

Quarterly report

Czech Economic Outlook

Low all around, the highest at home



- Czech economy showing unexpected resilience Despite problems in the German industry Czech trade figures print record high results and the manufacturing sector maintains positive dynamics. Inflation remains high and the rise in excise tax will boost it next year.
- CNB to halt tightening due to external risks Although domestic statistic should suggest the CNB to hike further, we doubt that the board would increase rates in current very uncertain environment. That said, we expect rates stability for some time now.
- The koruna is unlikely to strengthen this year We expect the currency to depreciate slightly, mainly due to year-end effects and a worsening market interest rate differential vis-à-vis the euro area. The koruna will weaken above 26.00 EUR/CZK next year. It is also unlikely to receive any support from CNB monetary policy over the coming years.
- The yield curve is set to remain flat until the end of 2021 Government bond supply will decline significantly in the second half of the year. However, demand will remain strong due to solid yields. In conjunction with the further easing of monetary policy in the euro area, this should lead to a further decline in yields and interest rate swaps.



Jan Vejmělek (420) 222 008 568



Viktor Zeisel (420) 222 008 523 viktor_zeisel@kb.cz



František Táborský (420) 222 008 598 frantisek_taborsky@kb.c:



Monika Junicke (420) 222 008 509 monika junicke@kb.c



Jana Steckerová (420) 222 008 524 iana steckerova@kb.cz

SOCIETE GENERALE G R O U P Page left intentionally blank





Jan Vejmělek (420) 222 008 568 jan_vejmelek@kb.cz

Czech Economic Outlook 1Q19



Source: Economic and strategy research, Komerční banka

Czech Economic Outlook 2Q19



Source: Economic and strategy research, Komerční banka

There is no place like home. How true!

The summer update of our macroeconomic forecast is, as usual, the first in which we offer detailed prospects for the coming year. The reason is that the planning processes for 2020 are set to take off – and not only at Komerční banka. And where else should they start from other than the macroeconomic framework? However, our domestic economic situation is much more difficult now, which could be felt during our team's discussions on what headline we should actually write for this issue of the *Czech Economic Outlook*.

previous two issues were marked by our emphatic warnings of external risks and the threats that the materialisation of the risks would have for the exportoriented Czech economy. Headlines such as *On thin ice* and *In the minefield* reflected that. **The Czech economy actually is,**

being blitzed by adverse

from

every

figuratively

reports

almost

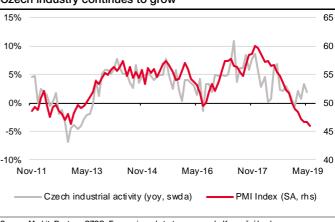
speaking,

day.

abroad

You may recall that the

Although producers' sentiment is below the freezing point Czech industry continues to grow



Source: Markit, Reuters, CZSO, Economic and strategy research, Komerční banka

Germany, we are vainly waiting for any signs of industrial recovery, which has been in recession for a year. Brexit has not yet taken place and with Prime Minister Boris Johnson at the helm of the Tory party, the likelihood of a no-deal is rising. President Donald Trump has not yet negotiated a trade agreement with China and almost all sentiment indicators to the west of the Czech Republic and elsewhere are falling to multi-year lows. The world's central banks are responding to the 'bad vibes' by changing their rhetoric and slowly turning the ship's direction. The change will occur quickly and interest rates will fall in both America and Europe.

Looking at the country's economy we almost wanted to sigh, "There is no place like home!". Data arriving from the real economy keeps bringing positive surprises all the time and the rate of growth seems to even have accelerated in the second quarter compared with the first quarter. In addition, the 2Q balance of external trade was perhaps the best ever. We have therefore improved this year's expected growth to 2.7%. Nevertheless, although leading indicators are volatile, they estimate the direction correctly as Monika Junicke shows in her Box 1. For next year we therefore expect growth of 'only' 2.1%. It is not advisable to rely too much on the investment cycle supported by EU funds, which helped the country so much last year (see Jana Steckerová's Box 2). And the conclusions of Viktor Zeisel's analysis (Box 3) confirm that the extreme overheating of the Czech labour market seems to have begun to subside.

The cooling of Czech growth is and will be reflected in core inflation, which will slightly decline. But this definitely does not apply to overall inflation. Viktor Zeisel has figured out the impact of the planned increase in excise duties on tobacco products and spirits. Combined with food prices rising due to drought, his results indicate average inflation rising to 2.7% next year from this year's forecasted 2.6%. In this situation, the CNB can hardly be expected to join its US or European counterparts and cut its rates. **Our main scenario for this and next**

30 July 2019 3

year is stabilisation of interest rates. Thus, while everywhere around us rates will fall, Czech rates will stay flat. In short, "*low all around, at home the highest*". Have a great summer!

Table of Contents

There is no place like nome. How true!	3
Table of Contents	5
External Environment and Assumptions	6
Interest rates to go lower	6
Fiscal policy helps regional economies	9
Macroeconomic outlook	10
Unexpected resilience	10
Labour market at turning point	18
Rise in excise tax to keep inflation well above 2% target	19
Risks: Brexit a prominent risk	21
Key economic indicators	22
CNB Focus	23
CNB to stay on hold despite hawkish economic forecast	23
Czech FX Market	25
The koruna in a duel with the sentiment of foreign investors	25
Czech government bonds and the IRS market	28
Yield curve to remain flat over the coming years	28
Banking Sector	33
Flat price and mortgage dynamics slowing down	33
Key Economic Indicators	34
Disalsiman	0.5

External Environment and Assumptions



Interest rates to go lower

The US economy is in the last phase of its longest expansion in history. The Fed will try to prolong the expansion by easing monetary policy, but we doubt it will be able to do so beyond the middle of next year. Fears of an economic slowdown will likely force the ECB to cut rates as well and to bring back QE. Nevertheless, we think the US and euro area economies will perform relatively well over a one-year horizon.

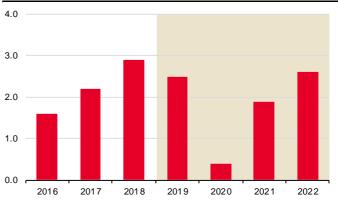
US economy still in relatively good shape.

At the end of July, the Fed will very likely cut interest rates. This would be a pre-emptive move aiming to protect the US amid risks stemming from trade wars, Brexit and declining global demand. The current data for the US real economy do not necessarily call for interest rate cuts, with May and June retail sales showing that consumers trust the economy and are not afraid to spend. This is supported by low inflation, which improves real incomes, and by the very strong labour market, where new vacancies are still being created. As a result, consumer confidence remains high. The last time it was this strong (120 points) was in 2001. What the Fed is concerned by is the leading indicators. The manufacturing ISM is at its lowest level since September 2016. This is the result of trade-war fears and slowing global demand. Nevertheless, the index is still in expansionary territory and indicates further economic growth. In the past, the current levels of the ISM were not consistent with rate cuts.

US: Inflation decelerates (%, yoy)



US: We still expect recession in 2H20 (yoy, annualised)



Source: Bloomberg, Economic & Strategy Research, Komerční banka

Source: Bloomberg, SG Cross Asset Research/Economics, Economic & Strategy Research.

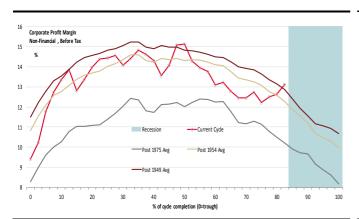
Inflation decelerated in recent months

Consumer inflation down in recent months. Inflation is currently 1.6%, while it was 3% at this time last year. Similar, the core PCE deflator, the Fed's preferred inflationary indicator, has fallen, dropping from the 2% target to 1.6%. On the other hand, core inflation surprisingly jumped by 0.3pp mom in June to 2.1% yoy, the biggest mom rise since January 2018. In addition, May's introduction of tariffs on Chinese goods might shift inflation 0.2-0.3pp higher.

Our recession call has not changed.

Our prognosis that the US economy will fall into recession in 2H20 has not changed. We expect GDP to grow by 2.5% this year and 0.4% next year. The current expansion will become the longest in the history of the US. The reasons we expect a recession are still the same: falling corporate profit margins, a consequent drop in investment, and a depleted credit cycle. Nevertheless, the recession should not be long and deep. The Fed is likely to come to the assistance of the US economy next year, when we expect it to hike rates three times.

US - Profit margins likely to decline



Source: SG Cross Asset Research/Economics. Economic & Strategy Research. Komerční banka

Spread between 2y and 10y US government bonds indicates recession



Source: Bloomberg, Economic & Strategy Research, Komerční banka

Household consumption to keep euro area economy afloat.

The euro area economy grew by 0.4% q/q in the first quarter of the year. Increased construction activity (given the warm weather) and catch-up effects in consumption (after a weak 2H18), boosted the result. For 2Q19, we now see GDP growth one-tenth lower at 0.3% qoq. However, in the second half of the year, we expect the economy return to 0.4% qoq growth due to more accommodative fiscal policy, lower inflation, a weaker euro, high household savings, and solid profit margins. Consumer confidence remains good, which should result in a decline in the savings rate. We expect business investment to grow. The construction sector is also doing well. Domestic demand, therefore, should keep the euro area economy afloat amid slowing global demand and many uncertainties. For this year, we have revised our estimate of GDP growth down only slightly to 1.3%. We see a bigger slowdown (quarter-on-quarter, towards 0%) after the likely onset of the US recession in 2H20. We expect GDP growth to slow to 1.1% in 2020 and 0.6% in 2021, mainly as a result of a drop in net exports.

There are a lot of risks to our

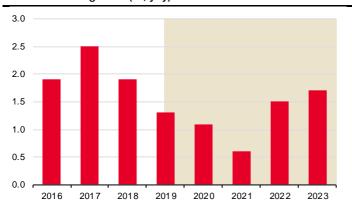
A risk to our scenario is a hard Brexit. This would cost the UK 3% of its GDP. A 1% drop in UK domestic demand would lower euro area GDP growth by 0.25bp, and any recession would then be deeper. Another risk is the euro strengthening against the US dollar (next year, we see EUR/USD at 1.25 on average), which could result in a drop in euro area exports. The imposition of tariffs on EU cars cannot be excluded, and President Trump should decide in October. Another slowdown in China is also a risk.

Inflation to remain low.

Low inflation remains a permanent handicap for the euro area. According to our forecast, headline inflation will not exceed 1.3% on average until 2021. Core inflation should gradually slightly accelerate due to the tight labour market and rising real wages. However, it is unlikely to exceed 1.4% by the end of 2021.

