



**NBP**

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Narodowy Bank Polski

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Economic Institute

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

Warsaw / 12 November 2013



## Outline:

## Changes in the scenario

- Changes in the assumptions
- Current versus previous projection

## Projection 2013-2015

## Uncertainty

- Risk factors
- Fan charts

# Outline

## 1 Changes between projection rounds

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- Changes in the projection assumptions
  - November projection compared to July projection
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## 2 Projection 2013-2015

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## 3 Uncertainty

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- Risk factors
  - Fan charts
-

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# November projection compared to July projection

# November projection compared to July projection: GDP

Outline:

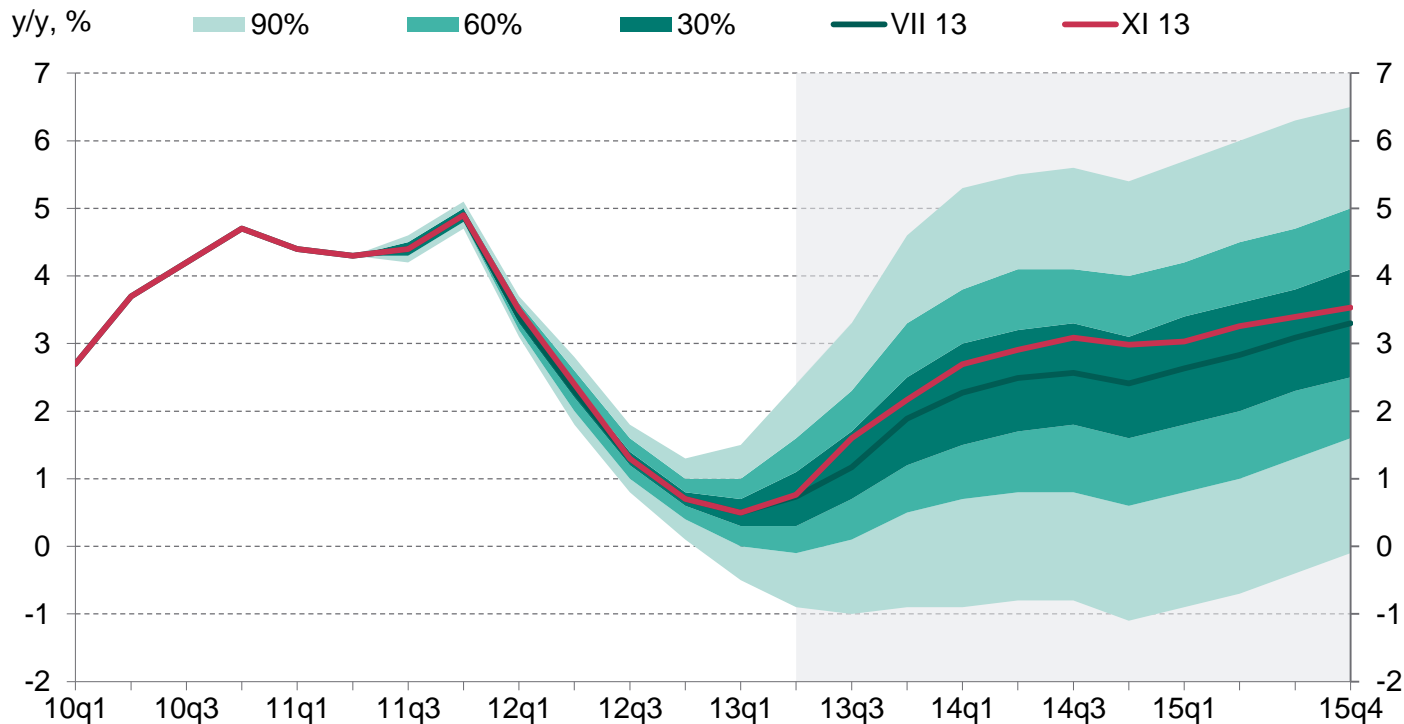
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# November projection compared to July projection: CPI

Outline:

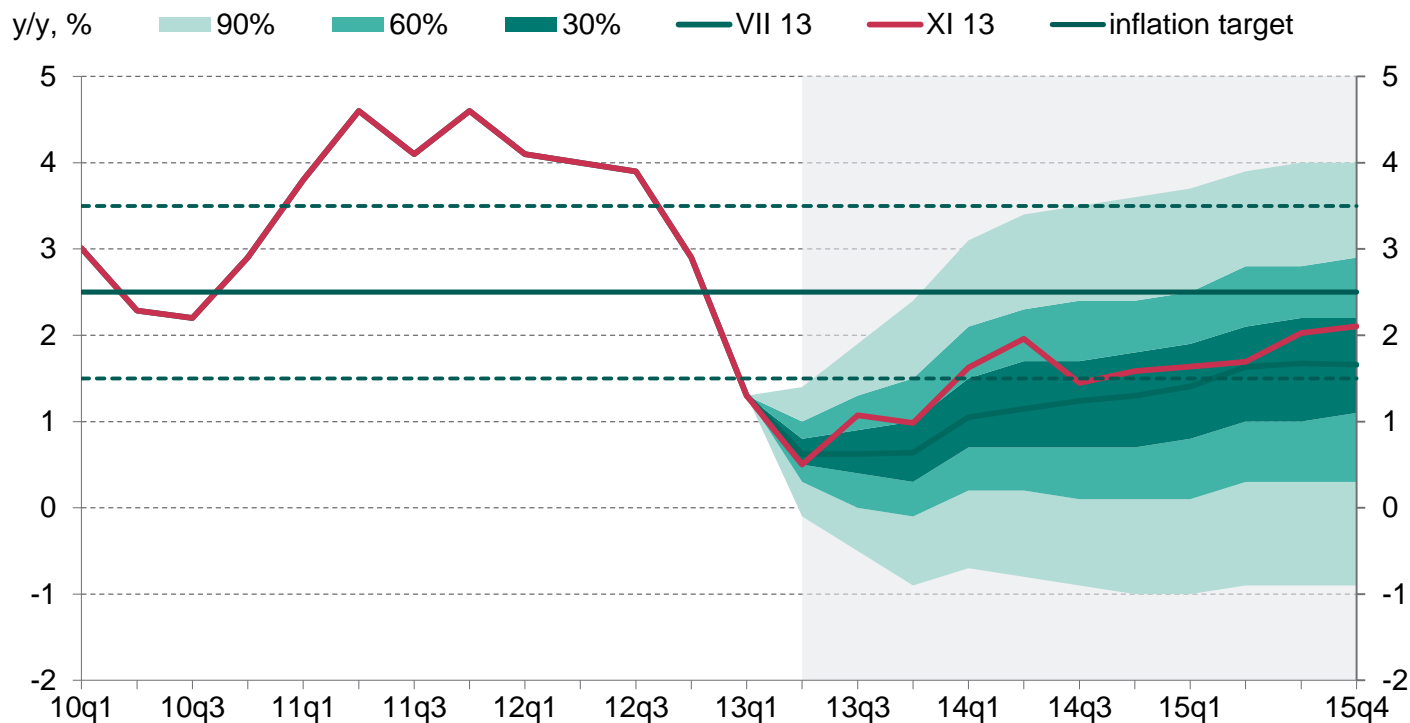
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# Changes in the projection assumptions

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- NBP reference rate lower by 25 basis points
- Weaker Zloty exchange rate at the projection' starting point
- Change in external environment assumptions (higher forecast of GDP growth abroad, especially in 2013, and lower energy and agricultural commodity prices)
- Higher forecast of food prices in the short-term horizon (unfavourable domestic agricultural and weather conditions)

# 3 month WIBOR

(lower by 25 bp)

Outline:

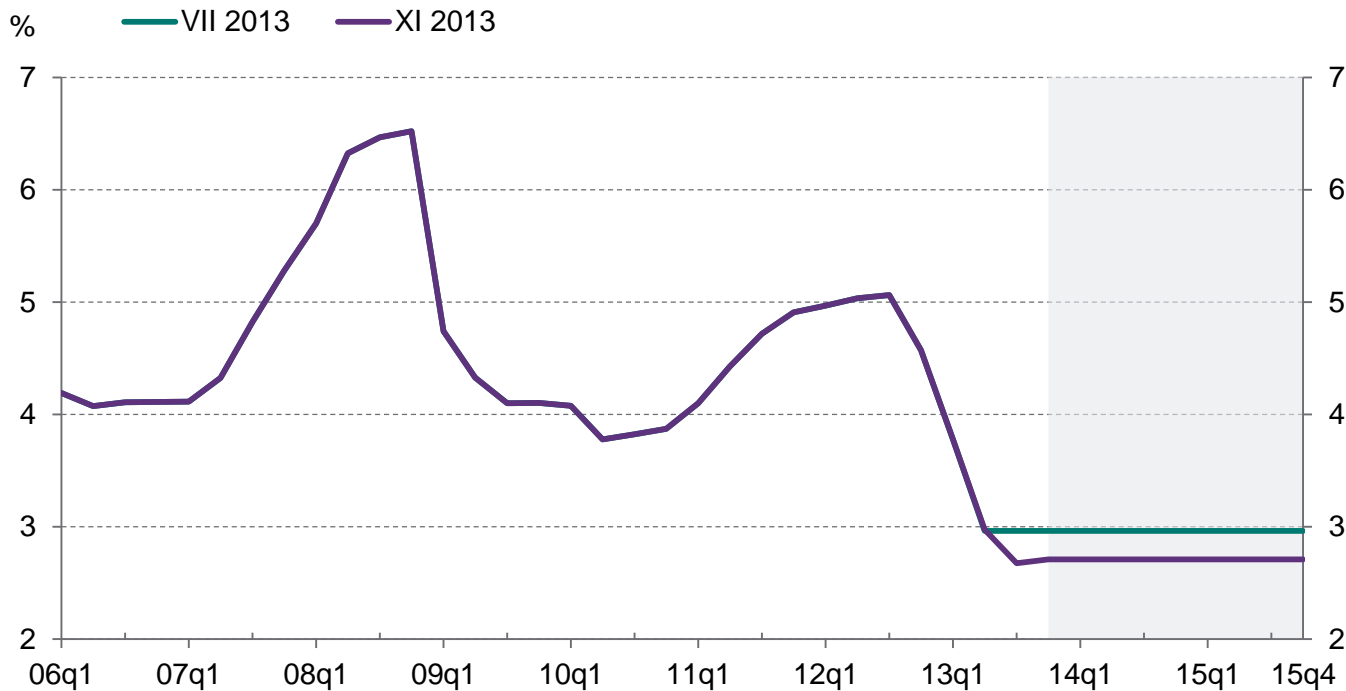
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# Exchange rate

(weaker at the starting point, stronger in the longer-term horizon)

Outline:

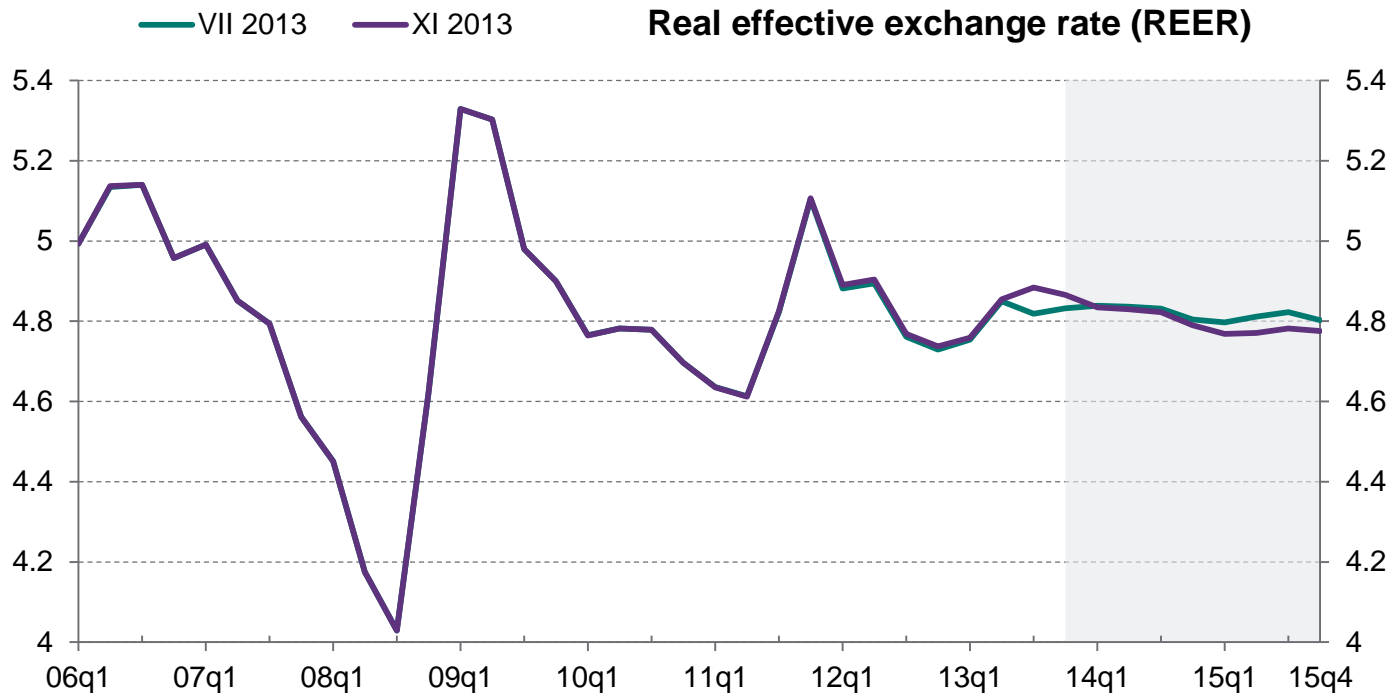
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## GDP growth abroad

