

Running down that hill

Poland: 2023 Outlook

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Executive Summary (macro)

Since the start of the war in Ukraine, we have seen a recession on the horizon as a result of the disruption in trade relations, the drastic increase in energy costs and the tightening of financial conditions. However, the first three quarters of this year have turned out to be better than forecast, firstly due to significant revisions of historical data, and secondly due to the resilience of the main demand components in H1 and inventories in Q3. As a result, **we raised our GDP growth forecast for 2022 to 4.7%** (close to our forecast a year ago: 4.9%). However, the baseline scenario still implies a recession in the coming quarters - the cycle trough will be, in our view, in the middle of winter, i.e. 1Q23, when annual GDP growth will fall well below zero. However, the recession should be mild and short-lived enough to keep **average GDP growth in 2023 slightly above zero (0.1%)** (p.8). The risks for this scenario seem symmetric - on the one hand, a harsh winter increasing Europe's energy deficit or the lack of success in unfreezing the recovery funds, on the other hand, a fairly rapid de-escalation of the conflict and the start of Ukraine's reconstruction, an influx of foreign direct investment.

The economic slowdown and the deterioration of corporate profits (p.14) will translate into a lower demand for jobs and a weakening of wage pressure. As long as we expect a fairly mild and short recession, **the scale of redundancies should not be large**. The buffers against a significant rise in unemployment are the large number of vacancies at the starting point, the ongoing decline in the working-age population, and possible drop in labour participation in response to job cuts (p.29). Under these conditions, it is difficult to expect the wage-price spiral to unwind. Recent months have already seen some easing of wage pressures, helped to some extent by the influx of refugees from Ukraine taking up jobs mainly in services (p.33). Our analysis shows that **without the minimum wage increase, average wages could slow down next year**; yet, given that the minimum wage will jump by c.20%, they will grow at a similar pace than this year, by around 10% on average (p.31).

Weakening demand, cooling labour market, commodity and energy prices retreating from their peaks, deceleration in the credit market - these will all be drivers of disinflation in 2023. Before this happens, **CPI growth will peak in February, slightly above 20% y/y, after which it will start to descend** (p.37). The optimist will probably emphasise that inflation is likely to halve by the end of the year. The pessimist will point out that the return of inflation to the official target will be protracted. In our view, it is difficult to expect inflation anywhere near the target in the next two years, and even 2025 is questionable (it will be probably already a period of rebound in the economy, tightening labour market).

Based on the results of the November NBP projection and the strength of monetary transmission, we estimated that bringing inflation down to the 2.5% target in eight quarters would require additional 600 bps rate hikes (p.43). However, the Monetary Policy Council apparently accepts a longer disinflation process and does not intend to raise interest rates. **We assume that the monetary policy parameters will remain unchanged at least until the end of 2023** (p.42) Major central banks abroad are likely to complete the policy tightening cycle in Q1 2023. The NBP rate cuts currently priced in by the financial market next year can only materialise, in our view, in the scenario of a much sharper deceleration of the economy and inflation than we anticipate. On the other hand, the bar for further rate rises is also set very high - inflation would have to surprise strongly again and, for example, at its peak significantly exceed the currently expected 20% y/y level, while economic slowdown would have to be smaller.

Many governments around the world are taking steps to mitigate the effects of high inflation and the energy crisis on companies and households, but - [as we wrote](#) at the beginning of September - absorbing rising debt supply can be a challenge for markets in an environment of global monetary tightening, as the UK found out shortly afterwards. The Polish government has recognised the risks involved and is therefore attempting to reduce the fiscal burden and to minimise the increase in borrowing needs for next year (e.g. shifting some of the costs from the public to the private sector and trying to unlock funding from the Recovery and Resilience Programme). However, the scale of the new initiatives is such that **the public sector deficit is likely to increase slightly more than the draft budget predicts, to over 5% of GDP** (p.46). This is assuming, of course, that no new costly proposals are implemented in the course of the election campaign.



Executive Summary (markets)

FX

Pause in the cycle of rate hikes by the NBP amid their further continuation in the core markets and the expected economic slowdown translating into a decline in expectations of interest rate levels in the longer term puts pressure on the weakening of the zloty. Nevertheless, the global situation related to the signalled slowdown in the pace of further rate hikes in the main markets improved global risk appetites leading to a gradual weakening of the dollar, which benefited the currencies of the emerging markets including the Polish zloty. Also in favour of the zloty is its low liquidity in the domestic market, which makes long-term speculation against the Polish currency difficult. **We assume that the liquidity situation in the domestic market, which is favourable for the zloty, the structurally increased FX liquidity of the banking sector, and the gradual improvement in global investment sentiment in Europe in the 2023 outlook will have a dominant impact on the zloty's exchange rate, leading to its gradual appreciation.** Only the first months of 2023 may be a certain exception to this rule, due to a marked economic slowdown in the first quarter and possible problems with gas availability in European markets ([p.53](#)).

FI

In 2023, we expect a continuation of the downward trend in domestic bond yields that began at the beginning of Q4 of this year. This should be favoured by disinflationary processes in major world economies and in Poland - even if this process in the country were to proceed much more slowly. We expect a temporary increase in yields only in the first months of next year, due to problems with gas availability in European markets and domestic inflation reaching its peak during this period ([p.48](#)). A factor that will slow the pace of strengthening of Polish debt in the following months of next year will be a large increase in gross bond issuance to finance the 2023 budget's borrowing needs ([p.50](#)), which may require more support from foreign debt issues and a slightly higher risk premium. Nevertheless, its scale will be determined not only by domestic conditions but also, or even predominantly, by the mood of global financial markets, which we assume should create rather favourable conditions for Polish debt financing throughout 2023.



2022 Forecasts in rear view mirror

Indicator	Our view in April 2022	Outcome
GDP	War in Ukraine generated a sudden stop shock for the economy, albeit of moderate magnitude - after very strong start of the year, the real activity may stall in the next two quarters. GDP growth may slow to c.3.5% in 2022, as all main demand components will suffer and supply disruptions will likely weigh on output.	1Q22 proved stronger (data revision) and the following quarters proved surprisingly resilient. We moved GDP growth forecast to 4.7%, but the economic deceleration is still on the horizon, although will happen later, culminating in 1Q23. Signals of demand easing are already visible.
GDP breakdown	Consumption still solid, but the shock to real disposable income will likely outweigh the boost in demand for basic goods due to refugee inflow. Investment rebound slowed by lower confidence, delay in recovery plan and rising rates. Current account gap widening amid terms of trade deterioration, but net export's contribution to GDP growth may actually improve amid domestic demand cooldown.	After a strong two quarters (supported by the influx of refugees), consumption has started to decelerate under the impact of the drain on real incomes and dismal sentiment. Investment also slowed down after the first half of the year. Export growth in current prices remained high for most of the year, but the rise in energy and commodity prices and raw material prices worsened terms of trade and widened the trade deficit.
Labour market	Inflow of refugees may ease labour market pressures in the long run, but the short-term effect neutral at best, the impact will differ across sectors.	The labour market was very heated until the middle of the year, with wage growth exceeding forecasts. By the end of the year, however, a reduction in tensions was evident, helped by the slowing economy and the influx of refugees taking up work.
Inflation	Energy and food price shock will drive inflation higher – despite the likely extension of temporary tax cuts CPI may stay in double digits until late summer. Core inflation, after jumping above 7% in mid year, should start easing in 2H amid lower demand.	The increase in energy, raw material and food prices under the impact of the war pushed inflation well above forecasts, which overlapped with the pressure generated by the resilient demand. The inflationary impulse spread across all categories.
Monetary policy	Interest rate peak will be higher due to inflation surprise, pressure on the currency and looming fiscal easing. We think the NBP will stop rate hikes at 6% in mid-year	The scale of the increases had to be higher with much higher inflation. The flexible approach to targeting allowed the MPC to keep rates at 6.75% despite projections indicating no return to target over the standard horizon.
Fiscal policy	Higher costs of anti-inflation measures, refugee inflow, new tax reductions, defence spending will boost fiscal deficit in 2022 to c.4.5% of GDP, at least. We still hope for unfreezing the EU funds, but the government does not seem to hurry, so the inflow of money before the year-end may be negligible.	The war in Ukraine and the energy crisis have resulted in unforeseen fiscal costs (around 3% of GDP), yet the deficit may be close to the planned 3% of GDP due to much higher revenues supported by very high inflation. The EU recovery fund remains frozen, although the talks are in progress.
Fixed income market	We see positive circumstances for a return of foreign demand, but the expected increased supply could prevent a quick fall of bond yields even at the time when the war in Ukraine would be over. Yield curve compression should be seen until the middle of 2023, bullish steepening should follow as the MPC moves to rate cuts.	The NBP rate hikes chasing inflation, the proximity of war, the global deterioration in sentiment, the increase in fiscal risk - all this pushed yields much higher than expected. The curve inverted as usual when the market started to believe in the end of the hike cycle.
FX market	The war in Ukraine redrew the FX landscape in the region, sending PLN to the weakest levels ever. Its recovery is already advanced but may face burdens in the form of weaker than usual relative economic performance of Poland.	The war in Ukraine and then galloping inflation pushed the zloty to its weakest levels ever. The conflict with the EU over the rule of law did not help either. The year-end rebound was helped by global sentiment, weaker dollar and drained PLN liquidity.



2023: Forecasts and main risks

Indicator	Our view (in a nutshell)	Main risks
GDP	In our view, 1Q2023 will be the trough of the mini-recession, and then the economy will gradually rebound. A weak starting point (opposite to the 2022 situation) will weigh on the average annual growth rate, which we forecast to be close to zero.	Risks symmetrically distributed: on the negative side: prolonged freeze of EU funding, severe winter aggravating EU energy deficit, escalation of war; on the positive side: quick end to the war and rebuilding of Ukraine, influx of re-shoring investments.
GDP breakdown	Consumption will be the most resilient component of demand, but will also slow markedly. Investment will fall, as will exports and imports, affected by the global recession, but the contribution of net exports to GDP will be positive, as in 2022. The contribution of inventories to GDP will be clearly negative.	Failure to unlock the Recovery Fund would mean a much stronger and longer investment slump. Very difficult to predict inventories – if there is a correction, it could be much deeper than expected. Risks to consumption are symmetric: negative real interest rates vs. decelerating incomes.
Labour market	The economic downturn and the worsening corporate performance will translate into a decline in demand for employees. However, the scale of redundancies and the increase in unemployment should be moderate. Wage dynamics will be similar on to 2022 average. A stronger deceleration will be prevented by a jump in the minimum wage by c20% in total.	The rise in unemployment and wage slowdown will be proportional to the depth and length of the recession. An additional factor that could dampen wage demands could be another large wave of refugees (services are already seeing the impact of an earlier wave).
Inflation	After peaking in February (slightly above 20% y/y), inflation should slide later in the year, but we do not expect a drop below 10% until 2024. Core inflation to remain in a similar disinflationary trend and to decline to around 6% by the end of 2023.	Signals from financial markets (rate cuts expectations) suggest downward risks for inflation. Disinflation could be faster in a scenario of a deeper recession in Poland and abroad. However, in our view, the risks to economic growth, and therefore to inflation, are symmetric.
Monetary policy	The MPC accepts a postponed return of inflation to target and no longer intends to raise interest rates. However, our scenario implies that there are no conditions to start rate cuts, at least until the end of 2023.	Deviation of rates up or down from the baseline scenario will depend on the behaviour of inflation. Resumption of increases possible if CPI clearly above forecasts, start of cuts (towards the end of the year) if disinflation is faster.
Fiscal policy	The draft budget assumes an increase in the fiscal deficit to 4.5% of GDP but we estimated the actual one will be slightly higher (over 5%) due to new spending related to the energy crisis.	Lower-than-expected GDP and CPI are the biggest risks to the public finances. New costly measures during the election campaign cannot be completely ruled out.
Fixed income market	We expect the downward trend in domestic bond yields to continue, supported by disinflationary processes in Poland and abroad - even if this process was to be much slower domestically. A temporary increase in yields is possible in the first months of next year.	Potential problems with financing the budget's borrowing needs resulting in a more significant increase in the risk premium.
FX market	The first months of 2023 may be difficult for the zloty (the recession trough), but we assume that in the later part of the year the domestic market liquidity situation and the gradual improvement in global investment sentiment will have a dominant impact on the zloty, leading to its gradual appreciation.	Possible budget problems may force the need to increase the liquidity of the zloty on the domestic currency market in circumstances of increasing risk aversion in the CEE region (e.g. escalation of the war in Ukraine) and weaken the zloty.

Economic growth

1

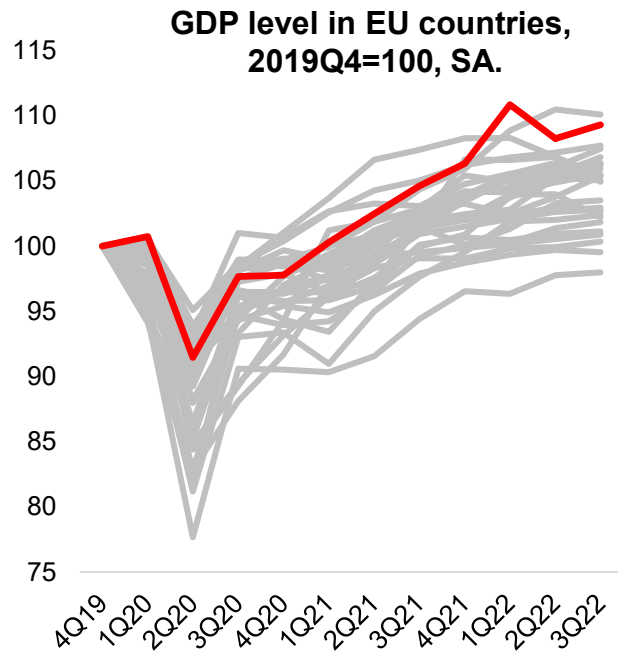


GDP forecast: Winter Is Coming

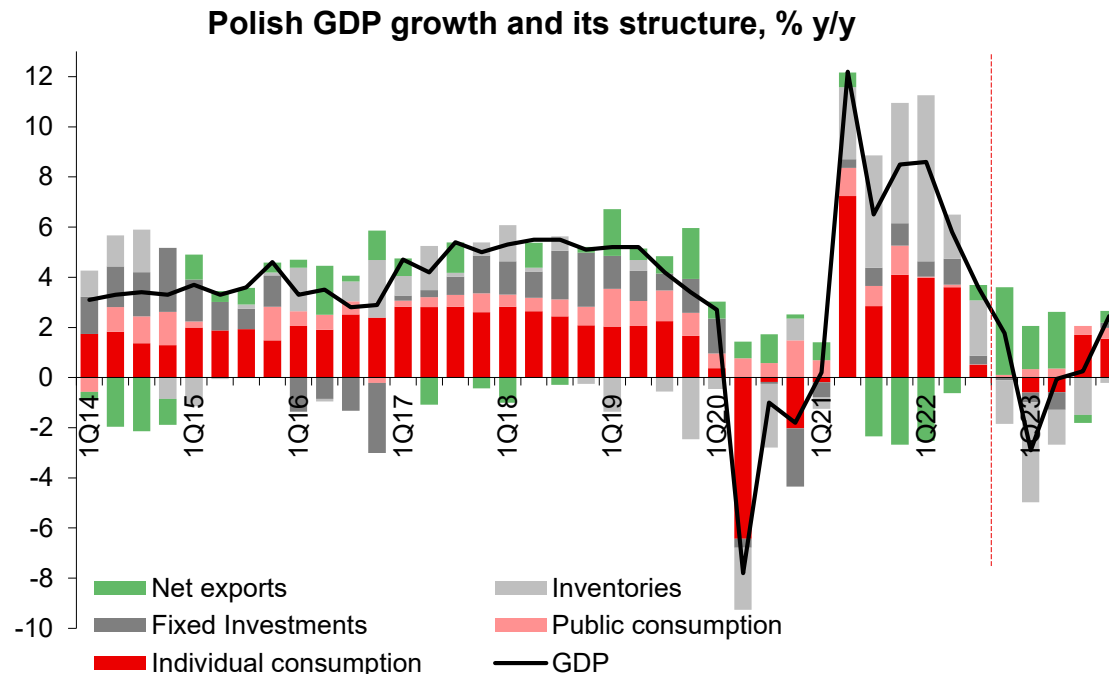
Poland led the post-pandemic recovery in Europe, which culminated in 1Q22. In 2Q, Poland experienced the largest q/q GDP decline in the EU, but this was largely due to inventory adjustments. Meanwhile, there has been a strong revision of historical data, both in terms of the level and structure of GDP, and, taken together, the first three quarters of 2022 have turned out to be markedly better for the economy than we had previously assumed. As a result, **this year's GDP growth is likely to be around 4.7%, close to our forecast from a year ago**, despite the completely different quarterly path.

However, the deceleration of the economy has already started and will continue in the coming quarters. We forecast a moderately short and mild recession, with the bottom of the cycle coming in the first half of 2023. **GDP growth in y/y terms is likely to go well into negative territory in 1Q23, and will be close to zero on average for the year as a whole.**

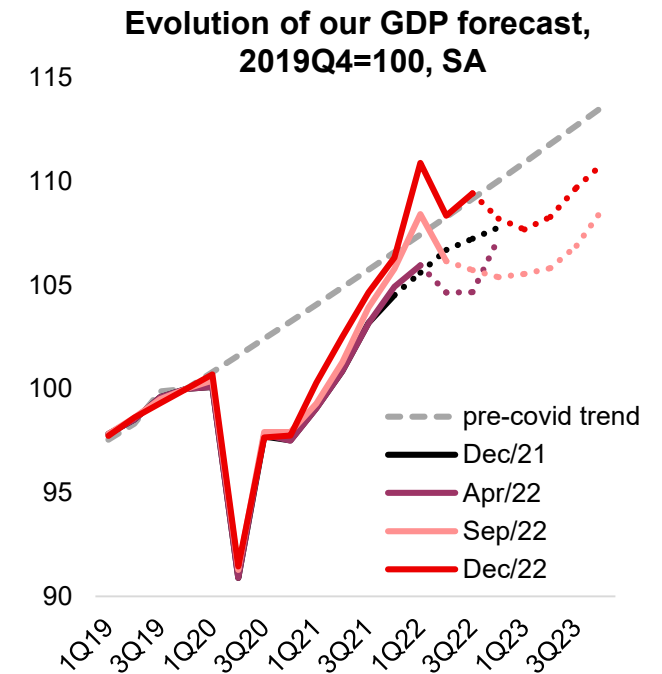
The main risks for this scenario on the negative side are: escalation of the war in Ukraine, a harsh winter (which could mean energy rationing in Europe), a failure of the government's efforts to unlock EU funds. The risks on the positive side are mild weather, a quick end to the war and the start of Ukraine's reconstruction, an influx of investment into Poland as part of re-shoring processes.



Source: Eurostat, GUS, Santander



Source: GUS, Santander



Source: GUS, Santander



Global business environment is worsening

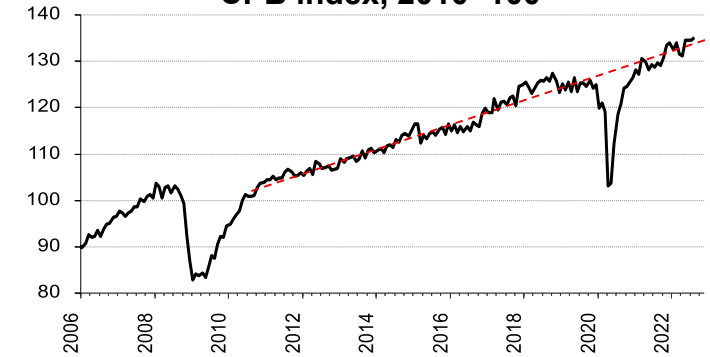
All the major leading indicators herald a deceleration of the global economy, which will be particularly acute for Europe. **Germany and the Eurozone are getting closer to a recession scenario.** Nevertheless, it is worth noting that some sentiment indicators already seem to be bottoming out. If the winter is not too severe, the risk of an energy shortage will decrease and the bottom of the cycle in Europe may not be particularly deep.

For the time being, there is no clear disruption of the trend in international trade flows. However, a weakening is to be expected, firstly for cyclical reasons (lower demand for raw materials and commodities due to weakening global demand) and, in addition, as a result of the fact that the current geopolitical processes may contribute to a progressive deglobalisation, re-shoring, fragmentation of markets.

As a result, a clear weakening of the dynamics of Polish exports in the coming quarters is to be expected. Economic surveys are already pointing to a weakening of foreign demand for domestic goods.

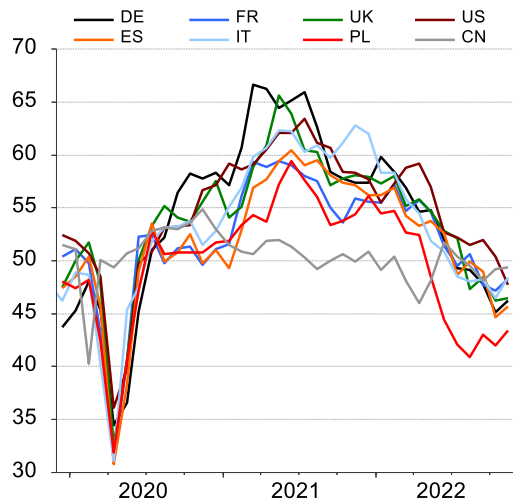
In the baseline scenario, we assume a gradual improvement in the global economy in 2H23.

Global export turnover is still rising: CPB index, 2010=100



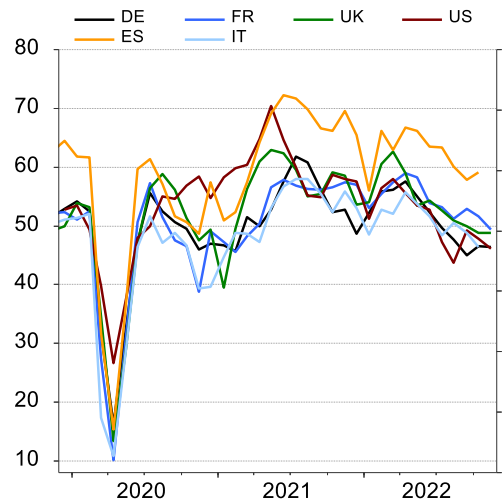
Source: Refinitiv Datastream, Santander

Manufacturing PMIs



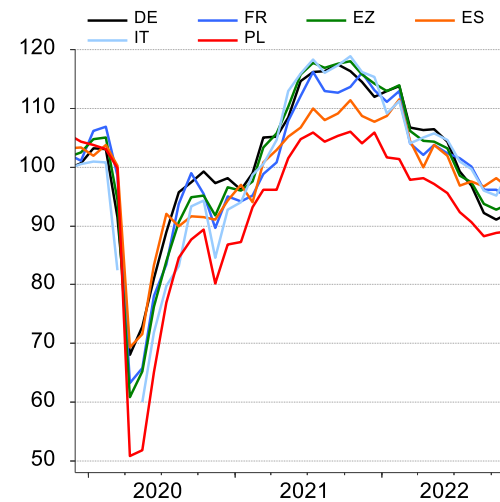
Source: Refinitiv Datastream, Santander

Services PMIs



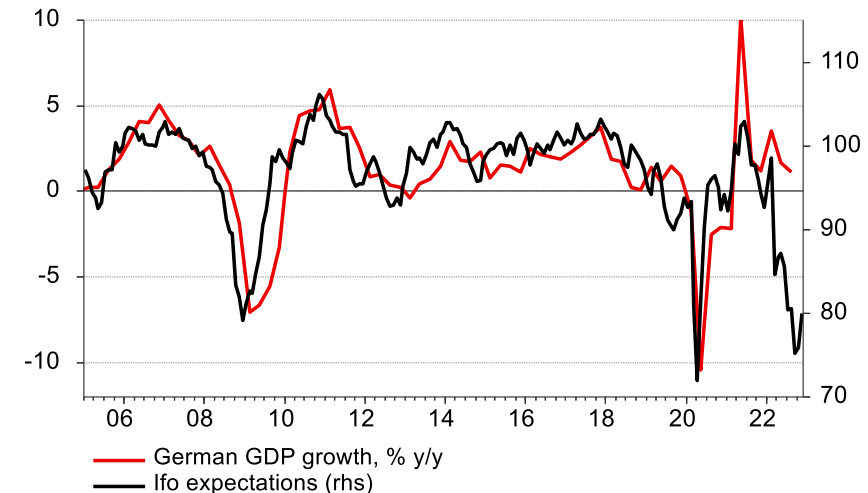
Source: Refinitiv Datastream, Santander

ESI: overall economic sentiment



Source: Refinitiv Datastream, Santander

Ifo index vs. German GDP growth



Source: Refinitiv Datastream, Santander

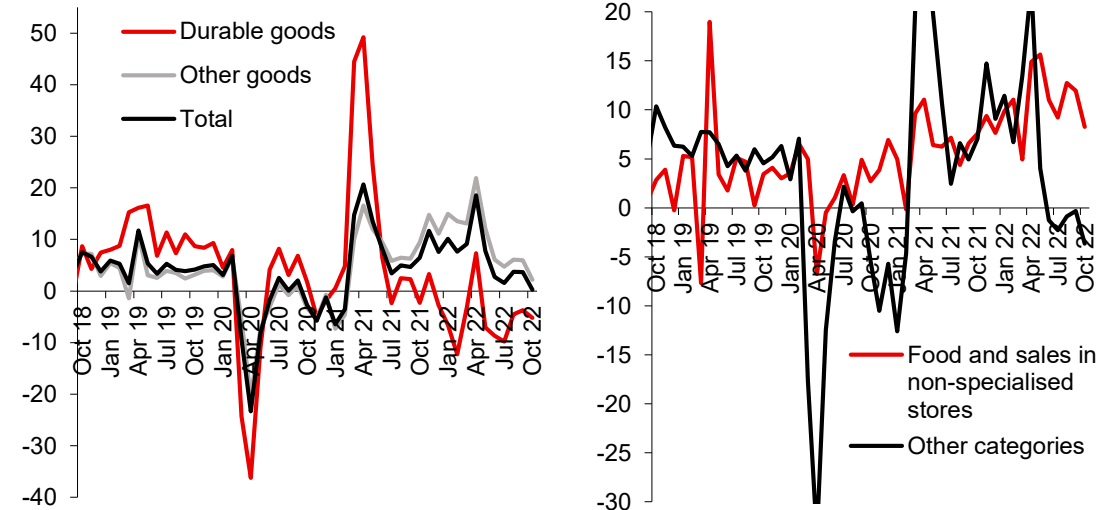
Consumption is braking (1)



In our [July MACROscope](#) we wrote we were moderately optimistic about private consumption growth this year. At the time, wages were rising in real terms and we assumed that households would smooth consumption at the expense of lower savings, with an influx of refugees providing additional support. To a certain extent, this was the case - consumption growth in 1H22 was indeed solid (over 6% y/y), but 3Q already brought a correction to 0.9% y/y. The scale of the consumption slowdown in 3Q exceeds, in our view, what other available signals on consumer demand indicated. This is all the more difficult to interpret as there was a further escalation and spill-over of the inflationary impulse at the same time, which should be difficult in a contracting demand environment.

It cannot be ruled out that future data revisions will change this picture to a slightly less negative one (e.g. by reclassifying part of the increase in inventories). Such situations have already been seen in the past. Nevertheless, **the positive trend in consumer spending is beginning to wane** and the factors that sustained it are gradually losing strength.

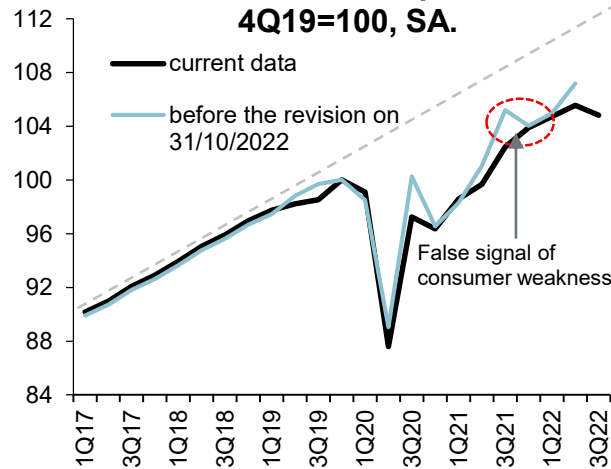
Retail sales in constant prices, % y/y



Source: GUS, Santander

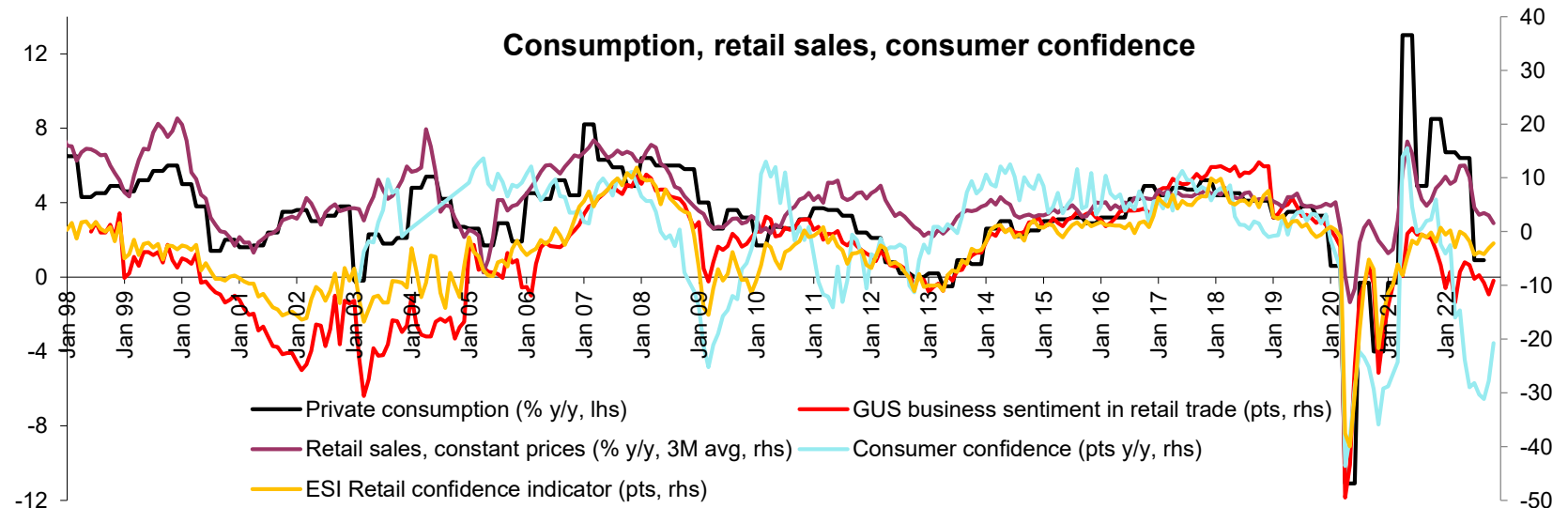
Source: GUS, Santander

Private consumption, 4Q19=100, SA.



Source: GUS, Santander

Consumption, retail sales, consumer confidence



Source: GUS, Santander



Consumption is braking (2)



The household saving rate has clearly retreated after rising sharply during the pandemic period and has already fallen to a record low by the middle of this year. Deeply negative real interest rates are theoretically still a strong disincentive to save. However, the room for a further decline in the savings rate appears to be running out, and this may be influenced by, among other things, a sense of uncertainty and concerns about one's security (financial, energy, employment).

A key factor limiting the room for spending in the coming quarters will be the decline in real incomes. Inflation has already outpaced the growth of wages and social benefits in 3Q22 and this situation will not change soon. In addition, consumer credit has stopped rising (p.24).

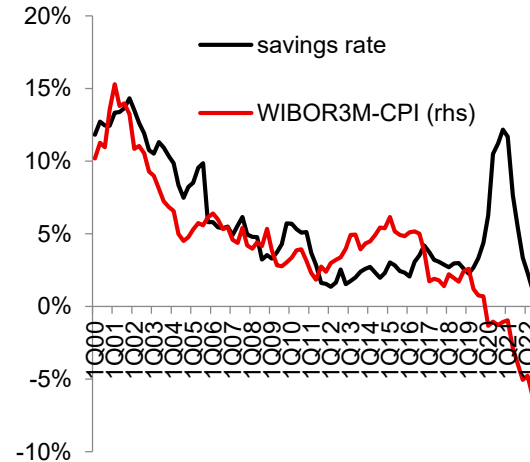
A buffer for consumption is provided by the government's measures protecting household budgets from the shock increase in the cost of living. Total household gains from allowances, benefits and loan moratoria can be estimated at over PLN70bn.

Nevertheless, the next quarters are likely to bring a further slowdown. **Our forecast for consumption growth is around 3.5% in 2022 and around 1% in 2023.**

The scale of demand weakness could prove to be smaller if the destruction of the energy infrastructure in Ukraine resulted in another large wave of refugees arriving in Poland.

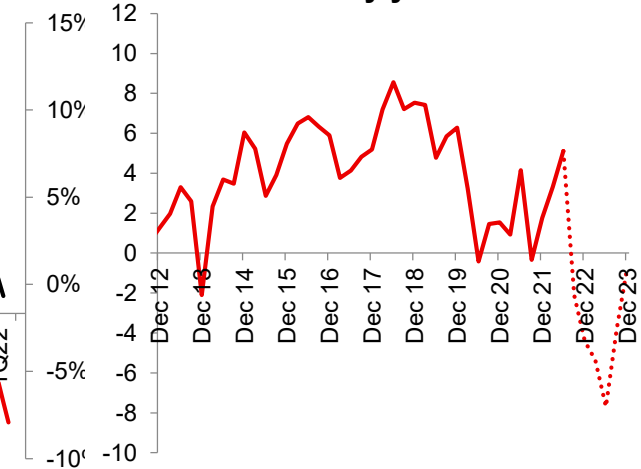
According to our estimates, in 2022, the expenditures by Ukrainians could have accounted for about 1% of Polish individual consumption and were visible mainly in the sale of non-durable goods (food, clothing, hygiene products). Without them, the deceleration of consumption would probably have started earlier, already in 2Q.

