

Economic Perspectives

November 2018

Highlights

- While the US economy continued to lead the way with 0.9% qoq real GDP growth in Q3, the aggregate GDP growth figure for the euro area disappointed (0.2% qoq). In general, the overall sentiment deterioration and increased uncertainty seemed to be important negative factors, influenced by Brexit, the Italian budget process, political turmoil and the ongoing trade war. Preliminary growth figures point to large divergences within the euro area. The German economy shrank by 0.2%, although this effect is likely to be temporary. Clearly, Italian growth (0% qoq) has been the main worrisome disappointment. As a consequence of the weak third quarter, we revised down our euro area 2018 growth forecast by 0.2 p.p. to 2.0%. Moreover, for 2019 we adjusted our GDP growth forecast from 1.9% to 1.7%.
- Chinese economic growth continues to decelerate. Sentiment indicators as well as export data, though still resilient thanks to front-running in order to avoid tariffs, suggest that Chinese trade performance is suffering from the ongoing trade war. Fiscal and monetary stimulus measures have been implemented. Simultaneously, limited debt deleveraging has taken place in response to excessive credit creation. Our general view on China remains one of a soft landing path, though the probability of a harder landing has increased.
- The Czech National Bank (CNB) unexpectedly raised its policy rate (two-week repo rate) by 25 basis points to 1.75%. The rate hike was based on new macroeconomic forecasts of the CNB staff. These assume an acceleration of the Czech growth momentum and a later renewal of the appreciation of the Czech Koruna (CZK). In particular, the rate increase was a response to the recent depreciation of the CZK and the associated inflationary pressures via higher import prices. We continue to expect one more rate hike in 2019 as the relative weakness of the CZK will, in our view, give the CNB a window of opportunity to raise its policy rate while economic growth momentum will slow down.
- All KBC home markets in the Central and Eastern European (CEE) region reported ongoing sound economic growth in Q3 2018, clearly outpacing the 0.2% qoq real GDP growth measured in the euro area. Growth dynamics, varied between the countries though.
- Focus article: Innovation: a lifesaver for the European economy.

Global Economy

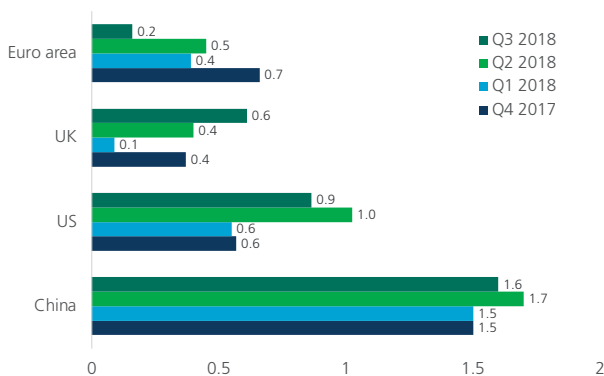
Euro area growth disappointing

The release of Q3 preliminary real GDP growth figures for several countries and regions around the world in recent weeks reflected the picture set out by higher frequency data. As expected, the US economy continued to lead the way with 0.9% qoq growth (figure 1). In particular private and government consumption posted very strong performances. This was in line with the previous quarter and for a large part driven by continued robust labour market performance and ongoing fiscal stimulus. One development possibly warranting attention in future releases is a slowdown in corporate investment growth. The deceleration compared to the previous quarter might be a sign that the corporate tax cuts have not induced as much capital accumulation as was hoped for. Net exports were a drag on Q3 growth, with high import growth and a drop in exports, while inventories grew substantially. The export decline, which mostly reflected a slump in goods exports, was not completely unexpected as Q2 exports were boosted by companies trying to front-run tariffs in the US-China trade war. Nevertheless, weaker export performance was not limited to the US. New exports orders are weakening around the world, signalling a deterioration in international trade momentum. All in all, the fundamentals for the US economy remain favourable for now as consumer and corporate confidence remains high and the labour market continues to perform well. However it is likely that the positive impact from the fiscal stimulus measures will gradually fade. Other factors such as the tightening of the labour market and the negative effects of the trade war may also pose a risk to US growth. Summarising all this, we stick to our US growth scenario. For the remainder of this year and for

2019, we remain relatively optimistic but in terms of growth dynamics we project a slowdown from current elevated levels.

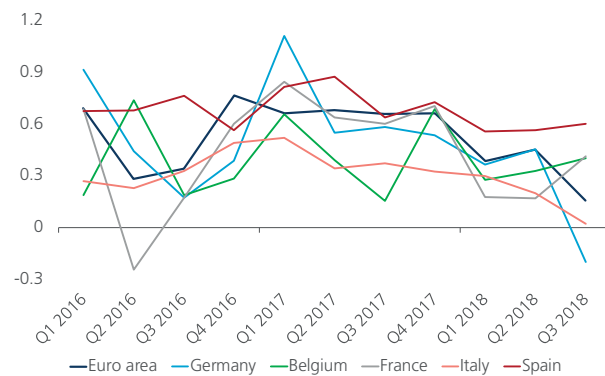
In sharp contrast to the strong US performance, the aggregate Q3 GDP growth figure for the euro area was disappointing. Real GDP growth only reached 0.2% qoq, which was considerably below expectations. In general, the overall sentiment deterioration and increased uncertainty seemed to be important negative factors, influenced by Brexit, political turmoil and the ongoing trade war. While the disaggregated details are not yet available for all euro area economies, recent data point to large divergences within the euro area (figure 2). Belgium (+0.4% qoq) and France (+0.4% qoq) performed relatively well and Spain (+0.6% qoq) clearly outperformed the rest of the euro area. The most disappointing outturn was the German growth figure (-0.2%) which showed a substantial decline in export growth, in combination with weaker domestic demand and increased imports. The weaker export growth is likely a combination of the negative international trade as well as issues in the car industry surrounding the emissions standards scandal. Nevertheless, the underlying trend in the German economy remains positive with substantial job creation and continued investment growth. Meanwhile, the most worrisome disappointment came from Italy where growth came to a standstill in Q3. The zero percent qoq growth figure resulted from a flat contribution of the domestic and external demand side. Growth composition details are still lacking but this disappointment might signal a negative impact of political instability on households' and corporates' spending decisions. Moreover, it comes as an unwelcome surprise in the light of the ongoing budget process where Italian authorities are assuming a markedly higher growth pace in the coming years in their budget calculations.

