

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
 - November projection compared to July projection
2. Projection 2012-2014
3. Uncertainty
 - Risk factors
 - Fan charts

CHANGES IN
THE SCENARIO

» Changes
in the assumptions

» Current vs. previous
projection

PROJECTION 2012-14

UNCERTAINTY

» Risk factors

» Fan charts

NOVEMBER PROJECTION COMPARED TO JULY PROJECTION

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

Changes in the projection assumptions

CHANGES IN THE SCENARIO

» Changes in the assumptions

» Current vs. previous projection

PROJECTION 2012-14

UNCERTAINTY

» Risk factors

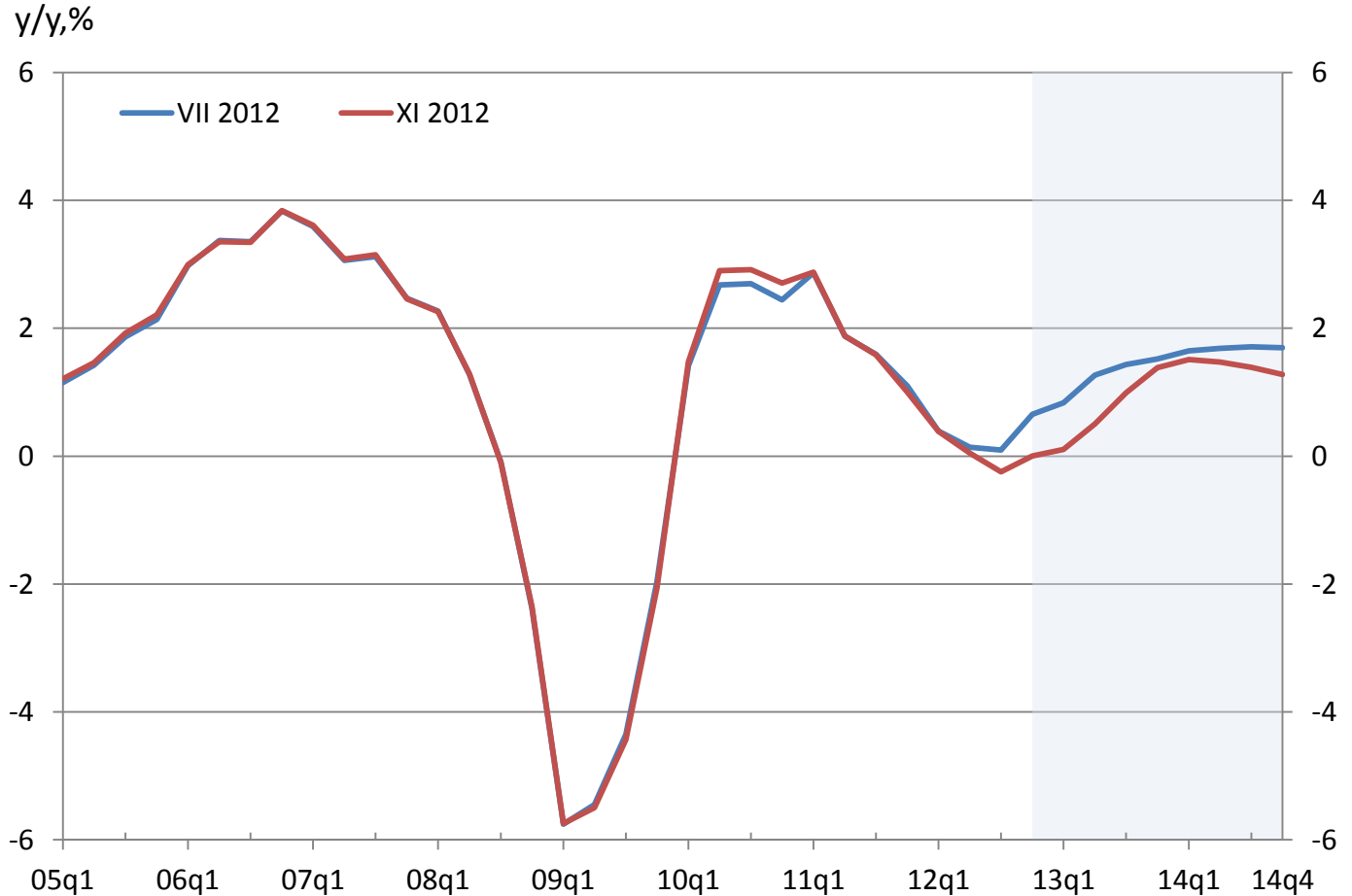
» Fan charts

- Lower growth forecasts abroad
- Higher agricultural commodity and oil prices [USD]
- Weaker 2012 Q2 GDP data
- Weaker labour market data

The projection does not take into account the MPC decision of decreasing interest rates by 0.25 pp on 7 November 2012.

GDP growth abroad

(lower)



CHANGES IN THE SCENARIO

» Changes in the assumptions

» Current vs. previous projection

PROJECTION 2012-14

UNCERTAINTY

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Inflation abroad (lower)

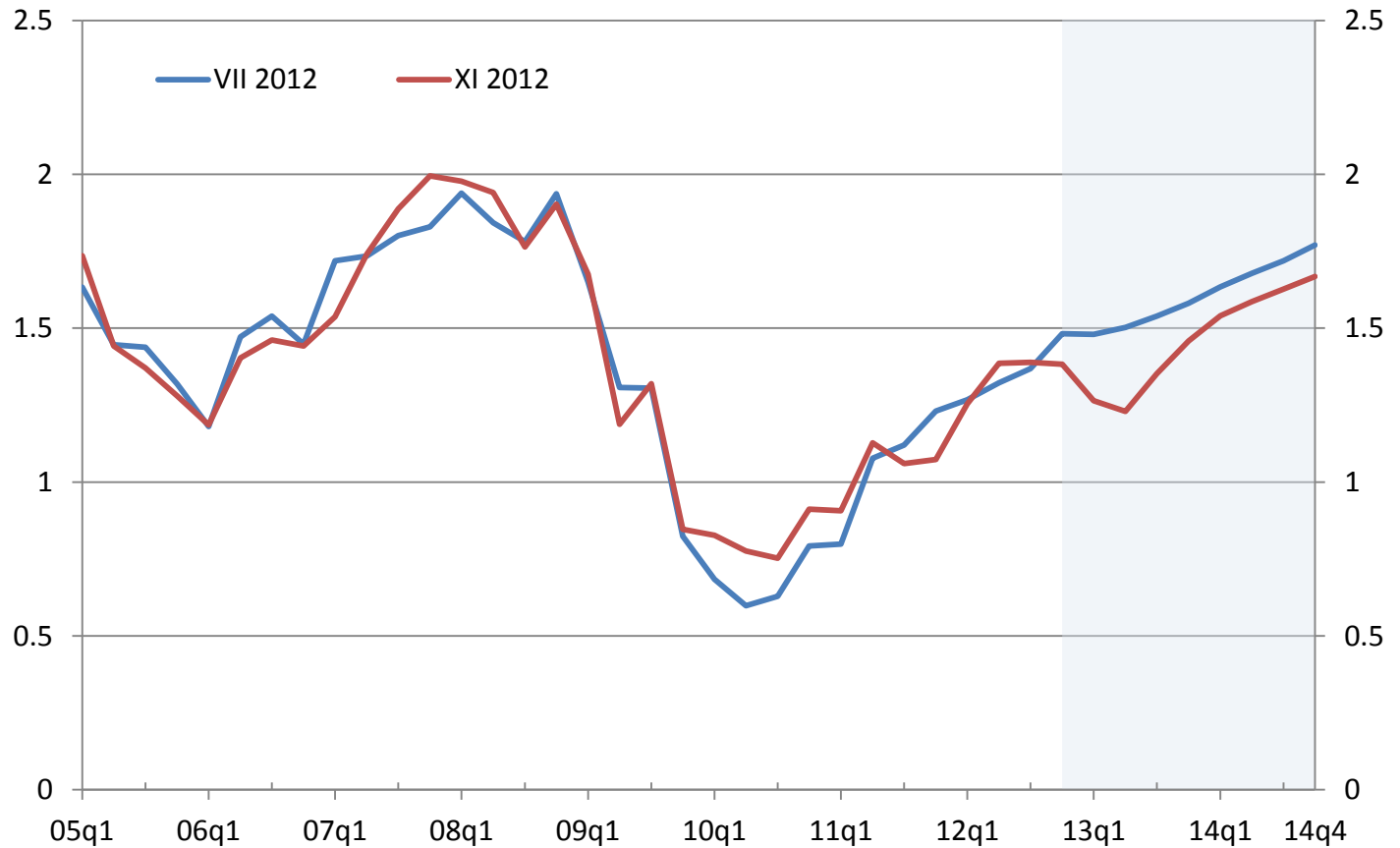
CHANGES IN THE SCENARIO

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

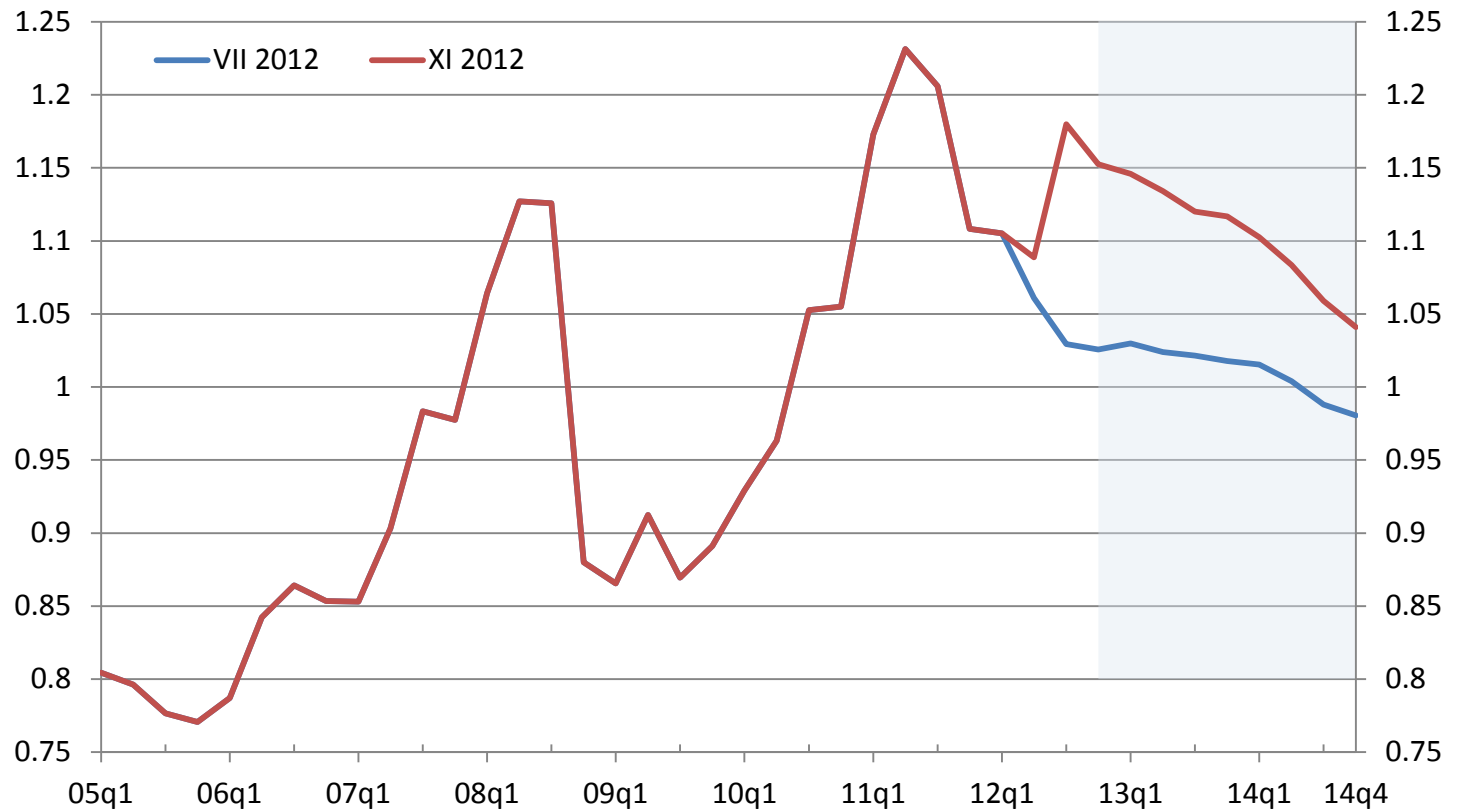
PROJECTION 2012-14

UNCERTAINTY

- » Risk factors
- » Fan charts



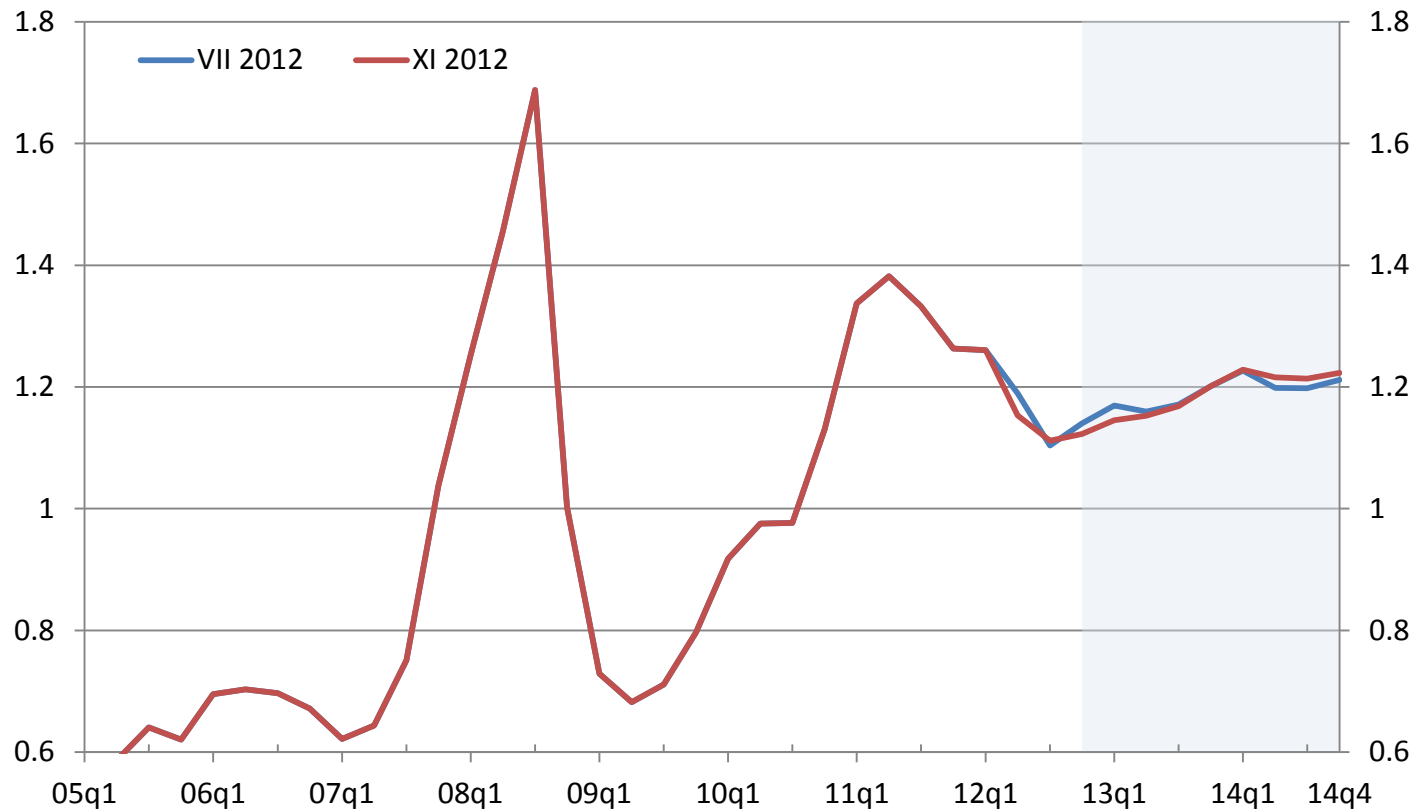
Index of agricultural commodity prices (higher)