Household saving rate and real interest rate



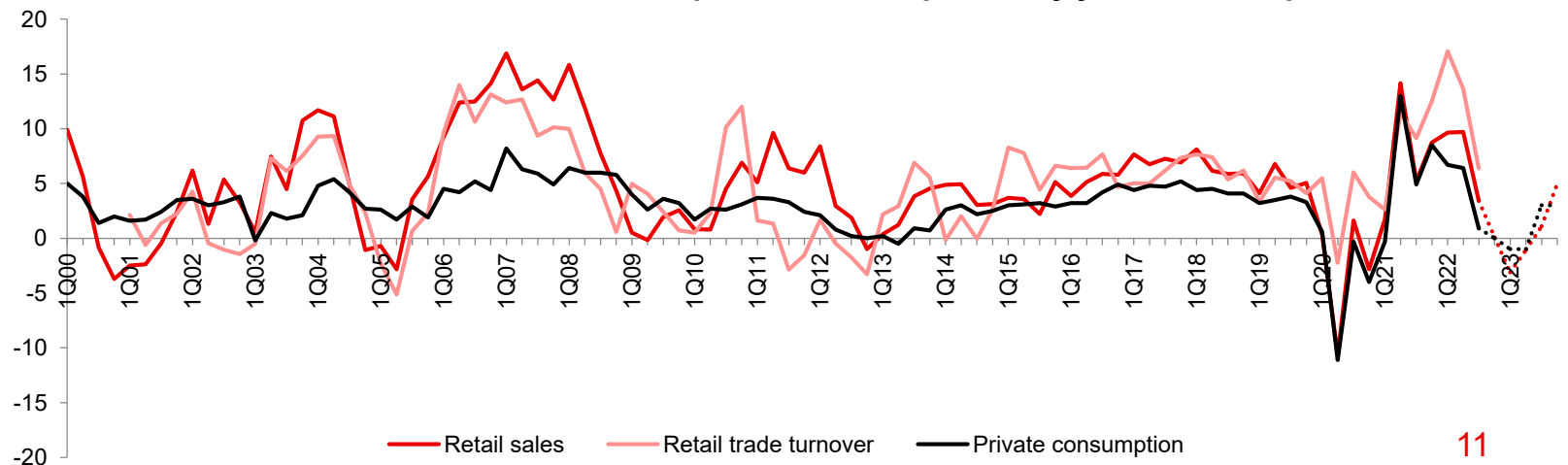
Source: GUS, Santander

Real growth of labour income % y/y



Source: GUS, Santander

Retail sales, retail trade turnover, private consumption, % y/y, in constant prices



Source: GUS, Santander

Signs of weakness in card payments



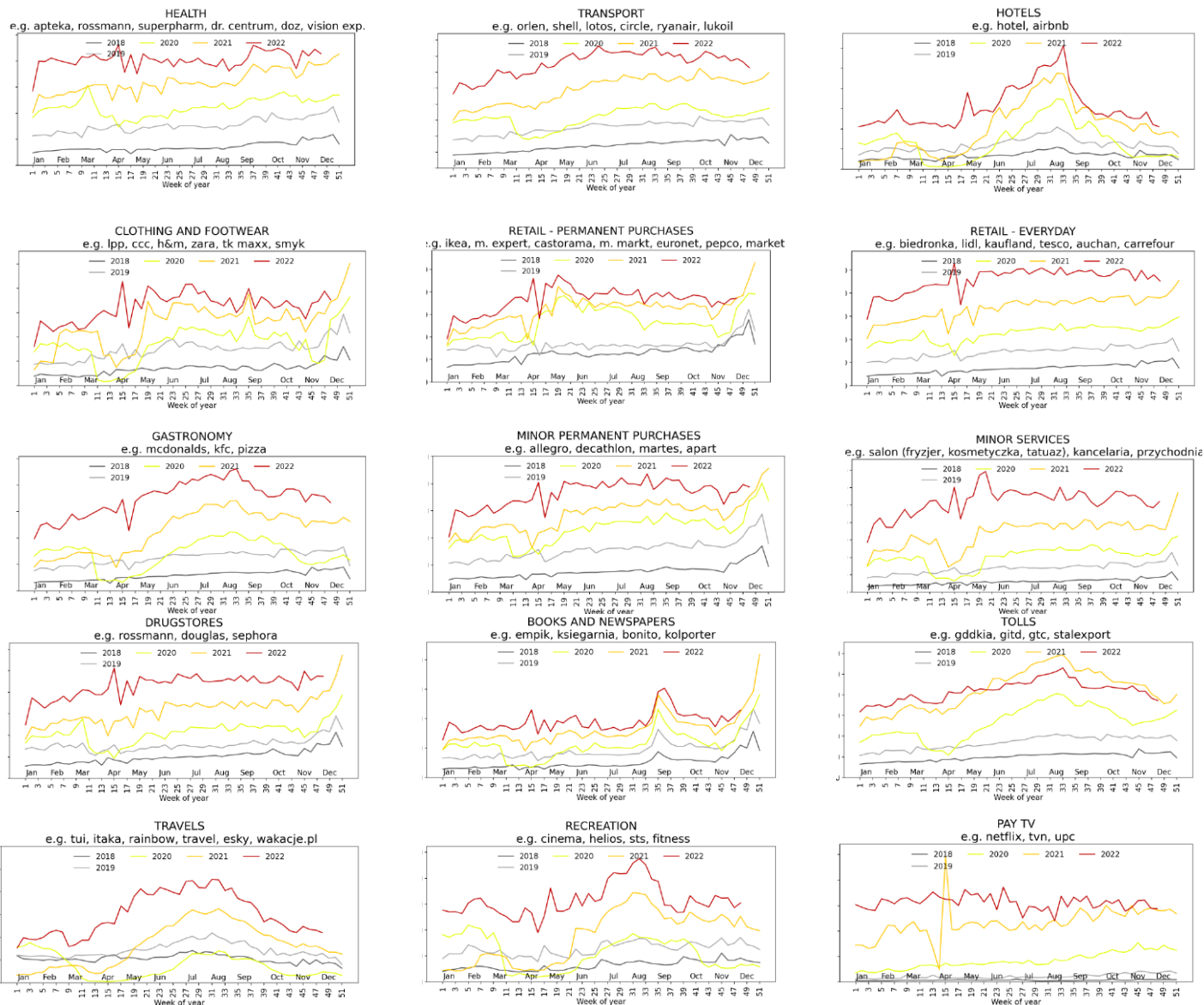
Santander Bank Polska card payments: selected categories, number of transactions

Santander Bank Polska's card payment data are showing worrying trends:

After a fairly solid start to the year, the y/y growth rate of payments began to weaken in most categories, and this trend has accelerated in recent weeks.

It appears that the revival in shopping activity during the Black Week, Black Friday and Cyber Monday special offers period was clearly smaller than the seasonal pattern would suggest.

Travel, leisure and gastronomy services, which held strong in the first half of the year on the wave of post-pandemic recovery, are also starting to slow down more and more. Apparently, consumers have started to cut back spending on goods and services that are not necessities.



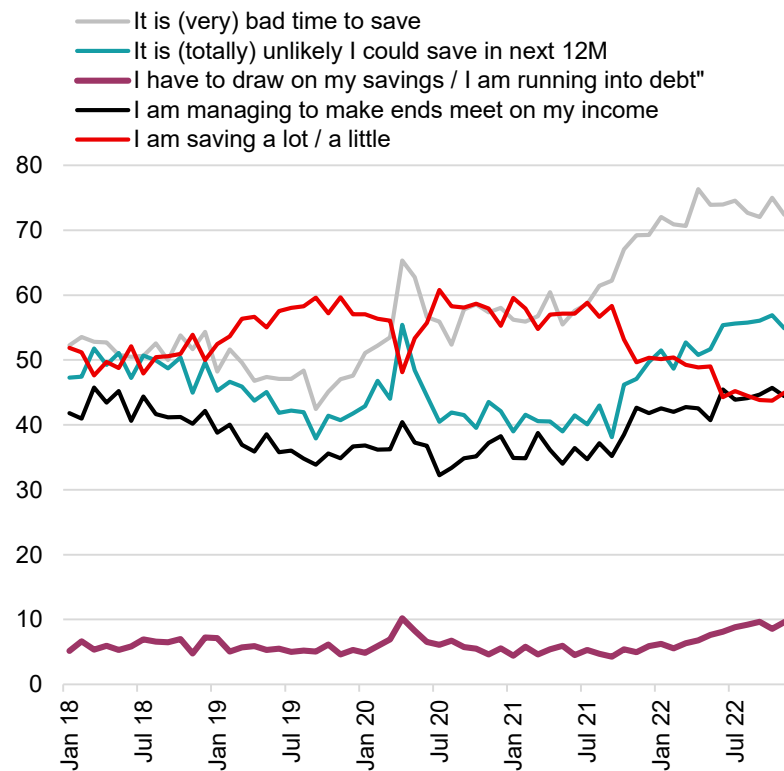
Source: Santander



Savings have started to shrink

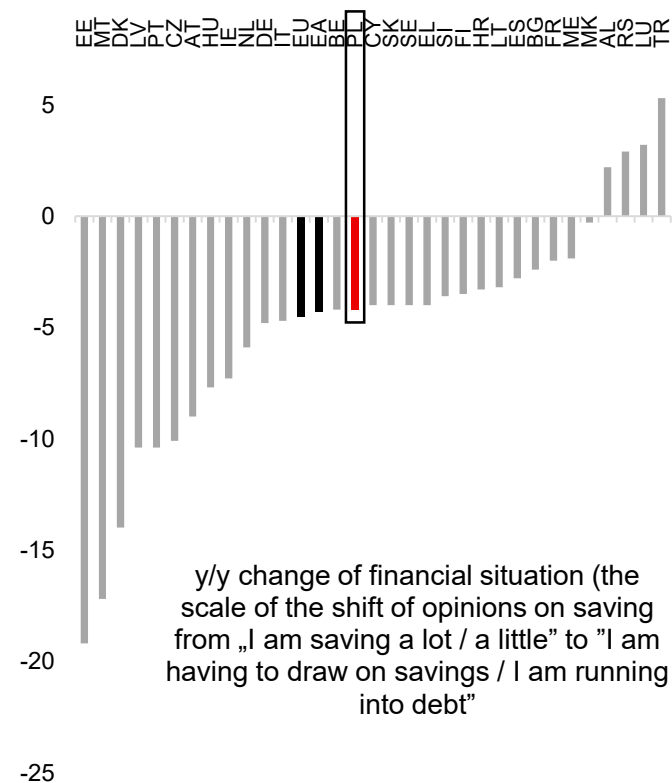
Surveys suggest that the rising cost of living has pushed consumers to tap into previously accumulated savings. The loss of the ability to increase savings is increasingly reported. The scale of the phenomenon in Poland is rather moderate compared to other European countries. The erosion of accumulated assets can also be seen in the data on financial accounts. By the middle of this year, household financial assets had still not returned to the pre-pandemic trend line, but if the current negative tendency continues, there will not be much excess reserves left for 2023.

Consumer confidence: opinions regarding saving



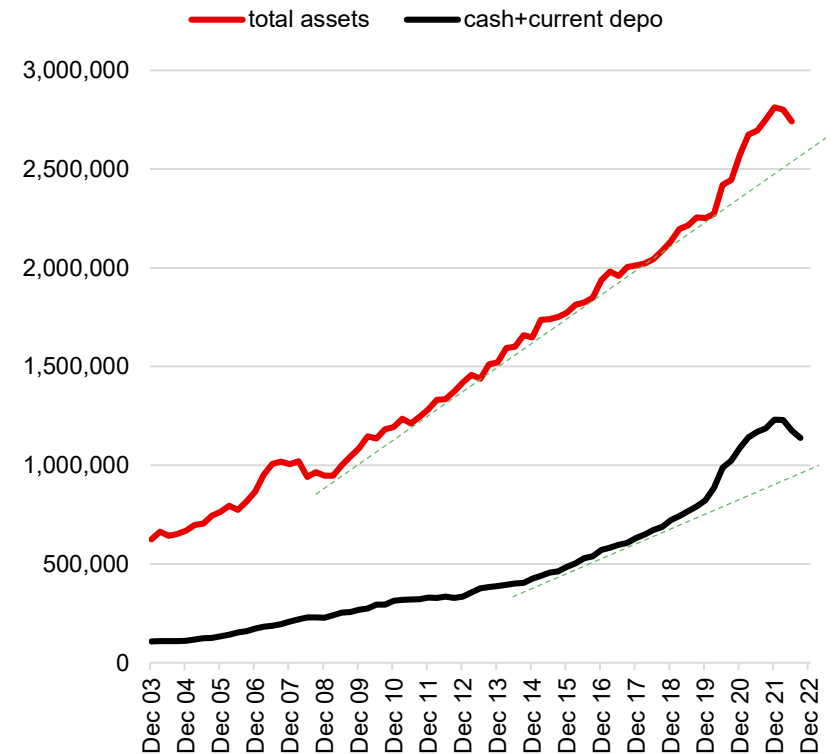
Source: GUS, Santander

ESI indicator of financial situation, y/y change



Source: European Commission, Santander

Financial assets of households, PLNmn



Source: NBP, Santander



Companies face a deterioration in results

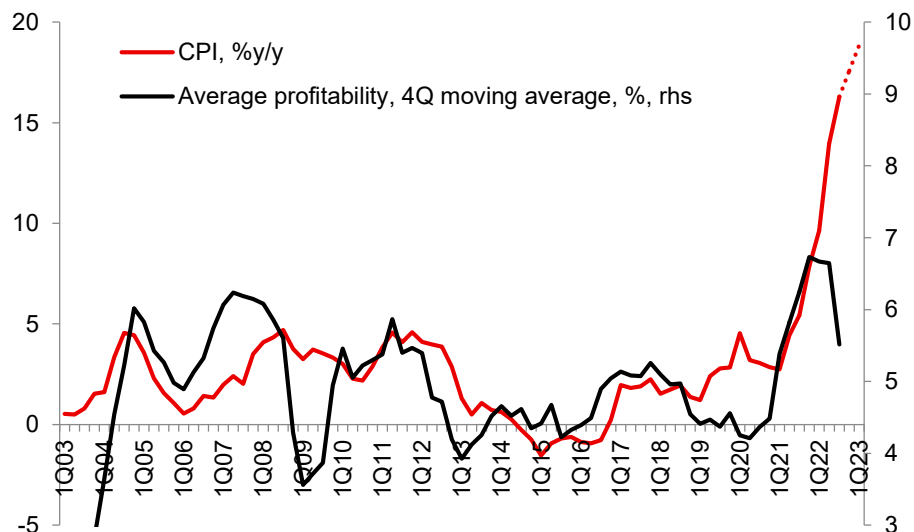
Companies employing 50 or more people reported a **marked deterioration in financial results in 3Q22**. Gross financial result was half that of a year earlier, with gross profitability falling to 2.4% from 6.9% a year earlier. The scale of the margin decline was the second largest since comparable data are available (1996). Only during the 2008 crisis did margins fall more sharply. It is worth noting, however, that the data from earlier quarters already pointed to growing problems - although the headline figures still looked good, an in-depth analysis showed that profits were concentrated in the energy and raw materials sectors, while the number of companies reporting losses and the average size of losses increased.

Although energy costs almost doubled, at the end of the day they are not a significant driver of cost growth across the sector, with materials and third-party services contributing the most to total cost growth.

We expect companies' financial results to be under pressure in the coming quarters, which will have a negative impact on their propensity to invest, hire and raise wages.

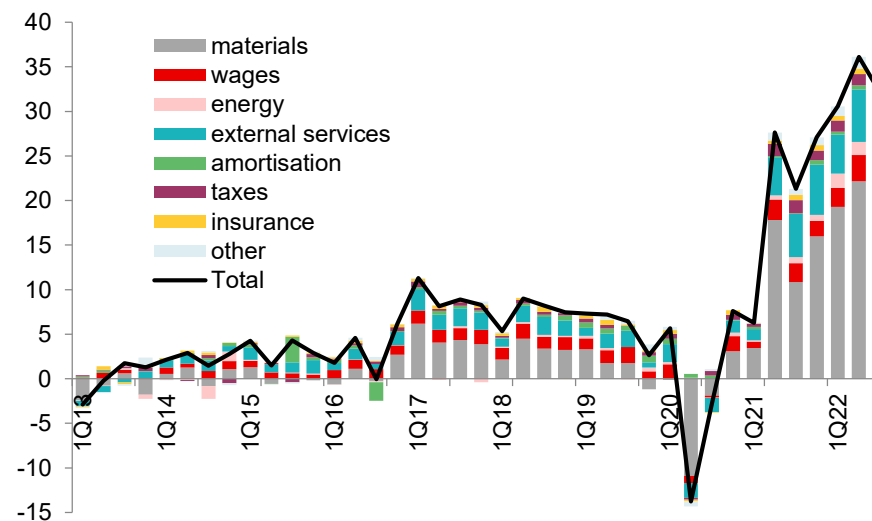
Declining margins have often heralded a fall of inflation. In our view, this is because when companies experience weakening demand, they lose the ability to raise prices without sacrificing sales volumes, which, with time, leads to a brake on price increases.

Financial results of companies employing 50+ people vs. inflation



Source: GUS, Santander

Breakdown of companies' cost growth, % y/y



Source: GUS, Santander

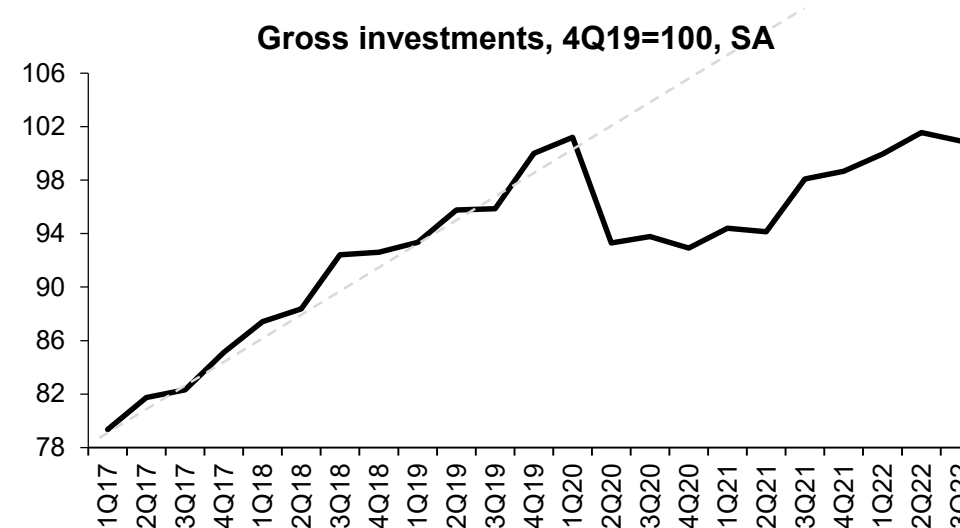


Investments rose until mid-2022

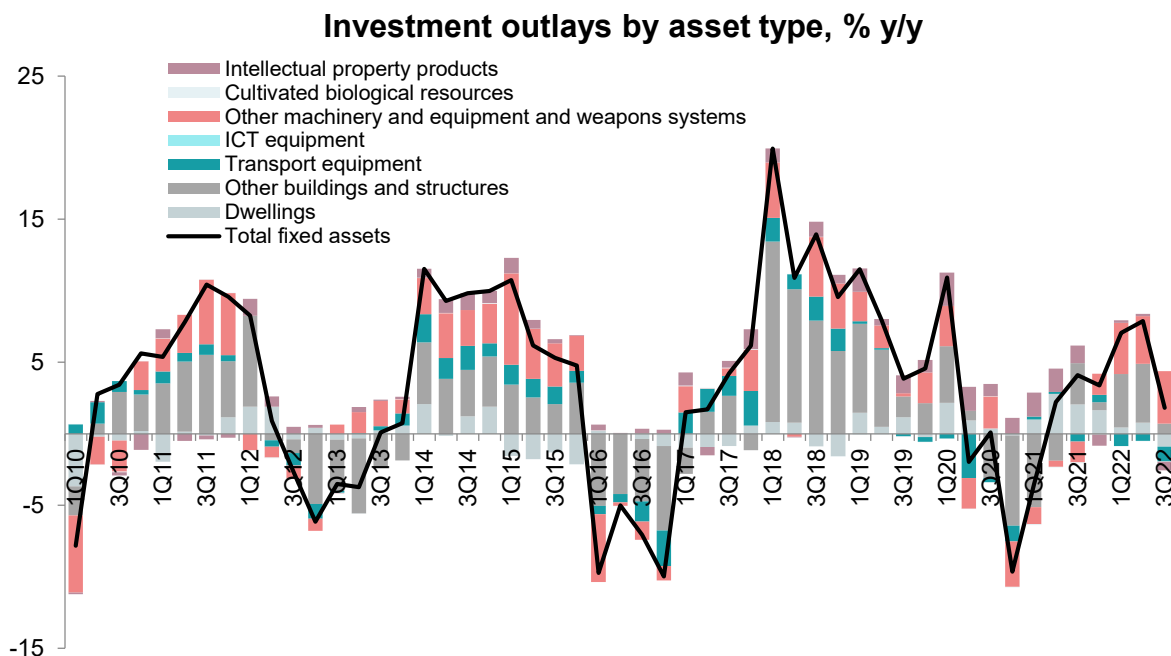
During the Covid-19 crisis, investments fell less than consumption, but subsequently recovered much more slowly and remained clearly below the pre-pandemic trend. Nevertheless, investments were surprisingly resilient in 1H22, thanks in large part to strong corporate and local government spending. The two main drivers of investment growth by asset type were spending on machinery and non-residential buildings.

Only 3Q brought a more pronounced deceleration in investment spending, mainly in construction (both housing and non-housing).

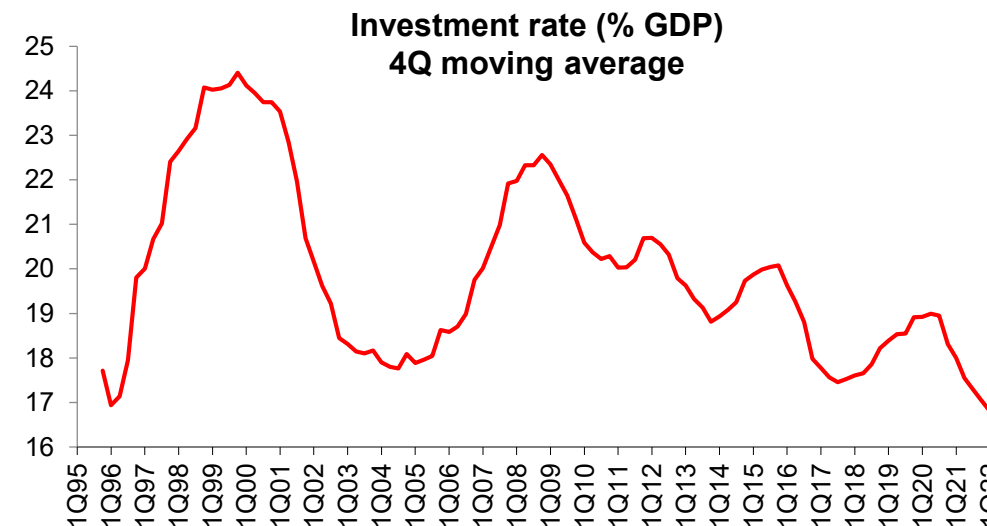
The investment rate (their share of GDP) reached a new record low in 3Q22 at 16.6%.



Source: GUS, Santander



Source: Eurostat, Santander



Source: GUS, Santander



Investment to decline in 2023

We think that investments will be weak in 2023 and expect them to decline in real terms.

Inflow of EU funds is slowing down, and thus the volume of investment financed from this source. The prolonged freeze of the Recovery and Resilience Fund ([p.17](#)) will be negative for investment in companies and local governments.

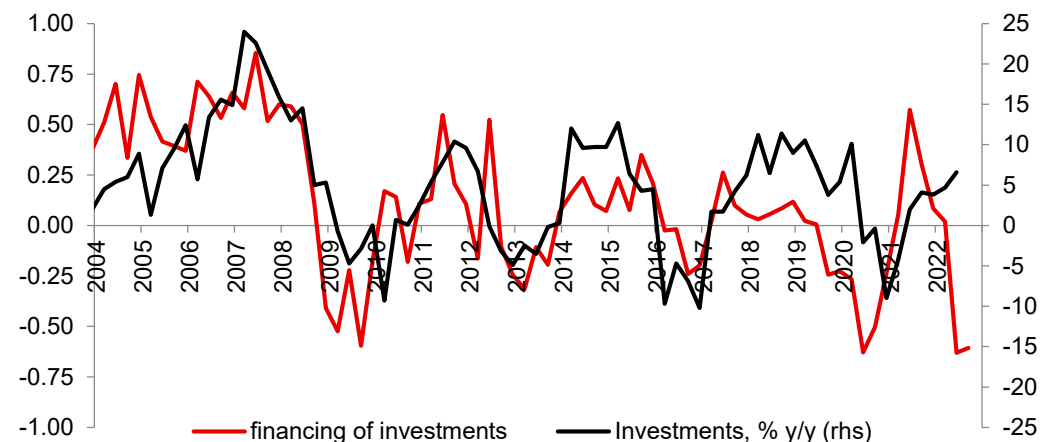
In the last few quarters, local governments have maintained a positive investment growth rate despite the declining value of EU-funded investments. However, we do not believe that this situation can continue in the long term. Similarly, a weak inflow of EU funds will weigh on business investment. Investment optimism indicators among entrepreneurs are at very low levels anyway, and financial performance is deteriorating rapidly, suggesting a decline in investment in this sector.

The collapse in the mortgage market ([p.23](#)) and its poor prospects in the face of the high expected path of interest rates means that there is little hope for a rebound in household investment either.

The outlook for government investment was slightly better until recently. Government outlays largely depend on spending for major infrastructure investments, especially roads and railways. Road and railway expenditure took off recently, following the weak 2020-2021 period. Plans were ambitious and it suggested that 2023 could look good as well. However, the government's search for budget savings in recent weeks suggests that public investments may suffer. Investment spending in the sector may be supported by increased military spending, however.

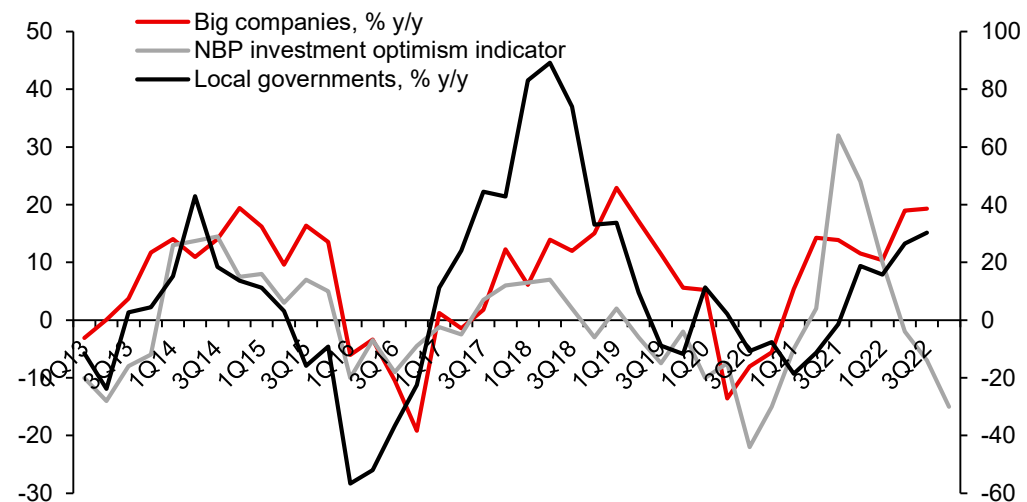
We forecast that investment will fall by around 1% in 2023, following a 3% increase in 2022.

Signals from NBP credit survey vs investment growth



Source: GUS, NBP, Santander

Investment growth vs NBP investment optimism indicator



Source: GUS, NBP, Santander

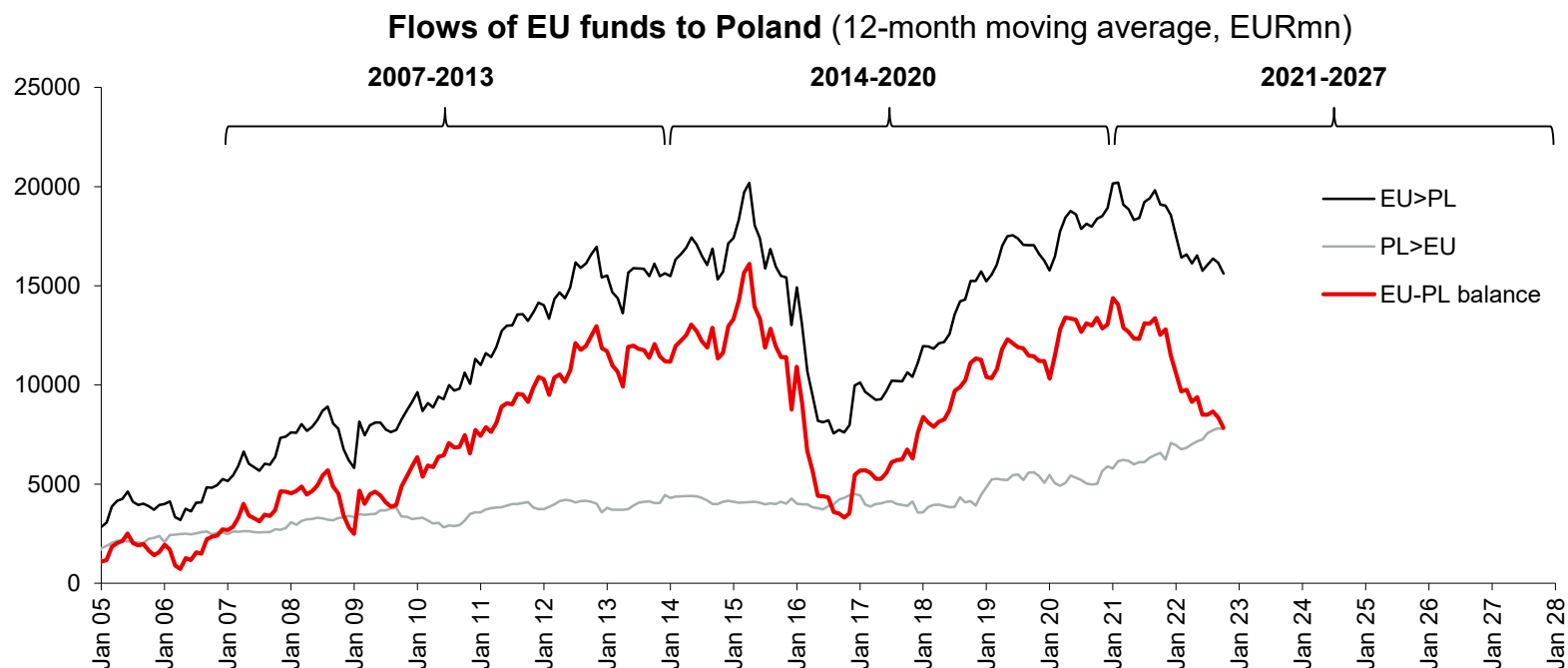


Recovery Fund still frozen

The prolonged freeze of EU funds disbursements is one of the key risk factors for the 2023 macroeconomic scenario. According to our estimates from a year ago, if the payments from Recovery and Resilience Programme are blocked completely, it could reduce GDP in 2023 by around 1%.

In recent weeks, the Polish government has stepped up its efforts to meet the conditions for triggering Recovery Fund disbursements. This is very good news, as signals from the European Commission suggested that not only the Recovery Fund but also the Cohesion Funds under the new seven-year EU financial framework (€75bn for 2021-28) could be blocked until an agreement on the rule of law is reached. And funds from the previous framework are already almost depleted ([p.18](#)).

In the baseline scenario, we assume that access to EU funds will be unblocked in the coming months, which should prevent a drastic collapse in public investment in 2023 and a deterioration in the current account financing, as well as increase BGK's 'ammunition' to stabilise the currency if needed. Nevertheless, some projects are likely to be implemented with big delays and some funds may be lost due to tight deadlines.



Source: Ministry of Finance, Santander

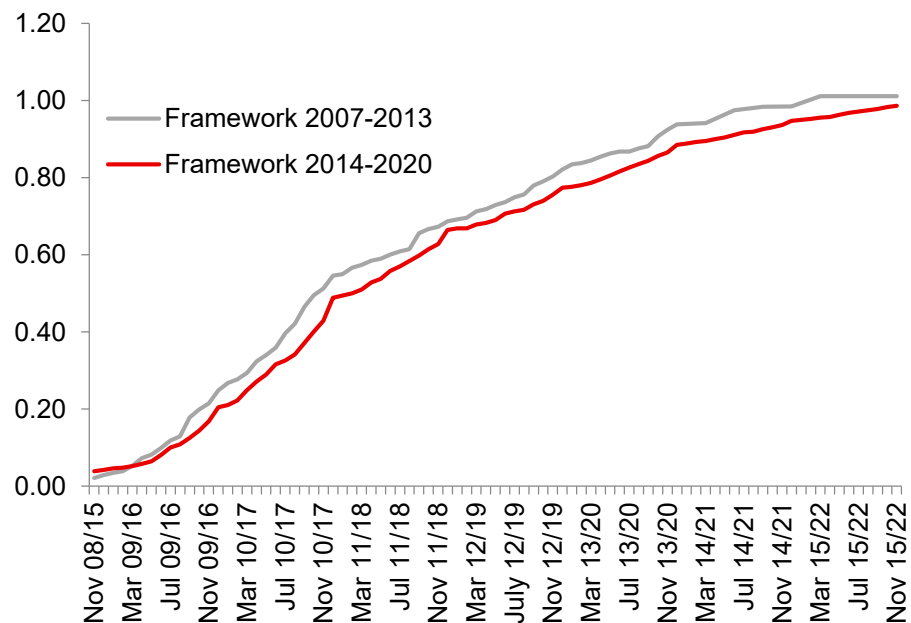


How much is left of 2014-2020 EU framework?