(higher, especially in 2013)

Outline:

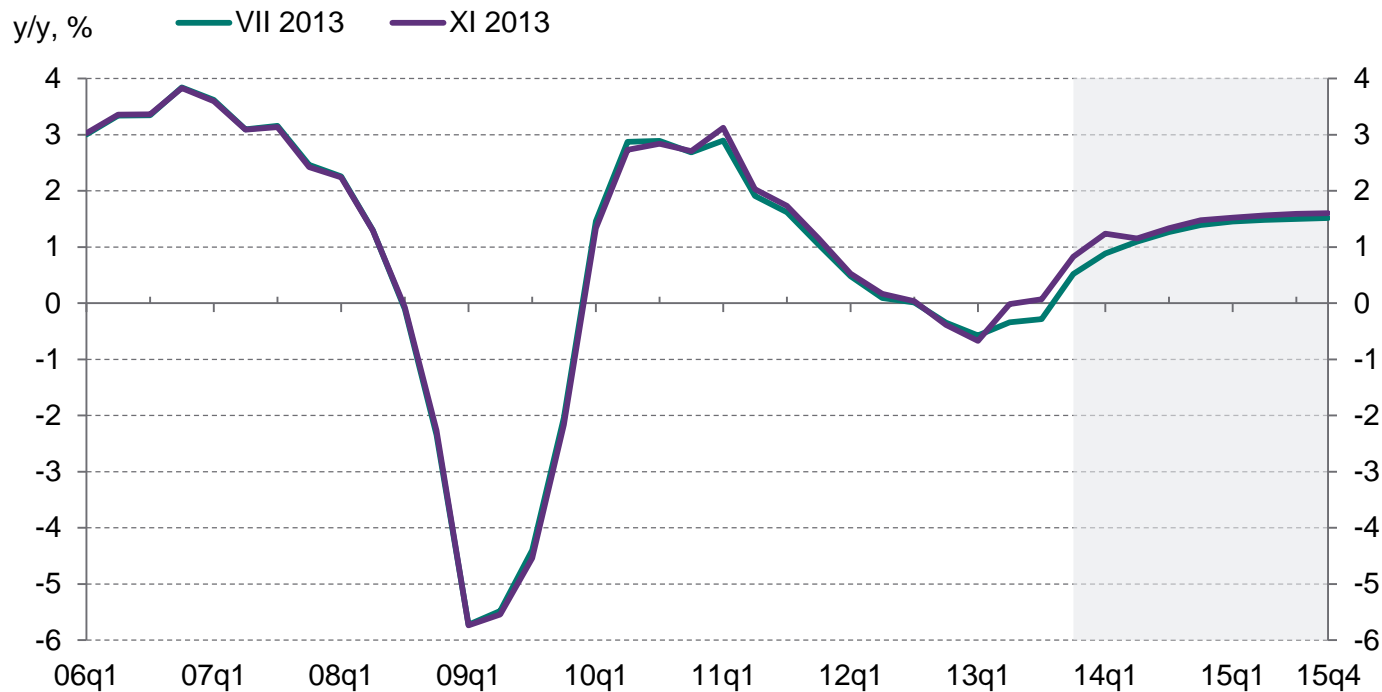
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# Energy commodity price index \*

(lower in the medium- and the long-term horizon)

Outline:

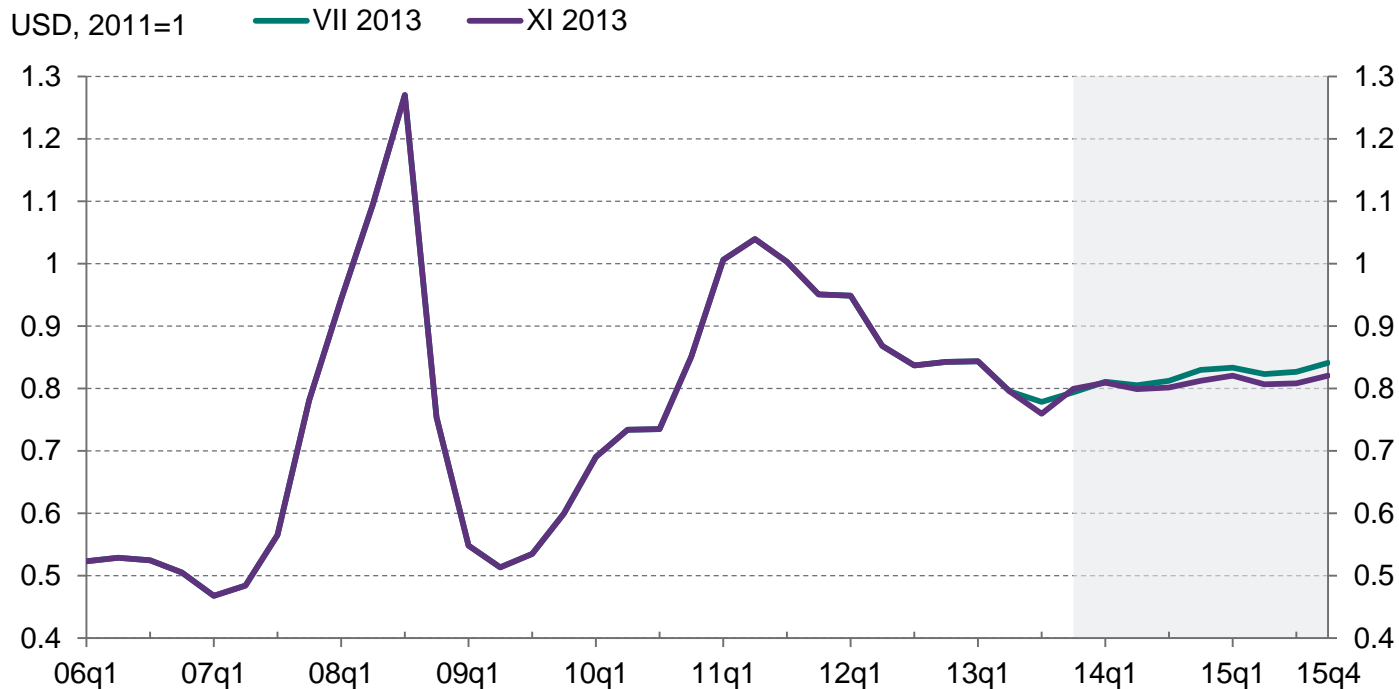
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\*Global index of energy commodity prices consists of: hard coal, crude oil, natural gas.

## Index of agricultural commodity prices \*

(lower)

Outline:

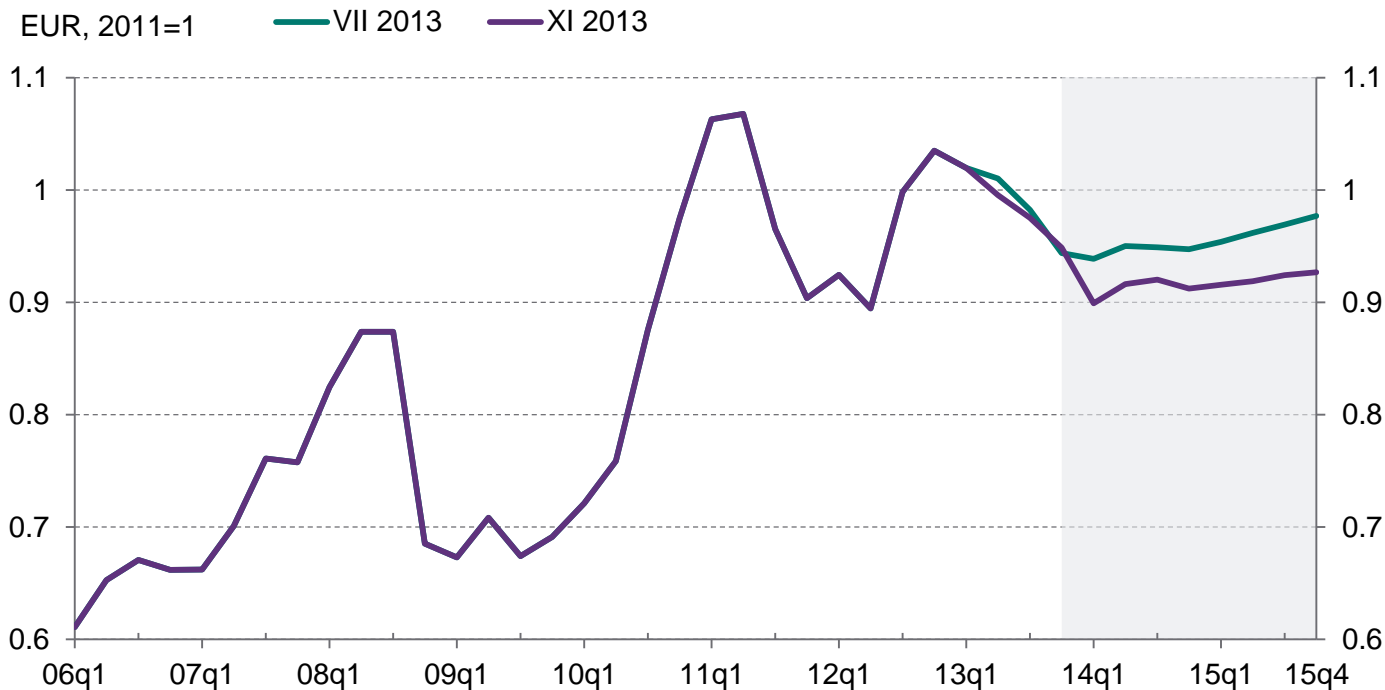
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\* Index of agricultural commodity prices is based on futures quoted mainly on European exchanges. Index includes prices of: wheat, oilseed, pork, potatoes, sugar, cocoa, coffee, skimmed milk powder, butter and frozen concentrated orange juice.

# Interest rates abroad

(higher in the long-term horizon)

Outline:

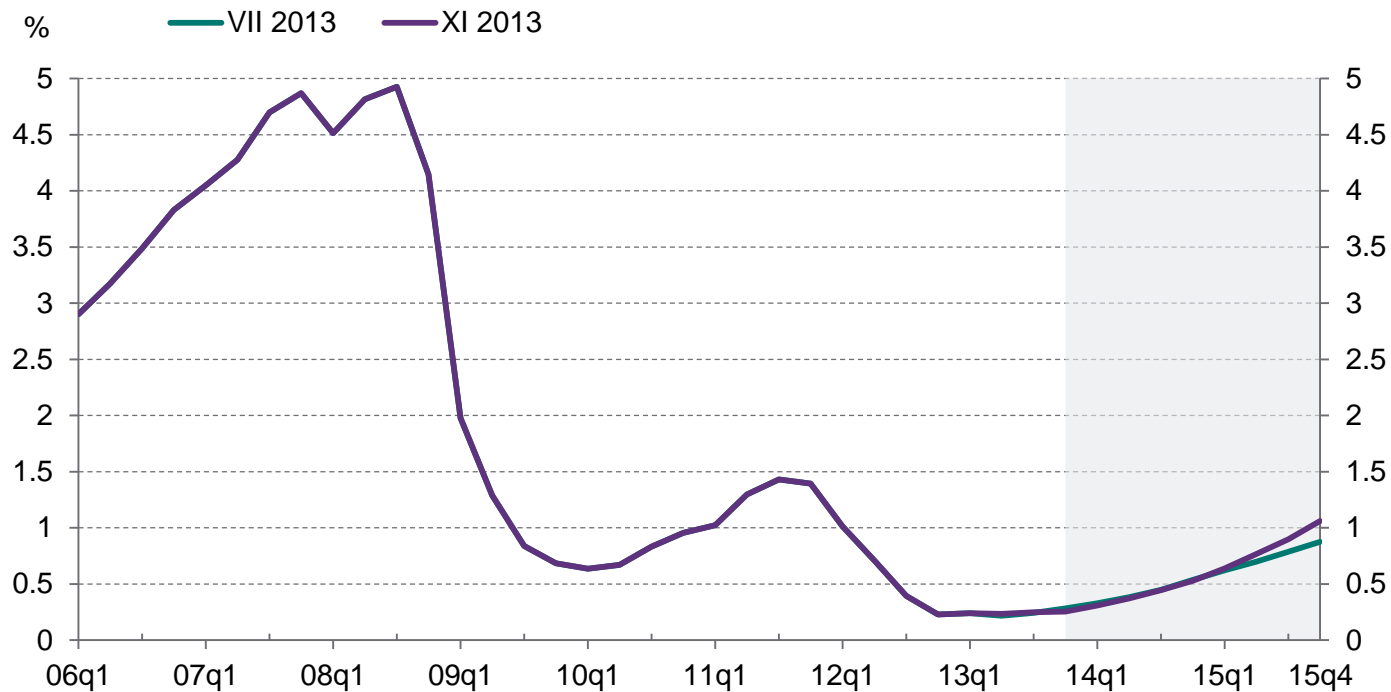
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# Absorption of EU transfers (higher)

Outline:

