MiFID II
Information about our offer

| Quarterly report |

Czech Economic Outlook

2018: Richer households, stronger koruna

© Shutterstock

- **Czech economy maintains its strong momentum** We have once again revised our growth outlook upwards. The Czech economy is riding the wave of recovery of its main European trading partners and investment activity has been strengthening. Moreover, capital expenditures will be supported by EU fund inflows.
- **Labour market tensions to create wage pressures** The labour market has hit its limits. Unemployment does not have any room to decrease further and wage pressures are mounting. This will be visible in prices. Inflation is set to stay above 2% on average.
- **CNB to keep hiking despite koruna appreciation** The central bank still assumes only two hikes for 2018, but the expanding economy and wage pressures will allow the central bankers to move the rates even higher.
- **The Czech currency will continue its long-term appreciation trend** In 2018, the exchange rate is likely to break through the EUR/CZK25 and USD/CZK20 levels.
- **Government expenditures to boost consumption and investment** While the 2018 budget sees a significant increase in operating non-investment expenditures, we assume public investment will also rise materially. The coming year is set to be bearish for Czech government bonds due to CNB policy, strong economic fundamentals and higher EUR yields.


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


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


Marek Dřímal
(420) 222 008 598
marek_drimal@kb.cz


Monika Junicke
(420) 222 008 509
monika_junicke@kb.cz


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

SOCIETE
GENERALE
GROUP

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

2018 will be a good year for Czech households

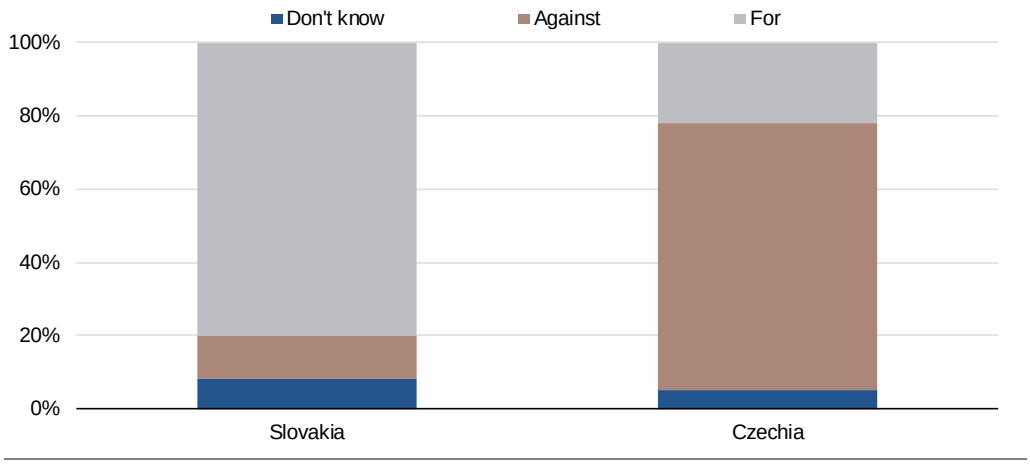
The Czech economy has obviously started 2018 off on the right foot. Economic growth kept accelerating throughout 2017 and the strong momentum of recent months has laid the foundation for more success this year. It is therefore no accident that this *Czech Economic Outlook* issue is permeated by an optimistic spirit. Czech households will continue to grow richer thanks to rising wages and a stable rate of inflation close to the CNB's target. The central bank will continue to hike rates once per quarter. The resulting stronger koruna will make the Czech households' wealth grow even faster in terms of the euro.

However, nothing has changed from the tenor of the preceding *Czech Economic Outlook* issue, in which we took a closer look at the scenario of a US recession in 2019. And while we were one of only a few who espoused that opinion at the time, there are definitely many more now. According to the Bloomberg consensus, the market as a whole is expecting US economic growth to slow from this year's 2.6% to 2.2% in 2019. The Czech Republic's dynamic will therefore also slacken. **An economic slowdown remains our main scenario for the end of 2019 and beginning of 2020.**

While internal demand is indisputably vigorous, now that livelier investment activity has finally joined household consumption, the Czech Republic is still a small open and export-oriented economy that relies heavily on the performance of its largest trade partner, i.e. the euro area, and on the exchange rate. That being the case, the recent parliamentary and presidential elections have revived the topic of the Czech Republic's potential accession to the project for the common European currency.

Regardless of political proclamations, the euro is gaining ground in the Czech Republic

Population's attitude to the common European currency



Source: Eurobarometer, November 2017, European Commission, Economic and strategic research, Komerční banka

According to the European Commission's latest survey, the Czech Republic tops the list of countries that are the most strongly opposed to the euro. The Slovak experience is completely different, as 80% of Slovaks are happy with the euro. **One of the reasons Czechs are so pessimistic, in our opinion, is a lack of knowledge and the dissemination of misleading information as part of the political fighting.** We have therefore decided to use special boxes in this *Czech Economic Outlook* issue to set the record straight as regards at least some of the misleading statements, and to continue the discussion on the common European currency.

Claims that the euro is a collapsing project are definitely misleading. The number of euro area countries has gradually increased from the original 11 to the current 19 countries. Euro trading on forex market is flourishing, and the euro is the second-most traded currency in the world after the US dollar. The euro is considered a reserve currency. Jana Steckerová shows that most euro countries are satisfied with the euro. In contrast, it is the non-euro countries that are the most dissatisfied with the euro. **The euro zone is not an optimum currency area,** but according to Monika Junicke, **it is gradually converging to these conditions**. Our country's close connections with Germany and the euro area as a whole are resulting in a situation where **the introduction of the euro is clearly gaining ground in the Czech Republic, regardless of political decisions.** Viktor Zeisel argues that we have sectors in which the euro is used not only as an accounting unit but actually as a transaction unit. The claim that following the euro's introduction, the country would have to pay other countries' debts should also be disproved. The **Maastricht treaty already explicitly prohibits guaranties for the commitments of other Member States, and that won't change.** It is true, however, that Member States must contribute to the European Stability Mechanism. These funds would be provided to countries in need of financial assistance subject to stringent conditions, in the form of loans that would gradually be repaid.

We trust that the arguments that we have offered will support the matter-of-fact nature of the debate on the introduction of the common European currency, which is unquestionably a crucial issue.

Contents

External Environment and Assumptions

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

Outlook for 2018 remains favourable

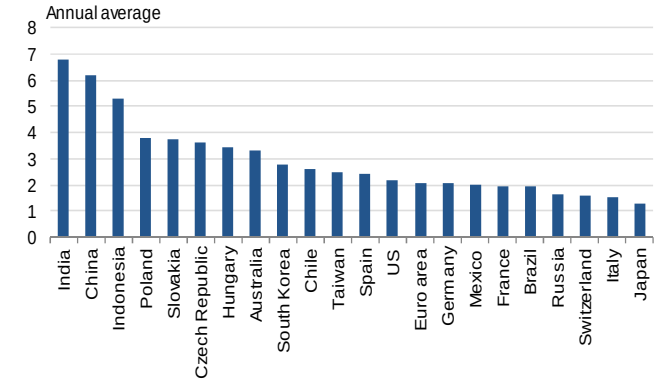
Economic growth in the US, euro area and CEE region should remain solid in 2018. Household consumption, which is benefiting from tight labour markets and growing wages, should remain the common feature of GDP growth. Investment too will remain an important contributor to growth. Central banks look set to continue normalising monetary policy. The Fed is expected to hike rates three times this year, while the ECB will likely finally end the QE programme. This should allow the euro to strengthen to 1.27 against the dollar at the end of this year. In the CEE region, the Polish central bank will join to the Czech National Bank in tightening monetary policy.

US: tax reform to prolong expansion by a year

Economic growth in US driven by household consumption.

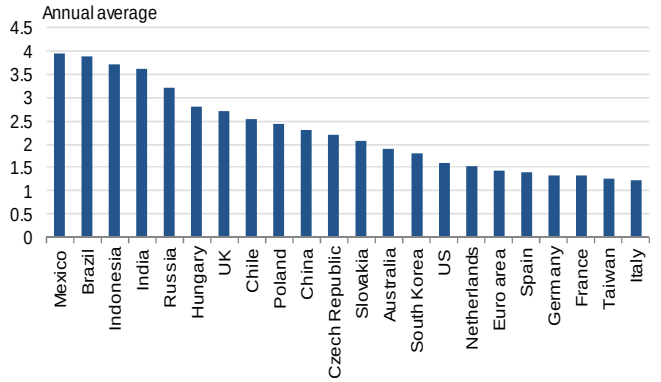
The US economy grew by 3.3% qoq annualised in 3Q17, the fastest pace of growth in three years. Nevertheless, inventories contributed 0.8ppt, substantially above the long-term average. In 4Q17, GDP grew just by 2.6%. Nevertheless, the structure was healthy, driven by strong domestic demand. For all of 2017, the economy grew 2.3%. Household consumption is set to rise given high consumer confidence, declining unemployment (lowest rate since 2000) and rising household wealth. In addition, consumption is set to be supported by the upcoming tax reform, which we think will extend the current expansion by a year to 2H19. This year, SG forecasts GDP growth of 2.4%, with the risks concentrated to the upside. For 2019, SG forecasts that GDP growth will slow to 1.1%.

GDP growth forecasts for 2018 (%, yoy)



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

Inflation forecasts for 2018 (%, yoy)

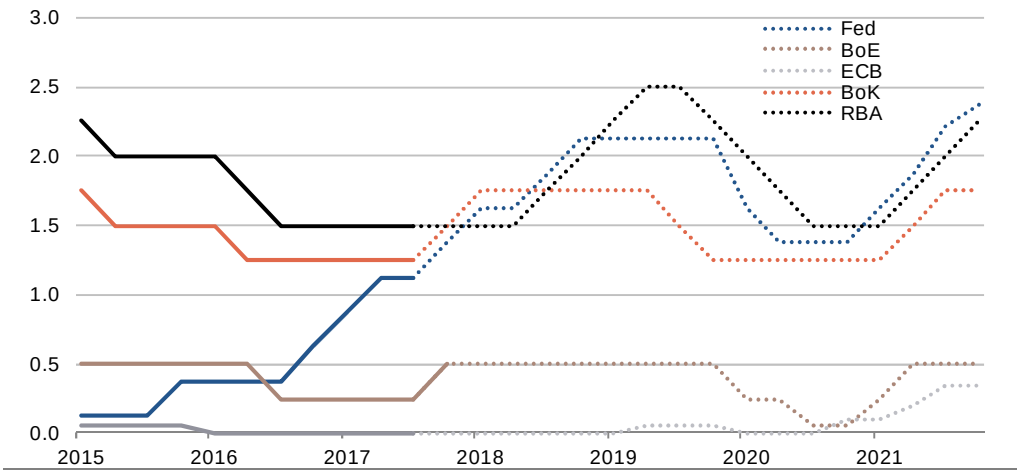


Source: SG Cross Asset Research, Economics, Economic & Strategy Research, Komerční banka

Fed will likely hike rates three times this year.

At the end of last year, the Fed hiked rates by another 25bp to 1.25-1.50%. This year, the Fed will hike rates three times, based on the „dots". This is in line with our prognosis. We expect hikes in March, September and December. According to the Fed, monetary tightening should continue in 2019 and 2020, at a pace of 50bp per year. In this respect, our prognosis is more sceptical, as given the expected recession in 2019, we do not expect rate hikes in 2019 or 2020. The normalisation of the Fed's balance sheet, which started last October, will also serve to tighten monetary policy. This year, the FOMC faces important changes in personnel: doves Charles Evans and Neel Kashkari will leave the board and President Trump may appoint up to three new members, including the vice governor. However, the continuity of the current monetary policy stance should be ensured by the appointment of vice president Jerome Powell as chair.

Central bank policy – interest rates (%)



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

Euro area: QE to be prolonged one more time

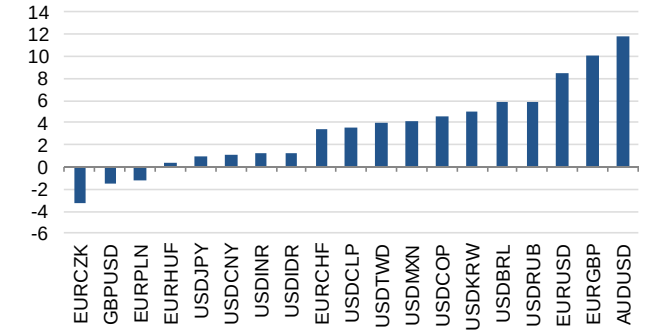
Economic activity likely to decelerate in 2018-19.

GDP growth in the euro area came in at a solid 0.6% qoq in 3Q17. In yoy terms, the economy grew by 2.6%, the fastest pace since 2011. Household consumption, investment and net exports were the main drivers. Household consumption is being supported by a tight labour market. In November, unemployment declined to 8.7%, the lowest level since 2009, and the decrease is set to continue, according to SG forecasts. This is reflected in growing consumer confidence, which at the end of last year moved back into positive territory for the first time in 16 years. The euro area economy is also benefiting from the global trade recovery. While in 2Q17 net exports dragged on GDP growth, they contributed positively in 3Q17. Investment also remains an important contributor to GDP growth. This year, we expect euro area GDP growth to come in at 2.3% yoy, but the risks are concentrated on the upside. However, we think economic activity is likely to decelerate in 2018-19 as the ECB starts to taper QE, the negative impacts of Brexit become more visible, and the US moves into recession from 2H19, according to our forecasts. According to SG, the euro area economy should grow by 2.1% in 2018 and 1.4% in 2019.

First rate hike (also the last) to take place in June 2019.

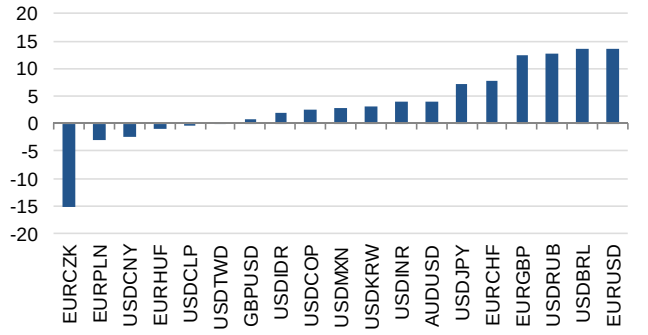
In October, the ECB announced that it would prolong its quantitative easing programme by nine months until September 2018. At the same time, it reduced the volume of purchases from €60bn per month to €30bn, starting from January 2018. Whether the programme comes to an end or not will depend mainly on wage, investment and inflation trends. At the beginning of this year, inflation will be affected by a diminishing statistical base effect in energy and food prices, and we think it will fall below 1%. We see inflation climbing to 1.4% at the end of the year and averaging 1.2% for the year. The lack of inflationary pressure can be attributed to low unit labour costs, among other things. In Germany, new agreements with unions in both industry and the public domain could bring higher wage growth. Meanwhile, core inflation is unlikely to exceed 1.4% yoy on average over the 2018-2021 period. According to SG economists, the inflation trend is likely to prompt the ECB to prolong QE once more, until the end of this year. However, the volume of asset purchases should not be more than €15bn. We see the first rate hike (and at the same time the last) taking place in June 2019. We think the deposit rate will rise by 20bp to -0.2% and the repo rate by 5bp to 0.05%. Current ECB policy has kept the euro undervalued against the US dollar. With the gradual exit from QE, we expect the euro to gradually strengthen to reach 1.27 vs the USD at the end of this year.

