

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
 - July projection compared to March 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

JULY PROJECTION COMPARED TO MARCH PROJECTION

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

Changes in the projection assumptions

CHANGES IN THE SCENARIO

- » Changes in the assumptions
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PROJECTION 2012-14

- Appreciation of the zloty exchange rate
- Decrease of energy commodity prices [USD]
- Increase of the NBP interest rates by 25 basis points
- Data on CPI inflation for ref. period 2012 Q1
- Re-estimation of the model

UNCERTAINTY

- » Risk factors
- » Fan charts

Exchange rate (stronger)

CHANGES IN THE SCENARIO

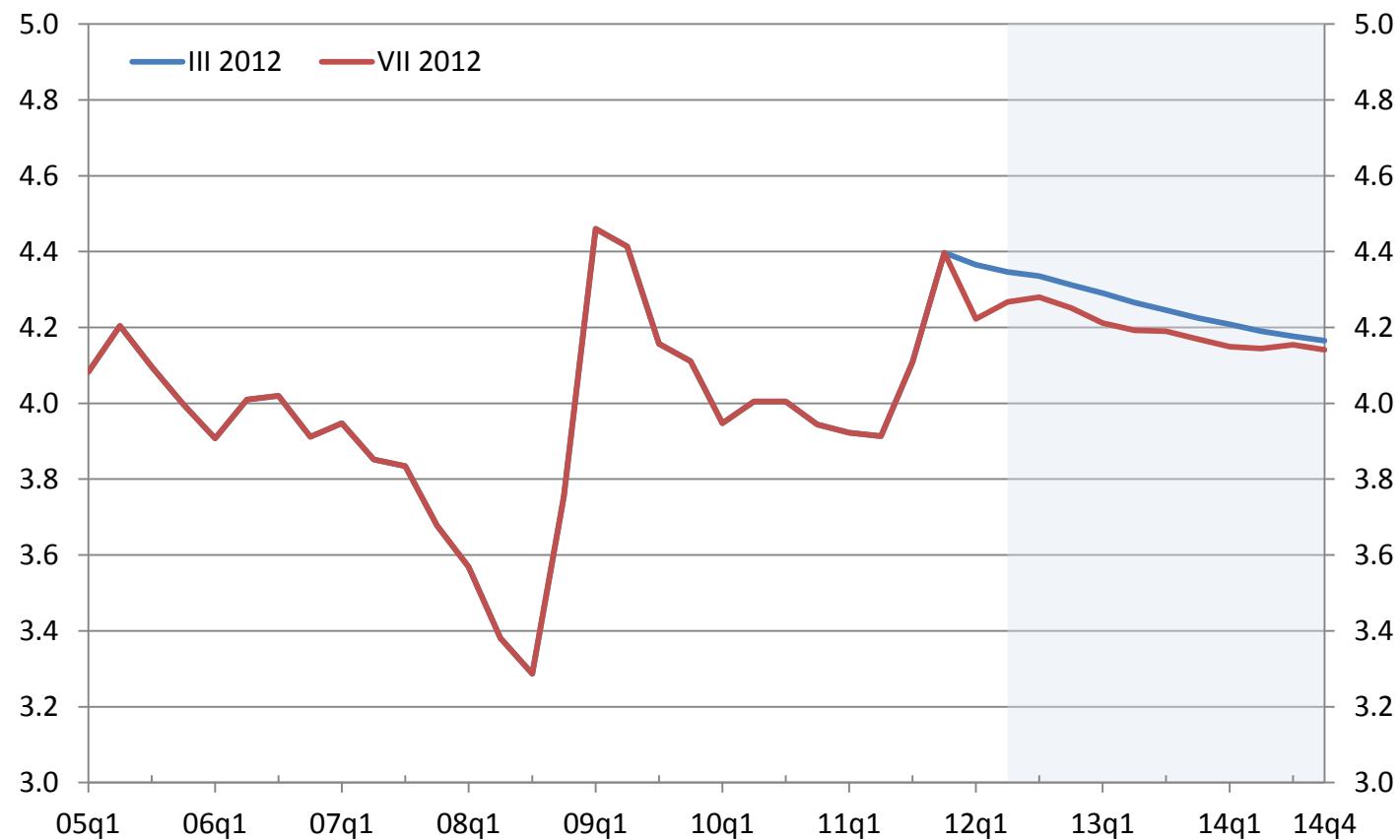
- » Changes
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PROJECTION 2012-14

UNCERTAINTY

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Nominal effective exchange rate (NEER)



Energy commodity price index*

(lower)

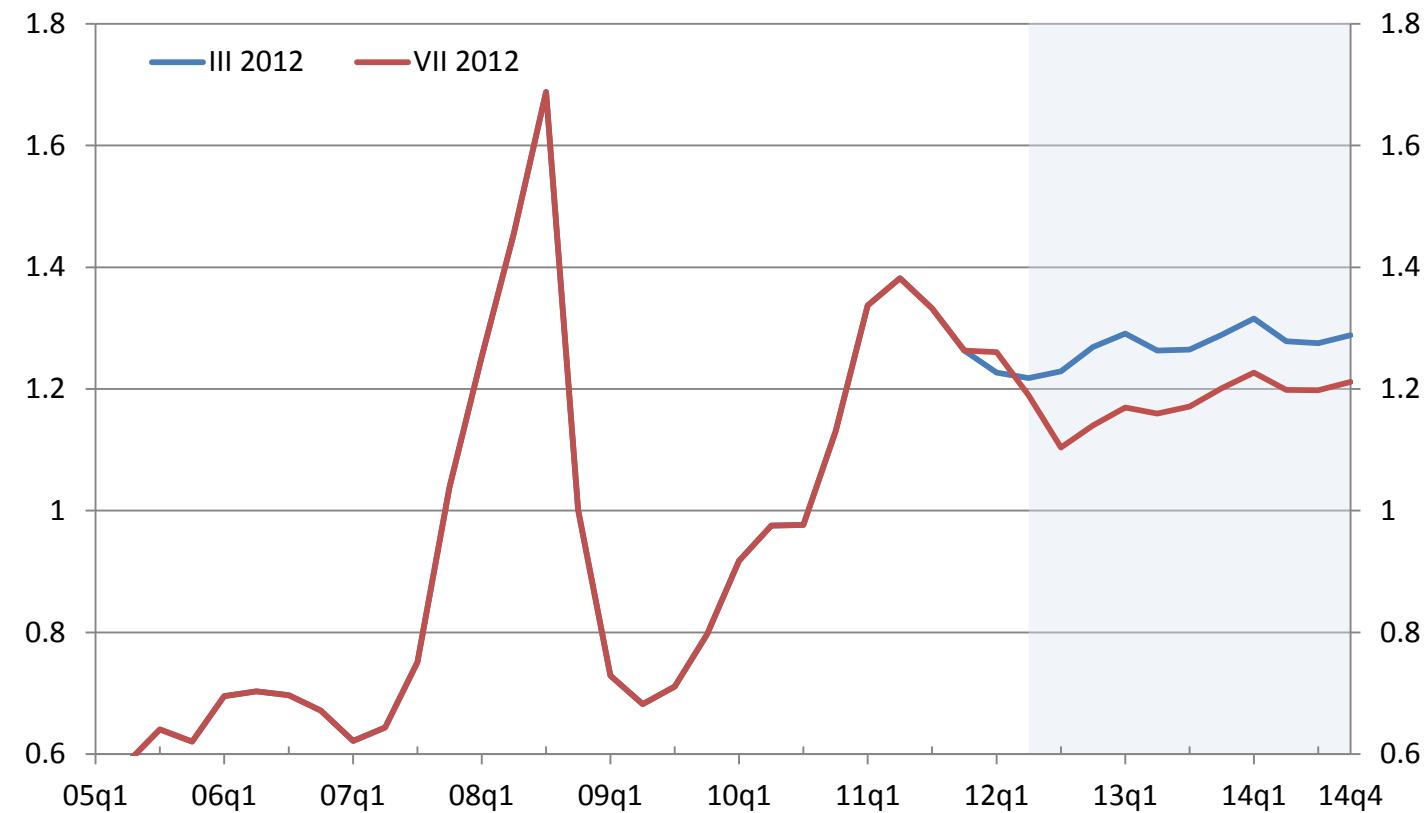
CHANGES IN THE SCENARIO

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

3 month WIBOR (higher)

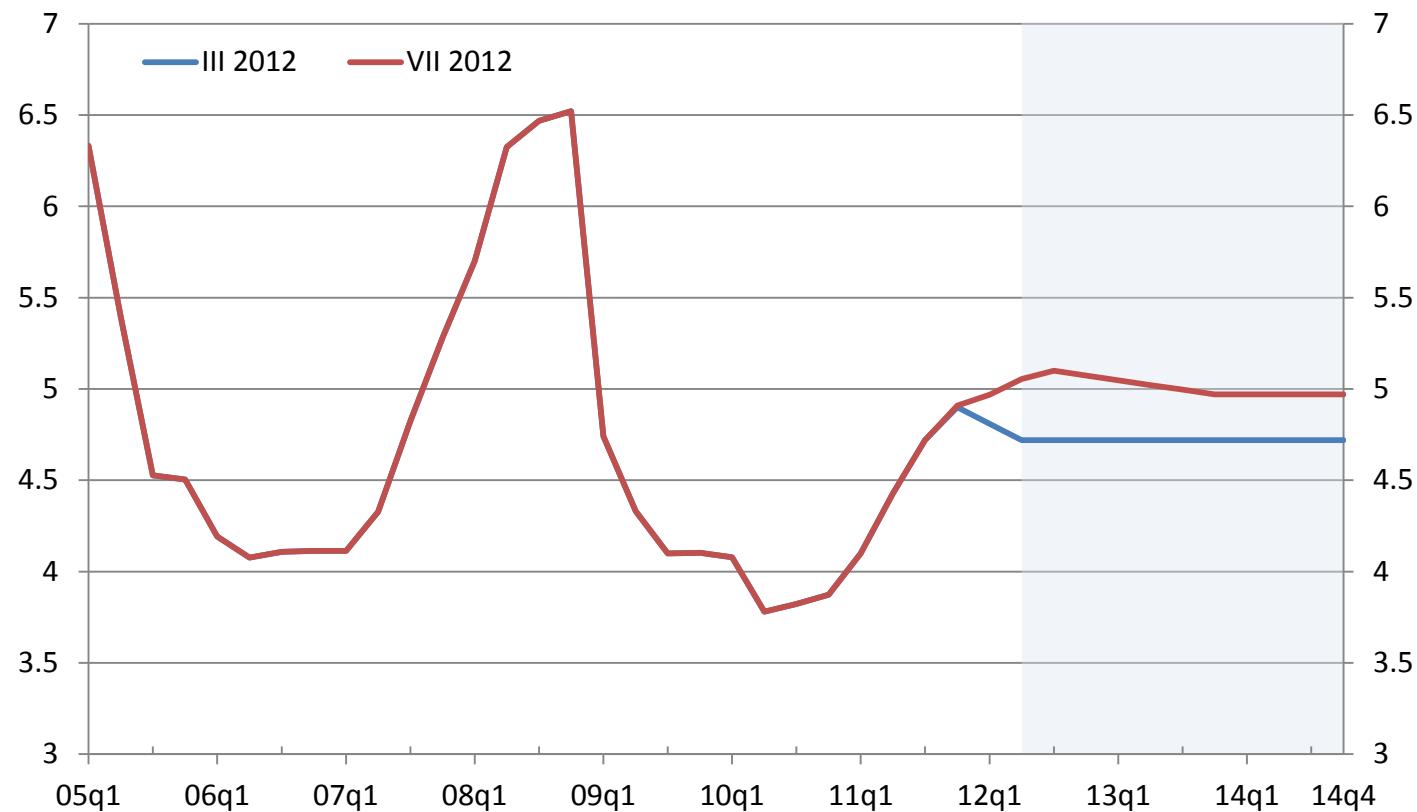
CHANGES IN THE SCENARIO

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Inflation

CHANGES IN THE SCENARIO

- » Changes in the assumptions
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PROJECTION 2012-14

