

NBP

Narodowy Bank Polski

Economic Analysis Department

Inflation and economic growth projection of Narodowy Bank Polski based on the NECMOD model

Warsaw / 11 March 2019



Outline

Outline:

Changes between rounds

Projection 2019 – 2021

- Economic conditions abroad
- Polish economy
 - GDP
 - Consumption demand
 - Investment demand
 - Foreign trade
 - Inflation

Uncertainty

1 Changes between projection rounds

2 Projection 2019 – 2021

3 Uncertainty

Outline:

Changes between rounds

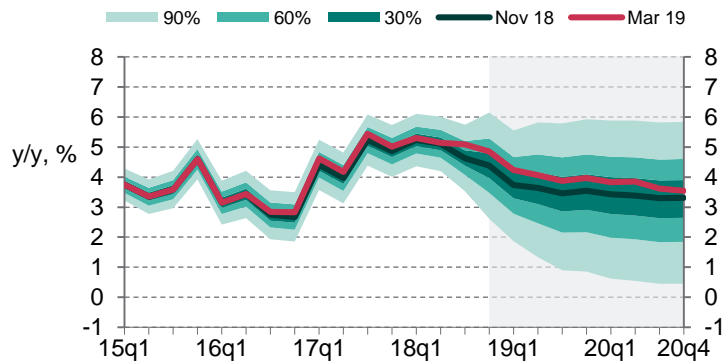
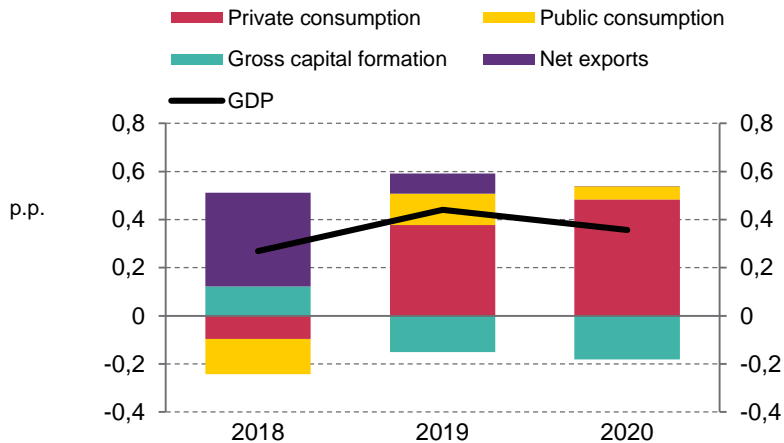
Projection 2019 – 2021

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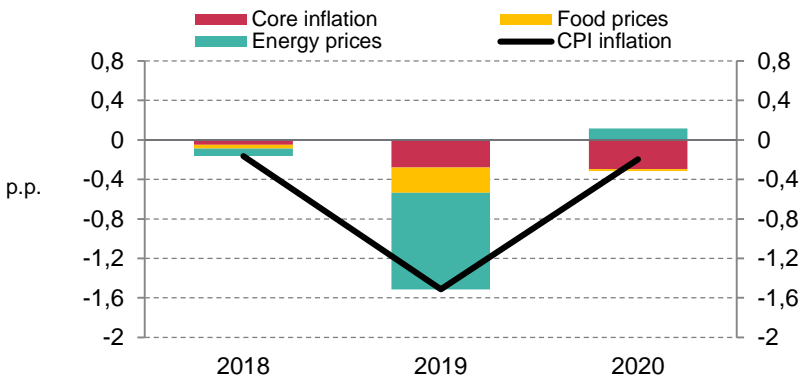
March GDP projection compared to November projection



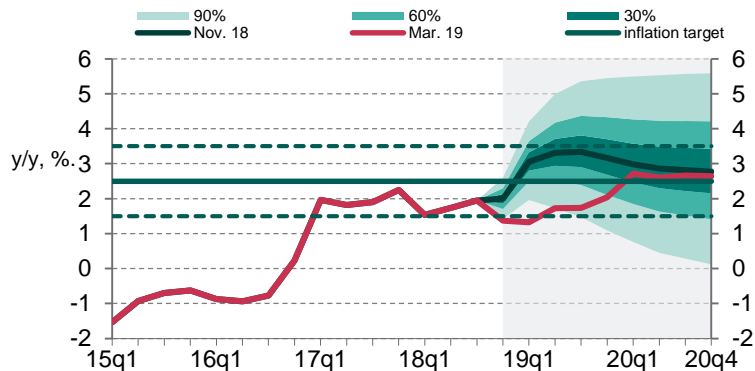
- ↑ Higher net exports contribution to GDP growth in 2018.
- ↑ Stronger growth of gross capital formation in 2018, related to higher EU funds absorption by local government.
- ↑ Legislation package, planned by the government, significantly increasing expenditures on social benefits and reducing tax burden.
- ↑ Lower energy prices for households and businesses in 2019.
- ↑ Higher wage growth in the public sector in 2019.
- ↓ Lower expected economic growth in the euro area.

GDP y/y, %	2018	2019	2020
November 2018	4.8	3.6	3.4
March 2019	5.1	4.0	3.7

March CPI projection compared to November projection



- ↓ Substantial fall in global oil prices in 2018Q4.
- ↓ Freezing of electricity prices for end-users in 2019 on the 2018 level.
- ↓ Stronger than anticipated impact of immigration from Ukraine on Polish potential output growth.
- ↓ Special offers for mobile telephony and digital and cable TV lowering core inflation in 2018Q4.



CPI y/y, %	2018	2019	2020
November 2018	1.8	3.2	2.9
March 2019	1.6	1.7	2.7

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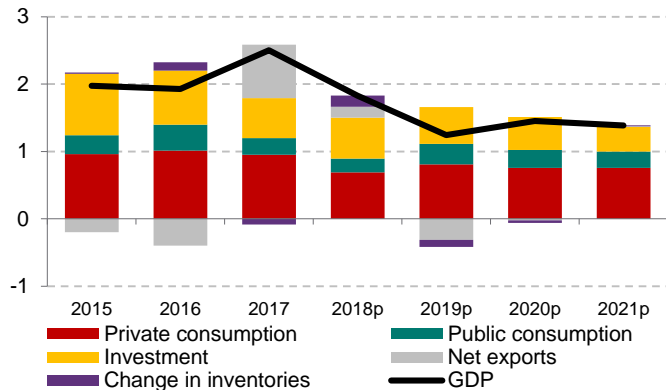
Economic conditions abroad

Weak 18Q4 data and deterioration of the export outlook contributed to the reduction of economic growth forecast for the euro area in 2019-2020

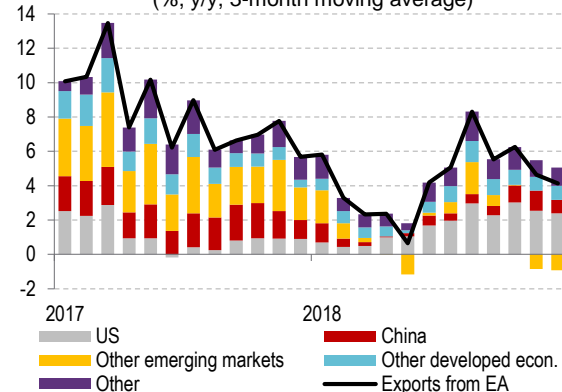
NBP forecasts
(November 2018 projection in brackets)

GDP y/y, %	2018	2019	2020
Euro area	1.8 (2.1)	1.2 (1.8)	1.5 (1.6)
Germany	1.5 (1.8)	0.9 (1.8)	1.4 (1.6)
United States	2.9 (2.9)	2.5 (2.6)	2.0 (2.0)
China	6.6 (6.6)	6.1 (6.1)	6.0 (6.0)

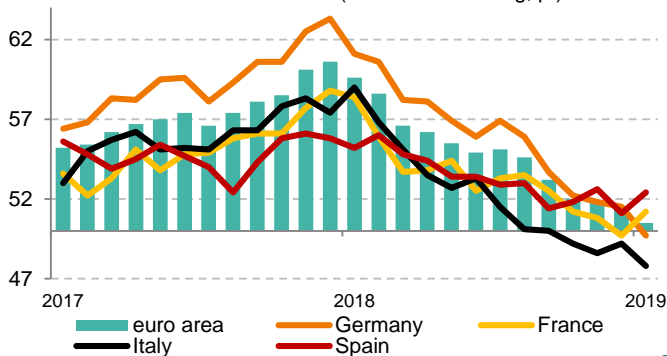
Forecast for GDP growth in the euro area (% , pp., y/y)



Exports from the euro area by destination (% , y/y, 3-month moving average)



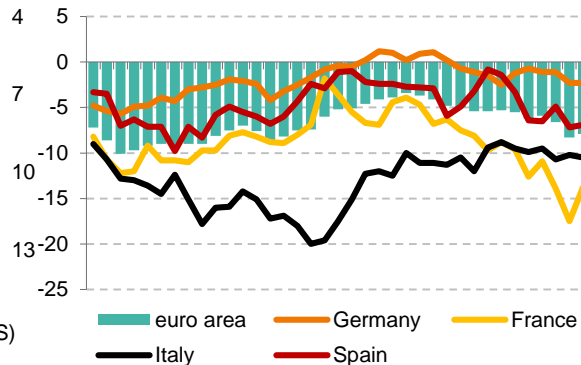
Business confidence (PMI manufacturing, p.)



Negotiated wages growth (% , y/y) and unemployment rate in the euro area (%)



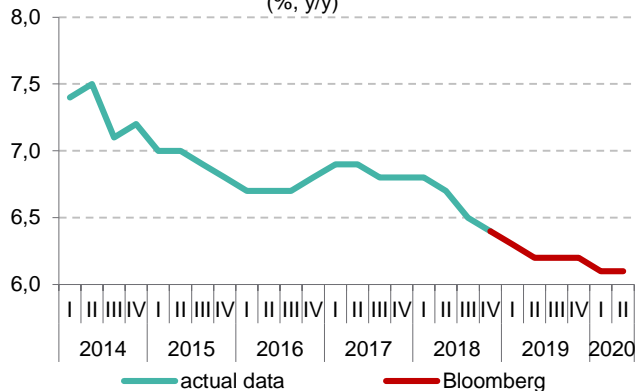
Consumer confidence in the euro area (CCI, p.)



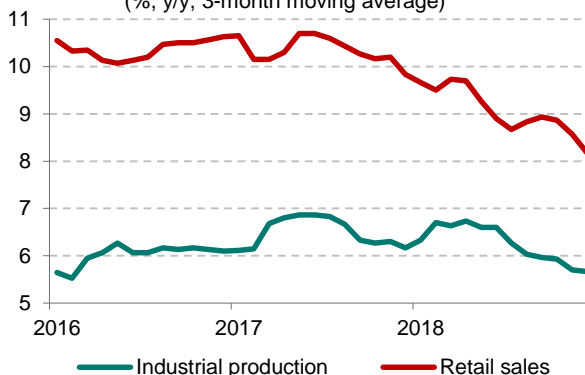
Source: Eurostat, European Commission, EAD calculations.

Slower growth in China, deepened by the trade dispute with the United States

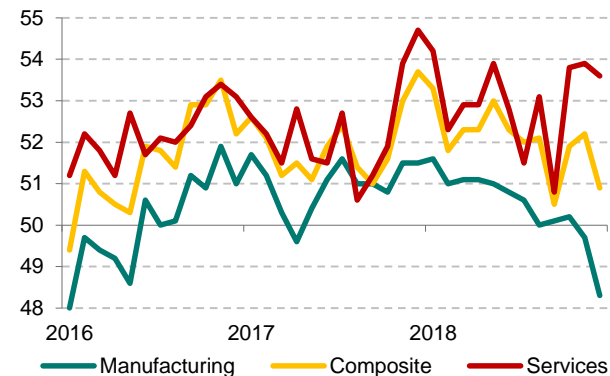
Forecast for GDP growth in China (% y/y)



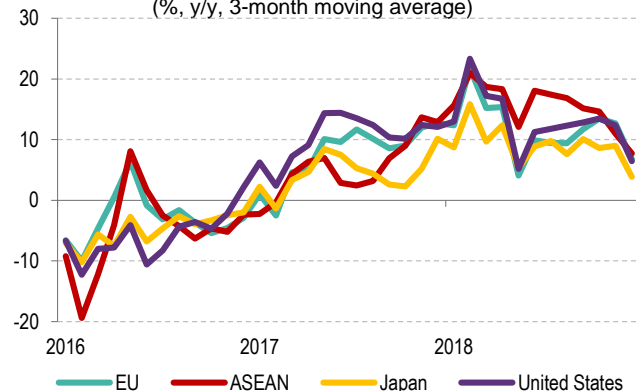
Industrial production and retail sales (% y/y, 3-month moving average)



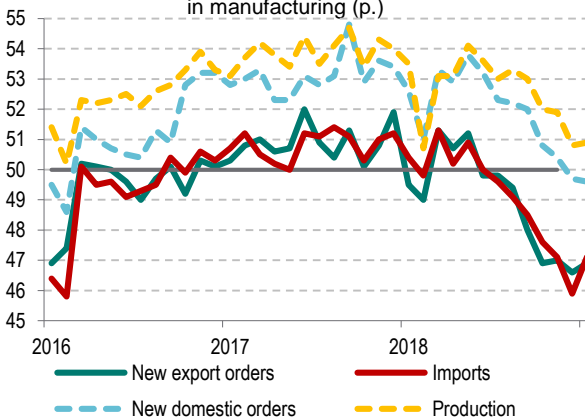
PMI Markit (p.)