Euro area: GDP growth (%, yoy)

Euro area: inflation likely to remain below ECB target (%, yoy)





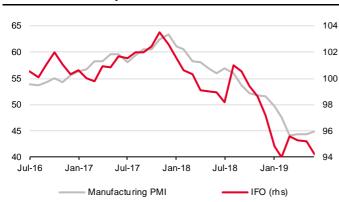
Source: Macrobond, SG Cross Asset Research/Economics, Economic & Strategy Research, Komerční banka

Source: Macrobond, SG Cross Asset Research/Economics, Economic & Strategy Research, Komerční banka

At its July meeting, the ECB sent a dovish message, indicating the possibility of more easing in September. In our opinion, it will likely reduce the deposit rate by 20bp in September and by another 20bp in June 2020, i.e. to -0.8%. At the same time, it will likely lower the rate for the main refinancing operations from the current zero to -0.1% (MRO, the rate at which banks borrow money from the ECB for one week). With the onset of the recession in the US, we expect the ECB to relaunch QE, consisting of monthly purchasing of assets worth €40bn over two years. The net volume of purchased assets could reach up to €1trn. If the data is not sufficiently resilient, the ECB could launch additional QE already this year, but this is not our baseline scenario.

Among the euro area countries, Germany is not in the best shape. The German economy is still plagued by recession in the industrial sector. Germany is much more dependent on this sector than the rest of the euro area (industry in Germany accounts for 24% of GVA; in the euro area, it's 18%). Consequently, problems in the automotive sector, weaker foreign demand and uncertainty associated with trade wars affect Germany much more than other euro area countries. Thus, 2Q19 German GDP growth is likely to be negative. However, beyond the industrial sector, the fundamentals remain favourable. Tax cuts, easy fiscal policy, solid wage growth, lower inflation and a weaker euro than last year all play in favour of domestic demand growth. Overall, we expect GDP growth of 0.7% (NSA) this year.





Source: Bloomberg, Economic & Strategy Research, Komerční banka

German GDP growth (%, yoy)



Source: SG Cross Asset Research/Economics, Economic & Strategy Research, Komerční banka



Inflation in Poland accelerates.

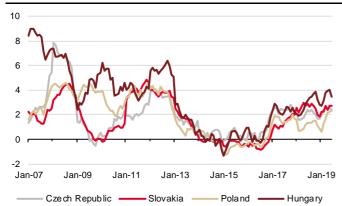
Fiscal policy helps regional economies

likely thus remain unchanged on a one-year horizon.

Poland is preparing for parliamentary elections at the turn of October/November. According to opinion polls, the ruling Law and Justice party currently has 40% support. The opposition has been fragmented since the European Parliament elections. This, together with generous fiscal policy, has boosted the ruling party. At the beginning of July, parliament approved universal child benefit, the payment of a one-off 13th salary for pensioners, and the exemption of employees aged under 26 from income tax. Overall, government spending could rise by as much as PLN40bn (CZK240bn) annually. In terms of GDP growth, easier fiscal policy should help maintain consumption at solid levels, thus contributing to GDP growth of 3.8% this year. However, we expect a slowdown to 2.8% next year owing to lower external demand, lack of production capacity and tighter fiscal policy. The lack of production capacity and a tight labour market are already starting to be visible in accelerating inflation. In June, it rose to 2.6%, the highest rate since November 2012. Core inflation is accelerating (1.9% in June) due to the tight labour market. Given the expected rise in food prices, inflation at the beginning of next year is likely to exceed 3%. Nevertheless, the central bank sees current price developments as a return to normal, and its rhetoric remains dovish. Interest rates will

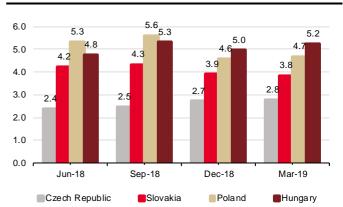
Hungarian economy sees secondhighest pace of growth since 1996. The Hungarian central bank is not in a hurry to tighten monetary policy either. It has lowered its FX programme by another HUF100bn in June. The key three-month deposit rate has been left unchanged, as has the overnight deposit rate. The central bank is wary of further external developments, and it will step cautiously. Hungarian inflation decelerated in June to 3.4% from May's 3.9% due to the decline in food and fuel prices. Nevertheless, it is likely to stay above the 3% target until 2021, according to the central bank. Hungarian GDP growth surprised on the upside in 1Q, growing by 1.5% qoq and 5.3% yoy, the second-highest pace of growth since 1996. The economy is being supported by strong private consumption, quick tapping of EU funds and government consumption. According to the central bank, the Hungarian economy should grow by 4.3% this year. Nevertheless, it is likely to decelerate next

CEE: Inflation accelerates (%, yoy)



Source: Macrobond, Eurostat, Economic & Strategy Research, Komerční banka

CEE: GDP set to slow (%, yoy)



Source: Macrobond, Eurostat, Economic & Strategy Research, Komerční banka

Macroeconomic outlook

Viktor Zeisel (420) 222 008 523

Main changes

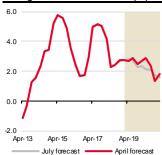
GDP:

We have revised up our full-year GDP growth forecast for 2019 to 2.7% from 2.4%. In 2020, we see GDP growth decelerating to 2.1%.

Inflation:

We have increased our full-year forecast by a tick to 2.6% on the back of rising food prices. Inflation in 2020 should accelerate to 2.7% due to an increase in excise tax

Change to our GDP outlook (%)



Source: CZSO. Macrobond. Economic & Strategy Research, Komerční banka

Change in our inflation outlook (%)

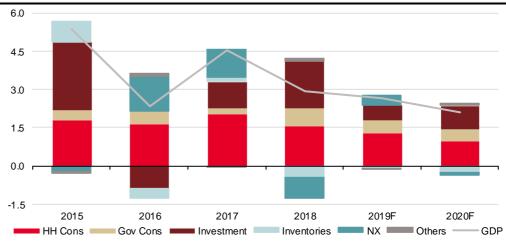


Source: CZSO, Macrobond, Economic & Strategy Research, Komerční banka

Unexpected resilience

With German industry still in recession, Czech economic growth has stabilised very close to its long-term potential. External trade has been the biggest surprise. Despite the major slowdown in Germany and the euro area, the monthly figures suggest that external trade saw a record surplus in the second quarter of this year. Private consumption remains sound, while investment has been slowing, as expected, due to the nature of the EU funds cycle. We expect the economy to maintain its growth dynamics this year, while it will likely decelerate next year due to a slowing global economy. While core inflation is set to ease continuously, food and administered prices will likely keep price growth above 2% this year. In 2020, an increase in excise tax will likely push inflation towards the upper bound of the CNB's tolerance band.

External trade to provide surprising support to growth this year (%, yoy)

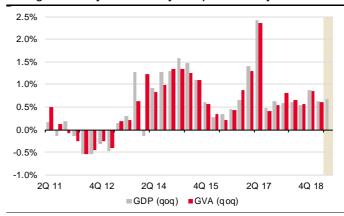


Source: CZSO, Macrobond, Economic & Strategy Research, Komerční banka

External trade boosts GDP growth in second quarter

The monthly figures from the real economy confirm that the Czech Republic remains relatively resilient slowdown Germany. The car industry is still the main driver of industrial production, and it has a big impact on the trade balance. estimate that in the the second quarter, external balance saw its best result ever, strongly supporting

GDP growth not yet affected by slump in Germany



Source: CZSO, Macrobond, Economic & Strategy Research, Komerční banka

excellent trade result was also due to lower imports amid moderating investment activity. Investment eased after a year of very strong EU fund inflows, which must be tapped by the end of the year. In contrast, private consumption remained on an upward trend, making a decent contribution to GDP growth. That said, GDP has likely moderately accelerated to 0.7% qoq and 2.8% yoy in 2Q19.

Automotive sector still motoring ahead despite subdued demand in euro area

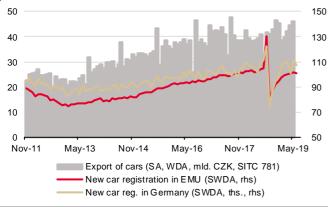
Czech industrial growth to remain positive but subdued.

After a sluggish start to the year, domestic industry has been doing well. It is still resilient to the weakness in global trade that has seen German industry in recession for almost a year. The Czech Statistical Office's latest business cycle survey suggests that a lack of staff is almost as big a barrier to growth as lack of demand. Moreover, the survey showed that businesses in the industrial sector have orders for 13.2 months ahead. Capacity utilization is still notably above its long-term average. Despite demand for cars in the euro area remaining subdued, the Czech automotive sector is still the main driver of industrial production. The

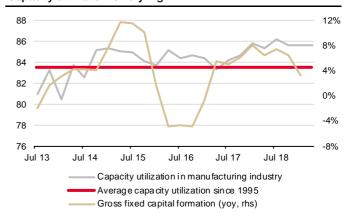
number of cars produced in the country is still rising, albeit at a slower pace than last year. Investment activity will likely ease, but growth should remain positive. The German economy is set to regain momentum in the second half of the year, providing support to domestic industry. We expect the Czech manufacturing sector to grow by 1.3 % this year.

In the first half of next year, industrial production should benefit from the recovery in Germany and continuous investment activity. The yoy dynamics will be supported by a relatively weak statistical base. The second half of the year will likely be different. We expect a major slowdown in the global economy, which will drag on external demand and consequently domestic production. The slowdown in the Czech industry is set to lag. We still expect a relatively solid performance, with growth of 3.0% in 2020.

Demand for cars in euro area still lower than last year



Capacity utilization is very high

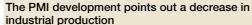


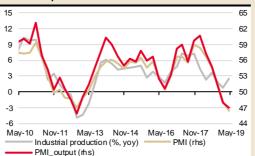
Source: CZSO, Macrobond, Economic & Strategy Research, Komerční banka

Source: CZSO, Macrobond, Economic & Strategy Research, Komerční banka

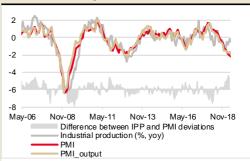
Box 1: The power of forward-looking indicators

Leading indicators like the Purchasing Managers' Index (PMI) are monitored and used to predict economic developments in the short term. In the past few months, however, we have seen a deviation between what the leading indicators predict and the hard data. This applies to more or less all forward-looking indicators, both at home and abroad, especially in the industrial production sector. PMI is derived from monthly surveys of private sector companies. The surveys ask only for factual information, never for opinions, intentions or expectations. Nevertheless, they are often considered informative about the near-term economic outlook, since decisions regarding the setup of future production often depend on the information reflected by the index.





Standard deviation from long run trend increases more by PMI



Source: IHS Markit, CZSO, Reuters, Macrobond, Economic and Strategic

Source: IHS Markit, CZSO, Reuters, Macrobond, Economic and Strategic Research, Komerční banka

The PMI has been declining for several quarters, as has Czech industrial production growth. Leading indicators and industrial growth reached their local maximums in 4Q17 at more than twice their long-run average, but since then their value has been decreasing. At end-2018, the PMI fell into a band that marks a downturn in industry. Unlike in the past, however, the industrial sector has continued to grow at a slower but steady rate since the beginning of the year.

