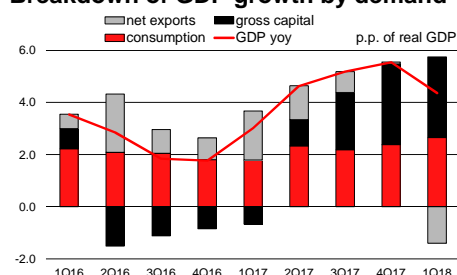


Testing supply-side limits

- In 1Q18, real GDP growth slowed to 0.4% qoq and 4.4% yoy. Domestic demand was powering ahead, whereas foreign demand slowed with exports expanding at the lowest pace since 4Q16.
- High-frequency data published on 2Q18 as yet have been rather on a weaker side of expectations. We nevertheless foresee economic activity to be picking up somewhat towards the end of the quarter. All in all, 2Q18 GDP growth is forecast to slow to 3.2% yoy.
- Signs are mounting that the economy is testing its supply-side limits. The labor shortage is being felt as the most acute problem in the corporate sphere. We expect a gradual slowdown in GDP to 3.5% in 2018 and 2.8% in 2019.
- Tightening of monetary conditions looks very much needed for both 2018 and 2019. We now see a good chance for the first hike to be decided already on 27th June, while another hike may be carried forward from the formerly assumed November. We are keeping our EUR-CZK forecasts at 25.0 for 2018-end and 24.8 for 2019-end, although now the risk is tilted towards a slightly weaker CZK path.

Breakdown of GDP growth by demand*



* / Contributions to real GDP growth in percentage points
Sources: CZSO, UniCredit Research.

In 1Q18, gross capital formation was again the biggest contributor to GDP, with its yoy growth fastest since 3Q15. Final consumption delivered a bit smaller contribution which was nevertheless highest for that component in 14 years. Net exports, in contrast, brought a negative input to GDP growth for the first time since 3Q15. Slowing export demand as well as robust imports stood behind that.

REAL GDP (CONSTANT PRICES OF 2010, ADJUSTED)

	1Q18		4Q17 revised	
	YoY change	% of change in GDP*	YoY change	% of change in GDP*
GDP total	4.4	4.4	5.5	5.5
Household consumption (%)	4.1	1.9	4.3	2.0
Government consumption (%)	3.6	0.7	1.9	0.4
Fixed capital formation (%)	10.5	2.6	8.4	2.1
Change in inventories	-	0.5	-	1.0
Net exports	-	-1.4	-	0.1

Source: Czech Statistical Office. Calculations: UCB CZ.

* / Real GDP in the same period of previous year

Remark: The national accounts are based on chain-linked data, which introduces a discrepancy between GDP and real demand components.

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1Q18: NET EXPORTS FALTERING

In 1Q18, real GDP growth slowed to 0.4% qoq and 4.4% yoy. Domestic demand was powering ahead, with private consumption up 4.1% yoy, government consumption expanding 3.6% yoy and fixed capital formation adding 10.5% yoy. Gross capital grew even by 12.2% yoy, as the inventory stock accumulated in the equivalent of 0.5% of GDP. Foreign demand slowed in contrast, with exports expanding 4.1% yoy, the lowest pace since 4Q16. The combination of robust domestic and poorer external demand turned net exports' contribution to GDP growth negative for the first time since 3Q15, with the magnitude higher than any time since 2Q14. From the production side, all major sectors posted yoy growth. Against the previous periods, the yoy dynamic of gross value added eased in industry (admittedly, more so in mining and electricity production than manufacturing) while boosting in construction. Nominal GDP was up 7.1% yoy, the third highest quarterly dynamic in the cycle. Total employment growth accelerated again to 1.7% yoy. The number of employees added 2.1% yoy, the second highest momentum in the cycle. Compensation of employees hit a double-digit yoy expansion (10.2%), recording 15.1% yoy for sectors dominated by public employment. Gross operating surplus added a much more modest 3.0% yoy. Overall, signs of imbalances creeping in have been spotted but they have not yet got out of control.

