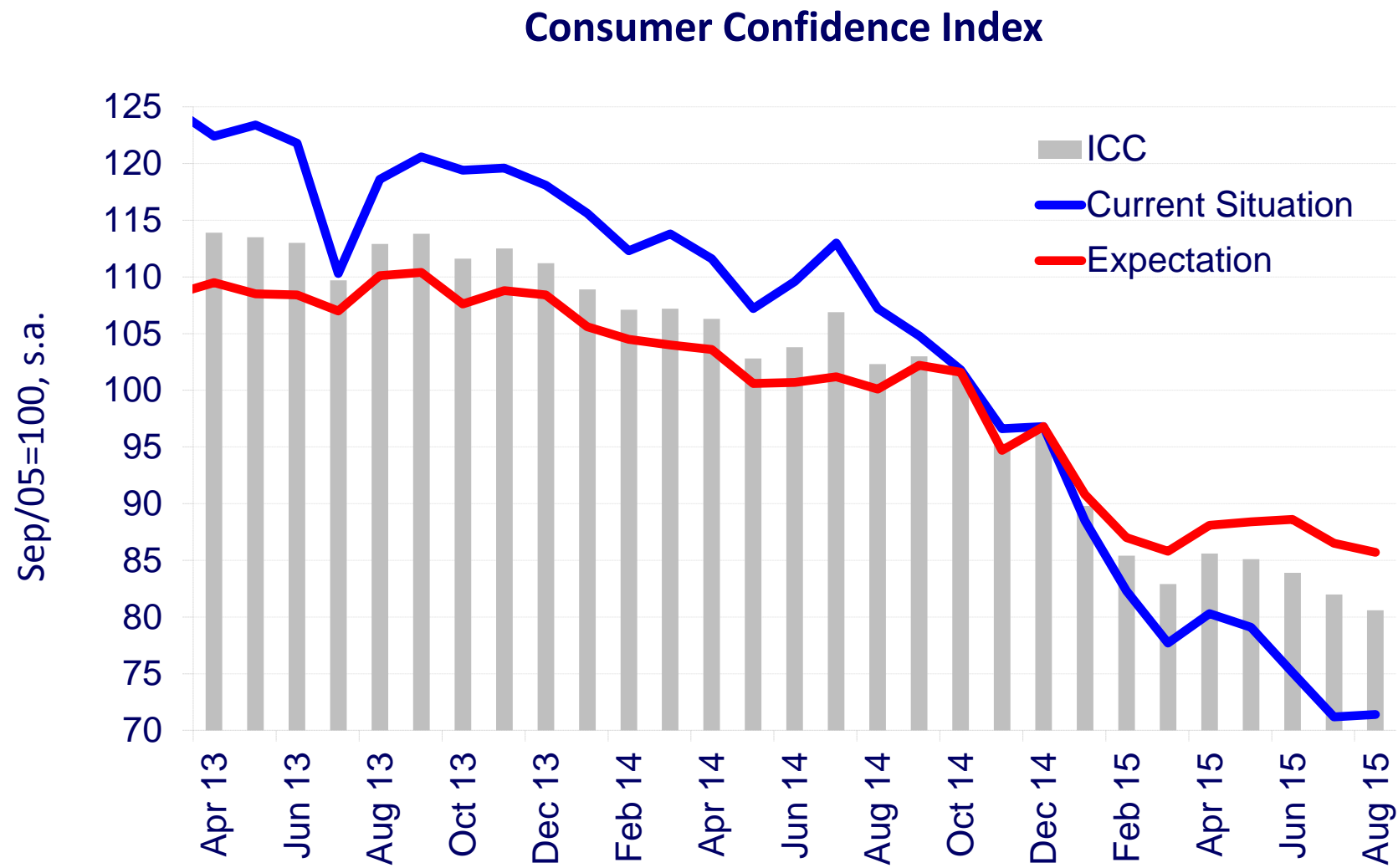
2015: IBGE estimates in Aug/15



# Demand: Moderation in Line with Adjustment



# Consumer Confidence (ICC): Stabilization of Decrease



Note: Proportion of favorable answers – proportion of unfavorable answers + 100 (100=neutral)