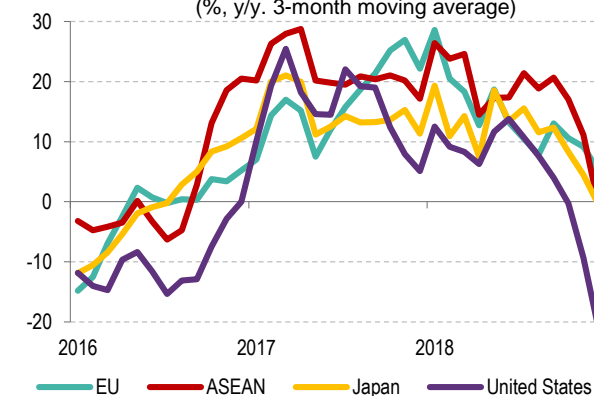
Exports from China to selected countries (% y/y, 3-month moving average)



Selected subindices of PMI NBS in manufacturing (p.)



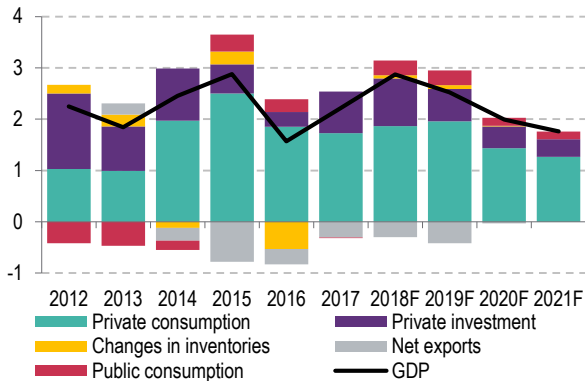
Imports of China by geographical region (% y/y, 3-month moving average)



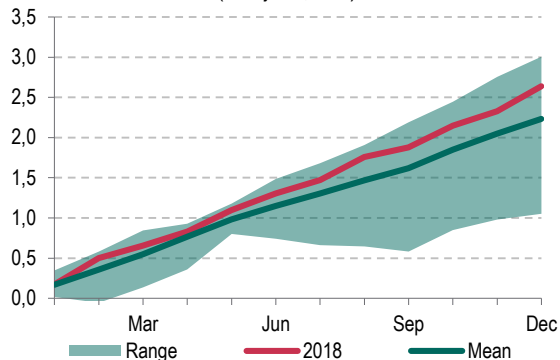
Source: Eurostat, European Commission, EAD calculations.

As expected growth in the United States gradually slowdowns

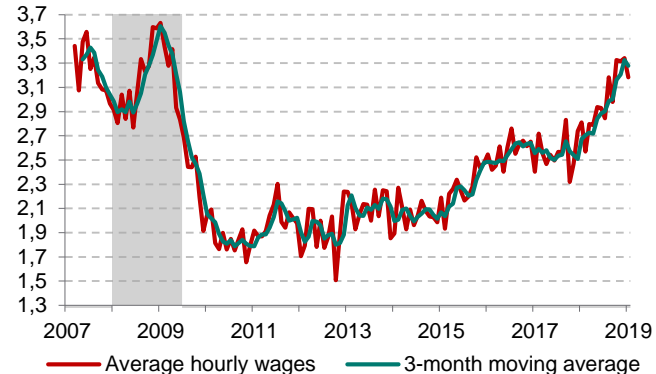
Forecast for GDP growth in the US (% , p.)



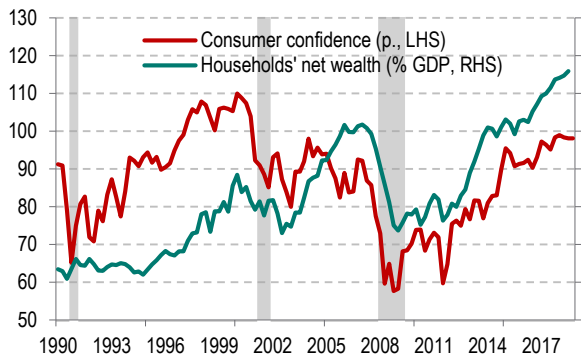
Cumulative nonfarm payroll employment growth in 2018 (mln jobs, s.a.)



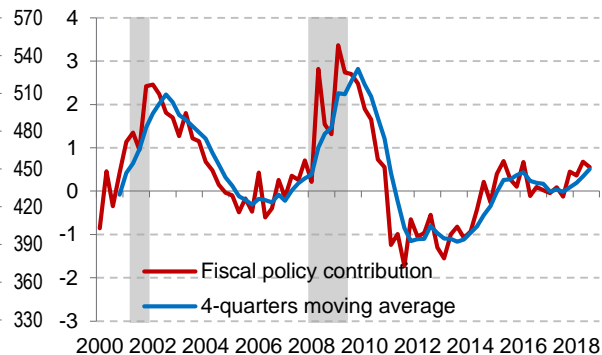
Nominal wages (% , y/y)



Consumer confidence and households wealth

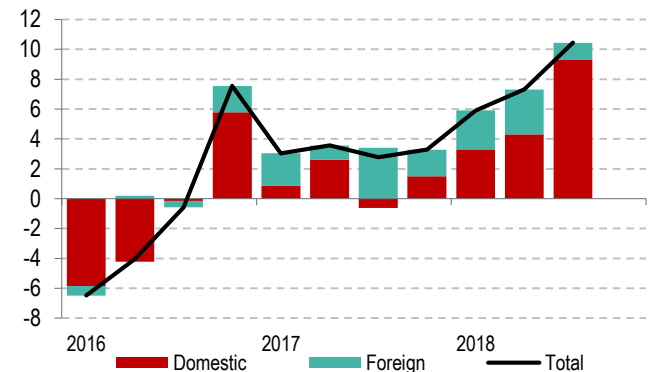


Impact of fiscal policy (pp.) on real GDP growth* (% q/q SAAR)



*Hutchins Center on Fiscal and Monetary Policy estimates.

Nominal corporate profits (% y/y)



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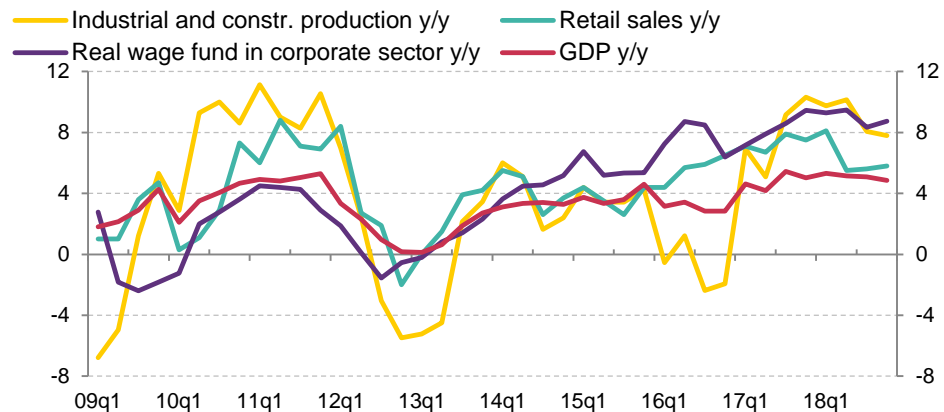
Uncertainty

Polish economy

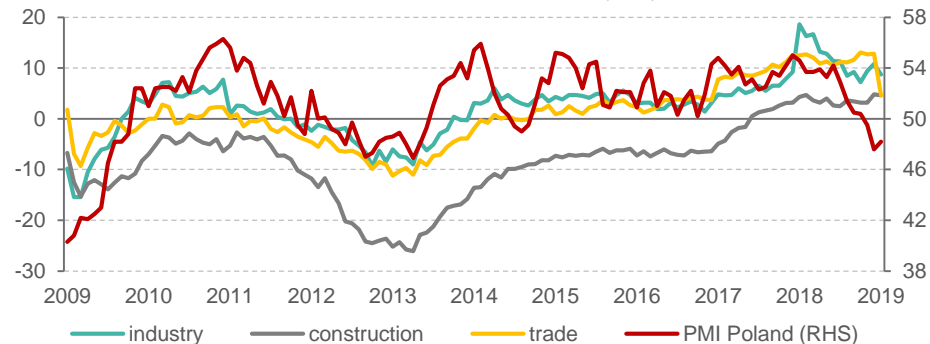
Gross domestic product

In 2018Q4 Polish economy still expanded at a high rate...

	18q3		18q4	
GDP (y/y) (%)	5.1	(4.6)	4.9	(4.4)
Domestic demand (y/y) (%)	6.2	(5.6)	4.3	(4.9)
Household consumption (y/y) (%)	4.5	(4.6)	4.2	(4.5)
Public consumption (y/y) (%)	3.6	(4.7)	4.6	(4.6)
Gross fixed capital form. (y/y) (%)	9.9	(8.0)	6.9	(6.2)
Eksports (y/y) (%)	4.9	(5.5)	7.2	(5.0)
Imports (y/y) (%)	6.9	(7.4)	6.1	(6.0)
Net exports contribution (p.p.)	-0.9	(-0.7)	0.7	(-0.4)

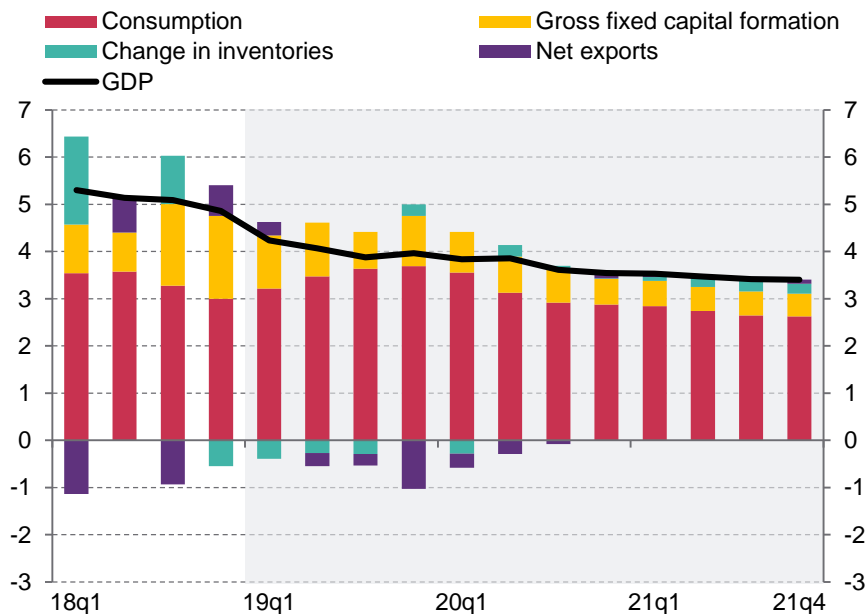


PMI Poland and business sentiment (GUS) – general expected economic conditions (s.a.)



Values from the November projection are given in brackets (18q4 seasonally adjusted). Indicators with values higher than in the November projection are marked green, and indicators with lower values are marked red.

... in the quarters to come the growth will gradually decline following the economic slowdown in the euro area and the slowdown in the growth of EU funds absorption



↑ Private consumption is the main factor behind GDP growth over the projection horizon due to favourable labour market conditions and expansive fiscal policy planned by the government.

↓ Gradual slowdown in the euro area will have a negative impact on the GDP growth at home.