	11Q4	12Q1
CPI inflation (y/y) (%)	4,6 (05)	4,1 (4,3)
Core inflation (y/y) (%)	3,0 (03)	2,5 (3,0)
Food price inflation (y/y) (%)	4,4 (04)	4,2 (3,8)
Energy price inflation (y/y) (%)	10,3 (10)	9,3 (9,4)

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

July projection compared to March projection: CPI inflation

CHANGES IN THE SCENARIO

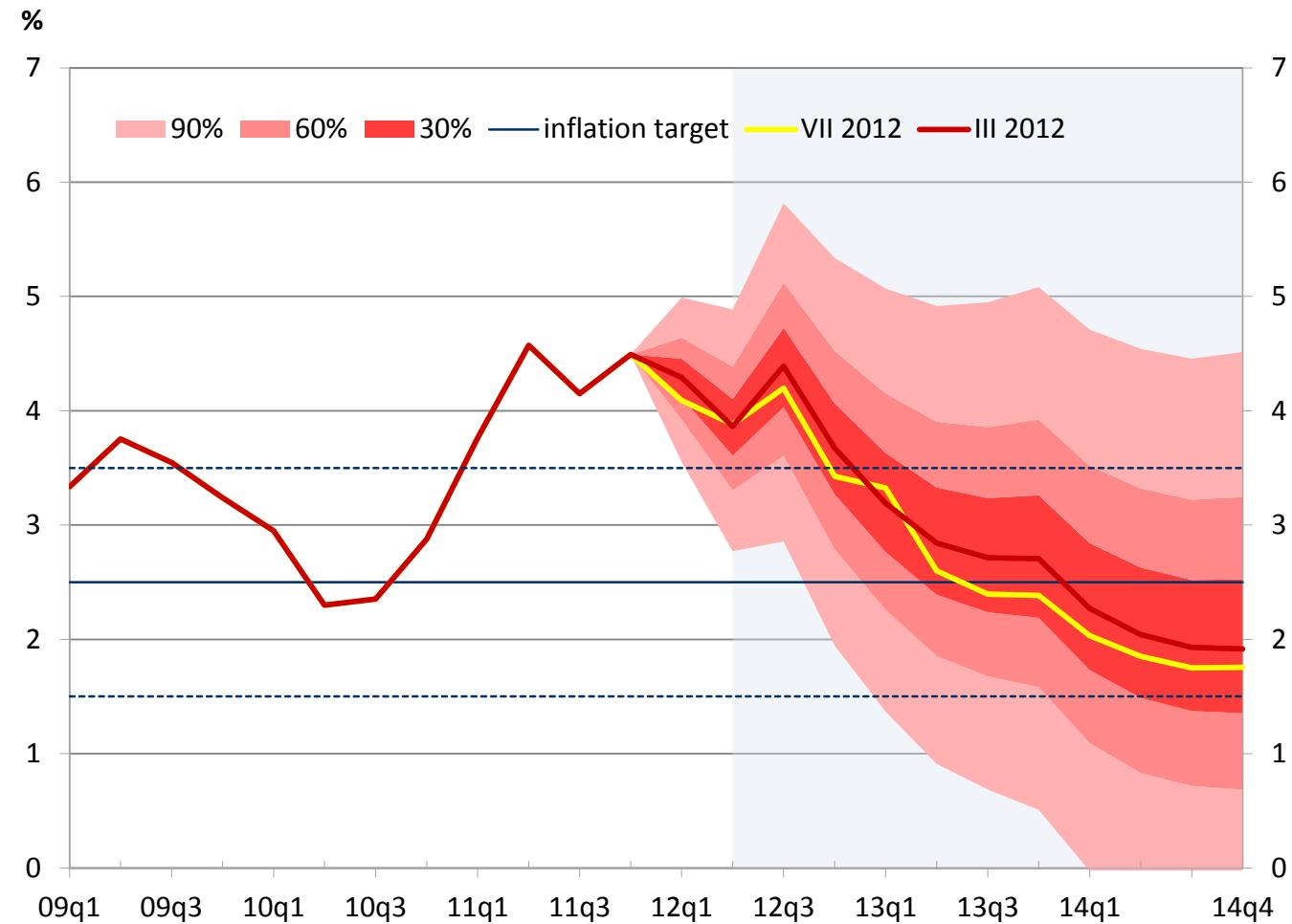
- » Changes
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PROJECTION 2012-14

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July projection compared to March projection: GDP

CHANGES IN THE SCENARIO

» Changes
in the assumptions

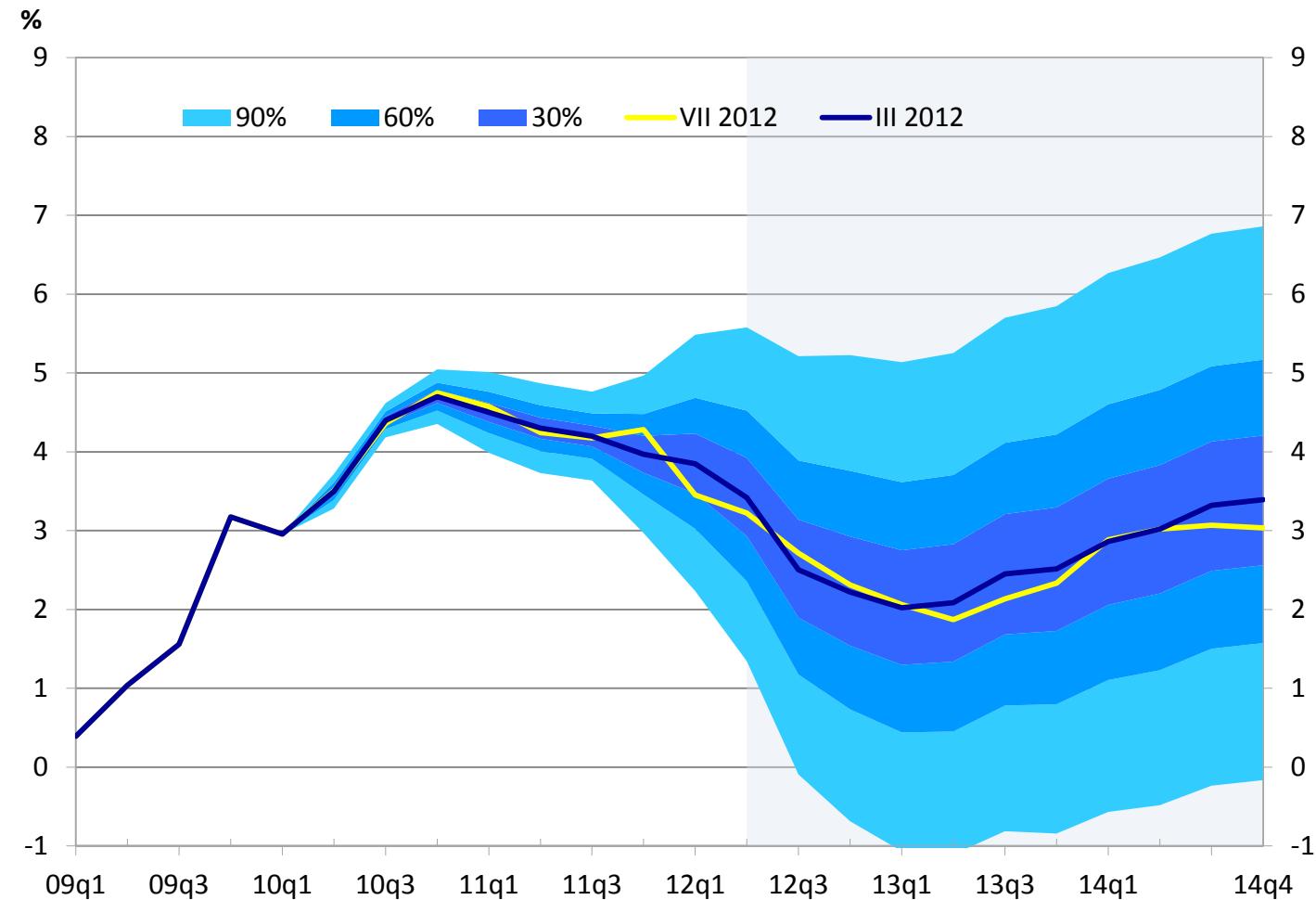
» Current vs. previous
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PROJECTION 2012-14

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Decomposition of deviations between July and March projections: CPI inflation