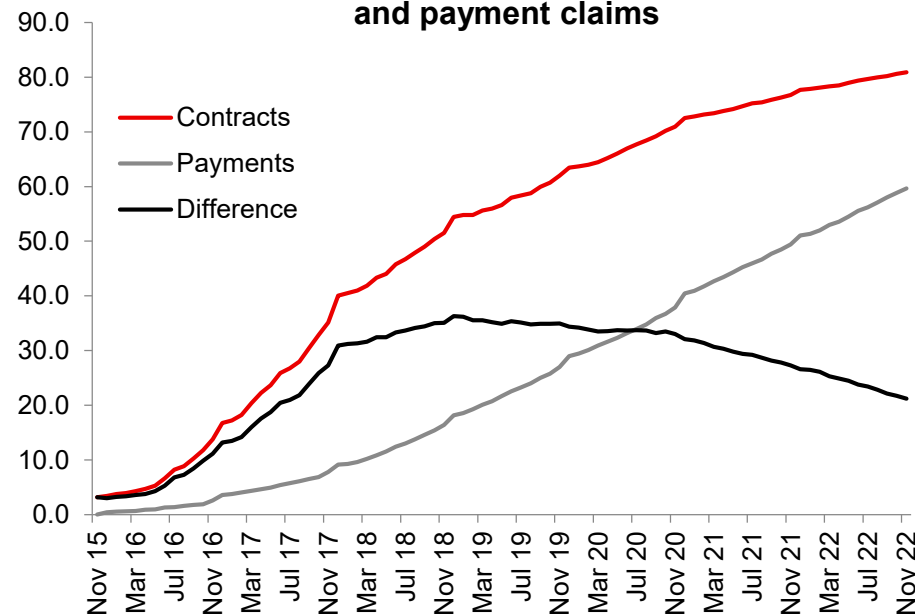
At the end of November, the utilisation rate of EU funds (signed contracts) from the 2014-2020 framework was at around 99%. Therefore, the funds are already running out and there is only about EUR1bn available, which we believe will be contracted by the end of this year.

Let us remind that the EU-funding process starts with the submission of an application, followed by the signing of a contract and the implementation of the investment, followed by the submission of a payment application and finally by actual payments. The total value of signed contracts (for the EU funding part) is around EUR81bn and the total value of payment claims is around EUR60bn. This means there are about **EUR22bn** uncontracted or unclaimed funds. In our opinion, the bulk of this sum should be transformed into payments over the course of the next two years (the payment rate is more or less equal to EUR10bn per annum).

**Utilisation of EU funds
– signed contract as % of the budget**



**Value of signed financing contracts
and payment claims**





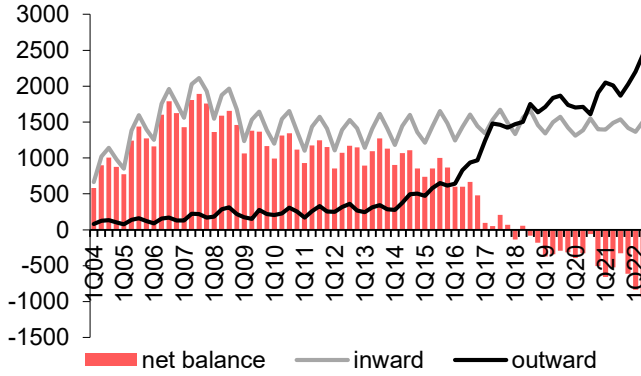
Balance of payments to deteriorate a bit more

There was a marked deterioration in the current account balance in 2022: to around -4.0% of GDP from -1.4% in 2021. Reasons behind this development were: the weakening of European industry and the slower performance of domestic manufacturing, the rise in energy commodity prices (this effect subtracted around 1.5 percentage points) and the government's stimulation of domestic demand.

We are expecting a widening of the current account deficit in 2023 to around 5% of GDP. A decline in merchandise trade (recession in EU) and an increase in travel costs will worsen the balance of transport and travel services. The income balance may improve on the back of lower dividends from companies (rising migrant earnings transfers will work the other way). On the goods balance, we would see an opportunity for a decline in the deficit due to better terms of trade (falling commodity prices), but this will be hindered, in our view, by a surge in spending on military equipment, driving up imports by around 1% of GDP.

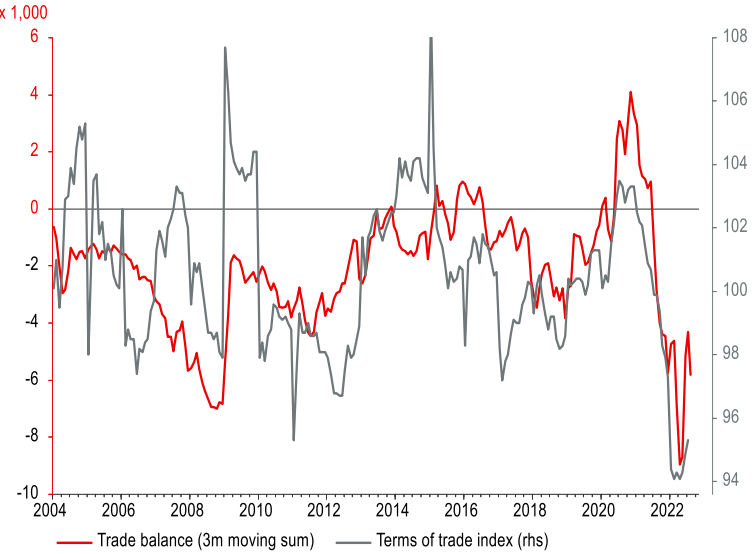
The financing of the deficit may worsen if inflows of EU funds and FDI slow, but should remain relatively secure.

Foreign remuneration transfers, € bn



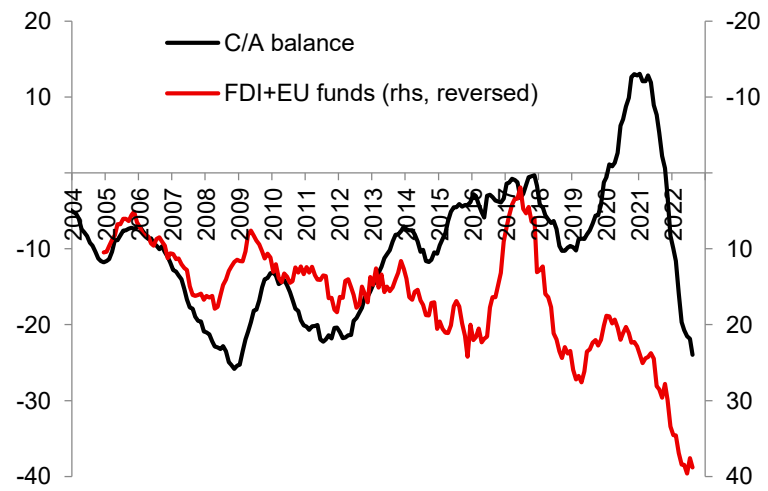
Source: NBP, Santander

Terms of trade vs trade balance



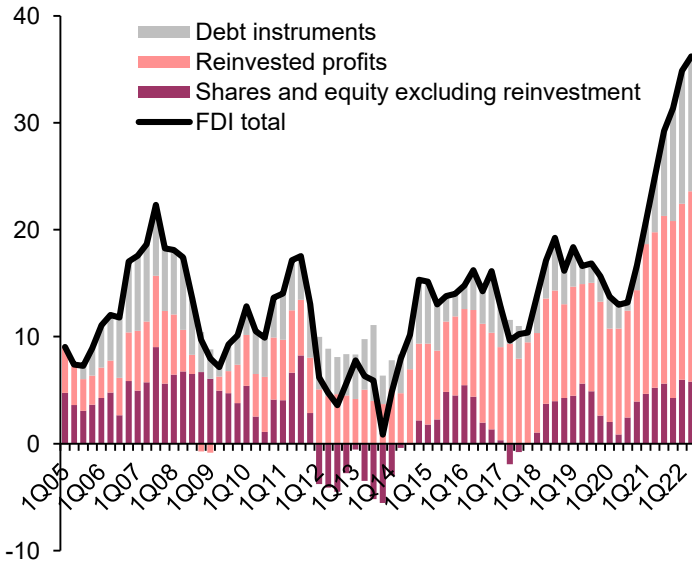
Source: Refinitiv Datastream, Santander

Current account balance and its coverage by long-term capital inflow (net FDI+EU funds), 12m moving sum, EURbn



Source: NBP, Santander

Gross FDI inflow, 4Q moving sum, €bn



Source: NBP, Santander



Year of twin deficits

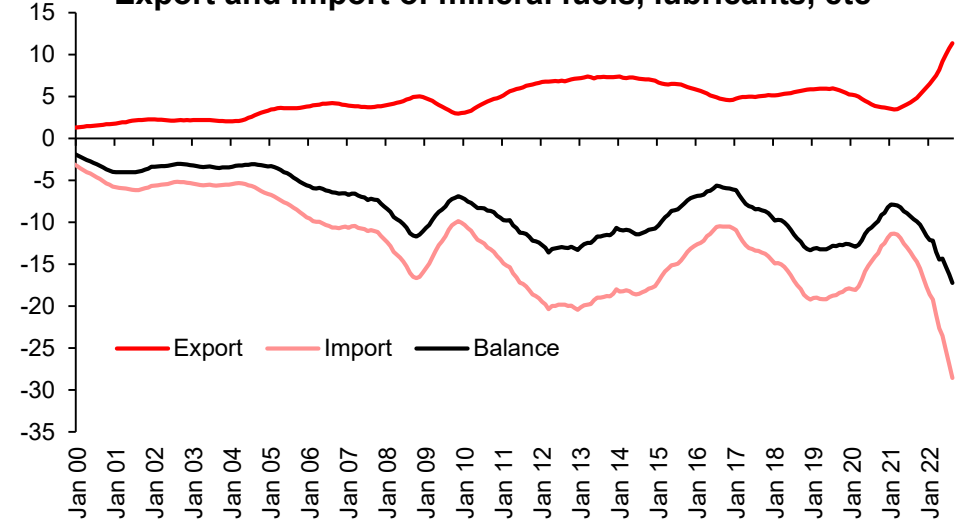
The external imbalances can also be viewed through the lense of institutional sectors. In principle, the sum of the surpluses/deficits of all domestic sectors (public sector, households, financial sector and non-financial corporations) is equal to the external balance of the economy (the sum of the current account and capital account).

In 2020 Poland has built up a large external surplus as, in addition to a sharp increase in the public sector deficit, there has been an even larger increase in surpluses in households (forced withholding of consumption) and firms (huge transfer of state aid, improved financial performance).

In 2021-22, despite the improvement in the government balance, the private sector balance began to worsen as consumption rebounded strongly, moving us back into deficit with the rest of the world. The government is now trying hard to support consumers, which will increase the government deficit (from 1.5% of GDP in mid-2022 to at least 5% of GDP in 2023) while delaying adjustment on the consumer side. The household sector balance sheet will improve but slowly. In turn, weaker performance of companies is likely to reduce the surplus in this sector.

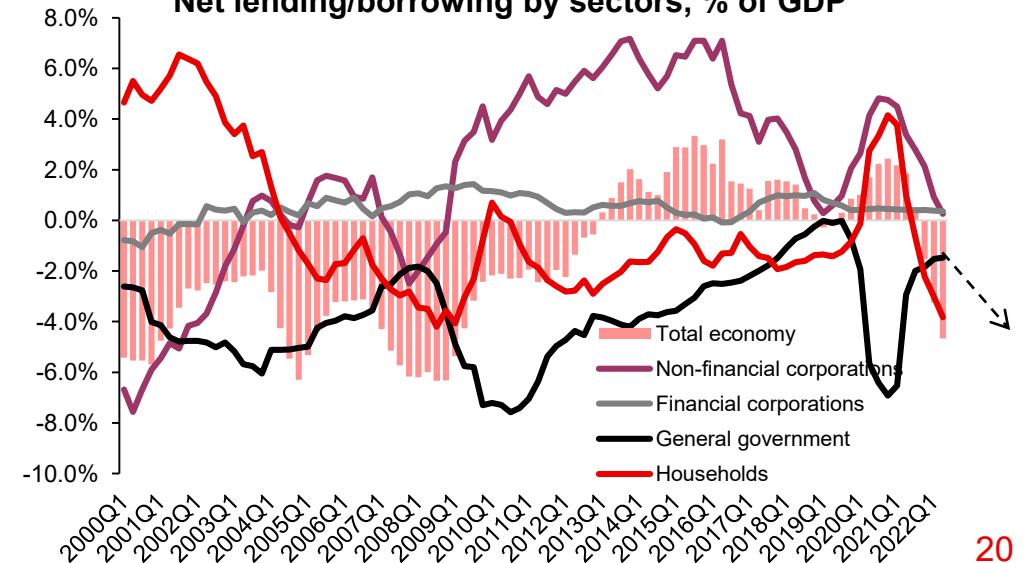
In view of these trends, **in the baseline scenario we assume that the external balance will deteriorate by around 1 percentage point of GDP in 2023.** It is noteworthy that this would be the first time in two decades that so-called twin deficits problem (deterioration of the fiscal and current account deficits at the same time) have occurred. Typically, fiscal expansion has occurred in parallel with a strong improvement in the private sector balance, resulting in a decline in external imbalances.

Export and import of mineral fuels, lubricants, etc



Source: NBP, Santander

Net lending/borrowing by sectors, % of GDP



Source: NBP, Santander

Inventories: burden for GDP in 2023, cure for inflation



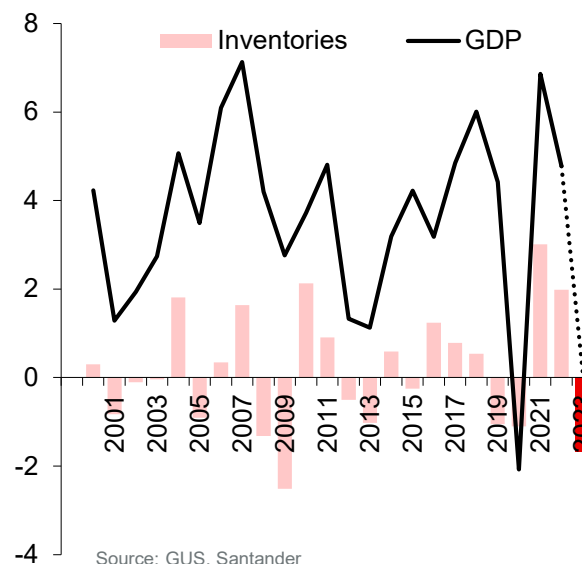
The last two years have been marked by an increase in inventories on a previously unprecedented scale. The change in inventories as a share of GDP did not go beyond the -1% to +3% range in previous cycles, and in 2021 it has already reached above 6%. The contribution of this category to GDP growth was 3 pp in 2021 and around 2 pp in 2022.

In our view, the business cycle has reached a point when inventories should be markedly reduced, which will have a negative impact on GDP growth, in our view of the magnitude of 3 pp. The positive contribution from inventories will disappear as early as Q4 2022, and this is signalled by results of the ESI indicators.

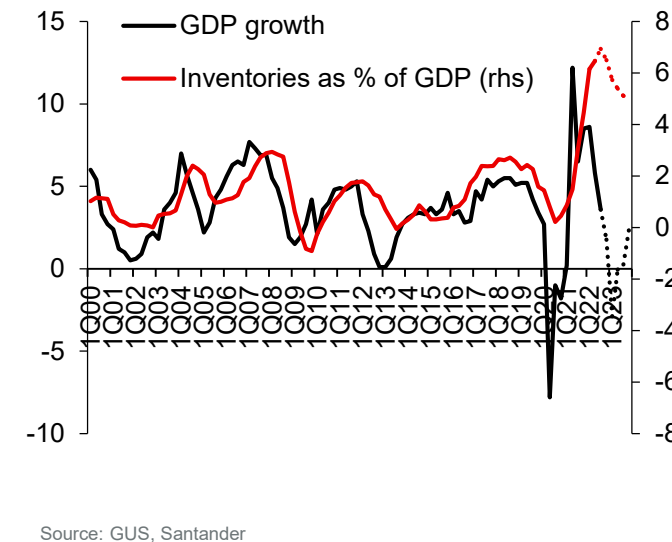
The concept of holding unusually high inventories after the experience of broken supply chains during the pandemic collided with the high cost of holding them. Cost pressures and weakening demand have put pressure on margins, which has also provoked the need to look for savings in stock holding.

If we consider that the large increase in inventories in 3Q22 not a consequence of the high inventory policy, but rather of the slump in private consumption and investment growth, then inventories, in addition to being a burden for growth, also become an important support in the fight against inflation (through possible sales to reduce inventory holding costs). However, remember that inventories are residual in GDP and it happens that data showing an initially large change are later strongly revised.

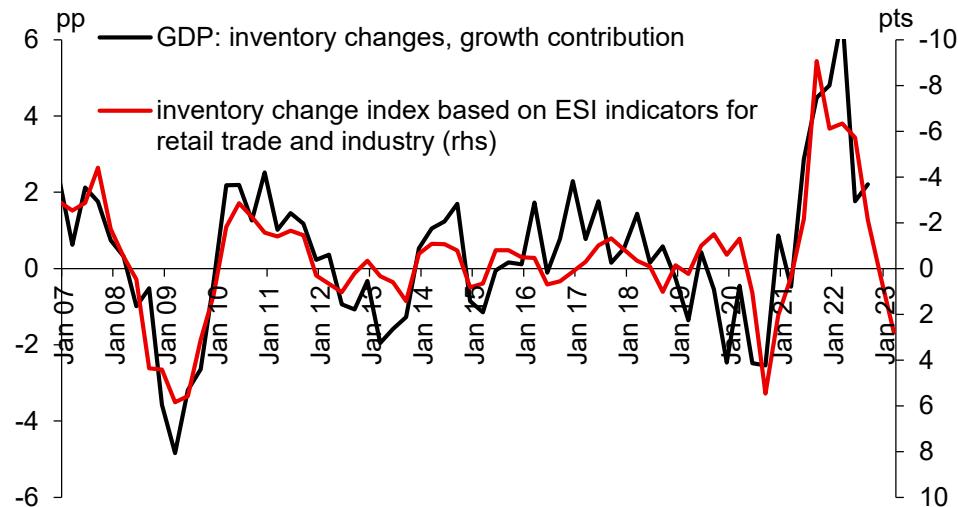
Contribution of inventories to GDP growth



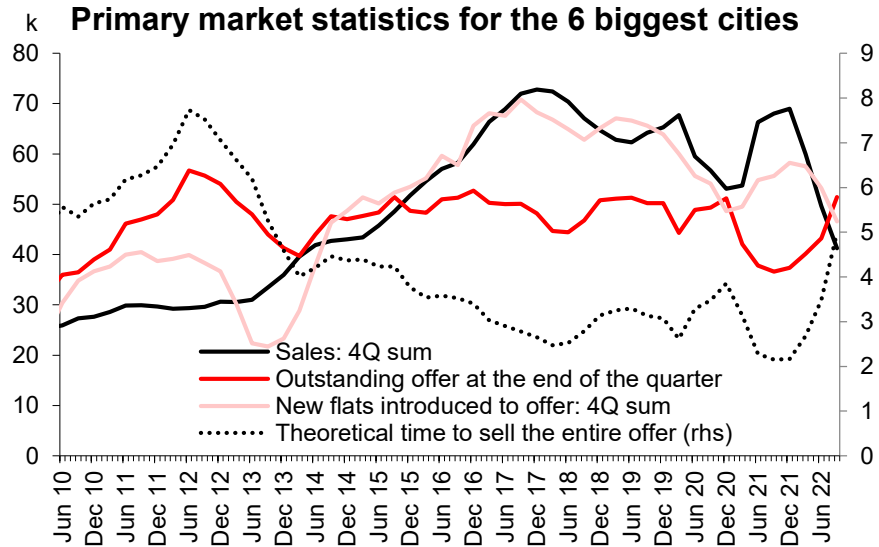
Cyclicality of inventories as % of GDP



ESI inventory adequacy indicators versus actual change



Housing market: activity slowing

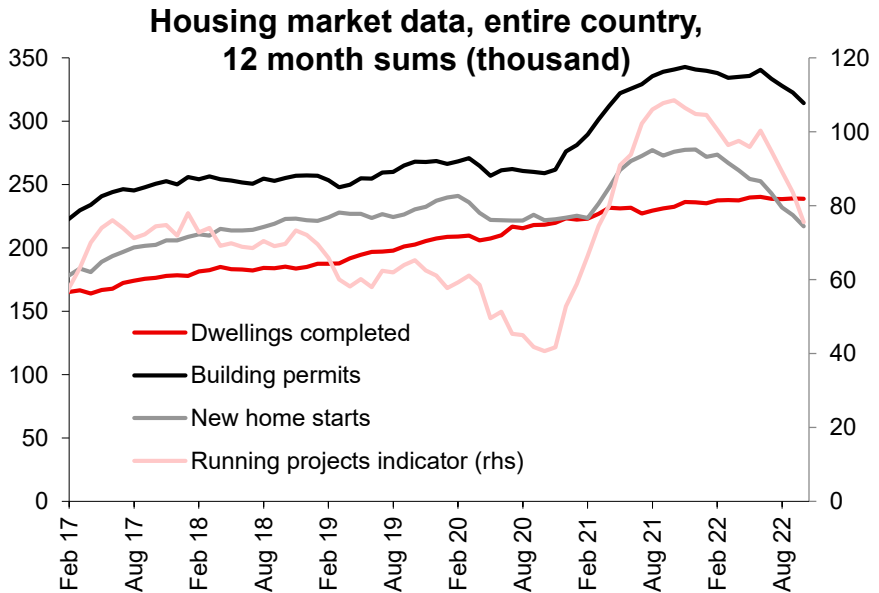


Source: JLL, Santander

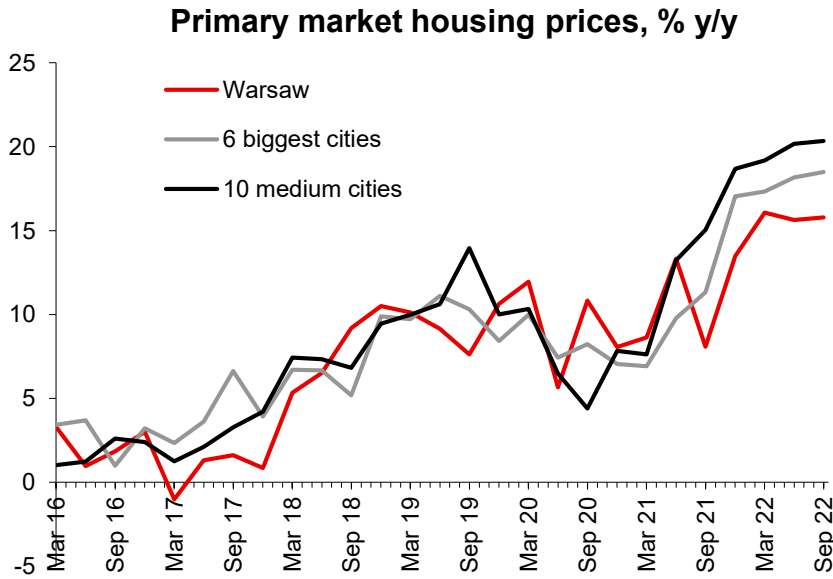
High interest rates have translated into a marked drop in demand for mortgages, which in turn has reduced the households' financial ability to buy flats. In the six largest cities, developers sold 26.2k flats in the first three quarters of the year - half as many as a year earlier and the least since 2013. Potential buyers have even started to resign from previously booked flats, so although developers are reducing the number of flats put on the market, their outstanding offer is growing and the theoretical time to sell out has doubled to around five months (also the highest since 2013).

Property prices have been growing noticeably slower in recent months, but they have not yet started to fall, which we believe is likely to happen soon. On the other hand, **decline of prices in real terms (CPI deflated) is almost certain.**

The weakness of the property market translates into a **weaker performance of the consumer durables manufacturing sector.** In recent months, this subsector of industrial production has clearly underperformed.

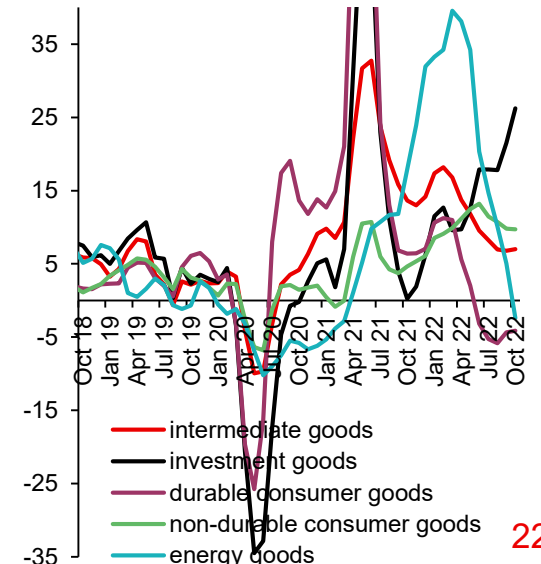


Source: GUS, Santander



Source: NBP, Santander

Output by groupings, % y/y, 3 month average

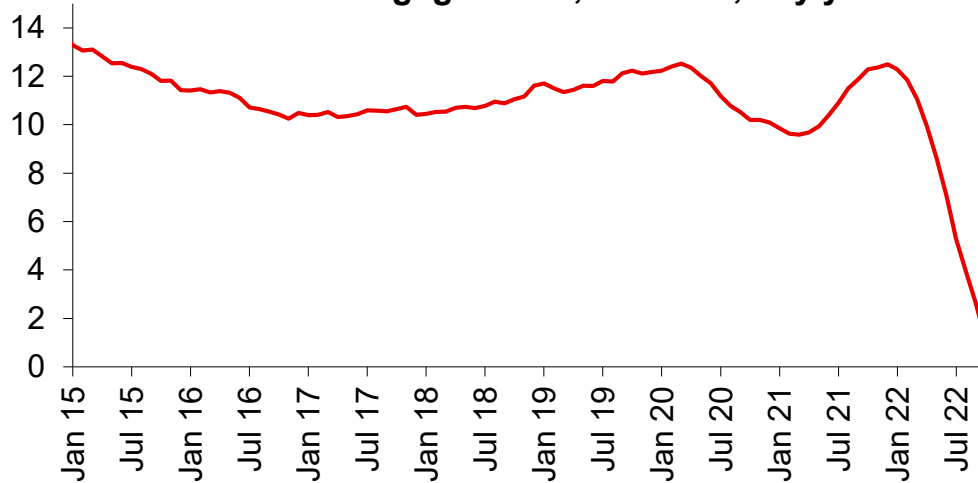


Source: GUS, Santander

Mortgage loans: rebound not imminent



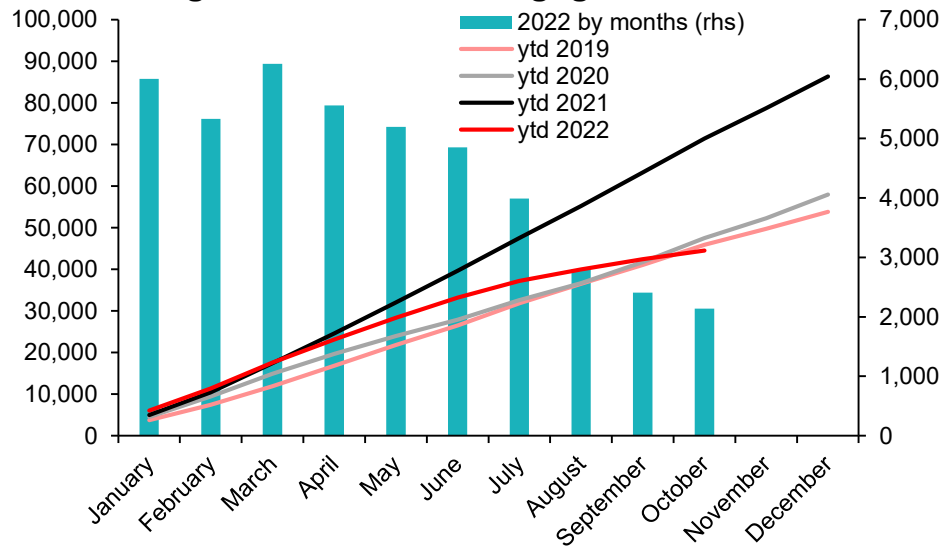
PLN mortgage loans, volumes, % y/y



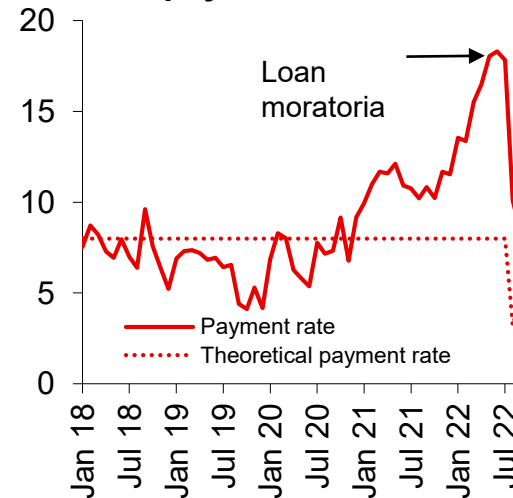
Since the beginning of 2022, PLN mortgages have slowed sharply: from double-digit levels in December 2021 to 1.1% y/y in October. Slump in sales is the main culprit, as origination declined by as much as 75% on an annual basis. Until July, the fall in sales was accompanied by a rise in repayment rates as borrowers sought to avoid high interest rates. With the introduction of the 'loan moratoria' in August, there was a marked reduction in the propensity to repay early. According to BIK information, around 60% of the loan volume was covered by the 'moratoria'. Similar conclusions can be drawn from the NBP's data on loan interest rates. This means that 'moratoria' should decrease the repayment rate by 5-6pp, but the decline was way more pronounced (9pp).

In our view, the 'moratoria' will mitigate the deceleration in volumes, but it is **difficult to count on a more pronounced rebound in sales** as long as interest rates remain at elevated levels.