↓ Gross fixed capital formation dynamics will weaken in 2019-2021 following the slowdown in the growth of EU funds absorption.

y/y, %	2018	2019	2020	2021
GDP	5.1	4.0	3.7	3.5

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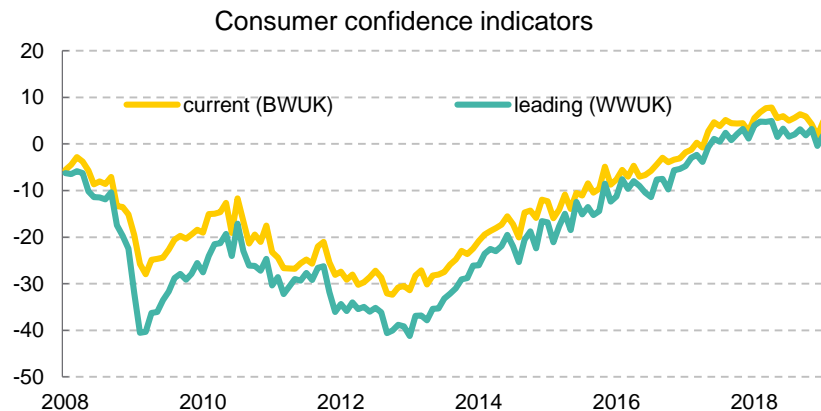
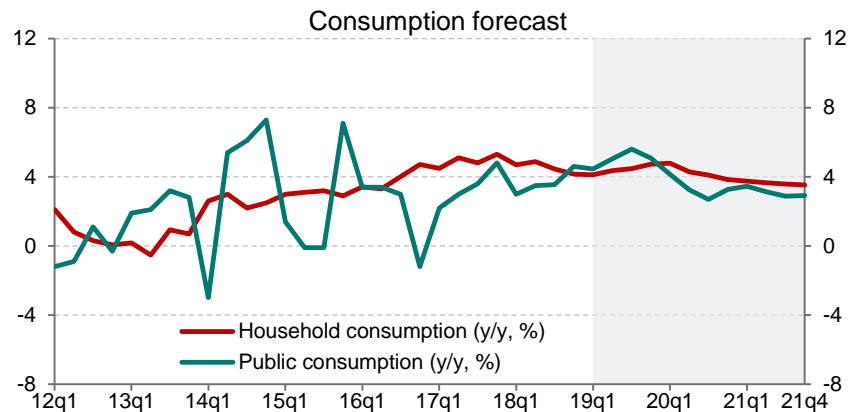
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Consumption demand

Consumption demand as the main driver of GDP growth in the projection



Private consumption:

- ↑ Favourable labour market conditions.
- ↑ Legislation package, planned by the government, significantly increasing expenditures on social benefits and reducing tax burden.
- ↑ Low interest rates facilitate financing consumption through borrowing.
- ↓ Weakening growth of wages and employment in 2020-2021.
- ↓ Higher inflation towards the end of projection horizon.

Public consumption:

- ↑ 2019 Budget Act – increase in wages in the budget sector and selected professional groups (i.a. teachers, academic teachers and employees of uniformed services).
- ↑ Higher expenditures on local transport under government legislation package announced in February.
- ↓ Lack of detailed information on the public consumption expenditure in 2020-2021.

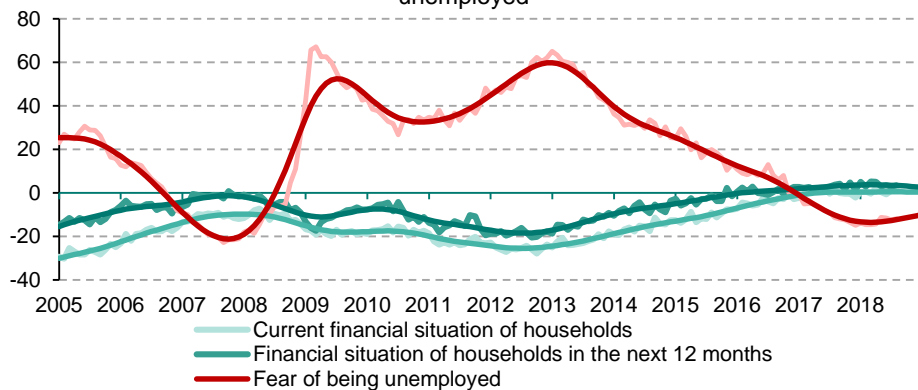
y/y, %	2018	2019	2020	2021
Household consumption	4.5	4.4	4.3	3.6
Public consumption	3.7	5.1	3.3	3.1

Still good financial situation of households

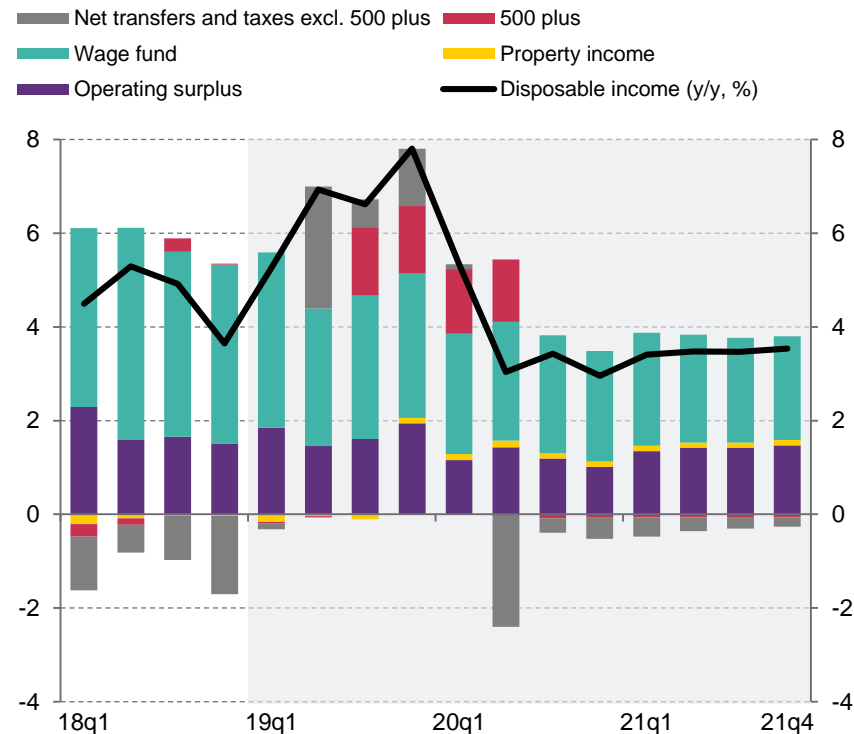
	18q3		18q4	
ULC (y/y, %)	3.3	(3.3)	3.1	(3.5)
Labour productivity (y/y,%)	4.4	(3.9)	3.9	(3.2)
Gross wages (y/y, %)	7.6	(6.9)	7.3	(6.7)
Employment LFS (y/y, %)	0.7	(0.7)	0.9	(1.1)
Unemployment rate LFS (%)	3.7	(3.3)	3.6	(3.3)
Participation rate (%)	56.4	(56.2)	56.4	(56.4)

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

Financial situation of households and fear of being unemployed

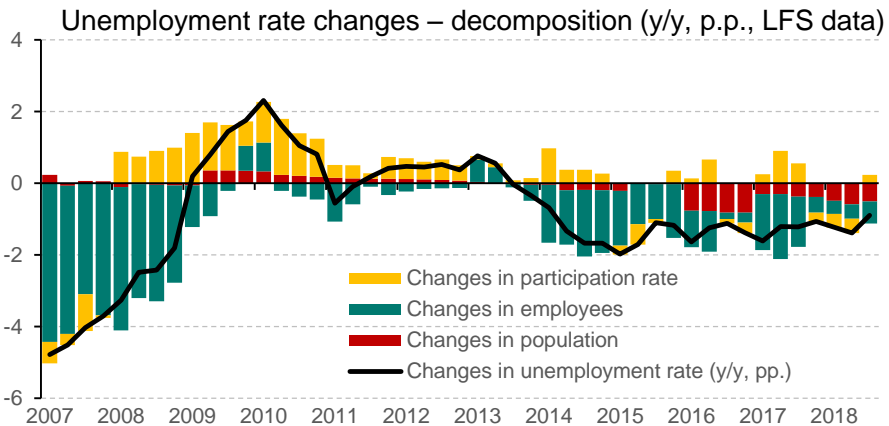
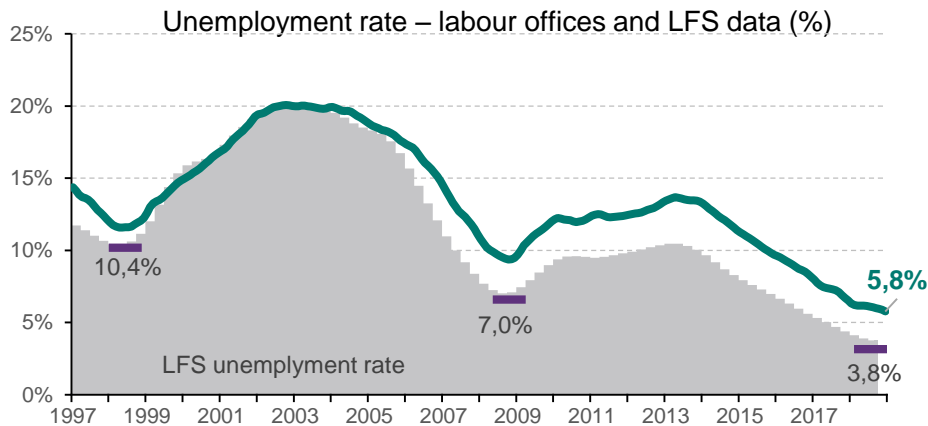
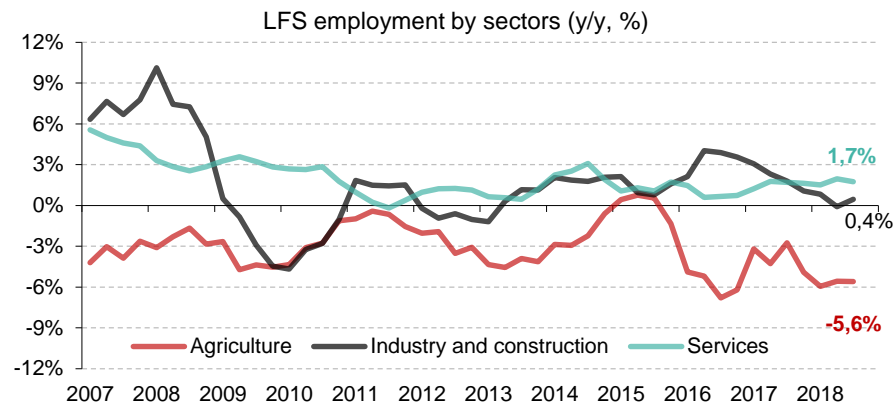
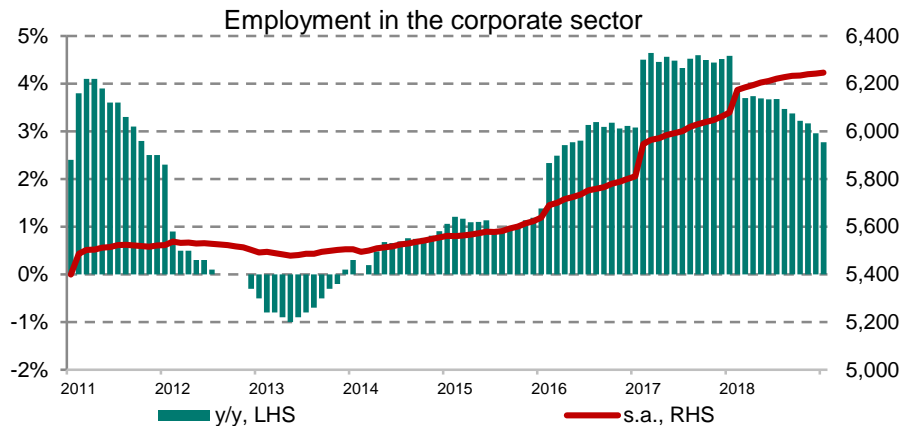


Disposable income decomposition (constant prices) (y/y, %)

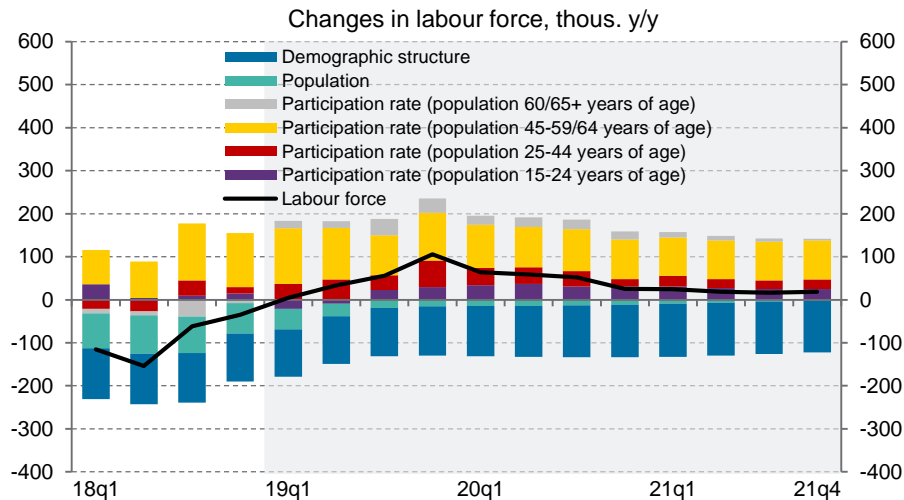
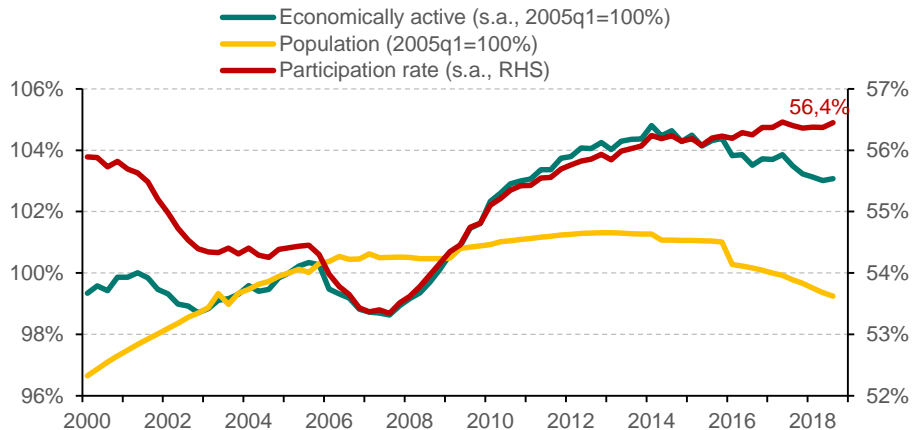


Source: GUS data, NBP calculations.

