



NBP

Narodowy Bank Polski

Economic Institute

Inflation projection of Narodowy Bank Polski based on the NECMOD model

Warsaw / 12 November 2014



Outline:

Changes between
rounds

Projection 2014 - 2016

Uncertainty

Outline

1 Changes between projection rounds

2 Projection 2014 - 2016

3 Uncertainty

Outline:

Changes between
rounds

Projection 2014 - 2016

Uncertainty

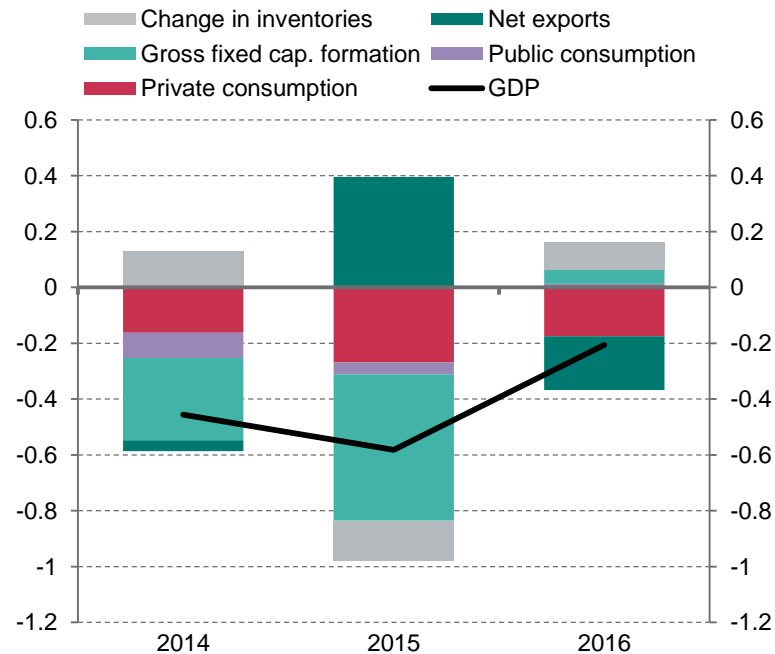
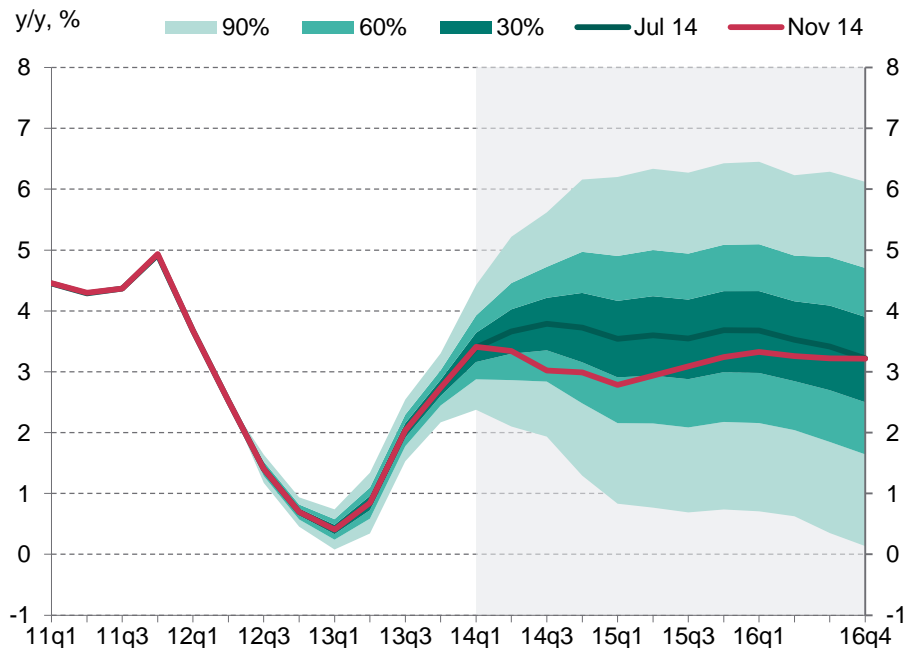
Changes between projection rounds

- Changes in the projection assumptions
- November projection compared to July projection

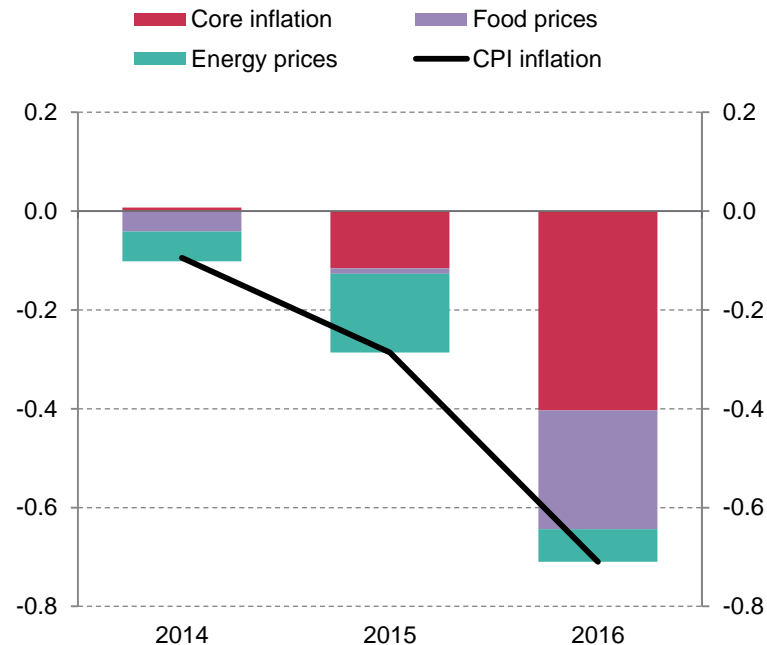
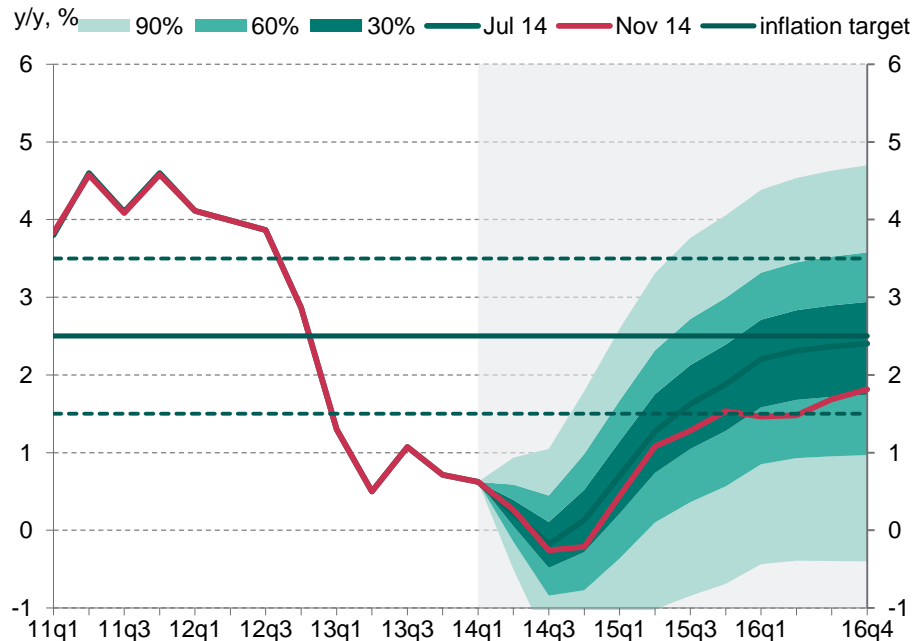
Changes in the projection assumptions

- External environment:
 - forecast of GDP growth abroad revised downwards (especially in the euro area),
 - significantly lower agricultural and energy commodity prices.
- GDP data in 2014Q2 lower than expected in July projection, with comparable domestic demand and weaker net exports.
- Lower absorption of funds from the 2014-2020 european financial perspective due to changes in *National Road Construction Programme*.
- Lower than expected food prices inflation (due to favourable agrometeorological conditions and the Russian embargo on fruits, vegetables, meat, fish and dairy).
- Lower expectations for the growth of fuel prices (falling oil prices on the global markets).

November GDP projection compared to July projection



November CPI inflation projection compared to July projection



Outline:

Changes between
rounds

Projection 2014 - 2016

Uncertainty

Projection for 2014-2016

- Projection scenario
- Economic conditions abroad
- Aggregate demand
- Inflation

Projection scenario

- Substantial deterioration in economic situation abroad (slowdown in the euro area, exacerbation of the Russian-Ukraine conflict).
- In consequence deterioration in foreign trade balance (weaker demand for Polish exports) and lower growth of private sector investment (depressed sentiments in the domestic corporate sector).
- Slowdown in Polish economy mitigated by the increase in private consumption due to the relatively sound labour market situation.
- The slow pace of closing of the output gap (negative since the second half of 2012).
- Relatively stable, low prices of commodities in the global markets.
- Low inflation in 2014 as a result of the economic slowdown, favourable weather conditions, Russian embargo and Energy Regulatory Office regulatory decisions.
- Since 2015 gradual, moderate increase in CPI dynamics, however CPI inflation remains below 2%.

Outline:

Changes between
rounds

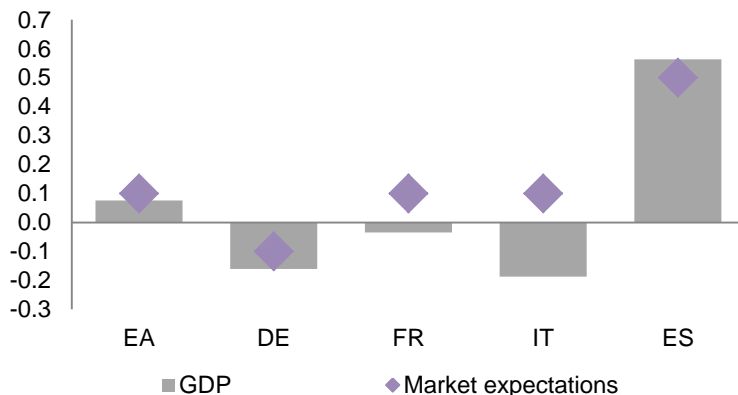
Projection 2014 - 2016

Uncertainty

Economic conditions abroad

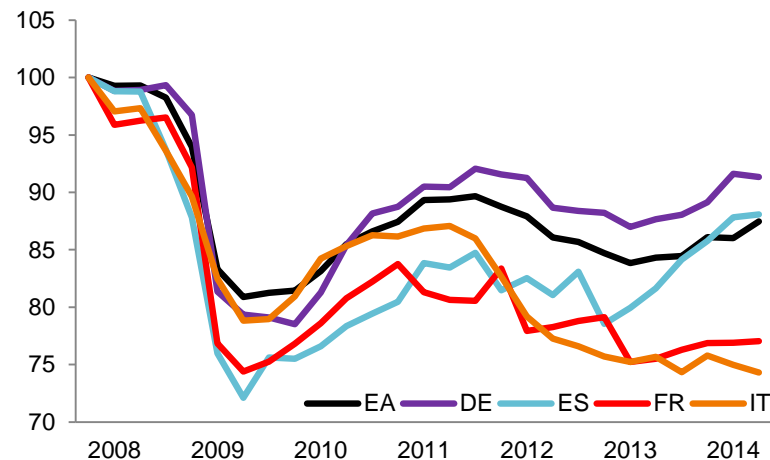
2014Q2 GDP data in the euro area

GDP in 2014Q2
(%, q/q)



- GDP dynamics in DE, FR, IT below the market expectations
- Declining investment demand (by 0.3% q/q) due to a drop in construction investment (the base effect), as well as low expenditure on other fixed assets

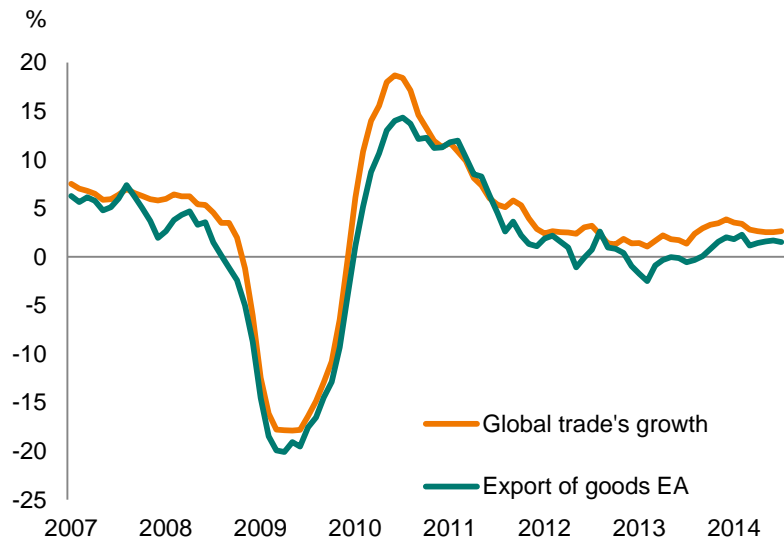
Non-construction GFCF
(2007Q4=100)



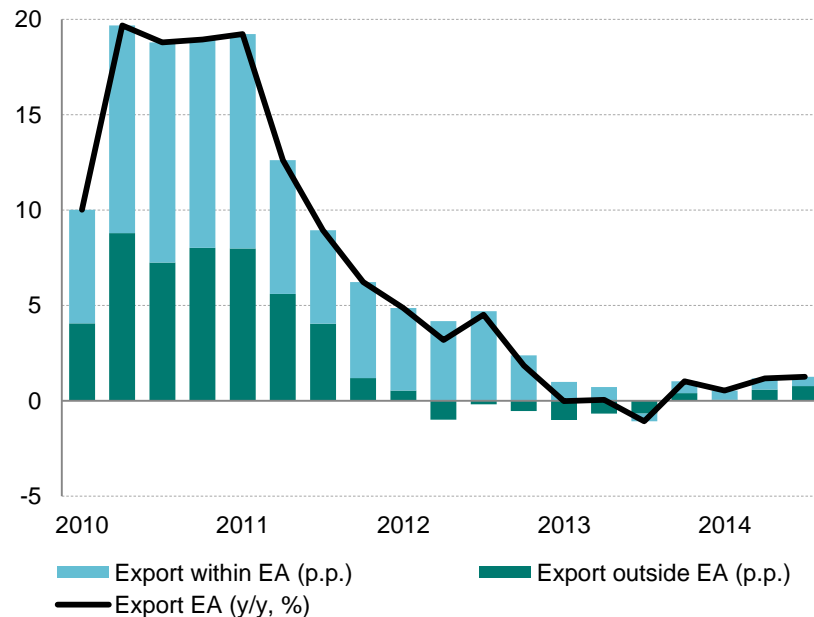
- In 2014Q2 low expenditure on non-construction gross fixed capital formation in three biggest economies of EA (slump in DE and IT, only a slight increase in FR)

Weak external demand

Global trade's growth and exports of goods from the euro area (constant prices y/y)



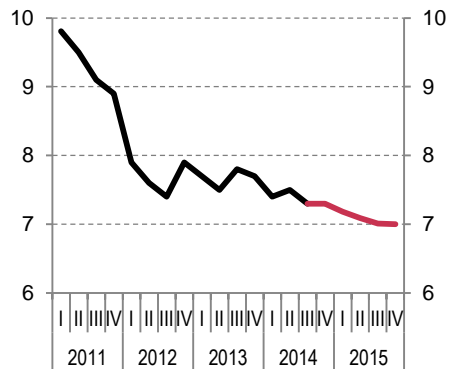
Dynamic's decomposition of EA exports of goods (current prices)



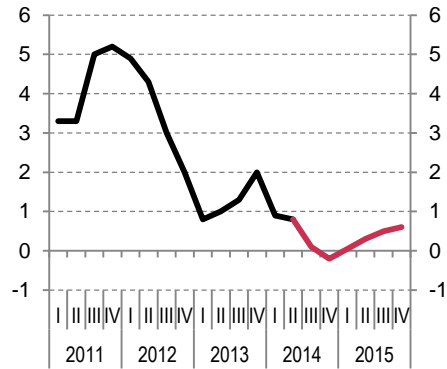
Emerging economies

GDP growth, (% , y/y)

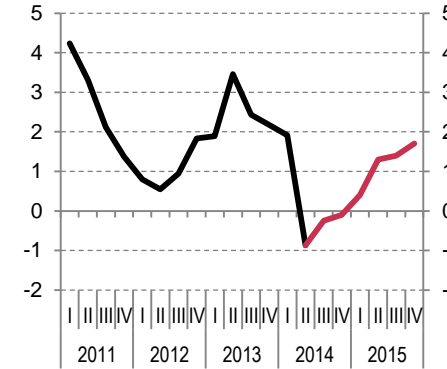
China



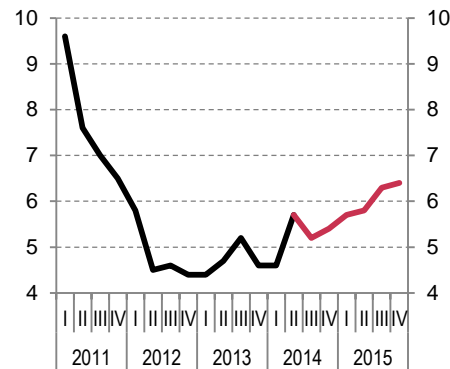
Russia



Brazil



India



— actual data

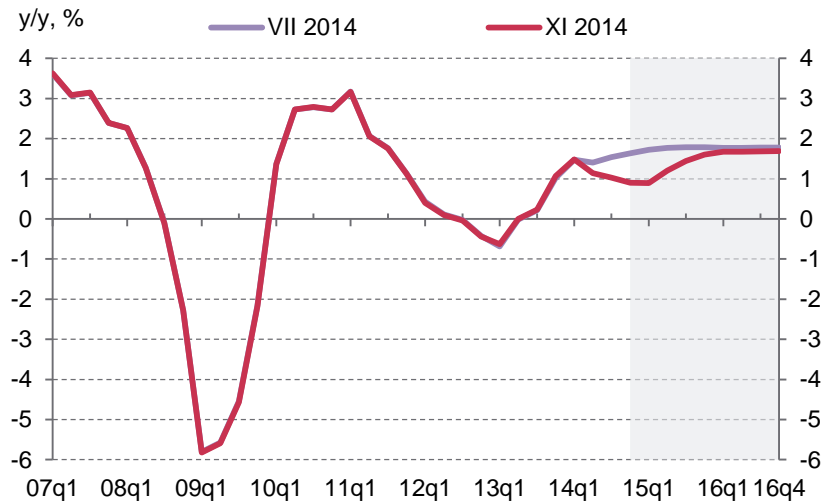
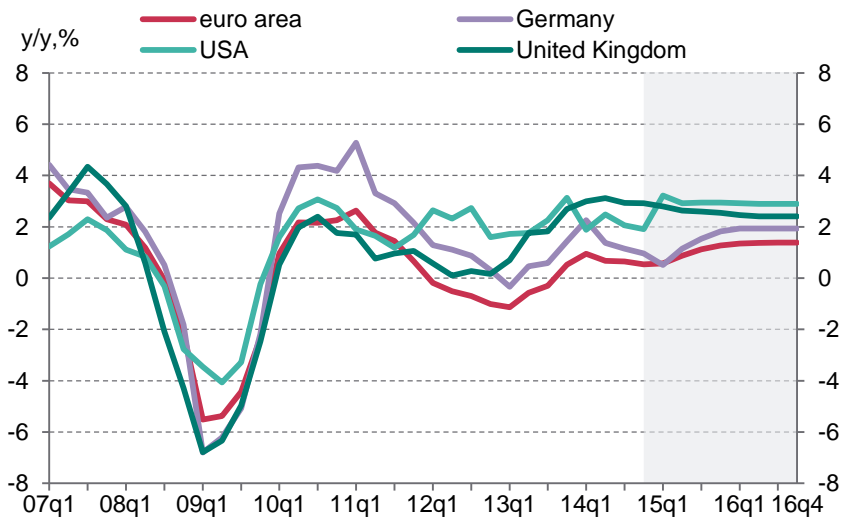
— Bloomberg forecast

