



Inflation Outlook

Carlos Viana de Carvalho

**Inflation Report
December 2016**

* This presentation represents the Copom's best effort to provide an English version of the Inflation Report presentation. In case of any inconsistency, the original version in Portuguese prevails.

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i. Economic Activity

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I. Introduction

Banco Central do Brasil - Institutional Mission

- To ensure the stability of the currency's purchasing power and a solid and efficient financial system
- The fulfillment with the mission to ensure price stability is reached through the inflation targeting regime, in which the targets are defined by the National Monetary Council (CMN)

Basic Principles

- **Low, stable and predictable inflation: best contribution of monetary policy for sustainable growth**
- **High and volatile inflation:**
 - generates distortions, increases risks, shortens planning horizons, depresses investment and economic growth
 - regressive
 - in short, reduces potential growth, affects employment and income generation, worsens income distribution

II. Baseline Scenario

i. Economic Activity:

- below expectations in the short-term
- decrease in GDP projections for 2016 and 2017
- high level of economic slack
- resumption may be further delayed and more gradual than anticipated

ii. External Scenario:

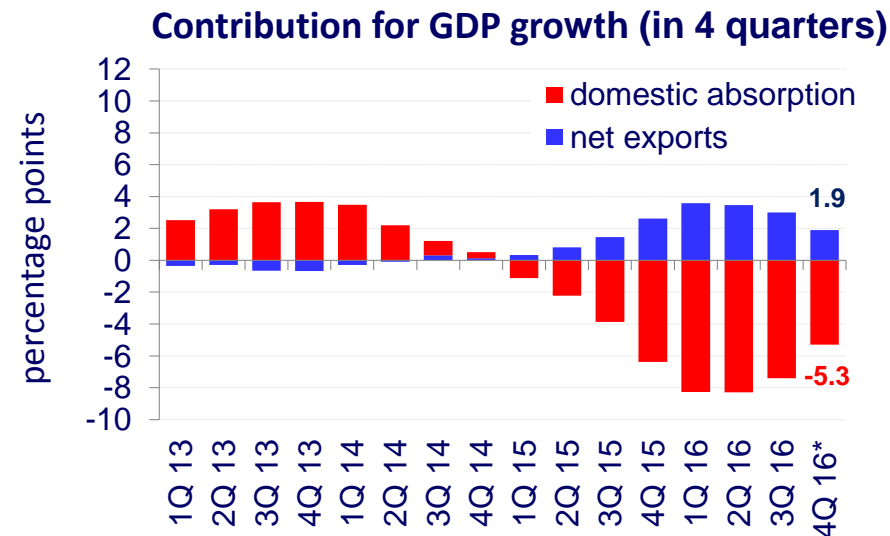
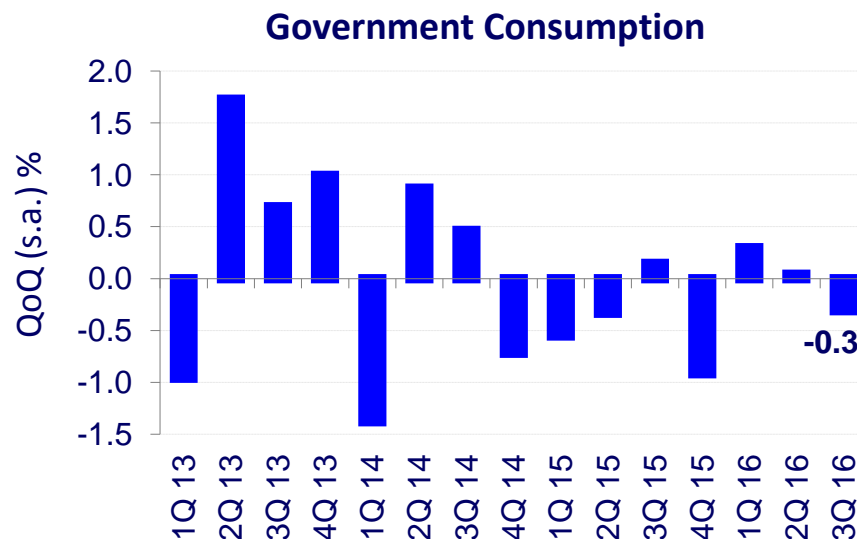
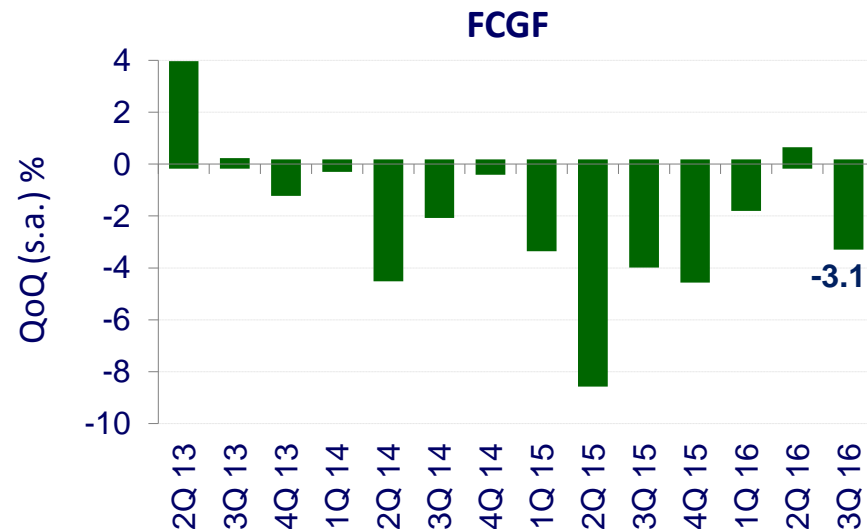
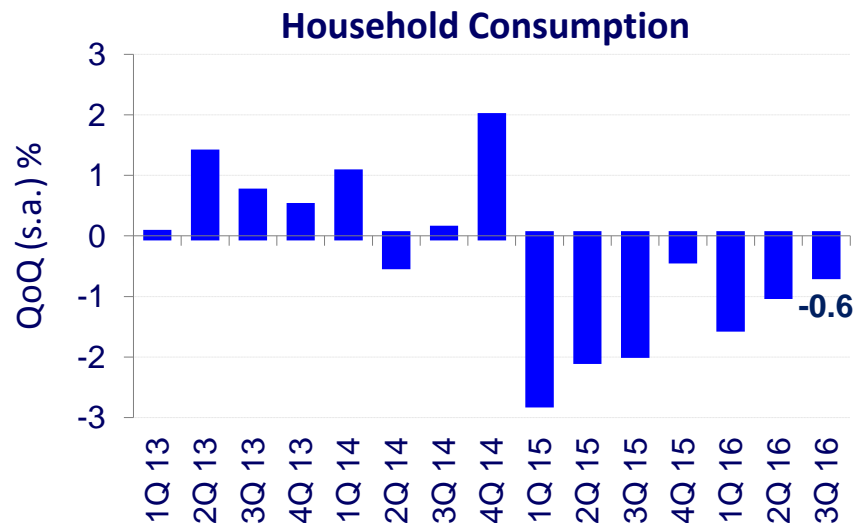
- possible end of benign period
- resumption of the normalization of monetary conditions in the US
- uncertainty over the future course of developed economies

iii. Inflation:

- recent inflation more favorable than expected
- signs of more widespread disinflation
- decrease in expectations for 2016 and 2017 and maintenance of the 4.5% level for 2018 and longer horizons
- Committee's conditional forecasts with little oscillations

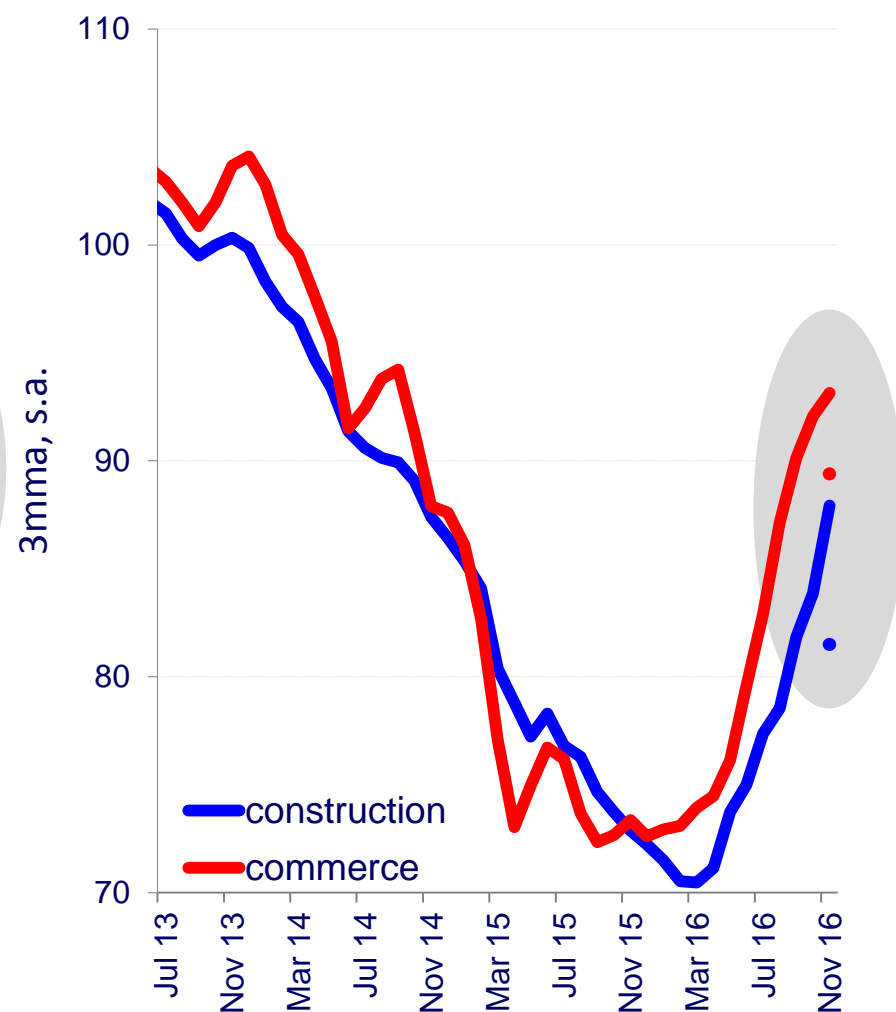
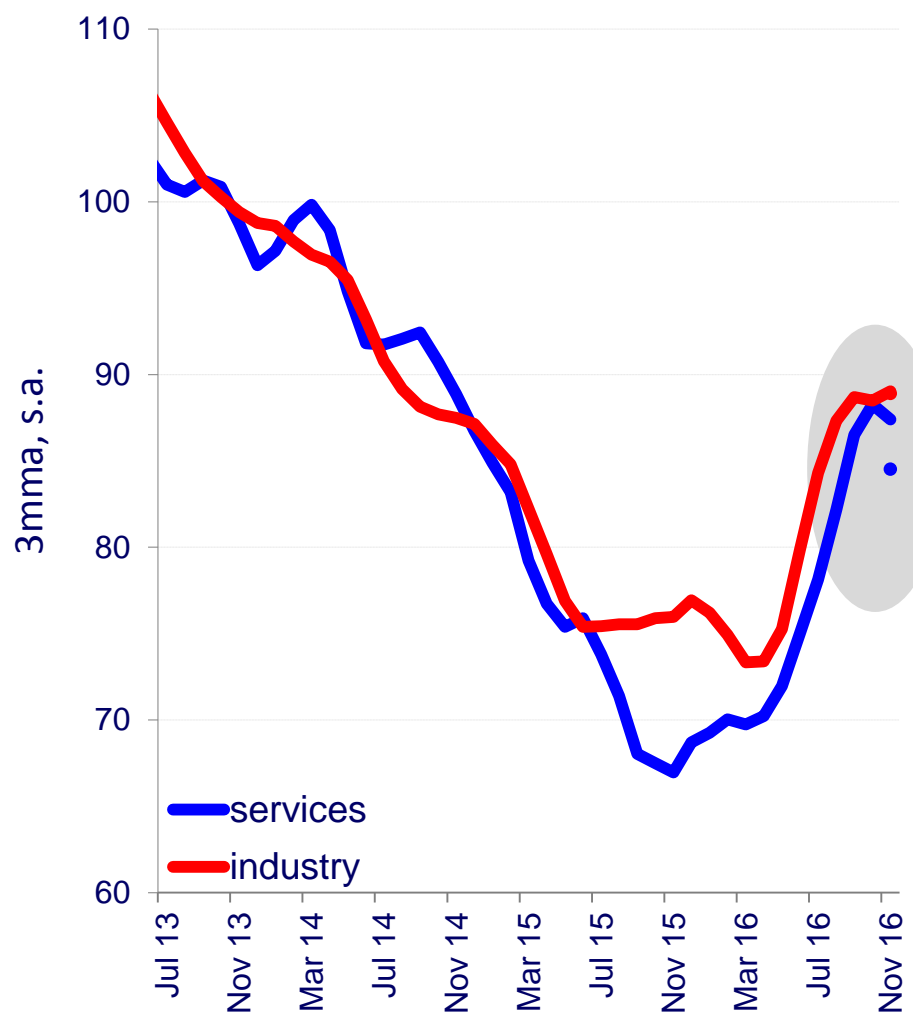
i. Economic Activity

