Mazars Report:
Economy and Financial Markets
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Editorial

We would like to take this opportunity to send you the eleventh issue of "Mazars Report: Economy and Financial Markets", in which we follow the developments on the international and local markets for you on a quarterly basis.

You will learn the latest information about current stock developments, exchange rates, the development of the labour market and wages, and you will also get, for example, an overview of trends in the price development of key commodities. Thanks to the review, you will get oriented in the developments of GDP, inflation and in other key macroeconomic data and indicators.

We are sure that this report could be a useful guide for you through the currently unstable economic developments and perhaps help you minimise the risks connected with the consequences of the war in Ukraine on the worldwide economy.

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1. Overview of the most important trends in the Czech economy

1.1 Basic summary

Overview – Czech Republic

- The decline in Czech GDP will deepen, the CNB expects a year-on-year decline in 2023 (three quarters of negative GDP growth on a q/q basis until the first quarter of 2023).
- Consumer price inflation will continue to be well above the CNB‘s inflation target in 2023 (the average annual inflation in 2023 at 9.1% – CNB estimate).
- Real wages will continue to decline in 2023 according to CNB‘s forecast, as the expected growth rate of nominal wages (approximately 7%) will lag behind inflation.
- Prices of electricity and natural gas in the Czech Republic have dropped significantly since the summer, but annual supply fixations are still at significantly higher levels than in spring 2022 (electricity EUR 340/MWh, natural gas EUR 130/MWh). The capacity of the tanks is currently at its highest level in five years.
- Czech interest rates have probably reached their maximum level in this cycle, but they should decrease only very slightly in 2023. On the other hand, EUR and USD interest rates will continue to rise in the first half of 2023.
- The EUR/CZK exchange rate is relatively stable thanks to the CNB‘s monetary interventions. A significant decline in the CNB‘s foreign exchange reserves remains a major risk to the koruna.

The forecast for the economic development of the Czech Republic is burdened with considerable uncertainties, and financial markets react sensitively to the incoming data on the development of the economy by adjusting traded prices.

1. Overview of the most important trends in the Czech economy

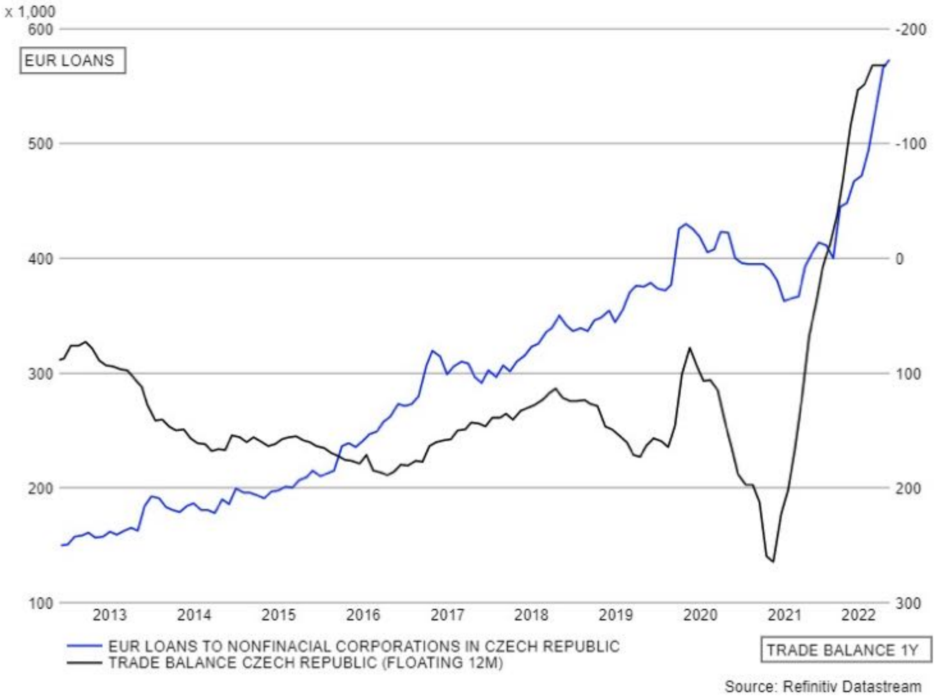
1.2 Natural gas prices with 1M and 1Y supply on the European market TTF

Data and chart: Refinitiv

1. Overview of the most important trends in the Czech economy

1.3 EUR financing in the Czech Republic

Since 2021, the Czech trade balance has deteriorated significantly, on the other hand we are recording a significant increase in the volume of financing in EUR by non-financial corporations in the Czech Republic. Currently, EUR loans account for more than 40% of the total financing of non-financial companies in the Czech Republic. The available data confirm the hypothesis that the increase in loans in EUR is primarily related to the efforts of non-financial corporations to limit the growth of interest costs in Czech crowns, while the natural hedging of currency risk in decision-making on the currency of financing is less important. For many companies, the repayment of loans in EUR is thus associated with the currency risk of the Czech crown weakening against the EUR.



1.4 Risks of weakening koruna

- The CNB‘s current interventions do not represent an analogy to the exchange rate commitment from the 2013-2017 period, and the CNB does not guarantee any pre-specified level of the exchange rate.
- After a long time, the Czech economy is in a situation of a double deficit (a negative trade balance, budget deficit). In 1997, the double deficit led to a speculative attack on the Czech koruna with negative impacts on the Czech economy.
- The nominal interest rates are still higher in the Czech Republic than in the Eurozone and the USA, but real interest rates (especially in the US) are significantly higher than in the case of the Czech koruna. Increasing USD and EUR interest rates further reduce the attractiveness of the koruna for foreign investors and thus increase the likelihood of leaving the Czech koruna.