Origination of PLN mortgage loans, PLNmn

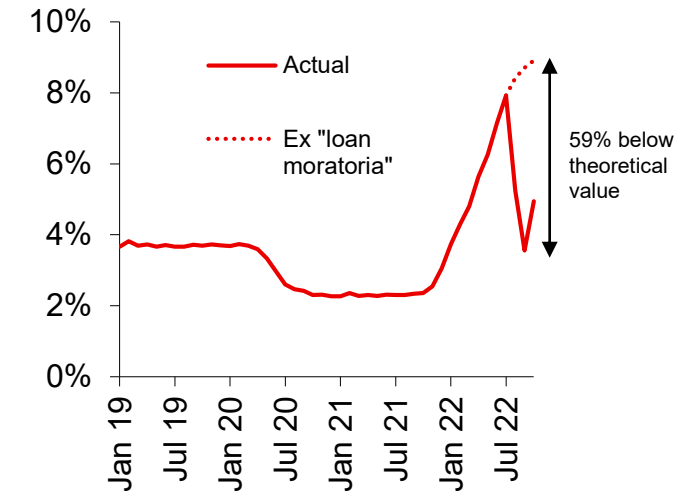


Annualised mortgage loan payment rate, %

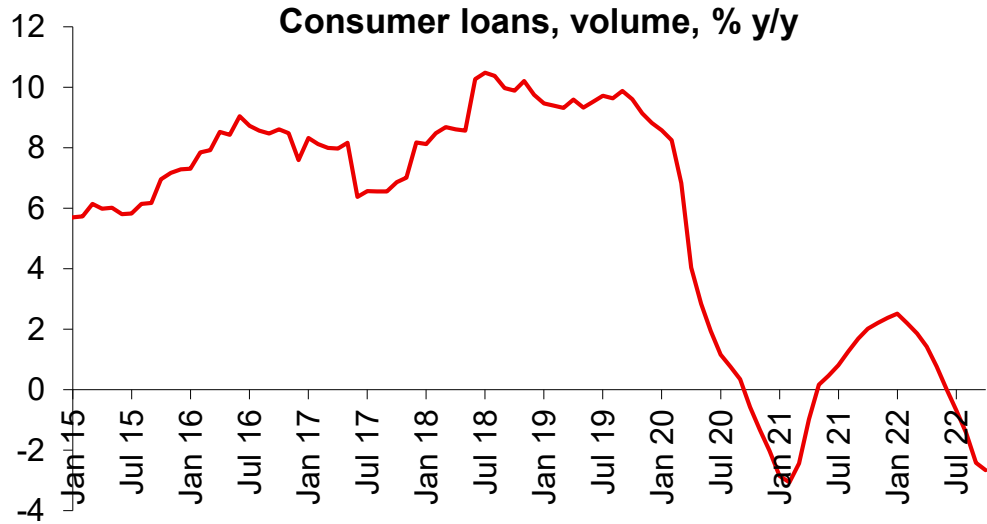


Theoretical payment rate – assuming just scheduled repayments and 2022 moratoria

Interest on PLN mortgage loans



Consumer loans: accelerated repayments

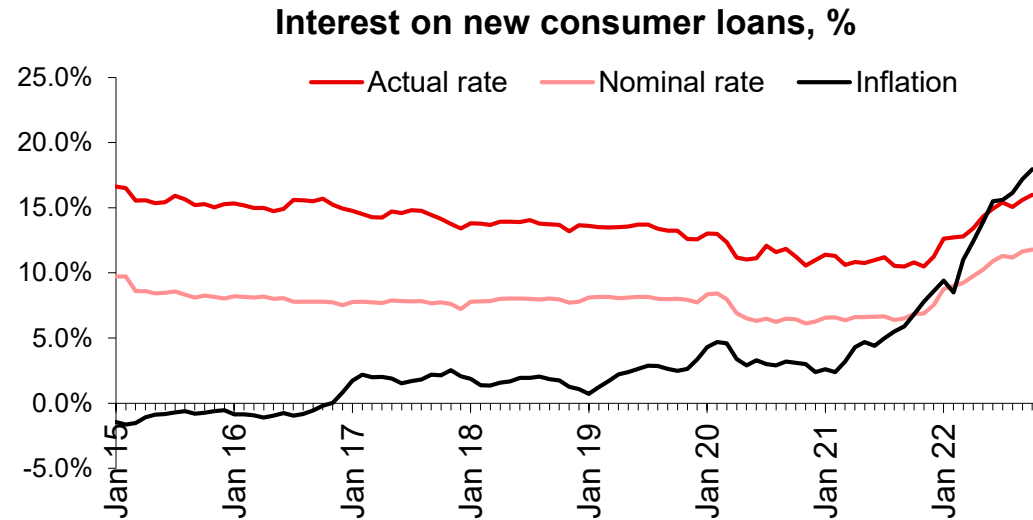


Source: NBP, Santander

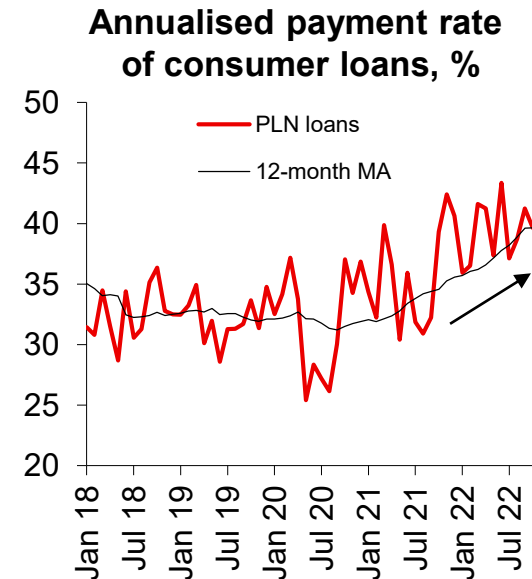
Since the beginning of 2022, consumer credit volumes have clearly slowed down after the rebound seen in 2021. The rate of volume growth fell below zero in July.

In recent quarters, a significant increase in the repayment rate has been observed, which translates into faster declines in volumes. Currently, the effect of higher repayments is even stronger than the effect of lower new sales. If the loan repayment rate had not accelerated, volume growth would now be around 5% y/y.

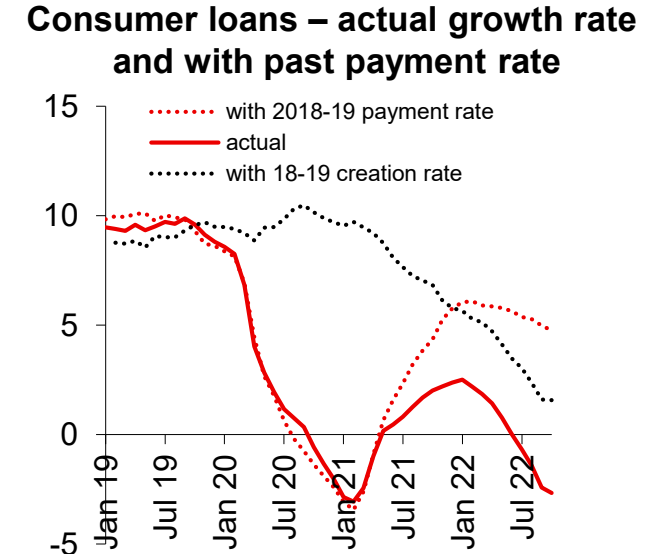
Interest rates have risen from the record lows recorded in 2020-2021, but remain markedly lower than before 2015 and are now below inflation - for the first time on record (2006). In theory, this should be a factor in favour of increasing consumer debt. However, banks are likely to tighten their credit policies, so **we expect sales to remain at relatively low levels, but repayment rate is likely to decline, which should be supportive for total volumes.**



Source: NBP, Santander



Source: NBP, Santander



Source: NBP, Santander



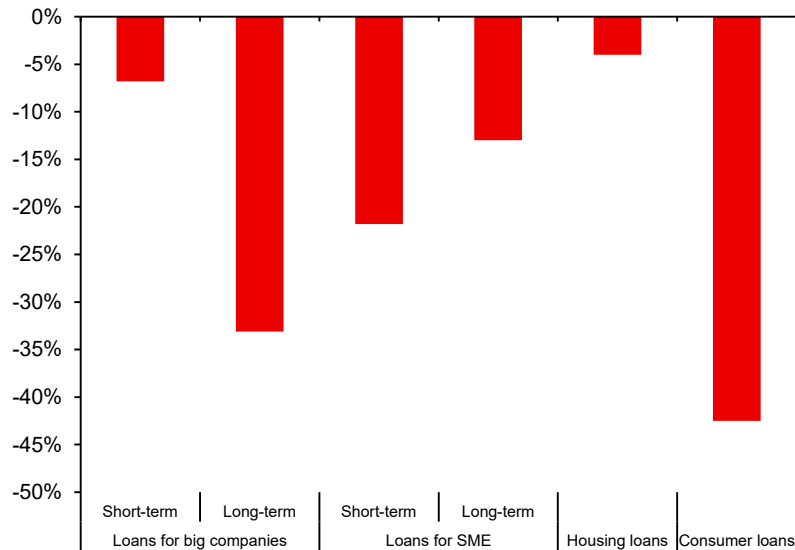
Loan policy: imminent tightening



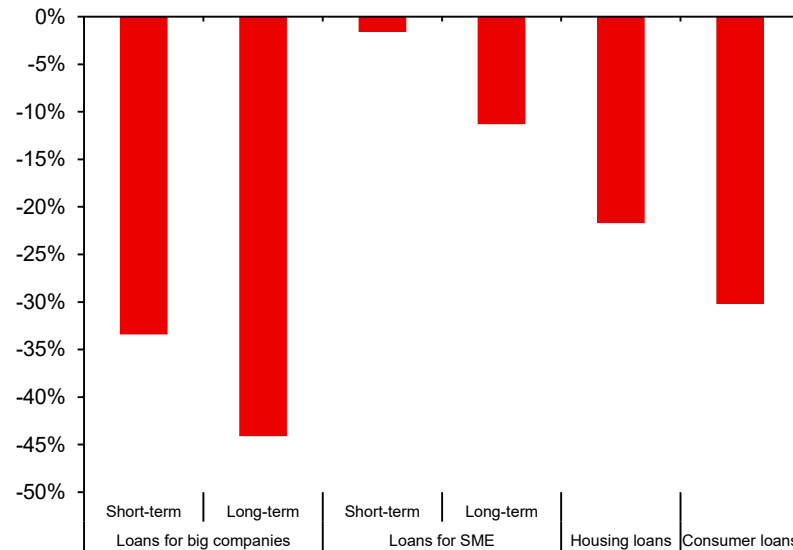
In 3Q22, banks tightened credit policy in all market segments. Such a change was dictated by the deterioration of the macro outlook, the rise in interest rates, the deterioration in the quality of portfolios and the increase in the risk of individual industries. Bank criteria were actually tightened since start of 2022. Banks expect a further tightening of credit policy in 4Q - also in all market segments.

In our view, **this is not the end of credit tightening** - although market interest rates should no longer rise in 1Q23, we expect a trough of economic growth in that very period, which could mean more pessimism among credit officers about the economic environment, an ongoing deterioration in loan portfolio quality and an increase in the risk of individual industries.

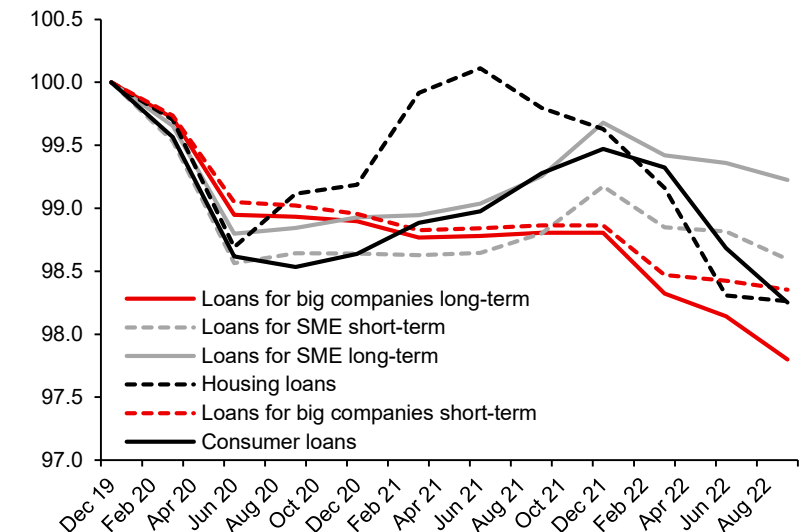
**Change of loan policy in 3Q22,
Weighted percent (negative = tightening)**



**Expected change of loan policy in 4Q22,
Weighted percent (negative = tightening)**



**Aggregate change of loan policy,
end of 2019 = 100**



Source: NBP, Santander

Labour market

2



Great resignation reactivation after the pandemic

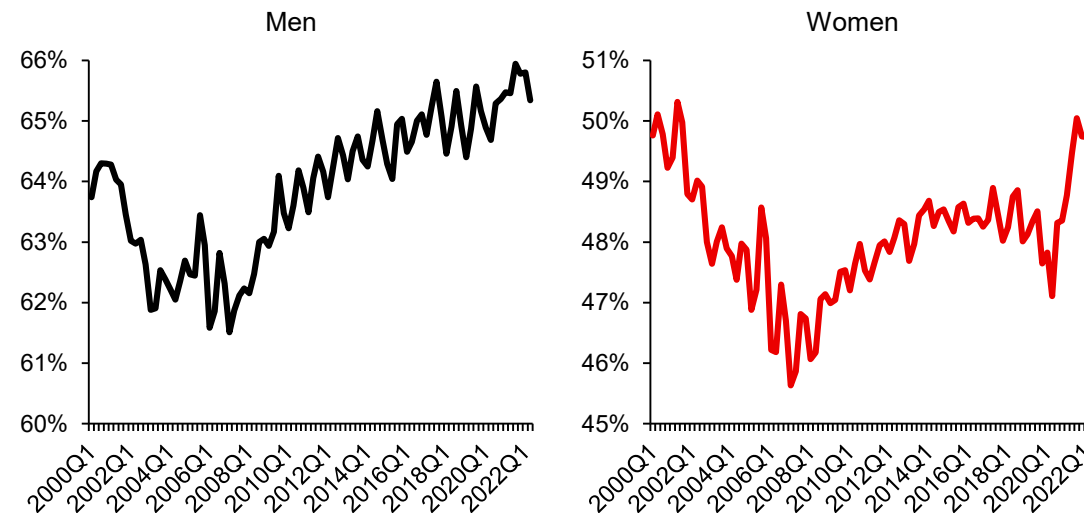
One of the widely discussed trends worldwide in recent years has been the phenomenon of the 'great resignation' – people voluntarily quitting job as a result of the pandemic and its aftermath.

In Poland, the first reaction to the crisis caused by the pandemic was also a temporary labour inactivity, but this did not last longer than six months and was immediately followed by a sharp increase in the labour participation rate. This phenomenon (both the initial decline and the subsequent increase in activity) related to women much more than men. It is possible that much of the credit can be attributed to a major remodelling of the employer-employee relationship in the wake of the pandemic and lockdowns, resulting in more flexible forms of employment, increased opportunities for remote and hybrid work, which allowed a greater proportion of women to combine household and professional responsibilities.

What we describe here are trends observed in the LFS data, which, due to the survey methodology, almost completely omit economic migrants and refugees. Therefore, the aforementioned changes should not be associated with flows of people between Poland and Ukraine.

An increase in the labour participation rate has been, moreover, characteristic for the entire last decade, which (in addition to the inflow of economic migrants) has made it possible to maintain an upward trend in the number of employed people despite the rapidly progressing decrease in the size of the national working-age population due to the ageing process. The downward population trend will continue in the coming years, so to keep the economy on an upward trajectory a further increase in the participation rate will be required (mainly for women, as the potential for men seems limited – unlike for women, Poland is not an outlier vs. other countries in this respect) and/or a significant inflow of foreign labour.

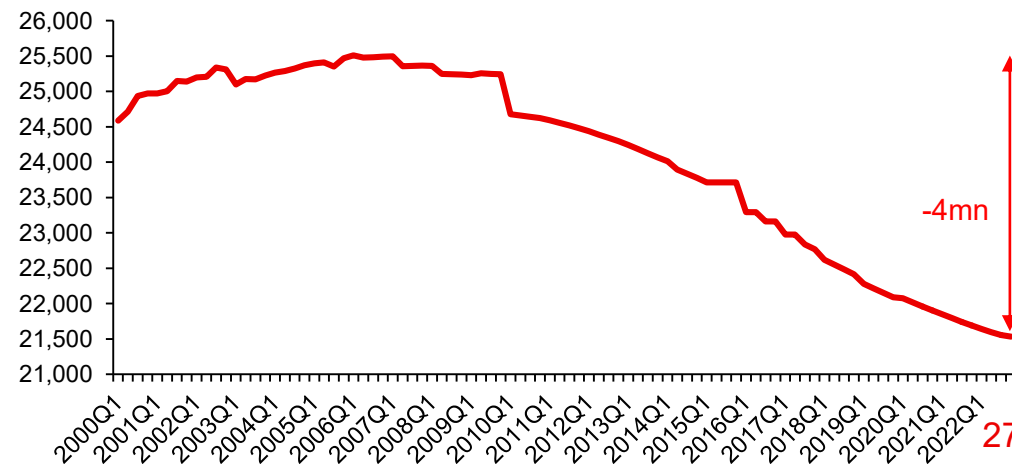
Labour participation rate



Source: Eurostat, Santander

Source: Eurostat, Santander

Working-age population (15-59/64), in thousand persons



Source: Eurostat, Santander



Labour market: a slow change in trend

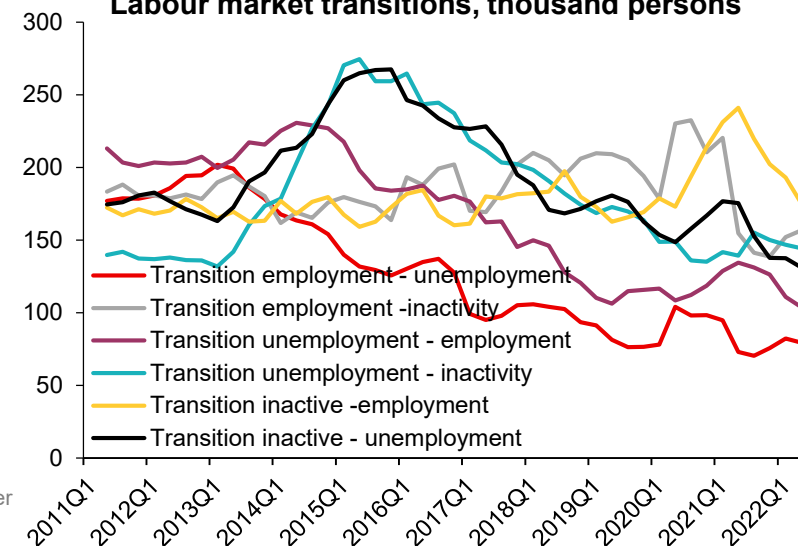
Despite the deceleration of the economy, employment is holding up well, the high level aggregate data show no net layoffs, the number of the unemployed remains low and companies continue to indicate that they are experiencing shortage of workers.

A deeper look into the detailed statistics, however, shows some cracks on the glass: employment in manufacturing has been declining, the number of job offers per unemployed person has started to fall slightly, the LFS data show that for the first time since the outbreak of the pandemic, the flow of people from work to unemployment and inactivity has increased and the flow from inactivity and unemployment to employment decreased, the economic surveys show a clear deterioration in the employment outlook. Job cuts are already quite visible in manufacturing, while in services the demand for employees has not weakened so far.

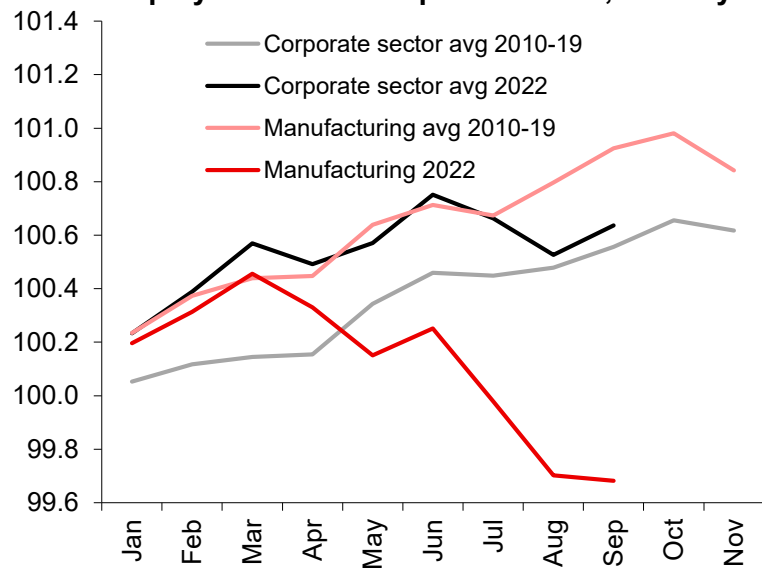
We expect the negative labour market trends to intensify.

Source: Eurostat, Santander

Labour market transitions, thousand persons

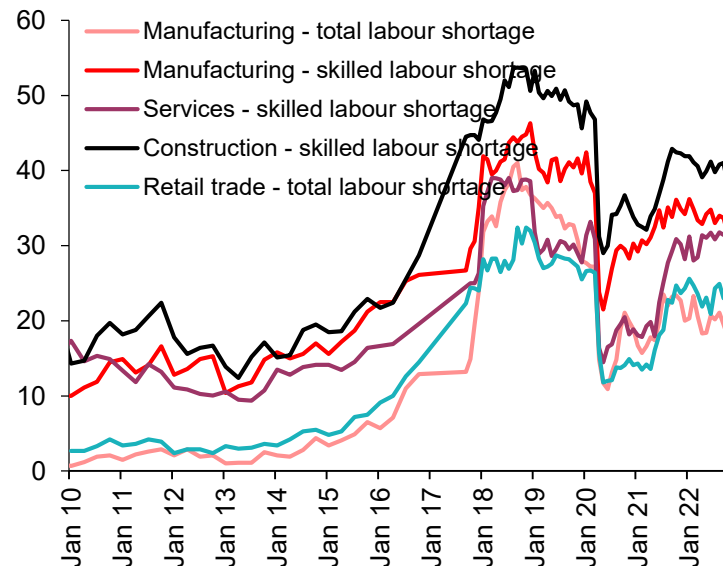


Employment in the corporate sector, January=100



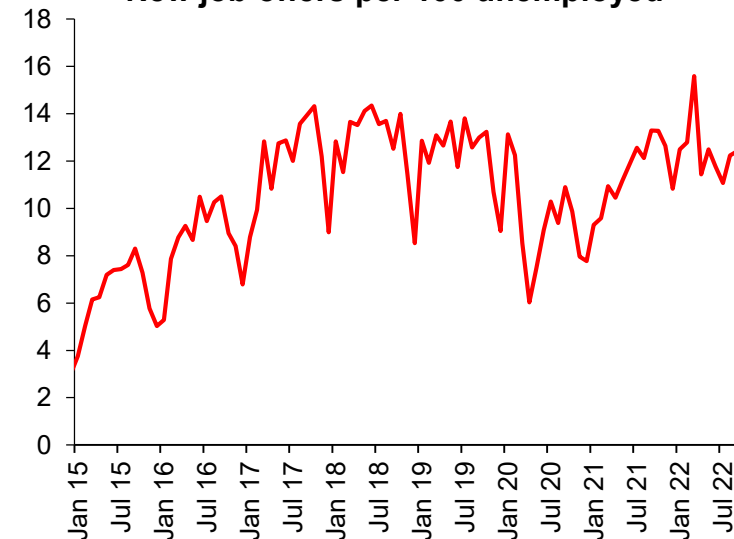
Source: GUS, Santander

Indices of labour shortage



Source: GUS, Santander

New job offers per 100 unemployed



Source: GUS, Santander



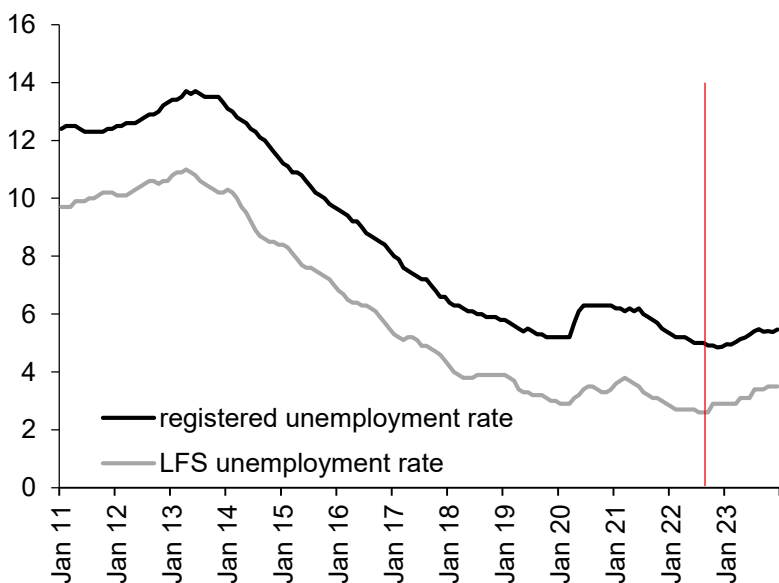
Unemployment rate not expected to rise significantly

The negative trends in the labour market that we anticipate assume an increase in unemployment. In our opinion, however, it will not be pronounced - the **unemployment rate might increase by less than 1 percentage point by the end of 2023**.

It seems that companies taught by the experience of recent years will **do the utmost to avoid large-scale layoffs**. Unemployment is also buffered by the large number of unfilled positions at the starting point (just before the start of the current slowdown/recession), the ongoing decline in the working-age population and the likely (temporary) economic inactivity of some of the laid-off.

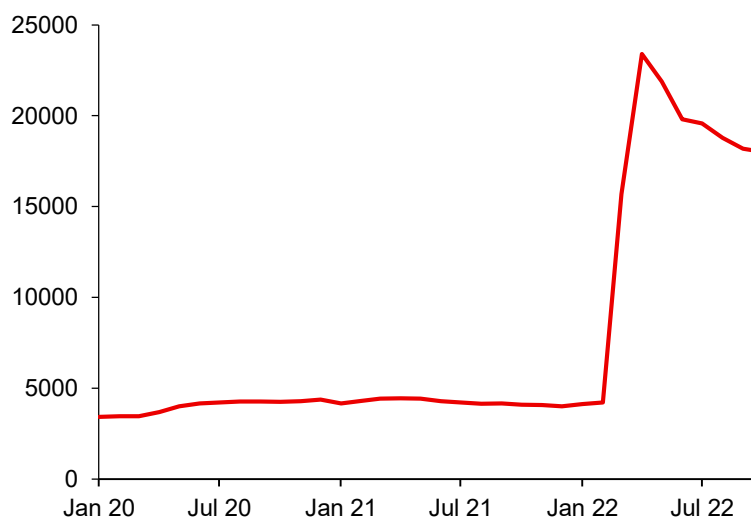
The relatively small increase in unemployment during the pandemic was partly due to the presence of large numbers of migrants from Ukraine in the Polish economy. Back then, when losing their jobs, they did not register as unemployed in the labour offices, but left for their homeland. This time, however, it is difficult to count on such an effect due to the Russian invasion of Ukraine. Already now, the number of registered foreigners is clearly higher than in previous years and, in our opinion, the chance that they will register in Poland if they lose their jobs is much higher than in 2020.

Unemployment rates, SA



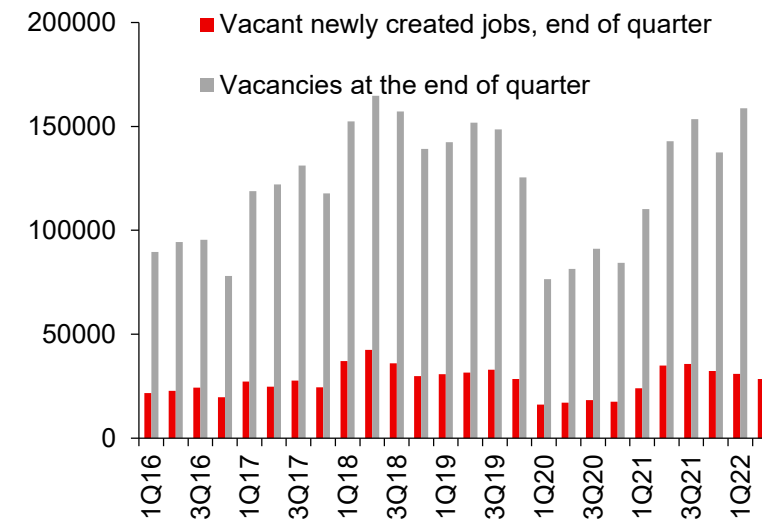
Source: GUS, Eurostat, Santander

Foreigners registered as unemployed



Source: Ministry of Labour, Santander

Vacancies



Source: GUS, Santander



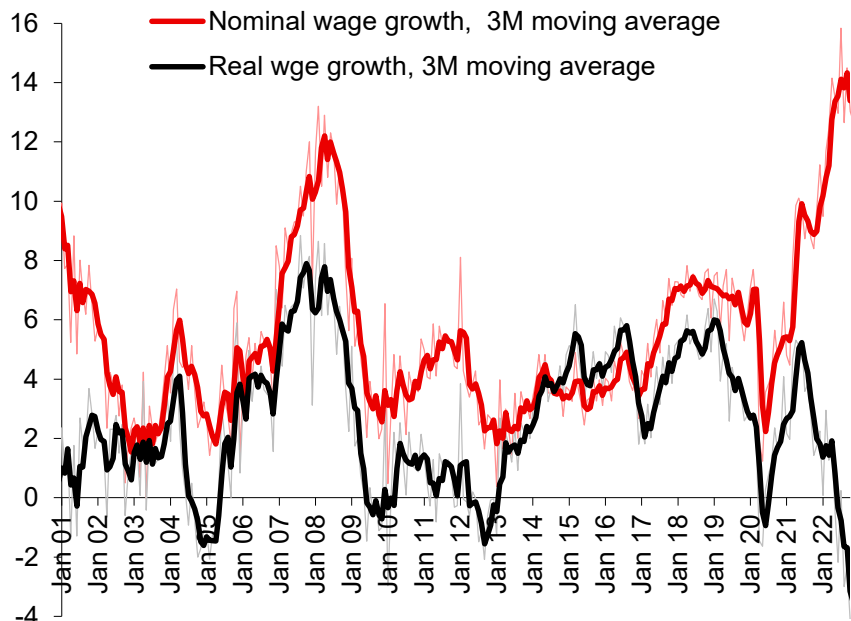
Wages have fallen behind inflation

The decline in labour demand, as seen in the number of job offers and vacancies, should translate into a reduction in wage growth. Wages in the corporate sector are already growing at a slower pace y/y than the CPI - real wage dynamics are so strongly negative for the first time ever (-4% y/y in October). In our view, real growth in average wages will remain below zero during the economic slowdown slows and the period of deteriorating corporate earnings.

The entry of Ukrainian refugees into the Polish labour market, concentrated in several areas (mainly services, some areas of manufacturing, see [p.33](#)), played a certain role in lowering wage pressure. We estimate that this has held back stronger wage increases in these sectors despite the demand for workers.

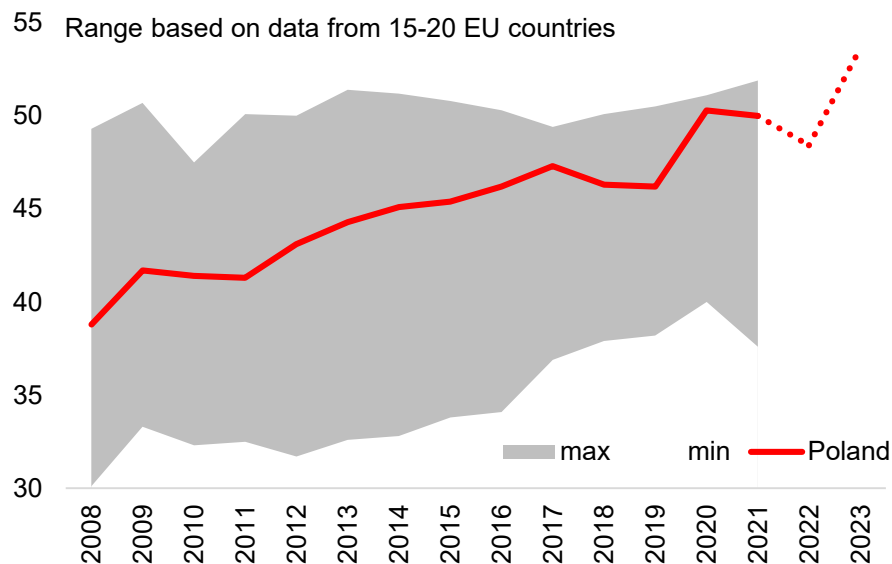
In 2023, a factor holding back wages from a stronger deceleration will be an increase in the minimum wage, in total by almost 20% in two steps ([p.31](#)).

Wage growth in the corporate sector, %/y



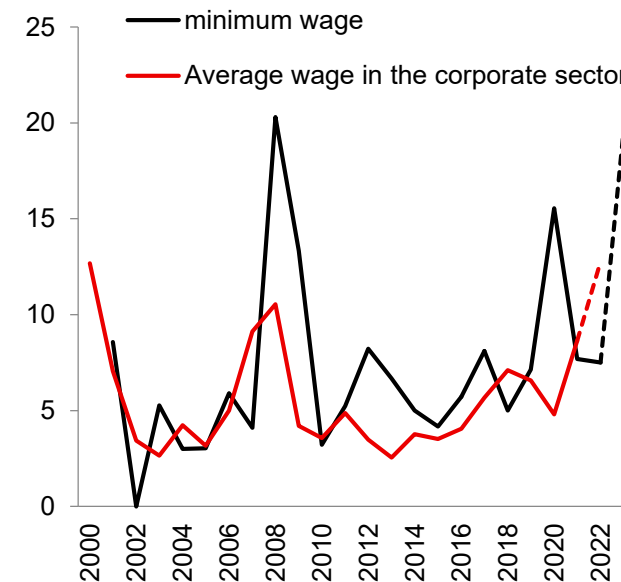
Source: GUS, Santander

Minimum wage as % of average wage



Source: Eurostat, Santander

Minimum wage vs. average wage, %/y



Source: GUS, Santander



Minimum wage to support wage growth

The reach of the minimum wage (MW) increase impact goes beyond people who were previously getting MW. It also automatically affects the salaries of those who were previously getting more than MW but less than the new MW. Also, an effect on the wage distribution should be added to this. A lack of reaction in wages slightly higher than the new MW would mean a significant distortion of relative wages between these groups of workers, giving rise to tensions and wage demands.

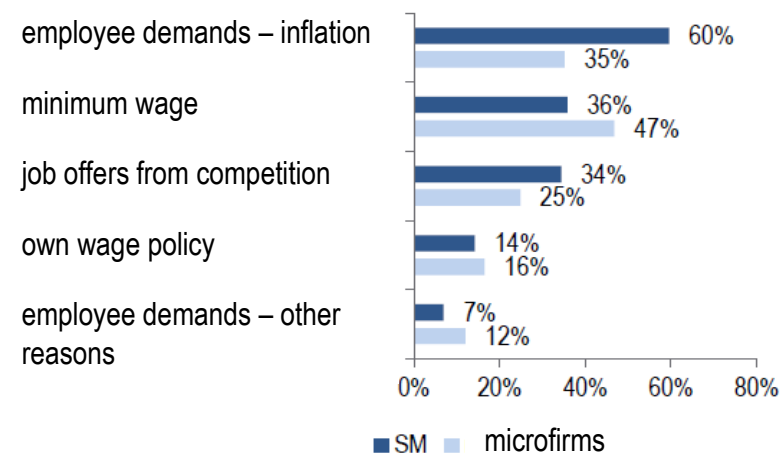
The minimum wage was paid to 7.8% of employees in 2020*. The government report on the cost estimate of the minimum wage increase in 2023 assumed that the impact of the increase would be felt by 2.2mn workers (about 13% of all workers). The NBP in 2014 found that the minimum wage increase affected the wages of around 15% of the employed, including 4% earning above the increased MW level. In small companies, more than 25% of the workforce received a wage hike due to the MW increase. NBP Quick Monitoring Survey from 3Q22 reports that, according to businesses, government regulations such as the MW are the second most important factor for wage formation after the economic condition of the company. In contrast, Quick Monitoring from 1Q22 showed that in micro companies MW is the strongest factor, key for 47% of them (in larger companies, 36% admitted this).

