September 20th, 2018

Investment-intense growth to be upstaged by exports next year

Macroeconomic forecast 2018 – 2021

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The Slovak economy is projected to accelerate to 4.1% this year, fuelled mainly by investment in the automotive industry and in the public sector. The economy is expected to add 47 thousand jobs, as labour market grows tighter and exerts upward pressure on wages and prices. In 2019 the economy will gather speed further, owing to exports in the automotive industry, easing to its long-term potential thereafter. The anticipated public sector wage growth will prop up nominal household consumption, and along with dynamic private sector wage growth will favourably impact the tax macro bases over the medium-term.

Investment and export as main engines of growth

The Slovak economy is set to rise by 4.1% this year on the back of revived export activity and investment, replacing household consumption as the main growth driver. Export activity is firming thanks to new automotive production capacities in Volkswagen (VW). In the meantime, the upsurge in investment is driven by Jaguar Land Rover (JLR) investments, as well as acceleration in public investment, mainly at the municipal level.

Economy to reach its post-crisis peak next year

Next year economic activity is projected to firm further to 4.5%. Household consumption will continue supporting growth like in the previous years, buttressed by dynamic wage growth. The impact of the latter on real household consumption will be limited due to the cyclical position of the economy, and will feed particularly in price growth. In addition, the remaining components of disposable household income will increase more slowly than the wage base. All in all, next year's growth will be led by exports, which will accelerate thanks to the onset of new JLR and VW production capacities. Investment activity is projected to lose steam again, as new automotive capacities are completed, except core investment[1] which is to retain its dynamics.

Growth to moderate only slightly in 2020, fuelled by onset of JLR production

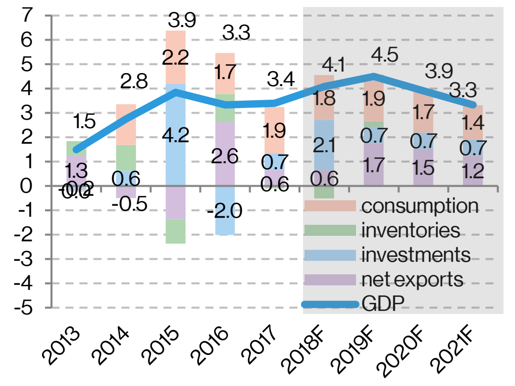
Growth is expected to ease below four per cent in 2020, as supportive factors related to new automotive production wear off. JLR may support the economy by deciding to produce an additional model but export growth will be hindered by the cyclical position of Slovakia's key trading partners. The cyclical slowdown will be also reflected in curbed investment activity. Meanwhile, household consumption will continue benefitting from strong labour markets, while rapid public sector wage growth will translate mostly into consumer price inflation.

Growth will level off at its potential

The expansion will cool close to 3.3% at the end of the medium-term forecast horizon, as the output gap begins to close (Box 2). Export performance will be affected by foreign demand wavering around the lower bound of its long-term potential. Household consumption will tumble as wage dynamics cools off. Sluggish private investment is to be partly offset by improved public investment (the latter owing to the approaching end of the third EU funds programming period). We project EU funds to more substantially support public investment and drive economic growth past the current forecast horizon.

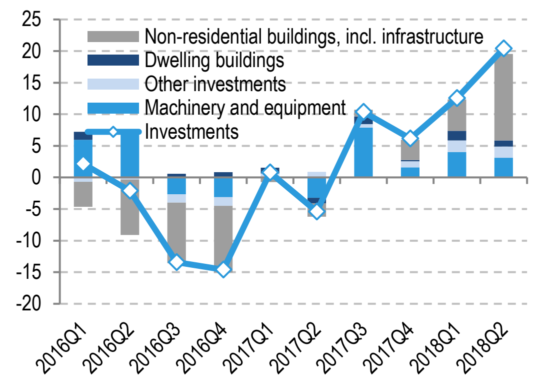
[1] Private investments less JLR and D4/R7.

Figure 1: Contributions to GDP growth (in p.p.)