Demand: Moderation in Line with Adjustment



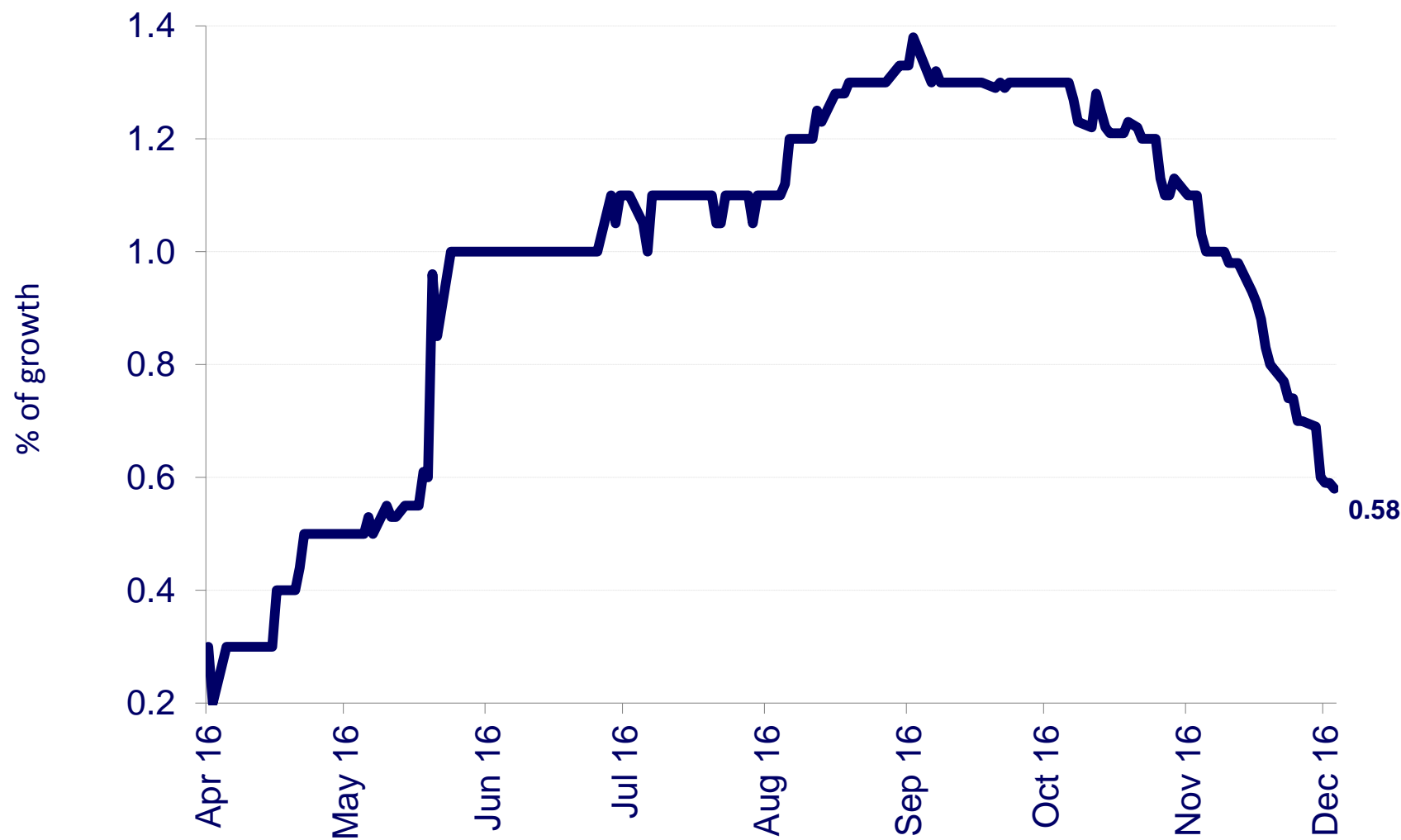
*BCB projections

Agents' Confidence - Businessmen Expectations

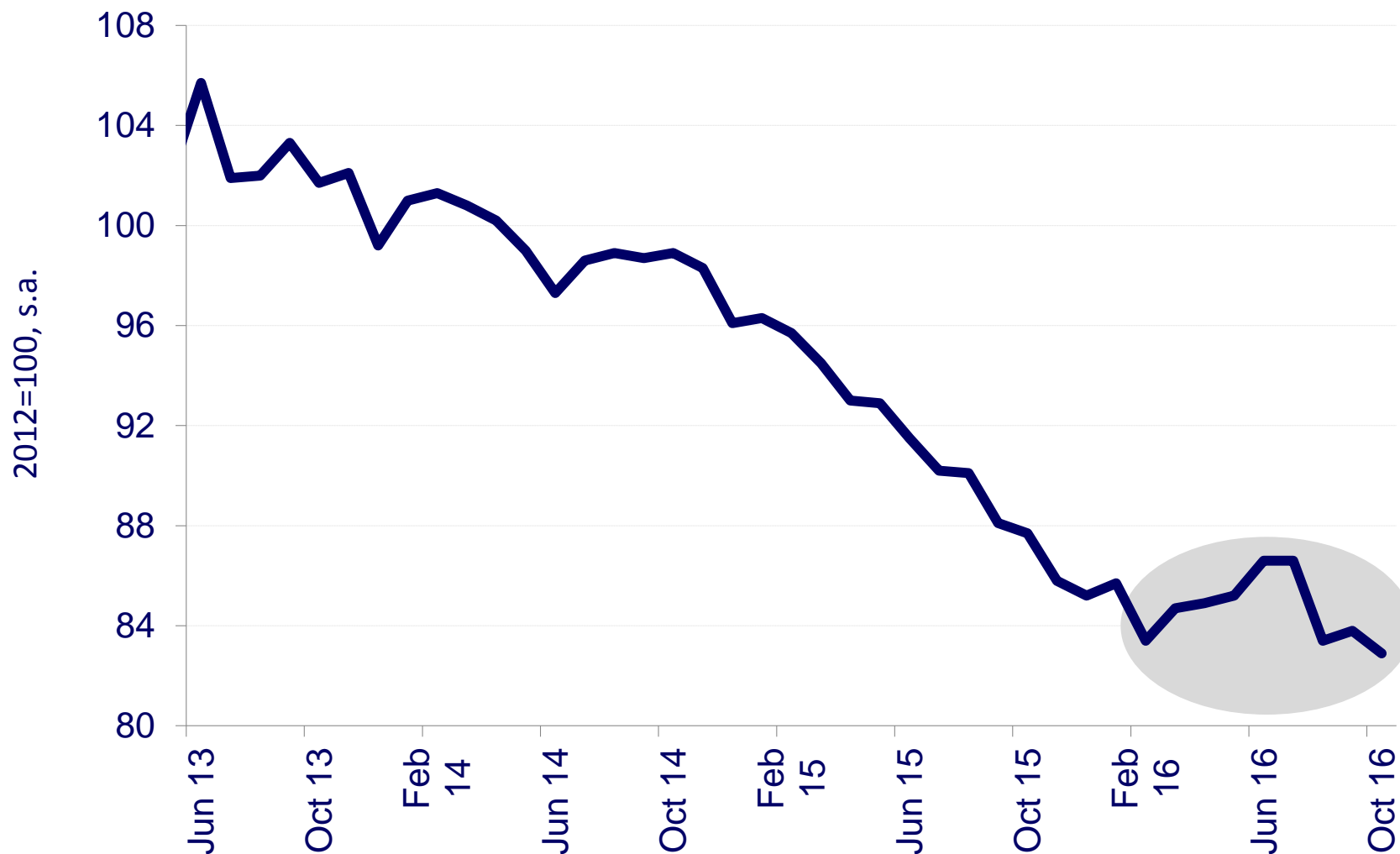


Obs.: proportion of favorable answers – proportion of unfavorable answers + 100 (100=neutral)

