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Fast economic growth and outperforming labour market

Macroeconomic forecast for 2016 – 2019

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Slovak economy will sustain a solid growth of 3.6 per cent this year, with private consumption and net export being the main drivers. The labour market will experience solid momentum with the creation of almost 50 thousand new jobs. Real wage growth will exceed the 3 per cent threshold for the second year in a row. Inflation will be recovering very slowly over the medium-term. Next year the economy will continue to grow at a robust pace of 3.5 per cent, despite a moderate impact of Brexit on the Eurozone economy.

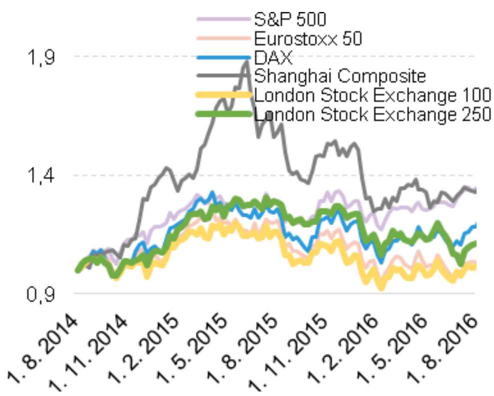
Central banks move in different directions

The rhetoric of the Fed indicates an interest rate hike at year-end, after a one-year pause. The expected hike is supported by a robust labour market, while the inflation remains far from target. **The ECB sticks to wait and see policy.** Even though the quantitative easing programme, after several adjustments, has not yet brought the expected price growth, no significant steps will probably be taken by year-end. **Bank of England has adopted stabilization measures.** It reacted to the results of the UK referendum by lowering the deposit rate by 25 bp to 0.25 per cent and by expansion of the asset purchase scheme.

Brexit without immediate significant effects

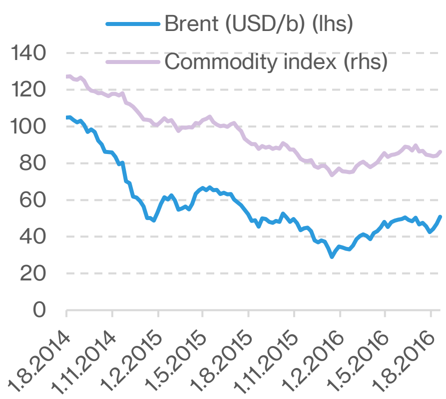
European markets have recovered from the referendum results, though its consequences for the future remain uncertain. Equity markets have stagnated due to weak growth in Europe and increased geopolitical risks. Yields of European government bonds fall for the same reasons. The pound has dropped and fluctuates around £1.33 per USD, which helps firms incorporated in the UK and generating profits overseas. **Oil price has stabilized below 50 USD per barrel.** Commodity index rose, driven by prices of agricultural commodities, gold and iron.

Fig. 1: Stagnation of stock indices



Source: Bloomberg

Fig. 2: Brent oil prices and other commodities



Source: Bloomberg

Russia and Brazil stabilised

The world economy continued to grow despite economic and political challenges. The Eurozone has returned to the previous growth rates after an exceptionally strong first quarter. The US economy has also recorded a solid growth. On the other hand, Japanese GDP growth has not met expectations. The economies of developing countries have shown some positive signs. China continued in a robust growth, while the economies of Russia and Brazil have shown signs of stabilization following a slight oil price increase.

Stagnation in France and Italy

Growth in Eurozone slowed down in the second quarter in line with expectations. Foreign trade has significantly contributed to growth, while domestic consumption and investment have slowed down. Among large economies Germany and Spain confirmed strong growth momentum. On the other hand, stagnation in France and Italy was rather disappointing. The impact of Brexit on economic indicators has not been observed yet. The Eurozone still faces low inflation and weak productivity growth.