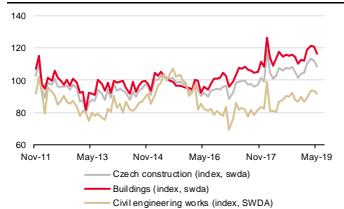
A deeper analysis shows that it is not the value of the index per se but its deviation from the long-run average (here measured as relative to standard deviation) that indicates future development in industrial production. The graph on the right above shows a remarkable overlap between deviations in industrial production growth and the PMI. Seldom do the two series move in opposite directions, but when they do, the effects are typically persistent. A split between the PMI and actual production at the levels we have seen recently also occurred in 2007 and, to a lesser extent, at end-2011. In contrast to the current situation, the PMI was above its long-term average and in expansion range in both those cases. In these instances, Czech industrial production fell into recession within a few months. Thus, the current state of the manufacturing PMI may point to downside risk for our outlook on industrial production.

Monika Junicke +420 222 008 509 monika_junicke@kb.cz

Construction output growth curbed by hard capacity constraints.

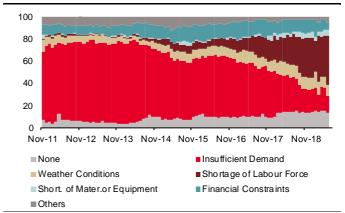
The construction sector is still doing well. Demand exceeds supply, and the sector lacks capacity. The shortage of workers is the biggest impediment to growth, according the business surveys. And this is visible in output. After strong growth last year, there has been a notable slowdown this year because of capacity constraints. However, we should still see decent growth of 3.9% this year. The economic slowdown in the second half of next year will be visible in the construction sector. We expect 1.8% growth in 2020.

Construction losing last year's momentum



Source: CZSO, Macrobond, Economic & Strategy Research, Komerční banka

Construction curbed by lack of capacity



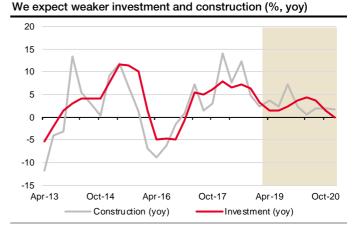
Source: CZSO, Macrobond, Economic & Strategy Research, Komerční banka

Investment slowing amid lack of capacity in construction sector.

EU funds cycle to curb investment this year

After booming last year, investment activity eased notably at the beginning of this year. This is linked to the EU funds cycle, which we describe in Box 2. We show that we cannot expect a repeat of the investment boom this year. We expect investment to increase by 2.2% this year.

The first half of next year should show improvement, as we expect a revival in



Source: CZSO, Macrobond, Economic & Strategy Research, Komerční banka

German economic activity. However, the revival will probably only be short-lived, as a major global slowdown is likely in the second half of the year. **We see investment growing by 3.4%** in 2020.

Box 2: N+3 rule will not support investment this year

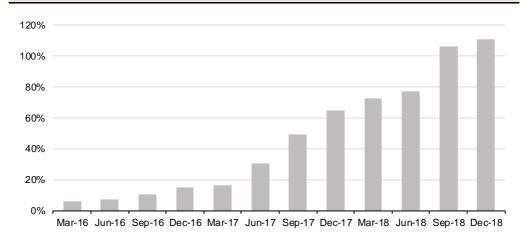
Investment increased 7% yoy in 2018. The fact that the Czech Republic had to follow the n+3 rule for tapping EU funds contributed to this. This meant the country had to tap all subsidies that were allocated to it in 2014 and 2015 (i.e. three years after the last allocation in 2015, hence n+3). A total sum was €8.3bn. It got off to a slow start, with the largest amount of payment requests being sent to the European Commission (EC) in 3Q18 (almost €1.1bn). In reality, however, this money was spent a few quarters earlier. Repayment to the final recipient, i.e. to the company/municipality that realized the investment, was not dependent on the actual disbursement of funds from the EU. Each entity had to make the investment using its own sources, and was then financed from the state budget, after which the Czech Republic asked Brussels for a refund.

This year, the Czech Republic has to draw all subsidies that it was allocated in 2016, a total of €6.6bn. By end-1Q19, it had already submitted requests for 94% of these funds to the EC for reimbursement. This removes the Sword of Damocles hanging over the Czech Republic, that it would risk losing subsidies if it had not spent the money that was allocated. Therefore investment growth is unlikely to accelerate the way it did last year.

30 July 2019 13

Most of the EU funds will probably be drawn as usual at the end of the programming period. The deadline for drawing the funds from 2020 was set on 15 February 2025. A significant increase in investment activity can therefore be expected in 2023-24. In the new programming period of 2021-27, the Czech Republic will have approximately €20bn at its disposal, i.e. €4bn less than in the current period. It will likely be slow to start again, as indicated by the state of preparations for the investment programme's launch.

Progress in fulfilling 2018's n+3 rule



Source: Ministry for Regional Development, Economic & Strategy Research, Komerční banka

Jana Steckerová +420 222 008 524 jana_steckerova@kb.cz

Fiscal policy: deteriorating outlook for the coming years

The state budget this year will record its worst result since 2015 and will end up in deficit of CZK40bn according to the Ministry's plan. The economy does not support higher tax collection, as in previous years, but weaker investment activity will save the budget from a deeper deficit. However, the overall public finances will remain in surplus this year due to continued sound management of municipalities and social security funds. We expect a further deterioration in the state budget and municipalities next year, leading to the first public finance deficit after five years of surpluses.

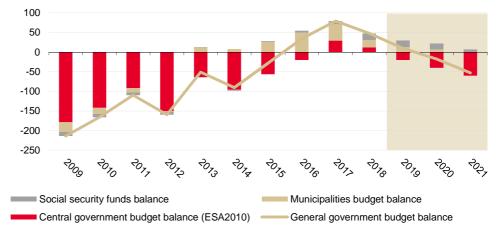
Slower growth in tax revenues and weaker investment activity

A solid public finance performance should be reduce by the state budget deficit, which is at its highest level since 2013. The state budget for the first six months of 2019 ended in a deficit of CZK20.7bn. This is the worst first six-month result since 2013, when it was ten billion worse. However, since then, with the exception of last year, all years have been in surplus over this period. On the other hand, it should be noted that the planned budget deficit for this year is CZK40bn. This is mainly due to weaker tax collection, especially VAT and personal income tax, which are slightly behind the plan. On the other hand, it is surprising that corporate income tax outperformed in 2Q after lagging in the first quarter. The government has been saved from an even deeper state budget deficit by a weak start of investment expenditures in the first half of the year. So far, only a third of the funds earmarked for this year have been invested. Economic growth is no longer strong enough to support the state budget, as reflected by weaker growth in the collection of taxes on all main items except the personal income tax, which is on average 14% more than a year ago. While we expect the state budget to end in a deficit of CZK40bn this year, as the Ministry of Finance expects, we see room for a slightly better result. The decisive factor will be the level of government investment activity in the second half of the year. This year, according to the n+3 rule, the government must draw approximately CZK24bn from EU funds whereas last year the amount was about CZK15bn

more (see Box 2). Also, the volume of planned investments was CZK35bn lower last year. This year, the volume of investments from own resources has increased significantly and the cofinancing rate from EU funds has decreased. The outcome of the increasingly exhausted capacity of the economy and the reduced necessity to draw funds could lower level of investment compared to the plan and hence result in a better budget performance.

This year's management of municipalities and social security funds offers a significantly different picture. Regions and municipalities continue to benefit from last year's change in the budget allocation of taxes, which increased their revenues by several billion CZK. Meanwhile, the budgetary responsibility of the municipalities is unchanged and their investment expenditure is still gradually rising. In the first five months, local budgets were in surplus by CZK19.9bn, which is six billion more than in the same period last year. At the same time, the volume of free funds on the municipalities' current accounts stabilised at slightly below CZK200bn, which corresponds to approximately one-third of last year's expenditures. This can clearly be seen as a solid reserve in case of worse times ahead. Therefore, we expect the local government budget to end in surplus of CZK13bn this year, which can still be considered as a good result, but the worst since 2014. By contrast, social security funds, which are largely formed by health insurance companies, reached a peak, reflecting several years of rapid wage growth and an increase in their minimum level. As a result, they have benefited from a higher amount of social security contributions and from last year's increase in payments for state insured persons. We therefore expect the social security budget to end this year with a record surplus of CZK16.7bn.

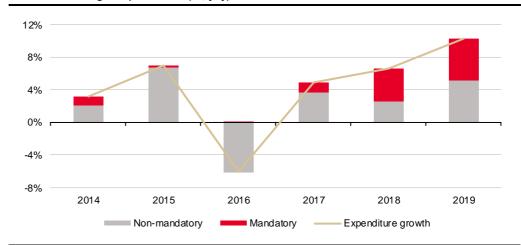
General government budget balance composition (CZKbn, ESA 2010)



Source: Finance Ministry, Macrobond, Economic & Strategy Research, Komerční banka

Overall, we have increased the general government balance for this year according to the ESA2010 methodology by three tenths of a percentage point to 0.2% of GDP. The main reason for the revision is visibly better management of regions, municipalities and health insurance companies, which will compensate the significant year-on-year deterioration of the state budget. Even so, this translates into a worsening of the general government surplus by seven tenths of a percentage point compared to the previous year.

Structure of budget expenditures (%, yoy)



Source: Finance Ministry, Macrobond, Economic & Strategy Research, Komerční banka

Absence of efforts to avoid deficit budgets

For this year, the government plans to increase mandatory expenditure further and raise existing taxes or introduce new ones.

The state budget for next year is still in the approval process. By the end of September, the government must submit a state budget draft to the Chamber of Deputies. Meanwhile, the preliminary draft budget has been approved by the government, but members of the minority party of the government coalition abstained - for the first time in history. They are demanding an increase in the salaries of some civil servants and social services. On the other hand, the Communists who support the minority government in the Chamber of Deputies are demanding a CZK10bn reduction in the budget deficit. These preliminary disputes suggest that the budget approval process will not be easy this year once again. However, we do not expect the scenario of recent years to be repeated, i.e. with the proposal being approved just a few days before the end of the year and creating a real risk of a temporary budget.

Meanwhile, the state budget for next year incorporates an increase in the average old-age pension by CZK900 to CZK14,358, an increase in parental allowance to CZK300,000 and the cancellation of the waiting period for sickness benefits (as of July this year), pushing up the cost side of the budget. Teachers' salaries should be increased again by ten percent and nonteaching professions salaries by seven percent. On the savings side, jobs in ministries and other state institutions should be reduced by up to 10%. Overall, however, more new positions should be filled than cut. In the tax mix, the House has already approved an increase in the excise tax on tobacco and alcohol. According to the Ministry's estimates, this change should represent about one billion CZK in alcohol tax and less than eight billion CZK in tobacco tax. In the case of the tobacco, however, we consider the Ministry's estimates unrealistic. On our estimates, the additional income will be around only CZK5bn if we exclude the possible frontloading effect, which would further reduce collection in the first year of the increase.