Forecast spot change by end-2018 (%)



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

Forecast spot change by end-2022 (%)



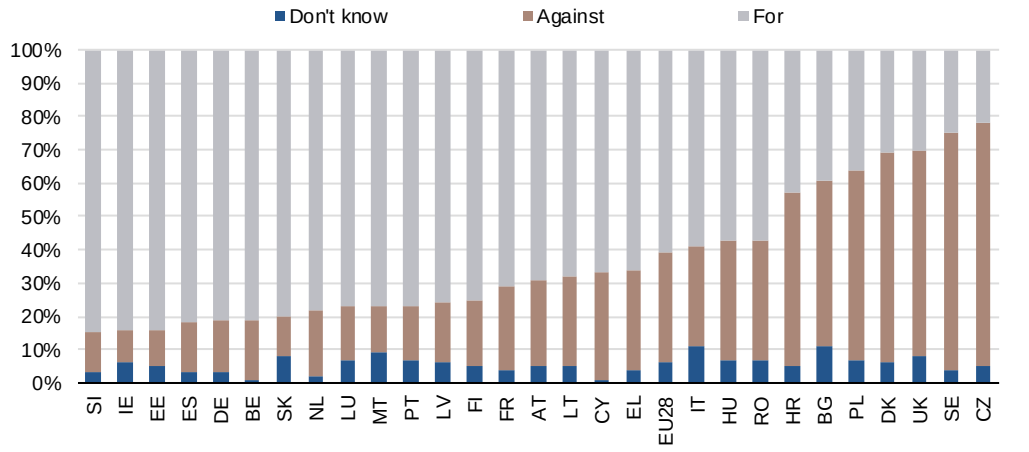
Source: SG Cross Asset Research/Economics, Economic & Strategy Research, Komerční banka

Box 1: Proposed euro adoption gives rise to many fears, but are they justified?

1. The euro is a collapsing project that we should avoid.

The question is how to evaluate the euro project. The number of countries in the euro area has grown from the 11 founding members to the current 19. The euro has survived economic crises and is 19 years old this year. A European Commission survey shows that most euro area countries are satisfied with the currency. On the other hand, the EU countries that have not yet adopted the euro are the most against the single currency, the Czech Republic in particular. In the November survey, 73% of respondents said they were opposed to the introduction of the euro. Conversely, in Slovakia, which adopted the euro in 2009, 80% of people are satisfied with the currency. Also the rapidly growing volume of loans that Czech companies receive in euros as well as the volume of euro payments demonstrates that the euro project is alive and well. We focus on this topic in Box 3.

Public opinion in EU countries on euro, European Commission survey, November 2017



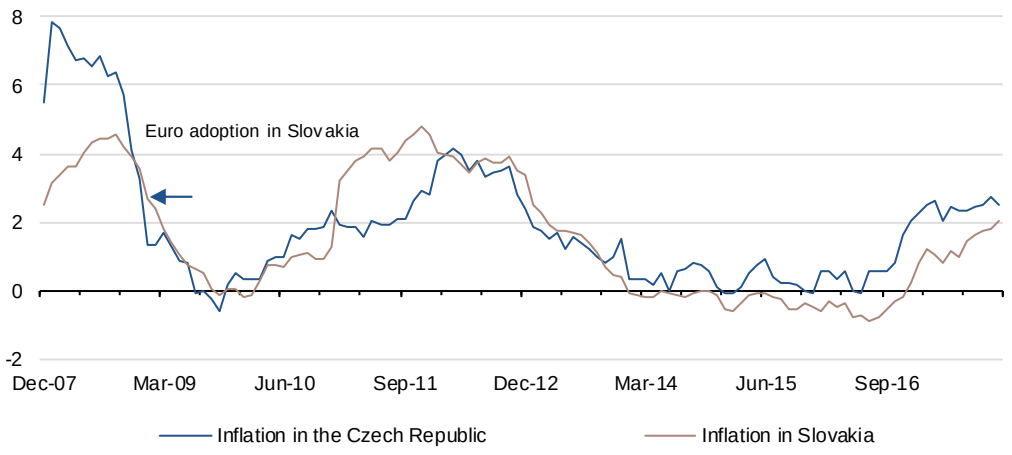
Source: Eurobarometer, European Commission, Economic & Strategy Research, Komerční banka

2. With euro adoption, inflation would likely accelerate significantly.

Another argument against the euro is that after its introduction, price levels would rise significantly. Nevertheless, inflationary developments after the adoption of the single currency, in Slovakia for example, show that this didn't happen. Moreover, a number of control mechanisms could prevent inappropriate price rises. These could include setting prices in both korunas and euros simultaneously, frequent price monitoring, and a blacklist of retailers who

abuse the introduction of the euro for improper price increases. A rise in price levels would probably happen but only in the long run and as a result of convergence towards developed economies.

Slovakia: Inflationary developments after euro adoption (HICP, %, yoy)



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

3. After euro adoption, we will pay for the debts of other countries.

After euro adoption, the Czech Republic will have to start contributing to the European Stability Mechanism (ESM), which aims to secure the financial stability of euro area countries. Within 12 years of joining the EMU, the Czech Republic would have to pay approximately CZK350bn to the ESM. However, the EU does not guarantee the debts of other countries and is not allowed to do so. The Maastricht Treaty explicitly forbids the guaranteeing of such debt. Aid given to member states, therefore, is not a non-repayable debt but rather a loan provided under very strict conditions that must be gradually repaid.

As a small open economy, the Czech Republic is exposed to shocks from the euro area, whether or not it adopts the euro. The question then is whether it is better for the Czech Republic to stay aloof from the decision-making process on the financial stability of the EMU or to participate.

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

Germany: fastest GDP growth since 2011

Economy to perform well despite political uncertainty.

The German economy surprised in 3Q17 with growth of 0.8% qoq. The yoy figure was 2.8%, the highest rate since 2011. For this year, the prospects for the German economy remain positive. We expect GDP growth of 2.1% in 2018 after last year's expected 2.5%. Domestic demand, which is benefiting from a tight labour market, should remain the main engine. Unemployment is set to decrease further to as low as 5.3%, substantially below the NAIRU at 6.6%. This should result in higher wage growth, which could, according to our forecasts, reach 3-3.5% this year. However, the rate could come in even higher given that the largest trade union in Germany, IG Metall, is demanding wage increases of 6%. An important contributor to GDP growth in 2018 should be investment. According to SG economists, inflation will reach 1.3% on average this year. The strong euro in particular will likely keep it lower.

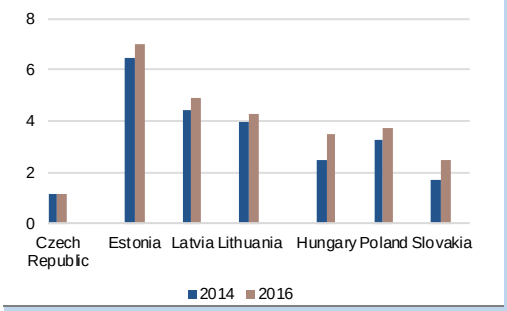
Box 2: The conditions required for the euro area to work well

ECB monetary policy is not tailor-made for each euro area member country, but it is uniform and valid for all countries. Thus, for the euro area work well, it must meet several conditions. Literature[1] cites six main criteria that identify an optimum currency area (OCA), three of which are economic and three political.

The most important condition for an OCA is the free movement of labour, capital and goods, which are fundamental freedoms of the European Union. While in reality capital has a great deal of flexibility, labour mobility remains rather limited. Problems arise if an asymmetric (negative) shock hits only some members of the union and only their economies are affected. In theory, the labour force can move freely to another region (or sector), but if labour mobility is limited, merely cutting labour costs (wages) can help to boost the economy again. Without the possibility of currency devaluation, this process is exhaustive and less effective.

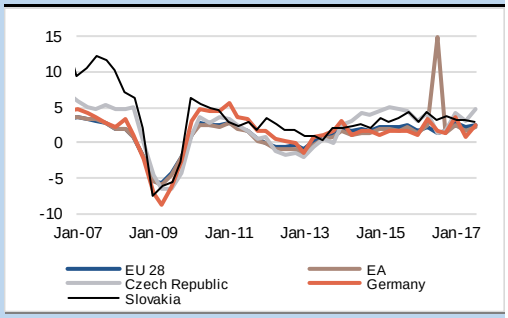
Labour mobility in the EU is however still lagging, mainly due to cultural differences between countries. In particular, the older generation is not willing to move abroad to work due to barriers such as lack of knowledge of foreign languages or differences in pension and social security systems across countries. However, the EC Annual Report shows that labour mobility within the EU is gradually improving. Between 2014 and 2015, it grew by 4% yoy, with the largest flows towards the EU15. The Czech labour force is also becoming more flexible, though the outflow of workers from the country to the euro area is still low. The statistics do not include those who commute to the euro area, but it is obvious that other countries use their freedom of movement in labour to a greater extent.

Share of economically active population (aged 20-64) working in a different EA country (%)



Source: Eurostat, Economic & Strategy Research, Komerční banka

Czech economic growth strongly correlates with growth among other euro area members (%)



Source: Eurostat, Economic & Strategy Research, Komerční banka

Secondly, where there is insufficient labour mobility, the alignment of the business cycle has to step in. The impact of any negative shock is reduced if the structures of member economies are similar and production enough diversified. Analysis by the CNB shows that the original euro area countries are the most similar structurally. Meanwhile, the share of industry in the overall economy is too high in the Czech Republic, as well as in Slovakia, while the share of services is rather low. Thus, there is a danger that a negative shock, for example in the form of lower demand for cars, will hit the Czech and Slovak economies more than others.

[1] For more information see, e.g., Baldwin, R. E., & Wyplosz, C. (2006). The economics of European integration (Vol. 2). London: McGraw-Hill.

Nevertheless, since 2006, the Czech economy has shown an 81% business cycle correlation with the German economy, while in the period 1997-2006, it was only slightly over 3%. The correlation with the euro area has reached as much as 92% over the past 10 years. **Thus, economic development in the Czech Republic is now closely related to that of the euro area**. This is mainly due to the Czech dependence on exports, of which almost 70% go to the euro area. The Czech economy certainly fulfils the third criterion – openness – and we think there is no doubt it would benefit from eliminating exchange rate risk and **reducing transaction costs.**

The political criteria for OCA include fiscal consensus among member countries. It is important that, in the event of asymmetric shocks, individual governments are willing to redistribute their wealth – as underpins the federation concept. Solidarity among regions can balance out imperfections in labour mobility. Secondly, national interests should be similar so that a common policy is suitable to as many member countries as possible. The final criterion is related to this, stating that countries should share a common destiny. The more similar countries are culturally, the more willing they are to accept the costs of managing the union and to demonstrate solidarity.

While the euro area does not meet all OCA conditions, it is getting close. It is in the economic interest of all member countries – both current and future – that individual countries converge and show solidarity. In our view, the Czech Republic would benefit from adopting the euro, both on an economic and political basis.

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

CEE region: Polish central bank to join in monetary tightening

Solid GDP growth to continue, investment to gather pace.

After very strong economic growth in 2017, the prospects for this year are also solid for the CEE region. However, last year's levels will probably not be reached, except in Slovakia, where we expect even stronger growth. The structure of GDP growth does not look like changing much this year. The main driver will remain household consumption, which is benefiting from record low unemployment and rising wages. Wages are growing by more than 10% yoy in Hungary, while in Poland the figure is around 7%. The productivity growth is, however, just around 3%. Therefore, wage growth will have to sooner or later translate into price growth. Up to now, higher wages have been taking from the profit margins of companies. Therefore, investment also looks set to rise in the CEE region, both in the private sector, where companies are being forced to invest to increase labour productivity given labour shortages, as well as in the public sector, where the drawing of EU funds is picking up speed. Due to the high import intensity of investments and appetite of households for imported goods, net exports will likely drag on growth, or their contribution will be very low. For 2018, we expect GDP growth of 3.6% in the Czech Republic, 3.7% in Slovakia, 3.8% in Poland and 3.5% in Hungary.

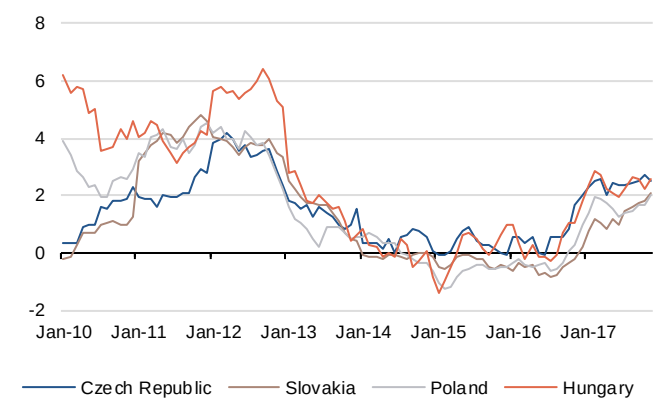
Polish central bank to start hiking rates this year.

Last year, the Czech National Bank was the first central bank in the CEE region to tighten monetary conditions (for more information on the CNB's policy, see the *CNB focus* section). This year, the Polish National Bank is likely to follow suit. In November, Polish inflation reached the 2.5% target, but it decelerated to 2% in December, mainly due to statistical base effects. However, according to our forecasts, inflation will reach the target again in 2Q18 and might even rise to 3% in 2H18. As a result, we expect the Polish National Bank to start tightening

monetary policy this year. We see a first hike from the current 1.5% in July, followed by another in 2H18.

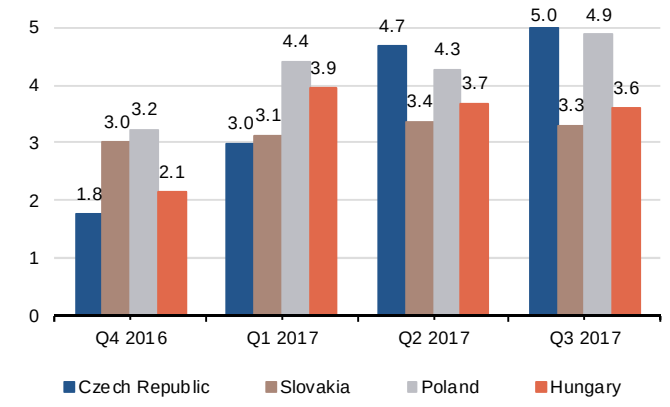
Meanwhile, the Hungarian Central Bank (MNB) plans to maintain its accommodative monetary policy. This year, it will launch a programme to purchase mortgage bonds with a maturity of more than three years and started offering swaps in the five- and ten-year maturities. In doing so, the MNB will try to push down yields at the longer end of the curve. Hungarian inflation is still below the 3% target and will likely remain so this year. According to our forecasts, the forint will tend to weaken slightly this year, moving to EUR/HUF314 at the end of the year.