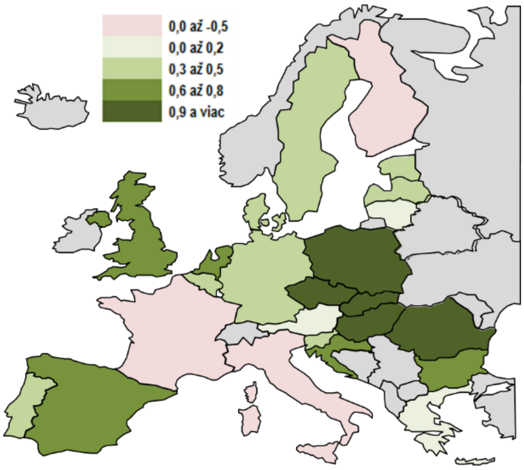
Growth in V4 region spurs again

Growth in V4 countries was among the fastest in the EU. Hungary and Poland returned to growth after a drop in 1Q and the Czech economy accelerated. This confirmed the assumption that the regional slowdown in the first quarter was only temporary and the solid growth will continue throughout the year.

Slowdown in Eurozone

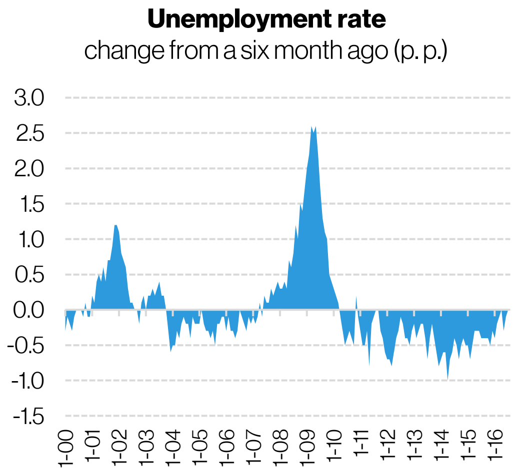
Falling leading indicators suggest a slowdown of growth in the Eurozone. Growth in both the Eurozone and Germany will exceed 1.5 per cent only marginally this year. V3 countries will see a slight correction from the last year's EU-funds driven growth. Slow down of the US economy, geopolitical situation and fragile banking sector in Italy and Portugal represent key downside risks in the external environment.

Fig 3: QoQ GDP growth in EU countries



Source: Eurostat, IFP

Fig 4: US labour market stabilised at a new equilibrium



Source: FRED, IFP

External environment worsens next year due to Brexit

Brexit lowers the expected growth of Slovakia's main trading partners in 2017. Compared to previous assumption the GDP of our main trading partners will be lower by 0.1 p.p. Core Eurozone countries will be the most affected. The impact on V3 countries will be compensated by their improved fundamental situation and the total impact on the forecast is therefore neutral[1]. **Expectation of growth of trading partners have not changed for this year**, with the exception of a slightly improved outlook for Poland and Hungary. Likewise the forecast of foreign demand has not changed, as slower German imports are compensated by an increase in the V3 countries. The assumptions concerning the external demand were based on the medium to pessimistic scenario from the July IFP brief on Brexit[2], taking into account the results from the second quarter of 2016[3] and nowcasting of the Eurozone. Assumptions covering the external environment, interest rates and commodity prices are based on information available by the end of August.

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[1] Assumption is in line with the most recent forecasts of the regional central banks.
[2] IFP, 2016: „Čo prinesie Brexit?" http://www.finance.gov.sk/Default.aspx?CatID=11174
[3] For selected countries the 2016Q2 data included.

Table 1: External environment in 2016-2019

	GDP (per cent growth)					Diff. from June 2016					Import (per cent growth)					Diff. from June 2016				
	2015	2016	2017	2018	2019	2015	2016	2017	2018	2019	2015	2016	2017	2018	2019	2015	2016	2017	2018	2019
Important trading partners of SR	2,2	1,9	2,0	1,9	1,9	0,0	0,0	-0,1	-0,1	0,0	5,7	5,2	4,8	4,4	4,5	0,0	0,0	-0,2	-0,1	0,0
Eurozone*	1,6	1,7	1,5	-	-	0,0	0,0	-0,2	-	-	4,5	3,7	4,0	-	-	0,0	0,0	-0,5	-	-
Germany	1,7	1,6	1,4	-	-	0,0	0,0	-0,2	-	-	5,3	4,2	4,7	-	-	0,0	-0,3	-0,5	-	-
Czech Republic	4,2	2,5	2,7	-	-	0,0	0,0	0,0	-	-	8,2	6,7	5,9	-	-	0,0	0,2	0,0	-	-
Poland	3,4	3,2	3,4	-	-	0,0	0,2	0,0	-	-	4,9	6,6	6,4	-	-	0,0	0,2	-0,1	-	-
Hungary	2,6	2,2	2,5	-	-	0,0	0,2	0,0	-	-	6,9	5,3	5,1	-	-	0,0	0,3	0,0	-	-