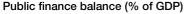
Public finance forecasts

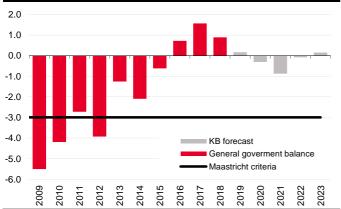
i ubile illiance forceasts						
	2018	2019f	2020ff	2021f	2022f	2023f
Balance (% GDP)	0.9	0.2	-0.3	-0.9	-0.1	0.2
Fiscal effort (pp GDP)	-0.8	-0.6	-0.1	-0.5	0.8	0.2
Public debt (CZKbn)	1735.1	1745.4	1773.4	1816.4	1831.4	1831.4
Debt ratio (% GDP)	32.5	30.9	30.1	29.9	29.0	27.6

Source: CZSO, Macrobond, Finance Ministry, Economic & Strategy Research, Komerční banka

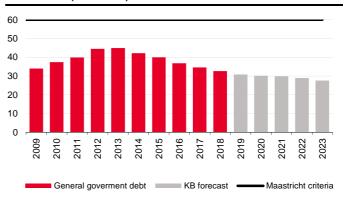
The current forecast of the Ministry of Finance from this April foresees next year's GDP growth of 2.4%, household consumption growth of 2.8% and wage growth of 5.7%. For all these indicators, we expect slightly weaker growth and therefore a lower level of revenues than expected by the current draft of the state budget. In July/August a new macroeconomic forecast is released by the MinFin. This could change the current outlook and could result in a revaluation of revenues in the current draft state budget. On the other hand, there will be no change in investment, which will remain difficult to implement, and this will reduce budget expenditure. Overall, we expect the state budget deficit to worsen further to CZK50bn next year. Municipalities and social security funds will remain in surplus, although their contribution will not be as high as this year (CZK7.0bn and CZK15.0bn respectively). We expect that, according to ESA2010 methodology, the general government will print a deficit of 0.3% of GDP next year, which would be the first deficit since 2015.

Public finance debt will continue to grow with a deteriorating outlook, albeit at a negligible pace. In relative terms, however, debt will continue to decline and should reach 30% of GDP at the end of next year, the lowest level since 2008. On the other hand, interest costs stemming from public debt fell to around CZK40bn and will stagnate or only slightly grow in the coming years.





Public debt (% of GDP)



Source: CZSO, Economic & Strategy Research, Komerční banka

Source: CZSO, Economic & Strategy Research, Komerční banka

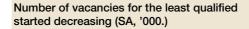
František Táborský +420 222 008 598 frantisek_taborsky@kb.cz

Labour market at turning point

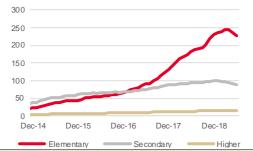
The unemployment rate dropped as low as 1.9% in February, according to the Czech Statistical Office. It seems that this figure was the low. The unemployment rate has since increased by three ticks. Although the share of unemployed measured by labour offices has still not started growing, labour office data suggest that the labour market is steadily turning (see Box 3).

Vacancies signal turning point in labour market

One of the most notable trends in the current business cycle has been the unprecedented drop in unemployment. The unemployment rate hit a record low at the beginning of the year. The number of vacancies has been growing rapidly in recent years. Job offers increased mainly for the least qualified. There might be some bias, as the jobs for the least qualified are more likely to be advertised, while candidates for highly qualified jobs are often searched for directly. However, we do not believe that the bias is substantial.







Source: MLSA, Economic & Strategy Research, Komerční banka



Source: MLSA, Economic & Strategy Research, Komerční banka

The overall number of vacancies fell notably in June for the first time since the seasonal drop at the end of 2016. However, if we look closely at the figures, we can see that increase since the beginning of this year is due to seasonality. The seasonally adjusted figures show that the number of vacancies has turned downward. Job offers for the low skilled are the driver of the downturn, showing that the labour market has started normalising.

Detailed labour office data show that the long-term unemployed have benefited most from the ongoing expansion. While the share of job candidates registered at the labour office for more than one year was almost 50% on the total number of unemployed when the expansion started, it dropped to 25% in recent statistics. We also see that frictional unemployment (up to three months) has stabilised, which might suggest that people are not looking for a new job as much as they were before. That should be reflected in slower wage growth.

The unemployment rate will likely print at 2.0% this year. The economic slowdown will pass through into the labour market next year. Yet given its current tightness, the increase in the unemployment rate should only be limited. We see the rate printing at 2.3% on average in 2020.

The slight loosening in the labour market is visible in wage growth. Although there was another significant boost to public sector salaries, average wage growth in the first quarter printed at 7.4%, showing that wage pressures have been fading, especially in the private sector. Employees perceive that the economy has been slowing and are not demanding as high pay rises as in previous years. We expect wage growth to increase 6.5% in nominal terms. Next year, wage growth should slow further. Salaries in the public sector should see slower

growth than this year. Labour market tensions will reduce, and the average wage should increase by 5.3%.

Wage growth set to decelerate



Consumer confidence rebounding



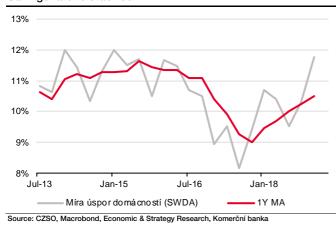
Source: CZSO, Macrobond, Economic & Strategy Research, Komerční banka

Consumer confidence recovering.

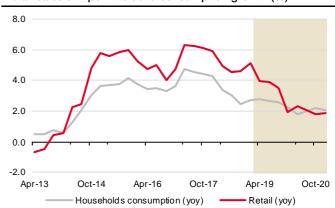
The economic slowdown at the turn of the year resulted in a decrease in consumer confidence and an increase in the savings rate. Recent business surveys show that consumer confidence has already stabilised or is even recovering. We expect the savings rate to stabilise as well. Consumption recovered in 1Q after slumping at the end of last year, confirming that households regained confidence. Monthly retail sales suggest that households did not lose their appetite to consume in the second quarter. Given the tight labour market and still strong domestic economic growth, we see household consumption increasing by 2.7% this year.

We expect private consumption to decelerate on the back of lower confidence and weaker wage growth. We see it printing at 2.1% in 2020.

Savings rate to stabilise



Retail sales still point to solid consumption growth (%)



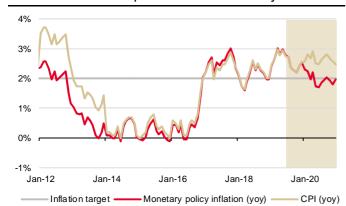
Source: CZSO, Macrobond, Economic & Strategy Research, Komerční banka

Rise in excise tax to keep inflation well above 2% target

While core inflation has been losing momentum a bit more quickly than we previously expected, headline inflation has been pushed up by elevated food prices. The persistent drought will keep pressure on food prices, while core inflation should continue easing towards 2%. We see an average price increase of 2.6% this year. The government is set to hike excise taxes significantly next year. Our calculations show that this will lift headline inflation by roughly 0.8pp. We see inflation printing at a relatively high 2.7% in 2020.

30 July 2019 19

Increase in taxes to keep inflation above 2% next year



Source: CZSO, CNB, Macrobond, Economic & Strategy Research, Komerční banka

Core inflation drifting down towards 2%



Source: CZSO, Bloomberg, Macrobond, Economic & Strategy Research, Komerční banka

Core inflation easing continuously.

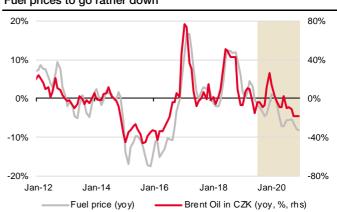
Core inflation decelerated in the second quarter but remains at around 2.5%. We expect that it will ease continuously towards 2% this year. Wage pressures are weakening, while the CZK exchange rate will have a roughly neutral effect. We expect core inflation to print at 2.4% on average this year. In 2020, wage pressures should be weaker than this year. Moreover, the global economic slowdown expected in the second half of the year should curb consumption, which would see core prices moderate. However, we expect koruna depreciation to hinder any massive deterioration in core inflation. We see core inflation printing at 1.9% on average in 2020.

Long-term drought leading to high food prices.

Food prices were very strong in the first half of the year. The drought has increased the price of vegetables, especially potatoes, and last year's poor harvest is also reflected in pastry and even livestock prices as feed becomes more expensive. As the weather has not improved significantly, we don't expect food prices to drop significantly. Prices in agriculture have skyrocketed, corroborating this view. We expect food prices to grow by 2.2% this year and 3.1% next year.

Fuel prices to decrease on back of koruna appreciating against dollar. After falling in the end of May, oil prices stabilised at around USD65 per barrel. We expect Brent prices to fall slightly over the remainder of the year and remain a drag on domestic fuel prices. In 2020, the oil price should stabilise, but we expect the koruna to appreciate against the dollar, which will make imports cheaper. We expect fuel prices to a modest decrease by

Fuel prices to go rather down



Source: Bloomberg, CZSO, Macrobond SG Cross Asset Research/Economics, Economic & Strategy Research, Komerční banka

0.9% this year and decelerate by 5% next year.

Administered price inflation to remain elevated.

Administered prices surged this year on the back of rapid increases in electricity prices. The increases are not set to reverse over the remainder of the year. Average growth in administered prices will likely be 4.4% this year. In 2020, we expect a slowdown to 2.4%. So far, it does not seem that the energy prices would change significantly compared to this year.



Government approved changes in excise tax for the next year. Cigarettes should be CZK10 more expensive and some increase will hit also spirits. Altogether we expect it to add 0.8pp to inflation this year.

Risks: Brexit a prominent risk

There are persistent risks emanating from the external environment. Domestically, capacity constraints, the propagation of higher energy costs into other areas and the second-round effects of tax increases are a risk. The main risks include:

- Brexit. With the appointment of Boris Johnson as prime minister, the probability of a nodeal Brexit has increased notably. Such an outcome would be a blow for Czech economic growth.
- Outright EMU recession. While the Czech economy has so far resisted the slowdown in the euro area, in Germany in particular, a prolonged period of sluggish growth or recession would surely result in weakness in the domestic economy as well.
- Substantial fall in demand for cars or car parts. This would be a big blow to the Czech automotive industry, one of the main drivers of the current economic boom. It could arise from market saturation or new environmental regulations. Or car tariffs could be introduced in the US, which would harm German car makers in particular.
- Propagation of higher electricity prices into other price categories. A surge in electricity prices and the excise tax increase might propagate into other price categories. In that event, inflation might be stronger than we expect in our baseline forecast.



