ASSESSMENT OF THE BUDGETARY EFFECTS OF THE COVID-19 PANDEMIC IN AUSTRIA

The measures implemented by Austria’s federal government in reaction to the COVID-19 pandemic primarily aim to ensure access to health care services in Austria and, in addition, to mitigate the direct economic effects of the pandemic and the indirect effects caused by the movement restrictions and the suspension of business operations aimed to enforce social distancing. The primary objective of the economic policy measures is to maintain Austria’s production potential by providing liquidity to solvent enterprises, and to secure jobs.

The total budgetary effect of the COVID-19 pandemic comprises direct effects, i.e. higher expenses and/or lower tax revenues resulting from the discretionary economic policy measures, and indirect effects, i.e. budget reactions to the macroeconomic situation (automatic stabilizers). Measured by national accounts data, the overall budgetary effect of the adopted discretionary measures is EUR 16.1 billion (table 1).

Table 1: Overall budgetary effect of macroeconomic shock and economic policy measures to combat COVID-19 pandemic

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<tbody>
<tr>
<td></td>
<td></td>
<td>EUR billion</td>
<td></td>
<td>EUR billion</td>
</tr>
<tr>
<td>Immediate aid</td>
<td>Total</td>
<td>-2.3</td>
<td>Discretionary measures</td>
<td>-16.1</td>
</tr>
<tr>
<td></td>
<td>Hardship Fund</td>
<td>-2.0</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Short-time working</td>
<td></td>
<td>-5.4</td>
<td>Macroeconomic shock</td>
<td></td>
</tr>
<tr>
<td>Emergency aid</td>
<td>Compensation for lost earnings</td>
<td>-4.3</td>
<td>Scenario 1</td>
<td>-9.5</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>-16.1</td>
<td>Scenario 2</td>
<td>-7.4</td>
</tr>
<tr>
<td>Tax deferrals</td>
<td>Corporate tax, income tax</td>
<td>-3.9</td>
<td>Total effects under scenario 1</td>
<td>-25.6</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>-16.1</td>
<td>Total effects under scenario 2</td>
<td>-23.5</td>
</tr>
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</table>


Based on a sectoral analysis of the Austrian economy and by assuming a sector specific maximum shock duration of 12-weeks, the COVID-19 containment measures are expected to result in a 5.8 percentage point loss of real GDP compared to previous forecasts. This macroeconomic shock implies a reduction of GDP by 4.6% in 2020. The Fiscal Advisory Council’s forecasting model analyses the effect on the budget balance induced by the COVID-19 discretionary measures, as well the aggregated GDP shock decomposed by a DSGE model. The results imply that the COVID-19 pandemic will reduce the budget balance, in total, by EUR 25.6 billion or 6.6% of GDP (scenario 1) or EUR 23.5 billion or 6.1% of GDP (scenario 2). Scenario 1 applies a higher weight to demand shocks, while scenario 2 applies equal weights of supply and demand shocks. At the same time, the COVID-19 pandemic increases government debt in the year 2020 by EUR 31.2 billion or 8.1% of GDP (scenario 1) or EUR 29.1 billion or 7.5% of GDP (scenario 2).

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1 This article does not necessarily reflect the opinion of the Fiscal Advisory Council.
1. INTRODUCTION

The strong rise in the number of COVID-19 infections created an emergency situation in Austria: To contain the spreading of the virus and to stabilize the Austrian health care system, the federal government and some provincial governments, in particular those of Tyrol and Vorarlberg, have taken far-reaching measures, such as restricting movement to ensure social distancing or locking down those industries that are not immediately essential to maintaining basic care for the population. These measures have serious economic consequences with regard to both macroeconomic demand and supply. Against this background, the measures the federal government has adopted so far, in two steps, primarily aim to

- ensure access to health care services (i.a. by providing additional funds for purchasing health-related products),
- mitigate the negative impact on the economy.

The measures include immediate measures with a short-term focus on providing liquidity support as well as short- to medium-term measures to secure jobs and ensure an efficient return to full production once the pandemic has been overcome. In addition, a longer-term stimulus package has been adopted that is to be implemented downstream, i.e. once the immediate health crisis is over.

The following analysis details the measures the federal government has adopted so far and quantifies them on the basis of an assessment by the Office of the Fiscal Advisory Council (chapter 2). To assess the pandemic’s effects on the Austrian economy, we look at individual economic sectors (chapter 3) and then aggregate the results to establish the shock to the Austrian economy as a whole. In a next step, we employ a DSGE model for Austria to break down the macroeconomic shock into individual macroeconomic variables that are relevant to the fiscal forecast (chapter 4). Using the quantified budgetary effects of the discretionary measures and the macroeconomic scenarios, we estimate the overall effect of the COVID-19 pandemic on the budget balance and on Austria’s debt level by applying the Fiscal Advisory Council’s forecasting model (chapter 5). Finally, we identify the implications for the application of EU fiscal rules (chapter 6).