The only significantly positive factor for the Czech koruna so far remains the declared readiness of the CNB to use foreign exchange reserves to support the koruna, which, however, is not a permanent liability of the CNB and may be terminated anytime for various reasons.

2. Czech Republic – Czech National Bank (CNB) macroeconomic forecast

2.1 Summary of the development forecast according to the CNB

- New CNB Economic Forecast for the Czech Economy (Monetary Policy Report IV. 2022), published following the CNB Bank Board meeting in November 2022.
- Compared with the previous forecast, the CNB's analytical team expects a more pronounced decline in GDP in 2023-2024, but the inflation forecast has not been significantly changed.
- The EUR/CZK exchange rate was adjusted in 2023 in the direction of a stronger EUR/CZK exchange rate, while the new forecast indicates higher 3M Pribor interest rates in 2023-2024 (or a significantly lower decline in the CNB's repo rate than in the August forecast).
- The Bank Board assessed the risks to the forecast at the monetary policy horizon as significant and going both ways.

The base case – CNB forecasts overview

	2022	2023
Headline inflation (%)	15.8	9.1
GDP	2.2	-0.7
Average nominal wage	6.3	7.7
Exchange rate (EUR/CZK)	24.6	24.8
3M Pribor (%)	6.6	7.0

2. Czech Republic – Czech National Bank (CNB) macroeconomic forecast

2.2 Forecast of domestic GDP development

- The CNB's baseline scenario expects GDP growth of **2.2%** in 2022, but only due to better economic performance in the first half of 2022. On the CNB outlook, it expects a continuation of the decline in economic activity (first estimate of GDP for 3Q 2022 - 0.4% q/q) on a quarterly basis until the first quarter of 2023. Economic output is expected to decline by **0.7%** in 2023.
- Economic growth will slow down significantly in the last quarter of this year. In particular, the CNB expects a significant fall in household consumption due to a decline in real income. In a context of high uncertainty, companies will reduce investment, also due to the worsening financial situation and low domestic demand, while stockpiling will remain elevated. Exports will be dampened by a decline in euro area demand, which will also limit the positive contribution of net exports to GDP growth.
- Overheating of the Czech economy will quickly subside and the economy will temporarily be below its potential.

GDP (annual percentage changes %, contributions in p.p., constant prices, seasonally adjusted)

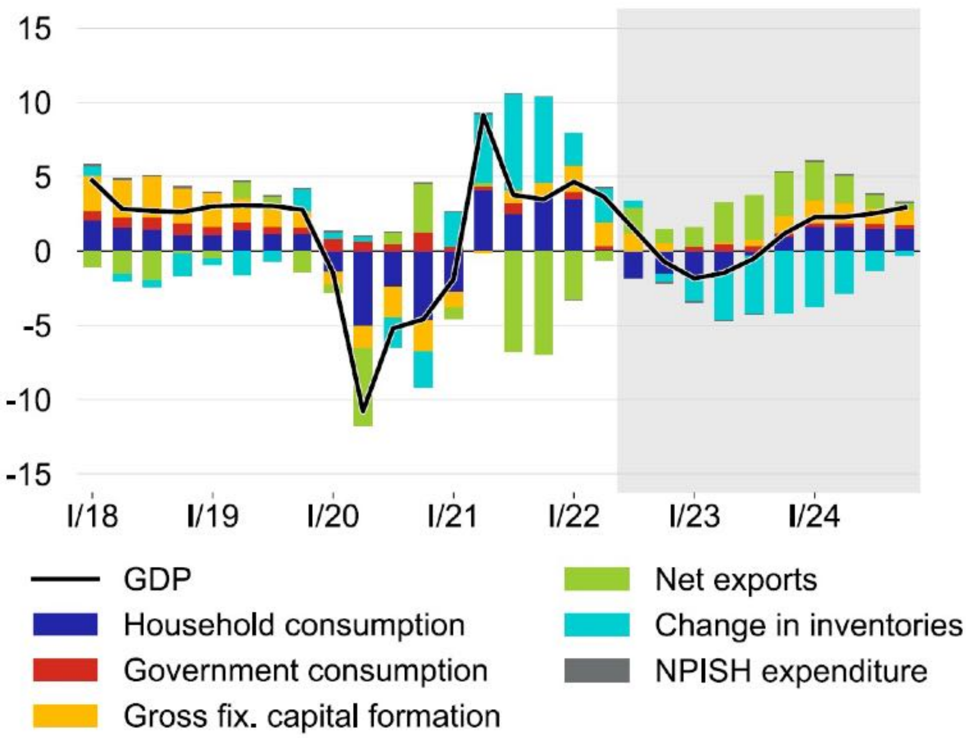


Chart: CNB

2. Czech Republic – Czech National Bank (CNB) macroeconomic forecast

2.3 Forecast of the development of inflation

- Annual inflation declined to **15.1%** in October 2022 (published after the CNB's current forecast) due to the inclusion of state aid in the CZSO's energy prices in 2022. Without the statistical effect, inflation would have been above 18%, in line with the CNB and financial institutions' forecast, well above the upper limit of the CNB's inflation tolerance band (3%).
- The CNB's baseline forecast assumes an average annual inflation rate of **14.9%** in the first quarter of 2023, **10.2%** in the second quarter of 2023 and **4.2%** in the last quarter of 2023. According to the CNB's forecast, inflation should return to the CNB's inflation band in the first quarter of 2024 (2.7%).
- The effect of high import prices will gradually fade away in 2023 (thanks to the statistical effect of the high base) and administrative interventions by the government (waiver of charges for renewable energy sources, price caps) should also act in the direction of lower inflation. The CNB assumes that monetary policy (higher interest rates) will contribute to the achievement of the inflation target, as well as a significant fall in real wages, which will dampen demand inflation.