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

Energy commodity price index*

(similar)



*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 2012-14

UNCERTAINTY

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» Fan charts

	12Q2	12Q3
GDP (y/y) (%)	2,3 (3,2)	1,8 (2,7)
Domestic demand (y/y) (%)	-0,4 (2,3)	-0,3 (2,0)
Individual consumption (y/y) (%)	1,2 (2,0)	1,3 (1,8)
Public consumption (y/y) (%)	0,3 (0,8)	1,9 (2,7)
Gross fixed capital formation (y/y) (%)	1,3 (6,2)	-2,8 (4,6)
Exports (y/y) (%)	2,6 (5,4)	1,2 (2,9)
Imports (y/y) (%)	-3,1 (3,2)	-3,2 (1,3)
Net exports contribution (p.p.)	2,7 (0,9)	2,1 (0,7)

* Values from the July projection are given in brackets (seasonally adjusted data). Indicators with values higher than in the July 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 2012-14

UNCERTAINTY

» Risk factors

» Fan charts

	12Q2	12Q3
ULC (y/y) (%)	3,5 (4,3)	3,0 (3,9)
Labour productivity (y/y) (%)	2,1 (2,7)	1,8 (2,2)
Gross wages (y/y) (%)	3,9 (5,0)	3,4 (4,7)
Totay employment LFS (y/y) (%)	0,3 (0,5)	0,1 (0,6)
Unemployment LFS (%)	9,8 (9,7)	9,7 (9,7)
Participation rate (%)	56,3 (56,5)	56,2 (56,5)

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

Inflation

CHANGES IN
THE SCENARIO» Changes
in the assumptions» Current vs. previous
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PROJECTION 2012-14

UNCERTAINTY

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» Fan charts

	12Q2	12Q3
CPI inflation (y/y) (%)	4,0 (3,9)	3,9 (4,2)
Core inflation (y/y) (%)	2,5 (2,5)	2,1 (2,3)
Food price inflation (y/y) (%)	3,7 (3,0)	5,2 (5,1)
Energy price inflation (y/y) (%)	9,4 (9,7)	8,1 (9,1)

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

3 month WIBOR (no change)

CHANGES IN THE SCENARIO

» Changes in the assumptions

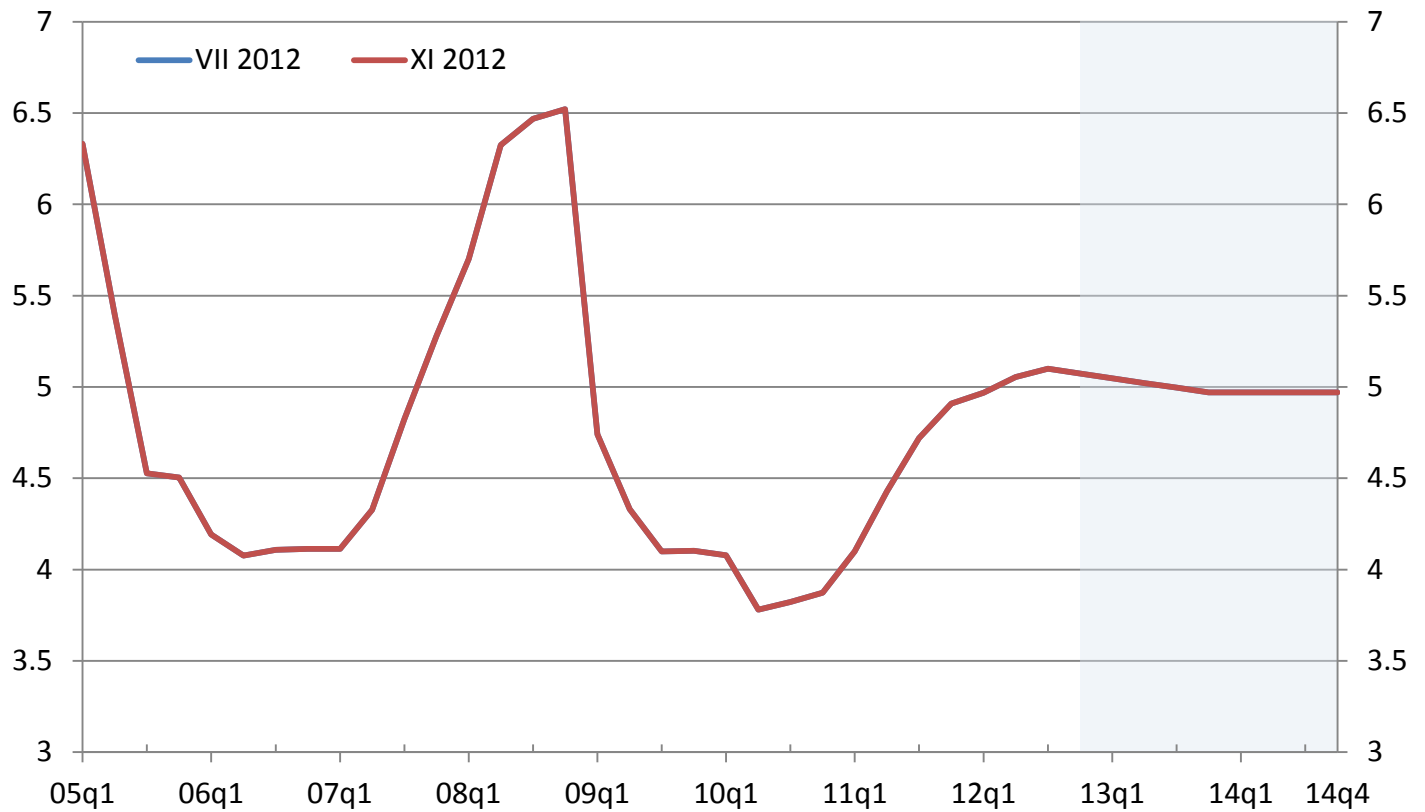
» Current vs. previous projection

PROJECTION 2012-14

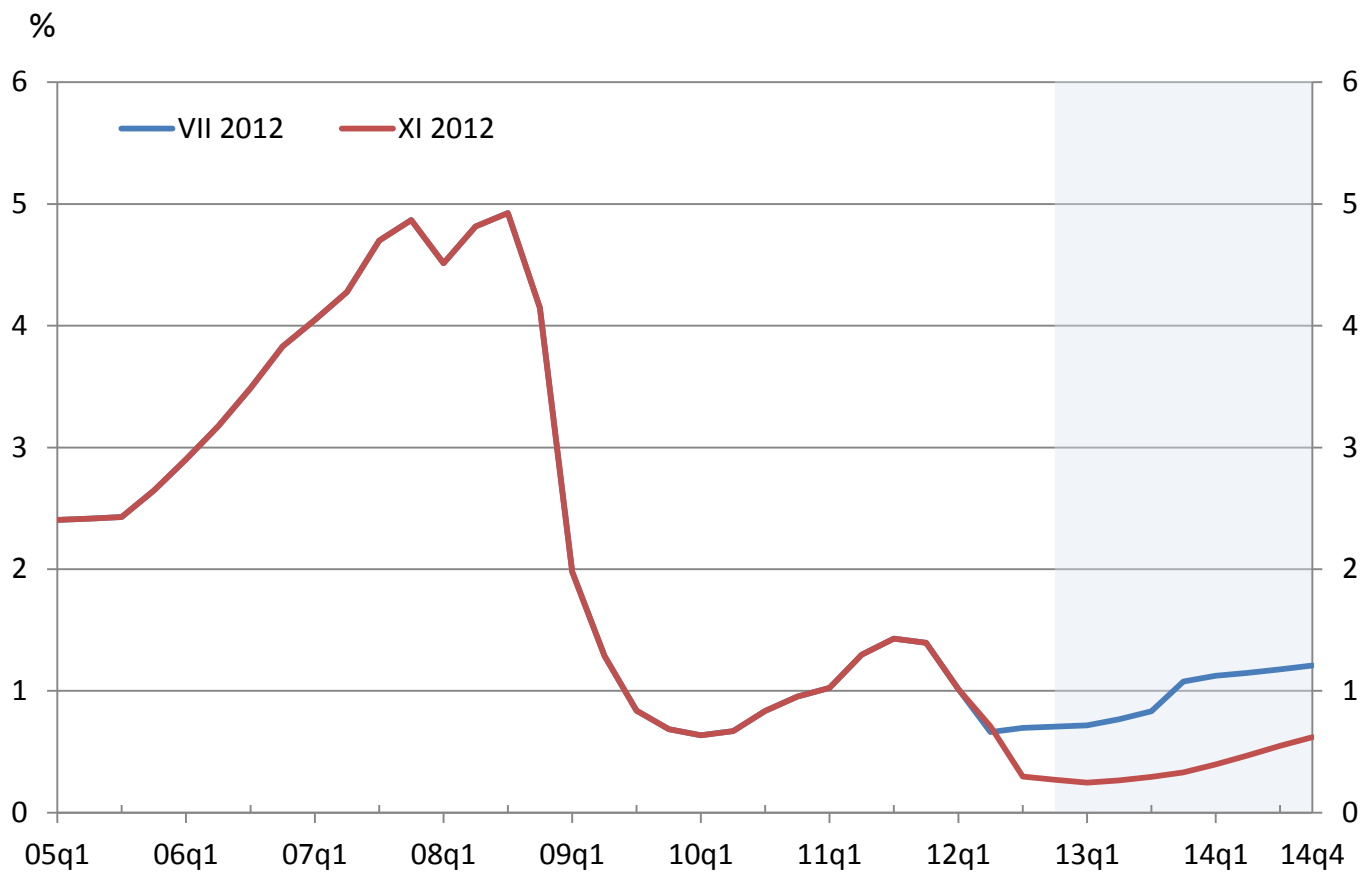
UNCERTAINTY

» Risk factors

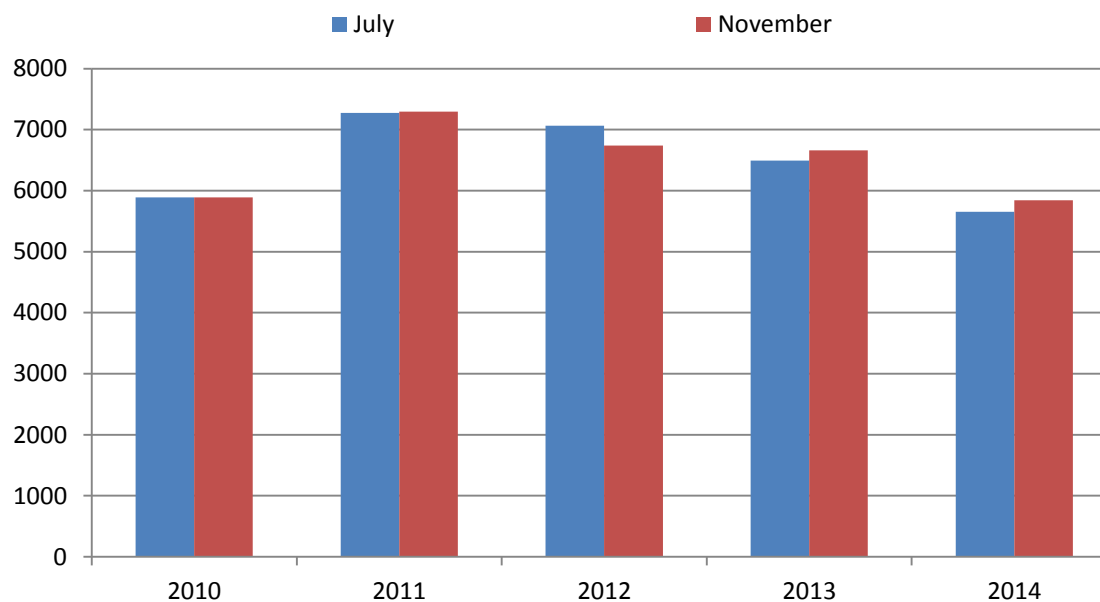
» Fan charts



Interest rate abroad (lower)



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



CHANGES IN THE SCENARIO

» Changes
in the assumptions

» Current vs. previous
projection

PROJECTION 2012-14

UNCERTAINTY

» Risk factors

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November projection compared to July projection: CPI inflation

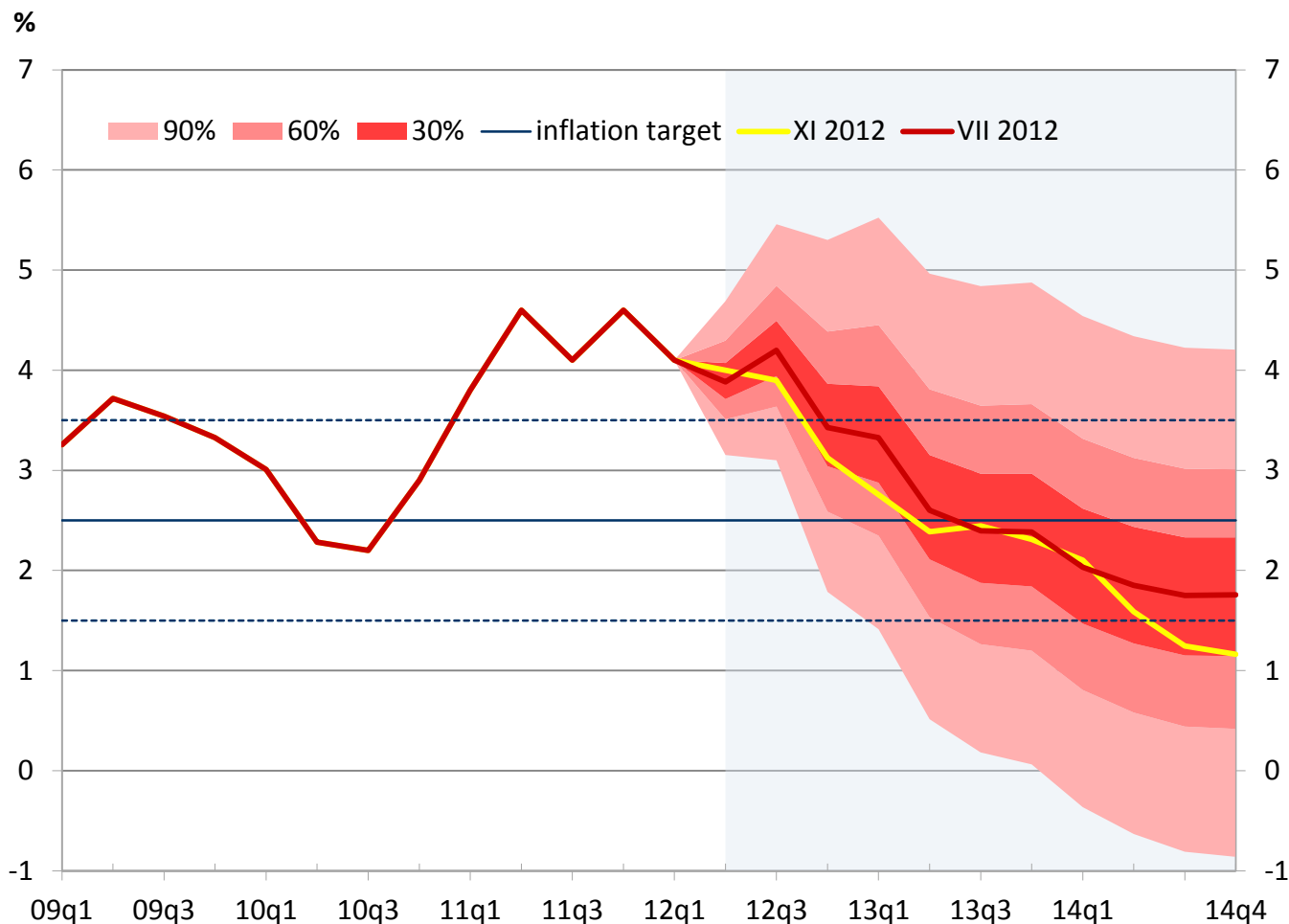
CHANGES IN THE SCENARIO

- » Changes in the assumptions
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PROJECTION 2012-14