Figure 1 - US economy continues to lead the way, while euro area growth disappointed (real GDP, % change qoq)



Source: KBC Economic Research based on Eurostat, ONS, BEA, National Bureau of Statistics of China

Figure 2 - Aggregate euro area growth figures hide large disparities between countries (real GDP, % change qoq)



Source: KBC Economic Research based on Eurostat (2018)

Despite still possible revisions of the euro area Q3 growth figures in upcoming releases, our previous growth forecast of 2.2% for 2018 seems unreachable given the Q3 setback. Therefore, we downwardly revised it to 2.0%. Moreover, for 2019 we adjusted our GDP growth forecast from 1.9% to 1.7%. Dynamically speaking, these projections do envisage a recovery from the weak Q3 performance as some temporary factors were at play. In fact, our forecasted quarterly growth dynamics for 2019 are still quite positive as fundamentals (solid labour market, continued robust performance in the services sector) remain supportive.

Several risks continue to create uncertainty in the European economy and may ultimately further distort the European economic cycle. The most immediate is the very negative political reaction in the UK to the recent preliminary Brexit-deal between the European Commission and the British government. It remains to be seen whether sufficient political support can be found in the British Parliament for the current proposal or for some arrangement that avoids a disorderly Brexit with the UK crashing out of the EU without a deal or transition arrangement in four months. Further, we expect continued confrontation between the Italian government and the European Commission on the Italian budget. If Italy is forced into the excessive deficit procedure, the uncertainty might last well into 2019. Finally, a [further escalation of the ongoing international trade conflicts cannot be excluded](#) after the US mid-term elections and taking into account that China has not yet fully retaliated to the announced US trade interventions.

No systemic emerging market crisis

As previously suggested by activity and sentiment indicators, Chinese real GDP growth slowed down further in Q3, reaching 6.45% yoy. Some debt deleveraging took place, in response to excessive credit creation in recent years and contributed to the growth decline. This was mainly seen in infrastructure and real estate investment. In addition, weaker domestic demand with a marked deceleration in retail sales growth contributed to the fall in GDP growth. The full effects of the ongoing trade war with the US are still undetermined. However, sentiment indicators as well as export data, though still resilient thanks to front-running in order to avoid tariffs, suggest that Chinese trade performance is indeed feeling adverse effects. To counteract all this, Chinese authorities have been using several stimulus measures - such as tax cuts, monetary policy easing and measures to support private companies. Their goal is likely to control the pace of the slowdown and to avoid instability rather than to boost growth to levels seen in recent years. Our general

view on China remains one of a soft landing path, though the probability of a harder landing has increased somewhat.

Meanwhile, the Chinese currency, the Renminbi (RMB), has depreciated since the end of last year (USD/RMB almost -6%). In the first half of 2018, the fall in the USD/RMB exchange rate was in line with the movements of other emerging market currencies. This signals that the moves in the bilateral exchange rate were mainly driven by the USD strength. However, since the summer months, there has been a clear underperformance of the RMB relative to the other emerging market currencies. This was a consequence of the combination of weaker economic growth figures and monetary policy stimulus. However, despite accusations made by US President Trump, there are hardly signs of any currency manipulation by the Chinese authorities to keep the Renminbi weaker. On the contrary, China has even been using its foreign reserves to limit the downward moves of the RMB. Hence, although volatility has increased, we do not see any signs of an ongoing currency war. This is in line with China's strategy of a stable currency. After all, China aims to give its currency a larger role in foreign trade and international reserve management. Moreover, in the past, a RMB depreciation often caused capital outflows, with a negative impact on domestic assets (including equities and bonds). This kind of instability would be undesirable as it often required costly interventions in financial markets.

In other emerging markets, political developments were the main market-moving triggers in recent weeks. Brazilian assets rebounded as now President-elect Jair Bolsonaro solidified his lead in the Brazilian presidential race and eventually won the second round of the election. He is viewed by markets as more market friendly than his left-wing opponent. At the same time, the Brazilian congress remains fragmented. Passing much needed pension reform to help address Brazil's sizable fiscal deficit and growing debt burden will, therefore, still prove to be very challenging for the new president. Mexico's President-elect Lopez Obrador has also been the subject of market attention lately after cancelling the ongoing construction of a new airport in Mexico City. The move has spurred investor concern that the new leftist administration could cancel other contracts or investment projects and move away from the previous administration's market-friendly reforms. In his latest pledge not to change banking laws during his first three years in office, Obrador sought to reassure investors. Markets, however, remain wary of the President-elect's more interventionist approach to the economy.

Overall, we expect country-specific risks and vulnerabilities in emerging markets to remain a source of market concerns going

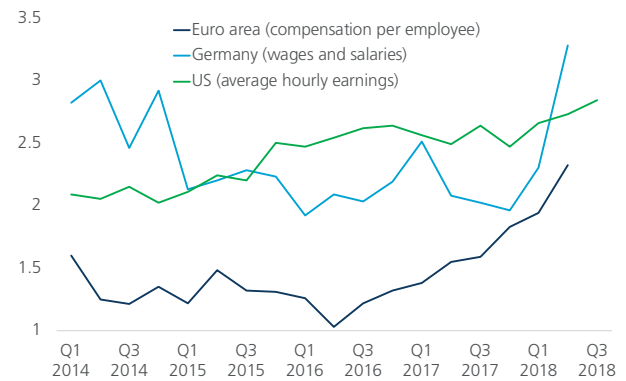
forward. These will likely cause returning spikes in volatility on financial and exchange rate markets. However, we don't expect them to cause significant spillovers to other emerging markets and lead to a systemic crisis in the emerging economies. As our economic scenario for China doesn't envisage a hard landing - which would be particularly harmful for other Asian emerging markets - we don't see that as a trigger for a systemic emerging markets crisis.

Underlying inflationary pressures rising gradually

September inflation figures in the US were somewhat weaker than expected. Headline and core PCE, the preferred inflation indicator by the Federal Reserve (Fed), are now at 2% yoy, with the headline figure recording a drop in recent months, coming from 2.3% yoy in July. A similar movement was seen in the CPI figures, caused by a combination of a fall in energy (-0.5% mom) and a flatlining in food price inflation (0.0% mom) together with somewhat weaker core inflation. The latter was largely influenced by a sharp dip in used car prices (-3.0% mom) in September, which was mainly a consequence of a methodological change in the way used car prices are reported. However, October figures again showed a rebound in headline inflation. In general, underlying developments still point to upward inflationary pressures going forward. Wage growth is continuing its upward trend (figure 3) and since labour market tightness is rising, this will likely remain the case. Hence, we see no reason to adjust our projected path for US inflation containing annual headline inflation of 2.5% in 2018 and 2.6% in 2019. Recent inflation developments don't imply any alteration to the Fed's monetary policy path. We continue to look for another rate hike in December of this year and four more hikes in 2019.

