



NBP

Narodowy Bank Polski

Economic Analysis Department

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

Warsaw / 12th November 2019



Outline

Outline:

Projection 2019 – 2021

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

Changes between rounds

Uncertainty

- 1 Projection 2019 – 2021
- 2 Changes between projection rounds
- 3 Uncertainty

November projection compared to July projection – main changes

	Impact on GDP	Impact on CPI
Weaker outlook for global growth and trade	↓	↓
Current data readings for Polish economy below expectations	↓	↓
Fiscal changes (continuation of "thirteenth pension" payment, PIT rate reduction from 18 to 17% sooner than expected)	↑	↑
Announced minimum wage increases	↓↑	↑
Faster growth of fruits and vegetables prices due to unfavourable weather conditions	↓	↑
Increase in prices of services related to the dwelling in 2019 (new price lists for refuse collection)	↓	↑
Lower global energy commodities prices	↑	↓

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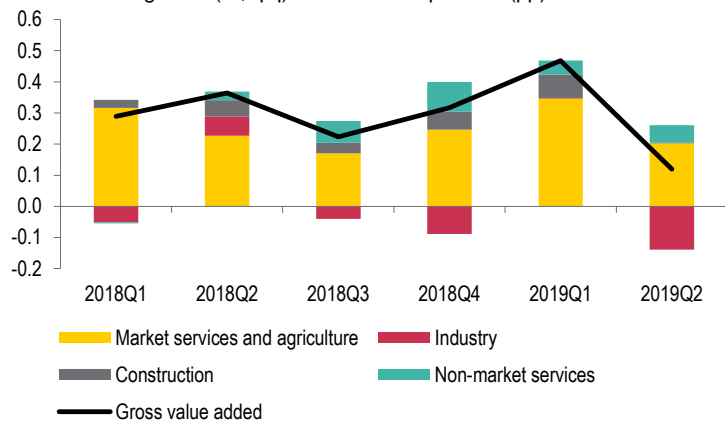
Changes between rounds

Uncertainty

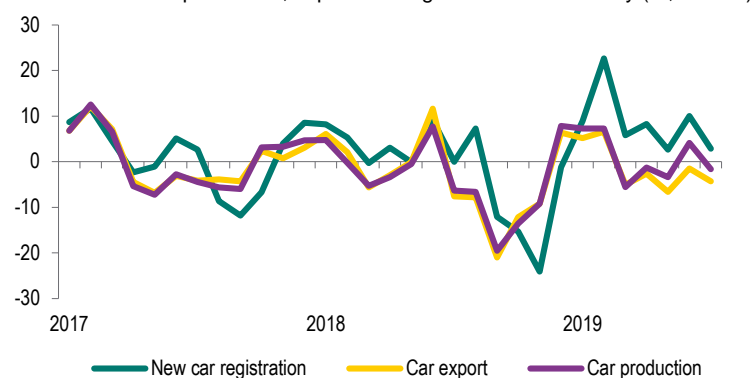
Economic conditions abroad

Downturn in the euro area deeper than expected, especially in Germany and Italy.

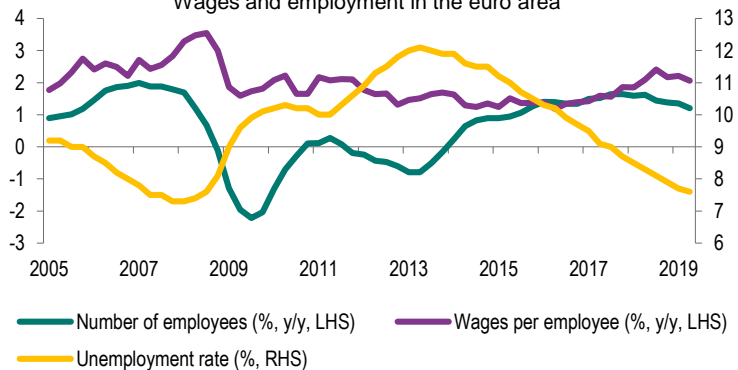
Value added growth (% q/q) and its decomposition (pp) in the euro area



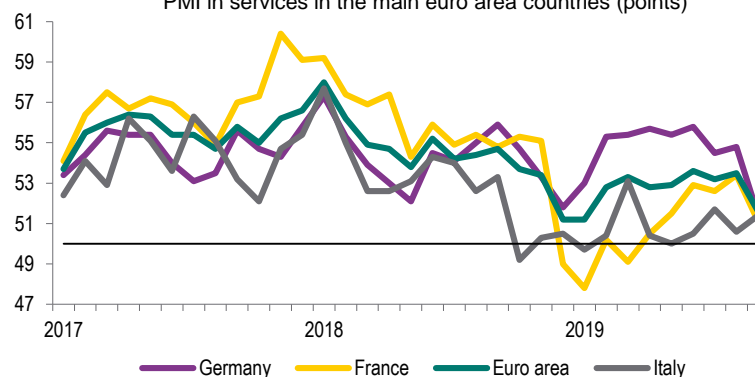
Car production, export and registrations in Germany (% 3m/3m)



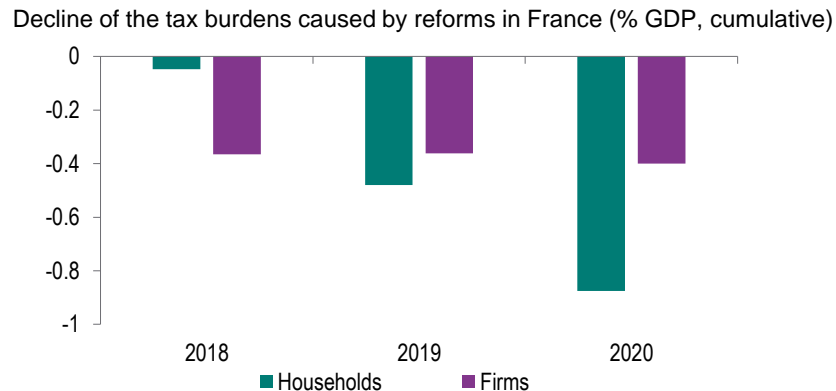
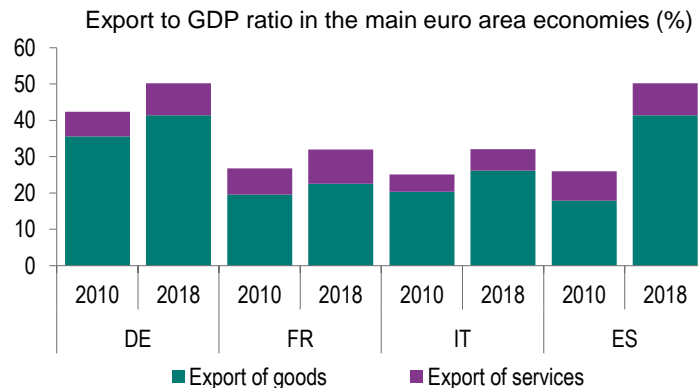
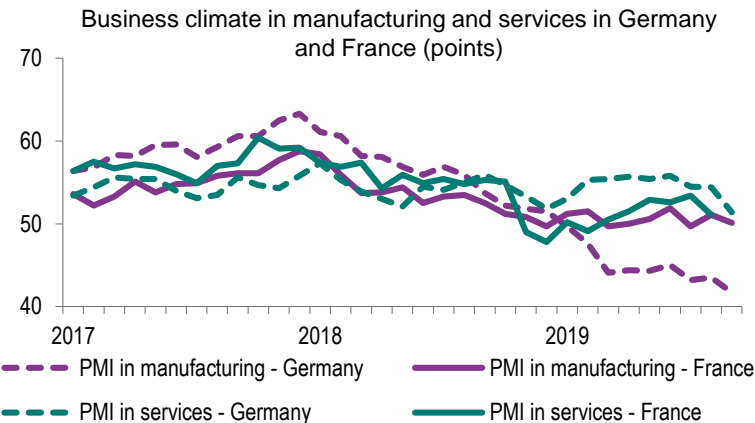
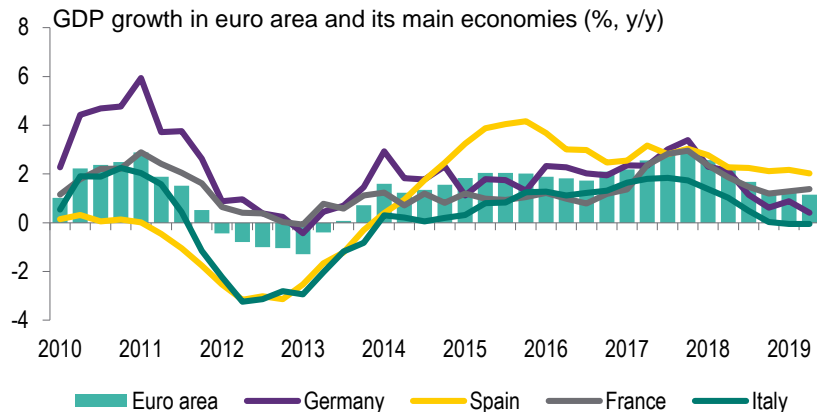
Wages and employment in the euro area



PMI in services in the main euro area countries (points)

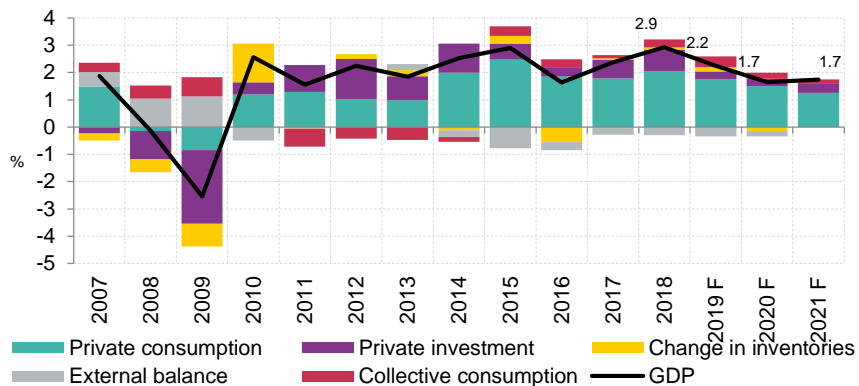


The slowdown affects the euro area countries to a different degree - French economy seems to be relatively resistant

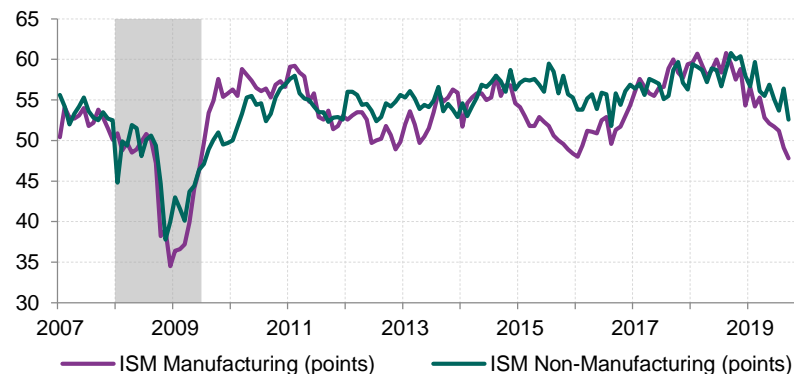


Weakening industry and trade policy uncertainty hinder GDP growth in the United States

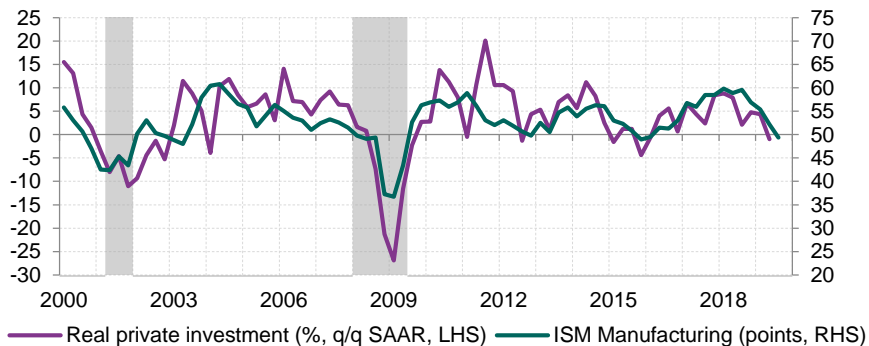
GDP growth decomposition (%)



