

Compensation of High Economic Losses.

Economic Outlook for 2020 to 2022

Stefan Schiman

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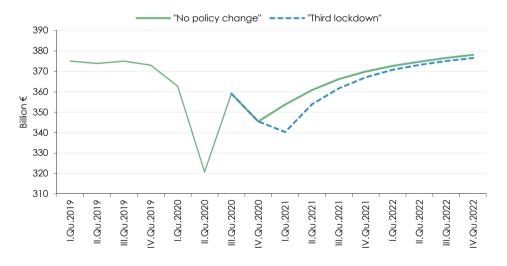
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Stefan Schiman

- WIFO works in all research areas on the topic In the summer of 2020, the economy in Austria recovered from the first COVID-19 slump with above-average strength.
- The second lockdown depresses economic activity again in 2020, but due to the smaller impact on industry less than the first.
- Without a further lockdown, economic growth of 4.5 percent is forecast for 2021, with a third lockdown of 2.5 percent. In both scenarios, the crisis would not be overcome until 2022.
- Without a further lockdown, winter tourism would be severely curtailed due to the ongoing travel warnings; with a third lockdown, it would cease altogether.
- In both scenarios, unemployment, which rose significantly in 2020 despite short-time work, declines only slowly in 2021.
- Only in the warmer season and with the vaccination coverage of the population can social and economic activities return to normal.

GDP trajectory in the scenarios "no policy change" and "third lockdown"

GDP volume, seasonally and working-day adjusted according to Eurostat, annualised



"Due to ongoing travel warnings, the catering and hotel industry – the sectors with the highest losses so far – will recover only slowly. They would be particularly affected by a third lockdown."

The "third lockdown" scenario – in contrast to the "no policy change" scenario – takes into account a further lockdown in the first quarter of 2021. The economic recovery therefore only sets in later. A slight loss of value added remains until the end of the forecast period (Source: WIFO, Statistics Austria; values realised until the third quarter of 2020).

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In the summer of 2020, economic recovery in Austria was extraordinarily strong, even by international standards. The second lockdown depresses economic activity again in 2020, but – since industry is less affected – by less than the first. Overall, real GDP fell by 7.3 percent in 2020 and unemployment rose by one-third despite the use of COVID-19 short-time work. Without a further lockdown ("no policy change"), GDP is expected to grow by 4.5 percent in 2021; and by 2.5 percent with a third lockdown. Upcoming winter tourism in particular will be severely curtailed due to the ongoing travel warnings, or even fully cancelled. Only in the warmer season and with the vaccination coverage of the population can social and economic activities return to normal. In any case, unemployment will remain above the pre-crisis level in 2022.

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Research assistence: Astrid Czaloun (<u>astrid.czaloun@wifo.ac.at</u>), Maria Riegler (<u>maria.riegler@wifo.ac.at</u>), Martha Steiner (<u>martha.steiner@wifo.ac.at</u>) • Cut-off date: 4 December 2020

Contact: Stefan Schiman, MSc (stefan.schiman@wifo.ac.at)

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Economic output slumped sharply in Austria in 2020. However, at –7.3 percent (forecast), the decline in GDP was less severe than the circumstances of the last few weeks – the lockdown since the beginning of November in varying intensity – would have suggested. In its forecast from early October, WIFO already expected a decline of 6.8 percent. The relatively low forecast revision for 2020 has two main causes:

• The recovery was stronger than expected in the summer and, measured against the depth of the previous slump, was also above average by international standards. In addition to the generous easing of the COVID-19 pandemic containment measures, the strong rebound was also due to expansionary economic policies, which stabilised private household incomes and thus consumer demand, as well as the rapid recovery of world trade, which benefited foreign trade and subsequently industrial production and investment.

• The solid development of world trade also explains why the economy is less affected by the second lockdown since November 2020 than by the first. International supply chains have been maintained, factories have not been closed and supply-side barriers to industrial production have been avoided. The second lockdown mainly affects the service industries and therefore has less macroeconomic effects than the first one.

Under the current conditions, the mean of the forecast interval will – contrary to the usual assumption – not correspond to the value with the highest probability of occurrence. Rather, a bimodal forecast interval seems plausible, i.e. a range with two probable outcomes: either the health policy stance remains unchanged ("no policy change"), and a recovery from the current lockdown follows in the first quarter of 2021. Or a new lockdown is imposed in the first quarter, so that a – relatively stronger – rebound is deferred to the second quarter:

- In the "third lockdown" scenario, a complete lockdown of four weeks is assumed from the end of January 2021 and a subsequent partial lockdown until the end of March 2021 with continued closure of restaurants and accommodation services. GDP would thus continue to decline in the first quarter of 2021 and the economic recovery would be delayed. With the closure of retail trade, the use of COVID-19 short-time work would increase again, while the abrupt end of the winter tourism season would temporarily increase seasonal unemployment.
- In the "no policy change" scenario without a third lockdown, a jump in economic output could be expected in the

first quarter of 2021, as businesses that had to close for several weeks at the end of 2020 would be active again. This would affect the retail sector, although some catch-up purchases would already be made before Christmas, as well as the catering sector and, to a lesser extent, the accommodation sector. Accommodation businesses would only compensate the losses very slowly, as travel warnings issued by important countries of origin will keep foreign guests from holidaying in Austria until including February 2021. The rebound after the second lockdown would therefore be weaker than after the first or a possible third.