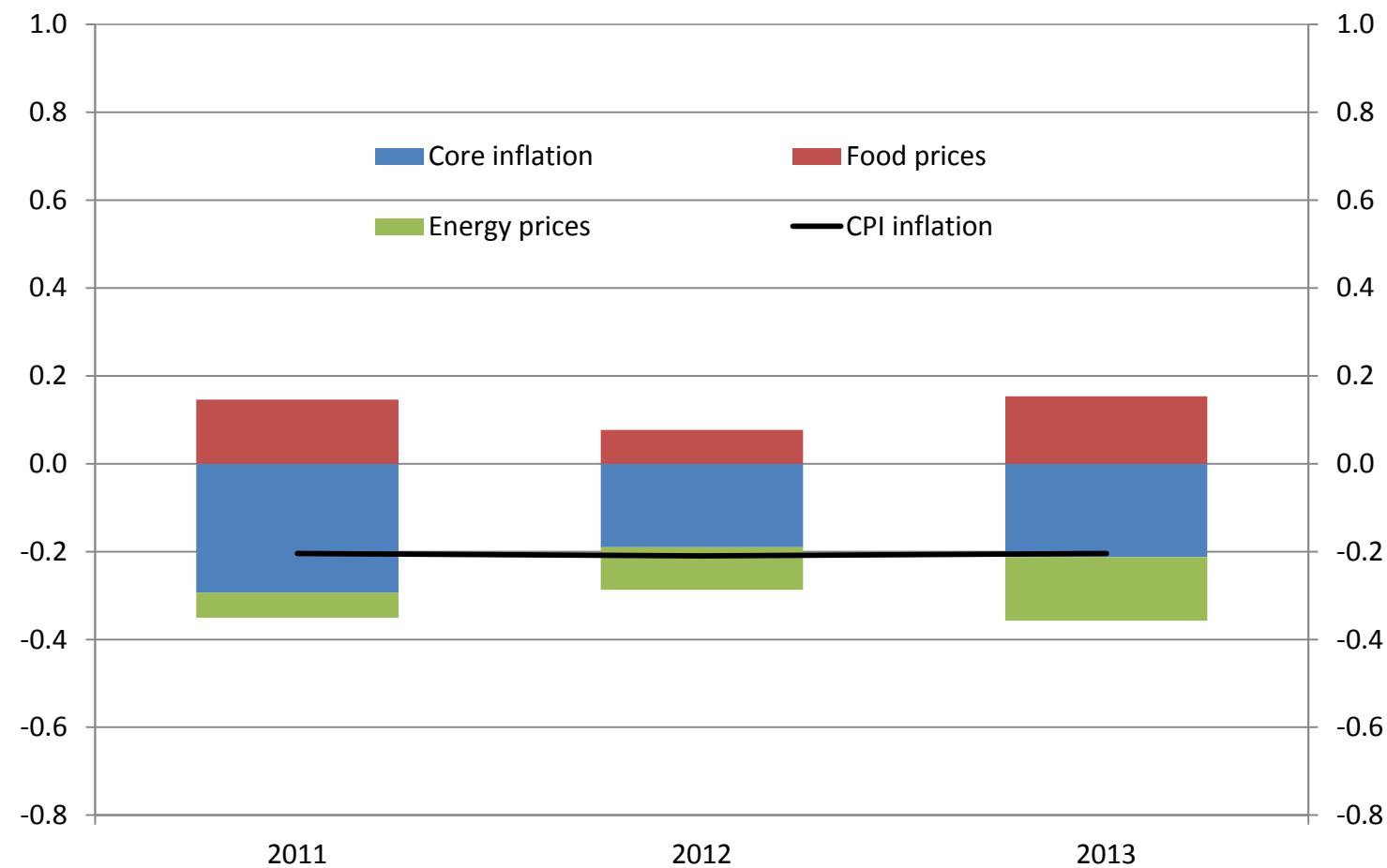
CHANGES IN THE SCENARIO

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UNCERTAINTY

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Decomposition of deviations between July and March projections: GDP

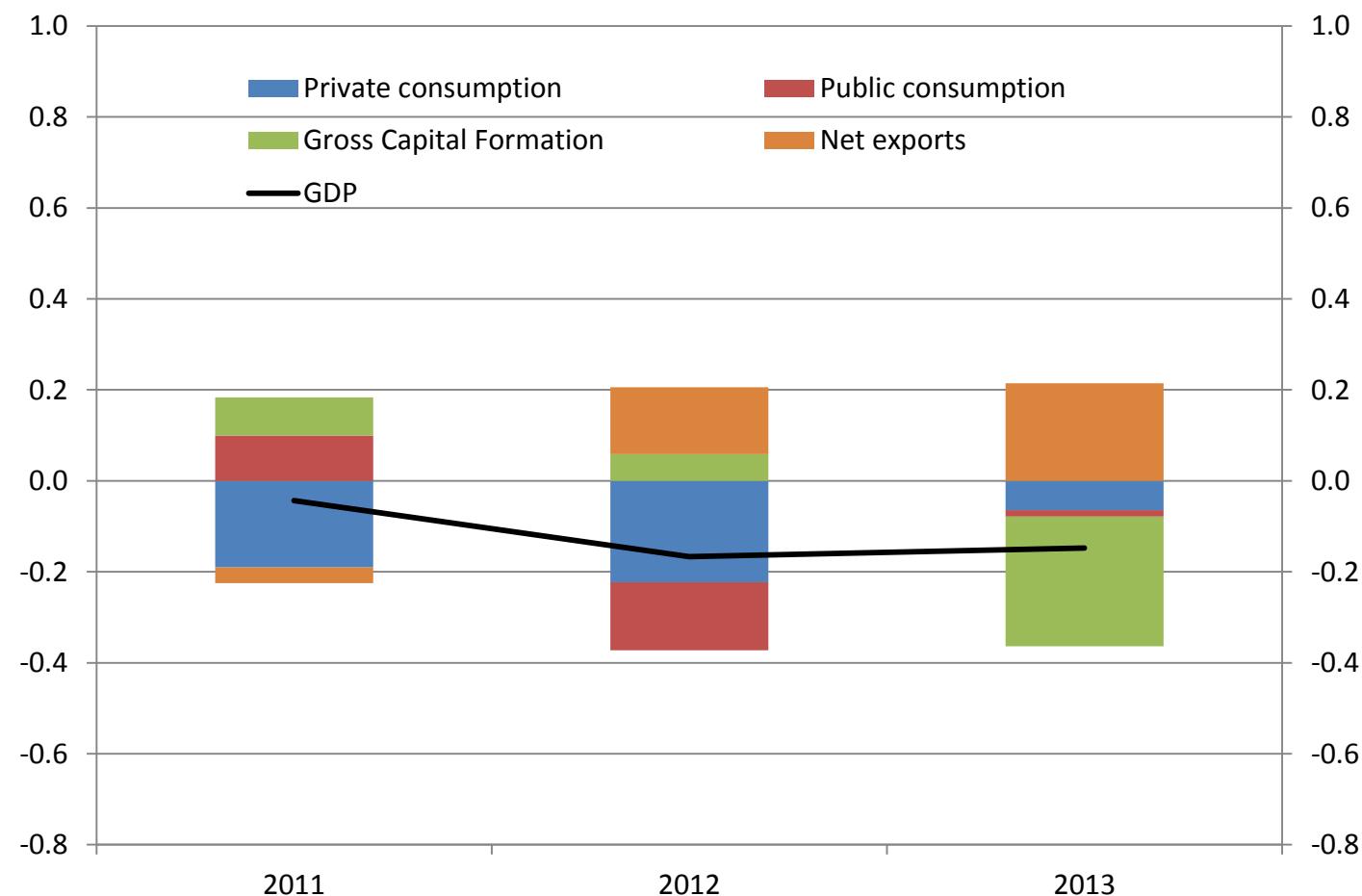
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PROJECTION

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PROJECTION 2012-14

Projection for 2012-2014

UNCERTAINTY

- » Risk factors
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- GDP and its components
- Labour market
- Exchange rate
- Inflation

GDP and its components

CHANGES IN THE SCENARIO	
» Changes in the assumptions	
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PROJECTION 2012-14	
UNCERTAINTY	
» Risk factors	
» Fan charts	

	11Q4	12Q1
GDP (y/y) (%)	4,3 (4,0)	3,5 (3,8)
Domestic demand (y/y) (%)	3,2 (2,6)	2,7 (3,3)
Individual consumption (y/y) (%)	2,1 (2,9)	2,1 (2,6)
Public consumption (y/y) (%)	-0,1 (-3,5)	-1,3 (-2,4)
Gross fixed capital formation (y/y) (%)	9,7 (10,0)	6,7 (8,1)
Exports (y/y) (%)	7,9 (7,4)	4,8 (6,2)
Imports (y/y) (%)	5,0 (4,2)	3,2 (5,1)
Net exports contribution (percentage points)	1,0 (1,3)	0,7 (0,5)

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

GDP: Poland vs euro area

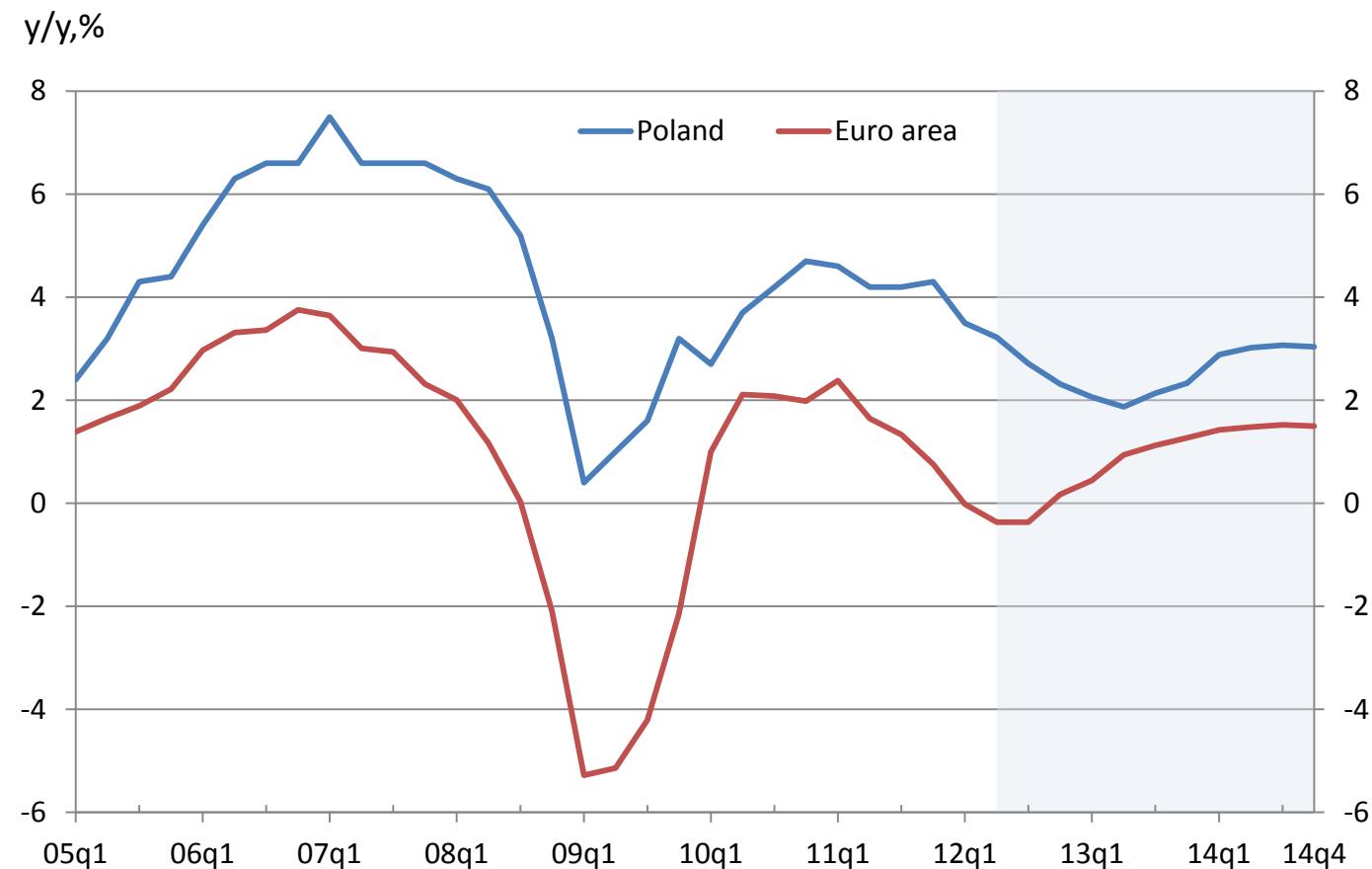
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EU transfers – decomposition (EUR bn.)

