

15 May 2020

## Coronavirus Takes its Toll

Extraordinary forecast of tax and social security revenues for 2019 - 2023

Jaroslav Bukovina, Michal Havlát

While tax and social security contribution revenues increased by 5.7% in 2019, they are expected to drop by 6.9% this year due to the coronavirus. The main reason is a significant decline of the Slovak economy. The forecast assumes a similar rate of decline in corporate profits and a lower willingness to pay taxes inspired by the developments in 2009. The loss of revenue will be exacerbated by economic measures aimed at reducing the effects of the coronavirus on the Slovak economy. From 2021 onwards, we expect a slow recovery of revenue in line with the renewed growth of economic activity. Compared to February estimates, i.e. before the outbreak of the coronavirus in Slovakia, revenues fell by almost EUR 3.1 billion this year. The uncertainty associated with the development of the current recession is high, which we tackle by presenting alternative risk scenarios. In the event of a worse development, the decline in revenues this year may be even more pronounced, by up to EUR 3.7 - 4.2 billion.

### Comparison of the current estimate with the February forecast

Compared to the last forecast, tax and social security revenues will be lower by EUR 3.1 billion to EUR 2.6 billion (Figure 1). Across the forecast horizon, revenues are pulled down by the decline in economic activity. The experience of 2009 shows that during a significant economic decline, revenues drop more sharply than the tax bases themselves. This experience is similarly reflected in this forecast in the decline of the effective tax rate (ETR). Compared to the February forecast, the most significant declines are in corporate tax by more than a quarter and in value added tax (VAT) with a 14% shortfall. The decline in the labour market will reduce the income of the Social Insurance Agency and health insurance companies by 6%. The current crisis will take away 8% of personal income tax revenues for towns and municipalities (Figure 2).

Global pandemic cuts  
State revenues

Figure 1: Change of tax revenue forecast compared to February 2020 (EUR mil.)

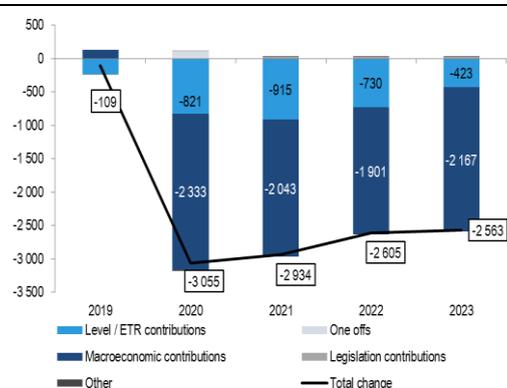
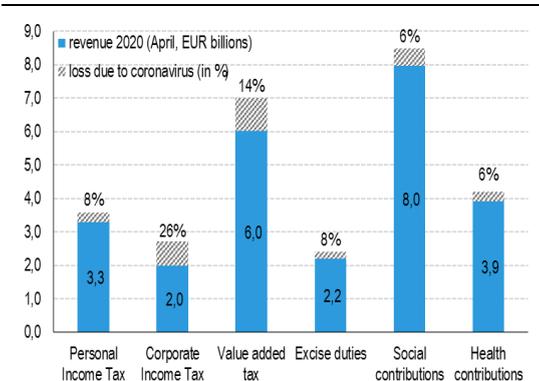


Figure 2: Loss of tax revenues due to the coronavirus in 2020 (% of revenues, EUR billions)