Euro area inflation figures for October were in line with expectations. Headline HICP inflation climbed marginally higher to 2.2% yoy, while underlying core inflation recovered by 0.2pp to 1.1% from its dip in September. The energy component delivered the main contribution (+10.6% yoy) while also services price inflation increased to 1.5% yoy from 1.3% yoy the month before. Hence, this means that headline inflation has been above the ECB's target of 2% for several months now. However, on the core inflation side, price pressures are much more muted, with the recent uptick being more of a correction than the start of an upward trend. As a consequence, our euro area inflation forecasts are unchanged. Given our oil price assumptions, headline inflation will likely stay at or somewhat above the 2% level. We think headline inflation will likely fall

Figure 3 - Wage inflation indicators on an upward trend (% change yoy)



Source: KBC Economic Research based on ECB, Bundesbank, BLS (2018)

down again and converge towards gradually increasing core inflation as oil prices will remain relatively stable over the coming years and wage pressures are gradually building. Accordingly, our view on the European Central Bank (ECB) policy path isn't altered either. At the October ECB meeting, there was a strong determination to signal that economic and financial conditions remain sufficiently healthy to warrant the ECB remaining on its current course towards a gradual and predictable reduction in the degree of policy support it now provides. In our view, a first policy rate hike will only take place at the earliest after the summer of 2019.

CNB surprise

At its November monetary policy meeting, the Czech National Bank (CNB) unexpectedly raised its policy rate (two-week repo rate) by 25 basis points to 1.75%. It was the fifth instance of policy tightening in 2018, thereby increasing its policy gap compared to the ECB. The latest rate hike of the CNB was based on new macroeconomic forecasts of the CNB staff. These assume an acceleration of the Czech growth momentum and a later renewal of the appreciation of the Czech Koruna (CZK). Moreover, the rate increase was a consequence of the recent depreciation of the CZK and the associated inflationary pressures via higher import prices. We continue to expect one more rate hike in 2019, as opposed to none expected by the CNB. In our view, economic growth momentum will slow down in 2019 and the CZK's appreciation will likely be more gradual than the path projected by the CNB. A driving force is the negative sentiment on FX markets, which will not change in the near future. Furthermore, the large amount of speculative capital in the Czech Republic will not decrease meaningfully

either. This relative weakness of the CZK will, in our view, give the CNB a window of opportunity to raise its policy rate by 25 basis points in 2019.

Predictable Trump unpredictability

The market reaction to the US midterm elections has been generally subdued as the results were widely anticipated. Republicans maintained their majority in the Senate while the Democratic Party gained the majority in the House of Representatives. Given the vast differences between the Democrats' and Republicans' legislative agendas, and the precedent set in past years to reject bi-partisan compromise, little to nothing is expected to be accomplished over the next two years. The more progressive wing of the Democrats will likely urge party leadership to move further left rather than compromise with the current administration while the increased Republican majority in the Senate will mean fewer opportunities to strike a bipartisan deal on any future legislation. Now that Democrats have control of the House committees, an increase in subpoena-backed investigations into corruption or ethics

scandals, such as potential Russian election interference in 2016, has increased in probability.

The Congress will, however, be less able to stymie President Trump on trade policy. Due to specific presidential trade authorities implemented by Congress over the last decades, import tariffs are under control of the executive branch of the President in certain circumstances. This is also the case in the ongoing US-China trade war. Moreover, Democrats are unlikely to turn the trade war into a major partisan battle. After all, there is some bipartisan support for pushing China to change its trade practices. Though there may be a momentary lull in trade war escalation now that there are no more elections in sight in the short-term, that could change rapidly if Trump needs to distract from an onslaught of investigations. Prospects for a rapid truce in the trade war are therefore gloomy. Also major showdowns over the funding of the US government in the divided Congress are a high possibility. Hence, the US political path over the next two years could be rather bumpy. As a result, increased economic and financial market uncertainty going forward should be expected.

Central & Eastern European Economies

All KBC home markets in the Central and Eastern European (CEE) region reported ongoing sound economic growth in Q3 2018, clearly outpacing the 0.2% qoq real GDP growth measured in the euro area. Growth dynamics, varied between the countries though. The Czech economy rapidly reduced its GDP growth rate to less than a half during the past 12 months. A less pronounced growth deceleration was seen in Bulgaria, Slovakia and Hungary. The largest Central European economy, Poland, grew at a rate even higher than that in Slovakia or Hungary (5.7 % yoy in Q3 2018). The main reason for the widening growth rate gap between the Czech Republic and Slovakia or Hungary is largely exhausted Czech production capacities.

Strong economic interconnections of the CEE region with the euro area will likely be a very important growth determinant in coming quarters besides country-specific elements. While the Czech GDP growth rate will likely stabilise around 2.5% yoy, Slovak and Hungarian economic growth may decelerate towards roughly 3% yoy.

Also consumer price inflation varies significantly between the CEE countries. The Czech economy has been reporting the lowest value (+2.0 % in October), while in Hungary and Bulgaria, the yoy CPI growth exceeded 3.5 %. Looking at economic growth and inflation combined, Slovakia comes out as the winner in Q3 2018: strong economic growth in the country has been accompanied by a slightly downward inflationary trend, resulting in 2.5% yoy harmonized inflation in October.