UNCERTAINTY

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November projection compared to July projection: GDP

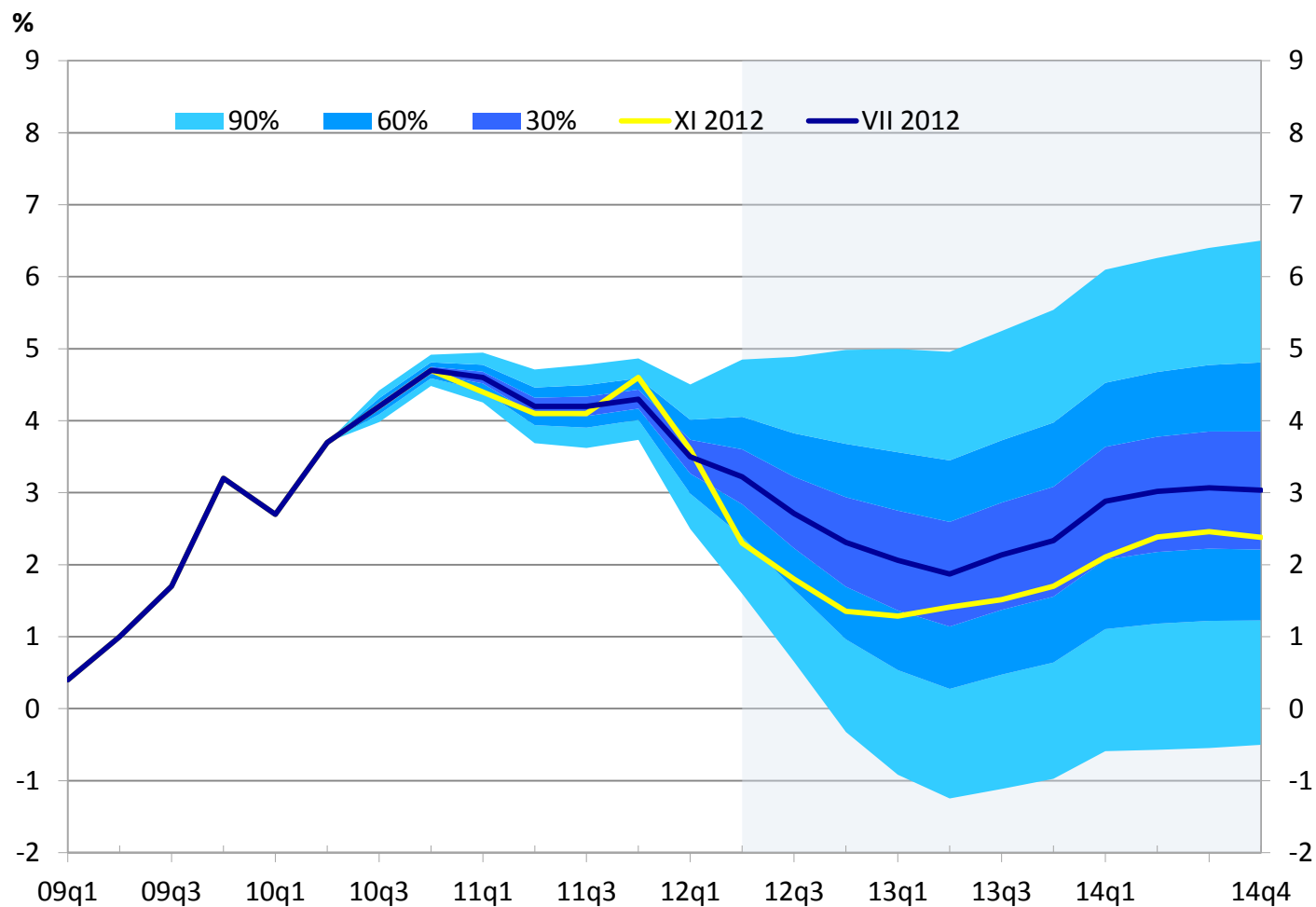
CHANGES IN THE SCENARIO

- » Changes in the assumptions
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PROJECTION 2012-14

UNCERTAINTY

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Projection scenario

CHANGES IN THE SCENARIO

» Changes in the assumptions

» Current vs. previous projection

PROJECTION 2012-14

UNCERTAINTY

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November projection:

- Lower economic growth
- The euro area stuck in a recession
- Zloty exchange rate relatively stable over the projection horizon
- A decline of energy and agricultural commodity prices on global markets due to global economic slowdown
- Tightening of fiscal policy
- Weakening of the labour market

Changes in the projection scenario:

- Lower economic growth abroad

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UNCERTAINTY

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PROJECTION

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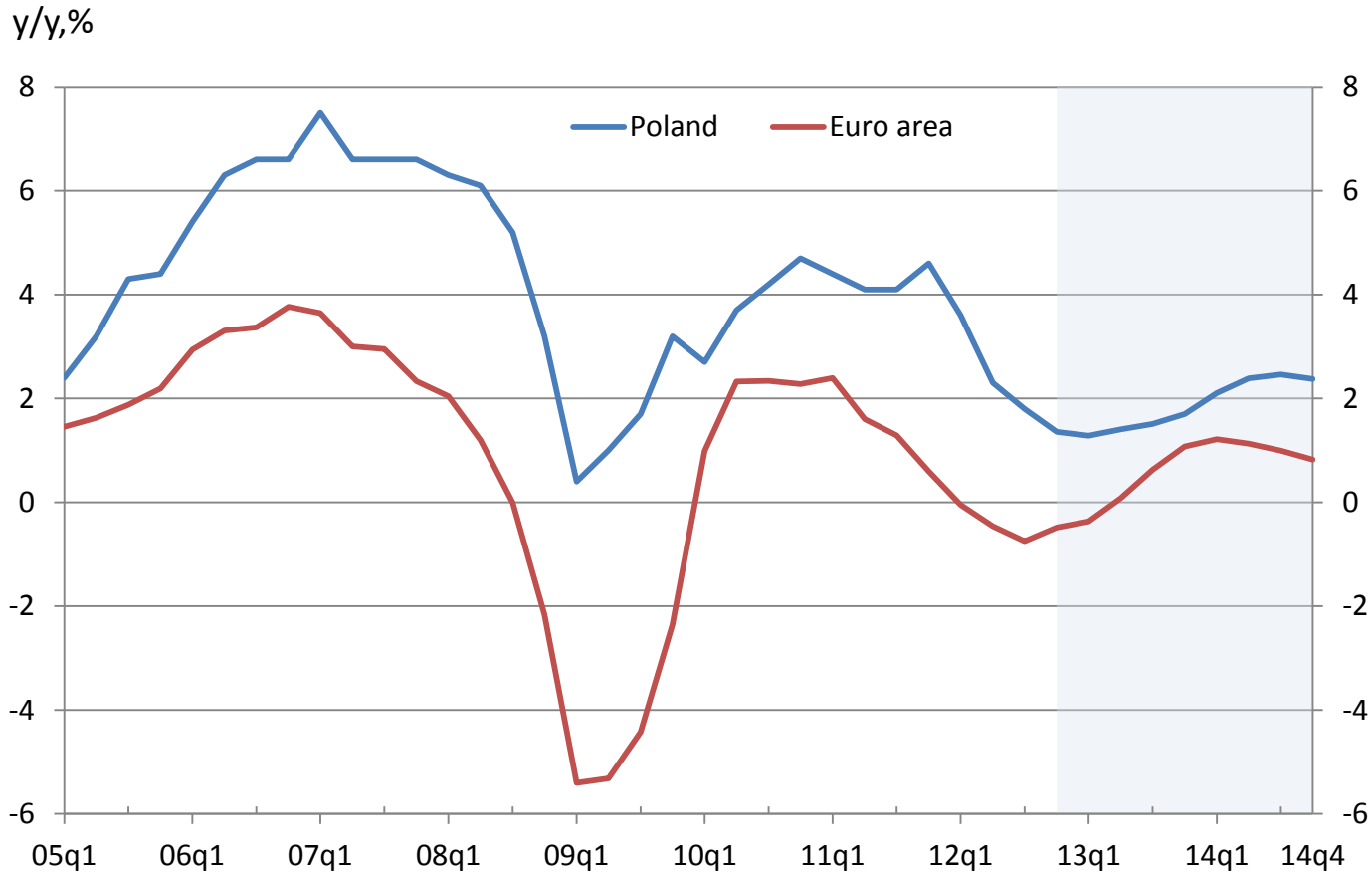
» Risk factors

» Fan charts

Projection for 2012-2014

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

GDP: Poland vs euro area



CHANGES IN THE SCENARIO

» Changes in the assumptions

» Current vs. previous projection

PROJECTION 2012-14

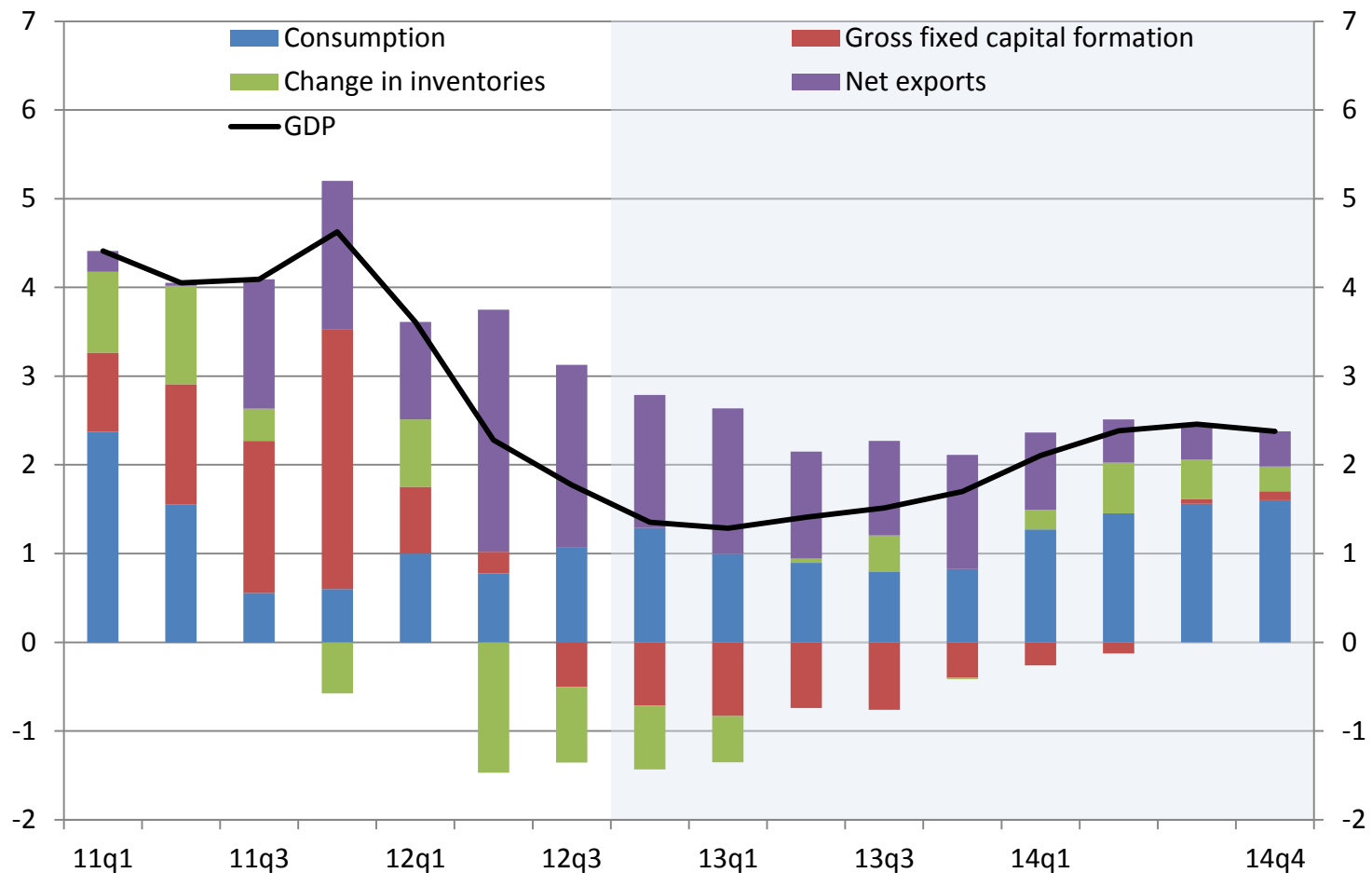
UNCERTAINTY

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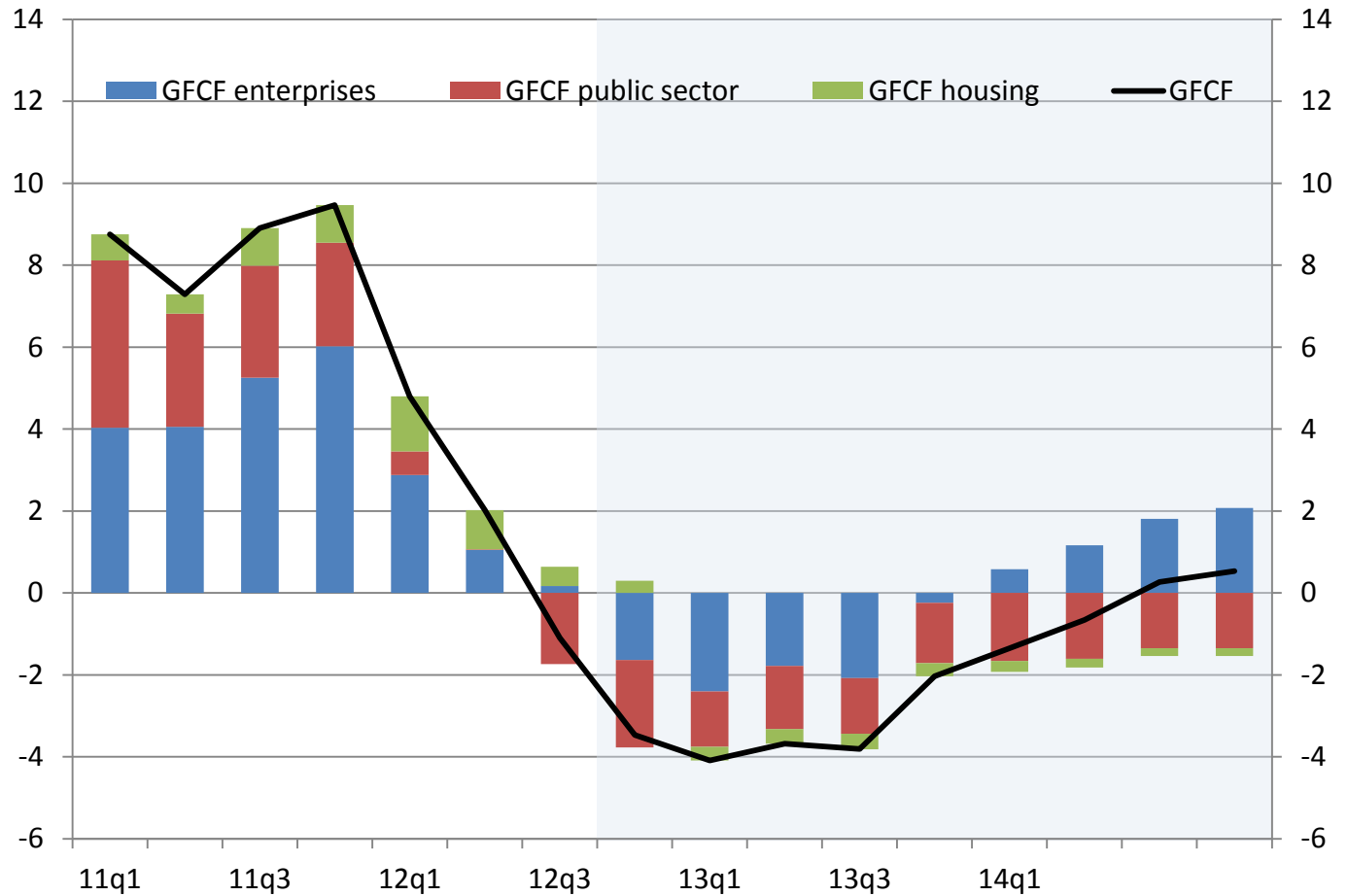
GDP: decomposition

