

Growth borrowed from the future

TOP MACRO THEME(S):

- **Borrowing from the future growth (p. 2):** The high contribution of inventories to GDP growth suggests that the current, high GDP growth is partly "borrowed" from the future – a normalization of the demand for inventories will likely result in a decline of GDP growth, even to around zero at the beginning of 2023.

WHAT ELSE CAUGHT OUR EYE:

- **CPI inflation in May (flash estimate) increased to 13.9% y/y** from 12.4% y/y. The reading hasn't exceeded market expectations for the first time since the print for January. The data showed a relatively strong but weaker than expected increase in food and fuel prices. Energy prices increased by 3.4% m/m (31.4% y/y), driven by soaring coal prices. Core inflation was higher than expected and, on our estimate, went up to 8.3-8.5% y/y.
- **Manufacturing PMI in May fell more than expected, to 48.5 pts.** (from 52.4 pts. in April), marking the first reading below the neutral threshold of 50 pts. since June 2020. A sharp decline of both new orders and production were conducive to this strong PMI decline. In May both input prices and prices of finished products, were still rising, although at a weaker pace than in April.
- **The European Commission has given a positive assessment of Poland's recovery and resilience plan**, an important step towards the EU disbursing EUR 23.9 billion in grants and EUR 11.5 billion in loans under the Recovery and Resilience Facility. Poland has struggled to secure the approval as the Commission pressed for reforms to the judiciary system that would implement several CJEU rulings on the matter.

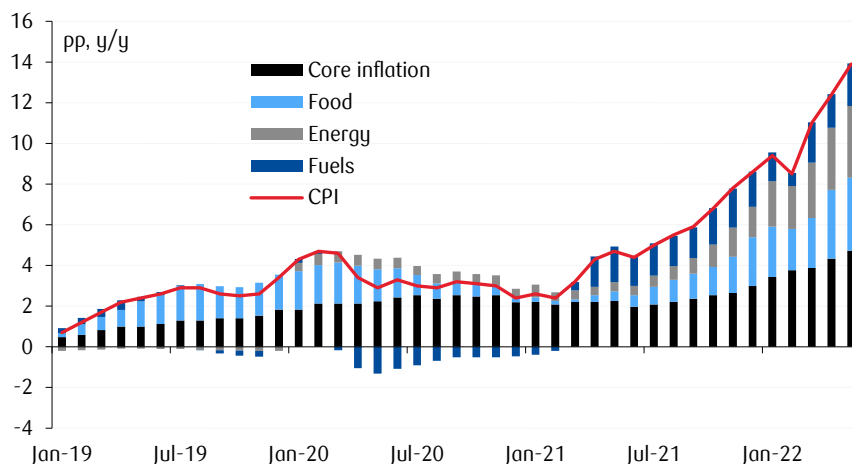
THE WEEK AHEAD:

- **We expect the MPC to hike rates by 75bps on Wednesday, following the pledge to keep raising rates as long as the CPI is growing.** The MPC will have to balance accelerating inflation and worrying signs from the industrial sector suggesting sharp slowdown.

NUMBER OF THE WEEK:

- **1092.67 PLN/MWh** – the weighted average price in May of a base energy contract for 2023, compared to PLN 627.17 in January.

CPI inflation and main components



Source: GUS, PKO Bank Polski.

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	2021	2022 _†
Real GDP (%)	5.9	4.9
Industrial output (%)	15.4	12.9
Unemployment rate [#] (%)	5.4	5.8
CPI inflation ^{**} (%)	5.1	12.5
Core inflation ^{**} (%)	4.1	7.9
Money supply M3 (%)	8.9	5.6
C/A balance (% GDP)	-0.6	-2.3
Fiscal balance (% GDP)*	-1.9	-2.8
Public debt (% GDP)*	53.8	49.9
NBP reference rate ^{##} (%)	1.75	6.50
EURPLN ^{†##}	4.60	4.55

Source: GUS, NBP, MinFin, †PKO BP Macro Research team forecasts; ‡PKO BP Market Strategy team forecasts; under revision; *ESA2010, **period averages; #registered unemployment rate at year-end; ##at year-end.

Borrowing from the future growth

- In 1q22 GDP grew by 8.5% y/y, but the most striking element of the GDP reading (in our view) was a record high contribution from the build-up of inventories, equal to 7.7pp.
- High cost of commodities and limited supply of crucial components has led to a substantial adjustment in the companies' supply chain management.
- The high contribution of inventories to GDP growth suggests that the current, high GDP growth is partly "borrowed" from the future – a normalization of the demand for inventories will likely result in a decline in GDP growth, even to around zero at the beginning of 2023.

The most striking element of the GDP reading for 1q22 was a record high contribution from the build-up of inventories, equal to 7.7pp vs. already high contribution of 4.3pp in 4q21. GDP growth in 1q22 was confirmed at 8.5% y/y vs. 7.6% y/y in 4q21. Domestic demand increased by 13.2% y/y, while net exports shove out 3.8pp from the annual growth.

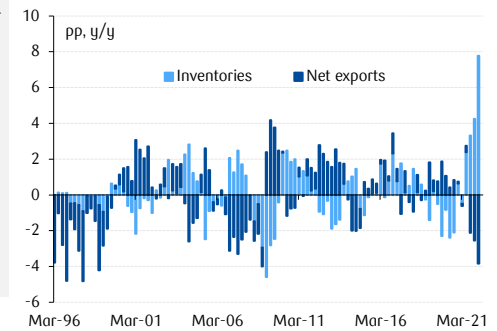
We have argued on many occasions that high cost of commodities and limited supply of crucial components has led to a substantial adjustment in the companies' supply chain management. **They tend to keep inventories *just in case* instead of previous model of *just in time* production.** Indeed, the enterprise sector data confirms that in 1q22, among large companies, raw material constituted more than 54% of the total inventories, the highest share since at least 2007. This confirms, in our opinion, the precautionary motive of current stock accumulation.

