

NBP

National Bank of Poland

Inflation projection of the National Bank of Poland based on the NECMOD model

Economic Institute



Overview

1. Changes between projection rounds
 - Changes in the projection assumptions
 - March projection compared to November projection
2. Projection
3. Uncertainty
 - Risk factors
 - Fan charts

CHANGES IN
THE SCENARIO

» Changes
in the assumptions

» Current vs. previous
projection

PROJECTION 2013-15

UNCERTAINTY

» Risk factors

» Fan charts

MARCH PROJECTION COMPARED TO NOVEMBER PROJECTION

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

Changes in the projection assumptions

CHANGES IN THE SCENARIO

» Changes in the assumptions

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PROJECTION 2013-15

UNCERTAINTY

» Risk factors

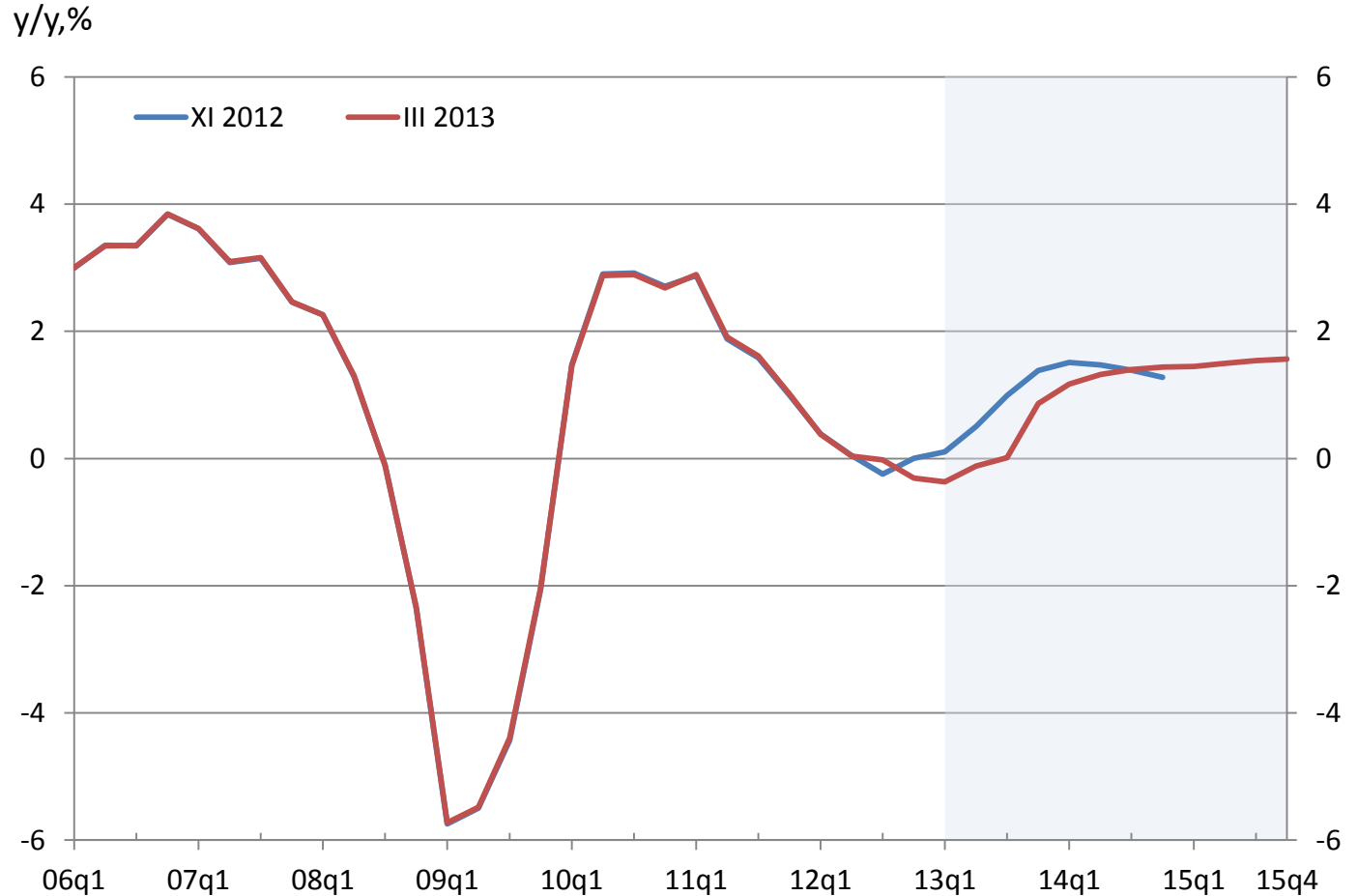
» Fan charts

- Lower forecasts of growth abroad for 2013
- Weaker than expected estimates of GDP growth for 2012 Q3 and for the year 2012
- NBP reference rate lower by 100 basis points
- Weaker than anticipated data on wages in the national economy for 2012 Q3
- Regulatory changes influencing energy prices

The projection does not take into account the MPC decision of decreasing interest rates by 0.50 pp on 6 March 2013.

GDP growth abroad

(lower in 2013, similar in 2014)



CHANGES IN THE SCENARIO

» Changes in the assumptions

» Current vs. previous projection

PROJECTION 2013-15

UNCERTAINTY

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Index of agricultural commodity prices

(lower in 2013, similar in 2014)

CHANGES IN THE SCENARIO

» Changes in the assumptions

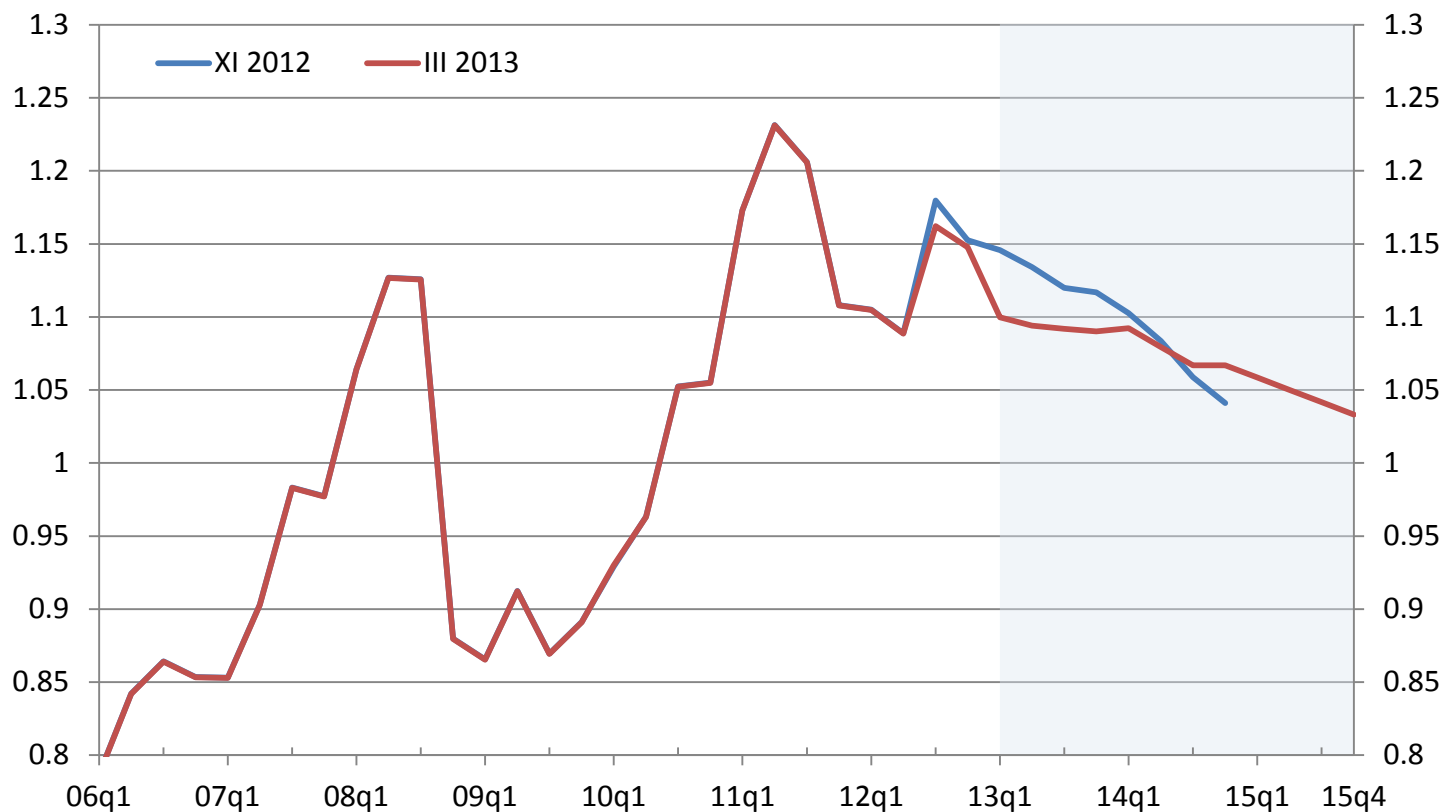
» Current vs. previous projection

PROJECTION 2013-15

UNCERTAINTY

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» Fan charts



*The index of agricultural commodity prices comprises wheat, pork, beef, poultry, fish, sugar, rape seed oil, oranges, bananas and beverages.

Energy commodity price index* (slightly lower)

CHANGES IN THE SCENARIO

» Changes in the assumptions

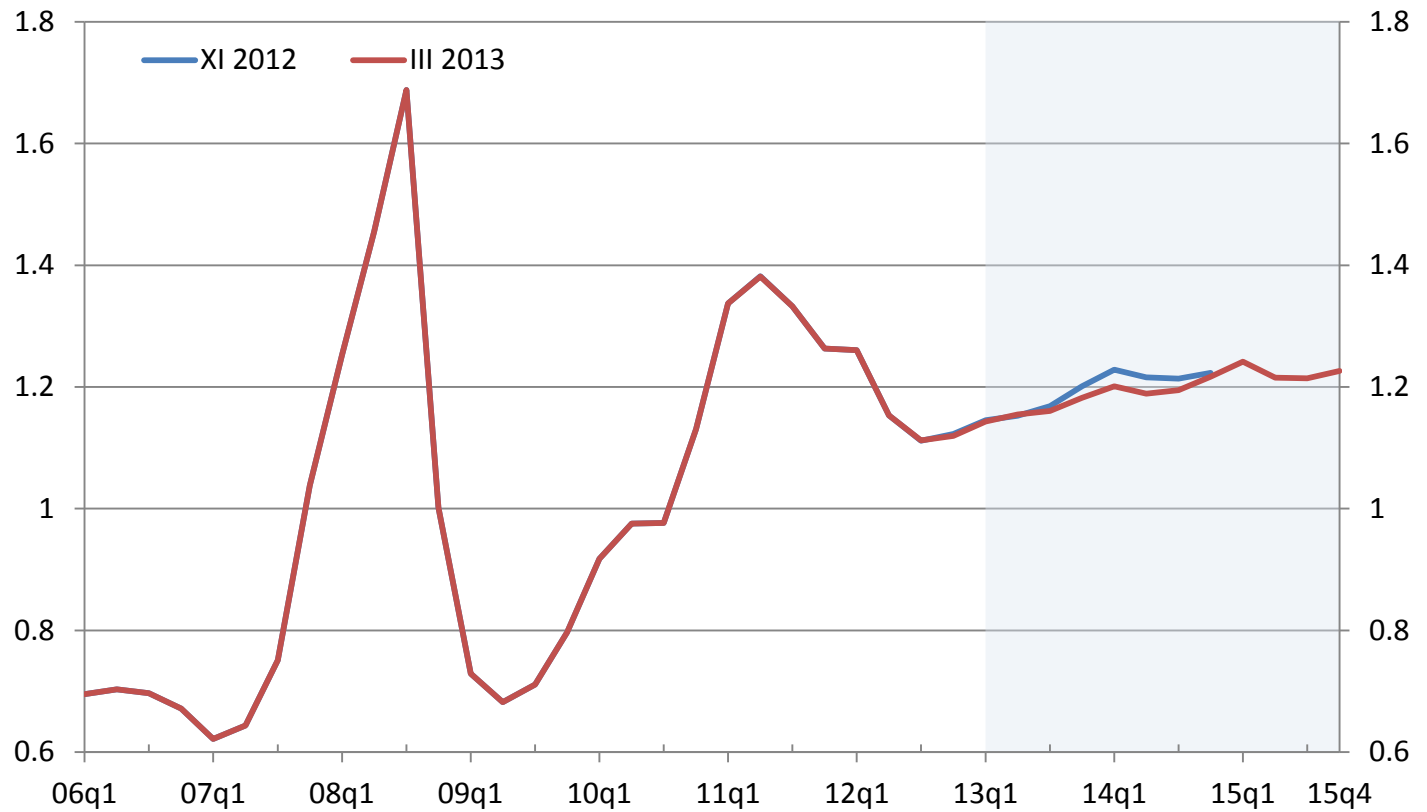
» Current vs. previous projection

PROJECTION 2013-15

UNCERTAINTY

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*Global index of energy commodity prices consists of: hard coal, crude oil, natural gas.

GDP and its components

CHANGES IN
THE SCENARIO» Changes
in the assumptions» Current vs. previous
projection

PROJECTION 2013-15

UNCERTAINTY

» Risk factors

» Fan charts

	12Q3	12Q4
GDP (y/y) (%)	1.4 (1.8)	0.8 (1.4)
Domestic demand (y/y) (%)	-0.7 (-0.3)	-0.7 (-0.1)
Individual consumption (y/y) (%)	0.1 (1.3)	-0.9 (1.5)
Public consumption (y/y) (%)	0.1 (1.9)	0.3 (2.3)
Gross fixed capital formation (y/y) (%)	-1.4 (-2.8)	-0.5 (-3.5)
Exports (y/y) (%)	0.7 (1.2)	1.6 (2.6)
Imports (y/y) (%)	-3.7 (-3.2)	-1.8 (-0.8)
Net exports contribution (pp)	2.1 (2.1)	1.5 (1.5)

* Values from the November projection are given in brackets (seasonally adjusted data). Indicators with values higher than in the November projection are marked green, whereas indicators with lower values are marked red.