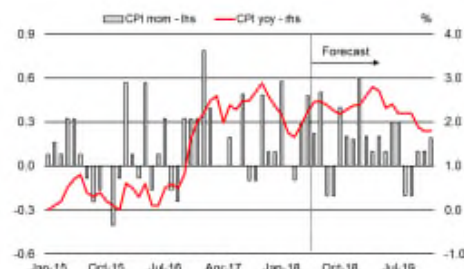
2Q18: A SLOWER START

High-frequency data published on 2Q18 as yet have been rather on a weaker side of expectations. April industrial output reported a 5.5% yoy expansion which, working days-adjusted, came in at -0.2% yoy. Looking at a combined March-April picture, which should remove the Easter break as well as working-day effects, industrial output grew at a sluggish 2.0% yoy while industrial orders saw a 0.5% yoy decline. Trade surplus improved in yoy terms by CZK 4bn in April while deteriorating by CZK 3bn in the March-April period. Construction output added 7.7% yoy in April (3.8% seasonally-adjusted) with business expanding just in the construction of buildings and not in civil engineering. Retail sales (ex-car) increased by 5.6% yoy in April and 4.6% yoy in the March-April period, both figures looking slightly less dynamic as compared to previous months. New (passanger+LUV) car registrations rose 7.8% yoy in April but declined 4.0% yoy in May. VAT income growth for the first five months of the year was reported at a still very firm 9.5% yoy. We expect economic activity to be picking up somewhat towards the end of the quarter. All in all, 2Q18 GDP growth is forecast to slow to 3.2% yoy. The qoq dynamic should hence post 1.3%.

2018-2019: MIND THE LABOR MARKET

Signs are mounting that the economy is testing its supply-side limits. In manufacturing (as reported by PMI), the order flow remains healthy but suppliers' delivery times are at all-time highs. While price negotiations

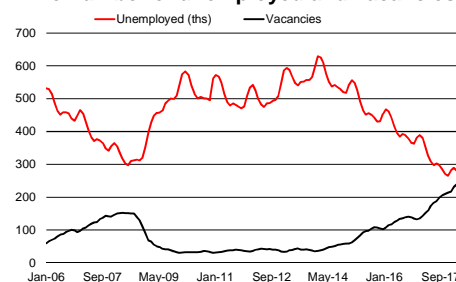
CPI – history and outlook



Sources: CZSO, UniCredit Research.

Inflation jumped above the 2% CNB target in May and is set to remain there until at least late-2019. This will be partially due to inflationary pressures affecting a part of the consumer basket, particularly services. Price pressures in services may persist even after the price spike for volatile items such as food and energy subsidies.

The number of unemployed and vacancies



Sources: CZSO, UniCredit Research.

The all-time low in the number of unemployment and the all-time high in the number of vacancies illustrate overheating of the Czech economy. In May, the unemployed-to-vacancies ratio declined to 0.81. Unemployment rate will hardly go further down. Economic growth will need to rely more on productivity gains in 2018-2019.

would be a natural reaction in such a situation, there is a limited scope for price increases within supply chains where final prices are set abroad. Therefore, an increasing number of companies report turning down some orders because of supply constraints.

The labor shortage is being felt as the most acute problem in the corporate sphere. In April, the ILO-based unemployment rate hit 2.3%, the lowest in the EU. Moreover, more job vacancies than unemployed have been reported since April. Some manufactures face decreasing productivity, which they attribute to lower quality of marginal employment. An additional reduction of unemployment rate cannot be relied upon as a source of human capital. There are two sources to alleviate this constraint – imports of labor force and a higher participation in the 60–65 age group – both of them with minor impact. We expect employment to grow by just 0.6% in 2018 – a third of its (highest-in-the-cycle) 2017 growth – its growth slowing further in 2019.

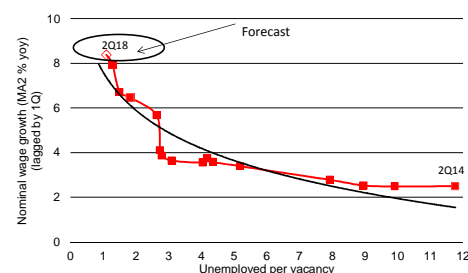
The overheated labor market puts a pressure on nominal wage growth, which we project to hit 8.2% in 2018, a decade-high, easing only moderately to 6.8% in 2019. The pressure is being exacerbated by double-digit salary rises in all sectors dominated by public institutions. Moreover, trade unions want the minimum wage to rise by 15% in 2019 after growing 10.9% in 2018. If the government agrees in August, private-sector wages will come under additional pressure.