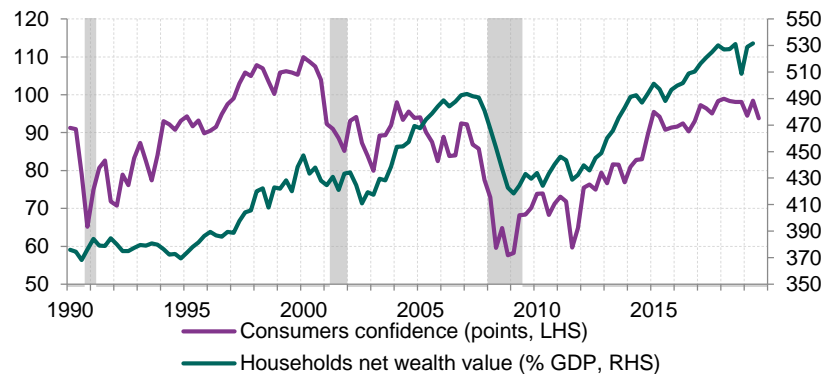
ISM Index for manufacturing and services (points)



Growth of private investment



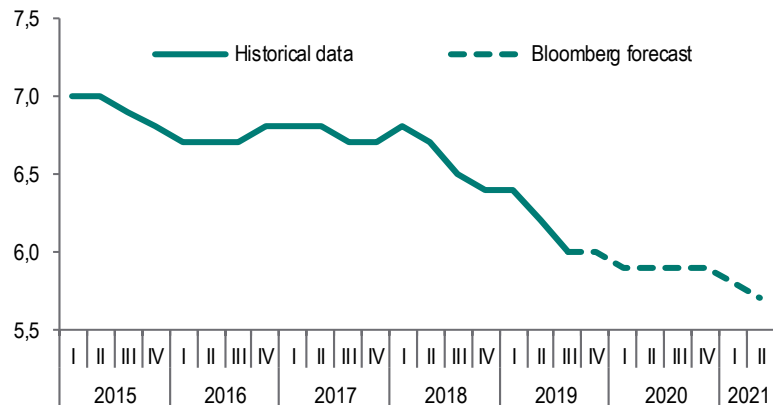
Consumer confidence and wealth



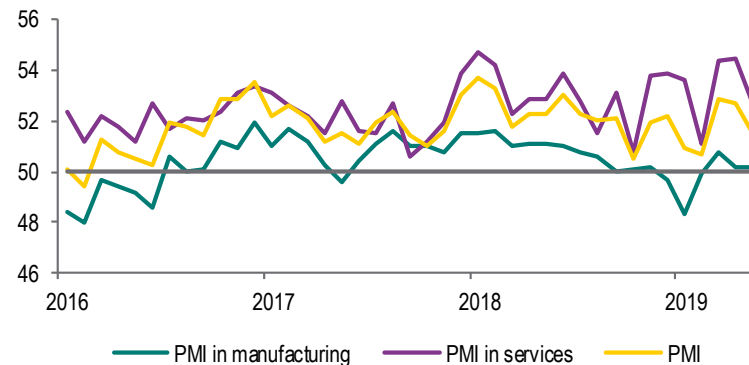
Source: Datastream, EAD calculations.

Trade tensions and weakening global demand deepen Chinese slowdown

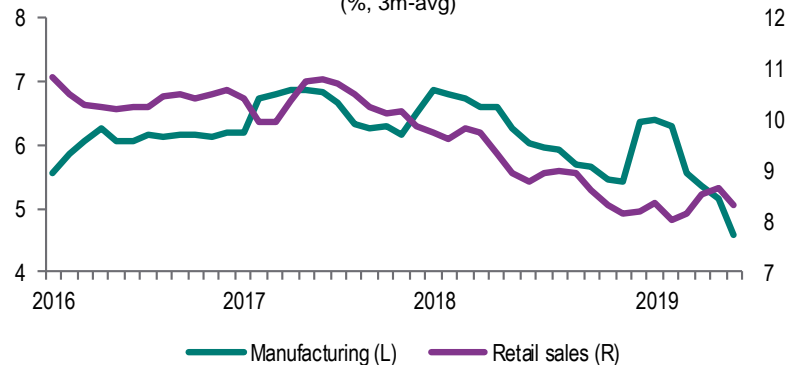
GDP growth in China (% , y/y)



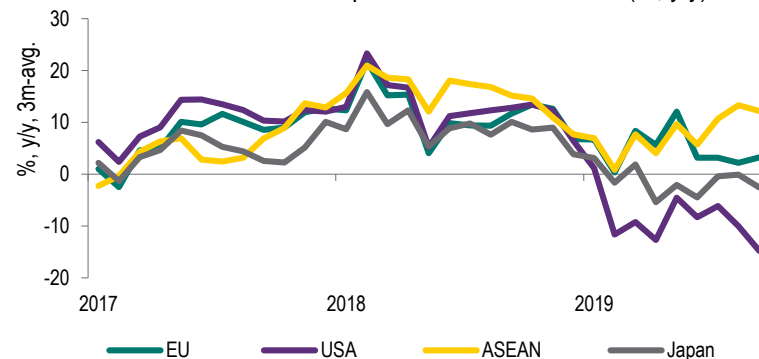
PMI indices in the Chinese economy (pkt)



Manufacturing and retail sales growth in China (% , 3m-avg)



Growth of Chinese export to selected countries (% , y/y, 3m-avg)



Source: Bloomberg, Datastream, EAD calculations.

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Polish economy

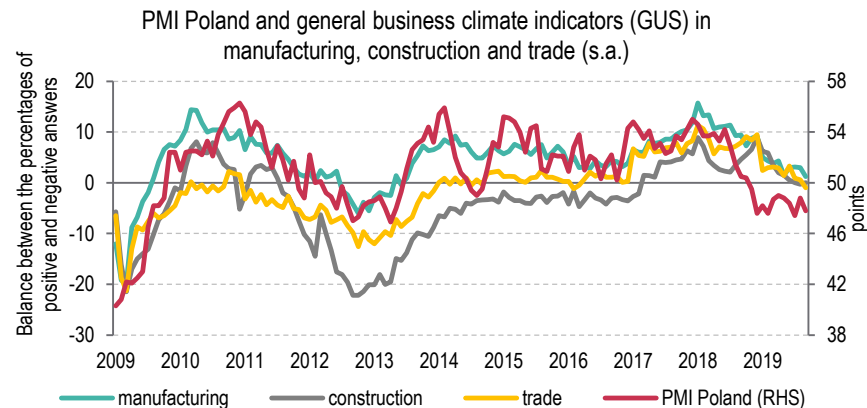
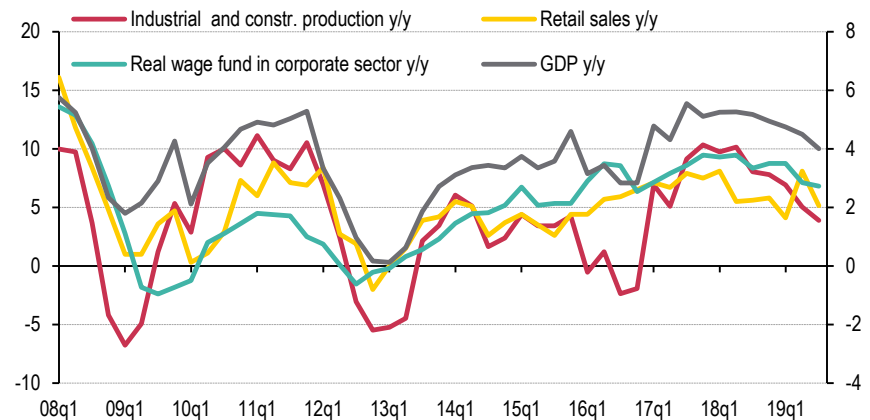
Gross domestic product

Still high economic growth in 19Q1 and 19Q2, however, signs of weakening intensify

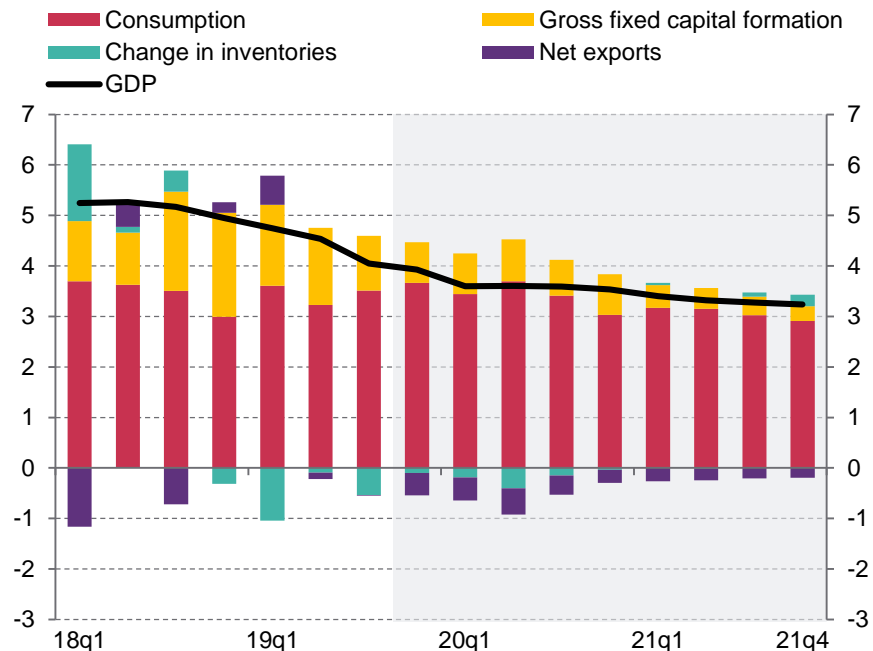
	19q2	19q3
GDP (y/y) (%)	4.5 (4.7)	4.0 (4.3)
Domestic demand (y/y) (%)	4.8 (5.4)	4.1 (4.9)
Household consumption (y/y) (%)	4.4 (4.6)	4.3 (4.5)
Public consumption (y/y) (%)	3.4 (5.5)	5.6 (5.2)
Gross fixed capital form. (y/y) (%)	9.0 (12.1)	5.8 (7.0)
Exports (y/y) (%)	3.9 (4.4)	3.5 (6.2)
Imports (y/y) (%)	4.3 (5.6)	3.6 (7.3)
Net exports contribution (pp.)	0.0 (-0.4)	0.1 (-0.5)

Values from the July projection are given in brackets (19Q3 seasonally adjusted).

Indicators with values higher than in the July projection are marked green, and indicators with lower values are marked red.



In the following quarters GDP growth will gradually moderate due to the ongoing lower economic activity in the euro area and a slowdown in EU funds absorption growth.



- ↑ **Private consumption** is the main driver of GDP growth in the projection horizon.
- ↓ Weakening of **gross fixed capital formation** growth as a result of growth deceleration of the general government investment and – in the longer term – also private investment.
- ↓ Moderating **private investment growth** in 2020-2021 following the weakening demand, external in particular, and a slowdown in EU funds absorption growth.
- ↓ Slightly negative **net exports' contribution** over the projection horizon.

y/y, %	2018	2019	2020	2021
GDP	5.1	4.3	3.6	3.3

Outline:

Projection 2019 – 2021

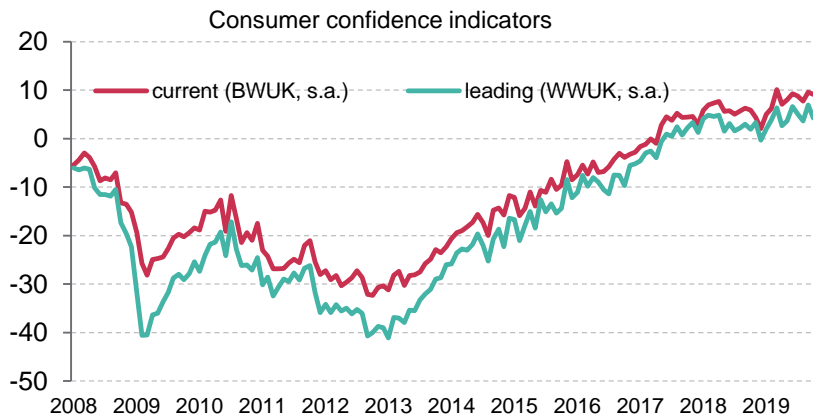
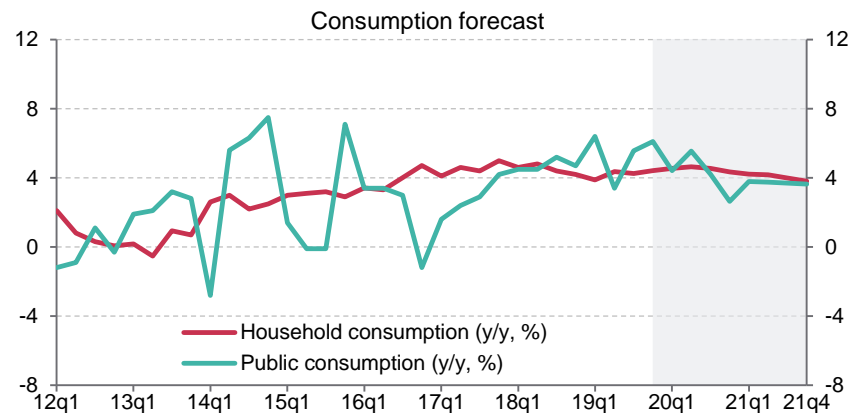
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Consumption demand

Consumption demand remains the main driver of GDP growth over the projection horizon



Household consumption:

- ↑ Spread-out effect of fiscal changes (increasing expenditures on social benefits, lowering tax burden).
- ↑↓ Still favourable, from the point of view of employees, labour market conditions (relatively fast wage growth, increase in minimum wage). In the longer term the wage fund growth is expected to slow down due to the weakening demand for labour.
- ↓ Higher inflation reducing the household purchasing power.