[1] Due to the CNB model settings, the results always indicate the achievement of the inflation target at the monetary policy horizon.

Structure of inflation and its forecast

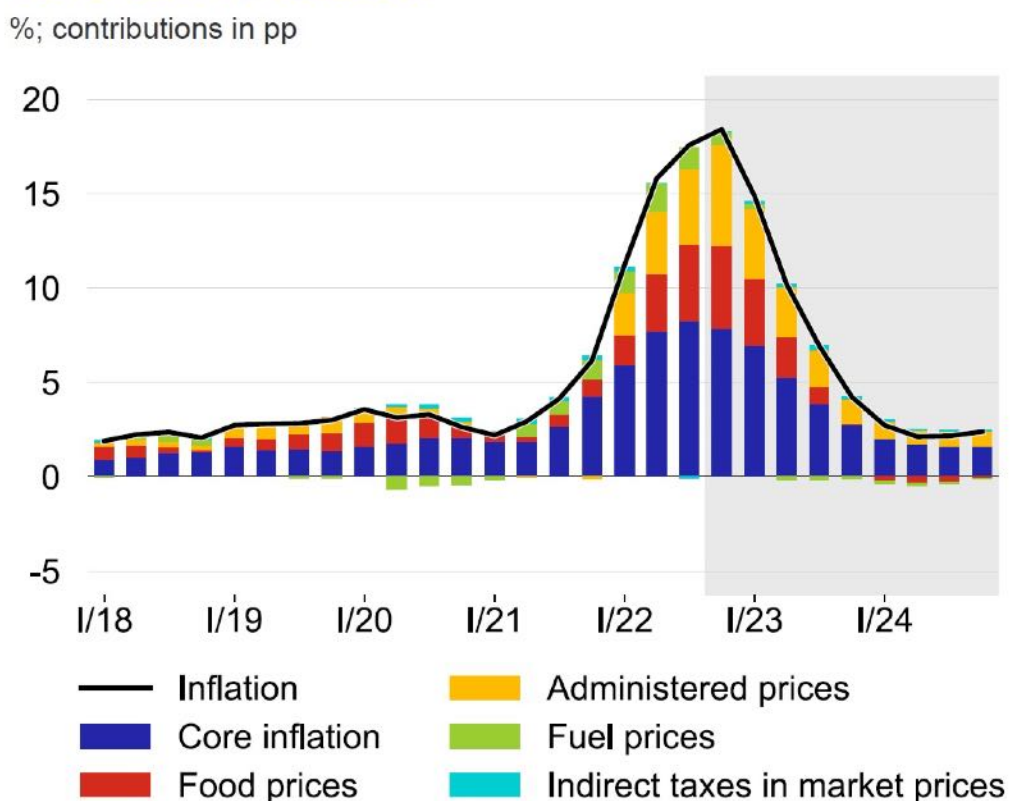


Chart: CNB

2. Czech Republic – Czech National Bank (CNB) macroeconomic forecast

2.4 Forecast of the development of the labor market and the development of wages

- The CNB forecast assumes that employment has peaked this year and will then gradually decline in response to the fall in economic activity. The decline in real wages will continue in 2023 as nominal wage growth will lag behind inflation in subsequent quarters. Wage growth in the private sector will be higher than in non-market sectors. A stronger real wage growth can only be expected in 2024.
- Wage statistics will continue to be affected in 2023 by one-off factors, such as the increase in the minimum wage from January 2023. The average nominal wage growth forecast has been raised to **6.3%** for 2022 and **7.7%** in 2023.