## Box: GDP Projection

- **Revision of the 2015 growth rate, from -1.1% to -2.7% (domestic demand, -5.1 p.p.; and net exports, +2.4 p.p.):**
- **Supply:**
  - Agriculture and livestock: 2.6% (1.9% in 2Q2015)
  - Industry: -5.6% (-3.0% in 2Q2015)
  - Services: -1.6% (-0.8% in 2Q2015)
- **Demand:**
  - Investment: -12.3% (-7.0% in 2Q2015)
  - Households' Consumption: -2.4% (-0.5% in 2Q2015)
  - Government Consumption: -1.4% (-1.6% in 2Q2015)
- **A 2.2% retreat in the four quarters ending in June 2016**

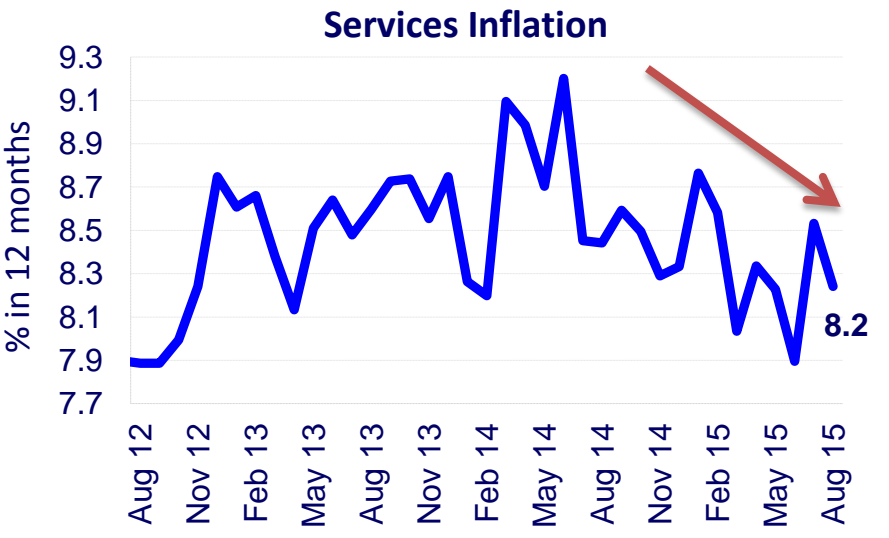
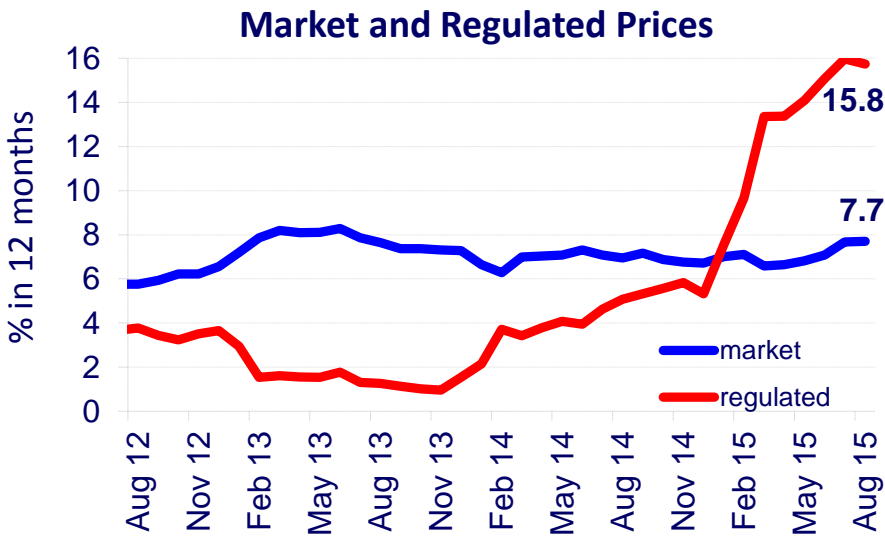
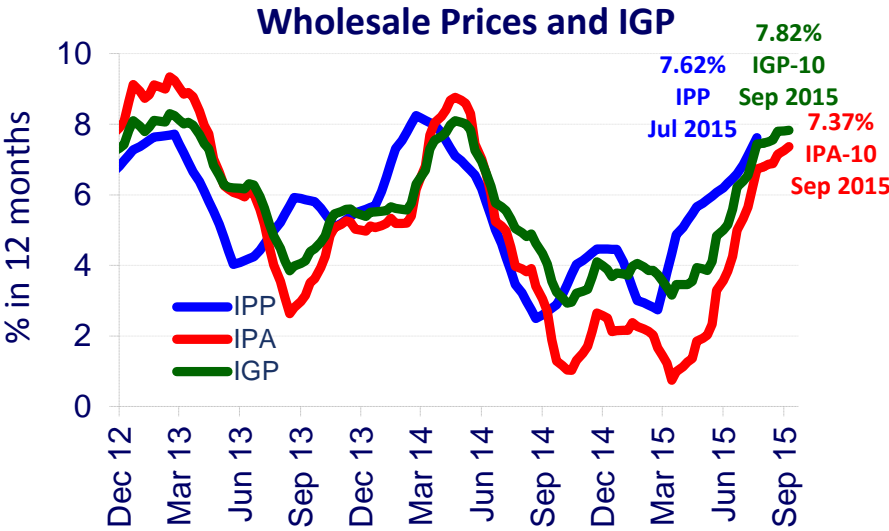
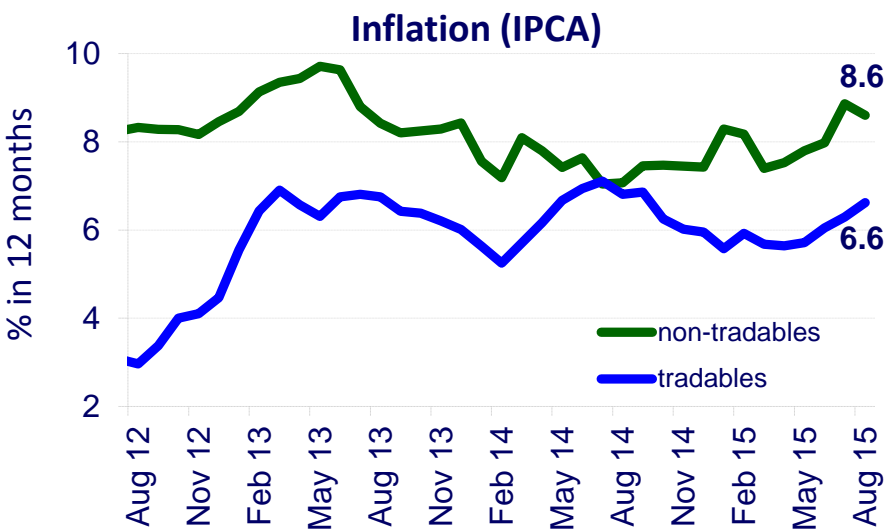
# V. Inflation Developments