Key economic indicators

	2Q19	3 Q 19	4Q19	1Q20	2 Q 20	3 Q 20	4 Q 20	1Q21	2018	2019	2020	2021	2022	2023
GDP and its breakdown														
GDP (real, yoy)	2.8	2.8	2.3	2.4	2.2	2.1	1.8	1.7	2.9	2.7	2.1	1.8	2.5	2.7
Household consumption (real, yoy)	2.8	2.7	2.6	2.3	1.9	2.0	2.3	2.1	3.3	2.7	2.1	2.1	2.5	3.1
Government consumption (real, yoy)	2.9	2.2	2.6	2.8	2.4	2.7	2.2	2.2	3.9	2.7	2.5	2.4	1.8	1.3
Fixed investments (real, yoy)	1.5	1.6	2.5	3.7	4.5	3.8	1.6	0.1	7.1	2.2	3.4	-0.5	1.9	1.8
Net exports (contribution to yoy)	1.0	1.3	-0.5	0.6	-1.1	-0.6	0.5	0.6	-0.8	0.4	-0.1	1.0	0.3	0.9
Inventories (contribution to yoy)	-0.5	-0.4	0.4	-0.8	0.6	-0.1	-0.6	-0.7	-0.4	-0.1	-0.2	-0.7	0.2	-0.1
Monthly data from the real economy														
Foreign trade (CZK bn) (*) (***)	137	121	111	110	111	109	111	112	383	486	440	459	448	475
Exports (nominal, yoy) (*)	6.8	6.8	4.8	6.1	4.4	3.9	4.2	2.6	3.7	6.0	4.6	5.1	7.9	8.4
Imports (nominal, yoy) (*)	2.6	3.3	5.3	7.5	7.5	5.4	4.6	2.7	5.7	3.9	6.2	5.2	8.8	8.6
Industrial production (real, yoy)	1.0	1.2	2.7	4.5	3.6	2.8	1.4	-0.1	3.1	1.3	3.1	2.8	6.2	6.7
Construction output (real, yoy)	3.7	2.4	7.3	2.5	0.6	2.1	2.0	1.7	9.8	3.9	1.8	2.7	3.9	6.4
Retail sales (real, yoy)	4.4	3.9	3.5	2.0	2.4	2.1	1.8	1.9	5.0	4.2	2.1	1.6	2.6	4.0
Labour market														
Wages (nominal, yoy)	6.7	5.9	5.9	5.5	5.3	5.6	5.0	4.4	7.6	6.5	5.3	3.8	4.7	5.6
Wages (real, yoy)	3.8	3.4	3.5	2.6	2.5	2.8	2.3	2.6	5.4	3.8	2.6	2.3	2.9	3.5
Unemployment rate (MLSA)	2.6	2.7	3.0	3.2	2.9	3.1	3.5	3.7	3.1	2.8	3.2	3.7	3.8	3.7
Unemployment rate (ILO 15+)	1.8	2.0	2.0	2.2	2.2	2.4	2.5	2.7	2.2	2.0	2.3	2.8	3.0	2.8
Employment (ILO 15+, yoy)	0.4	0.5	0.0	-0.4	-0.3	-0.7	-0.7	-0.7	1.4	0.4	-0.5	-0.6	-0.1	0.2
Consumer and producer prices														
CPI Inflation (yoy)	2.8	2.4	2.4	2.8	2.7	2.7	2.6	1.8	2.1	2.6	2.7	1.5	1.8	2.0
Taxes (contribution to yoy inflation)	-0.1	-0.1	-0.1	0.7	0.8	0.8	0.8	0.1	0.0	0.0	0.7	0.0	0.0	0.0
Core inflation (yoy) (**)	2.6	2.2	2.0	1.8	1.9	2.0	1.8	1.5	2.2	2.4	1.9	1.4	1.6	1.9
Food prices (yoy) (**)	2.5	2.6	2.8	3.3	3.0	3.1	3.1	2.2	1.3	2.2	3.1	1.2	1.5	1.3
Fuel prices (yoy) (**)	2.5	-3.3	-4.1	-1.1	-6.4	-5.4	-7.1	-5.7	6.2	-0.9	-5.0	-5.5	-1.6	-0.9
Regulated prices (yoy) (**)	4.5	4.4	5.0	3.1	2.4	2.0	1.9	3.2	1.7	4.4	2.4	3.7	3.7	3.6
Producer prices (yoy)	3.5	2.9	2.9	2.7	1.9	1.7	1.3	1.3	2.1	3.2	1.9	0.9	1.3	1.8
Financial variables														
2W Repo (%, average)	1.91	2.00	2.00	2.00	2.00	2.00	2.00	2.00	1.06	1.92	2.00	2.00	2.4	2.7
3M PRIBOR (%, average)	2.13	2.25	2.25	2.25	2.25	2.25	2.25	2.25	1.27	2.16	2.25	2.25	2.5	2.8
EUR/CZK (average)	25.68	25.60	25.73	25.67	25.97	26.47	26.38	26.15	25.7	25.7	26.1	25.6	24.9	24.4
USD/CZK (average)	22.86	22.86	22.18	21.39	20.94	20.84	20.45	20.27	21.7	22.6	20.9	20.2	19.2	18.3
External environment														
GDP in EMU (real, yoy)	1.1	1.4	1.6	1.6	1.3	1.0	0.7	0.5	1.8	1.3	1.1	0.7	1.5	1.7
GDP in Germany (real, yoy)	0.4	0.9	1.3	1.3	1.5	1.0	0.6	0.3	1.5	8.0	1.1	0.9	1.8	1.6
CPI in EMU (real, yoy)	1.4	1.2	1.0	1.4	1.3	1.2	1.1	1.1	1.7	1.2	1.3	1.2	1.3	1.4
Brent oil price (USD/brl, average)	79.5	70.0	75.0	70.0	70.0	68.7	67.3	66.4	71.5	72.1	69.0	65.0	65.0	65.0
EURIBOR 1Y (%, average)	-0.15	-0.21	-0.29	-0.35	-0.38	-0.36	-0.28	-0.22	-0.17	-0.19	-0.34	0.00	1.00	1.80
EUR/USD (average)	1.12	1.12	1.16	1.20	1.24	1.27	1.29	1.29	1.18	1.13	1.25	1.27	1.30	1.30

Source: CZSO, MLSA, Bloomberg, Macrobond, Economic & Strategy Research, Komerční banka
Note: (*) foreign trade according to cross border statistics;

(**) these parts of inflation are adjusted for the primary effect of indirect tax changes;

(***) the quarterly data are seasonally adjusted.

CNB Focus

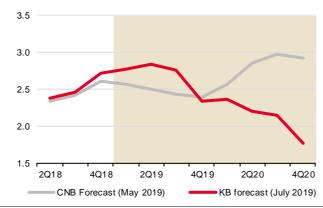


CNB to stay on hold despite hawkish economic forecast

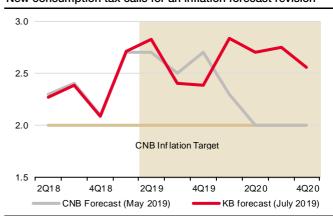
The Czech National Bank (CNB) meets on Thursday 1 August amidst monetary policy loosening talk not only in the US, but also the euro area. In our view the CNB is unlikely to join the cutting wave, but we feel the need to revise our hike call. Although domestic economic fundamentals point to more tightening and the CNB forecasting model likely will imply more hikes, we expect the fragile situation abroad and the risks stemming from the external environment to stop the race to neutral rates. Nevertheless, we do not think the board will start cutting and we still see the risks tilted more to a rate increase than to reversing the cycle this year.

The CNB is meeting when the Fed already is set to reverse its monetary policy cycle and when the ECB is likely to resume monetary policy loosening. However, the CNB does not talk about reversing its monetary policy cycle. The reason is the country's very different economic performance. Though GDP growth has underperformed compared to the best years of this cycle (2015 and 2017), its dynamics remain very close to our estimate for potential growth. Capacity utilization is well above its long-term average and labour market tension confirms that resources for further expansion are limited. Moreover, despite the weakness of the external environment, Czech external trade has been printing a record surplus. That is partly due to fixed investment easing (connected to the EU funds cycle), while private consumption still remains robust. A tight labour market and pressure from the pay rises in the public sector will ensure that wage pressures persist. Though wage growth likely will ease somewhat, this will create enough inflationary pressures for price growth to remain around the CNB target given profit margins are already squeezed. Moreover, the planned excise tax increase likely will drive inflation to the upper bound of the tolerance band next year.

GDP growth surprisingly resilient to slowdown in Germany



New consumption tax calls for an inflation forecast revision



Source: CNB, CZSO, Macrobond, Economic & Strategy Research, Komerční banka Source: CNB, CZSO, Macrobond, Economic & Strategy Research, Komerční banka

We see the strength of the domestic economy and inflation at the upper bound of the tolerance band as the main reason the CNB will not join in the loosening monetary policy talk. However, it is difficult to expect the CNB to hike in current circumstances. The board members perceive the currently difficult situation in the external environment. We expect the ECB to cut rates in September and restart QE next year. Though the CNB proved that it does not necessarily need ECB tightening to hike rates itself, we do not believe that board members would suggest hiking while the ECB loosens its monetary policy. However, nothing suggests that the CNB will follow the Fed and start pre-emptive cutting

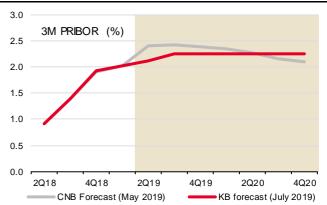
because of the risks. Moreover, inflation is set to stay elevated so there is no imminent need to cut rates to hit the inflation target. This approach likely will be supported by the staff forecast. We believe that this forecast will indicate more monetary policy tightening. Already, the May staff projection showed PRIBOR at 2.42% in the third guarter (current level 2.16%), which would now imply one more 25bp rate increase. The CNB will use its upgraded G3+ model for the new staff projection; however, there should not be much difference in the outcome. Like the older CNB G3 model, its upgraded G3+ model maintains its dynamic properties, resulting in the equivalence of a one percent CZK appreciation to one 25bp rate hike. The current exchange rate is at the moment more than 1% above the CNB forecast for the 3Q average (25.66 vs 25.20). Yet, the board is very likely to prefer to stay a bit behind the curve than hike given the many risks in the global economy. We believe a similar story will repeat in the meetings up to mid-2020. The CZK is set to underperform and the domestic economy to remain relatively resilient. The forecasts are thus likely to continue to show more tightening, adding a somewhat hawkish tone to the on hold results. That said, for this year, we see the risk of a rate hike more than a cut.

Vice Governor Nidetzky pleaded for stability in rates in an interview with Reuters. That comes as no surprise as we consider Nidetzky rather dovish. The message was confirmed by board member Michl who made his stance clear in an interview with Bloomberg. Though he is generally considered to be a hawk, he stated: "Maybe I would be able to find in it a justification for another hike now, but then the forecast would imply cuts in a year or later. So I believe it's better to smooth it out." That corroborates our view for the meeting on Thursday 1 August, but we believe that the situation is set to repeat in the next 12 months.