Labour market

CHANGES IN
THE SCENARIO» Changes
in the assumptions» Current vs. previous
projection

PROJECTION 2013-15

UNCERTAINTY

» Risk factors

» Fan charts

	12Q3	12Q4
ULC (y/y) (%)	2.3 (3.0)	2.8 (2.8)
Labour productivity (y/y) (%)	1.2 (1.8)	1.2 (1.6)
Gross wages (y/y) (%)	2.8 (3.4)	3.2 (3.5)
Total employment LFS (y/y) (%)	0.2 (0.1)	-0.3 (-0.2)
Unemployment LFS (%)	10.0 (9.7)	10.4 (10.0)
Participation rate (%)	55.9 (56.2)	56.0 (56.3)

* Values from the November projection are given in brackets (seasonally adjusted data). Indicators with values higher than in the November projection are marked green, whereas indicators with lower values are marked red.

Inflation

CHANGES IN
THE SCENARIO» Changes
in the assumptions» Current vs. previous
projection

PROJECTION 2013-15

UNCERTAINTY

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» Fan charts

	12Q3	12Q4
CPI inflation (y/y) (%)	3.8 (3.9)	2.9 (3.1)
Core inflation (y/y) (%)	2.1 (2.1)	1.7 (1.7)
Food price inflation (y/y) (%)	5.2 (5.1)	4.2 (4.4)
Energy price inflation (y/y) (%)	8.0 (8.1)	5.0 (6.2)

* Values from the November projection are given in brackets (seasonally adjusted data). Indicators with values higher than in the November projection are marked green, whereas indicators with lower values are marked red.

3 month WIBOR

(lower by 100 bp)

CHANGES IN THE SCENARIO

» Changes in the assumptions

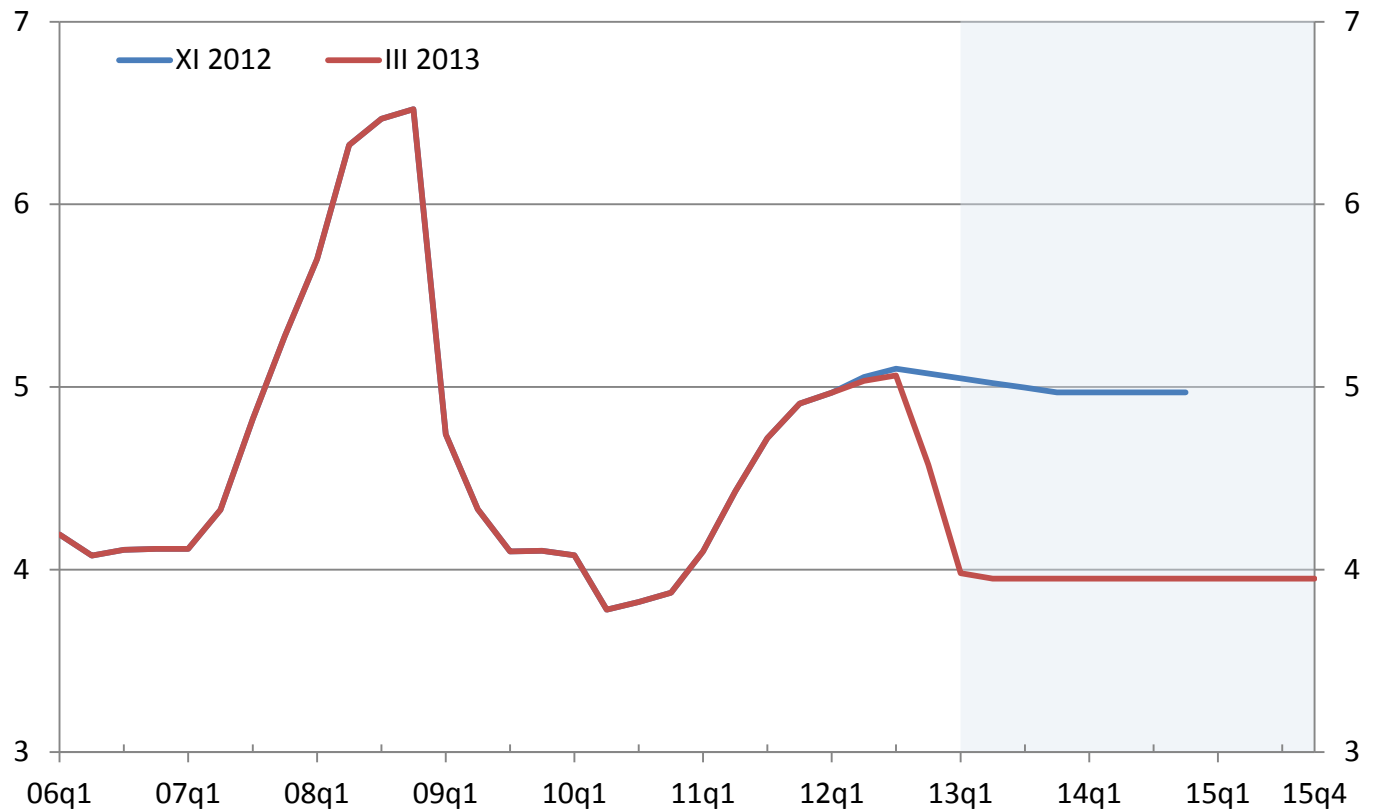
» Current vs. previous projection

PROJECTION 2013-15

UNCERTAINTY

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Interest rate abroad (similar)

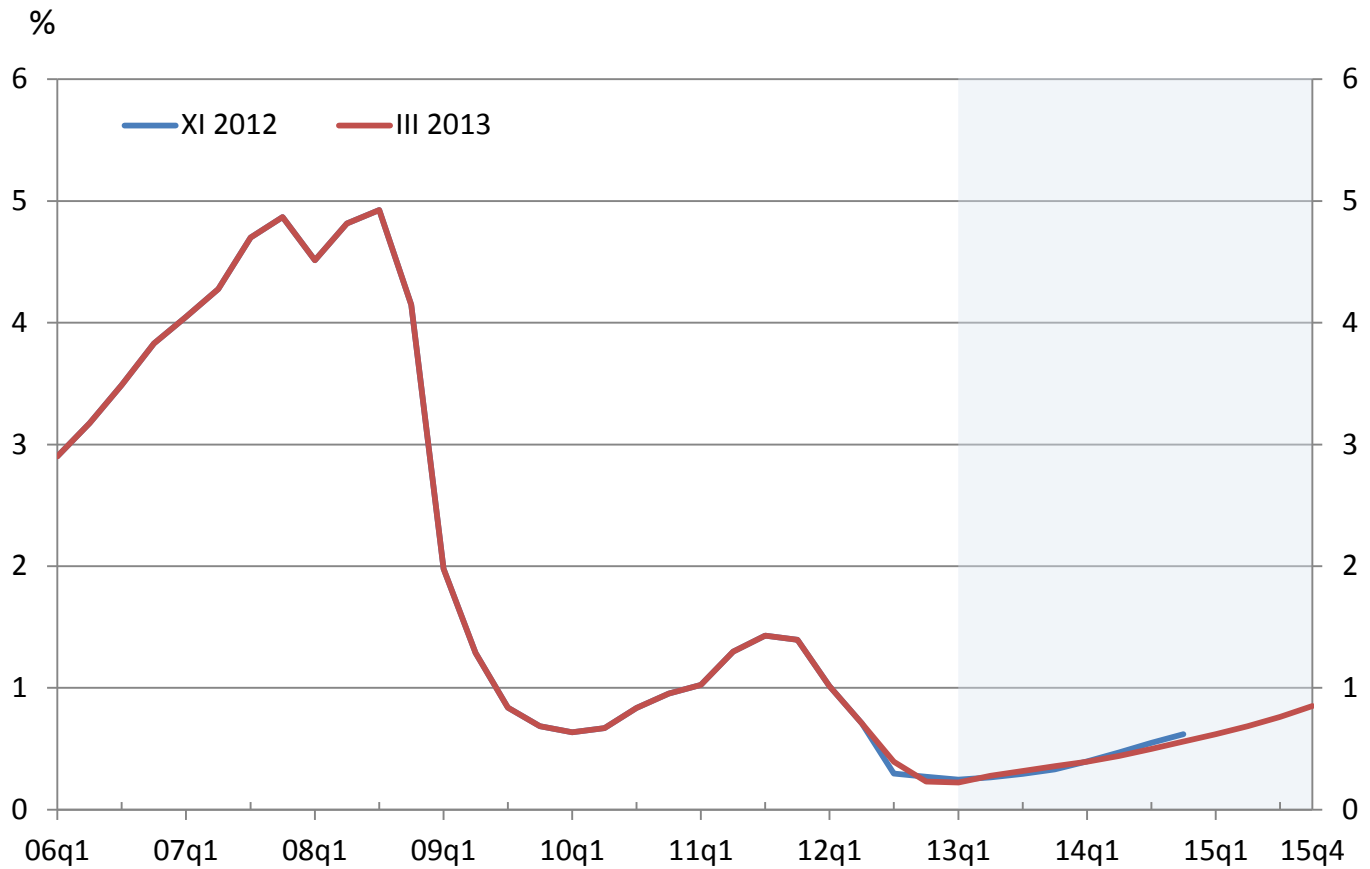
CHANGES IN THE SCENARIO

- » Changes in the assumptions
- » Current vs. previous projection

PROJECTION 2013-15

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Absorption of EU transfers aimed at public sector investments (mln euro)

CHANGES IN THE SCENARIO

» Changes
in the assumptions

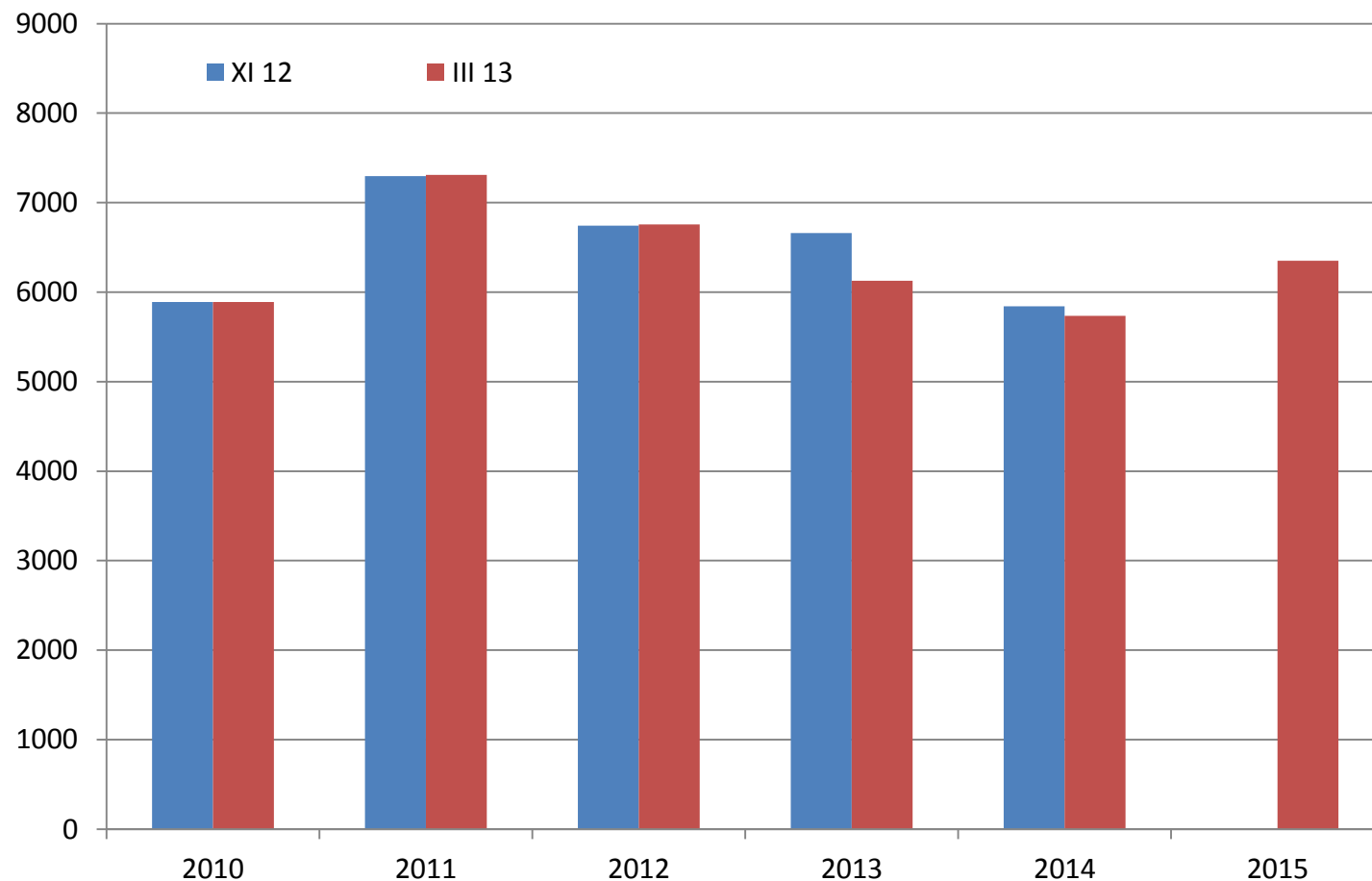
» Current vs. previous
projection

PROJECTION 2013-15

UNCERTAINTY

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March projection compared to November projection: CPI inflation