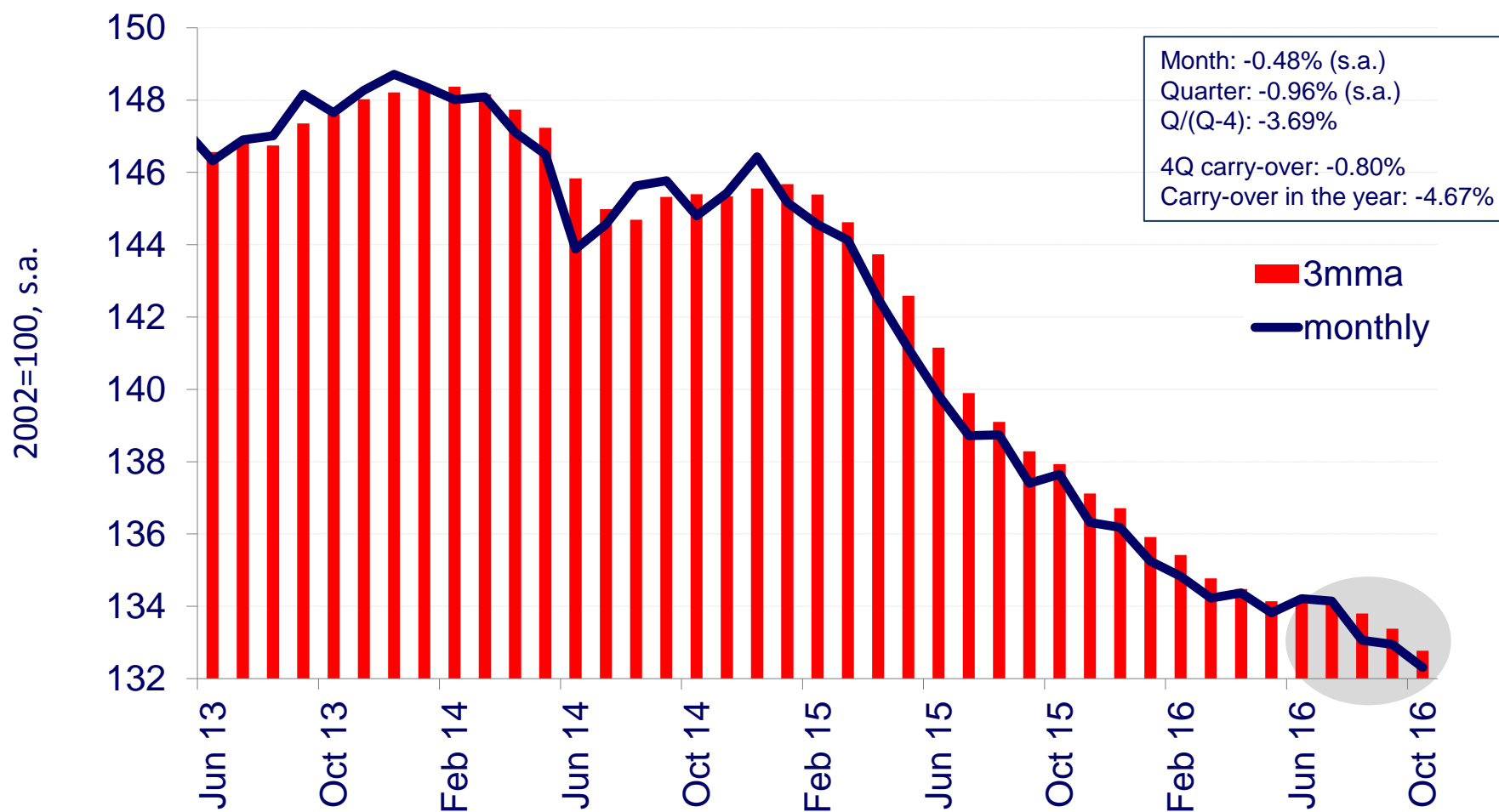
Market Expectations for 2017 GDP

through Dec 16th

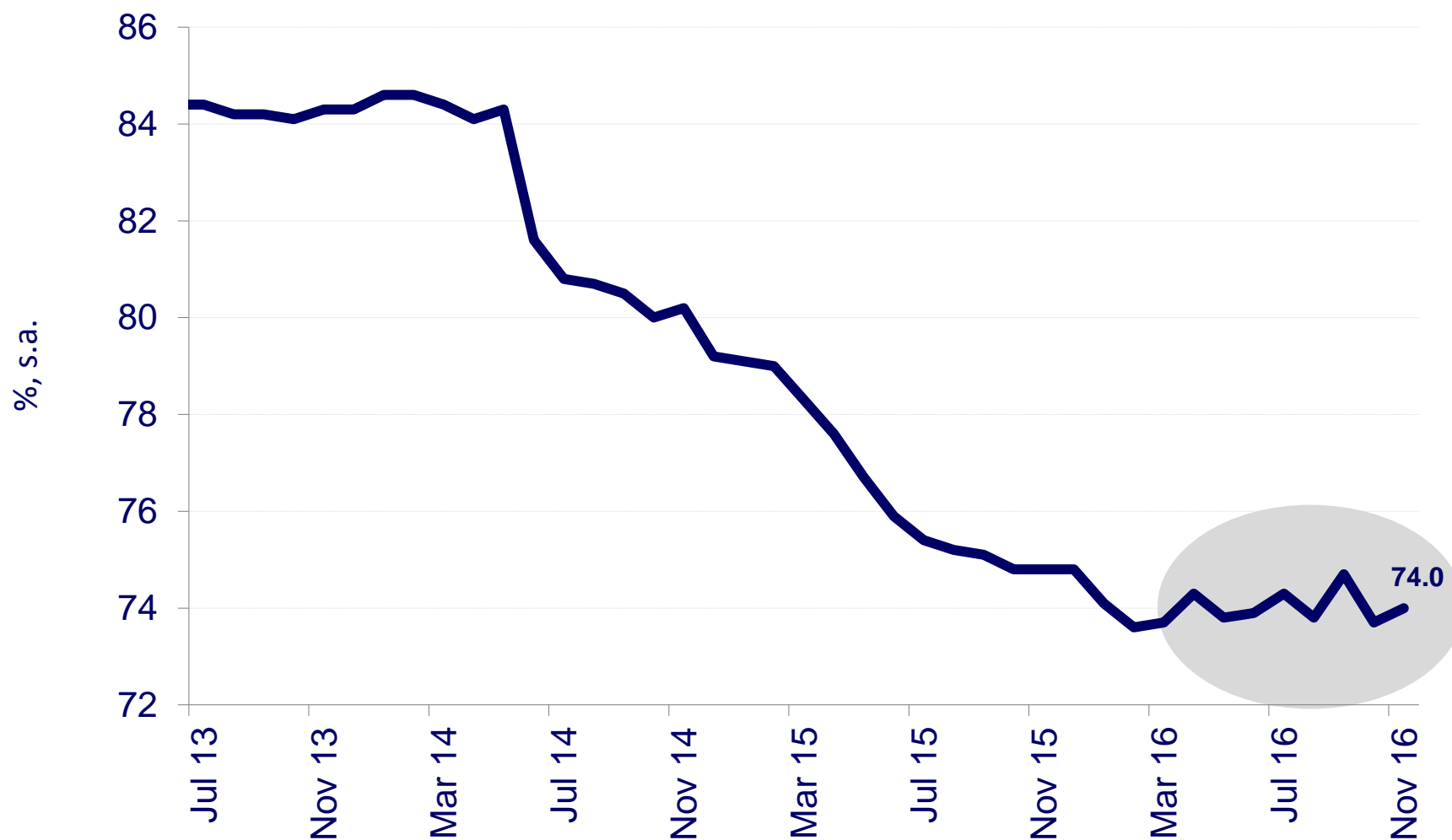
Industrial Production



IBC-Br

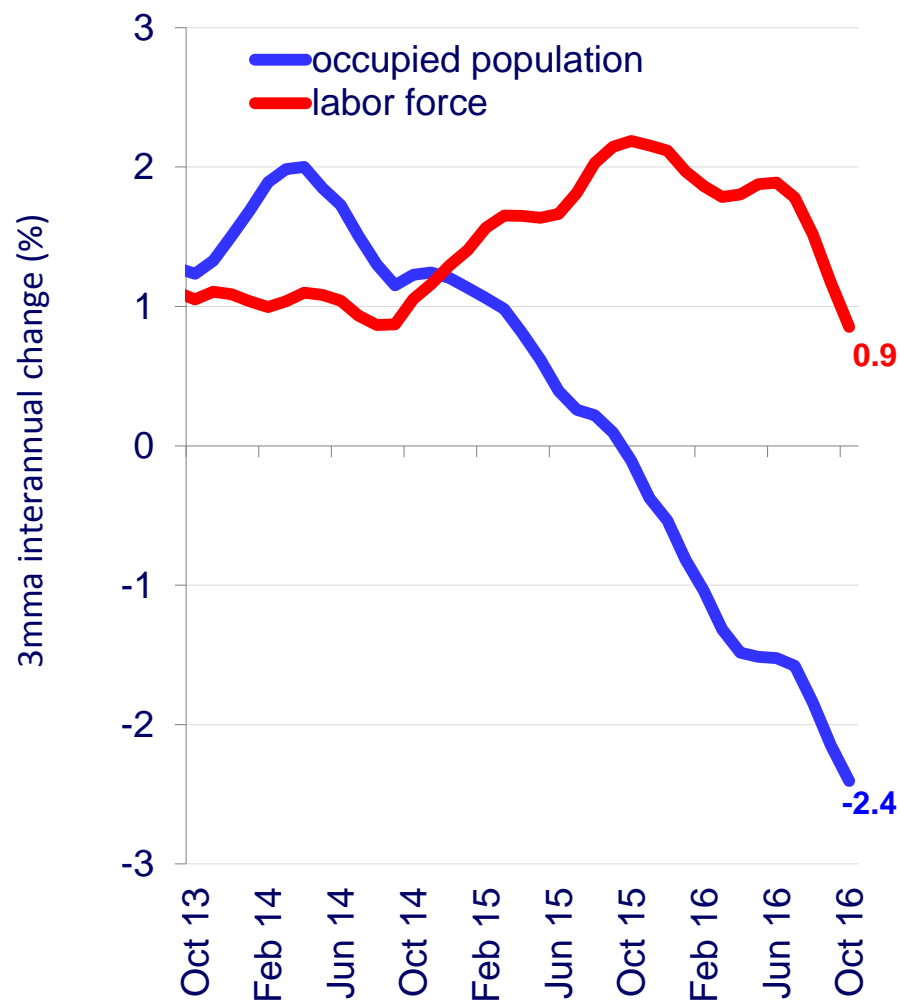


Installed Capacity Utilization Level (NUCI)

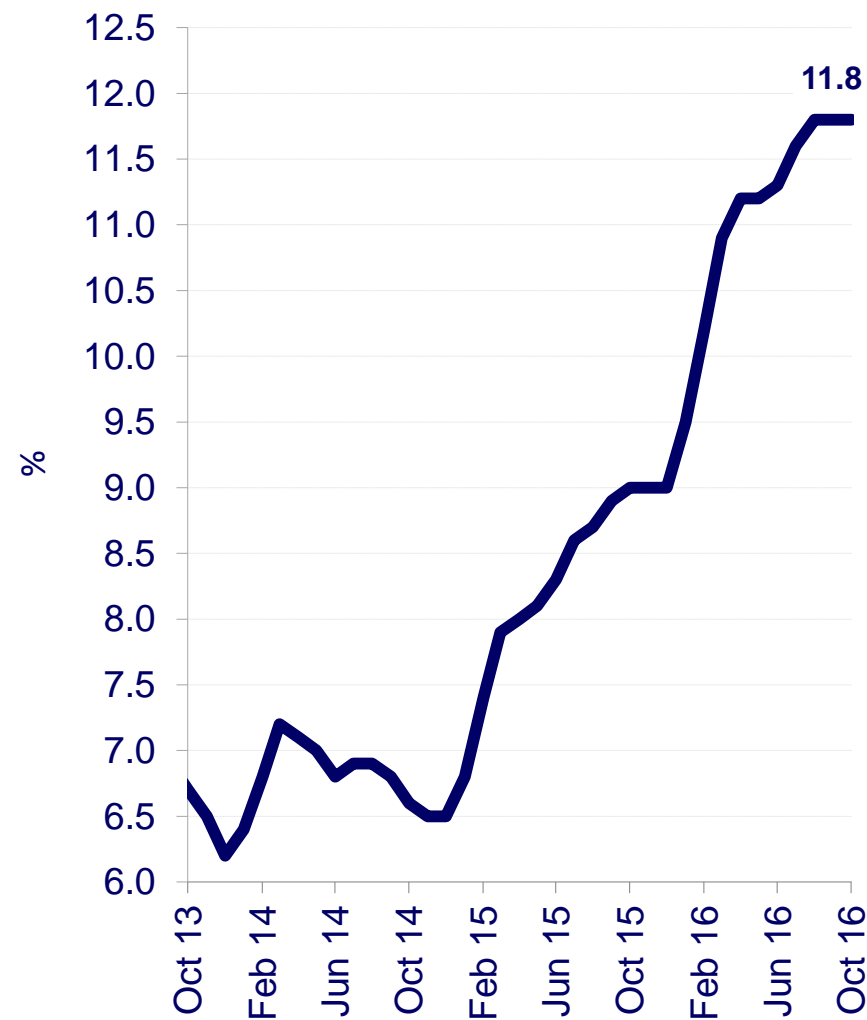


Labor Market: Softening

Population



Unemployment

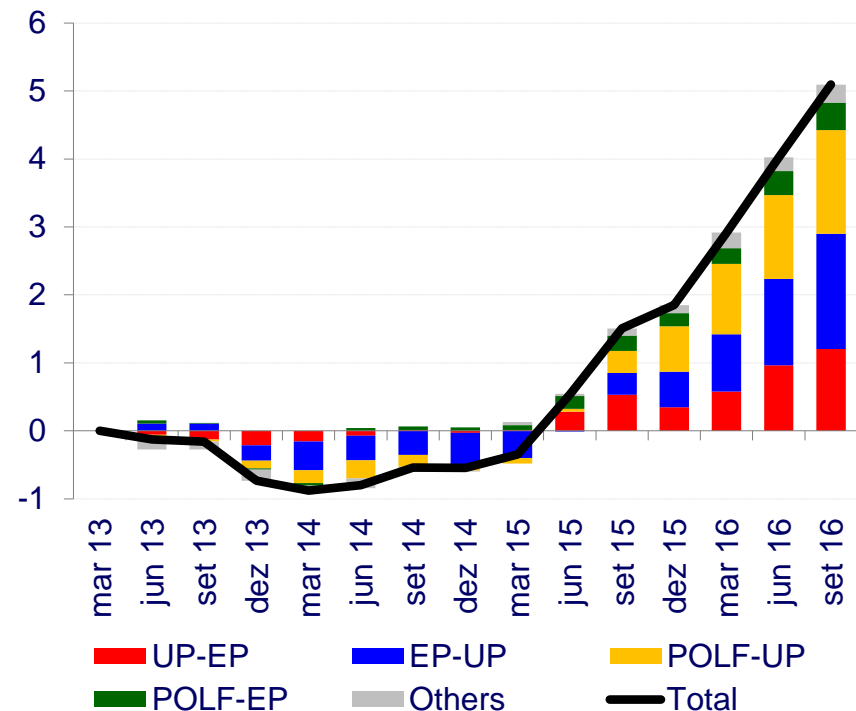


Box: Transition Rates and Unemployment Evolution

- 3Q16 unemployment rate was 5.1 p.p. higher than if transition rates were kept at 2012 levels (beginning of Continuous PNAD)

- More difficult for unemployed to find work and for employed to remain employed
- Increase of the migration of individuals from POLF to unemployed and decrease of their insertion into employment

Accumulated Effect of Changes in the Transition Rates on the Unemployment Rate (p.p.)



UP: Unemployed Population, EP: Employed Population, POLF: Population Out of Labor Force

Box: GDP Projections

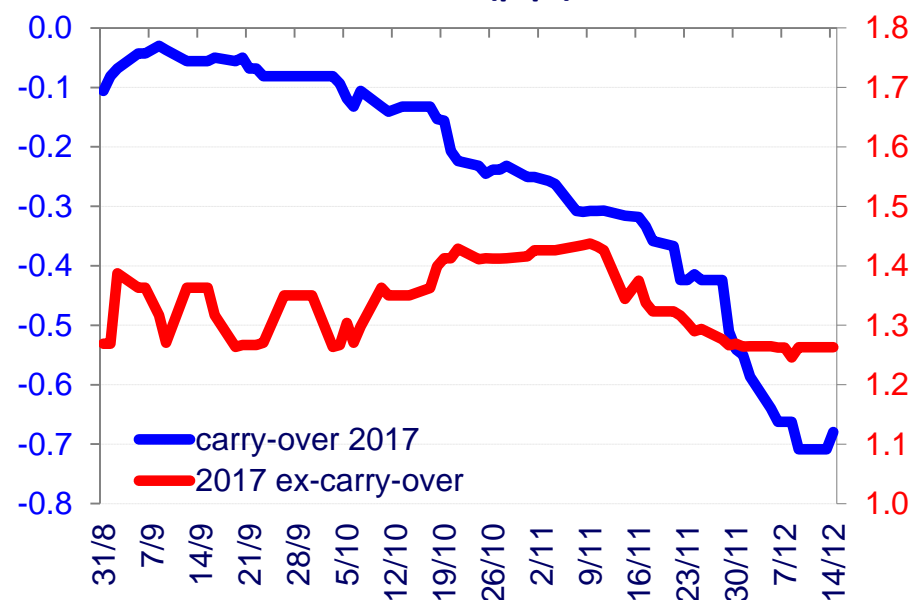
- **2016 change at -3.4% (domestic absorption, -5.3 p.p.; and net exports, 1.9 p.p.)**
 - **Supply**
 - Agriculture and livestock: -5.9% (3.6% in 2015)
 - Industry: -3.5% (-6.3% in 2015)
 - Services: -2.5% (-2.7% in 2015)
 - **Demand**
 - Investment: -10.1% (-13.9% in 2015)
 - Household Consumption: -4.2% (-3.9% in 2015)
 - Government Consumption: -0.5% (-1.1% in 2015)

- **For 2017, expected growth of 0.8%**

Box: Market Expectations for GDP

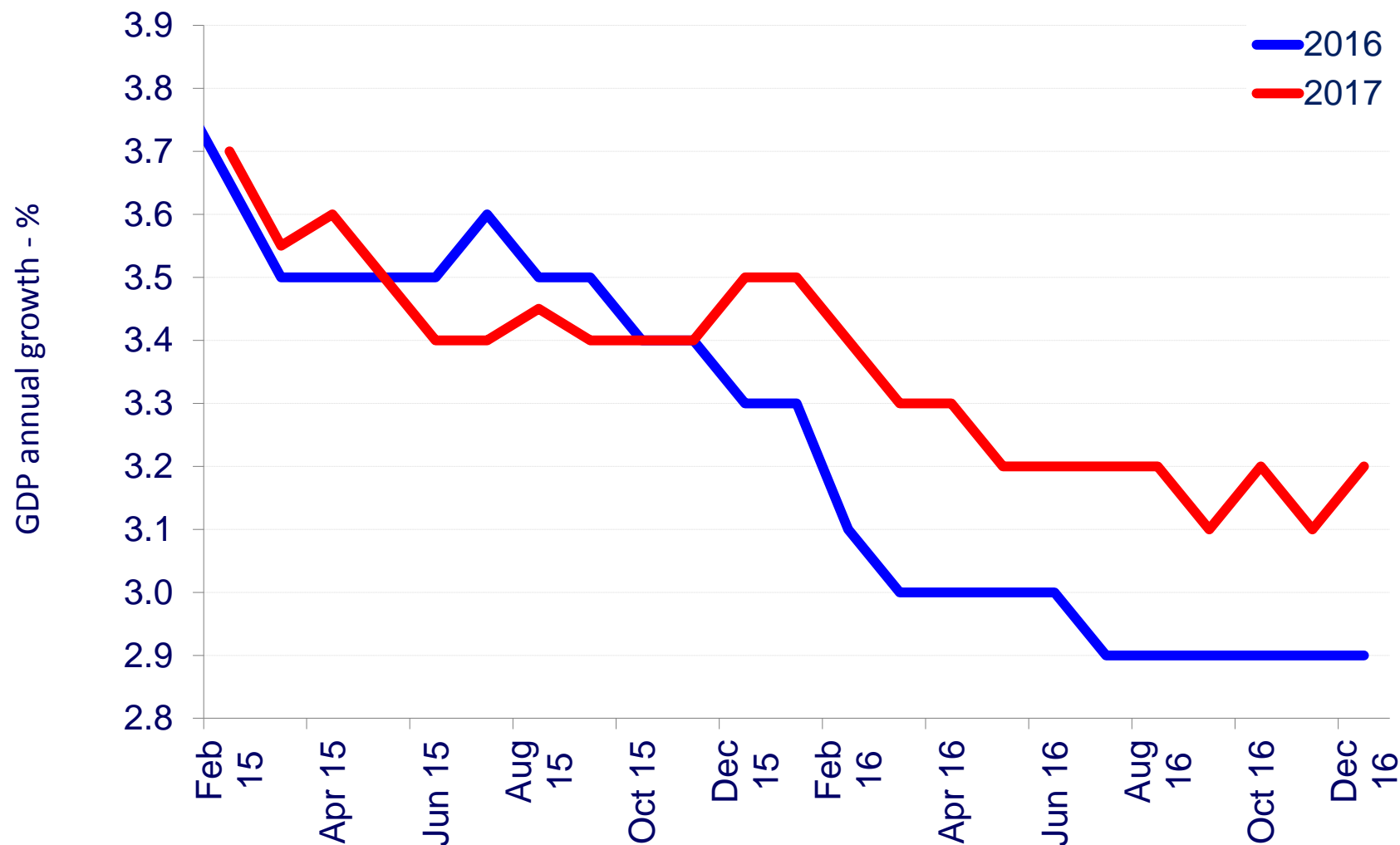
- Recent decline in median market expectations for 2017 GDP growth follows the stronger deterioration of median expectations for 2016 GDP growth
- The decomposition of projected 2017 GDP growth in carry-over + growth purely attributed to 2017, based on Focus's microdata, reveals that much of the reduction in market projections was mechanically caused by the 2016 carry-over effect
- Once this effect is removed, the reduction in growth projections for 2017 is very modest