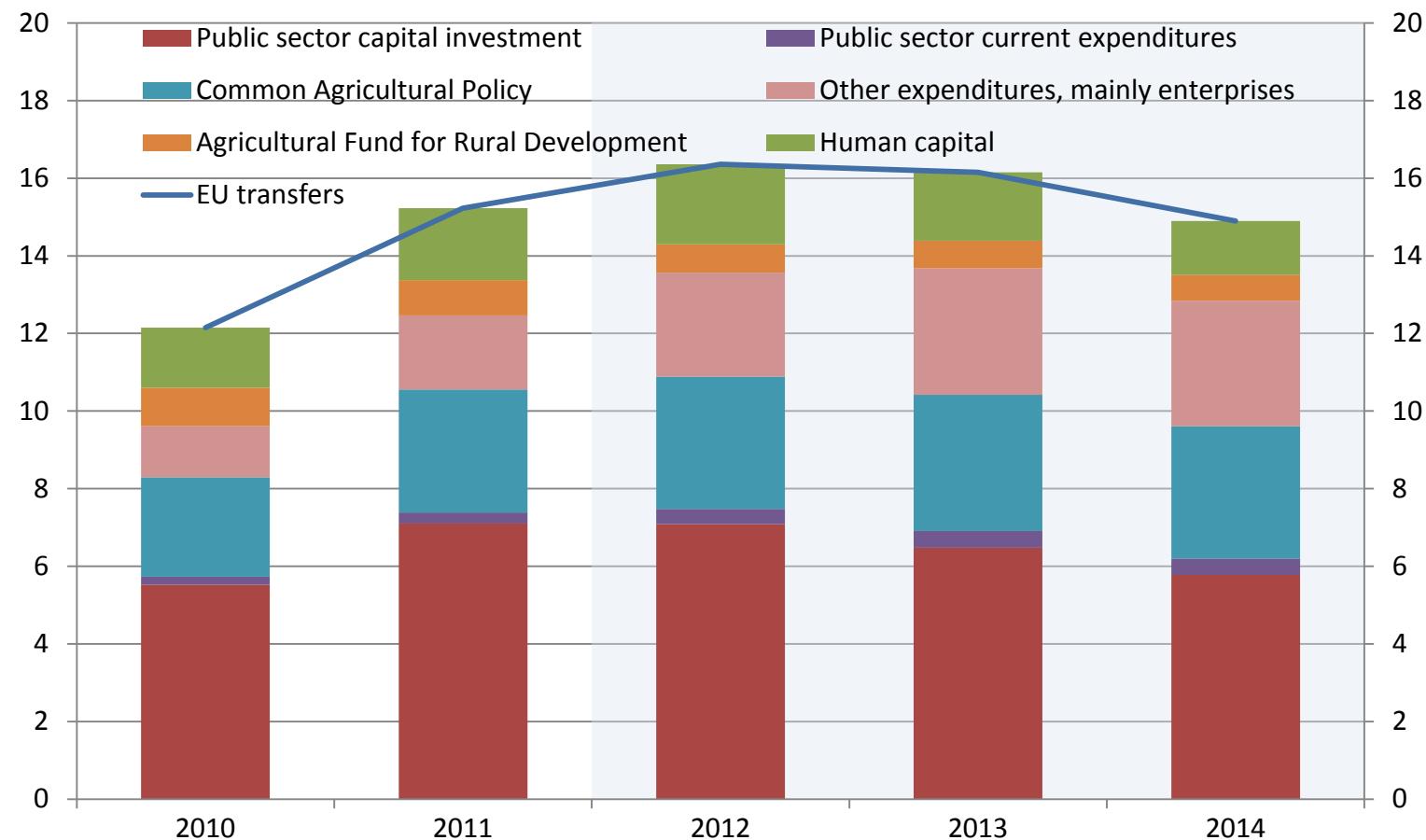
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GDP: decomposition

CHANGES IN THE SCENARIO

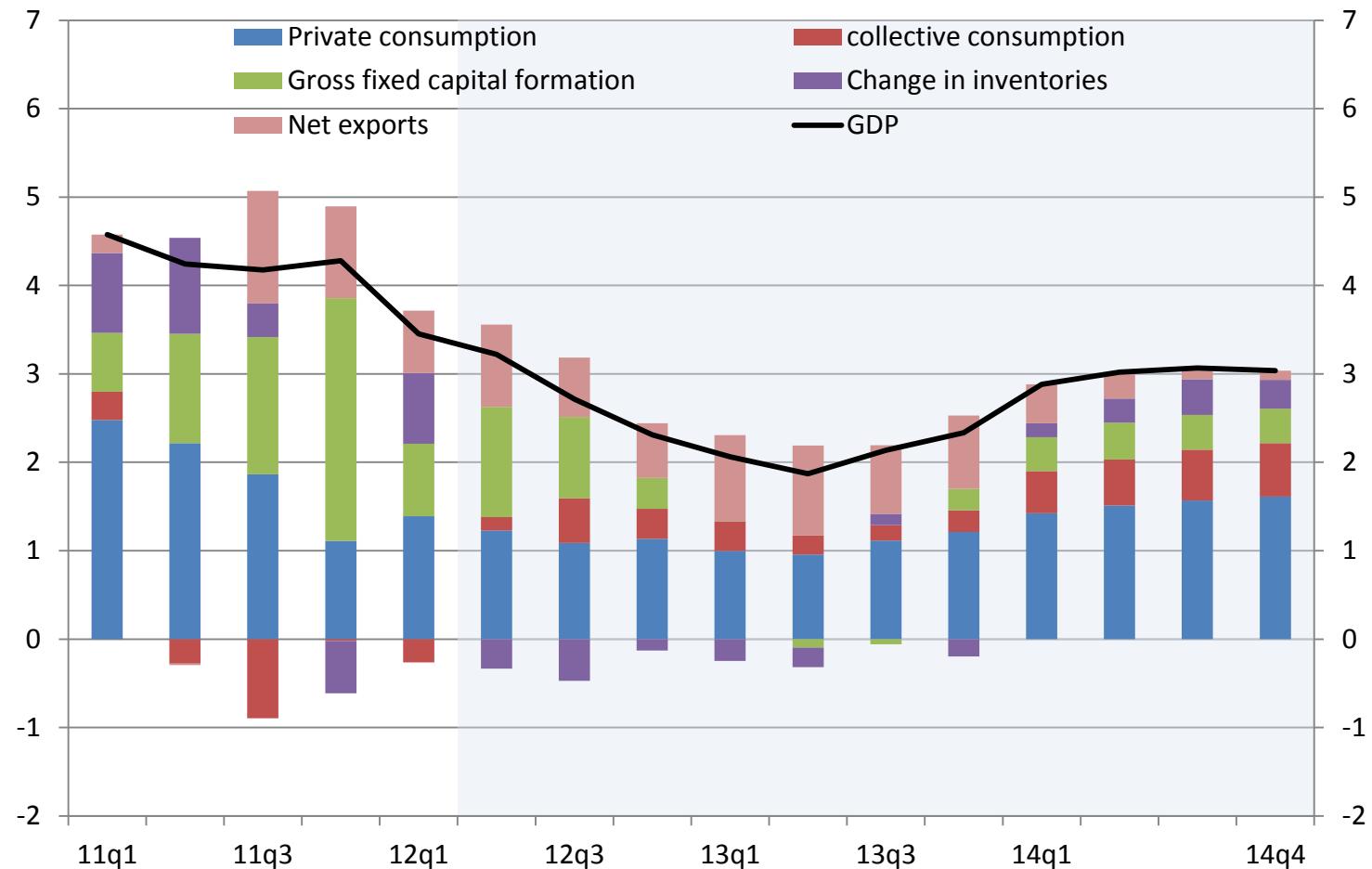
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Gross fixed capital formation: decomposition

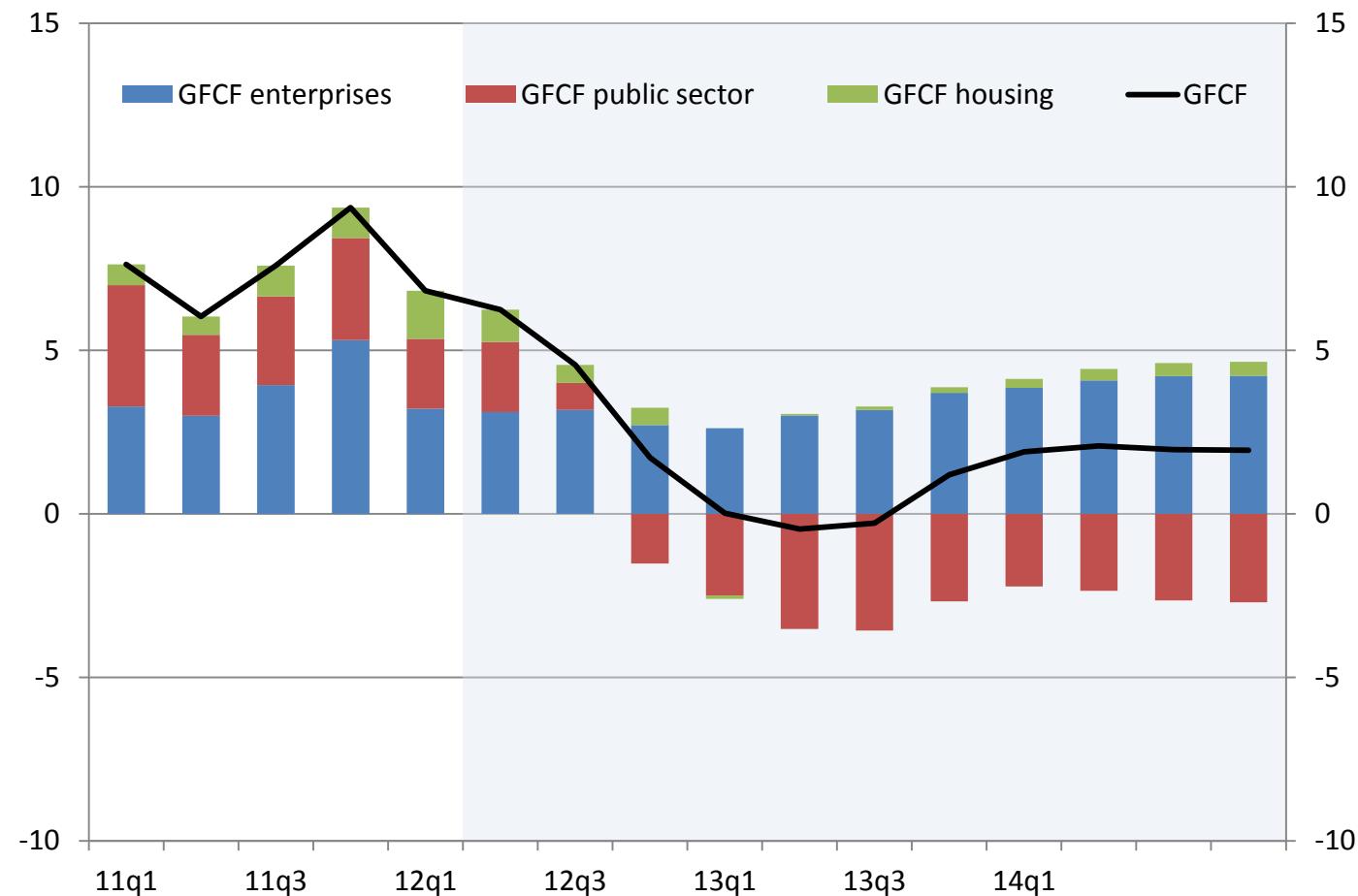
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Gross fixed capital formation

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

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Private consumption (lower)