CNB's forecast for koruna much too optimistic



Staff forecast to keep implying tightening



Source: CNB, Bloomberg, Economic & Strategy Research, Komerční banka Source: CNB, Bloomberg, Economic & Strategy Research, Komerční banka

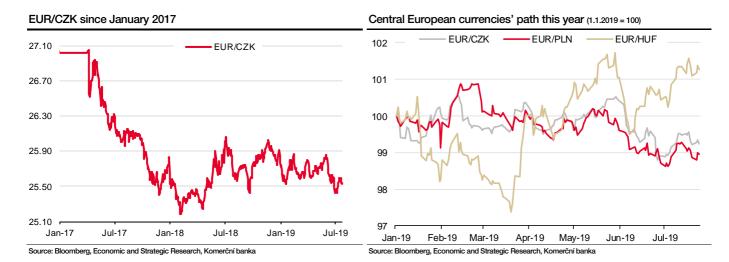
> The August meeting should not be any different. The forecast should show a hawkish message in our view. We would not be surprised if this were to imply more than one hike for the third quarter. Conversely, the board members likely will be very cautious as the risks stemming from the global economy remain high. They will thus very likely vote for stable rates, and one or two board members might even suggest a rate hike. Amid the current cutting talk, the CNB message of stable rates might be perceived as a hawkish signal, which should protect the currency from any stronger depreciation.

Czech FX Market



The koruna in a duel with the sentiment of foreign investors

In June, the koruna reached its strongest level against the euro in the past year but did not maintain its gains. The problematic presence of a large amount of foreign capital in the economy was confirmed once again. This year we expect only a slight depreciation of the koruna, mainly due to the end-of-year effect and the worsening market interest rate differential vis-à-vis the euro area. In the coming years, the koruna will not receive support from CNB monetary policy. Next year, we expect to see a more pronounced weakening of the currency due to the deteriorating outlook for domestic and foreign economies. We see risks clearly skewed towards a more pronounced depreciation of the koruna.



The koruna "overboughtness" by foreign investors is preventing the

foreign investors is preventing the koruna from strengthening sustainably.

Foreign capital prevents the koruna from strengthening

The koruna appreciated by 1.3% against the euro in 2Q. During July, however, it corrected part of its gains. The Polish zloty also developed similarly despite further losses against the dollar. The Hungarian forint, on the other hand, showed signs of weakness and, like the Eurodollar, is experiencing much higher volatility than other local currencies. The relatively positive development of the Czech koruna was influenced by better data from the real economy than expected, surprising resilience to the ongoing stagnation of the German economy and, above all, a turnaround in the market expectations of the US central bank and the ECB. The expectation of a Fed interest rate cut has supported currencies across all emerging economies. Lower rates would also mean lower returns on investment in the US, which would encourage investors to look for more profitable destinations at a higher risk. On the other hand, there is a risk that interest rate cuts will not be as hot as markets currently think and capital will return to the dollar.

The problematic presence of a large amount of speculative capital in the domestic economy continues to be confirmed, and will further hamper any potential gains by the koruna. Foreign investors are simply waiting for the close of their positions and realize the desired profit, which implies a further weakening of the koruna. The currency will not be supported by the CNB's monetary policy, which we believe will remain dovish in the coming years and will allow the weaker koruna to ease monetary conditions in the economy instead of using interest rates. However, we can expect verbal interventions in the form of hawkish bank board members comments, as consumer inflation remains well above the inflation target next year (see the chapter External Environment and Assumptions), while the economy slows further. In terms of monetary conditions, however, we believe that a weaker koruna will not

30 July 2019 25

help the economy much. According to CNB statistical surveys, around 50% of all exporters are hedged against exchange rate risk and less than 20% of all domestic payments to and from customers are denominated in euro. Therefore, the effect of currency fluctuations on domestic foreign trade is muted.

Koruna sensitive to regional and global developments but less so than last year

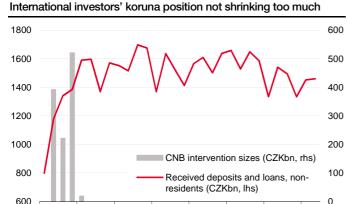
The CNB's monetary policy will no longer support the koruna



Source: Bloomberg, Economic and Strategic Research, Komerční banka

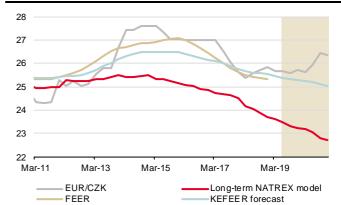
Source: Bloomberg, Economic and Strategic Research, Komerční banka

Our forecast of the koruna has been just slightly adjusted by moving the whole forecast by ten to twenty hellers higher. In the coming months, we therefore expect the koruna to stay at current levels or only slightly weaker, ending this year at 25.80 CZK/EUR. The last quarter will again be affected by the end-of-year effect, when banks pay their contributions to the resolution fund. That's calculated on the size of their balance sheet and encourages the banks not to accept deposits, including those from foreign clients. This is then negatively reflected in the koruna exchange rate. The longer this fund is used, the more the markets become accustomed to this phenomenon and its impact is fragmented over time. This year's impact is difficult to estimate, but we assume that the koruna will depreciate slightly at the end of this year as a consequence of this event. At the same time, investors are closing positions before the end of the year or rebalancing portfolios. Last year we also witnessed the presence of other central banks on the domestic foreign exchange market, and this seasonal negative impact on the koruna was offset by their operations. However, we do not expect the koruna to not make any major downward move in value until the second quarter of next year, when a worsening of the US economy and the euro area will likely be visible. By the end of the middle of next year, the koruna should stand above 26.00 per euro. This trend would also be supported by the expected interest rate differential between the domestic economy and the euro area, as measured by the difference in two-year interest rate swaps. This relationship shows solid strength this year and if it remains valid over the following months, it would indicate a significant depreciation of the koruna next year. Looking at the forecasts of other institutions, we see a significant dispersion between the minimum and maximum of the available forecasts, which are also pointing in opposite directions. This underlines the current market uncertainty regarding the further development of the koruna.



Apr-17 Aug-17 Dec-17 Apr-18 Aug-18 Dec-18 Apr-19

Models of koruna equilibrium exchange rate



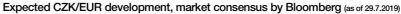
Source: CNB, Bloomberg, Economic and Strategic Research, Komerční banka

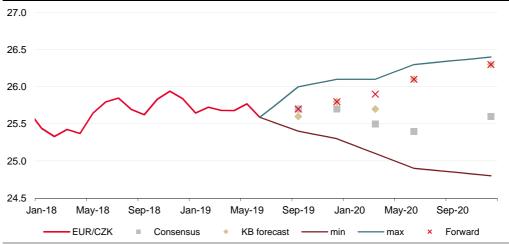
Dec-16

Source: Economic and Strategic Research, Komerční banka

Risks: with geopolitics for ever

At present, however, we see the risks as pointing rather upwards, i.e. in favour of a stronger depreciation of the koruna. Strengthening is in our opinion limited by a large volume of foreign money (see the second paragraph of the text). The situation remains almost unchanged even more than two years after the exchange rate commitment. Speculative positions not only hinder the sustainable strengthening of the koruna but also increase its sensitivity to foreign developments, particularly to stress on financial markets. This makes it all the more necessary to keep an eye on geopolitical events, where there are several risks. The main topics are Brexit, trade wars and the slowdown of the German economy, and the introduction of tariffs on car imports to the US (see the chapter External Environment and Assumptions), all of which directly and indirectly affects the domestic economy and consequently, the koruna's exchange rate. There are also unresolved problems in Italy and Turkey, whose strength has weakened the koruna, but on the other hand, the outlook for monetary policy easing in the US and the euro area should mitigate these risks.





Source: Bloomberg, Economic and Strategic Research, Komerční banka

30 July 2019 27

Czech government bonds and the IRS market



Yield curve to remain flat over the coming years

Czech government bond supply is set to decline significantly in the second half of the year. However, demand is likely to remain strong given solid yields in relation to the risks and relative to other countries in the region or the euro area. In conjunction with the further easing of monetary policy in the euro area, this should lead to a further decline in yields and interest rate swaps. In the case of bond yields, the curve should remain flat until the end of 2021. Meanwhile, the interest rate swap curve is unlikely to return to its normal shape over the same period. The risk to our forecast may be our perception of domestic government bonds as a safe haven asset.

CZGB yields, Bloomberg generic (%)



Source: Bloomberg, Economic and Strategy Research, Komerční banka

ASW spreads (bp)



Source: Bloomberg, Economic and Strategy Research, Komerční banka

Strong MinFin issuance is

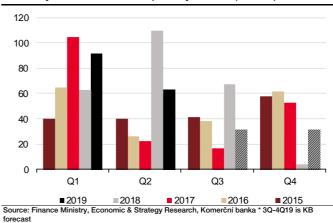
supported by the need to finance the expected state budget deficit and the large volume of CZGB maturing this year.

Supply in 2019: heavy maturity calendar

In line with our expectations, the first half of the year was marked by an extremely high supply of new government bonds, which met with record-high demand on the primary market.

However, the second half will be significantly calmer, as confirmed by the August issue calendar. The main the reason for strong is issuance unprecedented amount of government bonds falling due this year. So far, the government has CZK154.8bn, but a further CZK79.5bn remains to be paid (in October). At the same time, the government

Quarterly CZGB issuance in primary market (CZKbn)



budget is heading for a deficit of CZK40bn after several years of surplus (see the chapter Macroeconomic Forecasts), which implies that the government will need to refinance these liabilities. Nevertheless, financial markets conditions should be supportive. This year, we estimate total government primary market bond issuance will reach CZK236.5bn. So far, MinFin has issued approximately 80%. At the same time, the ministry is celebrating the success of this year's euro-denominated bond issuance under domestic law (not a classic Eurobond). So far, it has issued EUR900m through the primary market and direct sales, which has met with high demand (average bid/cover ratio 3). The ministry has thus achieved a negative yield in all auctions so far, which supports its intention to cover the government's FX needs in this way. On the other hand, the new euro-denominated bond offers investors a higher (or less negative) yield than an alternative domestic Eurobond or koruna bond hedged by a foreign exchange swap. We expect the ministry to issue at least another EUR100m of this type of bond this year and to come up with another new longerdated bond next year which should either confirm or refute the demand for this type of instrument. The negative aspect of this security so far is that it cannot be used as collateral for operations with the ECB, as opposed to standard Eurobonds or corporate bonds denominated in euro. At the same time, investors may be discouraged by the low liquidity of the issue given the EUR900m issued so far and the impossibility of trading on standard settlement platforms. However, MinFin is working on both issues. At the same time, it does not rule out a return to classic Eurobonds. It essentially wants to cover at least half of all FX needs with the new euro bonds. Next year, another EUR1bn of Eurobonds are set to mature. At the end of 1H19, the average maturity on government bonds stood at 5.9 years, vs 4.5 years 12 months ago. The current situation is thus in line with the ministry's goal (six years) and this trend is likely to continue in the future. This strategy also benefits from the flat yield environment. In addition, the ministry is pleased with the success of its retail bonds. In the first four issuances this year, it placed more than CZK9bn in this way, which surprised everybody. Three more issuances are scheduled before the year-end, which we believe should attract another CZK6bn.