Medians of Market Expectations for the Carry-Over for 2017 GDP Growth and for 2017 Ex-Carry GDP Growth (p.p.)



ii. External Scenario

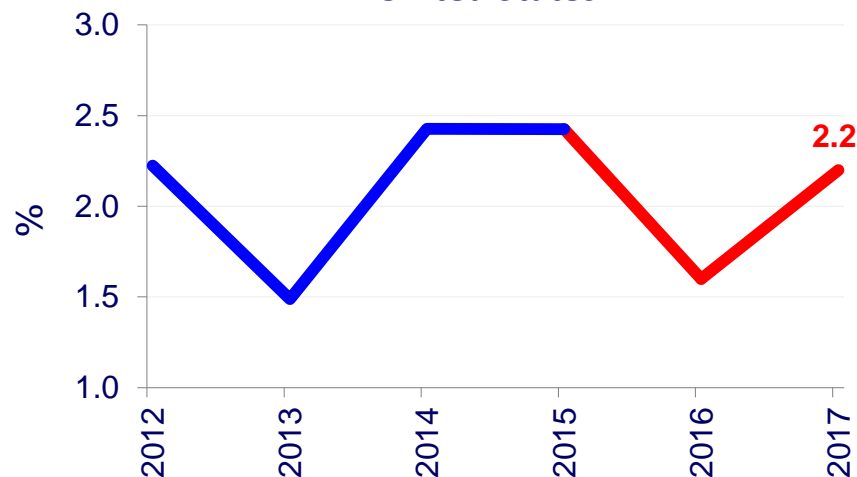
Prospect for Moderate Global Growth



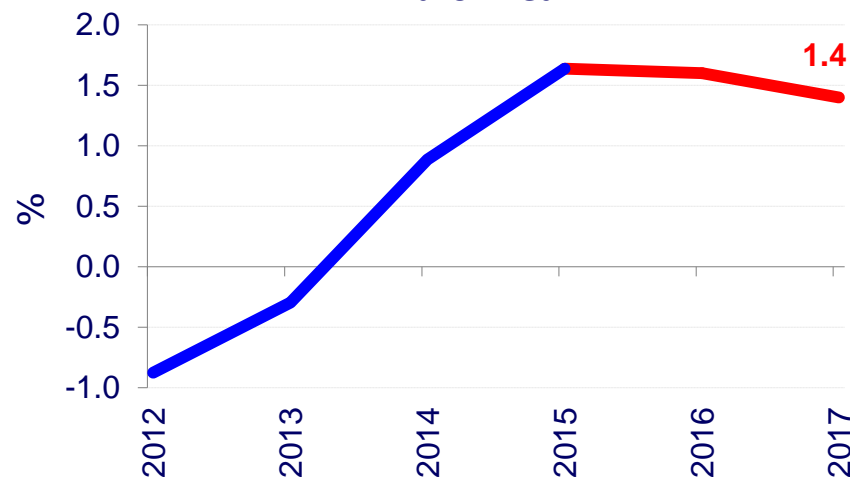
Source: Bloomberg (Dec/16: on Dec 16th)