Looking at the nominal data, the PLN 65.6 billion increase of inventories in 1q22 was by 40% higher than in 4q21 and more than 7-fold higher than a year ago. **The current cycle of inventories accumulation is, in historical perspective, both extremely strong and already relatively prolonged.** The cycle of positive contributions of stock build-up to GDP has previously lasted from 4 to max. 7 quarters, and has been followed by a period of its' substantial negative impact on the economic growth. It is worth remembering that to have a negative contribution of inventories to GDP growth, it is sufficient to have a smaller increase than in the reference period. As a consequence, even if the current high level of inventories persists, but the pace of accumulation slows down, the inventories cycle will negatively influence economic growth. We however keep in mind that there is an automatic stabilizer of net exports, as inventories tend to be strongly import-intensive.

As the supply constraints are a global phenomenon, we see a similar patterns of stock management in other countries. It is however worth noting, that in Poland the build-up seems to be stronger. Moreover, in 1q22 in the CEE region we see some deterioration of the inventories contribution to GDP, as the growth has clearly deteriorated.

We predict that later in the year GDP growth will decline. The high contribution of inventories to GDP growth suggests that the current, high GDP growth is partly "borrowed" from the future – a normalization of the demand for inventories will likely result in a decline of GDP growth, even to around zero at the beginning of 2023 (we will see the opposite "carry over effect"). However, we keep in mind that the hoarding of stocks could result in a higher amplitude of the business cycle increasing the likelihood of (at least technical) recession in the case of any negative demand shocks.

Contribution to GDP growth



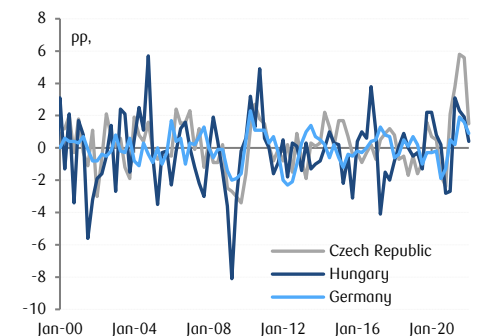
Source: GUS, PKO Bank Polski.

Nominal change in inventories



Source: GUS, PKO Bank Polski.

Contribution of inventories to GDP growth



Source: Macrobond, PKO Bank Polski.

Weekly economic calendar

Indicator	Time (UK)	Unit	Previous	Consensus*	PKO BP	Comment
Tuesday, 7 June						
GER: Factory orders (Apr)	7:00	% m/m	-4.7	-0.7	--	--
GER: Factory orders (Apr)	7:00	% y/y	-3.1	-4.7	--	--
EUR: Sentix Index (Jun)	9:30	pts.	-22.6	-21.3	--	--
USA: Trade balance (Apr)	13:30		--	--	--	--
Wednesday, 8 June						
GER: Industrial production (Apr)	7:00	% m/m	-3.9	1.0	--	--
GER: Industrial output (Apr)	7:00	% y/y	-3.5	-3.4	--	--
HUN: CPI inflation (May)	8:00	% y/y	9.5	10.2	--	--
EUR: Employment (1q)	10:00	% y/y	2.1	2.6	--	--
EUR: GDP growth (1q)	10:00	% y/y	4.7	5.1	--	--
POL: NBP base rate (Jun)	--	%	5.25	6.00	6.00	As inflation keeps growing the MPC is set to continue the tightening cycle.
Thursday, 9 June						
EUR: ECB Refinancing Rate (Jun)	12:45	%	0	0	--	--
EUR: EBC deposit rate (Jun)	12:45	%	-0.5	-0.5	--	--
USA: Initial Jobless Claims (Jun)	13:30	thous.	200	--	--	--
Friday, 10 June						
CHN: PPI inflation (May)	2:30	% y/y	8	6.6	--	--
CHN: CPI inflation (May)	2:30	% y/y	2.1	2.3	--	--
CZ: CPI inflation (May)	8:00	% y/y	14.2	15.5	--	--
POL: Minutes from MPC meeting	13:00	--	--	--	--	A purely historical insight into May MPC meeting.
USA: CPI inflation (May)	13:30	% y/y	8.3	8.2	--	--
USA: Core inflation (May)	13:30	% y/y	6.2	5.9	--	--
USA: University of Michigan sentiment (Jun, flash)	15:00	pts.	58.4	58.9	--	--

Source: GUS, NBP, Parkiet, PAP, Bloomberg, Reuters, PKO Bank Polski. Parkiet for Poland, Bloomberg, Reuters for others.