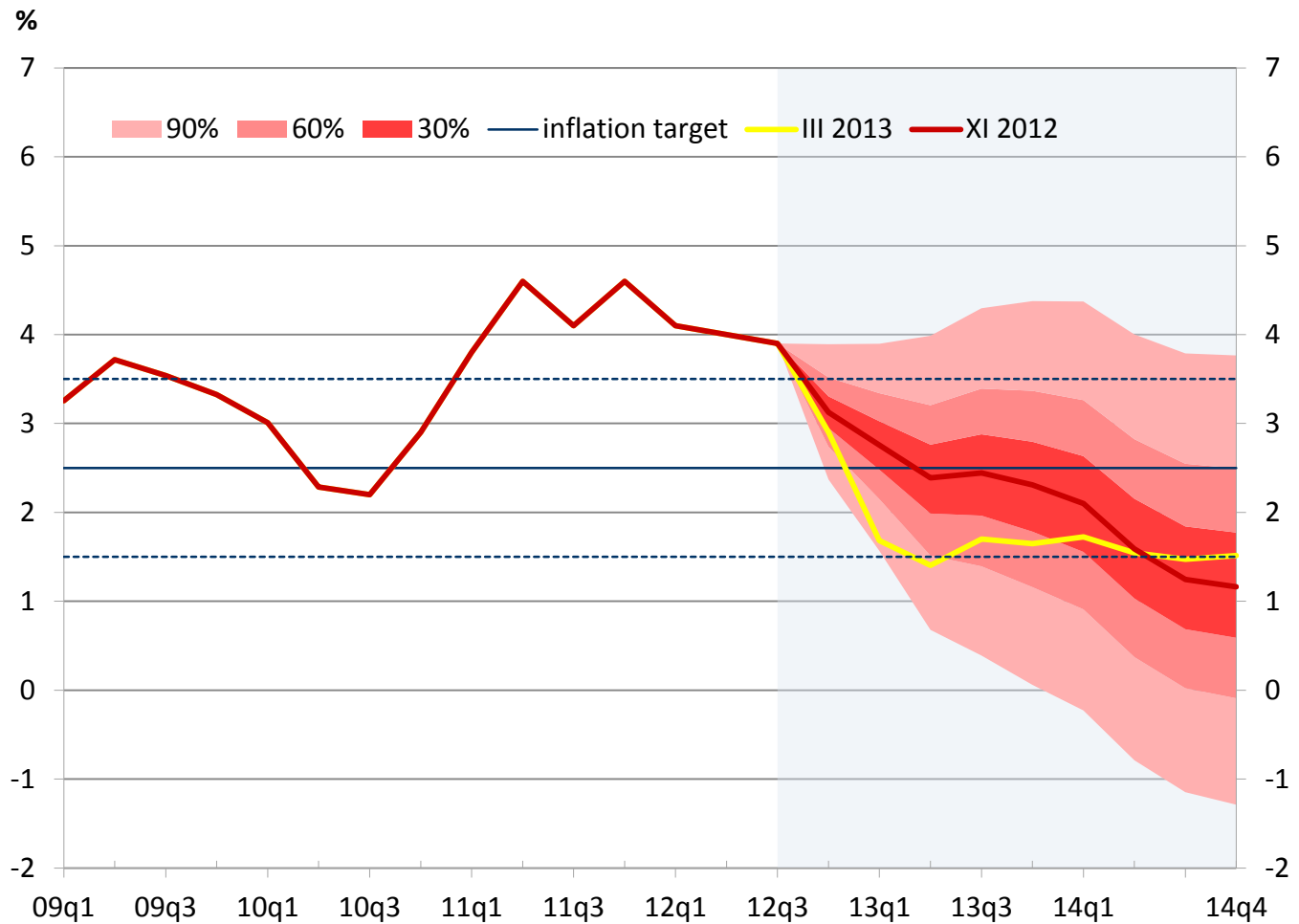
CHANGES IN THE SCENARIO

- » Changes in the assumptions
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March projection compared to November projection: GDP

CHANGES IN THE SCENARIO

» Changes in the assumptions

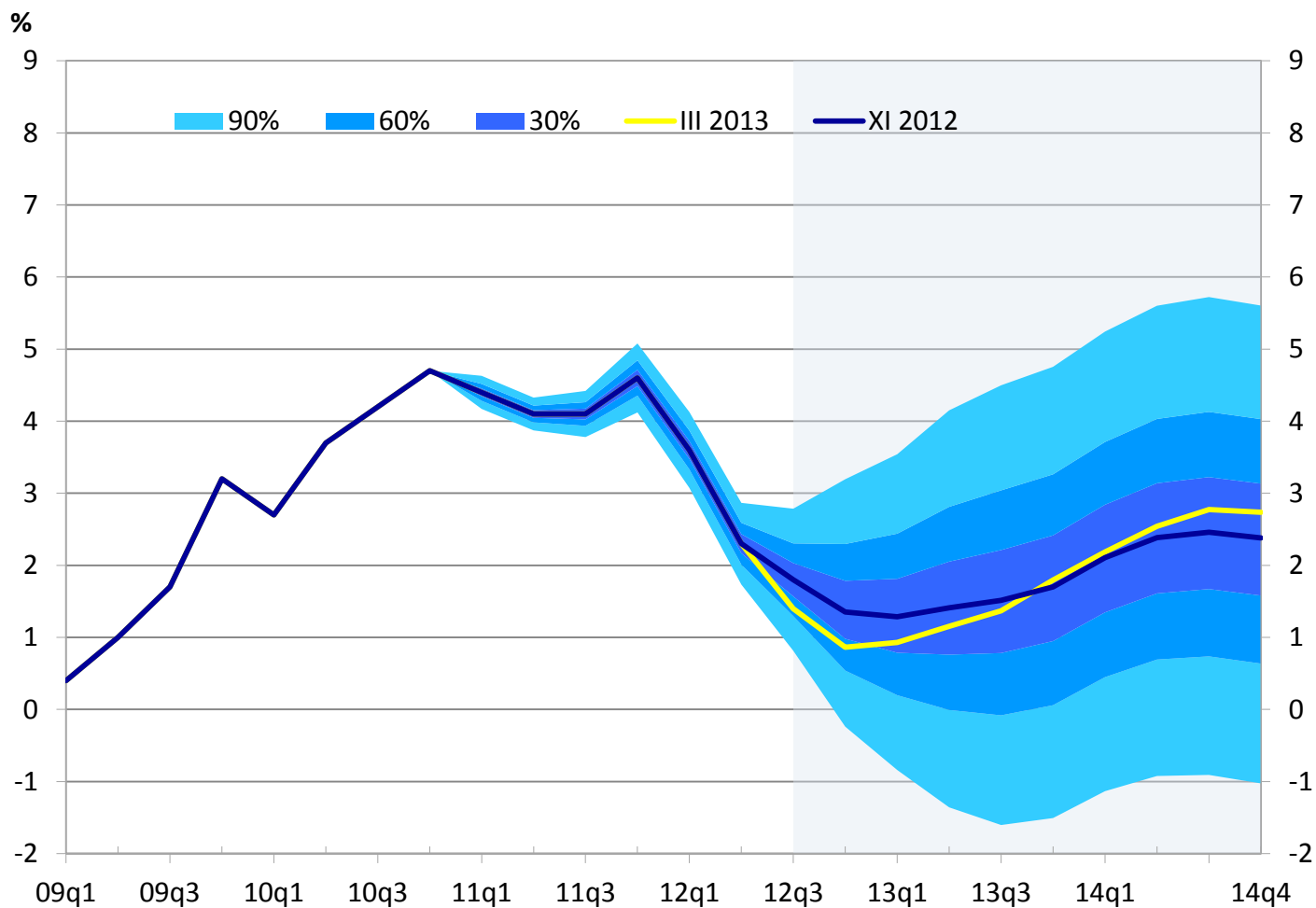
» Current vs. previous projection

PROJECTION 2013-15

UNCERTAINTY

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Projection scenario

CHANGES IN THE SCENARIO

» Changes in the assumptions

» Current vs. previous projection

PROJECTION 2013-15

UNCERTAINTY

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Short-term horizon:

- Lower economic growth in domestic economy
- Unfavourable economic conditions abroad, in particular, within euro area
- Lower households' consumption caused by worsening situation on labour market along with low savings rate
- Tightening of fiscal policy and decline in public investment financed with EU structural funds
- Zloty exchange rate relatively stable over the projection horizon

Projection scenario

CHANGES IN THE SCENARIO

» Changes in the assumptions

» Current vs. previous projection

PROJECTION 2013-15

UNCERTAINTY

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» Fan charts

Medium- and long-term horizon:

- GDP growth accelerates (yet it will remain below its potential level until 2014 Q2)
- Moderate recovery in economic conditions abroad in 2014-2015
- Rebound in private consumption and investment (however growth in domestic demand will be weaker in comparison to 2010-2011 recovery)
- End of fiscal policy tightening
- Inflow of funds from the new EU financial perspective 2014-2020
- Stable Zloty exchange rate

Projection scenario

CHANGES IN THE SCENARIO

» Changes in the assumptions

» Current vs. previous projection

PROJECTION 2013-15

UNCERTAINTY

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Changes in projection scenario:

- Lower forecasts of growth abroad for 2013
- Faster impact of the downturn abroad on domestic economy
- Lower interest rates
- Regulatory changes influencing energy prices

CHANGES IN
THE SCENARIO

» Changes
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» Current vs. previous
projection