Our model of average wage growth, based on annual data, estimates the parameter at the minimum wage at 0.1-0.2. which roughly corresponds to the shares mentioned above. This means that in 2023 the MW will account for 1.9-3.9pp of wage growth. In the model, to explain the behaviour of the average wage we used variables describing inflation, the business cycle, the scale of labour market slack and the labour demand of firms in different configurations.

Model results are that in 2021, the acceleration in wages was mainly driven by the post-pandemic rebound and the openness of firms to increase employment (probably due to still elevated Covid-related absenteeism). In 2022, the economic climate no longer provided the impetus to lift wage growth; instead, inflation turned out to be the crucial factor pushing wage growth higher. In 2023, based on our macroeconomic scenario, there should be a slight deceleration in wage growth, but the scale of the minimum wage increase completely offsets this effect.

Our tool imposes the assumption of no price-wage spiral. The occurrence of this phenomenon in Poland would imply a risk of higher wage dynamics than suggested by the model.

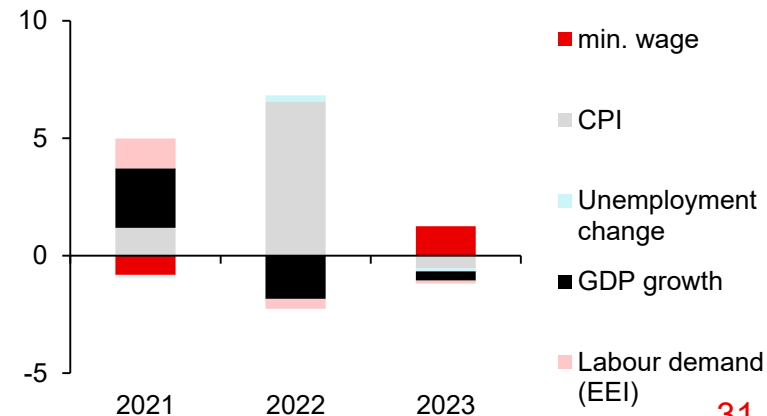
Quick Monitoring 1Q22, share of companies naming the factor as key in wage decisions



SM – data on SMEs and large caps from regular NBP Quick Monitoring survey
Microfirms' answers come from a special NBP survey ran in Nov-Dec 2021

Source: NBP, Santander

Impact of factors on changes of wage growth



Source: GUS, KE, Santander



Refugees from Ukraine: fewer registered

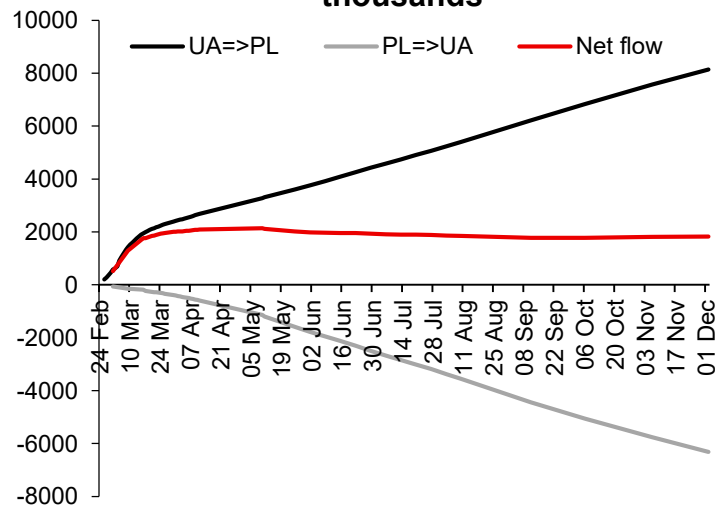
Russia's attacks on Ukraine's energy infrastructure and the coming winter may trigger a **new wave of refugees to Poland**, but the scale of the phenomenon is difficult to guess. For now, data show that the number of refugees staying in Poland has slightly decreased.

According to the Border Guard, the net inflow of people across the Polish-Ukrainian border has decreased from about 2.1mn to 1.8mn. Moreover, there has been a **marked decline in the number of Ukrainian citizens registered in the national PESEL database of identification numbers** in recent months (c.400k from the peak). It is likely that they have moved to other countries, but rather not to Ukraine, as such a fact would be reflected in the Border Guard data. It also cannot be ruled out that they have simply given up their PESEL number (required for getting social benefits), but are still in Poland.

Despite the decrease in the number of foreigners registered in PESEL, their number in the social security (ZUS) continued to increase. This, in our opinion, suggests that it was mainly those who did not find employment in Poland who decided to leave.

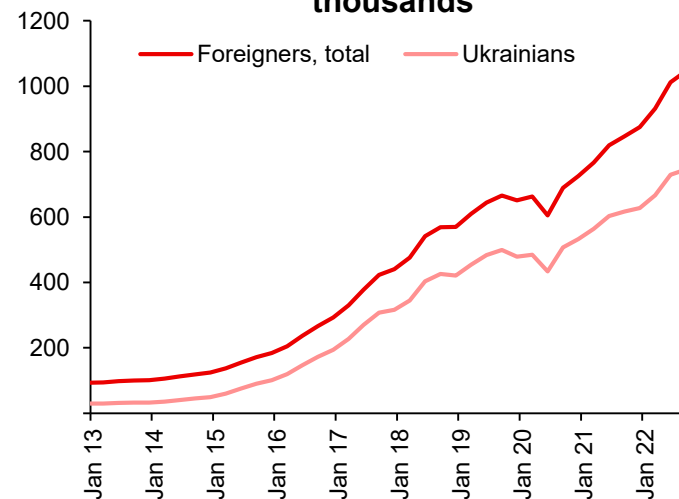
20% of men and 35% of women disappeared from the statistics. In the case of men (down 85k from the peak), the decrease was basically only in children (-79k) and the elderly (-8k), while in the case of women (-330k from the peak), it was mainly the 1963-2003 age group that disappeared from the statistics – their number was down 38% (or 220k).

Polish-Ukrainian border crossings, since 24 Feb, in thousands



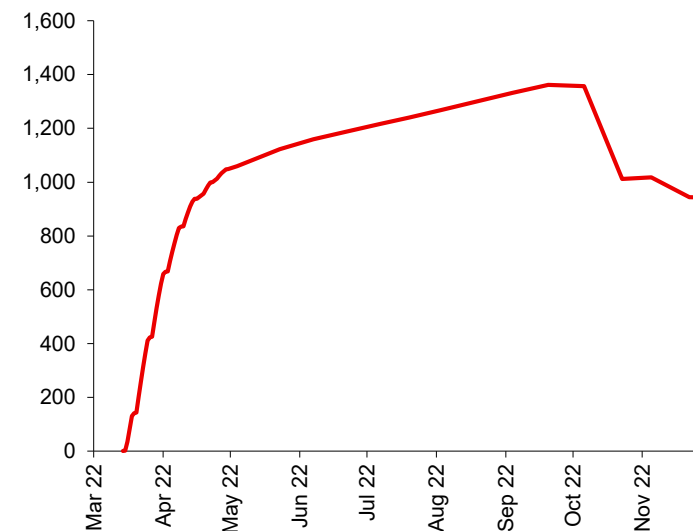
Source: Border Guard

Foreigners registered in social security system, in thousands



Source: ZUS

Refugees granted a PESEL number, thousands



Source: dane.gov.pl





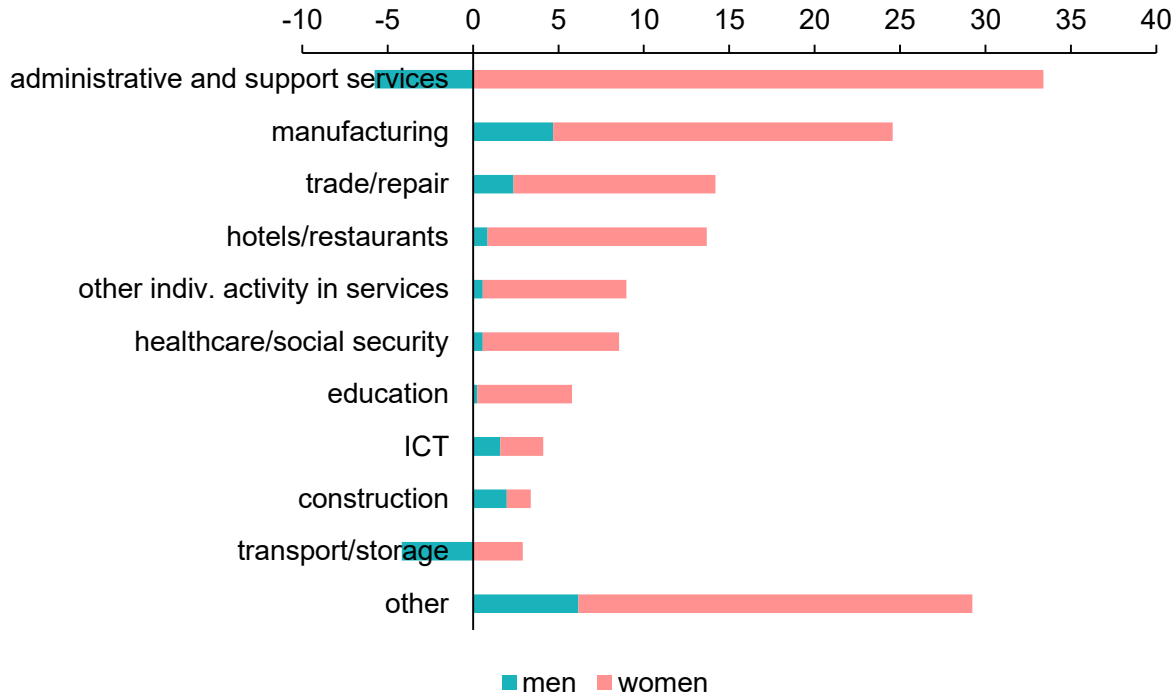
Refugees from Ukraine: selective labour market entry

Social security registration data shows an influx of Ukrainian workers (mainly female employees) concentrated in several service sectors.

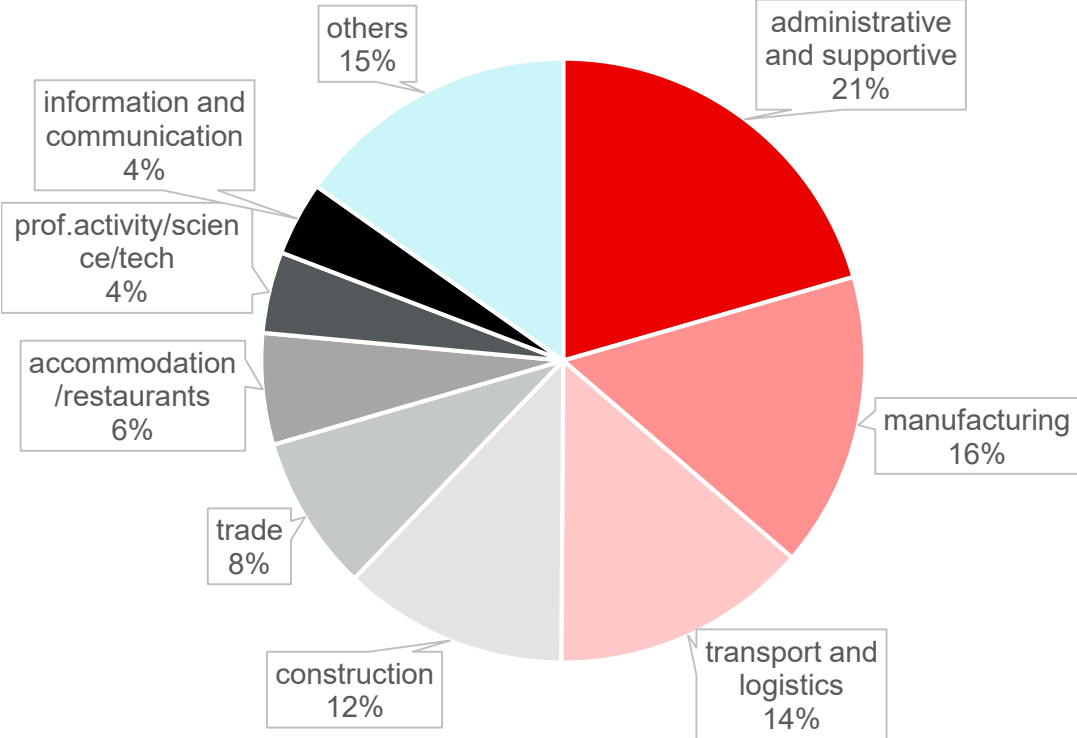
However, this identifies only a part of the population of Ukrainians on the Polish labour market (about 140k persons, while according to the Ministry of Family and Social Policy, about 400k found work).

In particular, it is difficult to find confirmation of a clear outflow of men from selected industries. However, this may be due to the fact that employers do not report such outflows, treating them as temporary, or the outflows mainly concerned persons working in the grey economy.

Ukrainians registered in social security system, change between Dec'21 and Oct'22, selected sectors, in thousand persons



Ukrainians registered in social security system, by sectors, Oct'22



Inflation

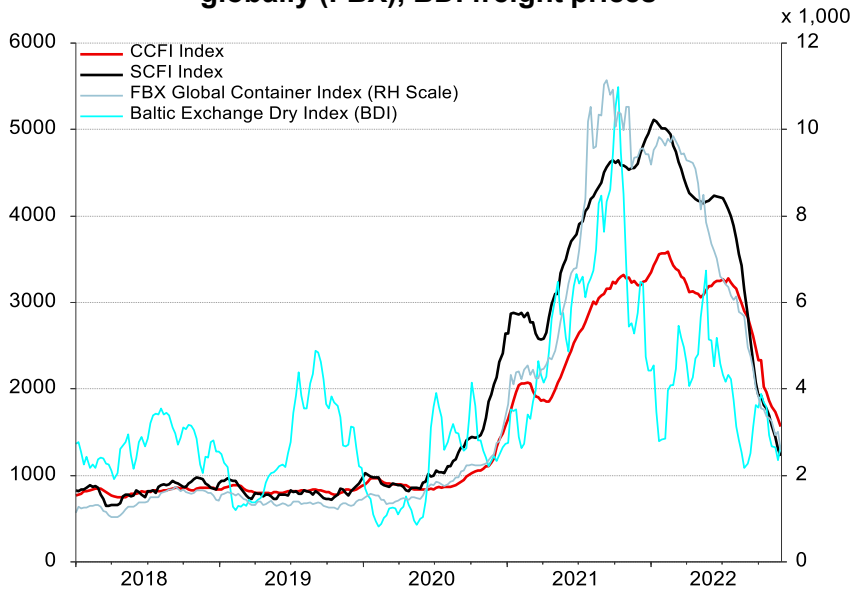
3



Pressures in global supply chains ease

Disruptions in global supply chains are steadily decreasing: transport delays, sea freight costs and sea ports congestion have been declining since the beginning of this year. These are still **above** pre-pandemic Covid-19 levels., but receding logistics problems should ease global inflation pressures in 2023, at least thanks to 'high statistical base' effect.

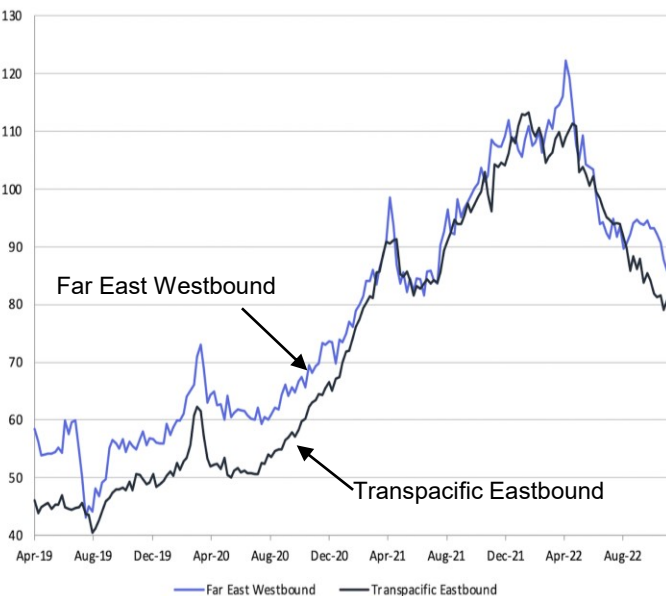
**Declining indicators of supply costs:
containers in China (CCFI), shanghai (SCFI),
globally (FBX), BDI freight prices**



Source: Refinitiv Datastream, Santander

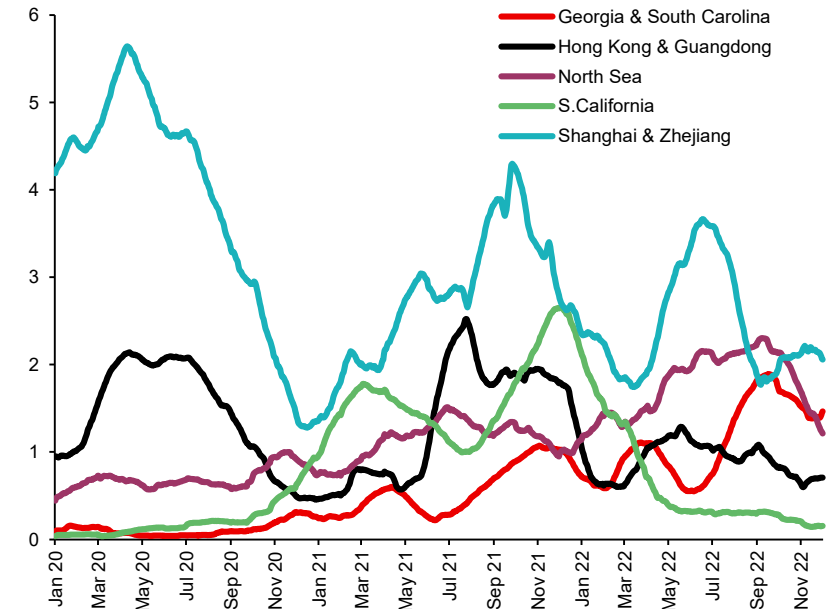
**Declining indicators of sea deliveries' time:
Ocean Timeliness Indicator**

Cargo Ready Date to Destination Port Departure, to 12/04/22



Source: Flexport Research

**Declining indicators of sea ports congestion
(awaiting ships as % of port capacity)**



Source: Kiel Trade Indicator





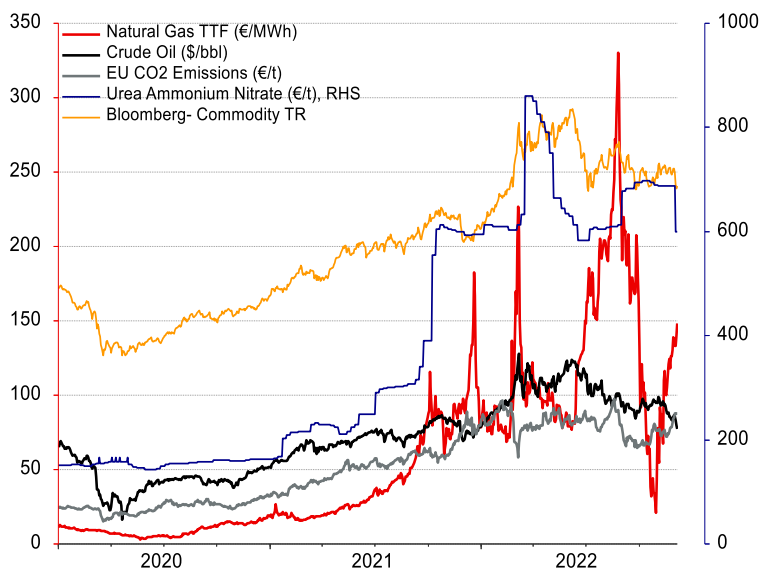
Commodity prices off the peak

Global commodity and energy prices are coming off the peaks. In October, an exceptionally warm autumn and logistical issues (a large number of LNG deliveries arrived at ports, while gas storage facilities were close to full) contributed to the strong fall in gas and electricity prices in Europe, but this effect has started to reverse as we enter the winter period. Changes in commodity prices over the next few months will depend on the depth of the global slowdown.

China's gradual relaxation of its zero-Covid policy, on the one hand, raises hopes for further easing of tensions in supply chains; on the other hand, if it helps China revive the GDP growth, it will mean a higher demand for raw materials and strain on logistics. We are not sure about the final impact on global inflationary pressures, especially as the lifting of restrictions with the low immunity of the Chinese population and the lack of effective vaccines means the risk of a large increase in illnesses, and strain on the health service, so it may be ultimately difficult to actually carry out.

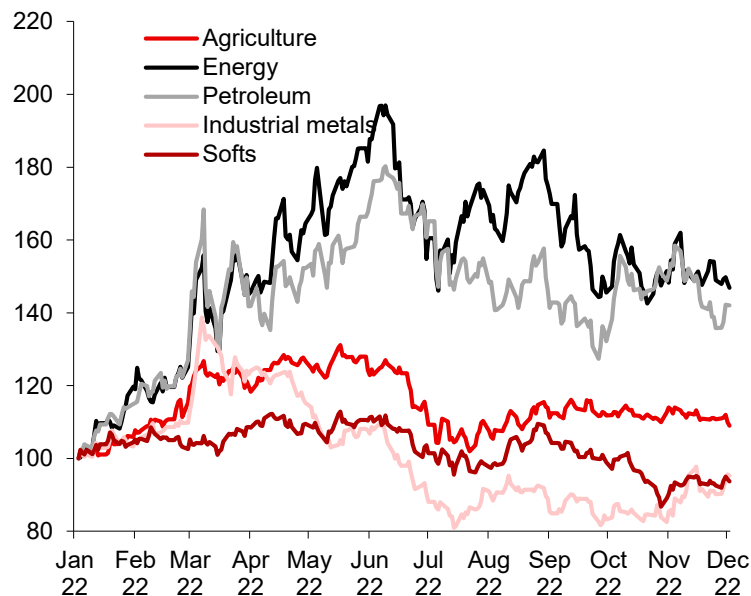
PPI inflation has started to fall quite markedly. Historical data show that PPI is a fairly good leading indicator for CPI. In particular, a strong signal of falling CPI historically has been when PPI has fallen below CPI - we are still quite a long way from that.

Prices of natural commodities, CO2 permits, fertilisers



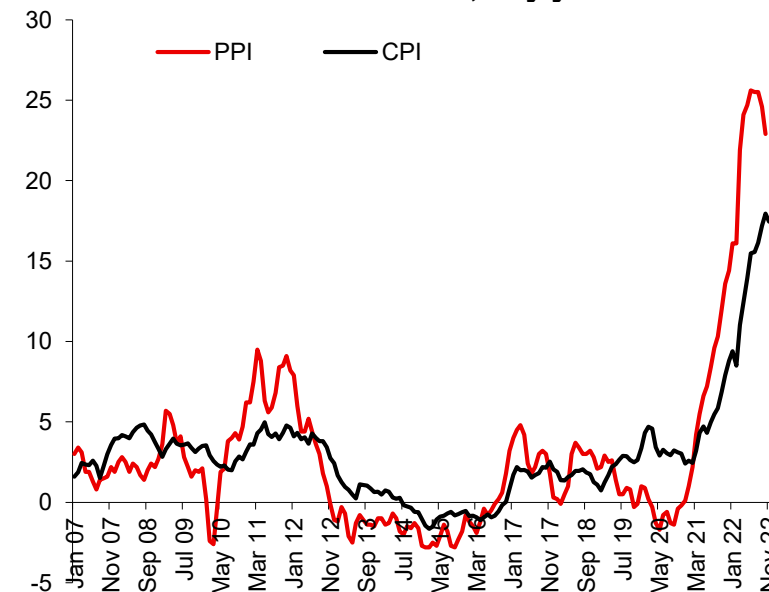
Source: Refinitiv Datastream, Santander

Bloomberg commodity indices, 03/01/2022 = 100



Source: Bloomberg, Santander

CPI vs PPI, % y/y



Source: GUS, Santander



Inflation close to its peak

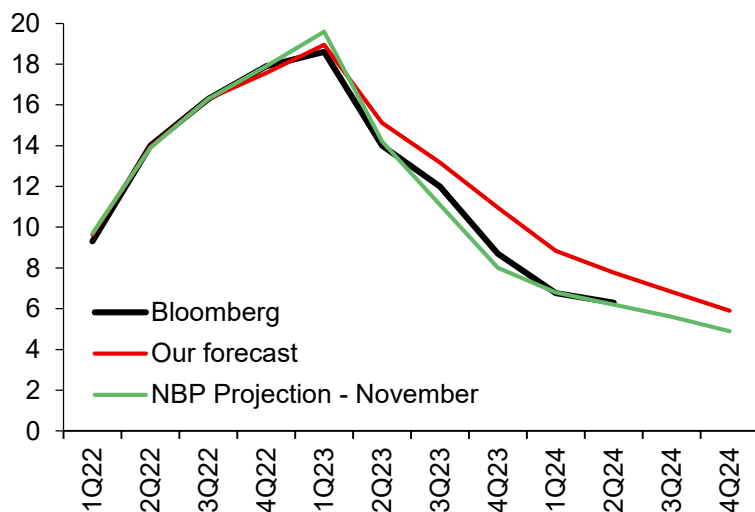
CPI inflation finally eased slightly in November, for the first time since February when the Anti-Inflation Shield was introduced. The drop in CPI was mainly due to lower coal and fuel prices, while core inflation continued to rise and overall price growth continued to deviate upwards from the median.

However, **a number of disinflationary factors** have emerged in recent months that support the forecast for a fall in CPI inflation in 2023, following a peak in February, due to the low base effect and the reversal of some of the Anti-Inflation Shield tax cuts in January. These factors include slower economic growth, declining corporate margins, slower credit growth, lower PPI inflation, declines in international commodity prices and the slower growth in unit labour costs that we expect.

We expect CPI inflation to decline to around 10% y/y by the end of 2023 and to around 6% by the end of 2024.

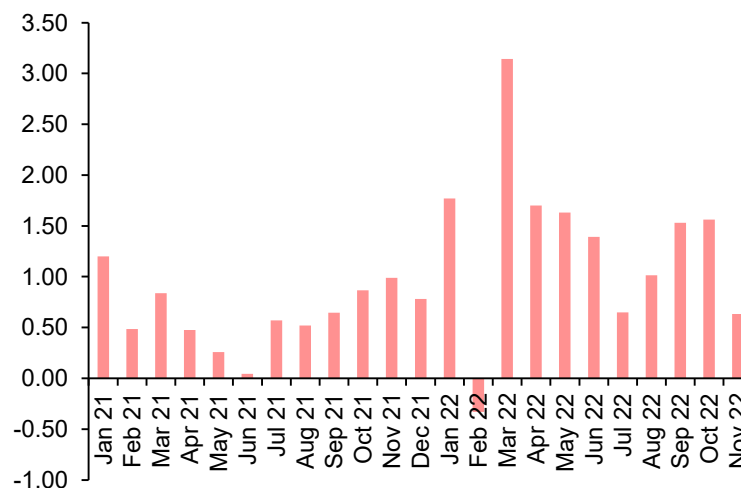
In our view, however, the return of inflation to the target will be slow and, in our view, difficult to expect in the next two years, and we are doubtful about 2025 as well (we assume that this will already be a period of recovery in the economy again, with tightening in the labour market).

CPI forecasts, % y/y



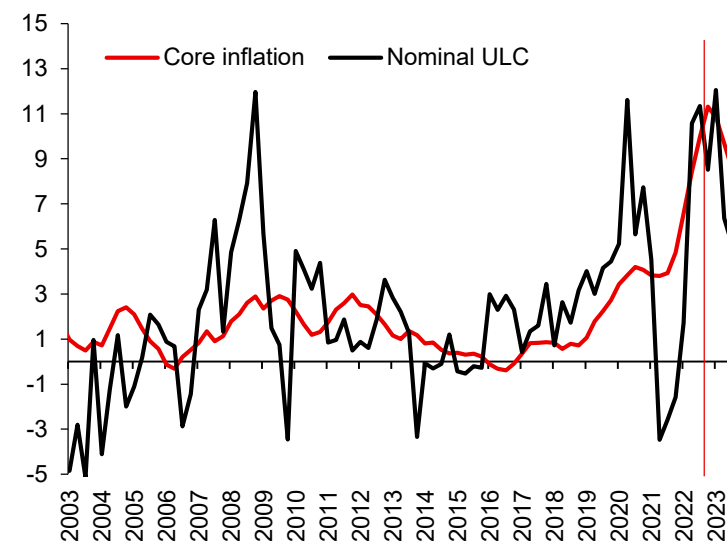
Source: NBP, Bloomberg, Santander

Deviation of price growth from 2013-2020 median, percentage points



Source: GUS, Santander

Unit labour costs vs core inflation, % y/y



Source: Eurostat, Santander





Electricity prices capped

The government enacted a **freeze on electricity prices** for households up to a set limit of consumption. Above this level, the maximum price was set at PLN693 / MWh. The regular limit was set at 2.0 MWh per annum, for people with disabilities at 2.6 MWh and for farmers and holders of Big Family Card at 3.0 MWh.

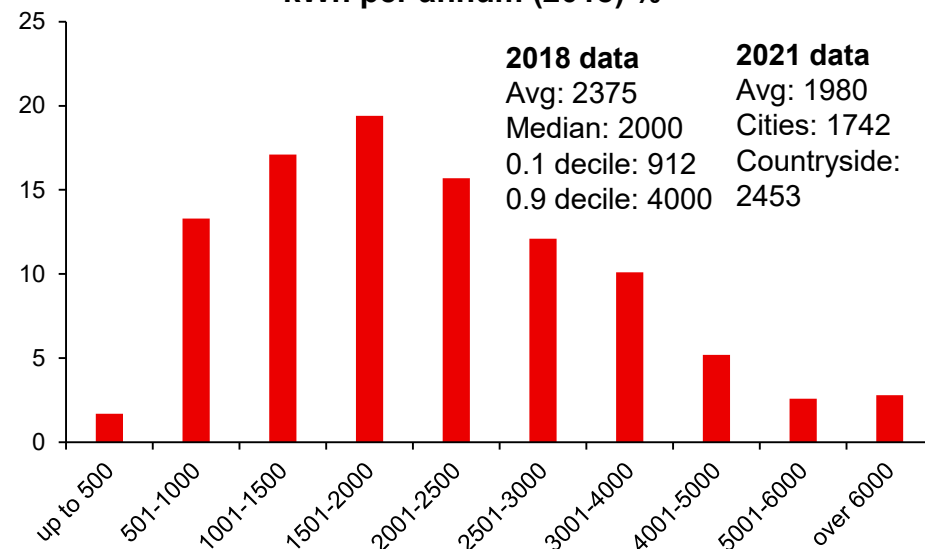
According to our estimates, the maximum fare is about 70% higher than the current average prices, and the laws described above will **increase average electricity bills by 7%. Cancellation of the 'Anti-inflation Shield' will add other 18% to electricity bills.**

To arrive at the estimates shown above, we use 2018 breakdown of household energy consumption and correct it using 2021 averages. We use average in the countryside to proxy for energy consumption of farmers, big family card holders and people with disabilities. We assume there are 16.8mn energy consumers in total, 2.3mn are farmers and Big Family Card holders, 1.0 are people with disabilities.

Based on these assumptions, we estimate that a 100% hike in energy prices would translate into 18% average price growth for regular-limit group and 21% for 2.6 MWh limit group and 16% for 3 MWh limit group. This yields a total average of c18%. Given that energy prices make up about 50-55% of total households' energy bills (the rest are distribution charges, taxes), a 100% hike in energy prices with the government cap will increase average energy bill by about 10%.

Another question is: how is GUS going to account for the cap? One option is that it will average prices over the year like we did in the exercise above and add, 7% to energy tariffs in January. Another approach is to take into account the actual payments. In such an approach, average energy prices will be gradually going up throughout the year and in December 2023 will be by 20% higher than in December 2022. Our forecast is base on the second variant.