Activity – GDP Annual Growth

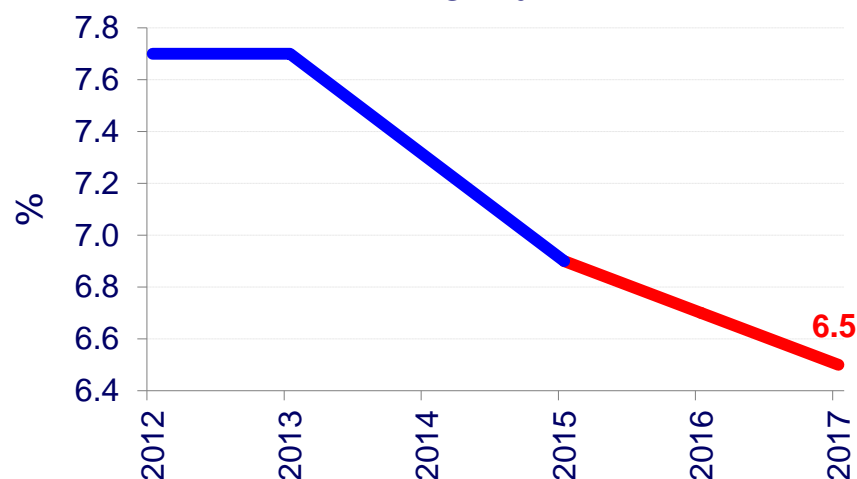
United States



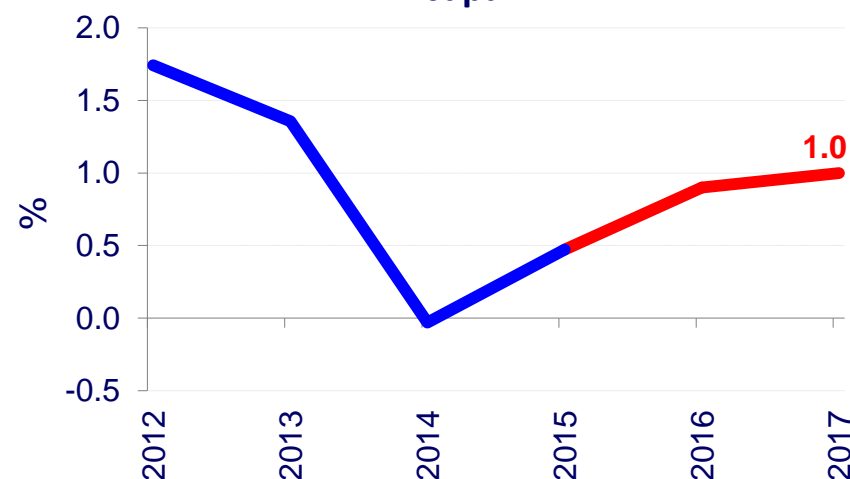
Euro Area



China



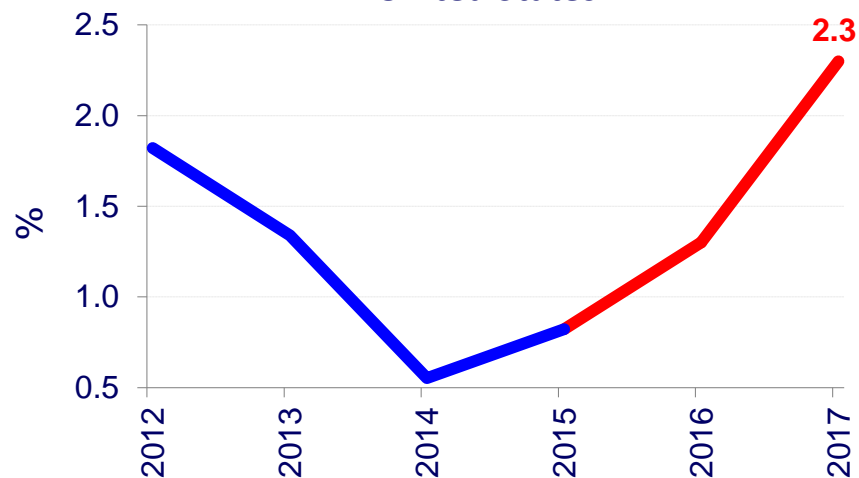
Japan



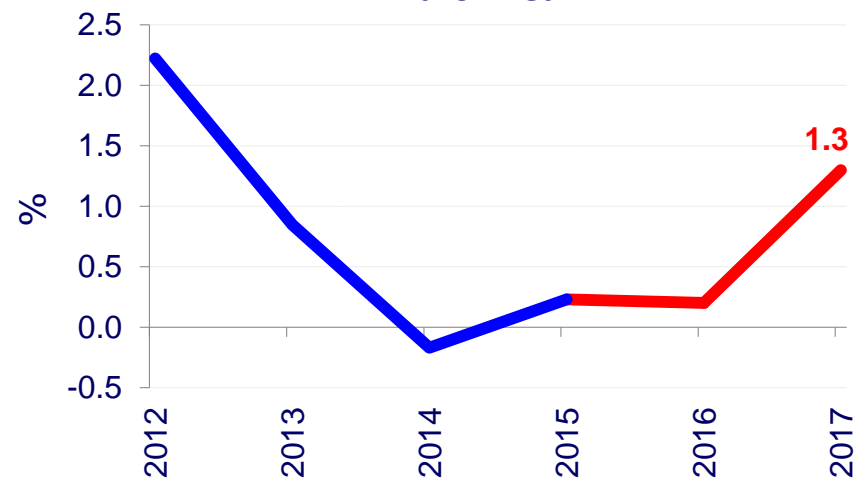
2016/17: projection

Inflation

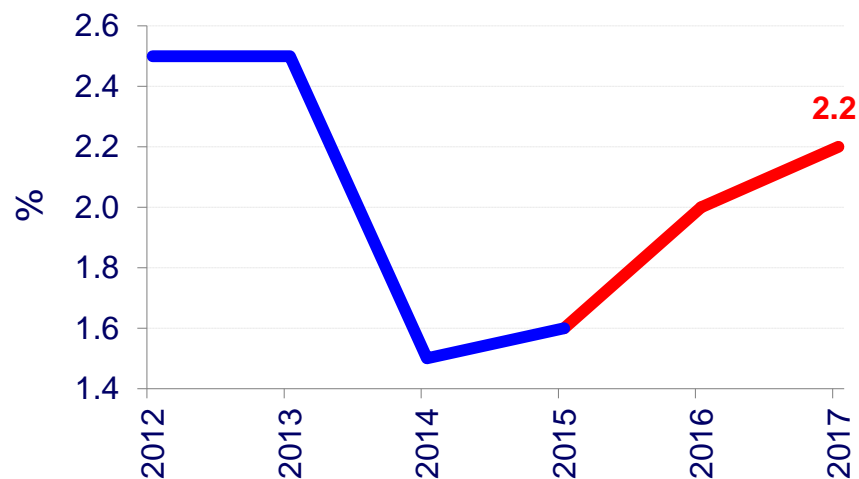
United States



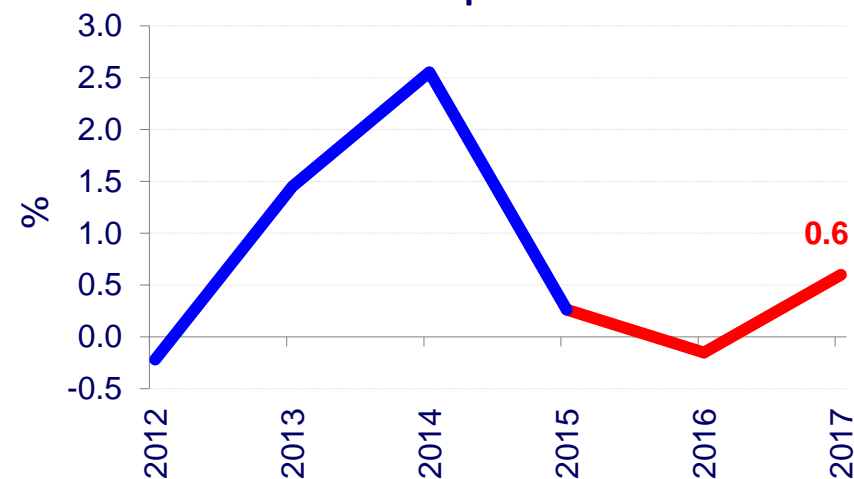
Euro Area



China



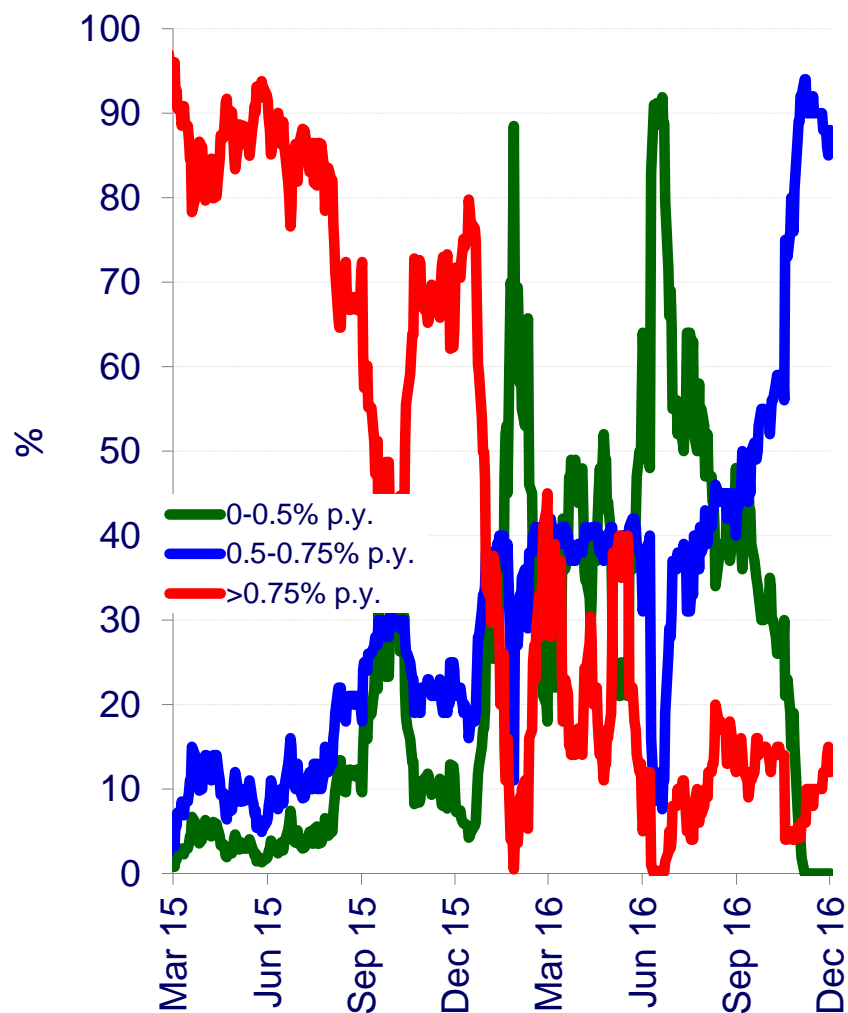
Japan



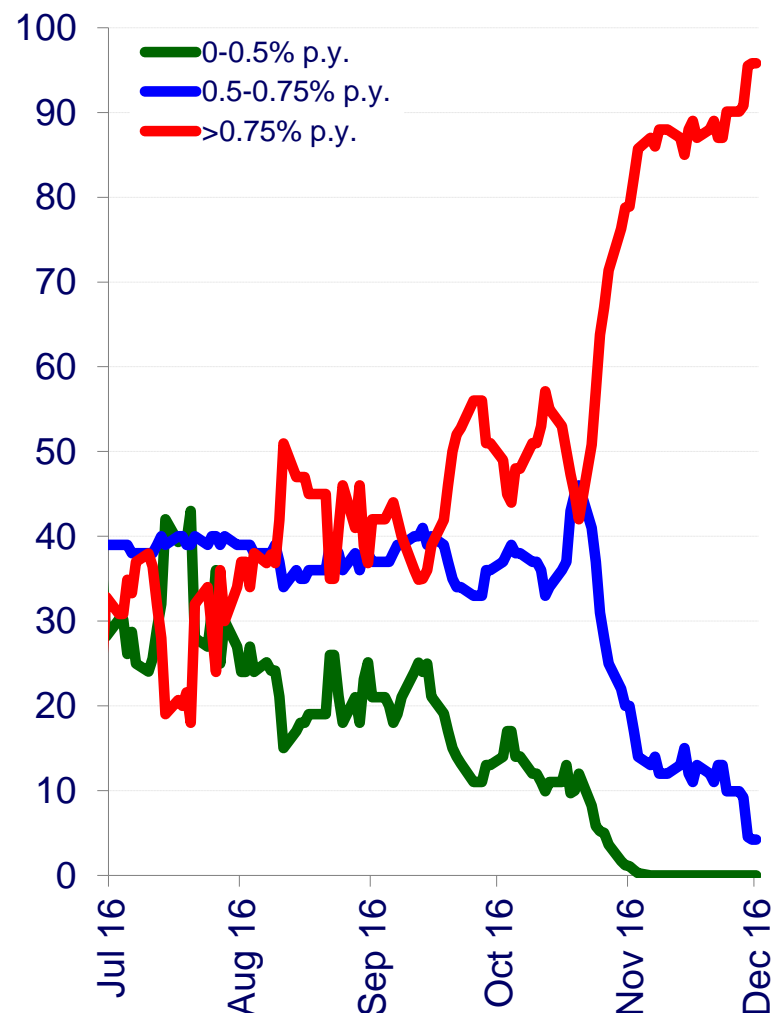
2016/17: projection