PROJECTION 2013-15

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PROJECTION

CHANGES IN
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UNCERTAINTY

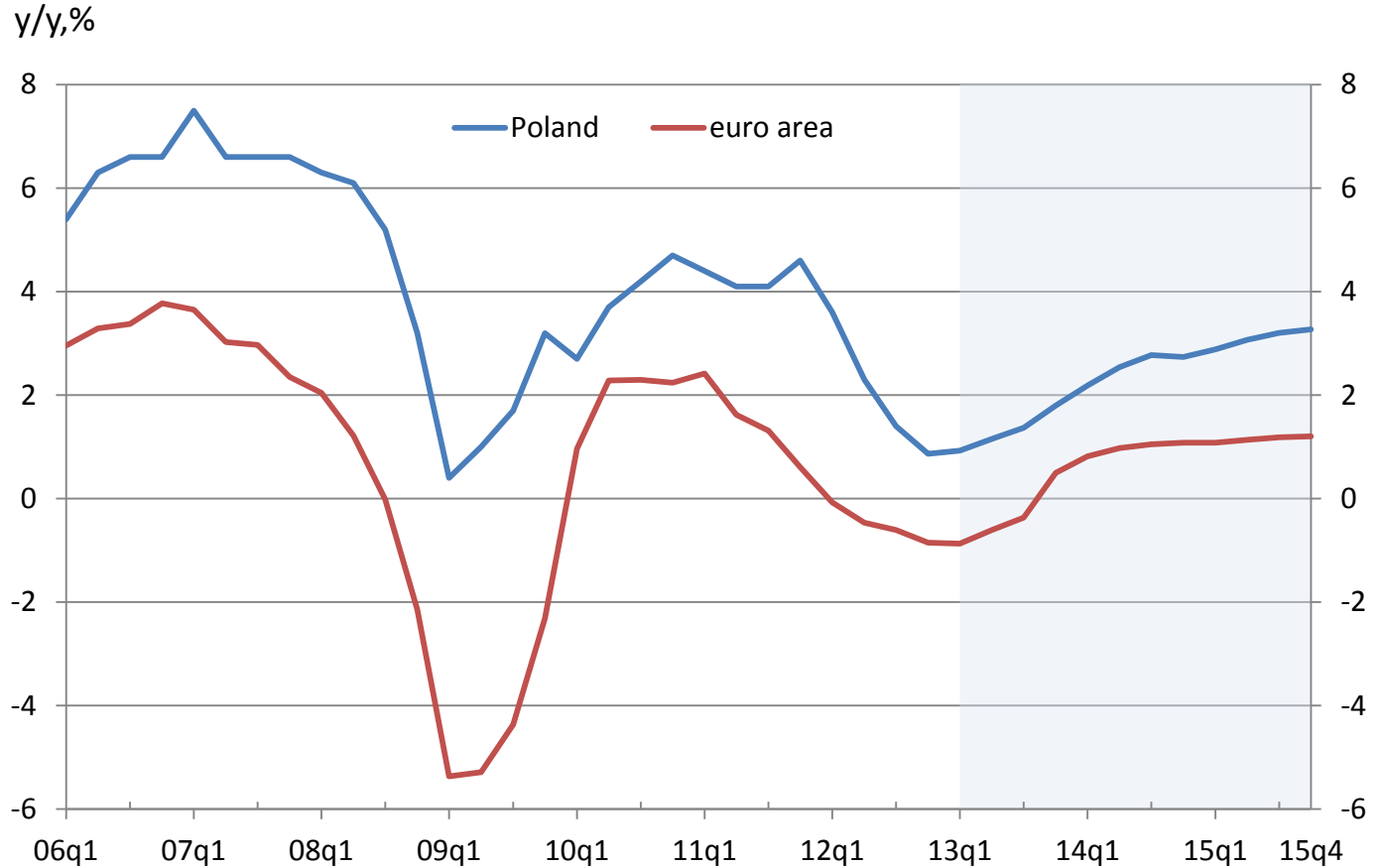
» Risk factors

» Fan charts

Projection for 2013-2015

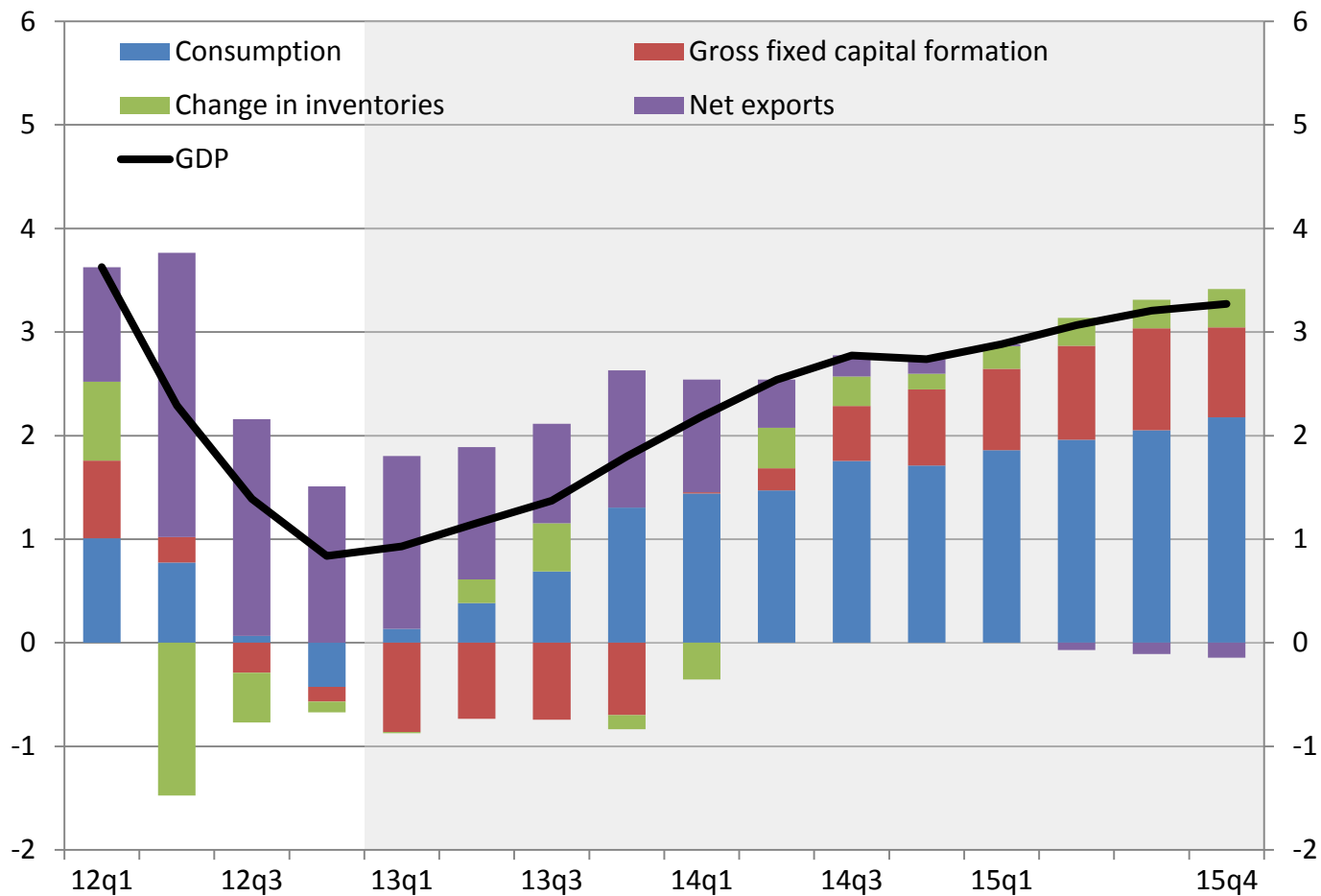
- GDP and its components
- Labour market
- Exchange rate
- Inflation

GDP: Poland vs euro area



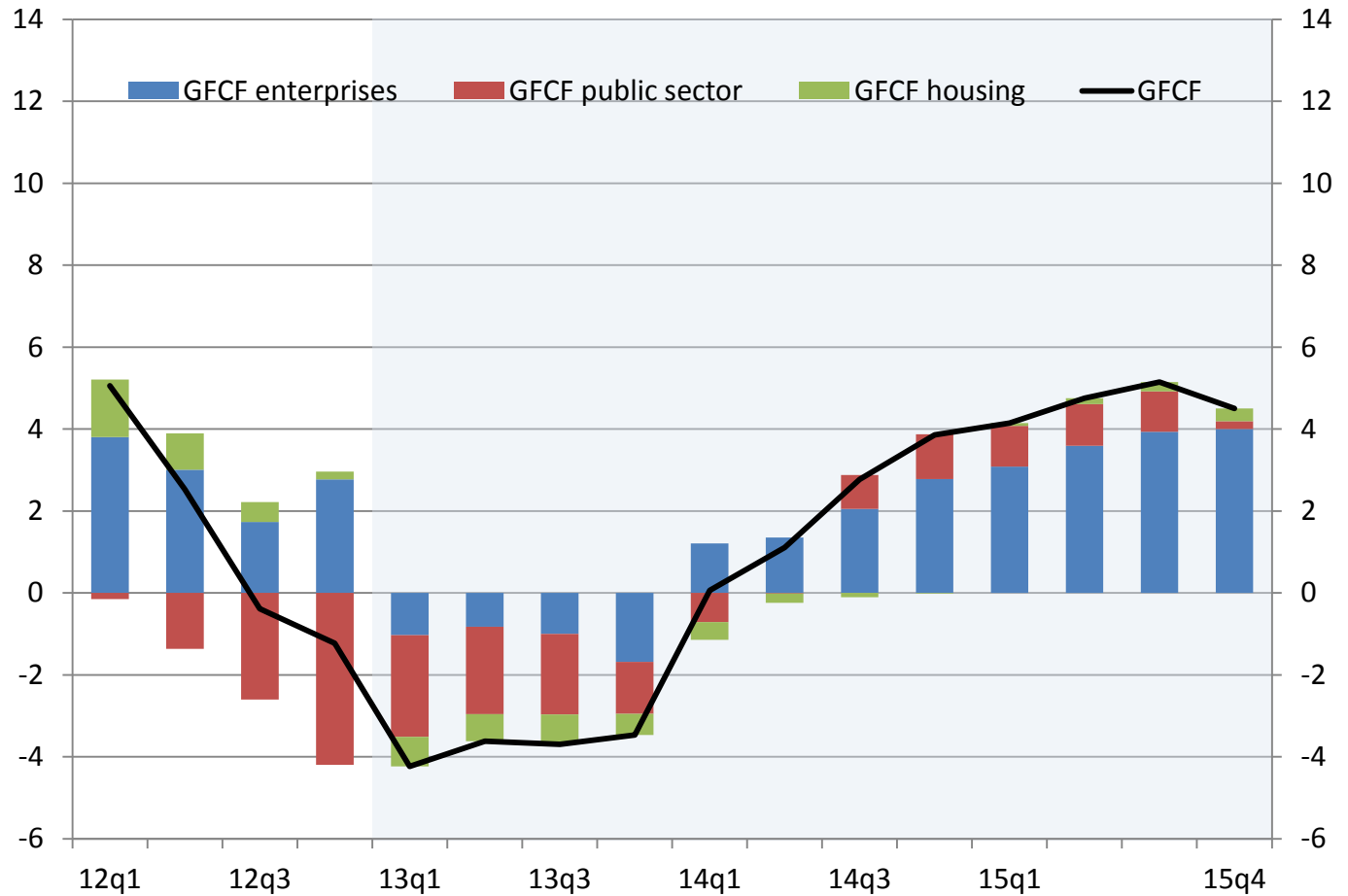
GDP: decomposition

- CHANGES IN THE SCENARIO
- » Changes in the assumptions
- » Current vs. previous projection
- PROJECTION 2013-15**
- UNCERTAINTY
- » Risk factors
- » Fan charts



Gross fixed capital formation: decomposition

- CHANGES IN THE SCENARIO
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- PROJECTION 2013-15**
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- » Fan charts



Gross fixed capital formation

(higher over medium-term horizon)

CHANGES IN THE SCENARIO

» Changes in the assumptions

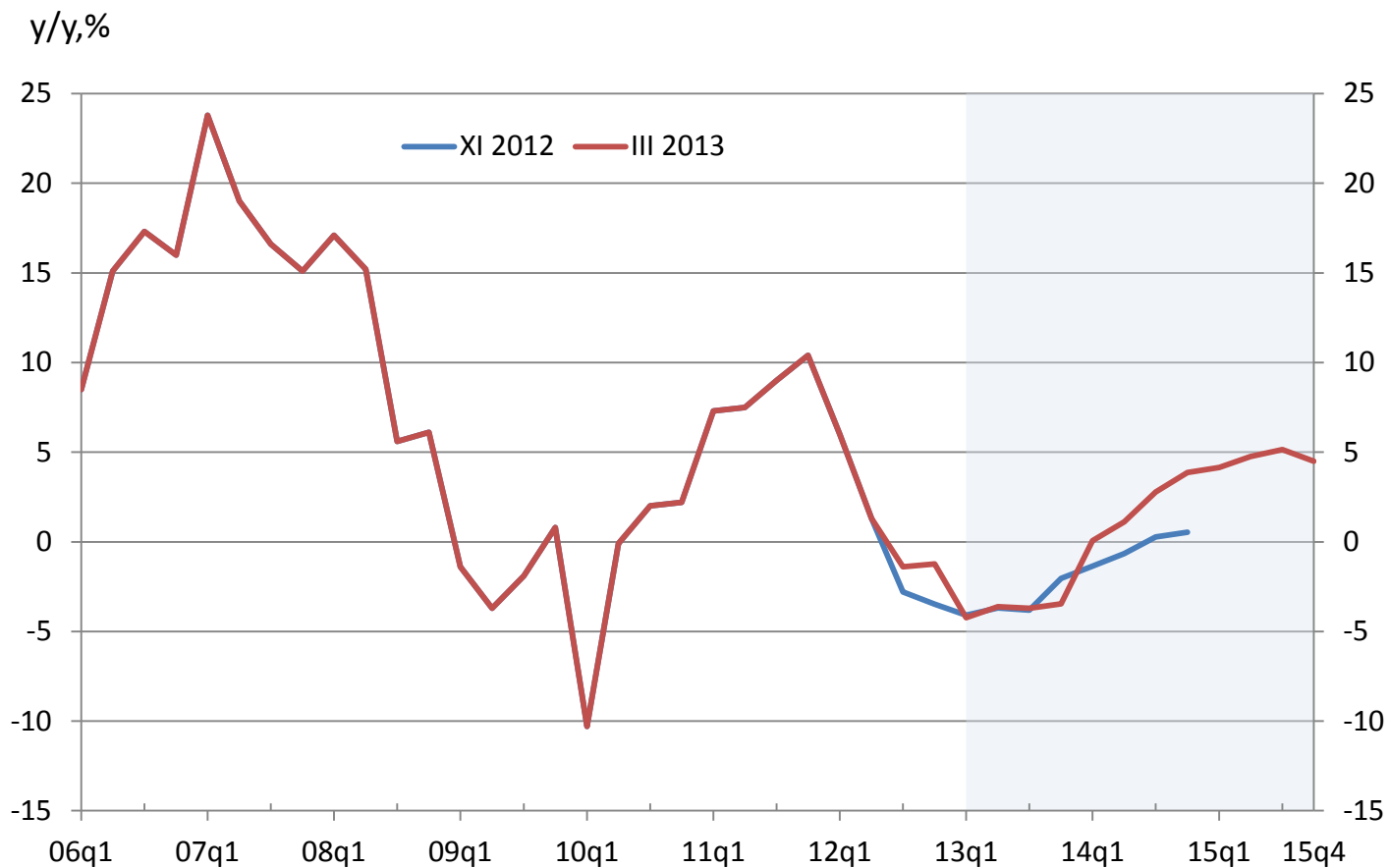
» Current vs. previous projection

PROJECTION 2013-15

UNCERTAINTY

» Risk factors

» Fan charts



Private consumption

(lower over short-term horizon)

CHANGES IN THE SCENARIO

» Changes in the assumptions

» Current vs. previous projection

PROJECTION 2013-15

UNCERTAINTY

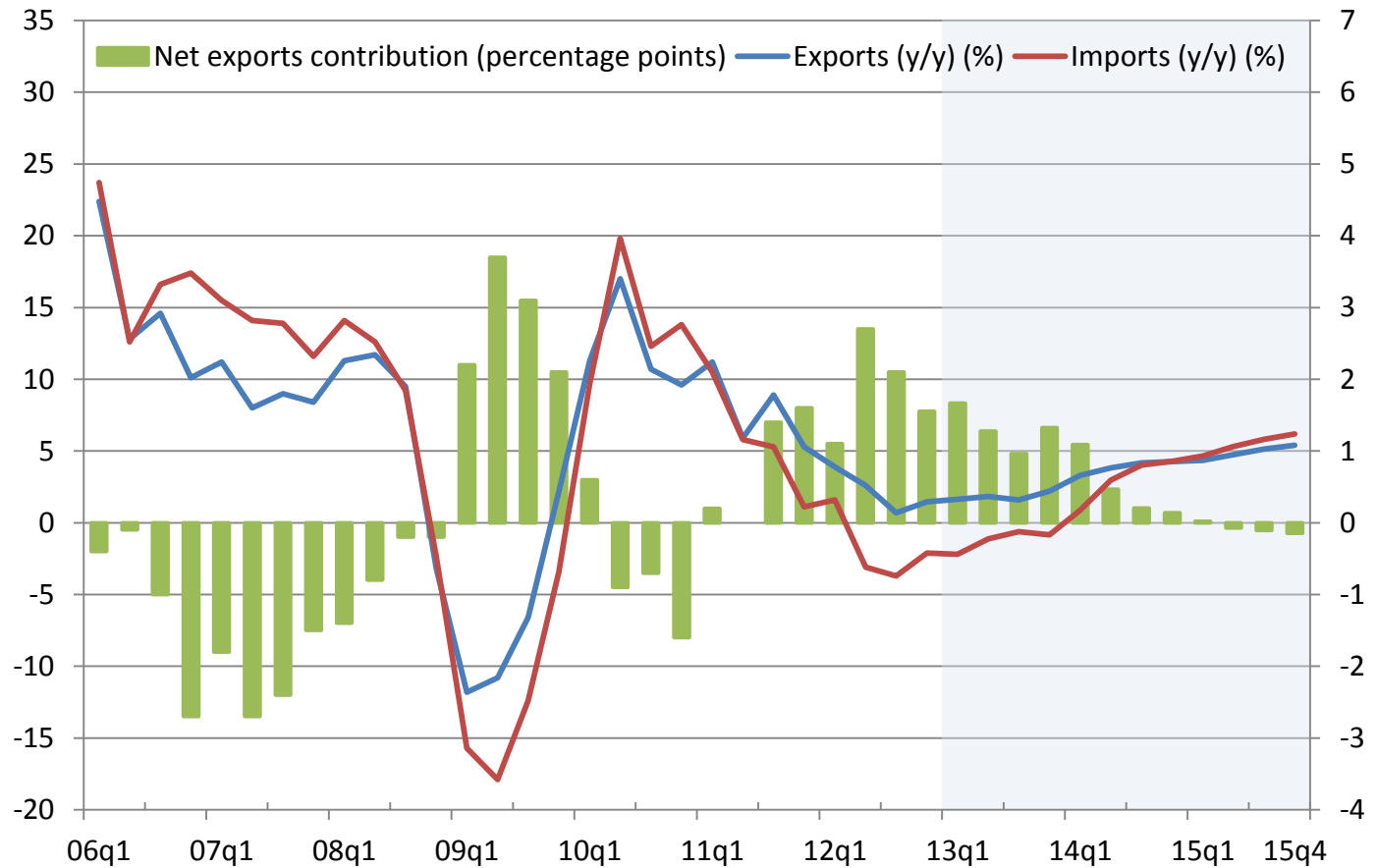
» Risk factors

» Fan charts



Trade with other countries

- CHANGES IN THE SCENARIO
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Net exports contribution