- CHANGES IN THE SCENARIO
- » Changes in the assumptions
- » Current vs. previous projection
- PROJECTION 2012-14**
- UNCERTAINTY
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Gross fixed capital formation: decomposition

- CHANGES IN THE SCENARIO
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- PROJECTION 2012-14**
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Gross fixed capital formation (lower)

CHANGES IN
THE SCENARIO

» Changes
in the assumptions

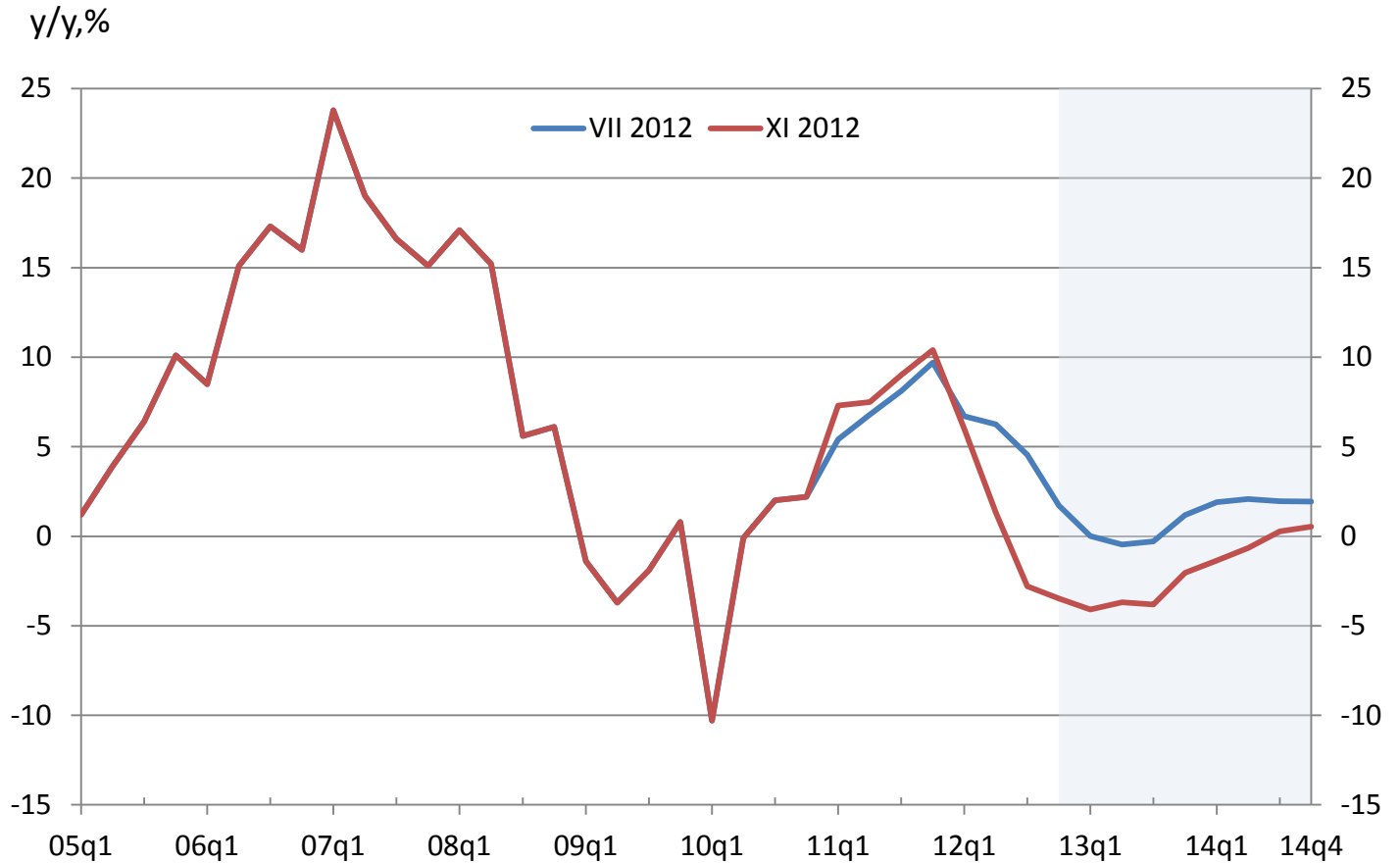
» Current vs. previous
projection

PROJECTION 2012-14

UNCERTAINTY

» Risk factors

» Fan charts



Private consumption (lower)

CHANGES IN THE SCENARIO

» Changes
in the assumptions

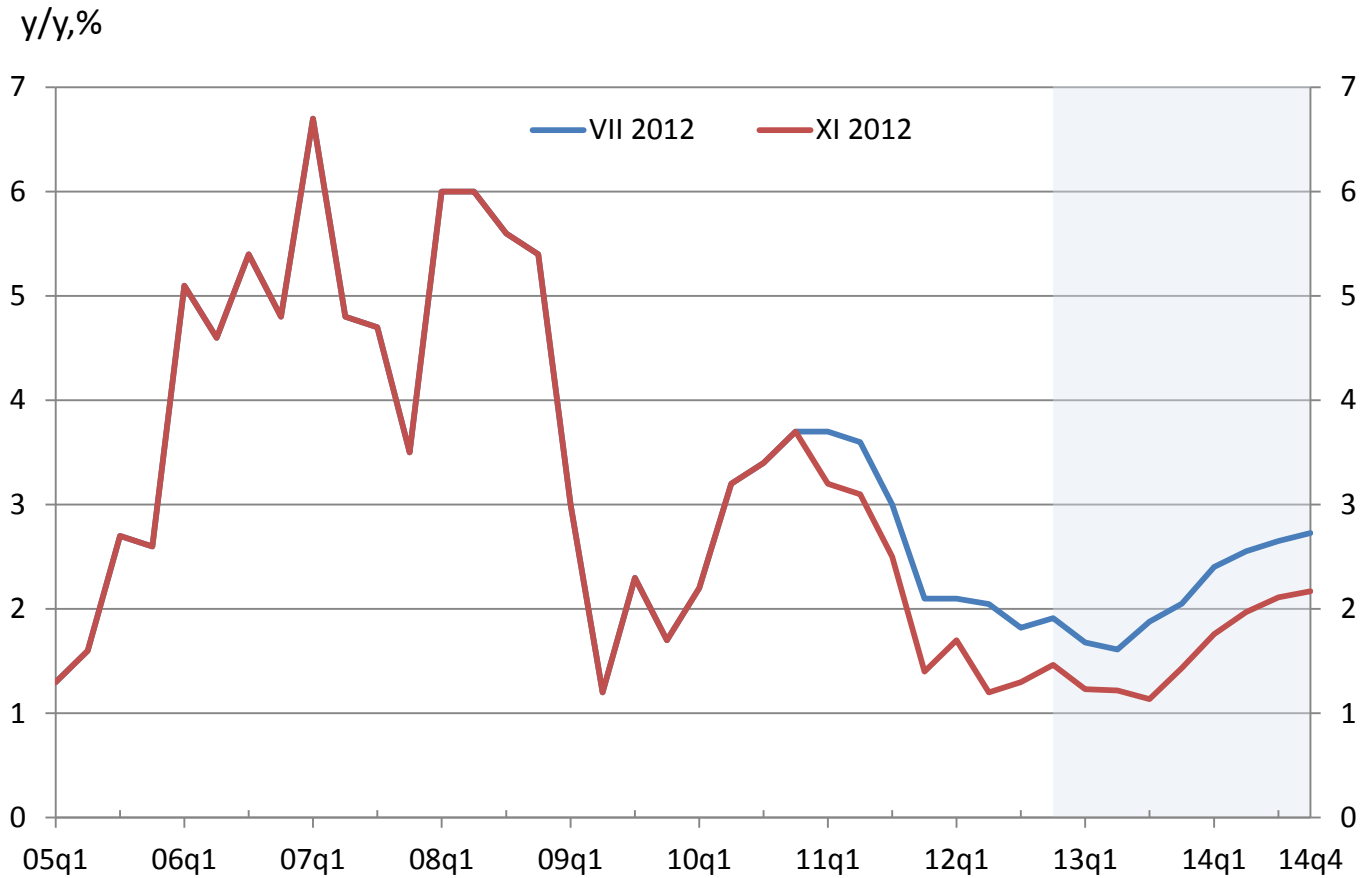
» Current vs. previous
projection

PROJECTION 2012-14

UNCERTAINTY

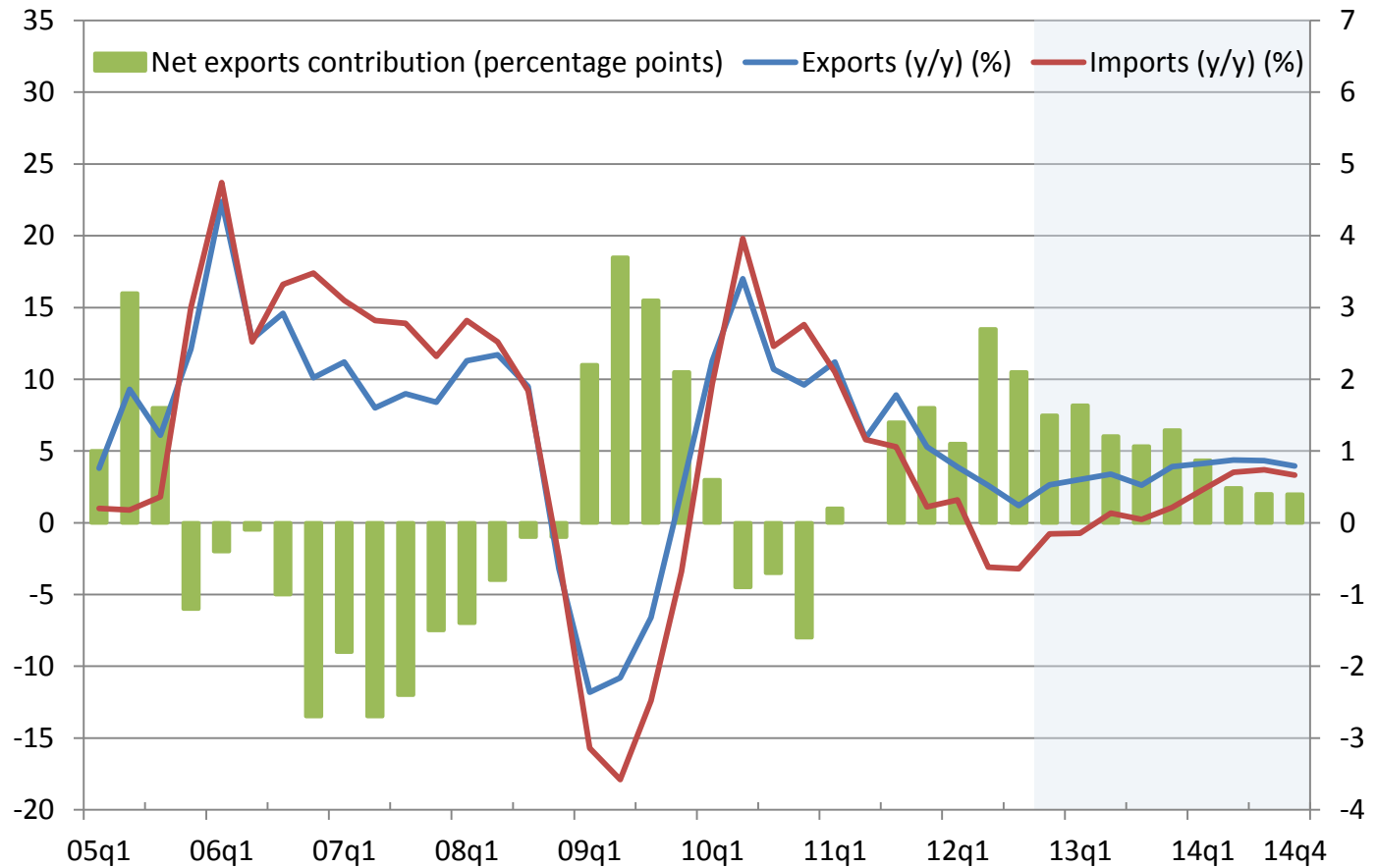
» Risk factors

» Fan charts

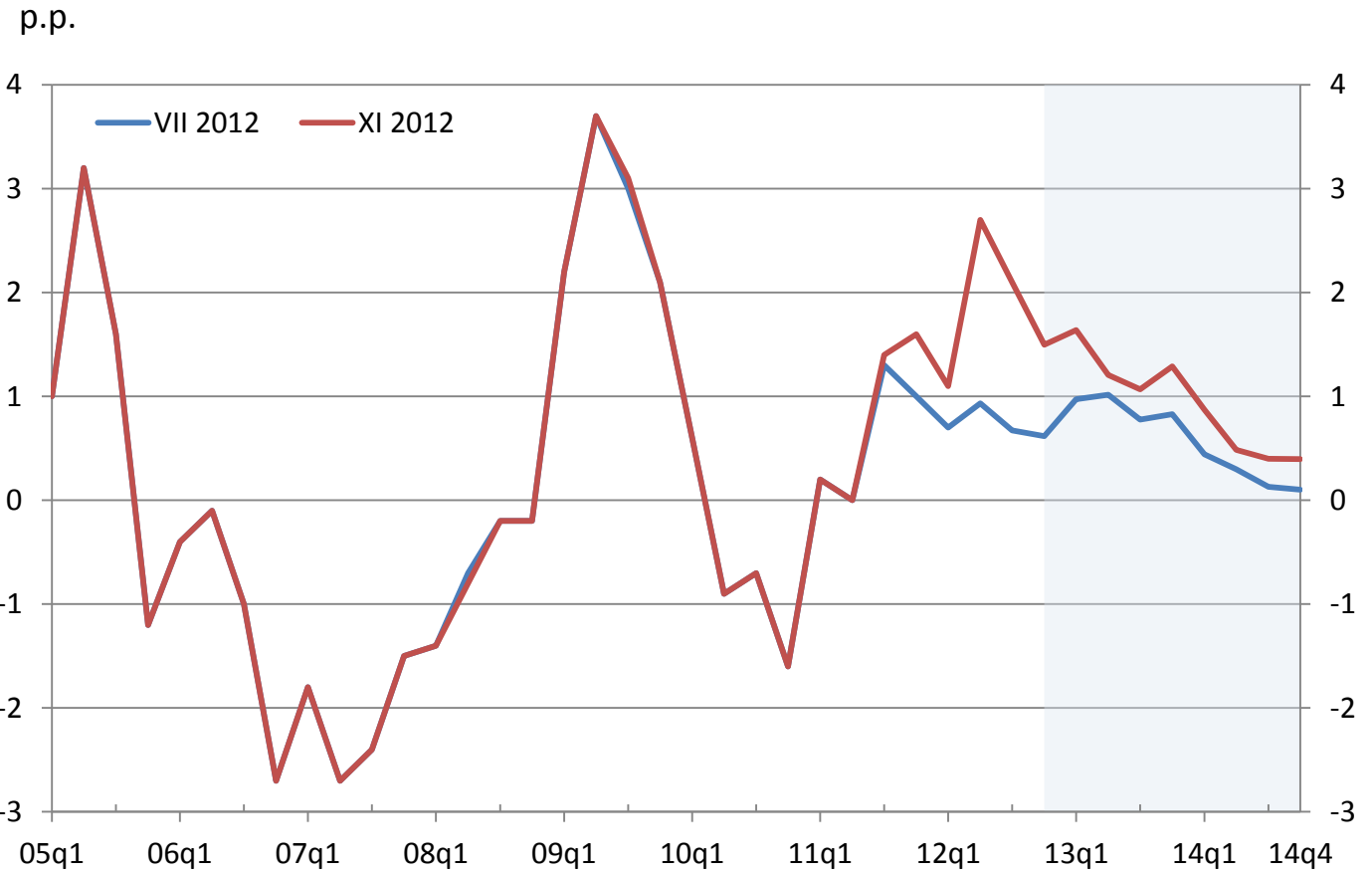


Trade with other countries

- CHANGES IN THE SCENARIO
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- PROJECTION 2012-14**
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Net exports contribution (higher)