2. COVID-19 MEASURES TAKEN BY THE AUSTRIAN FEDERAL GOVERNMENT AND HOW THEY ARE RECORDERD UNDER ESA 2010

The First COVID-19 Act was adopted in Austria on March 15, 2020, to facilitate the provision of immediate support of up to EUR 4 billion in a timely manner from a COVID-19 Crisis Management Fund that was set up for this purpose. Within a matter of days, as the scale and scope of the economic impact came into focus, the federal government presented further comprehensive support measures. The Second COVID-19 Act was passed by the Nationalrat on March 21, 2020, followed by the third, fourth

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2. This act also provides for an authorization to ban people, by way of a regulation, from entering certain locations. Such a regulation was issued promptly by the Federal Minister for Social Affairs, Health, Care and Consumer Protection. [https://www.ris.bka.gv.at/Dokumente/BgblAuth/BGBLA_2020_II_98/BGBLA_2020_II_98.html](https://www.ris.bka.gv.at/Dokumente/BgblAuth/BGBLA_2020_II_98/BGBLA_2020_II_98.html)
5. [https://www.parlament.gv.at/PAKT/VHG/XXVII/BNR/BNR_00017/fname_788779.pdf](https://www.parlament.gv.at/PAKT/VHG/XXVII/BNR/BNR_00017/fname_788779.pdf)
and fifth\(^8\) COVID-19 Act only two weeks later. The set of measures announced will total up to EUR 38 billion. They will serve to

1. ensure access to health care services,
2. stimulate the labor market (in particular: short-time working pursuant to Article 13 paragraph 1 Labour Market Policy Financing Act (Arbeitsmarktpolitik-Finanzierungsgesetz – AMPFG)),
3. maintain public order and safety,
4. compensate for lost earnings caused by the health crisis,
5. partially amend the Epidemics Act of 1950 (Epidemie-Gesetz), Federal Law Gazette No. 186/1950,
6. stimulate the economy.

**Mix of fiscal policy measures to limit the social and economic effects of the COVID-19 pandemic**

The adopted measures comprise five types of support:

1. immediate aid, up to EUR 4 billion (Crisis Management Fund)
2. emergency aid, up to EUR 15 billion
3. tax deferral, up to EUR 10 billion
4. guarantees and assumption of liabilities, up to EUR 9 billion
5. short-time work, up to EUR 5 billion

**Immediate aid:** Immediate aid primarily serves to ensure the functioning of the health care system and provide rapid, unbureaucratic support for those affected. Apart from providing additional funds for care and health care (so far, with a focus on purchasing protective equipment, medical supplies and health-care equipment), financial support is also provided to micro-enterprises under the Hardship Fund. In addition, under immediate aid, legal action can be taken ad hoc on the basis of the Second COVID-19 Act. The Office of the Fiscal Advisory Council expects the measures under immediate aid to have budgetary effects of around EUR 2.3 billion in 2020, which are largely attributable to higher expenses.

Immediate aid comprises

- the **Hardship Fund** (EUR 2 billion): nonrepayable grants for one-person businesses, free agents, NPOs and micro businesses, new self-employed and liberal professions (to be handled by the Austrian Federal Economic Chamber); the Office expects full utilization of the Hardship Fund. The measure is structured into an immediate grant (1st phase) and a second phase grant. The two phases differ in respect of their eligibility criteria.
  - 1st phase: immediate grant
    - of EUR 1,000 for those with a net income of more than EUR 6,000
    - of EUR 500 for those with a net income of less than EUR 6,000
    - eligible persons need an annual gross income between EUR 5,527 and 80% of the annual maximum contribution basis under social security law (around EUR 60,000) and no multiple insurance policies
  - 2nd phase maximum subsidy of up to EUR 2,000 per month for 3 months
    - assessment on the basis of proven loss of revenue
    - ex post assessment of the grant provided depending on actual lost earnings

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considered periods of time are 16.3. to 15.4., 16.4. to 15.5. and 16.5. to 15.6.

there are no upper and lower limits and it is possible to be insured several times

- **special care** for parents to care for children (up to the age of 14):
  - special leave for a period of up to three weeks,
  - one-third of the compensation of employees will be reimbursed by the federal government (up to the earnings cap on social security at the maximum, i.e. currently EUR 5,370 per month).

- the **artists’ support fund** (EUR 5 million): to be managed via the Artists’ Social Security Fund (Künstler-Sozialversicherungsfonds – KSvF),

- funds for the **Austrian Health Fund** (Österreichische Gesundheitskasse – ÖGK) (EUR 60 million): support for the automatic deferral of contributions not paid on time or paid only in part (no reminder, no collection measures, no initiation of insolvency proceedings);

- **health-related expenditure** (currently EUR 130 million): acquisition of medical supplies, e.g. respirator masks, protective suits,

- **support for care** (EUR 100 million): for provincial governments to build up additional supply in home care and long-term care,

- **tax-free bonus payments**\(^5\): bonus payments offered by critical businesses will be exempt from taxes (“15\(^{th}\) monthly salary”),

- **medication research** (EUR 23 million): promotion of projects to research the effectiveness of existing medication against the coronavirus,

- **cancellation costs for school trips** (EUR 13 million),

- **provision of computers for pupil** (EUR 5.5 million) to support home schooling.

- **loans** (envisioned).

**Emergency aid** comprises the (partial) compensation for lost earnings, in particular for enterprises in sectors for which the federal government’s business shutdown measures have particularly severe implications. Emergency aid currently consists of loan guarantees and grants. Grants are provided either directly or by converting loans granted by local banks and secured by federal guarantees. According to a preliminary assessment by the Office of the Fiscal Advisory Council, EUR 4.3 billion will be provided in the form of grants, which will weigh on the budget balance accordingly.\(^9\)

- **agreement on loan subsidies**:
  - loans will be granted up to a maximum of EUR 120 million or in the amount of the quarterly turnover of the enterprise in question (by charging a maximum of 1% interest on the loan, for a term of 5 years, renewable for a further 5 years),
    - up to 90% of the loan is guaranteed by the government
    - partial conversion into a nonrepayable grant
  - grants for the partial reimbursement of fixed costs (rent, electricity, gas, interest not covered by the moratorium, leasing, insurance premiums, fictive entrepreneurial income) and seasonal

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\(^5\) Assuming that the grant component is clearly defined up front and can thus be booked as such when the loan is granted (see table 2).
or perishable goods (if these lose more than 50% of their value due to the corona crisis); amount of the rate is determined on the basis of loss in sales

- loss in sales 40% to 60%: 25%,
- loss in sales 60% to 80%: the subsidy is 50%,
- loss in sales 80% to 100%: the subsidy is 75%.