(lower over medium-term horizon)

CHANGES IN THE SCENARIO

» Changes in the assumptions

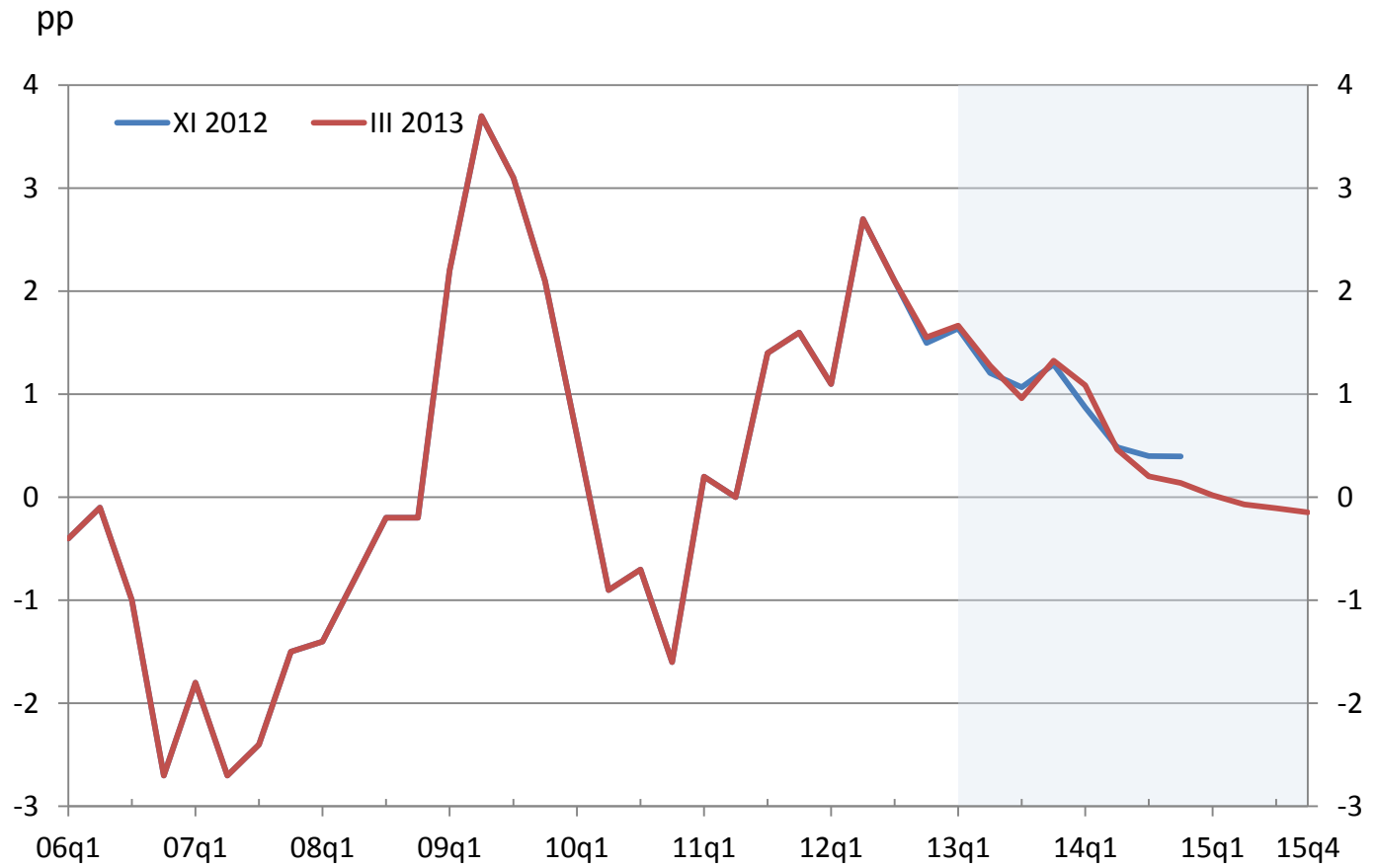
» Current vs. previous projection

PROJECTION 2013-15

UNCERTAINTY

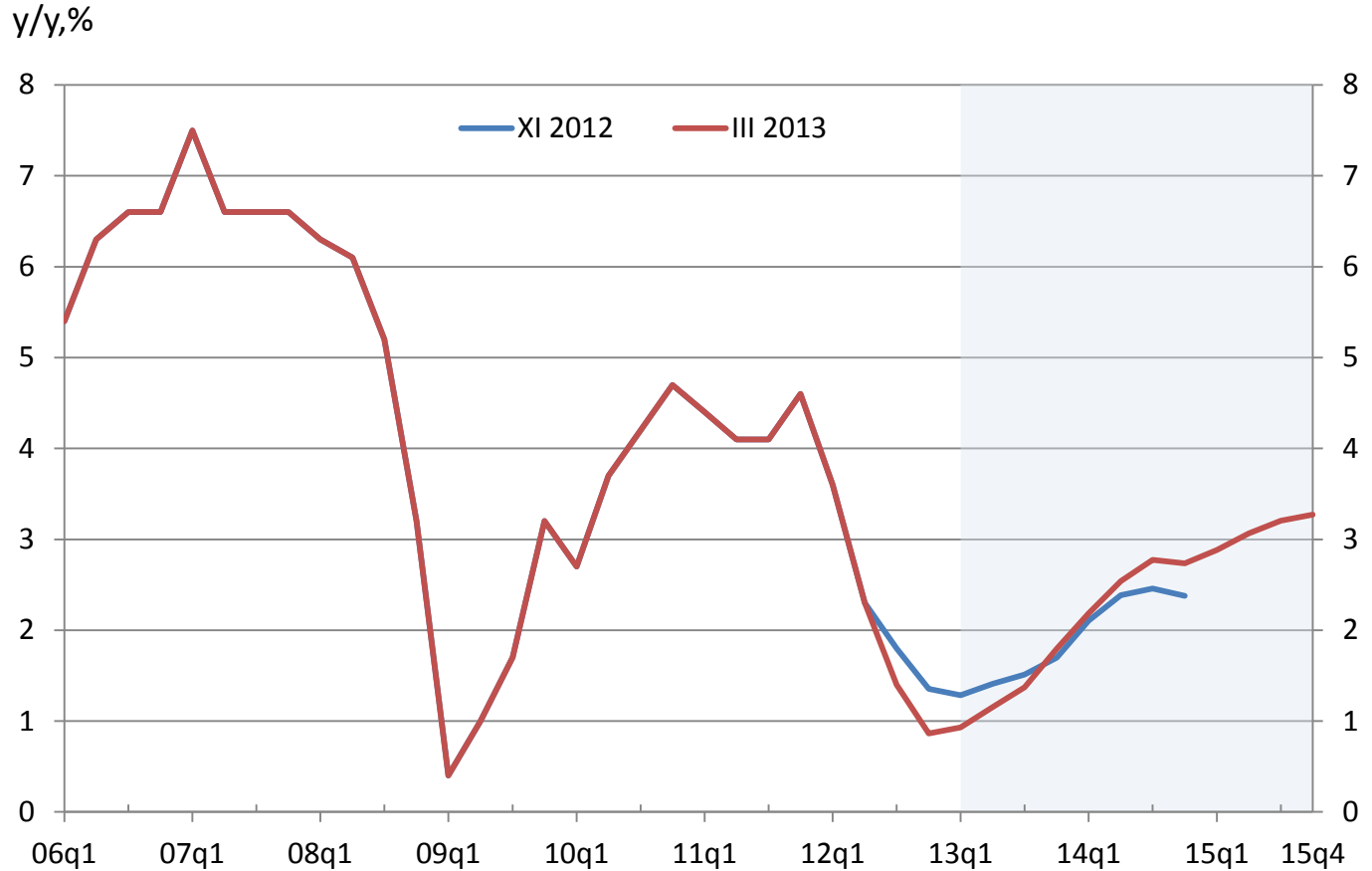
» Risk factors

» Fan charts



GDP

(lower over short-term and higher over medium-term horizon)