Source: IFP

Figure 2: A positive surprise in investments (in per cent, y-o-y)



Source: IFP

MF SR FORECAST - MAIN ECONOMIC INDICATORS (Sep 2018)

indicator (growth in % unless otherwise noted)	actual	forecast				diff. from Jun 2018			
	2017	2018	2019	2020	2021	2018	2019	2020	2021
Gross domestic product									
GDP, real	3.4	4.1	4.5	3.9	3.3	0.0	0.0	0.0	0.0
GDP, nominal (bn €)	85.0	90.5	96.9	103.2	109.3	0.0	0.2	0.3	0.4
Private consumption, real	3.7	3.0	3.2	2.8	2.4	-0.4	0.0	0.0	-0.1
Private consumption, nominal	5.1	5.6	5.8	5.4	5.0	-0.4	0.2	0.1	0.0
Public consumption	0.2	1.8	1.5	1.7	1.2	0.3	0.2	0.5	0.1
Fixed investments	3.2	9.6	3.1	3.0	3.0	3.1	-0.9	-0.3	0.0
Export of goods and services	4.3	6.8	7.9	6.6	5.7	-0.5	-0.6	-0.5	-0.2
Import of goods and services	3.9	6.6	6.8	5.7	5.1	-0.5	-0.6	-0.5	-0.2
Labor market									
Employment (registered)	1.8	1.9	1.1	0.9	0.7	0.2	0.1	-0.1	0.0
Wages, nominal	4.6	6.2	6.3	6.2	5.4	0.4	0.6	0.8	0.1
Wages, real	3.3	3.6	3.7	3.6	2.9	0.4	0.3	0.6	0.2
Unemployment rate	8.1	6.9	6.4	5.9	5.7	0.0	0.0	0.1	0.1
Inflation									
CPI	1.3	2.5	2.5	2.5	2.5	0.0	0.2	0.1	0.0

Source: SO SR, IFP

Employment growth above 2% for four consecutive years

Employment growth is projected to accelerate to 2 per cent this year, corresponding with 47 thousand new jobs. The economy will add jobs mostly in the services sector, followed by manufacturing, and also construction, where job creation will be most rapid. In fact, the construction sector is to post its strongest year since the crisis. In the following years, employment growth will moderate to below 1 per cent. Labour supply constraint will be mitigated partly by lower number of Slovaks working abroad, and partly by the continued growth of foreign workers (Box 2). Owing to these factors, total employment in the Slovak economy will grow twice as fast than the one captured by the national LFS methodology[2]. **The unemployment rate has hit new lows and going forward is foreseen at 6.9 per cent this year**, and below 6 per cent until 2021.

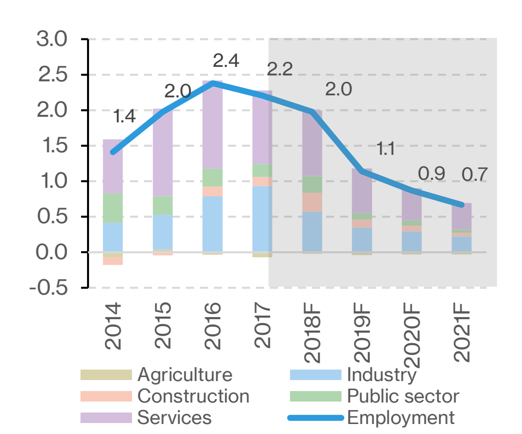
Wages to pick up the pace to above 6% in the coming years

Turning to nominal developments, the average nominal wage will pick up to 6.2% this year, even across most sectors of the economy, but with most pronounced acceleration in the public sector and manufacturing where supply constraints are most binding. Moreover, nominal wage growth is expected to waver above the 6 per cent mark in 2019-2020, partly on the back of newly introduced valorisation of public sector wages[3]. Real wages will increase by 3 per cent until 2020.

Inflation is on the move

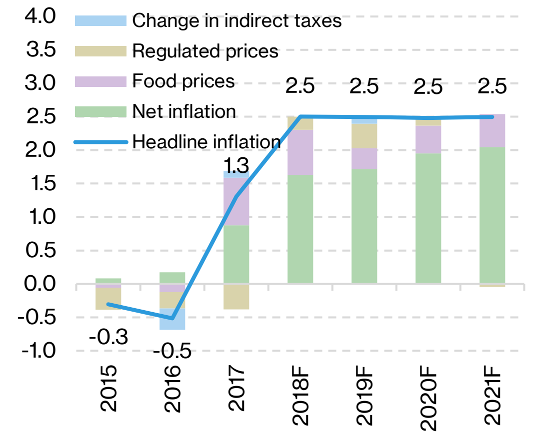
Consumer price growth is projected to reach 2.5 per cent this year, driven primarily by the services sector in response to the tightness in the labour market. In the meantime, food price inflation that has fuelled price growth in the first half of the year is gradually fading off. The contribution of regulated prices will be modest in line the decisions of the Regulatory Office early in the year. Higher oil prices will prop up prices of fuel, while price developments abroad will limit inflation of tradable goods.