Labour market – Average Nominal Wage

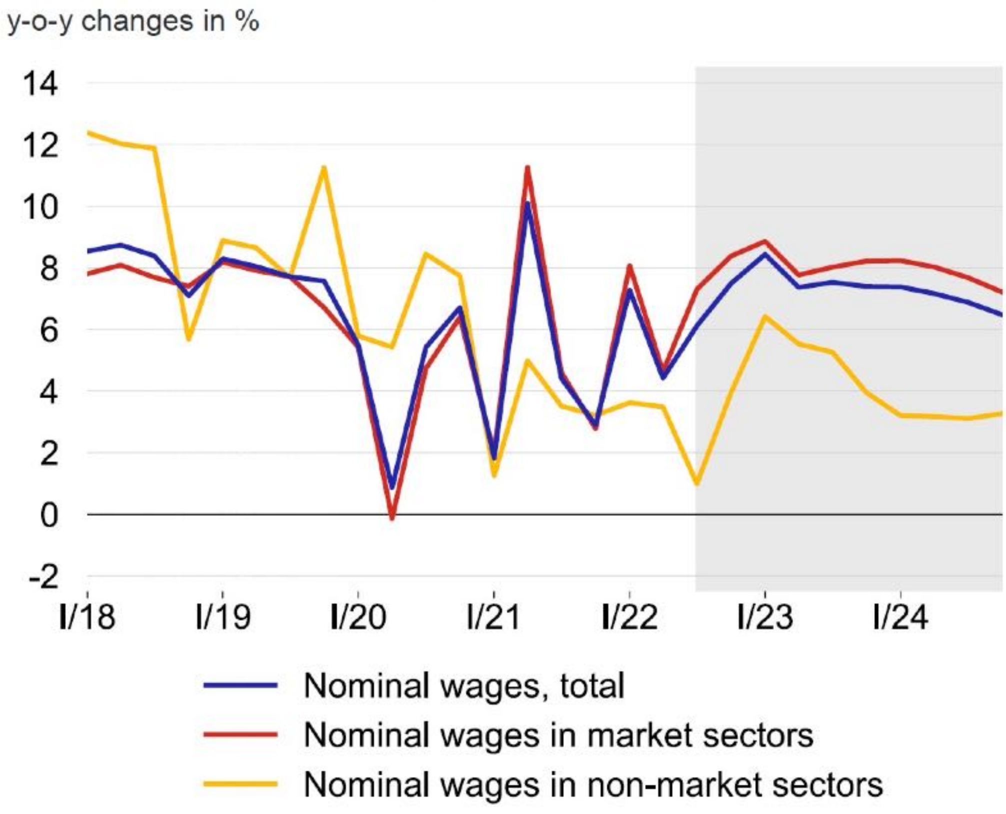


Chart: CNB

2. Czech Republic – Czech National Bank (CNB) macroeconomic forecast

2.5 Interest rate development and forecast

- At its November monetary policy meeting, the CNB Bank Board left the two-week repo rate at **7.00%**, even though the baseline scenario of the autumn forecast predicts a repo rate rise followed by a gradual decline (the CNB's Q4 2023 repo rate average baseline scenario at **5.80%**)
- The financial market currently expects interest rates to be lower than the baseline scenario of the CNB forecast (end of 2022 and in the first quarter of 2023). In the longer term, the differences between the CNB's forecast and the rates traded on the financial market are insignificant.

Interest rate forecast (baseline scenario)

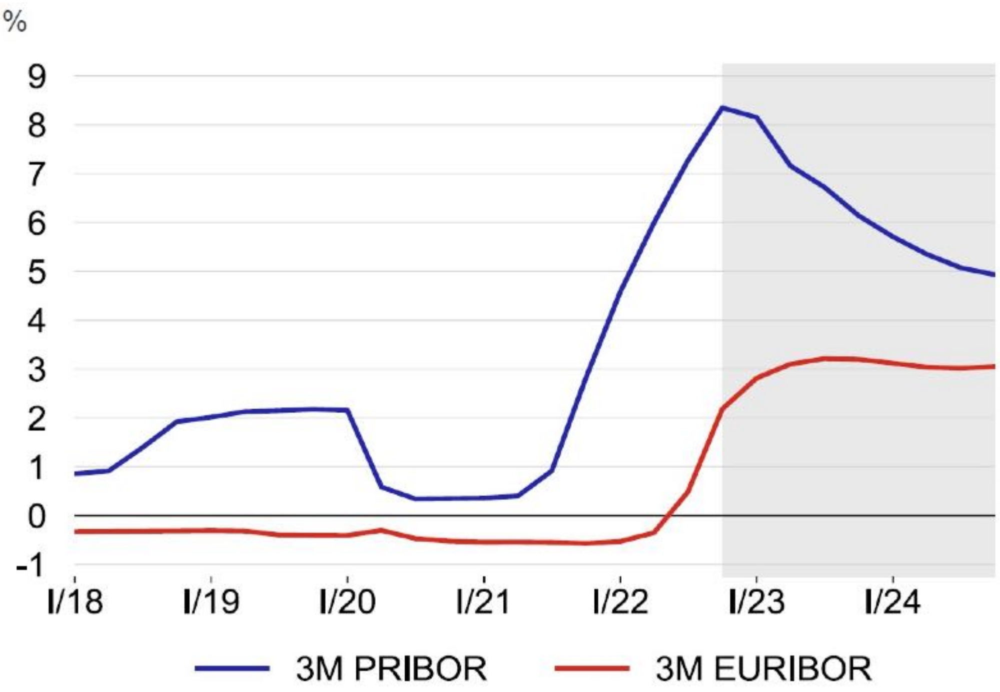


Chart: CNB

2. Czech Republic – Czech National Bank (CNB) macroeconomic forecast

2.6 Forecast of the development of exchange rates

- According to the forecast, the koruna should be relatively stable and weaken only very slightly in the second half of 2023 due to a lower interest rate differential between the EUR and CZK. The EUR/CZK exchange rate should weaken to around 25.00 in the annual horizon, i.e., below **forward rates** traded on financial markets for the same period.
- The stability of the EURCZK exchange rate in the forecast seems to presuppose further effects of interventions by the CNB, even though these interventions do not represent the equivalent of the CNB's exchange rate commitment from the period 2013-2017.