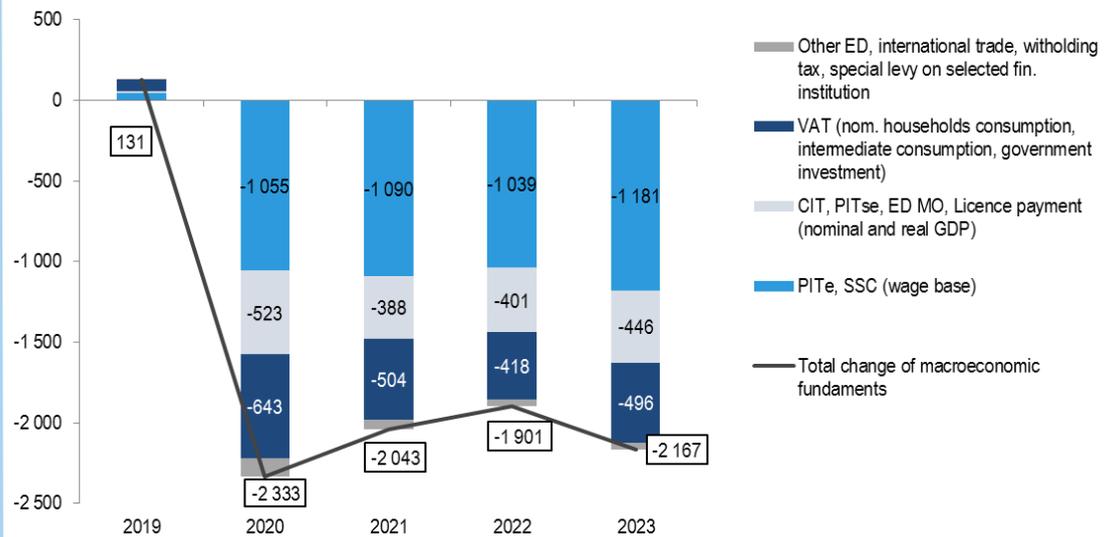
Source: IFP, UloziskoIFP

Macroeconomic developments are responsible for the overall loss in revenues across the whole horizon (Figure 3). The developments have a significant negative impact on household consumption and the labour market. Despite the expected recovery in growth from the second half of 2020, some of the negative economic impacts of the coronavirus

Revenues reduced due to  
a drop in domestic  
consumption and foreign  
demand

will not be caught up. Due to lower energy prices, the price level will also drop, which has an adverse effect on most tax bases. Drawing of state benefits compensates for the loss of household income during an illness or care for a relative. However, they result in an additional decline in revenues linked to the labour market.

**Figure 3: Effect of current macroeconomic forecast on tax intake (EUR million)<sup>1</sup>**

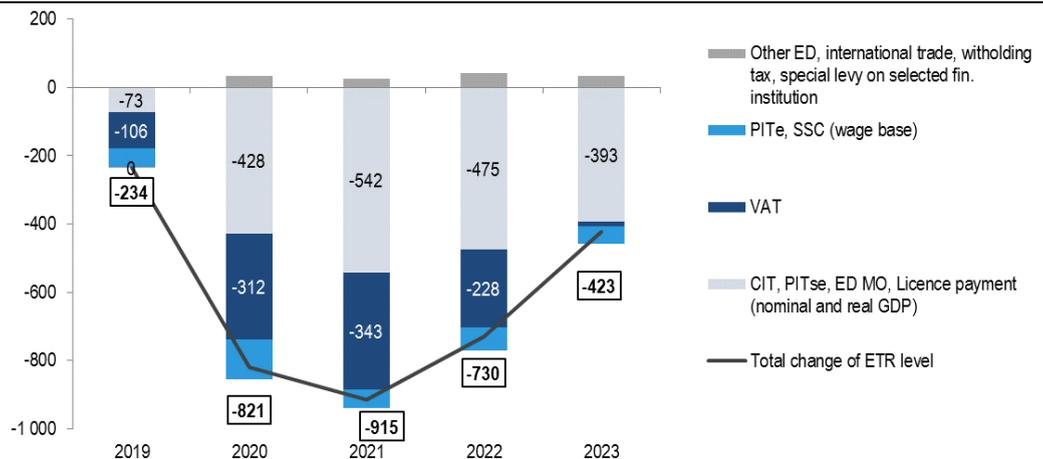


Source: IFP, UložiskoIFP

Effective tax rate pulled down by a major recession

**The fallout of the pandemic situation reduces tax and social contribution revenues also via lower effective tax rates (Figure 4).** The profitability of the private sector, which is directly linked to corporate tax intake, responds significantly to the economic cycle<sup>2</sup>, which, as in 2009, will be reflected in the losses beyond the macro-base<sup>3</sup>. For VAT, we also take into account the deterioration of the ETR in the magnitude of the 2009 decline. An additional risk for the collection of taxes and social contributions is the postponement of payments, which can be difficult to repay after the pandemic ends.