Forecasts' revisions

	2014						2015					
	IMF			Bloomberg			IMF			Bloomberg		
	Jul-14	Oct-14	Difference	Jul-14	Oct-14	Difference	Jul-14	Oct-14	Difference	Jul-14	Oct-14	Difference
USA	1.7	2.2	0.5	1.7	2.2	0.5	3.0	3.1	0.1	3.0	3.0	0.0
UK	3.2	3.2	0.0	3.0	3.1	0.1	2.7	2.7	0.0	2.5	2.6	0.1
EA	1.1	0.8	-0.3	1.0	0.8	-0.2	1.5	1.3	-0.2	1.5	1.3	-0.2
DE	1.9	1.4	-0.5	2.0	1.5	-0.5	1.7	1.5	-0.2	2.0	1.6	-0.4
FR	0.7	0.4	-0.3	0.7	0.4	-0.3	1.4	1.0	-0.4	1.3	1.0	-0.3
IT	0.3	-0.2	-0.5	0.3	-0.2	-0.5	1.1	0.8	-0.3	1.1	0.7	-0.4

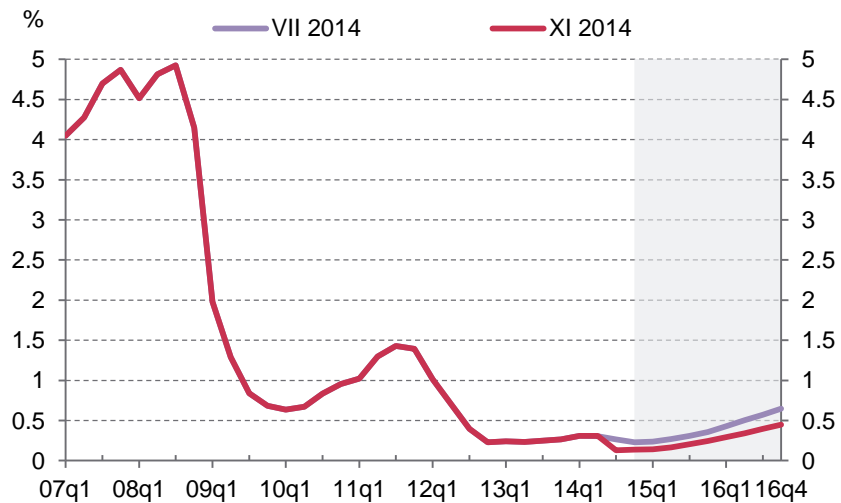
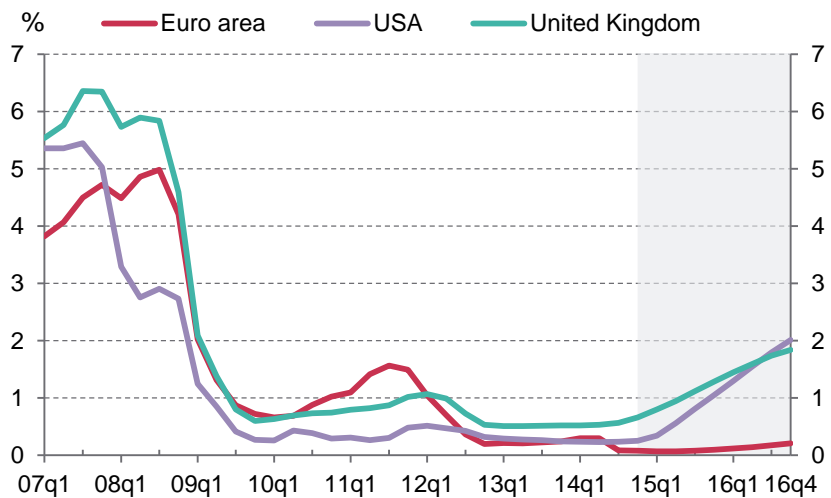
GDP abroad

(lower in the short term, similar in the long term)



Interest rates abroad

(lower)



Outline:

Changes between
rounds

Projection 2014 - 2016

Uncertainty

Aggregate demand

- Consumption demand
- Government demand
- Investment demand
- Foreign trade

GDP and its components – 2014 Q2 and Q3

	14q2		14q3	
GDP (y/y) (%)	3.3	(3.7)	3.0	(3.8)
Domestic demand (y/y) (%)	5.1	(4.5)	3.8	(4.5)
Private consumption (y/y) (%)	2.8	(3.0)	2.6	(3.1)
Public consumption (y/y) (%)	0.8	(2.0)	2.9	(3.2)
Gross fixed capital formation (y/y) (%)	8.4	(8.6)	6.1	(7.9)
Exports (y/y) (%)	5.9	(7.0)	3.2	(7.1)
Imports (y/y) (%)	9.8	(8.9)	4.9	(8.9)
Net exports contribution (p.p.)	-1.6	(-0.6)	-0.7	(-0.6)

Values from the July projection are given in brackets (seasonally adjusted).

Indicators with values higher than in the July projection are marked green, whereas indicators with lower values are marked red.

Values for 2014Q3 are the estimates of IE and constitutes the starting point for the November projection.

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rounds

Projection 2014 - 2016

Uncertainty

Consumption demand

Labour market – 2014 Q2 and Q3

	14q2		14q3	
ULC (y/y) (%)	2.2	(2.0)	2.0	(1.8)
Labour productivity (y/y) (%)	1.6	(2.2)	1.7	(2.6)
Gross wages (y/y) (%)	3.5	(4.2)	3.8	(4.3)
Total employment LFS (y/y) (%)	1.7	(1.5)	1.3	(1.2)
Unemployment rate LFS (%)	9.2	(9.9)	9.3	(9.7)
Participation rate (%)	56.2	(56.4)	56.4	(56.5)

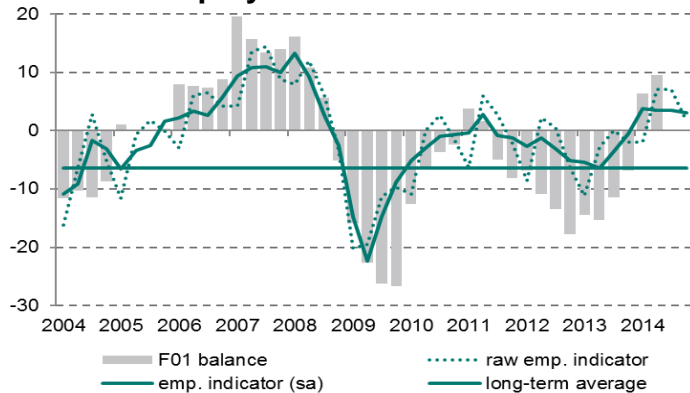
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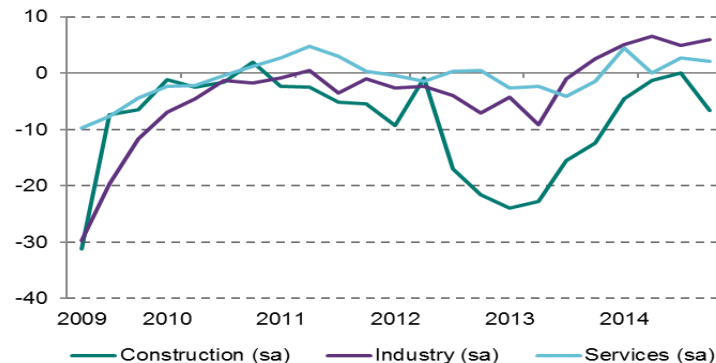
Values for 2014Q3 are the estimates of IE and constitutes the starting point for the November projection.

Stable employment forecasts, no wage pressure (NBP Quick Monitor.)

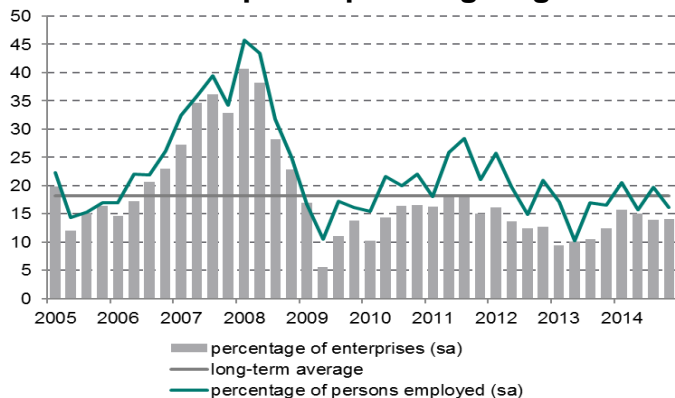
Employment forecasts



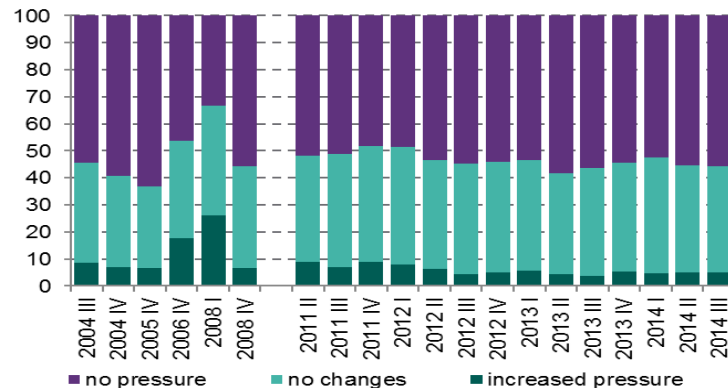
Employment forecasts for 3 sectors



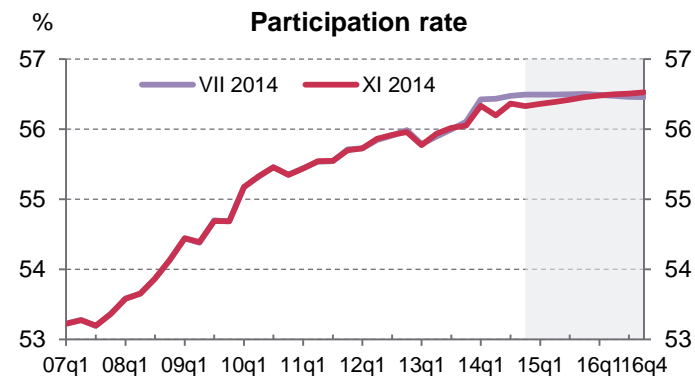
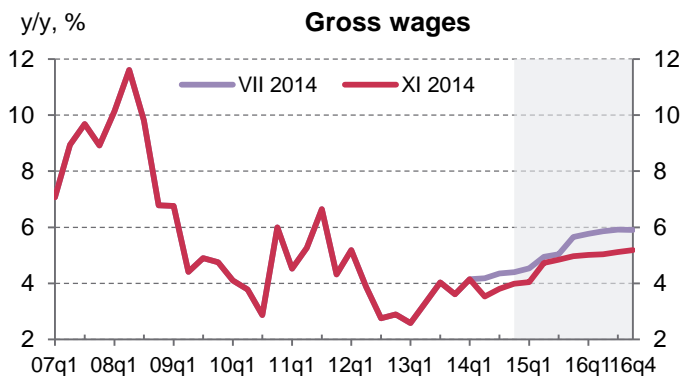
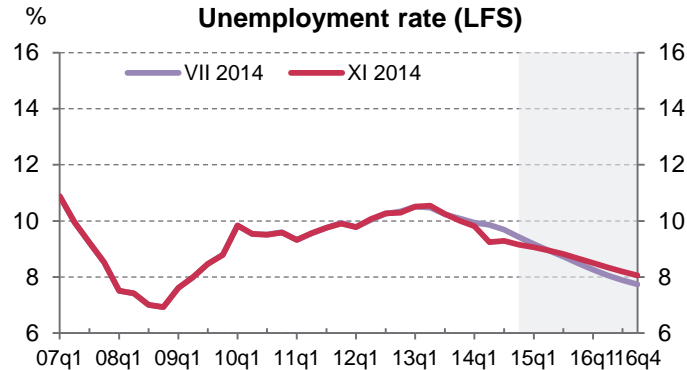
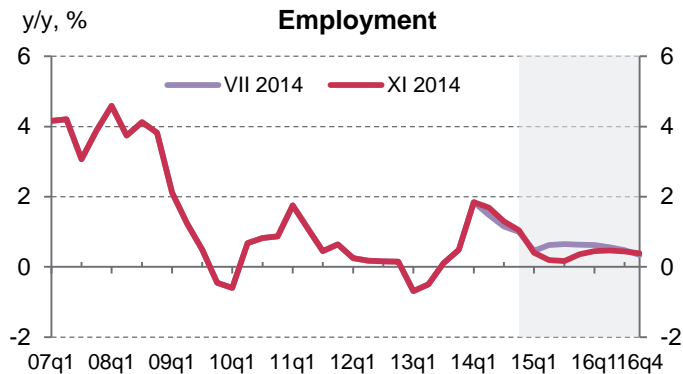
Share of enterprises planning wage increases



Wage pressure

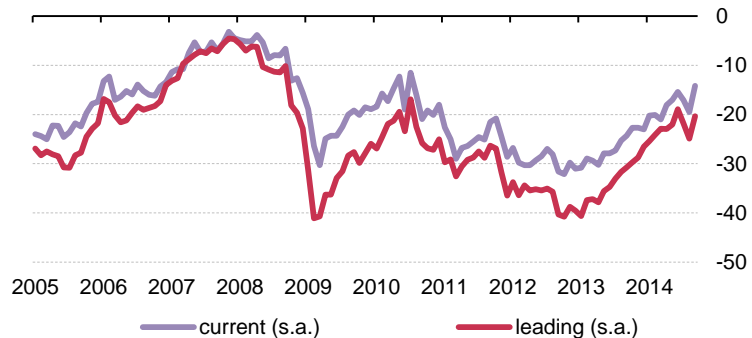


Labour market

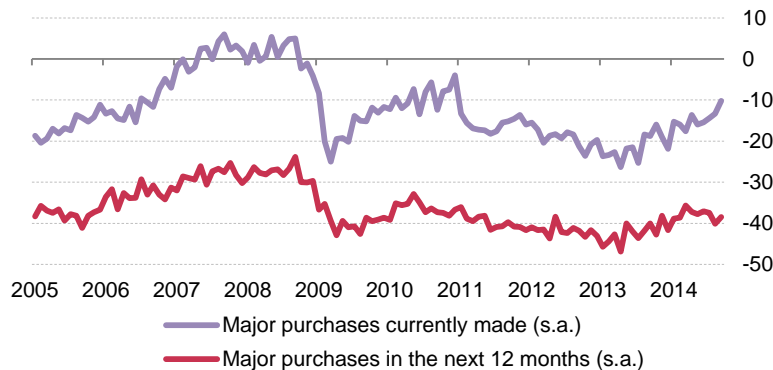


Consumer sentiment and retail sales

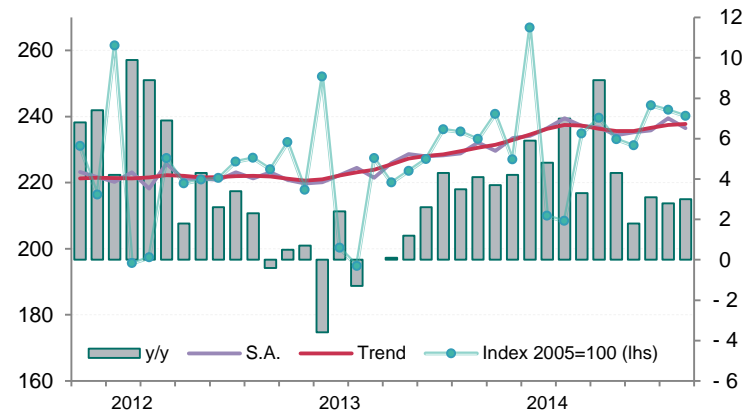
Consumer confidence indicators



Current purchases and intentions of purchases



Retail sales

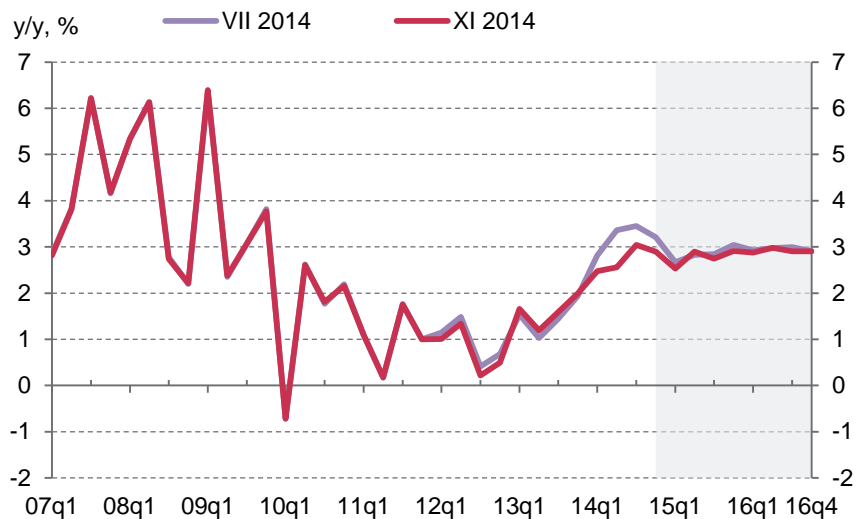


Source: NBP data

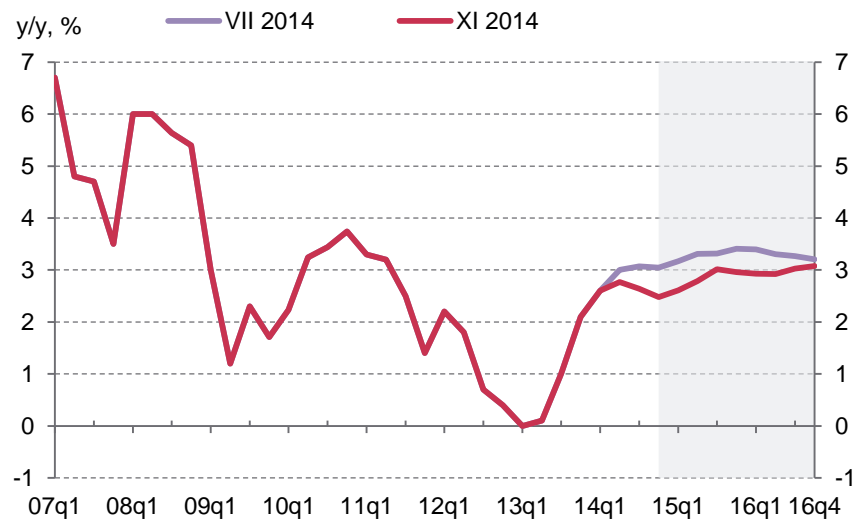
- Improvement in consumer sentiment in September 2014, after 2-month deterioration period.
- The index of intended major purchases in the next 12 months has stabilized since 2014Q2.