Gross borrowing needs and financing (CZKbn)

	2019f				
	MF June 2019	KB July 2019			
Borrowing needs					
Budget deficit	40.0	40.0			
Redemption of CZGBs in EUR (CZK)		0.0			
Redemption of CZGBs	238.5	238.5			
Redemption of Eurobonds		0.0			
Redemption of retail bonds	2.7	2.7			
Redemption of T-bills		4.2			
Redemption of other money market instruments	43.5	39.3			
Redemption of EIB loans	4.7	4.7			
Total	329.4	329.4			
Financing					
Gross T-bill issuance		28.1			
Other money market instruments	53.9	25.8			
Gross CZGB issuance (in auctions)		227.9			
Tap sales		35.0			
Gross issuance of CZGBs in EUR (CZK)		25.6			
Gross issuance of retail bonds		12.8			
EIB loans		0.0			
Tapping of financial reserve		0.0			
Net effect of CZGB switches		0.0			
Total financing		329.4			
Net CZGB issuance		24.4			

Source: Economic & Strategy Research, Komerční banka, Finance Ministry

Supply in 2020: high emission activity next year

We expect only slightly weaker issuance activity next year. The calendar of maturing bonds adds up to CZK184bn including the above mentioned Eurobond. At the same time, foreign exchange loans on the money market will also be payable, which the ministry plans to cover with a new issue of euro-denominated bonds. From a fiscal policy perspective, we anticipate

and deficit of ten billion more in the state budget compared to the ministry's expectations. This raises our government bond issuance to CZK190.2bn. At the same time, we expect another EUR1bn of euro-denominated government bonds to be issued (see previous paragraph). Also next year, the ministry will continue to issue retail bonds, which have been enjoying stong demand this year. Overall, this strategy should result in relatively strong net CZGB issuance. However, we assume that investors will be able to absorb such a level of supply without any problems.

Gross borrowing needs and financing (CZKbn)

2020f			
MF June 2019	KB July 2019		
40.0	50.0		
	0.0		
183.9	158.2		
	25.7		
2.6	2.6		
	28.1		
53.9	25.8		
3.8	3.8		
284.2	294.2		
	40.0		
40.0	0		
	190.2		
	20.0		
	26.0		
	5.0		
	3.0		
	10.0		
	0.0		
	294.2		
	52.0		
	MF June 2019 40.0 183.9 2.6 53.9 3.8		

Source: Economic & Strategy Research, Komerční banka, Finance Ministry

CZGB yields: significant growth in yields in 2021

ECB and Fed monetary policy easing, coupled with high demand for domestic government bonds, should keep the yield curve flat over the coming years.

Despite the high supply of CZGB this year, the bid/cover ratio on domestic government bonds has broken the records. High demand is thus pushing yields down, and we believe this will continue in the future. The main driver this year has been the revision of foreign expectations towards lowering interest rates in the euro area and in the US. In recent months, domestic yields have shown a strong correlation to foreign yields, especially US yields, since the markets were expecting further increases in central bank rates at the beginning of the year but are now discussing how much they will decrease. The high external influence is based on the large volume of foreign investment in the economy. The change in market sentiment is also reflected in expectations regarding CNB rates. This has resulted in yields declining by several tens of points and a significant flattening of the yield curve, which has in turn led us to sharply lower our yield forecasts, which will likely decline further in the coming months. US interest rate cuts are to a large extent included in current prices, but further ECB easing is not fully priced in. According to our forecasts, besides reducing both discount and repo rates, the ECB will come up with another quantitative easing programme next year. At the same time, we don't rule out the risk that this step could be announced this year (see the chapter External Environment and Assumptions). In any case, further quantitative easing in the euro area will be reflected in a decline in the domestic bond term premium, which is currently around zero. At the same time, we also expect the high demand for domestic bonds to persist given the still strong outlook for the domestic economy and

the country's high rating compared not only to the region but also euro area countries.

This is one of the reasons why we expect the yield curve to remain more or less flat until the end of next year while in 2021 there will be a significant increase in yields with the start of a new monetary policy tightening cycle. We see the main risks to the scenario described above as its dependence on a large number of foreign investors and a potential sell-off if our assumption that domestic bonds will be perceived as a safe haven asset in times of financial market stress proves to be inaccurate.

CZGB yield forecast

	Q3 19f	Q4 19f	Q1 20f	Q2 20f	Q3 20f
2y CZGB yield (%)	1.40	1.25	1.20	1.25	1.15
10y CZGB yield (%)	1.35	1.20	1.20	1.25	1.20
10y CZGB ASW (bp)	-0.15	-0.15	-0.10	-0.05	-0.10

Source: Economic & Strategy Research, Komerční banka

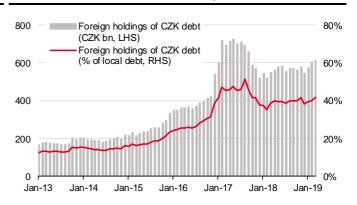
Structure of CZGB holders: unchanged

The profile of holders of domestic government bonds remains unchanged, with slightly over 40% of government bonds continuing to be held by foreign entities, which is still roughly three times more than the level seen before the CNB announced its exchange rate commitment. We do not expect this ratio to return to its original levels. The exchange rate commitment irreversibly increased the attractiveness of the domestic market for foreign investors and we don't see any reason for this to change at this time.

Holdings of CZK government debt, end-May 2019

Other Households .Central bank Foreign bond. 3% 1% 0% issues 10% Monetary _financiaĺ Foreign institutions, investors excl. CNB 38% 20% Other Insurance corporations financial and pension intermediaries funds and financial 25% auxiliaries 3%

Share of non-resident bondholders stays around 40%



Source: Finance Ministry, Economic & Strategy Research, Komerční banka

Source: Finance Ministry, Economic & Strategy Research, Komerční banka

We expect the IRS curve to return to its normal shape at the end of 2021, when the central bank embarks on a new interest rate tightening cycle.

Czech IRS market: curve to remain inverse until 2021

The slope of the interest rate swap curve has been negative since the end of last year and should remain negative for the next two years. The gap between the two-year and ten-year swaps has deepened further, reflecting growing expectations of CNB interest rate cuts. The market currently expects interest rates to decline by around 35bp at the one-month horizon. The reason for the expected decline, however, may not be market expectations alone, but also the low liquidity of the domestic market.

CZK IRS outlook (%)

	Q3 19f	Q4 19f	Q1 20f	Q2 20f	Q3 20f
2y	1.85	1.70	1.60	1.55	1.50
5y	1.60	1.50	1.40	1.35	1.35
10y	1.50	1.35	1.30	1.30	1.30

Source: Economic & Strategy Research, Komerční banka

Our forecasts call for CNB interest rates to remain stable until the end of 2021. Nevertheless, foreign easing of monetary policy could also depress domestic expectations and interest rate swaps. The koruna IRS curve should thus remain negative until approximately the end of 2021.

CZK IRS curve has inverted (%)



Source: Bloomberg, Economic & Strategy Research, Komerční banka

Banking Sector



Flat price and mortgage dynamics slowing down

Double-digit dynamics in flat prices is gone. Prices have slowed down significantly. CNB's strict recommendations have thus fulfilled their role. But it was not only the CNB's recommendations. Market demand is saturated and prices are so high at the moment that an increasing number of families cannot afford to buy their own home. Lower interest rates have provided some support to the market, but we see only very limited room for further declines this year and next. House prices should increase by 4.8% this year but by only 1.1% in 2020, according to our calculations. We also see a drop in mortgage growth. This is linked to the deceleration in housing prices and also to the new CNB recommendations.

Corporate lending continues to lag economic growth. Many of the investment projects from the last year were financed by EU funds and thus did not require as much longer-term credit. However, the slowdown in investment activity due to global uncertainty is unlikely to provide a significant boost to corporate lending either. We expect corporate lending growth to print at 4.3% this year, and thus remain below nominal GDP growth again. We also expect only a slight improvement next year when we estimate it to come in at 4.9%. While consumer lending has decelerated as well, it remains relatively solid. Consumer confidence has increased and the labour market remains tight. That said, we expect the solid dynamics to persist and consumer lending to increase by 5.6% this year and by 5.7% in 2020.

Rising interest rates, growing wages and a recovery in the savings rate have all helped increase individual deposits this year. However, we expect the savings dynamics to moderate steadily in line with slowing wage growth. Corporate deposits also look poised to increase, although the overall momentum should remain relatively muted. Corporate profit margins have stabilised, but the slower economic growth should curb deposit growth.

Bank loans and deposits (%, yoy)

	1Q19	2Q19	3Q19	4Q19	1Q20	2Q20	3Q20	4Q20	2018	2019	2020	2021	2022	2023
Bank loans														
Total	5.6	4.6	5.3	5.7	5.8	6.2	5.9	5.3	5.5	5.5	5.9	4.5	4.2	4.8
Households - real estate loans	7.4	6.4	5.6	6.3	6.3	6.9	7.0	6.4	6.8	6.8	6.6	5.7	4.3	4.4
Households - consumer loans	5.9	5.3	5.0	5.5	5.4	5.7	6.0	5.7	5.6	5.6	5.7	5.3	5.1	5.9
Corporate loans	3.8	2.9	4.1	4.5	4.9	5.5	4.5	4.3	4.3	4.3	4.9	3.2	4.2	5.0
Deposits														
Total	8.6	8.0	7.3	6.5	5.4	5.1	4.2	3.4	8.2	8.2	5.3	3.6	4.1	4.9
Households	7.1	6.8	6.7	7.2	6.6	5.8	4.7	3.5	7.1	7.1	6.1	3.3	3.8	4.8
Non-financial corporations	4.3	4.9	3.4	3.4	2.5	2.6	1.9	2.1	4.2	4.2	2.6	4.1	5.1	5.5
Others	15.2	12.6	12.4	7.5	5.4	5.7	5.1	4.1	13.9	13.9	5.9	3.8	4.0	4.7
Ratios														
Loans/GDP	62.1	62.4	61.6	62.3	62.6	63.4	62.7	63.2	62.1	62.1	62.7	63.4	63.7	63.8
Deposits/GDP	87.6	87.1	84.4	89.4	88.0	87.5	84.4	89.0	86.9	86.9	87.3	87.5	87.8	88.1
Loans/deposits	70.8	71.6	73.0	69.7	71.1	72.4	74.2	71.0	71.4	71.4	71.9	72.4	72.5	72.5
Interest rates														
Real estate loans	3.0	3.0	3.1	3.1	3.1	3.1	3.1	3.0	3.0	3.0	3.1	3.0	2.9	2.9
Consumer loans	8.5	8.6	8.8	9.0	9.2	9.5	9.7	9.9	8.6	8.6	9.3	10.2	10.7	11.1
Corporate loans	3.0	3.1	3.2	3.2	3.2	3.3	3.3	3.3	3.1	3.1	3.2	3.4	3.8	4.1
Share of NPL														
Real estate loans	1.5	1.6	1.6	1.6	1.6	1.7	1.8	1.9	1.5	1.5	1.7	2.0	2.2	0.4
Consumer loans									1.5 5.0	1.5 5.0		8.1		2.4 10.1
	4.6	5.1	5.6	5.8	6.1	6.4	6.9	7.4			6.3		9.5	
Corporate loans	3.6	3.7	3.9	4.1	4.4	4.6	4.8	5.1	3.7	3.7	4.5	5.5	6.2	6.2