**Deferral of taxes and reduction of tax advances** to avoid economic difficulties or liquidity shortages owing to tax payments:

- **corporate income tax and income tax** (up to EUR 10 billion): reduction or waiver of tax advances, waiver of interest on additional claims, deferral or payment in instalments without interest surcharges and deferral interest.

- **social insurance of the self-employed**: deferral or instalment payments, reduction of preliminary contribution base, total or partial waiver of interest on late payments.

- According to a first assessment by the Office of the Fiscal Advisory Council, deferral of corporate income and income tax will reduce tax revenues by EUR 3.9 billion in 2020. The deferral of social insurance contributions, by contrast, will not have an effect on the budget balance that is relevant under ESA 2010. Nevertheless, the deferral of social insurance contributions increases government debt in 2020 by EUR 5.6 billion.

- **Credit moratorium**: consumer credits and credits of small enterprises must be deferred in case of application.

**Guarantees and assumption of liabilities** as collateral for loans:

- for **exporting firms** (credit line EUR 2 billion), ÖeKB bridge loans in the amount of 10% (large firms) or 15% (SMEs) of the enterprise’s export revenue; maximum size of loan: EUR 60 million per enterprise, state guarantee for between 50% and 70%.

- for **businesses in the tourism industry** (guarantee volume: EUR 1 billion; initially: EUR 100 million): state guarantees in the amount of 80% of bridge financing (to be managed by the Österreichische Hotel- und Tourismusbank),

- for **one-person businesses and SMEs** (guarantee volume: EUR 1.25 billion): state guarantees in the amount of 80% of bridge financing (to be granted and managed by Austria Wirtschaftsservice – AWS); maximum size of loan: EUR 2.5 million per SME.

- Assuming, that state guarantees will only be claimed in subsequent years, there will be no budgetary effect in 2020.

**COVID-19 short-time work** (EUR 5 billion; initially budgeted: EUR 400 million): aims to address the decline in human capital, the rise of structural unemployment and the related decrease in both labor potential and potential output growth in Austria. It allows to reduce usual working hours and compensation of employees.

- Working hours can be shortened during the entire averaging reference period to between 10% and 90% (and may equal 0% temporarily).

- Part of the lost compensation of labor is provided by the Public Employment Service Austria (AMS) in the form of transfer payments.

- The net compensation rate is staggered. For gross wages of more than EUR 2,685 and up to the earnings cap, employees will receive a compensation of 80% of the net compensation they received before short-time working was introduced; for gross wages of between EUR
1,700 and EUR 2,685, they will receive a compensation of 85%; and for gross wages of below
EUR 1,700, the AMS will pay 90% of compensation in the form of transfer payments.
Apprentices will continue to receive 100% of their previous apprentice compensation.

- Short-time working subsidies will be granted in the form of fixed rates per working hour lost.
  These fixed rates include social security contributions as well as any other wage-related
  employer taxes. To compensate for proportionate shares of bonuses, the fixed rates will be
generally increased by one-sixth.

- Enterprises may apply for short-time work for a period of three months; if necessary, this
  period can be extended for another three months.

- The **Office of the Fiscal Advisory Council** estimates that the budgetary effect of these
  measures will be around EUR 5.4 billion.

When the Second COVID-19 Act was passed other measures were also adopted which are not included
in the 38 billion package. Those include

- **family hardship fund** (EUR 30 million): financial support for families with parents became
  unemployed or in short-time-work due to the COVID-19 crisis. One-time payout that is not repayable.
The financial resources are provided through the FLAF.

- **media promotion** (EUR 17 million): promotion of private commercial (EUR 15 million) and non-
  commercial (EUR 2 million) broadcasting program financed from the revenues of the broadcasting
  fees.

- elimination of the obligation to pay specific supplements to the **Construction Workers’ Annual
  Leave and Severance Pay Fund** (Bauarbeiter-Urlaub- und Abfertigungskasse – BUAK, EUR 60
  million): Waiver of certain supplements related to severance, interim supplement and winter holiday
  provisions for the period from March 16, 2020, to May 15, 2020.\(^\text{10}\)

- It was decided that the rise in **tobacco tax** on cigarettes, fine-cut tobacco and heated tobacco products
  envisaged for April 1, 2020, will be postponed to October 1, 2020 (estimated loss in tax revenue: EUR
  17 million).

In addition to the measures outlined above, complementary **sets of measures** were adopted at the
**provincial government level** (e.g. by Vienna or Lower Austria). The instruments chosen here are similar
to the measures adopted by the federal government: for instance, Vienna’s EUR 35 million support
package comprises EUR 12 million in guarantees to strengthen the liquidity of Viennese SMEs, EUR 20
million in emergency funds for one-person businesses and micro businesses, and EUR 3 million in
additional funds to the Vienna Employment Promotion Fund (waff) to support reemployment schemes.