Exchange rate forecast

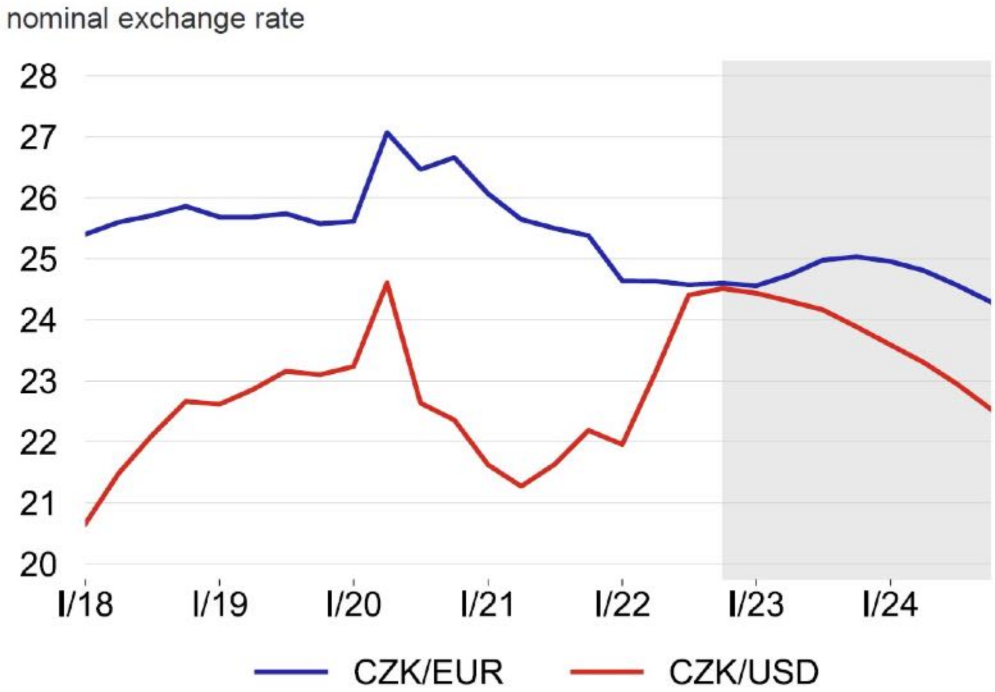


Chart: CNB

3. Key macroeconomic data/world

3.1 Current development of world GDP

US – GDP for Q3 2022 was up **2.6% q/q** (annualised)

Euro area – Euro area GDP in Q3 2022 was **+0.2% q/q** (+2.1% y/y)

	2023	2024
GDP – FED forecast[2]	1.2 %	1.7 %
GDP – ECB forecast	0.9 %	1.9 %

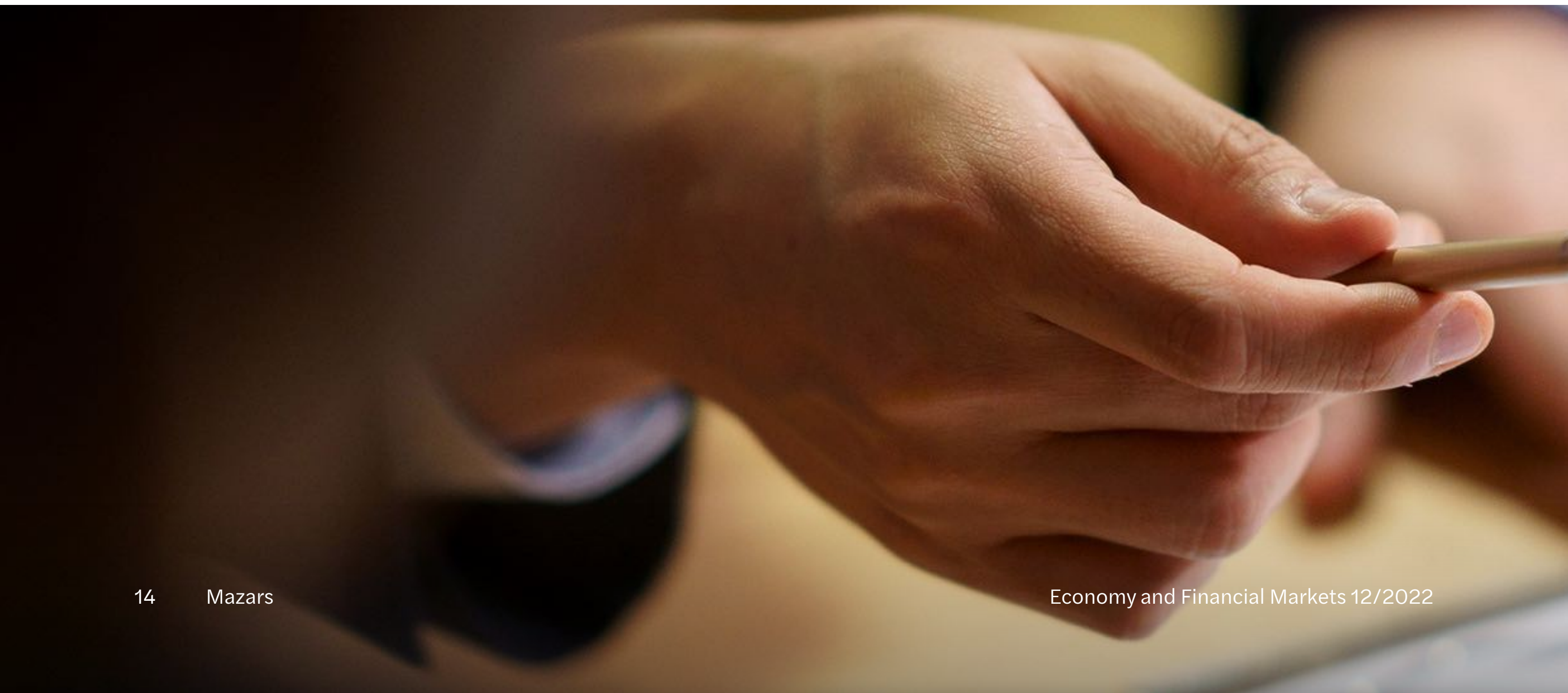
[2] Forecast from September 2022, other updates in December 2022, forecast based on y/y.