* Eurozone weighted by volume of Slovak exports

Source: OECD , Bloomberg, IFP

Economy will grow 3.6 per cent this year

Slovak economy will grow by 3.6 per cent this year. GDP growth in the second quarter was driven by the domestic demand, exceeding the expectations from June´s forecast. We expect a swift pace of growth throughout the remainder of the year. **The structure of the growth will be balanced this year.**

Household consumption at eight year maximum

Private consumption will grow at a fastest pace in 8 years due to favorable economic development. Car production in Slovakia is expected to post a new record this year, which will result in export growth above 5per cent. Slower absorption of EU funds will lead to lower public investment. The drop will be however fully compensated by announced investment in the automotive sector (JLR, VW and PSA) and the construction of Bratislava highway D4/R7. We expect that the **announced investment will be concentrated in the last quarter of the year.**

Brexit lowers growth in 2017 by 0.2 p.p.

Slovak economy will grow at a solid 3.5 per cent pace in 2017 despite Brexit. Export performance will improve, although it will be dampened by the situation in the external environment as a result of the UK exit from the EU. Brexit will increase the overall uncertainty and will slow down the economies of key trading partners. **We assume that Brexit will decrease the growth of Slovak economy by 0.2 p.p in 2017.** Investment activity will accelerate significantly as a result of the continuing construction of JLR and VW car plants as well as D4/R7. Public investment will also return to growth. The gradual recovery of inflation will reduce the growth of real wages and consequently household spending. **The impact of tax and social security measures on the economy in 2017 will be negligible.**

Growth will accelerate in 2018 and 2019

In the medium term horizon we expect a gradual acceleration of the economic growth to 3.9 per cent in 2018 and 4.4 per cent in 2019. New production in JLR and VW plants will spur the export.[4] The moderation of the pace of investment reflects mainly the fadeout of the one-off factors in the automotive industry. However, the ongoing accommodative monetary policy will boost credit financing, which will bring the dynamics of core investment[5] closer to the potential growth. Growth of private consumption will slightly overtake the growth of gross disposable income with the assumption of a gradual decrease of the saving rate. **The package of tax and social security measures will lower the GDP growth in 2018 by 0.1 p.p. Its impact in 2019 is negligible.**

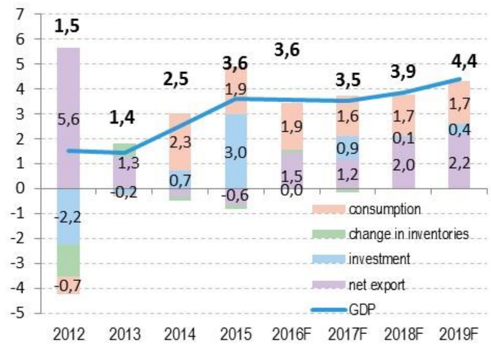
[4] Considering the former automotive investment dynamics we expect the JLR initial production to be similiar and solid.
[5] Investments adjusted for public sector and one-offs.