**Recording of COVID-19 measures under ESA 2010**

The mix of fiscal policy measures to mitigate the social and economic effects of the COVID-19 pandemic
comprises various support instruments, which are linked to specific recording practices under ESA 2010.
This means that measures differ in terms of how they are recorded in the national accounts of the general
government sector (time and volume) and, consequently, in terms of the extent of their effects on the
general government budget balance and on government debt (table 2). For instance, tax reliefs (e.g.
reduction of advances, deferrals or payment in instalments) constitute a loss in tax revenue whereas grants
(e.g. direct payments to enterprises) constitute additional expenditure. They thus contribute directly to
deteriorating the budget balance and, in case of a budget deficit, contribute to increasing the debt level
accordingly. By contrast, liabilities assumed or loans granted have no immediate effect on the budget

\(^{10}\) see Article 20 Second COVID-19 Act (17/BNR).
balance (apart from possible income from guarantee fees or interest income). They will only begin to have an immediate effect if liability claims are made or if loans outstanding become uncollectible.

Table 2: Recording of COVID-19 measures under ESA 2010

<table>
<thead>
<tr>
<th>COVID-19 measure</th>
<th>ESA 2010 recording</th>
<th>Transaction class</th>
<th>Net lending/borrowing</th>
<th>Impact Government debt</th>
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<tbody>
<tr>
<td>Tax relief</td>
<td></td>
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<tr>
<td>Reduction of corporate and income tax prepayments</td>
<td>On a time-adjusted cash basis, i.e. measures are recorded at the time of actual disbursement, with lags in payments received being taken into account</td>
<td>Current taxes on income, wealth, etc. (D.5)</td>
<td>Direct</td>
<td>Direct</td>
</tr>
<tr>
<td>Waiver of surcharges for late payment of taxes or interest on additional income or corporate tax claims</td>
<td>On an accruals basis, i.e. at the time interest (income) accrues (regardless of the time of actual payment)</td>
<td>Property income (D.4)</td>
<td>Direct</td>
<td>Direct</td>
</tr>
<tr>
<td>Tax deferral or payment in instalments</td>
<td>On a time-adjusted cash basis, i.e. later tax payments increase tax revenues in the following years</td>
<td>Current taxes on income, wealth, etc. (D.5)</td>
<td>Direct</td>
<td>Direct</td>
</tr>
<tr>
<td>Deferral of social security contributions</td>
<td>On an accruals basis</td>
<td>Social contributions and benefits (D.6)</td>
<td>None</td>
<td>Direct</td>
</tr>
<tr>
<td>Guarantees (1)</td>
<td>At the time a guarantee is called</td>
<td>Other capital transfers (D.9)</td>
<td>Not direct</td>
<td>Not direct</td>
</tr>
<tr>
<td>Bridge loans</td>
<td>At the time of issue</td>
<td>Financial transactions (loans, F.4)</td>
<td>None</td>
<td>Not direct, unless debt capital is raised to grant loan</td>
</tr>
<tr>
<td>Interest income</td>
<td>On an accruals basis, i.e. at the time interest (income) accrues (regardless of the time of actual payment)</td>
<td>Property income (D.4)</td>
<td>Direct</td>
<td>Direct</td>
</tr>
<tr>
<td>Waiver of loan repayment or recognition of claim as uncollectible</td>
<td>At the time of write-off of claim</td>
<td>Other capital transfers (D.9)</td>
<td>Direct</td>
<td>Direct</td>
</tr>
<tr>
<td>Subsidized loans</td>
<td></td>
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</tr>
<tr>
<td>Loans with an ex post subsidy component, transformation of part of loan into subsidy (2)</td>
<td>At the time of issue/ transformation (write-off of claim)</td>
<td>Financial transactions (loans, F.4)/ other capital transfers (D.9)</td>
<td>None/at the time of write-off of claim</td>
<td>Not direct, unless debt capital is raised to grant loan/at the time of write-off of claim</td>
</tr>
<tr>
<td>Loans with an ex ante defined subsidy component</td>
<td>At the time of issue; different treatment of loan and subsidy components</td>
<td>Loan: financial transactions (F.4), subsidy: subsidies (D.3)</td>
<td>Direct, in the amount of the subsidy</td>
<td>Direct, in the amount of the subsidy; loan: not direct, except debt capital is raised to grant loan</td>
</tr>
<tr>
<td>Short-time working</td>
<td>On an accruals basis, at the time of approval</td>
<td>Other subsidies (D.3)</td>
<td>Direct</td>
<td>Direct</td>
</tr>
<tr>
<td>Other direct aid to businesses</td>
<td>On an accruals basis, at the time of approval</td>
<td>Subsidies (D.3)</td>
<td>Direct</td>
<td>Direct</td>
</tr>
</tbody>
</table>

1) Exception: Uncollectible social security contributions are written off and reduce total social security contributions under ESA, which will be directly reflected in the budget balance.
2) As a rule, guarantee fees are recorded, which have a positive impact on the Maastricht balance. However, it can be expected that such fees will not be recorded under the COVID-19 package.
3) If subsidies have been agreed but no details are known as regards the timing and amount of subsidies.
Source: Authors’ compilation.

The actual extent of the budgetary effects depends on the actual utilization of the individual measures. See chapter 3 for assessments made by the Office of the Fiscal Advisory Council.