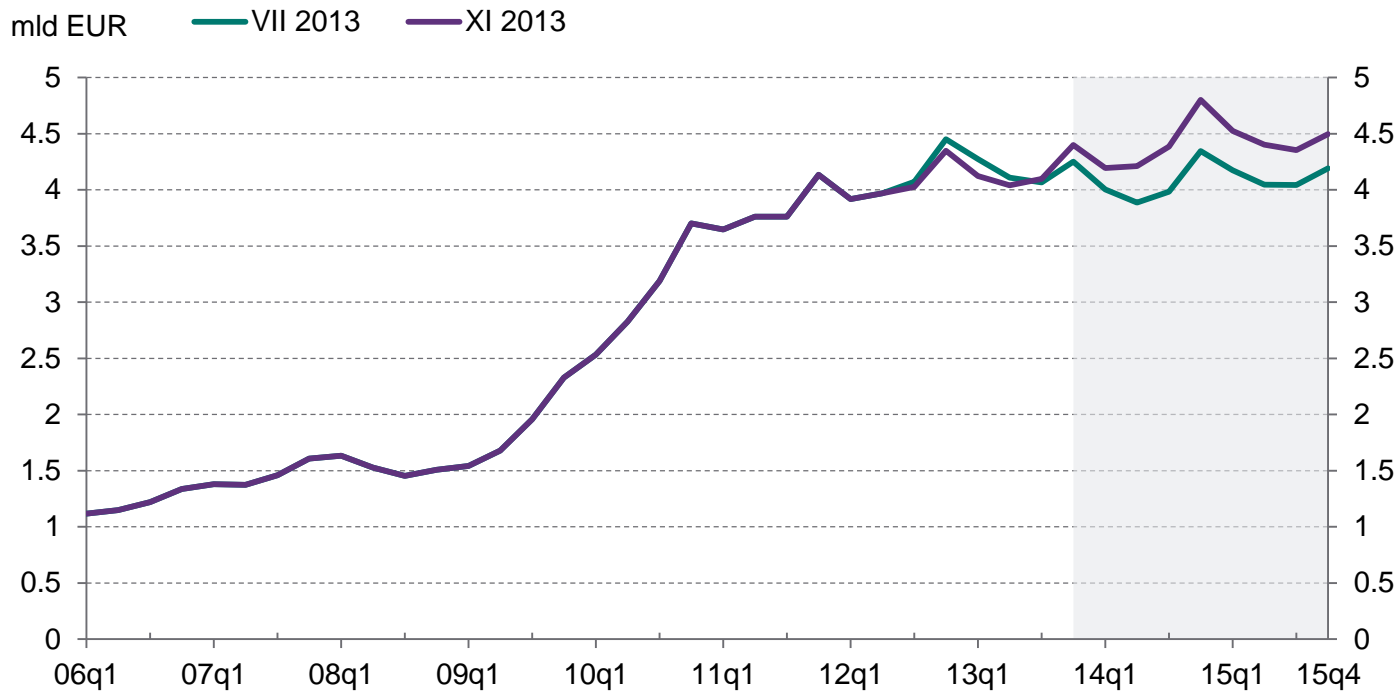
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# Public consumption

(higher in the longer term)

Outline:

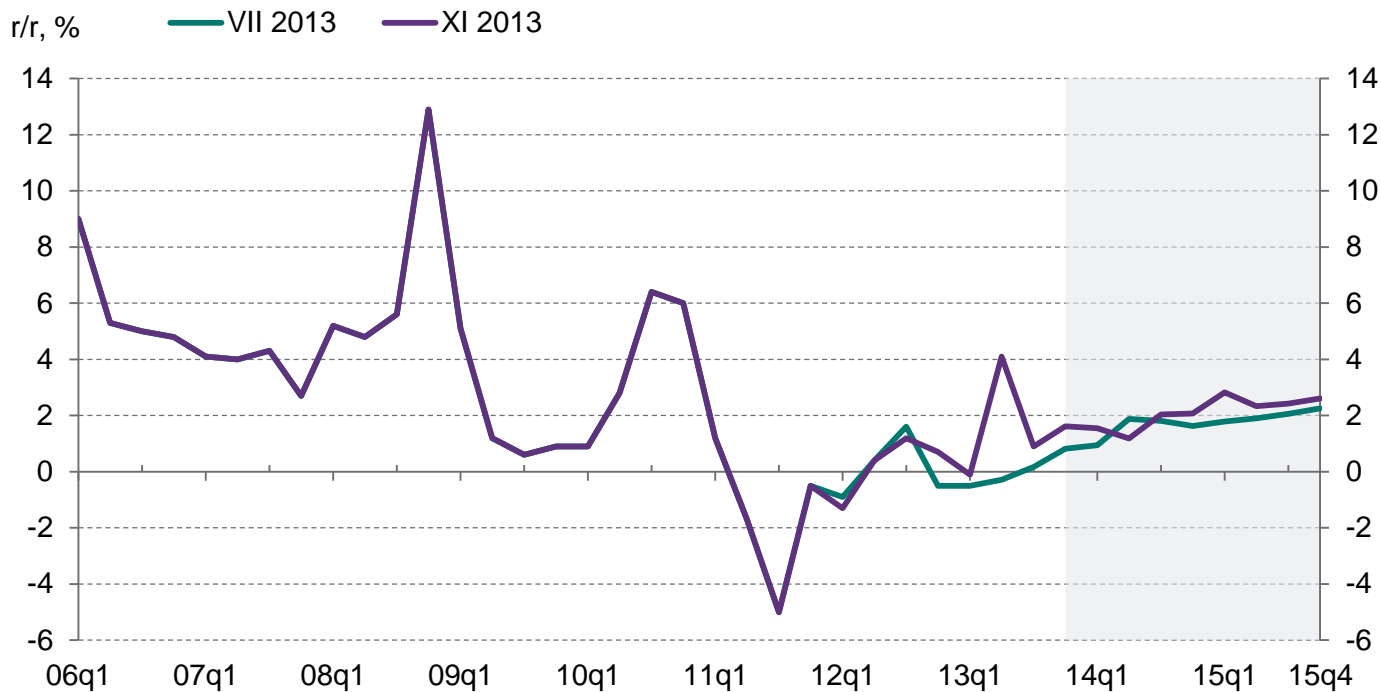
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# GDP and its components

## Outline:

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	13q2		13q3	
GDP (y/y) (%)	0,8	(0,7)	1,6	(1,2)
Domestic demand (y/y) (%)	-1,7	(-0,3)	-0,1	(0,2)
Individual consumption (y/y) (%)	0,2	(0,6)	0,9	(1,1)
Public consumption (y/y) (%)	4,3	(-0,3)	0,9	(0,2)
Gross fixed capital formation (y/y) (%)	-3,2	(-3,5)	-1,8	(-3,5)
Exports (y/y) (%)	3,2	(1,8)	3,5	(1,7)
Imports (y/y) (%)	-1,9	(-0,4)	-0,1	(-0,5)
Net exports contribution (pp)	2,5	(1,0)	1,7	(1,0)

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

## Outline:

### Changes in the scenario

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### Uncertainty

- Risk factors
- Fan charts

	13q2		13q3	
CPI inflation (y/y) (%)	0,5	(0,6)	1,1	(0,6)
Core inflation (y/y) (%)	1,0	(1,0)	1,4	(0,9)
Food price inflation (y/y) (%)	1,3	(1,6)	2,5	(1,6)
Energy price inflation (y/y) (%)	-2,3	(-2,0)	-1,8	(-1,7)

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

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# Decomposition of deviations between November and July projections: GDP growth

Outline:

Changes in the scenario

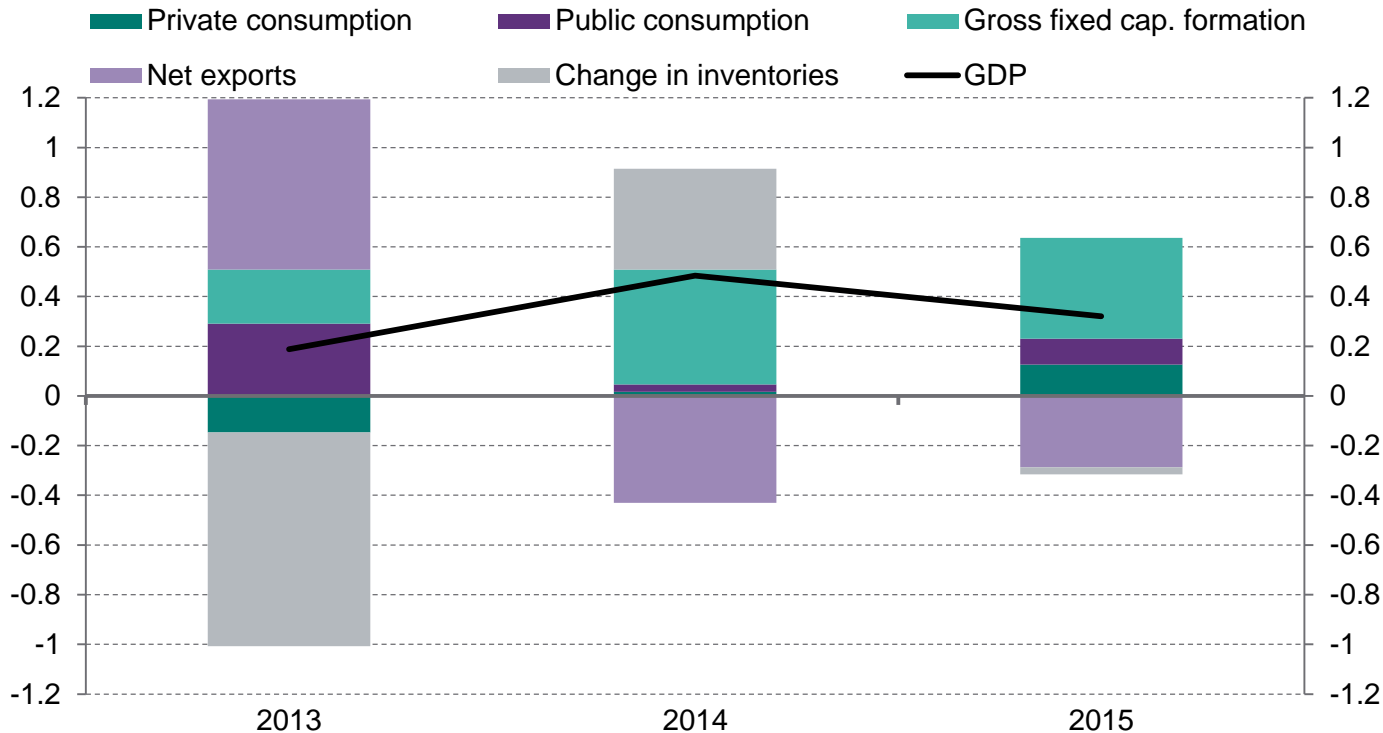
- Changes in the assumptions

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## Decomposition of deviations between November and July projections: CPI inflation

### Outline:

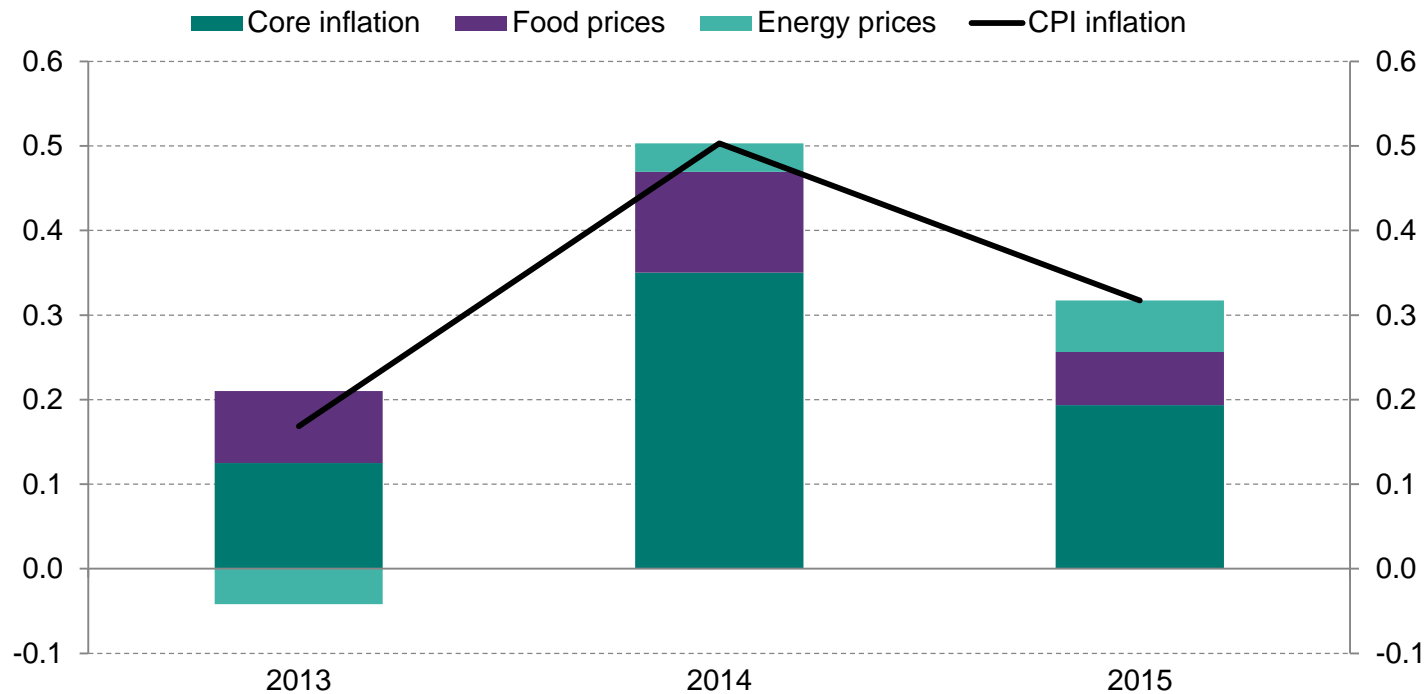
#### Changes in the scenario

- Changes in the assumptions
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#### Projection 2013-2015