Inflation in CEE region gradually accelerating (%, yoy)



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

GDP in CEE region (%, yoy)



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

Macroeconomic outlook

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

Main changes

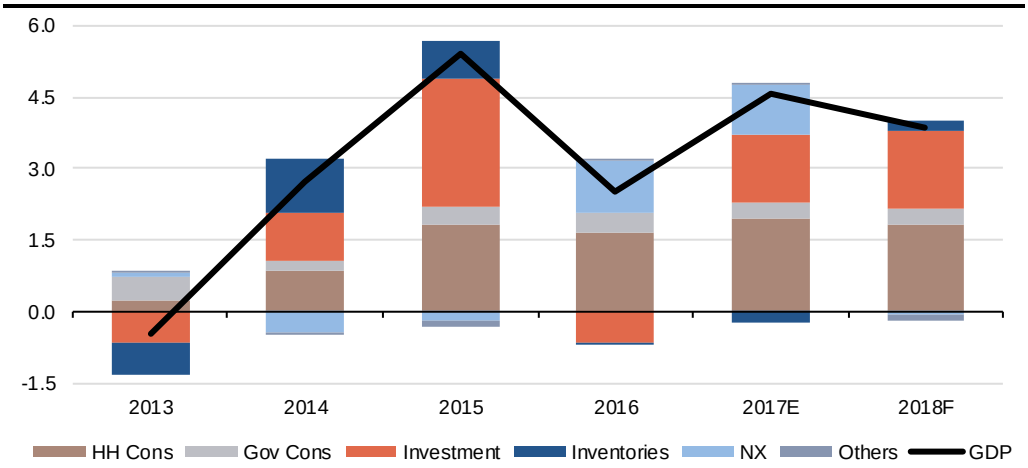
GDP:
We raise our full-year GDP growth estimate for 2017 to 4.6% (previously 4.5% after December update) on the back of a stronger global performance at the year-end. For 2018, we expect the expansion to continue, with growth set to print at 3.8% (previously 3.6%) on the back of increased public investment and strong consumption.

Inflation:
We lower our estimate for 2018 to 2.1% due to the current weakening of the core inflation.

2018 development marked by labour market tensions

Tension in the labour market is the key driver of economic trends in the Czech Republic right now. The historically low unemployment rate has been creating strong pressure on wages. High wages and a lack of labour supply have forced businesses to invest in productivity but represent a risk for further growth in output and competitiveness. Finally, higher production costs and growing household purchasing power create inflationary pressure within the economy.

2018 to see only modest slowdown (% yoy)

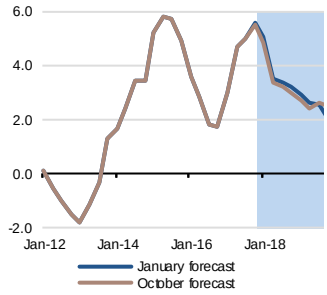


Source: CZSO, Macrobond, Economic & Strategy Research, Komerční banka

The Czech Republic's economic growth keeps surpassing our expectations. In the end, the slowdown in 3Q17 was less pronounced than we expected, with GDP growth coming in at 0.5% qoq. Domestic demand remained firm, while net exports contributed very negatively. Our nowcasting estimates suggest that the Czech economy strongly benefited from global economic momentum in the last quarter of 2017. Industrial output increased by over 2% in October and November combined, and the data imply that December was also very strong. Moreover, retail sales data show that not only was production solid, but consumption was as well. Overall our estimates suggest that GDP growth in the fourth quarter is set to come in at 1.1% qoq. **This would mean that in 2017, the Czech Republic's GDP experienced increase in GDP of 4.6%,** the second strongest increase in the last ten years according to our estimates. We have seen a strong revival of private investment activity, while domestic consumption remained firm. Despite stronger imports, external trade also contributed positively.

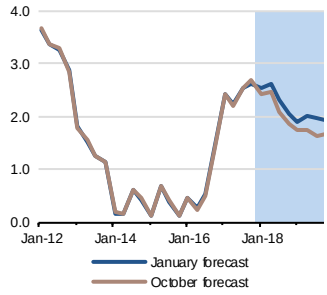
The positive trends have continued into the current year. The previous section shows that the Czech Republic's main trading partners will ensure external demand for Czech products. Investment activity is likely to grow further**, but domestic consumption should remain the country's main economic growth driver. We expect this year's growth to print at 3.8%.**

Change in our GDP outlook (%)



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

Change in our inflation outlook (%)



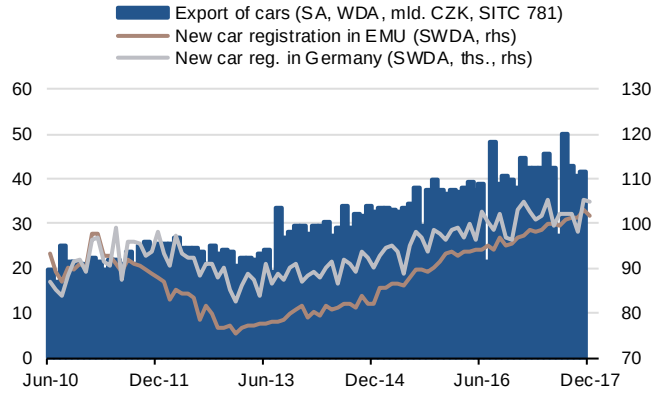
Source: CZSO, Macrobond, Economic & Strategy Research, Komerční banka

Industrial production to remain strong growth driver.

Industry and construction to ride on investment wave

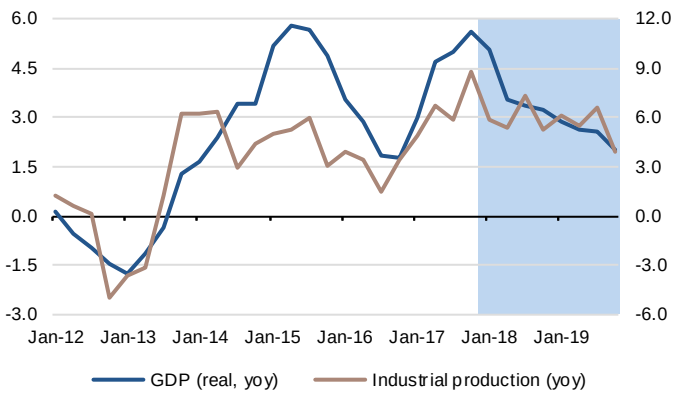
Industrial production notably accelerated in 2017. We expect the acceleration to be sustained at the same pace this year. **The external environment should still play a very supportive role** as we discussed in the previous section. The Czech industry already proved that it is capable of riding the wave of a global trade uptick. Though we assume that demand for cars in Europe will not grow at the same pace, it should nevertheless continue to increase. The Czech car sector's market share in Europe is also set to rise further. Moreover, other industrial sectors should benefit from growing consumption and investment activity by the Czech Republic's main trading partners. Furthermore, domestic factors should continue to play a major role. The Czech economy needs investment. The lack of an available labour force, strong wage pressure and a strengthening koruna are a drag on competitiveness. The businesses have been using the cushion they created during the FX commitment regime, but increased productivity is a must and the 2017 data suggest that Czech entrepreneurs know it. Productivity should remain in the spotlight in terms of economic trends. Some parts of the automotive industry have been showing the way. Private investment should also be partly supported by an inflow of EU funds. **Overall, we expect industrial production to increase 5.9% this year after an estimated 6.5% increase in 2017.**

Industrial production supported by demand for cars



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

Industrial production to remain a growth driver

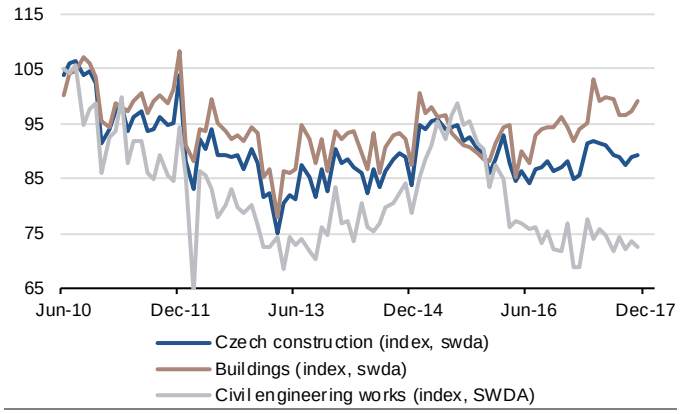


Source: CZSO, Macrobond, Economic & Strategy Research, Komerční banka

Construction set to surge this year.

The construction sector is not expanding as expected. Engineering construction is especially to blame, while building construction has appeared to stay out of the red, and has at least in some regions, met booming housing demand. A new construction law which came into force on 1 January should make the preparation process for construction a bit simpler. **However, there are still big problems which make construction in the main cities difficult.** In particular, we are awaiting the new master zoning plan for Prague. That should be ready as late as 2022-23. Without it, a

Civil engineering construction is weak but set to take off on the back of EU funds inflow



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

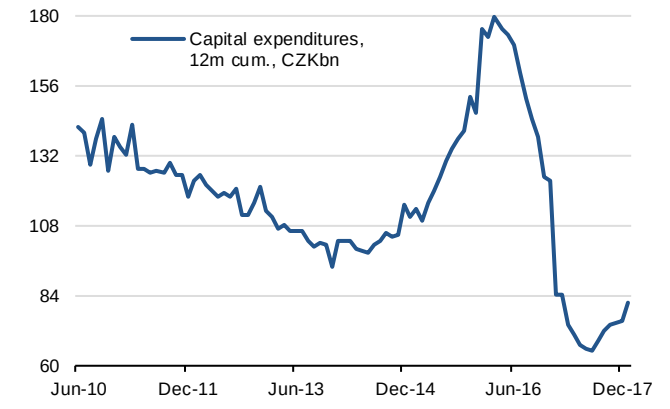
construction boom in Prague remains improbable. Building and public works growth has proven highly disappointing. Main infrastructural projects still remain in the preparation phase and are not moving quickly enough into the construction phase. There is hope that the new construction law will help. Funding of construction projects does not seem to represent a big obstacle. On the contrary, the public administration will be pushed to tap a significant part of EU funds already this year. Otherwise, the Czech Republic will lose the money. That said, we expect the building and public works segment to pick up this year. See more on public investment in the section on *Fiscal policy.* **All in all, we keep a positive outlook for the construction sector. It should grow 7.1% this year** after only mild growth of 1.9% in 2017. The risks are on the downside, however, as that projection is based on the ability of the government to invest.

Fiscal policy: Increase in capital and operating expenditures

This year's central government budget sees a significant increase in spending on public wages and social benefits, which will support household consumption. While investment expenditure is budgeted at a relatively contained level, we expect public investment to spike this year as projects in the pipeline start to materialise. Nonetheless, the general government account is likely to post another surplus in 2018 due to the booming economy supporting tax revenues and the strong surplus among local governments.

In 2017, the central government cash budget saw a minor deficit of CZK6bn, significantly lower than the originally planned CZK60bn shortfall and our expectation of -CZK25bn. On the revenue side, the tax intake vastly surpassed the budgeted figure due to the economy's strong performance, while non-tax income was slightly under the figure budgeted due to the sluggish revival in investment activity. On the expenditure side, current (operating) expenditures printed roughly in line with the target. On the other hand, investment spending disappointed because EU-funded projects rolled out only slowly, though government investment accelerated in final months of 2017. Combined, these factors explain the difference between the budgeted figures and the actual figures.

Capital (investment) expenditures finally started to rise in late 2017 (CZKbn)



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

While the central government budget posted a (minor) shortfall, we estimate that the general government balance will print a surplus of 0.7% of GDP for 2017.

While the central government budget posted a (minor) shortfall, we estimate that the general government balance will print a surplus of 0.7% of GDP for 2017. Local government budgets put in a very resilient performance last year – at the end of November, their combined surplus was CZK41bn. We assume that this was due to better tax revenues (faster economic growth, increased VAT income), rising transfers from the central budget, and muted investment on the spending side. These surpluses likely more than outweighed the central administration's deficit.

According to our estimates, public debt decreased in both absolute and nominal terms in 2017. The CZK10bn increase in central government liabilities (as per Finance Ministry debt issuance versus redemptions and revaluation of foreign debt) was likely offset by a fall in the debt of local governments given their favourable financial results. We estimate that the general government debt therefore declined from CZK1,755bn to CZK1,735. **Its share of GDP likely fell from 36.8% in 2016 to 34.3%** due to strong economic growth and the revival of inflation.

The 2018 budget, which was prepared by the previous centre-left administration ahead of October's general election, sees a significant increase in operating non-investment expenditures.

The 2018 central government budget was approved by the lower chamber of parliament in mid-December despite post-election political fragmentation. **The budget, which was prepared by the previous centre-left administration ahead of October's general election, sees a significant increase in operating non-investment expenditures** (up CZK76bn versus the actual 2017 level). The most visible increase is that of public sector wages, which are due to rise by 10% for civil servants and 15% for teachers. The budget assumes that average wages in the public sector will rise by 13.2% in 2018. Pensions, which account for a third of total central government spending, are set to rise by 4%, resulting in an increase in the real purchasing power of pensioners. Social expenditure is also set to rise in other areas, notably social security services and healthcare.

We think that investment will spike this year given the difference between the budgeted and realised figures in recent years and seasonality in the tapping of EU funds.

The budget has been criticized by the political opposition for its lack of ambition in terms of public investment. Capital expenditure is planned at CZK90bn (6.5% of the total outlay), which is lower than the 2017 budgeted amount (CZK107bn, of which CZK82bn was realised). **However, we think that investment will spike this year given the difference between the budgeted and realised figures in recent years and seasonality in the tapping of EU funds**. Unrealised pent-up investment can be drawn once projects are approved and begin to materialise. According to the Finance Ministry, deferred expenditure amounted to CZK100bn at the start of 2018, a figure in excess of the CZK90bn of approved investment in this year's budget. However, there is a drawback. Part of the deferred CZK100bn is "domestic investment", i.e. it is not funded by the EU. If the government taps these funds, it will increase the budget deficit, as the related revenues were realised in previous years. Even drawing deferred EU investment can temporarily increase the budget deficit until the EU approves the projects and reimburses the government. This is the biggest risk for a worse-than-expected 2018 cash budget deficit, in our view.

Moreover, part of the EU funds allocated to the Czech Republic in the new programming period must be tapped by end-2018 or the country loses the money. As of end-3Q17, there was CZK55.5bn of EU money to be tapped by the end of this year (of course, more money can be tapped freely). In the final months of 2017, public investment accelerated, and we assume that this will continue into 2018.