3. SECTORAL BREAKDOWN OF MACROECONOMIC SHOCK

As the effects of the measures adopted to contain the COVID-19 pandemic – i.a. restrictions in trade, food and beverage service activities or services – differ considerably across industries, this analysis adopts a sectoral perspective. This way, it is possible to make different assumptions on the development of sales and gross value added for different sectors. We follow the ÖNACE 2008 classification (for some cases to the level of +4) of the 2017 structural business statistics, which allows us to capture the subsectors within individual industries. This makes it possible, for instance, to differentiate between food retailers and commodity retailers and thus to see on which subsectors the COVID-19 pandemic and the related measures have a stronger impact than on others. The underlying assumption is that the measures will be in effect for up to 12 weeks.
The impact on the individual sectors is modeled in four different degrees (see table 3), depending on the extent of the respective effect. For firms that had to temporarily cease operations following the federal government’s regulation – i.a. most trade and retail companies, hotels, restaurants and caterers, as well as most providers of personal services (e.g. hair styling salons, beauty salons and spas) – we assume a loss in sales and gross value added of 100% during the lockdown period and 50% for the catching-up phase afterwards.\footnote{After the lockdown we assume a 50% reduction for the period half the lockdown time. This means that in sectors which are affected longer by lockdown measures the catch-up process will take longer too, e.g. hotels and restaurants.} For sectors on which the legal measures have a strong indirect impact, e.g. staff leasing, parts of wholesale trade and construction as well as various manufacturing companies, we assume a sharp decline in sales and gross value added. The majority of other services (architects, IT services, etc.) can be expected to face lower demand, although the decline will not be as pronounced as in other segments. Finally, we assume no negative effects on value added in those sectors on which the containment measures have only marginal direct and indirect effects, namely some manufacturers, food retailers, and professional, business and support services (e.g. external auditors, consulting agencies and security services).

Table 3: Assumptions of sectoral analysis

<table>
<thead>
<tr>
<th>Criteria</th>
<th>Industries</th>
<th>Slump in output</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mandatory businesses closures</td>
<td>Parts of retail sector, hotels and restaurants, etc.</td>
<td>-100%</td>
</tr>
<tr>
<td>Businesses suffering strong indirect impact</td>
<td>Parts of manufacturing and construction, car retailers, wholesale trade, etc.</td>
<td>-70%</td>
</tr>
<tr>
<td>Businesses suffering small indirect impact</td>
<td>Various service sectors (IT, financial services, housing), freelancers, etc.</td>
<td>-30%</td>
</tr>
<tr>
<td>Businesses suffering marginal direct or indirect impact</td>
<td>Parts of manufacturing, food retailers, R&amp;D, market research, etc.</td>
<td>–</td>
</tr>
</tbody>
</table>

Source: Fiscal Advisory Council assessment on the basis of Statistics Austria data.

Once the containment measures are lifted, different catching-up effects can be expected for different industries. Some manufacturing businesses have brought forward company holidays or rescheduled maintenance works to be able to make up for production losses later in the year. Such catching-up processes seem rather unrealistic for large parts of the services sector, though. Against this background, the underlying shock scenario assumes a stronger catching-up effect for manufacturing or the construction sector than for services. In particular, hotels, restaurants and caterers will not be able to catch up on lost sales on a large scale. The assumed catching-up effects take into account the economic policy measures adopted by the federal government to secure jobs and support enterprises’ liquidity. Without these measures, the economic catching-up process would have to be expected to take substantially longer.

Starting from these assumptions, a sectoral analysis results in a marked decline in sales and gross value added. The largest contribution to the decline in sales stems from the slump in other services and parts of manufacturing, followed by losses in accommodation and food and beverage service activities and retail trade. In total, the negative effect of the COVID-19 pandemic is expected to be around EUR 23.5 billion for gross value added and around EUR 54 billion for sales. This roughly corresponds to a negative shock on real GDP of 5.8%.\footnote{GDP is the sum of gross value added plus taxes and less subsidies on products.} The effect of discretionary measures was taken into account via the size of the catching-up effect in deriving the shock. Yet, given high level of uncertainty (we do not know how far the coronavirus will spread and how long the containment measures will be kept up), these estimations must be regarded as preliminary and will have to be adjusted on basis of incoming information.

Quantification of discretionary measures

We perform an initial assessment on the basis of the sectoral analysis outlined above for those measures the federal government took to support the labor market and to compensate for lost earnings caused by
the health crisis (emergency aid, COVID-19 short-time working subsidies and tax deferrals) that will have
the strongest impact on the budget balance.

In order to estimate the share of emergency aid loans that may be converted into grants after one year and
direct grants, the subsectors taken into consideration are those in which businesses were shut down or
experienced significant losses as a direct or indirect consequence of the federal government’s measures.
The grant depends on the losses in sales and ranges from 25% to 75%. Considering those fixed operating
costs that are eligible for support under the emergency fund (such as rents, insurance or interest payments,
etc.), the total financial support amounts to EUR 4.3 billion.

Our assessment of the costs of COVID-19 short-time working subsidies relies on the analysis of individual
sectors and the assumption that the corona crisis will have different implications for different sectors.
Depending on the assumptions made for different impact categories – total shutdown, high or low impact
– per industry, the share of enterprises that will introduce short-time working or lay off employees will
differ. Moreover, we assume that some businesses will not opt for any of the two measures despite losses
in sales, i.a. hotels and restaurants, given the high share of one-person businesses and seasonal
employment. In total, however, the number of layoffs in hotels and restaurants remains high as businesses
(except delivery services) have closed completely. Based on the above assumptions and calculations,
additional expenditure for short-term working will come to EUR 5.4 billion. Our assessment assumes a
broad-based resumption of occupation as soon as the federal government’s containment measures are
lifted, with short-time working being discontinued and the number of unemployed declining to pre-crisis
levels.

The reduction of tax advances and the deferral of income and corporate income tax are also assessed via
the sectoral distribution of the effects of the COVID-19 containment measures. In its assessment, the
Office of the Fiscal Advisory Council assumes that around 25% of assessed income tax and corporate
income tax revenue will be deferred. This results in a loss of tax revenue for 2020 of EUR 3.9 billion. For
the most part, lower tax advances have been considered via the underlying macroeconomic path (and are
thus not considered again under discretionary measures). Deferred social security contributions do not
affect the 2020 budget balance as these contributions are recorded on an accrual basis but increase
government debt by EUR 5.6 billion. This assessment is based on an assumed deferral of 25% of the
relevant social security payments in 2019.