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Outline:

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# Projection

## Projection scenario – assumptions

### Outline:

#### Changes in the scenario

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#### Uncertainty

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- Moderate recovery in economic conditions abroad
- Relatively stable commodity prices
- Limited public consumption growth
- Transition from the old to the new EU financial perspective (2014-2020)
- Stable Zloty exchange rate
- GDP growth and inflation accelerate, yet they remain low

## GDP: Poland vs euro area

Outline:

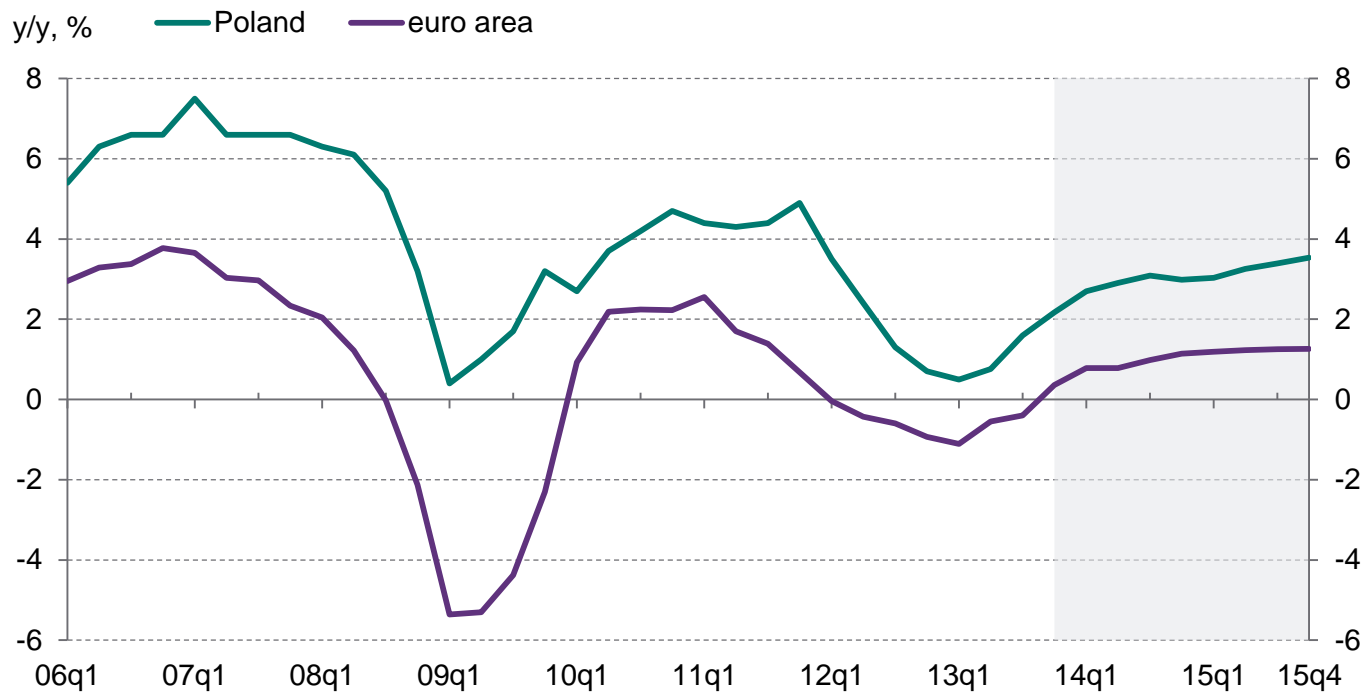
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## EU transfers – breakdown

Outline:

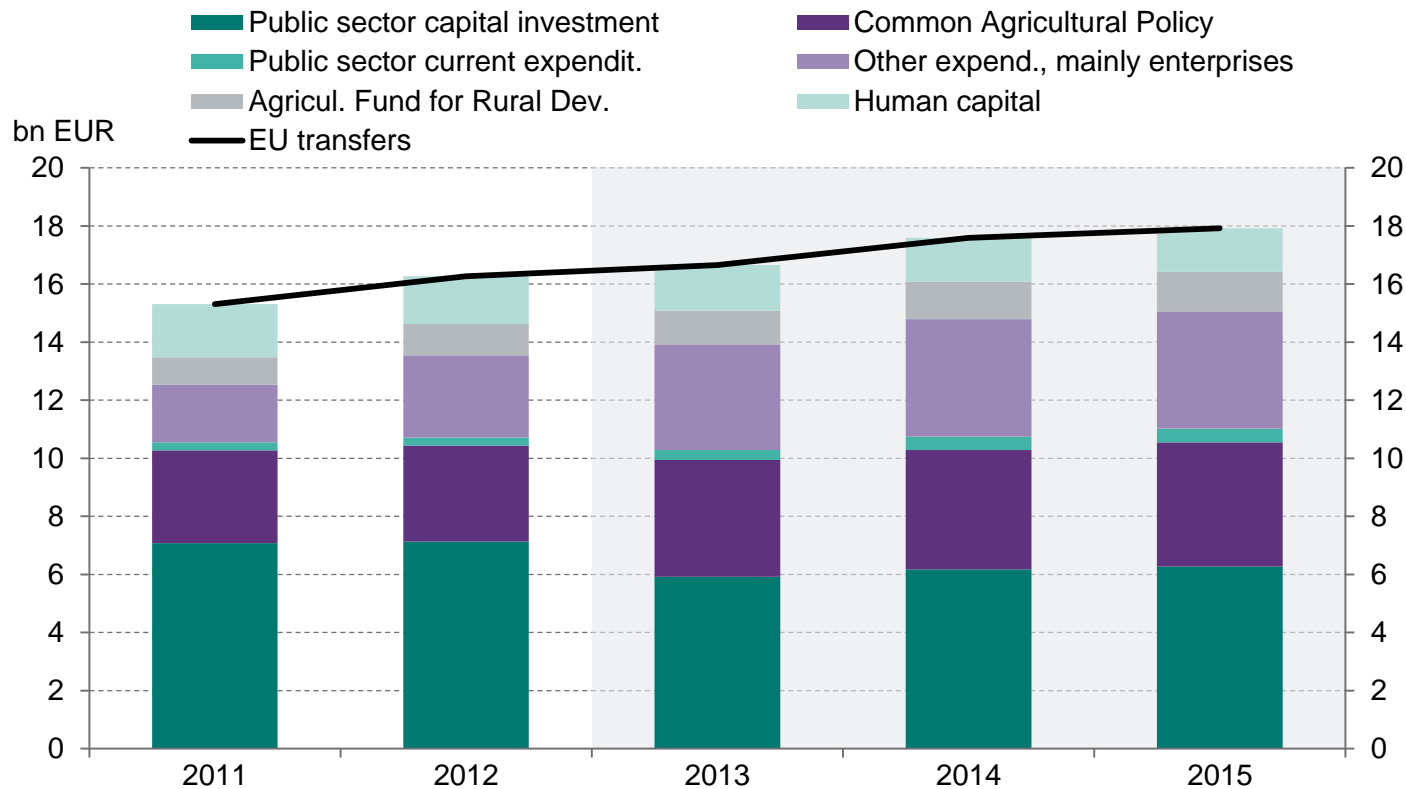
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# GDP: decomposition

Outline:

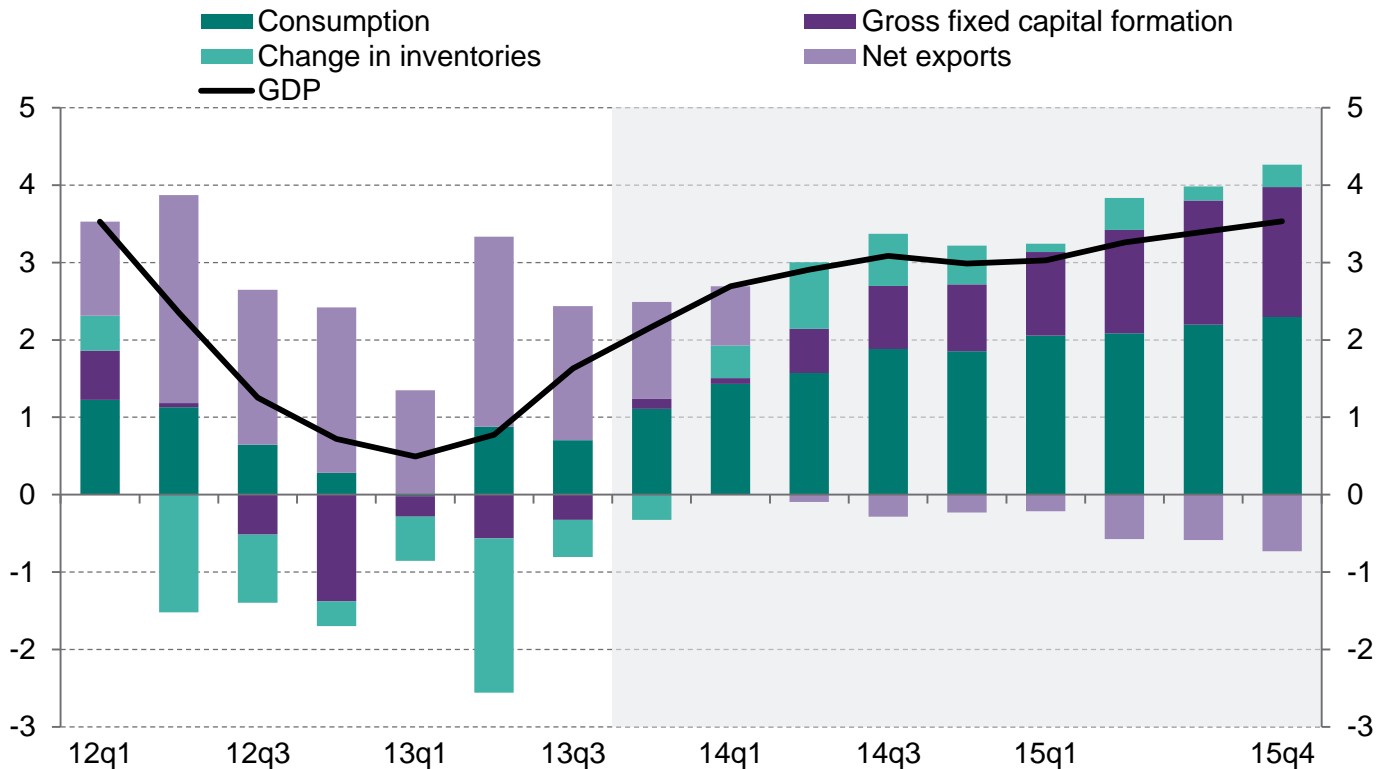
Changes in the scenario

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# Gross fixed capital formation: decomposition

Outline:

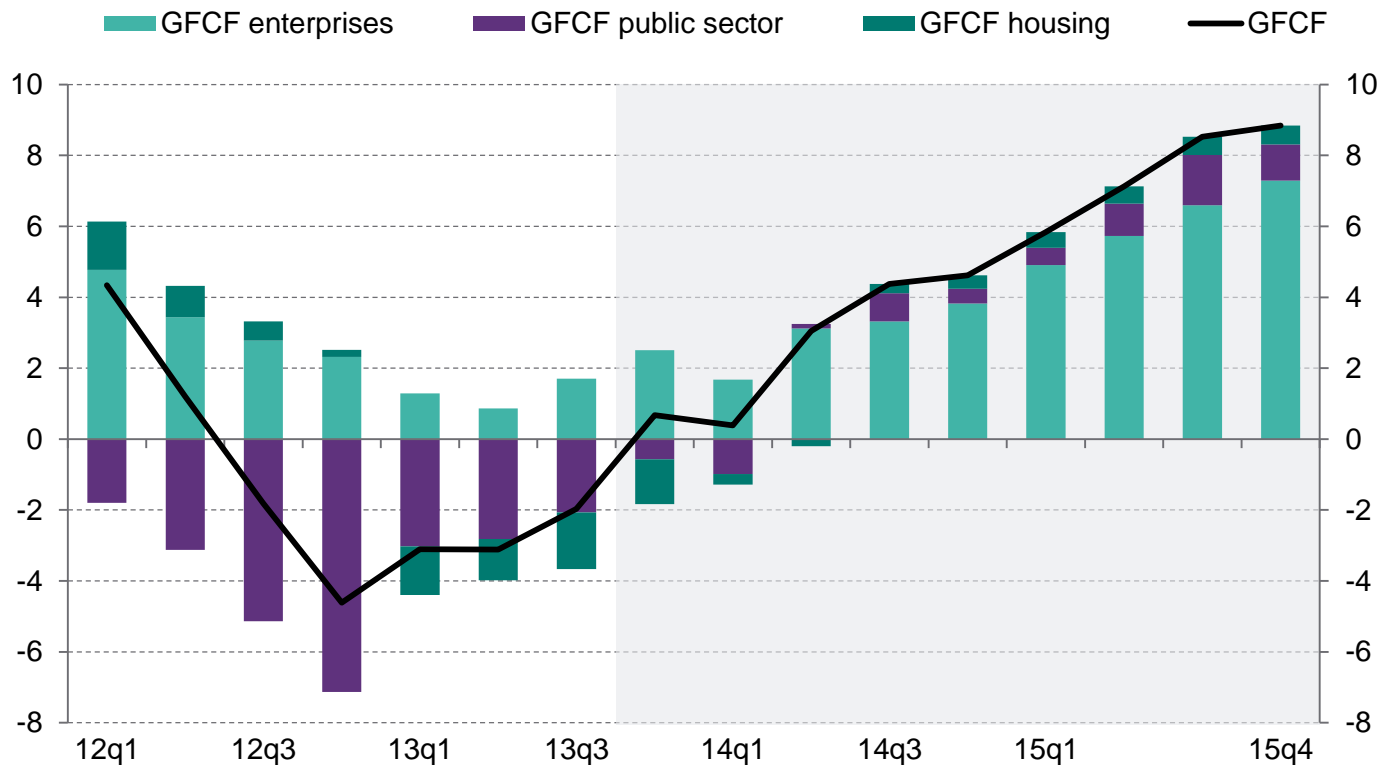
Changes in the scenario

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# Gross fixed capital formation (higher)