Public consumption:

- ↑ In 2019 increase in wages of health care workers oraz public administration employees.
- ↑ Teachers' wage hikes of 9.6% in September 2019.
- ↑ Approved by the government, an average annual increase in wages in the public sector of 6% in 2020.

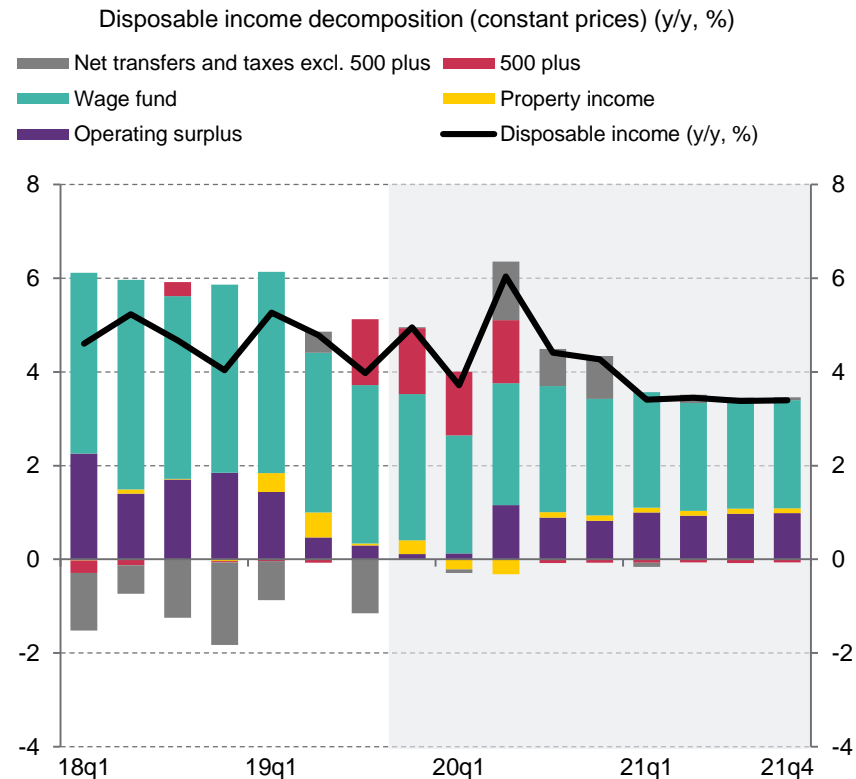
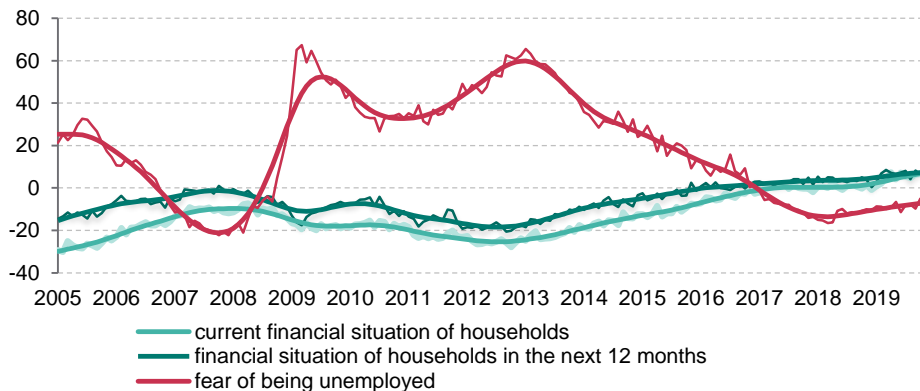
y/y, %	2018	2019	2020	2021
Household consumption	4.5	4.2	4.5	4.1
Public consumption	4.7	5.1	4.2	3.7

Very good financial situation of households. Gradual decline in real disposable income growth in 2020-2021.

	19q2		19q3	
Real wages (y/y, %)	4.5	(5.0)	4.2	(4.7)
Employment LFS (y/y, %)	-0.5	(-0.3)	-0.3	(-0.2)
Unemployment rate LFS (%)	3.5	(3.7)	3.5	(3.6)
Participation rate (%)	56.2	(56.4)	56.3	(56.4)

Values from the July projection are given in brackets (19Q3 seasonally adjusted). Indicators with values higher than in the July projection are marked green, whereas indicators with lower values are marked red.

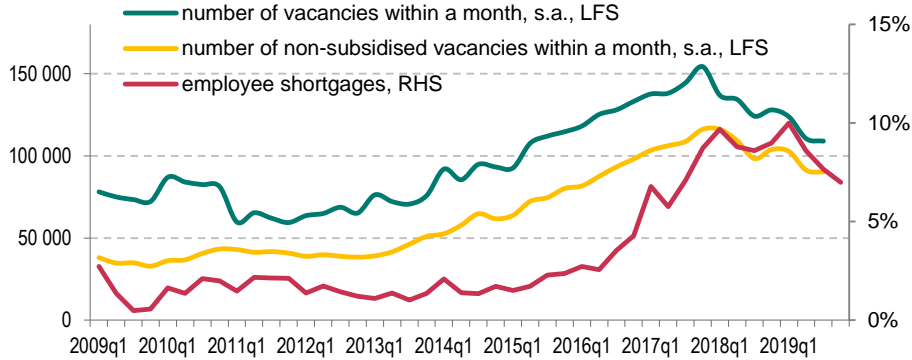
Financial situation of households and fear of being unemployed



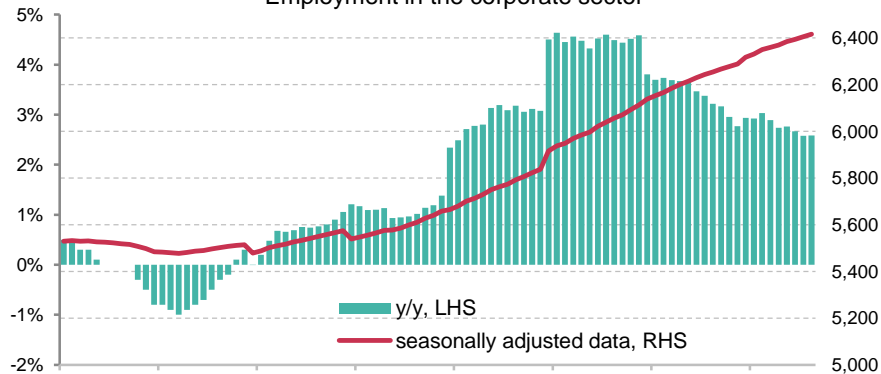
Source: GUS data, NBP calculations.

Gradual moderation of demand for new labour, holding strong so far, translates into a systematic decrease in employment growth

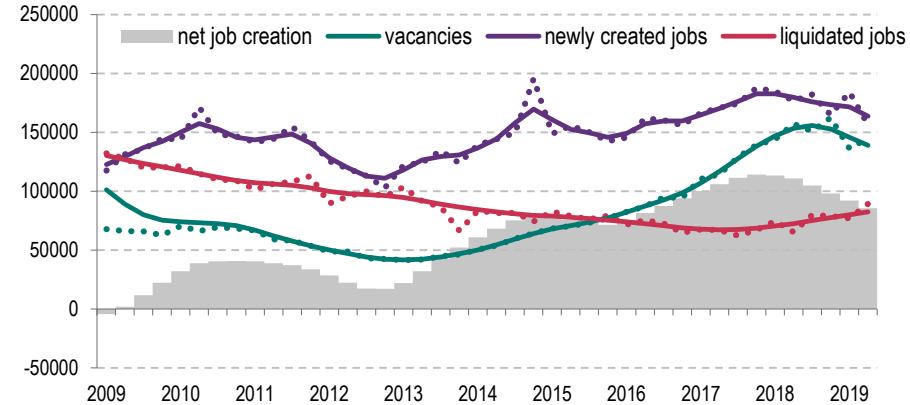
Vacancies and a share of surveyed companies reporting difficulties in finding new employees as a barrier for expansion



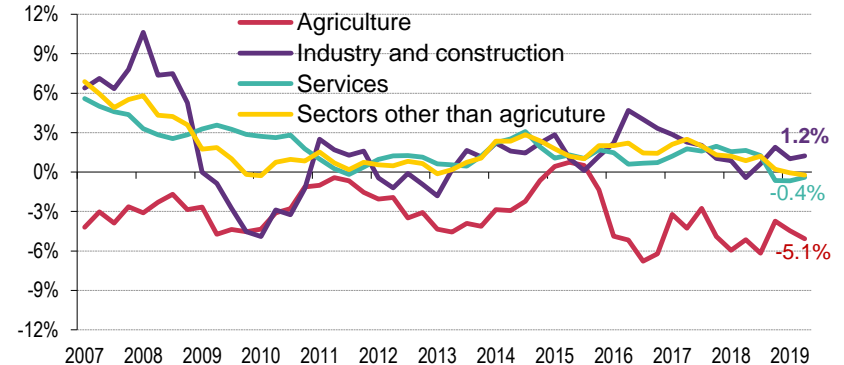
Employment in the corporate sector



The demand for labour - GUS study (levels in thousands s.a. and trend)



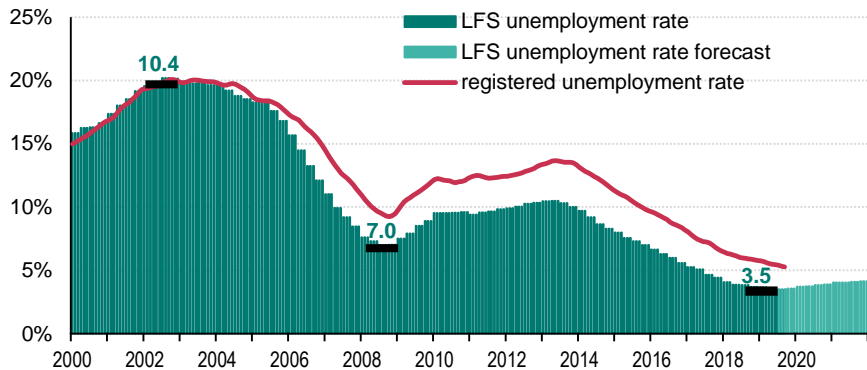
LFS employment by sectors (s.a., y/y, %)



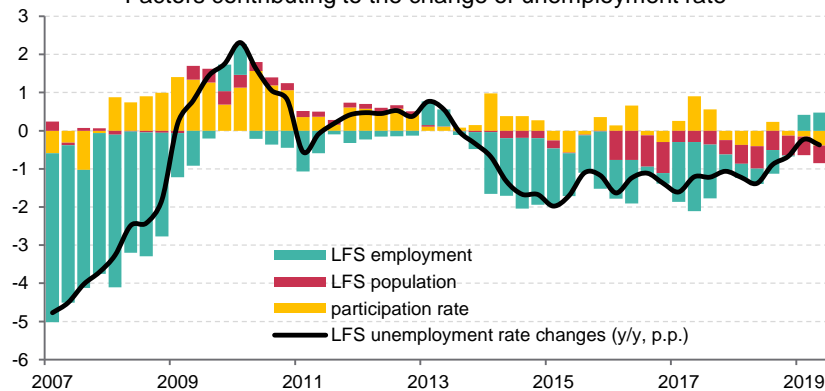
Source: GUS data, NBP Quick Monitoring Survey, NBP Annual Survey, NBP calculations.