Table 1: Main results - "no policy change" scenario

		2	017	2	2018	2	019	2	020	2	021	2	2022
			Pe	erce	entage	e ch	nange	s fr	om pr	evi	ous ye	ar	
Gross domestic product, volume		+	2.4	+	2.6	+	1.4	-	7.3	+	4.5	+	3.5
Manufacturing		+	3.7	+	5.3	+	0.7	_	7.7	+	5.5	+	3.7
Wholesale and retail trade		+	0.1	+	2.9	+	0.6	_	6.3	+	5.7	+	1.5
Private consumption expenditure ¹ , volume		+	1.9	+	1.1	+	8.0	-	8.3	+	5.9	+	3.0
Consumer durables		+	2.0	+	1.1	_	0.4	_	3.5	+	6.0	+	2.5
Gross fixed capital formation, volume		+	4.1	+	3.9	+	4.0	-	5.0	+	4.0	+	2.9
Machinery and equipment ²		+	5.4	+	4.1	+	4.3	_	6.5	+	4.7	+	3.6
Construction		+	2.5	+	3.6	+	3.6	-	3.2	+	3.1	+	2.1
Exports, volume		+	4.9	+	5.5	+	2.9	_	11.6	+	5.2	+	7.3
Exports of goods, fob		+	4.9	+	5.4	+	2.1	-	8.3	+	6.0	+	4.3
Imports, volume		+	5.3	+	5.0	+	2.4	_	11.0	+	6.2	+	6.0
Imports of goods, fob		+	4.4	+	3.8	+	1.1	-	8.7	+	6.2	+	4.0
Gross domestic product, value		+	3.3	+	4.3	+	3.2	-	6.1	+	6.1	+	5.2
k	oillion €	3	69.34	3	85.36	3	97.58	3	73.41	3	96.22	4	16.93
Current account balance as a percentage of	of GDP		1.4		1.3		2.8		2.6		2.2		3.0
Consumer prices		+	2.1	+	2.0	+	1.5	+	1.4	+	1.5	+	1.6
Three-month interest rate p	ercent	-	0.3	_	0.3	_	0.4	-	0.4	-	0.4	-	0.3
Long-term interest rate ³ p	ercent		0.6		0.7		0.1	_	0.2	_	0.2	-	0.1
General government financial balance, Maastricht definition as a percentage o	of GDP	_	0.8		0.2		0.7	_	10.1	_	5.5	_	3.0
Persons in active dependent employment ⁴	01 001	+	2.0	+	2.5	+	1.6	_	2.0	+	1.3	+	2.0
Unemployment rate		•	2.0	•	2.0		1.5		2.0	Ċ	1.0	•	2.0
Eurostat definition ⁵			5.5		4.9		4.5		5.4		5.1		4.8
National definition			8.5		7.7		7.4		9.9		9.3		8.5

Source: WIFO. 2020 to 2022: forecast. - 1 Including non-profit institutions serving households. - 2 Including weapons systems. - 3 10-year central government bonds (benchmark). - 4 Excluding persons in valid employment contract receiving child care benefit or being in military service. - 5 As a percentage of total labour force, Labour Force Survey. - 6 As a percentage of dependent labour force, unemployed persons according to Public Employment Service Austria.

In the course of 2021, first the rising outdoor temperatures and, at the latest in the second half of the year, the vaccination coverage of the population should again allow more societal and thus economic activities and enable a return to normal social behaviour, thereby supporting the economic recovery. Based on this assumption, a GDP growth rate of 4.5 percent is forecast for 2021 in the "no policy change" scenario and 2.5 percent in the "third lockdown" scenario.

The losses in value added due to the crisis will not be compensated in either scenario until 2022. The unemployment rate, which rose by 2.5 percentage points to 9.9 percent in 2020 despite widespread use of COVID-19 short-time work, will fall to 9.3 percent in 2021 in both scenarios. The budget deficit is expected to decline from around 10 percent of GDP in 2021 to about 5.5 percent ("no policy change" scenario) and 6.2 percent ("third lockdown" scenario), respectively.

1. COVID-19 pandemic shapes the global economy

There is a negative correlation between economic growth and the change in lockdown intensity. However, the size of the economic slump is a better indicator of the subsequent rebound.

The first wave of the COVID-19 pandemic and the accompanying containment measures (mainly border, business and factory closures) as well as social distancing resulted in a drastic decline in economic output worldwide. Trade in goods fell by 8.8 percent in the first half of 2020 compared to 2019, while industrial production fell by 7.3 percent. A correlation emerged between the intensification of the measures and the severity of the slump: the more restrictive the lockdown in a country, the

higher the value-added losses tended to be. In Finland and South Korea, for example, the lockdown was only slightly tightened in the second quarter. The economic performance of these countries declined accordingly by 4 percent and 3 percent, respectively, compared to the previous quarter. In the UK and Mexico, on the other hand, measures were tightened significantly, and value added slumped by 20 percent and 17 percent, respectively.

Table 2: International economy

	Percentag 201		201	7	2	018	2	019	2	020	2	021	2	022
	Austria's exports of goods	World GDP ¹	G	DP vo	lun	ne, per	cer	ntage c	han	ges fro	m p	previous	уе	ar
EU 27	66.7	15.4	+ 2.	.8	+	2.1	+	1.5	-	6.9	+	4.4	+	3.0
Euro area	51.5	12.5	+ 2.	.6	+	1.9	+	1.3	-	7.5	+	4.8	+	3.1
Germany	29.3	3.5	+ 2.	.6	+	1.3	+	0.6	-	5.1	+	3.4	+	2.3
Italy	6.4	2.0	+ 1.	.7	+	0.9	+	0.3	_	9.3	+	6.1	+	2.4
France	4.4	2.4	+ 2.	.3	+	1.8	+	1.5	-	9.3	+	6.8	+	2.4
CEEC 5 ²	14.7	1.8	+ 4.	.7	+	4.7	+	3.8	-	4.8	+	3.2	+	2.7
Hungary	3.6	0.2	+ 4.	.3	+	5.4	+	4.6	-	6.6	+	3.0	+	2.4
Czech Republic	3.5	0.3	+ 5.	.2	+	3.2	+	2.3	_	6.9	+	2.7	+	2.4
Poland	3.4	1.0	+ 4.	.8	+	5.4	+	4.5	_	3.4	+	3.1	+	2.4
USA	6.7	15.9	+ 2.	.3	+	3.0	+	2.2	-	3.9	+	3.1	+	2.2
Switzerland	5.0	0.5	+ 1.	.6	+	3.0	+	1.1	-	3.7	+	3.1	+	2.0
UK	2.9	2.4	+ 1.	.7	+	1.3	+	1.3	_ '	11.3	+	4.2	+	3.2
China	2.9	17.4	+ 6.	.9	+	6.7	+	6.1	+	1.8	+	7.9	+	5.0
Total ³														
PPP-weighted⁴		52	+ 3.	.9	+	3.8	+	3.2	_	3.2	+	5.2	+	3.4
Export weighted⁵	84		+ 2.	.8	+	2.3	+	1.7	_	6.4	+	4.4	+	3.0
Market growth ⁶			+ 6.	.5	+	4.4	+	1.4	-	7.8	+	7.5	+	4.0
Forecast assumptions														
Crude oil prices														
Brent, \$ per barrel			54.	.3		71.0		64.3		13		48		49
Exchange rate														
\$ per €			1.	129		1.181		1.120		1.15		1.18		1.18
Key interest rate														
ECB main refinancing r	rate ⁷ , percent		0,0		С	0,0		0.0		0.0		0.0		0.0
10-year government b	·	ermany,	0,3		C),4	_	0.3	_	0.5	_	0.5	_	0.3