In our previous Czech Economic Outlook, we stated that defence spending was likely to increase in 2018. While the defence ministry's budget assumes a rise in expenditures, recent news in the media indicates delays in defence contracts. This puts at risk our call in the previous Outlook that there would be CZK10-20bn of defence investment.

Public finance dynamics

	2017f	2018f	2019f	2020f	2021f	2022f
Balance (% GDP)	0.7	0.5	-0.1	-0.7	-0.5	-0.3
Fiscal effort (pp GDP)	-0.8	-0.7	-	-	-	-
Public debt (CZKbn)	1,735	1,740	1,755	1,805	1,835	1,855
Debt ratio (% GDP)	34.3	32.4	31.4	31.4	30.6	29.5

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

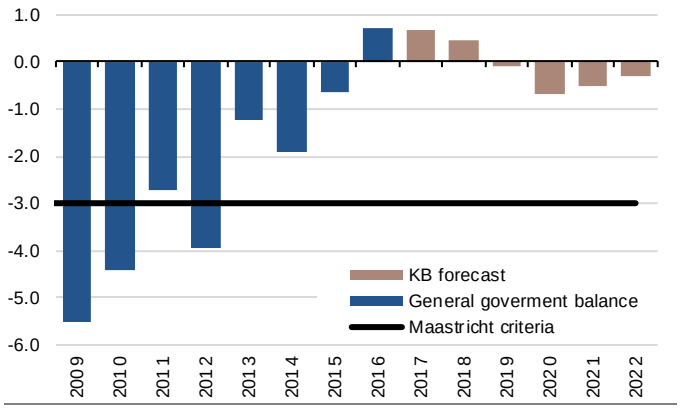
On the revenue side, there are only negligible discretionary changes in tax rates and exemptions. The budget assumes 2018 economic growth of 5.4% in nominal terms, while our forecast is 6.0%. Tax revenues are set to rise by 5.6%, but we see upside risks due to our more positive economic outlook.

Overall, we expect the 2018 budget to post a deficit of CZK40bn, or CZK10bn less than the official target of CZK50bn.

Overall, we expect the 2018 budget to post a deficit of CZK40bn, or CZK10bn less than the official target of CZK50bn. In our view, there are risks of both better or worse results stemming from public investment. If capital expenditures accelerate significantly, the deficit could be wider and even exceed the CZK50bn target. On the other hand, if public investment falls behind expectations, the budget could deliver a better headline result. A more theoretical risk is a financial and/or economic slowdown, which would slash tax revenues and result in a deeper budget deficit.

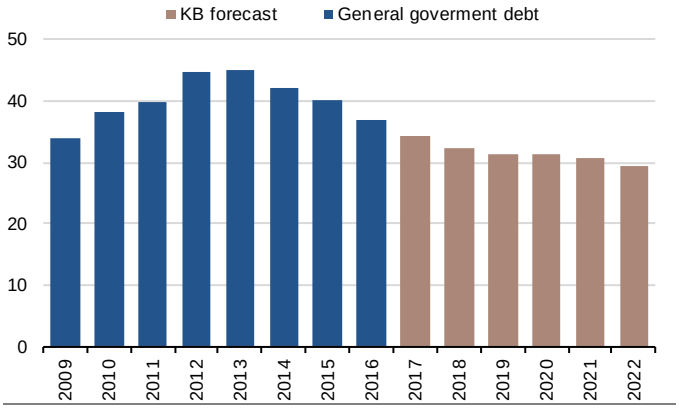
Under the ESA2010 methodology, we expect the general government account to post a surplus of 0.5% of GDP in 2018. We assume that the central government shortfall will be lower using accrual accounting due to a likely mismatch between investment expenditure and related revenues. Importantly, we see another major surplus in municipal budgets. While local government investment is likely to rise in 2018 due to the need to tap EU funds and the increase in spending related to the political cycle given coming municipal elections, revenues will likely continue to grow, with a further rise in VAT intakes likely.

Public finance balance (% of GDP)



Source: CZSO, Economic & Strategy Research, Komerční banka

Public debt (% of GDP)



Source: CZSO, Economic & Strategy Research, Komerční banka

The general government debt is set to rise marginally to CZK1,740bn, in our view. However, we expect its share of GDP to fall again due to the strong economic growth. **We expect the debt-to-GDP ratio to reach 32.4% at the end of 2018**.

Following October's general election, the victorious ANO party formed a minority government, with ANO leader Andrej Babis as PM. The other parties in the fragmented lower chamber did not seek either to enter a coalition with ANO or support ANO's minority government, and the administration therefore lost a vote of confidence on 16 January. The next day, the government resigned, as required by the constitution. However, the cabinet remains in power until the new PM is named by the president. The president has said that he will reappoint Mr Babis as PM, and Mr Babis is likely to start a new round of negotiations. To date, the political uncertainty has not resulted in any economic or market stress, and we expect no (significant) problems to emerge. The 2018 budget was approved, and the public sector is on autopilot. We see a risk of market turmoil if non-mainstream parties (specifically, the right-wing SPD) were to participate in the next administration, whether in a coalition or via their support of an ANO minority

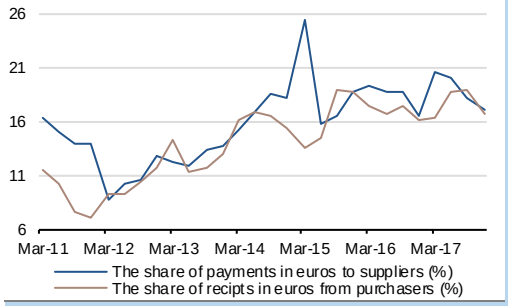
government. One of the key points in SPD's manifesto is a call for a referendum over the Czech Republic's EU membership. If such a referendum is held, there would be a non-negligible chance that a "Czexit" would be approved, which would likely have aggressively adverse consequences for the country's very open economy and markets.

Marek Dřímal
+420 222 008 598
marek_drimal@kb.cz

Box 3: Czech businesses already starting to adopt euro

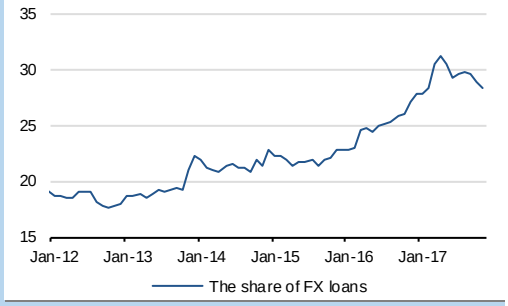
Although politicians have not yet agreed on a date for adopting the euro, some businesses have already decided to use the common European currency. In the real estate and automotive industries, for example, euros are used almost exclusively, even between Czech parties only. Businesses thus can avoid exchange rate risk, and it also makes these sectors more attractive to foreign investors. In addition, non-financial institutions are tapping an increasing share of their loans in foreign currencies. The vast majority of these loans are in euros, and so to a great extent, they serve as a hedge against FX risk. The share of Czech exports that goes to the euro area has been increasing as new countries adopt the common European currency. It is thus not surprising that NFCs use the euro as much as possible. However, there are some adverse effects, including the reduced impact of CNB monetary policy – the central bank now has less power to influence the domestic economy.

Share of euro transactions is growing…



Source: CNB, Economic & Strategy Research, Komerční banka

… as is the share of loans tapped in euros (%)



Source: CNB, Economic & Strategy Research, Komerční banka

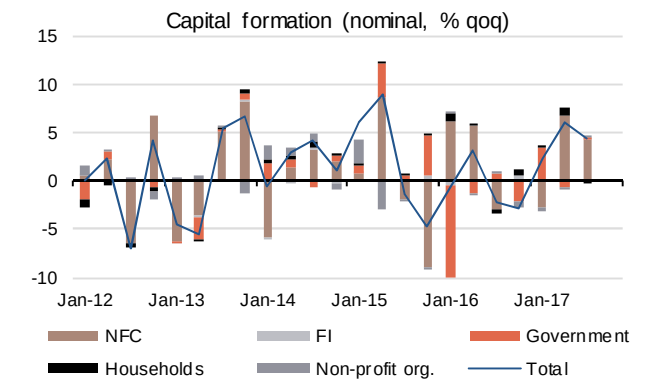
The CNB's FX commitment, discontinued last year, confirmed the importance of FX stability for the domestic economy. Anecdotal evidence (mostly conversations with our corporate clients) indicates that CZK depreciation played only a minor role. The most important factor for the economic growth was long-term exchange rate stability. We do not have hard proof for this claim, but the anecdotal evidence suggests that adopting the euro would support domestic economic growth.

Private investment booming, public sector to join in

Investment to increase productivity of the Czech economy.

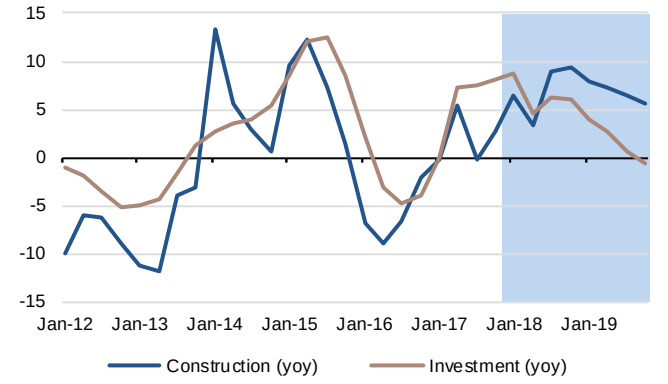
In previous articles we stated that we believe investment is set to surge this year. While private investment was strong already in 2017, public capital expenditures lagged behind our expectations. Investment should provide productivity gains to the economy and ensure its competitiveness despite the tight labour market and strengthening koruna. **We expect investments to increase by a strong 6.4% this year after an estimated 5.7% in 2017.**

NFCs driving current surge in investment; public sector to join this year



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

EU funds inflow to propel investment in 2018 (% yoy)



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

Extremely tight labour market to exert more wage pressure

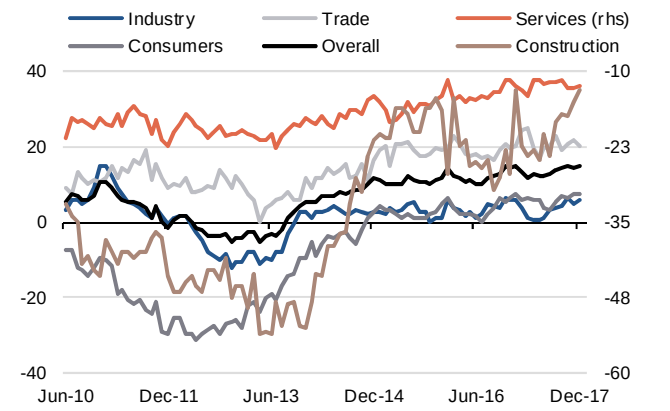
Record-low unemployment to keep wage growth strong.

The Czech labour market has already reached its limits. We do not expect any further growth in employment nor a decrease in the unemployment rate. In November, the unemployment rate (released by CZSO according to ILO methodology) dived to 2.5%. The number of vacancies recorded by the labour offices has reached a record high, but we do not believe that many of these vacancies will be filled, because job applicants do not have the required skills or they are not willing to move. Recent wage deals struck with big employers (e.g. the Czech post office or Hyundai Motor car producer) show that the confidence of employees and labour unions is high. As we describe in the section on *Fiscal policy*, the public sector should deliver a strong wage increase too. **Overall, we expect nominal wage growth to print at 6.2% this year, after it recorded an estimated increase of 6.6% in 2017. Given lower expected inflation in 2018, real wage growth will accelerate marginally from 4.0% in 2017 to 4.1% in 2018.**

Consumer confidence at an all-time high, suggesting strong consumption this year.

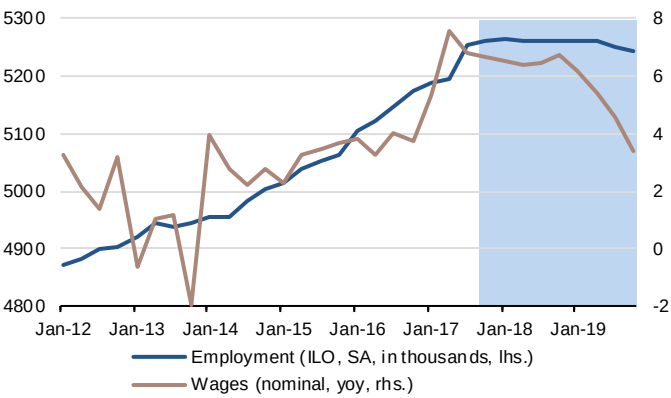
Strong consumer confidence is a reflection of current labour market trends. Households are less afraid of future economic trends in the Czech Republic. Their financial situation has been improving and thus the confidence indicator has reached a record high. **Even though Czech households are conservative, we believe that they will increase their spending and that consumption will grow 3.9% this year, accounting for almost half of GDP growth.**

Consumer confidence suggests further growth in consumption



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

Employment growth depleted

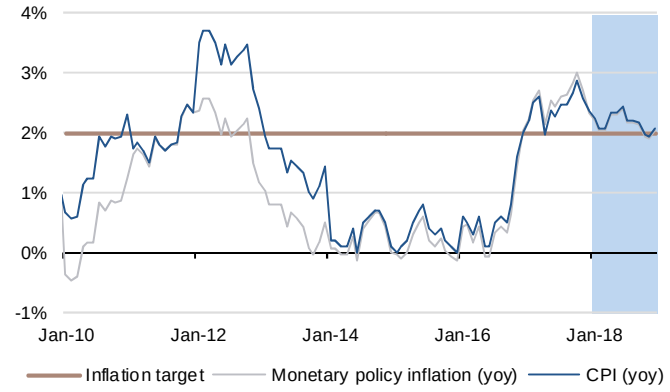


Source: CZSO, Macrobond, Economic & Strategy Research, Komerční banka

Inflation: hovering around the target

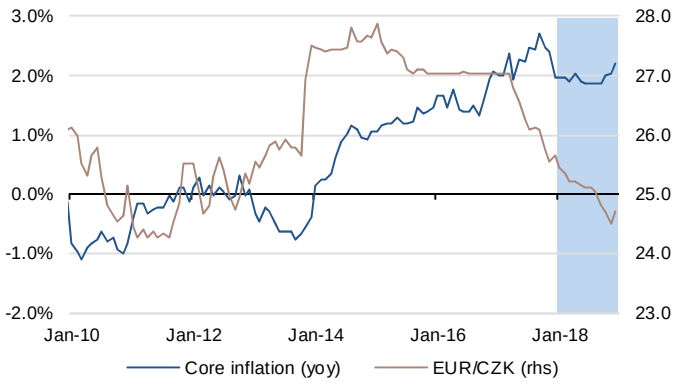
Headline inflation eased towards the end of the last year. The drop in core inflation was especially surprising. At the beginning of this year, prices are expected to rise owing to regulated prices, as energy prices are set to go north. This should offset the fading out of food prices, likely making headline inflation stable at around 2% in 2018.