Outline:

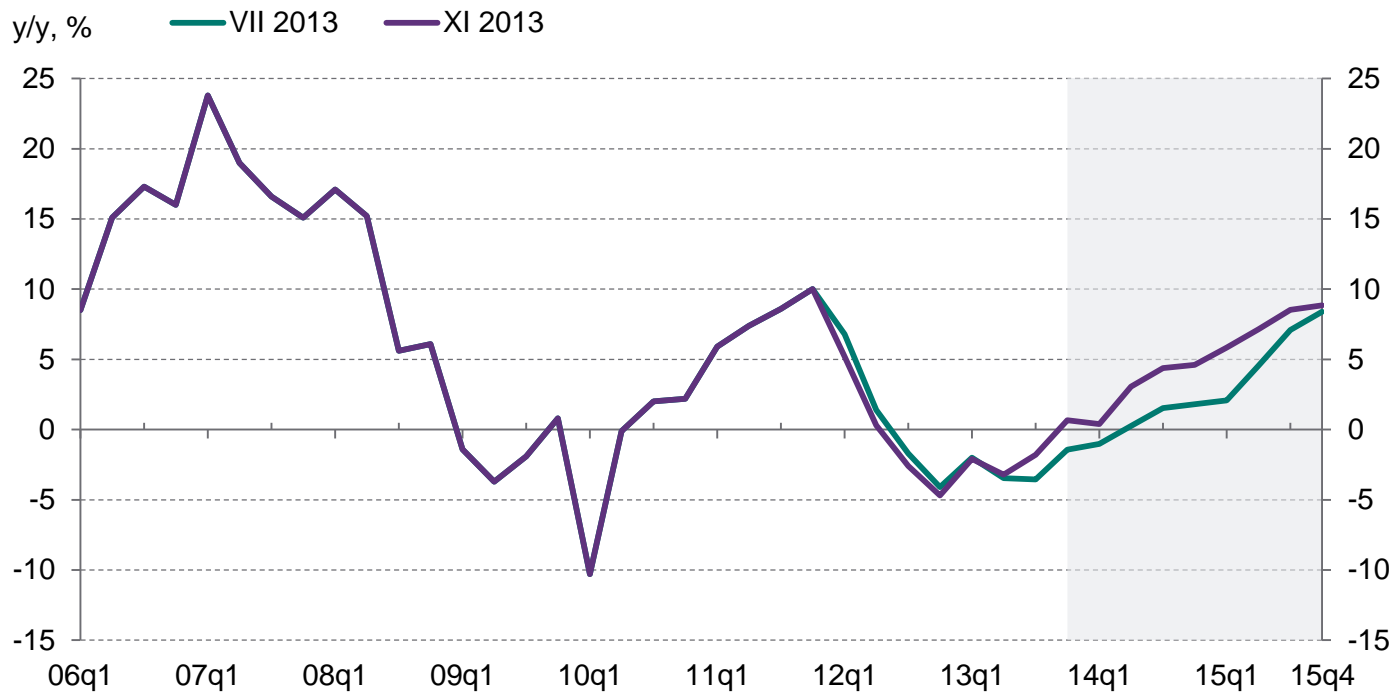
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## Private consumption

(lower in the short-term horizon, higher in the longer term)

Outline:

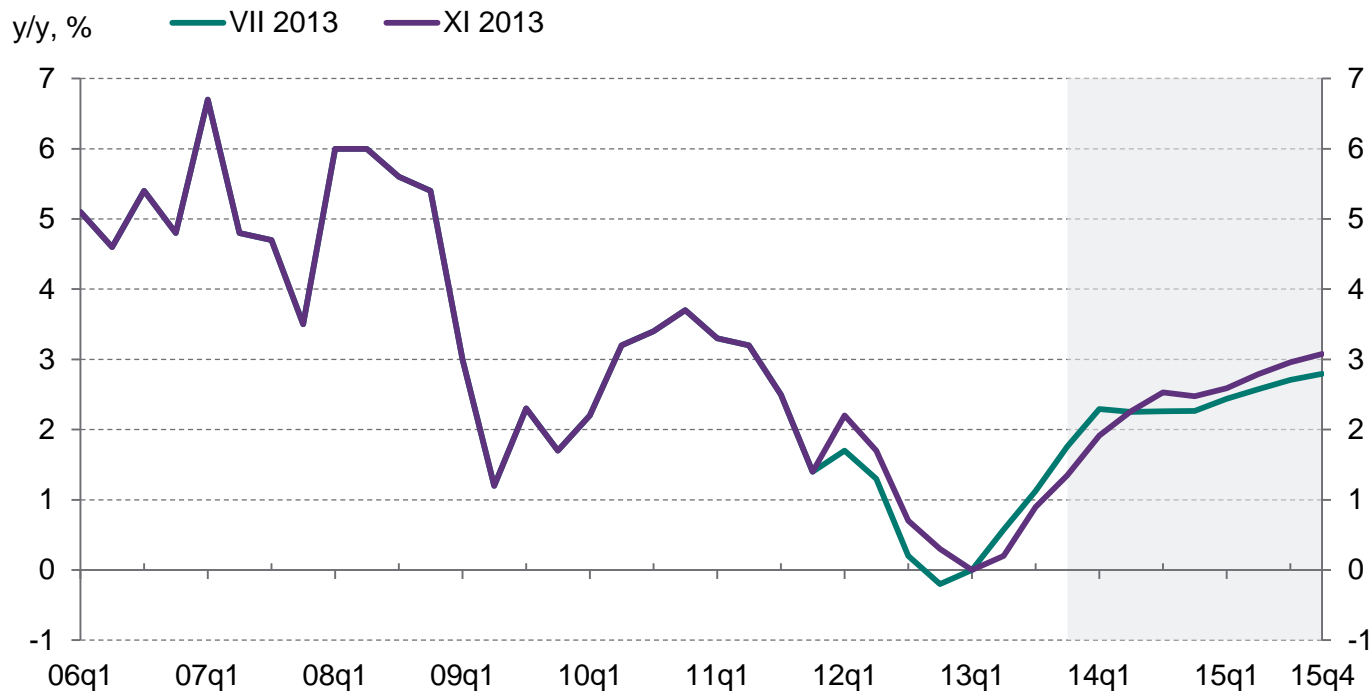
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# Foreign trade

Outline:

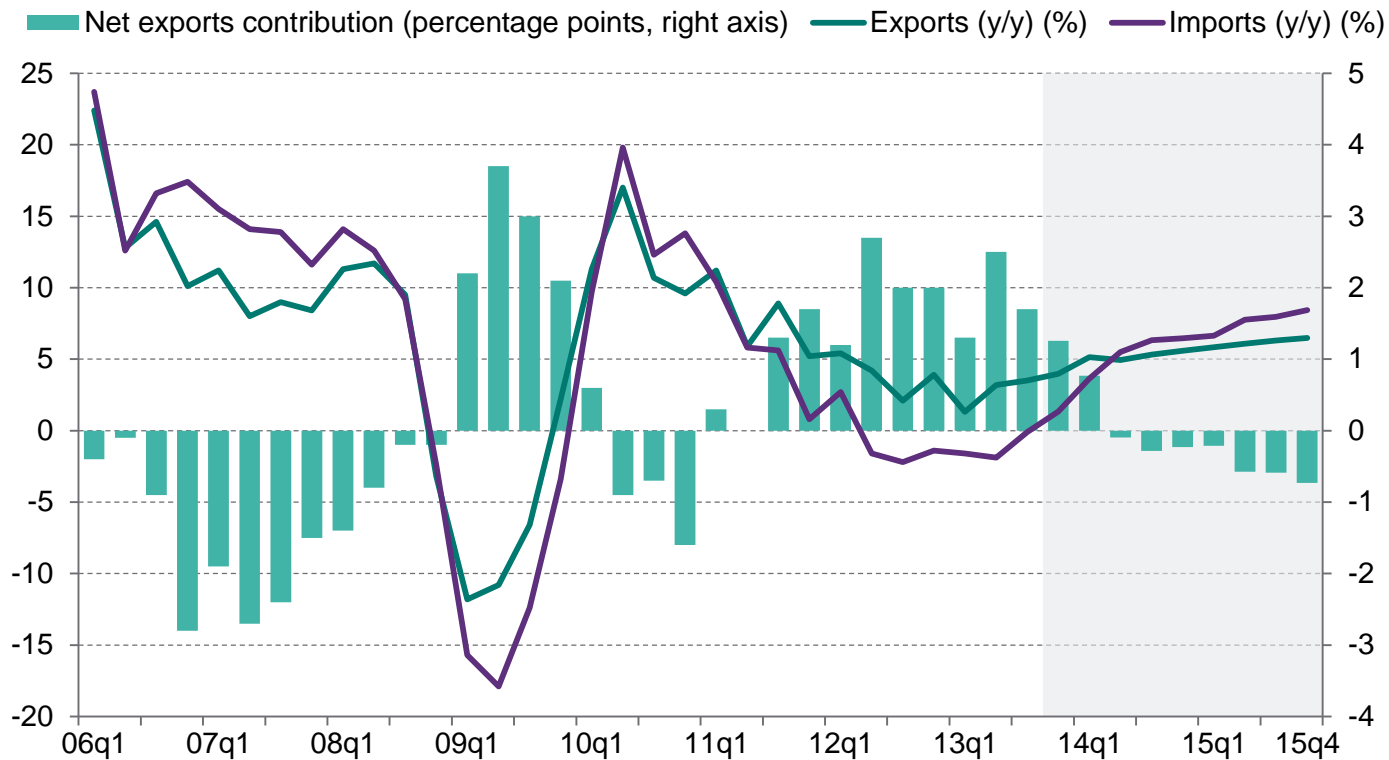
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# Net exports contribution

(higher in the short-term horizon, lower in the longer term)

Outline:

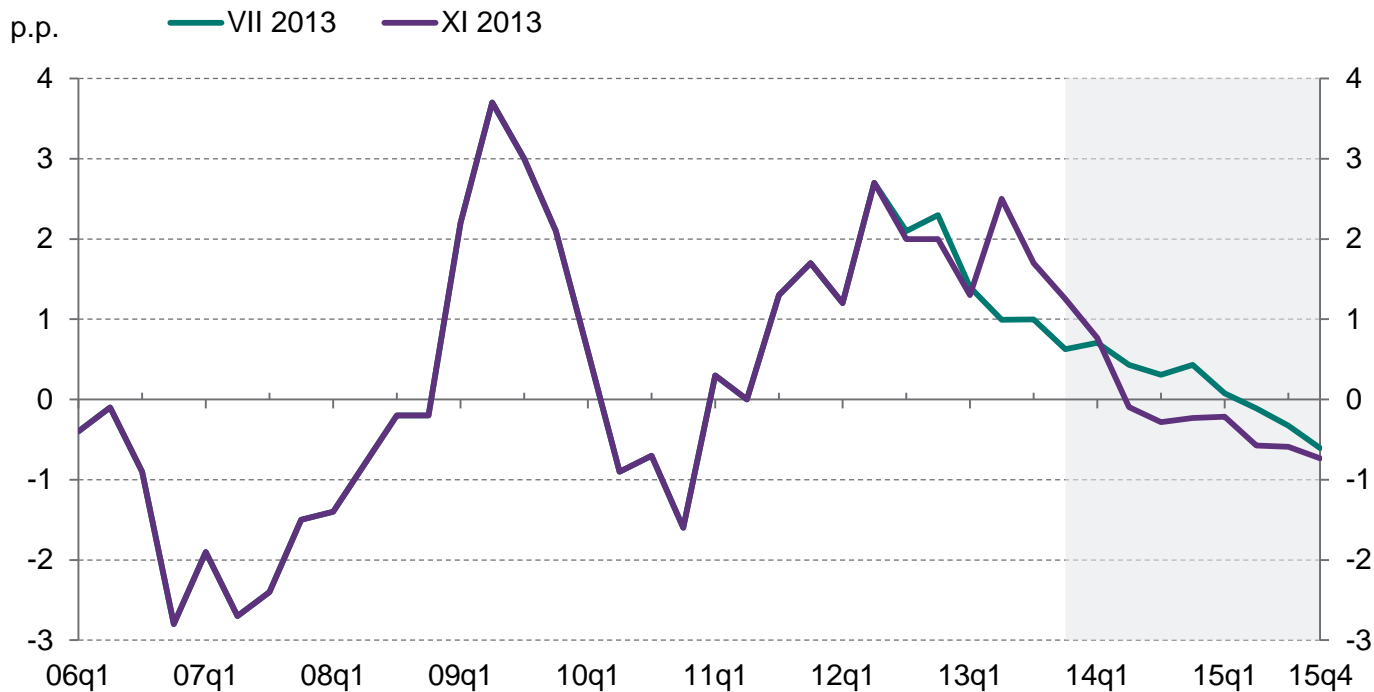
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# GDP (higher)