Unemployment rate remains low - mainly due to negative demographic factors offset partly by immigration

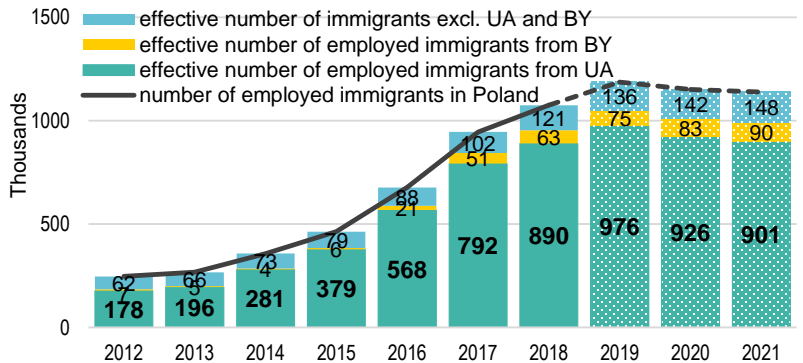
Registered and LFS unemployment rate (%)



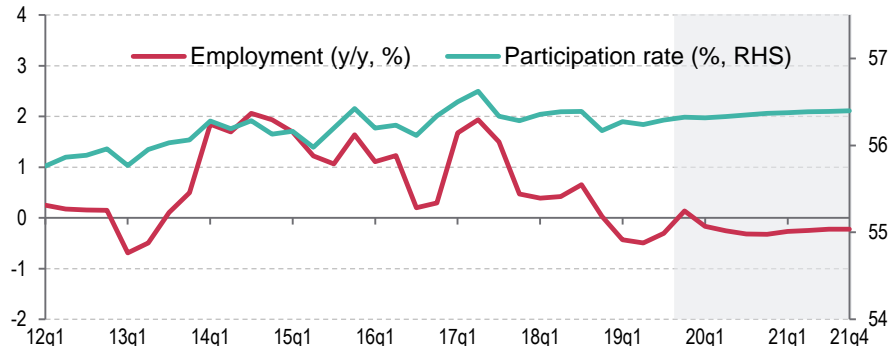
Factors contributing to the change of unemployment rate



Forecasted number of employed immigrants in Poland (thousands)



Employment and participation rate forecast

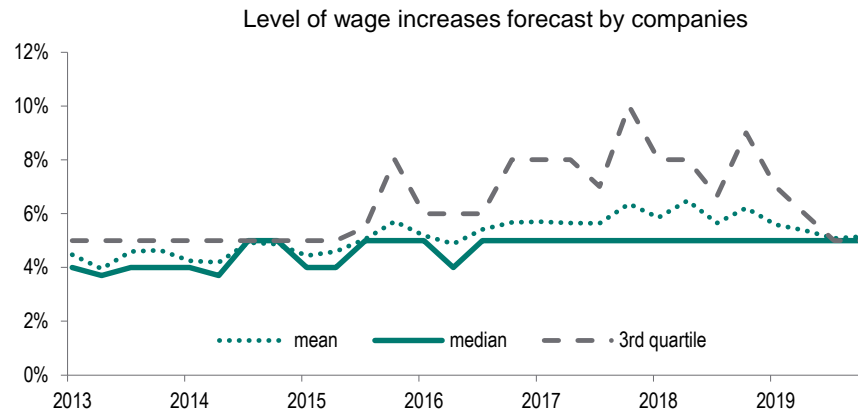
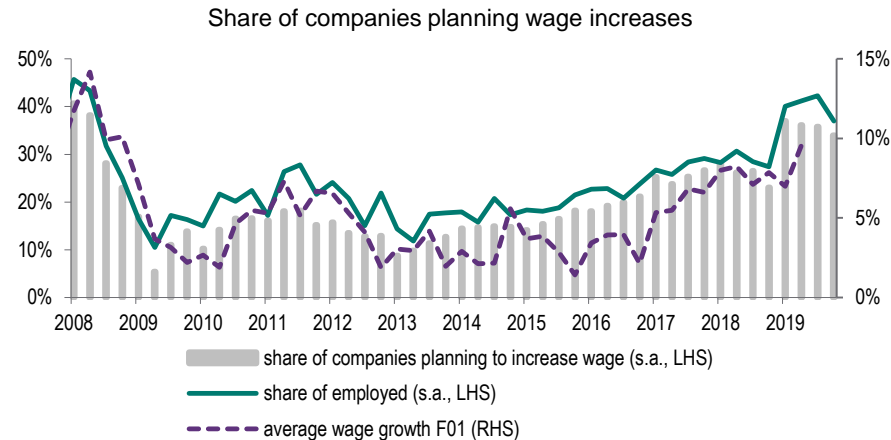
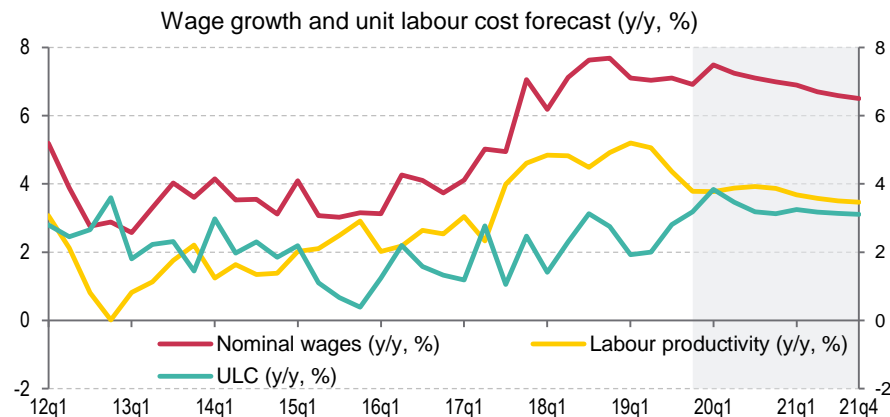


Source: GUS data, NBP calculations. NBP estimates based on data from Ministry of Foreign Affairs, ZUS and the Office for Foreigners.

Weakening labour demand is curbing wage growth

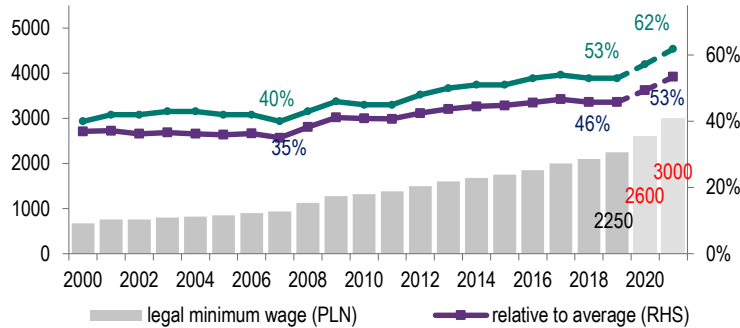
	19q2		19q3	
ULC (r/r, %)	2.0	(2.3)	2.8	(2.5)
Labour productivity (y/y, %)	5.1	(5.0)	4.4	(4.5)
Gross wages (y/y, %)	7.0	(7.3)	7.1	(7.1)

Values from the July projection are given in brackets (19Q3 seasonally adjusted). Indicators with values higher than in the July projection are marked green, whereas indicators with lower values are marked red.



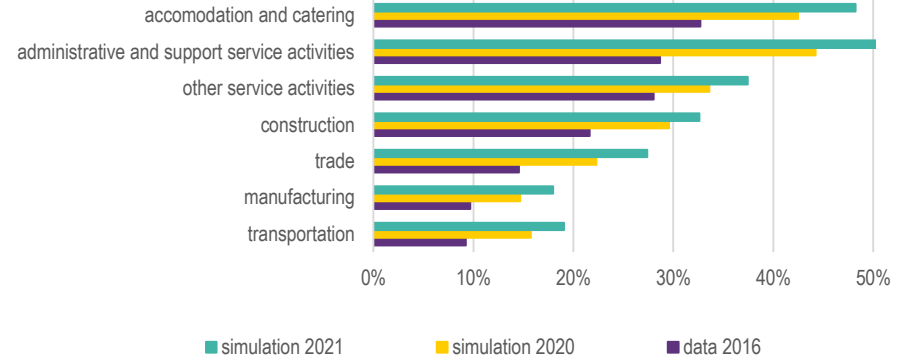
Minimum wage increases will stimulate wage growth in the short term

Minimum wage in Poland relative to the median and average wage



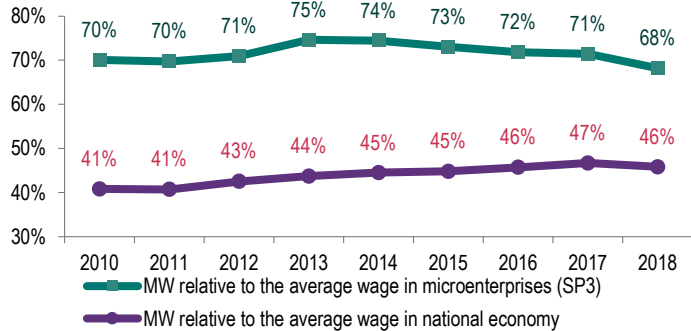
Source: GUS, OECD, NBP calculations.

Share of minimum wage earners (Z12, static simulation)



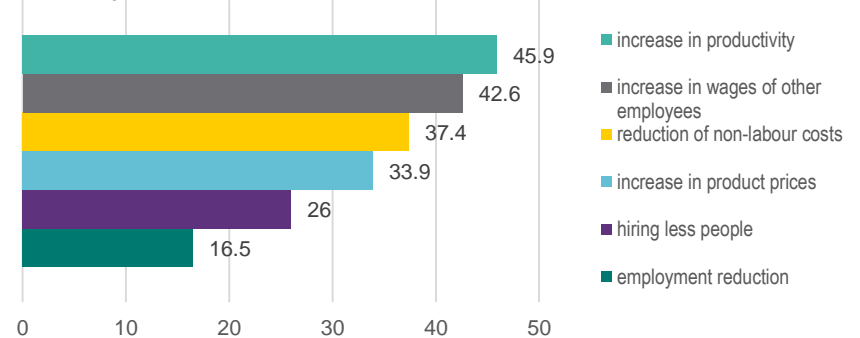
Source: GUS (Z12).

Minimum wage in Poland relative to the average wage in microenterprises



Source: GUS (SP3), NBP calculations.

Channels of firms' adjustment to the MW increase in 2010-2013 (% of enterprises answering that the channel was "relevant")



Source: ECB (WDN3).