**Figure 4: Effect of effective tax rate on taxes (EUR million)**



Source: IFP, UložiskoIFP

<sup>1</sup> Taxes are categorised based on the macroeconomic aggregate having the major impact thereon. ED = excise duties, PITb = personal income tax (business activities), PITe = personal income tax (employment), ED MO = excise duty on mineral oils, SC= social contributions, HC= health insurance contributions.

<sup>2</sup> See, for example, Výškrabka: Tax revenues sensitivity to economic activity, IFP 2017.

<sup>3</sup> The available macro-base of GDP-compensation is a broader and less volatile concept than corporate profitability.

**The main legislative measures to mitigate the effects of the crisis are directly affecting the relevant macroeconomic variables.** The measures are mainly aimed at improving the liquidity of entrepreneurs and employees. Expenditure measures, such as the reimbursement of the gross wage of employees drawing sickness or nursing benefits, wage compensation and contributions for self-employed persons or for closed establishments will cause a shortfall in taxes and contributions through a reduced wage base. Other measures tend to have a temporary cash impact on public finances (the deferrals of levies or waiver of advance payments). The inclusion of loss carry-forward in current tax returns will have an accrual impact on 2019 results<sup>4</sup>. The legislative measures incorporated directly in the tax forecast (except for the effects incorporated through the macroeconomic forecast) have only a minor negative impact of EUR 8 mil.<sup>5</sup>.

Supporting measures during corona crisis ("first aid")		
No.	Measure <sup>6</sup>	Impact via
1	Contribution to maintain employment – 80 % of gross wages (closed establishments)	Included into macro
2	Contributions for the self-employed and employees based on a drop in their revenues	Included into macro
3	Provision of bank guarantees for loans	Without direct impact on the deficit
4	Employees in quarantine and parents who are at home with their kids will get 55 percent of their gross salary from the state - Employees on sick leave and being at home with their kids - Lost contributions due to employees on sick leave and being at home with their kids	Included into macro
5	Postponement of the payment of contributions for employers whose revenues drop by more than 40 percent - Employees - Self-employed	Legislation with cash impact in 2020
6	Waiver of corporate income tax advances in the event of a decrease in revenues by more than 40 percent - Corporate income tax - Self-employed	Legislation with cash impact
7	Possibility to include loss carry-forward for 2015-2018	Legislation with accrual impact in 2019

### Main tax and social security contribution development

**The corporate tax revenue for 2020 is reduced by EUR 710 mil. eur compared to the last forecast.** Based on tax returns filed by the end of March, we revise the estimate of tax paid for 2019 down by almost EUR 50 mil. For 2020 we expect a drop in profits similar to 2009. From 2021 onwards, the growth rate of corporate tax will be lower than the growth of profits, because the tax base will be reduced by tax losses from 2020. A positive impact across the whole horizon is a lower drawdown of the deductions for science and research due to a lower corporate tax base.

<sup>4</sup> Entities are currently filing tax returns for the ended year 2019, within which they can include losses.

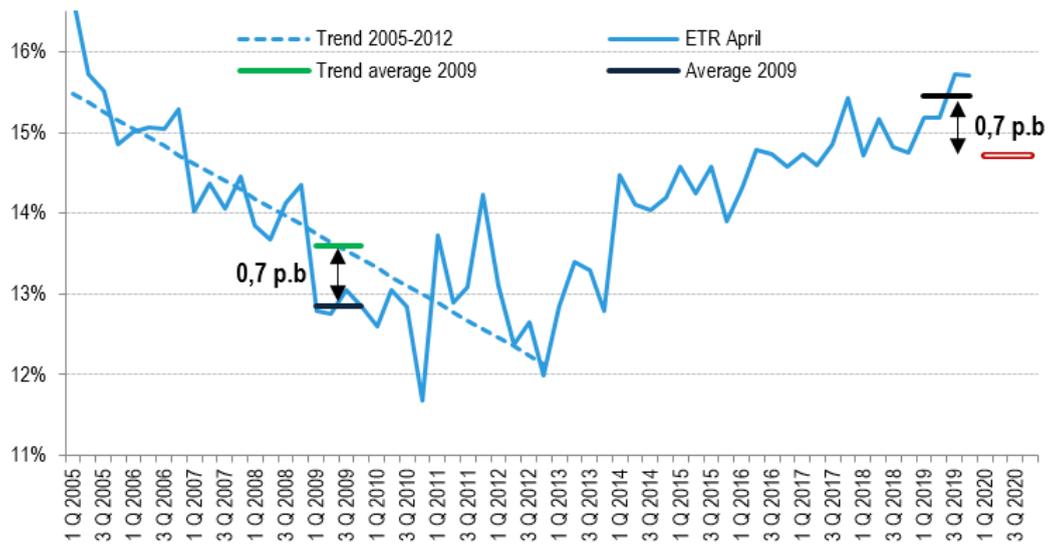
<sup>5</sup> The postponement of tax inspections (EUR -13 mil.) balances the positive impact of the transfer of the filing of the motor vehicle tax return (EUR +5 mil.) as the loss of revenues (EUR -5 mil.) from the transfer will occur as early as in 2019.