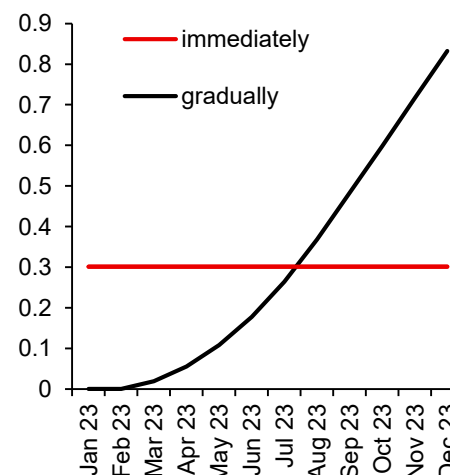
Breakdown of household energy consumption, kWh per annum (2018) %



2018 data	2021 data
Avg: 2375	Avg: 1980
Median: 2000	Cities: 1742
0.1 decile: 912	Countryside: 2453
0.9 decile: 4000	

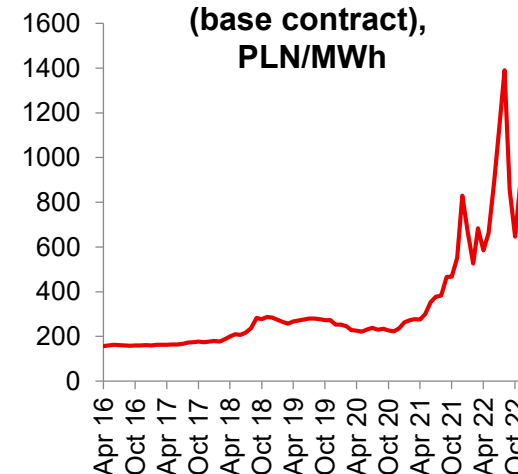
Source: GUS, Santander

Possible impact of energy on CPI – based on GUS approach



Source: Santander

TGE electricity prices (base contract), PLN/MWh



38

Source: TGE, Santander

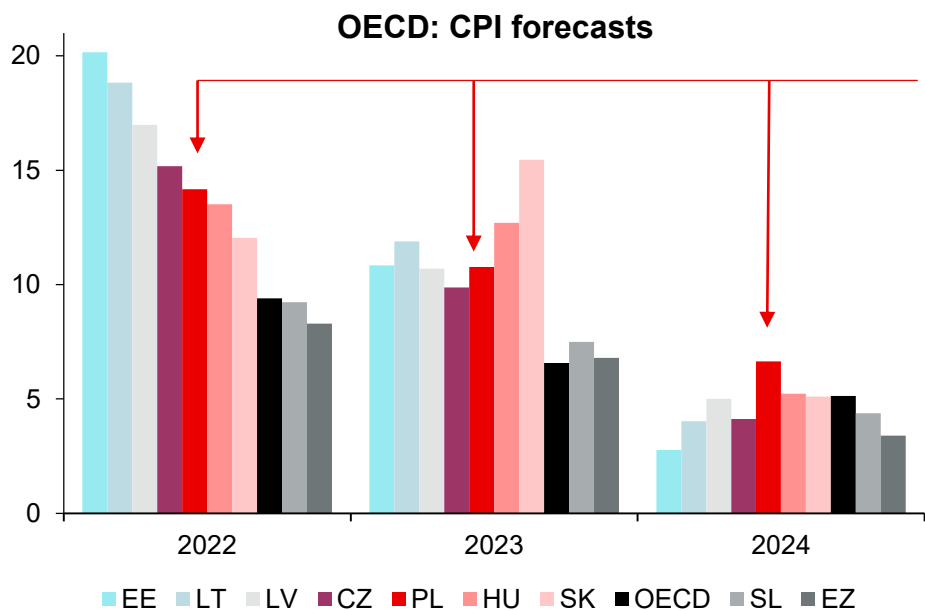


How long will elevated inflation stay?

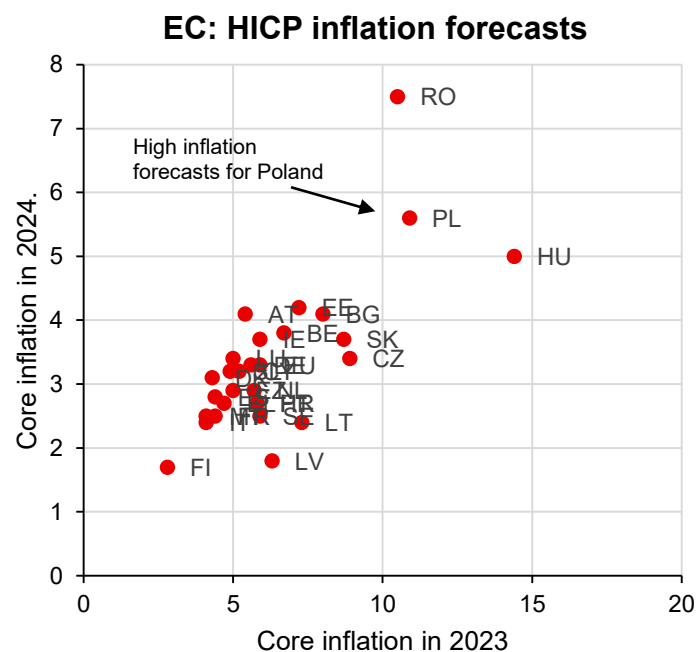
According to the EC and OECD forecasts, **Poland may remain in the lead in terms of CPI inflation in 2023, but also in 2024.** Out of the 46 countries for which the OECD formulated an inflation forecast in the November round, Poland would have the fifth highest level in 2022 and 2023 (after Turkey, the Czech Republic, Hungary and the Baltic states), and the second highest in 2024 (after Turkey). The EC expects Poland to be an outlier in terms of inflation, both as regards the full HICP basket and the core inflation, in both 2023 and 2024, with their relatively high readings in 2023 occurring with economic growth unusually moderate for Poland compared to the rest of the EU. In 2024, however, Poland may retain one of the highest private consumption dynamics, according to the EC.

As regards the EC forecasts, Poland stands out with its labour market robustness, high GG deficit and debt increase, which could be interpreted as reasons behind relatively high inflation. The Commission is also referring to Harrod-Balassa-Samuelson effect (prolonging the inflation in services) as an obstacle for disinflation in the upcoming years in the CEE region.

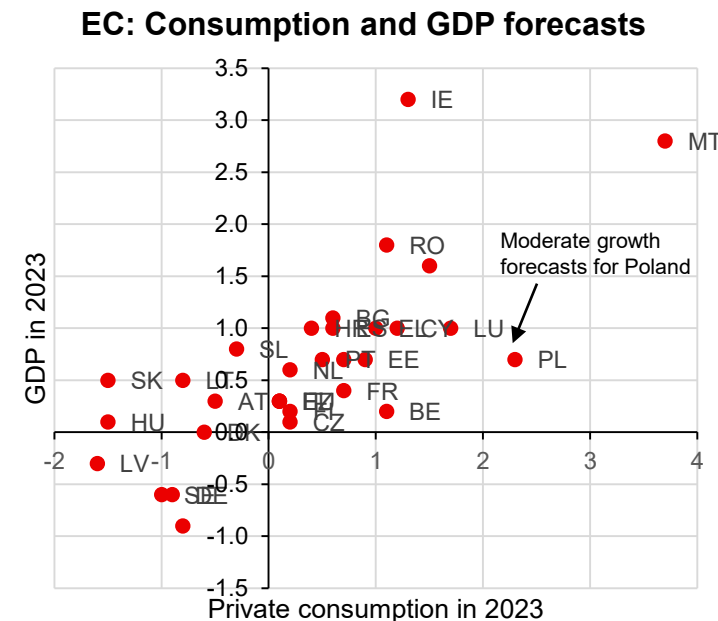
It also seems that the focus of fiscal and monetary policy observed in Poland on protecting household budgets (in the case of the NBP, in the form of a shift in emphasis from CPI to the slowdown and the risk of an unemployment rebound) will make inflation more persistent and difficult to bring down to the inflation target.



Source: OECD, Santander



Source: European Commission, Santander



Source: European Commission, Santander



Inflation expectations: there is no good measure

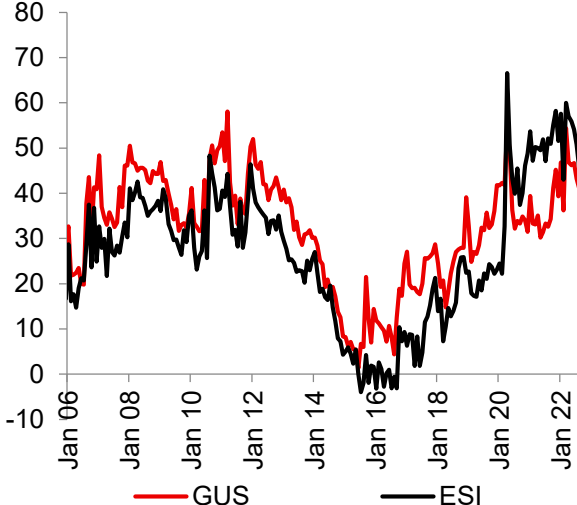
While inflation expectations are considered key to the behaviour of inflation, including the pace of its return to the target, the assessment of what is happening to them is not clear. Available sources based on consumer and business surveys show declines for six months (with the exception of the retail trade sector), although index levels are still historically high.

The difference between the inflation expectation index and the current inflation perception index (based on the consumer part of the ESI survey) is the lowest on record which theoretically implies an extremely strong belief that inflation will fall. Historically, however, when such a measure marked a local low it heralded merely a transition of inflation from a phase of growth to a phase of consolidation at the top.

Meanwhile, MPC’s Ludwik Kotecki and Henryk Wnorowski expressed concern in November that de-anchoring of inflation expectations was taking place (i.e. loss of conviction that inflation would be brought down to the target), with the former mentioning NBP studies indicating an expected inflation level of 20-30%. On top of this, the November inflation projection added a provision in its ‘balance of risks’ part about the increased persistence of inflation due to the level of inflation expectations. And yet, the pace of disinflation shown in the projection is, in our view, quite rapid (faster than we assume).

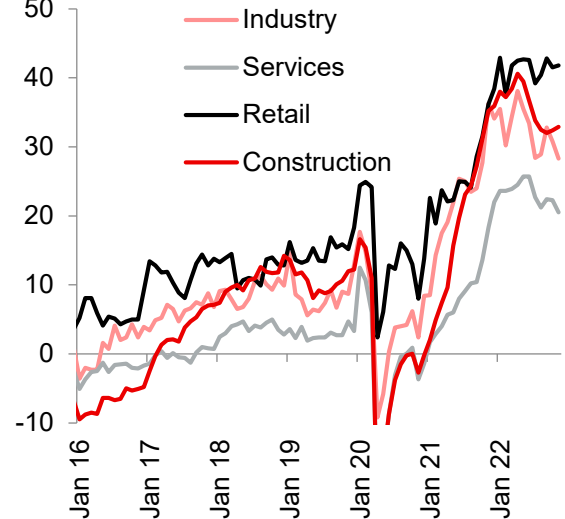
In our view, the conclusion is that it is difficult to base judgements on the further inflation path in Poland on publicly available data on inflation expectations, as these do not provide a clear indication. **Even if inflation expectations have already started to retreat, the levels of the indicators remain historically high, which might mitigate the disinflation process in the following years.**

GUS and ESI consumer inflation expectations indices



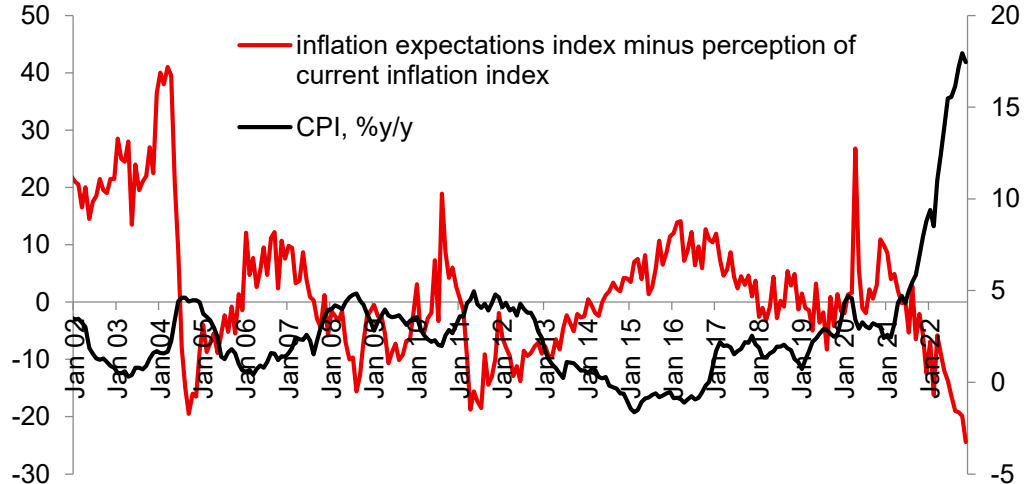
Source: GUS, European Commission, Santander

Sectoral ESI indices of price expectations



Source: European Commission, Santander

ESI consumer survey, expected inflation relative to perceived inflation



Source: GUS, European Commission, Santander



Economic policy

4

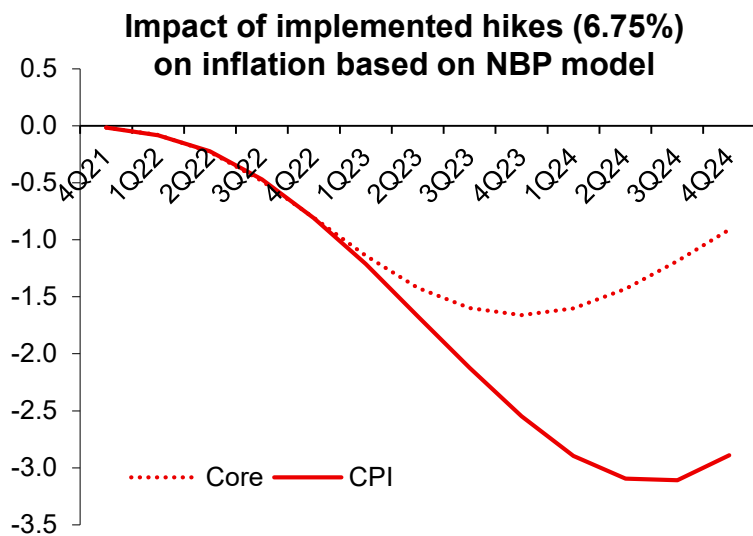


Monetary policy: this is the end (of hikes)

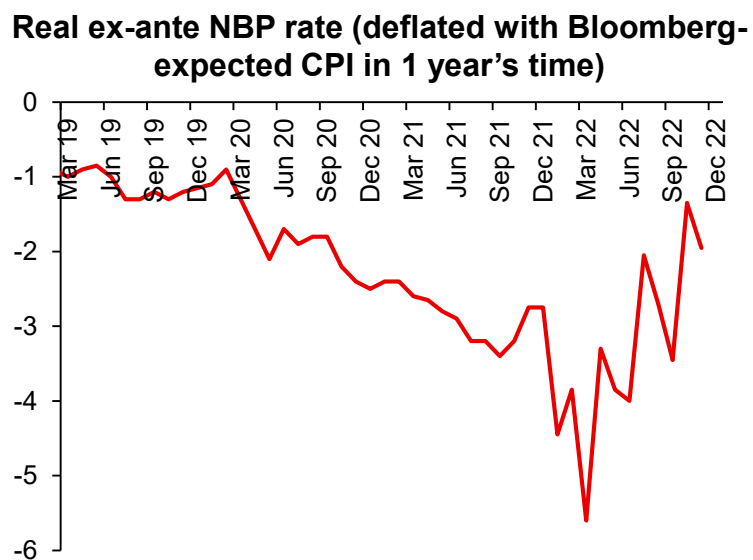
The MPC is signalling that interest rates are already at the adequate level. Recent communication indicates MPC's **acceptance of an extended period of elevated inflation and rising concern about a slowdown in the economy**. Confirmation that the MPC uses this kind of approach is also provided by our analysis of the MPC's actual decisions to raise rates in recent quarters compared vs. those that would be implied by indications of subsequent inflation projections ([p.43](#)).

The MPC believes that inflation needs to come down as external shocks (energy, tensions in supply chains) unwind, monetary policy tightens abroad, the economy slows and the rate hikes already made are fully channelled through the economy.

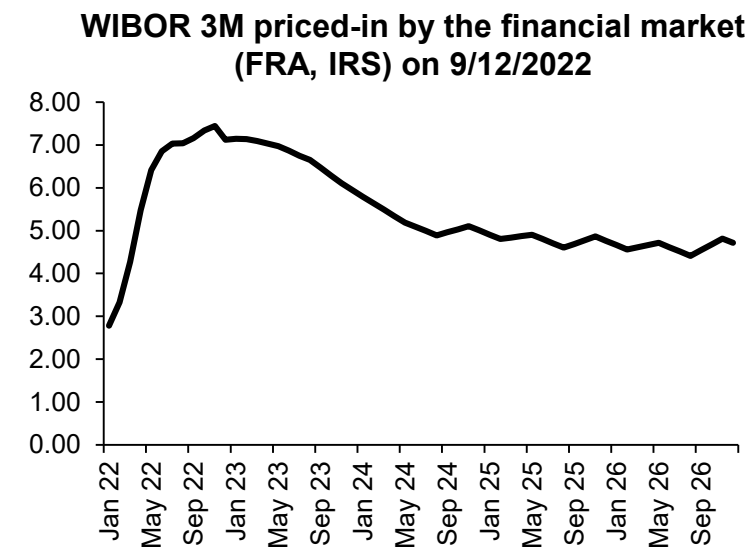
In the baseline scenario, **we assume that key interest rates remain unchanged until at least the end of 2023**. The NBP rate cuts currently priced in by the financial market next year can only materialise, in our view, in a scenario of a much sharper deceleration of the economy and inflation than we anticipate. On the other hand, the bar for further rate rises is also set high - inflation would have to surprise strongly again and, for example, at its peak significantly exceed the currently expected 20% y/y, while economic slowdown would have to be smaller.



Source: Santander



Source: Bloomberg, Santander



Source: Refinitiv, Santander

MPC's flexible approach to inflation targeting



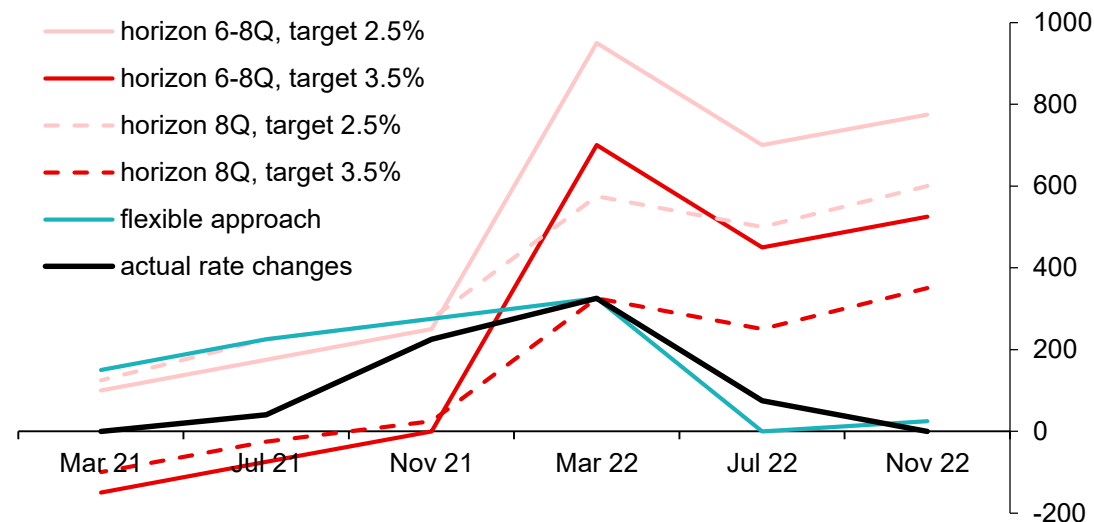
Knowing the strength of monetary transmission, revealed by the NBP (100bp rate hike makes inflation fall by 0.4pp in the long term), it is possible, based on the results of the central bank's inflation projections, to estimate what scale of rate hikes would bring inflation down to the desired level in the monetary policy-relevant horizon. We carried out such an analysis for the inflation projections of the last two years, relating them to the changes in rates actually introduced by the MPC (in this exercise we deliberately focus on the inflation path alone, omitting other signals contained in the projections).

We repeated the analysis with two variants of the 'desired' inflation level (one is the 2.5% inflation target, the other is the upper bound of acceptable deviations from the target, i.e. 3.5%) and three variants of the time horizon over which the Council would like CPI to reach the target (as the MPC has clearly communicated a growing tolerance for an extended period of disinflation) – apart from the standard 6-8 quarters window, considered as the time horizon of the strongest impact of monetary policy changes on CPI (in this variant, the objective is to bring average inflation within this window to the target), we looked at how the conclusions of the study change if the objective were to bring CPI to the target in the 8th quarter of the projection and in the 10th quarter.

Our analysis suggests that the MPC's reaction function has been evolving (the 'flexible approach' path in the upper chart). After initially ignoring signals from the projections (the Mar'21 and Jul'21 projections suggested hikes of around 200bp each if targeting 2.5%), the Council raised rates as indicated by the Nov'21 projection. Faced with further signals for large hikes but also a clearly declining inflation trajectory further out, the MPC's decisions became consistent with targeting the upper end of the target range (3.5%) and then extending the outlook for bringing CPI to 3.5% to 10 quarters.

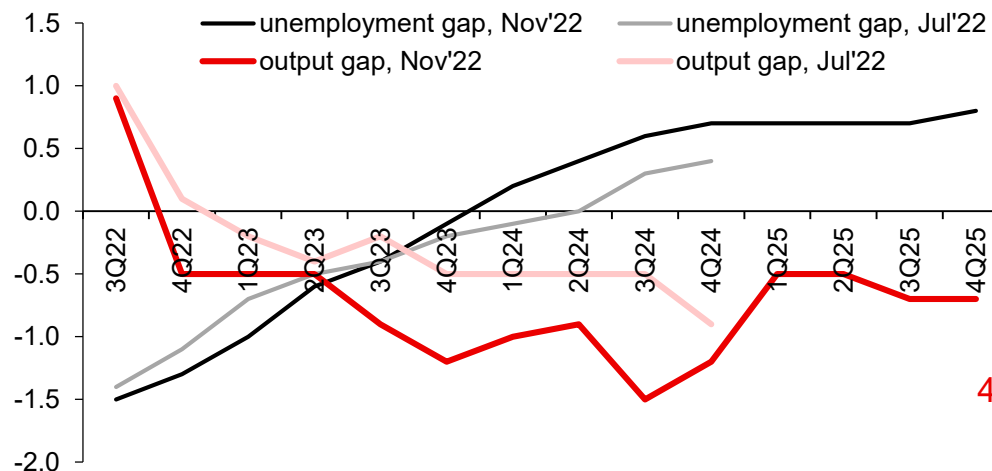
In Nov'22, another reason to ignore the projection's indications of the need for massive rate hikes (at the standard target and horizon) was the widening of the unemployment gap (i.e. the unemployment rate escaped further above the neutral level) and the output gap relative to the Jul'22 projection.

Scale of rate hikes implied by deviations of inflation from the target in successive NBP projections vs. actual MPC decisions between projections



flexible approach - a path assuming that the MPC switched in 2022 to the target of bringing inflation to or below 3.5% and extended from mid-2022 the time horizon for this to 10 quarters.

Selected measures of economic imbalances from the July and November 2022 NBP projections



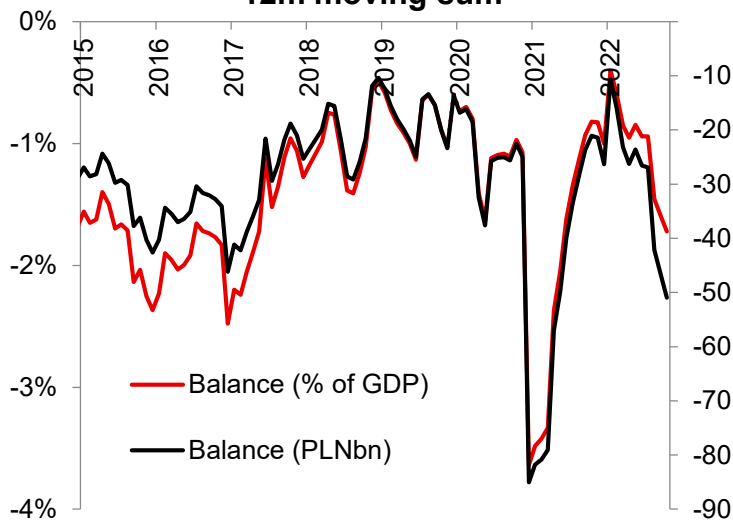


Fiscal policy: budget starts to feel the slowdown

The performance of public finances so far this year looks quite good - the state budget has a surplus of PLN27bn after 10 months, and the public sector deficit (GG) measured according to EU methodology at the end of 2Q2022 was 1.5% of GDP - the least since the start of the pandemic. However, the deficit is bound to increase in the coming quarters. **Budget revenues in relation to GDP are weakening much faster than expenditures**, which is partly due to the cyclical nature of tax receipts, in addition to the tax cuts introduced this year (anti-inflationary shields, the Polish Deal). Despite the surplus in January-October, the cumulative result of the central budget for the last 12 months amounted to -PLN50bn (around -1.7% of GDP).

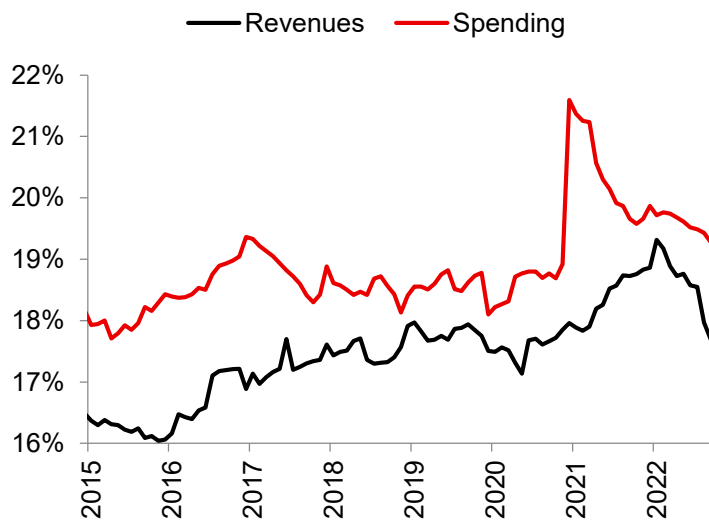
The budget balance at the end of 2022 depends to a large extent on the discretionary decision of the Finance Ministry as to how much to 'offload' 2023 by shifting some spending to December (in the two previous years, spending jumped by around PLN70bn in December). However, the government cannot exceed the amount of spending in the Budget Act (PLN522bn) without a budget amendment. Thus, as long as there is no budget amendment in the pipeline, we assume that **the central deficit at the end of 2022 will not exceed PLN23bn**. This, however, need not be a major setback for the government in a situation where a significant part of public spending has been pushed out to extra-budgetary entities and funds.

Central budget balance, 12m moving sum



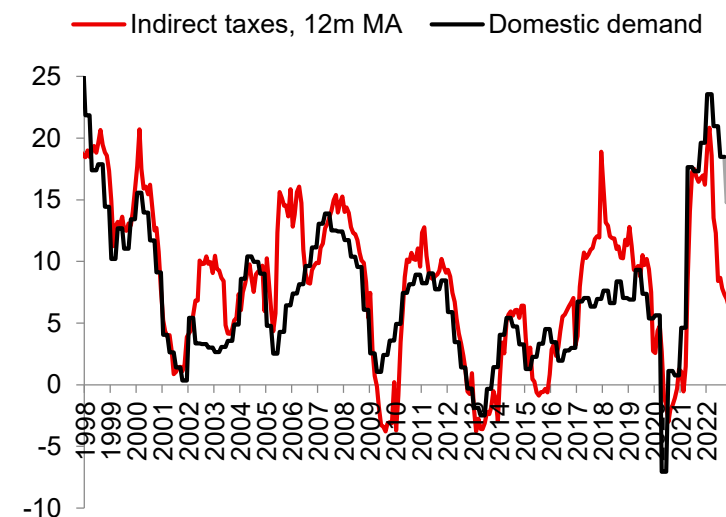
Source: MoF, GUS, Santander

Revenues and spending of the central budget as % of GDP, 12m moving sum



Source: MoF, GUS, Santander

Tax revenues decelerate stronger than the nominal GDP growth, % y/y



Source: MoF, GUS, Santander



Fiscal policy: a bout of additional costs

The outbreak of war in Ukraine and the energy crisis have resulted in a number of measures being taken by the government during 2022 with significant costs for public finances. **We estimate the total costs of these measures, which we already know, to be around 3% of GDP in 2022 and around 1.5% of GDP in 2023** (see table on the right for details, based on the available draft laws). None of the items that relate to 2023 were included in the draft budget, but all will be included in extra-budgetary funds rather than in the central budget.

In October, there was a clear change in the government's declared approach to fiscal discipline, probably due to the difficult market situation. As a result, we have heard suggestions of 'looking for savings' to reduce borrowing needs for 2023, with the Prime Minister mentioning spending cuts of 'a dozen billion zlotys', although detailed proposals have not yet emerged. According to the government, the cuts are expected to spare defence and social benefits. One sign of the search for savings was the partial withdrawal of indirect tax cuts being the part of the anti-inflationary shield, which will increase tax revenues in 2023 by around PLN20bn. The newly enacted regulations on freezing electricity and gas prices also included solutions to pass on some of the costs to the private sector (contributions of energy companies to the Price Difference Payment Fund). Estimating how much money can be accumulated in this fund is subject to considerable uncertainty. Both the costs of price freeze compensation and the amount of contributions will depend on market energy prices. We make a working assumption that contributions will cover about two-thirds of the cost of freezing electricity and gas prices.

Some of the government's initiatives (e.g. subsidies for coal and other heat sources, inflation allowances, expenses related to the influx of migrants) only apply to this year and are not currently planned for 2023. The risk of such shielding measures being renewed as a result of a prolonged energy crisis and/or a worsening migrant crisis seems to be non-negligible, but we do not currently include this in our baseline scenario.

We see a greater risk on the defence and energy spending side, due to the government's large purchasing and investment plans in this area. Recent statements by the authorities mention military spending of 4% of GDP in 2023 against the 3% planned in the budget.

Costs of compensation related to energy crisis and other government's initiatives in public finance 2022-23 (PLNbn)

	2022	2023	SUM
War-related spending (migrants, fertilisers)	23.0		23.0
14. pensions	10.0	10.0	20.0
Anti-inflation shield* **	35.0	10.0	45.0
Inflation allowance*	4.7		4.7
Coal compensation	11.5		11.5
Coal for local governments	4.0		4.0
Compensations for other heat sources	6.2	3.8	10.0
Freeze of electricity prices below limit		24.0	24.0
Cap on electricity prices above limit	1.4	13.8	15.1
Freeze of gas prices		30.0	30.0
<i>Contributions to Price Difference Payment Fund</i>		-40 ?	-40 ?
Sum in PLNbn	95.8	50.2	145.9
Sum as % of GDP	3.2%	1.5%	

* Included in the central budget, not in extra-budget funds.

** Including cancellation of tax cuts in 2023 with exemption of food VAT.

Source: sejm.gov.pl, rcl.gov.pl, Santander

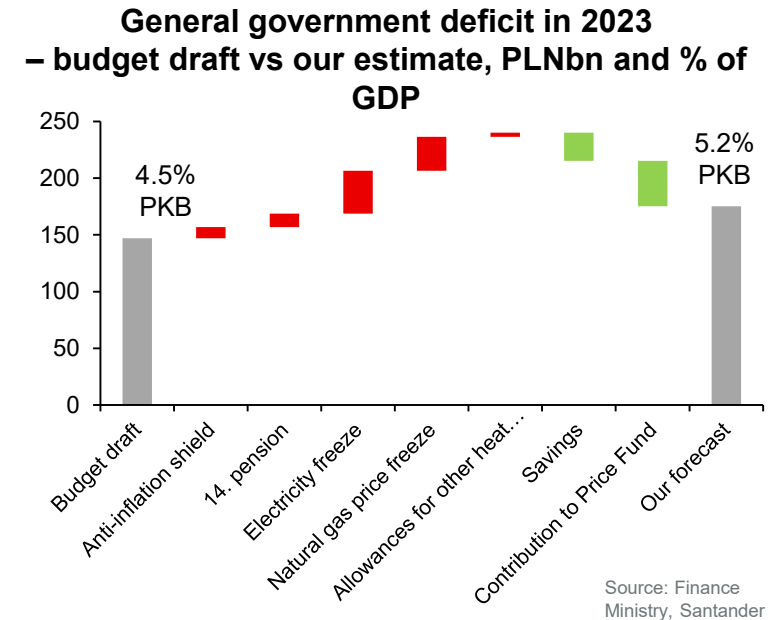


Fiscal policy: what about 2022-23 GG deficit?

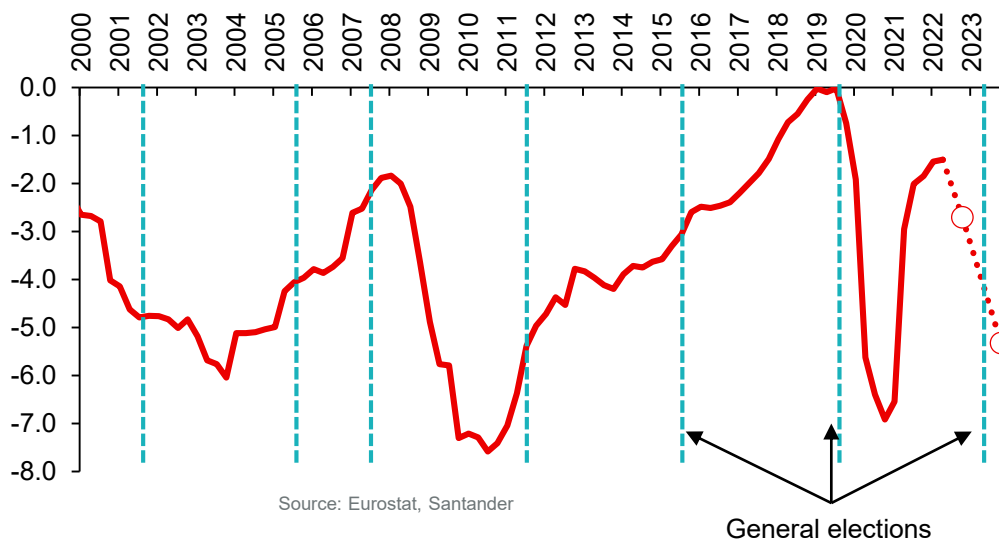
The MF's fiscal notification from October forecasts a GG deficit of 4.7% of GDP in 2022, but since 2017, fiscal notifications have strongly overestimated the scale of the deficit. We project that the **fiscal deficit in 2022 could be around 3% of GDP** (against 1.5% of GDP after the first half of the year).