Selected economic indicators and forecasts

	Mar-22	Apr-22	May-22	1q22	2q22	3q22	4q22	2020	2021	2022
Economic activity										
Real GDP (% y/y)	x	x	x	8.5	5.9	3.7	2.1	-2.2	5.9	4.9
Domestic demand (% y/y)	x	x	x	13.2	9.8	4.8	2.5	-2.9	7.6	7.2
Private consumption (% y/y)	x	x	x	6.6	9.5	5.6	4.1	-3.0	6.1	6.4
Gross fixed capital formation (% y/y)	x	x	x	4.3	-1.0	-3.0	-5.0	-4.9	3.8	-2.0
Inventories (pp)	x	x	x	7.7	3.5	1.2	0.6	-1.2	2.4	1.1
Net exports (pp)	x	x	x	-3.8	-3.3	-1.0	-0.2	0.6	-1.2	0.0
Industrial output (% y/y)	15.4	13.0	16.9	16.8	14.2	14.0	7.3	-1.2	15.6	12.9
Construction output (% y/y)*	27.6	9.3	12.1	23.7	12.2	18.8	15.5	-2.7	1.6	16.9
Retail sales (real, % y/y)	9.6	19.0	12.7	9.4	14.2	12.6	11.8	-2.7	7.6	12.0
Nominal GDP (PLN bn)	x	x	x	699.6	715.7	742.2	839.7	2339	2614	2997
Labour market										
Registered unemployment rate‡(%)	5.4	5.2	5.0	5.4	5.2	5.7	5.8	6.3	5.4	5.8
Employment in enterprises (% y/y)	2.4	2.8	2.6	2.3	2.7	2.9	3.1	-1.2	0.5	2.8
Wages in enterprises (% y/y)	12.4	14.1	14.9	11.2	14.3	12.5	11.7	4.8	8.8	12.4
Prices^										
CPI inflation (% y/y)	11.1	12.4	13.9	9.7	13.6	14.0	12.7	3.4	5.1	12.5
Core inflation (% y/y)	6.9	7.7	8.5	6.6	8.4	8.7	8.0	3.9	4.1	7.9
15% trimmed mean (% y/y)	7.8	9.2	x	7.3	x	x	x	3.9	4.1	x
PPI inflation (% y/y)	21.9	23.3	24.7	18.2	24.5	23.3	18.9	-0.5	7.8	16.9
Monetary aggregates‡										
Money supply, M3 (PLN bn)	2003.9	2012.5	2017.8	2003.9	2049.9	2085.9	2100	1822.7	1985.0	2100.2
Money supply, M3 (% y/y)	7.6	8.2	7.8	7.6	7.9	6.9	5.6	16.4	8.9	5.6
Real money supply, M3 (% y/y)	-3.2	-3.8	-4.5	-1.9	-5.0	-6.3	-6.2	12.6	3.6	-6.1
Loans, total (PLN bn)	1430.4	1445.0	x	1430.4	1437.7	1455.1	1464.4	1333.8	1403.5	1464.4
Loans, total (% y/y)	6.4	7.5	x	6.4	6.5	5.7	4.3	0.8	5.2	4.3
Deposits, total (PLN bn)	1794.3	1783.9	x	1794.3	1832.6	1843.9	1830.2	1602.2	1780.1	1830.2
Deposits, total (% y/y)	7.4	6.1	x	7.4	6.2	2.5	2.8	13.9	11.1	2.8
Balance of payments										
Current account balance (% GDP)	-2.2	-2.1	-2.1	-2.2	-2.4	-2.5	-2.7	2.9	-0.6	-2.3
Trade balance (%GDP)	-1.7	-2.2	-2.2	-1.7	-2.3	-2.6	-2.9	2.4	-0.1	-2.9
FDI (% GDP)	3.8	3.6	3.7	3.8	3.5	2.8	2.1	2.1	3.6	2.1
Fiscal policy										
Fiscal balance (% GDP)	x	x	x	x	x	x	x	-6.9	-1.9	-2.8
Public debt (% GDP)	x	x	x	x	x	x	x	57.1	53.8	49.9
Monetary policy‡										
NBP reference rate (%)	3.50	4.50	5.25	3.50	6.00	6.50	6.50	0.10	1.75	6.50
NBP lombard rate (%)	4.00	5.00	5.75	4.00	6.50	7.00	7.00	0.50	2.25	7.00
NBP deposit rate (%)	3.00	4.00	4.75	3.00	5.50	6.00	6.00	0.00	1.25	6.00
WIBOR 3M ^x (%)	4.77	6.05	6.40	4.77	6.40	6.70	6.70	0.21	2.54	6.70
Real WIBOR 3M ^x (%) [#]	-6.30	-6.36	-7.33	-4.91	-7.18	-7.32	-5.96	-3.19	-2.54	-5.77
Exchange rates*‡										
EUR-PLN	4.65	4.66	4.58	4.65	4.64	4.60	4.55	4.61	4.60	4.55
USD-PLN	4.18	4.41	4.27	4.18	4.30	4.18	4.14	3.75	4.06	4.14
CHF-PLN	4.52	4.55	4.44	4.52	4.46	4.38	4.25	4.25	4.45	4.25
EUR-USD	1.11	1.06	1.07	1.11	1.08	1.10	1.10	1.23	1.14	1.10

Source: GUS, NBP, PKO Bank Polski.

*PKO BP Market Strategy team forecasts.

‡period averages for quarterly and yearly data.

#deflated with current CPI inflation.

‡period end values.

*under revision.

Monetary policy monitor

MPC Members	Hawk-o-meter*	Recent policy indicative comments^
R. Sura	2.7	"We should adjust the scale of hikes to inflowing data on inflation and business sentiment, as well as to forecasts. Hence, the Council does not set the target interest rate level or the time frame for tightening. It would be difficult even without the additional uncertainty tied to the war in Ukraine." (24.05.2022, PAP)
C. Kochalski	2.2	"I see room for rate hikes, also because economic conditions are good and the industry continues to grow at a fast pace. (...) At the same time, some caution is needed because we cannot predict how economies will react to the war in Ukraine longer term. (...) the current level of rates is safe, and what is more, room for hikes exists. (...) Economic slowdown amid forecast inflation still far away from the NBP target would not be a sufficient argument for me to stop the cycle." (27.04.2022, Parkiet).
A. Glapinski	1.8	"As the NBP president and chairman of the Monetary Policy Council, I would like to clearly stress that we take very seriously our constitutional and legal obligations (...) That is why in October we started decisive hiking of interest rates that will likely continue in the coming months, until we are certain that inflation will decline lastingly." (23.05.2022, obserwatorfinansowy.pl, PAP)
L. Kotecki	--	"We probably had an underestimation - by analysts, by decision-makers - of what could happen in the economy. And it actually happened, inflation is way too high. Moreover, in my opinion, it has escaped us. In the sense that it spilled over all the goods and services it could. It is not just that only gasoline or food prices grow. At the moment, everything is getting more expensive, the prices of over 90 percent of goods are growing faster than allowed by the inflation target or deviation from the target, i.e. faster than 3.5% (...) Unfortunately, this inflation is very high and probably still slightly growing. We have the so-called real negative interest rates, which means that raising interest rates should probably continue for some time. Of course, I do not want to say by what steps (...) but it seems that comparing the main interest rate at 5.25 percent at the moment with inflation over 12%, looks like there is still room for some more hikes." (16.05.2022, RMF FM)
P. Litwiniuk	--	"I am a proponent of monetary policy tightening, but not [PAP: of one conducted] in a sudden manner (...) I believe that rate hikes should take place at a pace allowing stakeholders from the banking sector, including borrowers, to adapt to this phenomenon." (16.05.2022, TVN24, PAP)
W. Janczyk	--	"I could assume a more cautious approach to monetary policy at the next meetings (...) Unpredictability is hitting its zenith during these weeks (...) That's exactly why I'm seeing some space for being less bold in monetary tightening. The situation's changing though almost every hour, and we need to stay on alert to act accordingly" (18.03.2022, Bloomberg).
H. Wnorowski	--	"For a long time, we have been facing a very expansionary fiscal policy. (...) Bigger money supply always has a pro-inflation effect [and] as a result the central bank has practically no choice but to tighten monetary policy." (1.06.2022, TVP Bialystok; PAP)
I. Dąbrowski	--	"Poland is not expected to suffer stagflation within a year." (23.05.2022, PAP)
(Vacant places)	--	--