Consumption demand

Real gross disposable income
(similar)



Private consumption
(lower)



Outline:

Changes between
rounds

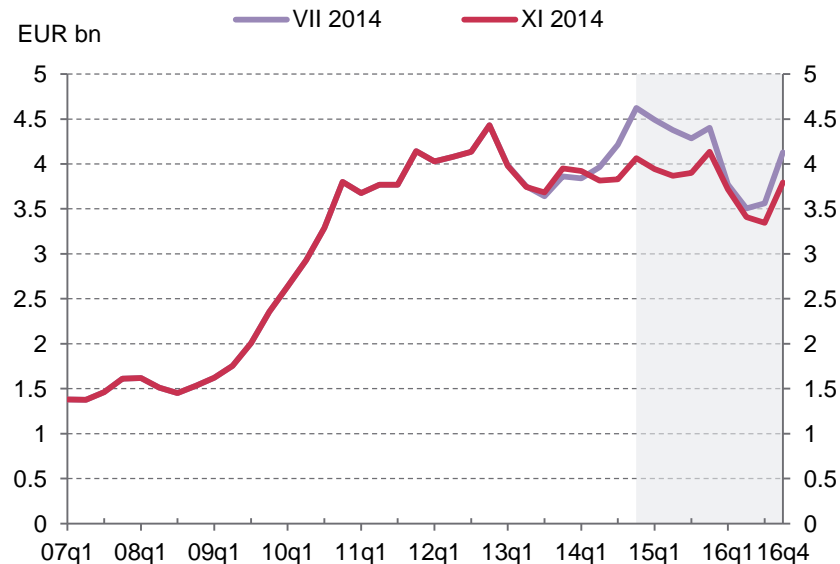
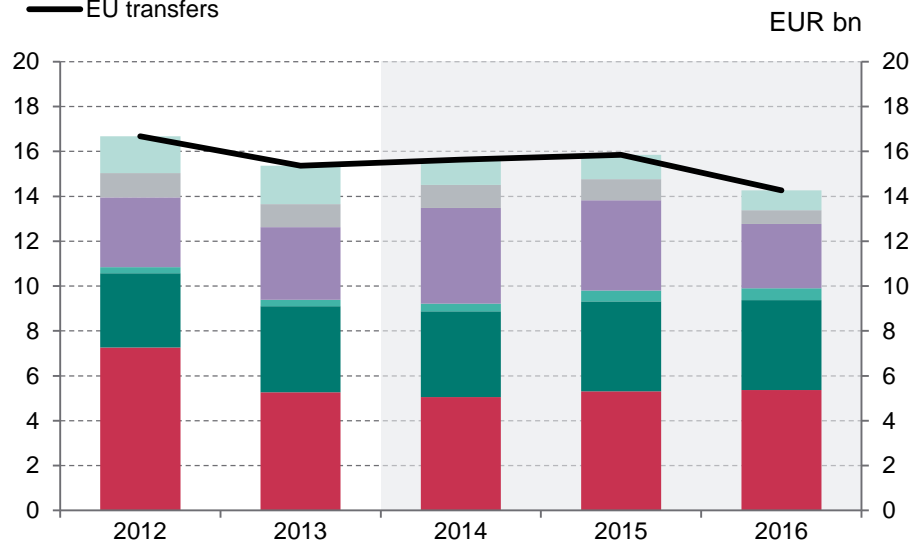
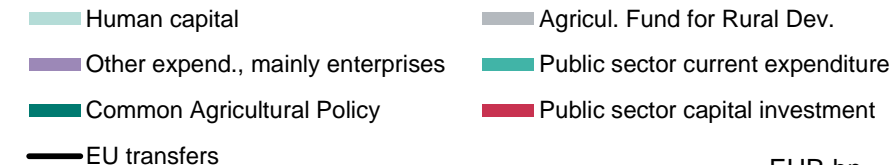
Projection 2014 - 2016

Uncertainty

Government demand

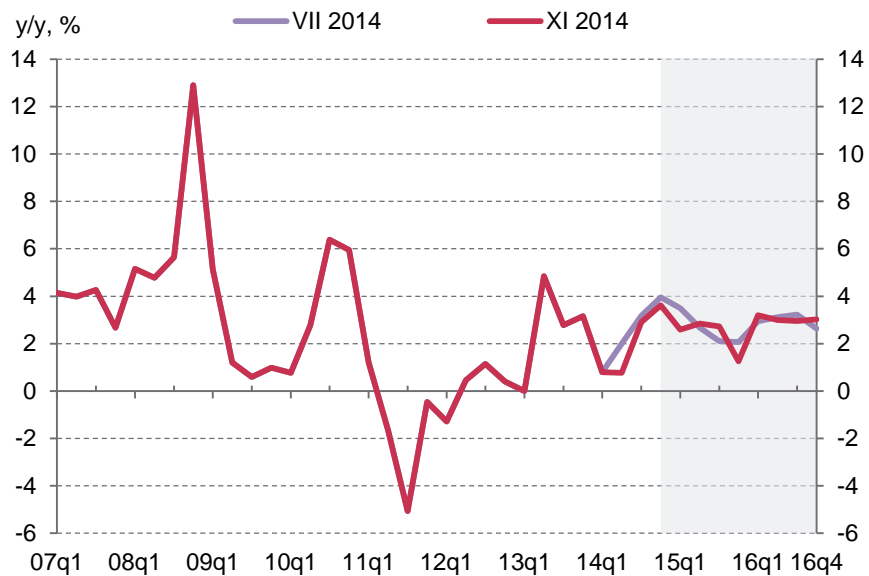
EU transfers absorption

(lower)



Public consumption

Public consumption



Outline:

Changes between
rounds

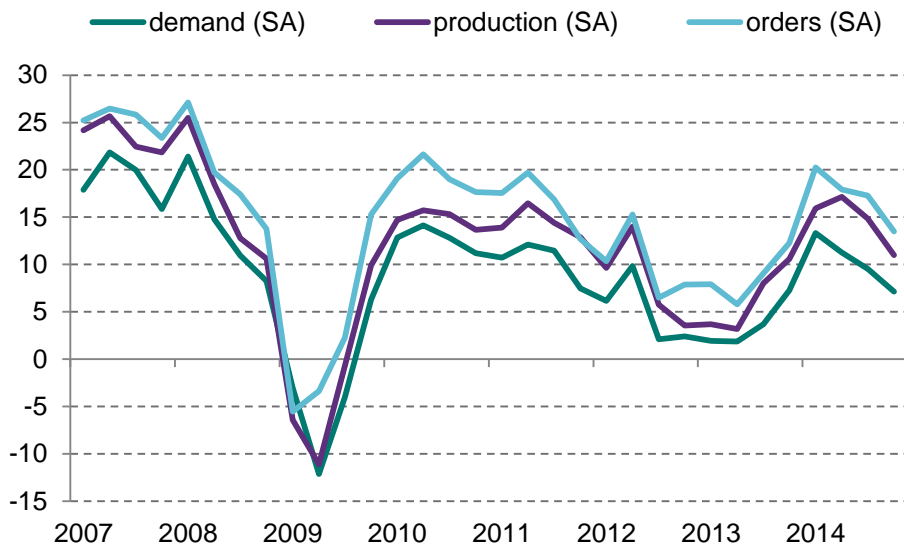
Projection 2014 - 2016

Uncertainty

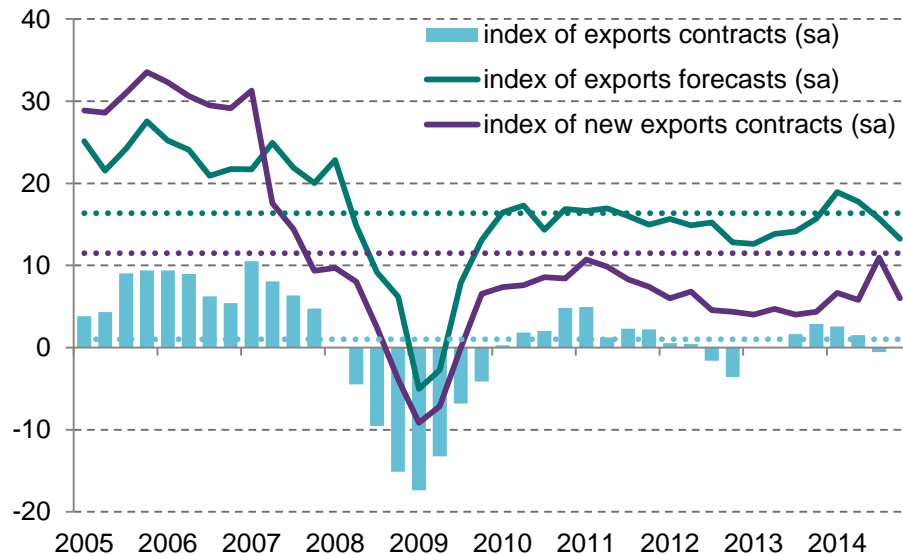
Investment demand

Investment demand

Forecasts of demand, production and orders



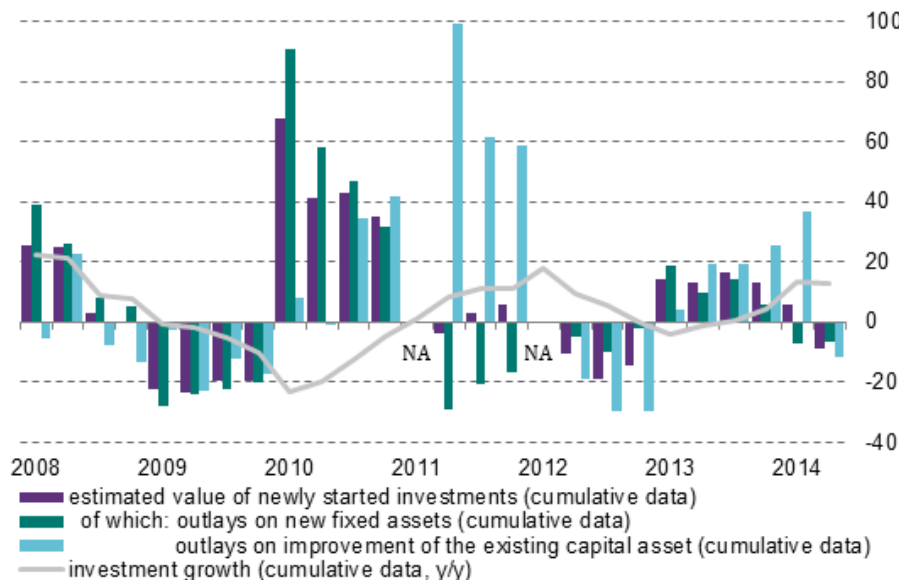
Forecasts and assessment of exports conditions



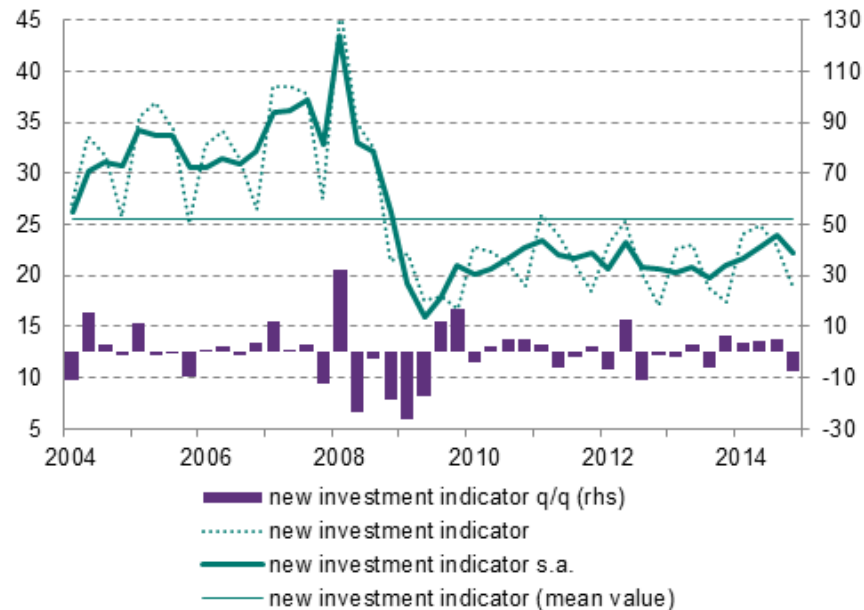
Source: NBP Quick Monitoring Survey data

Investment outlays of enterprises

Estimated value of newly started investments – cumulative data, current prices, y/y (F01/I-01 CSO)

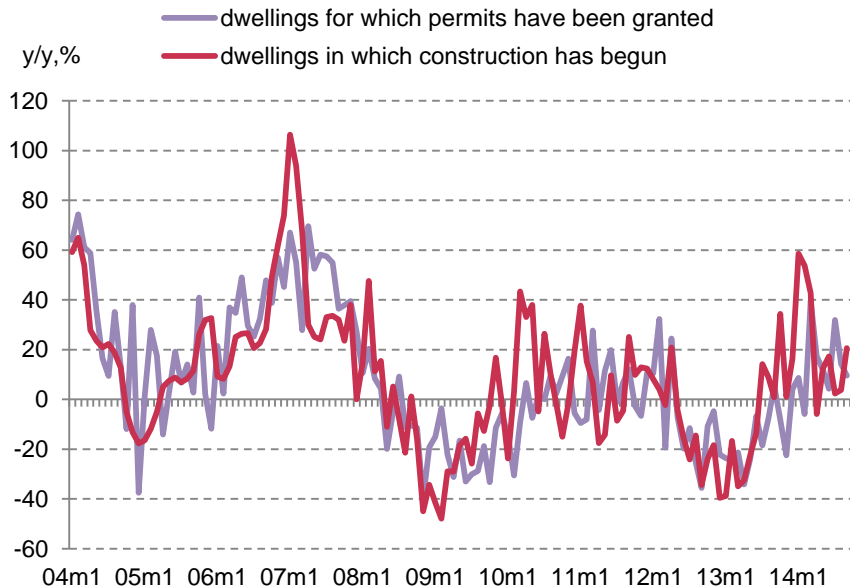


New investment indicator (share of enterprises planning to commence new investment within a quarter, NBP Quick Monitoring Survey)



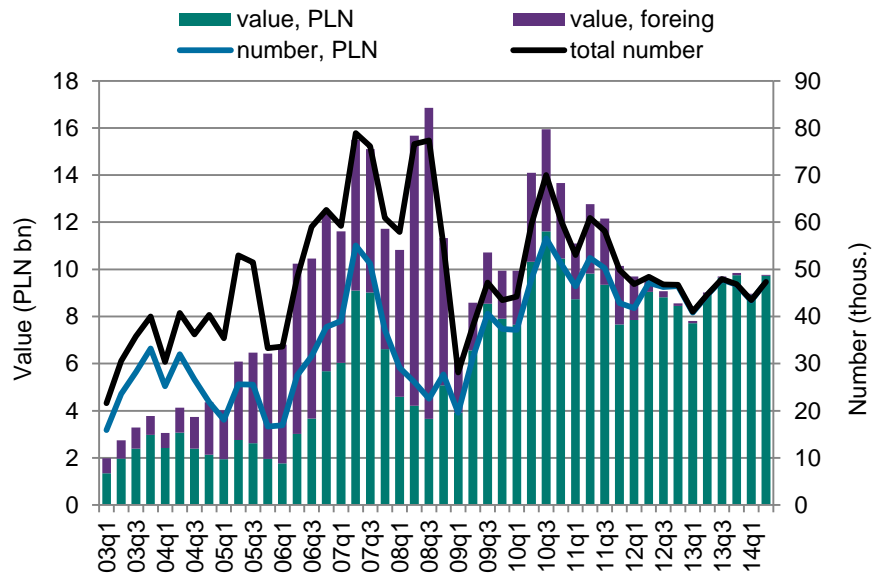
Investment demand

Housing construction



Source: CSO data

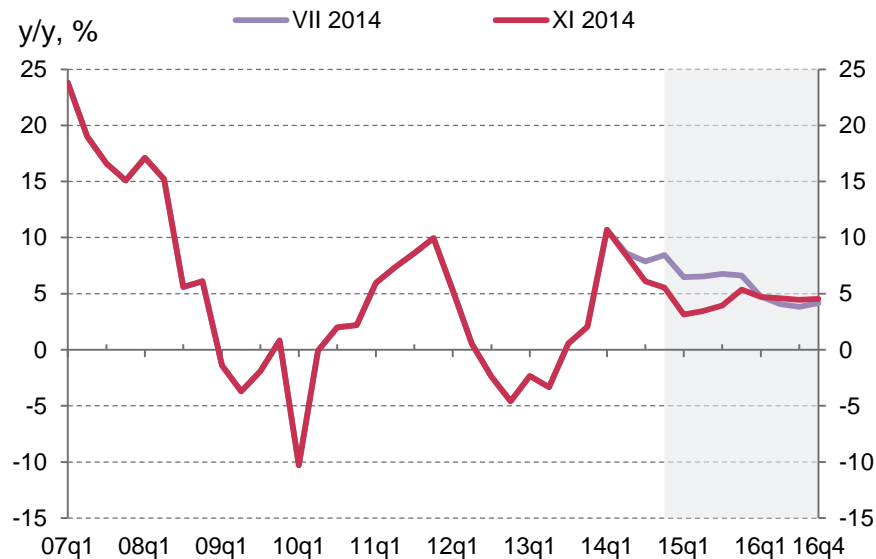
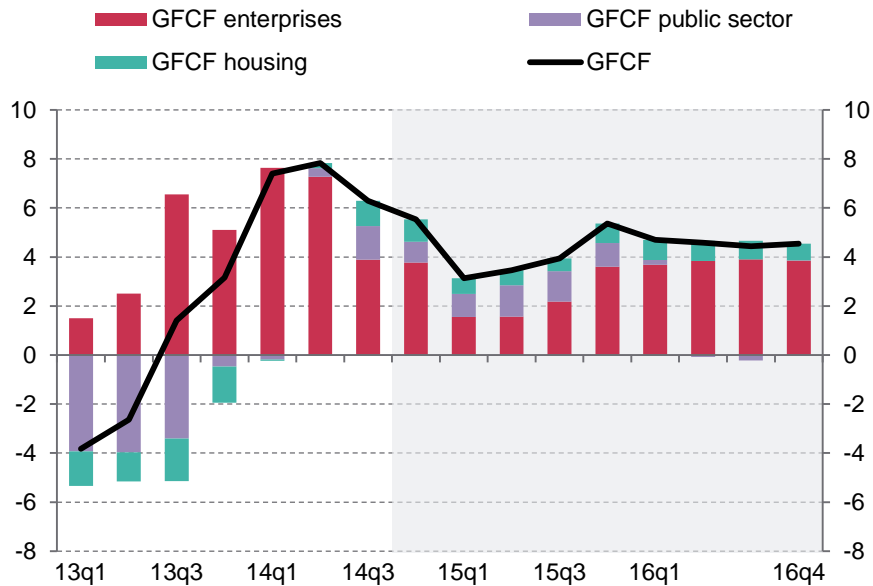
New housing loan contracts : value and number of contracts