Figure 3: Contributions to the employment growth (in ppt.)



Source: SO SR, IFP

Figure 4: Headline inflation and contributions of individual components (p.p.)



Source: SO SR, IFP

Food price shock fading off next year

Inflation will maintain its pace over the medium-term. Recent energy commodity price developments in the world markets and their futures will lift up regulated energy prices in the course of next year. Furthermore, brisk pace of growth in the prices of tradeables and in the services sector will counter-act the fading effect of elevated food prices in the world markets. This will be further echoed in a dynamic wage growth and in the continued labour market overheating. Headline inflation is projected at 2.5 per cent over the medium-term, mainly on the back of a dynamic price growth in the services sector.

[2] LFS employment does not include foreign workers, but it includes Slovaks working abroad less than one year and activation workers.
[3] While the collective bargaining agreement has not yet been finalised, the current forecast assumes adjustment of wages of general government employees by 10% in 2019 and 2020.

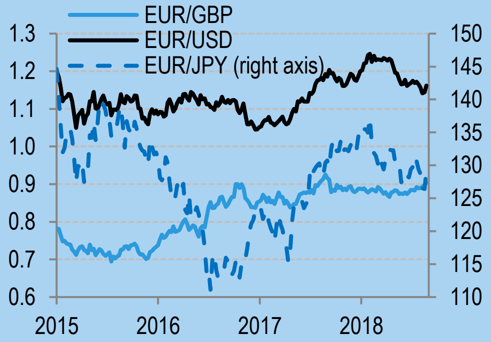
BOX 1: External Environment Assumptions

The US monetary policy continues on track of gradual normalisation, while the euro area will have soon reached the final phase of its Asset Purchase Programme (APP). After the Federal Reserve's second policy rate hike to 2 per cent this year, most observers expect the total of four hikes in the course of 2018. The yield curve of US government bonds have continued flattening, encouraging interest in short-term securities. The ongoing monetary policy normalisation in the US is supported by the unwinding of Fed's swollen balance sheet. Across the ocean, the APP tapering of the ECB is ongoing with monthly purchases lowered to 15 billion EUR beginning September 2018 until the end of the year. The APP is to wrap up thereafter, while policy rates hikes are expected no earlier than the second half of 2019.

The euro exchange rate against the dollar stabilised after a pronounced drop in the first quarter of the year (Figure 5). A slight downtick towards the end of the period under review reflects the knock-on effect of US trade policy. The euro area economic fundamentals remain solid, and are to sustain euro appreciation against other major currencies at the medium-term forecast horizon. Nonetheless, further escalation of trade wars could weaken the euro and other currencies. The future trajectory of the euro against the pound will depend on the details of the Brexit deal expected in March 2019.

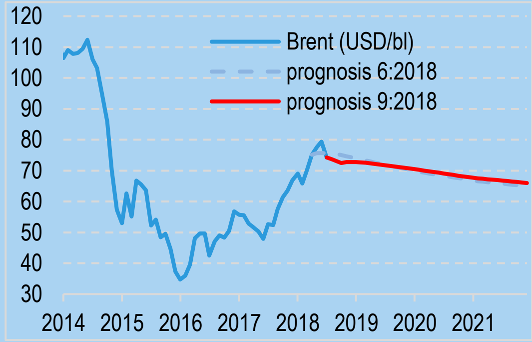
Brent Crude oil price fell to below 75 USD/b and is expected to carry on a downward path over the forecast horizon (Figure 6). Oil prices have been subjected to multiple opposing forces lately, including economic sanctions against Iran, and modalities concerning US drilling rig counts and its oil supply. Based on oil futures, we expect oil prices to settle below 70USD/b over the medium-term.