3.2 Current developments in inflation and consumer purchasing behaviour

US – CPI consumer inflation stood at **7.7%** y/y in October 2022

Euro area – consumer inflation was **10.6% y/y** in October 2022

	2023	2024
PCE y/y – prediction FED	2.8 %	2.3 %
Inflation y/y – ECB prediction	5.5 %	2.3 %



3. Key macroeconomic data/world

S&P PMI – Purchase Manager Index

US – S&P PMI indicators are gradually declining. With the exception of the S&P PMI Manufacturing, all indicators are already below 50 points (the similar ISM index for October 2022 has not yet indicated a contraction). Values of S&P PMI indicate a slowdown trend in the US economy.

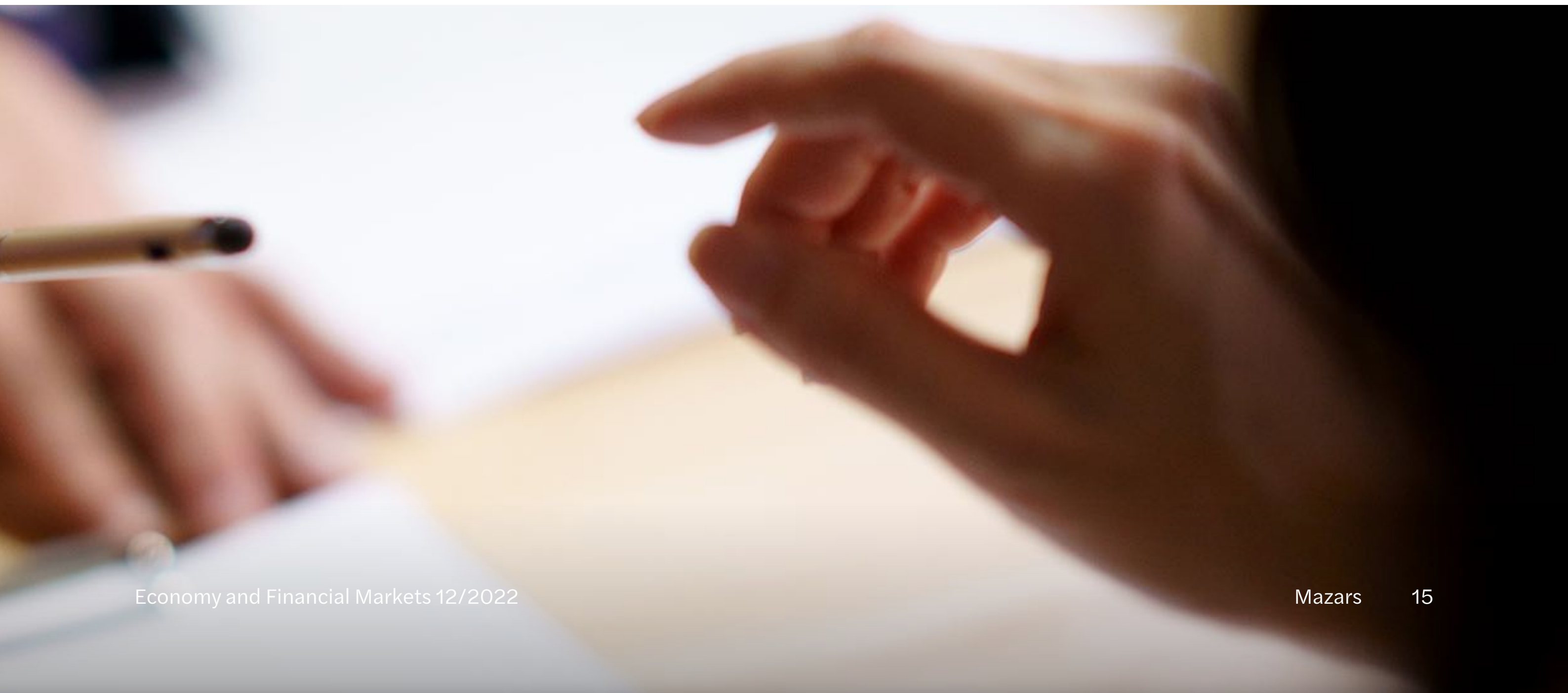
Eurozone – All S&P PMIs were well below 50 points in October, signalling the beginning of a recession in the Eurozone. The negative industrial outlook in Germany is supported by the IFO business expectations and ZEW business expectation statistics, which show very pessimistic expectations in German industry (comparable to 2008 levels).

Industrial producer price inflation (PPI) growth in the Czech Republic peaked in June 2022 and now stands at 24.4% per year. In the euro area, by contrast, industrial producer price growth continued in 3Q 2022 and currently stands at 41.9%, almost double the level in the Czech Republic. The level of the S&P PMI Manufacturing index in the Czech Republic confirms the assumptions about the recession in the Czech economy.