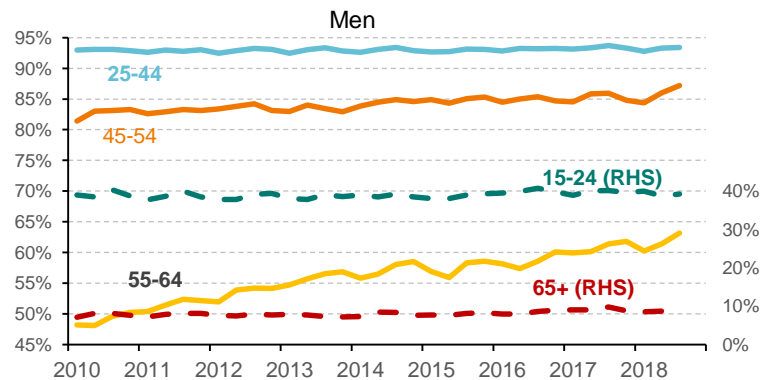
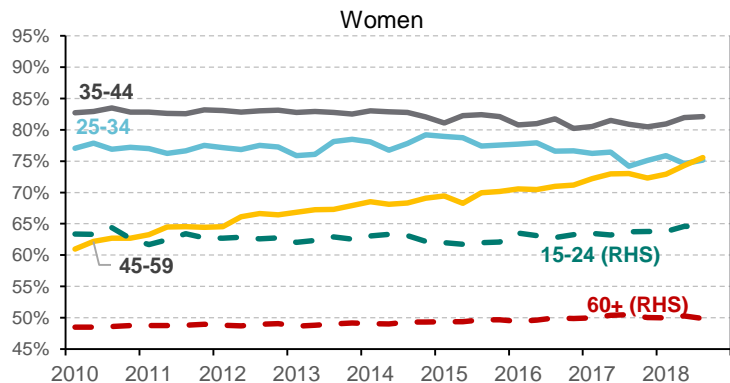
Diminishing employment growth, slowdown of unemployment rate declines



Labour shortages



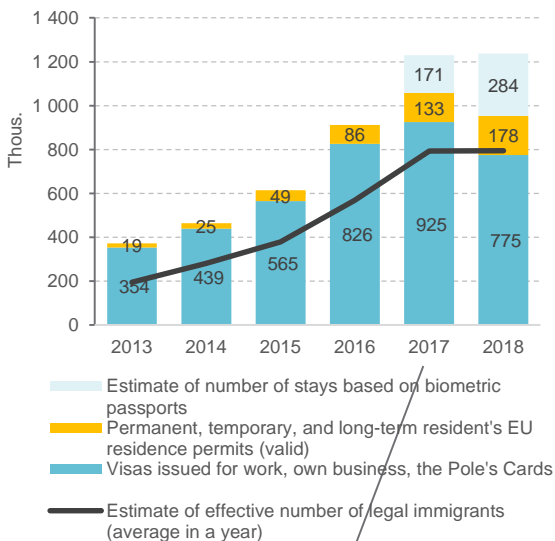
Changes in participation rate by age groups



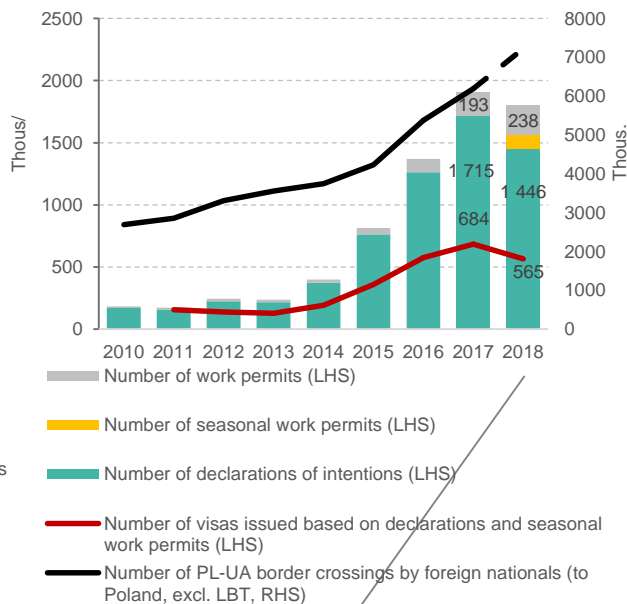
Source: GUS data, NBP calculations.

Stabilisation of immigration from Ukraine

Estimate of number of Ukrainians based on residence data

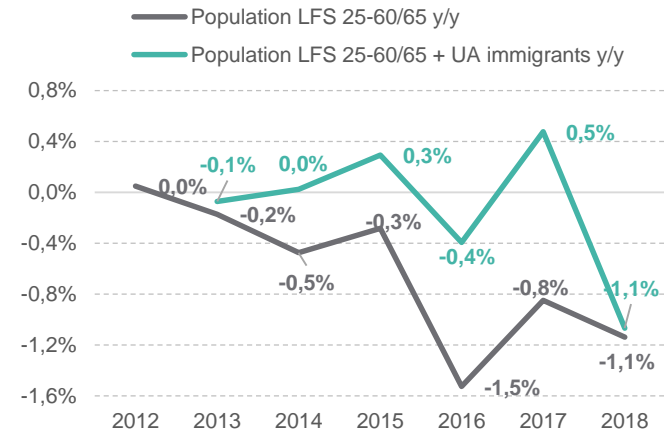


Number of declarations and seasonal work permits issued to Ukrainians



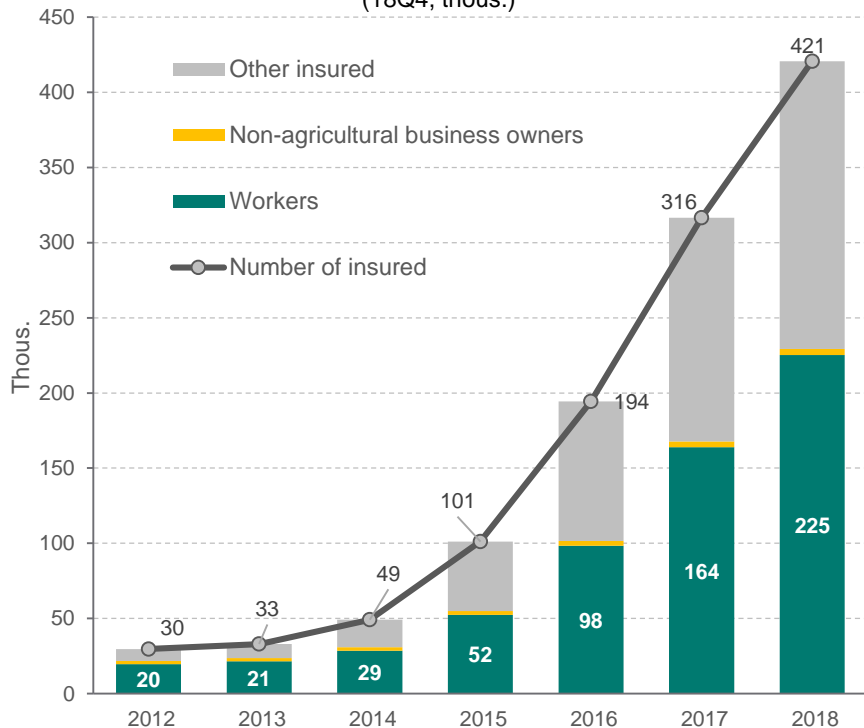
11 June 2017 – EU visa liberalisation i.a. for Ukrainian citizens

1 January 2018 – changes in national law regarding employing of foreign nationals

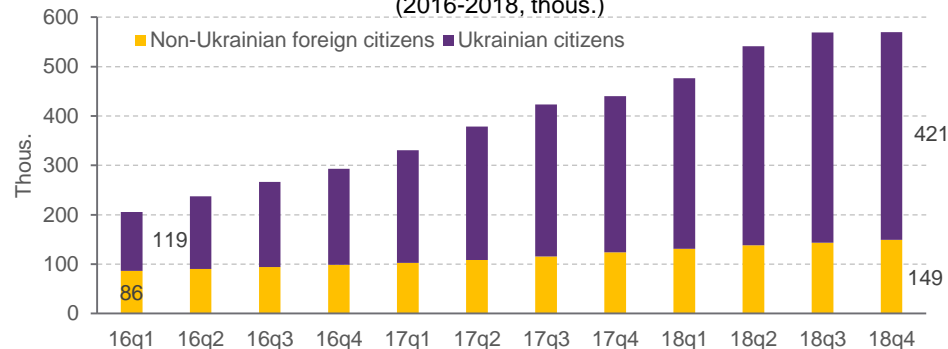


Number of immigrants from countries other than Ukraine increases, but still remains low compared to number of Ukrainian citizens. Possible outflow of Ukrainian citizens to Germany.

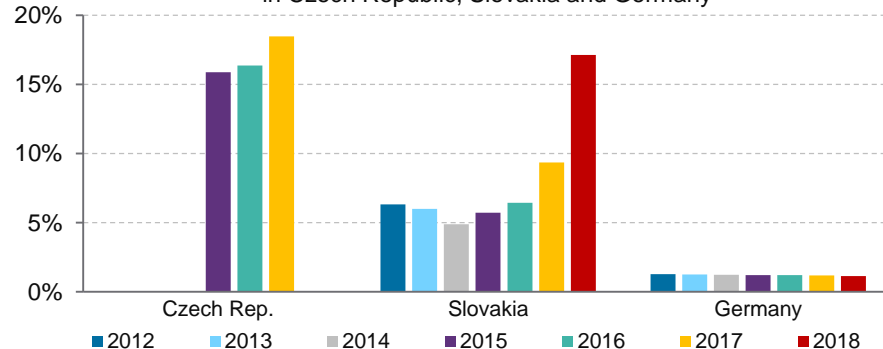
Number of Ukrainian citizens insured in ZUS (18Q4, thous.)



Number of foreign nationals insured in ZUS (2016-2018, thous.)



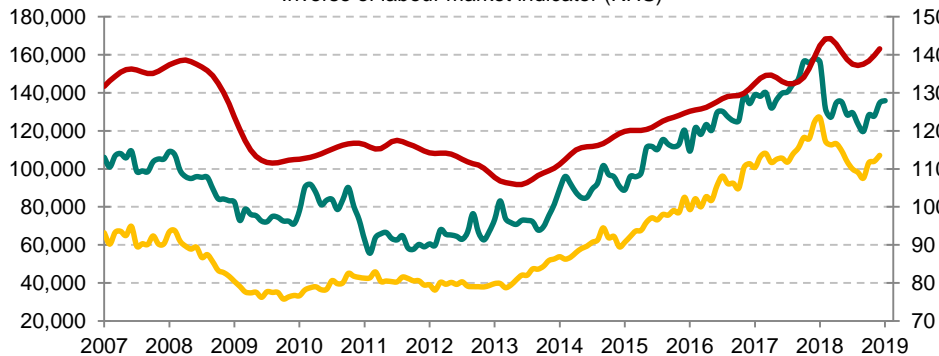
Share of Ukrainian citizens among employed foreign nationals in Czech Republic, Slovakia and Germany



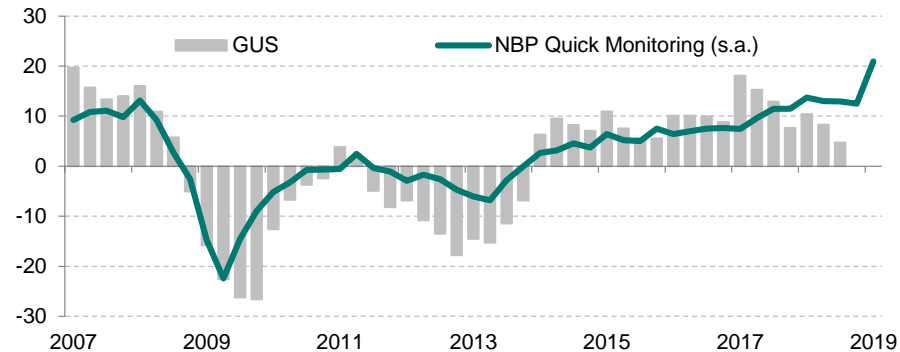
Stabilisation of high labour demand. Expected gradual decline of employment growth.