Source: ZBP

Gross fixed capital formation

(lower in short and medium term)



Outline:

Changes between
rounds

Projection 2014 - 2016

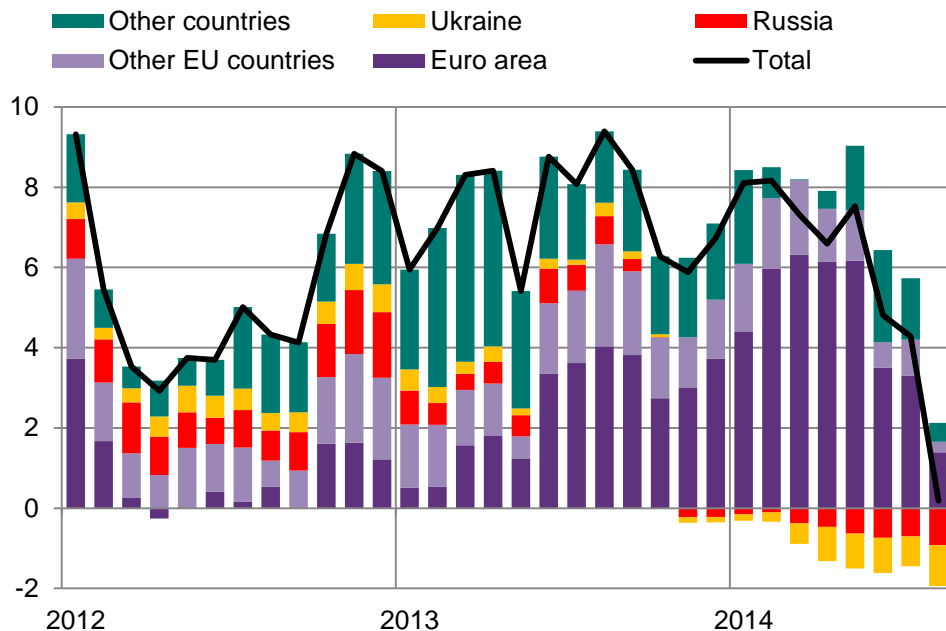
Uncertainty

Foreign trade

Lower dynamics of Polish exports

Polish exports by countries

(current prices, EUR, y/y)

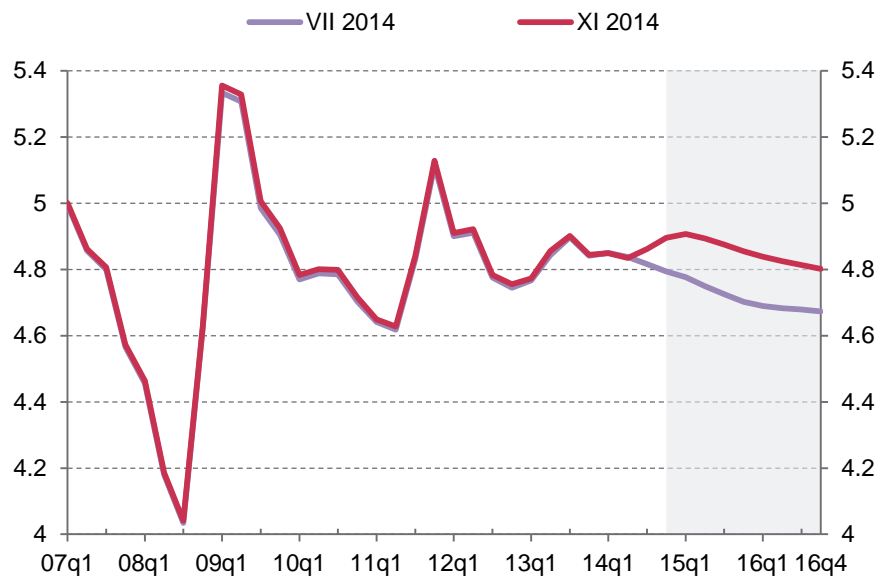


- Deeper slump in exports to Russia and Ukraine.
- Decreasing exports to UE countries – due to the economic slowdown in UE, a drop in sales of final GVC goods intended for the Russian market and the Russian embargo on food, covering also UE countries.

Foreign trade

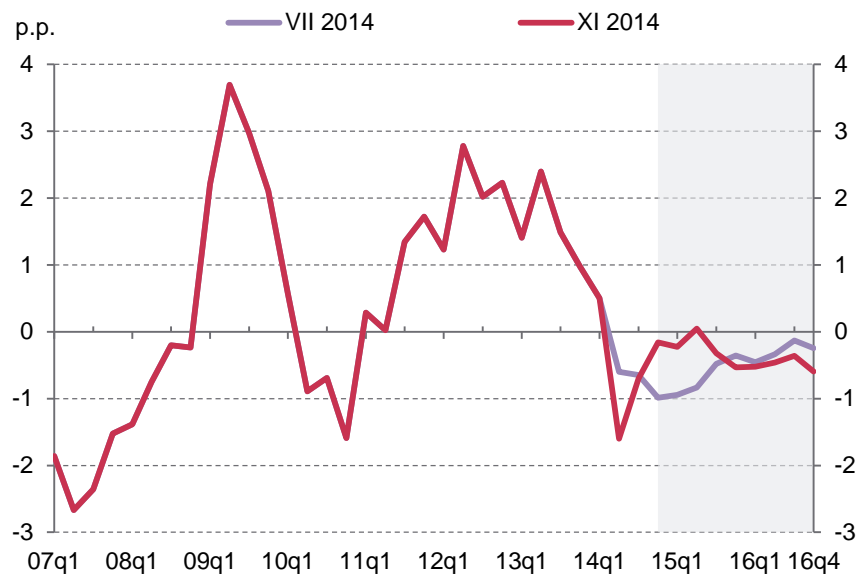
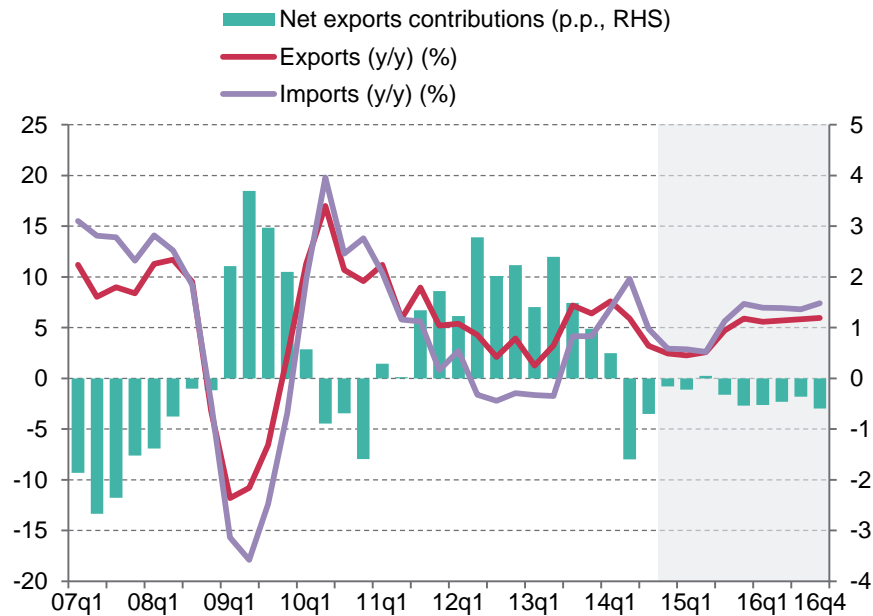
Real effective exchange rate

(weaker)



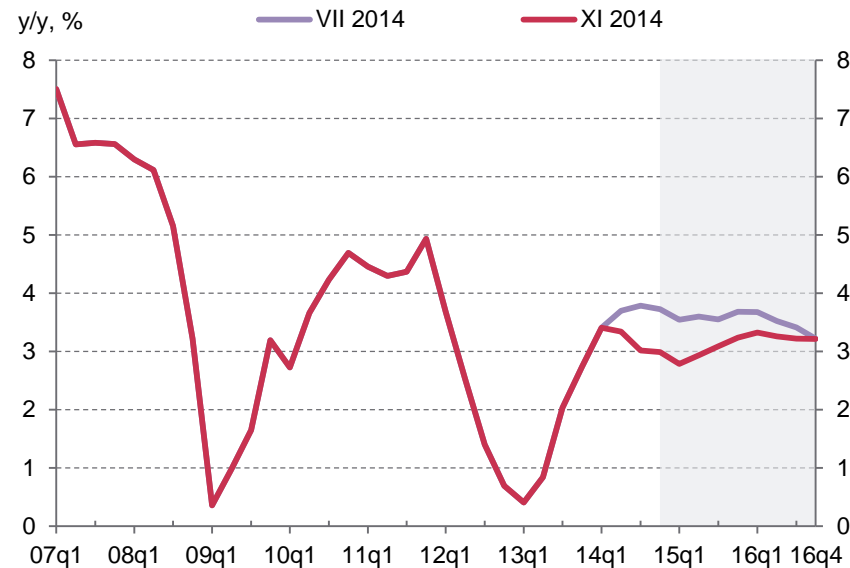
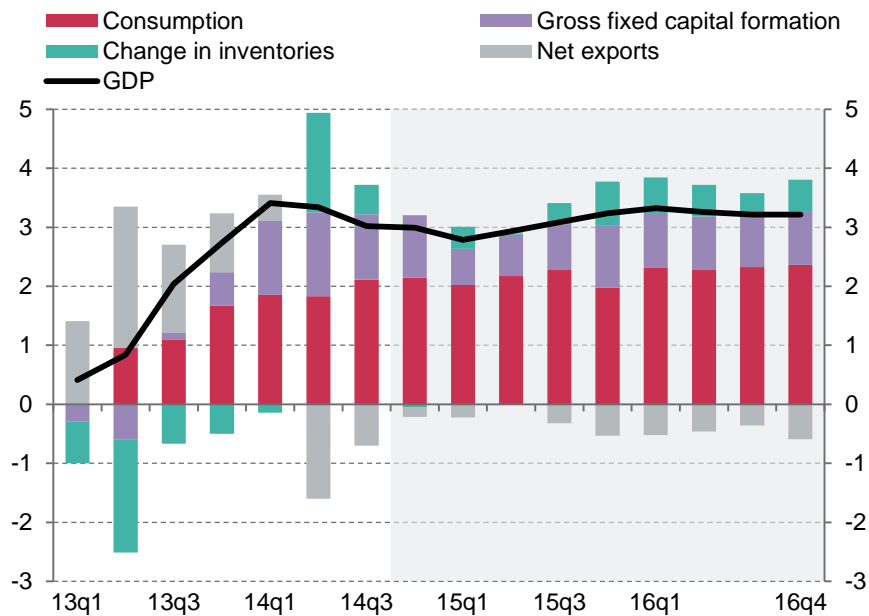
Net exports contributions

(higher in the short term)



GDP

(lower)



Outline:

Changes between
rounds

Projection 2014 - 2016

Uncertainty

Inflation

CPI inflation – 2014Q2 and 2014Q3

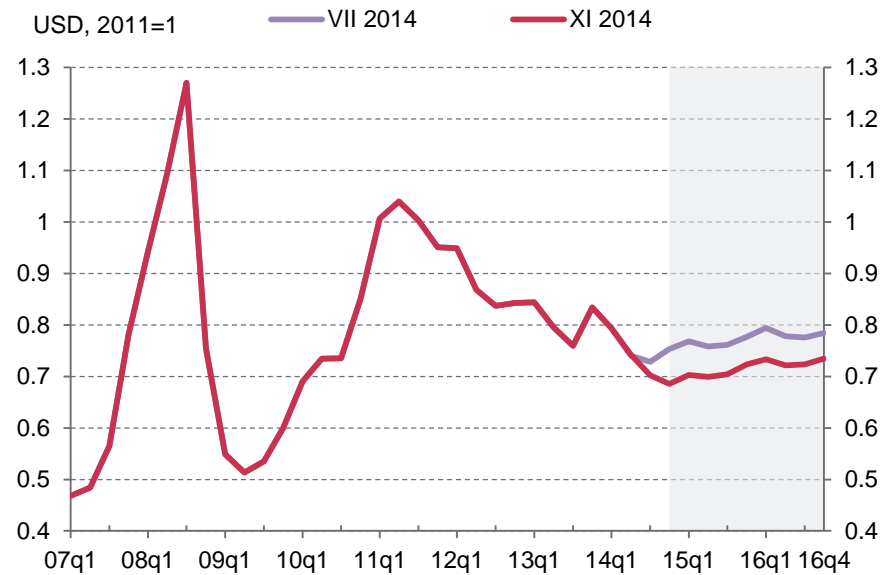
	14q2		14q3	
CPI inflation (y/y) (%)	0.3	(0.2)	-0.3	(-0.2)
Core inflation (y/y) (%)	0.8	(0.8)	0.5	(0.5)
Food price inflation (y/y) (%)	-0.4	(-0.5)	-1.9	(-1.8)
Energy price inflation (y/y) (%)	-0.6	(-0.6)	-0.5	(-0.1)

Values from the July projection are given in brackets (seasonally adjusted).

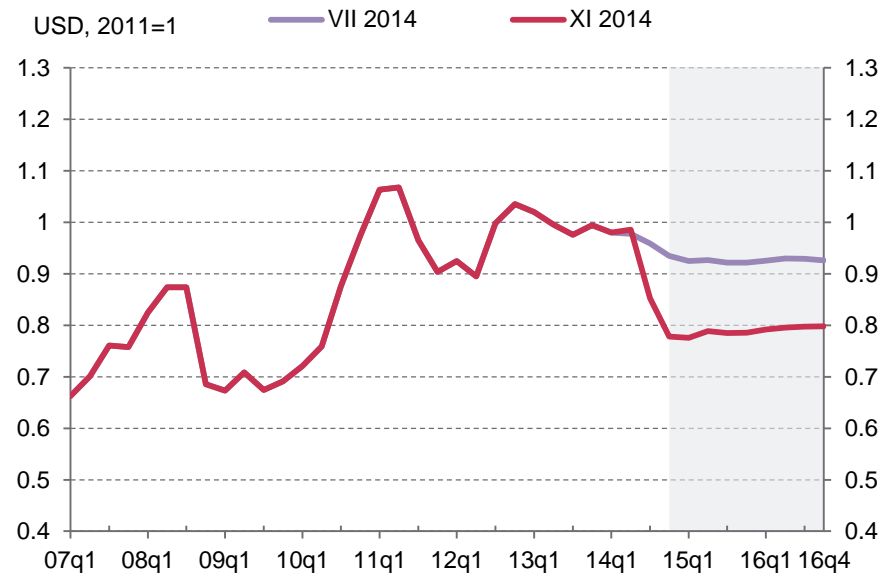
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Commodity prices

Index of energy commodity prices (lower)

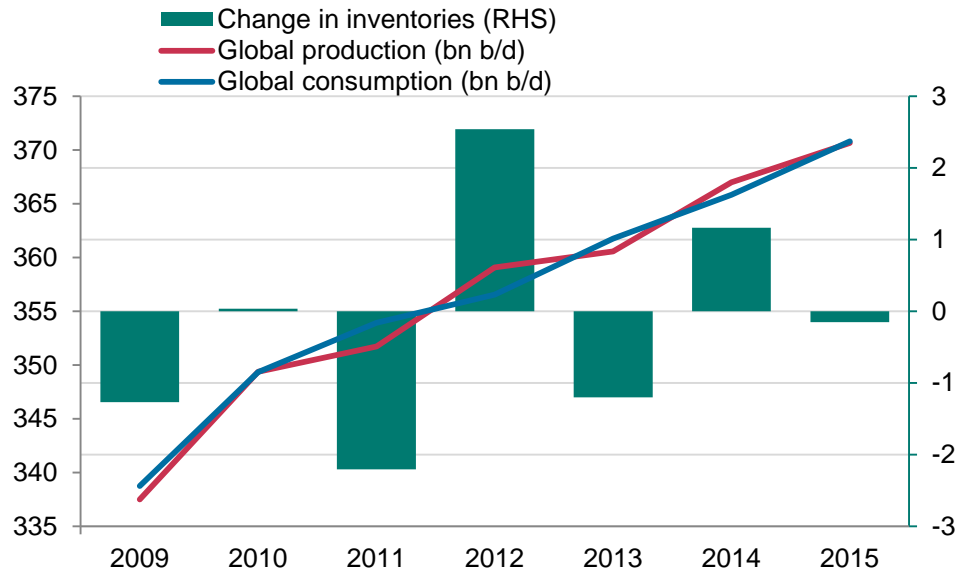


Index of agricultural commodity prices (lower)



Brent oil prices

The global production, consumption and inventories of Brent oil

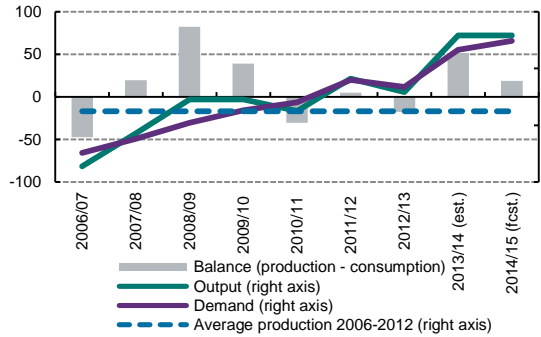


- A decrease in Brent oil prices in 2014 due to lower consumption, which is the effect of lower global economic growth as well as the increase in shale oil extraction in the USA.
- In October 2014 USA Department of Energy (DE) lowered its oil production forecast for 2015 expecting OPEC to reduce its extraction (by 300 thous. b/d as compared to 2014).
- Moreover Department of Energy envisages the global demand improvement in 2015, which combined with lower production leads to a decrease in oil inventories and a gradual increase in oil prices.
- Oil prices index based on futures contracts was lowered as compared to the July projection assumptions, however it is following the upward trend, in line with the forecasts of DE.