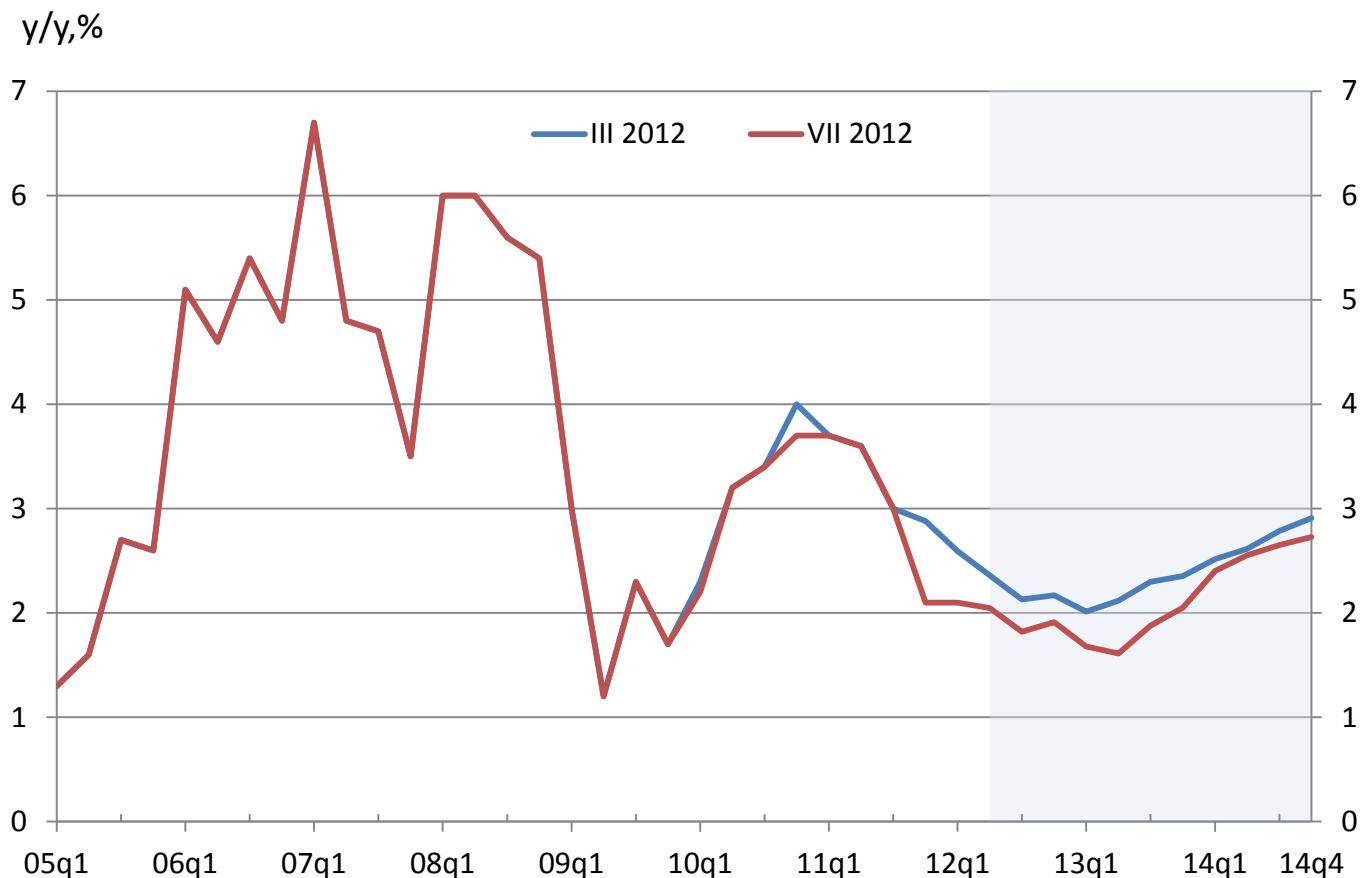
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Trade with other countries

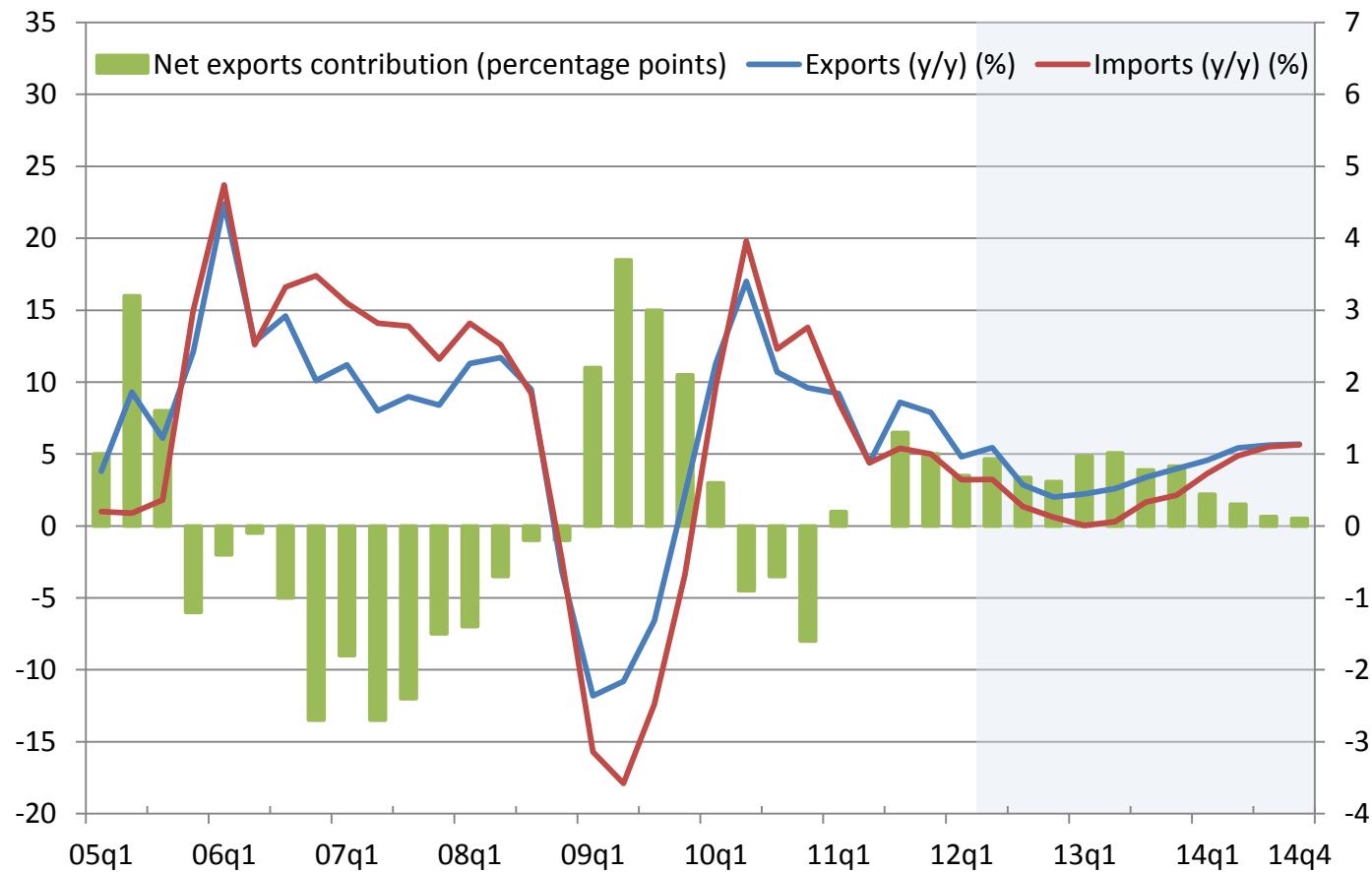
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Potential output

CHANGES IN THE SCENARIO

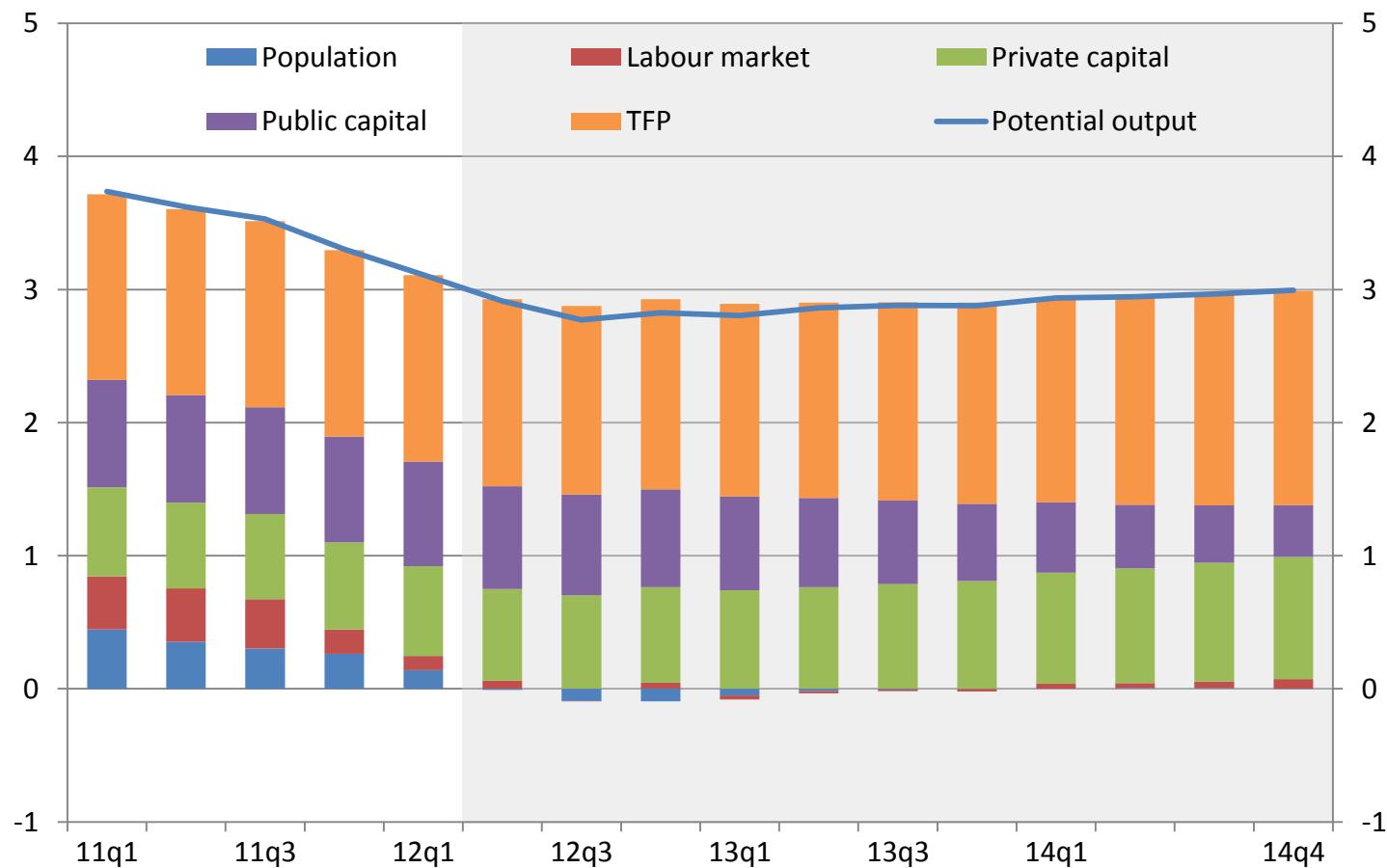
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Output gap