Czech Republic

Lowering expectations

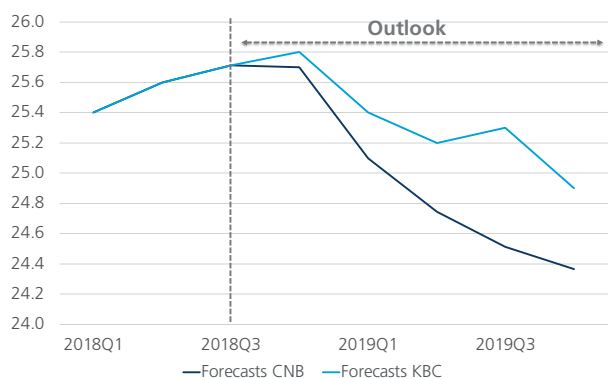
Slowly but surely, the Czech economy is reaching its limits in terms of capacity. This is reflected, inter alia, in the performance of the country's largest sector - industry - which has been heavily affected by the changes in the automotive industry over the last three months. The year-on-year rate of production reached 2.5% in September, and even -0.9% when cleared off the impact of the differing numbers of working days. However, production in the automotive industry has been falling for two months and new orders don't suggest a change in sight in the months to come. The fundamental factors include not only the six-year cycle of growth in demand for new cars, but also the new emission limits that have made the automotive statistics of the whole of Europe more obscure. Before the new regulation

came into effect, cars that received short-term registrations were produced in huge quantities; the question is, what to do with them now. In any case, the automotive industry is unlikely to provide any other impetus, so its contribution to economic growth will remain rather marginal in the time until the end of this year. The only sector on a steeply rising trajectory is the construction industry, which is riding on a wave of new orders from the private and public sectors in the field of building construction as well as civil engineering. There is no boom in housing construction at present, but the demand for new housing is likely to be decreasing due to higher interest rates and stricter mortgage rules combined with record-breaking real estate prices. This is also indicated by consumer confidence surveys - although confidence remains very high, the interest in new housing (as well as car) purchases fell considerably in the last quarter.

The PMI (Purchasing Managers' Index) results have also shown signs of slowing down in recent months. While it remains above the neutral 50 threshold, it fell to a two-year low in October. The result of new orders was particularly unfavourable which indicates a limited potential for further growth in the sector. On the other hand, the growth of orders has remained solid in the construction industry although, similarly to the industry, the sector has also reached its limits when it comes to a lack of staff as is confirmed by the number of vacancies available in the market. A record-breaking unemployment rate and a record-high vacancy rate constitute obstacles to the further growth of the Czech economy, prompting faster job growth while encouraging a restructuring of the economy at the same time. They have become a catalyst for previously postponed investments in automation and robotization of manufacturing and even some services. They have probably been the main driver of the current investment activities of companies, which started at the beginning of last year.

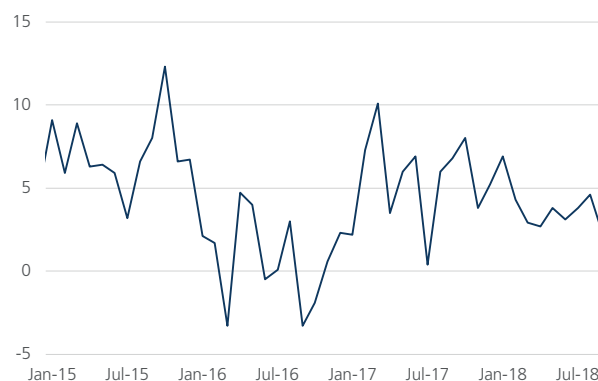
Although the labour market continues to tighten, there are still no significant inflationary pressures from the demand or cost side. The main inflation driver remains housing, which mirrors all-time high real estate prices, rents and even energy in the recent months. Food or fuel has had a secondary impact on inflation this year. Therefore, inflation remains slightly above the CNB's target and essentially in line with its forecasts. We expect inflation to keep close to the current level for the rest of this year. At the beginning of next year, inflation may rise slightly as a result of further energy price growth but it should still remain within the central bank's tolerance band. That is why we do not expect the CNB to continue the truly activist policy it has been executing this year.

Figure CZ1 - CNB's outlook for the CZK probably too strong (CZK per EUR, 3 month average)



Source: KBC Economic Research based on CNB and own forecasts

Figure HU1 - Gradual slowdown in Hungarian industrial sector (industrial production, calendar adjusted, % change yoy)



Source: KBC Economic Research based on KSH (2018)

Fifth interest rate increase this year

At the November meeting, the CNB raised its main interest rate for the fifth time this year to 1.75%. The deposit - discount - rate used by banks for 1-day deposits of their liquidity was raised at the same time, namely to 0.75%. Since the end of the exchange rate commitment in April last year, the central bank has increased its rates seven times, bringing them to the 2009 level. The CNB was motivated to take this step not only due to the performance of the economy, or the fact that it was viable, but also because the koruna remains significantly weaker than the CNB model suggests.

At the November meeting, the CNB decided on a new forecast that again assumes an acceleration in the Czech economy and a significant strengthening of the CZK. According to the central bank, the koruna should strengthen from the current CZK 25.85 per euro to CZK 25.10 per euro, i.e. by three percent at the beginning of the year. By the end of the year, the koruna should gain another three percent to the euro. With respect to the amount of free speculative capital, we believe this is a strong assumption that may remain unfulfilled just like the expectations for the last six months (figure CZ1). Therefore, contrasting with the CNB's forecast, we think the central bank could raise its interest rates once more at the very beginning of 2019. This would further increase the interest rate differential to euro rates (from the current 215 bps) by another 25 points. That might bring on the ceasefire the Governor had announced at the November session already.

Hungary

Like elsewhere in the region, the export-oriented Hungarian industrial sector had a weaker quarterly volume performance in Q3 (compared to Q2). This was also the case in September as industrial production decreased by 0.6% yoy (though the working day adjusted figure still showed positive growth of 2.2% yoy). The seasonally and working day adjusted figure was down by 2.1% mom in September, but the previous months showed a 3.9% mom growth, so the comparison base was high. All in all, this points to a gradual slowdown of the industrial sector (figure HU1). Moreover, as the global environment might deteriorate further as well, prospects for the near future are not as favourable as they were in recent years. On the other hand, ongoing investments in the sector might counterbalance the negative international environment. So we still expect that industrial production may grow by around 4% yoy in 2019.

Q3 GDP figures confirmed that the Hungarian economy continued to grow very fast this year. According to flash estimates real GDP grew by a very strong 5% yoy and 1.2% qoq respectively in Q3 2018. The above-mentioned industrial production figures already suggested that the sector wasn't the main driver of economic growth. Although detailed growth composition figures are not yet available, most likely, the industrial sector's growth contribution was roughly 0.5 p.p. Meanwhile the construction sector remained on track, so it likely boosted the economy by around 0.8 p.p. in Q3. The biggest growth contribution likely came from the service sector.