CHANGES IN THE SCENARIO

» Changes in the assumptions

» Current vs. previous projection

PROJECTION 2013-15

UNCERTAINTY

» Risk factors

» Fan charts

Decomposition of deviations between March and November projections: GDP

CHANGES IN THE SCENARIO

» Changes in the assumptions

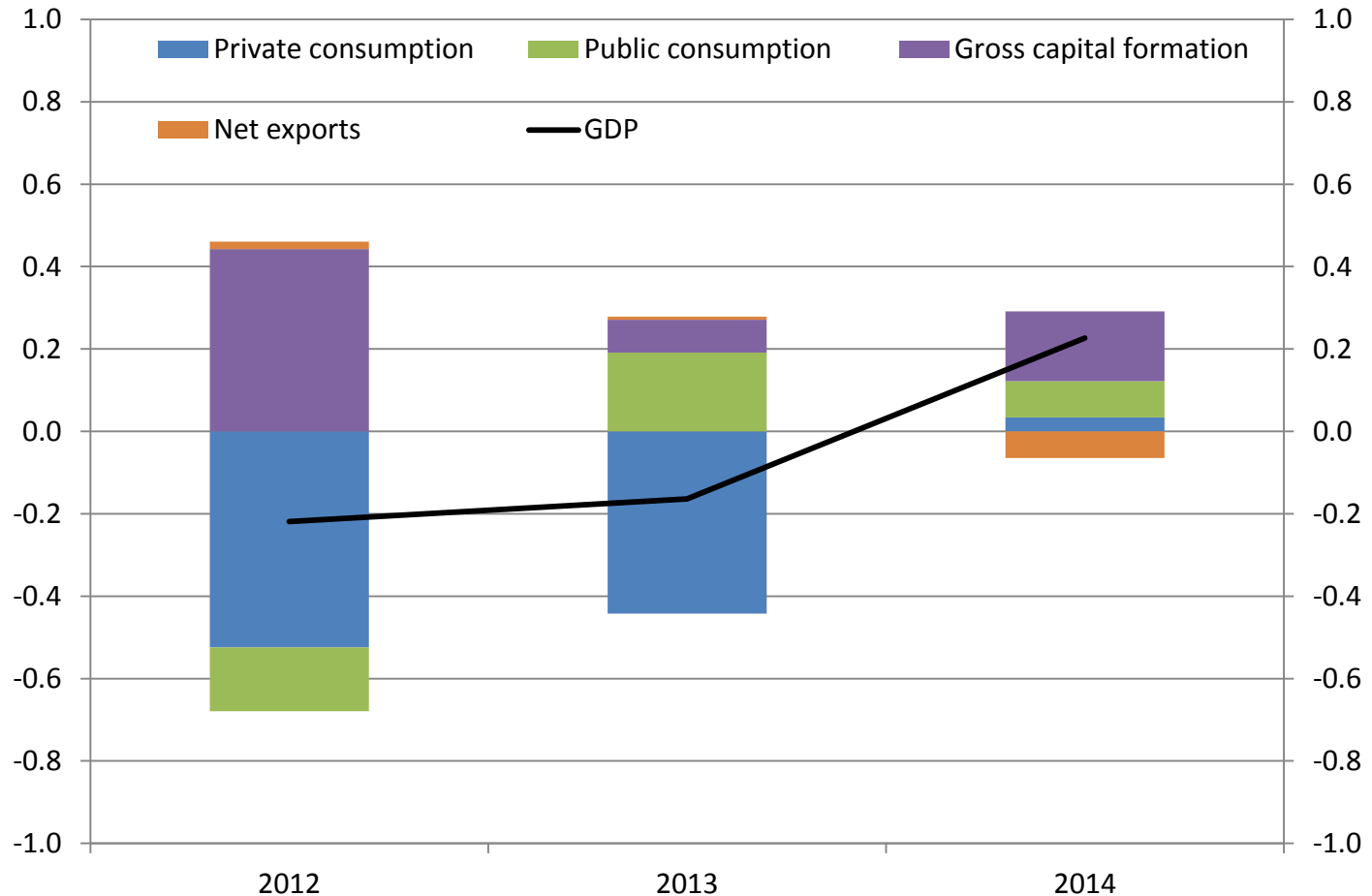
» Current vs. previous projection

PROJECTION 2013-15

UNCERTAINTY

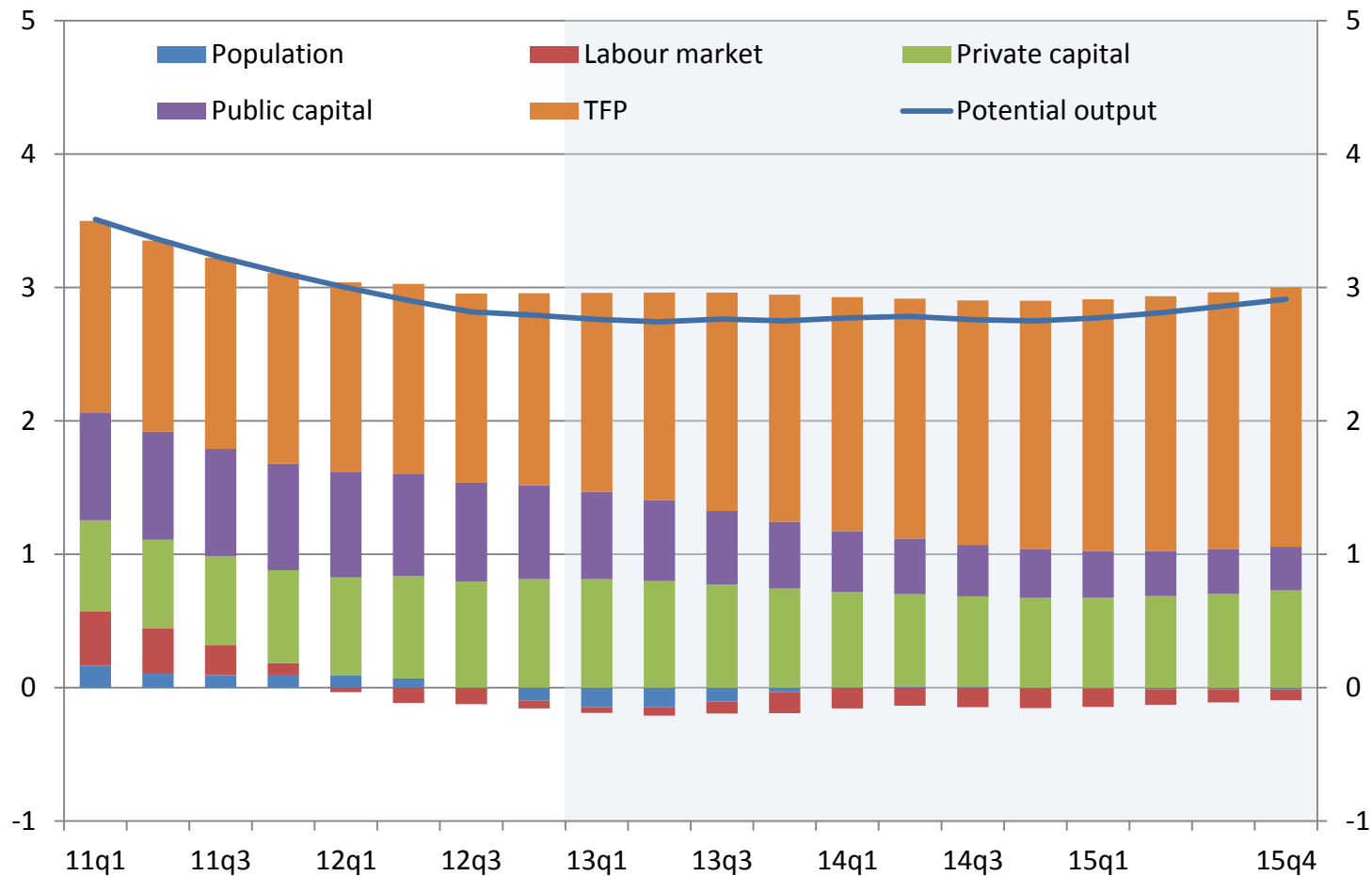
» Risk factors

» Fan charts

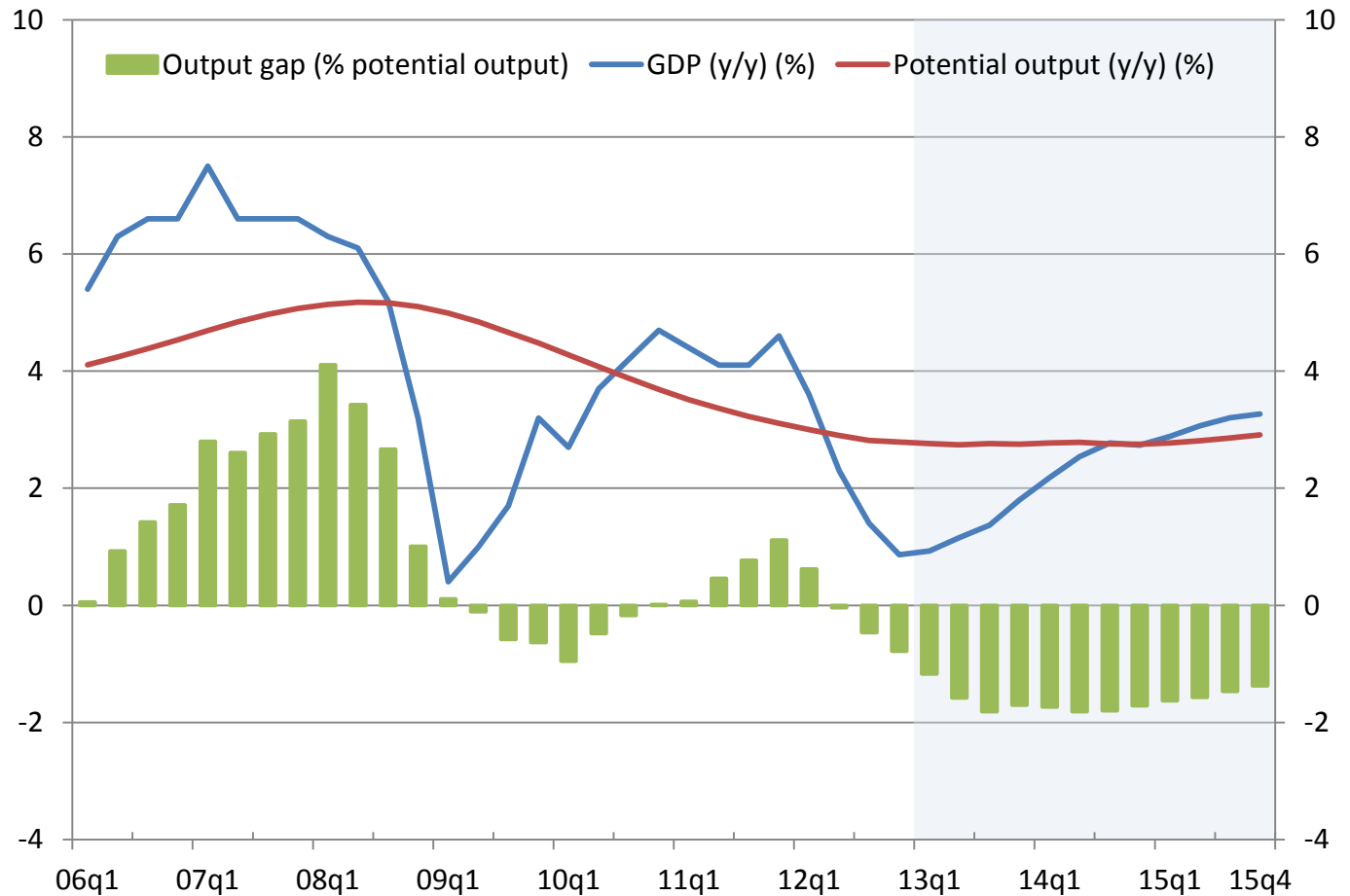


Potential output

- CHANGES IN THE SCENARIO
- » Changes in the assumptions
- » Current vs. previous projection
- PROJECTION 2013-15**
- UNCERTAINTY
- » Risk factors
- » Fan charts



Output gap



CHANGES IN THE SCENARIO

» Changes in the assumptions

» Current vs. previous projection

PROJECTION 2013-15

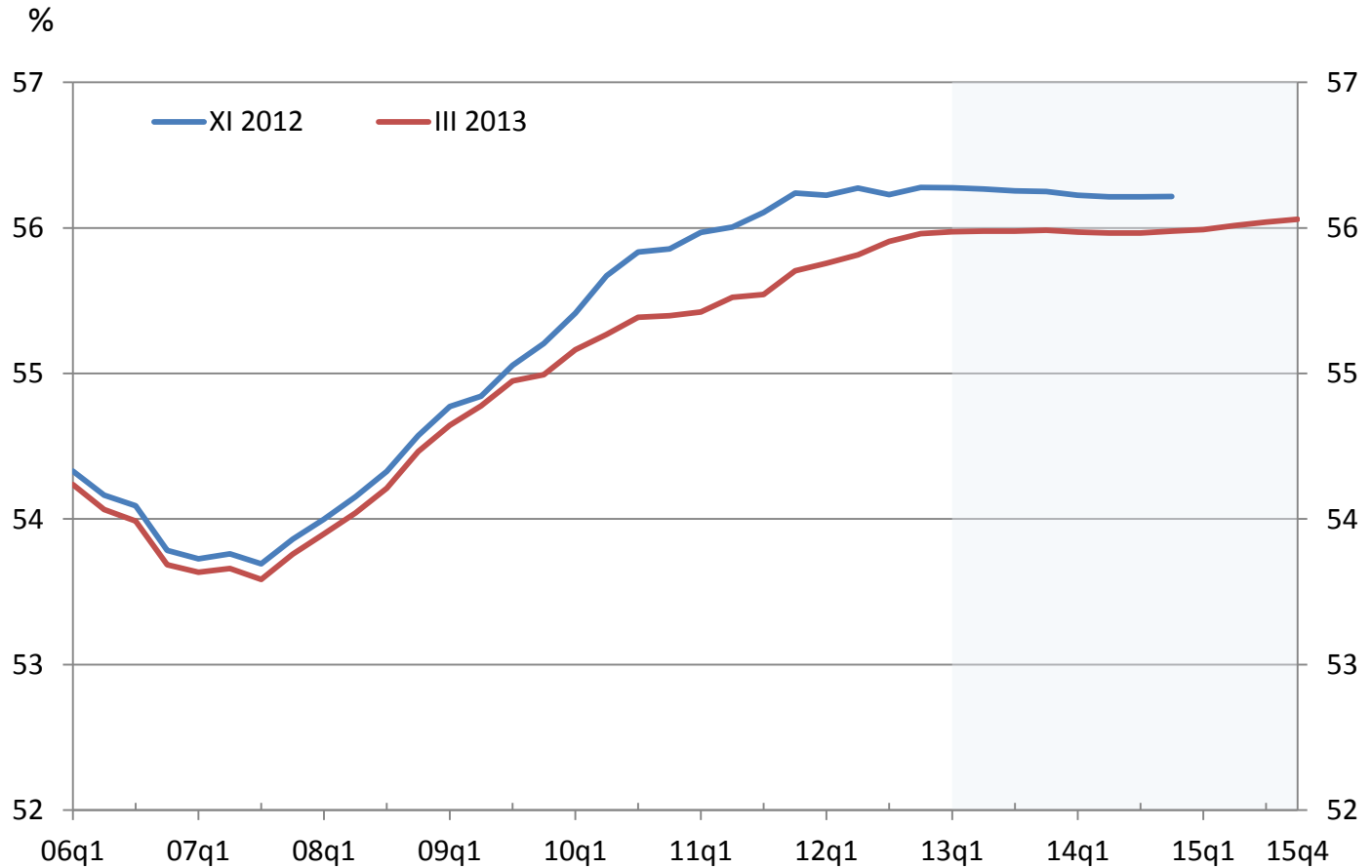
UNCERTAINTY

» Risk factors

» Fan charts

Participation rate (lower*)

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* Differences in historical data are caused by LFS data revision.

Labour Market

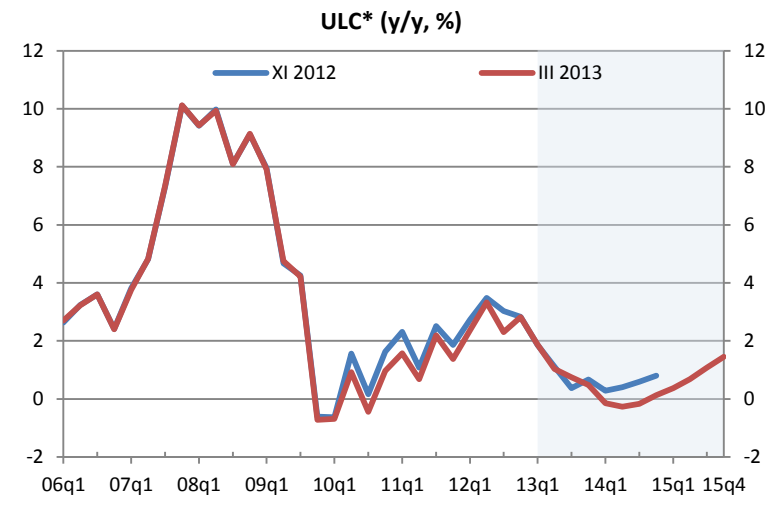
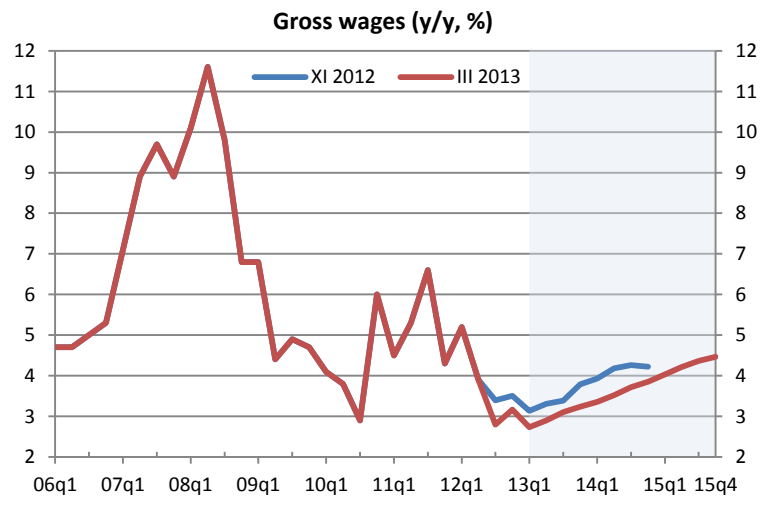
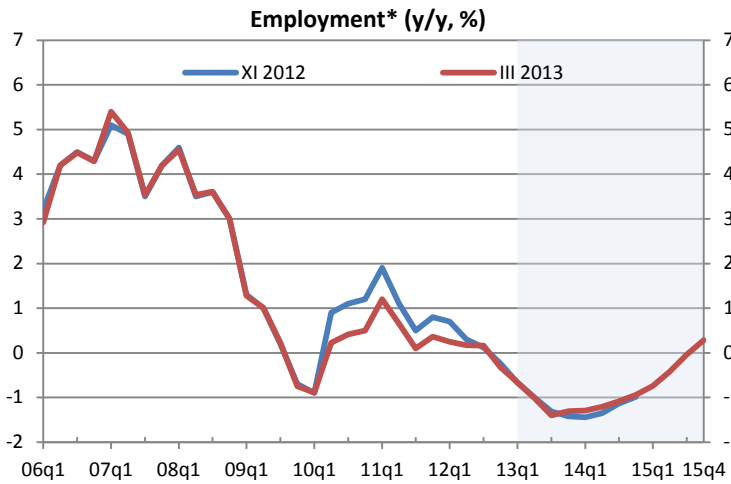
CHANGES IN THE SCENARIO