Source: WIFO. 2020 to 2022: forecast. $^{-1}$ PPP-weighted. $^{-2}$ Czech Republic, Hungary, Poland, Slovenia, Slovakia. $^{-3}$ EU 27, UK, USA, Switzerland, China. $^{-4}$ Weighted by GDP at purchasing power parities in 2019. $^{-5}$ Weighted by shares of Austrian goods exports in 2019. $^{-6}$ Real import growth of trading partners, weighted by shares of Austrian goods exports. $^{-7}$ Minimum bid rate.

The negative correlation between lockdown intensity and economic growth also applied in the third quarter of 2020: the more the lockdown was eased in a country, the higher the rebound after the slump tended to be. For example, the easing in Sweden and Japan was slight, and value added increased by only 5 percent in these countries. In Slovakia and Austria, on the other hand, the strict measures were relaxed generously, and the GDP rebound was correspondingly stronger (+12 percent in each case).

However, the correlation between lock-down intensity and economic growth weakened in the third quarter. A better indicator of the strength of the rebound was the extent of the previous slump. For instance, the easing in Mexico and the UK was almost as restrained as in Japan and Sweden, but GDP grew by 12 percent and 15.5 percent, respectively, in the third quarter – as it had contracted sharply in the second quarter. Conversely, GDP in Finland grew by only slightly more than 3 percent in the third quarter after the marked relaxation of

containment measures, as it had contracted little in the second quarter.

Of Austria's ten most important trading partner countries, Italy, France and the CEECs recently tightened the lockdown measures again considerably, Germany, the USA and Switzerland less so. Accordingly, stronger value-added losses are assumed for the first

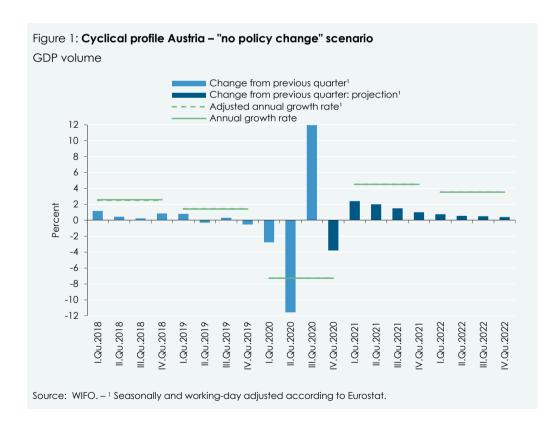
group in the fourth quarter of 2020 than for the latter, followed by a higher rebound. GDP is therefore expected to have contracted by 6.4 percent in these countries overall and export-weighted in 2020, and by 7.5 percent in the euro area; in 2021 it will rise by 4.4 percent and 4.8 percent, respectively.

2. Rebound in summer 2020 in Austria stronger than expected

The rebound after the first lockdown in spring was stronger than WIFO had forecast. Economic output in the third quarter of 2020 was only 4 percent below the previous vear's level and, seasonally adjusted, 12 percent above the value of the previous quarter. If the extent of the economic slump in the first half of the year is taken as a predictor for the rebound in the third quarter - the coefficient of determination of this correlation in a cross-section of 40 countries is over 60 percent – the recovery in Austria was above average. According to this correlation, the GDP decline of -14 percent in the first half of 2020 (second quarter of 2020 compared to fourth quarter of 2019) would imply a growth of only a good 10 percent in the third quarter.

The economic recovery benefitted almost all economic sectors in the summer. The tourism industry (accommodation and catering), which was particularly affected by the lockdown, recovered significantly, and in trade value added even reached the previous year's level. The manufacturing of goods, which had shrunk considerably due to the interruption of international supply chains, among other things, also grew strongly, as did construction. The rebound in transport and other business services was less dynamic, with labour leasing in particular lagging behind the general trend. Sectors less affected by the public health measures to contain the COVID-19 pandemic, such as real estate, financial and insurance services, and the public sector including health care and education, continued to be stable in the summer of 2020.

The economic recovery in Austria in the summer of 2020 was above average in international comparison and affected almost all economic sectors.



The particularly strong rebound requires an upward revision of the forecast for 2020, but also for 2021. Combined with the assumed pattern for the cyclical trend from the WIFO forecast of early October 2020, this would

result in an annual rate of change of real GDP of -6.2 percent for 2020 and an increase of 4.6 percent for 2021 (WIFO forecast of early October -6.8 percent and +4.4 percent, respectively). However, the

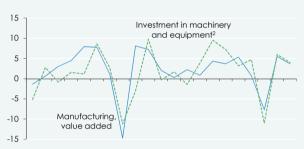
second lockdown, which is in effect from the beginning of November 2020 until the beginning of January 2021 with varying intensity, requires a downward revision that overcompensates for this upward correction.