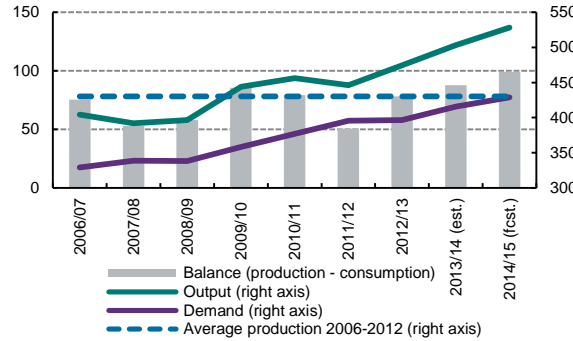
Agricultural commodities

(favourable supply conditions and stable production costs)

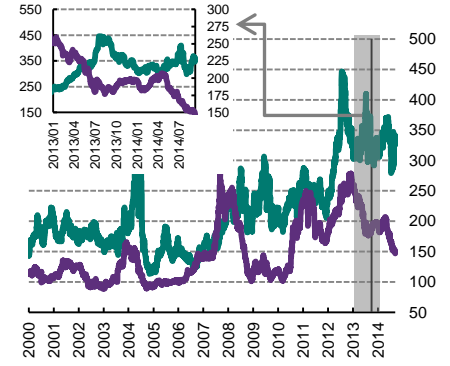
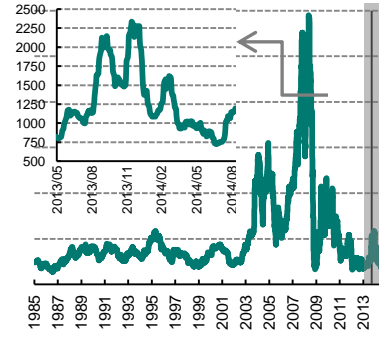
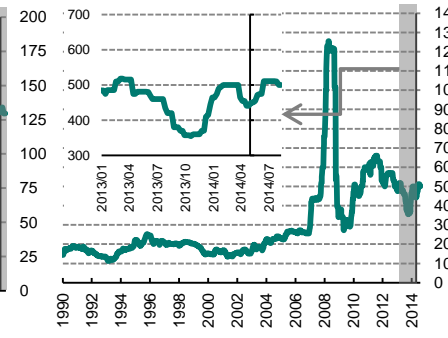
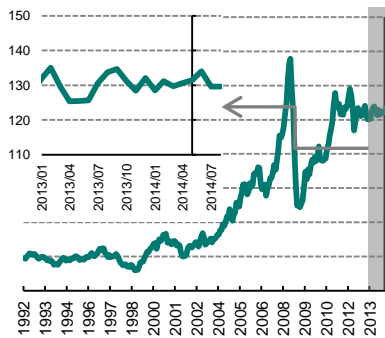
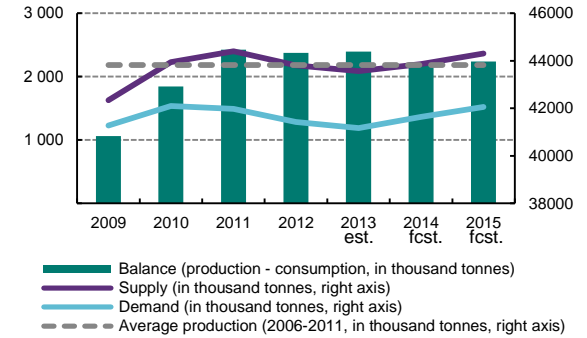
Grains market



Oilseeds market



Meat market



IMF World Energy Index

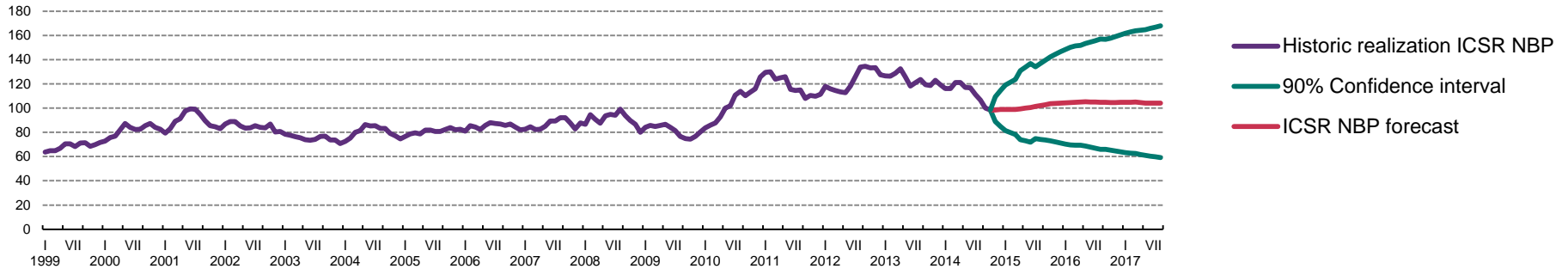
Green Market Fertilizer Price DAP US Gulf Export

Baltic Dry Index

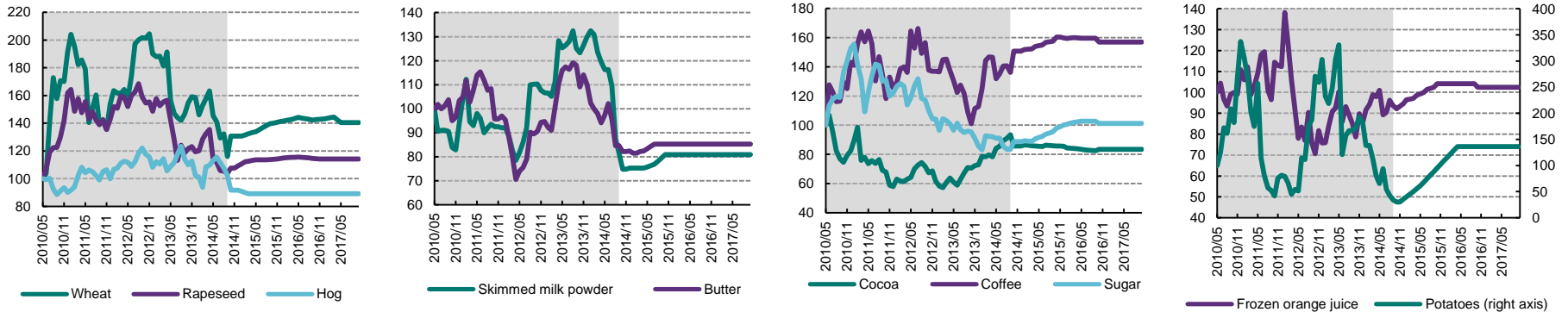
Soybean Meal Futures
Feed Wheat Futures

Stable agricultural commodity prices expectations

ICSR NBP (cut-off: 2014-09-30, V 2010=100)

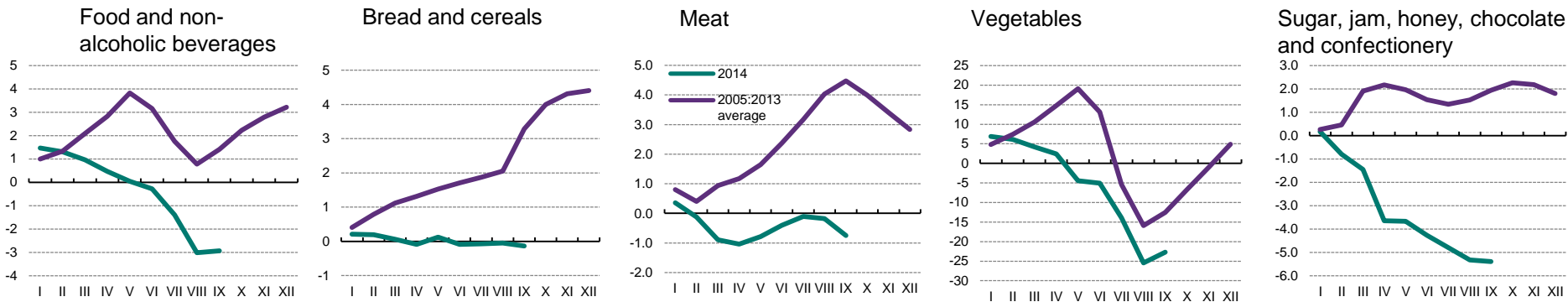


ICSR NBP forecasts (cut-off: 2014-09-30)

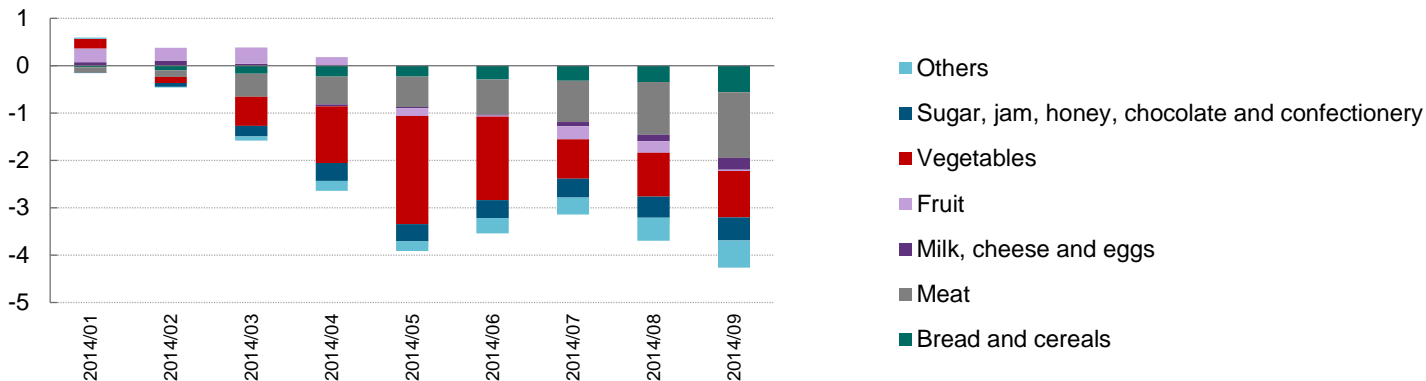


Food and non-alcoholic beverages inflation

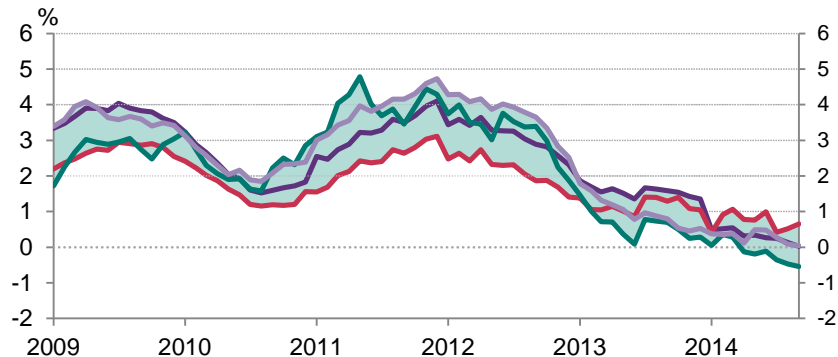
2014 vs 2005-2013 average



Prognostic groups contributions to the difference between the average path of 2005-2013 and CPI path of the 2014



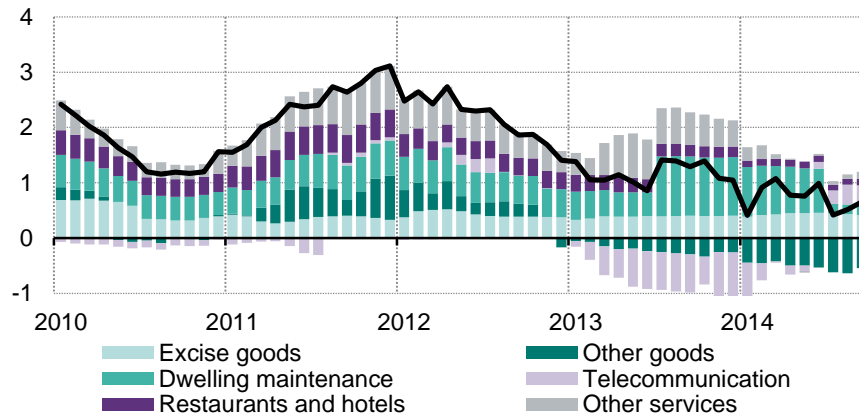
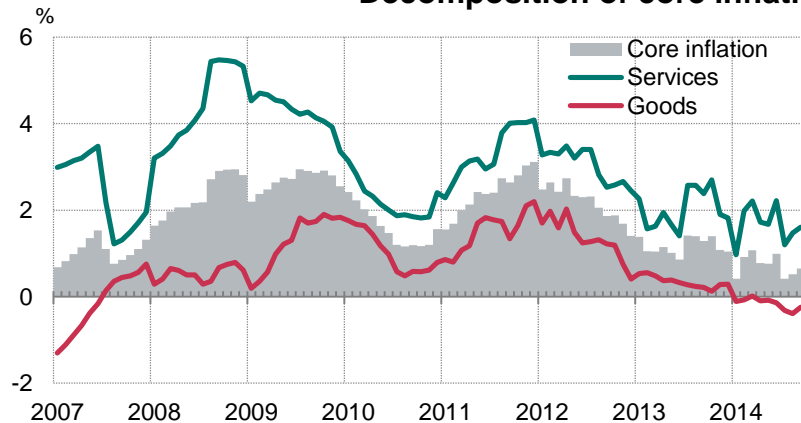
Core inflation



Core inflation measures (% , y/y)

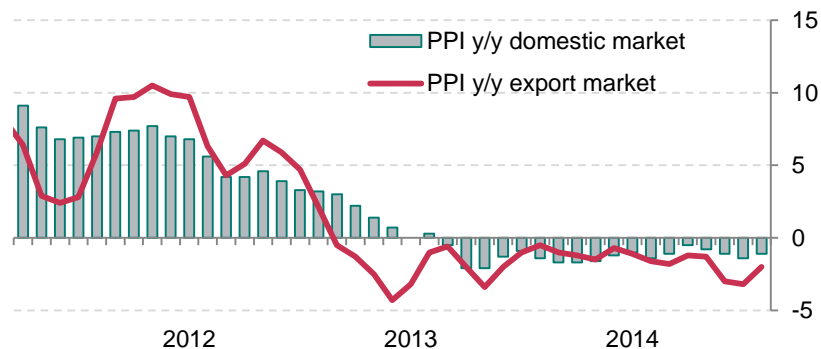
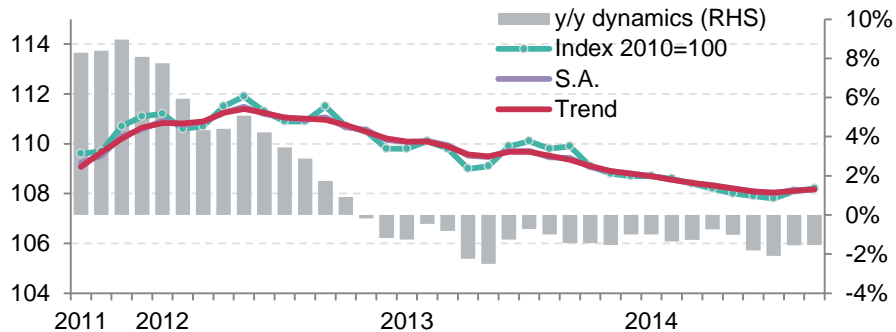
- Variability interval of core inflation indices
- Inflation excluding most volatile prices
- Inflation excluding food and energy prices
- Inflation excluding administered prices
- 15% trimmed mean

Decomposition of core inflation (CPI excl. food and energy prices, y/y)



PPI Inflation

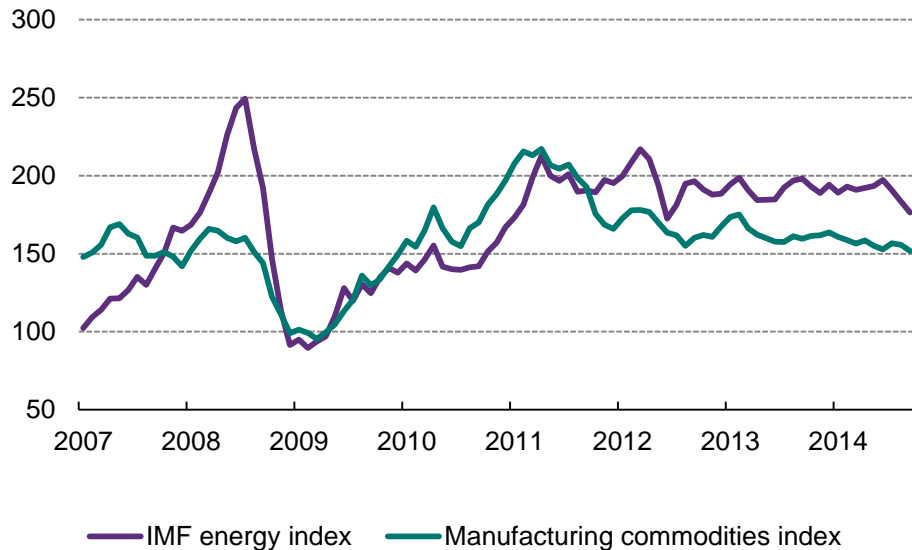
Deceleration of the downward trend of the producer price index



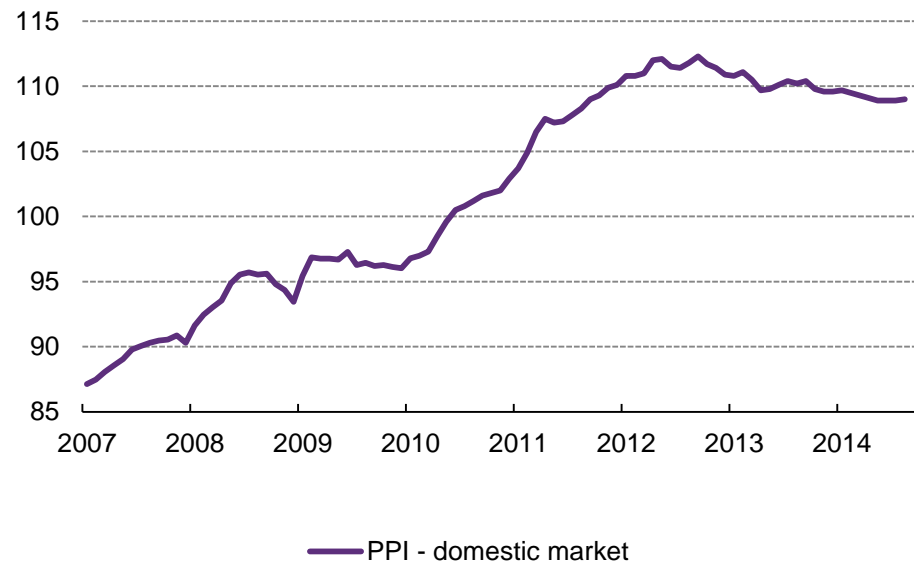
- In recent months there has been a deceleration of the downward trend of the producer price index, which is lasting for over 2 years.
- The dynamics of producer price index in September diminished slightly by 0.1 p.p. to -1.6% y/y .
- In October, the dynamics of PPI on exports market production was lower than PPI composite (y/y) by 0.5 p.p.
- The dynamics of the domestic market production PPI y/y (-1.2% y/y, IE forecast for September) was higher than the dynamics of PPI composite y/y by 0.4 p.p.