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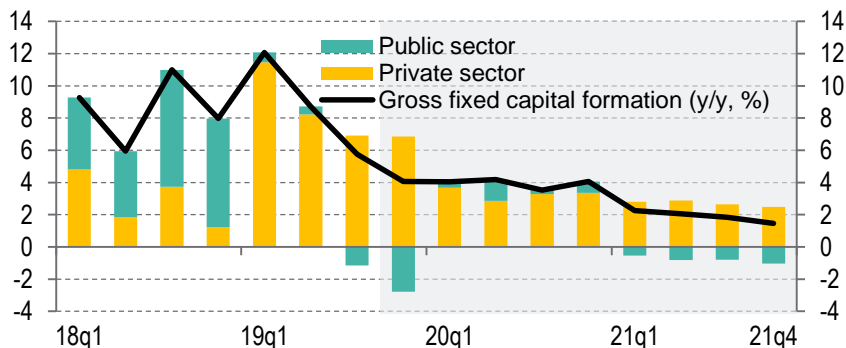
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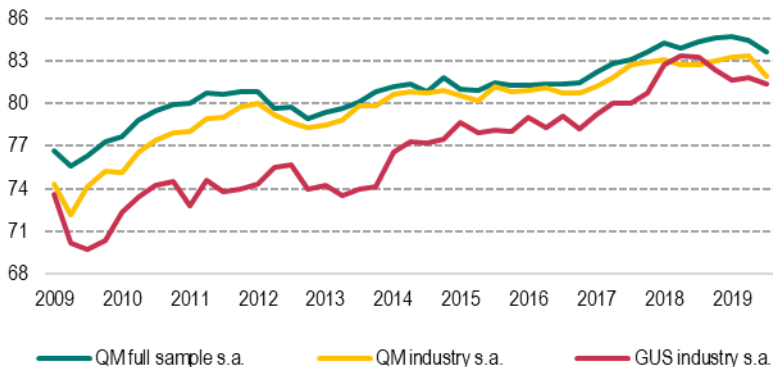
Uncertainty

Investment demand

Gross fixed capital formation growth will slow down due to the deceleration of public investment growth, as well as - in the longer term – of private investment growth



Capacity utilisation index



Public investment:

- ⇓ Lower investment spending of local government units in 2019
- ⇓ EU funds absorption for public investment (only a slight growth in 2020 and the decrease in 2021)

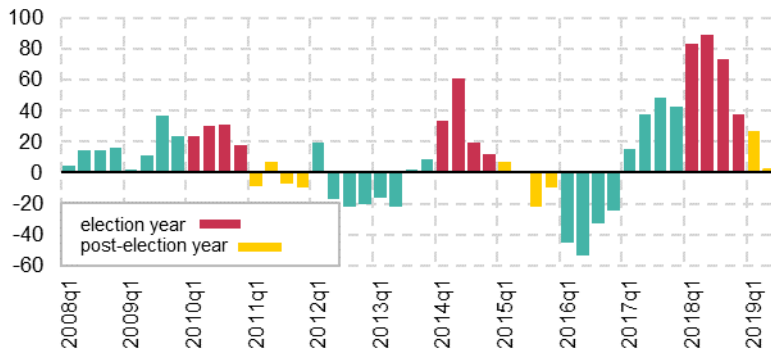
Private investment:

- ⇑ Strong housing demand of households in 2019
- ⇑ High level of capacity utilisation so far, accompanied by a low investment rate
- ⇑ Low interest rates
- ⇓ Delayed effects of a slowdown in foreign demand growth
- ⇓ Decreasing contribution of EU funds absorption for the private sector
- ⇓ Gradual reduction in housing expenditure growth

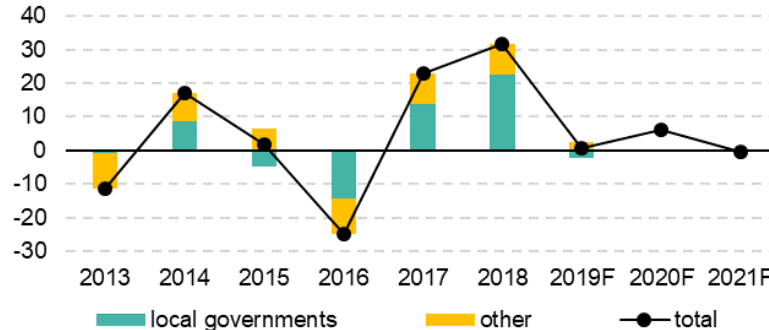
y/y, %	2018	2019	2020	2021
Gross fixed capital formation	8.7	7.1	4.0	1.9

Investment contribution to GDP growth in 2019, financed from national sources as well as from EU funds, will probably be smaller than in the July projection.

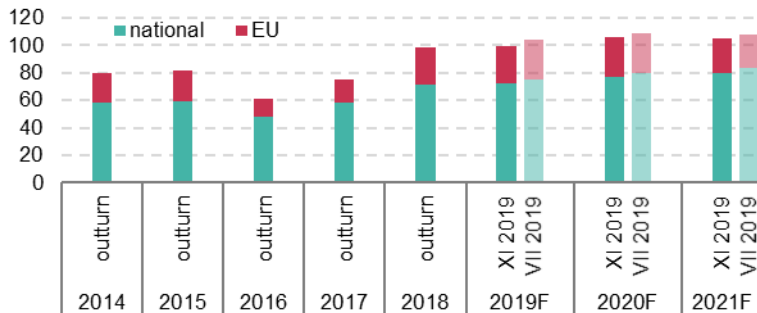
Investment spending of local government units (y/y, %)



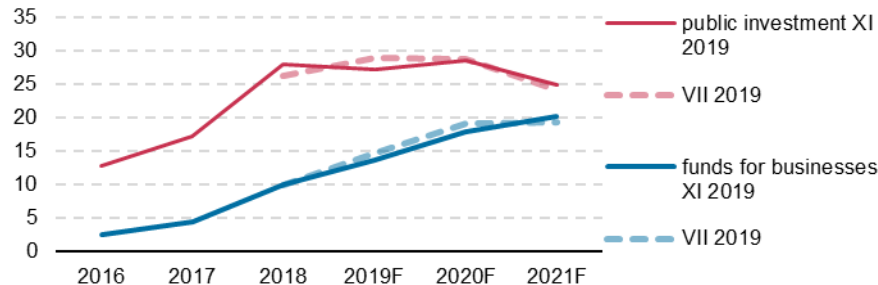
Contributions to public investment growth (y/y, %)



Public investment expenditures (bn PLN)



Use of EU funds – for public investment and for businesses (bn PLN)

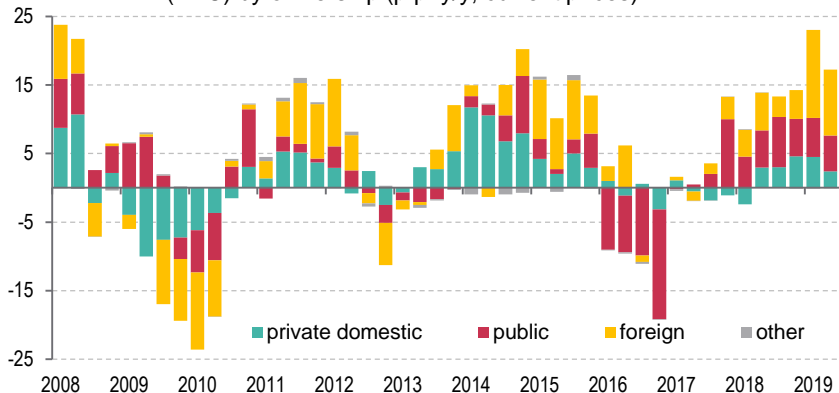


Source: GUS, Eurostat, MF, MiiR, KFD, PKP PLK, NBP calculations.

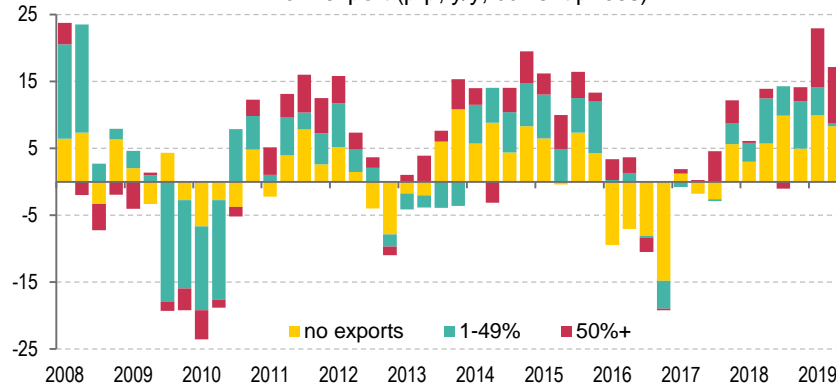
F – EAD forecast

After a fast growth in 2019 business investment dynamics will decelerate in the following years

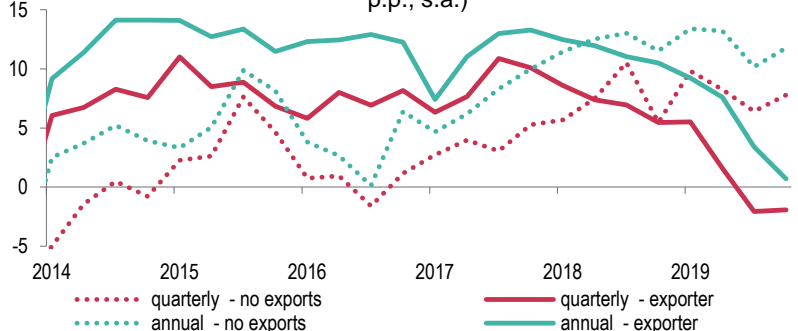
Investment expenditure of medium and large non-financial corporations (NFC) by ownership (p.p. y/y, current prices)



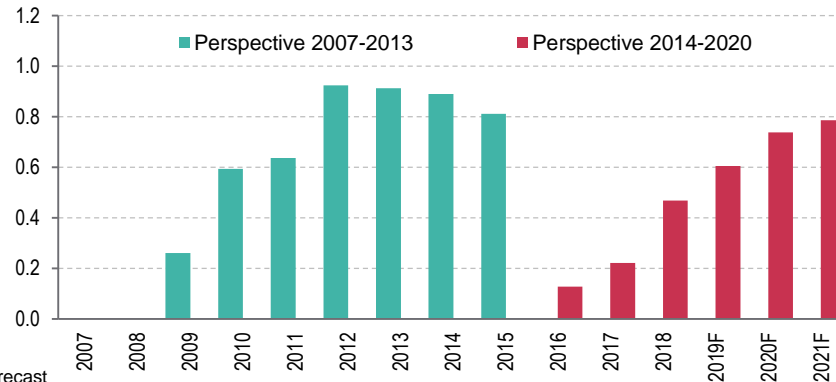
Decomposition of NFC's investment growth by firms' share of revenues from export (p.p. y/y, current prices)



Expected change in investment spending and export activity (balance of changes, p.p., s.a.)



Absorption of EU funds for businesses, % GDP



Source: GUS F-01, NBP Quick Monitoring Survey, NBP calculations.

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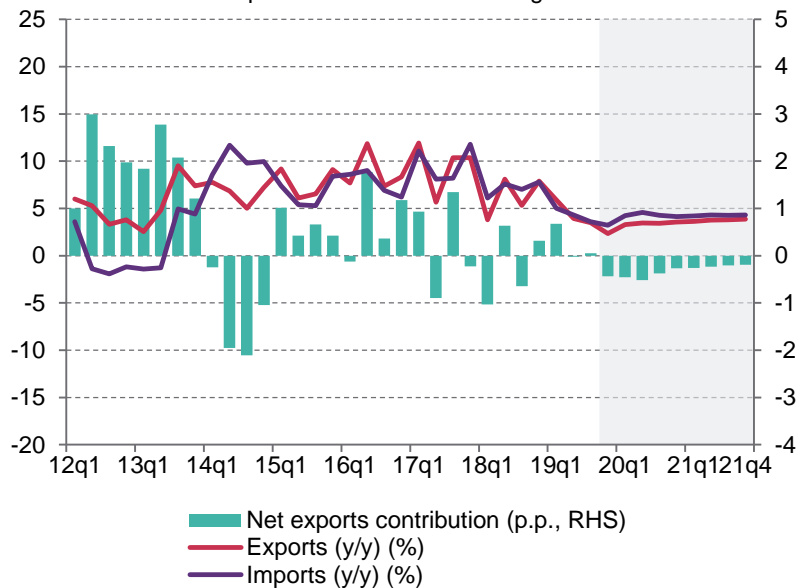
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Foreign trade

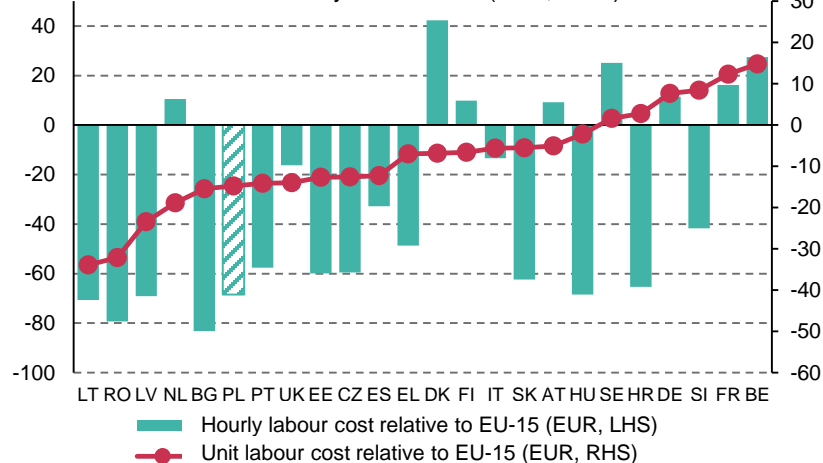
Negative net exports' contribution to growth in the projection horizon due to the slowdown in the euro area