4. DECOMPOSITION OF AGGREGATE MACROECONOMIC SHOCK

From a macroeconomic perspective, the COVID-19 pandemic constitutes a contractive shock which, however, only partly fits the classical dichotomy of supply and demand. Instead, the current situation can
rather be understood as a combination of known supply and demand shocks that also possesses the quality
of a novel shock.

The supply-side shock results from the economic shutdown, which also means that many people are
suddenly without a job. The AMS (Public Employment Service Austria) reports a rise in the number of
unemployed by 240,000 (year-on-year change) as of April 13, 2020. In the short term, collective wage
agreements might budget no, or only marginal, wage increases. While the high degree of general
uncertainty discourages investment.13

13 Contraction supply shocks are in general accompanied by a rise in relative prices. The current situation, however, is not
categorized by scarcity in the narrow sense.
At the same time, demand is collapsing in many sectors, partly as a consequence of the decline in employment and the low growth in the total compensation of employees. Private consumption has gone down since people have been urged to stay at home; tourism has swiftly come to a complete standstill, and the same applies to the bulk of the restaurant business. Production sector output has been contracting sharply. Once the COVID-19 pandemic subsides, significant catching-up effects can be expected. It can be assumed with certainty that the demand-side losses will not be fully recovered, however. Export demand is declining sharply.

**Table 4: Decomposition of the macroeconomic shock**

<table>
<thead>
<tr>
<th>%P</th>
<th>Real GDP Scenario I</th>
<th>Scenario II</th>
<th>Nominal GDP Scenario I</th>
<th>Scenario II</th>
<th>Volume of labor Scenario I</th>
<th>Scenario II</th>
<th>Compensation of employees Scenario I</th>
<th>Scenario II</th>
<th>Nominal private consumption Scenario I</th>
<th>Scenario II</th>
</tr>
</thead>
<tbody>
<tr>
<td>2020</td>
<td>-5.8</td>
<td>-5.8</td>
<td>-6.2</td>
<td>-5.9</td>
<td>-6.1</td>
<td>-4.1</td>
<td>-6.8</td>
<td>-4.8</td>
<td>-4.3</td>
<td>-3.3</td>
</tr>
</tbody>
</table>

Source: WIFO forecast and authors’ calculations.

To illustrate potential effects on the Austrian economy, we analyzed the impact of two different types of shocks which are comparable in size with regard to their aggregate impact on GDP and different with regard to their composition, estimating a Dynamic Stochastic General Equilibrium (DSGE) model. Given the singularity of current developments, this analysis is, however, subject to great uncertainty. The decomposition of the shocks considers shock-induced changes in domestic and external supply and demand. Under the assumption derived from the sectoral analysis (chapter 3) that real GDP will fall by 5.8 percentage points due to the COVID-19 pandemic in both scenarios, we calculate the corresponding change in the number of workers and the number of unemployed, in the CPI, in the compensation of employees and in real and nominal consumption following this shock. Decomposing the aggregate shock into the macroeconomic variables listed above is indispensable for assessing the fiscal effect of the COVID-19 shock. Scenario 1 assumes that demand shocks cause three-quarters of the total shock, and that both shocks are attributable equally to domestic and external factors. Scenario 1 assumes that supply and demand shocks are equal drivers of GDP contraction, retaining symmetric shares for domestic and external factors in the shocks.

5. **EFFECTS ON BUDGET BALANCE AND DEBT LEVEL**

The budgetary effect of the COVID-19 pandemic results from the rise in expenditure and the reduction in tax revenues caused by the measures adopted by the federal government and from the budgetary effects of the macroeconomic shock. The present macro scenario (5.8% contraction of GDP, implying that GDP shrinks by 4.6% 2020) already considers the expansive effect of the discretionary measures. In total, the discretionary measures will weigh on the budget with EUR 16.1 billion, of which increases in expenditure account for the largest share (EUR 12.1 billion). The decline in tax revenues caused by the discretionary measures will come to EUR 3.9 billion (table 5).

The 5.8% real GDP shock analyzed in scenario 1, three-fourth of which are caused by the demand side, will reduce government revenues by EUR 8.6 billion. Government expenditure will rise by EUR 0.9 billion, mainly driven by the increase in the payment of unemployment benefits. The symmetric macro shock caused by a supply and demand shock (scenario 2) leads to a slighter decline in government revenues, by EUR 6.6 billion, compared with scenario 1. This is mainly attributable to the smaller decrease in the compensation of employees and the number of employees. The macroeconomically motivated rise...

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14 At present, there is uncertainty with regard to both the “real” development of the Austrian economy and the “true” nature of the observable macroeconomic shocks. The model assumes linearity in the shocks identified.
in government expenditure, however, will remain almost unchanged compared with scenario 1, namely at around EUR 0.9 billion.