S&P PMI – 10/2022

	S&P PMI Composite	S&P PMI Manufacturing	S&P PMI Services
US	48.2	50.4	47.8
Eurozone	47.3	46.4	48.6
CR		41.7	

(PMI above 50 indicates growth, PMI below 50 indicates decline)

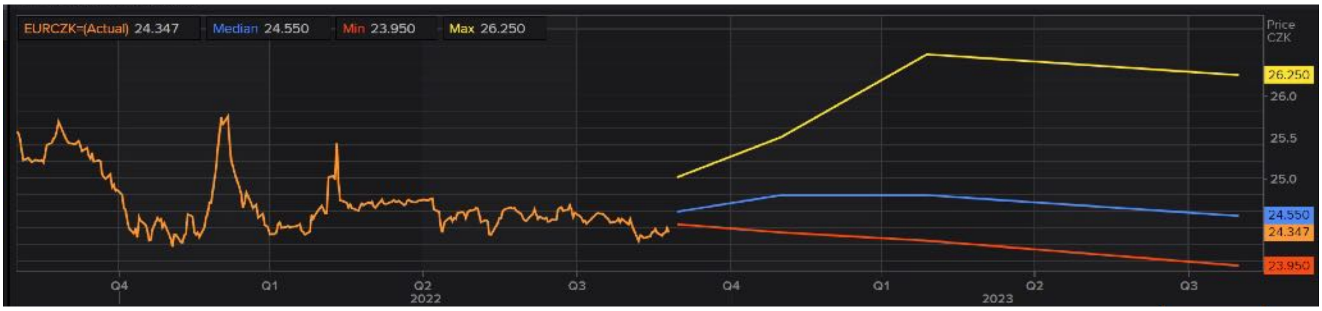


4. Financial markets

4.1 Exchange rate EUR/CZK

- The median prediction of financial analysts in the Reuters FX Poll of 02/11/2022 assumes approximate stability of the EURCZK exchange rate, in line with the CNB‘s baseline scenario this year – the median estimate of EUR/CZK of 24.55 at the end of November 2023 is lower than the value of the exchange rate in the CNB‘s baseline scenario (the average exchange rate in Q4 2023 in the CNB‘s baseline scenario is 25.00).

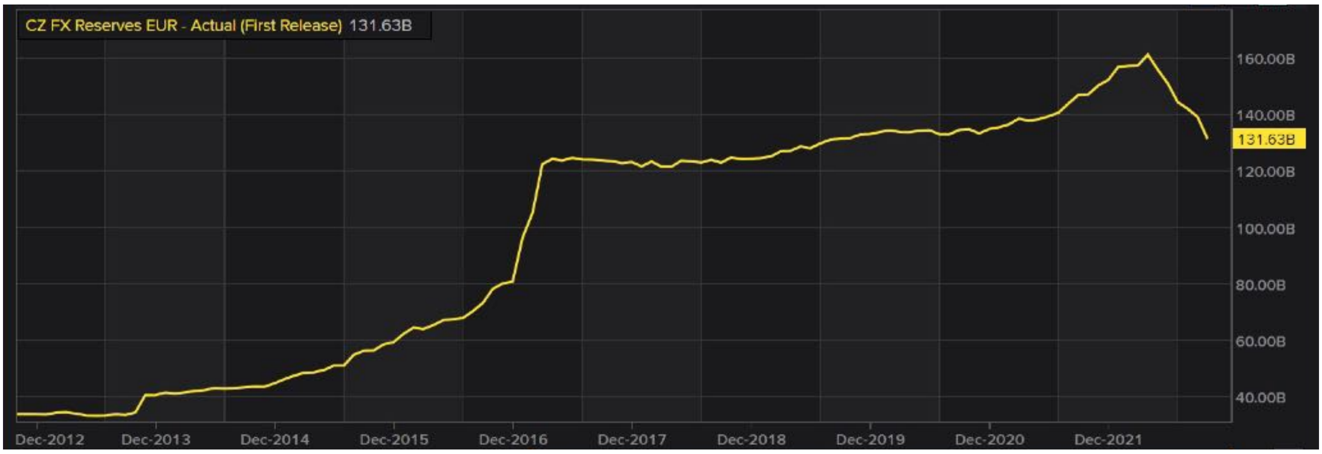
Reuters FX Poll 02/11/2022



Data: Refinitiv

In the course of 2022 so far, EUR/CZK has been relatively stable, with the exception of two sharp depreciations of the koruna in response to the start of the war in Ukraine and the appointment of a new CNB Governor Aleš Michl. In May, after announcing the name of the new CNB Governor, the central bank began to intervene on the foreign exchange market, and these interventions with varying degrees of intensity have continued to this day. According to the bank’s statistics, by September 2022 the CNB had spent approximately EUR 25.5 billion on currency interventions and managed to stabilize the EUR/CZK exchange rate at levels close to those before the interventions (levels around 24.25 – 24.80). The interventions are helping the CNB to fight high inflation (limiting the growth of import prices and withdrawing korunas from circulation) and reducing the pressure on koruna interest rates and thus financing costs in Czech crowns. The artificially maintained strong EUR/CZK exchange rate has a negative impact on the Czech trade balance and the competitiveness of Czech exports.