Net exports' contribution to GDP growth

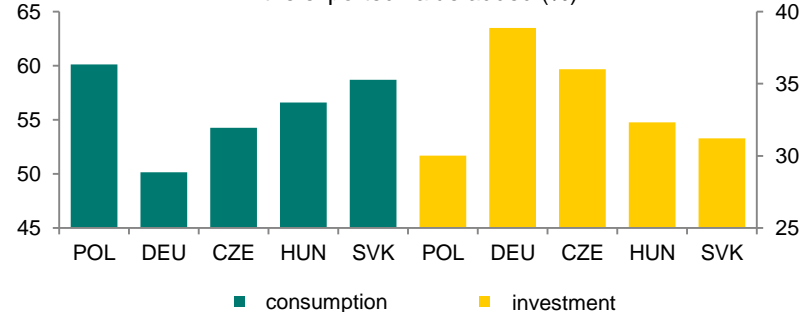


y/y p.p.	2018	2019	2020	2021
Net exports contribution to growth	-0.2	0.0	-0.4	-0.2

Unit and hourly labour costs (EUR, 2018)

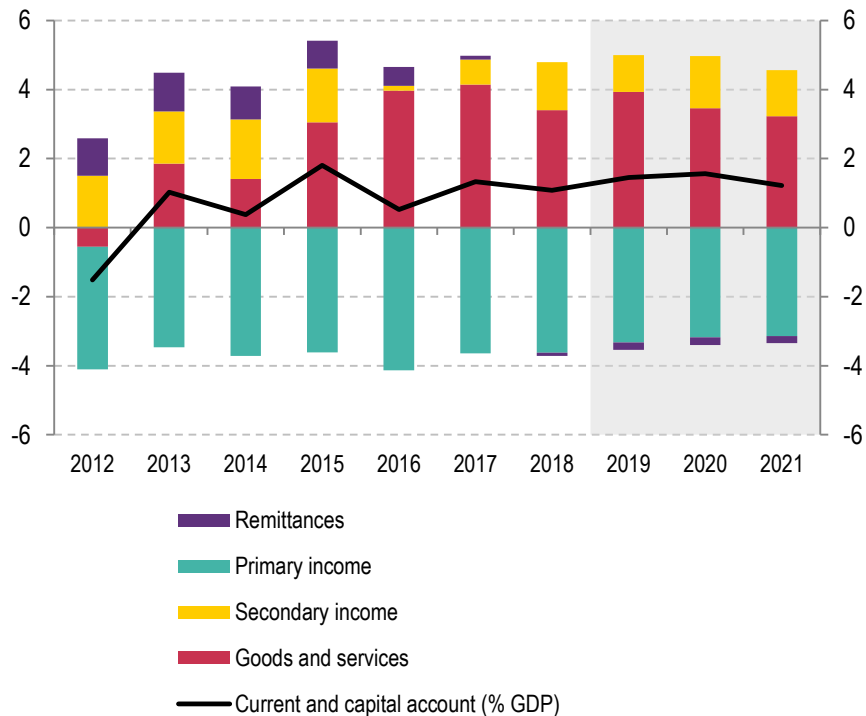


Share of consumption and investment external final demand in the exported value added (%)

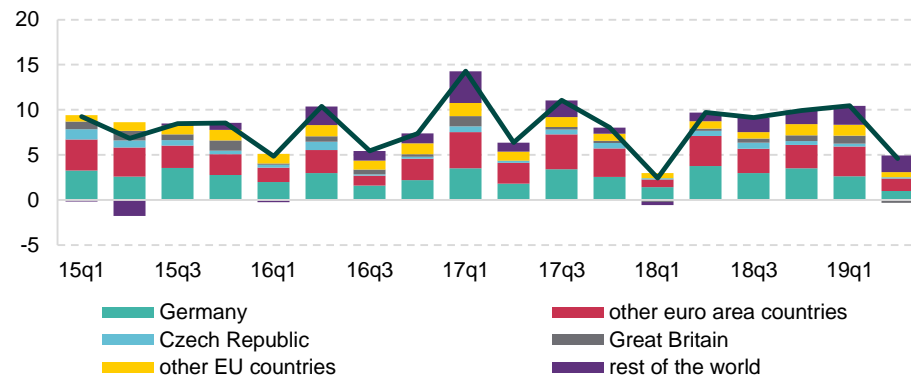


Still positive current and capital account balance

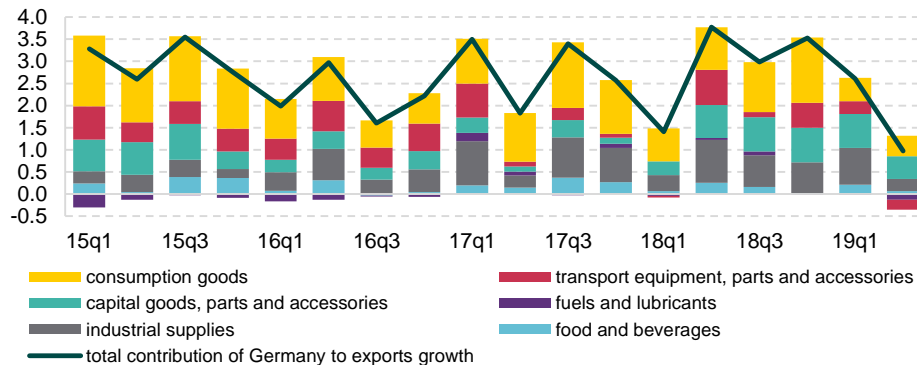
Saldo rachunku bieżącego i kapitałowego w projekcji (% PKB)



Structure of Polish exports classified by direction (current prices, y/y, % i p.p.)



German contribution to the growth of Polish exports - decomposition by product group (p.p.)



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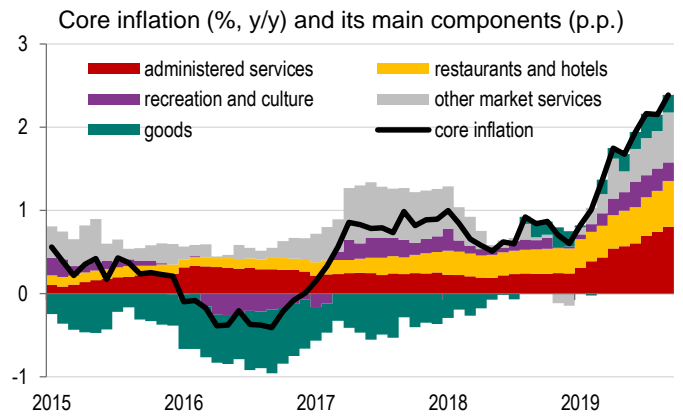
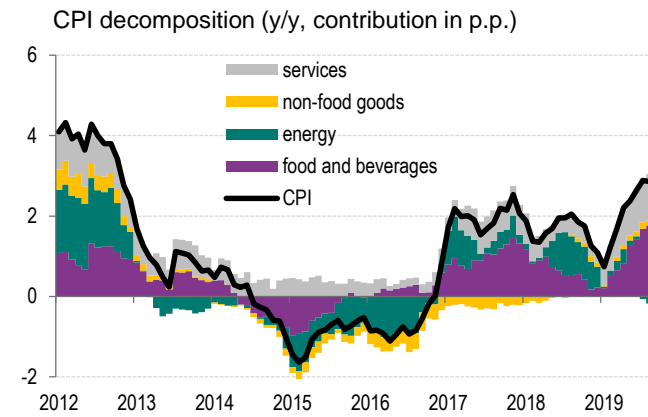
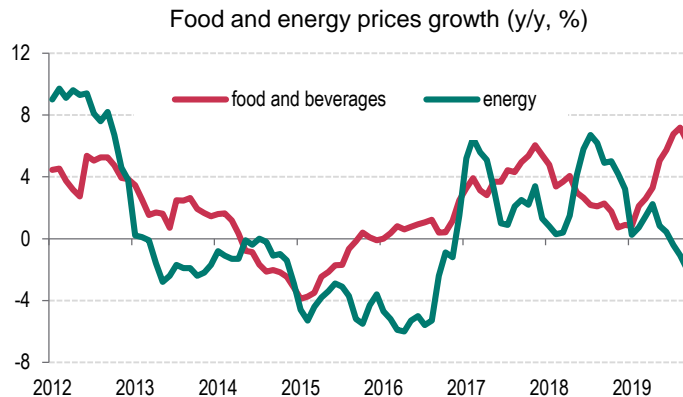
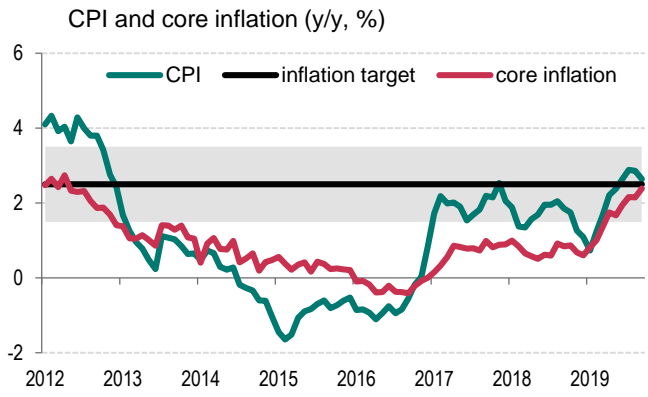
Polish economy

Inflation

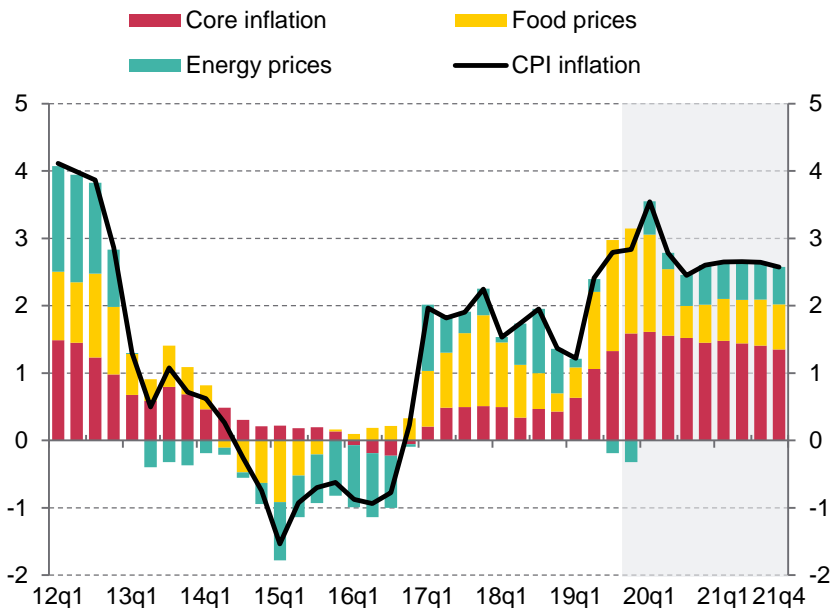
Increase in inflation in 19Q2 and 19Q3 due to a faster food price growth and a rise of core inflation, caused mainly by hiking prices of services.

y/y, %	19q2		19q3	
CPI inflation	2.4	(2.2)	2.8	(2.3)
Core inflation	1.8	(1.7)	2.2	(1.8)
Food prices	4.7	(4.2)	6.7	(4.6)
Energy prices	1.2	(0.9)	-1.2	(0.1)