CHANGES IN THE SCENARIO

» Changes in the assumptions

» Current vs. previous projection

PROJECTION 2012-14

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GDP (lower)

CHANGES IN THE SCENARIO

» Changes in the assumptions

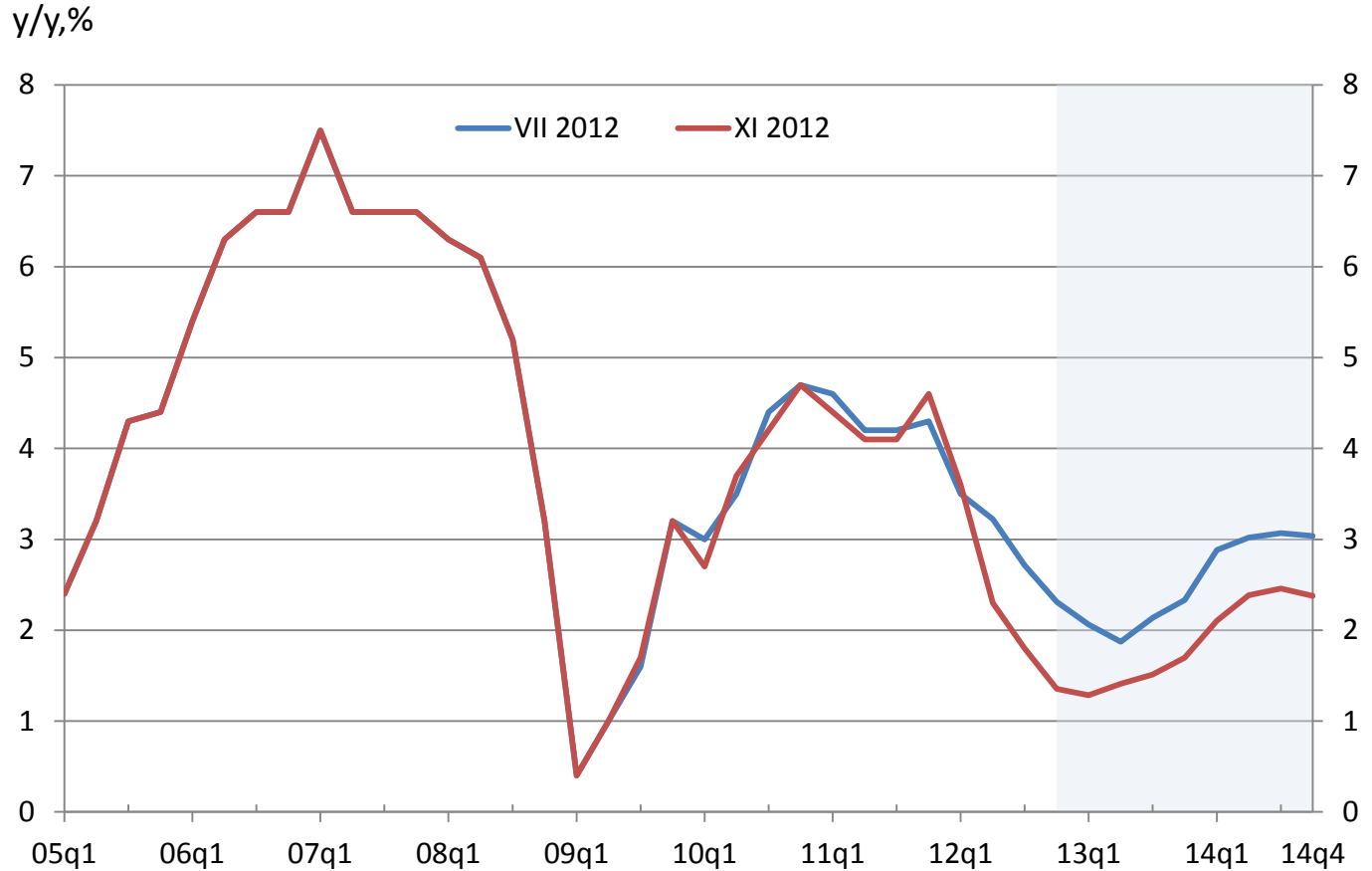
» Current vs. previous projection

PROJECTION 2012-14

UNCERTAINTY

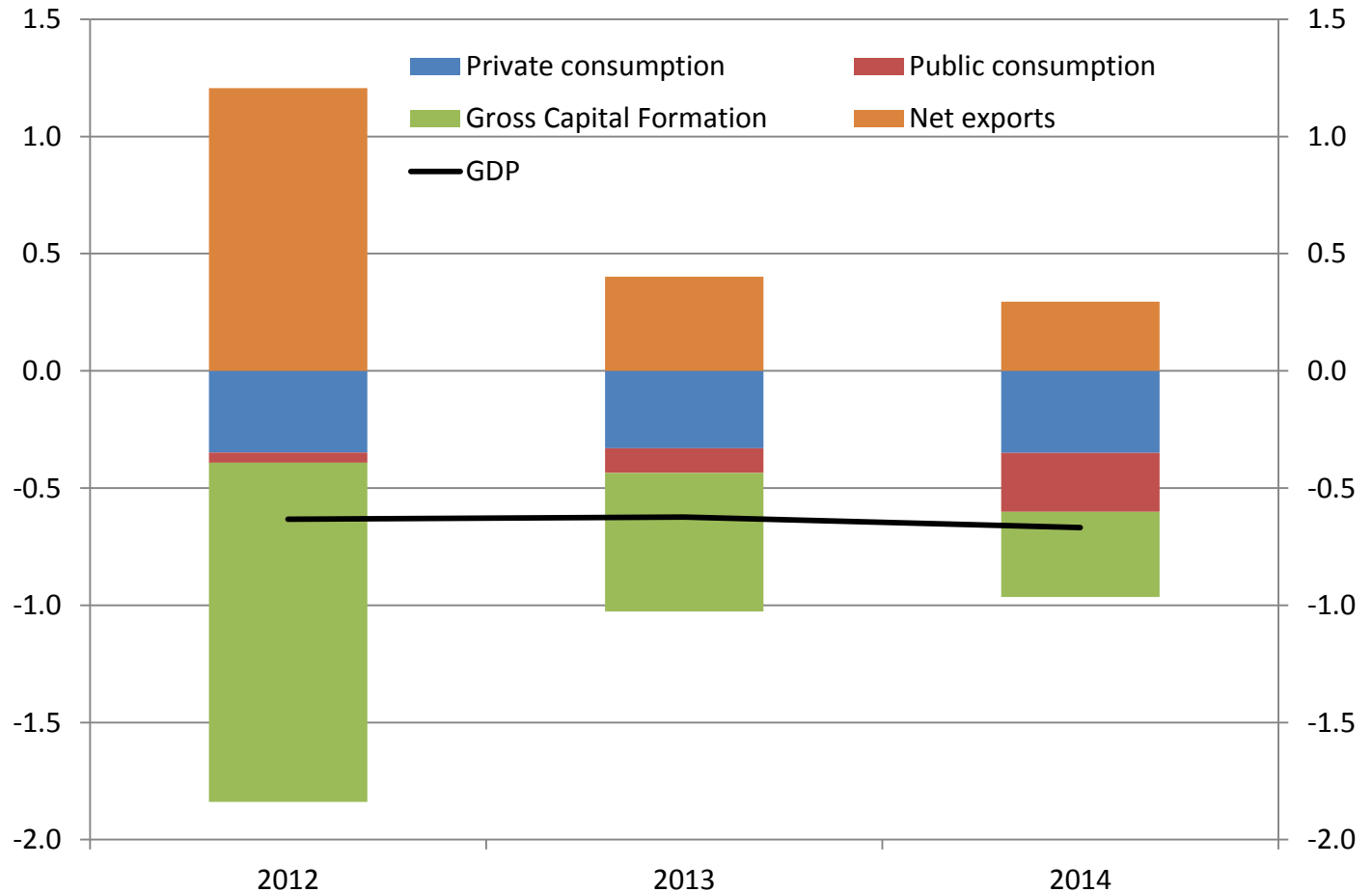
» Risk factors

» Fan charts



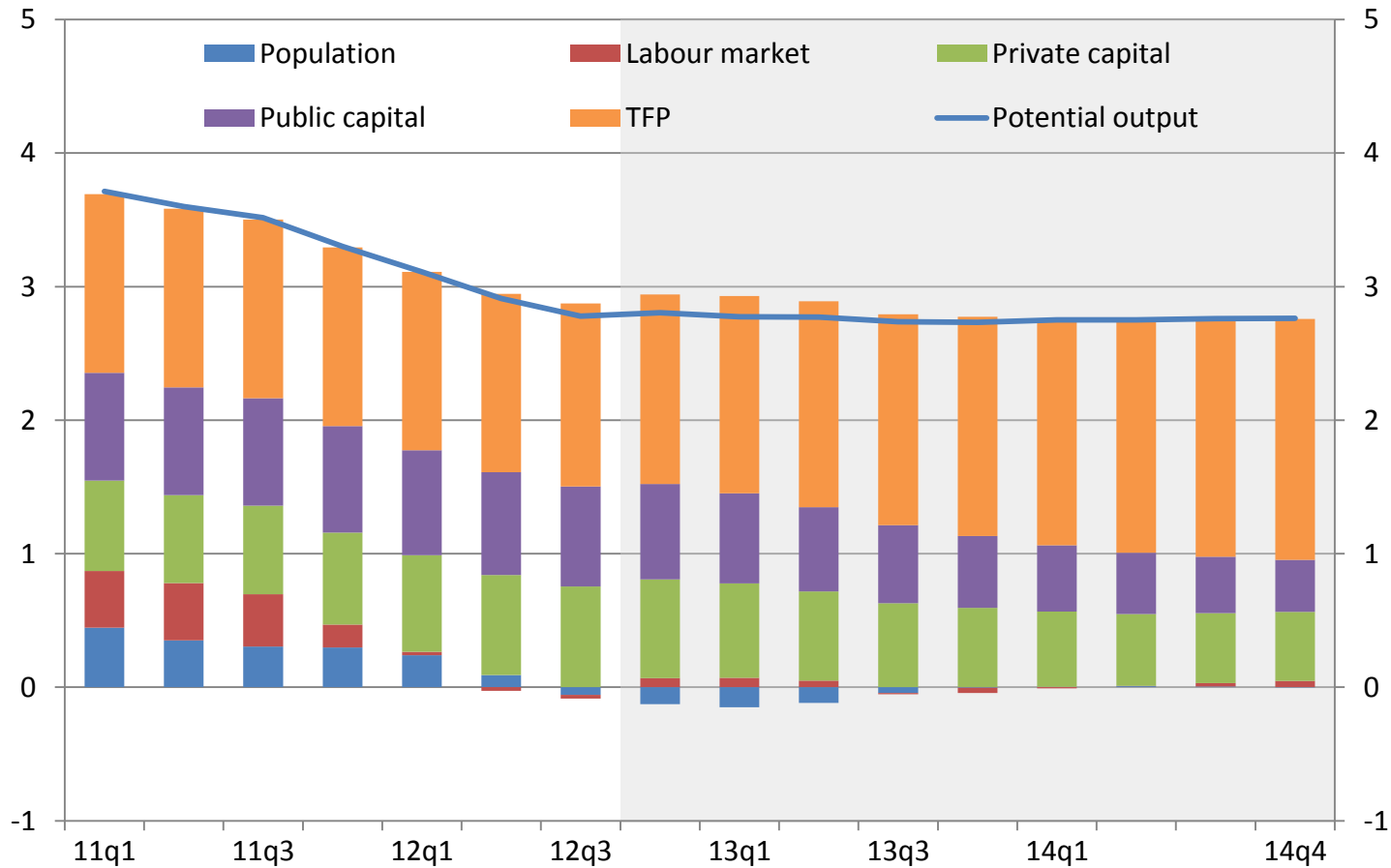
Decomposition of deviations between November and July projections: GDP

- CHANGES IN THE SCENARIO
- » Changes in the assumptions
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- PROJECTION 2012-14**
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Potential output

- CHANGES IN THE SCENARIO
- » Changes in the assumptions
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- PROJECTION 2012-14**
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Output gap

CHANGES IN THE SCENARIO

» Changes in the assumptions

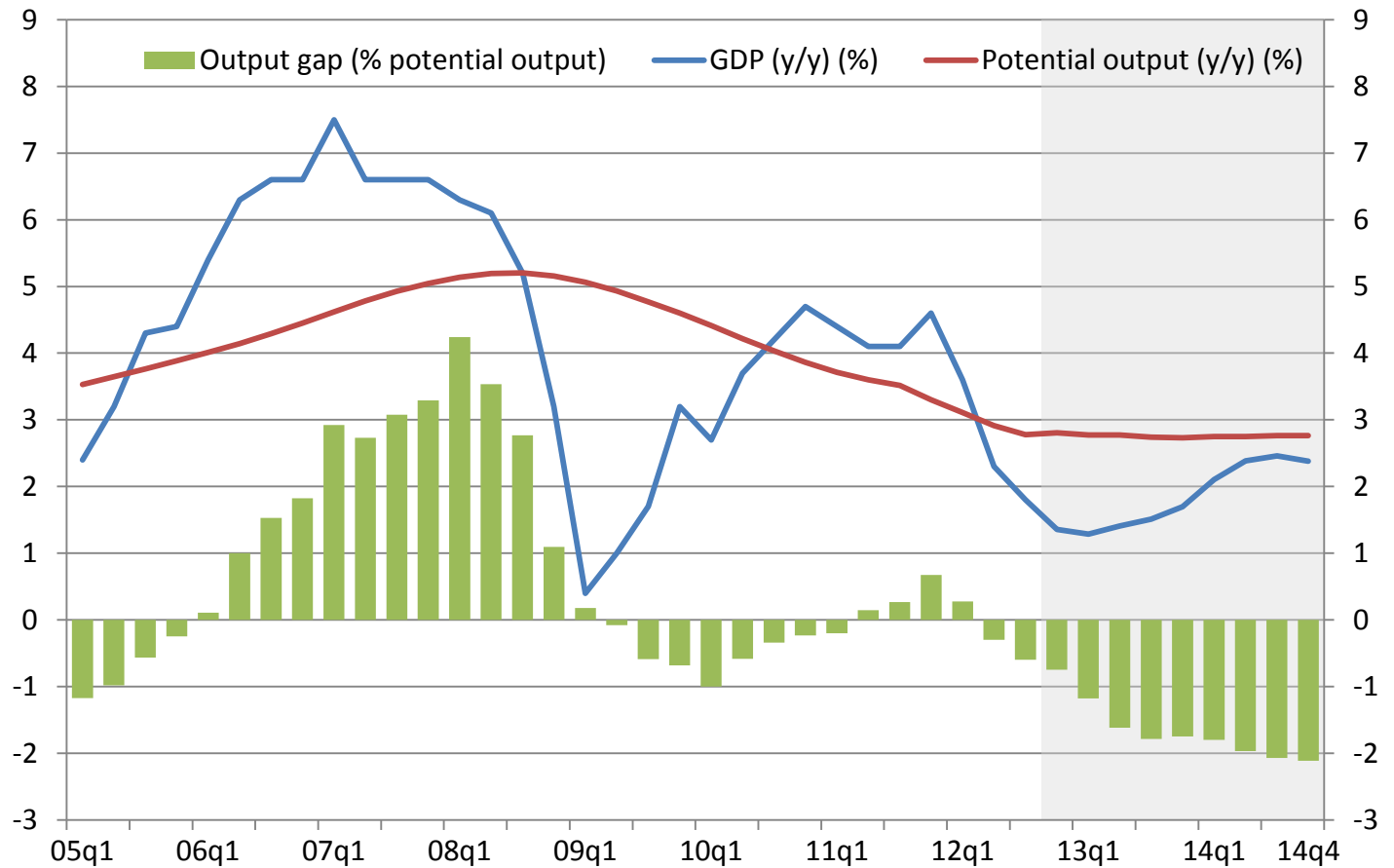
» Current vs. previous projection

PROJECTION 2012-14

UNCERTAINTY

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» Fan charts



Employment (lower)