*the higher the indicator the more hawkish views. Due to the fact that the new MPC has not voted yet on interest rates changes, the positioning has been made based positively on PAP survey conducted among economists at banks in Poland (scale 1-5). ^Quotes in bold have been modified in this issue of Poland Macro Weekly.

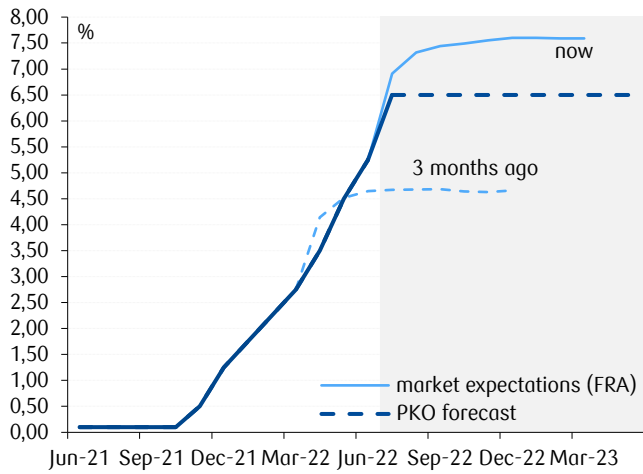
Interest rates – PKO BP forecasts vs. market expectations

		1M	2M	3M	4M	5M	6M	7M	8M	9M
Date	2-Jun	2-Jul	2-Aug	2-Sep	2-Oct	2-Nov	2-Dec	2-Jan	2-Feb	2-Mar
WIBOR 3M/FRA†	6.64	7.11	7.52	7.64	7.69	7.75	7.80	7.80	7.79	7.79
implied change (b. p.)		0.47	1.28	1.80	2.25	2.31	2.36	2.36	2.35	2.35
MPC Meeting	8-Jun	7-Jul	-	7-Sep	5-Oct	9-Nov	7-Dec	-	-	-
PKO BP forecast*	5.25	6.50	6.50	6.50	6.50	6.50	6.50	6.50	6.50	6.50
market pricing*		5.72	6.53	7.05	7.50	7.56	7.61	7.61	7.60	7.60

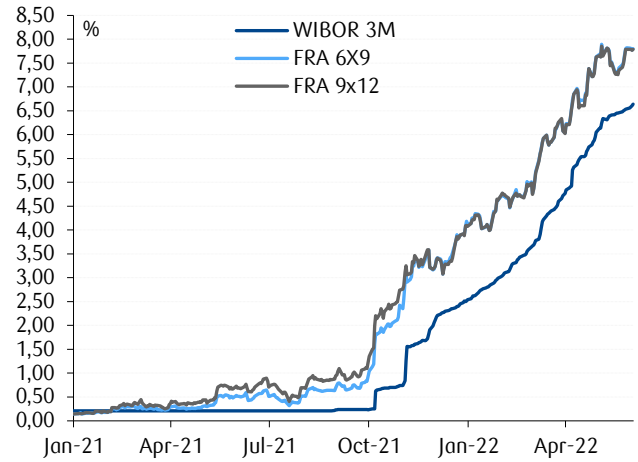
†WIBOR 3M from the last fixing, FRA transactions based on WIBOR 3M for subsequent periods, ‡in basis points, *PKO BP forecast of the NBP reference rate.

Poland macro chartbook

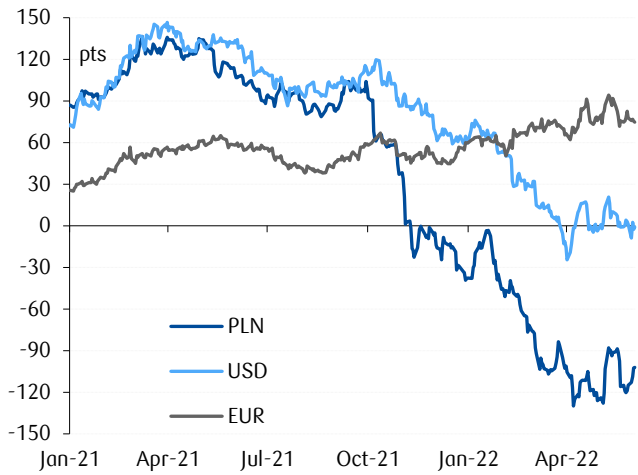
NBP policy rate: PKO BP forecast vs. market expectations