Figure 5: The euro exchange rate has stabilised



Source: Bloomberg

Figure 6: Brent crude oil price (USD per barrel)



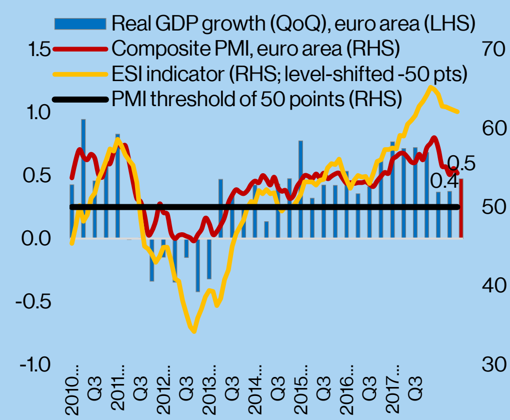
Source: Bloomberg

The euro area growth continued on a path of cyclical slowdown, after a weak first quarter (Figure 7). In the second quarter the euro area economy decelerated to 0.4 per cent on quarter, dragged down by weaker foreign demand. On the other hand, euro area growth benefitted from healthy domestic demand, reinforced by accomodative monetary policy stance and strong labour markets. Across individual economies, Germany, France and Italy recorded subdued growth, while Spain maintained a more dynamic pace of expansion in the second quarter.

The US economy supported by fiscal stimulus posted in the second quarter one of its strongest performances in the last three years. The UK economy accelerated to 0.4 per cent on quarter, reflecting a rebound in the services sector and stronger wholesale data. The Chinese economy continued growing at a stable annual rate of 6.6 per cent.

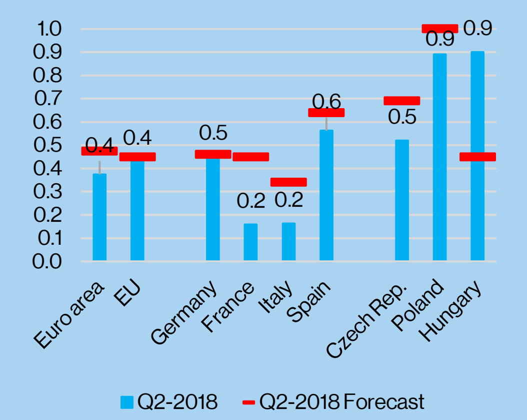
Weaker performance in the euro area was offset by robust growth in the V3 region (Figure 8). Within V3, Hungary paved the way, followed by Poland, both driven by vigorous household consumption. Strong labour markets, and upbeat economic sentiment form a sound foundation for continued growth, which should be further propped up by EU funds and the continued recovery in public investment. The external sector is, to the contrary, not expected to aid growth going forward.

Figure 7: Moderation in the euro area, after last year's cyclical peak



Source: Markit, EC, Eurostat

Figure 8: The V3 region is expanding at most rapid pace in Europe



Source: IFP, Eurostat

Conjunctural survey readings for the euro area and Germany point to a sustained cyclical slowdown. The euro area economy is projected to expand by 0.5 per cent on quarter over the short-run. Real GDP growth of euro area economies will soften close to its long-run potential on the medium-term horizon.

The foreign demand indicator has been revised up for 2018-2019, despite the dismal performance of the German economy, **on the back of stronger-than-expected performance of the V3 region** (Table 1). The downward revision for this year is due to the weak performance of large euro area economies (Germany, France, Italy) in the first half of 2018. The cut-off date for selected external environment assumptions, including interest rates, commodity prices, and exchange rates is August 30, 2018.

Table 1: **The External Environment Assumptions 2018 – 2021**

	GDP (% growth)					Difference vs. last					Import (% growth)					Difference vs. last				
	2017	2018	2019	2020	2021	2017	2018	2019	2020	2021	2017	2018	2019	2020	2021	2017	2018	2019	2020	2021
Most important trade partners	3.4	2.8	2.5	2.0	1.8	0.0	0.2	0.2	0.1	0.0	6.4	5.1	5.0	4.7	4.5	-0.1	-0.8	0.0	0.0	0.0
Euro area*	2.6	2.1	2.0			0.0	-0.1	0.0			5.2	3.6	4.2			-0.2	-1.4	0.0		
Germany	2.5	1.9	1.9			0.0	-0.3	0.0			5.3	3.6	4.0			-0.3	-2.1	-0.4		
Czech Rep.	4.5	3.0	3.0			-0.1	0.0	0.3			6.3	5.7	5.1			0.1	0.1	0.0		
Poland	4.7	4.9	3.7			0.0	1.4	0.5			8.4	8.1	6.1			-0.3	0.0	0.1		
Hungary	4.2	4.1	3.0			0.0	0.7	0.3			9.7	7.1	6.6			0.0	-0.9	-0.3		