Low cost pressure

IMF index 2005=100

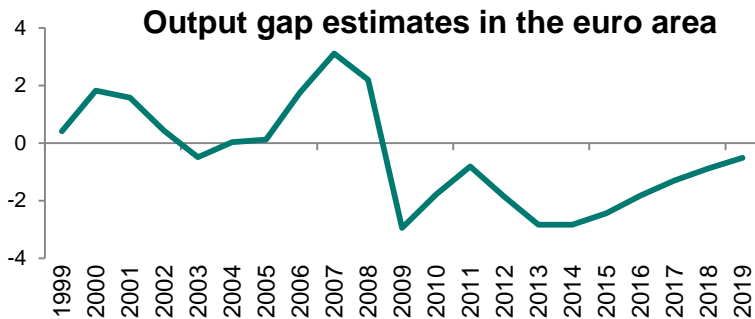


PPI 2010=100

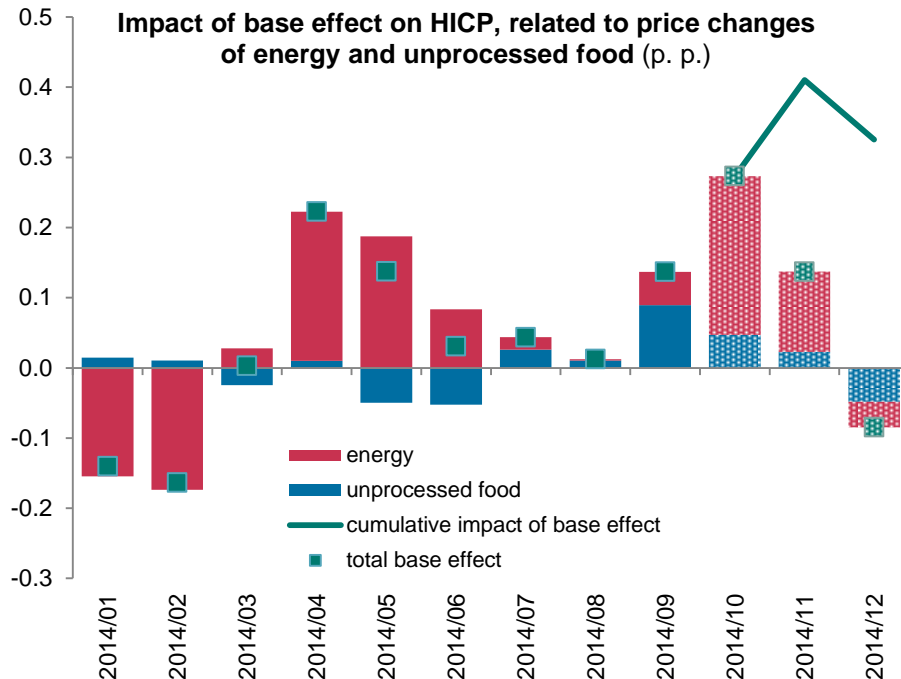
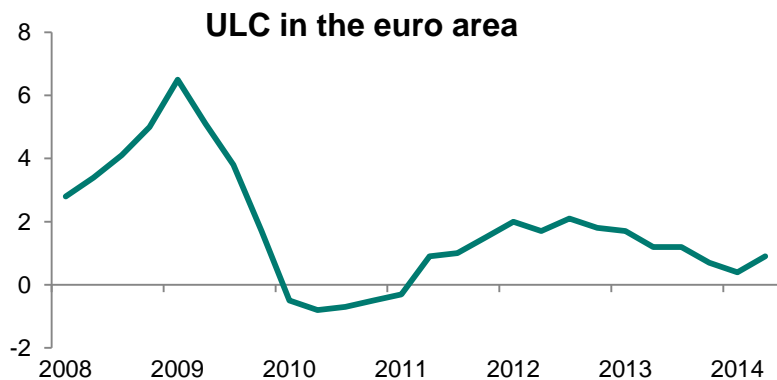


Inflation in the euro area

Positive, however low ULC growth, v. slow closing of the output gap and base effect

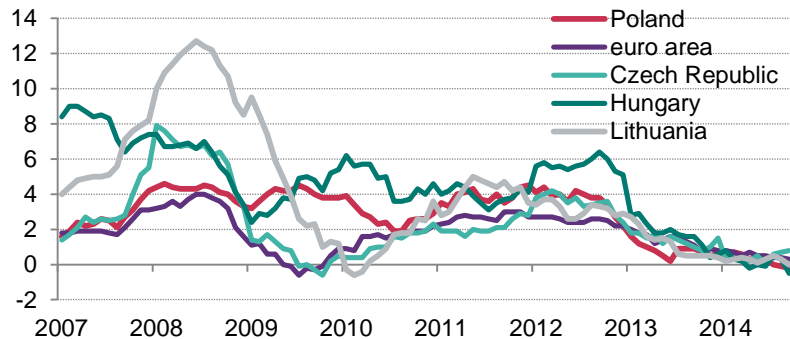


Source: IMF, 10.2014 WEO

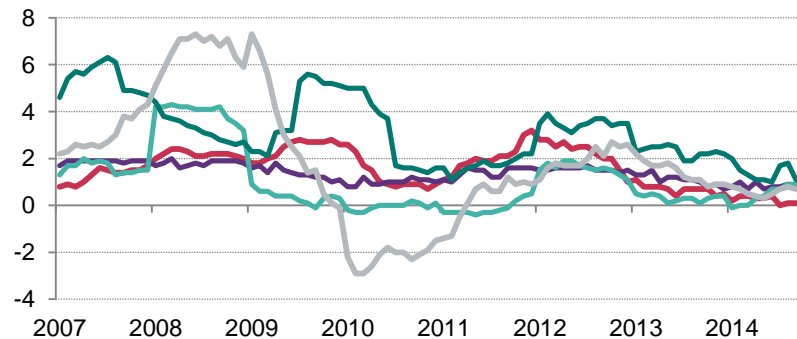


Inflation in the CEE countries and the euro area

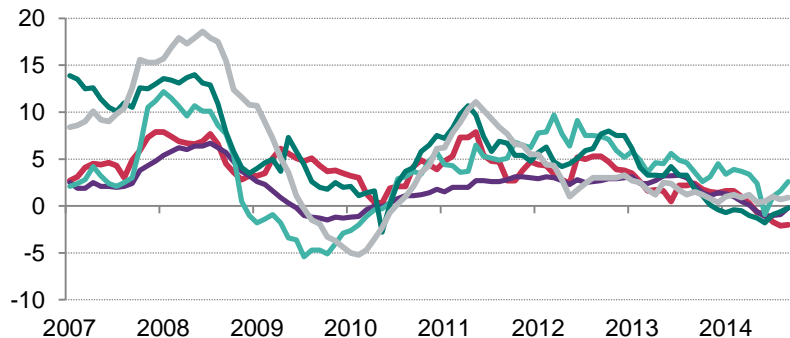
HICP



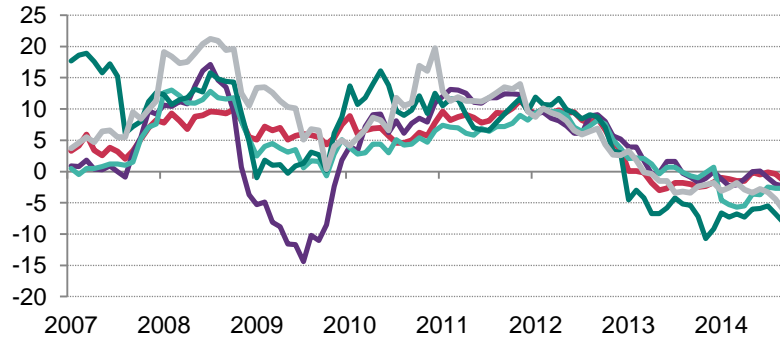
HICP excluding food, energy, alcohol and tobacco



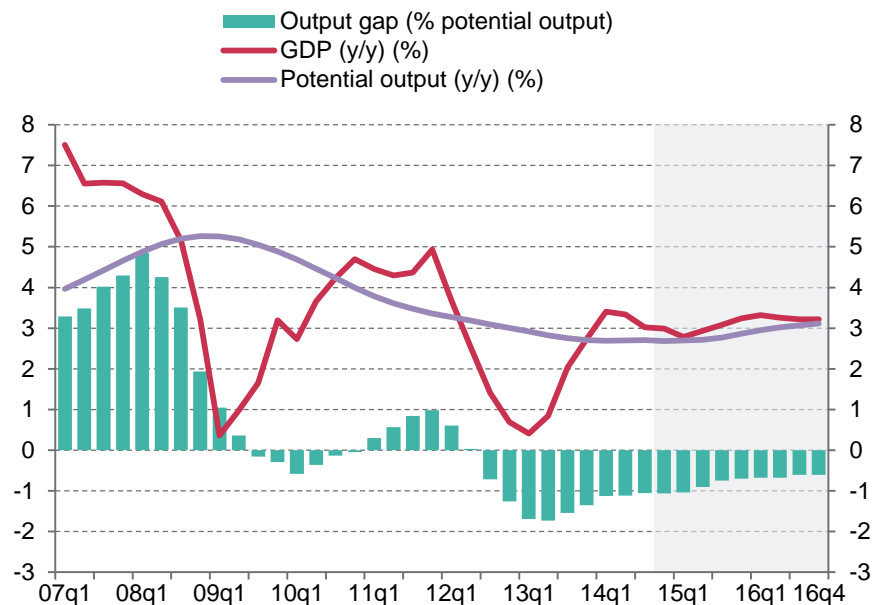
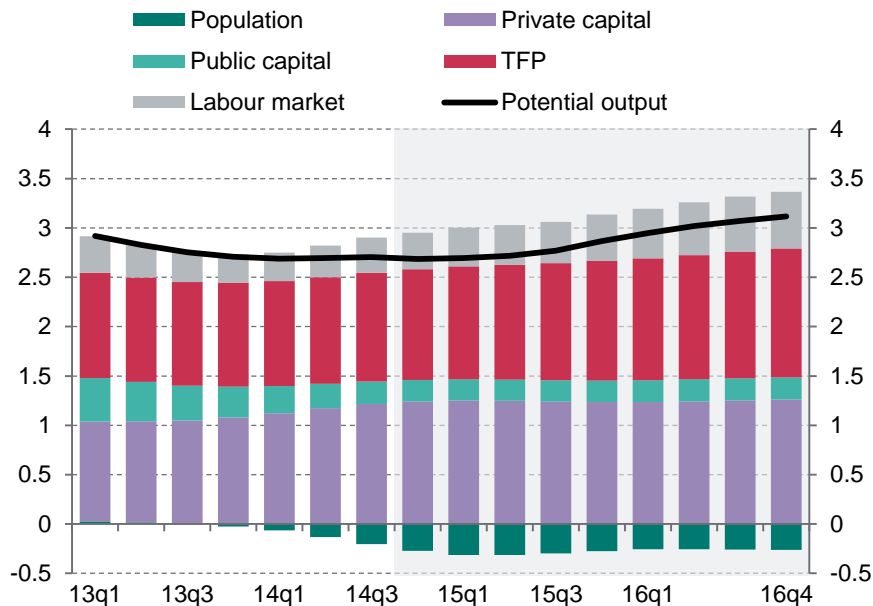
HICP – Food and non-alcoholic beverages



HICP – Energy

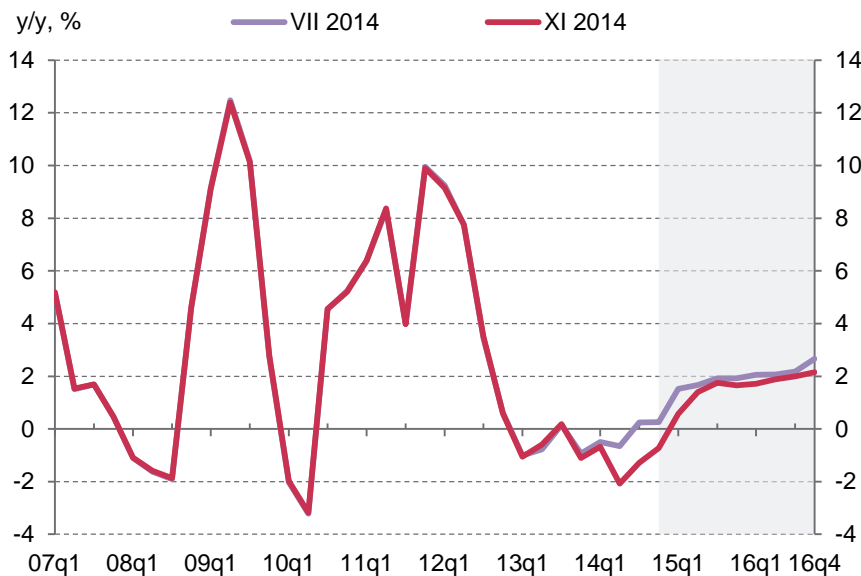


Potential output

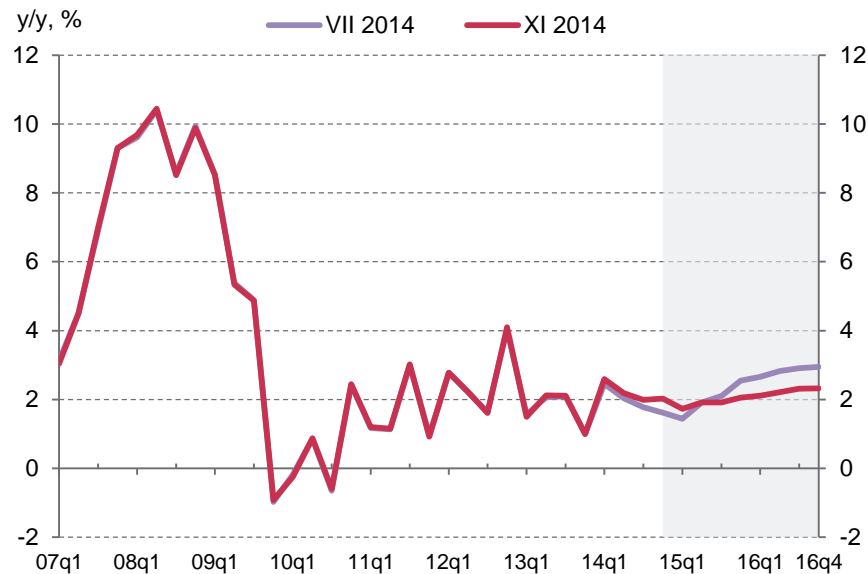


Import prices and unit labour costs

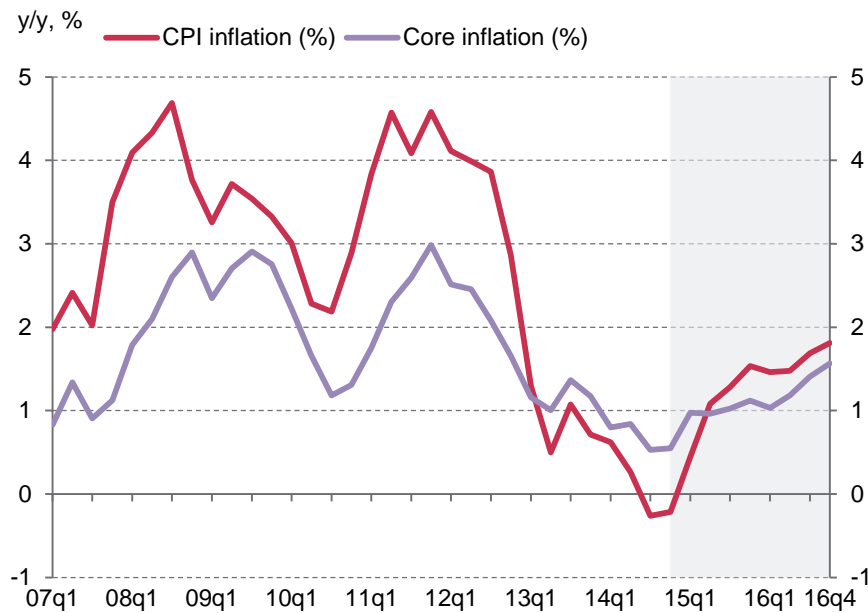
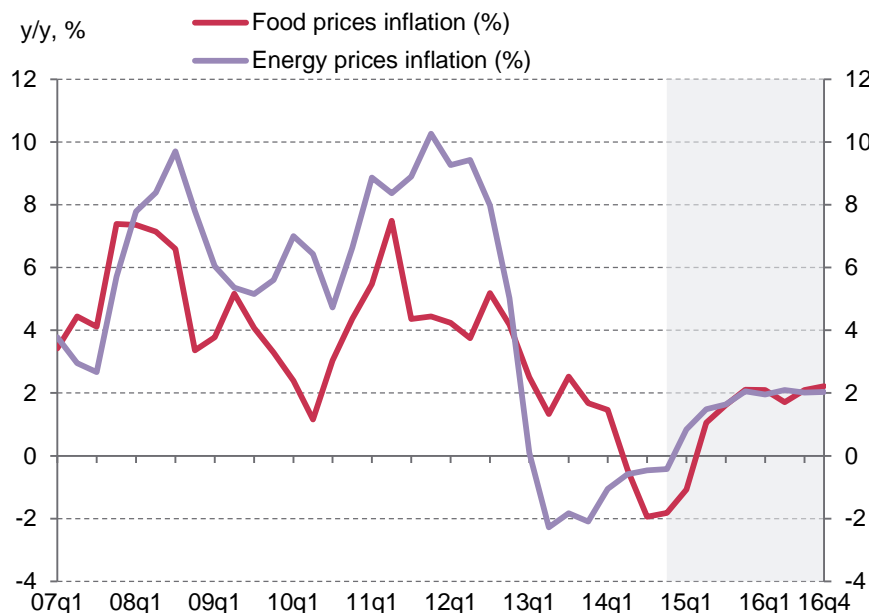
Import prices (excluding oil and natural gas) (lower)