Outline:

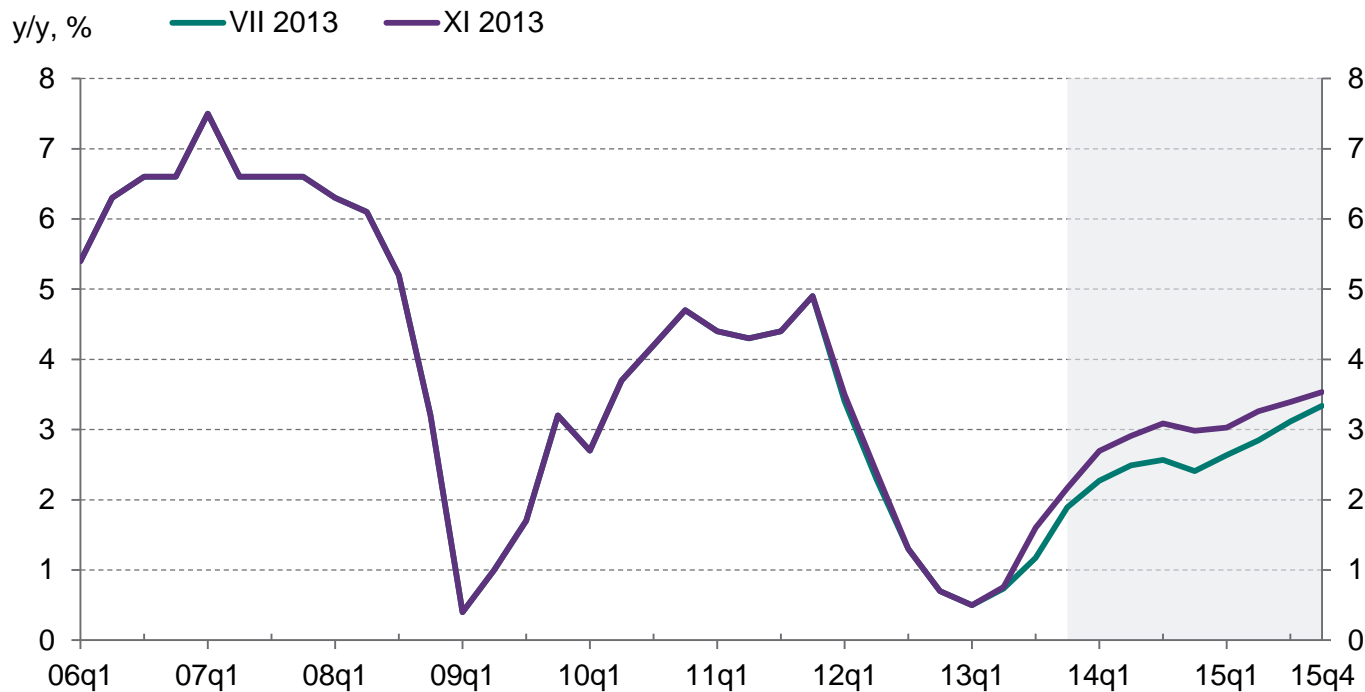
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# Potential output

Outline:

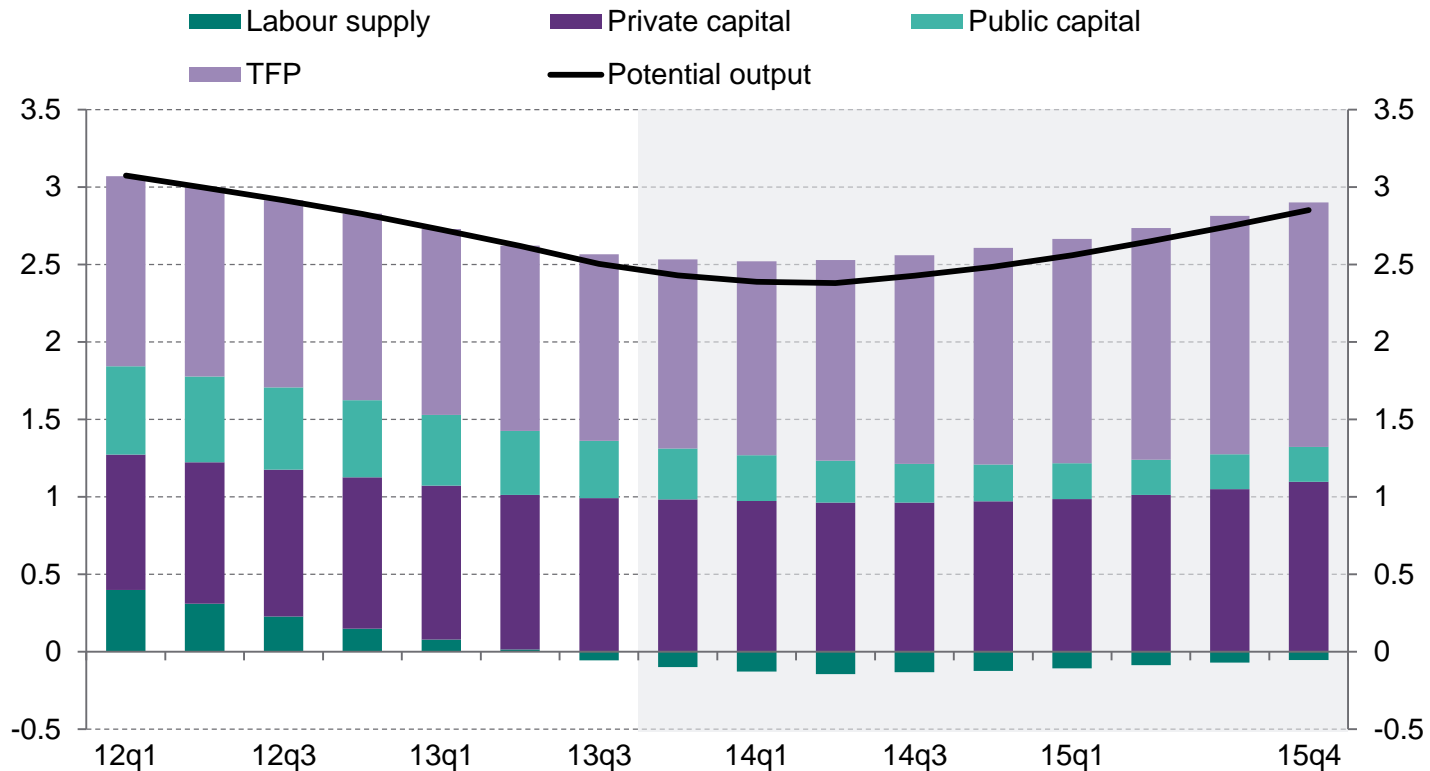
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# Output gap

Outline:

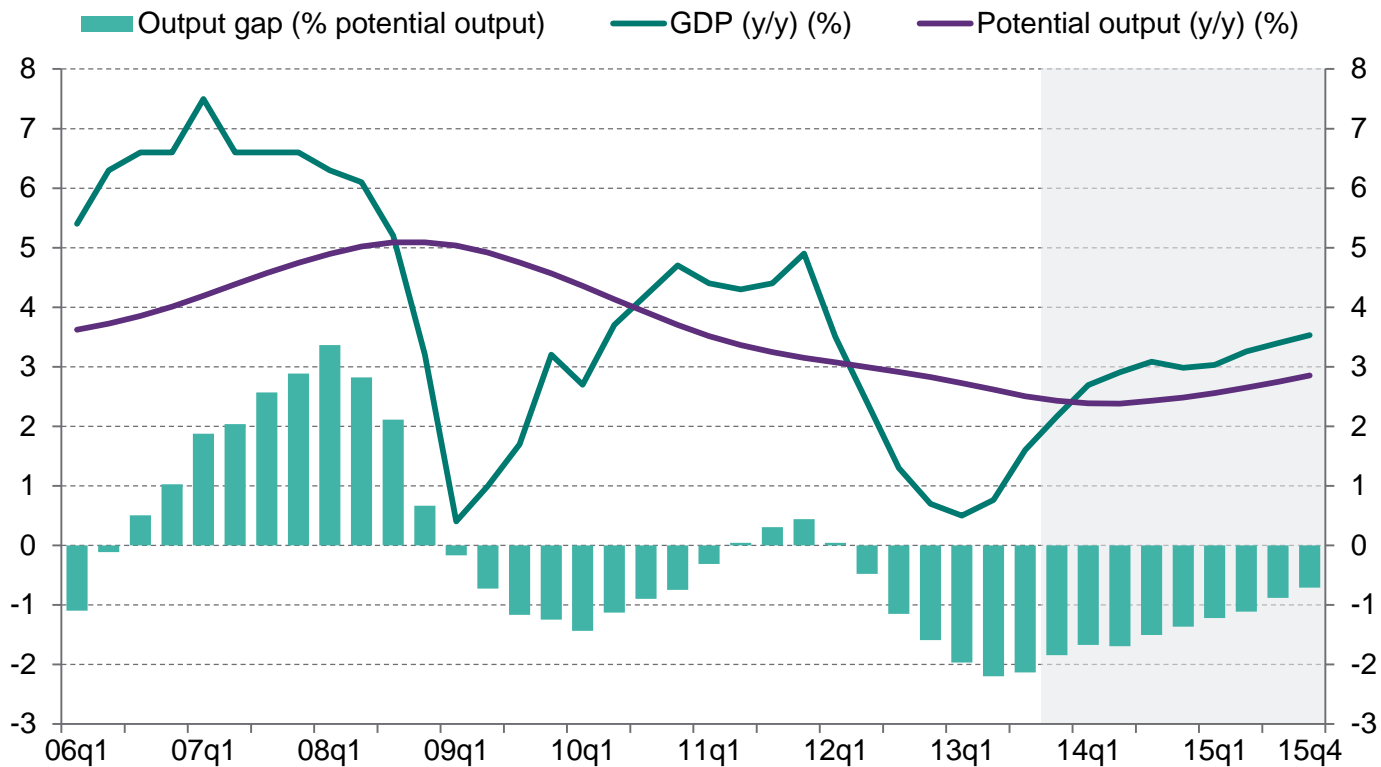
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# Labour market

## Outline:

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	13q2		13q3	
ULC (y/y) (%)	3,1	(2,0)	1,8	(1,3)
Labour productivity (y/y) (%)	1,3	(1,6)	2,0	(2,2)
Gross wages (y/y) (%)	3,3	(2,8)	3,4	(2,9)
Total employment LFS (y/y) (%)	-0,5	(-0,8)	-0,5	(-1,0)
Unemployment LFS (%)	10,5	(10,8)	10,4	(11,0)
Participation rate (%)	56,0	(56,0)	55,9	(56,0)

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

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# Population (similar) and participation rate (lower)

Outline:

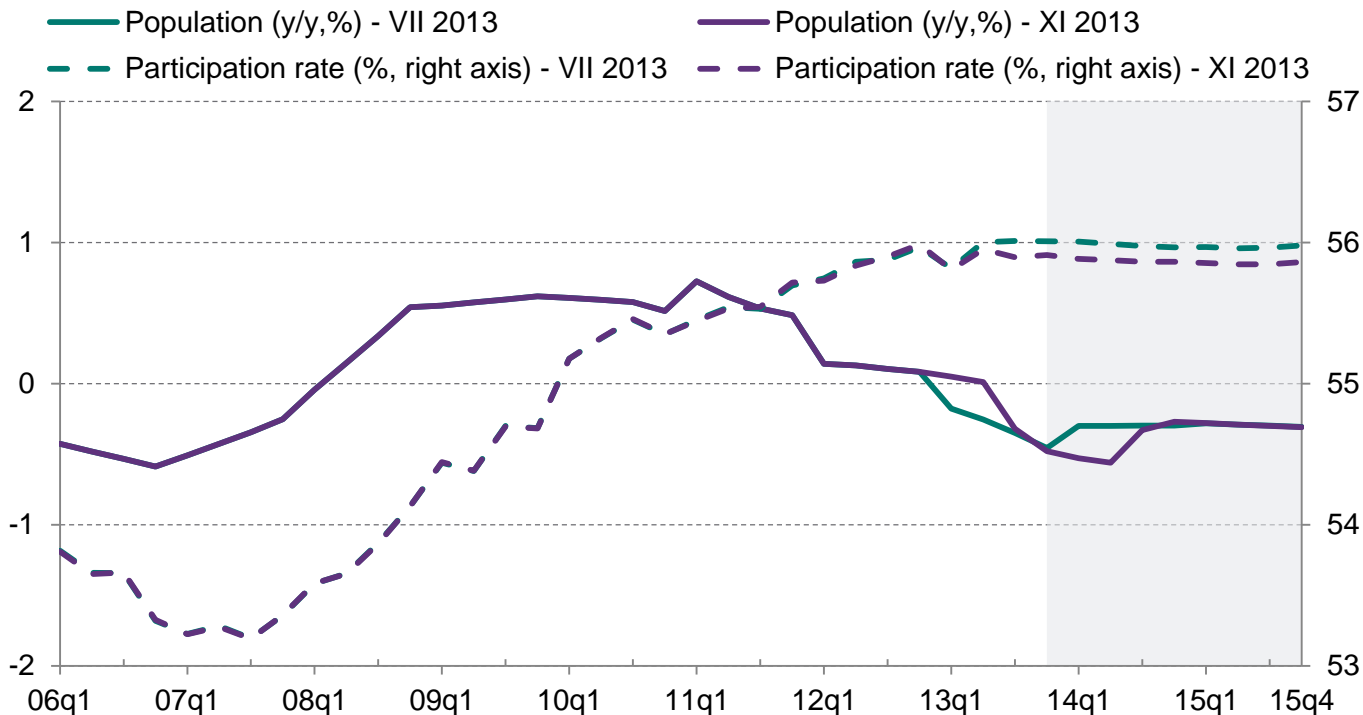
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# Labour market