Tight labor market conditions are driving consumer sentiment to all-time highs. That said, private consumption growth lagged real wages dynamics in 1Q18 (4.1% yoy vs 6.6% yoy). The growing debt service of mortgage borrowers is one explanation of cautious spending by consumers. Nevertheless, households are likely to start catching up with their purchasing power growth in the coming quarters, lifting 2018 private consumption growth to 4.3% yoy. At 3.8%, household spending growth is projected to stay elevated also in 2019.

Besides consumption, capital spending could be a strong driver of GDP growth. Businesses are expected to invest in machinery in order to boost productivity, whereas construction investment should benefit from a recent inflow of orders for infrastructure as well as housing projects. Two key factors cooling off the investment boom may be administrative obstacles and a lack of human resources for construction companies. Our forecasts for fixed capital formation stand at 6.7% in 2018 and 3.5% in 2019.

Exports are set to face more challenges alongside global trade concerns and the signs of saturation in car demand in Europe. In fact, new orders at Czech transport equipment producers have been on the brink of stagnation since mid-2017. Industrial output held up well until recently but has also hit a soft patch, dragged down, above all, by the sector of transport equipment. Going forward, we rather see an extension of the soft patch as a risk than the baseline scenario. Robust domestic demand combined with slower export growth will translate into a negative contribution of net exports to GDP in 2018 and probably also 2019. In total, we expect a gradual slowdown in GDP to 3.5% in 2018 and 2.8% in 2019.

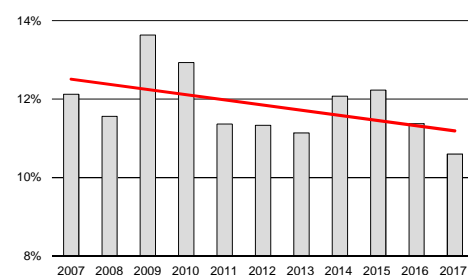
Phillips curve for wages



Sources: Macrobond, CZSO, UniCredit Research.

The Phillips curve for wages remains firmly exponential as a result of an extremely tight labor market. Nominal wages accelerated to 8.6% yoy in 1Q18 and are predicted to exceed 8.0% also for full-2018.

Household saving ratio



Sources: CZSO, UniCredit Research.

Households show a pro-cyclical behavior as regards their saving and consumption. In times of high unemployment, households tend to save a larger portion of their disposable income, while under low unemployment they save less. In 2017, household saving ratio was the second lowest in twenty years (after 2004). Indeed, the lower the saving ratio gets now, the deeper the cuts in consumption are needed when the economy slows.

CNB POLICY: TIGHTENING IS VERY MUCH NEEDED

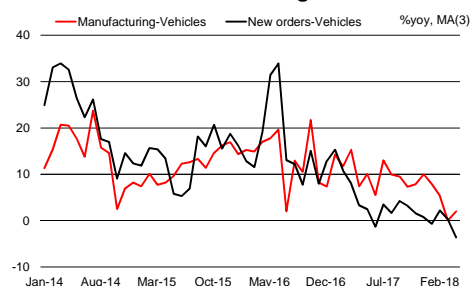
Headline inflation is now seen slightly above the 2% CNB target rate for the rest of 2018 as well as for much of 2019. Reasons for a moderate upward revision of our 2018 forecast from three months ago include higher crude oil prices and a slightly weaker CZK. Demand-pull inflation, materializing above all in the segment of services, will remain an issue but probably not more than previously assumed. Tightening of monetary conditions looks very much needed for both 2018 and 2019. With the CNB's scenario of a currency appreciation failing to materialize so far, there is more urgency to utilize the interest rate channel for monetary tightening. We have been long communicating a call for a hike in August, followed by another 25bp rate increase later in 2018 (possibly in November) and two more hikes in 2019. We now see a good chance for the first hike to be decided already on 27th June, which may also carry forward a bit the assumed November hike. We are keeping our EUR-CZK forecasts at 25.0 for 2018-end and 24.8 for 2019-end, although now the risk is tilted towards a slightly weaker CZK path. On the one hand, the CNB FX interventions from 2013-2017 still affect CZK value negatively, on the other hand, wider CZK-EUR interest rate differential may support it. What may then decide is an upward drift in EUR-USD, which UniCredit Group expects and which should bolster the CZK.

FOCUS: IS THERE ANY SEASONALITY LEFT IN THE SEASONALLY-ADJUSTED GDP DATA?