Figure 2: Indicators of economic performance – "no policy change" scenario



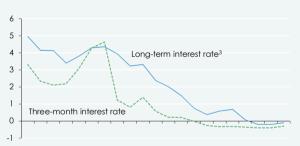


Percentage changes from previous year, volume



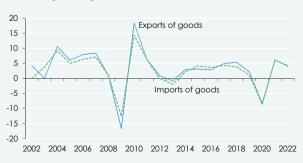
Short-term and long-term interest rates

Percent



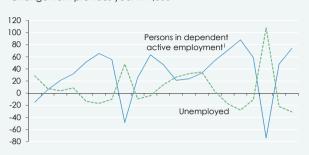
Trade (according to National Accounts)

Percentage changes from previous year, volume



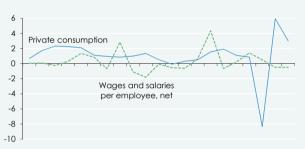
Employment and unemployment

Change from previous year in 1,000



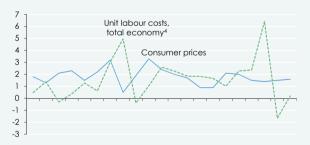
Consumption and income

Percentage changes from previous year, volume



Inflation and unit labour costs

Percentage changes from previous year



General government financial balance

As a percentage of GDP



Source: WIFO. 2020 to 2022: forecast. – ¹ Excluding persons in valid employment contract receiving child care benefit or being in military service, and unemployed persons in training; break in 2007-08 due to changes in the employment statistics. – ² Including weapons systems. – ³ 10-year central government bonds (benchmark). – ⁴ Including short-time work grants. – ⁵ Source: European Commission.

2.1 Second lockdown dampens economic performance in 2020

From 3 to 16 November 2020, health policy measures were in force in Austria similar to those in the first half of May 2020 (partial lockdown): all retail was open, personal services were allowed, restaurants and hotels were closed, and events were (largely) prohibited. From 17 November to 6 December, measures were tightened similar to the first lockdown in March and April 2020 (full lockdown); in particular, non-essential retail had to close and all-day curfews applied.

The estimate of the macroeconomic effects of the second lockdown is based on the Weekly WIFO Economic Index (WWWI), a high-frequency indicator measuring current real economic activity in Austria¹. With the onset of the partial lockdown, the index fell from –2.6 percent at the end of October (calendar week 44) to –5.4 percent at the beginning of November (calendar week 45) and further to –9.2 percent in calendar week 46. With the onset of the full lockdown, economic activity declined further, with the WWWI falling to as low as –14.8 percent in calendar week 49.

In particular, the sub-indicators for credit card sales, hotel booking enquiries, the labour market and mobility data have recently declined significantly, some even falling below the low point from the first lockdown. At the same time, production-related indicators are picking up noticeably. For example, freight transport, nitrogen dioxide emissions and electricity consumption have recently increased. Overall, the sub-indicators show a dichotomy in the economy: a continuation of the economic recovery in industry contrasts with downward momentum in the market services sector.

Thus, the second lockdown has less of an effect on the real economy than the first. Moreover, capacity utilisation was higher in spring 2020 than in autumn and the slump was correspondingly larger. Assuming a change from the full to the partial lockdown in calendar week 50, real GDP in the fourth quarter of 2020 falls by 3.8 percent compared to the previous quarter and is thus about 7½ percent below the previous year's value. Overall, this results in a real GDP change rate of –7.3 percent in 2020.

The "no policy change" scenario is described in more detail below. In view of the high infection figures at the editorial deadline (16 December 2020), the probability of this

scenario occurring decreases and that of a third lockdown increases. The GDP, labour market and budget effects of a third lockdown are discussed in Chapter 3.

2.2 Economy recovers in 2021

Even if parts of the Austrian economy, especially the accommodation sector, will still be severely underutilised at the beginning of 2021, a rebound in economic output can be expected in the first quarter of 2021, as trade and personal and other services are readmitted after weeks of closure in the fourth guarter of 2020. Similar to the first lockdown, we can expect to see a rebound in consumer spending, as a considerable backlog of consumption has built up again and household incomes are being supported by the government. Overall, real GDP is expected to grow by 2.4 percent in the first quarter of 2021 compared to the previous quarter. This will only make up for a good 60 percent of the current slump. By contrast, the rebound in the third quarter of 2020 compensated for 73 percent of the losses in the previous half-year.

As the year progresses, social and economic activities will return to normal with the warmer season and later the vaccination coverage of the population. After the rebound at the beginning of the year, business activity flattens out somewhat, with the quarterly GDP growth rate falling to 1 percent at the end of the year. On average, real GDP should be 4.5 percent higher in 2021 than in the previous year. In 2022, the expansion will continue at a slower pace (+3.5 percent), so that economic output will return to the pre-crisis level in mid-2022.

2.3 Foreign trade in goods little affected by second lockdown

In foreign trade in goods, market share losses are to be expected in 2020 due to negative commodity and country structure effects: the recession in the first half of 2020 had an above-average impact on some of Austria's main markets (France, Italy, CEEC), but also on the most important product groups for Austrian exports, namely machinery and vehicles, capital goods and fabricated metal products.

In contrast to the first lockdown, the second lockdown affects foreign trade in goods only slightly. Exports of goods are declining much less than in the spring because supply chains remained upright and demand is robust in important target markets, especially

stations, workplaces) as well as data from the weekly evaluations of the WIFO-Konjunkturtest (business cycle survey). It is shown as the annual GDP rate of change: a value of +2 percent in a given week means that GDP growth of 2 percent compared to the same quarter of the previous year would be expected, provided that the conditions of that week persist for a whole quarter.

The second lockdown causes a double-dip recession in Austria and requires a downward revision of the forecast. The effects of the second lockdown are smaller than those of the first because industry is hardly affected.

The rebound in the first quarter of 2021 will be weaker than that in the summer of 2020, as the hotel and accommodation facilities will remain underutilised for longer.

¹ The WWWI is compiled using a dynamic factor model and currently includes the following weekly data, truck mileage, electricity consumption, credit card transaction volume, unemployment, nitrogen dioxide emissions, number and volume of financial transactions, air traffic, freight traffic, hotel booking search queries, Google data on mobility (retail and recreation, grocery stores and pharmacies, train

Germany, the USA and Switzerland, but also in Asia.