Fed Fund Rates – Implicit Probabilities

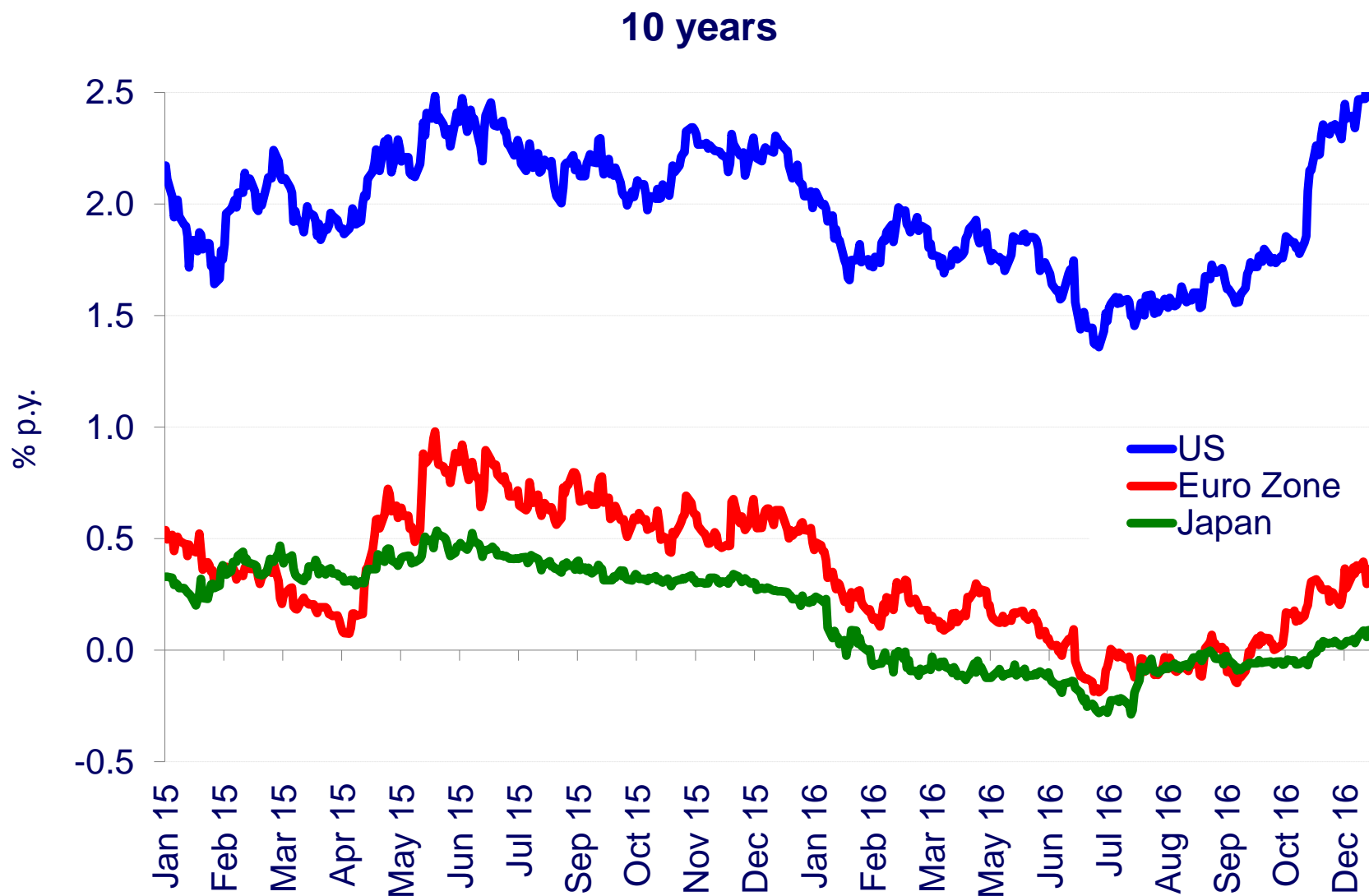
Feb 17 FOMC Meeting



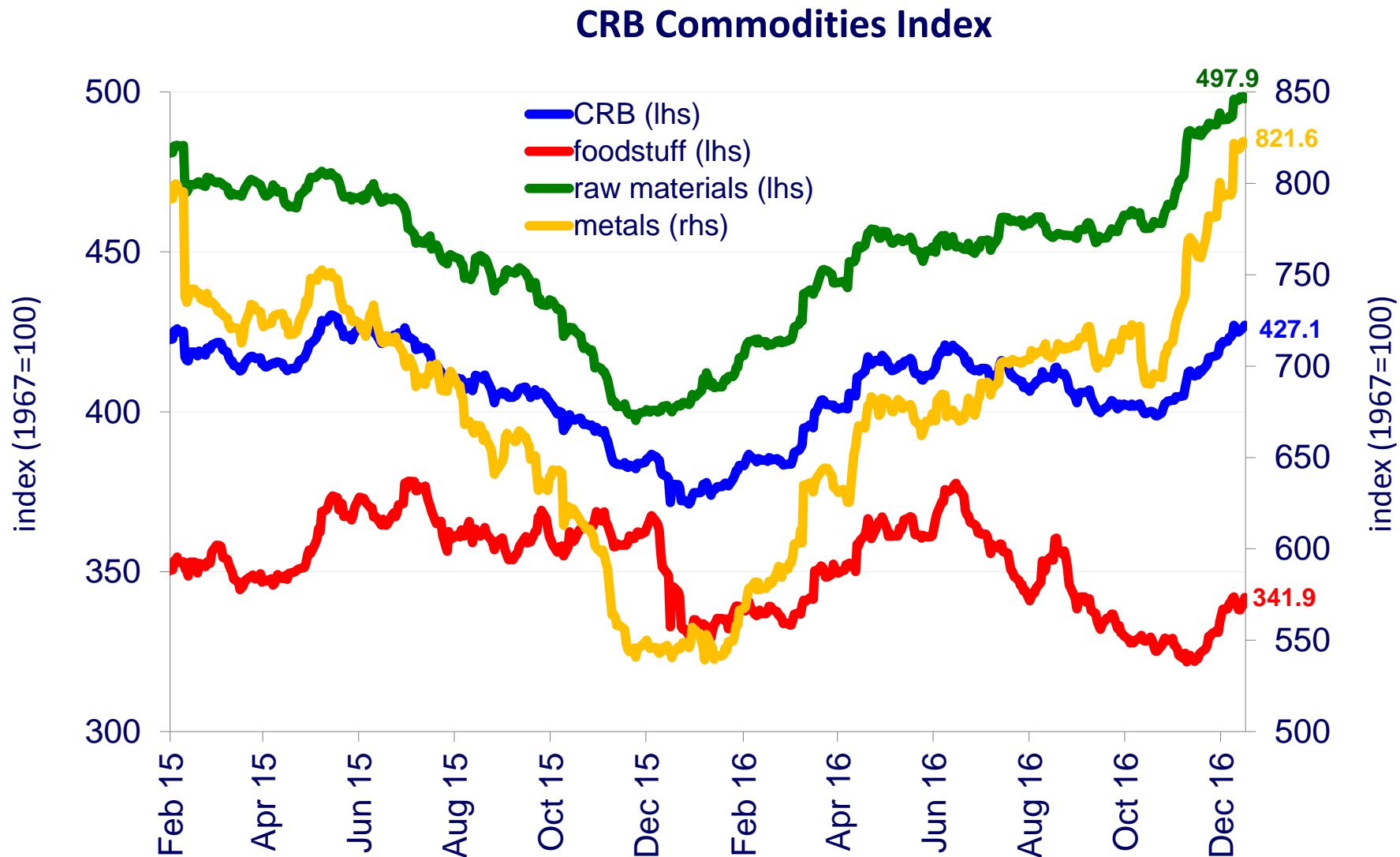
Dec 17 FOMC Meeting

through Dec 16th

Long-Term Interest Rates

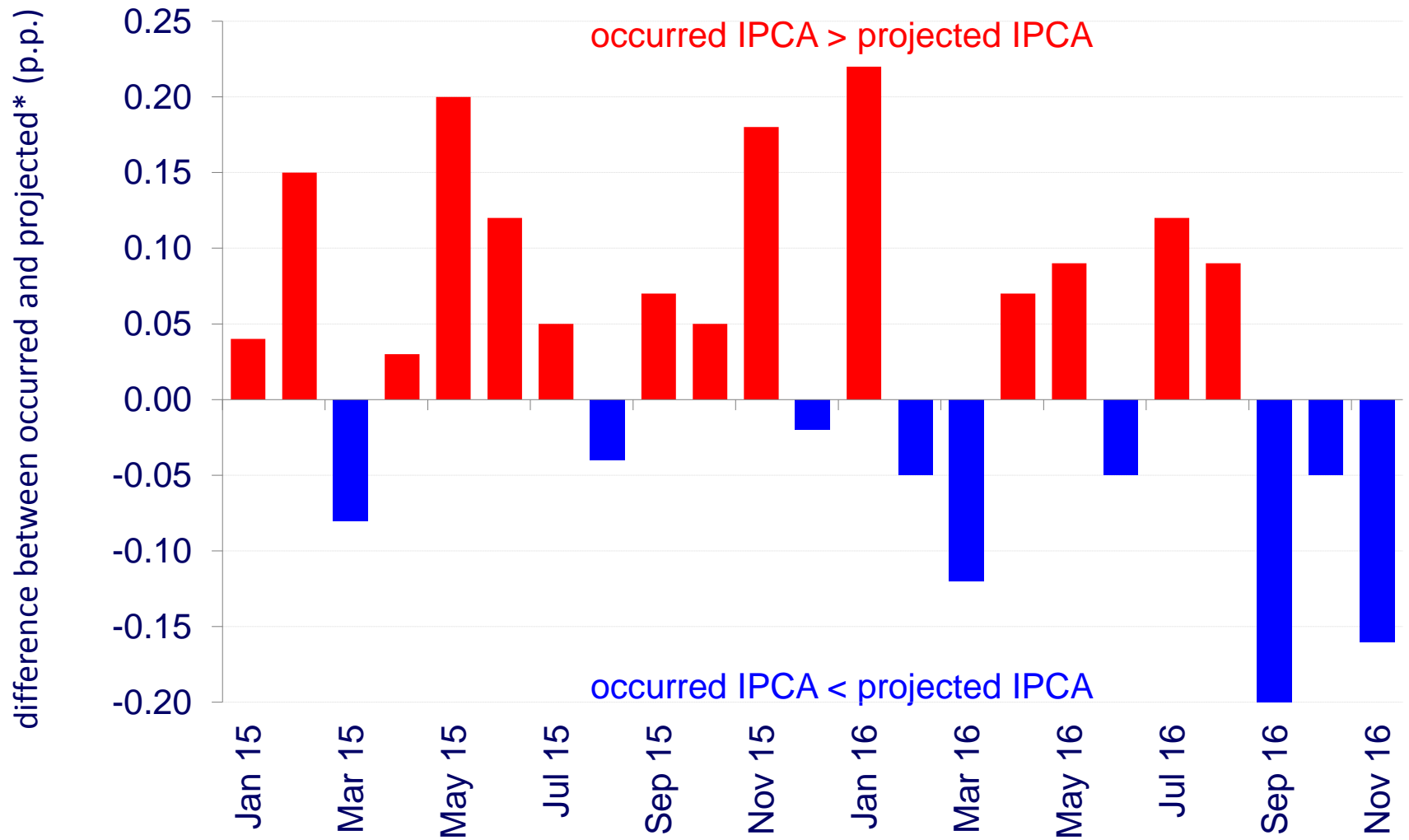
through Dec 16th

Commodities Prices

through Dec 16th

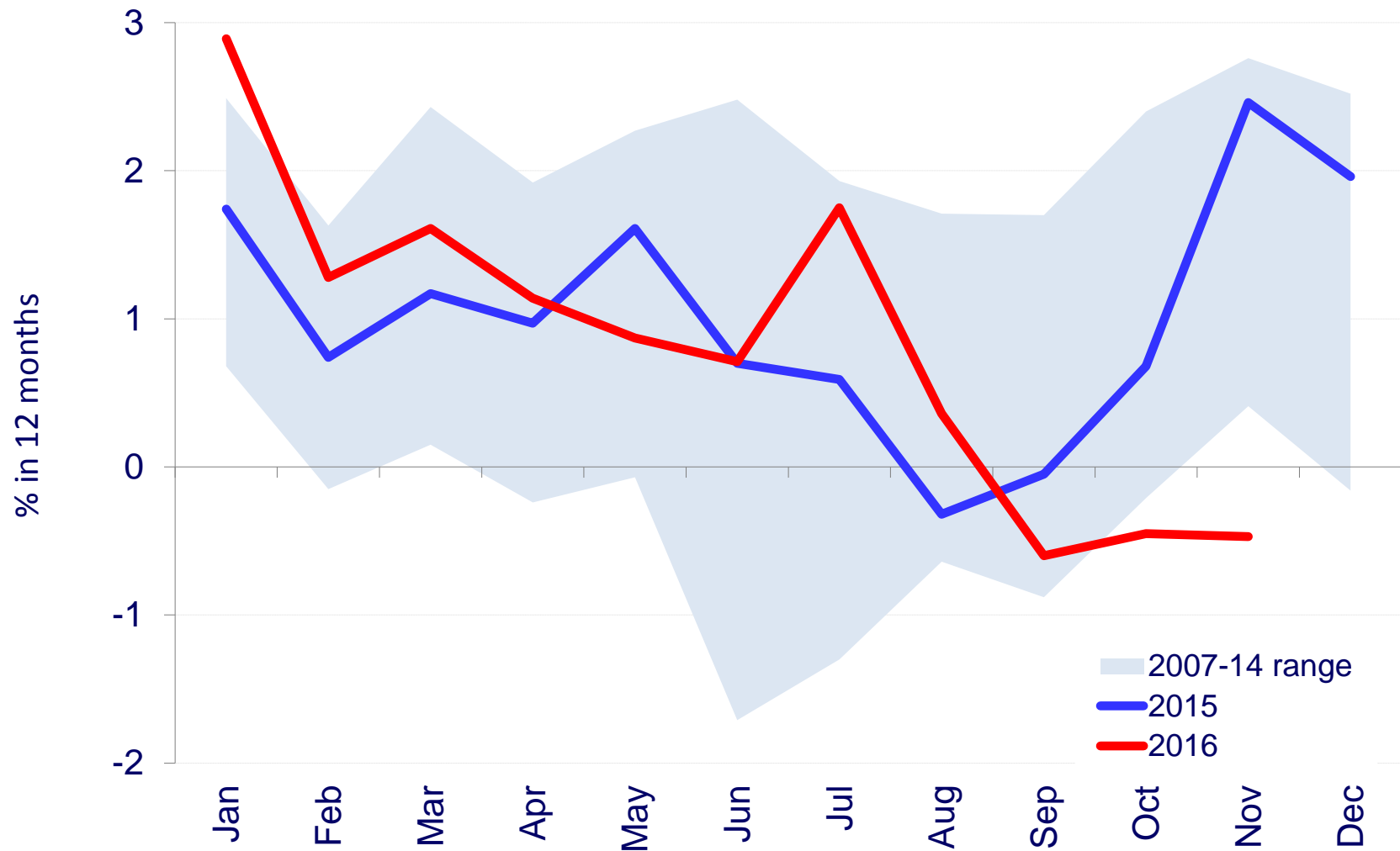
iii. Inflation

Monthly IPCA – Expectations x Projected



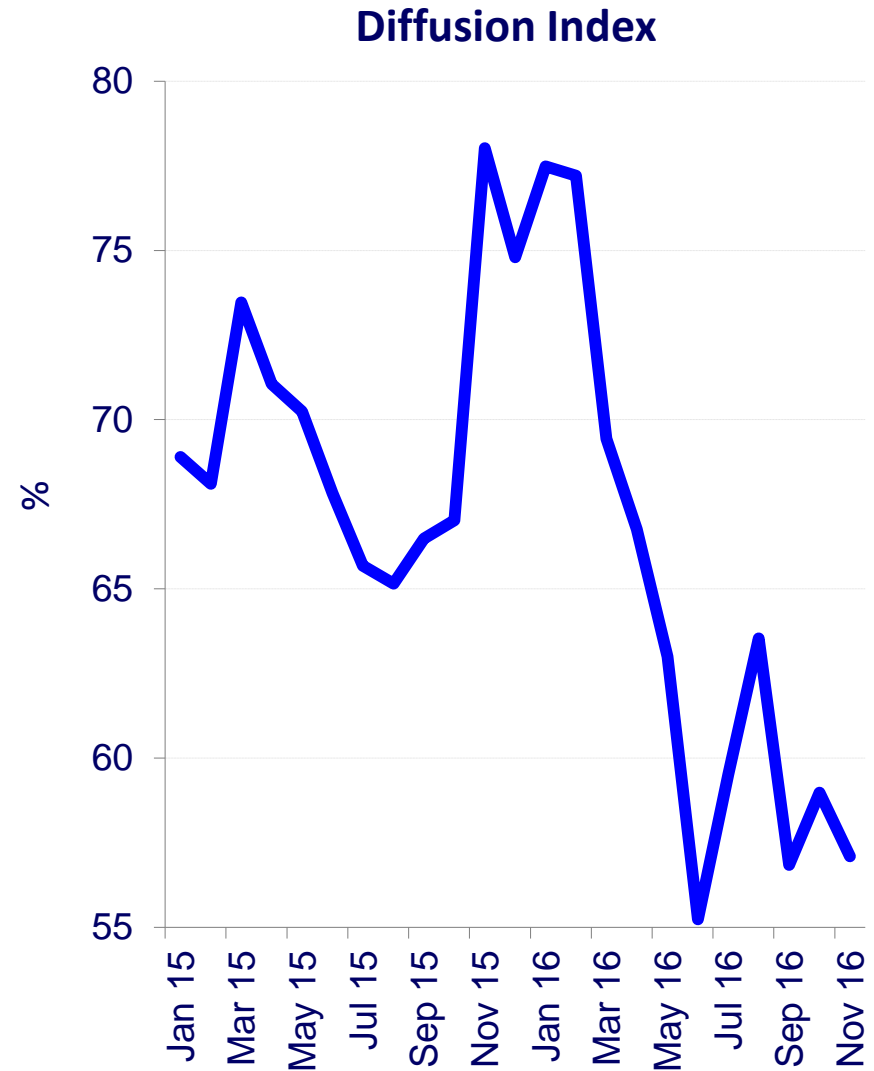
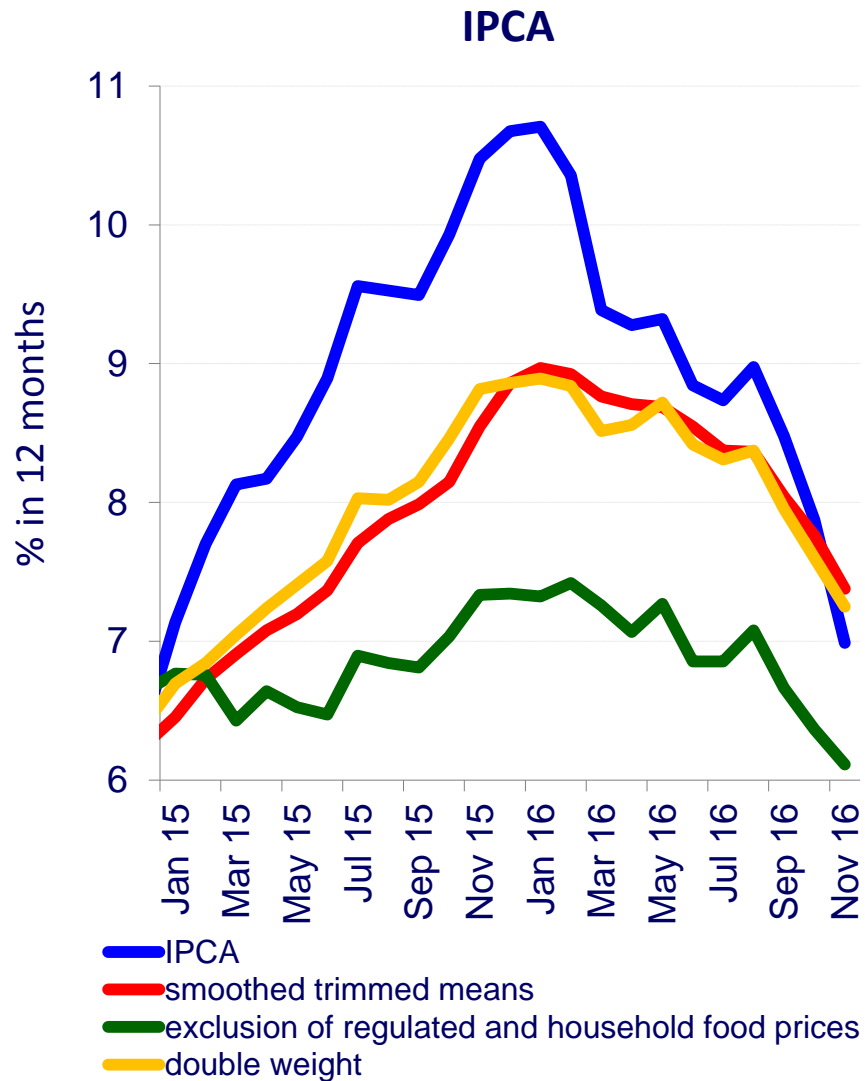
*projected on the IPCA Top 5 reference dates