CHANGES IN THE SCENARIO

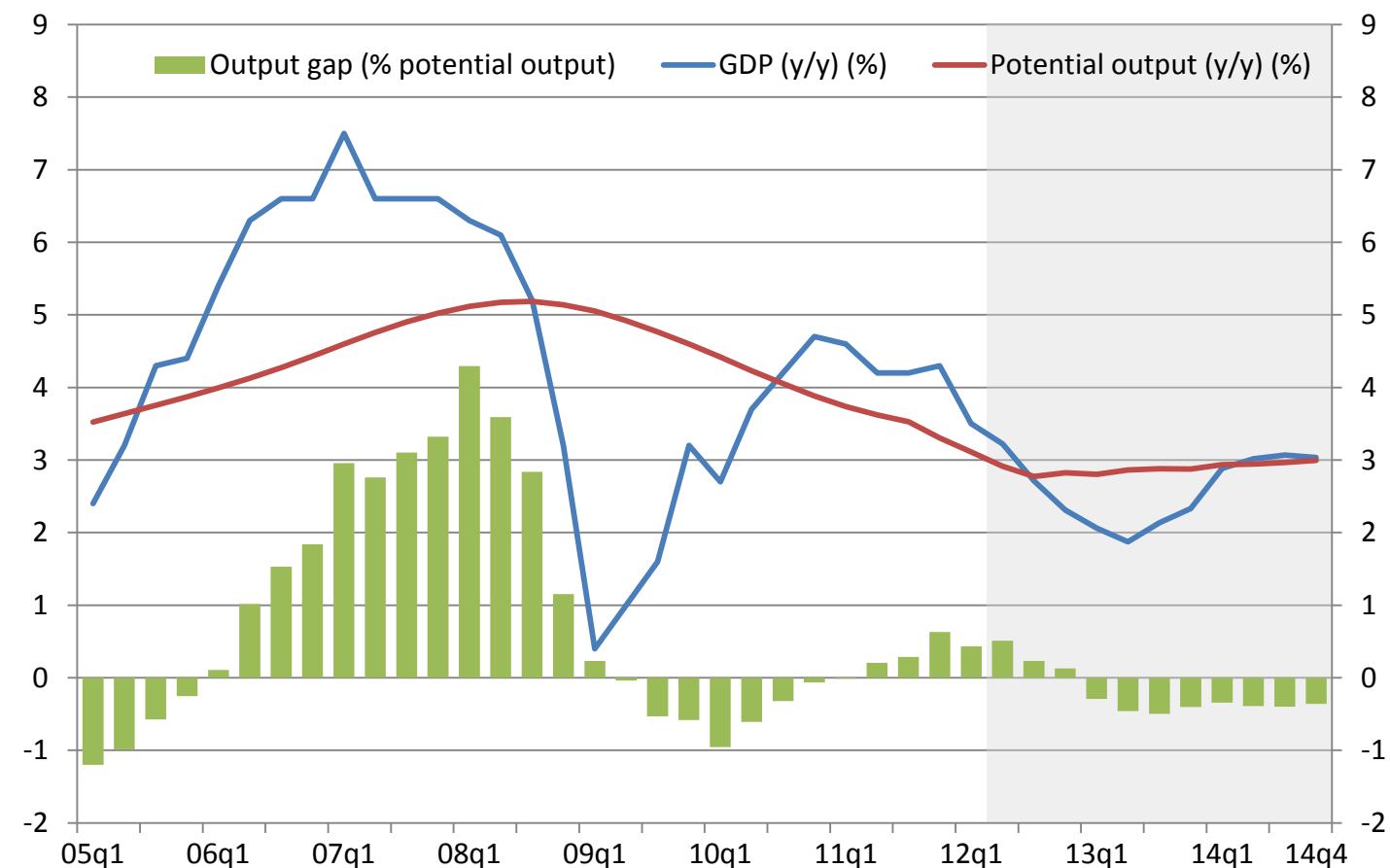
- » Changes in the assumptions
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Labour market

CHANGES IN THE SCENARIO

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UNCERTAINTY

- » Risk factors

- » Fan charts

	11Q4	12Q1
ULC (r/r) (%)	2,1 (1,8)	2,6 (2,0)
Labour productivity (y/y) (%)	3,5 (3,3)	2,8 (3,5)
Gross wages (y/y) (%)	4,3 (4,8)	5,2 (5,4)
Total employment LFS (y/y) (%)	0,8 (0,7)	0,7 (0,3)
Unemployment LFS (%)	9,9 (9,6)	9,9 (9,5)
Participation rate (%)	56,3 (56,1)	56,4 (56,1)

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

Participation rate (higher)

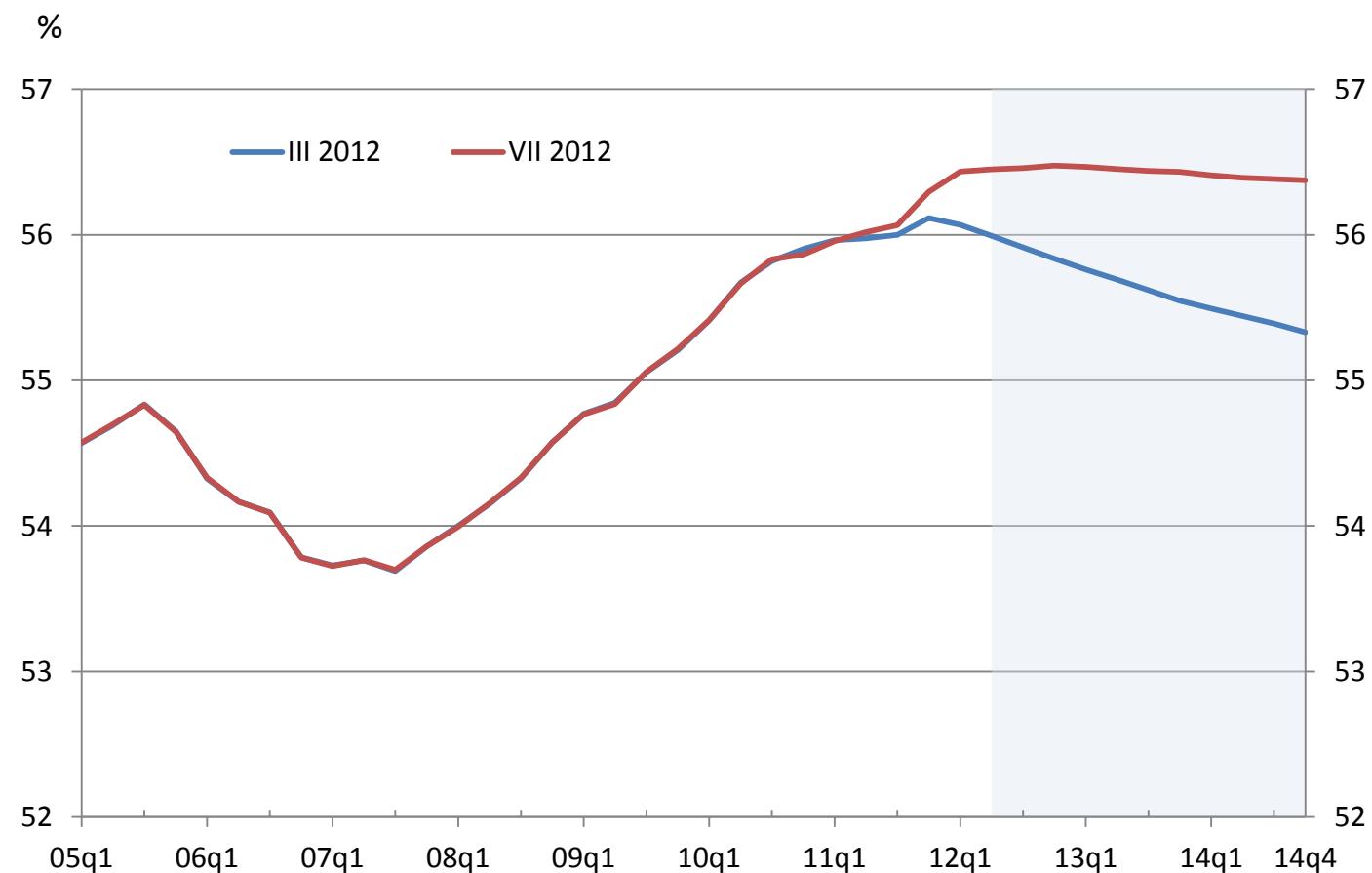
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Employment (higher)

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Unemployment (higher)

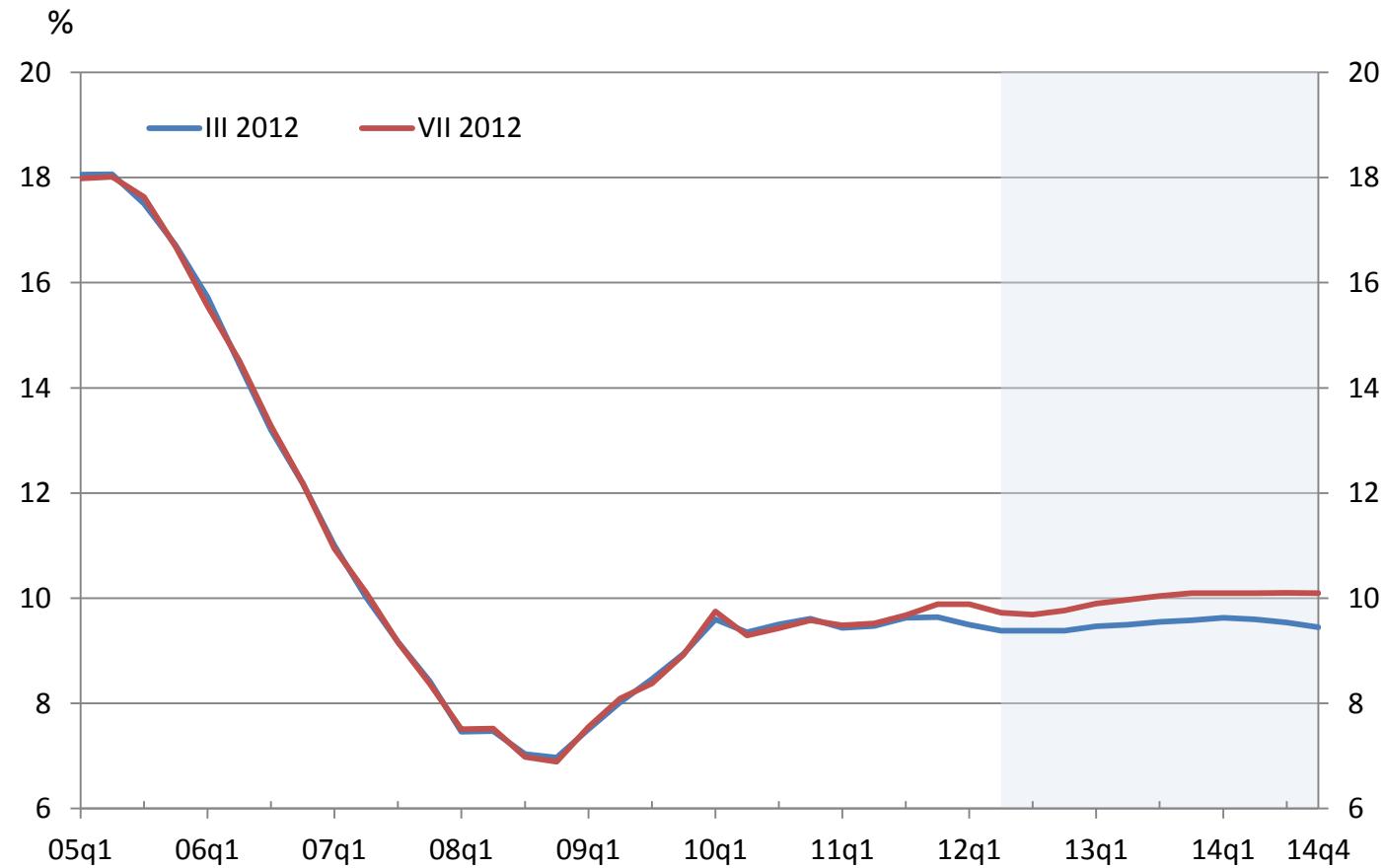
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Gross wages (lower)