Losses in market share are still to be expected in 2021, as the economies of

important trading partners are growing more slowly than markets in which Austria is less strongly represented. World trade development is likely to continue to be determined by trade growth in Asia.

Table 3: Technical breakdown of the real GDP growth forecast

"No policy change" scenario

		2019	2020	2021	2022
Growth carry-over ¹	percentage points	+ 0.9	- 0.3	- 0.4	+ 2.0
Growth rate during the year ²	percent	+ 0.2	- 7.4	+ 7.1	+ 2.2
Annual growth rate	percent	+ 1.4	- 7.3	+ 4.5	+ 3.5
Adjusted annual growth rate ³	percent	+ 1.4	- 7.3	+ 4.5	+ 3.5
Calendar effect ⁴	percentage points	- 0.0	± 0.0	± 0.0	± 0.0

Source: WIFO. 2020 to 2022: forecast. – ¹ Impact of year-earlier growth dynamics on growth in the current year. Equals the annual growth rate in the current year, if the level of GDP in the current year remains constant from the fourth quarter of the previous year; seasonally and calendar adjusted according to Eurostat. – ² Reflects the growth dynamics during a calendar year. Equals the year-on-year growth rate for the fourth quarter; seasonally and calendar adjusted according to Eurostat. – ³ Seasonally and calendar adjusted according to Eurostat. Corresponding figure to OeNB short-term forecast. – ⁴ Impact of the annual number of working days and the leap day. The sum of the adjusted annual growth rate and calendar effect may differ from the value of the unadjusted annual growth rate as it also includes seasonal and irregular effects.

Table 4: Expenditure on GDP – "no policy change" scenario

Volume (chain-linked series)

	2019	2020	2021	2022	2019	2020	2021	2022			
	Billior	ı € (refere	nce year	2015)	Per	centage (changes f	rom			
					previous year						
Final consumption expenditure	263.11	247.77	259.32	265.59	+ 1.0	- 5.8	+ 4.7	+ 2.4			
Households ¹	191.36	175.38	185.80	191.37	+ 0.8	- 8.3	+ 5.9	+ 3.0			
General government	71.75	72.37	73.51	74.21	+ 1.5	+ 0.9	+ 1.6	+ 1.0			
Gross capital formation	94.79	86.70	90.68	94.06	+ 0.8	- 8.5	+ 4.6	+ 3.7			
Gross fixed capital formation	91.68	87.07	90.54	93.18	+ 4.0	- 5.0	+ 4.0	+ 2.9			
Machinery and equipment ²	31.75	28.26	29.96	31.15	+ 4.7	- 11.0	+ 6.0	+ 4.0			
Construction	40.22	38.94	40.14	40.99	+ 3.6	- 3.2	+ 3.1	+ 2.1			
Other investment ³	19.72	19.82	20.41	21.02	+ 3.6	+ 0.5	+ 3.0	+ 3.0			
Domestic demand	359.24	334.58	351.28	360.97	+ 1.1	- 6.9	+ 5.0	+ 2.8			
Exports	214.54	189.73	199.57	214.22	+ 2.9	- 11.6	+ 5.2	+ 7.3			
Travel	16.85	9.63	10.24	15.55	+ 3.1	- 42.9	+ 6.4	+ 51.8			
Minus imports	199.72	177.68	188.63	200.01	+ 2.4	- 11.0	+ 6.2	+ 6.0			
Travel	9.11	4.01	4.59	7.95	+ 0.0	- 56.0	+ 14.4	+ 73.3			
Gross domestic product	374.05	346.75	362.38	375.20	+ 1.4	- 7.3	+ 4.5	+ 3.5			
Value	397.58	373.41	396.22	416.93	+ 3.2	- 6.1	+ 6.1	+ 5.2			

Source: WIFO. 2020 to 2022: forecast. - 1 Including non-profit institutions serving households. - 2 Including weapon systems. - 3 Mainly intellectual property products (research and development, computer programmes, copyrights).

2.4 Stabilisation of investment demand still ahead

The current multiple uncertainties – looming insolvencies, another COVID-19 infection wave (see "third lockdown" scenario, Chapter 3) or a renewed supply chain disruption – and the international environment – impending hard Brexit, further trade disputes between the USA and China – are dampening the propensity to invest. Financing conditions, on the other hand, are highly favourable. Lending rates for non-financial institutions are around 1.4 percent for loans

above 1 million € and will remain low for the foreseeable future due to accommodative monetary policy.

Investment activity is supported by the investment premium, which promotes non-climate-damaging tangible and intangible new investments in fixed assets from September 2020 to February 2021. This triggers windfall gains, but also pull-forward effects that dampen the decline in investment. In addition, some projects that had already been cancelled are now likely to be realised after all, as the investment premium

Although the second lockdown has little impact on investment and industrial production, orders are recovering only sluggishly and the order backlog predating the outbreak of the crisis has largely been cleared.

provides a considerable investment incentive (7 percent of the investment volume plus 7 percent for investments in the areas of health, digitalisation and greening).

2.5 Solid development in construction

The construction industry has already overcome the COVID-19 shock and produced at

or above the previous year's level again in the third quarter of 2020. However, the mostly optimistic sentiment did not improve further recently. Although the second lockdown does not affect construction, impairments to construction output are also to be expected. In the fourth quarter of 2020, expansion is therefore likely to be somewhat weaker than in the third quarter.