* exports-weighted euro area

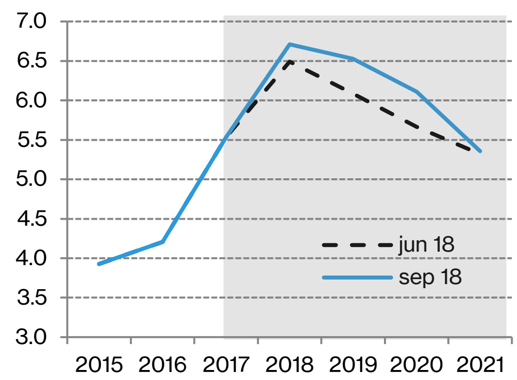
Source: IFP, EC

The risks to the baseline forecast are balanced

The risks to the baseline forecast are broadly balanced. Negative risks emanate from the external environment, with an emphasis on rising protectionism in international trade. We estimate the eventual impact of import tariffs imposed by the United States on EU automobile exports to reduce Slovak real GDP growth by up to 0.11 percentage points (assuming no secondary effects) [4]. Furthermore, the baseline projections could be adversely affected by an escalation of political situation in Italy, as well as by rising risk premiums of Italian debt. **Upside risks are mostly domestic**, and involve a more pronounced wage acceleration (related to the planned valorisation of public wages) and more robust private consumption, as well as additional fiscal measures[5] not embedded in the current baseline. Also, this year public investment activity – especially municipal – could turn up more intense than projected. Labour supply shortages limiting the economy's potential constitute the main domestic downside risk at the farther end of the forecast horizon. The latter can be effectively alleviated by virtue of well-designed migration policy.

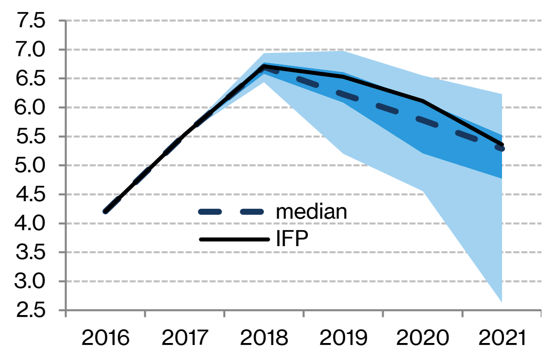
The overall impact of the macroeconomic forecast update on tax bases is favourable, owing to stronger wage growth over the entire forecast horizon. The overall impact of the present macroeconomic forecast on tax and social contributions will be subjected to further scrutiny at the Tax Forecast Committee meeting held on September 20, 2018.

Figure 9: Macroeconomic tax bases growth compared to previous forecast



Source: IFP

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



Source: IFP

The medium-term forecast prepared by the Institute for Financial Policy (IFP) of the MF SR has been discussed at the Macroeconomic Forecast Committee on September 12, 2018. **The medium-term forecast was evaluated as realistic by most members of the Committee** (NBS, ČSOB, Infostat, SAV, SLSP, Unicredit), while two members assessed the forecast as optimistic (Tatrabanka, VÚB), especially at the far end of the forecast horizon. The detailed macroeconomic forecast, as well as the minutes from the meeting and all supporting documentation are available at the IFP website.

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[4] An increase to 25 per cent from the current 2.5 per cent according to the US Harmonized Tariff Schedule.

[5] The cut-off date for the forecast assumptions is the end of August 2018

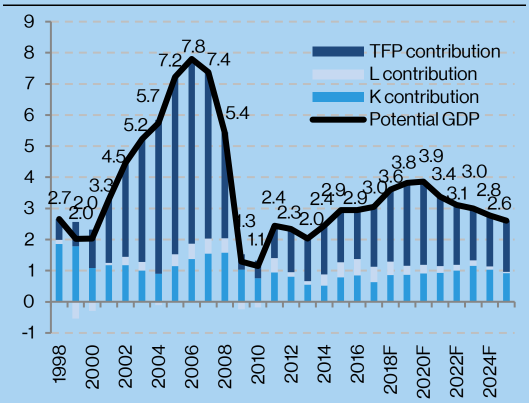
[6] Macroeconomic base for the budget revenues (weight of indicators depends on the proportional share of the particular tax on the total tax revenues); Wage base (employment x nominal wage) – 51.1 per cent; Nominal private consumption – 25,7 per cent; Real private consumption – 6.6 per cent; Nominal GDP growth – 9.9 per cent; Real GDP growth – 6.7 per cent.