IPCA - Food

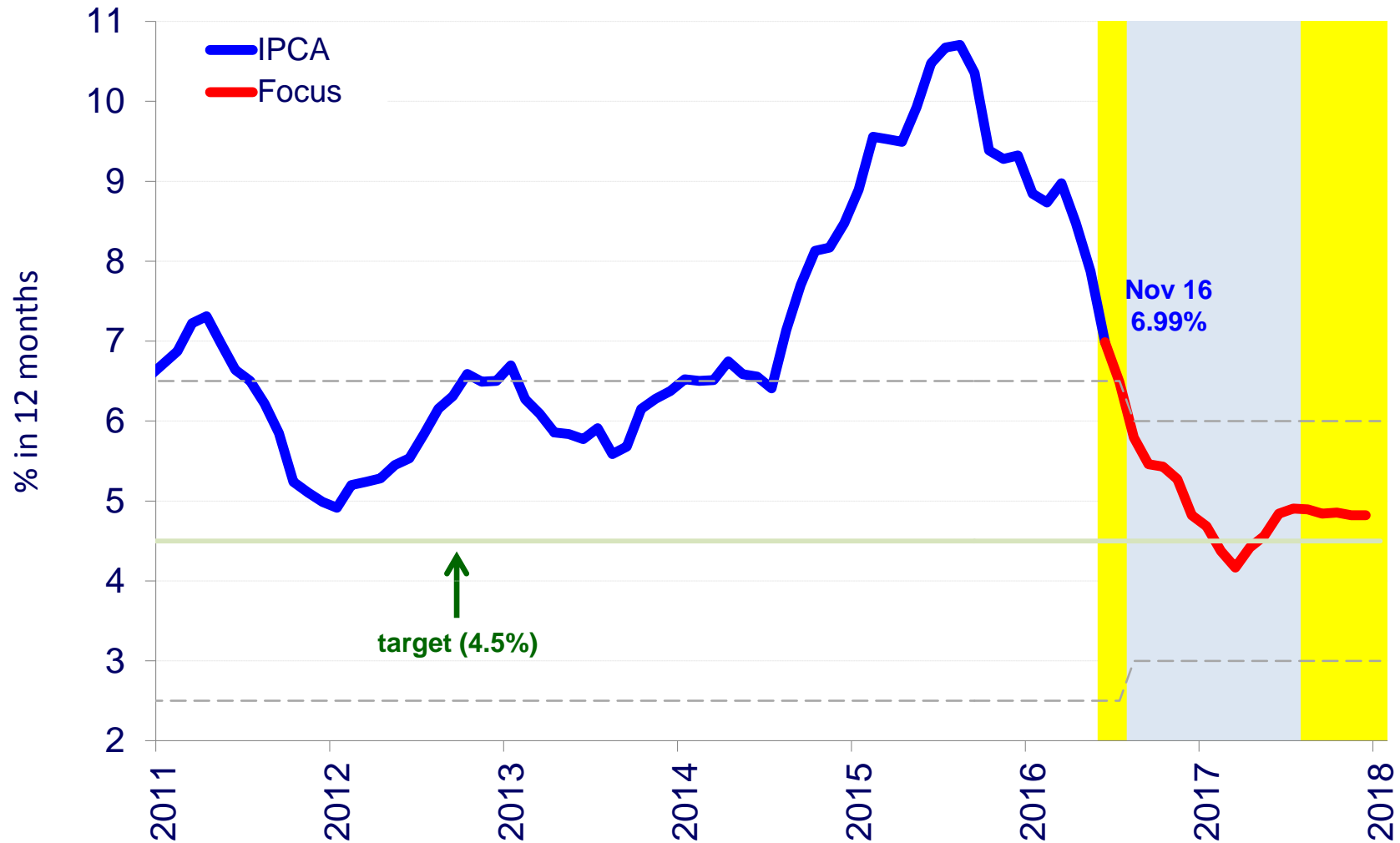


shadowed area: highs and lows for each month of 2007-2014

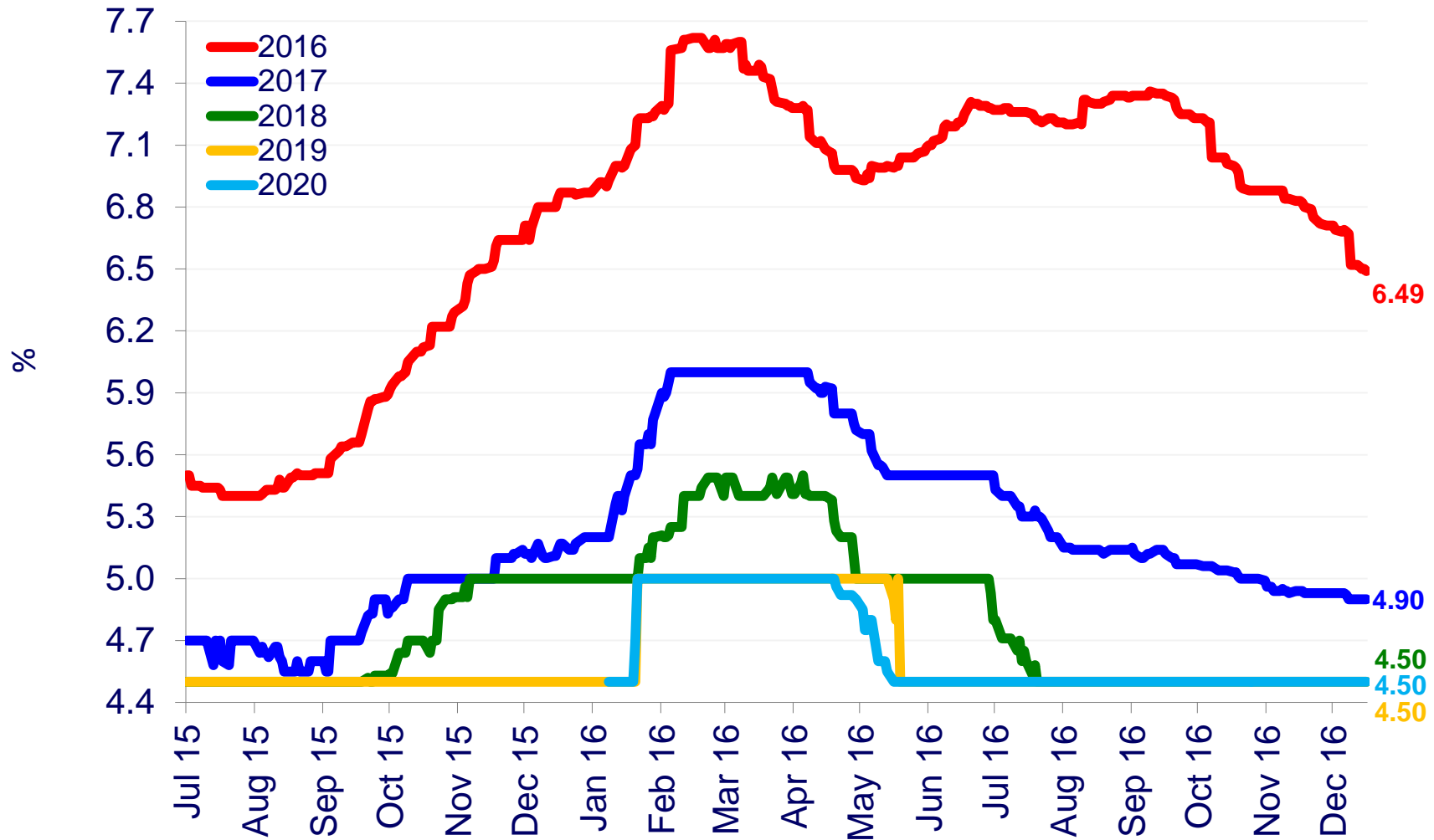
IPCA – Headline, Cores and Diffusion Index



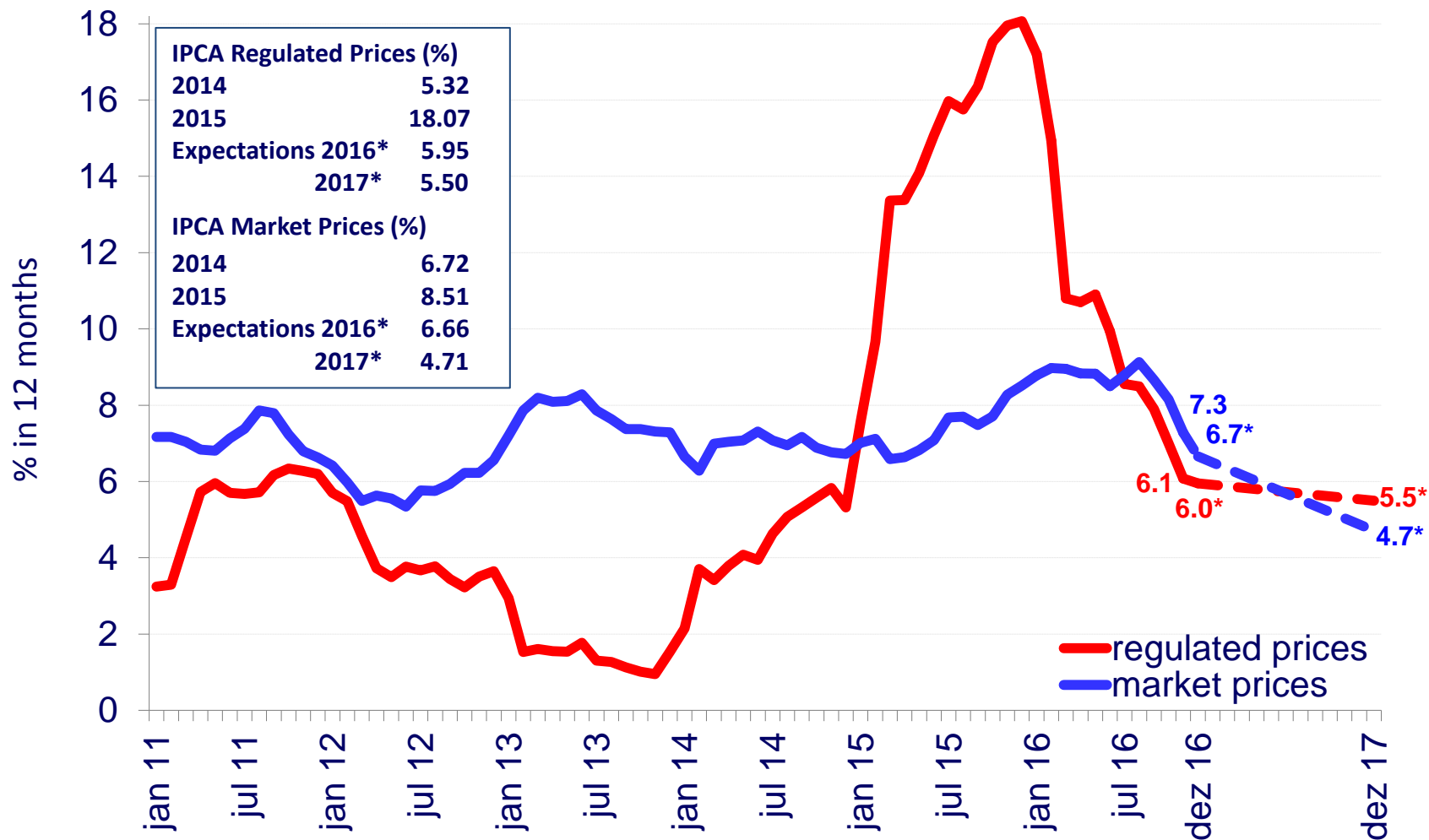
Consumer Price Inflation

Focus: expectations as of Dec 16th

Evolution of 2016-2020 IPCA Market Expectations

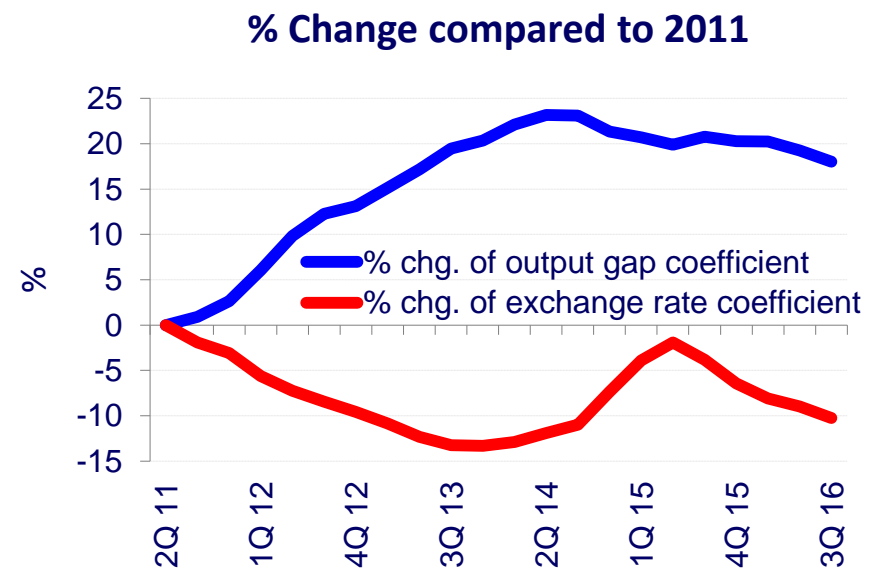
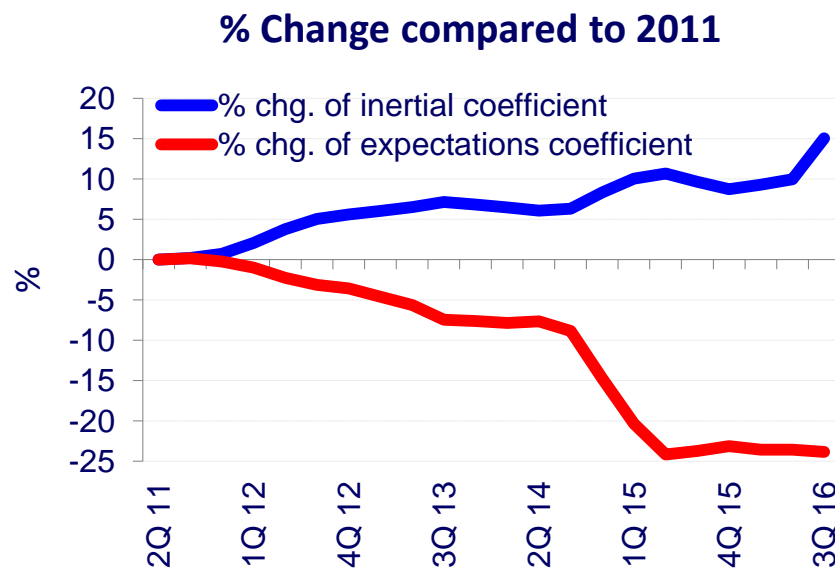
through Dec 16th

Market Prices and Regulated Prices

*expectations on Dec 16th

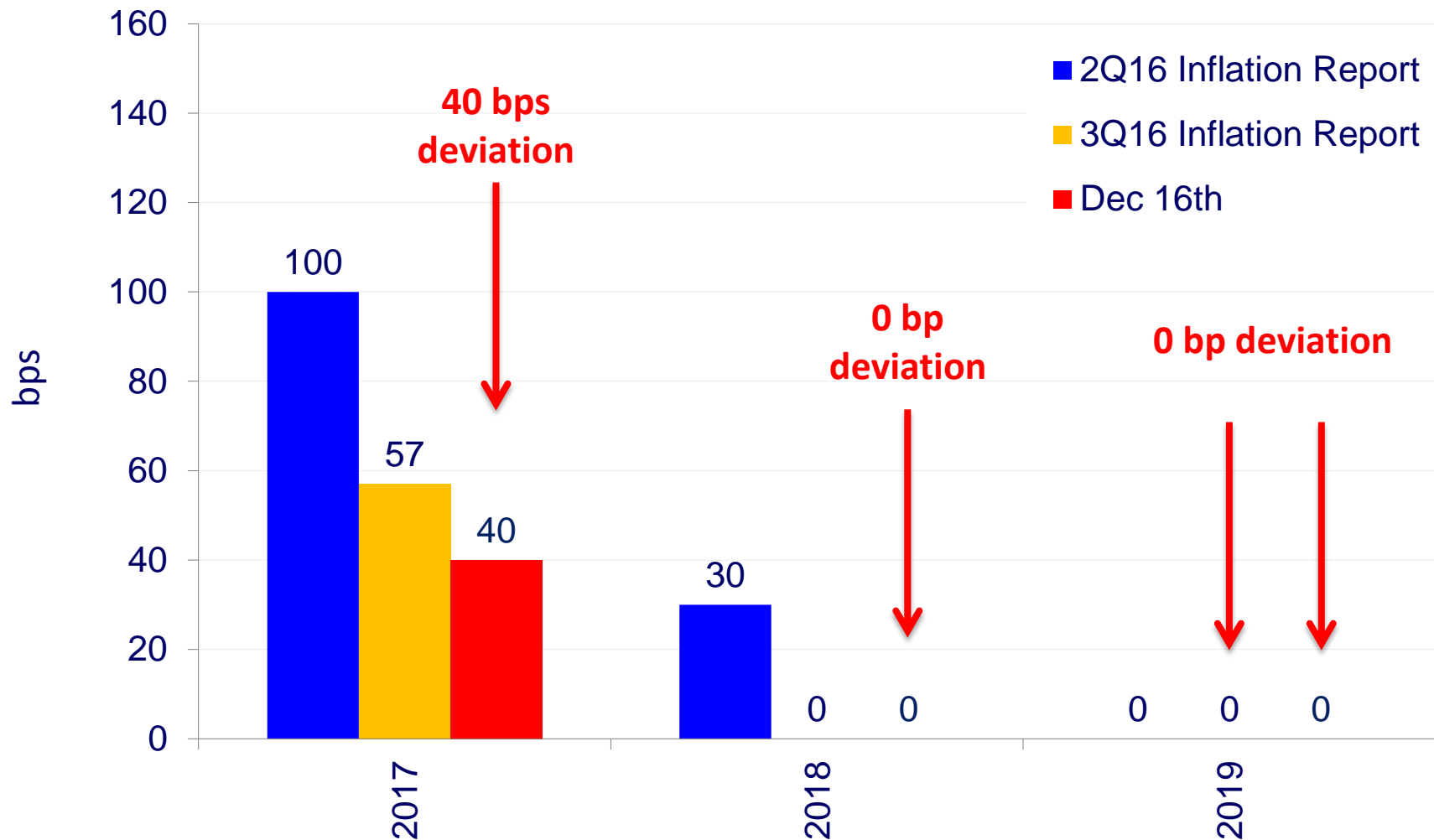
Box: What Determines the Behavior of Industrial Goods Inflation?