Vacancies

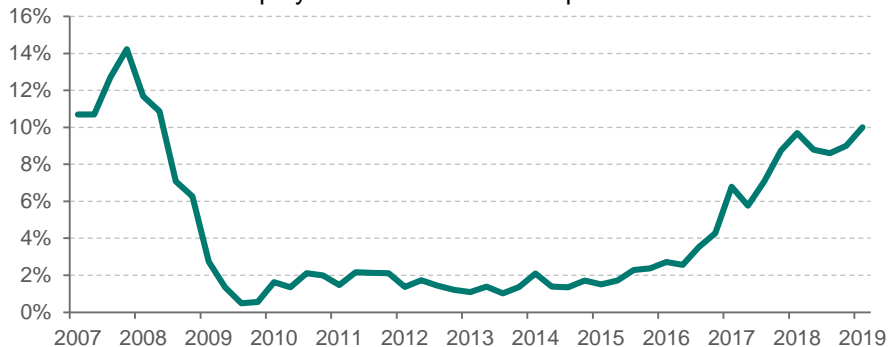
- Number of vacancies within a month (sa. LHS)
- Number of non-subsidized vacancies (sa. LHS)
- Inverse of labour market indicator (RHS)



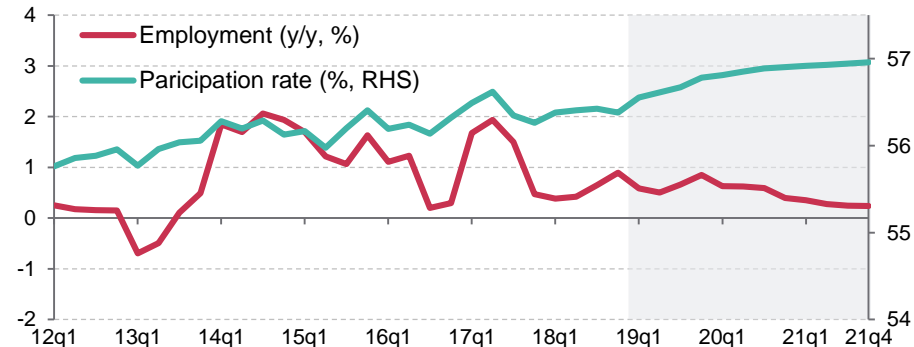
Employment forecasts (in pp.)



Share of companies reporting difficulties with finding new employees as a barrier for expansion



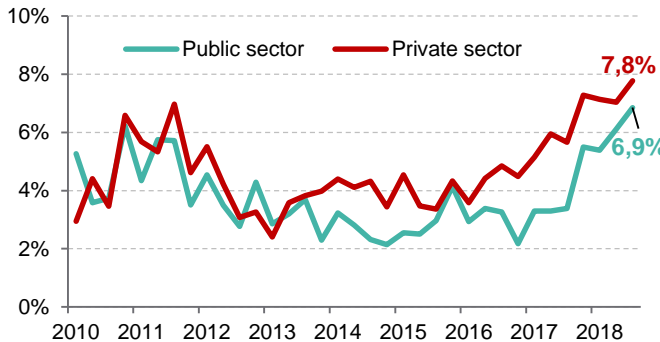
Employment and participation rate forecast



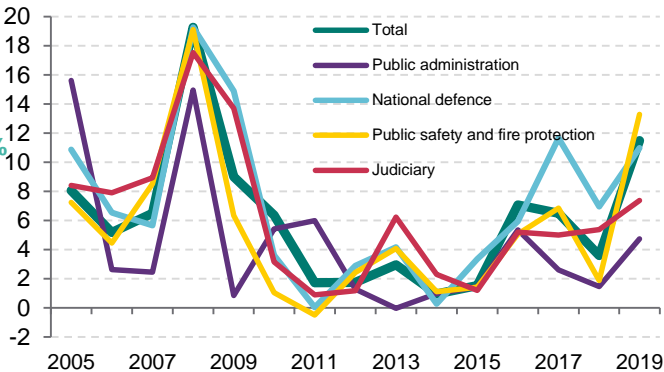
Source: GUS data, NBP Quick Monitoring, NBP Yearly Survey, NBP calculations.

Elevated wage growth decreases in projection horizon

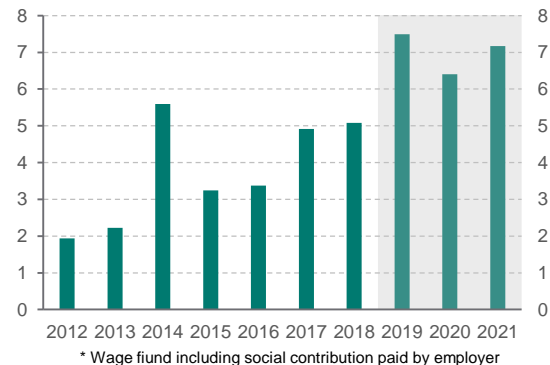
Nominal wages (y/y, %, s.a., last data point 2018Q3)



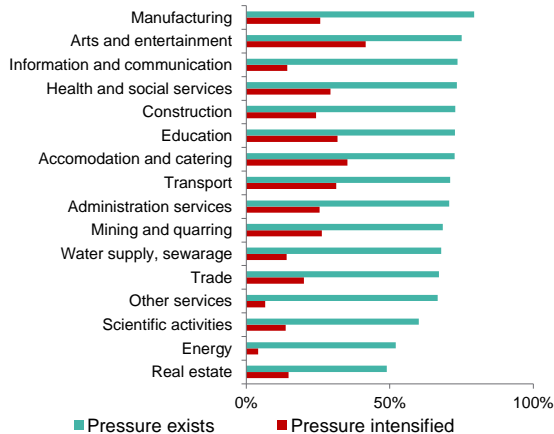
Government expenditures on salaries (current prices, y/y, %)



General government wage fund* (current prices, y/y, %)



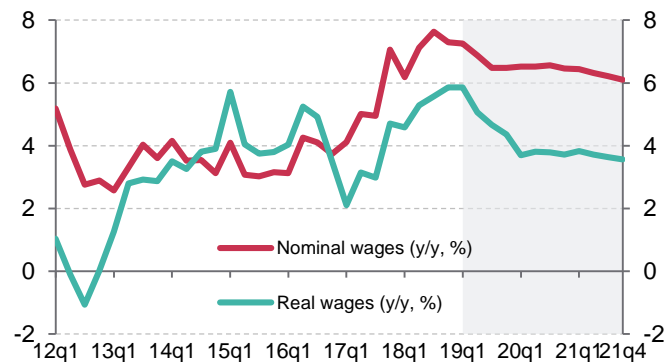
Share of enterprises reporting wage pressure by sections of economic activity



Increase in wage pressure and wage growth exceeding labour productivity (share of enterprises)



Wage growth forecast (y/y, %)



Source: GUS, NBP Quick Monitoring, MF, NBP calculations.

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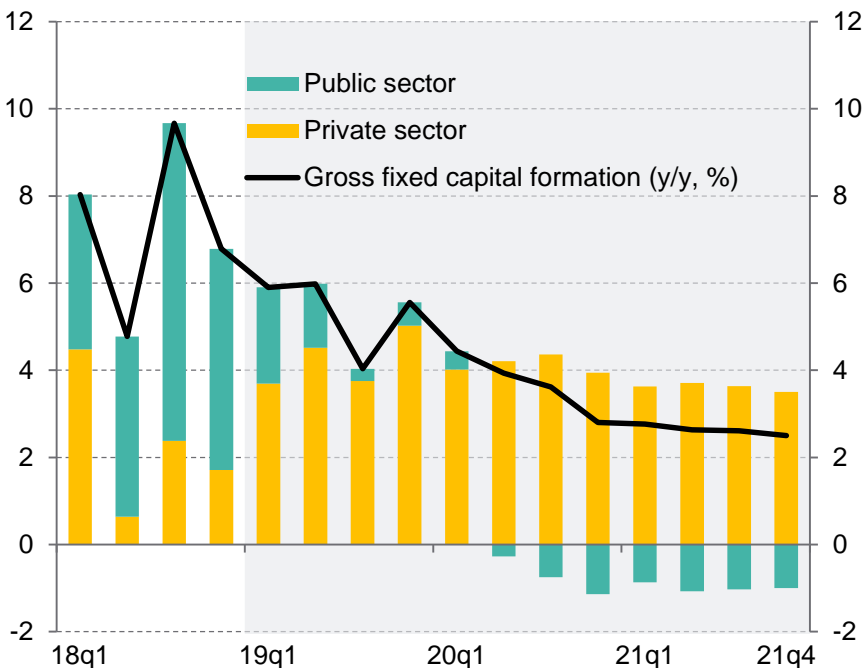
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Investment demand

Weakening growth of gross fixed capital formation in 2019-2021



Public sector investments:

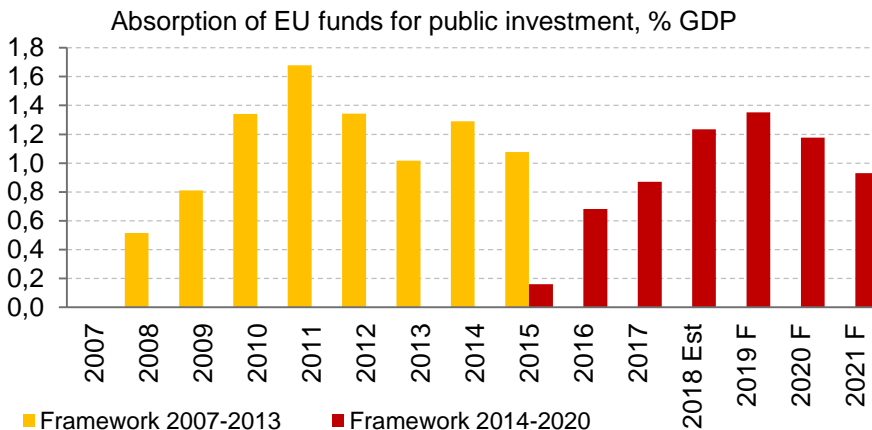
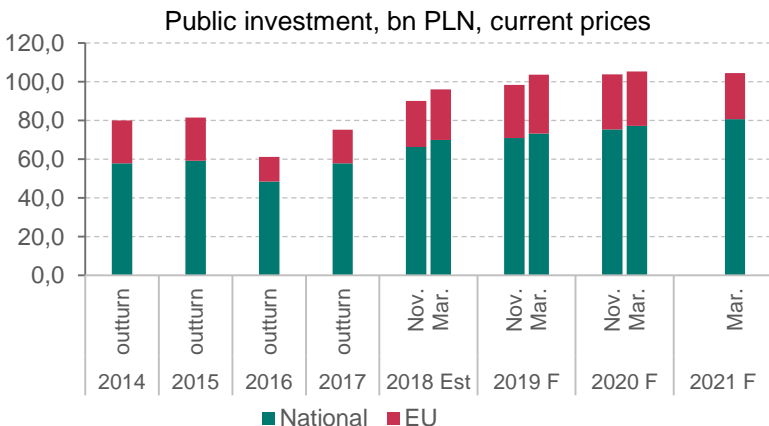
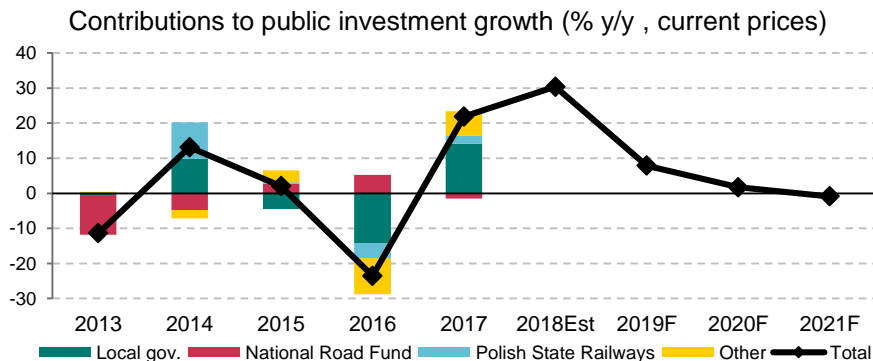
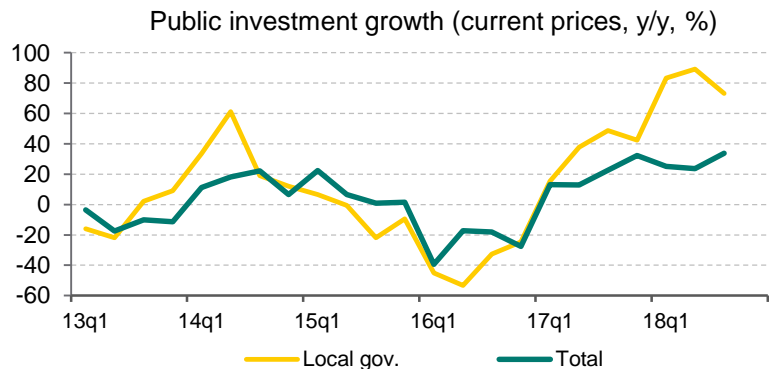
- ↑ Positive, but lower than in 2018, growth in EU funds absorption in 2019.
- ↓ Decreasing EU funds absorption in 2020-2021.