- The double relative prices adjustment (regulated and external) impacted inflation in the first half of 2015, increasing the 12-month accumulated inflation; the objective is to avoid its transmission to 2016 and longer terms, being necessary the maintenance of the current level of the Selic rate, for a sufficiently long period
- There was deterioration in the balance of risks for inflation, but, as it is not possible to ensure today if the recent elevations of risk premia are temporary or permanent, this demands that the monetary policy, from the one hand, observe with attention the causes of volatility and, on the other hand, remain vigilant in case of significant deviations of the Copom inflation projections relative to the target

# Inflation Developments: Led by Regulated Prices

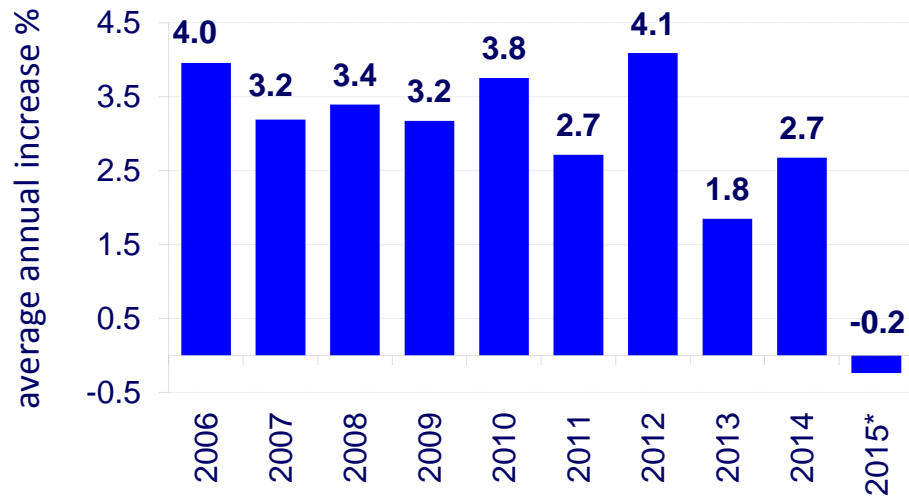
	change in 12 months (%)		
	Aug/14	Aug/15	
<b>IPCA</b>	<b>6.51</b>	<b>9.53</b>	<b>▲</b>
<b>Market</b>	<b>6.95</b>	<b>7.70</b>	<b>▲</b>
<b>Regulated</b>	<b>5.07</b>	<b>15.75</b>	<b>▲</b>
<b>Tradables</b>	<b>6.81</b>	<b>6.62</b>	<b>▼</b>
<b>Non-Tradables</b>	<b>7.07</b>	<b>8.60</b>	<b>▲</b>
<b>INPC</b>	<b>6.35</b>	<b>9.88</b>	<b>▲</b>
<b>IPC-C1</b>	<b>6.22</b>	<b>10.37</b>	<b>▲</b>
<b>IGP-DI</b>	<b>4.63</b>	<b>7.80</b>	<b>▲</b>
<b>IPA-DI</b>	<b>3.41</b>	<b>7.15</b>	<b>▲</b>
<b>Agriculture</b>	<b>1.91</b>	<b>10.45</b>	<b>▲</b>
<b>Industrial</b>	<b>3.97</b>	<b>5.94</b>	<b>▲</b>
<b>IPC-DI</b>	<b>6.76</b>	<b>9.73</b>	<b>▲</b>
<b>INCC-DI</b>	<b>7.26</b>	<b>7.30</b>	<b>▲</b>