Inflation to remain close to CNB target



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

Strengthening koruna unlikely to drag on core inflation



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

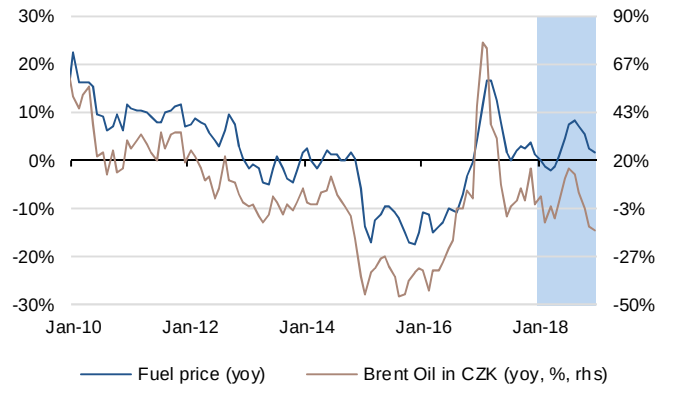
Core inflation has eased, but we do not expect it to drop.

Core inflation eased significantly at the end of the year. For us, it was a surprisingly strong move. **Yet, given the strong wage pressure, we believe that core inflation should not fall further.** We expect the exchange rate to increase, which would cause some disinflationary pressure. But given the demand strength, retailers will be reluctant to reduce prices to reflect lower import prices, thus **the pass-through from the exchange rate to inflation will be weaker. We believe that labour market impact will be stronger. That said, we believe that core inflation will print at 1.9%.**

Food price inflation to ease steadily.

In the beginning of 2017, food prices recorded steep growth. First it was due to fruit prices related to freezes at the beginning of the year. Later butter prices surged and became the symbol of inflation. At the end of the year, we saw an increase in egg prices when butter prices started to normalise. Moreover, last year's harvest was mediocre after a couple of years of successful harvests. That will keep the price of some goods high even at the beginning of this year. Yet, we do not expect as massive an increase in food prices as last year. **Food price inflation is set to ease steadily. On average, it should come to 2.8% after last year's 5.1%.**

Fuel price inflation should not have big impact on headline data



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

Higher oil prices should be mitigated by a stronger koruna.

Oil prices surged at the turn of the year when Brent prices surpassed USD70 per barrel. The increase was partially mitigated by koruna strengthening vs the dollar. Thus, domestic fuel prices increased only modestly. **We**

believe that fuel prices will not play as crucial a role for price development as they did in previous years. SG analysts expect oil prices to normalise at around USD60 per barrel. Together with CZK strengthening, expected oil price trends will result in only modest growth of fuel prices. **The impact on headline inflation would thus remain negative as fuel price growth should decelerate from 6.6% to 2.9% in 2018.**

Energy prices pushed inflation up at the beginning of the year, in our view.

Energy prices jumped at the beginning of the year, according to our estimates. Energy distribution prices increased after several years. This growth is in addition to rising energy prices. In January, we assume that administered prices increased 1.7%. On average, administered prices should be up 2.2%.

Risks: Phillips curve might stop working

Weaker Phillips curve relationship would lower inflation.

- Weaker demand for cars in Europe would be a significant hit for Czech producers in the automotive industry, which is one of the main drivers of the current economic boom.
- Koruna volatility remains a risk for the Czech economy, as there continues to be too much liquidity in the financial system. The closing of positions by foreign investors might trigger sharp koruna weakening and a surge in inflation. On the other hand, wide interest rate differentials might attract more investors and the koruna could strengthen sharply. That would curb the country's competitiveness and impede the hiking cycle.
- The recent drop in core inflation is a warning that the Phillips curve relationship is weaker than we assume. That is what we see in many European countries. Price growth would thus be slower than we currently expect.
- The lack of an available labour force might result in an economic slowdown if businesses do not invest in productivity.
- The possible (direct or indirect) participation of extremist in government could lead to trade barriers, conflicts in the EU and a referendum on the Czech Republic's membership in the EU. Such a referendum could easily end with Czexit, which would be a true disaster for the domestic economy.
- There is a risk that the government will not be able to tap EU funds, which must be drawn by the end of 2018 given the n+3 rule. In this event, investment growth would be weaker than we assume in our forecast.

Key economic indicators

	4Q17	1Q18	2Q18	3Q18	4Q18	1Q19	2Q19	3Q19	2016	2017	2018	2019	2020	2021
GDP and its breakdown														
GDP (real, yoy)	5.6	5.1	3.5	3.3	3.2	2.9	2.6	2.6	2.5	4.6	3.8	2.5	1.7	2.7
Household consumption (real, yoy)	4.8	4.5	3.7	3.8	3.6	3.6	3.3	2.7	3.6	4.2	3.9	2.9	1.1	1.9
Government consumption (real, yoy)	1.0	1.2	1.9	1.8	1.8	2.3	1.9	2.2	2.0	1.6	1.7	2.2	2.7	1.8
Fixed investments (real, yoy)	8.2	8.7	4.5	6.3	6.1	4.2	2.9	0.7	-2.4	5.7	6.4	1.8	-0.4	3.4
Net exports (contribution to yoy)	0.3	-0.6	-0.1	0.1	0.3	0.5	0.5	1.6	1.1	1.0	-0.1	1.1	2.3	0.9
Inventories (contribution to yoy)	0.7	1.1	0.6	-0.3	-0.5	-0.7	-0.5	-1.0	0.0	-0.2	0.2	-0.8	-1.6	-0.3
Monthly data from the real economy														
Foreign trade (CZK bn) (*) (***)	105	106	107	99	110	115	118	125	479	425	421	493	617	658
Exports (nominal, yoy) (*)	6.0	2.8	1.8	4.2	5.7	7.1	6.4	8.1	2.4	5.7	3.6	7.1	4.8	8.2
Imports (nominal, yoy) (*)	7.8	3.6	2.7	4.2	5.8	7.1	6.0	6.3	0.5	8.1	4.1	6.1	2.4	8.5
Industrial production (real, yoy)	8.7	5.8	5.4	7.3	5.3	6.4	5.8	6.7	3.4	6.1	5.9	5.8	3.1	7.4
Construction output (real, yoy)	2.7	6.4	3.3	9.0	9.6	8.1	7.6	6.4	-6.1	1.9	7.1	6.9	2.6	3.3
Retail sales (real, yoy)	7.0	6.7	6.6	7.3	6.7	6.0	5.2	3.7	5.7	5.8	6.8	4.3	0.4	2.0
Labour market														
Wages (nominal, yoy)	6.7	6.2	6.1	6.1	6.5	6.4	5.7	4.8	3.7	6.6	6.2	5.1	1.6	3.7
Wages (real, yoy)	4.0	4.1	3.8	3.9	4.4	4.0	3.3	2.7	3.0	4.0	4.1	2.9	0.3	1.8
Unemployment rate (MLSA)	3.8	3.8	3.4	3.4	3.7	3.7	3.3	3.6	5.4	4.1	3.5	3.7	4.1	4.2
Unemployment rate (ILO 15+)	2.6	2.7	2.5	2.6	2.5	2.7	2.5	2.7	4.0	2.9	2.6	2.7	3.1	3.1
Employment (ILO 15+, yoy)	1.7	1.5	1.2	0.2	0.0	-0.1	0.0	-0.2	1.9	1.7	0.7	-0.2	-0.5	-0.1
Consumer and producer prices														
CPI Inflation (yoy)	2.6	2.1	2.2	2.1	2.0	2.3	2.3	2.0	0.7	2.5	2.1	2.1	1.4	1.9
Taxes (contribution to yoy inflation)	-0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	-0.1	0.0	0.0	1.4	1.9
Core inflation (yoy) (**)	2.3	2.0	1.9	1.8	2.0	2.2	2.2	1.7	1.6	2.3	1.9	1.8	0.9	1.8
Food prices (yoy) (**)	6.3	4.1	4.1	2.1	1.0	1.6	2.1	2.9	-0.9	5.1	2.8	2.5	2.1	1.7
Fuel prices (yoy) (**)	2.5	-1.0	1.9	7.8	2.8	0.1	-1.4	-3.7	-8.5	6.6	2.9	-1.9	-2.8	1.0
Regulated prices (yoy) (**)	0.4	2.0	2.2	2.3	2.4	2.5	2.7	2.8	0.2	0.0	2.2	2.9	3.4	2.6
Producer prices (yoy)	0.9	0.7	1.0	1.9	1.8	1.0	1.3	1.4	-3.2	1.8	1.3	1.3	0.9	1.7
Financial variables														
2W Repo (%, average)	0.41	0.75	1.00	1.25	1.50	1.75	1.75	1.36	0.05	0.17	1.13	1.46	1.0	1.5
3M PRIBOR (%, average)	0.66	0.97	1.22	1.40	1.65	1.90	1.90	1.39	0.29	0.41	1.31	1.58	1.1	1.6
EUR/CZK (average)	25.66	25.31	25.15	24.98	24.63	24.26	24.63	25.41	27.0	26.3	25.0	25.0	24.3	23.6
USD/CZK (average)	21.79	20.92	20.45	19.99	19.40	18.96	18.94	19.10	24.4	23.4	20.2	19.0	18.1	17.7
External environment														
GDP in EMU (real, yoy)	2.4	2.3	2.2	2.0	1.9	1.7	1.5	1.2	1.8	2.3	2.1	1.4	0.6	1.2
GDP in Germany (real, yoy)	2.9	2.4	2.2	1.8	1.8	1.6	1.5	1.2	1.9	2.5	2.1	1.3	0.7	1.5
CPI in EMU (real, yoy)	1.3	0.9	1.1	1.2	1.2	1.2	1.4	1.4	0.3	1.5	1.1	1.4	1.3	1.3
Brent oil price (USD/brl, average)	56.3	62.0	60.0	64.0	62.0	61.2	60.4	59.6	45.0	53.6	62.0	60.0	60.0	62.5
EURIBOR 1Y (%, average)	-0.15	-0.14	-0.11	-0.04	0.03	0.08	0.08	0.05	-0.03	-0.14	-0.06	0.06	0.1	0.3
EUR/USD (average)	1.18	1.21	1.23	1.25	1.27	1.28	1.30	1.33	1.11	1.13	1.24	1.32	1.3	1.3

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

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

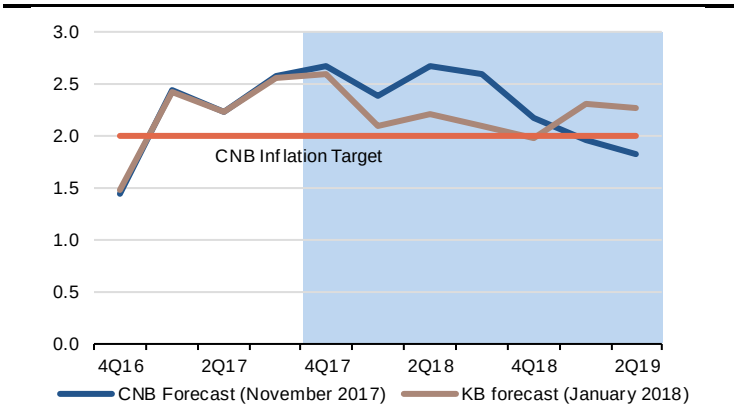
CNB to continue hiking despite CZK strengthen

The CNB looks set to continue hiking interest rates. The market widely expects a rate increase on 1 February, but we think it will again be delivered with a dovish side dish. After more than four years, the CNB will also resume publishing its FX forecast, which we expect to disappoint. That said, strong economic growth and resilient inflation should allow the CNB to hike rates more than it currently envisages. We expect four hikes in total this year, with the repo rate at 1.5% at year-end.

Dovish hikes followed by hawkish lack of hikes

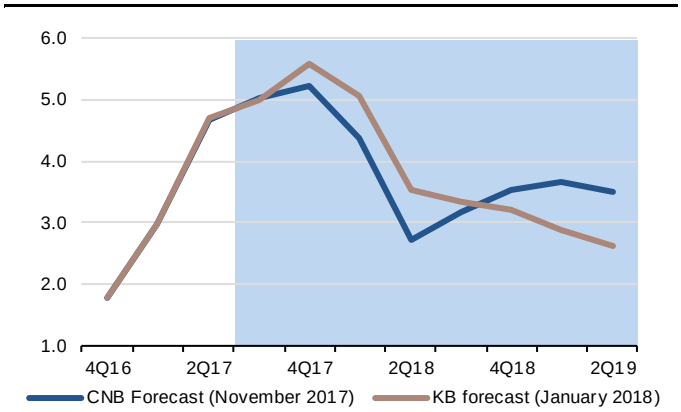
The CNB forecast published in November showed only a 30bp increase in 3m PRIBOR during 2018, and the central bankers are talking about at least two hikes this year. Still, even with two hikes, they remain behind market pricing (FRAs suggest a 70bp increase in the repo rate). The output gap is positive and has been widening in recent quarters, while the labour market is showing record low unemployment and sound wage growth pressures. Domestic conditions thus suggest that monetary policy normalisation should continue at a quicker pace. On the other hand, the external low interest rate environment is worrying for some board members, who are concerned that the widening interest rate differential might attract more speculative capital and cause rapid CZK appreciation with disinflationary effects. That said**, we expect the CNB to continue tightening with one hike per quarter to cool the overheating real economy and housing market,** while its rhetoric will likely remain rather dovish so that it does not create much appreciation pressure on the CZK.

Inflation to remain very close to 2% target (%)



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

GDP to keep providing upside surprises (%)



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

In line with what we saw in 2H17, we expect dovish hikes at the main monetary policy meetings, with a hawkish lack of hikes at the minor meetings. This would also correspond to the way the CNB models its FX forecast. The regulator is aware that increased CZK liquidity will limit the currency's appreciation, but it does not factor this limitation into its main model. The staff only adjusts the projected FX trajectory in the short-term forecast, so it shows only modest strengthening in the first few quarters. The mid-term forecast then probably shows

more pronounced appreciation due to wide interest rate differentials.[2] In line with what we saw in 2H17, we expect dovish hikes at the main monetary policy meetings, with a hawkish lack of hikes at the minor meetings. This would also correspond to the way the CNB models its FX forecast. The regulator is aware that increased CZK liquidity will limit the currency's appreciation, but it does not factor this limitation into its main model. The staff only adjusts the projected FX trajectory in the short-term forecast, so it shows only modest strengthening in the first few quarters. The long-term forecast then probably shows more pronounced appreciation due to wide interest rate differentials.

We expect the same from the February meeting. The CNB will likely hike, but the overall message should be relatively dovish, with the forecast probably pointing to only one more hike this year. The CNB will likely hike its repo and marginal lending rates, but we expect the deposit rate to remain unchanged. It is also slated to publish its EUR/CZK forecast, having discontinued this practice in October 2013, when it introduced the FX commitment. We expect the forecast to be a touch below EUR/CZK 25 at year-end. That might be slightly disappointing for markets, as it implies only mild appreciation. See more about possible risks related to FX forecast publication in section *FX Market*.