Private sector investments:

- ↑ Currently favorable demand conditions.
- ↑ Very high level of capacity utilisation in corporations.
- ↑ Low interest rates.
- ↑ Good economic situation of households.
- ↕ Problems with finding employees.
- ↓ Lower dynamics of internal and external demand.
- ↓ Diminishing contribution of EU funds absorption.

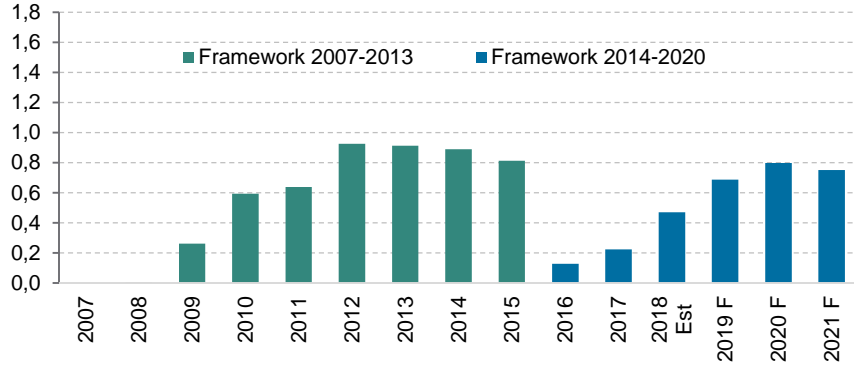
y/y, %	2018	2019	2020	2021
Gross fixed capital formation	7.3	5.4	3.7	2.6

High increase in absorption of EU funds for public investment in 2018. Lower increase in the absorption in 2019, pronounced declines in the following years.

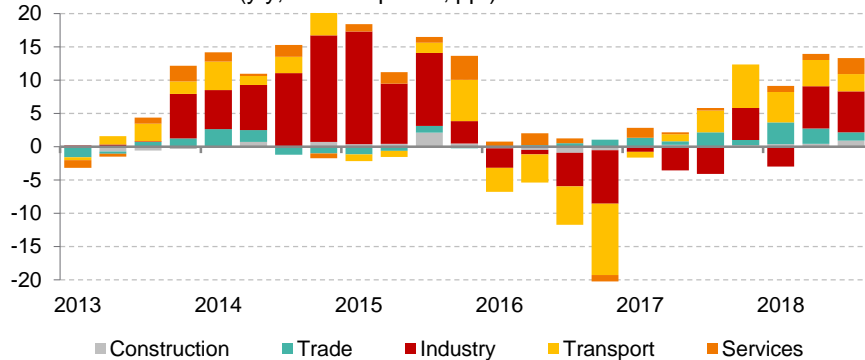


Expected acceleration of business investment in 2019, however its growth will be lower than in the previous business cycles. In the subsequent years its growth is forecast to slow down.

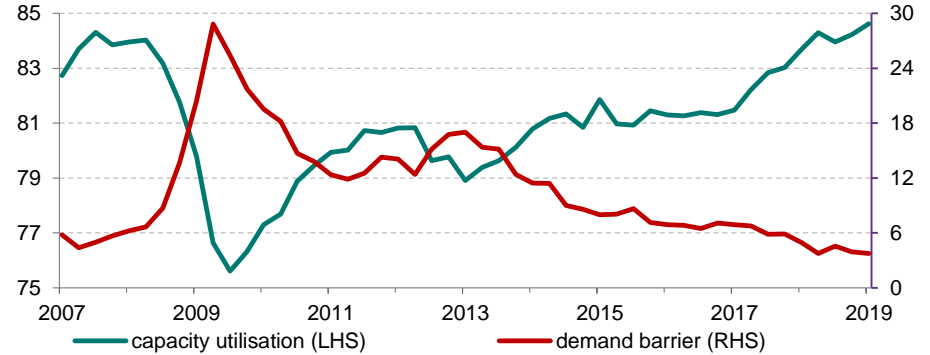
Absorption of EU funds for businesses, % GDP



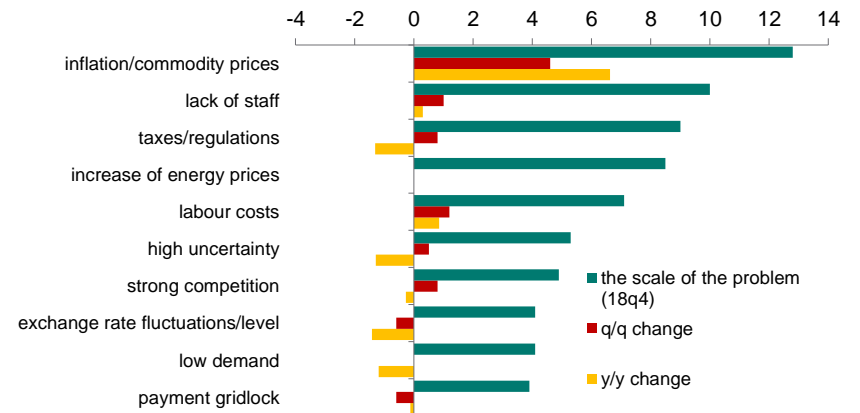
Contribution to the investment growth by economic activity (y/y, current prices, pp.)



Capacity utilisation and demand barrier (% , s.a.)



Development barriers in 2018q4



Source: GUS, NBP Quick Monitoring, NBP calculations.

Outline:

Changes between rounds

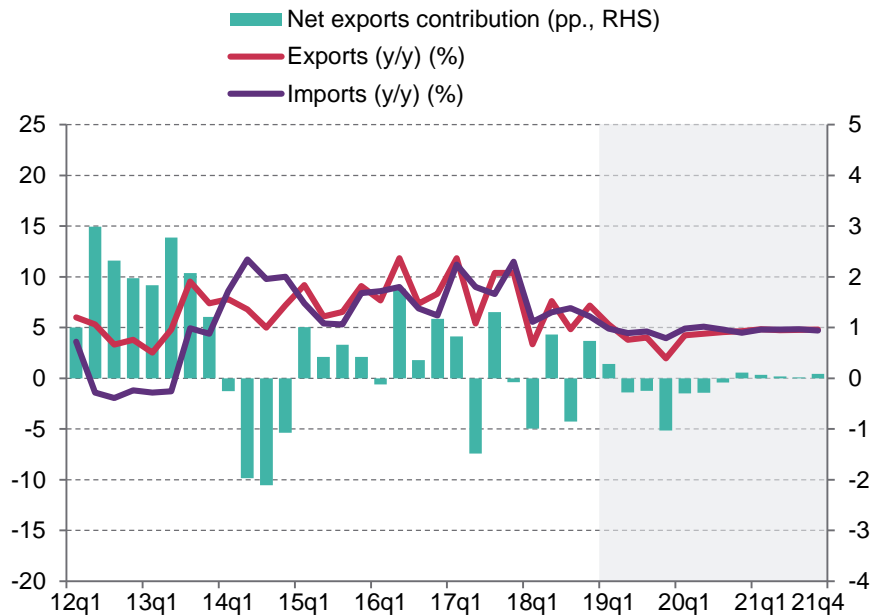
Projection 2019 – 2021

- Economic conditions abroad
- Polish economy
 - GDP
 - Consumption demand
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 - Foreign trade
 - Inflation

Uncertainty

Foreign trade

Contribution of net exports to GDP growth in 2020-2021 close to neutral



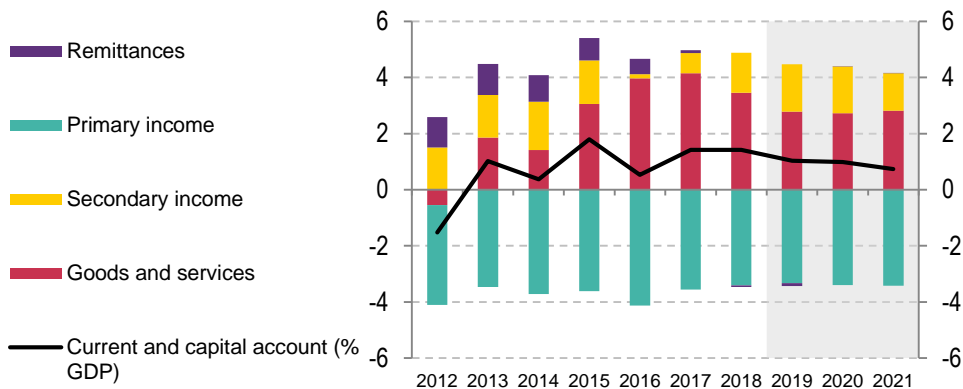
Net exports:

- ⬇ Slowdown in global trade and weaker economic growth in the euro area in 2019-2021.
- ⬆ Gradual decline in domestic demand growth.
- ⬆ Still relatively high competitiveness of the Polish economy.

y/y pp.	2018	2019	2020	2021
Net exports contribution to growth	0.0	-0.3	-0.1	0.1

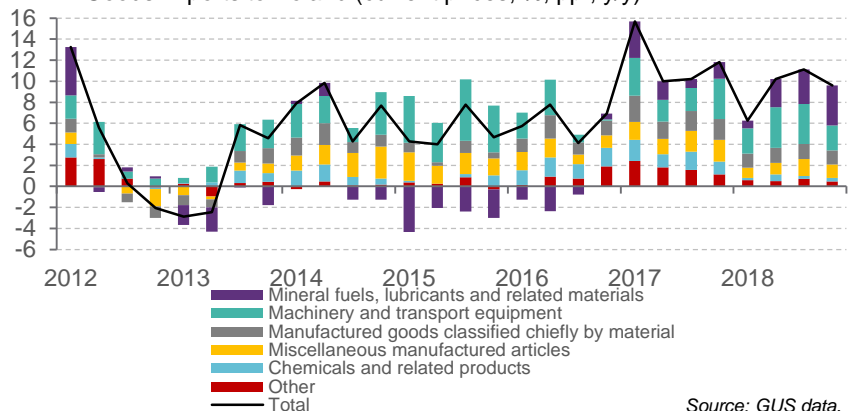
Slight deterioration of positive current and capital account balance in 2019-2021

Current and capital account balance (% GDP)

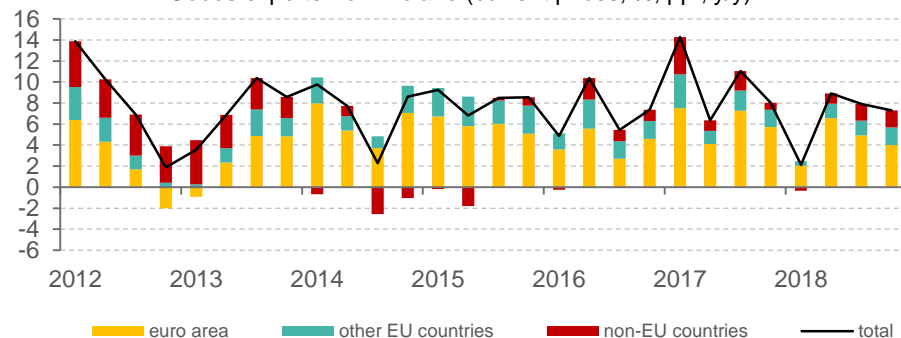


- ↑ Still relatively high competitiveness of the Polish economy.
- ↓ Decrease in surplus in trade of goods and services in 2019 – still relatively high growth of domestic demand accompanied by decline in demand for Polish exports.
- ↓ Decrease in surplus in capital account in 2021 – slower inflow of EU funds for investment purposes towards the end of the 2014-2020 framework.