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Unit labour costs (similar)

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Exchange rate (stronger)

CHANGES IN THE SCENARIO

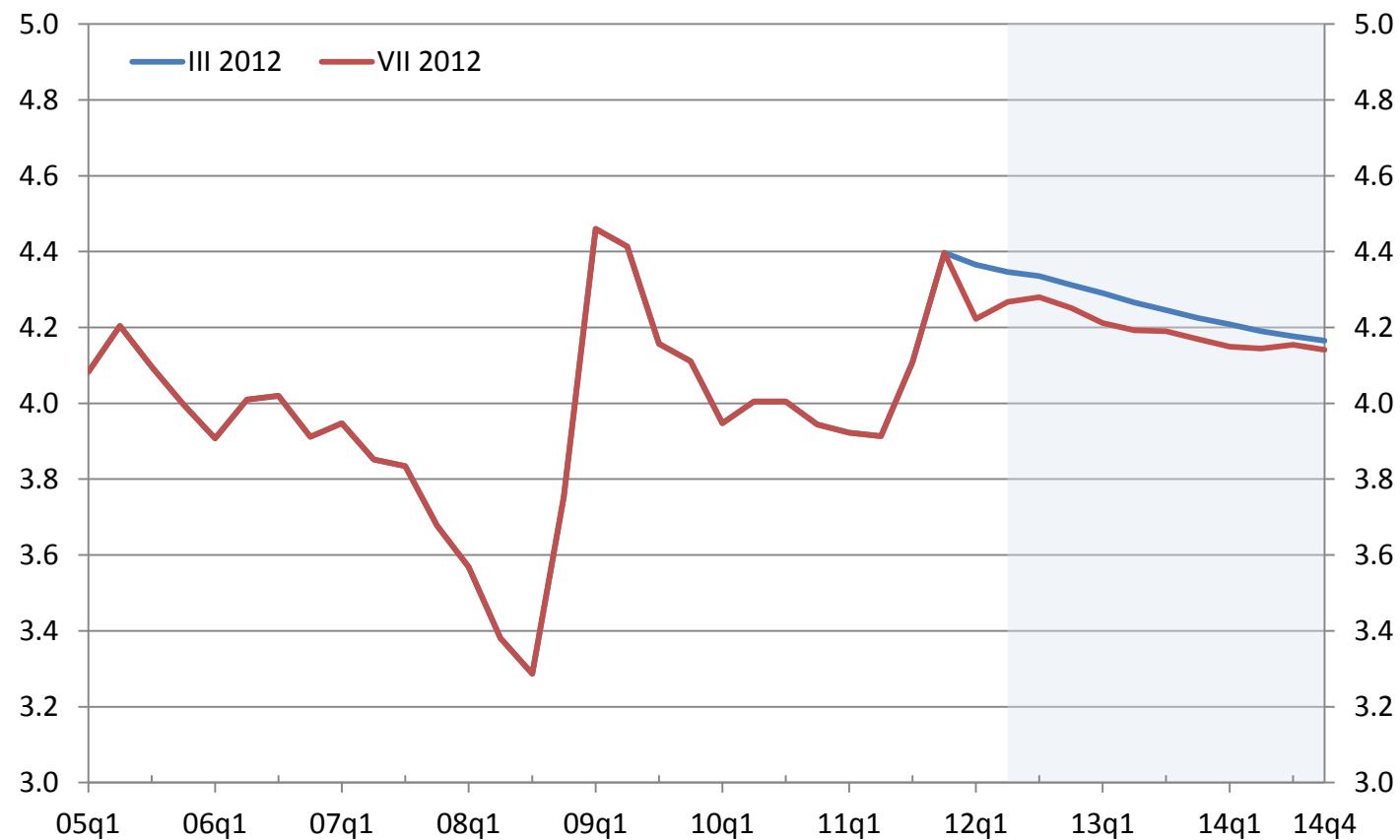
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Nominal effective exchange rate (NEER)



Import prices (excluding oil and natural gas)

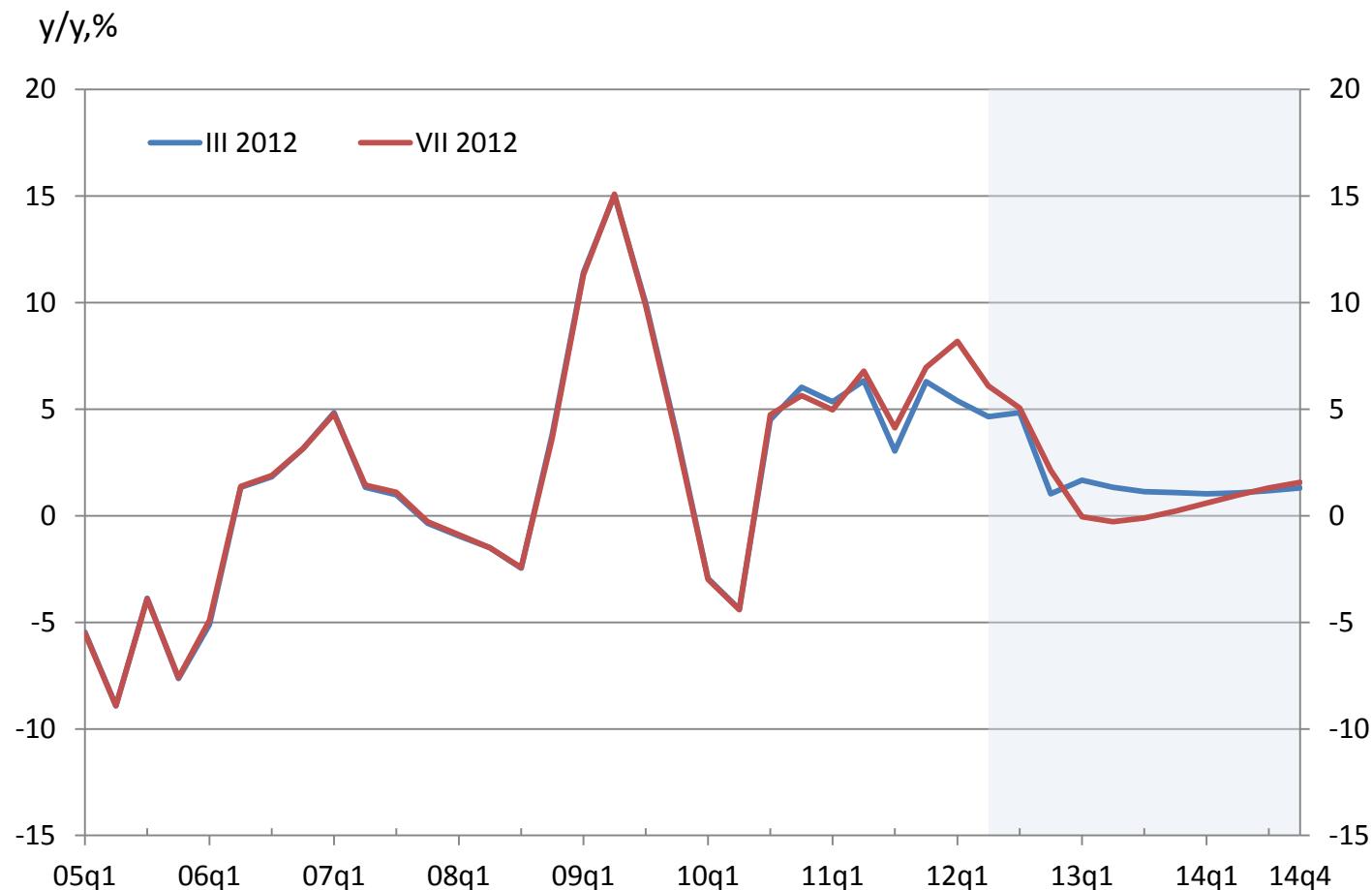
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Food and energy prices inflation

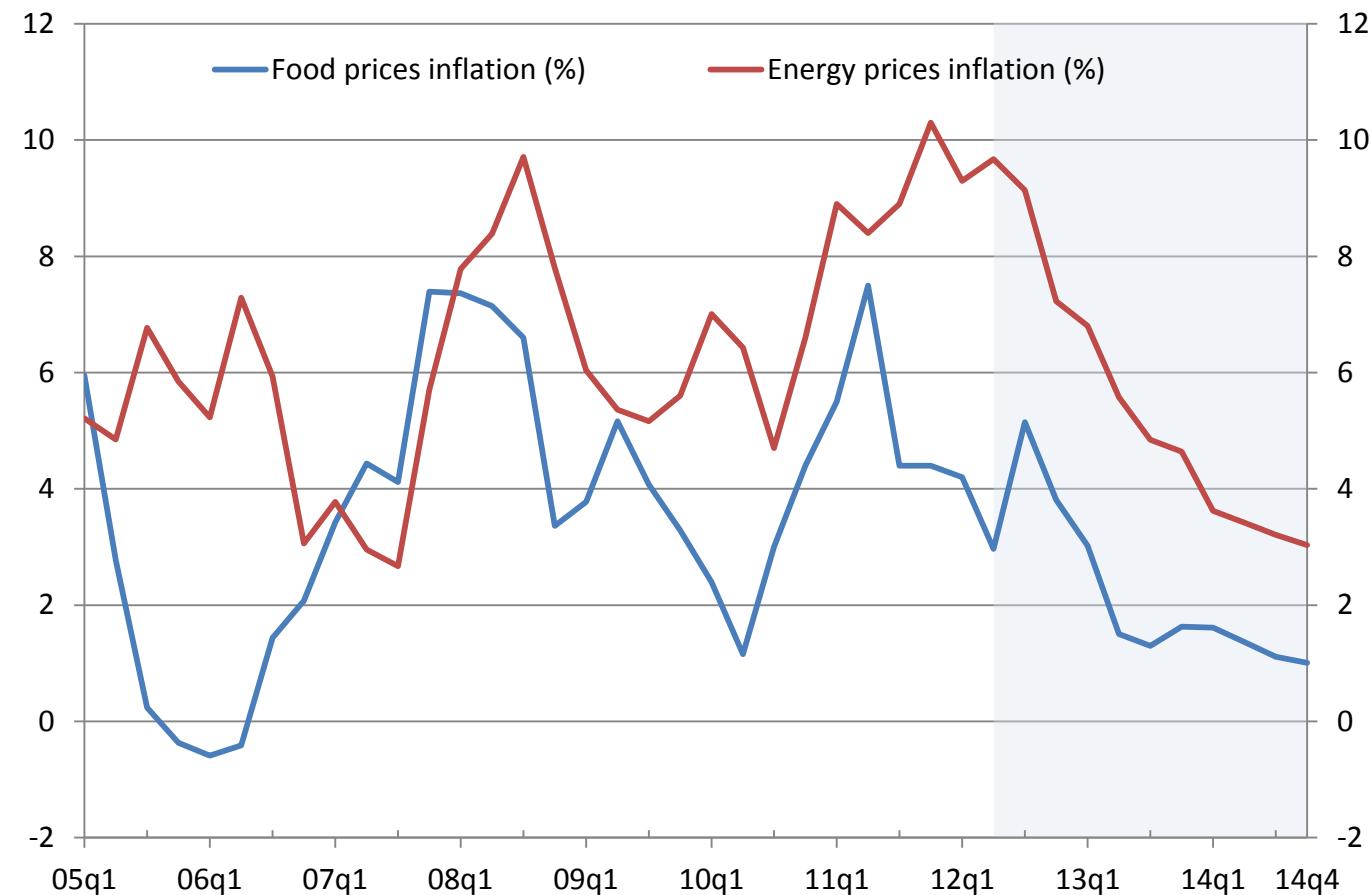
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Core inflation and CPI inflation*