As a striking feature of the series of seasonally-adjusted Czech GDP qoq data, Q2 dynamics are often higher compared to other quarters. Four times in the last ten years, Q2 was the best-performing period. Statistical mean is highest for Q2 in all considered time samples, i.e. 2000-2017, 2010-2017, 2013-2017. How to explain this? Arguably, seasonal adjustments made by the Czech Statistical Office may not be perfect, leaving some seasonality in the adjusted series. If so, analysts should be aware of this when making GDP forecasts, otherwise they would produce biased estimates. However, the empirical observation may as well just stem from noise and not show any statistical significance.

We therefore carried out some testing to see how statistically robust the deviation in GDP dynamics between individual quarters might be. First, the tests of hypothesis about equality of means and medians between quarters did not show any evidence of different average or median growth rates in respective quarters. Second, neither F-test of seasonality showed significant results. However, a regression of intercept and seasonal dummy (1=2Q, 0=otherwise) on GDP with AR(1) process of residuals showed the 2Q effect to be statistically significant at 5% in sample 2010-2017 and at 7% in 2013-2017. All standard OLS assumptions were met, so the outcomes seem reliable. We are hence cautious in our interpretation. On the one hand, finding any significance in such a short time series could mean the Q2 data are indeed biased. On the other hand, we are aware of an extraordinarily high 2Q17 figure, which could have influenced the tests. Anyway, we do take this data peculiarity into account when making our 2Q18 forecast.

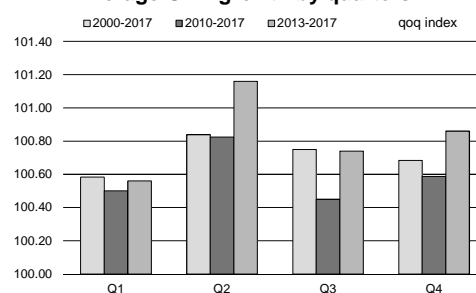
Production and new orders in car manufacturing



Sources: Macrobond, UniCredit Research.

Stagnation in car manufacturing new orders, in place since mid-2017, has been followed by slowing momentum in car manufacturing output lately. This comes as no particular surprise. We have long been pointing out at a potential saturation of car demand in the EU. The Czech economy is nevertheless losing an important growth driver, as car production made directly 5.6% of GDP in 2016 and as much as 13% if the whole chain of suppliers was included.

Average GDP growth by quarters



Sources: CZSO, UniCredit Research

The 2Q stands out among the quarters in displaying higher GDP qoq dynamics on average than the others. Statistical testing suggests that this peculiarity may not be just a coincidence, which leaves imperfect seasonal adjustment in the data as a possible explanation. However, due to a short sample and high variance, the statistical evidence is rather weak.

Czech Republic Macroeconomic Outlook

	2015	2016	2017	2018 forecast	2019 forecast
GDP growth (real yoy change, %)	5.4	2.5	4.6	3.5	2.8
Household consumption (real yoy change, %)	3.7	3.5	4.0	4.3	3.8
Gross fixed capital formation (real yoy change, %)	10.4	-2.5	5.9	6.7	3.5
Industrial output (real yoy change, %)	4.3	3.4	6.5	3.0	2.5
Unemployment rate (average, %)	6.5	5.5	4.2	3.2	3.2
Inflation rate (CPI yoy change, average, %)	0.3	0.7	2.5	2.2	2.3
Average wages (nominal yoy change, %)	3.2	4.4	6.2	8.2	6.8
Interest rates (3-M PRIBOR, end of period, %)	0.29	0.28	0.75	1.40	1.90
Interest rates (3-M PRIBOR, average, %)	0.31	0.29	0.41	1.05	1.65
EUR/CZK exchange rate (end of period)	27.03	27.02	25.54	25.00	24.80
EUR/CZK exchange rate (average)	27.28	27.03	26.33	25.40	24.90
Current account balance (% of GDP)	0.2	1.6	1.1	0.8	0.7
FDI net inflow (% of GDP)	-1.1	3.9	2.7	2.8	2.5
General government balance (% of GDP)*	-0.6	0.7	1.6	0.8	-0.2
Public debt (% of GDP)	40.0	36.8	34.6	32.1	31.0

Remarks:

* / ESA 2010 definition.

Sources: Czech National Bank, Czech Statistical Office.

Forecasts: UniCredit Bank CZ.

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