Goods imports to Poland (current prices, %, pp., y/y)



Goods exports from Poland (current prices, %, pp., y/y)



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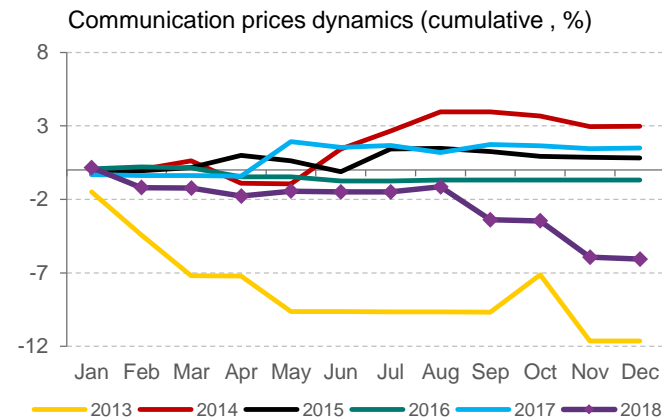
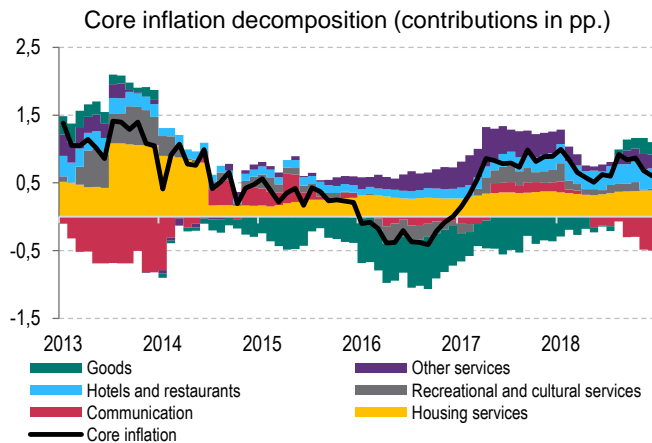
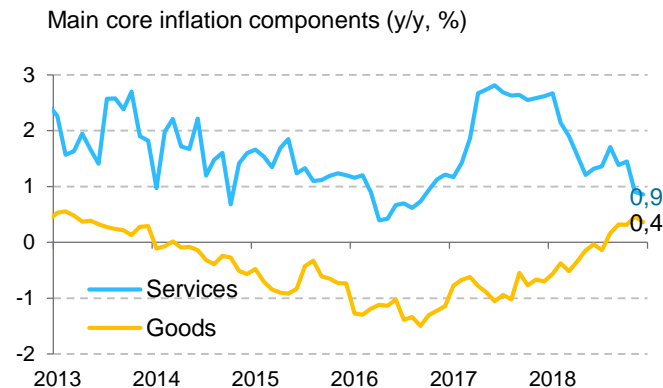
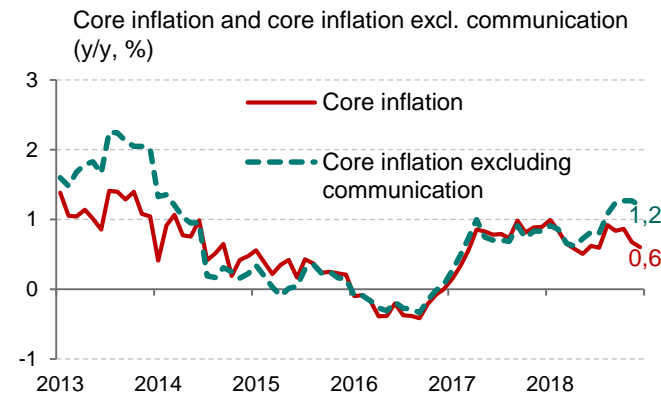
Polish economy

Inflation

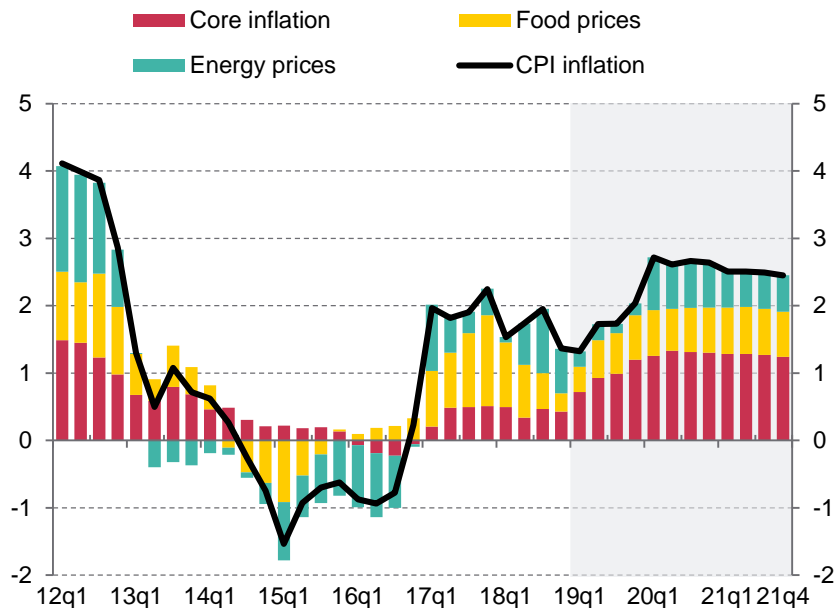
Lower than expected CPI inflation in 2018Q4. Persistent low core inflation in 2018.

y/y, %	18q4
CPI inflation	1.4 (2.0)
Core inflation	0.7 (1.1)
Food prices	1.1 (1.8)
Energy prices	4.1 (5.5)

Values from the November projection are given in brackets (seasonally adjusted). Indicators with values lower than in the November projection are marked red.



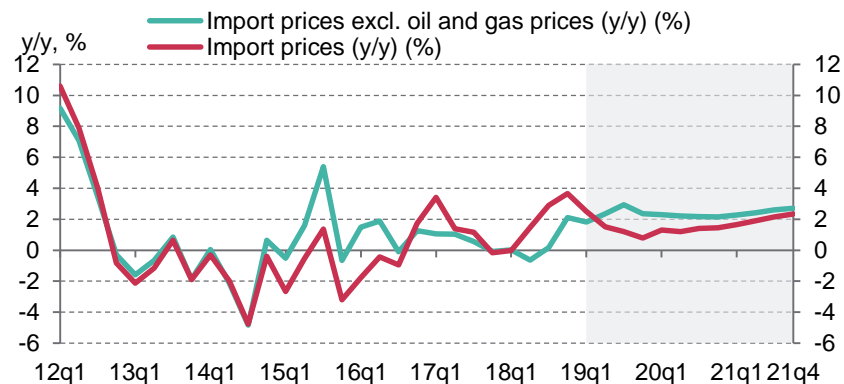
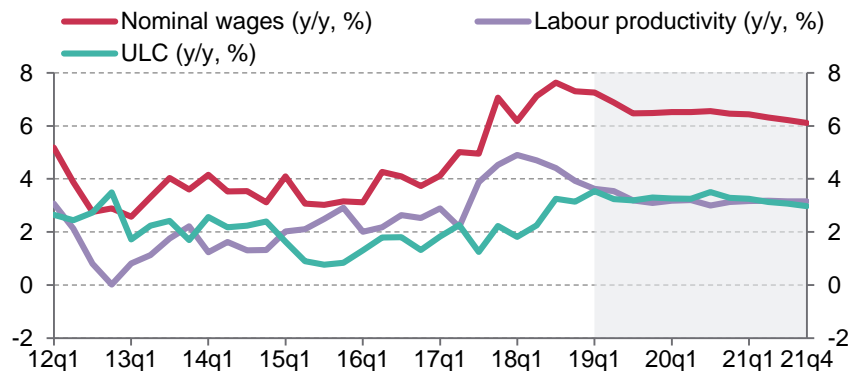
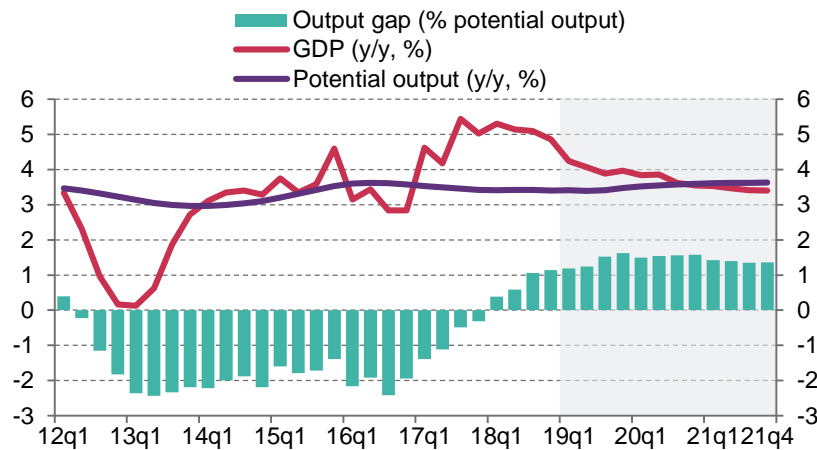
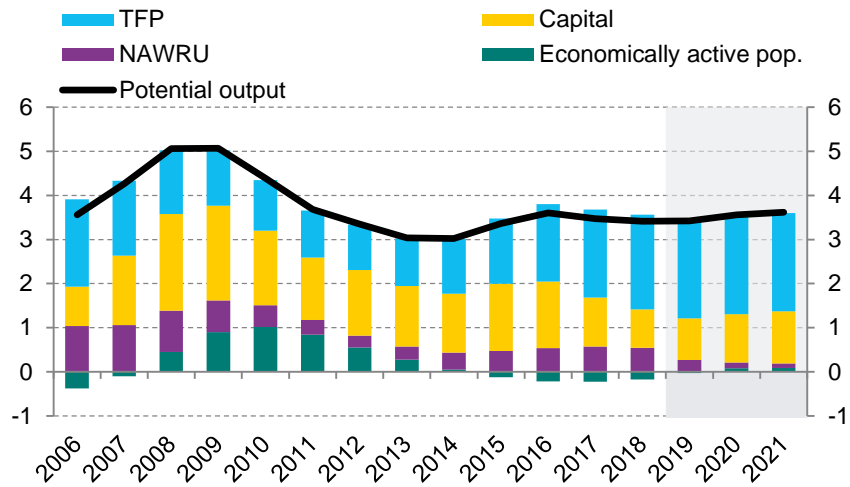
CPI inflation will increase in 2020 and then decline slightly to around 2.5% y/y towards the end of projection horizon



y/y, %	2018	2019	2020	2021
CPI inflation	1.6	1.7	2.7	2.5

- ↑ Delayed effect of current increase in cost pressure from the labour market and demand pressure.
- ↔ ↓ Stabilisation and then decline of the cost and demand pressure in the longer projection horizon.
- ↓ Low inflation in the external environment of Poland.
- ↓ Strong competition in the retail sector.
- ↓ Decrease in fuel prices growth in 2019, following a drop of energy commodities prices.
- ↓ Freezing of electricity prices for end-users in 2019 at the 2018 level, permanent reduction in excise duty and interim fee, and compensations paid to power companies in 2019.
- ↑ Increase in electricity prices in 2020-2021 (phased effect of higher production costs due to an increase in coal and CO2 emission allowances prices).

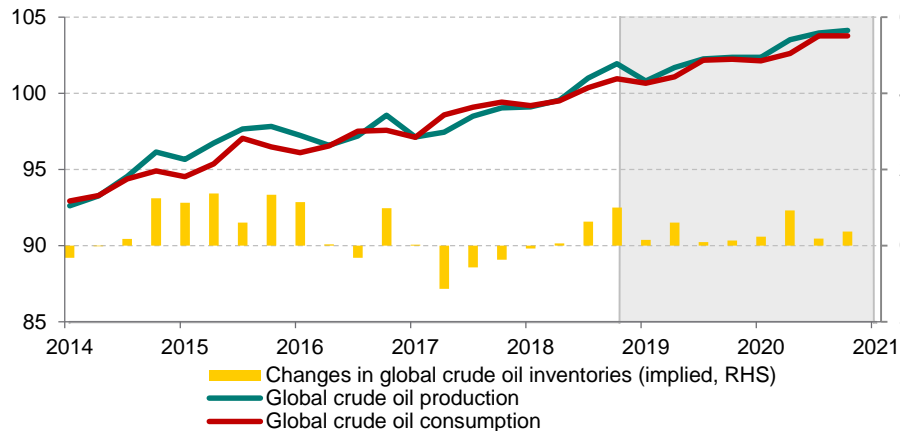
Increase in core inflation in the quarters ahead due to rising labour costs and high demand



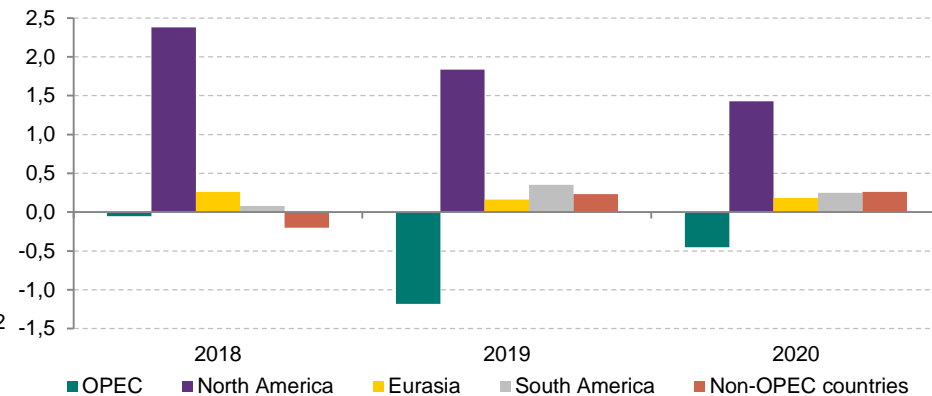
Source: GUS data, NBP calculations.