Table 5: Gross value added – "no policy change" scenario
At basic prices

	2019	2020	2021	2022	2019	2020	2021	2022		
	Billion	€ (refere	nce year	2015)	Percentage changes from previous year					
Volume (chain-linked series)										
Agriculture, forestry and fishing	4.30	4.34	4.34	4.34	- 0.8	+ 1.0	± 0.0	± 0.0		
Manufacturing including mining and quarrying	67.07	61.90	65.31	67.72	+ 0.6	- 7.7	+ 5.5	+ 3.7		
Electricity, gas and water supply, waste management	10.21	9.70	10.09	10.24	+ 3.6	- 5.0	+ 4.0	+ 1.5		
Construction	20.69	20.21	20.63	21.07	+ 2.7	- 2.3	+ 2.1	+ 2.1		
Wholesale and retail trade	39.10	36.64	38.73	39.31	+ 0.6	- 6.3	+ 5.7	+ 1.5		
Transportation	18.92	16.08	17.69	18.75	+ 1.6	- 15.0	+ 10.0	+ 6.0		
Accommodation and food service activities	16.62	11.14	12.25	15.19	+ 2.1	- 33.0	+ 10.0	+ 24.0		
Information and communication	13.14	13.25	13.51	13.72	+ 3.7	+ 0.8	+ 2.0	+ 1.5		
Financial and insurance activities	15.08	15.41	15.66	15.94	+ 3.0	+ 2.2	+ 1.6	+ 1.8		
Real estate activities	31.31	31.94	32.42	32.90	+ 1.2	+ 2.0	+ 1.5	+ 1.5		
Other business activities ¹	32.98	28.03	30.55	32.39	+ 2.1	- 15.0	+ 9.0	+ 6.0		
Public administration ²	56.05	56.22	56.50	56.79	+ 0.6	+ 0.3	+ 0.5	+ 0.5		
Other service activities ³	8.96	7.17	8.24	8.65	+ 0.7	- 20.0	+ 15.0	+ 5.0		
Total gross value added ⁴	334.29	311.77	325.55	336.76	+ 1.4	- 6.7	+ 4.4	+ 3.4		
Gross domestic product at market prices	374.05	346.75	362.38	375.20	+ 1.4	- 7.3	+ 4.5	+ 3.5		

Source: WIFO, 2020 to 2022: forecast. - 1 Professional, scientific and technical activities; administrative and support service activities (NACE M and N). - 2 Including defence, compulsory social security, education, human health and social work activities (NACE O to Q). - 3 Arts, entertainment and recreation; other service activities; activities of households (NACE R to U). - 4 Before deduction of subsidies and attribution of taxes on products.

The development in 2021 depends significantly on the investment activities of the Länder and municipalities. In past crises, these were dampened by the massive decline in tax revenues and revenue shares. The municipal investment programme of the federal government (1 billion €) has a partially compensating effect here.

2.6 After levelling off, high losses in tourism again

The massive drop in overnight stays in the summer pre-season 2020 (May to June –70 percent compared to the previous year) flattened out significantly in the summer peak season (July to August –14 percent). In autumn 2020, the influx of tourists decreased again due to the increase in COVID-19 infection figures and the mounting travel warnings. The closure of catering facilities and the ban on entering accommodation establishments for tourism purposes, which will apply from 3 November

2020 until presumably 7 January 2021 due to the second lockdown, are bringing tourism to a standstill again. In 2020 as a whole, the number of overnight stays is around 37 percent below the previous year's level.

The recovery of the tourism industry will be further delayed. WIFO estimates that the travel warnings will remain in place in January and February 2021, not allowing travel to Austria before March 2021. But domestic tourism will also only recover gradually. Overall, the number of overnight stays in the winter season 2020-21 (November 2020 to April 2021) is likely to be around 70 percent below the level of the winter season 2019-20 (already shortened by the COVID-19 pandemic).

Travel will not return to normal until the population is vaccinated. The recovery in tourism will therefore start later than in most other economic sectors.

Continuing travel warnings and the absence of domestic guests will have a massive impact on winter tourism.

Table 6: Earnings, international competitiveness – "no policy change" scenario

•												
	2017	2018	2019	2020	2021	2022						
		Percen	tage chang	es from previ	ious year							
Wages and salaries per employee ¹												
Nominal, gross	+ 1.6	+ 2.7	+ 2.9	+ 1.3	+ 1.3	+ 1.5						
Real ²												
Gross	- 0.5	+ 0.7	+ 1.3	- 0.1	- 0.2	- 0.1						
Net	- 0.7	+ 0.2	+ 1.4	+ 0.5	- 0.5	- 0.5						
Wages and salaries per hour worked	q_1											
Real, net ²	+ 0.2	+ 0.3	+ 0.9	+ 5.3	- 3.2	- 0.9						
			Per	rcent								
Wage share, adjusted ³	68.9	68.8	68.3	70.0	69.7	69.1						
		Percen	tage chang	es from previ	ious year							
Unit labour costs, nominal ⁴												
Total economy	+ 1.0	+ 2.3	+ 2.4	+ 6.4	- 1.7	+ 0.2						
Manufacturing	- 0.9	+ 0.6	+ 3.8	+ 8.5	- 3.1	- 0.8						
Effective exchange rate – manufac	tured goods ⁵											
Nominal	+ 0.7	+ 1.7	- 0.7	+ 1.3	- 0.4	+ 0.3						
Real	+ 1.0	+ 1.7	- 1.0	+ 1.5	- 0.7	+ 0.0						

Source: WIFO. 2020 to 2022: forecast. $^{-1}$ National Accounts definition. $^{-2}$ Deflated by CPI. $^{-3}$ Compensation of employees as a percentage of national income, adjusted for the change in the share of employees in total employment from base year 1995. $^{-4}$ Labour costs in relation to productivity (hourly compensation per employees divided by GDP and value added, respectively, per employed persons' hours worked), including short-time work grants. $^{-5}$ Weighted by exports and imports, real value adjusted by relative HCPI.

2.7 Wage increases slow down

The agreements for 2020 reached in the 2019 autumn collective bargaining negotiations provided for wage increases of 2.2 to 2.7 percent. Settlements for 2020 and 2021 following the outbreak of the COVID-19 crisis were lower, with agreed wage increases of up to +1.6 percent. In the metal-working industry wage round of September 2020, which is decisive for many sectors, an increase in per-capita wages of 1.45 percent was agreed. The wage forecast for 2020 takes into account a dampening of the growth of per-capita wages due to the reduction of working time per capita (reduction of overtime and time credits) as well as the reduction of gross incomes due to the COVID-19 short-time work.