<sup>6</sup> Measure no. 6 and 7 of the First Aid Table were not approved by the government at the time of the tax committee meeting and are therefore stated as a memorandum item not directly included in the tax forecast. Measure no. 5 has only a cash impact on public finances and does not affect the accrual general government deficit for 2020.

... VAT will also be higher than in 2009

**The significant VAT shortfall reflects a drop of household consumption, investment and reduced willingness to pay taxes.** The annual effective tax rate will drop to 14.7 % in 2020 due to the deterioration of business liquidity, a slight increase in the unrecorded economy, and an overall lower willingness to pay taxes. The other underlying effect is the gap between household consumption and revenues in VAT, raising concerns about the composition of the VAT macro-base (Figure 5). The magnitude of the decrease in ETR and also returning to its earlier levels reflects the dynamics of 2009 and 2010. The negative impact of the current economic decline, captured via the effective tax rate, should gradually wear off. Household consumption will exceed the level of 2019 already in the next year. Investment will not recover until the end of the forecast horizon.

**Figure 5: VAT Effective Tax Rate (%)**



Source: IFP, UloziskoIFP

Labour market pushes social contributions downwards...

**The decrease in the estimated social security and health contributions is caused by a considerable slump in the labour market.** The Government's active measures in the form of increased nursing and sickness benefits or allowances for maintaining employment will be reflected in a significant slowdown in wage growth. This impact is supplemented by a fall in employment. In addition, social security contributions are affected due to lower tax liabilities from previous years, also on the basis of the previous crisis. On the other hand, the one-off income from a hospital debt relief scheme in January 2020 causes a hike in social security revenues. New legislative measures, such as the postponement of the payment of contributions, have an impact only on a monthly cash basis and should not lead to an annual shortfall.

... including taxes on labour

**The labour market also had a negative effect on revenue from personal income tax from dependent activities.** As with contributions, the unflattering development of the labour market and the increased drawing state benefits are the main factors responsible for the change of the revenue. In addition, the impact of wage decline is exacerbated by the progressive nature of taxation. Among the announced measures, there are mainly the postponement of tax returns and the possibility to assign 2 % of the tax, which will affect only cash revenue on a monthly basis.

The crisis will hit the self-employed

**The pandemic has also reversed the promising tax revenue from the self-employed.** Positive expectations due to the growth in the number of the self-employed will drop over the next period. Interruptions or suspensions of self-employed licences will have an adverse

effect on tax revenue in the next year. Going forward, we expect a gradual return to pre-crisis levels thanks to the safety net for self-employed persons, as well as the continuing attractiveness of this type of employment, especially due to flat-rate expenditure.

Excise duties also affected by the shortfall

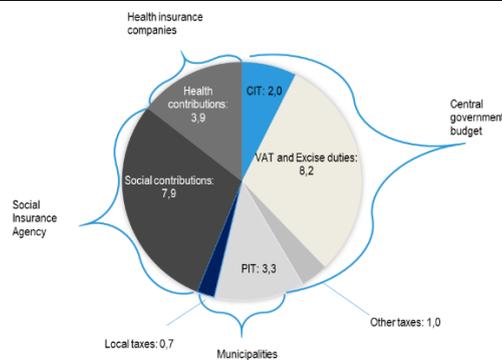
**We are also revising the estimated revenues from excise duties.** The decline in the economy and household consumption, which are the underlying macroeconomic variables, is fully captured in the current forecast. A lower decrease in excise duty on tobacco products, where we do not expect a significant change in consumption patterns, is an exception.