High supply and low demand are continuing to foster low level of oil prices

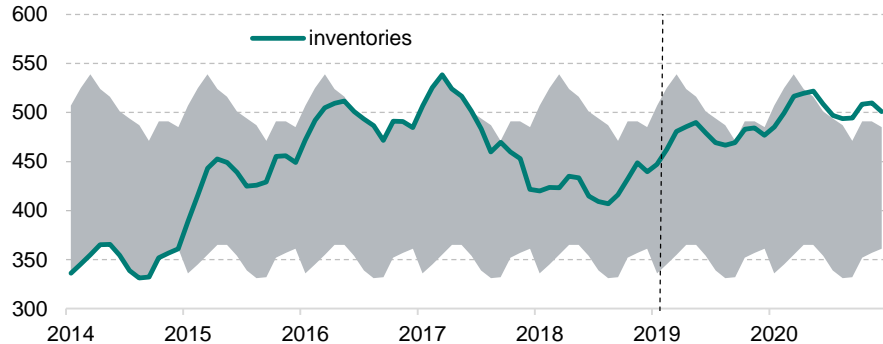
Global production, consumption, and changes in crude oil inventories (mln b/d)



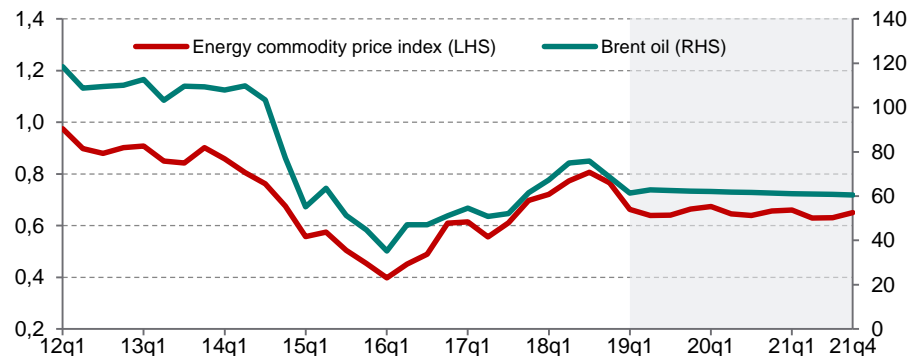
Changes in production of crude oil and liquid fuels in the world (mln b/d)



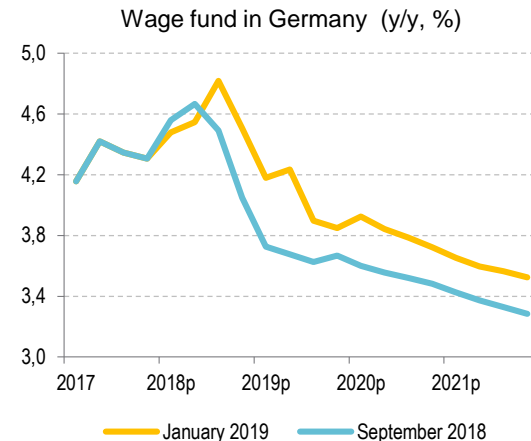
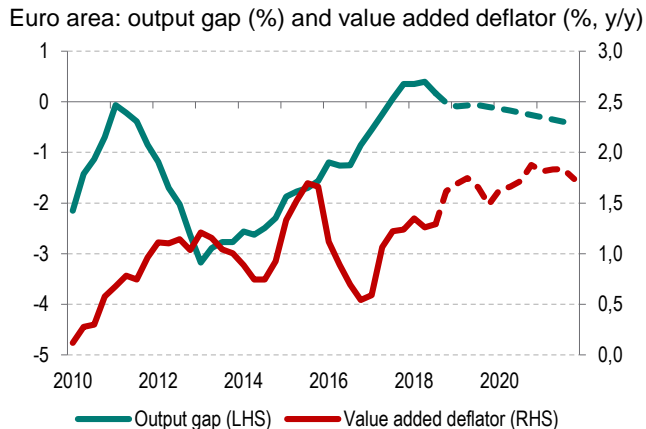
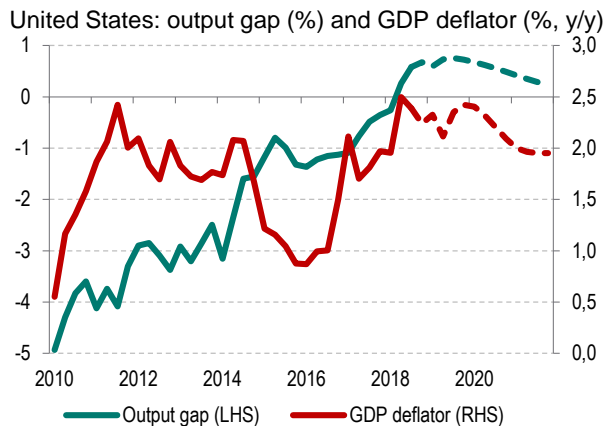
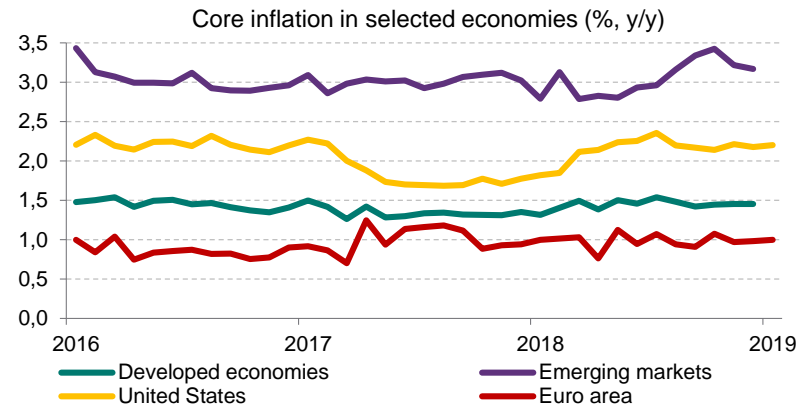
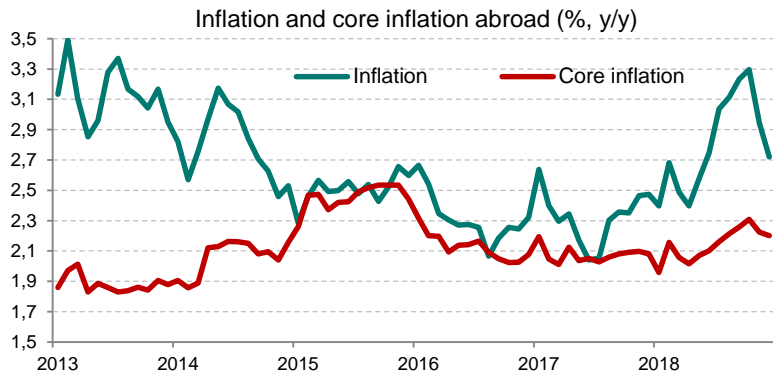
Market crude oil inventories in the US (mln b/d)



Energy commodity prices index (USD, 2011=1) and crude oil prices (USD/b)



Domestic inflation will be curbed by low inflation and slower economic growth abroad



Outline:

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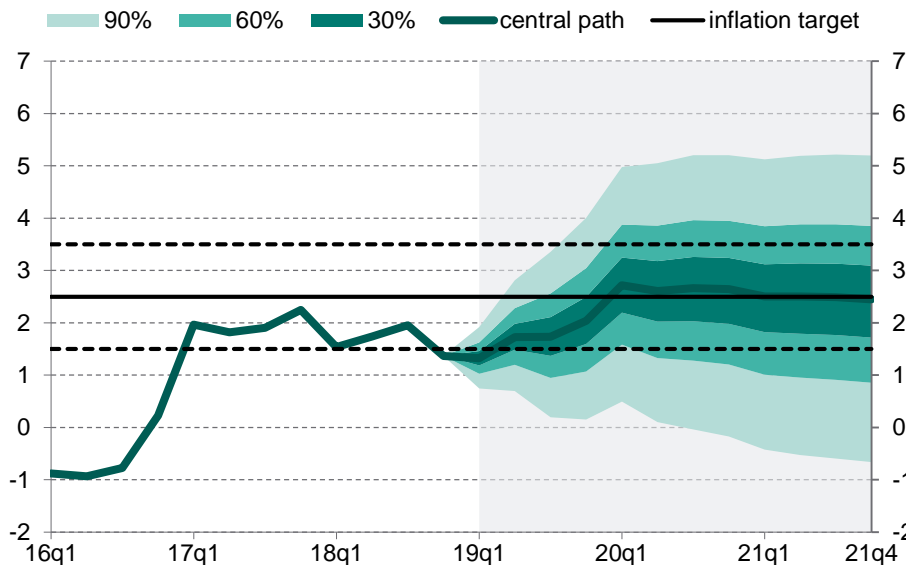
Uncertainty

- Risk factors
- Fan charts

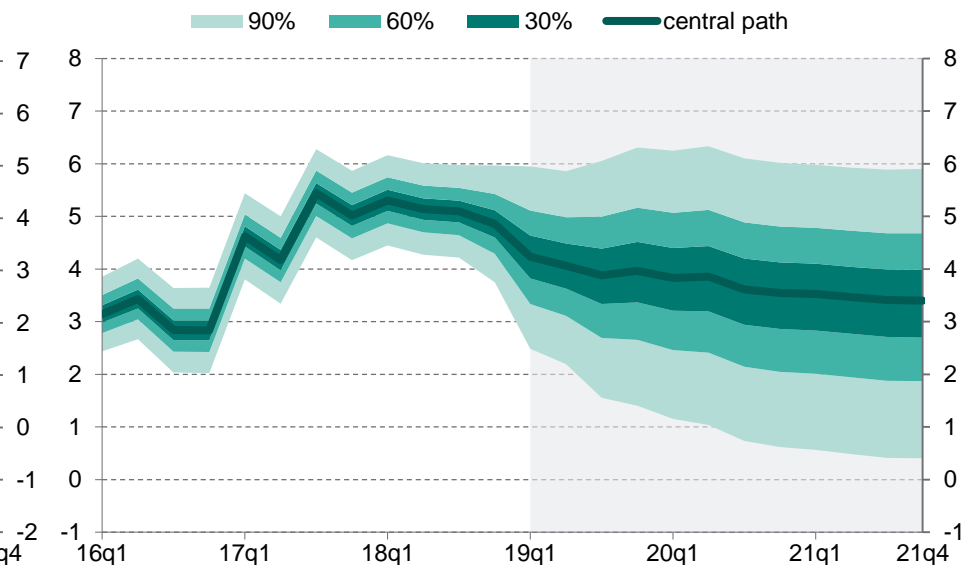
Uncertainty

Risk area	Description	Impact	Scale of impact
Global economic outlook	<ul style="list-style-type: none"> Escalation of current trade disputes and further spreading of protectionism, leading to larger disturbances in the global trade, deterioration of economic conditions, elevated uncertainty and tensions in the financial markets. 	Inflation ↓↓ GDP ↓↓	**
	<ul style="list-style-type: none"> Lower economic growth in the United States due to trade disputes and bigger drop in equity prices on American stock exchange (low households' saving rate, with high share of their wealth held in financial assets). 		
	<ul style="list-style-type: none"> The United Kingdom's withdrawal from the European Union without prior agreement on the terms on which it is to take place – so called <i>no-deal brexit</i> (increase in uncertainty and lower economic growth both in the UK and the EU). 		
Impact of the energy sector on inflation in Poland	<ul style="list-style-type: none"> Disturbances on global markets of oil and other energy commodities. 	Inflation ↔ GDP ↔	**
	<ul style="list-style-type: none"> Scale and timing of the impact of the increase in wholesale electricity prices on the tariffs for end users. 		
Labour supply in Poland	<ul style="list-style-type: none"> Uncertainty related to the scale of reemigration of Ukrainian workers from Poland due to changes in law in other EU countries, which will make it easier to employ the citizens of non-EU countries (i.e. in December 2018 the German government directed to the Bundestag a bill giving easier access to the German labour market for skilled workers from outside the EU). 	Inflation ↑ GDP ↓	*
Summary		Inflation ↓ GDP ↓	

CPI inflation y/y, %



GDP y/y, %



CPI y/y, %	below 1.5%	below 2.5%	below 3.5%	below centr. path	in the range 1.5-3.5%
2019	37%	87%	99%	49%	62%
2020	21%	47%	74%	51%	53%
2021	30%	53%	76%	53%	46%

CPI y/y, %	central path	50% probability interval	
2019	1.7	1.2	2.2
2020	2.7	1.7	3.6
2021	2.5	1.3	3.5

GDP y/y, %	central path	50% probability interval	
2019	4.0	3.3	4.7
2020	3.7	2.7	4.6
2021	3.5	2.4	4.3

Source: GUS data, NBP calculations.

We protect the value of money