In 2021, collective wage increases will continue to level off, as shown by the agreement for the metal-working industry and other agreements since then (retail +1.5 percent, public service +1.45 percent). The projected rebound in working hours counteracts this decline. Net wages will be boosted in 2020 by the reduction of the basic income tax rate from 25 percent to 20 percent and the delayed effect of the "family bonus plus" introduced in 2019 via the employee tax assessment. In 2021, they will be dampened by the effect of fiscal drag and the expiry of COVID-19 short-time work.

2.8 Restrained recovery on the labour market

Total hours worked drop at a similar rate as real GDP in 2020 (–7.0 percent). This decline results mainly from a reduction in working time per capita due to the brisk use of COVID-19 short-time work. The number of employees (including marginal employment) falls by a good 102,000 and 2.5 percent, respectively, after the slump in March and April. Extended unemployment (including persons in training) rises to about the same degree.

In 2021, the volume of working hours is expected to increase slightly less than economic output, resulting in a marginal increase in productivity. However, the volume of working hours will increase more strongly than the number of employees, as the use of COVID-19 short-time work will decline and working hours per capita will increase accordingly. By contrast, employment in manufacturing will merely stagnate in 2021.

Employment will expand in 2021 and 2022 – as it did before the crisis – only partly through hiring the unemployed, because additional workers will enter the labour market at the same time. On the one hand, the net inflow of foreign workers, which was interrupted due to the crisis (especially seasonal employment in winter tourism), is gaining momentum again. On the other hand, those who postponed their career entry due to the crisis will enter the labour market.

Most of the decline in the volume of working hours is due to a reduction in working hours per capita as a result of the brisk take-up of COVID-19 short-time work. But the extent of the decline in employment and the rise in unemployment is also considerable.

Table 7: Labour market - "no policy change" scenario

	2017	2018	2019	2020	2021	2022		
		Chang	e from pre	evious yea	r in 1,000			
Demand for labour								
Persons in active employment ¹	+ 76.8	+ 91.5	+ 61.0	- 77.0	+ 47.0	+ 73.0		
Employees ^{1,2}	+ 70.7	+ 88.0	+ 58.9	- 74.0	+ 48.0	+ 74.0		
National employees	+ 23.8	+ 33.7	+ 12.3	- 54.0	+ 17.0	+ 16.0		
Foreign employees	+ 46.8	+ 54.4	+ 46.6	- 20.0	+ 31.0	+ 58.0		
Self-employed ³	+ 6.1	+ 3.5	+ 2.1	- 3.0	- 1.0	- 1.0		
Labour supply								
Population of working age								
15 to 64 years	+ 23.0	+ 13.2	+ 11.4	+ 12.7	+ 2.3	- 6.0		
Labour force ⁴	+ 59.4	+ 63.7	+ 50.2	+ 31.0	+ 25.0	+ 42.0		
Labour surplus								
Unemployed ⁵	- 17.3	- 27.9	- 10.8	+108.0	- 22.0	- 31.0		
Unemployed persons in training	+ 4.9	- 3.4	- 6.8	- 5.0	+ 18.0	- 5.0		
			Per	cent				
Unemployment rate								
As a percentage of total labour force (Eurostat) ⁶	5.5	4.9	4.5	5.4	5.1	4.8		
As a percentage of total labour force ⁵	7.6	6.9	6.6	8.9	8.3	7.6		
As a percentage of dependent labour force ⁵	8.5	7.7	7.4	9.9	9.3	8.5		
		Percentage changes from previous year						
Labour force ⁴	+ 1.4	+ 1.4	+ 1.1	+ 0.7	+ 0.5	+ 0.9		
Persons in active dependent employment ^{1, 2}	+ 2.0	+ 2.5	+ 1.6	- 2.0	+ 1.3	+ 2.0		
Unemployed ⁵	- 4.9	- 8.2	- 3.5	+ 35.8	- 5.4	- 8.0		
Persons (in 1,000)	340.0	312.1	301.3	409.3	387.3	356.3		

Source: WIFO. 2020 to 2022: forecast. $^{-1}$ Excluding persons in valid employment contract receiving child care benefit or being in military service. $^{-2}$ According to the Organisation of Austrian Social Security. $^{-3}$ According to WIFO, including liberal professions and unpaid family workers. $^{-4}$ Persons in active employment plus unemployed. $^{-5}$ According to Public Employment Service Austria. $^{-6}$ Labour Force Survey.

Table 8: Productivity - "no policy change" scenario

	2017	2018	2019	2020	2021	2022
		Percen	tage chang	es from prev	ious year	
Total economy						
Real GDP	+ 2.4	+ 2.6	+ 1.4	- 7.3	+ 4.5	+ 3.5
Hours worked ¹	+ 1.0	+ 2.0	+ 1.7	- 7.0	+ 4.2	+ 2.6
Productivity ²	+ 1.4	+ 0.6	- 0.2	- 0.3	+ 0.3	+ 0.9
Employment ³	+ 1.7	+ 1.8	+ 1.3	- 2.4	+ 1.1	+ 1.8
Manufacturing						
Production4	+ 3.7	+ 5.3	+ 0.7	- 7.7	+ 5.5	+ 3.7
Hours worked ⁵	+ 1.0	+ 2.4	+ 0.7	- 6.8	+ 4.8	+ 1.0
Productivity ²	+ 2.6	+ 2.9	- 0.0	- 0.9	+ 0.7	+ 2.7
Employees ⁶	+ 1.3	+ 2.8	+ 1.3	- 1.4	± 0.0	+ 0.5

Source: WIFO. 2020 to 2022; forecast. $^{-1}$ Total hours worked by persons employed, National Accounts definition. $^{-2}$ Production per hour worked. $^{-3}$ Employees and self-employed, National Accounts definition (jobs). $^{-4}$ Gross value added, volume. $^{-5}$ Total hours worked by employees. $^{-6}$ National Accounts definition (jobs).

2.9 Lockdowns cause consumption backlog

The moderate wage increase and the employment losses result in a decline in compensation of employees in 2020. Self-employment and property income also fall. The decrease in primary incomes is compensated by the income tax cut. Together with the expansion of monetary social transfers, there is a slight increase in disposable income at current prices in 2020 compared to

2019. A large part of the crisis-induced market income losses will thus be offset by the automatic stabilisers and the discretionary fiscal measures.