Inflation reached its target

Hungarian inflation accelerated from 3.6% yoy in September to 3.8% yoy in October. Core inflation also went up from 2.4% yoy in September to 2.6% yoy in October. The main drivers of the increasing inflation are fuel, tobacco (there was an excise duty hike in September), tradable goods and market services. Food price increased more slowly than a year before. Although the National Bank of Hungary (NBH) stated that there are no inflationary pressures coming from the weaker exchange rate and faster wage growth, inflation figures suggest otherwise. Prices of clothes increased compared to last year, which confirms our view that as new collections are coming in and firms have to refill their inventories, a weaker exchange rate of the HUF pushes prices up even more. Services prices are gradually accelerating as well, which might be caused by strong domestic consumption and accelerating wage growth. Based on ongoing wage negotiations, these upwards inflationary pressures will remain in place for next year as well.

We expect that headline inflation will moderate temporarily in November, which will likely be followed by an acceleration till March (the peak might be around 4% yoy). We see annual harmonized inflation at 2.8% in 2018 and 3.3% in 2019, which suggests that the NBH has already reached its inflation target (3.0% +/-1 ppt).

NBH to stress the need of monetary policy normalisation soon

Hence, the main question is when and how the NBH may react to current inflation developments. As core inflation is still below 3% yoy, we don't expect any sudden policy changes but the NBH communication might become slightly more hawkish, highlighting the need for monetary policy normalisation going forward. We still don't expect a monetary policy change for this year, so the short end of the curve may not move substantially higher till year-end. However, by the end of next year, a first policy rate hike by the NBH becomes more likely.

Slovakia

Slovak economic growth accelerated to 4.6% yoy in the third quarter according to preliminary figures. GDP growth accelerated from the previously reported 4.5% in Q2 2018 and 3.7% in Q1 2018. Growth was probably supported by household consumption as there was strong demand for loans as well as a continued rise in employment and wages. The start of the Jaguar Land Rover car plant production will again

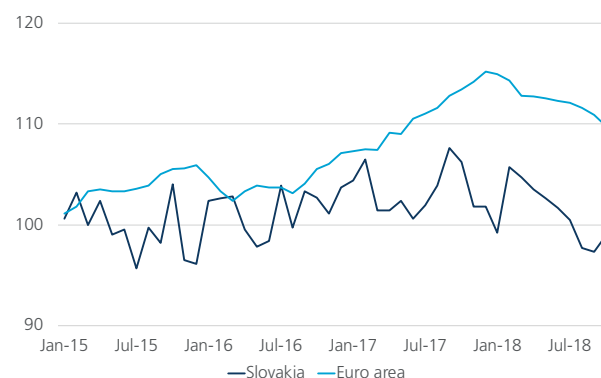
increase the Slovak export capacity. However, the projected slowdown of the global economy due to rising tensions and the possibility of a trade war pose risks to the Slovak economy.

Economic sentiment indicators suggest some growth slowdown though (figure SK1). The economic sentiment indicator was on a declining trend since the beginning of the year but reversed that in October. The support came from the rising confidence in services, retail and in construction. The overall index of economic sentiment increased by 1.6 points to 98.9. Similar development was registered in the Eurozone during last months. Moreover, PMI in the EMU declined to two years low in October. If this decline continues, it might affect the economic activity in Slovakia going forward. However, the start of the new production capacities in the automotive industry (new Jaguar Land Rover car plant) could make Slovakia an outlier in the region.

The unemployment rate stabilised at 6.6% in September according to Eurostat statistics, which is well below the EMU average of 8.1%. Generally speaking, strong growth pulled unemployment to all-time lows this year and the labour market started to overheat which is visible in several labour market statistics. For example, the number of vacancies is at all time high as well as the number of employed non-Slovakian nationals. The less complicated rules for employment of non-Slovakian nationals should help to even increase the number of employees from non-EU countries, mainly from Serbia and Ukraine.

HICP inflation decreased slightly from 2.9% to 2.7% in September 2018. There are visible demand led price pressures as well as the impact of higher fuel and food prices on inflation.

Figure SK1 - Economic sentiment indicator suggests some growth slowdown (DG ECFIN Economic Sentiment Indicator)



Source: KBC Economic Research based on European Commission (2018)

House prices continue to rise but at a slower pace in third quarter of 2018. Prices increased by 7% yoy in Q2 compared to 11.7% yoy in Q1 according to Eurostat data. As measured by the Slovak central bank, there was a deceleration in house prices that continued in the third quarter. The impact of measures with the aim to curb the demand for housing loans (registering double digit growth this year) appear to be having their intended effect.

Government bond spreads moved up by approximately 10-12 bps to 52 bps compared to 10y Bunds. This is in line with the expectation as the ECB will gradually reduce its purchasing activity on the bond market and demand for bonds will be more in the hands of market forces. However, the good economic performance and healthy public finances should help to limit the spread increase.

Eurostat revised the earlier published Government deficit for 2017. The all-time low deficit was revised even lower to 0.8% of GDP (1.0% in the spring notification). Public debt was reduced to 50.9% of GDP in 2017 from 51.8% in 2016. This is still well below the EMU average (87%). Better results of the public finances were due to the better collection of corporate taxes in 2017.

Bulgaria

Economic growth losing pace

Preliminary estimates for Bulgaria's real GDP growth in Q3 2018 suggest that economic growth continues to ease. The economy expanded by 0.5% qoq in the third quarter, down from 0.8% qoq in the Q2, while on a yearly basis growth slowed down to 3.0% from 3.4% in the second quarter of 2018. Although detailed figures on the composition of growth are not yet available, both final consumption (6.9% yoy), supported by a sustained wage growth, and gross fixed capital formation (6.2% yoy), supported by EU funding, remain strong drivers. However, the external sector put a drag on the growth as exports decreased by 3.2% yoy. This was likely due to weaker economic activity in Turkey, which is one of Bulgaria's main trading partners.

Preliminary GDP figures confirm the picture suggested by a weakening in Bulgarian activity and consumer confidence. In September, the seasonally adjusted industrial production index dropped by 1.2% in comparison to the August figure. Moreover, the total business climate indicator – though staying above its long-term average – decreased by 1.9% in October

Figure BG1 - Bulgarian unemployment rate close to historical lows (unemployment in % of active population)



Source: KBC Economic Research based on Eurostat (2018)

against the previous month in line with the more unfavourable conjuncture in the industry, retail trade and service sector. Last but not least, the total consumer confidence indicator fell by 3.2% in October compared to July.