MF SR FORECAST - MAIN ECONOMIC INDICATORS (September 2016)

indicator (growth in per cent unles otherwise noted)	actual	forecast				diff. from June 2016			
	2015	2016	2017	2018	2019	2016	2017	2018	2019
Gross domestic product									
GDP, real	3,6	3,6	3,5	3,9	4,4	0,4	-0,2	-0,2	-0,2
GDP, nominal (bn €)	78,1	80,5	84,0	88,5	94,2	0,1	-0,4	-0,9	-1,3
Private consumption, real	2,4	2,9	2,5	2,7	2,9	-0,2	0,1	0,0	0,0
Private consumption, nominal	2,2	2,4	3,4	4,4	4,9	-0,3	-0,3	-0,1	-0,1
Public consumption	3,4	1,8	1,7	1,3	1,1	1,6	0,0	0,0	-0,1
Fixed investments	14,0	-0,1	4,0	0,5	2,0	-0,2	-0,1	-0,4	0,0
Export of goods and services	7,0	5,5	5,8	7,3	7,7	1,3	-0,2	-0,2	-0,8
Import of goods and services	8,2	4,2	4,9	5,8	6,3	1,7	-0,1	0,0	-0,3
Labour market									
Employment (registered)	2,1	2,1	1,5	1,1	0,9	0,4	0,5	0,0	0,0
Wages, nominal	2,9	2,8	3,5	4,3	4,8	-0,4	-0,8	-0,2	-0,3
Wages, real	3,3	3,3	2,6	2,7	2,8	-0,1	-0,4	0,0	-0,1
Unemployment rate	11,5	9,8	8,5	7,4	6,4	0,1	-0,2	-0,1	-0,1
Inflation									
CPI	-0,3	-0,5	0,9	1,6	1,9	-0,2	-0,4	-0,2	-0,2

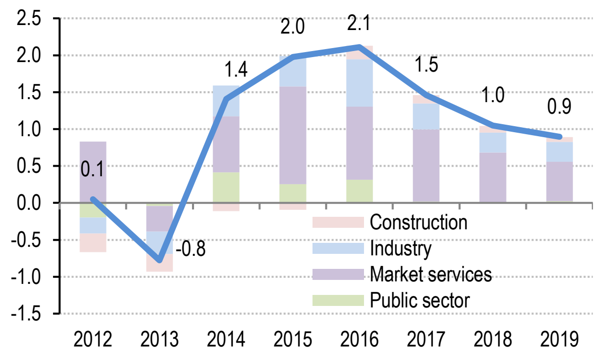
Source: SO SR, IFP

Graf 5: Contributions to GDP (p.p.)



Source: SO SR, IFP

Graf 6: Contributions of sectors to employment growth (p.p)



Source: IFP

Economy will add 50 thousand jobs

Employment will continue to grow in 2016 by 2.1 per cent, adding more than 48 thousand new jobs to the economy, more than in the last year. Growth will be vivid across all sectors. We expect a strong employment growth by 1.5 per cent in 2017, driven by private sector and, especially, by market services. In the following years, we expect a normalization of the relationship between GDP and employment, which will continue to grow by circa 1 per cent. **The unemployment rate will drop to 9.8 per cent this year** and it will reach a historic minimum in early 2017.

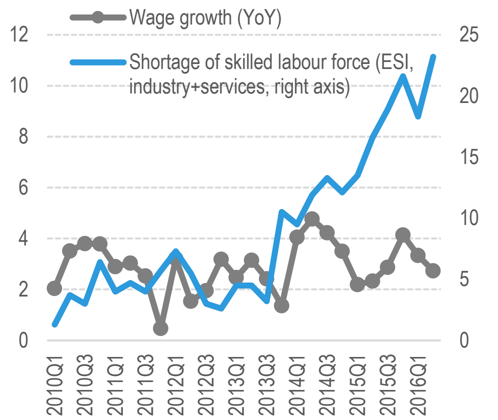
Average wage reaches 908 eur

The average nominal wage will grow by 2.8 per cent this year and will reach 908 euros. We expect a strong (above 4 per cent) wage growth in construction and the public sector. On the other hand, wages in market services will grow at a moderate pace. **Real wage growth will, due to deflation, exceed 3 per cent,** repeating the last year's performance. In 2017, the nominal wage growth will accelerate to 3.5 per cent and will reach 940 euros. In the following years we expect further acceleration above 4 per cent in line with inflation and productivity growth.