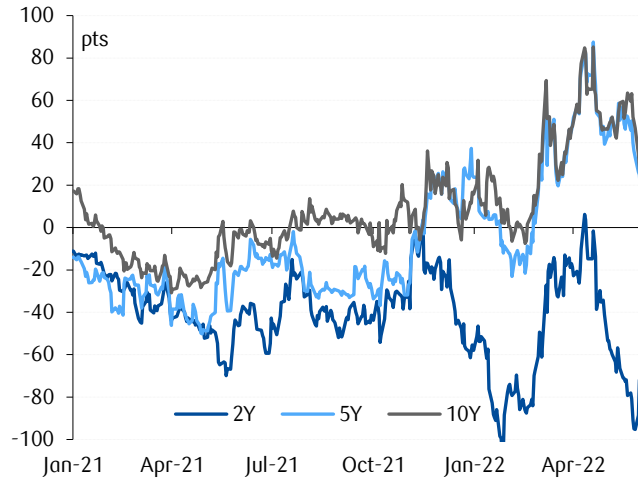
Short-term PLN interest rates



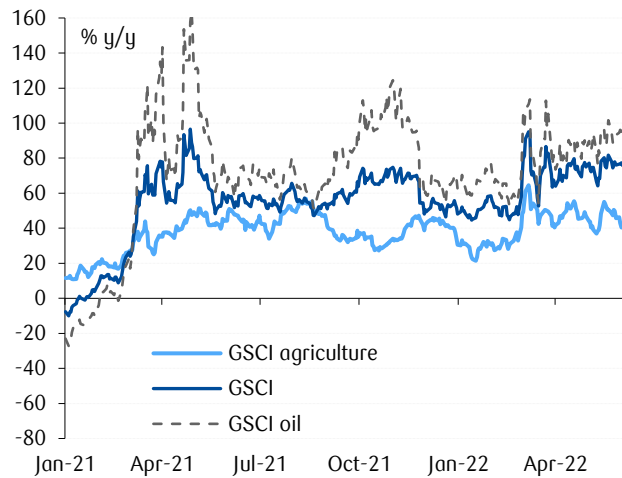
Slope of the swap curve (spread 10Y-2Y)*



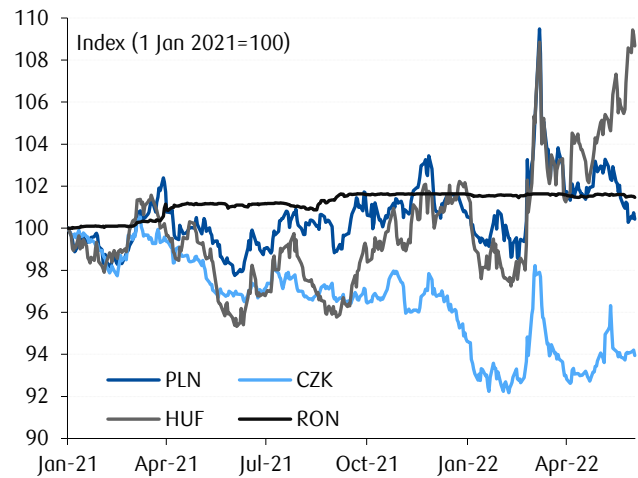
PLN asset swap spread



Global commodity prices (in PLN)

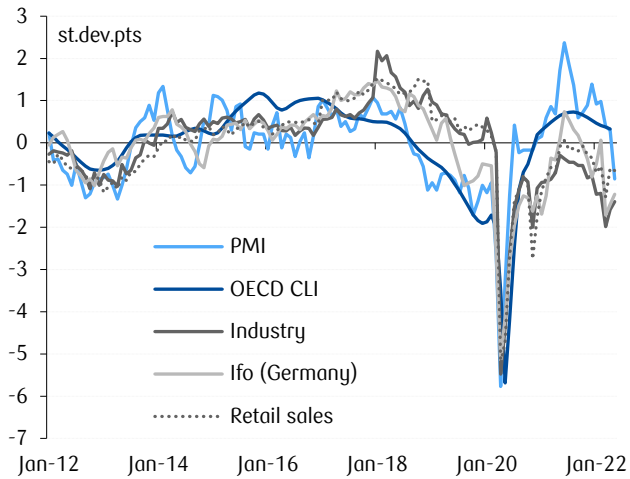


Selected CEE exchange rates against the EUR

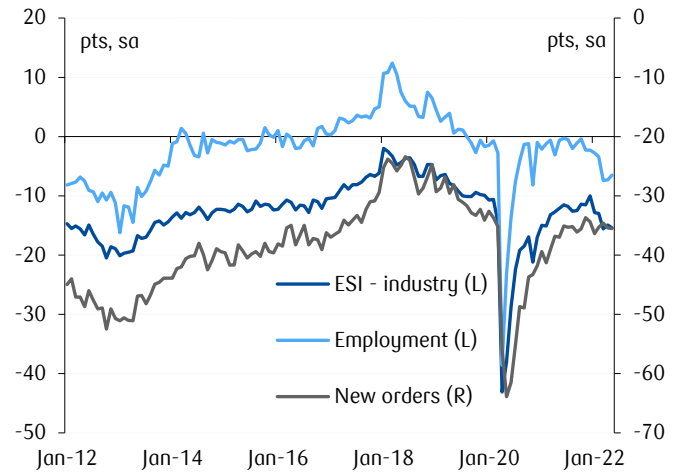


Source: Datastream, NBP, PKO Bank Polski. *for PLN, and EUR 6M, for USD 3M.

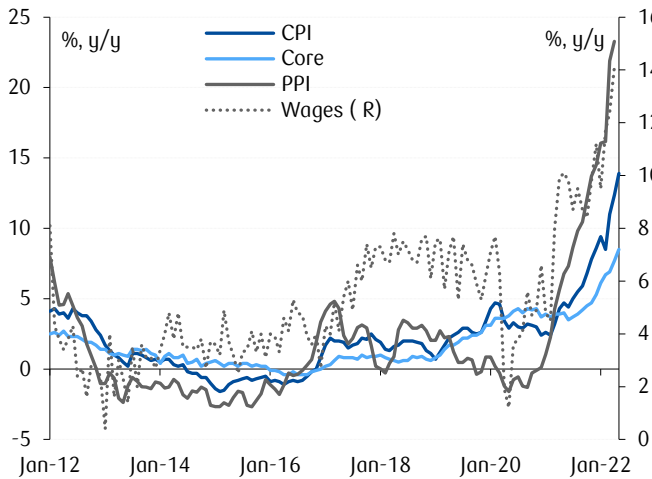
Economic sentiment indicators



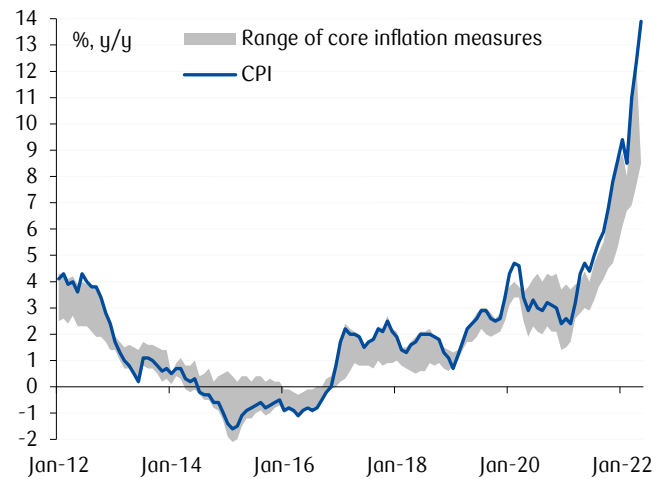
Poland ESI for industry and its components