Table 5: Quantified federal government measures

<table>
<thead>
<tr>
<th>Component of aid package</th>
<th>Measure</th>
<th>Impact on Maastricht budget balance* in EUR million</th>
</tr>
</thead>
<tbody>
<tr>
<td>Immediate aid</td>
<td>Hardship Fund</td>
<td>-2,000</td>
</tr>
<tr>
<td>Immediate aid</td>
<td>Special care</td>
<td>Not quantifiable</td>
</tr>
<tr>
<td>Immediate aid</td>
<td>Artists’ support fund</td>
<td>-5</td>
</tr>
<tr>
<td>Immediate aid</td>
<td>Support to ÖGK (Austrian Health Fund)</td>
<td>-60</td>
</tr>
<tr>
<td>Immediate aid</td>
<td>Health-related expenditure</td>
<td>-130</td>
</tr>
<tr>
<td>Immediate aid</td>
<td>Support to research activities</td>
<td>-23</td>
</tr>
<tr>
<td>Immediate aid</td>
<td>Support for care-related needs</td>
<td>-100</td>
</tr>
<tr>
<td>Immediate aid</td>
<td>Tax-exempt bonuses for workers that are critical in the COVID-19 response</td>
<td>Not quantifiable</td>
</tr>
<tr>
<td>Immediate aid</td>
<td>Cancellation costs for school trips</td>
<td>-13</td>
</tr>
<tr>
<td>Immediate aid</td>
<td>Provision of computers for school children</td>
<td>-5.5</td>
</tr>
<tr>
<td>Emergency aid</td>
<td>(Partial) compensation for lost earnings</td>
<td>-4,300</td>
</tr>
<tr>
<td>Tax deferrals</td>
<td>Corporate tax, income tax</td>
<td>-3,900</td>
</tr>
<tr>
<td>Tax deferrals</td>
<td>Social security contributions **</td>
<td>0</td>
</tr>
<tr>
<td>Guarantees</td>
<td>Federal government guarantees for bridge loans to one-person businesses/SMEs and to</td>
<td>0</td>
</tr>
<tr>
<td>Short-time working</td>
<td>Short-time working</td>
<td>-5,400</td>
</tr>
<tr>
<td>Other measures</td>
<td>Family hardship compensation, BUAK, Media promotion, tobacco tax</td>
<td>-124</td>
</tr>
</tbody>
</table>

Total: -16,061
Revenue side: -3,917
Expenditure side: -12,144

Note: *) Negative values imply a reduction of the budget balance.
** No effect on deficit, but on government debt.


The total budgetary effect of the COVID-19 pandemic is estimated to reach –EUR 25.6 billion (or –6.6% of GDP) in scenario 1, and to –EUR 23.5 billion (or –6.1% of GDP) in scenario 2; in both scenarios, around more than half of the total budgetary effect is attributable to the budgetary effect of the discretionary measures (see table 6).

Table 6: Expected effects on budget balance and debt level

<table>
<thead>
<tr>
<th>Fiscal impact of the COVID-19 pandemic in 2020</th>
<th>Δ Net lending/borrowing</th>
<th>Δ Government debt</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>EUR billion</td>
<td>% of GDP</td>
</tr>
<tr>
<td>Discretionary measures</td>
<td>-16.1</td>
<td>-4.2%</td>
</tr>
<tr>
<td>Macroeconomic shock</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Scenario 1</td>
<td>-9.5</td>
<td>-2.5%</td>
</tr>
<tr>
<td>Scenario 2</td>
<td>-7.4</td>
<td>-1.9%</td>
</tr>
<tr>
<td>Total effects under scenario :</td>
<td>-25.6</td>
<td>-6.6%</td>
</tr>
<tr>
<td>Total effects under scenario :</td>
<td>-23.5</td>
<td>-6.1%</td>
</tr>
</tbody>
</table>

The debt level will rise by EUR 31.2 billion (scenario 1) or EUR 29.1 billion (scenario 2).\textsuperscript{15} The debt increase going beyond the budgetary effect (stock-flow-adjustments) is driven by the assumed deferral of social security contributions. The debt-to-GDP ratio will go up by 8.1\% (scenario 1) or 7.5\% (scenario 2).

To sum up, the present analysis is subject to high uncertainty. Both the size of the macroeconomic shock and the budgetary effect of the discretionary measures are based on a wide range of assumptions. It will be expedient to continuously readjust the assessment made here.

Moreover, it is important to note that the severe fiscal impact of the COVID-19 pandemic does not lead to noncompliance with the European Stability and Growth Pact (SGP) as the European Commission, in consultation with the Ecofin Council, has activated the general escape clause (see chapter 6). The details about how this clause will be operationalized are still unclear, however.

\section*{6. IMPLICATIONS FOR THE APPLICATION OF FISCAL RULES}

The COVID-19 pandemic has far-reaching implications. With a view to its economic and fiscal policy dimension, we will, in the following, illustrate the flexibilization of numerical fiscal rules under the Stability and Growth Pact (SGP) and summarize the related policy responses by the European Commission and the Eurogroup.\textsuperscript{16}

Under the EU fiscal rules, there are various options for considering the budgetary impact caused by the COVID-19 pandemic separately:

- easing requirements regarding the \textit{adjustment path} toward the structural medium-term budget objective (MTO) in line with cyclical developments (“matrix of requirements”)
- treating expenditure in connection with the COVID-19 crisis as deductible \textit{one-off measures} in calculating the structural budget balance
- treating expenditure in connection with the COVID-19 crisis as an \textit{unusual event}, thus making it possible to temporarily ease the requirements or deviate from the MTO to the extent corresponding to the expenditure directly connected to the event (unusual event clause)
- activating the \textit{general escape clause}, which allows for additional discretionary (economic stimulus) measures in case of a serious economic downturn in the euro area

These SGP flexibilization elements differ with regard to both the \textit{time dimension of the easing of fiscal requirements} and the \textit{extent of eligible measures or expenditure categories}.

Considering this range of possibilities, the \textit{euro area finance ministers and the European Commission} agreed, already on March 16, 2020, to address the budgetary impact of the COVID-19 pandemic by applying the \textit{unusual event clause} and activating the \textit{general escape clause}. This response was confirmed by the Ecofin Council on March 23, 2020.