Labour market remains strong

The labour market in Bulgaria remains strong and its gradual tightening continues to support our expectation of robust wage growth figures, supporting household consumption. In September 2018, registered unemployment remained at the previous month's rate of 5.3%, which is the lowest since 2008 (figure BG1). While the last month registered a decline in seasonal activities in tourism, trade, manufacturing, agriculture and construction, the impact was offset by the observed growth in education related to the beginning of the new school year. Nonetheless, the continuous high level of labour demand is expected to be increasingly accompanied by labour supply limitations, i.e. unfavourable demographics trend as the working-age population is set to decline by about 1% a year in 2018-2020.

Inflation continues to accelerate

Consumer prices growth accelerated in September with a 0.7% mom and 3.7% yoy increase, the latter being the highest since January 2013. The main reason behind the additional rise is growth in food and non-alcoholic beverages (3.3% yoy) and housing (4.6% yoy) prices. Moreover, transport prices continue to grow fast at 9.2% yoy, supported by the surge in oil prices in the first three quarters of the year. We expect inflation to further accelerate in the second half of 2018, as it will be driven by a further increase in services prices as well as a surge

in administratively determined prices. The latter will reflect the effect of the increase in excise duty on tobacco products since the beginning of the year and, and to a lesser extent, the appreciation of water services since January 2018. In addition, as of October 2018, new price increases were introduced on electricity, gas and heating services, ranging from 4-9% in different regions of country.

Government debt set to decline further

The Bulgarian Ministry of Finance has set itself the task of

maintaining a stable nominal amount of government debt over the next three years. Despite the expected GDP growth moderation towards roughly 3.6% in the coming three years, the Ministry's target is to reduce the debt-to-GDP ratio from the current 22.5% down to 17.7% in 2021. The lack of fresh issuance, however, already hampers the development of secondary trading in Bulgarian government securities. This year is set to be the first in the last 26 years, which will not see new government bond issuance. Therefore, the yield of 10y Bulgarian government bond already dropped below 0.90%.

Focus article:

Innovation: a lifesaver for the European economy

Economic importance of innovation

Now that economic growth in some parts of the world has eased, the question of what the global economy can structurally improve resounds. Paul Romer, one of the Nobel Prize winners in Economics in 2018, is considered one of the founders of modern growth theory. Growth is achieved through a greater use of production factors, in particular labour and capital. Due to the increasing tightness in many labour markets and a reluctance in most of these countries to alter policies to improve participation rates or increase economic migration, activating a more intensive use of labour seems to be a difficult task. Recent upward wage movements are also gradually increasing the cost of labour. In addition, a greater use of capital - traditionally defined as the whole of business premises, factories, machinery and installations - is also subject to constraints. On the one hand, there are financial constraints, because [corporate debt has increased considerably worldwide in recent years](#). On the other hand, additional investments in the capital stock are only meaningful if sufficient personnel can be recruited for the production process or business operations. The latter is not evident in a tight labour market. The main complaint of entrepreneurs today is that the increasing shortage of skilled employees limits the growth of their businesses. Therefore, we must seek macroeconomic salvation from another growth recipe, which was also emphasized by Paul Romer in his "endogenous growth theory", namely innovation or the creation of new technologies.

In the context of the fourth industrial revolution, where digital technologies are becoming increasingly important in production processes, innovation is one of the essential elements to ensure sustainable economic growth. Innovation is the driving force behind productivity growth and the launch of new products and services. With declining productivity growth in the Western world and increasing competition from emerging economies in a global market environment, innovation is rightly the necessary response of the West, and of Europe in particular, to these challenges. It is therefore difficult to overstate the importance of innovation for our economy.

Measurement of innovation

Innovation is a broad and general concept that requires concrete implementation. The World Economic Forum (WEF) uses a number of principles to determine a country's innovative capacity. For example, a country's ability to innovate depends on the quality of a complex ecosystem. It is not enough for companies and research institutions to invest in research and development (R&D). After all, it is a necessary, but not a sufficient condition for innovation. Equally important is the conversion of R&D into successful products and services or into improving production or management processes. In other words, valorisation or actual implementation is crucial to create economic value from R&D activities. This is often where the shoe pinches. Many countries score relatively high in research activities, but fail to convert research results into new economic activities.

The degree to which a country is innovative is one of the components measured in the Global Competitiveness Index (GCI), the WEF measure that measures a country's competitiveness using twelve pillars. On the basis of the above principles, the WEF compiles two pillars that determine the score for the innovative ecosystem component. The first pillar comprises business dynamics, which include administrative procedures (cost and time of setting up a business, regulatory framework for insolvency, etc.) and business culture (attitude towards entrepreneurial risks, etc.). The other pillar gives a score on innovative capacity. Its subdivisions are: interaction and diversity (diversity of the workforce, international collaborations,...), research and development (R&D publications, patent applications,...) and commercialisation (trademark applications,...). In addition, other GCI components also play an important role in determining the extent to which a country is or can be innovative. These include the implementation of ICT applications, the quality of education, the intensity of competition and the availability of funding.

Complex process

Based on the scores for the innovation capacity pillar (pillar 12 in the GCI), we see that the number of innovation hubs in the world is very limited. Only 4 out of 140 economies achieve a score above 80 out of 100 on the pillar, with 100 representing the ideal situation. Germany (87.5/100), the USA (86.5/100), Switzerland (82.1/100) and Taiwan (80.8/100) are at the top of the ranking, while Haiti (20.3/100), Congo (18.8/100) and Angola (16.8/100) are at the bottom. The global median score on the innovation capability pillar is only 36 out of 100, the lowest across the 12 pillars. Moreover, more than half of the countries studied score worst on this pillar.

The situation within the European Union (EU) is similar. With the exception of Germany, the score on the innovation capacity pillar in all EU countries is lower than their overall score on the GCI (Figure A). Also immediately noticeable are the large differences between the European countries. (South) Eastern Europe still lacks basic infrastructure for innovation, which means that countries score weakly on the twelfth pillar, while their overall score on the GCI is much better. The absolute innovation frontrunner, on the other hand, is Germany. This strong German performance is due to good scores on patent applications, research publications, leading research institutions and relatively sophisticated customers, who constantly challenge companies to innovate. In addition, innovative companies can benefit from a favourable business environment to bring innovative products and services to the market. However, there is still room for improvement in Germany as well. Surprisingly, the country is lagging behind in ICT applications with a score of only 69.3 out of 100 (31st in the global ranking). Also the

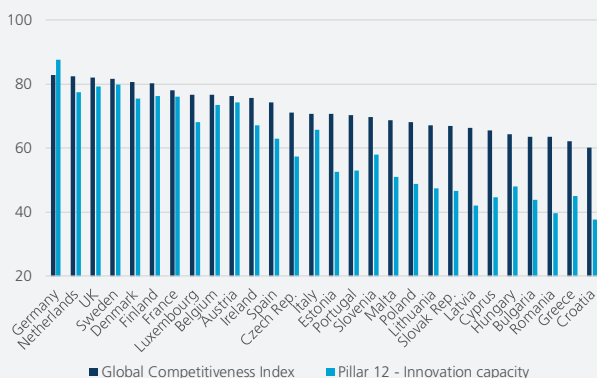
relatively low number of mobile Internet subscriptions and rather weak ICT infrastructure (e.g. internet cabling) require some catching up in Germany.