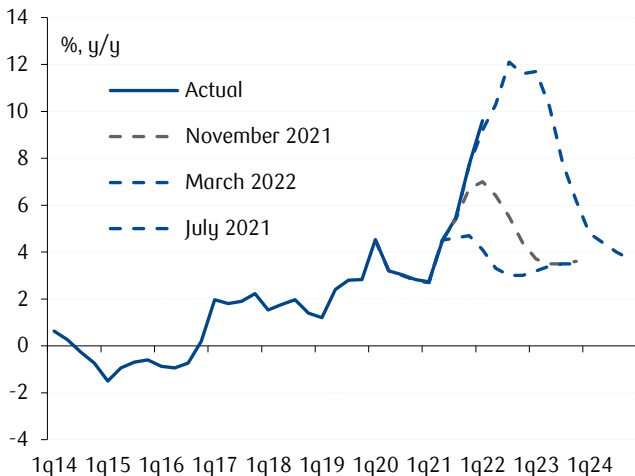
Broad inflation measures



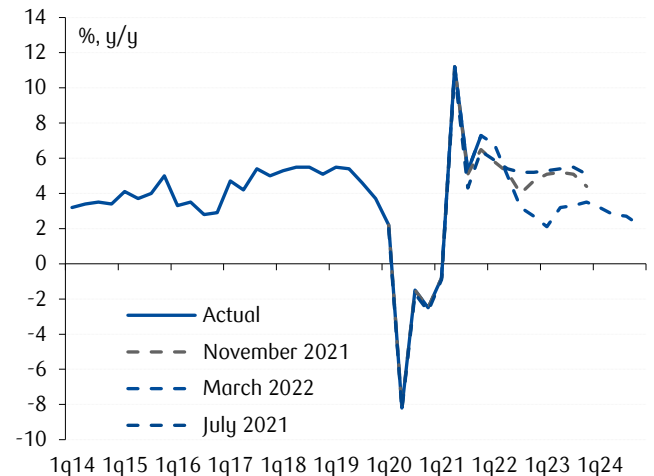
CPI and core inflation measures



CPI inflation – NBP projections vs. actual

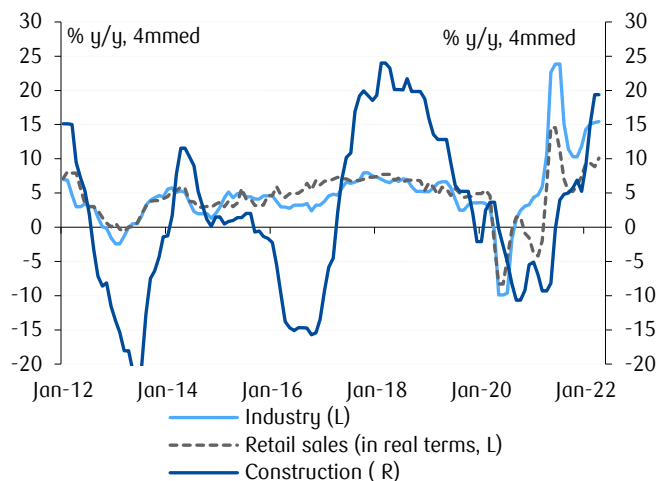


Real GDP growth – NBP projections vs. actual

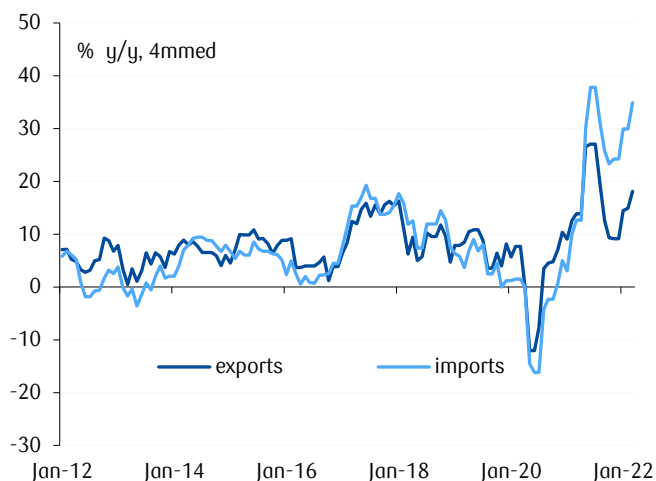


Source: Datastream, GUS, EC, NBP, PKO Bank Polski.