4.2 Development of the CNB’s foreign reserve assets 2012-2022 (EUR billions)



Data: Refinitiv

4. Financial markets

The koruna is currently supported only by CNB interventions and a decreasing nominal interest rate differential, other factors are unfavourable for the koruna. The potential problem is the limitation of the CNB's foreign exchange reserves. In the event of a very rapid decline in the CNB's foreign exchange reserves, the CNB would be forced to limit interventions with all the negative consequences.

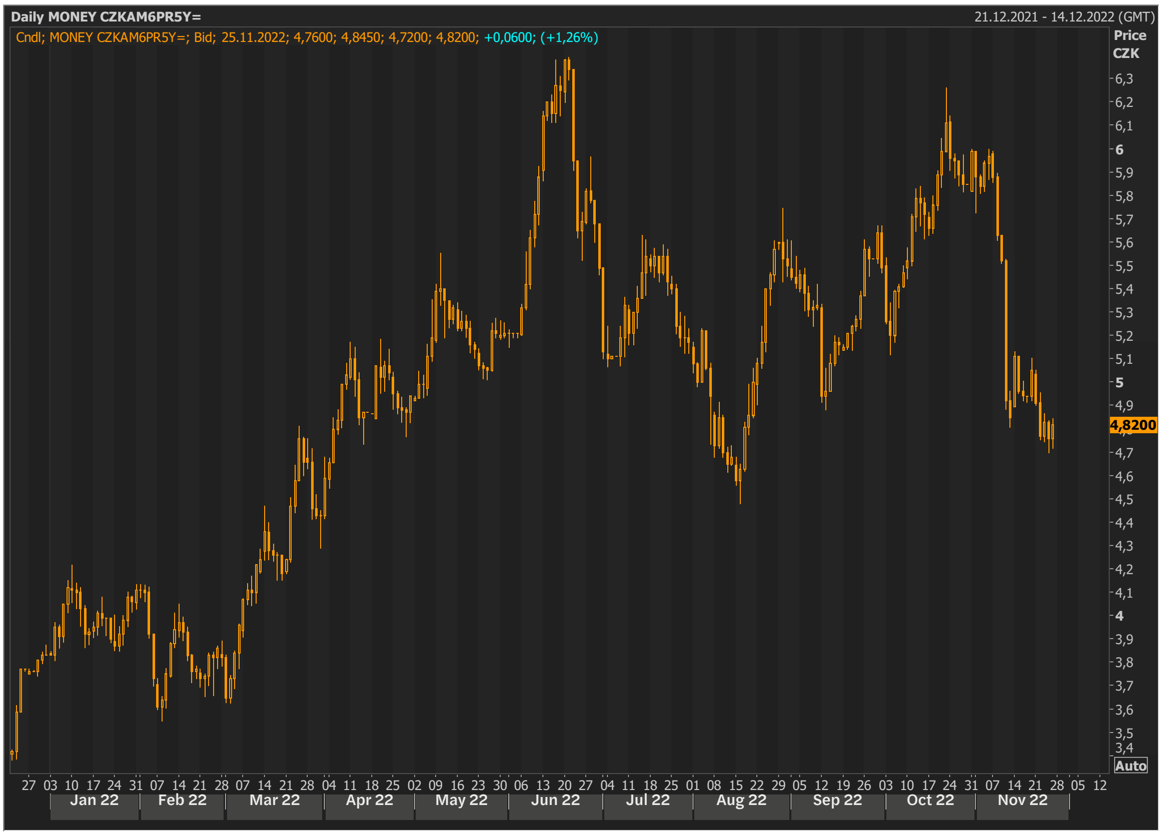
4.3 Development of EUR/CZK in 2022

Data: Refinitiv

4.4 Interest rates

- The US Federal Reserve's key rate was raised again by 0.75% to the current value of 3.7% - 4.0% at its November meeting, the median predictions of FOMC members indicate a further increase to 4.6% in 2023. At the same time, the Fed continues to reduce its balance sheet by selling off previously purchased financial assets, thereby tightening monetary policy further.
- Similarly, after eleven years, the ECB is rapidly raising the deposit rate (most recently by 0.75% in October) from negative levels to the current level of 1.50%. The market expects the ECB deposit rate to rise further to levels around 3%. At the same time, the ECB ended its asset purchase programme in July and is seeking to reduce its balance sheet by adjusting the terms of its TLTRO III commercial bank lending programme (so far excluding the sell-off of assets purchased under the quantitative easing programme).
- The interest rate hike in June this year by the previous CNB Bank Board is probably the last interest rate hike. Although the baseline scenario of the CNB's macroeconomic forecast points to the need for a further increase in interest rates, as does the latest monetary policy report of the International Monetary Fund, the current Bank Board does not (so far) support interest rate increases. An increase in interest rates would contribute to faster fulfilment of the CNB's inflation target (the central bank's main mandate), but with a negative impact on economic growth. The risk to the CNB Bank Board's strategy is a longer-term failure to meet the inflation target, which would require to maintain high interest rates for a longer period of time with a negative effect on economic growth (the overall negative impact may be greater than in the case of short-term higher interest rates). The value of the 3M Pribor rate for data until the end of the year is trading at stable levels close to 7.2% (consistent with the stability of the CNB's repo rate of 7.00%). The yield curve is significantly inverted, with long term interest rates significantly lower in response to the slowing economy and the CNB's communication.

The value of the CZK interest rate swap with a maturity of five years



Data a chart: Refinitiv

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