The draft budget for 2023 assumes a fiscal deficit of 4.5% of GDP. The draft does not include a number of costly measures to, among other things, protect households and companies from energy shocks (see [previous page](#)). But on the other hand, the Prime Minister has promised to introduce yet unspecified measures to bring about savings. In our view, this factor limits the risk of a strong increase in financial imbalances and the **public sector deficit could be slightly above 5% of GDP in 2023**. The chances of significant spending cuts appear to be limited by the prospect of general elections. Although, in truth, data from the last two decades do not indicate a strong link between the election period and an increase in the scale of fiscal expansion.

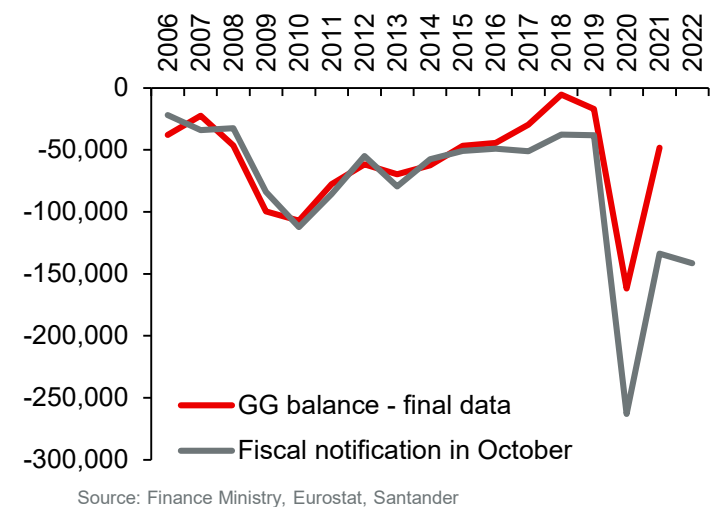
A deficit close to 5% of GDP implies a stabilisation of public debt near 50% of GDP, unless nominal GDP growth slows markedly below 10%.



General government balance as % of GDP, 4Q moving average



GG balance – final data vs MF fiscal notification for October respective year, PLNmn



Financial markets

A close-up photograph of a silver pen resting on a document with various financial charts, including line graphs and bar charts. The background is blurred, showing more of the document and a laptop screen.

5



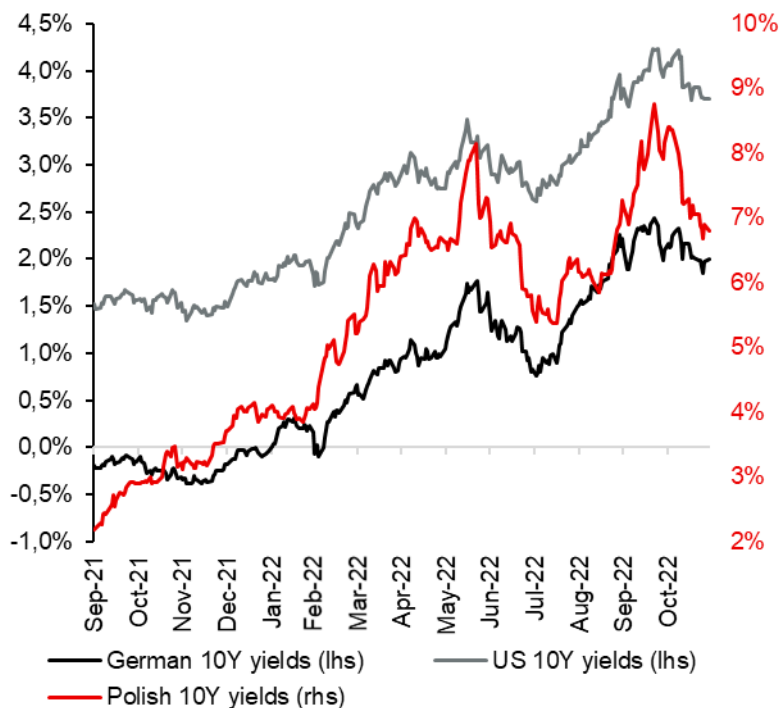
FI outlook: yields in a downward trend in 2023

We expect the downward trend in domestic bond yields to continue in 2023.

This should be supported by both disinflationary processes at home and abroad.

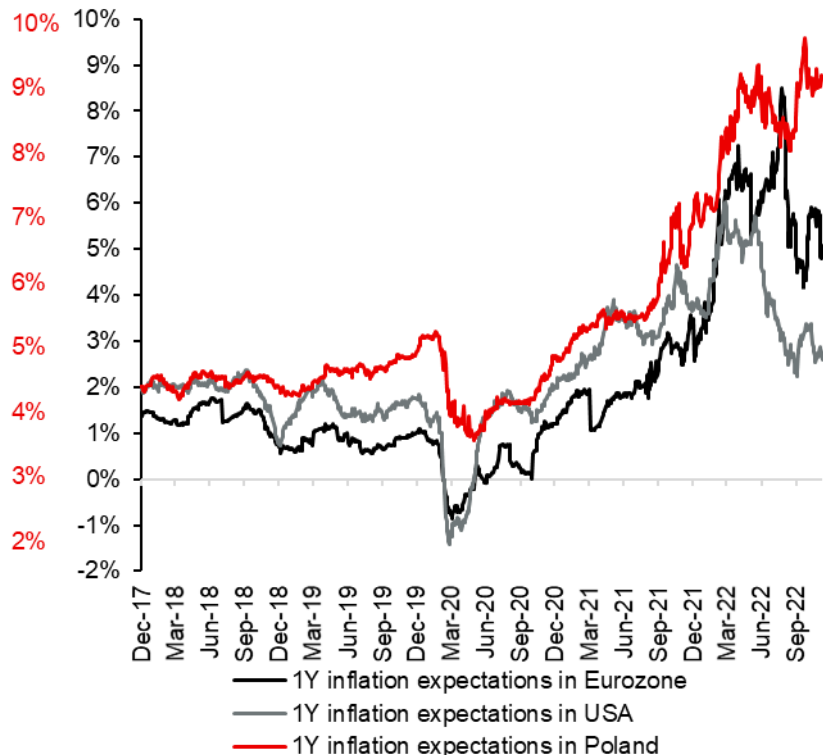
Planned large increase in gross bond issuance to finance the 2023 budget's borrowing needs may be a factor slowing the pace of strengthening of Polish debt next year.

Trends in the domestic debt market are similar to those in the main markets.



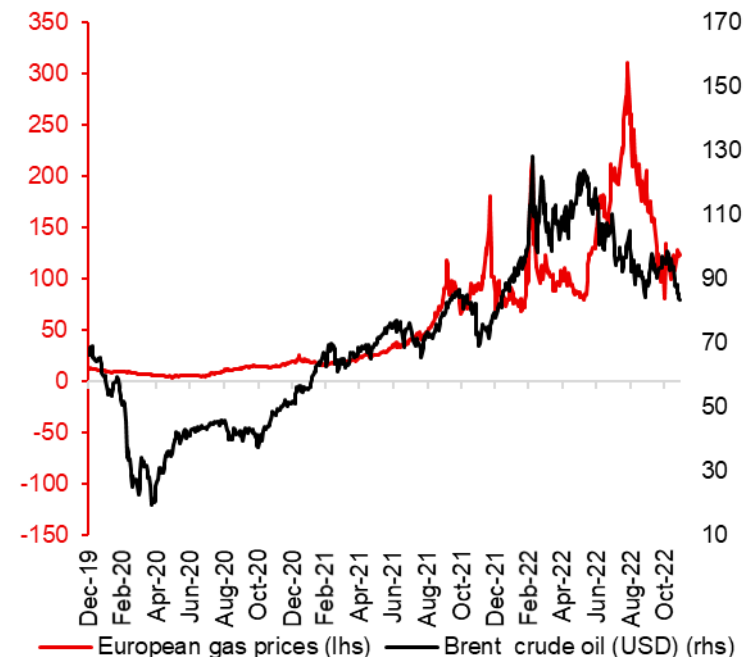
Source: Refinitiv Datastream, Santander

Market inflation expectations are gradually falling, not only in core markets but also in Poland.



Source: Refinitiv Datastream, Santander

Lower energy commodity prices favor declines in yields, but a risk factor is the possibility of gas shortages in the European market in early 1Q 2023, which could temporarily bump up yields during this period.



Source: Refinitiv Datastream, Santander

FI outlook: debt market and its inflationary expectations

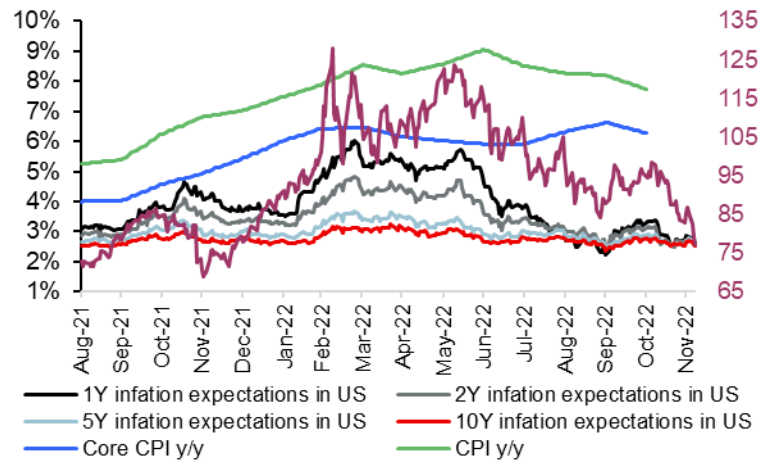


Market inflation expectations in the main markets and in Poland are strongly correlated with commodity prices: in the US, with oil prices; in the Eurozone, with gas prices on the European market; in Poland, with Brent crude oil prices on world markets.

In the US, the decline in market inflation expectations has dovetailed with both the decline in oil prices on world markets and the peak point of CPI inflation (May data was released in June). In the Eurozone, the peak in inflation expectations was reached together with the highs of gas prices in European market but a few months before the first lower reading of HICP inflation. In the Polish debt market, on the other hand, the peak in market inflation expectations did occur in the month for which the highest inflation reading of 2022 was recorded so far (October), but it should be noted that: (1) in the months of July-September, market inflation expectations in the domestic market fell in line with oil prices despite the progressive increase in domestic inflation, (2) although in the September-October period there was a renewed increase in inflation expectations and the establishment of their highest level so far, it should be noted the disproportionately small increase in inflation expectations in Poland during this period relative to changes in CPI inflation: between the peak level of inflation expectations in June and the maximum level reached in October, the difference is 8.98% vs. 9.58% June while, over the same period, CPI inflation rose from 15.6% to 18%. **It follows, then, that global markets so strongly influence inflation expectations of the domestic debt market that they can weaken the impact of domestic factors on it, and sometimes even impose trends that contradict local fundamentals (e.g., the July-August 2022 period).**

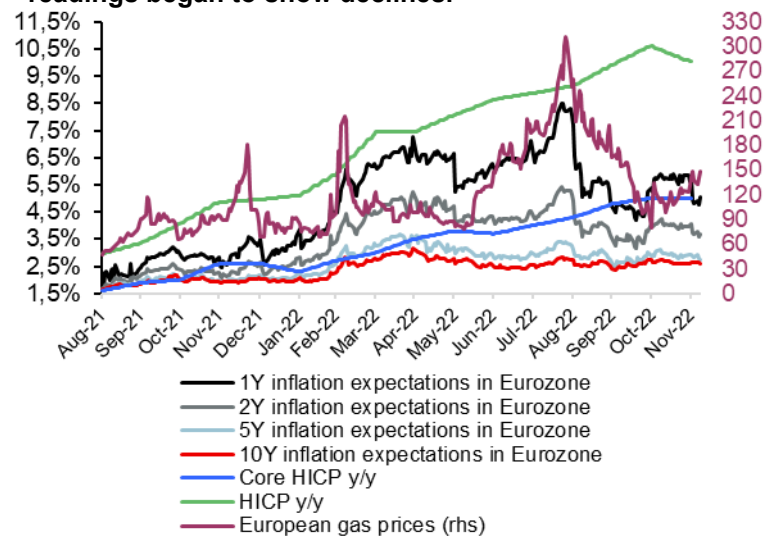
Taking this into account, we expect a continuation of the downward trend in bond yields in 2023.

Market inflation expectations in the US have begun to fall more sharply than CPI inflation rates.



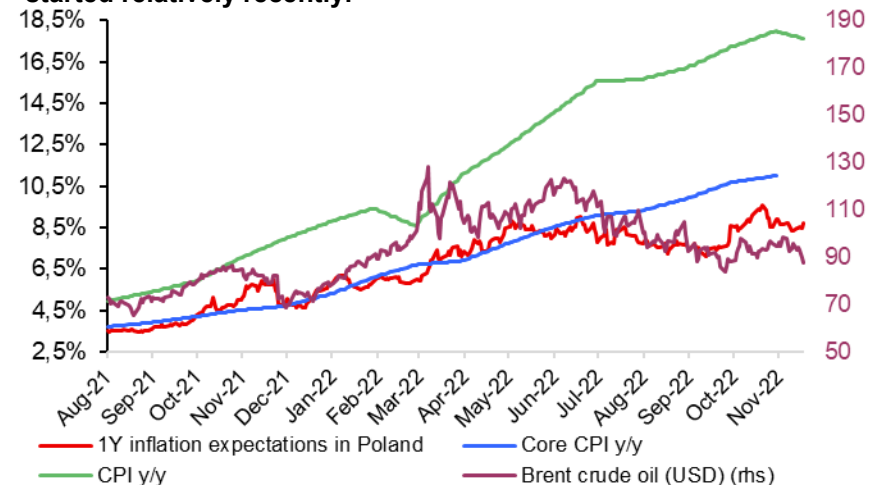
Source: Refinitiv Datastream, Santander

Market inflation expectations in the Eurozone fell as gas prices in European markets fell much faster than HICP readings began to show declines.



Source: Refinitiv Datastream, Santander

With the decline in inflation expectations in the mainstream markets and the lowering of oil prices, market inflation expectations in Poland have also begun to fall but this process started relatively recently.



Source: Refinitiv Datastream, Santander



FI outlook: more bond issuances in 2023

Bond issuance plans for 2023 are clearly higher than in previous years.

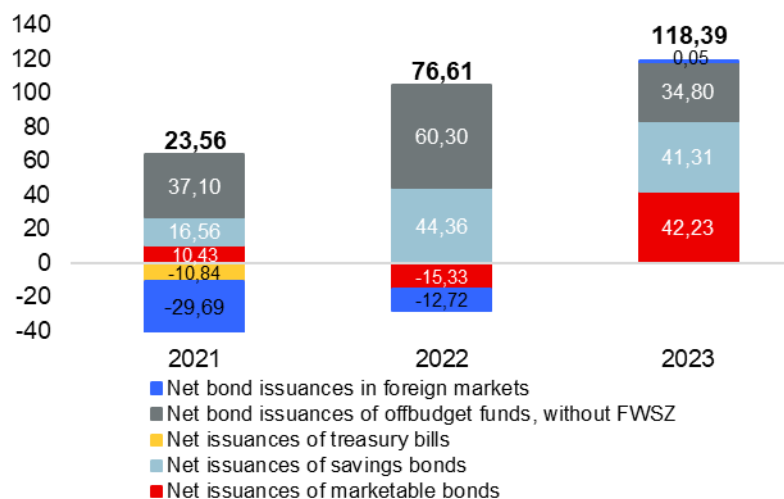
How the Armed Forces Support Fund will be financed remains an open question. However, it seems likely that it could be financed by foreign loans and NBP profits. In such a scenario, this would reduce the scale of bond issuance in 2023.

To date, about 38 to 40 billion PLN have been raised from the market as part of the pre-financing of next year's budget.

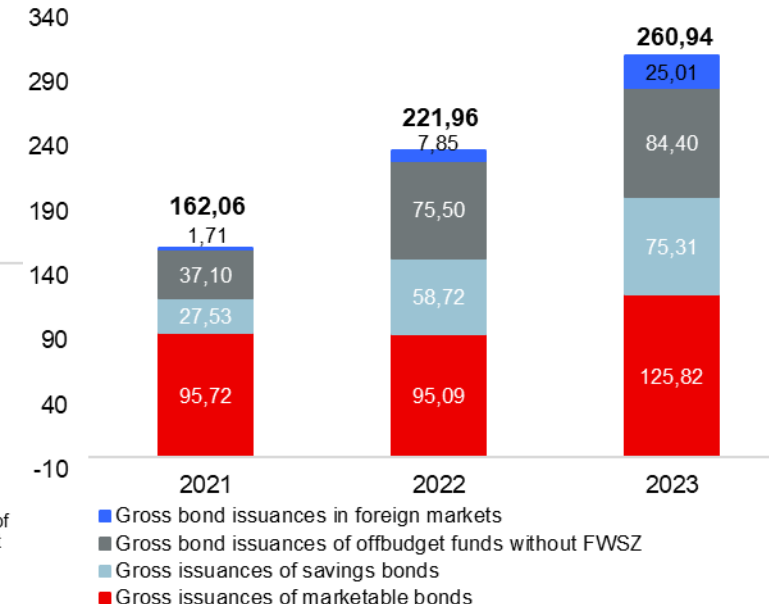
In the case of possible problems with financing next year's budget through the market, the government may additionally shore up the budget's "liquidity cushion", but this would nevertheless only be an ad hoc measure and insufficient given its scale.

Planned increase in bond issuance is a factor that could put pressure on the asset swap spreads, thus slowing the assumed downward trend in domestic bond yields in 2023.

Net issuance of bonds for budget and offbudget funds (PLN bn).



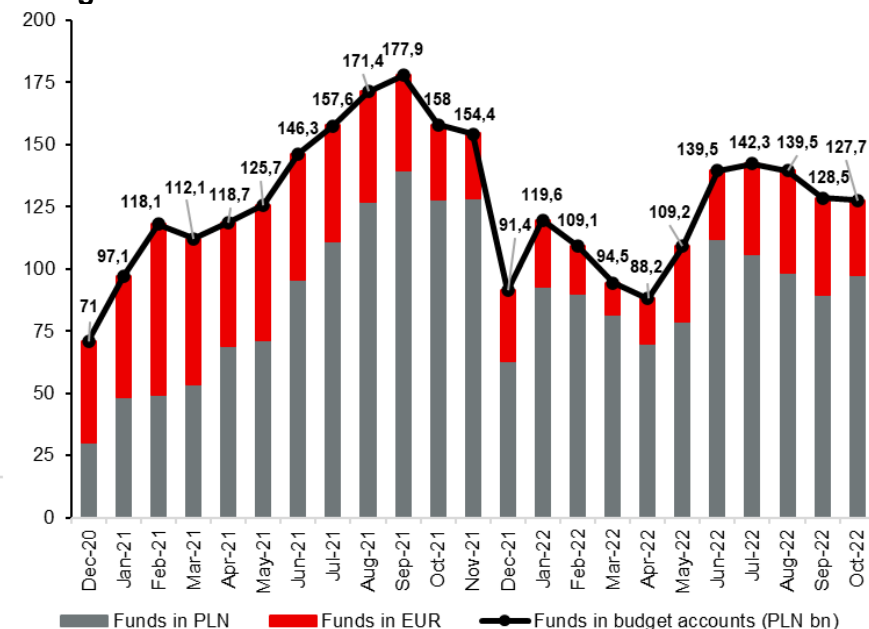
Gross issuance of bonds for budget and offbudget funds (PLN bn).



* Net issuance levels in 2022 and 2023 are calculated on the assumption that the amounts of PLN 15.2 billion in 2022 and PLN 49.6 billion in 2023 planned for the Armed Forces Support Fund (FWSZ) will not be financed by market bond issues.
Source: Finance Ministry, Santander

* Gross issuance levels in 2022 and 2023 are calculated on the assumption that the amounts of PLN 15.2 billion in 2022 and PLN 49.6 billion in 2023 planned for the Armed Forces Support Fund (FWSZ) will not be financed by market bond issues.
Source: Finance Ministry, Santander

Liquidity cushion can be partially used to finance the 2023 budget.



Source: Finance Ministry, Santander





FI outlook: domestic demand for bonds

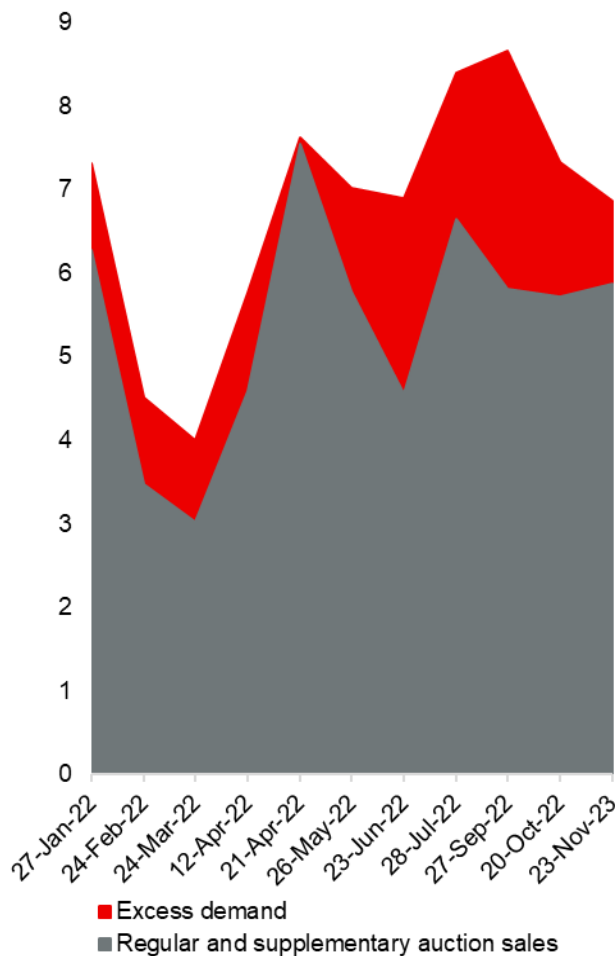
Demand for debt at the 2022 bond sale auctions was at sufficient levels to easily fund the assumed supply. The NBP's signaling of the end of the hike cycle had a positive impact on demand.

Financing the assumed net issuance of market bonds for 2023 at the level of PLN 42 billion of rollover should not encounter any major demand problems from the banking sector, as should rolling over next year's maturing bonds.

In the case of retail bonds, high sales in June-August were followed by a marked slowdown as commercial banks made their deposit offerings more attractive. Their budgeted sales with redemptions of around 75.3 billion zlotys may be difficult to meet. In addition, a side effect of higher retail bond sales is crowding out liquidity from the banking sector, so higher sales in the retail bond segment may result in lower demand for wholesale bonds.

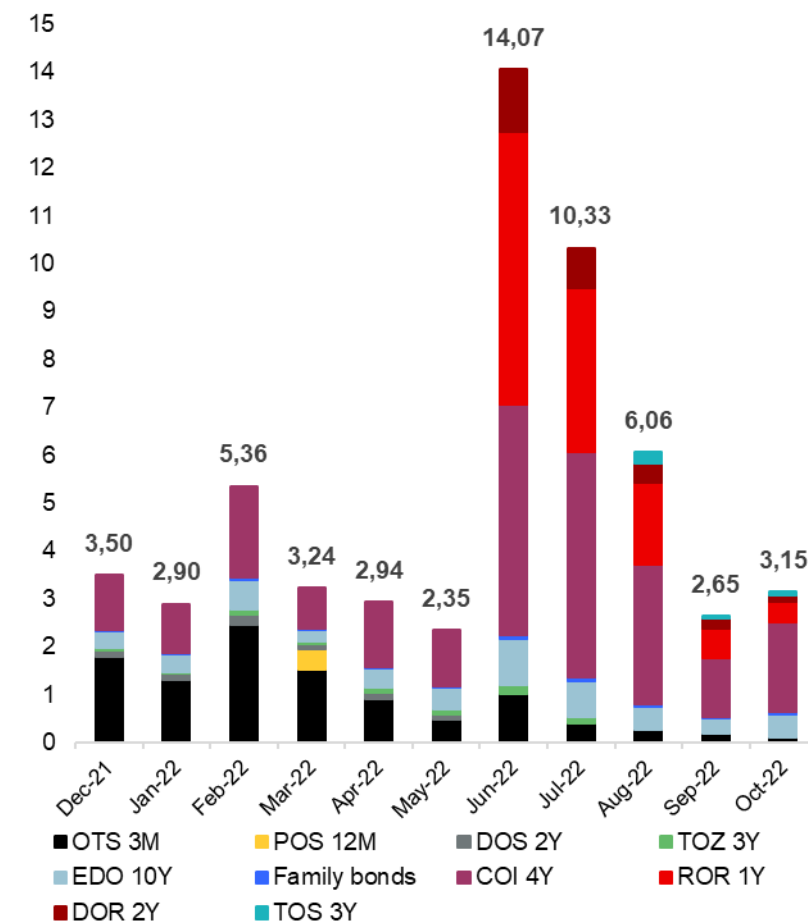
Achieving more sales of both wholesale and retail bonds may require a significant increase in the zloty's liquidity in the domestic market by BGK, but whether this translates into increased downward pressure on the zloty will also depend on trends in global financial markets - these, however, should favor the zloty throughout 2023.

Excess demand at bond sale auctions relative to supply (PLN bn).



Source: Finance Ministry, Santander

Sales of savings bonds (bn of PLN) weakened, which is not a good prognosis for 2023, when their gross issuance is expected to increase further.



Source: Finance Ministry, Santander



FI outlook: foreign demand for Polish debt

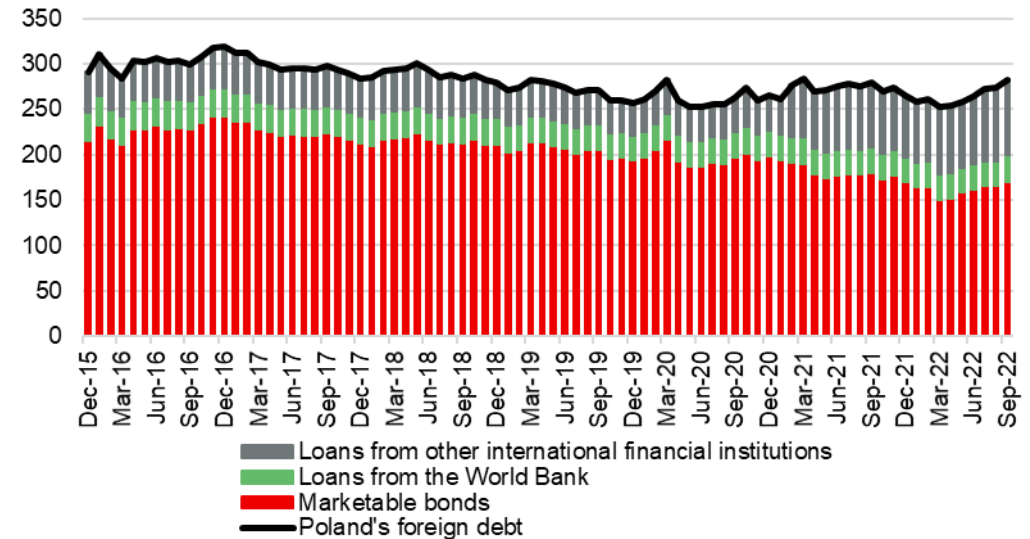
Alternative form of financing debt issuance can be provided by foreign markets. Since the end of 2016, the stock of outstanding bonds issued abroad has been gradually reduced, giving the Finance Ministry a sizable buffer.

November's \$3 billion bond issue in the U.S. market to finance next year's borrowing needs should be seen as a foray for possible further issues of this kind in 2023 in case a problem arises in financing debt through domestic bond issues.

Perception of Polish debt in both domestic and foreign markets is highly dependent on global trends, i.e. the current state of investment risk perception - as evidenced by the high correlation between the asset swap spread and the zloty's exchange rate against the euro. In conditions of greater global risk appetites, Polish debt is usually perceived as less risky, in the opposite situation as more.

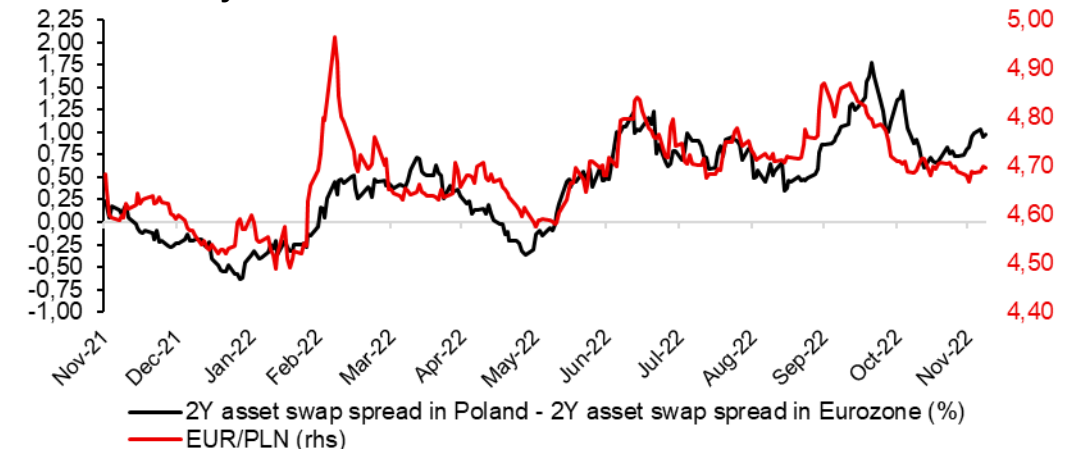
Degree of difficulty of financing a bond issue for the budget will depend largely on domestic and foreign investment sentiment in financial markets.

Structure of Poland's foreign debt (PLN bn)



Source: Finance Ministry, Santander

Perception of Polish debt largely depends on global trends, which also affect the zloty.



Source: Refinitiv Datastream, Santander

FX outlook: PLN supported by global markets

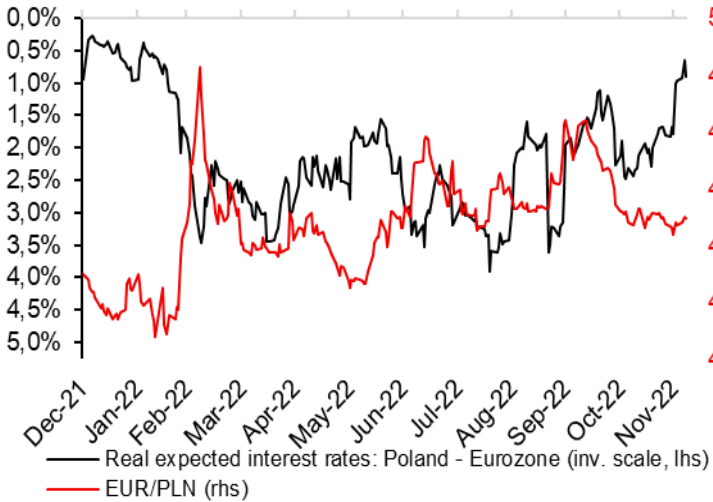


Pause in the cycle of rate hikes by the NBP amid their continuation in the core markets and the expected economic slowdown translating into a decline in expectations of interest rate levels in the longer term puts downward pressure on the zloty.

Lack of a clear weakening of the zloty on this account is a result of the low liquidity of the zloty in the domestic market, which hinders long-term speculation against the zloty, as well as growing risk appetites in global markets (weakening dollar). **We assume that in the 2023 perspective, these two factors, will have a dominant impact on the zloty exchange rate, leading to its gradual appreciation since the end of 1Q.**

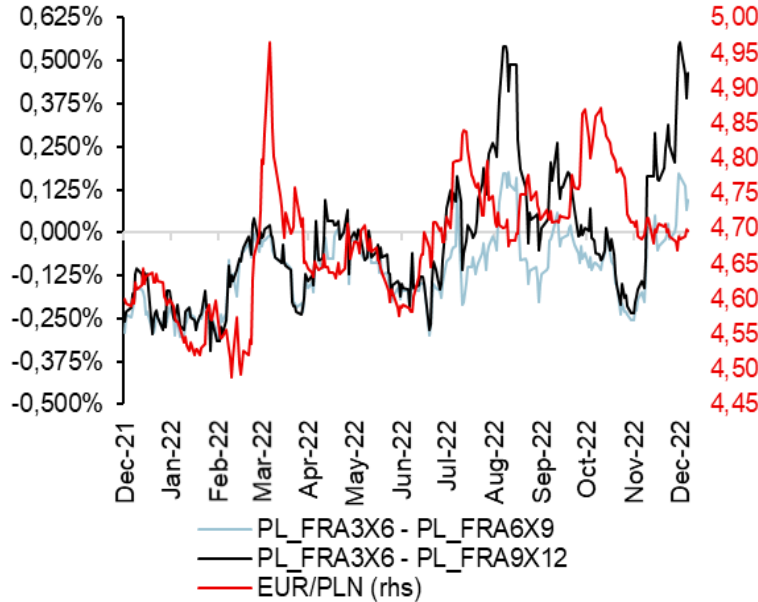
Only the first months of 2023 may be a certain exception to this rule, due to a marked economic slowdown in the first quarter and possible problems with gas shortages in European markets.

Relationship between expected real market interest rates in Poland and the Eurozone does not favour Polish currency.