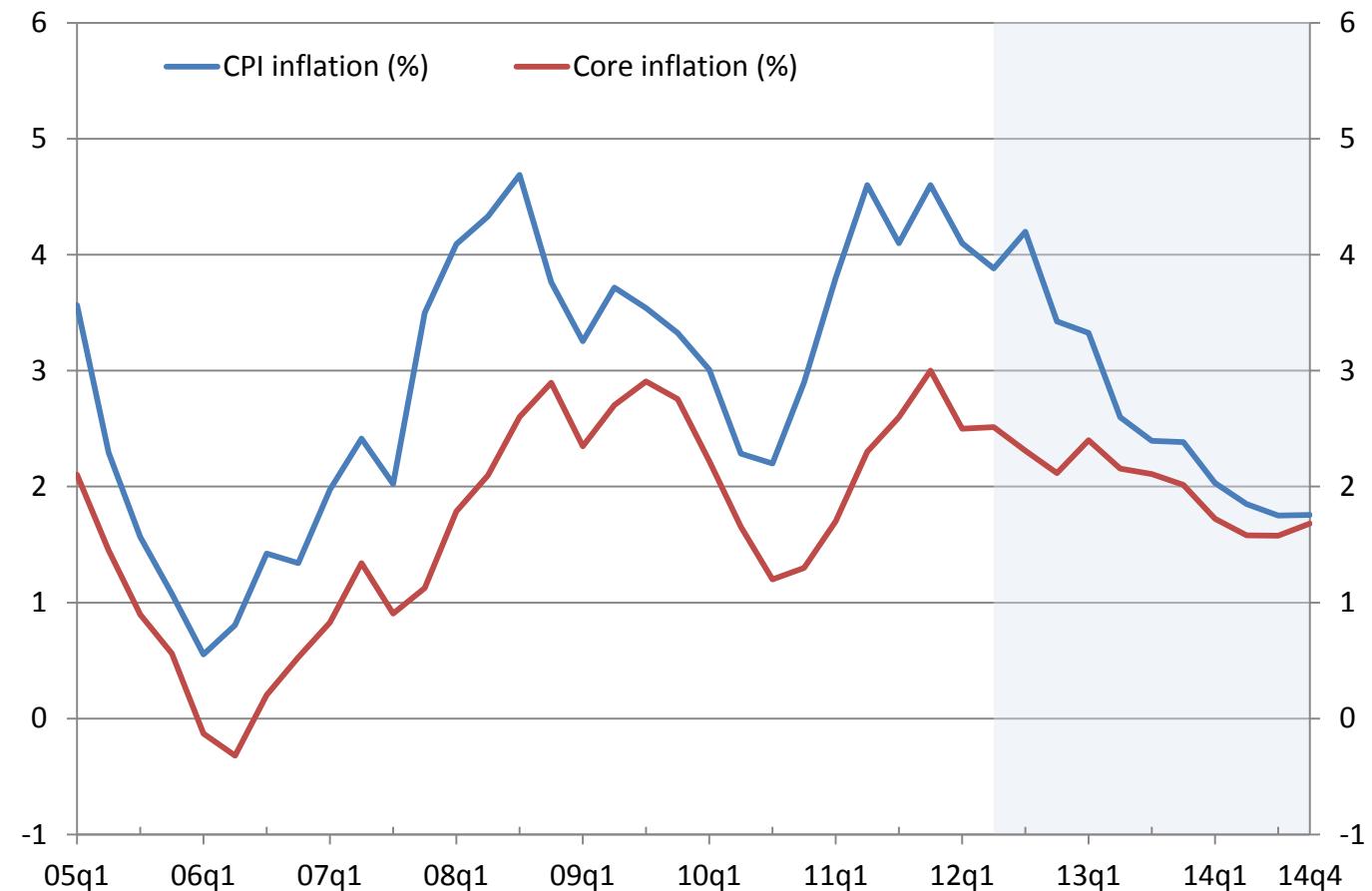
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* Core inflation does not include food, beverages and energy prices.

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UNCERTAINTY OF THE PROJECTION

- Risk factors
- Fan charts

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UNCERTAINTY

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Risk factors

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

CHANGES IN THE SCENARIO	Risk area	Description	Impact	Scale of impact
» Changes in the assumptions » Current vs. previous projection				
PROJECTION 2012-14				
UNCERTAINTY				
» Risk factors » Fan charts	External environment and exchange rate	<ul style="list-style-type: none"> ■ An increase in uncertainty due to worsening growth prospects in developed countries, especially in EU members. ■ The situation on the global financial markets – including impact of rising sovereign debt of some euro area countries and liquidity constraints of a few 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 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. 	inflacja ↔ PKB ↔	***

	Risk area	Description	Impact	Scale of impact
CHANGES IN THE SCENARIO				
» Changes in the assumptions				
» Current vs. previous projection	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. ▪ High financial liquidity of enterprises and rising capacity utilization – possible higher private investment and consumption. 	inflation ↔ PKB ↔	**
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, lack of decision regarding derogation of the Polish energy sector). ▪ Future tariff policy of the Energy Regulatory Office ▪ Regulatory activities on the food market 	inflation ↔ GDP ↔	**
» Fan charts		Conclusions	inflation ↔ GDP ↔	

Inflation projection – July 2012

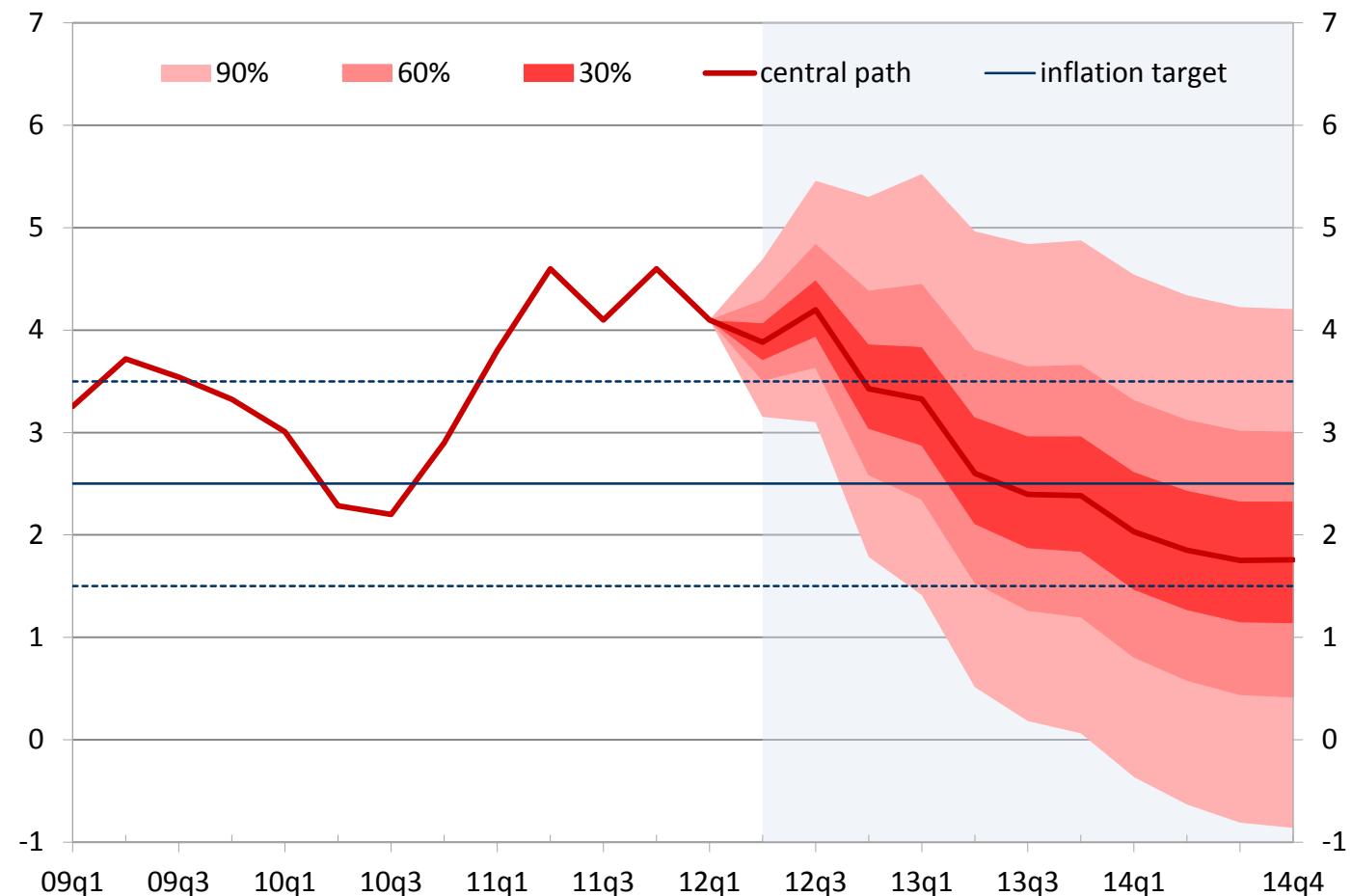
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Probability distribution for inflation

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	12q2	0,00	0,00	0,18	0,47	0,18
» Current vs. previous projection	12q3	0,00	0,01	0,14	0,47	0,14
PROJECTION 2012-14	12q4	0,02	0,16	0,49	0,47	0,47
	13q1	0,05	0,22	0,52	0,47	0,47
UNCERTAINTY	13q2	0,18	0,44	0,72	0,47	0,54
» Risk factors	13q3	0,24	0,50	0,76	0,48	0,52
» Fan charts	13q4	0,26	0,51	0,76	0,48	0,51
	14q1	0,35	0,61	0,83	0,49	0,48
	14q2	0,41	0,67	0,86	0,50	0,45
	14q3	0,44	0,70	0,88	0,51	0,44
	14q4	0,45	0,70	0,88	0,52	0,43

GDP projection – July 2012

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