BOX 2: Potential growth of the Slovak economy by 2025

Slovakia has been seen as a successful economic convergence story, with historically high average GDP growth rates. The convergence differential between the Slovak economy and EU average has been on the decline, as a part of a natural maturing of its economic cycle, as well as its catching-up to more advanced peers. While in the previous decade Slovakia had recorded and average annual growth of over 4 per cent (3 percentage points above the EU average), in the current decade the pace of expansion moderated to over 3 per cent (2 percentage points above the EU average). By 2020, Slovakia is projected to match the economic performance of 80 per cent of EU average. To put this figure in perspective, among other post-communist countries which have hit this mark, like the Czech Republic and Slovenia, the convergence differential stood slightly above 1 percentage point vis-à-vis the EU average. At such operational level, the growth model that relies on inexpensive labour force, tax breaks, and FDI inflows is probably exhausted. As long as the current growth path is not disrupted by substantial economic shocks, it is reasonable to expect similar development for the Slovak economy.

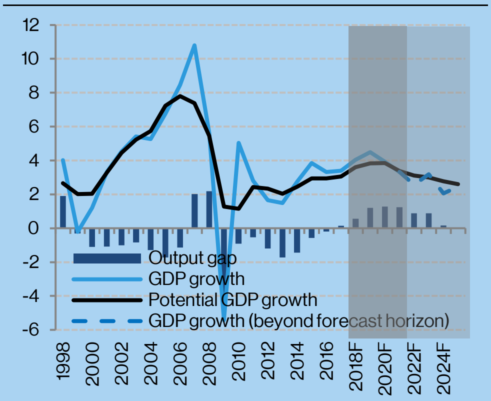
The potential of the Slovak economy is estimated at 3.3 per cent on average over 2018-2025, fuelled predominantly by total factor productivity (TFP). The contribution of potential employment growth is expected to diminish over time. In the short run, however, the potential growth will be buttressed by the onset on new automotive production of VW and JLR. Over 2022-2023, we expect a positive knock-on effect on capital resulting from the climax EU fund programming period. Assuming no additional shocks, the economy should lose steam to 2.6 per cent by 2025, 1.2 percentage points above the long-term EU average.

Figure A: Potential output growth contributions (in p.p.)



Source: IFP

Figure B: Potential output growth and overheating of the economy (in % of GDP)



Source: SO SR, IFP

Note: GDP growth estimates past the medium-term forecast horizon does not constitute IFP official

The demographic developments do not need to limit the economy's potential, so long as the decline of active population in the upcoming year is more than offset by higher participation rates and the rise of net migration, i.e. the difference between foreign workers active in the domestic economy and Slovaks working abroad (Figure C). Potential employment growth will be furthermore supported by gradual decrease of NAIRU[7] over the medium-term.

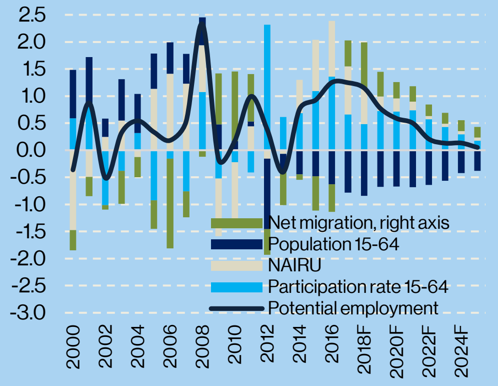
Active population is forecasted to fall by 20 thousand persons[8] each year on the horizon 2018-2025. With 0.3-0.8 per cent of annual declines (corresponding to 11 to 51 thousand

[7] See Policy Brief 2018/03: *http://www.finance.gov.sk/Default.aspx?CatID=11679*

[8] Based on *The 2018 Ageing Report: Economic and Budgetary Projections for the EU Member States.*

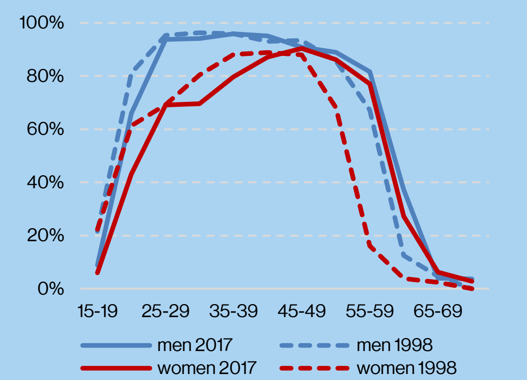
persons), it has been on a falling trajectory since 2012. A negative fallout on growth has been to the date fully mitigated by rising participation rates, i.e. the rise in the share of persons in productive age employed or actively seeking employment.