Deflation deepens

Deflation will post the record low in 2016, as prices will decline on average by 0.5 per cent. Deepening of the deflation is caused mainly by extraordinarily low food prices development as well as a slow price growth of tradeable goods. Inflation rate will approach zero only at year-end.

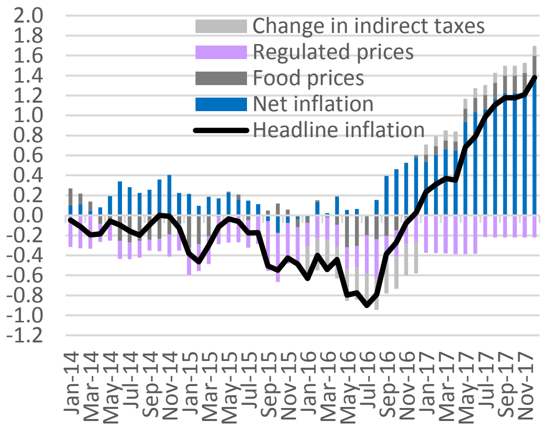
Fig. 7: Wages don't react to a lack of qualified workforce (lhs per cent)



Source: SO SR, IFP

Note: ESI = Economic Sentiment Indicator

Fig. 8: Inflation and contributions of individual components (p.p.)



Source: SO SR, IFP

Inflation recovers only gradually

Price growth in 2017 will be driven mainly by demand-pulled inflation. The impulse to return to positive figures will stem from the peaking quantitative easing programme. On the other hand, fall in energy prices (gas, electricity and heat for households), expected on the back of future contracts on European commodity markets, will have a dampening effect on inflation. Food prices will grow slowly over the medium-term horizon, as we consider the positive development on the global markets as structural to a large extent. Prices of market services will grow the fastest. **Inflation will return to ECB target only at the end of 2019.**

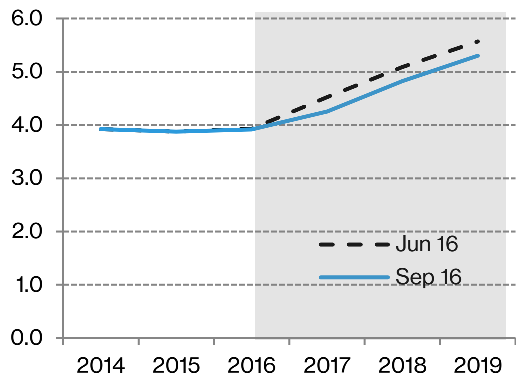
Macroeconomic risks are balanced

The risks of the macroeconomic forecast are balanced. In the external environment the negative risk is posed by an escalation of geopolitical tensions (Ukraine conflict, situation in Turkey), as well as the premature interest rate hike in the USA with a negative impact on the American labour market; and the instability of the banking sector in Italy and Portugal. **Positive risks** stem from delayed, but stronger impact of QE on the domestic demand in the Eurozone, as well as from **postponed Brexit decision and its weaker impact on the economy of the Eurozone and the UK**. In the domestic environment the positive risk is the decrease of extraordinarily high households' savings and potential acceleration of household consumption. The overheated labour market may bring additional pressure on wage growth in the private sector.

Lower inflation dampens the tax bases forecast

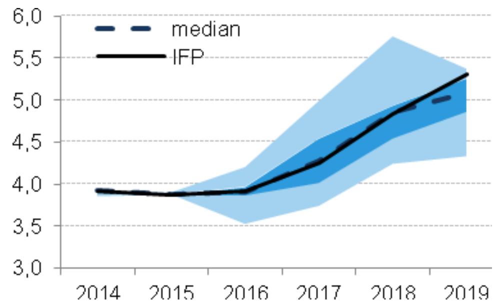
The overall impact of the update of the macroeconomic forecast on the tax bases is negative over the medium-term with the exception of 2016. Downward revision is caused by sluggish inflation development, which dampens the growth of all nominal indicators, together with expected lower real GDP growth. The overall impact of the macroeconomic forecast on the estimate of taxes and social contributions will be subject to discussion on the Tax forecast Committee on September 22, 2016.