The board has its doves and hawks again

The bank board is split in its view of the pace of monetary policy normalisation. We have identified a group of hawks which voted for hikes at the minor monetary meetings. Their vote underpinned the hawkish outcome of the meetings. In September, V. Benda, M. Hampl, and M. Mora voted for a 25bp hike, and in December, Benda and Hampl repeated their hawkish stance. The hawkish board members are very outspoken, so the rapid tightening view gets disproportional attention. Find below representative quotes by bank board members:

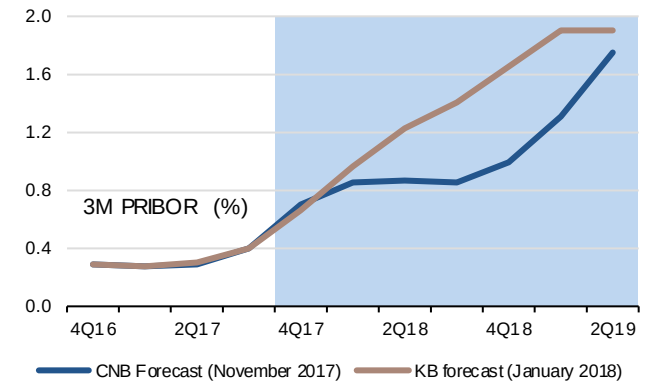
- **Jiri Rusnok** (neutral): *"We will raise the rates at least twice this year. Naturally, we can hike even more often. Increase by 50bp in one step does not seem realistic, in my view."* Lidove noviny, 22 January 2018
- **Mojmir Hampl** (hawk): *"…I'm rather leaning toward the view that there may be additional inflationary pressures that have yet to fully unfold."* And *"…the limited koruna appreciation is giving us more freedom to use interest rates."* Bloomberg, 13 December 2017
- **Vladimir Tomsik** (dove): *"A bigger portion of the tightening could be delivered by the exchange rate rather than by interest rates…" and "For me, rather than increasing interest rates prematurely, it would be a much lesser evil to wait a bit and be certain that we won't have to return to zero rates."* Bloomberg, 19 June 2017
- **Vojtech Benda** (hawk): *"I was one of two board members who consider the inflation risk a bit higher. That would allow us to hike more swiftly than the forecasts assume."* Info.cz, 16 January 2018
- **Oldrich Dedek** (dove): *"We will be evaluating all signals from the economy to decide whether to move at a faster or slower pace with monetary tightening."* Bloomberg, 15 August 2017
- **Marek Mora** (neutral): *"I would personally like to see tightening that's equally spread between koruna appreciation and rate hikes…"* Bloomberg, 24 October 2017

[2] We showed that this differential is too wide in the last publication of the *Czech Economic Outlook*.

- **Tomas Nidetzky** (dove): *"The Czech economy might not need more than two interest-rate hikes this year, if the economy continues to develop in line with policy makers' expectations."* Bloomberg, 19 January 2018

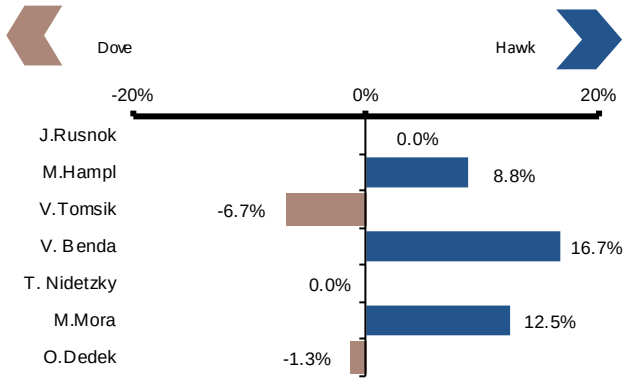
The bank board will welcome two new members in autumn, as vice-governors Hampl and Tomsik's terms end in November. The new members will be appointed by the new president. We do not expect the character of the board to change dramatically.

The CNB to hike once per quarter in 2018



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

The board has a slightly hawkish bias[3]



Source: CNB, Economic & Strategy Research, Komerční banka

Financial stability remains a silent concern, at least for some

Extremely low interest rates have been contributing to the rally on the housing market. Although the CNB has introduced powerful macro-prudential measures, some board members take financial stability into consideration when voting on monetary policy. The overheated real estate market thus supports our view that the CNB is set to tighten more than the current forecast assumes. That said, the board will probably not be vocal about financial stability being a reason to tighten monetary policy. The CNB claims that it does not mix macro-prudential measures with the monetary policy.

[3] A dovish/hawkish stance reflects voting deviations between the CNB's board members and the board's final decision. The results are adjusted for the number of meetings each member attended.

Czech FX Market

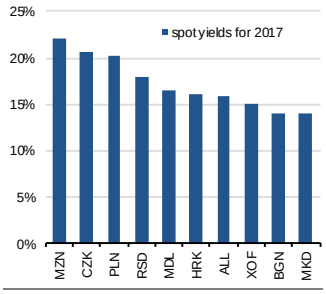
Jan Vejmělek
(420) 222 008 568
jan_vejmelek@kb.cz

Czech koruna will break below EUR/CZK25 this year

Last year was one of the most successful ever for the Czech koruna. The end of the FX floor regime provided the breathing space for the Czech currency to appreciate and it gained almost 6% over the whole year. Globally, only the Mozambican metical made a larger move. The domestic currency even made significant gains against the US dollar, with a 20.6% gain in the year. That said, the dollar did not fare very well in the global market last year, with the greenback losing almost 14% against the euro. The Polish zloty ended just behind the koruna in the list of the most successful currencies. Elsewhere, the Hungarian forint endured a difficult year, even weakening against the euro.

The positive trend has continued unabated in early 2018. The exchange rate has moved substantially below the EUR/CZK25.50 level. This puts the Czech currency at its strongest level for the last five years.

Top ten currencies in 2017 (against USD)

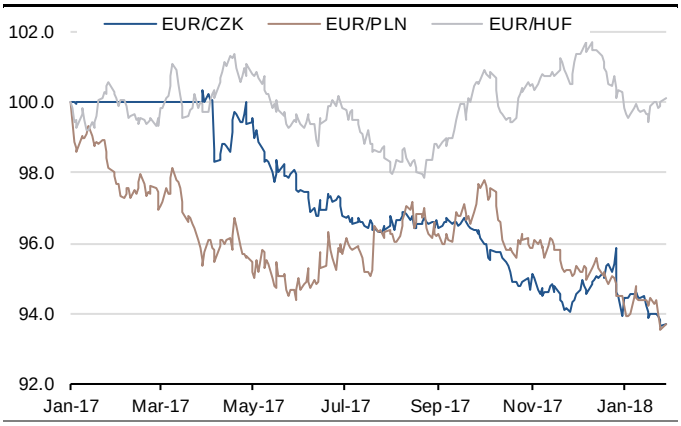


Source: Bloomberg

EUR/CZK trend

Source: Bloomberg, Economic & Strategy Research, Komerční banka

Relative development of CE currencies (01 Jan 2017 = 100)



Source: Bloomberg, Economic & Strategy Research, Komerční banka

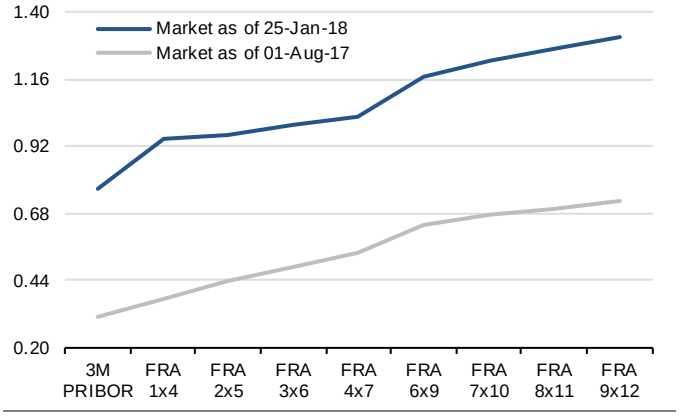
The koruna benefits from the expectation of a more attractive interest rate differential, among other factors.

Koruna's gains in 2017 were driven by the end of the exchange rate commitment in the context of economic expansion and the start of the interest rate hike cycle. 2017 saw a significant leap in real convergence, as the Czech economy grew more than twice as fast as the euro area. The main growth driver has been domestic demand, primarily household consumption. Households' appetite to spend is the result of the tight labour market and rising wages. This keeps inflationary pressures robust. Inflation has already settled safely above the CNB's target, in the upper half of the tolerance band. The central bank reacted to the constellation by starting the cycle of monetary tightening. It hiked rates in August for the first time in nearly ten years and followed that with a second hike in November.

The rising expectations of further interest rate hikes are helping the koruna substantially.

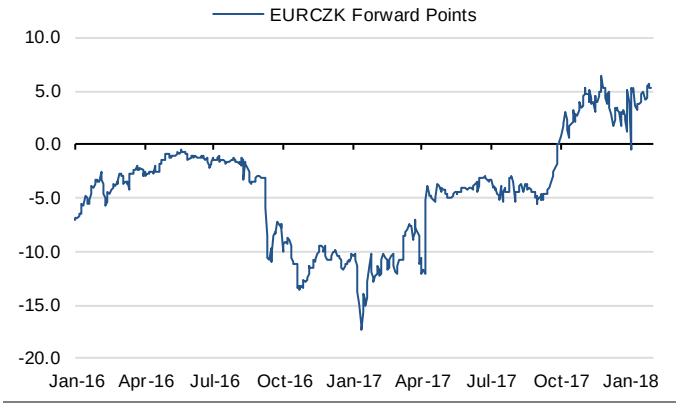
As recently as the autumn of last year, investors were sceptical about the quick rise in interest rates. However, their expectations have turned and this has provided significant support for the Czech currency. In addition, the situation on the forward market has stabilised, increasing the attractiveness of the interest rate differential. Since the end of September, forward points have been consistently in positive territory except for the year-end reading.

Money market rates moved up significantly



Source: Bloomberg, Economic & Strategy Research, Komerční banka

Development of the 1Y EUR/CZK forward points since 2016



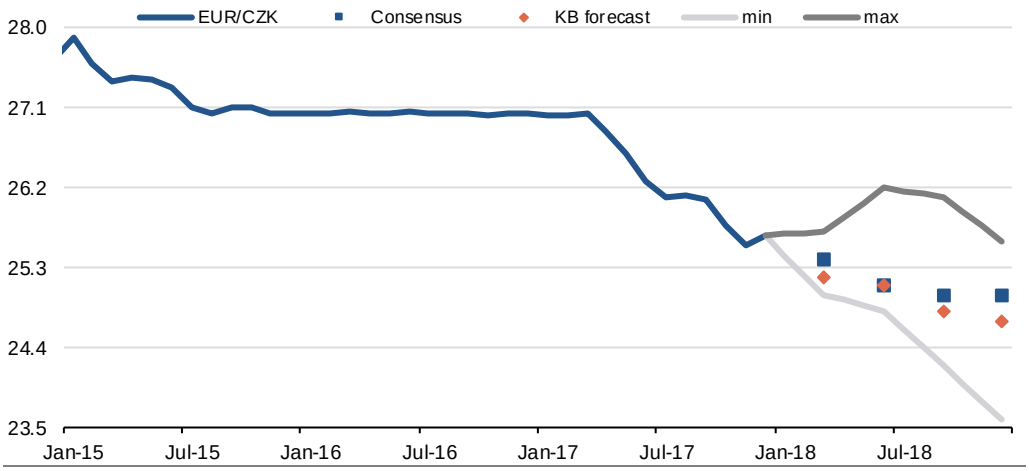
Source: Bloomberg, Economic & Strategy Research, Komerční banka

The koruna will likely strengthen below EUR/CZK25 this year

The koruna should strengthen over the one-year horizon.

This year, we expect the koruna to strengthen towards EUR/USD24.50. At the end of 2018, we expect the currency at EUR/USD24.70 due to negative end-of-year seasonality. The real convergence of the Czech economy towards the European one and improving interest rate differential will continue to drive the appreciation of the Czech currency. The Czech National Bank assumes 30bp of rate increases this year. We expect more interest rate hikes than the CNB, for a total of four (25bp each) over the year. We also expect the pace of CZK appreciation to come in roughly in line with the BEER model outcome. The ongoing normalization of the situation on the koruna basis swaps, where we expect an upward trend, should also serve to bolster the currency.

Expected EUR/CZK exchange rate – Market consensus, Bloomberg (22 Jan 2018)



Source: Reuters, Economic & Strategy Research, Komerční banka

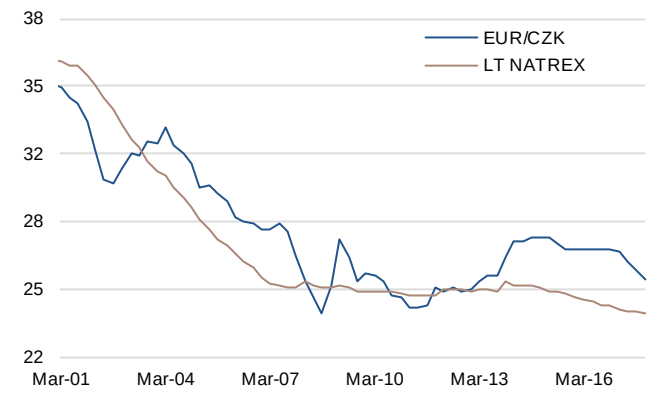
The koruna could strengthen further this year on the strong economic backdrop

Renewed convergence should mean further strengthening of the koruna.

The Czech economy's higher GDP growth than the euro area means the long-term equilibrium exchange rate of the koruna will tend to appreciate. Using a NATREX approach, we estimate that the long-term equilibrium exchange rate was EUR/CZK24.1 at the end of last year. The ongoing surplus on the current balance of payments and the more attractive interest rate differential should tend to push the currency to even stronger levels. In

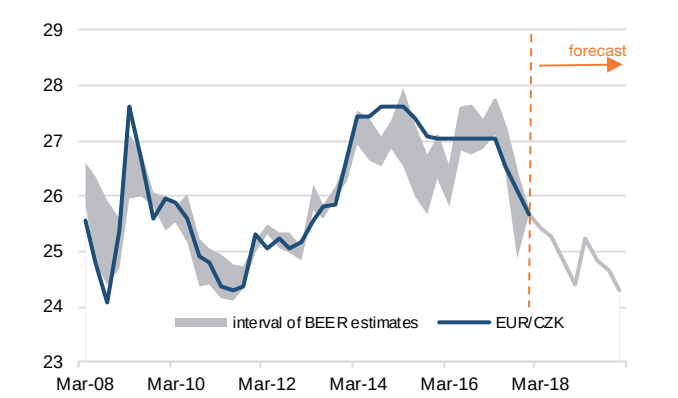
the midterm, our BEER model shows that the fundamentally justifiable exchange rate at the end of this year should be EUR/CZK24.4 at the end of this year.