- » Changes in the assumptions
- » Current vs. previous projection

PROJECTION 2013-15

UNCERTAINTY

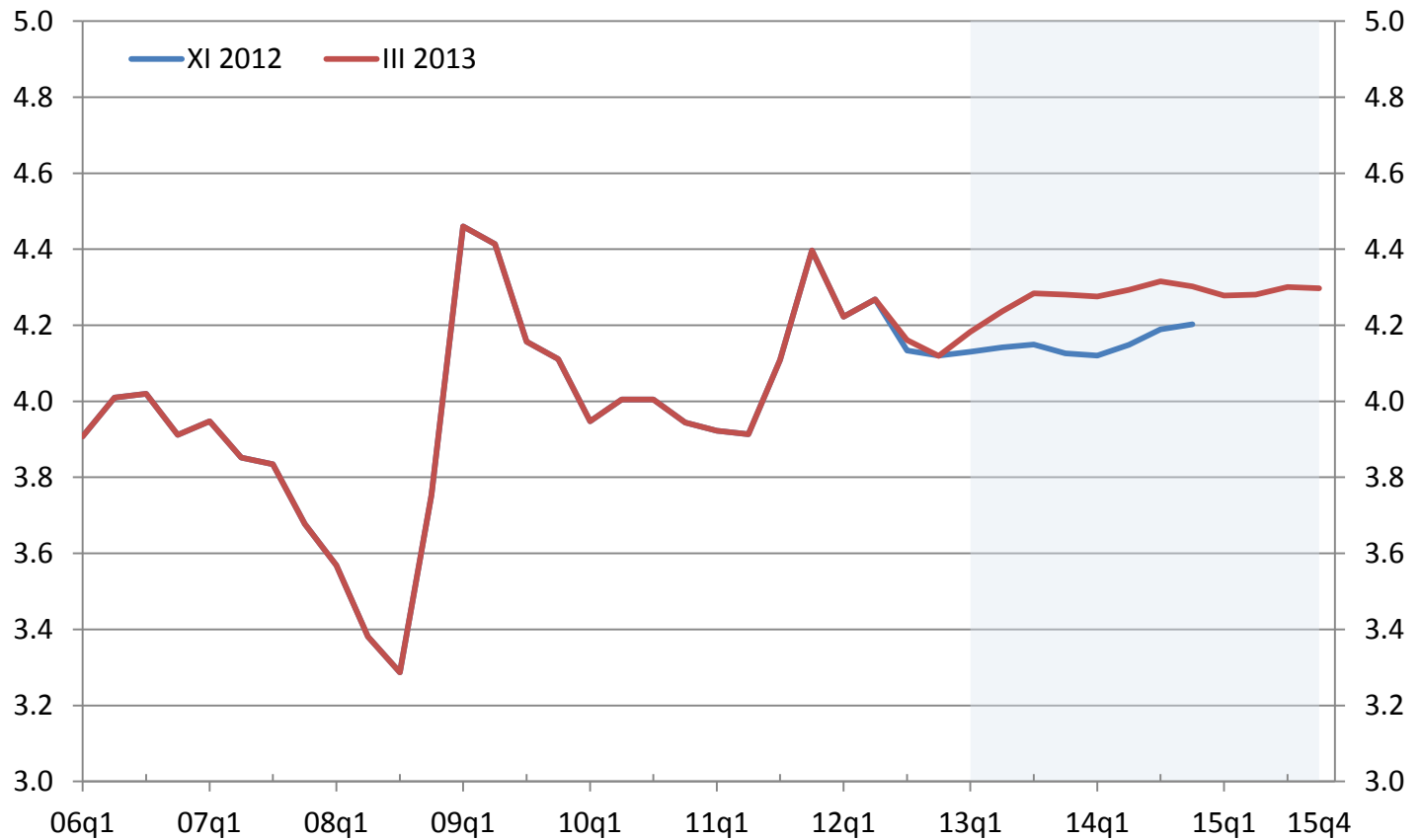
- » Risk factors
- » Fan charts



* Differences in historical data are caused by LFS data revision.

Exchange rate (weaker)

Nominal effective exchange rate (NEER)



CHANGES IN THE SCENARIO

» Changes in the assumptions

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PROJECTION 2013-15

UNCERTAINTY

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Import prices

(excluding oil and natural gas)