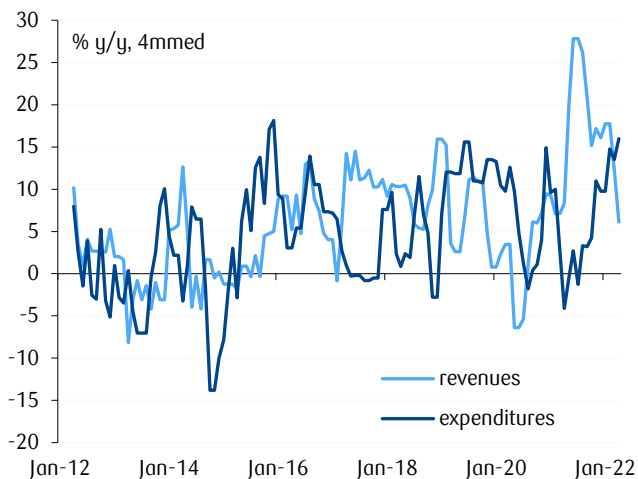
Economic activity indicators



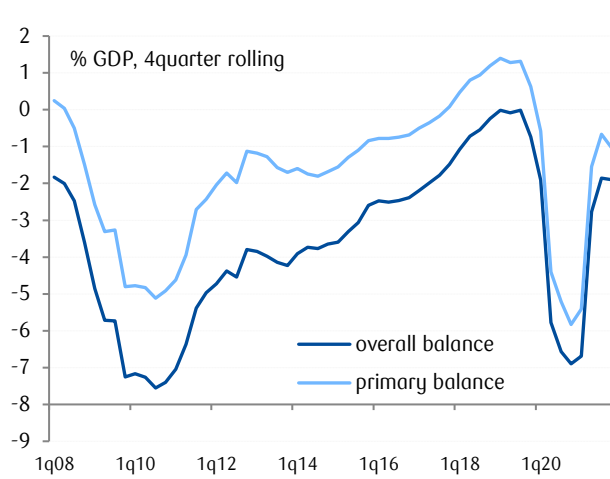
Merchandise trade (in EUR terms)



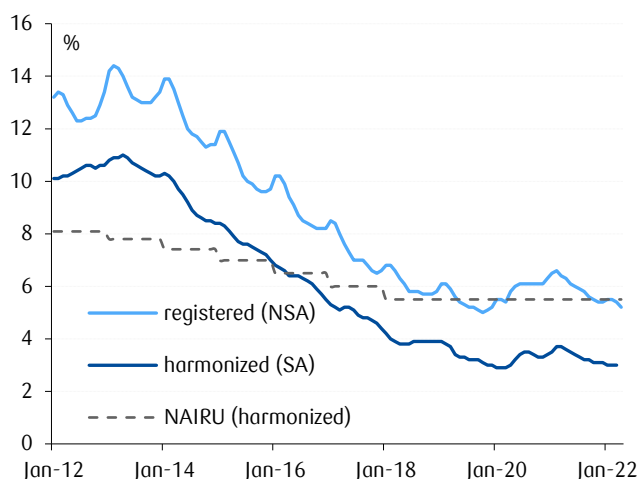
Central government revenues and expenditures*



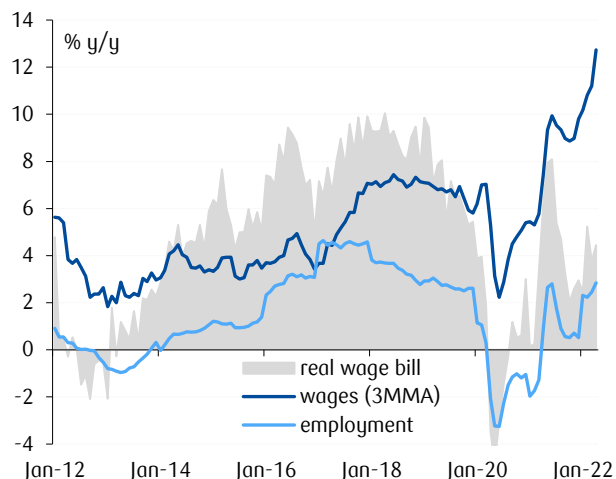
General government balance (ESA2010)



Unemployment rate

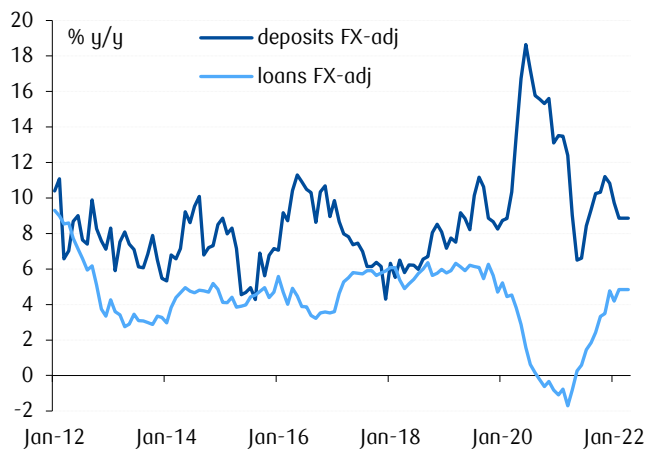


Employment and wages in the enterprise sector

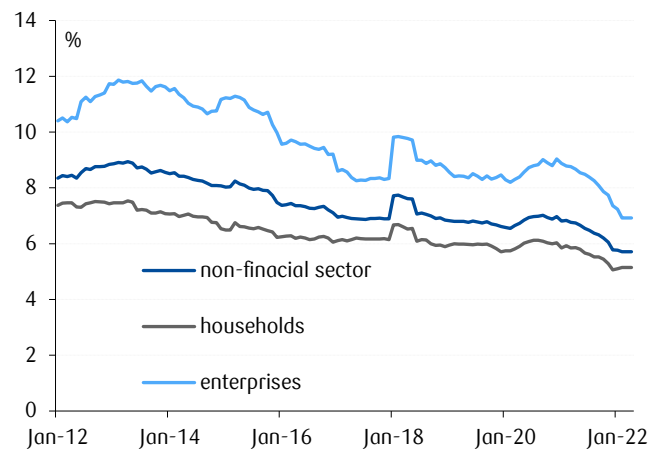


Source: NBP, Eurostat, GUS, MinFin, PKO Bank Polski. *break in series in 2010 due to methodological changes.