Figure C: Potential employment growth contributions (in p.p.)



Source: SO SR, IFP

Figure D: Changes in participation rates by gender by lifecycle (1998 vs. 2017)



Source: SO SR, IFP

The participation rate is expected to grow in the years to come, and in 2025 will exceed 76 per cent. In 2017, it has reached its all-time high at 72.1 per cent. Yet, it lags behind EU average by 1.2 percentage points, and behind Germany by 6.2 percentage points. Fortunately, the readiness of Slovaks to join the labour force has been on the rise since 2009, when merely 68.4 per cent aged 15-64 years had or was actively seeking employment. In this way, 170 thousand persons have joined the labour market since the crisis. Continuous increases of the participation rate are palpable especially for older workers aged 55+ years, owing to a legislative shift of retirement age. This effect is even more pronounced for females, where we observe a gradual catching-up to retirement age of males. The female participation rate aged 55+ years has doubled since 1998 (Figure D).

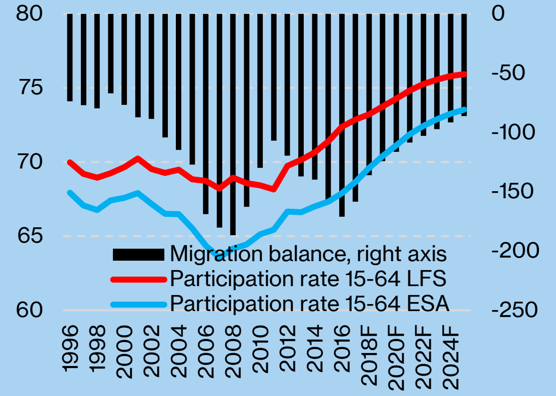
Over the long term, we expect the negative migration balance to continue softening. The short-term migration balance (defined as the differential between ESA employment and LFS employment) fell by almost 40 thousand persons in the past nine quarters. Moreover, we have observed a decline in Slovaks working abroad for short-term since mid-2016; a number that currently stands at 140 thousand persons, compared to 25 thousand more in mid-2016 (according to LFS methodology). At the same time, the number of foreign workers has increased significantly based on Labour Office data. In July 2018, this number has reached 60 thousand, while last year every fourth job opening was filled by foreign workers[9]. Over the period 2018-2025 we foresee that the negative migration balance softens, by 72 thousand persons cumulatively. This, in the long run, corresponds to annual decrease by 5-7 thousand persons, which will favourably affect potential employment by 0.2-0.3 percentage points.

Potential growth of the Slovak economy will be additionally affected by short-term supply shocks, including new production capacities in the automotive industry (Figure F), and one-offs related to the completions of EU fund programming cycles. The effect of these shocks enters the smoothed time-series and increases the volatility of potential output,

[9] The overall migration balance has also been mitigating. In the last two years, more people have come to Slovakia than left according to health insurance data. We estimate that approximately 63,000 Slovaks returned to Slovakia between 2016 and 2017. At the same time, approximately 40,000 foreigners were employed. Data for 2018 is not yet available. More in Policy Note 2018/6 *http://www.finance.gov.sk/Default.aspx?CatID=11740*

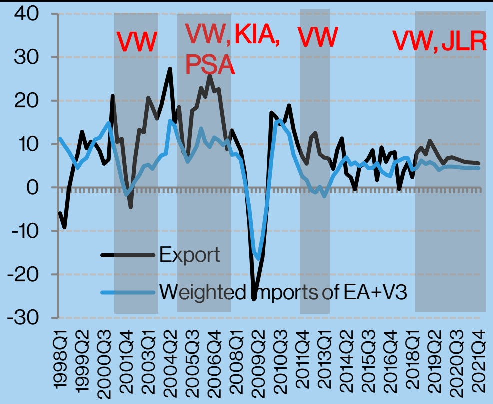
but also decreases the output gap volatility, aiding to more stable estimates of the fiscal position.

Figure E: Development of short-term migration balance (in thousand persons)



Source: SO SR, IFP

Figure F: Supply shocks in car manufacturing (in per cent, y-o-y)



Source: SO SR, IFP