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



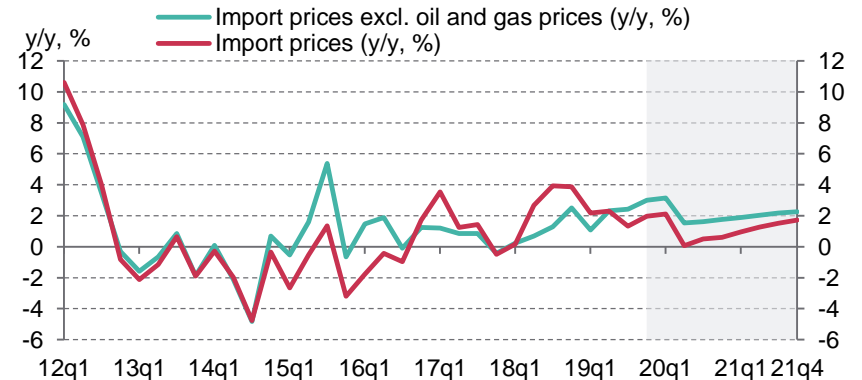
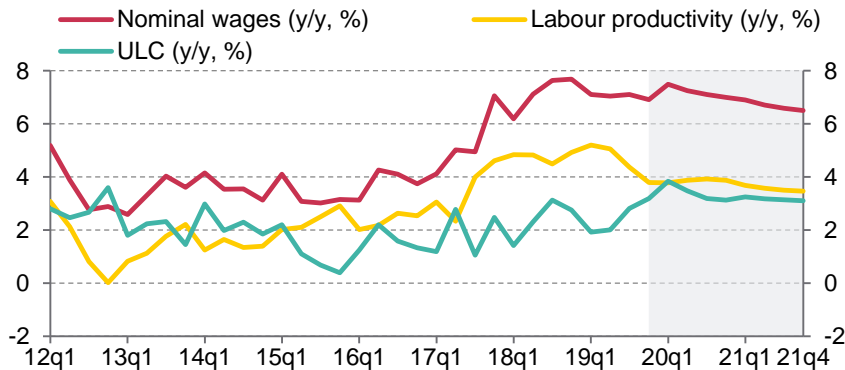
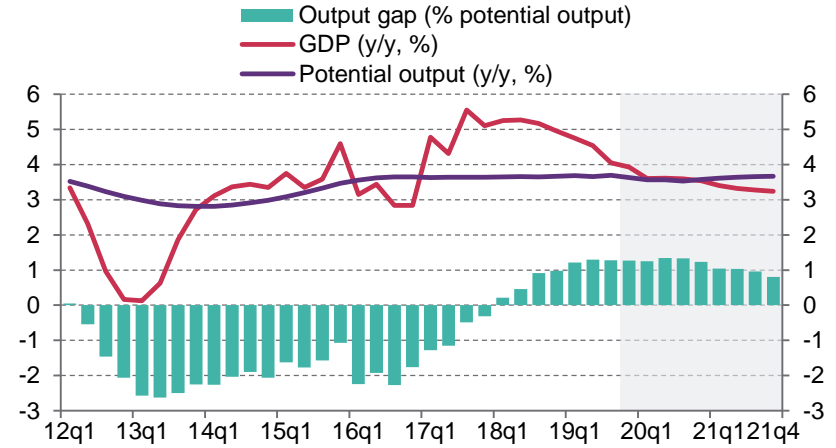
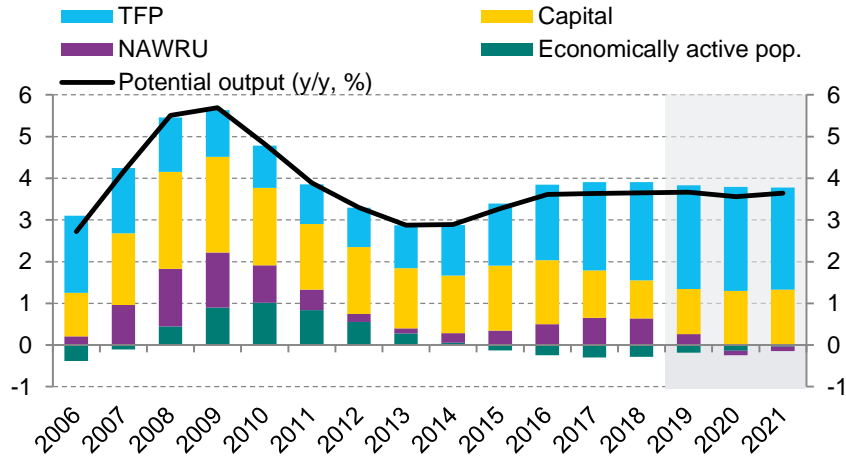
CPI inflation will be rising up till 20Q1 and will decrease thereafter.



- ↑ Labour cost growth elevated throughout the projection horizon
- ↑ Transitory increase in food prices resulting from supply constraints (higher prices of fruits and vegetables due to the drought, increase in meat and cold meats prices as a result of the ASF epidemic in China)
- ↓ Energy prices decline on the international markets in 2019, freezing of electricity prices for end-users
- ↑ Increase in electricity prices starting from 2020 on (phased effect of higher production costs and of the increase in wholesale prices, along with still reduced excise tax and the transitional fees)
- ↓ Positive effect of the demand pressure will gradually fade away in the wake of expected slowdown of GDP growth
- ↓ Low inflation outside the Polish economy

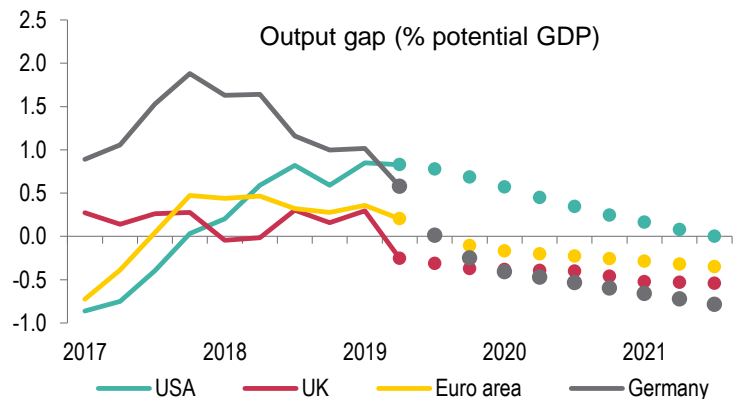
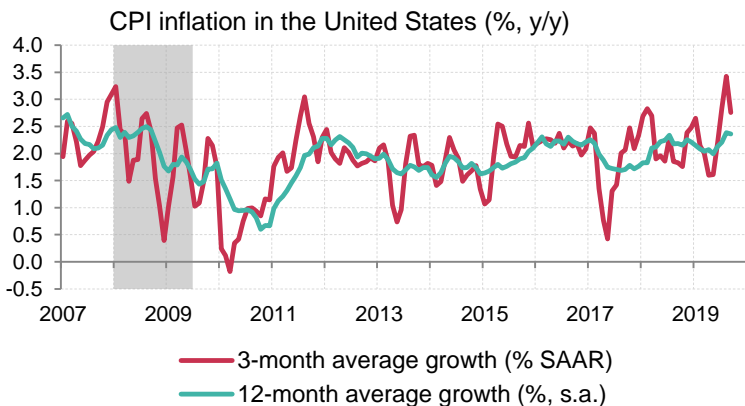
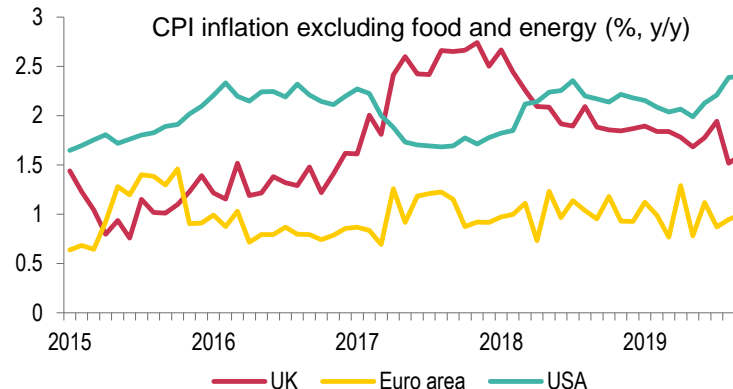
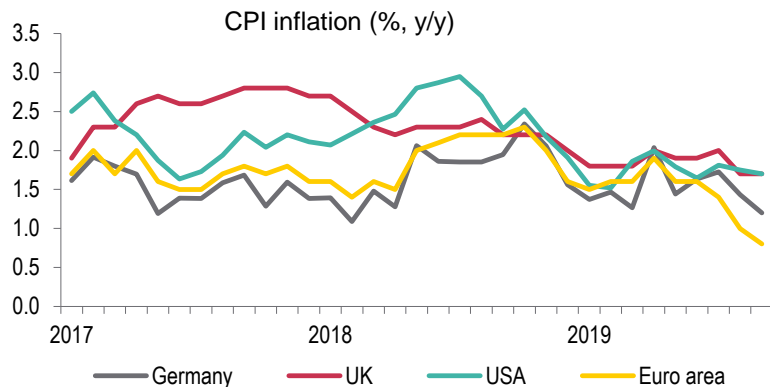
y/y, %	2018	2019	2020	2021
Inflacja CPI	1.6	2.3	2.8	2.6

In 2020-2021 core inflation will be influenced by elevated unit labour costs and a weakening demand pressure.

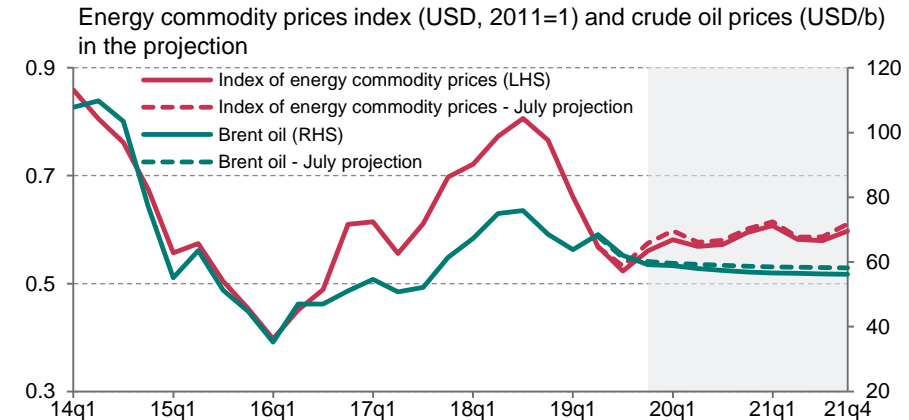
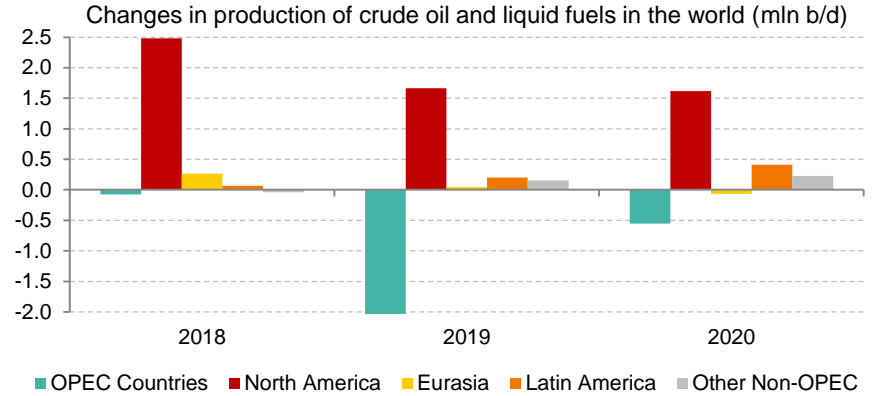
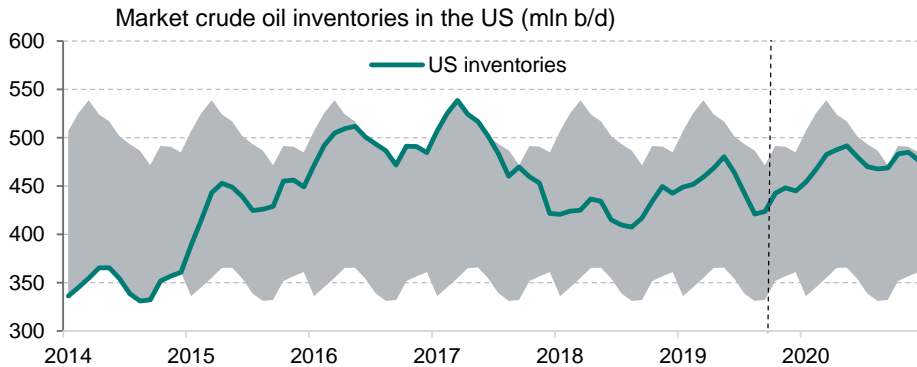
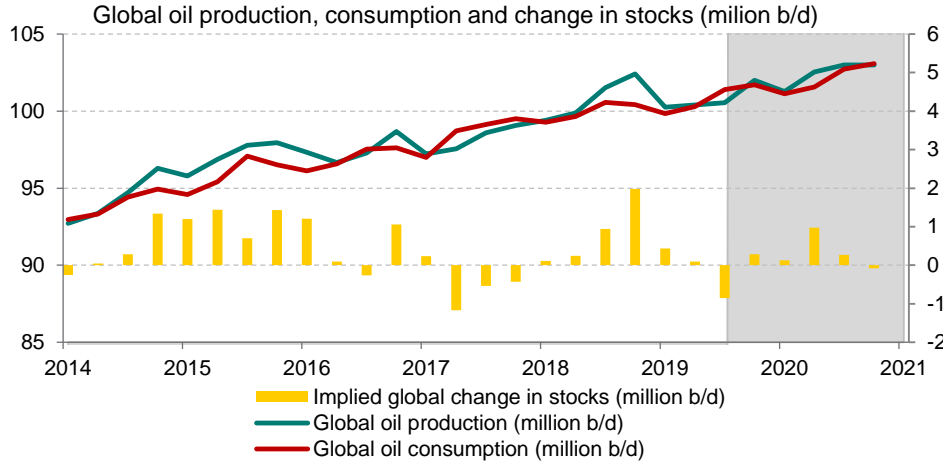


Source: GUS data, NBP calculations.