# Prices: Slow Adjustment in Non-Tradables

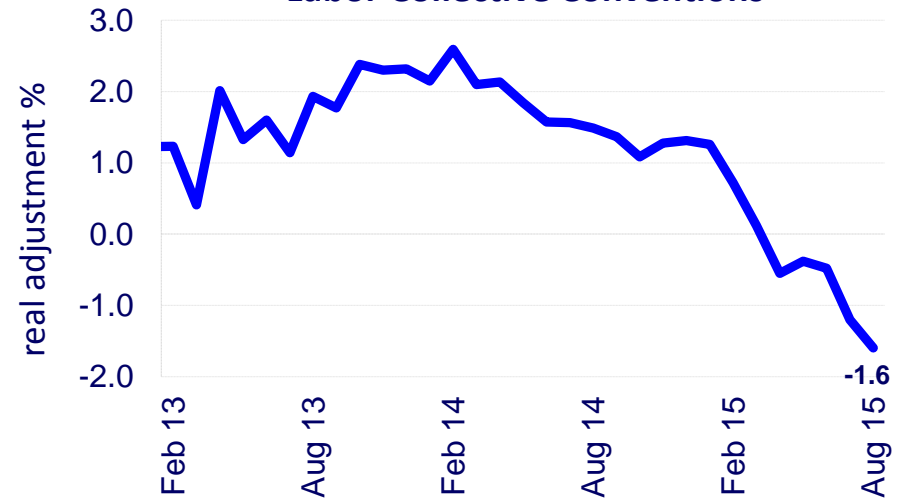


# Wages: Adjustments in Progress, but still Risks

Real Wages



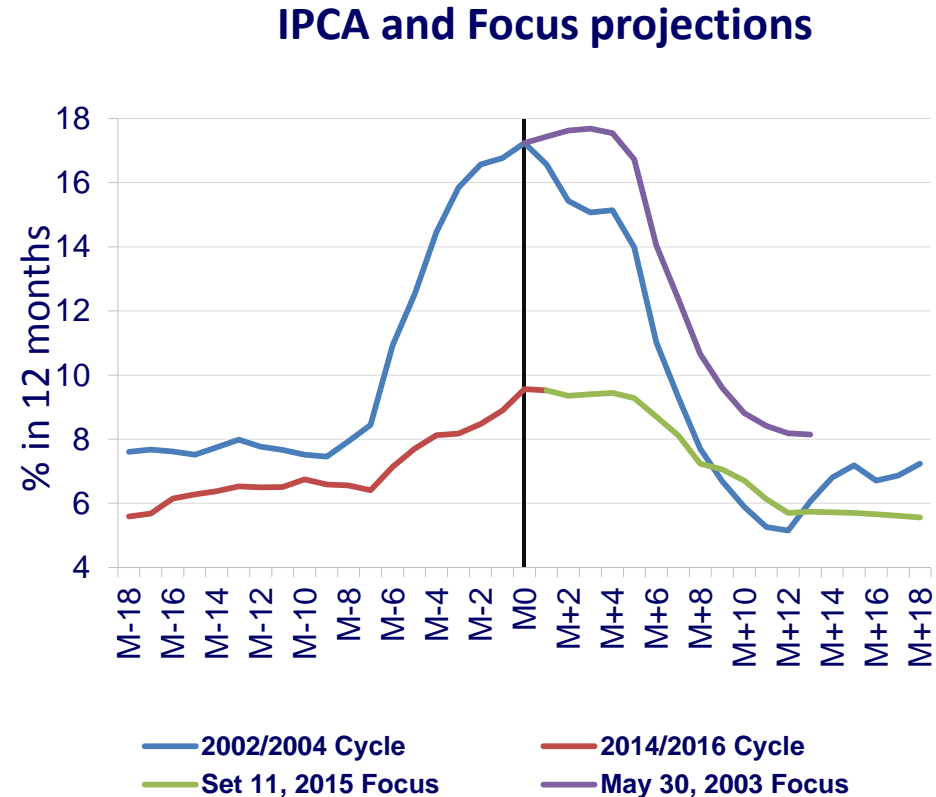
Labor Collective Conventions



\* 12m through July

# Box: Comparison of Desinflation Cycles

- Despite the absence of disinflationary contribution of the exchange rate, the market expectations indicate disinflation of 4 p.p. through the end of 2016, around 80% of the necessary to ensure the convergence to the target
- In May 2003 (peak of the cycle 2002/2004), the expectations signaled disinflation of 9 p.p. for the twelve months ahead - around 75% of the 12 p.p. disinflation that really occurred.





# BCB Inflation Forecasts

Baseline Scenario: Interest rate constant at 14.25% p.y. and exchange rate of R\$3.90/US\$

Period		Probability interval						Central projection
		50%						
			30%					
				10%				
2015	3	9.4	9.4	9.5	9.5	9.6	9.6	9.5
2015	4	9.2	9.3	9.5	9.6	9.8	9.9	9.5
2016	1	7.0	7.3	7.5	7.8	8.0	8.3	7.7
2016	2	5.7	6.0	6.3	6.6	6.9	7.2	6.5
2016	3	4.9	5.2	5.6	5.9	6.3	6.7	5.8
2016	4	4.4	4.8	5.2	5.5	5.9	6.3	5.3
2017	1	3.8	4.2	4.6	5.0	5.3	5.7	4.8
2017	2	3.7	4.1	4.5	4.8	5.2	5.6	4.7
2017	3	3.1	3.5	3.9	4.2	4.6	5.0	4.0

Obs.: 12-month accumulated inflation (% p.y.)

# BCB Inflation Forecasts

**Market Scenario: 2015 Interest rate at 14.25% p.y. and avg. exchange rate of R\$3.86/US\$**  
**2016 Interest rate at 12.25% p.y. and avg. exchange rate of R\$4.00/US\$**

Period		Probability interval						Central projection