CHANGES IN THE SCENARIO

» Changes
in the assumptions

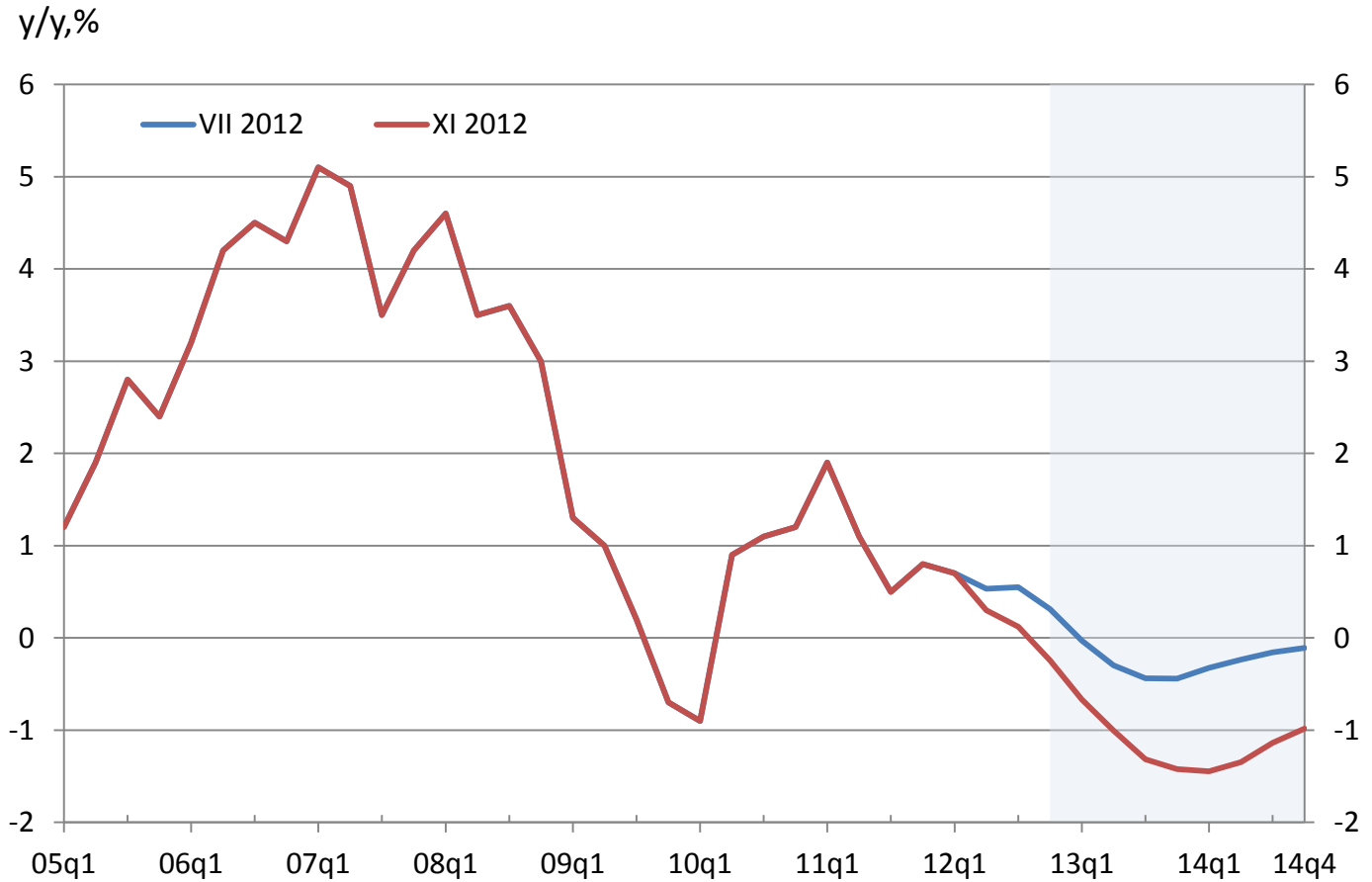
» Current vs. previous
projection

PROJECTION 2012-14

UNCERTAINTY

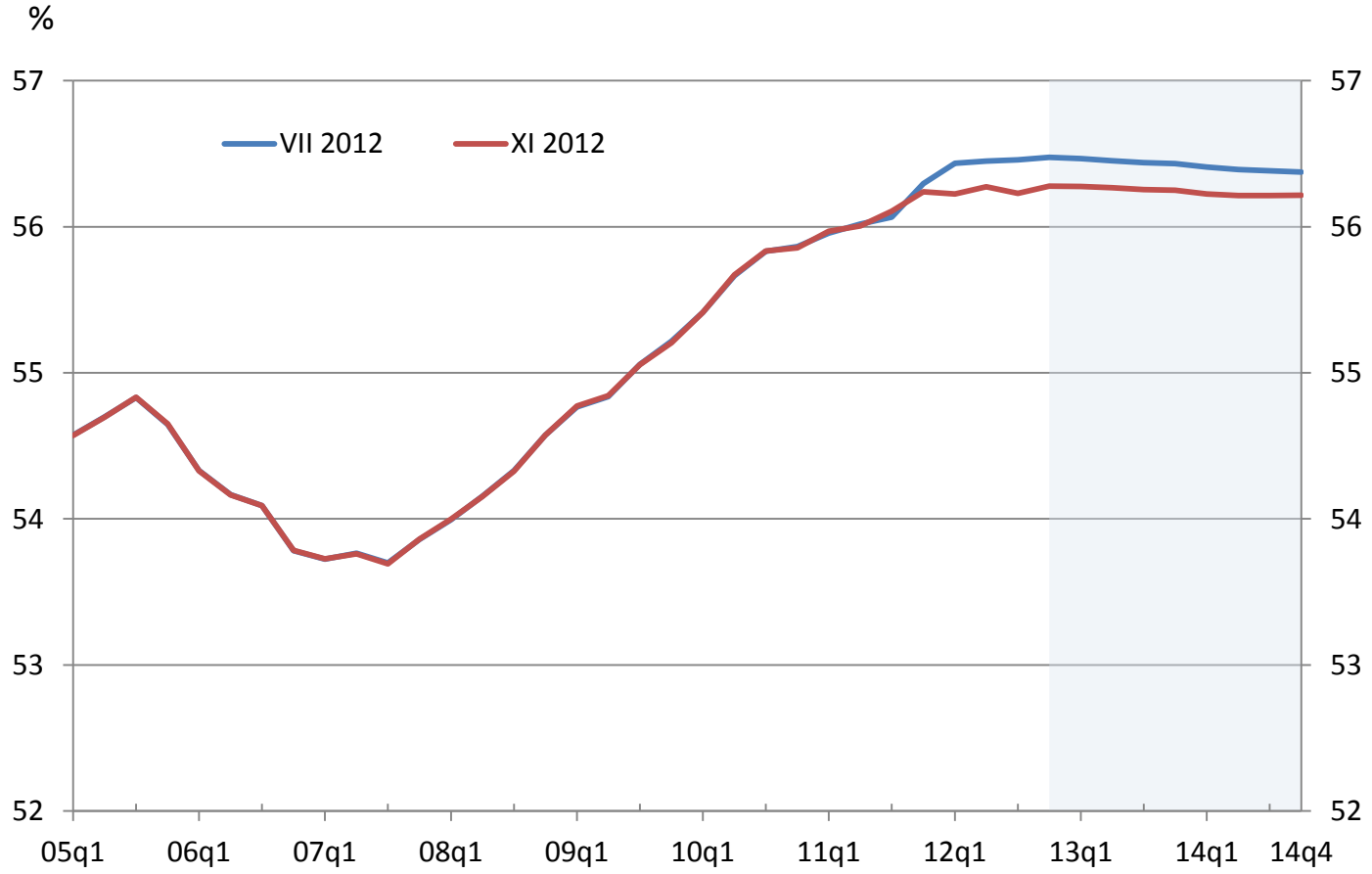
» Risk factors

» Fan charts



Participation rate (lower)

- CHANGES IN THE SCENARIO
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Unemployment

(higher)

CHANGES IN THE SCENARIO

» Changes in the assumptions

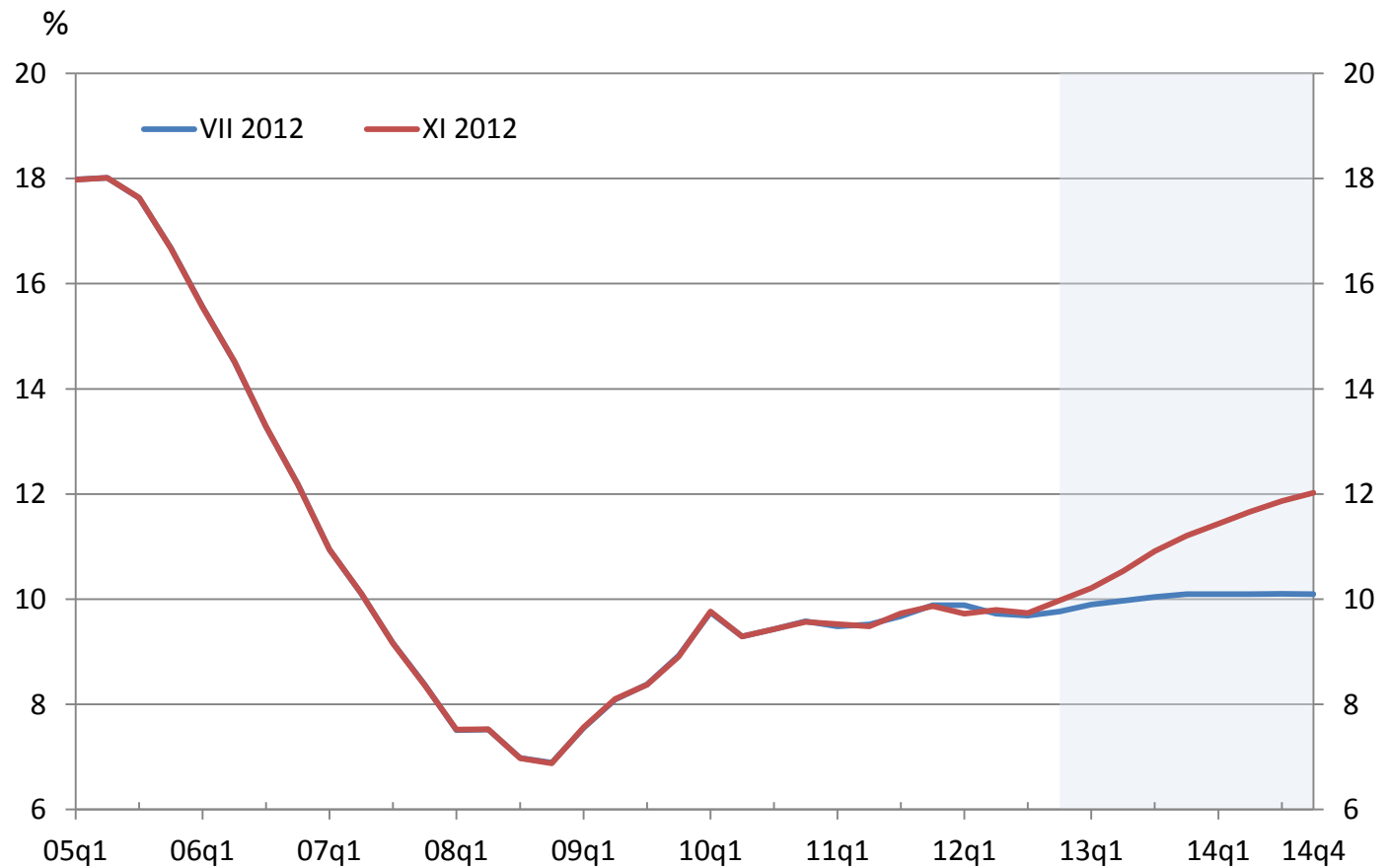
» Current vs. previous projection

PROJECTION 2012-14

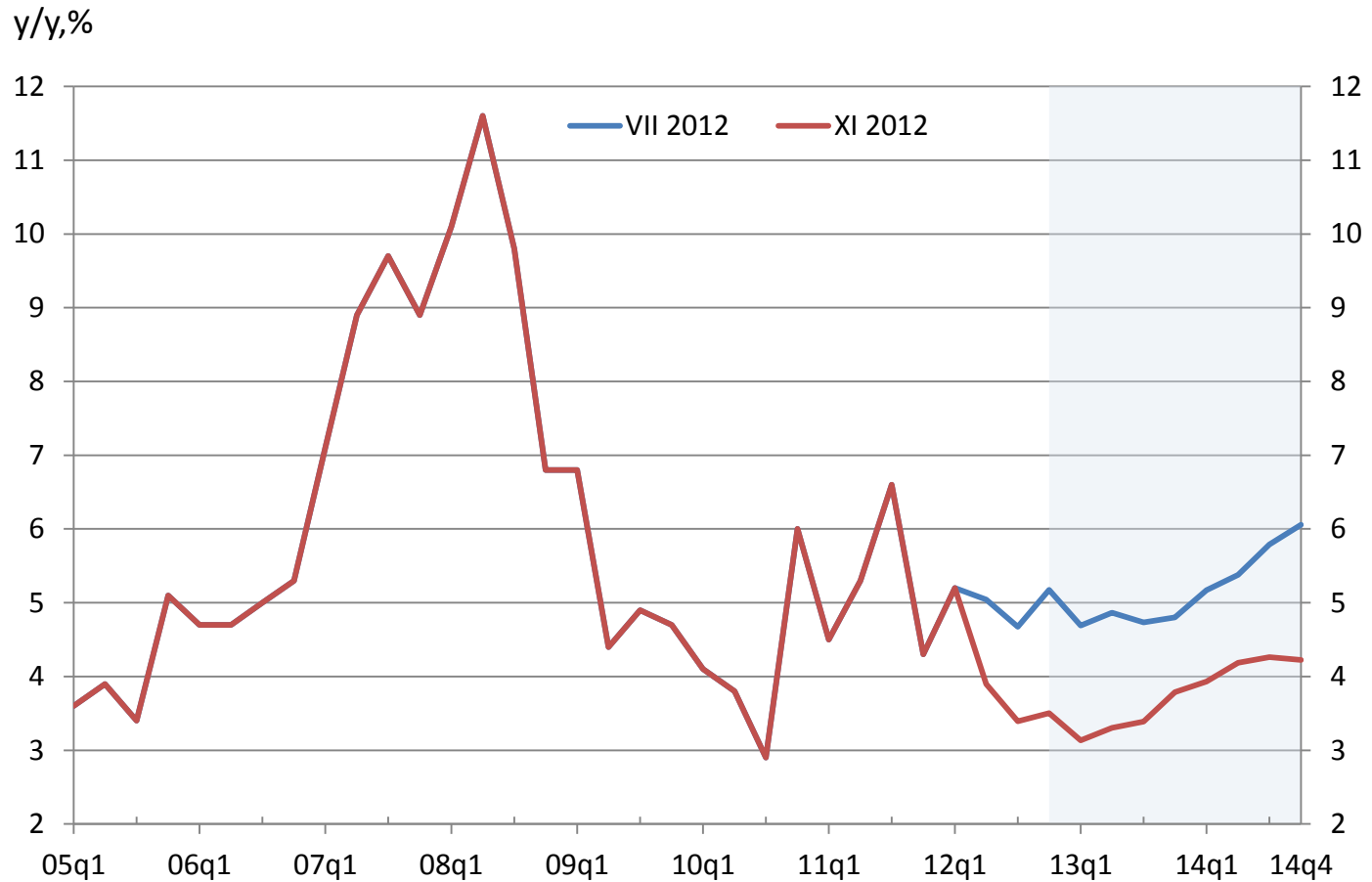
UNCERTAINTY

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» Fan charts



Gross wages (lower)