### Year on year tax and social security contributions development

Global pandemic cuts state revenue

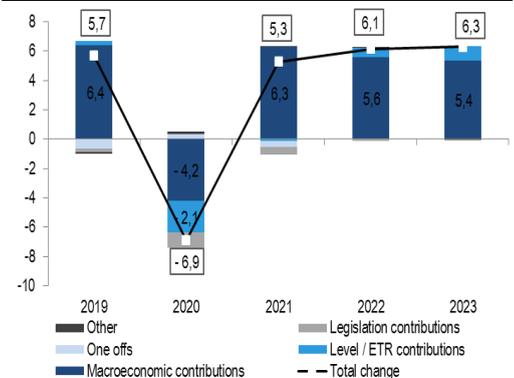
**The coronavirus pandemic will erase EUR 2 billion compared to the previous year, which reduces total revenues of general government to approximately EUR 27 billion (Figure 6).** The shortfall will be experienced mainly by the state budget, which will fall short by EUR 1.6 billion due to a drop in value added tax and corporate tax revenue. Overall, revenues will drop by almost 7 % year on year in 2020 (Figure 7). More than half of the decline is due to economic developments in the form of a shortfall in domestic consumption, while the drop in corporate profits and unemployment growth are mainly due to the slowdown of foreign demand. The deterioration in the effective tax rate causes up to one third of the annual shortfall. Legislative measures adopted in 2019 contribute to a decrease of 1 percentage point. From 2021 onwards, we expect a revenue growth in line with economic developments.

**Figure 6: Tax and social security contribution in 2020 (EUR billion)**



Source: IFP, UloziskoIFP

**Graph 7: Tax and social security contribution revenue growth (y-o-y, %)**



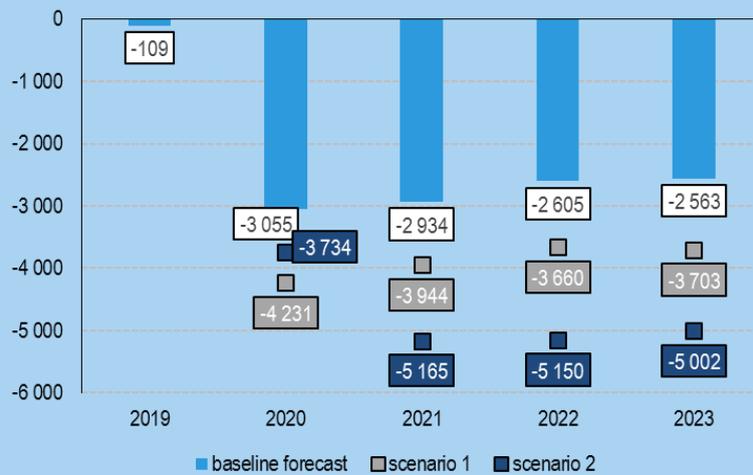
Source: IFP, UloziskoIFP

### Box 1: Risk scenarios

**At present, the any forecast is connected with a great deal of uncertainty, so we offer two additional revenue scenarios in line with the scenarios in the macroeconomic forecast.**

The assumptions about the effective tax rates and legislative measures are left unchanged compared to the baseline forecast. Risk scenarios would lead to a shortfall of EUR 3.7 - 4.2 billion in 2020 (Figure 8). A longer recession reflected in scenario 2 would lead to a shortfall of around EUR 5 billion from 2021.