Outline:

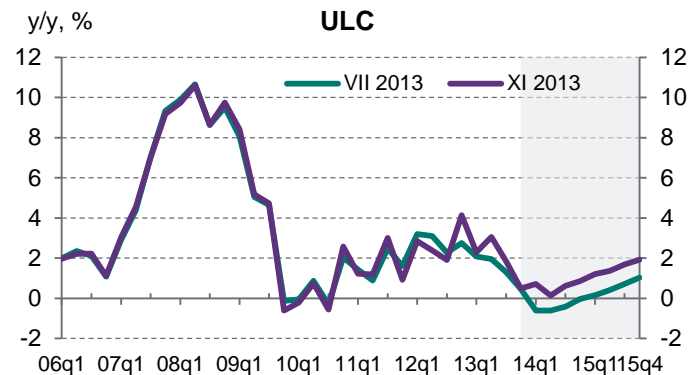
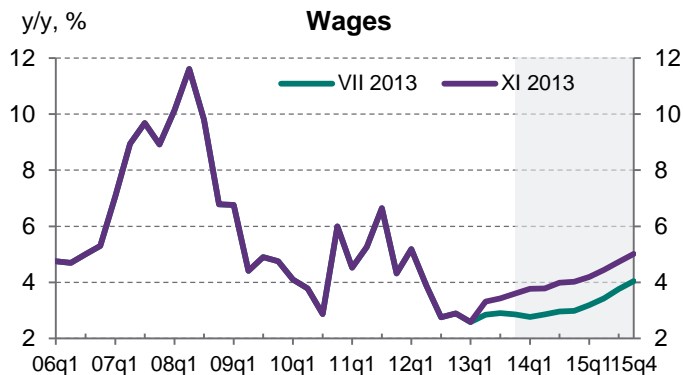
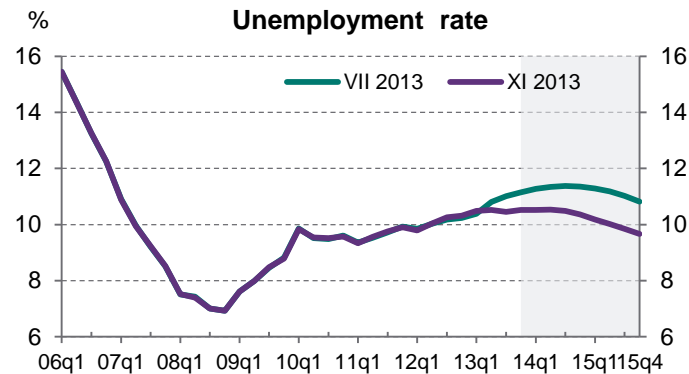
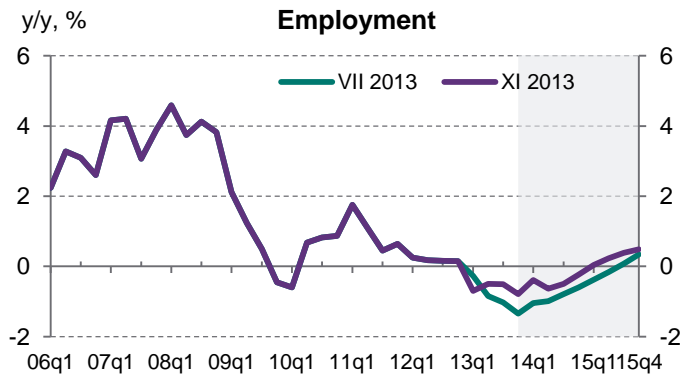
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# Import prices (excluding oil and natural gas)

Outline:

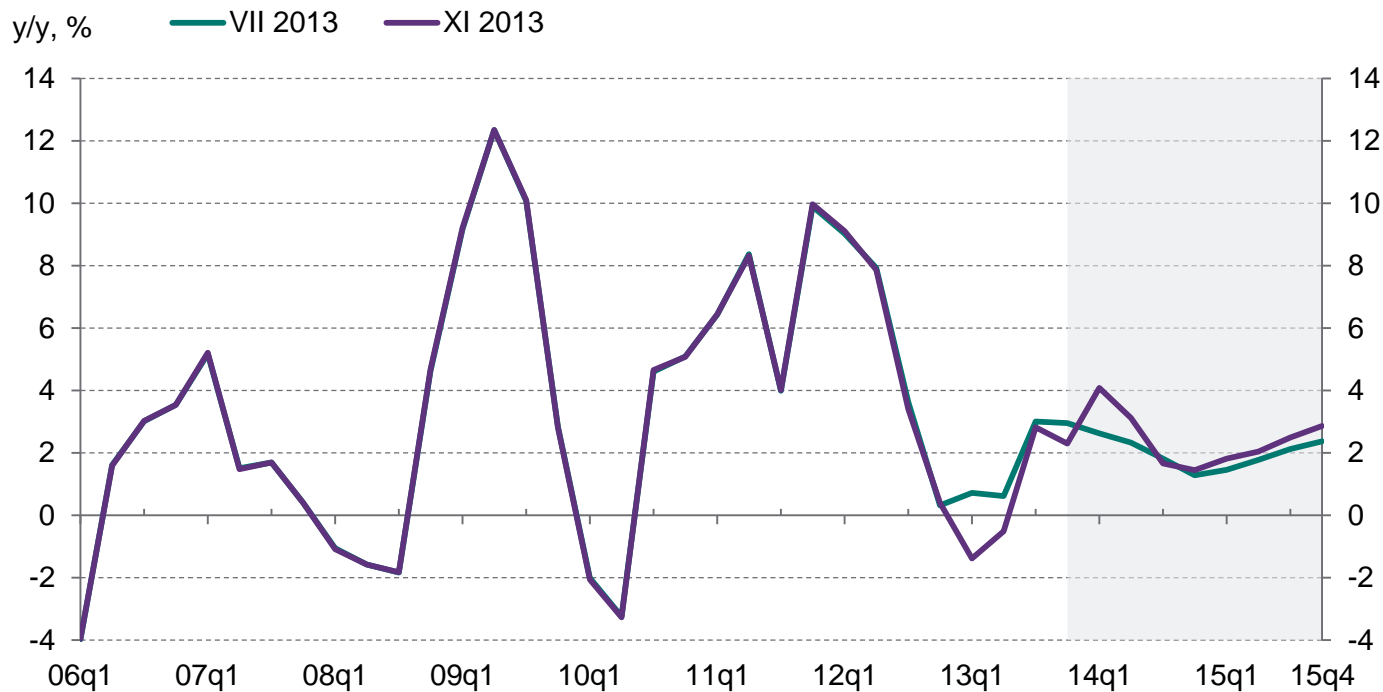
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# Food and energy prices inflation

Outline:

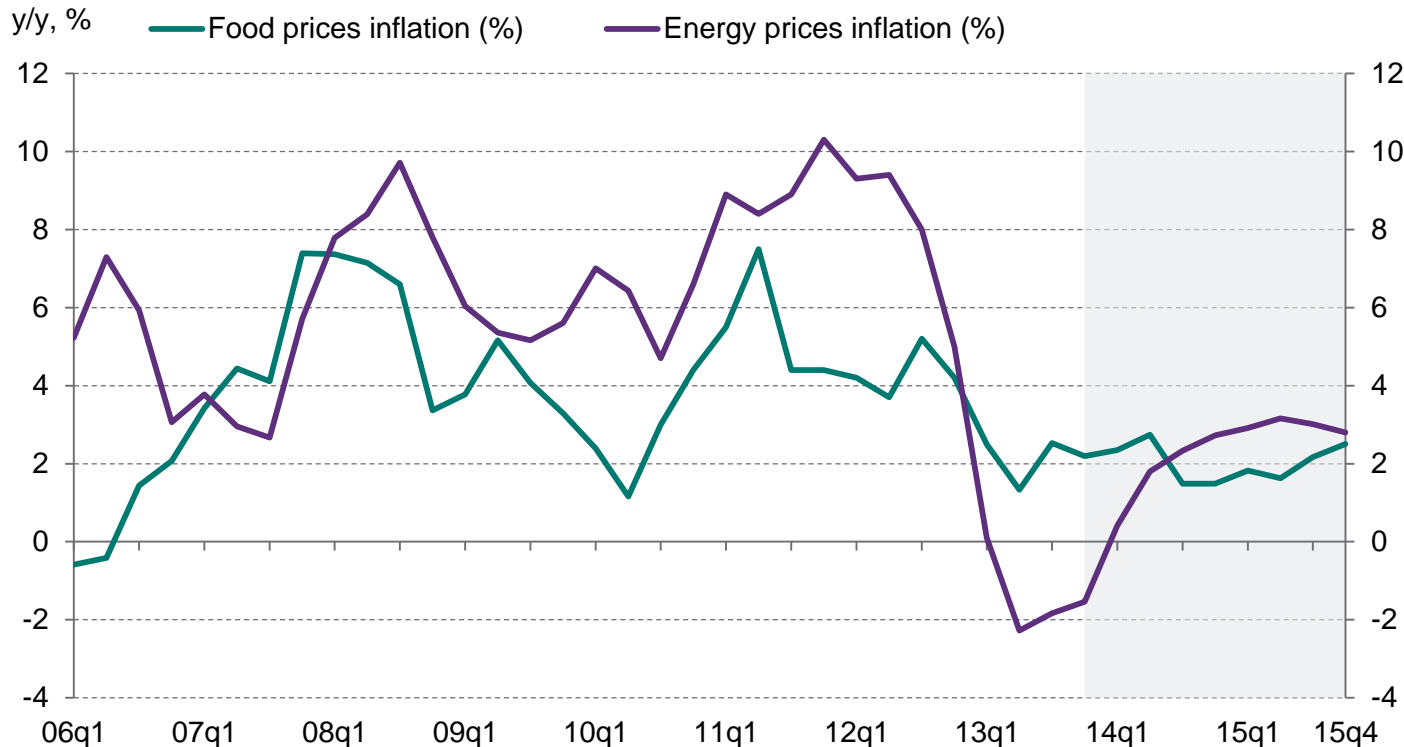
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# Core inflation\* and CPI inflation

Outline:

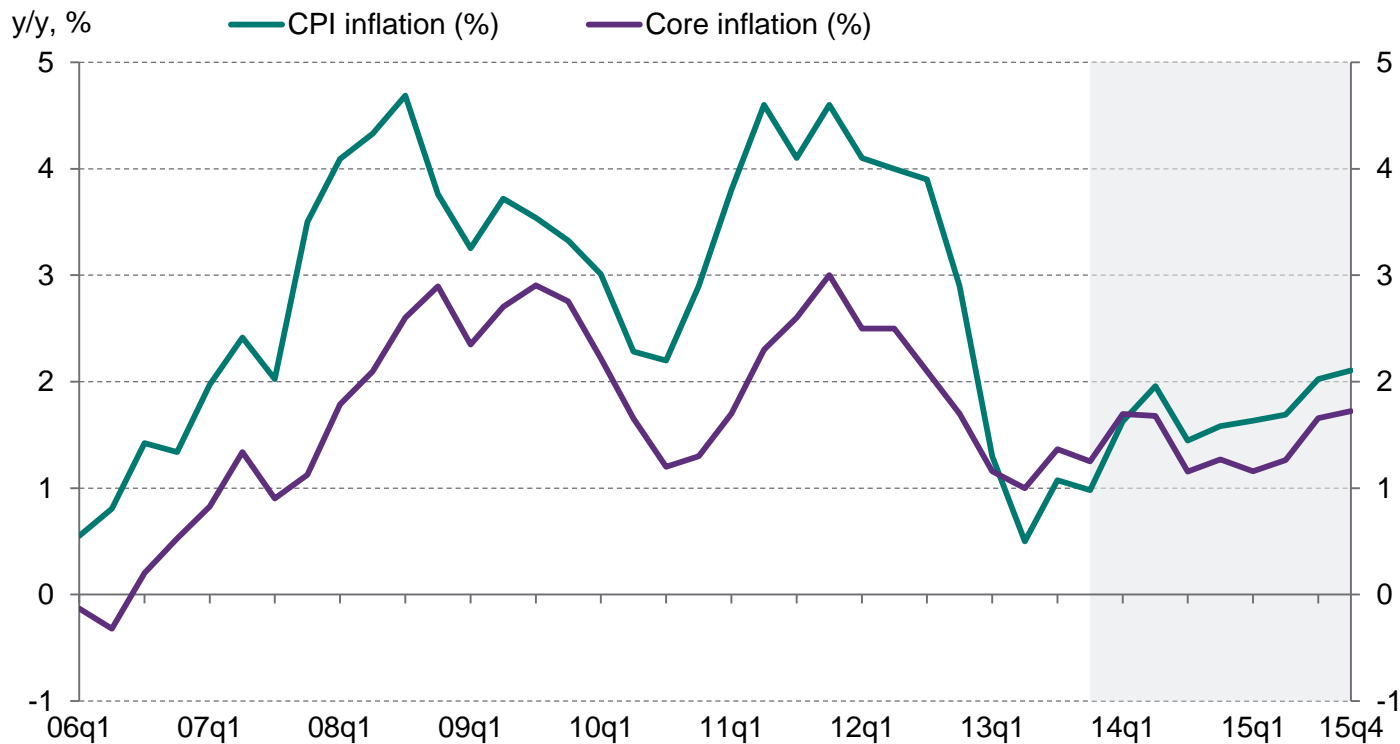
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\* Core inflation excludes food and non-alcoholic beverages and energy prices