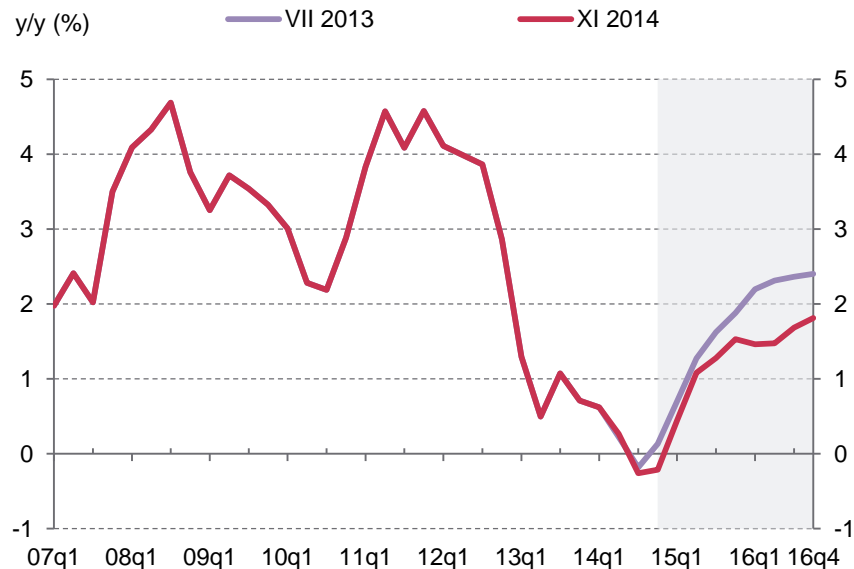
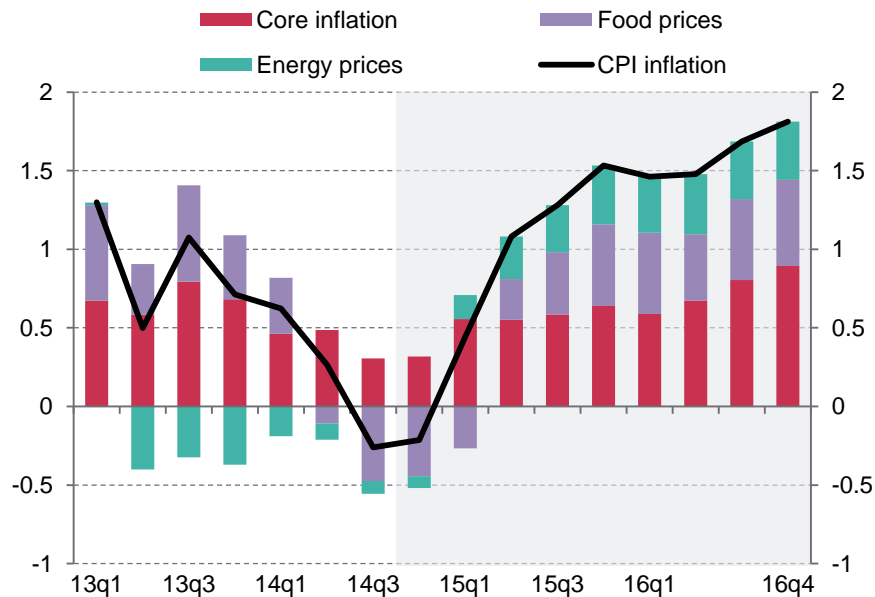
Unit labour costs (lower in medium and long term)



Domestic inflation



CPI inflation (y/y, %)



Outline:

Changes between
rounds

Projection 2014 - 2016

Uncertainty

Uncertainty

- Risk factors
- Fan charts

Outline:

Changes between
rounds

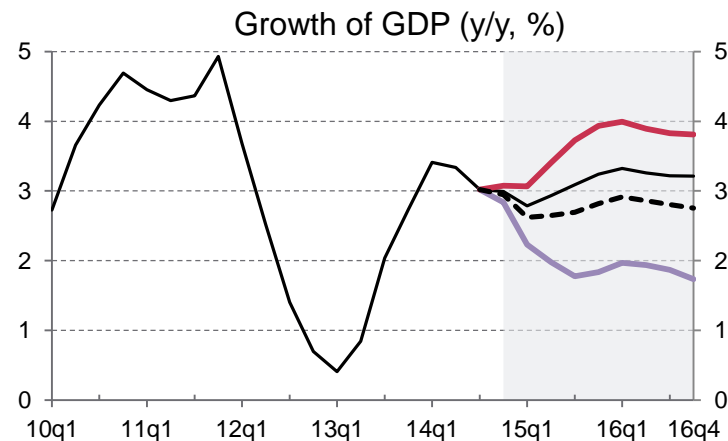
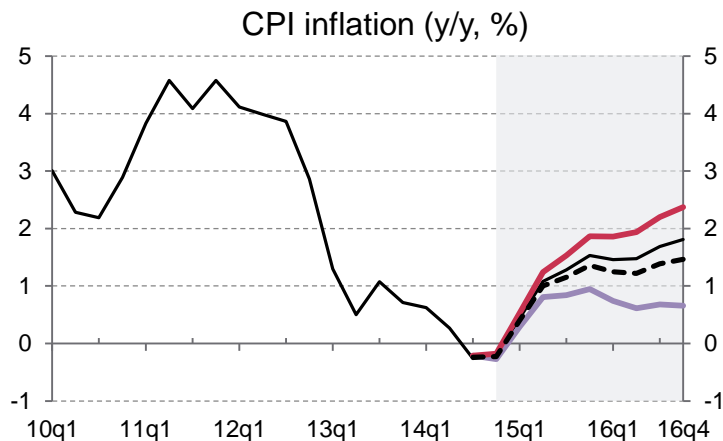
Projection 2014 - 2016

Uncertainty

Risk factors

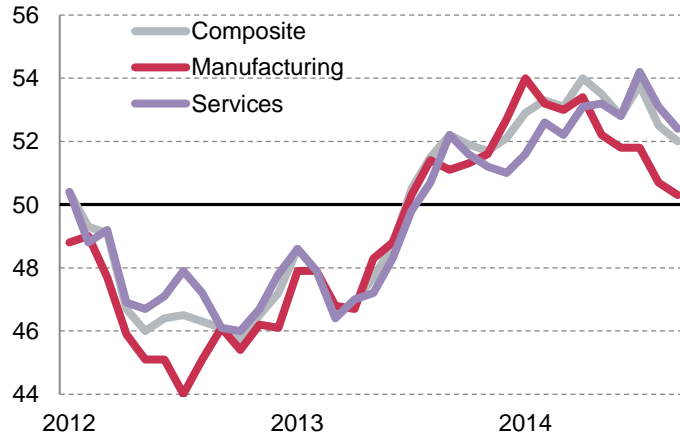
Scale of recovery abroad and in Poland

- Stagnation in the euro area (lack of improvement in competitiveness, ineffective actions aimed at stimulating lending, limited possibilities of ECB monetary policy easing) leading to decoupling of inflation expectations, deeper slowdown in emerging economies, especially in China, growing tensions in UE-Russia relations, deterioration in business sentiment in Europe, slower growth of global energy and agricultural commodity prices – **pessimistic scenario**
- Higher economic growth abroad (in the euro area, in particular in Germany, in USA, in China), the effect of the Russia-Ukraine conflict on the economy wears off, faster rebuilding of investment and consumption– **optimistic scenario**

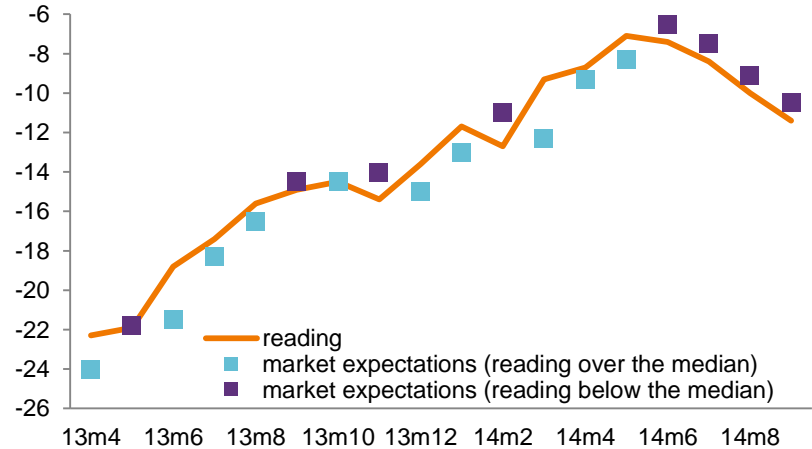


Consumers and producers sentiments in the euro area

PMI in the euro area



Consumers sentiments

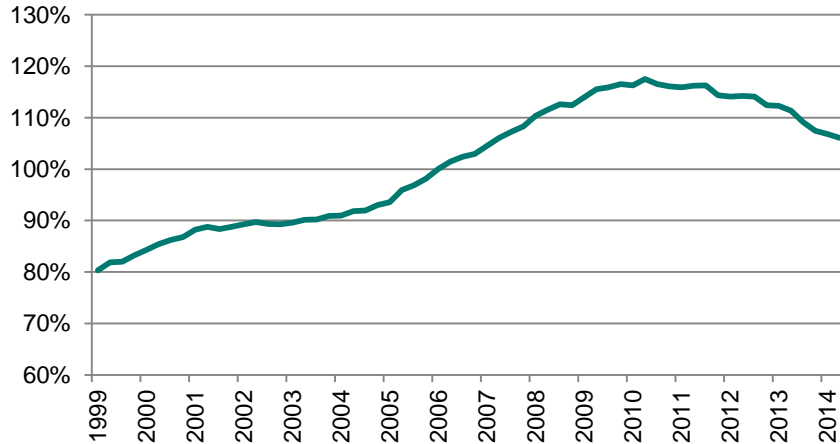


- Readings of PMI indicate a deterioration in situation both in manufacturing and in services sectors.

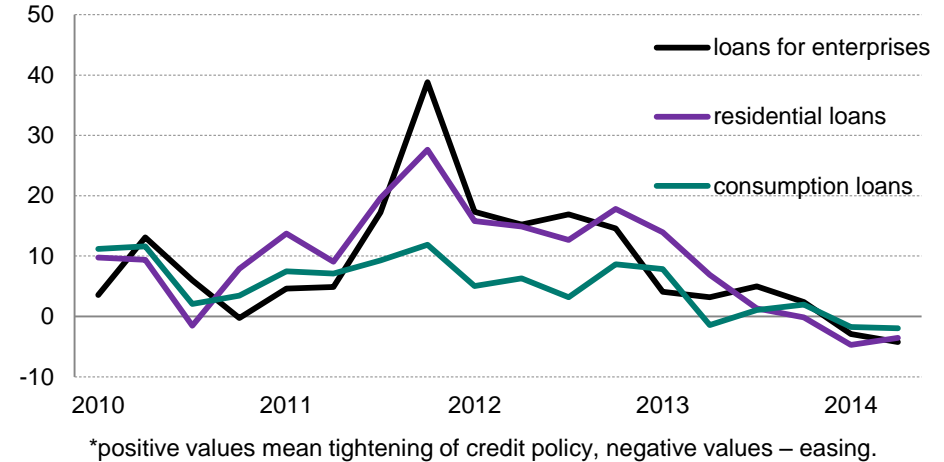
- Since the second half of 2014 consumers sentiments diminish, subsequent readings are below the market expectations median.

Euro area – enterprises' access to loans

MFI loans for the private sector in the euro area (% GDP)



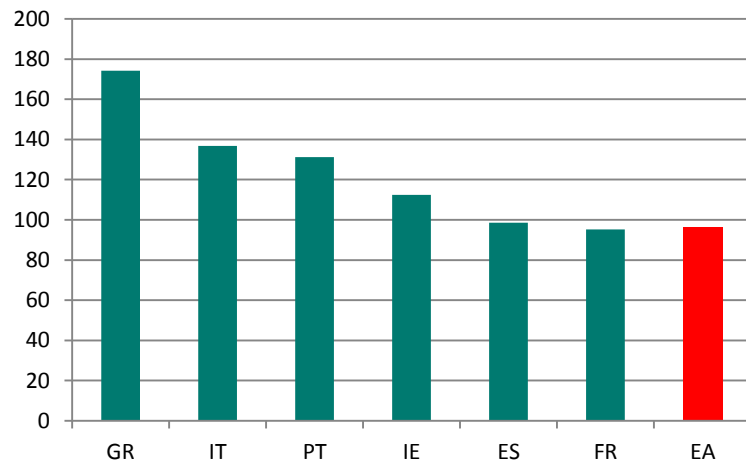
Credit conditions in the euro area (BLS survey)*



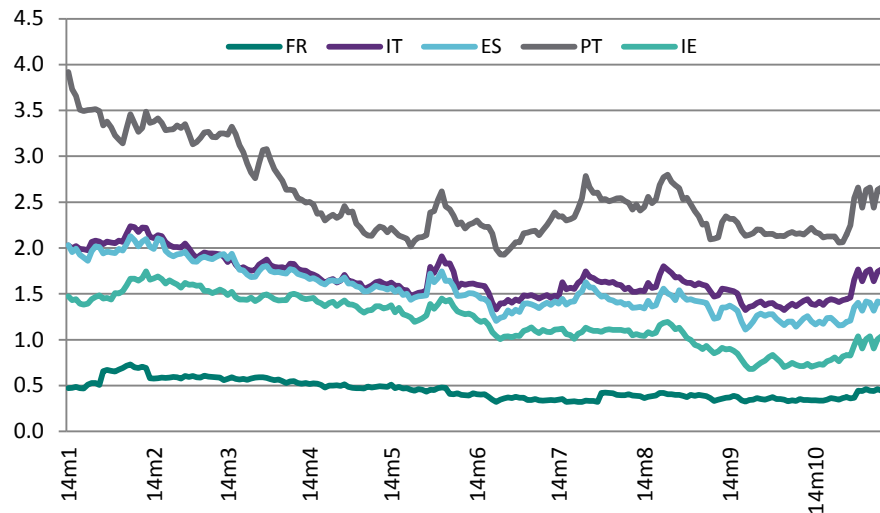
- Banks restrain from stronger credit policy easing due to the uncertainty associated with the review of banks' assets conducted by ECB.
- The structural problems of the banking sector in EA might be underestimated.
- The possible prolonging of EA banks deleveraging process might decrease the effectiveness of ECB action aimed at stimulating lending, which may hamper the economic recovery in the euro area.

Euro area – conditions of public debt financing

Public debt in 2014 (% GDP)



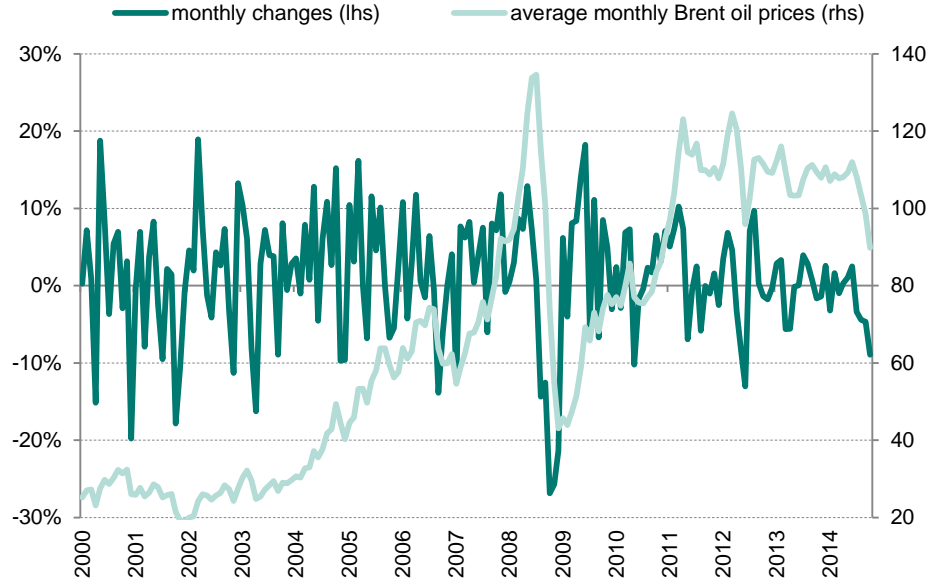
Spread against the German 10Y bonds



- Very low bonds profitability in some countries of EA (close to historically low levels), despite unsolved fiscal and structural problems of these economies – according to IMF these assets valuation substantially diverges from the fundamental factors.
- Possible change in financial markets risk evaluation may lead to higher pressure on fiscal tightening in the euro area, deteriorating financing conditions for banks and enterprises.