		50%						
			30%					
				10%				
2015	3	9.4	9.4	9.5	9.5	9.6	9.6	9.5
2015	4	9.2	9.3	9.5	9.6	9.8	9.9	9.5
2016	1	7.1	7.3	7.5	7.8	8.0	8.2	7.7
2016	2	5.7	6.0	6.3	6.6	6.9	7.2	6.4
2016	3	4.9	5.3	5.6	6.0	6.3	6.7	5.8
2016	4	4.5	4.9	5.3	5.6	6.0	6.4	5.4
2017	1	4.1	4.5	4.9	5.2	5.6	6.0	5.1
2017	2	4.2	4.6	4.9	5.3	5.6	6.0	5.1
2017	3	3.7	4.1	4.5	4.8	5.2	5.6	4.6

# Analysis of the 193<sup>rd</sup> Copom Minutes Remains Adequate

The Copom evaluates that the inflation convergence scenario to 4.5% at the end of 2016 has remained, despite some deterioration in the balance of risks. The Committee understands that **the maintenance of the basic interest rate at 14.25% p.a., for a sufficiently long period, is necessary for the convergence of inflation to the target at the end of 2016.**

For the Committee, on the one hand, the advances reached in the fight against inflation show that the **strategy of monetary policy is in the correct direction.** Under this view, certain remaining risks for the Copom inflation projections to reach safely the objective of 4.5% at the end of 2016 are in line with the lagged and cumulative effect of the monetary policy action. On the other hand, recent elevations of the risk premia that reflect in the prices of assets demand that **the monetary policy remains vigilant in case of significant deviations** of the Copom inflation projections in relation to the target.

# Inflation Outlook

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Thank you!

**Inflation Report**

September 2015