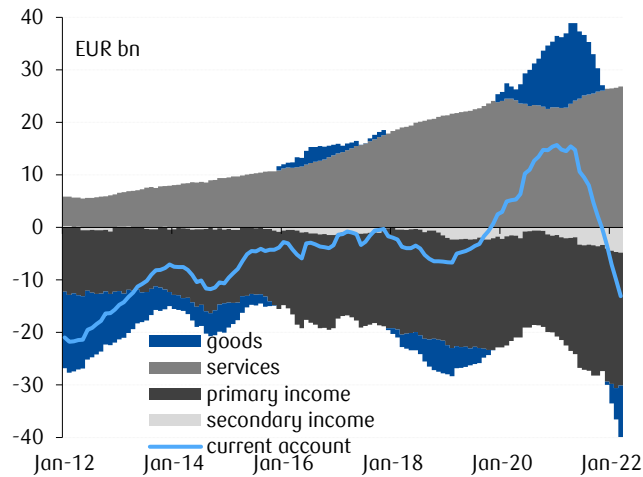
Loans and deposits



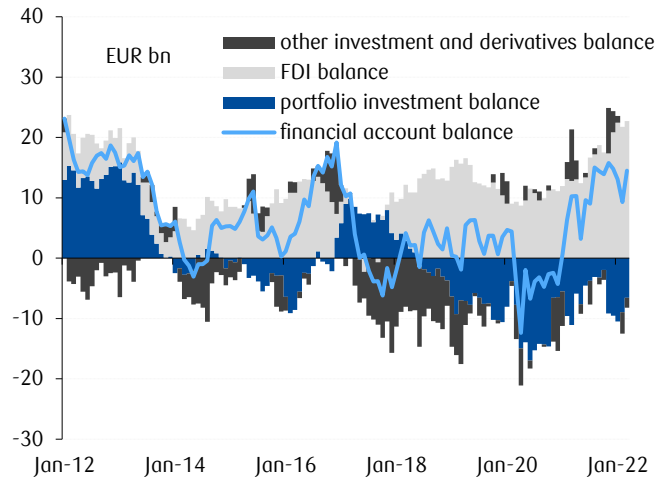
Non-performing loans (NPLs) - by sectors*



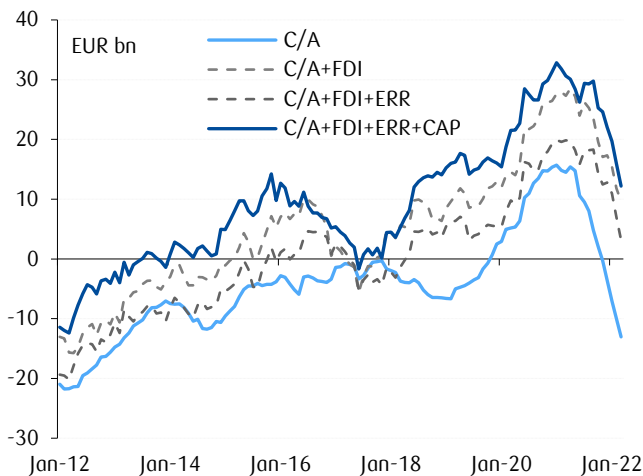
Current account balance



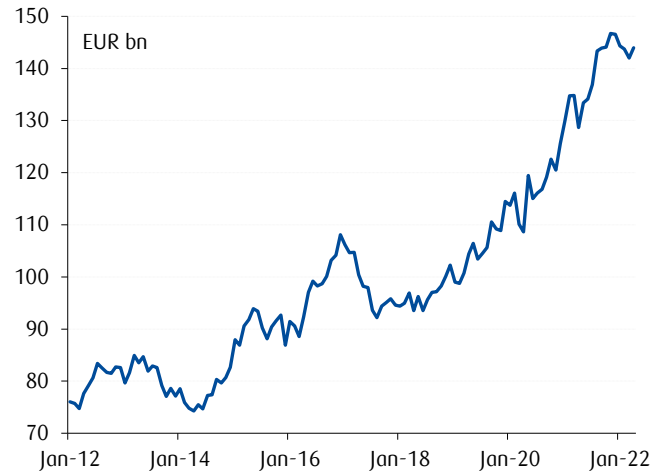
Financial account balance



External imbalance measures



NBP FX reserves (in EUR terms)



Source: NBP, PKO Bank Polski. *break in series in Jan2018 due to methodological changes.

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Poland's macro in a nutshell

	2021	2022	Comment
Real economy			
- real GDP (%)	5.9	4.9	The “carry-over” effect has intensified in 1q22 even more, making GDP growth rate at 5% in 2022 possible, but with some caveats. Taking this into account, we have revised our GDP forecast for 2022 (4.0%) to 4.9%, with risks skewed further to the upside. The headline GDP results in 2022 and 2023 might be misleading – showing a strong growth in 2022 despite stagnating growth, and much weaker performance in 2023, despite the economy likely gathering strength.
Prices			
- CPI inflation (%)	5.1	12.5	Even stronger growth of energy, food and fuel prices pass through to the rest of the economy pushing core inflation to new record highs. With robust consumer demand, the pass through is ever easier.
Monetary aggregates			
- M3 money supply (%)	8.9	5.6	The outbreak of the war in Ukraine could significantly limit demand for loans with deposits boosted by the state intervention (the same as in the case of pandemic response). Our high frequency data signal rising likelihood of such scenario (what implies additional downside risks for GDP growth rate).
External balance			
- current account balance (% GDP)	-0.6	-2.3	Recurring supply constrains (e.g. shortage of automotive components manufactured in Ukraine) has triggered production outages, limiting exports volumes while surging commodity prices boost imports value at the same time. On the other hand, a drop of imports-intensive investments (higher risk aversion of corporations amid extreme uncertainty) should partially offset this negative impact.
Fiscal policy			
- fiscal balance (% GDP)	-1.9	-2.8	High growth rate of nominal GDP supports fiscal revenues. Fiscal result in 2022 will hinge on the size of anti-inflationary shields (most likely they will be extended unit year-end) and a support for refugees, i.e. fiscal spending mainly via off-budget entities.
Monetary policy			
- NBP reference rate (%)	1.75	6.50	We assume that the MPC will continue rate hikes until July (100bps in May and then at least 100-150bps altogether at meetings in June and July) with terminal rate reaching at least 6.50-7.00%. Later on, Polish central bankers may adopt a wait-and-see approach, which would turn into the end of the cycle, if inflation starts descending (as currently indicated by forecasts) while both global and domestic economy get weaker.

Source: GUS, NBP, Eurostat, PKO Bank Polski.*under revision.

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