Long-term equilibrium EUR/CZK exchange rate, based on NATREX



Source: Bloomberg, Economic & Strategy Research, Komerční banka

Medium-term equilibrium EUR/CZK exchange rate, based on BEER



Source: Bloomberg, Economic & Strategy Research, Komerční banka

We see upside risk on the currency in the short term and a downside risk in the longer term.

At the 1 February monetary policy meeting, the Czech National Bank will resume its pre-intervention regime practice of publishing exchange rate forecasts. Given how its forecast model is constructed, as a function of the real convergence and interest rate differential, the **CNB will almost certainly assume a strengthening currency over the estimate horizon. The market might react to this information by triggering an even more vigorous strengthening of the currency.** It is important to remember, however, that the CNB makes no guarantees or commitment with respect to its exchange rate forecasts.

We see the risk as asymmetric over the 2018 horizon as the strengthening of the currency may not be so marked ultimately. This could be the case, for example, if the CNB does not deliver four rate hikes this year. The current overbought position on the Czech koruna also raises the risk of a sharp drop in the event of a major negative shock.

EUR/CZK Technical Analysis

Head of Technical Analysis
Stéphanie Aymes
(44) 207 762 5898
stephanie.aymes@sgcib.com

Technical Analyst
Tanmay Purohit
(91) 80 6716 8267
tanmay.purohit@sgcib.com

Technical Analyst
Natarajan Visweswaran
(91) 80 6758 7816
natarajan.visweswaran@sgcib.com

Risk of further down move if 25.30 gives way.

EUR/CZK is tentatively holding the weekly down sloping channel drawn since 2015 at 25.30, also 2013 lows. Weekly stochastic has been posting positive divergence lately denoting waning downside momentum, however reversal signs are still lacking. Holding 25.30 a rebound can't be ruled out initially towards 25.57/25.65. 200 Day MA at 26/26.07 will remain an important hurdle.

In case of a durable close below 25.30, the pair could extend the down move towards 25/24.80, a projection and also the 76.4% retracement from 2011 lows.

EUR/CZK, weekly chart.

EUR/CZK, daily chart.

Source: SG Cross Asset Research/Technical Analysis

Important Disclaimer: The recommendations in the part Technical analysis is based only on analytical methods of technical analysis and may be different from the fundamental opinion of KB (or SG) presented in other part s of this documents or of other documents of KB (or SG).

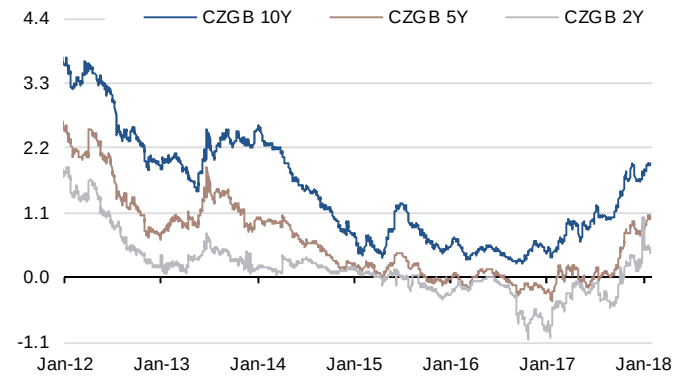
Czech Government Bonds and the IRS Market

Marek Dřímal
(420) 222 008 598
marek_drimal@kb.cz

2018: bearish year for Czech bonds

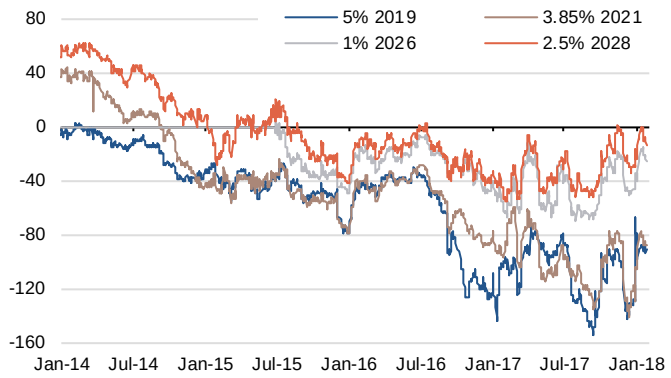
We expect Czech government bond yields to rise in 2018, with seasonally higher issuance in 1Q18, CNB rate hikes, strong fundamentals and lower demand by foreign investors due to the normalisation in implied yields. We see a 40% chance the Finance Ministry sells a eurobond this year.

CZGB yields, Bloomberg generic (%)



Source: Bloomberg, Economic & Strategy Research, Komerční banka

ASW spreads (bp)



Source: Bloomberg, Economic & Strategy Research, Komerční banka

Czech government bonds have been under selling pressure since 3Q17, mostly due to the CNB hikes, the booming economy, and the normalisation of implied yields. That said, December saw a partial reversal of the sell-off, as balance sheet constraints of local banks related to compulsory payments into the Resolution fund and plunging cross-currency implied yields resulted in higher demand for bonds and a decline in yields. As soon as the year-end effect of the Resolution fund faded, however, bond yields started rising again in January, reflecting the strong fundamentals, prospects for more CNB monetary policy tightening and higher supply going forward, in our view.

Supply side in 2018: strong CZGB issuance as our baseline

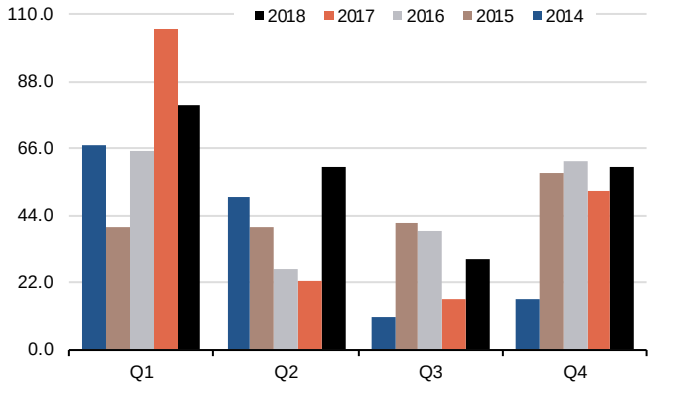
Borrowing needs are set to reach CZK340.7bn in 2018, in our view.

Borrowing needs are set to reach CZK340.7bn in 2018, in our view, or CZK10bn below both our previous call in December 2017 and below the Finance Ministry's expectations. The difference is due to the lower budget deficit as per our new Fiscal outlook. Other items remain the same as in our December's report (http://bit.ly/1712CZGBf). Total borrowing needs stand at their highest level since 2014 and amount to 6.4% of GDP.

On the financing side, we expect the ministry to sell CZK230bn of CZGBs in primary market auctions. We assume there will be another CZK10bn placed in secondary market taps, CZK80bn of borrowing needs will be covered by T-bills maturing in 2019, and that the ministry will use CZK21bn of its liquidity reserve (we will learn the size of the reserve only in mid-February, but we estimate there were tens of billions of free liquidity at the beginning of the year). The net CZGB issuance would reach CZK46bn in this case. Such an amount would easily be absorbed by the market, we believe. Last year, net issuance was slightly negative, and moreover, a significant portion of bonds was purchased by foreign investors due to the GBI-EM inclusion and the end of the FX floor. Domestic investors are hungry for CZGBs, we

assume – but they are likely to bid aggressively only at lower prices, given the prospects for CNB interest rate hikes (this was visible in the January CZGB auctions). In our view, the Finance Ministry will lengthen the maturity of its debt portfolio by issuing more longer-dated bonds. **Also, we assume the ministry will frontload the CZGB issuance into 1Q18, where we expect CZK80bn of bonds to be sold**. The official target is only CZK60bn, though. We attach a 60% probability to this "domestic" financing scenario.

Quarterly CZGB issuance on the primary market (CZKbn)



Source: Finance Ministry, Economic & Strategy Research, Komerční banka * 2018 is KB forecast

2018 gross borrowing needs and financing, CZKbn

	MinFin Dec-17	KB Jan-18
Borrowing needs		
Budget deficit	50.0	40.0
Buybacks of CZGBs		0.0
Redemption of CZGBs	236.4	184.4
Redemption of Eurobonds		51.1
Redemption of retail bonds	16.4	16.4
Redemption of T-bills	44.0	44.0
Redemption of other money market instruments	0.0	0.0
Redemption of EIB loans	4.8	4.8
Total	**351.6**	**240.7**
Financing		
Gross T-bill issuance		80.0
Other money market instruments		0.0
Gross CZGB issuance (in auctions)	min 150.0	230.0
Tap sales		10.0
Gross issuance of eurobonds		0.0
Gross issuance of retail bonds		0.0
Tapping of financial reserve		20.7
Net effect of CZGB switches		0.0
Total financing		**340.7**
Net CZGB issuance		*45.6*

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

In our view, there is a 40% chance that the Finance Ministry decides to issue a eurobond this year.

In our view, there is a 40% chance that the Finance Ministry decides to issue a eurobond this year to refinance the redemption of an old EUR-denominated paper maturing in June. While yields on the Czech and European markets have diverged due to the difference in central bank policies and economic conditions, we believe the attractiveness of eurobonds is not so straightforward due to the cost of hedging. Arguably, the ministry can decide to issue the paper without FX hedging, but we would see it as a risk due to the fragility of the koruna exchange rate in periods of market stress. While EURCZK is set to gradually move lower in the following quarters due to economic convergence, we see a risk that a major market turmoil would result in a sharp koruna sell-off, slashing the exchange rate even back to the EURCZK27 floor level. On the other hand, with rising interest rates on the Czech market and a

normalisation of cross-currency basis swaps, the hedged issuance in EUR looks less appealing. And finally, the basis would likely move higher on the news of a eurobond issuance and during the execution of hedging. We estimate that as of now, a 10Y eurobond would effectively have a 10-30bp lower yield (interest rate cost and hedging cost) vis-a-vis a 10Y CZGB. If the ministry decides to proceed, we assume EUR2bn will be sold, which would mechanically result in CZK50bn lower CZGB issuance, in our view.

Bond yields in 2018: cheapening in 1Q18

CZGB yields are set to slide more in 2018, according to our forecast. We assume the 1Q18 issuance frontloading will cheapen CZGBs both in absolute and relative terms.

CZGB yields are set to slide more in 2018, according to our forecast. We assume the 1Q18 issuance frontloading will cheapen CZGBs both in absolute and relative terms. While net issuance is likely to be negative in the first quarter due to large redemptions, we expect the (mostly foreign) investors who bought the old zero-coupon bonds to have only limited interest in newly issued CZGBs. The gradual increase in CNB rates, economic growth, and the expected increase in Bund yields will then continue to raise nominal CZGB yields in the remainder of 2018. In relative terms, however, we expect the 1Q18 cheapening to fade in the following quarters due to comparatively lower issuance and rising demand by investors at higher nominal yields. We expect the 10Y CZGB yield to reach 2.30% at the end of 2018. The yield curve is set to bear-flatten, in our view. The short-end bonds yields will increase faster over the course of 2018 due to the CNB interest rate hikes.

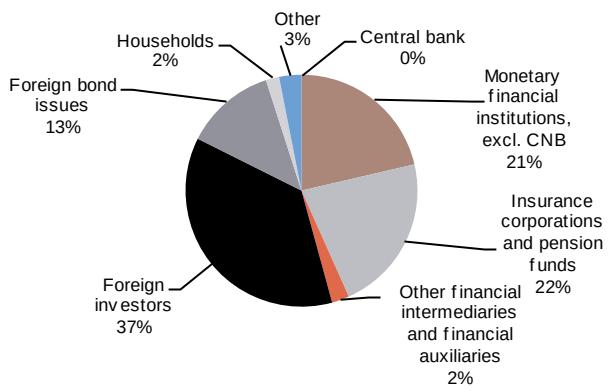
CZGB yield forecast

	1Q18f	2Q18f	3Q18f	4Q18f	1Q19f
2y CZGB yield (%)	0.85	1.00	1.22	1.30	1.55
10y CZGB yield (%)	2.20	2.25	2.25	2.30	2.40
10y CZGB ASW (bp)	20	10	0	-10	0

Source: Economic & Strategy Research, Komerční banka

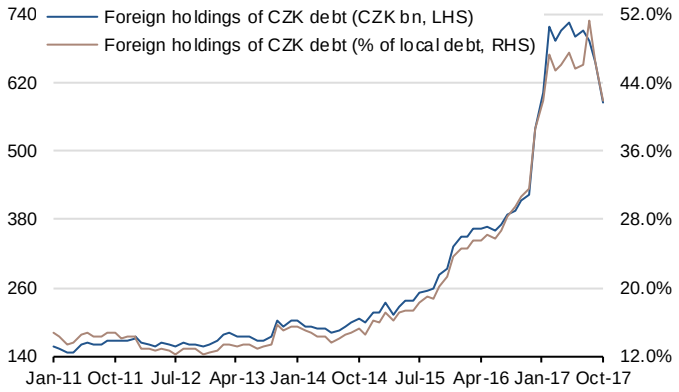
Should the Finance Ministry decide to issue a eurobond (if so, we expect this in 2Q18 to the tune of EUR2bn), **we expect nominal 10Y CZGB yield to print lower by 5-10bp versus our baseline** due to lower supply of local currency debt.

Holdings of CZK government debt, end-November 2017



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

Non-resident started to decline



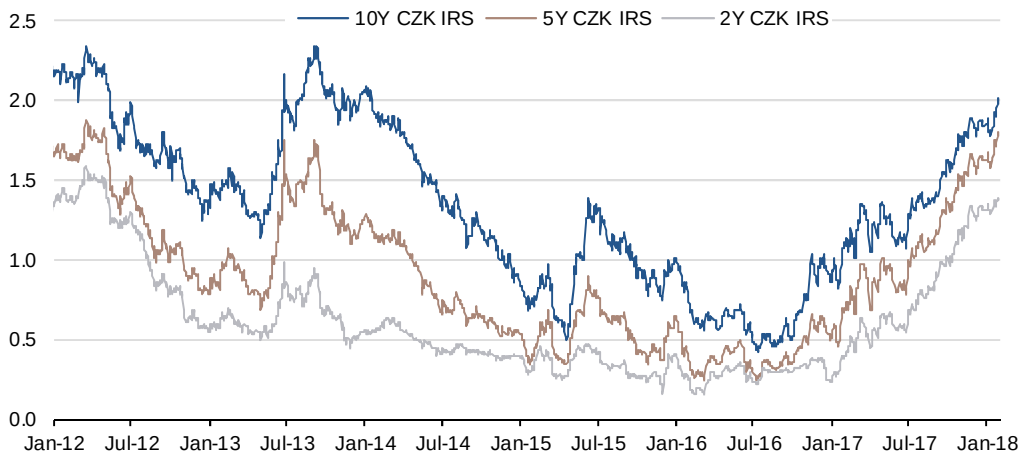
Source: Finance Ministry, Economic & Strategy Research, Komerční banka

CZGB holders: foreign holdings to fall in 2018

The share of foreign investors in local currency debt peaked in September 2017 and started to fall thereafter. While effects of the Resolution fund in December probably boosted foreign demand for local debt, we expect the share of foreigners to decline in 2018. Higher nominal

yields are set to attract domestic investors, while foreign investors should demonstrate less interest in Czech bonds due to the normalisation in implied yields/cross currency basis.