Stable low inflation in the global economy



Expected gradual decline in oil prices following global growth deceleration and increasing oil production in the US



Outline:

Projection 2019 – 2021

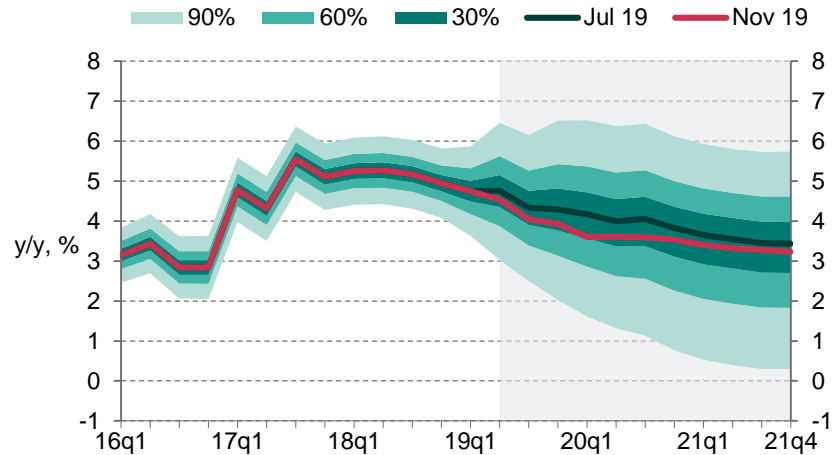
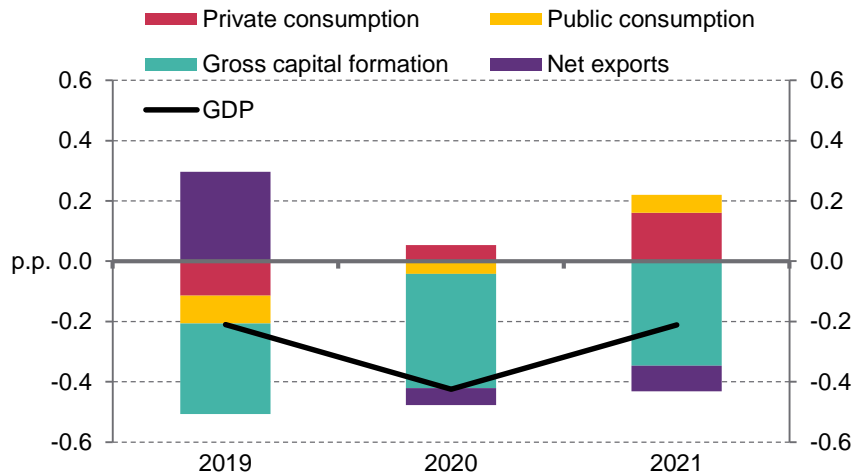
- Economic conditions abroad
- Polish economy
 - GDP
 - Consumption demand
 - Investment demand
 - Foreign trade
 - Inflation

Changes between rounds

Uncertainty

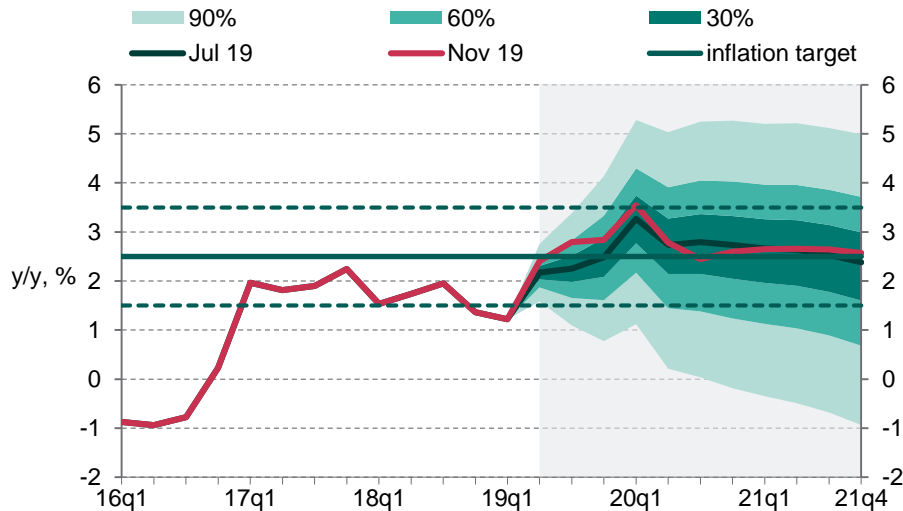
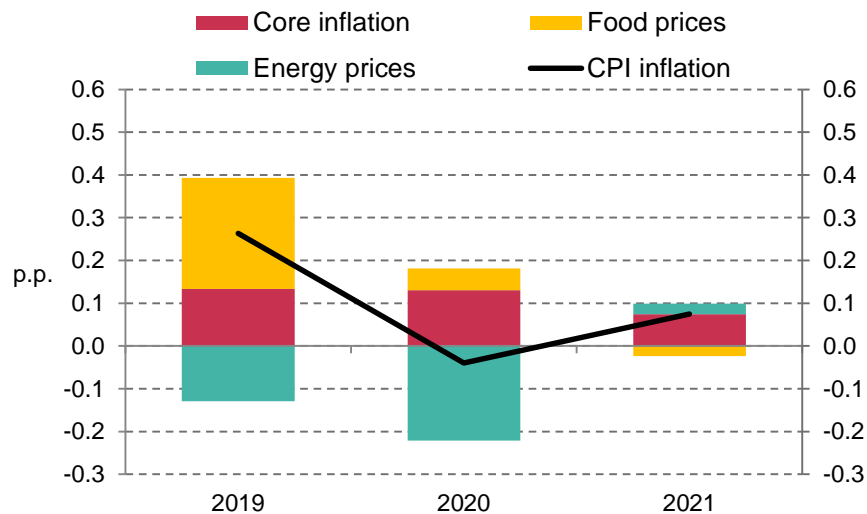
Changes between projection rounds

November GDP projection compared to July projection



GDP y/y, %	2019	2020	2021
July 2019	4.5	4.0	3.5
November 2019	4.3	3.6	3.3

November CPI projection compared to July projection



CPI y/y, %	2019	2020	2021
July 2019	2.0	2.9	2.6
November 2019	2.3	2.8	2.6

Outline:

Projection 2019 – 2021

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

Changes between rounds

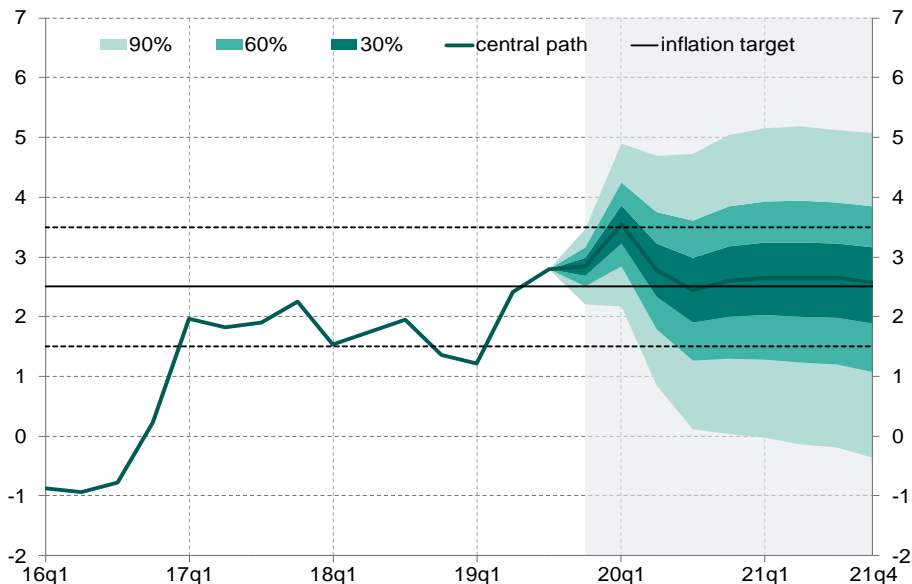
Uncertainty

Uncertainty

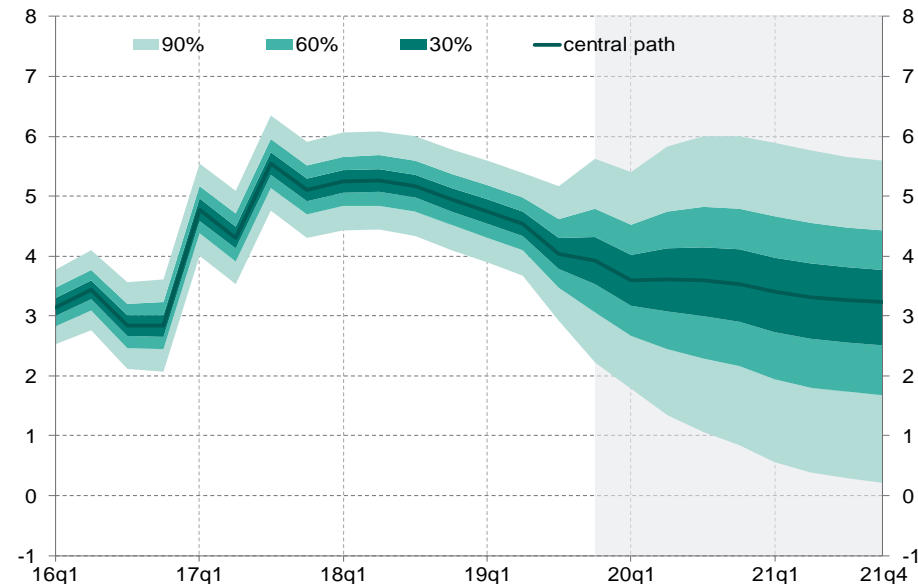
- Risk factors
- Fan charts

Risk area	Description	Impact	Scale of impact
Deterioration in the global economic outlook	<ul style="list-style-type: none"> Escalation of current trade disputes leading to larger disturbances in the global trade, deterioration of economic conditions, elevated uncertainty and tensions in the financial markets. Decline in economic growth in the euro area as a consequence of the imposition by the US of duties on cars produced in the EU (crisis in the automotive industry and deterioration of economic activity in other export-oriented industries). Potential spill-over of weak economic conditions from American and German industry to other economic sectors. Lower economic growth in the United States resulting from a bigger drop in equity prices on American stock exchange. The United Kingdom's withdrawal from the European Union without prior agreement on the terms of future cooperation – so called no-deal Brexit (increase in uncertainty and lower economic growth both in the UK and the EU) 	Inflation ↓↓ PKB ↓↓	**
Better global economic conditions	<ul style="list-style-type: none"> Easing of trade tensions, where both sides of the conflict lower the existing tariffs and refrain from imposing further measures. With no further conflict escalation, the recovery of global economic conditions could happen faster than it is assumed in the baseline scenario of the projection. More expansionary fiscal policy in several European countries. The effects of monetary easing by Fed and ECB more favourable than assumed in the November projection. 	Inflation ↑ PKB ↑	*
Impact of the energy sector on inflation in Poland	<ul style="list-style-type: none"> Demand and supply disruptions on the global markets of oil and other energy commodities. Regulatory changes on the domestic electricity market. Scale and timing of the impact of the increase in wholesale electricity prices on the tariffs for end users. 	Inflation ⇕ PKB ⇕	*
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	within 1.5-3.5% range
2019	0%	97%	100%	50%	100%
2020	12%	39%	73%	51%	61%
2021	25%	50%	75%	53%	49%

CPI y/y, %	central path	50% probability interval	
2019	2.3	2.2	2.4
2020	2.8	2.1	3.6
2021	2.6	1.6	3.6

GDP y/y, %	central path	50% probability interval	
2019	4.3	3.9	4.7
2020	3.6	2.7	4.4
2021	3.3	2.3	4.2

We protect the value of money