CHANGES IN THE SCENARIO

» Changes in the assumptions

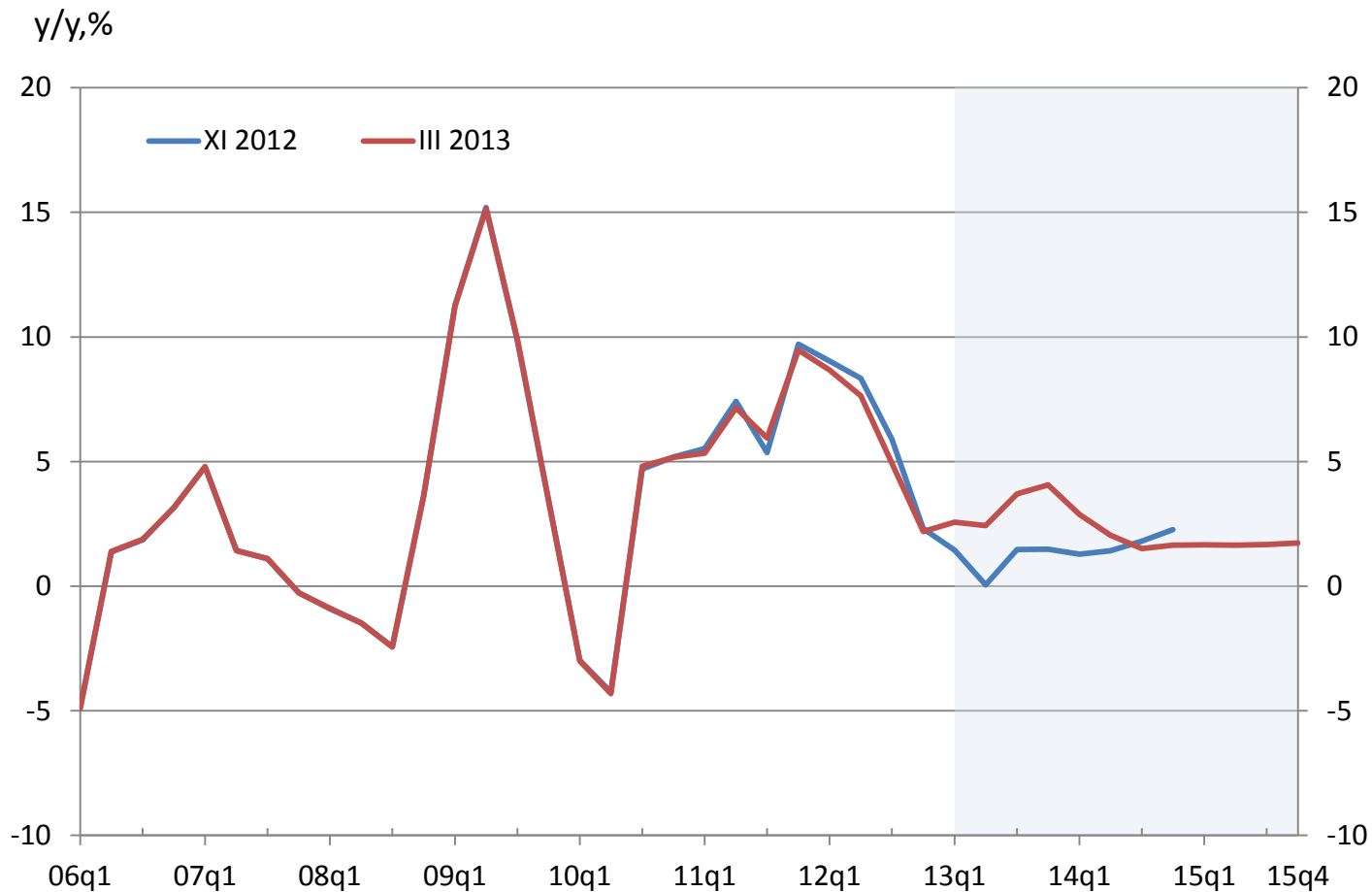
» Current vs. previous projection

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UNCERTAINTY

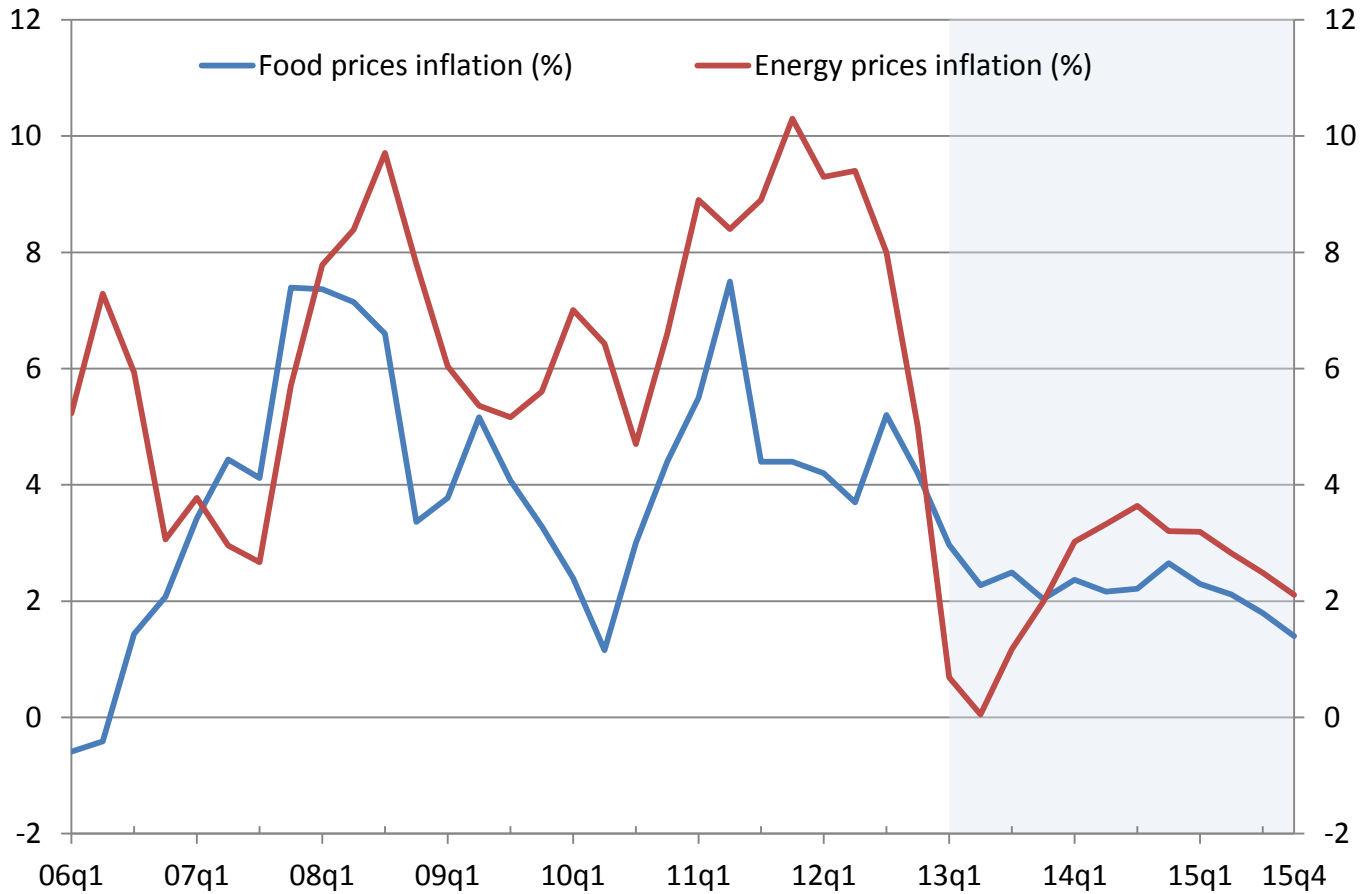
» Risk factors

» Fan charts



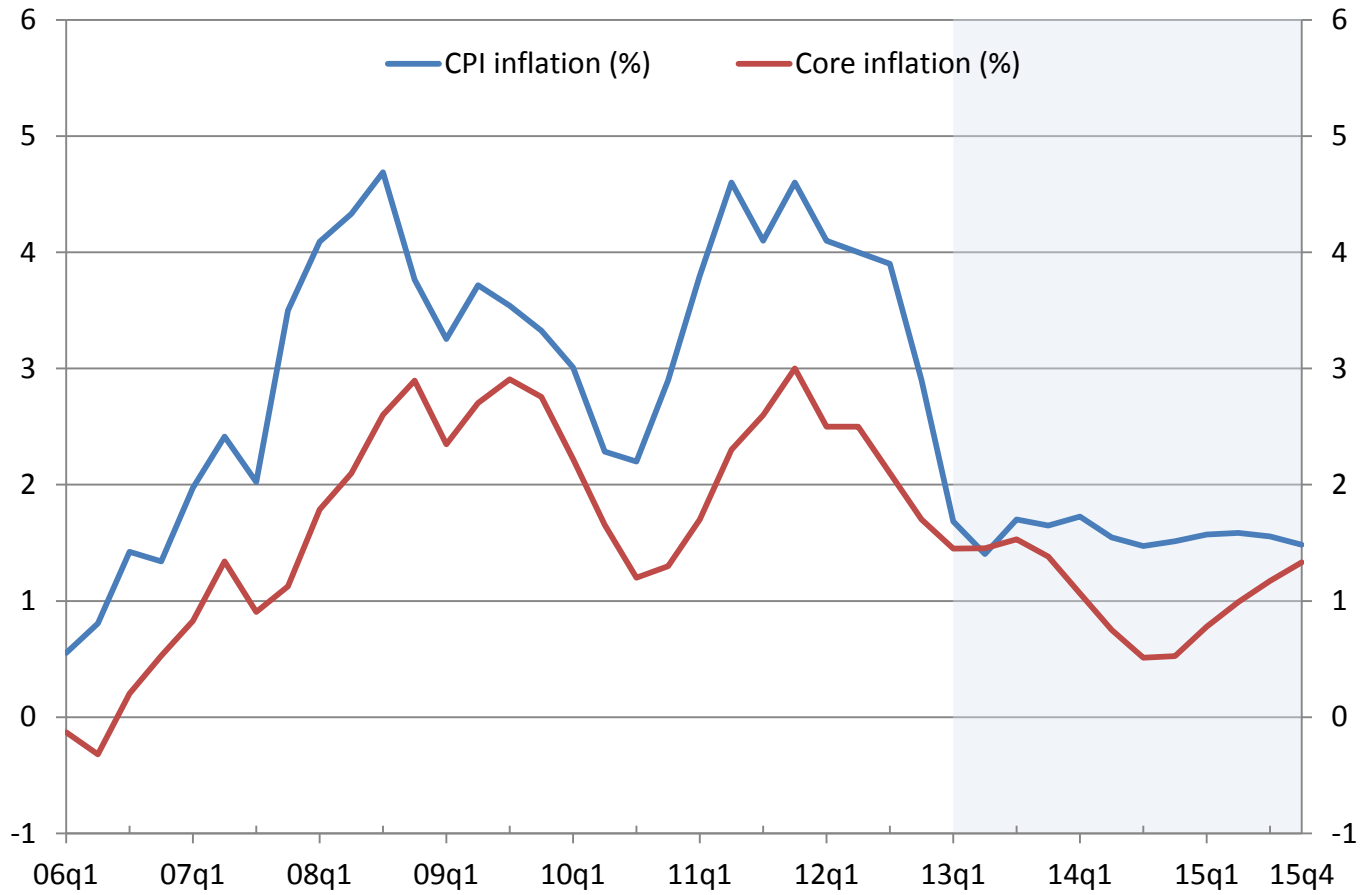
Food and energy prices inflation

- CHANGES IN THE SCENARIO
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- PROJECTION 2013-15**
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Core inflation and CPI inflation*

- CHANGES IN THE SCENARIO
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- PROJECTION 2013-15**
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* Core inflation does not include food, beverages and energy prices.

Decomposition of deviations between March and November projections: CPI inflation

CHANGES IN THE SCENARIO

» Changes in the assumptions

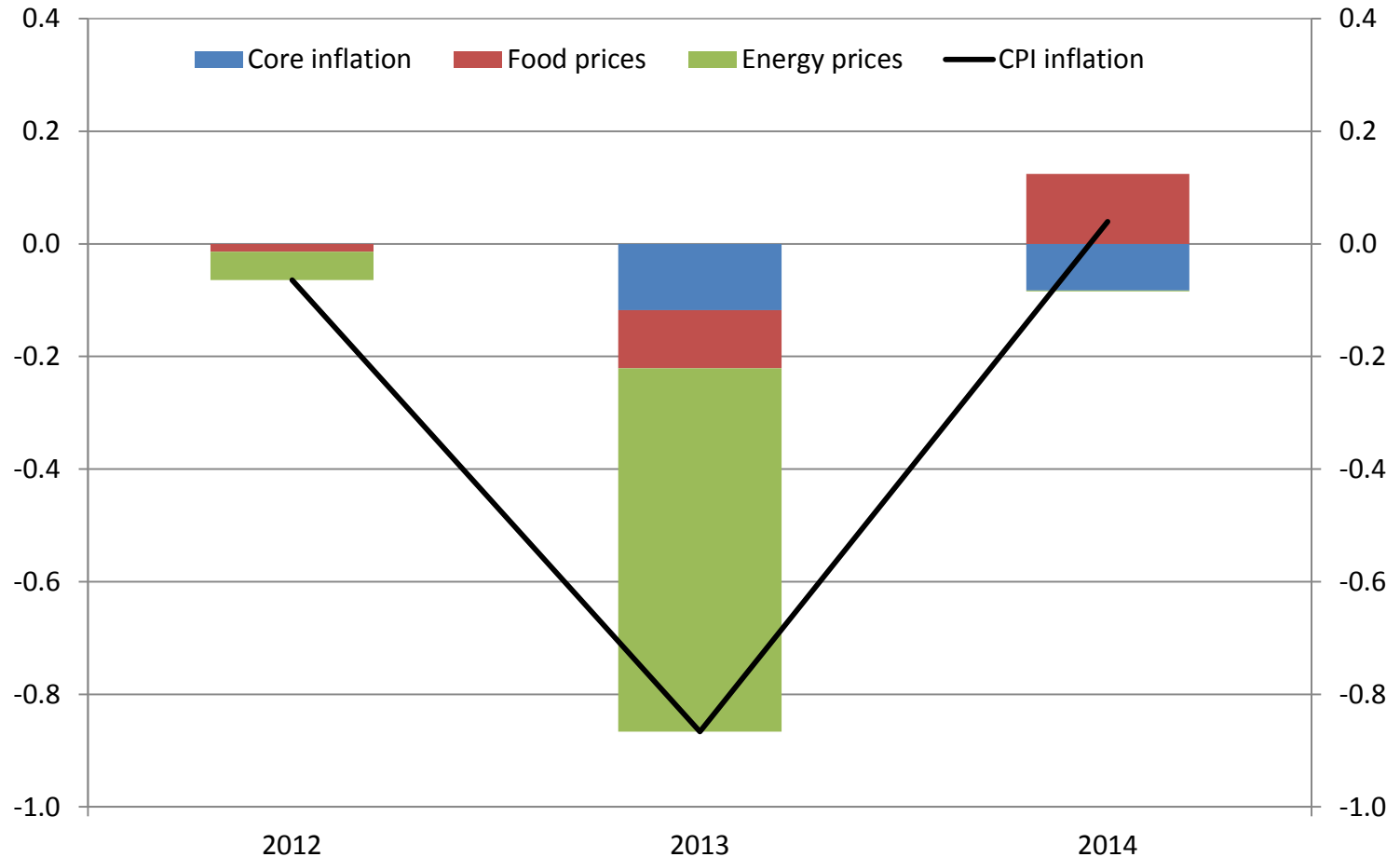
» Current vs. previous projection

PROJECTION 2013-15

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CHANGES IN
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UNCERTAINTY OF THE PROJECTION

- Risk factors
- Fan charts

CHANGES IN
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PROJECTION 2013-15

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Risk factors

The scale of impact: *** high
** medium
* low

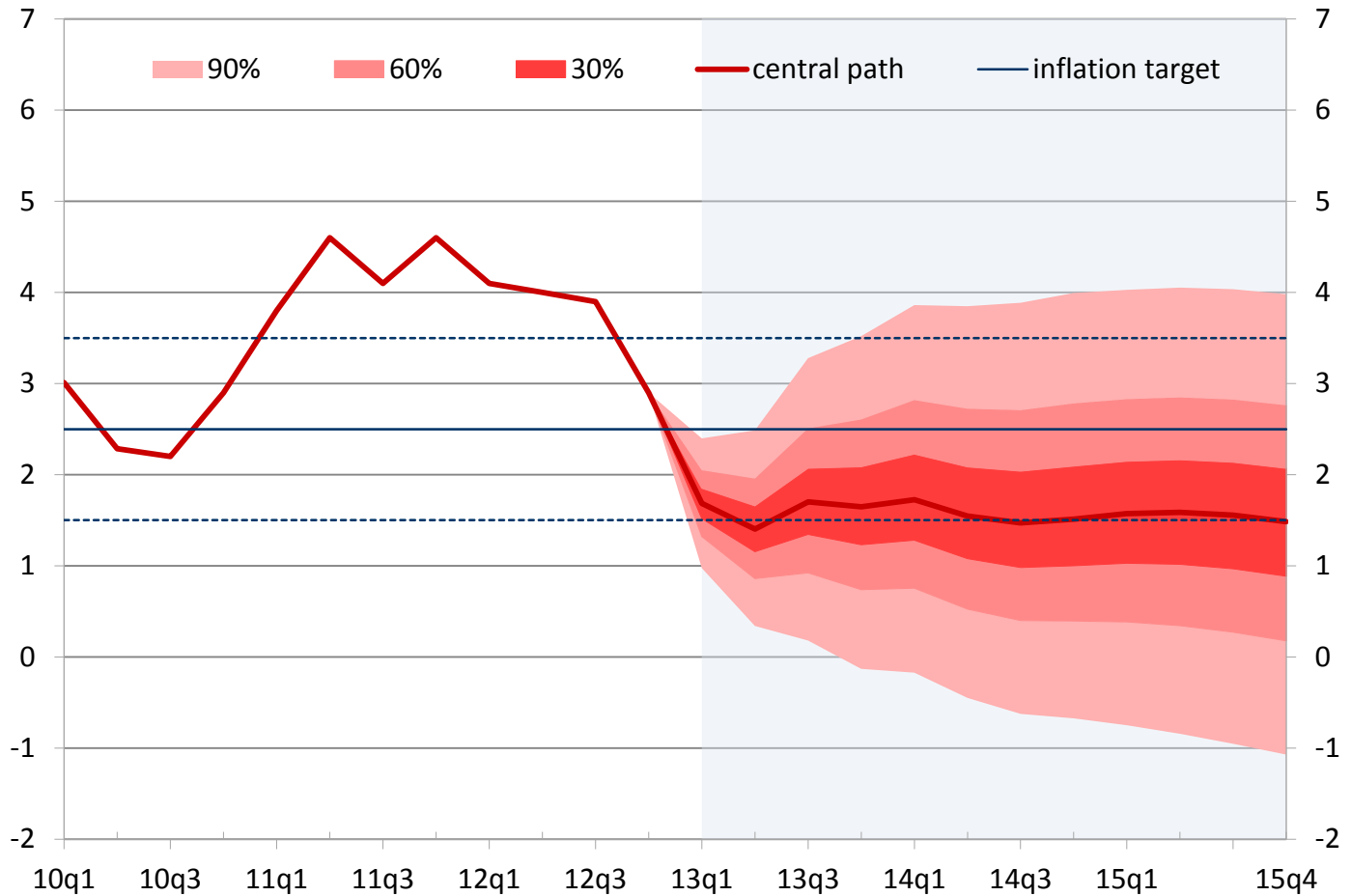
	Risk area	Description	Impact	Scale of impact
<p>CHANGES IN THE SCENARIO</p> <p>» Changes in the assumptions</p> <p>» Current vs. previous projection</p>	<p>External environment and exchange rate</p>	<ul style="list-style-type: none"> ▪ The length of the recession in the euro area and the limits of the future expansion. ▪ The zloty exchange rate path, highly dependent on the future situation in the euro area. ▪ The reaction of governments and central banks to uncertainty regarding economic situation in developed countries. ▪ The agricultural and energy commodities' prices on the global markets. 	<p>inflation ↔</p> <p>GDP ↔</p>	<p>***</p>
<p>PROJECTION 2013-15</p>				
<p>UNCERTAINTY</p>				
<p>» Risk factors</p>				
<p>» Fan charts</p>				

	Risk area	Description	Impact	Scale of impact
CHANGES IN THE SCENARIO	Domestic demand	<ul style="list-style-type: none"> ▪ The reaction of households and enterprises to situation abroad and to fiscal tightening. ▪ The impact of fiscal tightening on the assessment of Poland's creditworthiness (consequently, higher inflow of capital, including inflow of foreign direct investment): lower public deficit versus worse short-term growth prospects. ▪ The prolonging recession in the euro area amidst low savings rate and limited credit access may uphold low growth of private consumption and investment for an extended period. 	inflation ↔ GDP ↔	**
» Changes in the assumptions				
» Current vs. previous projection				
PROJECTION 2013-15				
UNCERTAINTY				
» Risk factors				
» Fan charts				

	Risk area	Description	Impact	Scale of impact
CHANGES IN THE SCENARIO				
» Changes in the assumptions				
» Current vs. previous projection				
PROJECTION 2013-15	Food and energy prices in Poland	<ul style="list-style-type: none"> ▪ Uncertain impact of European regulations on prices in Poland, particularly those concerning Energy and Climate Package (unknown amount and price of carbon emission allowances for the Polish economy). ▪ Future tariff policy of the Energy Regulatory Office. ▪ Regulatory activities on the food market. ▪ Agrometeorological conditions. 	inflation ↔ GDP ↔	**
UNCERTAINTY				
» Risk factors				
» Fan charts				
	Fiscal and regulation policy	<ul style="list-style-type: none"> ▪ Due to the expected economic slowdown, maintaining the public finance deficit at a level which ensures compliance with national and European fiscal rules, may require further adjustments throughout the projection horizon (such as the withdrawal from returning to the standard VAT rate of 22% in 2014). ▪ Absorption of EU funds is also a significant source of uncertainty in the coming years. 	inflation ↑ GDP ↔	**
	Conclusions		inflation ↑ GDP ↔	

Inflation projection – March 2013

- CHANGES IN THE SCENARIO
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Probability distribution for inflation

CHANGES IN THE SCENARIO							
» Changes in the assumptions	%	below 1,5%	below 2,5%	below 3,5%	below the central path	in the range (1,5% ;3,5%)	
» Current vs. previous projection							
PROJECTION 2013-15	13q1	0.33	0.97	1.00	0.50	0.67	
	13q2	0.55	0.95	1.00	0.50	0.45	
	13q3	0.41	0.79	0.97	0.49	0.56	
	13q4	0.43	0.77	0.95	0.49	0.51	
UNCERTAINTY	14q1	0.40	0.71	0.91	0.47	0.51	
	14q2	0.45	0.73	0.91	0.46	0.46	
	14q3	0.47	0.74	0.91	0.46	0.44	
	14q4	0.46	0.73	0.90	0.47	0.44	
	15q1	0.47	0.73	0.90	0.49	0.43	
	15q2	0.47	0.73	0.90	0.50	0.43	
	15q3	0.49	0.74	0.90	0.50	0.41	
	15q4	0.51	0.75	0.91	0.51	0.40	
	» Risk factors						
	» Fan charts						

GDP projection – March 2013

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