Recent developments of CZK IRS (%)



Source: Bloomberg, Economic & Strategy Research, Komerční banka

CZK interest rate swaps: revised slightly higher

We are revising our CZK IRS forecast marginally higher.

We are revising our CZK IRS forecast marginally higher. The most important driver of the gradual rise in swap rates is the expected tightening of the CNB. Also, still elevated inflation, strong macroeconomic fundamentals, and the call for higher EUR swap rates in the remainder of the year will contribute to the bearish development. At the end of 2018, we expect the 10Y CZK IRS to stand at 2.40%.

CZK IRS outlook (%)

	1Q18f	2Q18f	3Q18f	4Q18f	1Q19f
2Y	1.55	1.70	1.80	2.00	2.10
5Y	1.85	2.00	2.10	2.25	2.25
10Y	2.00	2.15	2.25	2.40	2.40

Source: Economic & Strategy Research, Komerční banka

The short end of the curve should rise quicker, as the expected CNB hikes will translate into shorter durations more intensively. The 2Y swap is set to reach 2.00% by the end of the year, in our view.

Banking Sector

Marek Dřímal
(420) 222 008 598
marek_drimal@kb.cz

Credit growth to slow in 2018 despite the economic expansion

We have made only minor changes to our forecast of loans and deposits in the Czech banking sector in 2018. **In terms of loans, we still expect credit growth to slow**. Following the mortgage lending boom of 2017 (which created an elevated statistical base), real estate lending is set to moderate in 2018, in our view. We assume 2017 saw a significant frontloading of mortgages, as the CNB introduced new recommendations to banks and central bank's hikes started to raise market interest rates. That said, rates are still low, most likely due to competition between banks. Also, there are a limited number of other opportunities in which to invest, apart from real estate, which should continue to push flat prices higher. Together with rising household purchasing power, as per our macroeconomic forecast, these factors should result in a rising mortgage lending market in 2018, albeit at a slower pace.

Bank loans and deposits (yoy, %)

	4Q17	1Q18	2Q18	3Q18	4Q18	1Q19	2Q19	3Q19	2016	2017	2018	2019	2020	2021	2022
Bank loans															
Total	3.9	3.8	3.3	4.8	5.8	5.9	5.7	5.8	**6.8**	**5.9**	**4.4**	**5.7**	**4.7**	**5.6**	**6.1**
Households - real estate loans	9.2	7.5	6.1	4.4	2.7	3.3	3.5	4.1	**8.1**	**9.4**	**5.2**	**4.0**	**6.6**	**7.3**	**7.0**
Households - consumer loans	4.3	5.3	6.2	6.7	7.2	6.9	6.3	6.2	**4.7**	**4.5**	**6.3**	**6.3**	**6.4**	**7.5**	**8.0**
Corporate loans	3.2	1.7	2.6	3.8	8.0	7.7	7.6	7.7	**6.8**	**4.5**	**4.0**	**7.5**	**3.6**	**4.6**	**5.5**
Deposits															
Total	10.9	5.0	3.9	2.9	7.2	7.3	7.3	6.9	**6.4**	**12.0**	**4.8**	**6.9**	**4.2**	**4.0**	**4.4**
Households	7.2	6.1	6.1	6.8	8.6	9.6	9.4	8.4	**7.4**	**8.6**	**6.9**	**8.6**	**4.4**	**3.7**	**4.5**
Non-financial corporations	16.8	4.4	7.1	5.7	8.2	7.3	6.2	6.1	**4.6**	**11.9**	**6.4**	**6.2**	**4.7**	**4.8**	**4.1**
Others	13.5	3.7	-3.0	-6.8	3.0	2.7	3.8	4.6	**6.5**	**20.0**	**-0.8**	**3.9**	**3.1**	**3.9**	**4.6**
Ratios															
Loan-to-GDP ratio	61.4	61.1	61.4	61.6	61.3	61.3	61.7	62.2	**61.9**	**62.7**	**61.4**	**61.8**	**62.9**	**64.0**	**64.7**
Deposit-to-GDP ratio	82.6	84.5	83.3	83.0	83.5	85.9	85.0	84.6	**79.4**	**85.1**	**83.6**	**85.1**	**86.2**	**86.3**	**86.0**
Loan-to-deposit ratio	74.4	72.3	73.6	74.3	73.4	71.4	72.6	73.5	**78.0**	**73.7**	**73.4**	**72.6**	**73.0**	**74.1**	**75.3**
Interest rates															
Real estate loans	2.4	2.5	2.6	2.7	2.9	3.0	3.1	3.0	**2.3**	**2.3**	**2.7**	**3.0**	**3.1**	**3.3**	**3.5**
Consumer loans	8.6	8.9	9.0	9.2	9.4	9.8	10.1	10.3	**10.6**	**9.2**	**9.1**	**10.1**	**10.4**	**11.0**	**11.2**
Corporate loans	2.2	2.6	2.8	3.0	3.3	3.6	3.6	3.1	**2.0**	**2.0**	**2.9**	**3.3**	**3.0**	**3.5**	**3.7**
Share of NPL															
Real estate loans	1.6	1.5	1.5	1.5	1.5	1.5	1.6	1.6	**2.2**	**1.7**	**1.5**	**1.6**	**1.8**	**2.1**	**2.2**
Consumer loans	6.0	5.8	5.8	5.9	5.9	6.2	6.5	6.9	**9.4**	**6.9**	**5.9**	**6.7**	**8.2**	**9.3**	**10.0**
Corporate loans	4.4	4.4	4.4	4.4	4.4	4.5	4.7	4.8	**5.2**	**4.6**	**4.4**	**4.7**	**5.6**	**6.1**	**6.1**

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

Corporate lending growth in 2017 was driven solely by EUR-denominated credit, as Czech companies either naturally hedged their increasingly euro-related operations against the strengthening koruna or speculated on FX gains following the removal of the EURCZK floor. In our view, FX lending will not rise significantly this year. **On the other hand, we expect a pickup in more traditional CZK-denominated loans** due to the acceleration of investment activity and lower profit margins on the back of rising wages.

The growth of deposits is set to slow in 2018 due to the absence of the FX floor, and the resulting stagnation (in fact a minor decline) of deposits of financial institutions. Deposits of individuals and corporations are expected to continue growing, albeit at a slightly slower tempo due to the declining savings rate and profit margins.

Key Economic Indicators

Macroeconomic indicators – long-term outlook

		2015	2016	2017	2018	2019	2020	2021	2022
GDP	real, %	5.4	2.5	4.6	3.8	2.5	1.7	2.7	2.8
Inflation	average, %	0.3	0.7	2.5	2.1	2.1	1.4	1.9	2.1
Current account	% of GDP	0.2	1.1	1.1	1.1	1.7	2.7	2.2	1.8
3M PRIBOR	average, %	0.3	0.3	0.4	1.3	1.6	1.1	1.6	1.7
EUR/CZK	average	27.3	27.0	26.3	25.0	25.0	24.3	23.6	22.9
USD/CZK	average	24.6	24.4	23.4	20.2	19.0	18.1	17.7	17.2

Source: CZSO, CNB, Macrobond, Economic & Strategy Research, Komerční banka, SG Economic Research
Note: KB forecasts are in blue

FX & interest-rate outlook

		29-Jan-2018	Mar-18	Jun-18	Sep-18	Dec-18	Mar-19
EUR/CZK	end of period	25.33	25.20	25.10	24.80	24.70	24.40
USD/EUR	end of period	1.243	1.21	1.23	1.25	1.27	1.29
CZK/USD	end of period	20.38	20.83	20.41	19.84	19.45	18.90
3M PRIBOR	end of period	0.79	0.92	1.17	1.42	1.59	1.90
10Y IRS	end of period	2.07	2.00	2.15	2.25	2.40	2.40

Source: CZSO, CNB, Macrobond, Economic & Strategy Research, Komerční banka, SG Economic Research
Note: KB forecasts are in blue

Monthly macroeconomic data

		4-17	5-17	6-17	7-17	8-17	9-17	10-17	11-17	12-17
Inflation (CPI)	%, mom	0.0	0.2	0.0	0.5	-0.1	-0.1	0.5	0.1	0.1
Inflation (CPI)	%, yoy	2.0	2.4	2.3	2.5	2.5	2.7	2.9	2.6	2.4
Producer prices (PPI)	%, mom	0.3	-0.5	-0.7	-0.2	0.2	0.4	0.0	-0.1	0.3
Producer prices (PPI)	%, yoy	3.2	2.3	1.3	1.1	1.4	1.7	1.1	0.9	0.7
Unemployment rate	% (MLSA)	4.4	4.1	4.0	4.1	4.0	3.8	3.6	3.5	3.8
Industrial sales	%, yoy, c.p.	0.3	11.8	5.0	7.1	5.2	3.5	8.7	5.7	n.a.
Industrial production	%, yoy, c.p.	-1.8	8.3	3.1	4.0	5.8	4.9	10.4	8.5	n.a.
Construction output	%, yoy, c.p.	4.1	3.9	8.0	1.8	1.1	-3.2	5.9	1.9	n.a.
Retail sales	%, yoy, c.p.	0.5	5.6	4.7	2.4	3.9	3.7	7.0	4.9	n.a.
External trade	CZK bn (national met.)	13.0	14.3	20.1	-3.4	4.2	18.2	9.7	11.7	n.a.
Current account	CZK bn	10.3	-8.0	-10.9	-26.0	-8.1	-3.6	15.0	0.0	n.a.
Financial account	CZK bn	29.3	-5.2	6.7	-20.2	14.4	3.7	21.0	-19.4	n.a.
M2 growth	%, yoy	11.5	10.6	10.0	9.9	10.1	9.8	8.6	7.6	n.a.
State budget	CZK bn (YTD cum.)	6.3	-18.7	4.6	25.0	15.6	17.4	26.5	-11.6	-6.2
PRIBOR 3M	%, average	0.29	0.30	0.30	0.30	0.43	0.46	0.51	0.71	0.75
EUR/CZK	average	26.82	26.57	26.26	26.09	26.11	26.08	25.77	25.55	25.66
USD/CZK	average	25.03	24.04	23.37	22.63	22.10	21.90	21.93	21.75	21.68

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 including the authors of this report, may from time to time have a position in or be holding any of the investments or related derivatives mentioned in this document. 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 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 investment recommendations 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.

The recommendations 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 usually 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.

KB ECONOMIC & STRATEGY RESEARCH

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

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

Marek Dřímal
(420) 222 008 598
marek_drimal@kb.cz

Monika Junicke
(420) 222 008 509
monika_junicke@kb.cz

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

Equity Analysts
Miroslav Frayer
(420) 222 008 567
miroslav_frayer@kb.cz

Jiří Kostka
(420) 222 008 560
jiri_kostka@kb.cz

Sectors
David Kocourek
(420) 222 008 569
david_kocourek@kb.cz

SG IN CENTRAL AND EASTERN EUROPE

Chief Economist of SG Poland
Jaroslaw Janecki
(48) 225 284 162
jaroslaw.janecki@sgcib.com

Head of Research of Rosbank
Yury Tulinov, CFA
(7) 495 662 13 00 (ext. 14836)
yury.tulinov@rosbank.ru

Chief Economist of BRD-GSG
Florian Libocor
(40) 213 016 869
florian.libocor@brd.ro

Head of Fin. Markets Research BRD-GSG
Carmen Lipara
(40) 213 014 370
carmen.lipara@brd.ro

Economist
Ioan Mincu
(40) 213 014 472
george.mincu-radulescu@brd.ro

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

SG GLOBAL ECONOMICS RESEARCH

Head of Global Economics
Klaus Baader
(852) 2166 4095
klaus.baader@sgcib.com

Euro area
Anatoli Annenkov
(44) 20 7762 4676
anatoli.annenkov@sgcib.com

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

Yvan Mamalet
(44) 20 7762 5665
yvan.mamalet@sgcib.com

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

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

Omair Sharif
(1) 212 278 48 29
omair.sharif@sgcib.com

Latin America
Dev Ashish
(91) 80 2802 4381
dev.ashish@socgen.com

Ankur Shukla
(91) 80 6731 4432
ankur.shukla@sgcib.com

China
Wei Yao
(852) 2166 5437
wei.yao@sgcib.com

Japan
Takuji Aida
(81) 3 5549 5187
takuji.aida@sgcib.com

Kiyoko Katahira
(81) 3 5549 5190
kiyoko.katahira@sgcib.com

Arata Oto
(81) 3 6777 8064
arata.oto@sgcib.com

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

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

Inflation
Vaibhav Tandon
(91) 80 6731 9449
vaibhav.tandon@sgcib.com

SG CROSS ASSET RESEARCH - FIXED INCOME & FOREX GROUPS

Global Head of Research
Brigitte Richard-Hidden
(33) 1 42 13 78 46
brigitte.richard-hidden@sgcib.com

Head of Fixed Income & Forex Strategy
Guy Stear
(33) 1 41 13 63 99
guy.stear@sgcib.com

Fixed Income
Bruno Braizinha
(1) 212 278 5296
bruno.braizinha@sgcib.com

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

Cristina Costa
(33) 1 58 98 51 71
cristina.costa@sgcib.com

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

Head of Euro Area Rates Strategy
Ciaran O'Hagan
(33) 1 42 13 58 60
ciaran.ohagan@sgcib.com

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

Rates Derivative Strategy
Adam Kurpiel
(33) 1 42 13 63 42
adam.kurpiel@sgcib.com

Head of US Rates Strategy
Subadra Rajappa
(1) 212 278 5241
subadra.rajappa@sgcib.com

Jason Simpson
(44) 20 7676 7580
jason.simpson@sgcib.com

Marc-Henri Thoumin
(44) 20 7676 7770
marc-henri.thoumin@sgcib.com

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

FX Derivatives Strategy
Olivier Korber
(33) 1 42 13 32 88
olivier.korber@sgcib.com

Alvin T. Tan
(44) 20 7676 7971
alvin-t.tan@sgcib.com

Head of Emerging Markets Strategy
Jason Daw
(65) 6326 7890
jason.daw@sgcib.com

Amit Agrawal
(91) 80 6758 4096
amit.agrawal@sgcib.com

Régis Chatellier
(44) 20 7676 7354
regis.chatellier@sgcib.com

Phoenix Kalen
(44) 20 7676 7305
phoenix.kalen@sgcib.com