With the exception of the four top innovators mentioned above, most countries perform poorly in terms of innovation. The WEF attributes this mainly to a lack of valorisation and explains this by the complexity of the innovation process. Innovation starts with ideas of which only a few develop into concrete inventions. In turn, not all inventions are commercialised either. Innovations stimulate economic and productivity growth only when they reach the market and are a commercial success. Any missing factor in the complex ecosystem - e.g. insufficient funding, hampering regulatory framework, etc. - is a key factor in the success of the project. - can cause new ideas not to become valuable commercial products.

Innovation policy: a tangle with a European dimension

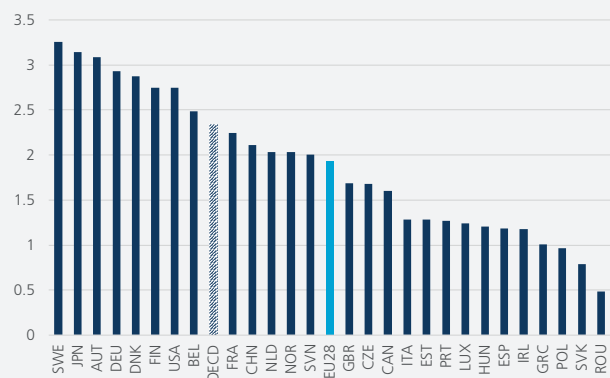
Because of the importance of innovation for economic development, innovation has traditionally been a part of a government's policy agenda. This applies to both the national (and often also regional) and the international level. The European Union, in particular, has been a major driver of innovation in recent years. However, the institutional policy space around innovation for the EU remains very limited. Above all, the EU can create a general framework within which the EU Member States can design their own policies. In 2000, the European Commission launched the Lisbon objectives. The aim was to make the EU the most innovative region in the world. The

Figure A - Global Competitiveness Index scores (score out of 100)



Source: KBC Economic Research based on WEF GCI (2018)

Figure B - Gross domestic spending on R&D (in % of GDP, 2016)



Source: KBC Economic Research based on OECD

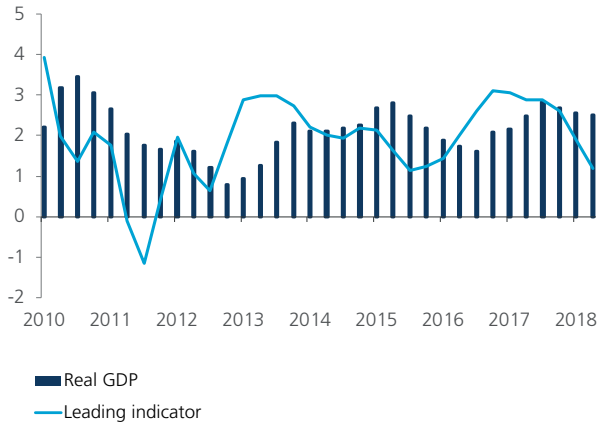
recent WEF scores show that this task is still far from complete. The Lisbon objectives include a concrete focus on spending on research and development. These were to reach 3% of GDP in all EU Member States by 2010. This objective was not achieved at all, with a few exceptions. In 2010, the European Commission reiterated the same objective, albeit somewhat differently packaged, as the 'Europe 2020 strategy'. The most recent state of affairs indicates that the objective has still not been achieved (Figure B). The 3% target is actually ad hoc, but was inspired at the time by the average R&D expenditure in other Western economies, in particular the United States and Japan. These countries did manage to maintain their R&D expenditure at that level. As a result, Europe's lag in terms of productivity growth, new technological sectors, etc. grew.

In addition to European targets for the level of R&D spending, Europe is committed to a general innovation-oriented policy. The focus here is strongly on valorisation, with a number of European initiatives being launched to increase cooperation between European companies and research institutions. The European funding programmes for innovation contribute to this by financing part of the research costs. The current Horizon

2020 programme focuses on strategic research themes that encourage collaboration between researchers from several Member States, as well as collaboration between businesses and universities. In particular, much attention is paid to the participation of SMEs in the entire process. Moreover, the focus is on the social contribution of each project. This programme makes a significant contribution to research and innovation in Europe, with a budget of around €80 billion over the period 2014-2020.

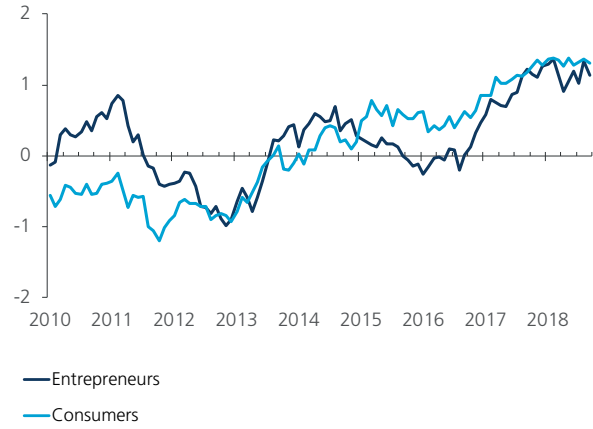
In a free market economy, innovation is primarily a market process. Only if there is sufficient economic return will companies be prepared to invest resources in research and development. Nevertheless, we note that public support at European and national level remains important in practice, especially in order to make up arrears. Funding for research, innovation and valorisation will be crucial in the future to prepare Europe for growing competition on the world market, as well as to mitigate the impact of social and demographic developments.