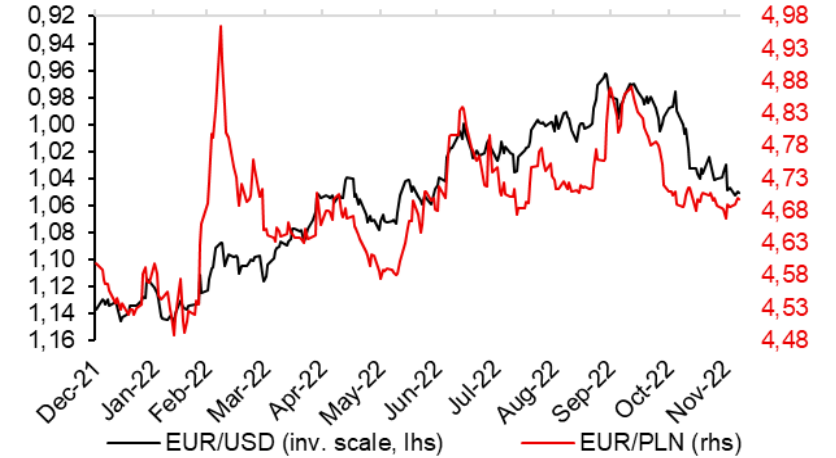
Source: Refinitiv Datastream, Santander

Expected decline in interest rates in the longer term is potentially working against the zloty.



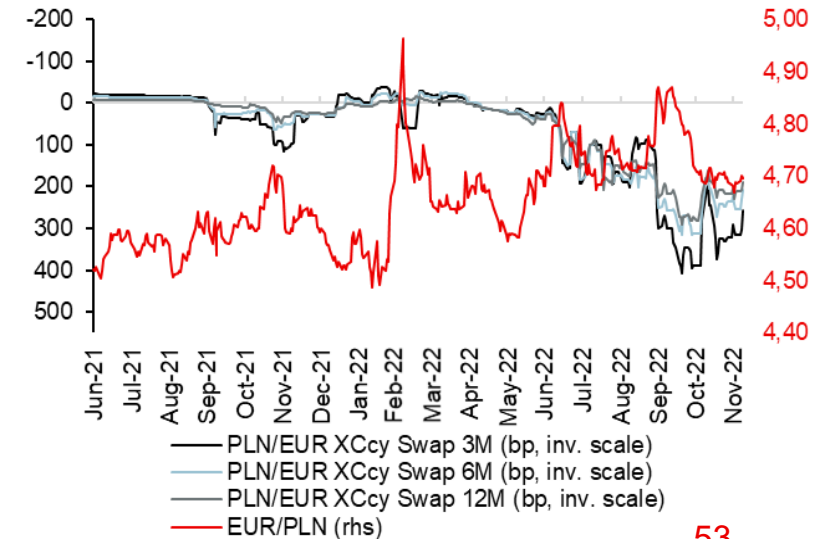
Source: Refinitiv Datastream, Santander

Weaker dollar in 2023 will favour the zloty.



Source: Refinitiv Datastream, Santander

Low PLN liquidity in the domestic market makes long-term speculation against Polish currency difficult.



Source: Refinitiv Datastream, Santander

Forecasts

6

Economic Forecasts

		2020	2021	2022E	2023E	1Q22	2Q22	3Q22	4Q22E	1Q23E	2Q23E	3Q23E	4Q23E
GDP	PLNbn	2,337.7	2,623.9	3,045.8	3,380.0	691.5	723.3	779.1	852.0	777.7	802.4	865.6	934.3
GDP	% y/y	-2.0	6.8	4.7	0.1	8.6	5.8	3.6	1.8	-2.9	0.0	0.3	2.4
Domestic demand	% y/y	-2.7	8.4	4.5	-0.9	12.0	6.9	3.1	-1.7	-4.6	-2.4	0.6	2.0
Private consumption	% y/y	-3.6	6.3	3.4	1.1	6.7	6.4	0.9	0.0	-1.0	-1.0	3.0	3.0
Fixed investment	% y/y	-2.3	2.1	2.5	-1.2	4.7	6.6	2.0	-0.5	-3.0	-4.5	0.0	1.0
Industrial output	% y/y	-1.1	14.5	10.3	0.4	16.8	12.5	9.3	3.6	-3.0	-1.7	1.0	5.4
Construction output	% y/y	-3.5	1.6	6.5	-5.2	23.7	9.2	3.3	-1.3	-12.5	-8.7	-2.9	0.3
Retail sales (real terms)	% y/y	-3.0	7.4	5.5	0.6	9.7	9.7	3.4	0.1	-3.1	-1.1	1.1	5.0
Gross wages in national economy	% y/y	5.3	8.9	11.9	10.6	9.7	11.8	14.6	11.5	11.8	10.1	9.5	10.8
Employment in national economy	% y/y	-1.0	0.4	2.0	-0.2	1.9	2.0	2.4	1.7	0.3	-0.3	-0.4	-0.5
Unemployment rate *	%	6.8	5.8	5.2	5.9	5.8	5.2	5.1	5.2	5.6	5.5	5.6	5.9
Current account balance	EURmn	12,811	-8,261	-25,873	-35,361	-7,402	-4,726	-6,780	-6,965	-8,968	-5,883	-9,097	-11,412
Current account balance	% GDP	2.4	-1.4	-4.0	-4.9	-2.7	-3.5	-3.7	-4.0	-4.1	-4.2	-4.4	-4.9
General government balance (ESA 2010)	% GDP	-6.9	-1.8	-2.6	-5.2	-	-	-	-	-	-	-	-
CPI	% y/y	3.4	5.1	14.4	14.5	9.6	13.9	16.3	17.6	18.8	15.1	13.2	10.9
CPI *	% y/y	2.4	8.8	17.3	10.9	11.0	15.5	17.2	17.3	17.4	14.1	12.2	10.8
CPI excluding food and energy prices	% y/y	3.9	4.1	9.1	8.7	6.6	8.4	10.0	11.3	10.8	9.5	8.1	6.4

* End of period; other variables – average in period
All shaded areas represent Santander's estimates

Source: GUS, NBP, Santander



Market Forecasts

		2020	2021	2022E	2023E	1Q22	2Q22	3Q22	4Q22E	1Q23E	2Q23E	3Q23E	4Q23E
Reference rate *	%	0.10	1.75	6.75	6.75	3.50	6.00	6.75	6.75	6.75	6.75	6.75	6.75
WIBOR 3M	%	0.67	0.54	6.03	7.00	3.46	6.25	7.08	7.34	7.06	6.98	6.98	6.98
Yield on 2-year T-bonds	%	0.50	0.79	6.35	6.69	4.07	6.78	7.06	7.48	6.83	6.83	6.65	6.45
Yield on 5-year T-bonds	%	0.96	1.39	6.37	6.59	4.41	7.01	6.57	7.48	6.73	6.73	6.55	6.35
Yield on 10-year T-bonds	%	1.52	1.97	6.09	6.44	4.29	6.63	6.19	7.23	6.58	6.58	6.40	6.20
2-year IRS	%	0.62	1.19	6.61	6.55	4.68	7.21	7.21	7.33	6.66	6.69	6.53	6.34
5-year IRS	%	0.80	1.69	5.91	5.68	4.31	6.53	6.22	6.59	5.77	5.80	5.66	5.49
10-year IRS	%	1.15	2.01	5.67	5.75	4.10	6.16	5.95	6.47	5.83	5.87	5.73	5.56
EUR/PLN	PLN	4.44	4.57	4.68	4.67	4.62	4.65	4.75	4.71	4.71	4.69	4.66	4.63
USD/PLN	PLN	3.89	3.86	4.46	4.43	4.11	4.36	4.71	4.64	4.50	4.50	4.39	4.31
CHF/PLN	PLN	4.15	4.22	4.66	4.66	4.46	4.52	4.88	4.79	4.78	4.73	4.61	4.52
GBP/PLN	PLN	5.00	5.31	5.50	5.27	5.52	5.48	5.55	5.44	5.57	5.45	5.17	4.93

* End of period; other variables – average in period
All shaded areas represent Santander's estimates

Source: NBP, Bloomberg, Santander

This analysis is based on information available until **9.12.2022** has been prepared by:

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Sectoral supplement

Strategic Sectors

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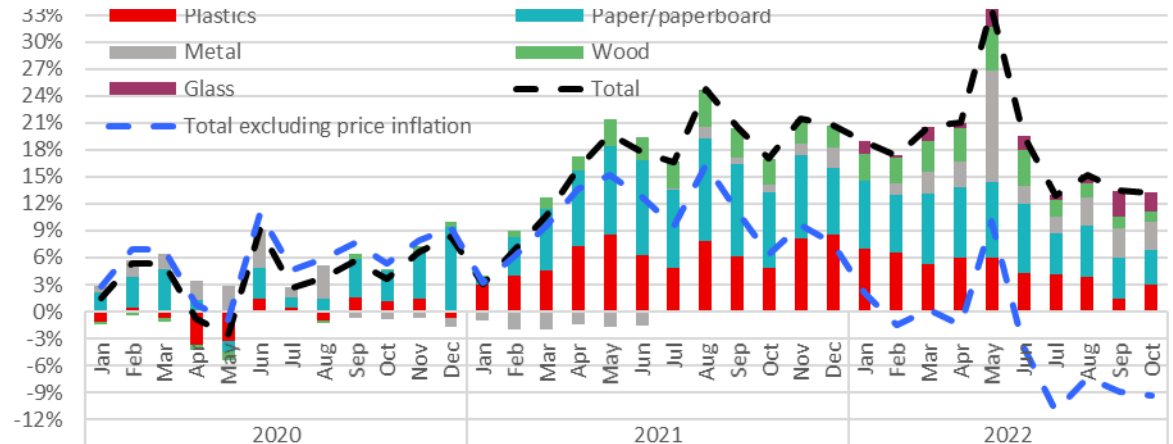
Pricing power to stay with paper packaging producers

Polish packaging industry sustains double digit growth dynamic after 10 months of 2022 at around 19% YoY. Since June we are seeing monthly growth decelerating to 13-15% YoY which shows that packaging industry is slowing down in line with overall macro environment. What is more disconcerting is that when cleared from price inflation, sold production dynamic dipped into negative territory after May, which confirms weaker demand for packaging. At the same time this means that price remains the main growth driver.

Over the past 2 years we have witnessed tremendous rise in the price of packaging, with materials cost inflation peaking as high as 120-130% YoY. Among main cost drivers was the increase in gas price, which started in early 2021. Based on this, we have modelled price expectations of companies in main industries that include packaging production. As a result, we can see that apart from cost inflation, paper and paperboard packaging benefitted from the strongest pricing power, with price increases outpacing what we would expect just from the increases in the price of gas. This obviously shows how strong the demand was over 2021 and 1H 22. To support this claim further we also observed that EBITDA margins in this segment remained more or less stable since 1Q 21 up to the end of 1H 22, which confirms that paper/cardboard packaging companies could transfer great majority of their costs. In case of plastic packaging we can see that pricing power is lower and price expectations are much more in line with what would result just from gas price inflation. Based on futures contracts on gas deliveries in 2023, we expect that packaging prices should remain high, with little room for decreases.

What is coming to the forefront of industry drivers are EU regulations on single use plastic packaging and waste collection. Due to prolonging implementation of EU directives to domestic law we saw investment outlays in the plastic packaging segment dip below amortisation, which means that companies are reducing their investment to levels that allow only for renewal of production capacities, rather than expansion. At the same time, we see paper packaging manufacturers leading the way with new investment outlays, which goes to show shifts in consumer demand and environmental perception.

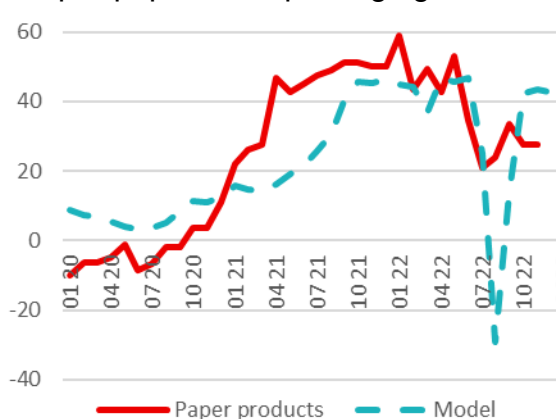
Sold production* of packaging by material type (YoY change)



Source: CSO, Eurostat, Santander *Manufactured production up to 2021, since 2022 sold production change

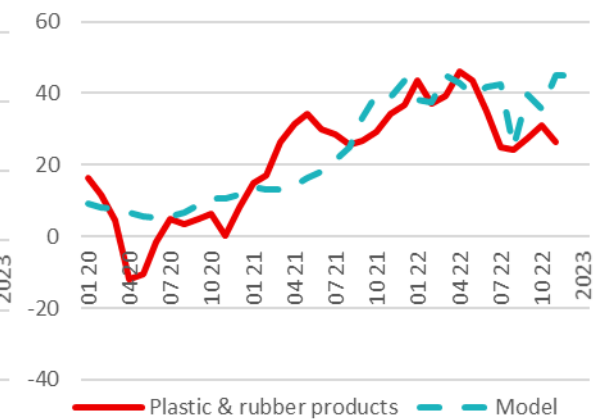
Industrial production selling price expectations – actual and modelled

Paper/paperboard packaging



Source: Destatis, Santander

Plastic packaging



Source: Reporter Chemiczny, Plastech, Plastics Europe, Investing.com, Santander

Export sales remains supportive for furniture producers

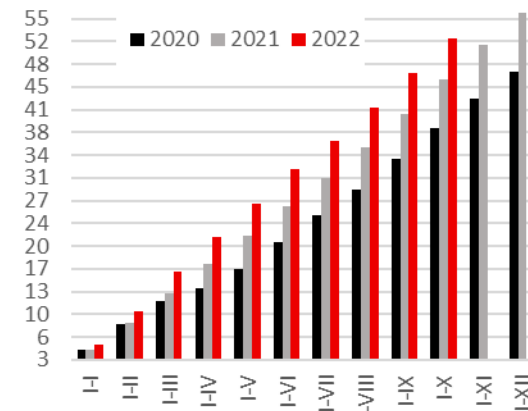
After 10 months of 2022, sold production of the furniture industry grew by ~14% YoY, while in October alone growth amounted to just 0,3% YoY. This goes to show furniture production is slowing down in line with increases in interest and cost of living not only in Poland but also in the Eurozone. Nevertheless, we see October reading as mildly positive as we expected YoY dynamic to turn negative, which now is probably postponed to following months. What is more, effect of price increases is fading, as producer prices are declining in MoM terms since August. All of the above draws a picture of demand slowing down but in a more gradual way than we expected.

Polish furniture production turnover index looks pretty good relative to main EU competitors to say the least, as we observe flatish MoM change in Italy and Germany. This goes to show how much Polish furniture industry benefits from weaker PLN and lower cost base. Comparison of foreign and domestic turnover indices further confirms this – export sales remain visibly above growth trend from 2019-2021, while domestic sales underperforms the trend.

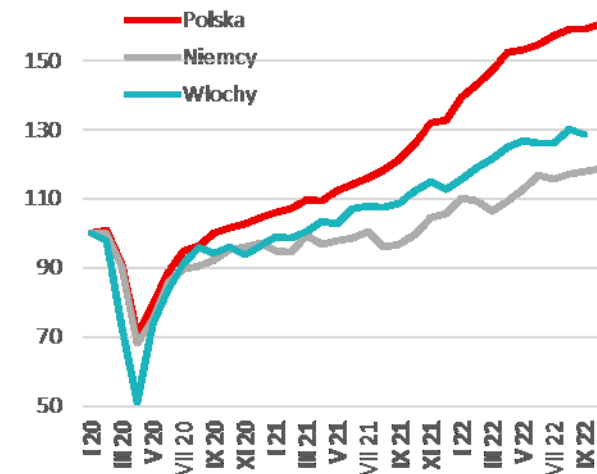
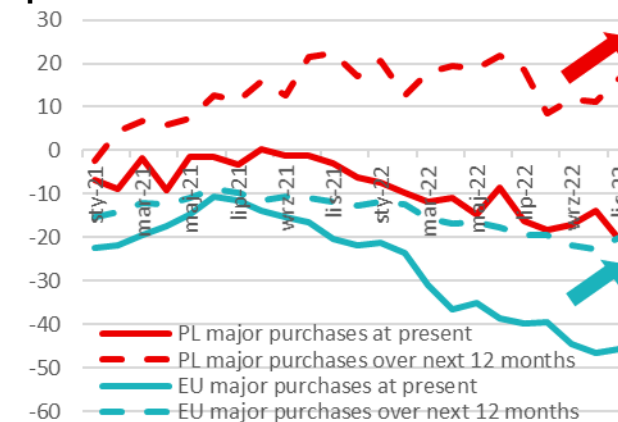
Sales profitability in furniture manufacture has dipped somewhat in 3Q 22 to 5,1% from 5,6% in 1H 22, while share of companies with negative margins in sector's revenues increased to ~17%. In both cases financial indicators show that furniture industry is in a tough situation but the scale of it is not unprecedented – we saw similar levels back in 2018.

At the end of the year we expect to see sold production growth at 10-11% YoY, mainly thanks to very strong growth in 1H 22. Material deceleration of the residential market and costs of living make it hard to expect increased sales from domestic market, especially as we see that consumers are mostly pessimistic at present. Nevertheless, in both Poland and EU we see that major purchases intention over the next 12 months has ticked upwards, which may mean that consumers are only postponing their purchases, rather than resign from them altogether.

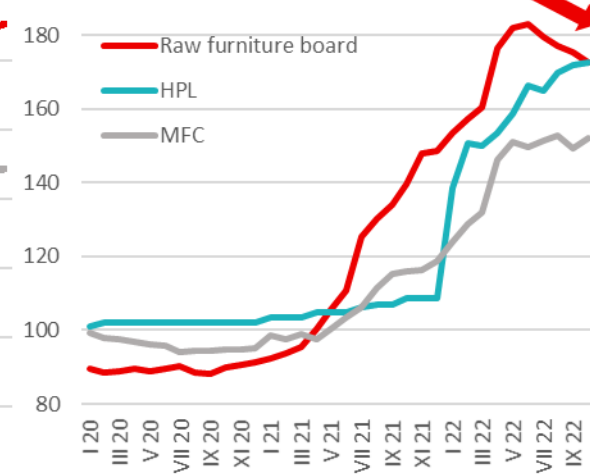
Sold production of furniture manufacturing (PLN bln)



Consumer confidence – major purchases intention



Source: Eurostat, Santander



Source: Destatis

E-sales declines across EU but Poland remains growth champ

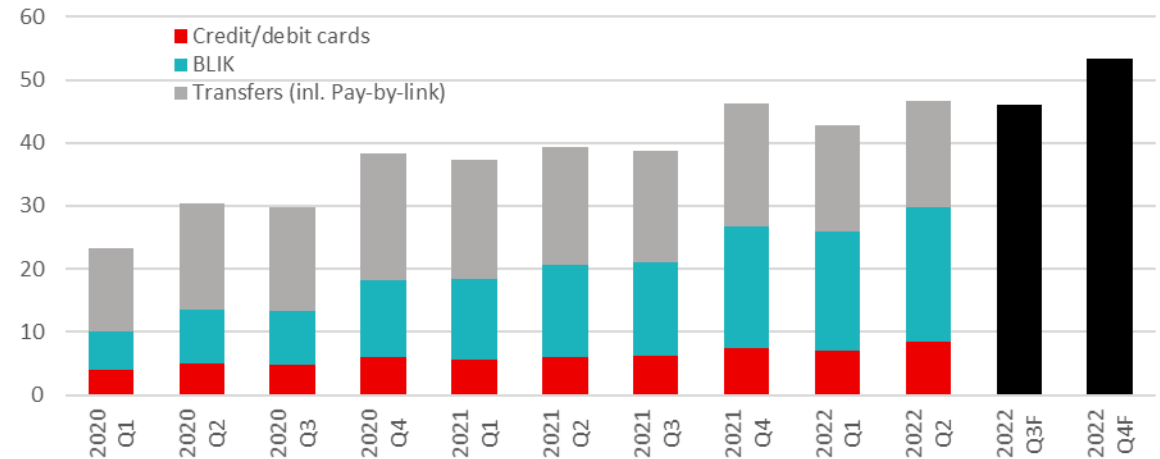
Main theme of e-commerce analyses for this year is „back to normal”. With pandemic boost gone, e-sales growth on many markets has stalled or even turned negative, despite rising inflation. According to Eurostat data, sales via Internet and mail order houses at EU level has decreased by 6% YoY (calendar and seasonally adjusted), with eurozone noting an even deeper decline of 7%.

Polish market stands out in a positive way, based on CSO (GUS) data, we estimate that after 10 months of this year, retail e-commerce sales value is up by 25-29% in current prices. We see high inflation as supportive e-retailers, as their share in retail has increased this year to an average of ~11% vs ~9% in the corresponding period last year. In October alone this has reached an all-time high of 14%, which bodes very well for 4th quarter e-sales. We estimate that retail e-sales could reach some PLN 112-113 bln at year end, which is visibly above our forecast from 1Q 22 of PLN 101-108 bln.

Top e-sales growth drivers this year are undisputedly textiles, clothing, and footwear at around 27% YoY growth and ~30% share in retail e-turnover. Next up is the category of food and beverages with ~25% growth but with a negligible share of ~1% of e-turnover. We also observe double digit, 13-15% growth in sales of cosmetics and pharmaceuticals, while sales of furniture and electrical household equipment is almost flat YoY at 5% growth. This confirms that consumer confidence has visibly deteriorated and major purchases are being postponed.

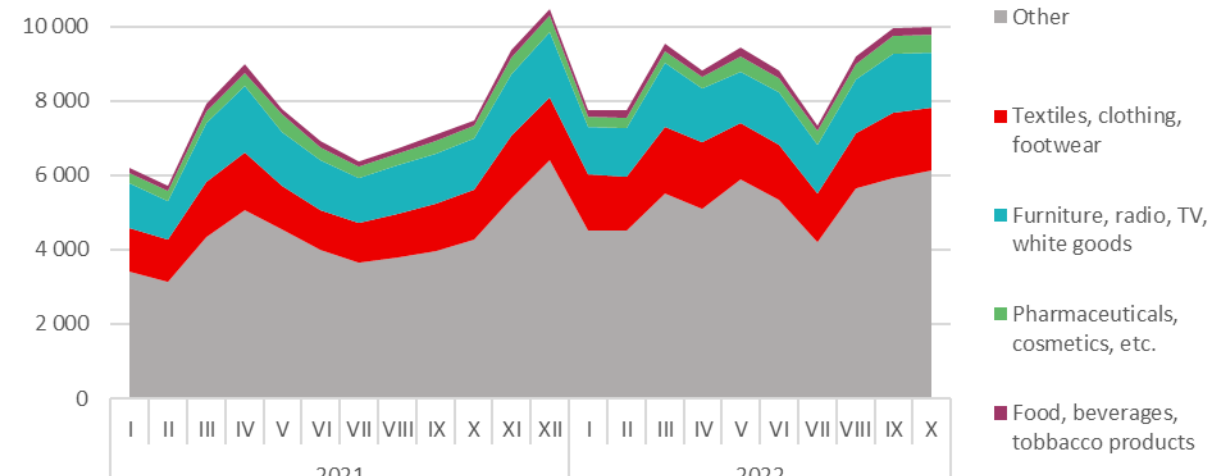
When we look at payments for internet purchases, we see 16,6% value growth in 1H 22 (latest available data) which we expect to reach 17% at year end. Overall, internet payments could reach around PLN 190 bln this year. BLIK remains the top performing payment method at 47% YoY growth in 1H 22, followed by 32% increase in card payments. At the same time we 10% decline in transfers value, including pay-by-link solutions.

E-commerce payments value (PLN bln)



Source: NBP, Santander

E-commerce sales by retail sales sector (PLN bln)



Source: CSO, Santander

Possible drop in profitability of road freight carriers

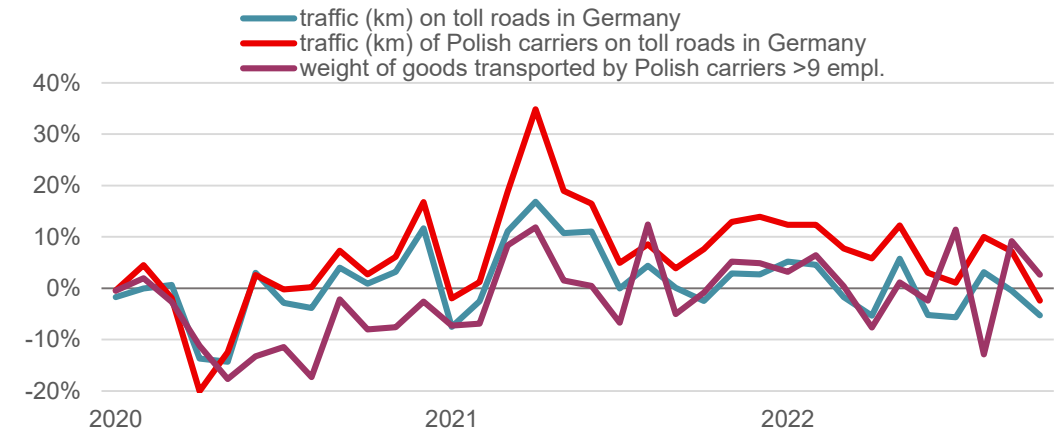
Road freight transport in Europe in 2022 by volume has not changed significantly. Road traffic in Germany fell by 1% YoY between January and October, while Transport Intelligence's November forecast was for 3% growth in Europe for the whole of 2022. The figures for Poland show higher dynamics. Polish truck traffic in Germany increased by 7% YoY and the weight of freight carried by carriers >9 employees rose by 1% YoY. The high demand was also indicated by the low percentage of carriers pointing to insufficient demand as a barrier to business.

Despite the anticipated slowdown in the European economy, road transport volumes should maintain positive momentum. Transport Intelligence, in its baseline scenario, projects volume growth of 1% in 2023, and long term, i.e. until 2026, projects a CAGR of 3%.

The driver shortage continued to be the biggest challenge for carriers. High demand in 2022 and the outbreak of war further exacerbated the problem. On the supply side, low vehicle availability was also a constraint. While it is true that the number of new heavy goods vehicles registered in Poland increased by 6% YoY up to October (+12% against 2019), waiting time for deliveries was long.

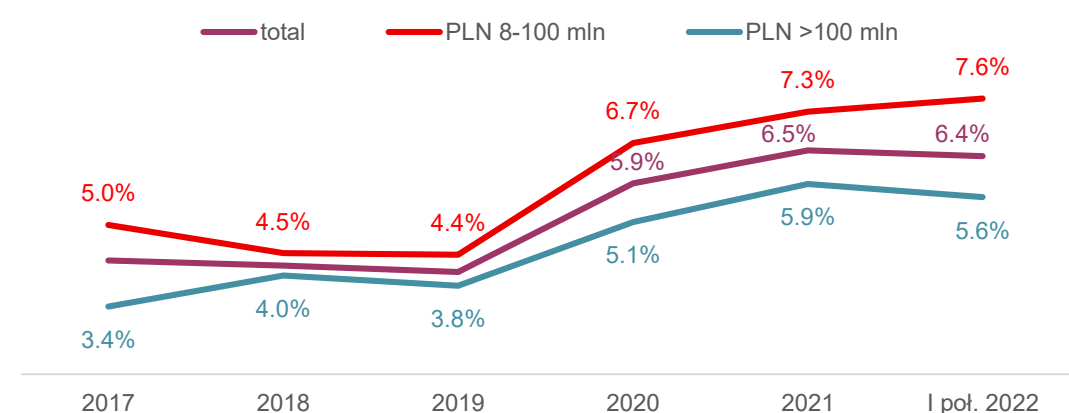
The demand advantage allowed carriers to pass on rising costs to customers and maintain high operating profitability in H1 2022. However, the difference in profitability between medium-sized carriers (revenues of PLN 8-100m) and large carriers (revenues >PLN 100m) increased. The reason for this may have been the larger share of contract orders in the larger ones' portfolio, which may have been less profitable against spot orders with rapidly rising fuel prices, as contract rates react with a time lag. On top of this, the large carriers may have had a higher share of cross-trade and cabotage, which saw a significant increase in wage costs after the subsequent Mobility Package regulations came into force. A greater exposure of large operators to drivers from Ukraine, whose availability decreased after the outbreak of the war, which resulted in the temporary idling of part of the fleet, may also have had an impact. It is reasonable to assume that a possible greater decline in demand in the following quarters could result in a weaker position for carriers and a decline in profitability.

Traffic (km) of freight carriers on toll roads in Germany and total weight of goods transported by road carriers (y/y change)



Source: GUS, BAG, Santander Bank Polska

Operating profitability of road freight carriers in Poland (PKD 49.4) >9 employees by revenue



Source: PONT Info, Santander Bank Polska

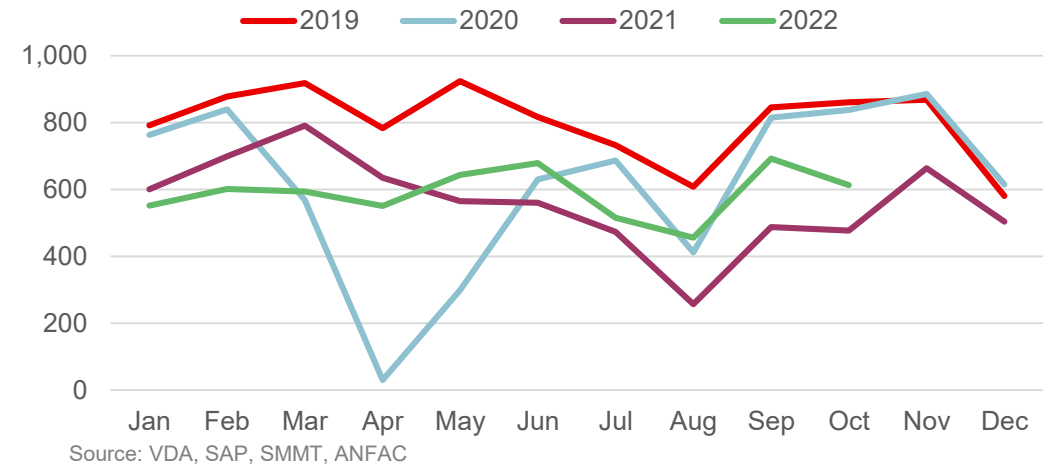
Tough time for automotive parts manufacturers

Production volumes of passenger cars in Germany, the Czech Republic, Spain and the UK in January-October 2022 increased by 6% YoY, but were 28% lower compared to the same period in 2019. The second customer segment of parts manufacturers, the aftermarket, performed much better. Here, volumes were around 4% higher at EU level in the first half of this year compared to pre-pandemic levels. Total parts production volumes were 7% lower in the EU compared to 2019 levels.

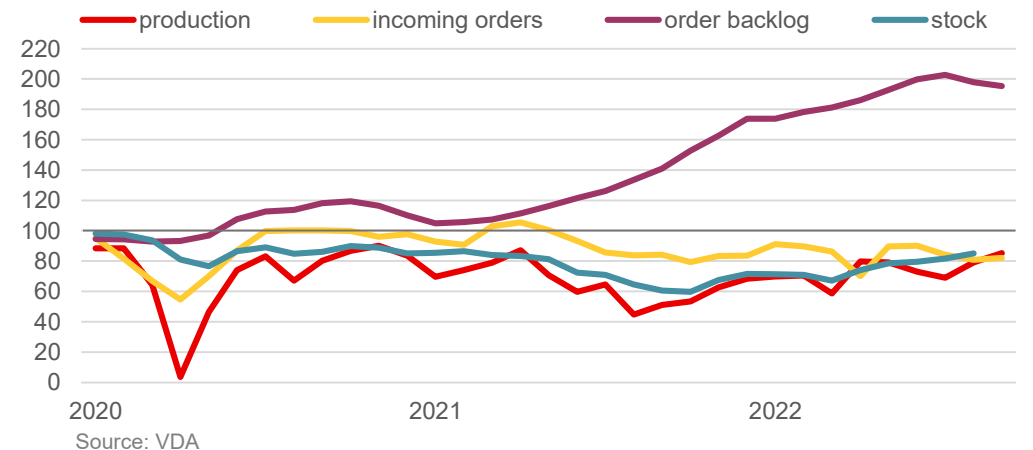
The continued excess of incoming orders for carmakers in Germany against production since 2020, limited by the availability of production materials (raw materials, components, semi-finished products), resulted in a systematic increase in the order book. In this situation, carmakers had favourable conditions to steer the production structure towards higher-margin models/versions. The large order backlog could also compensate for a possible significant drop in car demand and orders in subsequent quarters for some time. In September, current orders in Germany were below production levels for the first time since 2020, ignoring the April war outbreak effect.

Market conditions are particularly severe for automotive parts manufacturers producing primarily for first assembly. With low order volumes, it is even more difficult for them to pass on high costs to carmakers. Part manufacturers focused primarily on the aftermarket are certainly in a much better position. The operating profitability of total parts manufacturers in Poland in the first half of 2022 was 3%, which was much lower than in the pre-pandemic period (around 5%). The structure of the population is worrying, with the proportion of profitable entities at the net result level falling from 77% in 2019 to 68% in the first half of this year, and the proportion of profitable manufacturers' revenues falling from 87% to 62%. The decline in profitability for parts manufacturers shows their weak bargaining position within the automotive value chain. Last year and this year, both car manufacturers and parts distributors, as well as many sectors supplying parts manufacturers with raw materials and components for production, increased profitability. Moreover, the profitability of suppliers and customers was clearly higher than that of parts manufacturers.

Passenger car production volumes in Germany, Spain, the Czech Rep. and the UK (thous.)



Orders, production and inventories indexes in car manufacturing sector in Germany (2019=100)



This analysis is based on information available as of **9.12.2022** and has been prepared by:

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