Unit labour costs (lower)

CHANGES IN THE SCENARIO

» Changes
in the assumptions

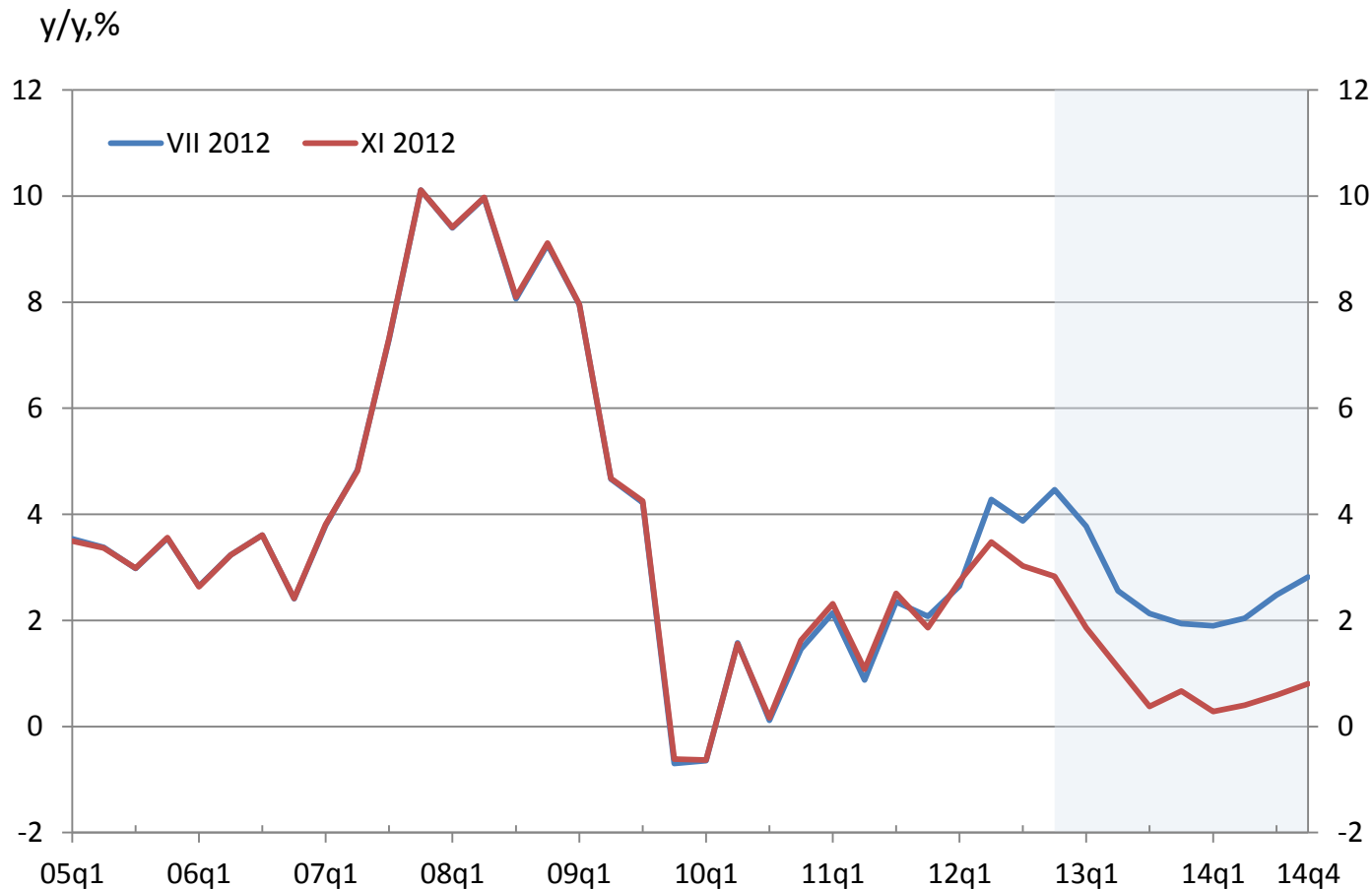
» Current vs. previous
projection

PROJECTION 2012-14

UNCERTAINTY

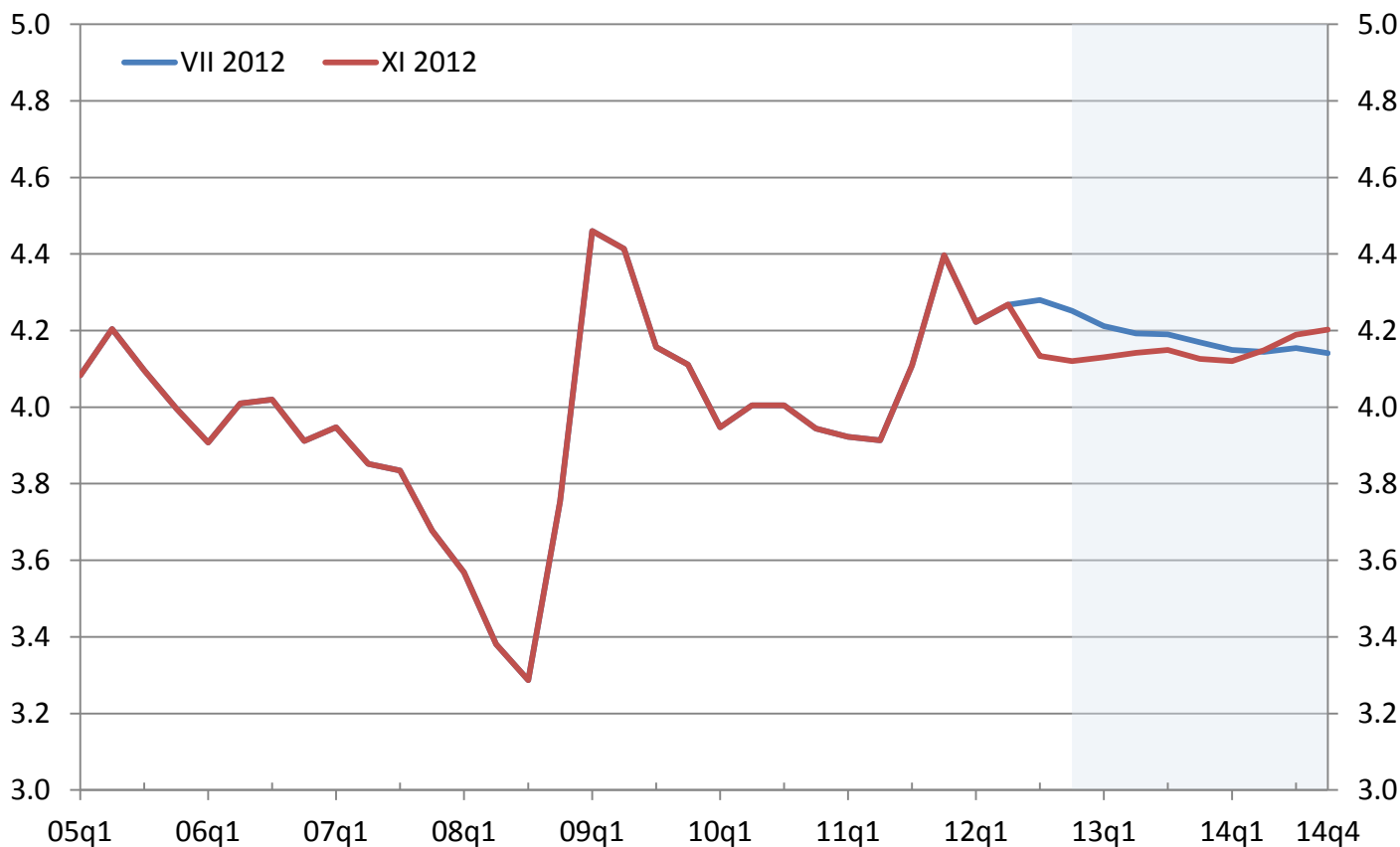
» Risk factors

» Fan charts



Exchange rate (stable)

Nominal effective exchange rate (NEER)



CHANGES IN THE SCENARIO

» Changes in the assumptions

» Current vs. previous projection

PROJECTION 2012-14

UNCERTAINTY

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Import prices (excluding oil and natural gas)