Figure 1 - Economic activity in the OECD
(annualised quarterly change in %)



Source: OECD

Figure 2 - G4 confidence
(standard deviation from the long-term average)



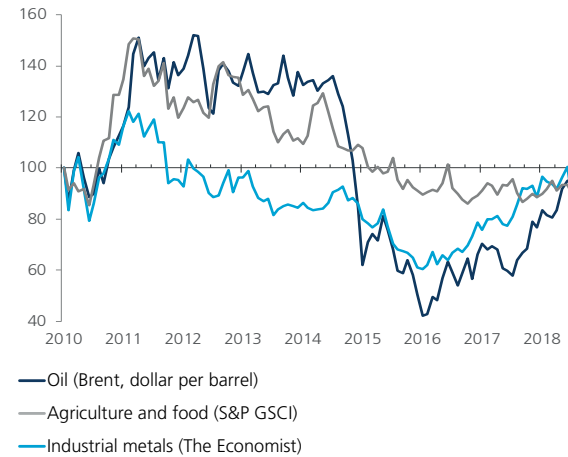
Source: National sources

Figure 3 - Inflation
(consumer price index, y-o-y change, in %)



Source: Eurostat, BLS and OECD

Figure 4 - Commodity prices
(January 2011 = 100)



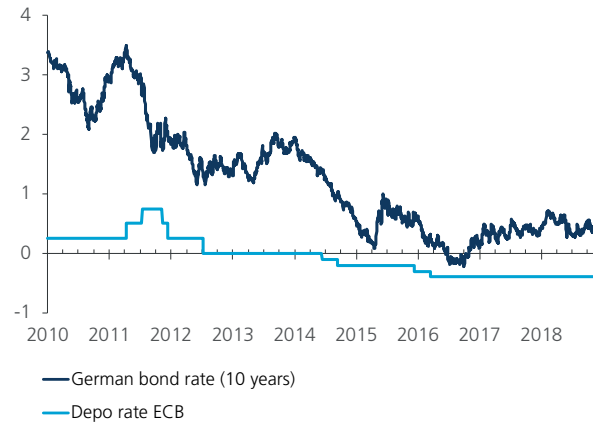
Source: ICIS pricing and S&P

Figure 5 - Interest rate movements US
(in %)



Source: Fed and Datastream

Figure 6 - Interest rate movements euro area
(in %)



Source: ECB and Datastream

Outlook world economies

	Real GDP growth		Inflation	
	2018	2019	2018	2019
US	2.9	2.5	2.5	2.6
Euro area	2.0	1.7	1.8	1.7
Belgium	1.5	1.4	2.0	1.8
Germany	1.6	1.5	1.9	1.9
Ireland	7.0	3.5	0.9	1.6
UK	1.3	1.4	2.6	2.2
Sweden	2.6	2.2	2.0	2.2
Norway	2.4	2.2	2.7	2.0
Switzerland	2.9	1.7	1.0	1.0
Slovakia	3.6	3.7	2.8	2.6
Poland	4.9	3.3	1.3	2.8
Czech Republic	3.0	2.7	2.2	2.4
Hungary	4.2	3.4	2.8	3.3
Bulgaria	3.5	3.4	2.7	3.0
Russia	1.8	1.7	2.9	4.0
Turkey	3.0	0.5	18.0	18.5
Japan	1.1	1.0	1.0	1.0
China	6.3	6.0	2.1	2.2
Australia	2.8	2.8	2.2	2.3
New Zealand	2.9	3.0	1.7	2.0
Canada	2.1	2.0	2.4	2.1
World	3.7	3.6	-	-

	10-year rates			
	12/11/18	+3m	+6m	+12m
US	3.19	3.30	3.30	3.40
Germany	0.38	0.60	0.90	1.15
Belgium	0.82	1.00	1.35	1.70
Ireland	0.96	1.15	1.45	1.75
UK	1.44	1.90	2.00	2.20
Sweden	0.63	0.85	1.15	1.40
Norway	1.99	2.20	2.50	2.75
Switzerland	-0.01	0.20	0.50	0.75
Slovakia	0.99	1.15	1.50	1.75
Poland	3.24	3.40	3.50	3.60
Czech Republic	2.11	2.25	2.40	2.45
Hungary	3.74	3.20	3.35	3.45
Bulgaria	0.93	1.30	1.65	1.95
Russia	8.99	8.60	8.35	8.15
Turkey	16.19	16.00	16.00	15.00
Japan	0.12	0.00	0.00	0.00
China	3.50	3.60	3.60	3.60
Australia	2.72	2.85	2.85	2.95
New Zealand	2.83	2.95	2.95	3.05
Canada	2.51	2.65	2.65	2.75

	Policy rates			
	12/11/18	+3m	+6m	+12m
US	2.25	2.50	2.75	3.25
Euro area (refi rate)	0.00	0.00	0.00	0.05
Euro area (depo rate)	-0.40	-0.40	-0.40	-0.20
UK	0.75	0.75	0.75	0.75
Sweden	-0.50	-0.25	-0.25	0.00
Norway	0.75	0.75	1.00	1.25
Switzerland*	-0.75	-0.75	-0.75	-0.75
Poland	1.50	1.50	1.50	1.50
Czech Republic	1.75	2.00	2.00	2.00
Hungary	0.90	0.90	0.90	0.90
Romania	2.50	2.75	2.75	3.00
Russia	7.50	7.50	7.50	7.25
Turkey	24.00	24.00	24.00	21.50
Japan	-0.10	-0.10	-0.10	-0.10
China	4.35	4.35	4.35	4.35
Australia	1.50	1.50	1.50	1.75
New Zealand	1.75	1.75	1.75	1.75
Canada	1.75	1.75	2.00	2.25

*Mid target range

	Exchange rates			
	12/11/18	+3m	+6m	+12m
USD per EUR	1.13	1.13	1.17	1.19
GBP per EUR	0.88	0.89	0.90	0.91
SEK per EUR	10.27	10.15	9.75	9.50
NOK per EUR	9.53	9.50	9.30	9.25
CHF per EUR	1.14	1.16	1.18	1.20
PLN per EUR	4.29	4.33	4.35	4.40
CZK per EUR	25.94	25.40	25.30	25.10
HUF per EUR	321.68	317.00	317.00	318.00
BGN per EUR	1.96	1.96	1.96	1.96
RUB per EUR	76.12	74.58	76.05	76.16
TRY per EUR	6.13	5.88	6.03	6.49
JPY per EUR	128.23	127.69	132.21	134.47
RMB per USD	6.96	6.97	6.88	7.00
USD per AUD	0.72	0.73	0.74	0.75
USD per NZD	0.67	0.68	0.69	0.69
CAD per USD	1.32	1.29	1.26	1.25

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