- The presented exercise indicates that the inertial coefficient increased, the coefficient of imported inflation pass-through decreased and the output gap coefficient increased
- Results suggest that the current disinflationary dynamics in Brazilian economy should be also observed for industrial goods inflation



Deviation of Market Expectations to the 4.5% Target

2018 and 2019: Anchoring



III. Conditional Forecasts

Revisions and Short-Term Forecasts

IPCA – Inflation Surprise

	in %			
	2016			
	Sep	Oct	Nov	12 months through Nov
Copom Scenario ^{1/}	0.19	0.40	0.45	7.54
Observed IPCA	0.08	0.26	0.18	6.99
Surprise	-0.11	-0.14	-0.27	-0.55

1/ On the September 2016 Inflation Report reference date

IPCA – Short-Term Forecasts

	in %			
	2016	2017		
	Dec	Jan	Feb	12 months through Feb
Copom Scenario ^{1/}	0.48	0.61	0.55	5.42

1/ on the reference date

Copom Conditional Inflation Forecasts

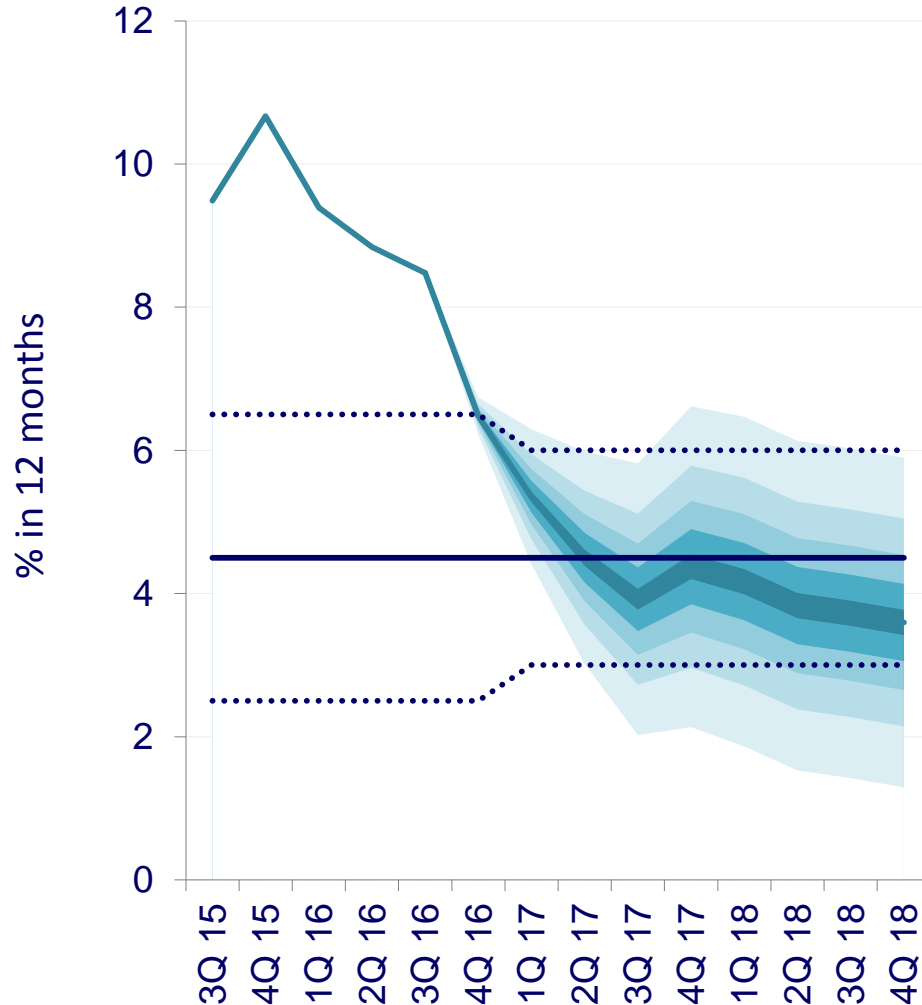
Reported Scenarios					
Period		Reference	Market	Hybrid with constant exchange rate	Hybrid with constant interest rate
2016	4	6.5	6.5	6.5	6.5
2017	1	5.4	5.4	5.4	5.3
2017	2	4.5	4.6	4.6	4.5
2017	3	3.9	4.1	4.1	3.9
2017	4	4.4	4.7	4.7	4.4
2018	1	4.2	4.7	4.7	4.2
2018	2	3.8	4.6	4.5	3.9
2018	3	3.7	4.6	4.5	3.8
2018	4	3.6	4.5	4.5	3.7

Obs.: 12-month accumulated inflation (%)

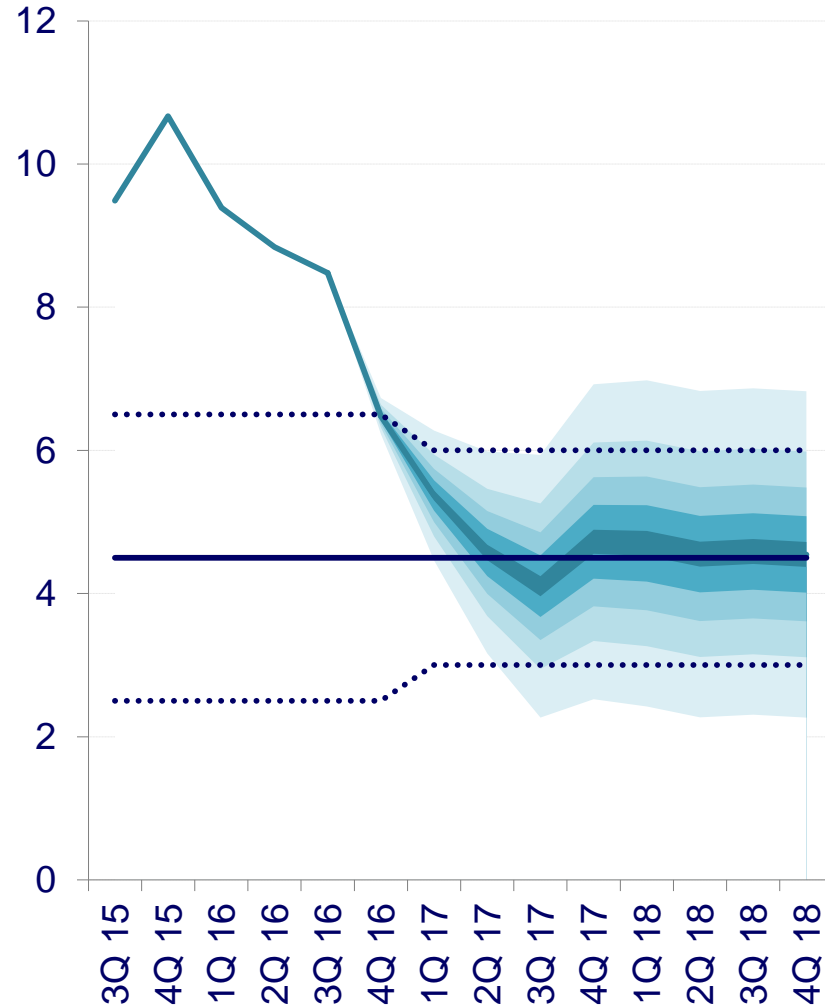
Copom Conditional Inflation Forecasts

Reference Scenario

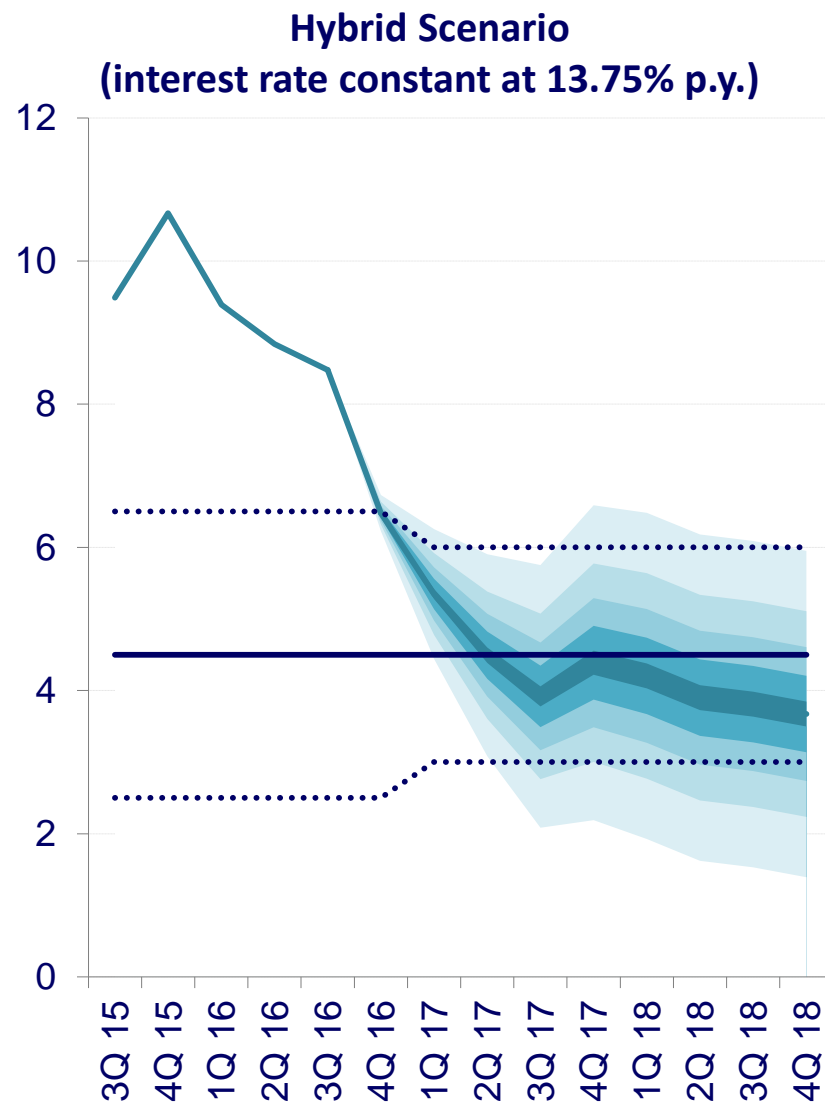
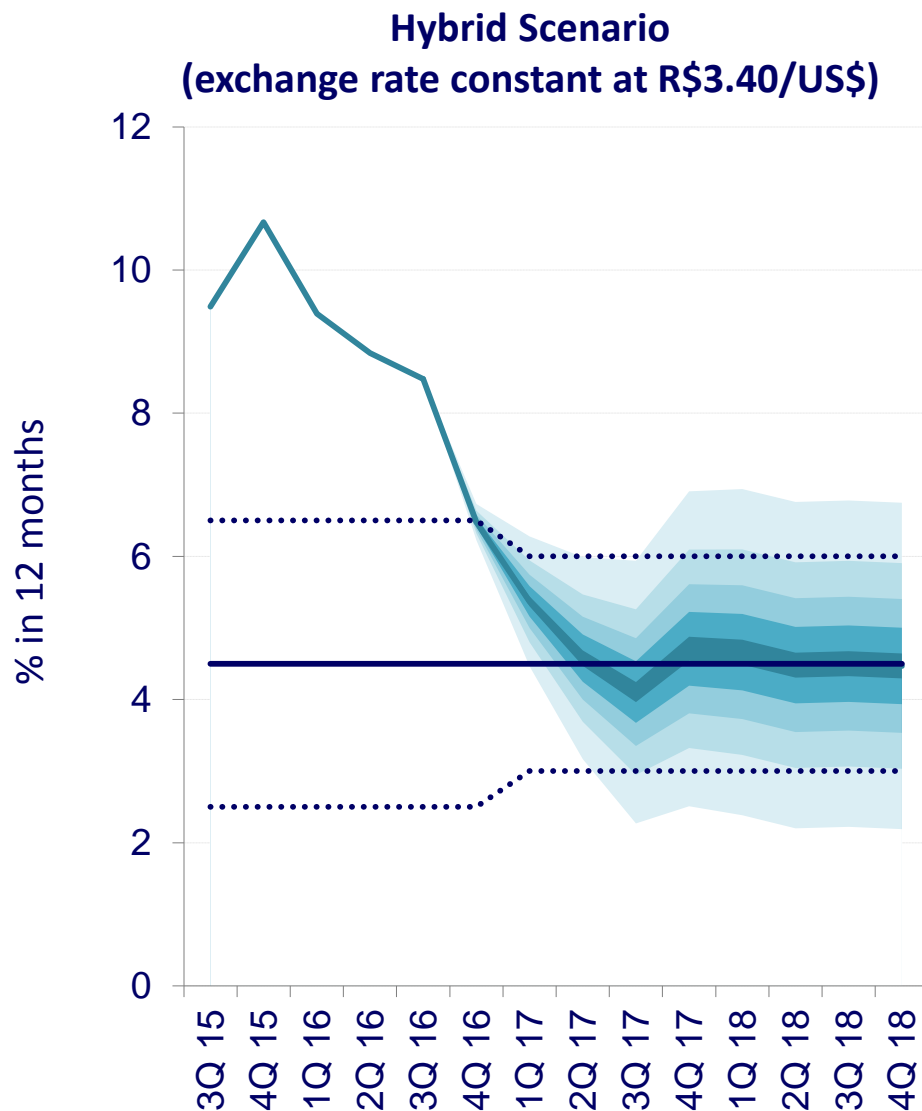
(exchange rate constant at R\$3.40/US\$ and interest rate constant at 13.75% p.y.)



Market Scenario



Copom Conditional Inflation Forecasts



Monetary Policy Conduct - 1

- The recent monetary policy stance contributed:
 - » To the anchoring of inflation expectations and
 - » To create more leeway for the easing of monetary policy
- An environment with anchored inflation expectations enables the Copom to focus on preventing second-round effects of possible relative prices adjustments on inflation
- Such an environment also allows to follow a principle that gives flexibility to inflation targeting regimes; it applies to Brazil. This environment permits disinflation costs to be taken into account in monetary policy decisions

Monetary Policy Conduct - 2

- Disinflation in progress, that might intensify if economic activity recovery is longer and more gradual
- Disinflation process may be spreading – more favorable signs stem from factors other than food prices

Monetary Policy Conduct - 3

- Signs of pause in the process of disinflation of some IPCA components that are most sensitive to the business cycle and monetary policy persisted
 - However, it is reasonable to expect that a softer economic activity lead to a faster resumption of the process of disinflation, at the margin, of these components
- The intensification of the disinflation process relies on an adequate global environment. There is no mechanical relationship, however, between the global outlook and monetary policy

Monetary Policy Conduct - 4

- **Importance of fiscal and microeconomic reforms:**
 - i. Long-term fiscal sustainability**
 - ii. More flexibility in the economy, efficiency gains, productivity increase, improvement of business environment**
 - iii. The Committee should monitor these efforts closely, since they have important implications for the disinflation process**

Monetary Policy Conduct - 5

- **Final assessment:**

The magnitude of monetary easing and the speeding up of its pace will depend on inflation forecasts and expectations, and on the evolution of the aforementioned risk factors. In that respect, the Copom emphasizes that the pace of disinflation in its forecasts might intensify if the economic recovery is delayed further, and occurs more gradually than anticipated. This intensification of the disinflation process relies on an adequate global environment. There is no mechanical relationship, however, between the global outlook and monetary policy.

Inflation Outlook

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