Brent oil prices

Brent oil prices
(USD/b)

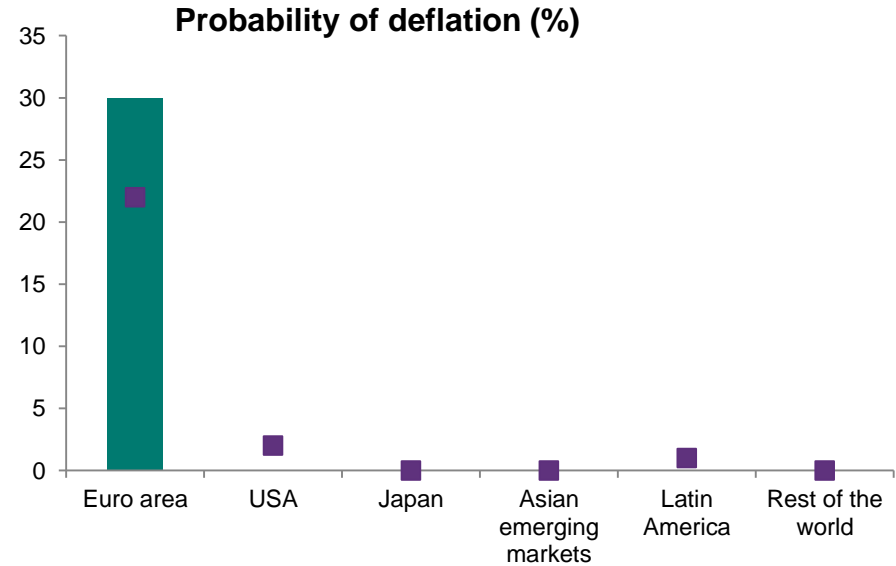
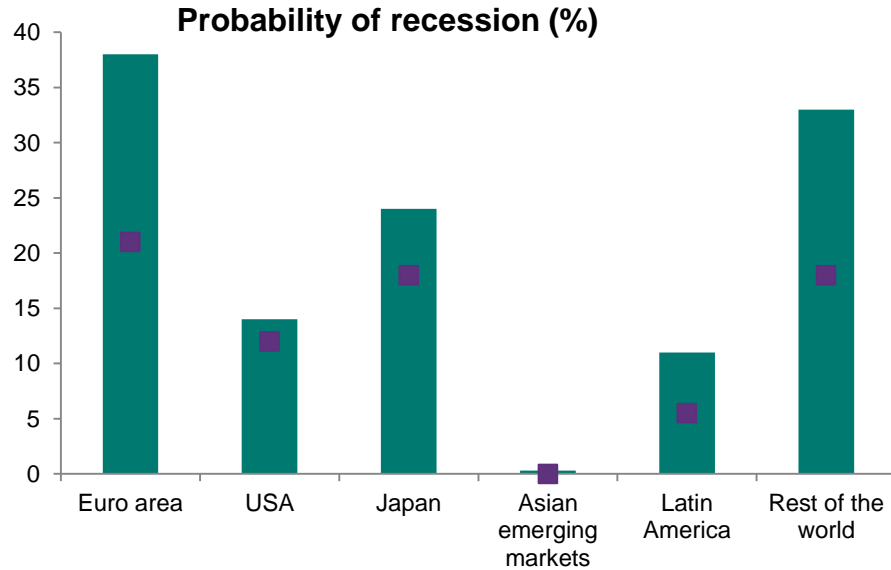


Since July average monthly Brent oil prices are decreasing due to:

- low demand (conditioned on the global economic growth),
- high supply (the increase in extraction of shale oil in USA; lower political risk for the supply of oil from Iraq and Libya)

The forecasts of the US Department of Energy which indicate the rise in oil prices in 2015 are based on the assumptions concerning the global economic growth.

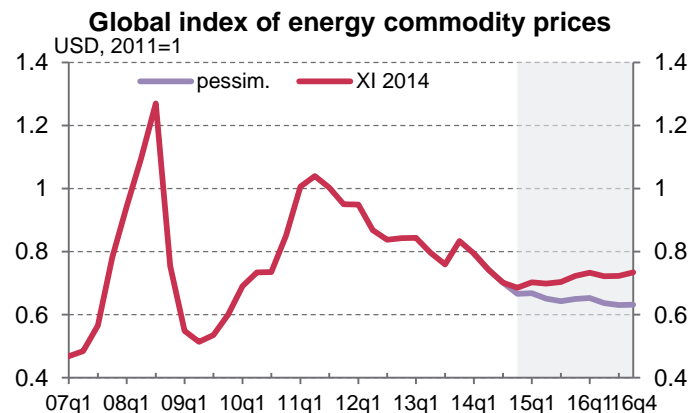
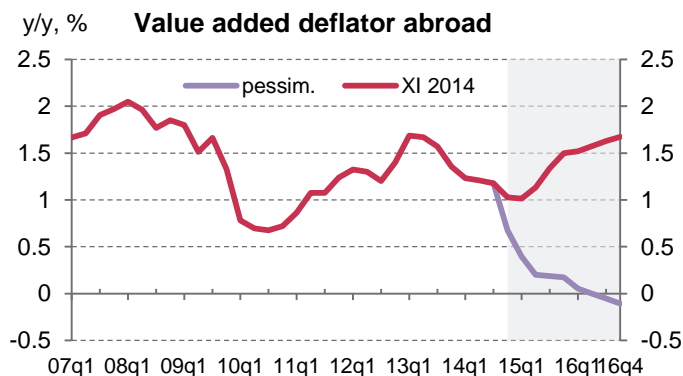
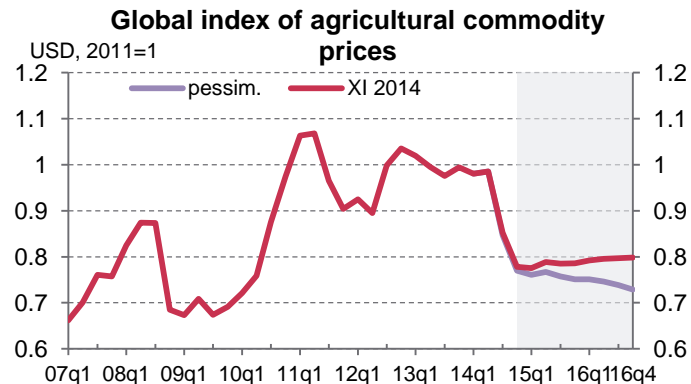
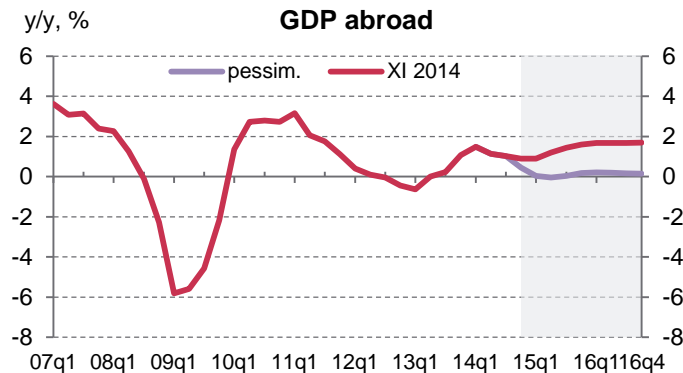
The increase in probability of recession and deflation in the euro area



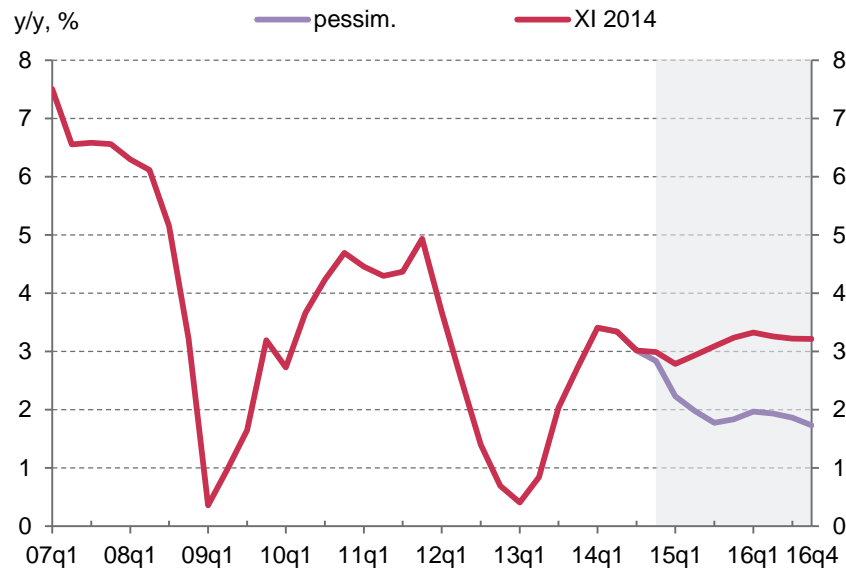
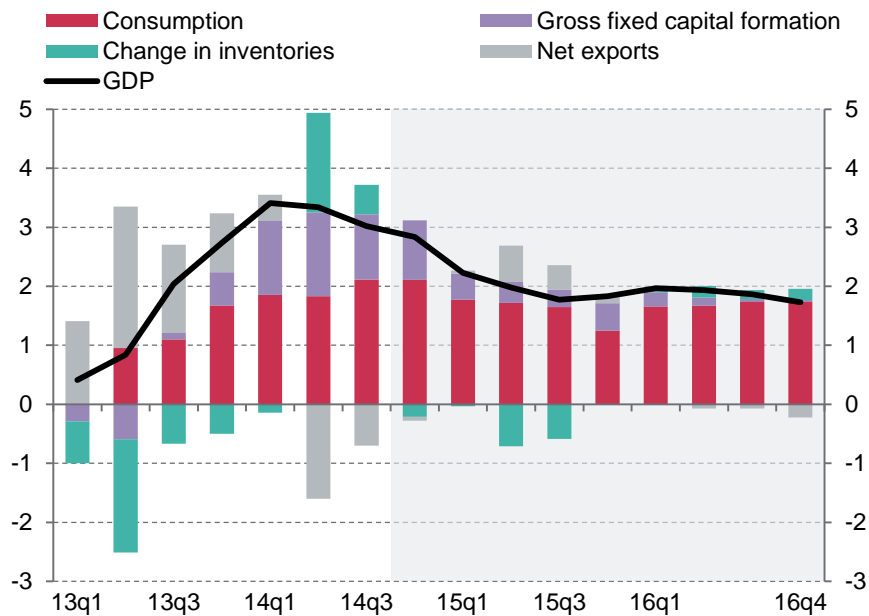
■ October WEO IMF, forecast for 2014Q3-2015Q2
 ■ April WEO IMF, forecast for 2013Q4-2014Q3

■ October WEO IMF, forecast for 2014Q3-2015Q2
 ■ April WEO IMF, forecast for 2014Q1-2014Q4

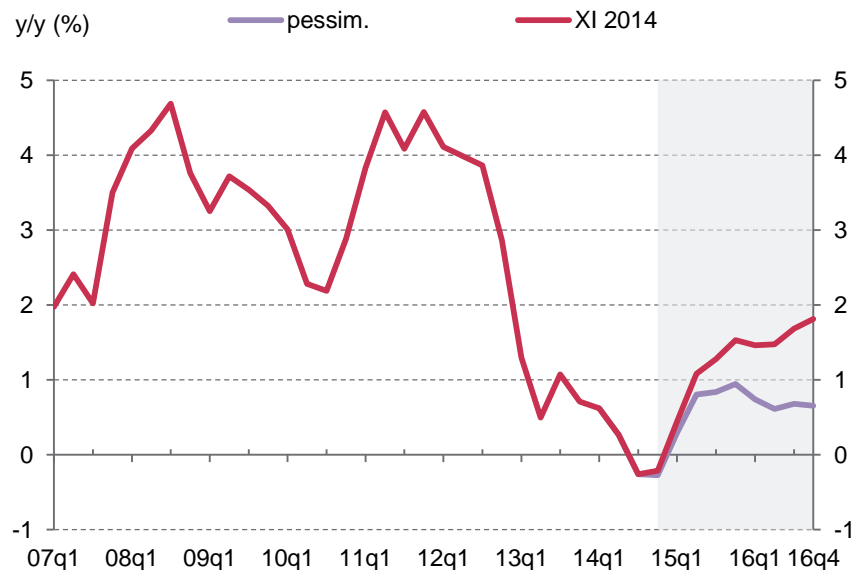
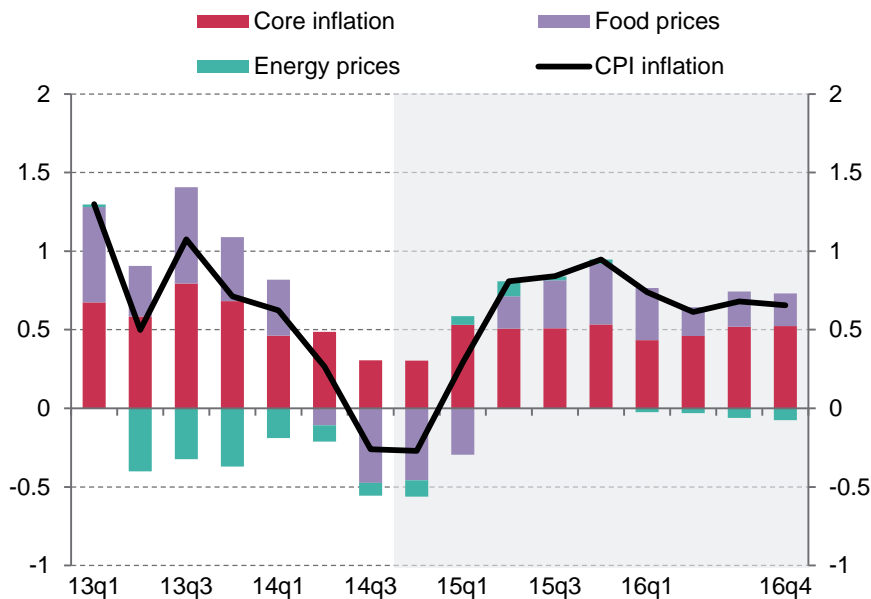
Pessimistic scenario – economic conditions abroad



Pessimistic scenario – GDP



Pessimistic scenario – inflation



Outline:

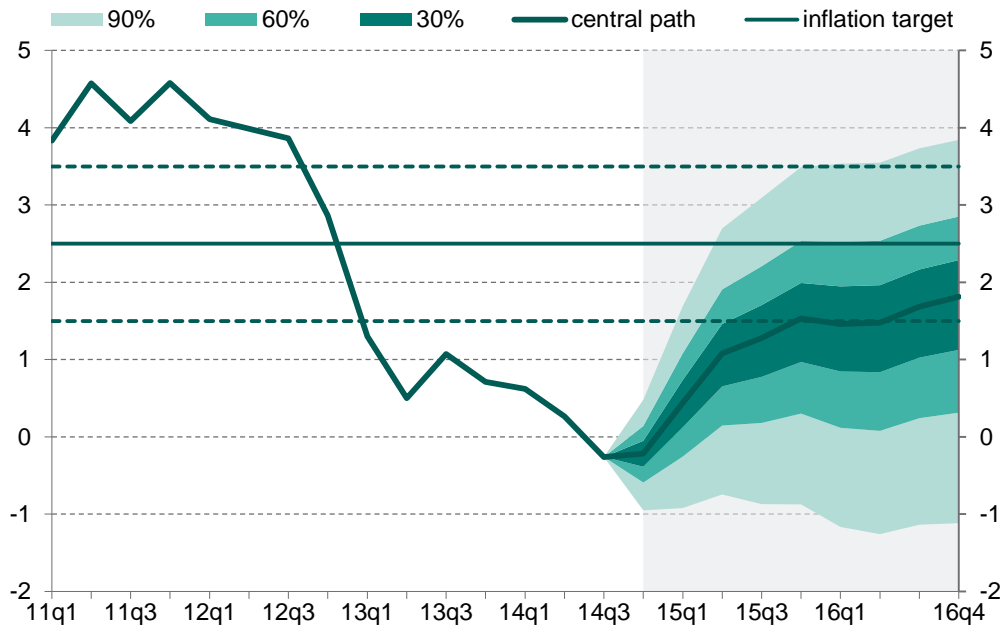
Changes between
rounds

Projection 2014 - 2016

Uncertainty

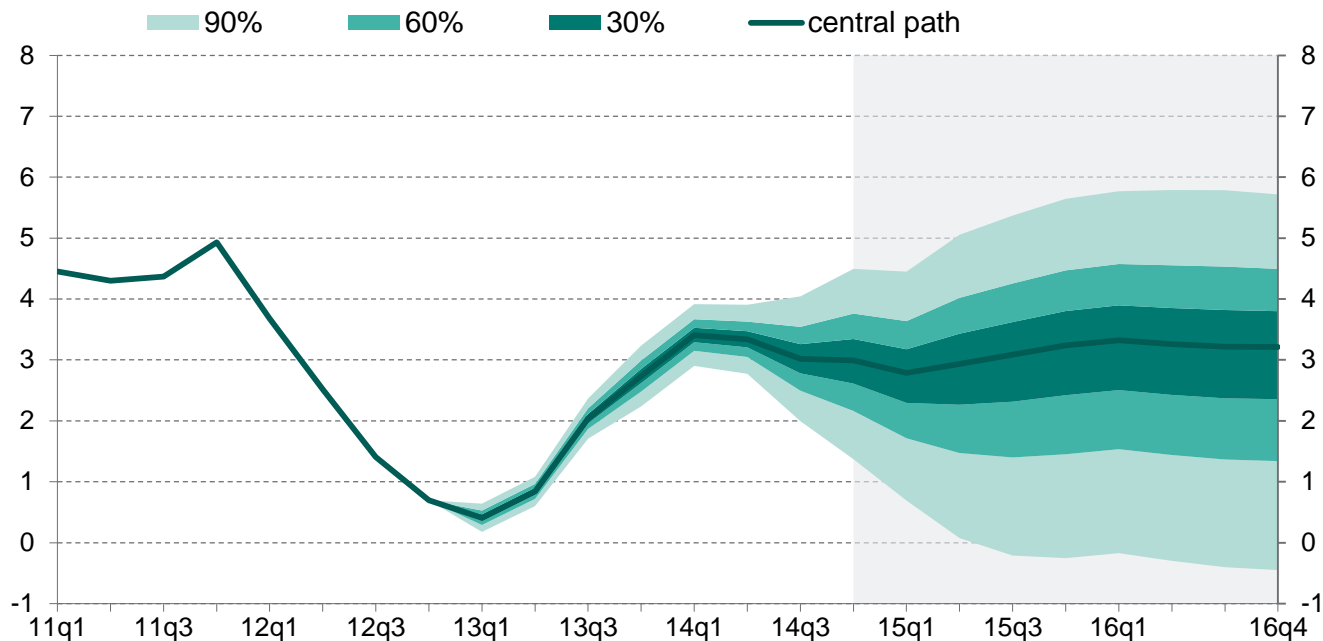
Fan charts

CPI inflation projection – November 2014



	below 1,5%	below 2,5%	below 3,5%	below central path	in the range (1,5-3,5%)
14q4	1.00	1.00	1.00	0.52	0.00
15q1	0.92	1.00	1.00	0.52	0.08
15q2	0.69	0.93	0.99	0.53	0.31
15q3	0.61	0.88	0.98	0.54	0.37
15q4	0.54	0.81	0.96	0.55	0.41
16q1	0.57	0.82	0.95	0.56	0.38
16q2	0.58	0.82	0.95	0.57	0.38
16q3	0.53	0.78	0.94	0.58	0.41
16q4	0.51	0.76	0.93	0.59	0.42

GDP projection – November 2014



We protect the value of money