Fig. 9: Macroeconomic tax bases growth compared to previous forecast



Source: IFP

Fig.10: Comparison of forecasts of macroeconomic bases[6] with the members of the Macroeconomic Forecasts Committee



Source: IFP

Forecast evaluated as realistic by all members of the Committee

The medium-term forecast prepared by the MF SR was discussed at a session of the Macroeconomic Forecasts Committee on September 14, 2016. The medium-term **forecast was evaluated as realistic by all members of the Committee** (NBS, ČSOB, Infostat, SLSP, Tatrabanka, Unicredit, VÚB and Sberbank). The detailed macroeconomic forecast, as well as the minutes from the meeting and supporting materials are available on the IFP website.

[6] Macroeconomic basis for the budget revenues (weight of indicators depends on the proportional share of the particular tax on the total tax revenues); Wage base (employment x nominal wage) – 51,1per cent; Nominal private consumption – 25,7per cent; Real private consumption – 6.6per cent; Nominal GDP growth – 9.9per cent; Real GDP growth – 6.7per cent.

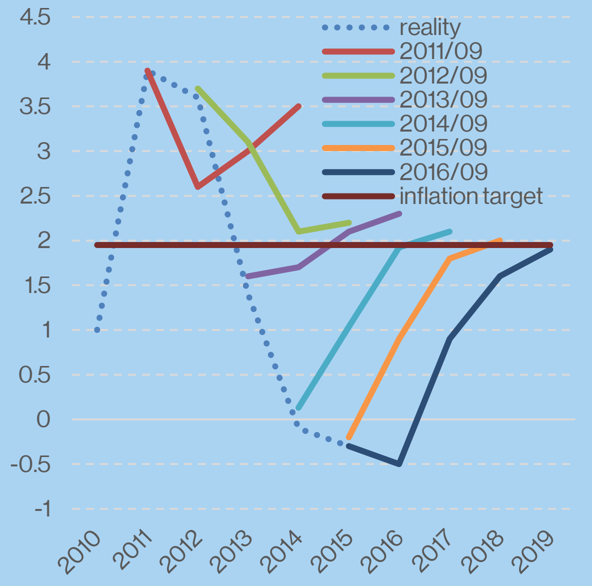
BOX: Will the inflation rate reach the target?

The probability that the inflation will reach 2 per cent in spring 2018 is very low in Slovakia (i.e. 15 per cent). Instead, the inflation will recover only gradually. MF SR reduces the inflation forecast over the medium-term.

At the beginning of 2014, economic analysts had been evaluating the risks of deflation in Slovakia. At that time, the probability of deflation had seemed to be negligible. Nevertheless, the deflation became reality and from January 2014 prices (y-o-y) are continuously falling.

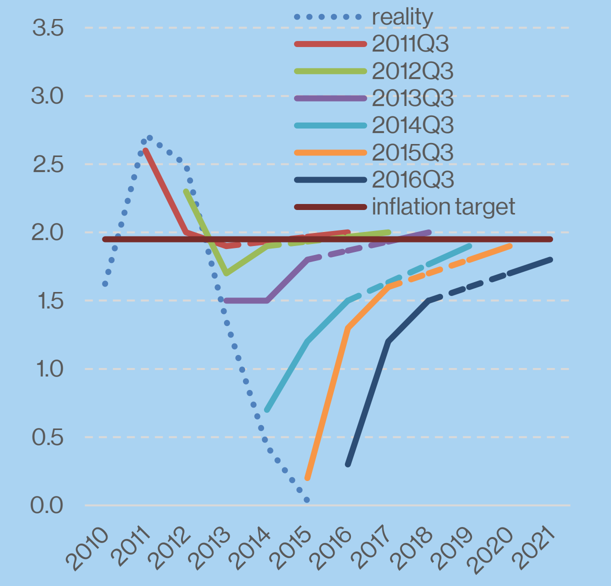
To hit the inflation target of 2 per cent, ECB started in March 2015 the quantitative easing programme (QE). By now effects of QE have not met the expectations. Hence, together with the absence of link between domestic labour market and prices of services, **MF SR repeatedly revised the inflation forecast downwards** (Figure A). **Similarly, global analysts reduced their forecast for the whole Eurozone** (Figure B). **Yet, the medium-term inflation expectations have remained anchored close to the inflation target** (see the Survey of Professional Forecasters, SPF, 2016Q3).