Source: CNB, CZSO, Macrobond, Economic & Strategy Research, Komerční banka



Key Economic Indicators

Macroeconomic indicators - long-term outlook

		2017	2018	2019	2020	2021	2022	2023	2024
GDP	real, %	4.5	2.9	2.7	2.1	1.8	2.5	2.7	2.7
Inflation	average, %	2.5	2.1	2.6	2.7	1.5	1.8	2.0	2.1
Current account	% of GDP	1.7	0.3	1.3	0.9	1.1	1.2	1.4	1.9
3M PRIBOR	average, %	0.4	1.3	2.2	2.3	2.3	2.5	2.8	2.6
EUR/CZK	average	26.3	25.6	25.7	26.1	25.6	24.9	24.4	24.1
USD/CZK	average	23.4	21.7	22.6	20.9	20.1	19.2	18.3	17.9

Source: CZSO, CNB, Macrobond, Economic & Strategy Research, Komerční banka, SG Economic Research

FX & interest-rate outlook

		29-Jul-2019	Sep-19	Dec-19	Mar-20	Jun-20	Sep-20
EUR/CZK	end of period	25.7	25.6	25.8	25.7	26.1	26.5
USD/EUR	end of period	1.11	1.12	1.16	1.20	1.24	1.27
CZK/USD	end of period	23.0	22.9	22.2	21.4	21.1	20.9
3M PRIBOR	end of period	2.16	2.15	2.15	2.15	2.25	2.25
10Y IRS	end of period	1.47	1.95	1.95	2.15	2.15	2.15

Source: CZSO, CNB, Macrobond, Economic & Strategy Research, Komerční banka, SG Economic Research

Monthly macroeconomic data

		X-18	XI-18	XII-18	I-19	II-19	III-19	IV-19	V-19	VI-19
Inflation (CPI)	%, mom	0.4	-0.1	0.1	1.0	0.2	0.2	0.1	0.7	0.2
Inflation (CPI)	%, yoy	2.2	2.0	2.0	2.5	2.7	3.0	2.8	2.9	2.7
Producer prices (PPI)	%, mom	0.7	-0.1	-1.1	1.0	0.3	0.5	0.7	0.5	-0.7
Producer prices (PPI)	%, yoy	3.9	3.9	2.4	2.9	3.6	3.8	4.3	3.8	2.5
Unemployment rate	% (MLSA)	2.8	2.8	3.1	3.3	3.2	3.0	2.7	2.6	2.6
Industrial sales	%, yoy. c.p.	9.4	9.3	0.7	0.3	3.7	4.8	7.5	6.9	n.a.
Industrial production	%, yoy. c.p.	6.1	4.6	-1.8	-0.9	1.4	0.3	3.2	3.2	n.a.
Construction output	%, yoy. c.p.	10.5	1.2	2.9	-12.6	5.1	12.0	8.9	0.2	n.a.
Retail sales	%, yoy. c.p.	3.3	3.3	0.2	1.4	3.9	3.0	4.8	2.3	n.a.
External trade	CZK bn (national met.)	0.9	18.7	-2.5	15.4	17.0	19.6	17.7	24.4	n.a.
Current account	CZK bn	7.7	6.4	-3.1	28.2	20.3	-3.9	17.7	11.2	n.a.
Financial account	CZK bn	12.0	-32.0	21.8	12.2	37.1	-2.2	25.2	-4.7	n.a.
M2 growth	%, yoy	5.5	6.2	5.6	6.0	6.0	5.9	6.4	6.5	n.a.
State budget	CZK bn (YTD cum.)	5.7	-21.6	2.9	8.8	-19.9	-9.2	-29.7	-50.9	-20.7
PRIBOR 3M	%, average	1.76	1.99	2.01	2.01	2.01	2.03	2.02	2.19	2.17
EUR/CZK	average	25.8	25.9	25.8	25.6	25.7	25.7	25.7	25.8	25.6
USD/CZK	average	22.5	22.8	22.7	22.5	22.7	22.7	22.9	23.0	22.7

Source: CZSO, CNB, MF, MLSA, Macrobond, Economic & Strategy Research, Komerční banka

Disclaimer

The information herein is not intended to be an offer to buy or sell, or a solicitation of an offer to buy or sell any securities. All information and opinions have been obtained from or are based on sources believed to be reliable, but their completeness and accuracy are not guaranteed by Komerční banka, a.s., even though Komerční banka, a.s. believes them to be fair and not misleading or deceptive. The views of Komerční banka, a.s. reflected in this document may change without notice.

Komerční banka, a.s. and its affiliated companies may from time to time deal in, profit from the trading of, hold or act as market makers of securities, or act as advisers, brokers or bankers in relation to securities or derivatives thereof emitted by persons, firms or entities mentioned in this document.

Employees of Komerční banka, a.s. and its affiliated companies, or individuals connected to them may from time to time have a position in or be holding any of the investments or related derivatives mentioned in this document. The authors of this document are not authorized to acquire the investment instruments mentioned in this document. This does not apply to cases when information mentioned in this document represents dissemination of an investment recommendation earlier produced by third parties according to Chapter III of regulation (EU) 2016/958. Komerční banka, a.s. and its affiliated companies are under no obligation to provide any services to their clients on the basis of this document.

Komerční banka, a.s. does not accept any liability whatsoever arising from the use of the material or information contained herein beyond what is required by law. This research document is primarily intended for professional and qualified investors. Should a private customer obtain a copy of this report, they should not base their investment decisions solely on the basis of this document and should seek independent financial advice. The investors must make their own informed decisions regarding the appropriateness of their investments because the securities discussed in this report may not be suitable for all investors.

The performance attained by investment instruments in the past may not under any circumstance serve as an guarantee of future performance. The estimates of future performance are based on assumptions that may not be realized. Investment instruments and investments are connected with different investment risks, the value of any investment can rise and fall and there is no guarantee for the return of the initial invested amount. Investment instruments denominated in foreign currencies are also subject to fluctuations caused by changes in exchange rates, which can have both positive and negative influences particularly on the prices of the investment instrument and consequently on the investment return.

This publication is issued by Komerční banka, a.s. which is a bank/stockbroker according to the applicable legislation and thus regulated by the Czech National Bank. Komerční banka, a.s. applies various measures to prevent conflict of interests in the process of creating this document and other investment recommendations, such as the implementation of an appropriate internal separation including information barriers between different departments of Komerční banka, a.s. in compliance with the requirements imposed by applicable regulation. The employees of Komerční banka, a.s. proceed in accordance with the internal regulations governing conflict of interest.

The evaluation of employees creating this document is never by any means tied with the volume or profit of the trades with instruments mentioned in this document done by Komerční banka, a.s., or the trades of Komerční banka, a.s. with the issuers of such instruments. However, the evaluation of the authors of this document is linked to the profits of Komerční banka, a.s. which also partially include the results of trading with investment instruments.

Information mentioned in this document are intended for the public and the document before its publication is not available to persons not involved in the creation of this document. As per our practice, the issuers do not receive a copy of research reports prior to their publication. Each author of this research report hereby states that (i) the views expressed in the research report accurately reflect his or her personal views about any and all of the securities or issuers at stake.

This document and its contents is not designed for persons with permanent residence or seat in the United States of America and to persons who are deemed as "U.S. persons", as defined in Regulation S under the US Securities Act of 1933, as amended.

This document is not an investment recommendation according to Regulation (EU) No 596/2014 of the European Parliament and of the Council on market abuse and does not constitute investment advisory according to Act no 256/2004 Coll., on Capital market undertakings as amended.

Please refer to our website http:\\www.trading.kb.cz for more details.

30 July 2019 35

KB ECONOMIC & STRATEGY RESEARCH



Chief Economist and Head of Research Jan Vejmělek, Ph.D., CFA (420) 222 008 568



Viktor Zeisel (420) 222 008 523



Economist BRD-GSG

(40) 213 014 472 george, mincu-radule



Monika Junicke (420) 222 008 509



(420) 222 008 560 jiri_kostka@kb.cz



Jana Steckerová (420) 222 008 524



František Táborský (420) 222 008 598





Head of Research of Rosbank Evgeny Koshelev (7) 495 725 5637 evgeny Koshelev@rosbank.ru

e.mincu-radulescu@brd.ro

Chief Economist of BRD-GSC Florian Libocor (40) 213 016 869

Equity Analyst Laura Simion, CFA (40) 213 014 370 laura.simon@brd.ro



mist Rosbank Anna Zaigrina (7) 495 662 1300

SG GLOBAL ECONOMICS RESEARCH



Head of Global Economics Klaus Baader (852) 2166 4095



Michel Martinez (33) 1 4213 3421 michel.martinez@sgcib.com North America



Stephen Gallagher (212) 278 4496 stephen.gallagher@sgcib.com



Wei Yao (33) 1 57 29 69 60



Anatoli Annenkov (44) 20 7762 4676 anatoli.annenkov@sgcib.com Latin America



Dev Ashish (91) 80 2802 4381



Michelle Lam (85) 2 21 66 57 21



Yvan Mamalet (44) 20 7762 5665 India



Kunal Kumar Kundu (91) 80 6716 8266 kunal.kundu@sgcib.cz



Takuii Aida (81) 3-6777-8063 takuji.aida@sgcib.com



United Kingdo Brian Hilliard (44) 20 7676 7165 brian.hilliard@sgcib.com



Suktae Oh (82) 2195 7430 suktae.oh@sgcib.com



Arata Oto (81) 3 6777 8064

SG CROSS ASSET RESEARCH - FIXED INCOME & FOREX GROUPS



Global Head of Research Brigitte Richard-Hidden (33) 1 42 13 78 46



Head of Fixed Income & Forex Strategy





Head of Rates Strategy Adam Kurpiel (33) 1 42 13 63 42



Jorge Garayo (44) 20 7676 7404 jorge.garayo@sgcib.com



Kevin Ferret (44) 20 7676 7073



Chief Global FX Strategy

Kit Juckes (44) 20 7676 7972 Kit.juckes@sgcib.com



Head of Euro Area Rates Strategy Ciaran O'Hagan (33) 1 42 13 58 60

FX Derivatives Strategy Olivier Korber

(33) 1 42 13 32 88 olivier,korber@sgcib.c



Covered Bonds & SSA (33) 1 58 98 51 71



Jean-David Cirotteau (33) 1 42 13 72 52 david.cirotteau@sgcib.com



Rohit Gauray +91 8067318958 rohit.gaurav@sgcib.com



Head of US Rates Strategy Subadra Rajappa (1) 212 278 5241



Shakeeb Hulikatti (91) 80 2802 4380 eb.hulikatti@sgcib.com



Michael Chang (1) 212 278 5307



Head of Emerging Markets Strategy Jason Daw (65) 6326 7890



Bertrand Delgado +1 212 278 6918 bertrand.delgado-calderon@sgcib.com



(44) 20 7676 7305 sgcib.com



kiyong.seong@sgcib.com



Marek Dřímal arek.drimal@sgcib.com