CHANGES IN THE SCENARIO

» Changes
in the assumptions

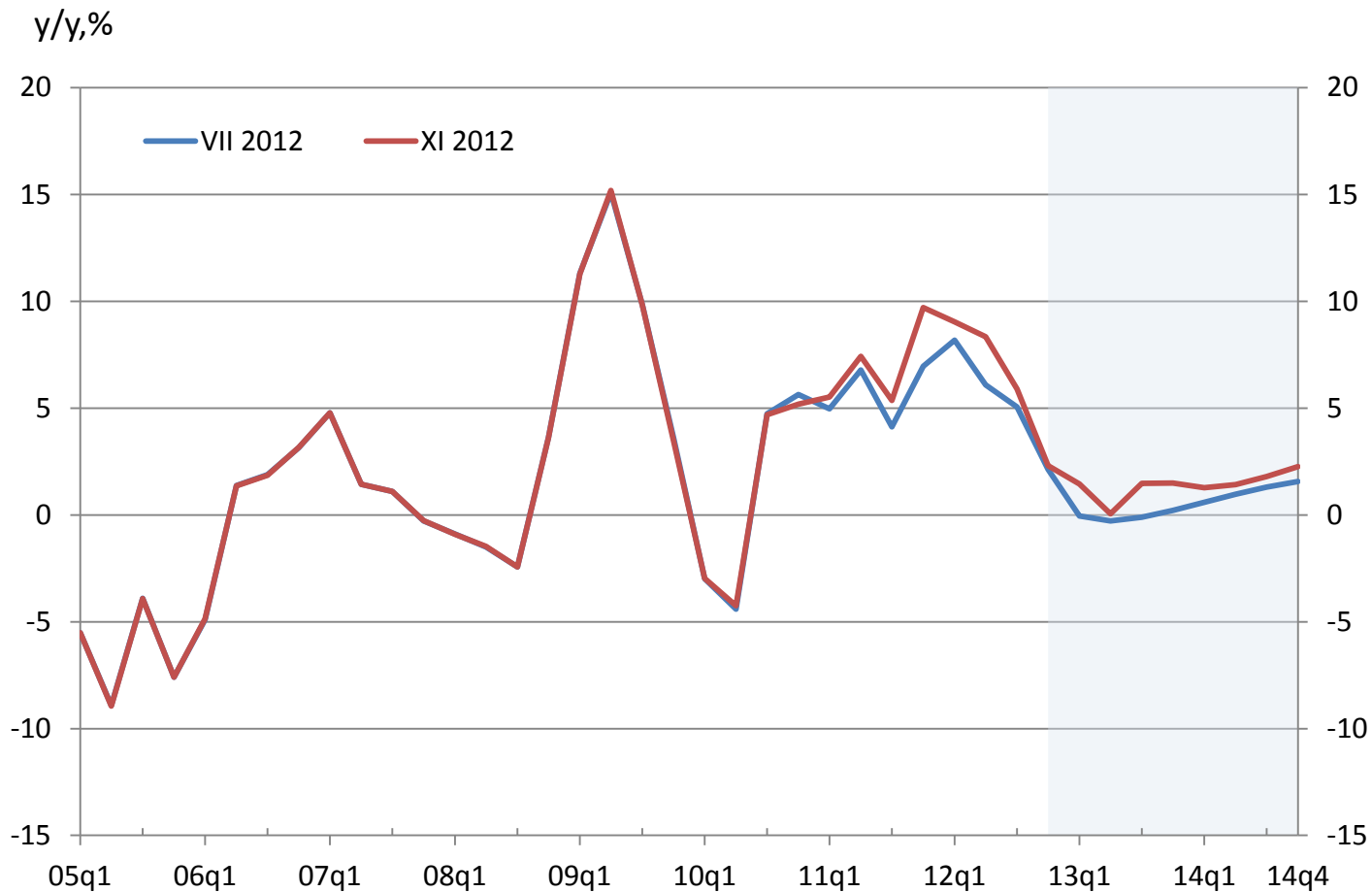
» Current vs. previous
projection

PROJECTION 2012-14

UNCERTAINTY

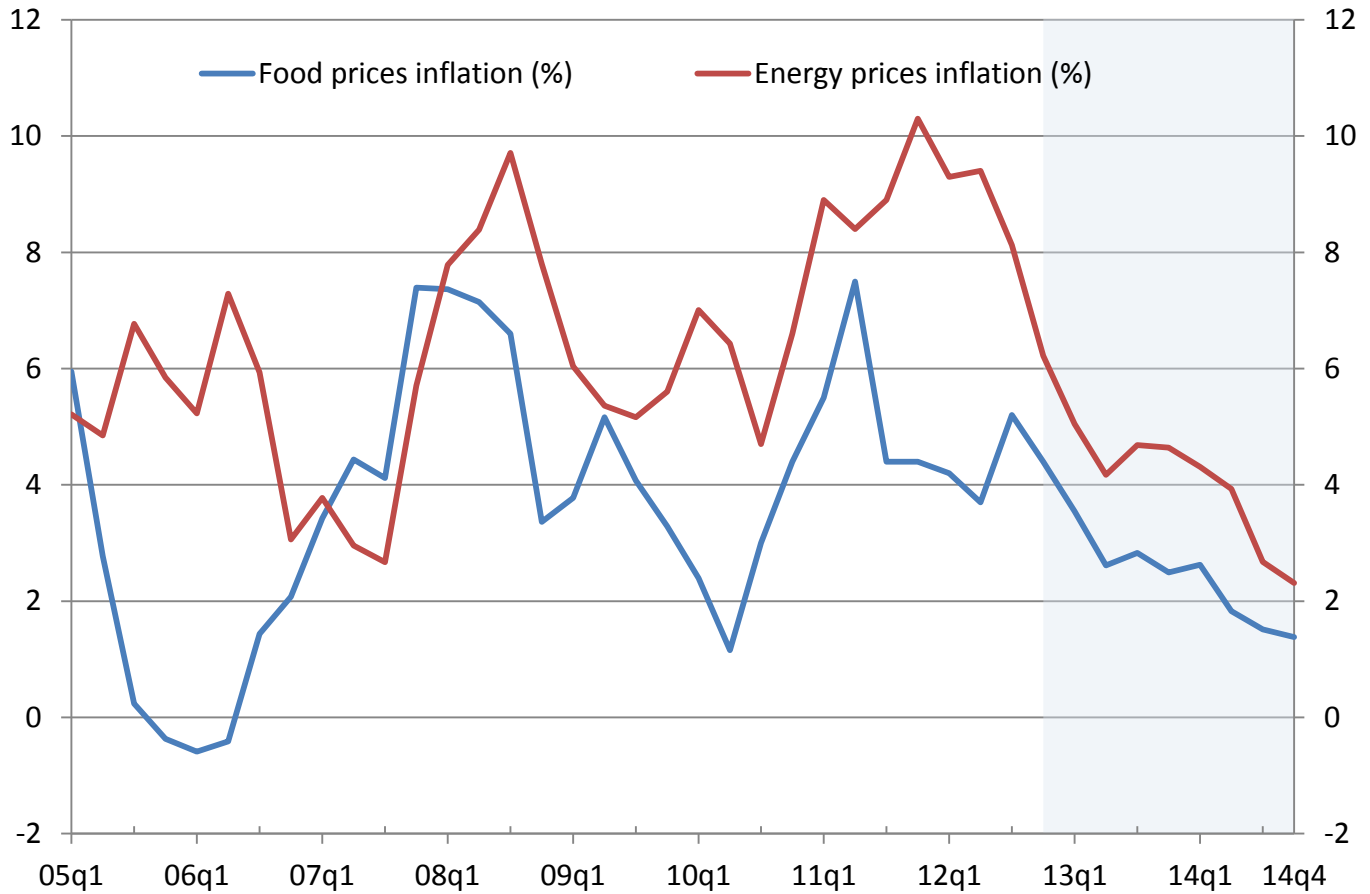
» Risk factors

» Fan charts

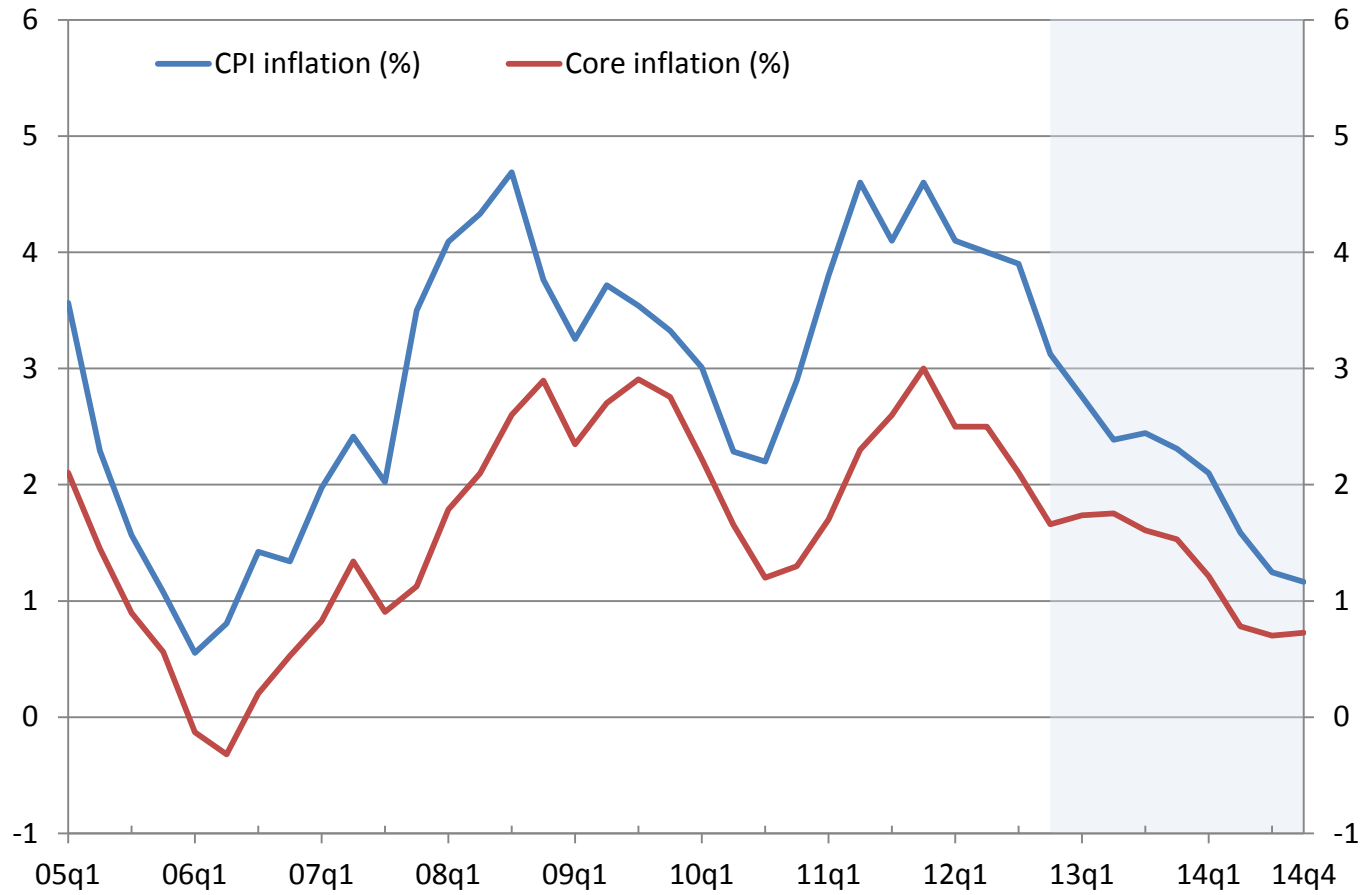


Food and energy prices inflation

- CHANGES IN THE SCENARIO
- » Changes in the assumptions
- » Current vs. previous projection
- PROJECTION 2012-14**
- UNCERTAINTY
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- » Fan charts



Core inflation and CPI inflation*



* Core inflation does not include food, beverages and energy prices.

CHANGES IN THE SCENARIO

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PROJECTION 2012-14

UNCERTAINTY

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Decomposition of deviations between July and March projections: CPI inflation

CHANGES IN THE SCENARIO

» Changes in the assumptions

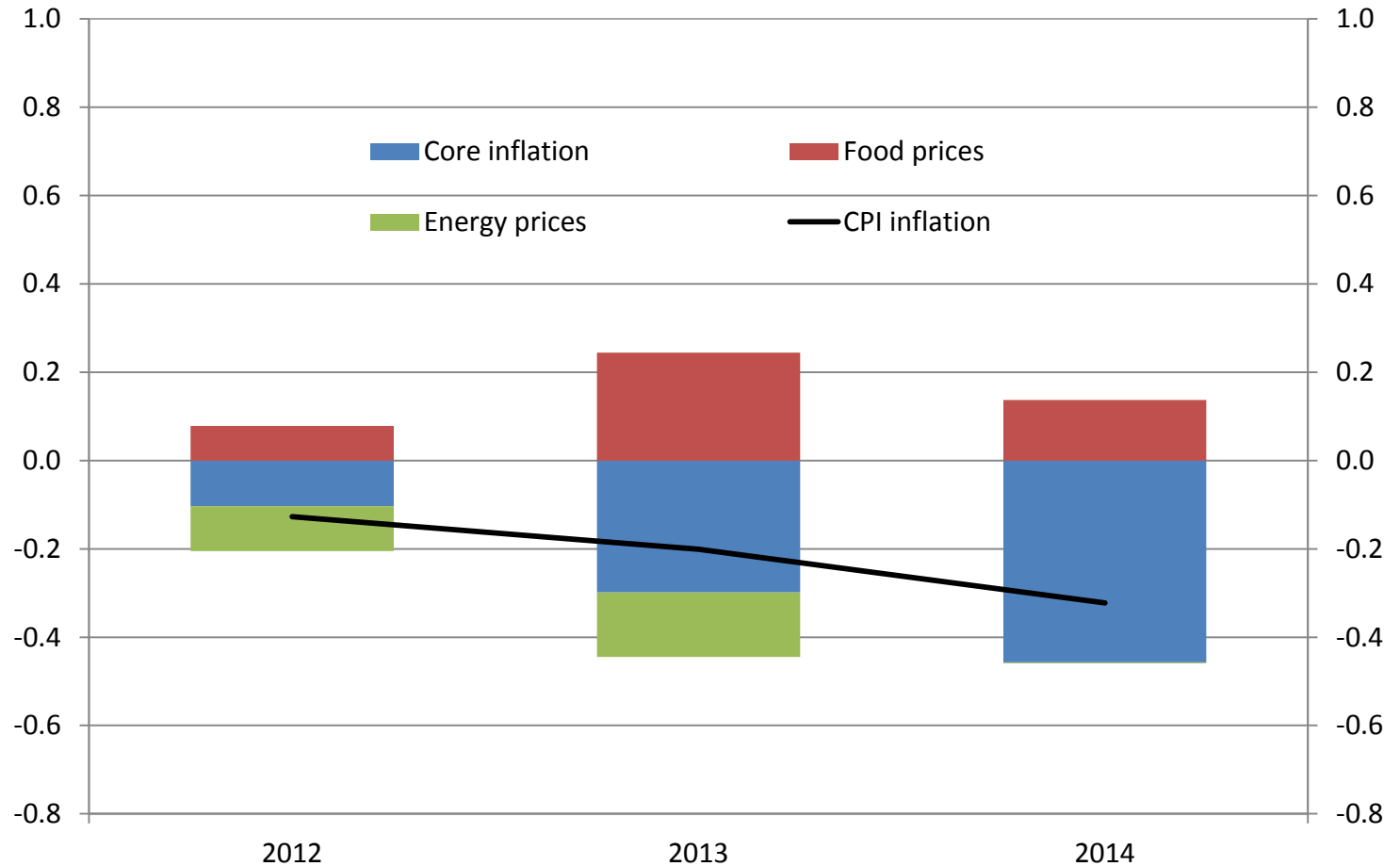
» Current vs. previous projection

PROJECTION 2012-14

UNCERTAINTY

» Risk factors

» Fan charts



CHANGES IN
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» Fan charts

UNCERTAINTY OF THE PROJECTION

- Risk factors
- Fan charts

CHANGES IN
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UNCERTAINTY

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Risk factors

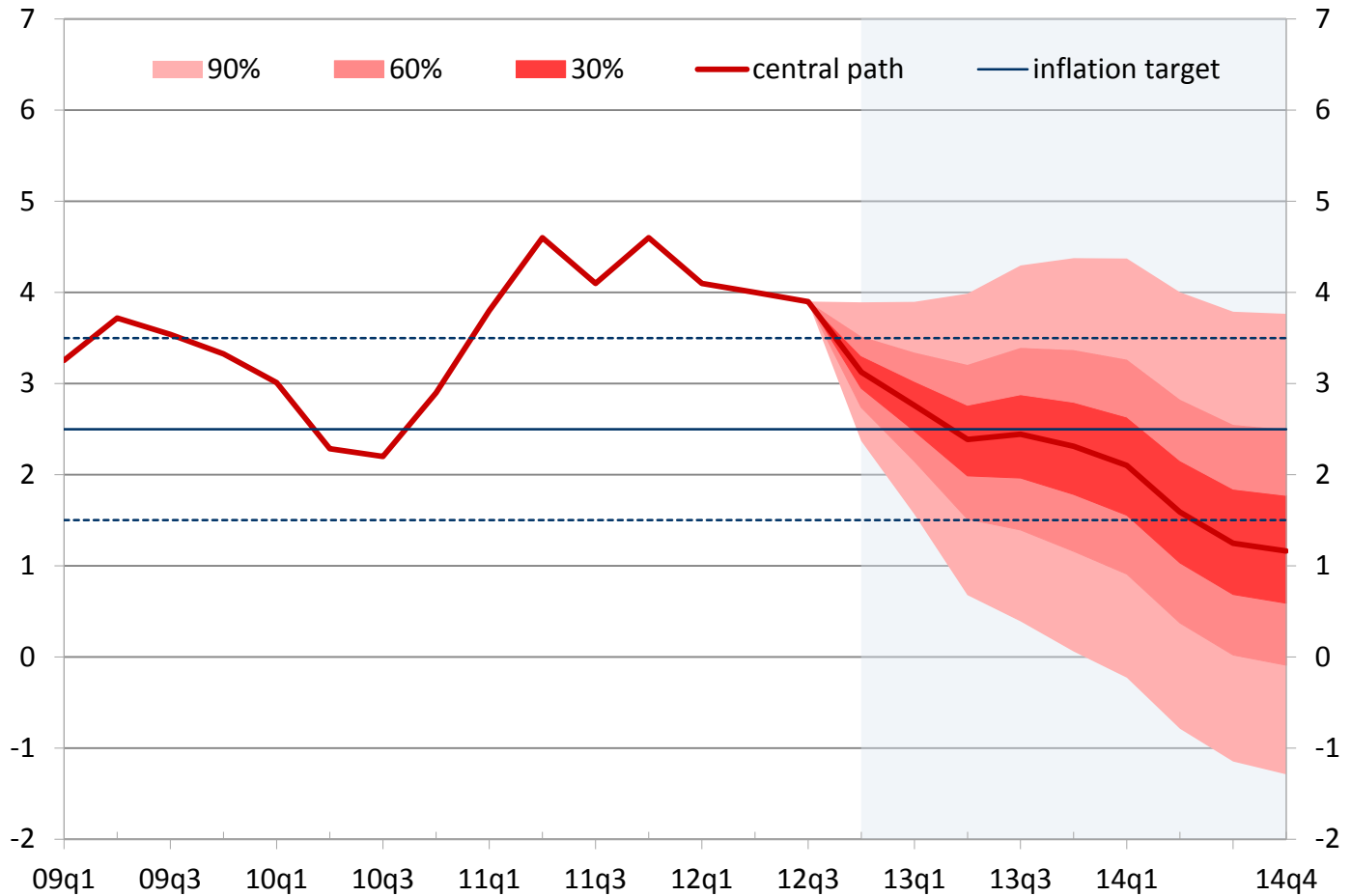
The scale of impact: *** high
** medium
* low

	Risk area	Description	Impact	Scale of impact
CHANGES IN THE SCENARIO » Changes in the assumptions » Current vs. previous projection	External environment and exchange rate	<ul style="list-style-type: none"> ▪ An increase in uncertainty due to worsening growth prospects in developed countries, especially the length of the recession in the euro area and the limits of the future expansion. ▪ The situation on the global financial markets – including impact of rising sovereign debt of some euro area countries and liquidity constraints of some European banks. ▪ The zloty exchange rate path, highly dependent on the future situation in the euro area. ▪ The reaction of governments and central banks of developed countries (i.e. the scale of a possible resumption of fiscal and monetary stimulus), including uncertainty about the effects of implementation by the Federal Reserve of the next round of quantitative easing (the so-called QE3 program). ▪ The agricultural and energy commodities' prices on the global markets. 	inflation ↔ GDP ↔	***
PROJECTION 2012-14				
UNCERTAINTY				
» Risk factors				
» Fan charts				

	Risk area	Description	Impact	Scale of impact
CHANGES IN THE SCENARIO				
» Changes in the assumptions	Domestic demand	<ul style="list-style-type: none"> ▪ The situation abroad and fiscal tightening - improved assessment of Poland's creditworthiness. Consequently, higher inflow of capital, including inflow of foreign direct investments. ▪ 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 ↔	**
» Current vs. previous projection				
PROJECTION 2012-14				
UNCERTAINTY				
» Risk factors	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. ▪ Unfavourable conditions of cereal production. 	inflation ↔ GDP ↔	**
» Fan charts				
	Conclusions		inflation ↔ GDP ↔	

Inflation projection – November 2012

- CHANGES IN THE SCENARIO
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Probability distribution for inflation

CHANGES IN THE SCENARIO						
	%	below 1,5%	below 2,5%	below 3,5%	below the central path	in the range (1,5% ;3,5%)
» Changes in the assumptions						
» Current vs. previous projection						
PROJECTION 2012-14	12q4	0,00	0,08	0,78	0,49	0,78
	13q1	0,04	0,35	0,85	0,50	0,81
	13q2	0,19	0,54	0,87	0,50	0,68
	13q3	0,22	0,53	0,82	0,51	0,60
	13q4	0,27	0,56	0,82	0,50	0,55
	14q1	0,33	0,60	0,83	0,49	0,51
	14q2	0,46	0,72	0,90	0,49	0,43
	14q3	0,54	0,78	0,92	0,48	0,38
14q4	0,57	0,79	0,93	0,48	0,36	
UNCERTAINTY						
» Risk factors						
» Fan charts						

GDP projection – November 2012

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