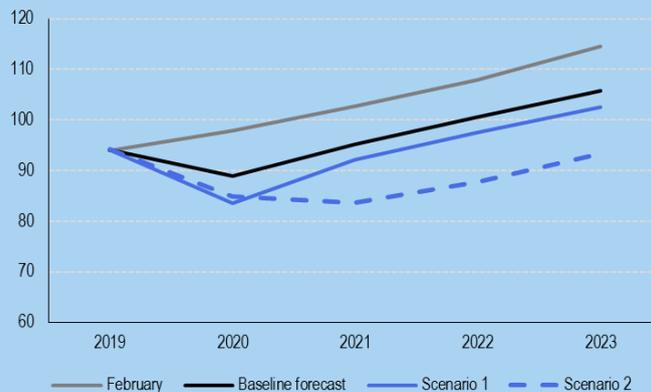
**Figure 8: Change of GG tax revenue forecast compared to February 2020 (EUR mil.)**



Source: IFP, UloziskoIFP

Compared to the baseline forecast, scenario 1 (Figure 9) assumes a deeper decline of GDP and macro-bases due to longer quarantine measures (3 months). Lower consumption would lead to a steeper shortfall in VAT and excise duties. Also, deepening problems in selected sectors would have a further impact on employment and corporate profits. In 2021 a rapid recovery would unfold, similarly to that in the baseline forecast. Scenario 2 applies a two months pandemic, but the recovery across the whole horizon will be more protracted than in the baseline forecast. This scenario has a more negative impact on the labour market and corporate profits. As in 2009, there may be a reduction in investment and the build-up of larger cash buffers on the part of households, which will be reflected in lower consumption.

**Figure 9: Change in GDP at current prices under different scenarios (EUR billion)**

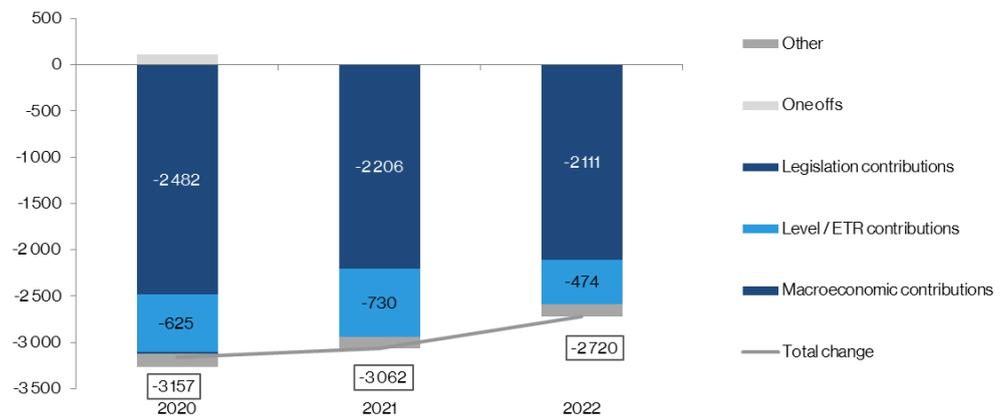


Source: IFP, UloziskoIFP

**Comparison of the current estimate with the general government budget 2020-2022**

**Compared to the general government budget, the current forecast of tax and social contribution revenues is lower by EUR 3,157 mil. to EUR 2,720 mil. EUR (Figure 10).** The budget was based on data available at the end of 2019 and also included revenue items beyond those approved by the Tax Revenue Forecasts Committee (revenues from eKasa and nanomarkers).

Figure 10: The current forecast vis-à-vis the general government budget 2020 - 2022 (EUR mil.)



Source: IFP, UložiskoIFP

In compliance with the constitutional Act on Fiscal Responsibility, the Ministry of Finance SR updates and publishes the forecasts of tax and levy revenues. These forecasts were discussed at the meeting of the [Tax Revenue Forecasts Committee on 16 April 2020](#). **KRRZ, NBS, Infostat, Tatrabanka, ČSOB, SLSP and UniCredit Bank consider the forecast as realistic.**

For more information about the tax forecasts as well as the background materials, see the [IFP website Economic Forecast section](#) → [Tax Forecasts](#).

For detailed data about the development of individual tax revenues on the forecast horizon as well as the breakdown of contributions of individual factors to the forecast update or the background data for individual comment entries see [UložiskoIFP](#).

The material presents the opinions of the author and the Institute for Financial Policy which do not necessarily reflect the official opinions of the Ministry of Finance SR. The comments of the Institute for Financial Policy (IFP) are published in order to incite and improve the professional and public discussion regarding the current economic topics. Therefore, the text quotations should refer to IFP (instead of MF SR) as the author of these opinions.