Figure A: Inflation forecast by MF SR (per cent)



Source: SO SR, IFP

Figure B: Euro area HICP forecast by SPF (per cent)



Source: SPF

Thus, **we analysed whether the anchored inflation expectations are consistent with the forecast of other macroeconomic variables.** We propose a simple probit model with endogenous binary variable equal to one, when the inflation rate exceeds the level of 2 per cent. Otherwise, the binary variable equals to zero. We aim to estimate the probability that the inflation rate will exceed the 2 per cent in next seven quarters, conditional on the forecast of other macroeconomic variables.

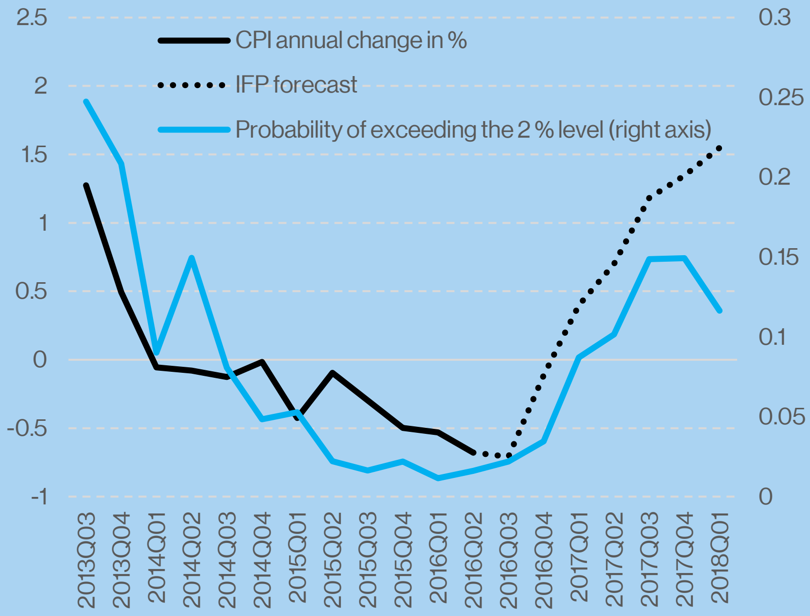
Considering various models, we use following statistically significant variables: foreign prices to capture external shocks; compensation of employees to control for the domestic demand; and food prices. Additionally, we use the HP-filter to adjust foreign prices for shocks already captured by the food price dynamics. We estimate the following probit model:

$$b(CPI_t) = \beta_0 - \beta_1 {*} d(EURSKK_{t-1}) {*} HP\_HICP\_EA_{t-1} - \beta_2 {*} COMPEN_t - \beta_3 {*} FAO_{t-2} + \varepsilon_t$$

- $b(CPI_t)$: binary variable constructed from Slovak CPI at time t;
- $d(EURSKK_{t-1}) {*} HP\_HICP\_EA_{t-1}$: foreign inflation (y-o-y) based on HICP for euro area at time t-1, HP-filtered and multiplied by the EURSKK exchange rate;
- $COMPEN_t$: compensation of employees growth rate (y-o-y) at time t;
- FAO_{t-2} : food inflation (y-o-y) at t-2.

Using the forecast of explanatory variables, we estimate the probability of reaching 2 per cent inflation in spring 2018 reaching only 15 per cent. Thus, the inflation recovery is going to be only gradual and we revise the inflation rate forecast downwards throughout the whole medium-term forecasting period (Figure C). According to the latest prediction, the inflation rate will approach the level of 2 per cent only in late 2019.

Figure C: CPI growth rate and the probability of exceeding the 2 per cent inflation rate



Source: SO SR, Eurostat, IFP