# CPI inflation (y/y, %) – decomposition

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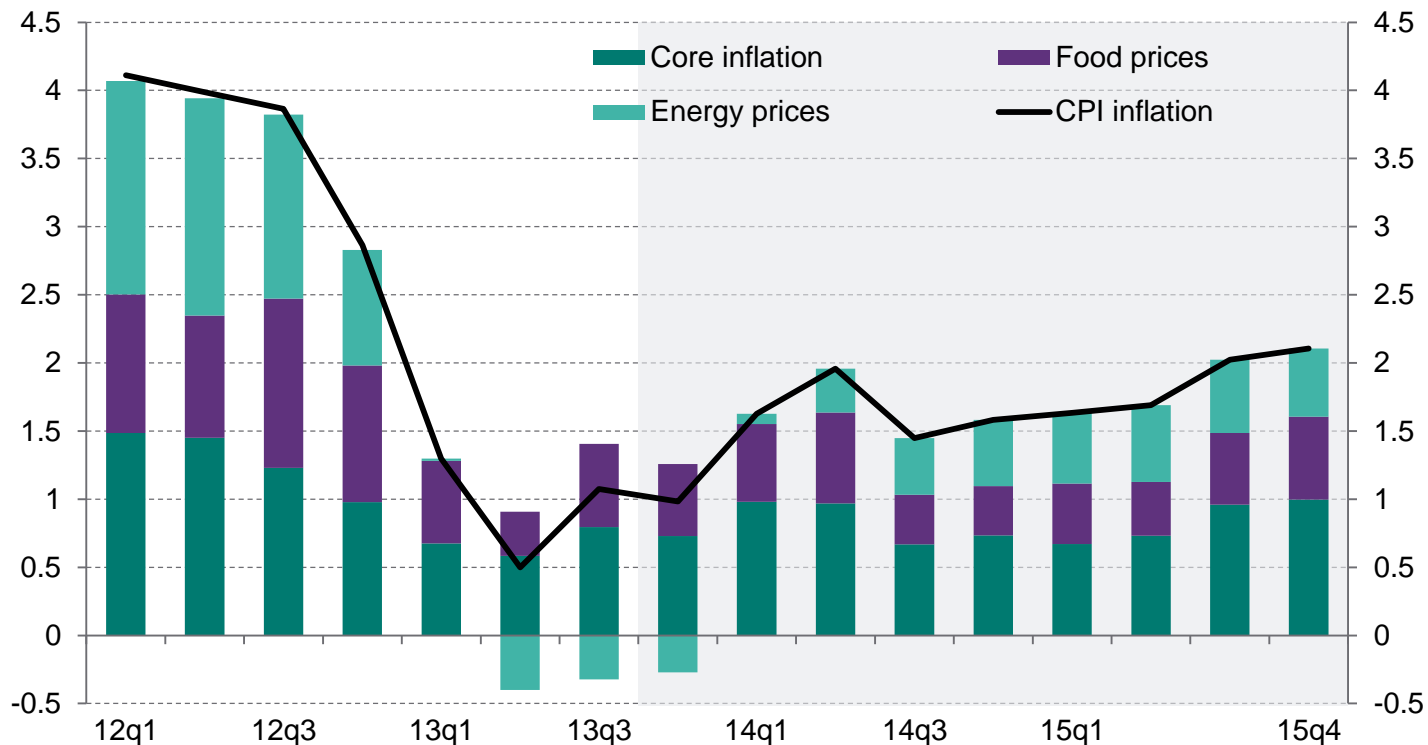
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# Risk factors

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Risk area	Description	Impact	Scale of impact
External environment and exchange rate	<ul style="list-style-type: none"> <li>• The scale and sustainability of the prospective recovery in the euro area                             <ul style="list-style-type: none"> <li>◦ the pace of global economic growth,</li> <li>◦ possible new increase in interest rates on the Treasury bonds of some euro area countries,</li> <li>◦ appreciation of the euro,</li> <li>◦ developments regarding United States debt ceiling.</li> </ul> </li> </ul>	Inflation ↔ GDP ↔	***
Domestic demand and the competitiveness of the Polish economy	<ul style="list-style-type: none"> <li>• The response of households and the corporate sector to developments abroad.</li> <li>• Protracted recession in the euro area amidst the prevailing low savings rate and restricted access to credit may perpetuate sluggish trends in domestic consumption and investment.</li> <li>• The response of exports and imports to the anticipated expansion in domestic and foreign demand.</li> </ul>	Inflation ↔ GDP ↔	**



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Risk area	Description	Impact	Scale of impact
<p style="text-align: center;">Food and energy prices in Poland</p>	<ul style="list-style-type: none"> <li>• Uncertain impact of European regulations on prices in Poland, particularly those concerning Climate and Energy Package (unknown amount and price of carbon emission allowances for the Polish economy).</li> <li>• Tariff policy of the Energy Regulatory Office.</li> <li>• Regulatory activities on the food market.</li> <li>• Agrometeorological conditions.</li> <li>• Future global energy commodity prices (oil supply disruptions and the reaction of OPEC countries, rising extraction of shale oil and gas in the United States).</li> </ul>	<p style="text-align: center;">Inflation ↔ GDP ↔</p>	<p style="text-align: center;">**</p>
<p>Conclusions</p>		<p style="text-align: center;">Inflation ↔ GDP ↔</p>	

# Inflation projection – November 2013

Outline:

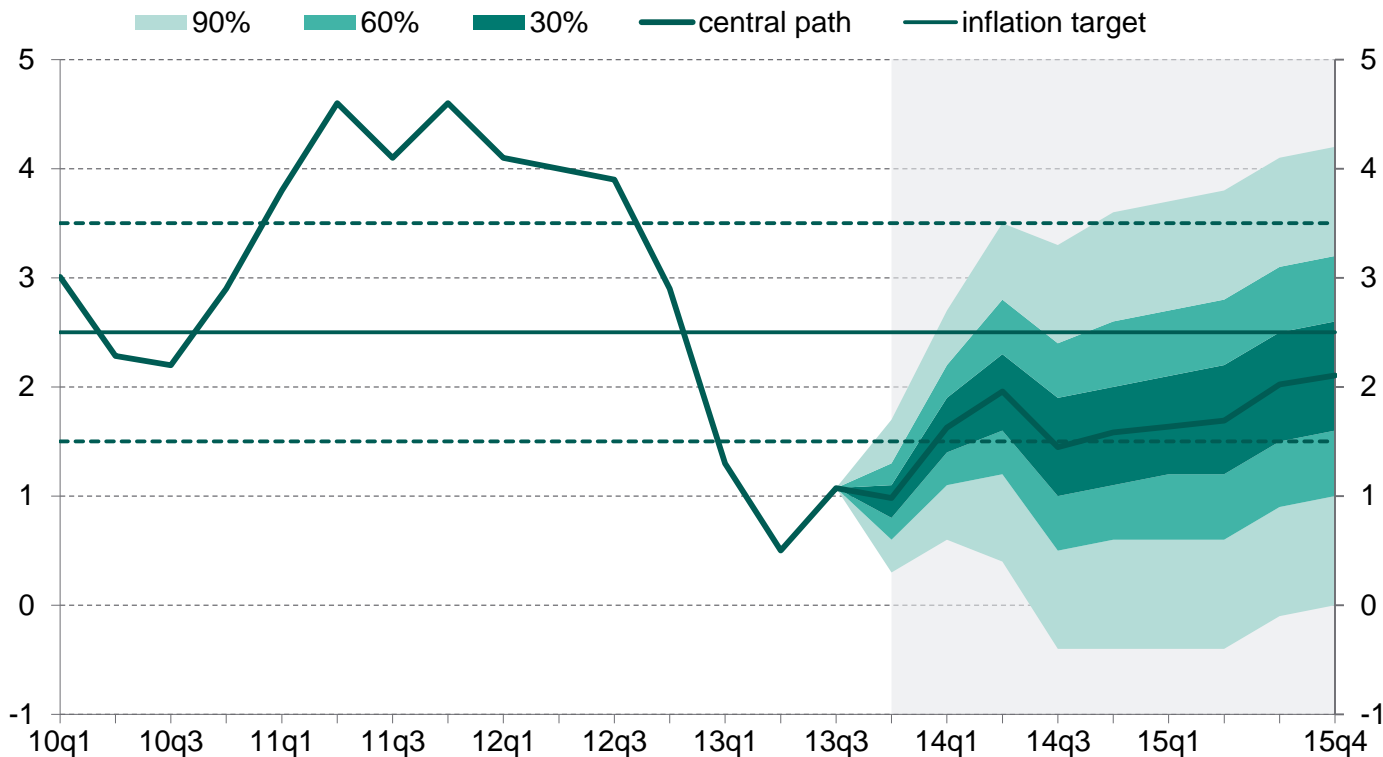
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## Probability distribution for inflation

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	below 1,5%	below 2,5%	below 3,5%	below the central path	In the range (1,5-3,5%)
<b>13q4</b>	0,89	1,00	1,00	0,50	0,11
<b>14q1</b>	0,42	0,91	1,00	0,50	0,58
<b>14q2</b>	0,31	0,72	0,95	0,50	0,64
<b>14q3</b>	0,52	0,83	0,97	0,50	0,45
<b>14q4</b>	0,47	0,78	0,94	0,50	0,47
<b>15q1</b>	0,45	0,76	0,94	0,50	0,48
<b>15q2</b>	0,44	0,74	0,92	0,50	0,48
<b>15q3</b>	0,34	0,64	0,88	0,50	0,53
<b>15q4</b>	0,32	0,62	0,86	0,50	0,54

# GDP projection – November 2013

Outline:

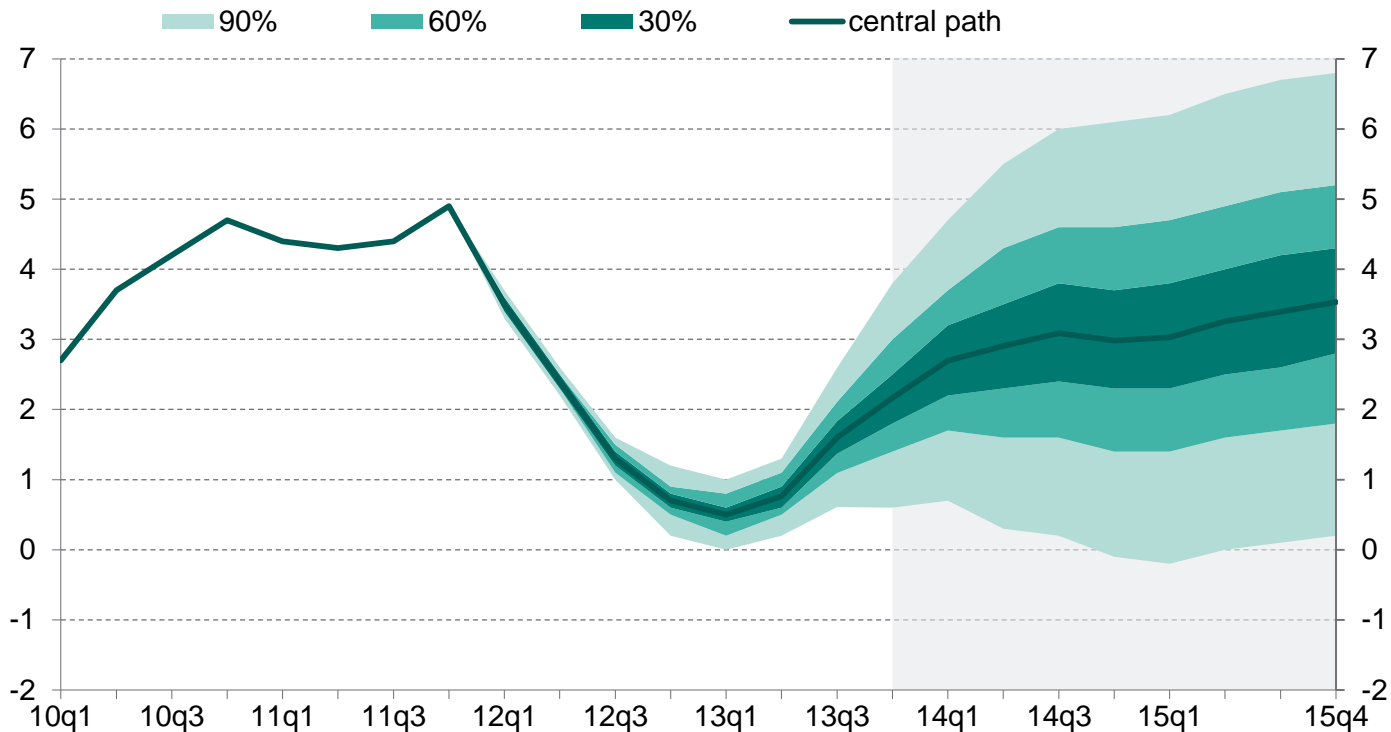
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*We protect the value of money*