\textsuperscript{15} In this context, the automatic stabilizers calculated in the Fiscal Advisory Council’s forecasting model are below the widely used budget semi-elasticity of 0.57.

Application of unusual event clause and general escape clause

The SGP provides for a certain degree of flexibility that allows easing the budgetary requirements, in both its preventive and corrective arms, in view of nonbudgeted expenditures that are attributable to unusual events and that are outside the control of the Member State concerned (Article 5(1) and Article 9(1) EU Regulation 1466/97). For Austria, this provision was last invoked for additional costs with regard to refugee migration (from 2015 to 2017) and counter-terrorism measures (in 2016 and 2017).

The preventive arm of the SGP expressly states that Member States may be allowed temporarily to depart from the required adjustment path toward the MTO, or from the MTO, if

i) such deviations result from an unusual event,

ii) the unusual event is outside the control of the respective Member State,

iii) the unusual event has a major impact on the financial position of the general government and

iv) such deviations do not endanger fiscal sustainability in the medium term.

The corrective arm of the SGP contains a similar clause according to which no excessive deficit procedure will be launched if

i) exceeding the benchmark can be considered exceptional,

ii) the deficit continues to be close to 3% of GDP and

iii) if exceeding the benchmark can be directly linked to an unusual event.

In this context, the easing of budgetary requirements in both the preventive and corrective arms refers to changes in the structural budget balance and to permissible deviations from the MTO. Temporary deviations from the requirements are permissible for three years and in line with the budgetary impact of the “additional costs” triggered by the unusual event. In other words, there must be a direct link to the unusual event. Against this background, in particular measures to support the health sector and to enhance civil protection as well as temporary support to enterprises and employees will be eligible; any discretionary measures going beyond that, e.g. measures to stimulate the economy, will not be eligible. The latter, however, are likely to be considered under the general escape clause the European Commission may activate in case of a severe economic downturn, provided that this does not endanger fiscal sustainability in the medium term.

Structural adjustment in the preventive arm of the SGP, depending on cyclical conditions: matrix

In the preventive arm of the SGP, an appropriate annual improvement of the cyclically adjusted budget balance as corrected for one-off and temporary measures (structural budget balance) is required.\(^\text{17}\) The benchmark is set at 0.5% of GDP. Member States with a debt level exceeding 60% of GDP, with pronounced risks to their overall debt sustainability or with a strong economic performance must adjust their structural budget balance by more than 0.5% of GDP per year. In times of economic downturn, they may fall below this benchmark. The detailed matrix in table 7 gives an overview of the

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\(^{17}\) The structural adjustment is calculated, by way of approximation, by subtracting the structural budget balance (as a percentage of GDP) of year \(t-1\) from that of year \(t\).
exact country-specific provisions. In the year the MTO is reached, the benchmark will be reduced to comprise the adjustment necessary to reach the MTO.\textsuperscript{18}

**Table 7:** Necessary structural adjustment of the deficit ratio (as a percentage of GDP) per year in percentage points

<table>
<thead>
<tr>
<th>Macro-economic conditions</th>
<th>Debt below 60% and no sustainability risk</th>
<th>Debt above 60% or sustainability risk</th>
</tr>
</thead>
<tbody>
<tr>
<td>Exceptionally bad times</td>
<td>Real growth &lt; 0% or output gap &lt; -4%</td>
<td>No adjustment needed</td>
</tr>
<tr>
<td>Very bad times</td>
<td>-4% ≤ output gap &lt; -3%</td>
<td>0</td>
</tr>
<tr>
<td>Bad times</td>
<td>-3% ≤ output gap &lt; -1.5%</td>
<td>0, if real growth below potential;</td>
</tr>
<tr>
<td></td>
<td></td>
<td>0.25, if real growth above potential;</td>
</tr>
<tr>
<td>Normal times</td>
<td>-1.5% ≤ output gap &lt; 1.5%</td>
<td>0.5</td>
</tr>
<tr>
<td>Good times</td>
<td>Output gap ≥ 1.5%</td>
<td>&gt; 0.5, if real growth below potential;</td>
</tr>
<tr>
<td></td>
<td></td>
<td>≥ 0.75, if real growth above potential;</td>
</tr>
</tbody>
</table>

Source: European Commission and own illustration.

**Deductibility of one-off measures in calculating the structural budget balance**

The budget balance (Maastricht definition) is adjusted for both cyclical budget components and one-off measures in the calculation of the structural budget balance. Following EU conventions, one-off measures are defined as follows: “One-off and temporary measures are measures having a transitory budgetary effect that does not lead to a sustained change in the intertemporal budgetary position, i.e. sales of nonfinancial assets; short-term emergency costs emerging from natural disasters; tax amnesties; revenues resulting from the transfers of pension obligations and assets (Code of Conduct, January 24, 2012).” Against this background, e.g. capital transfers under the Austrian banking package as well as expenditure in connection with flood relief have so far been treated as one-off measures.

One-off measures are fully reflected in the budget (i.e. not only the incremental change vis-à-vis the previous year, as with unusual events), and only in one single year. While unusual events are addressed by an easing of fiscal requirements, one-off measures directly influence the level of the structural budget balance – which is subject to the aforementioned rules and requirements.

\textsuperscript{18} To determine the deviation from the MTO required to define the requirement for year $t$, the value of the structural budget balance of year $t-1$ according to the European Commission’s spring or autumn forecasts for year $t-1$ is frozen and, if necessary, replaced retroactively in spring $t+1$ by the most favorable value (this means e.g. that the last possible correction for 2018 can be made in spring 2020).