Nevertheless, private consumption in 2020 is significantly lower than in 2019, mainly due to forced saving caused by the lockdowns. As a result, the saving rate rises sharply in 2020. Although the consumption backlog partially dissipates after the lockdowns,

private consumption does not recover as quickly as income trends would allow due to increased precautionary saving. The saving rate will therefore still be above average in 2021.

Table 9: Private consumption, income and prices – "no policy change" scenario

	in prices in princy criming a committee						
	2017	2018	2019	2020	2021	2022	
	Per	centage o	changes fro	om previou	s year, volu	ıme	
Private consumption expenditure ¹	+ 1.9	+ 1.1	+ 0.8	- 8.3	+ 5.9	+ 3.0	
Durable goods	+ 2.0	+ 1.1	- 0.4	- 3.5	+ 6.0	+ 2.5	
Non-durable goods and services	+ 1.9	+ 1.1	+ 1.0	- 8.9	+ 5.9	+ 3.1	
Household disposable income	+ 1.6	+ 1.4	+ 1.3	- 0.2	+ 0.0	+ 1.3	
Have also lel ancie a sali-		As a per	centage o	of disposabl	e income		
Household saving ratio							
Including adjustment for the change in pension entitlements	7.5	7.8	8.2	15.7	10.7	9.2	
Excluding adjustment for the change in pension entitlements	6.8	7.1	7.6	15.1	10.1	8.6	
		Percento	ige chang	es from pre	vious year		
Loans to domestic non-banks (end of period)	+ 0.7	+ 4.9	+ 4.4	+ 3.2	+ 3.2	+ 3.7	
			Per	cent			
Inflation rate							
National	+ 2.1	+ 2.0	+ 1.5	+ 1.4	+ 1.5	+ 1.6	
Harmonised	+ 2.2	+ 2.1	+ 1.5	+ 1.4	+ 1.5	+ 1.6	
Core inflation ²	+ 2.2	+ 1.9	+ 1.6	+ 1.9	+ 1.7	+ 1.6	

Source: WIFO. 2020 to 2022: forecast. – ¹ Private households including non-profit institutions serving households. – ² Excluding energy and unprocessed food (meat, fish, fruits, vegetables).

2.10 High budget deficit also after 2020

The disruption of economic activity through the lockdowns and the fiscal rescue and support measures have considerable consequences for public budgets. Government spending exceeds government revenues not only significantly in 2020, but also in the following years. The general government budget deficit is expected to amount to 10.1 percent of GDP in 2020 and to decline to 5.5 percent and 3.0 percent in 2021 and 2022, respectively.

Short-time work subsidies, fixed cost grants and sales replacement determine the development of subsidy expenditure, amounting to 20.0 billion \in or 5.4 percent of GDP in 2020 and 9.0 billion \in or 2.4 percent of GDP in 2021. Of this, 6.7 billion \in (2020) and 0.8 billion \in (2021) are accounted for by the short-time work subsidy, and 6.8 billion \in and 2 billion \in , respectively, by the interacting aid measures fixed cost grants and sales replacement.

Expenditures for monetary social benefits will also be massively expanded (2020 +6.2 billion €, 2021 +0.9 billion €). These include unemployment benefits, the child bonus, the negative tax, unemployment assistance, payments from the hardship fund and

pension adjustments above the inflation rate. Investment-supporting measures such as the investment premium, the climate package, the broadband network expansion or the school development programme will largely have an impact on the budget from 2021. The low interest rates reduce the budgetary pressure somewhat. Some relief is also provided by the subdued development of public consumption.

On the revenue side, the cyclical decline is also amplified by discretionary measures. These include, in particular, the tax loss carry-back, the acceleration of depreciation, the reduction of the basic income tax rate and the temporary reduction of the VAT rate in the catering, hotel and culture sectors. Social contribution revenues, on the other hand, decrease only slightly due to the short-time work regulations.

The revenue shortfall in the area of direct taxes will only be partially offset in 2021, as the depreciation allowances and the loss carry-back will continue to have an effect in subsequent years. However, a strong increase in indirect tax revenue is expected for 2022 due to the expiry of temporary regulations and the recovery of private consumption.

Table 10: Fiscal and monetary policy – key figures – "no policy change" scenario

	2017	2018	2019	2020	2021	2022
			As a perce	ntage of G	DP	
Fiscal policy						
General government financial balance	- 0.8	0.2	0.7	- 10.1	- 5.5	- 3.0
General government primary balance	1.0	1.8	2.1	- 8.7	- 4.3	- 2.0
General government total revenue	48.5	48.9	49.1	48.0	47.7	47.6
General government total expenditure	49.3	48.7	48.4	58.0	53.3	50.6
			Pe	rcent		
Monetary policy						
Three-month interest rate	- 0.3	- 0.3	- 0.4	- 0.4	- 0.4	- 0.3
Long-term interest rate ²	0.6	0.7	0.1	- 0.2	- 0.2	- 0.1

Source: WIFO. 2020 to 2022: forecast. – ¹ According to Maastricht definition. – ² 10-year central government bonds (benchmark).

3. "Third lockdown" scenario

A high risk for the present WIFO forecast is that a new, third lockdown could be necessary at the beginning of 2021 due to excessively rising COVID-19 infection figures.

In its forecast from the beginning of October 2020, WIFO already calculated a risk scenario of a second lockdown, which then actually occurred. The estimated effects were greater than the realised effects. The assumptions regarding the intensity of the lockdown were confirmed, namely an increase in the "stringency indicator" of the Blavatnik School of Government to over 70 from November until after the Christmas holidays. But the effects of the second lockdown were overestimated, especially those for industry, as the same pattern of economic slump as in spring 2020 was assumed.

The scenario of a third lockdown now assumes a full lockdown in the last week of January and in the first three weeks of February 2021 (extensive closure of shops, restaurants and accommodation, ban on personal services and events, curfews) as well as a partial lockdown until the end of March, in which accommodation and catering facilities remain closed. It is assumed that, as in the second lockdown, the manufacturing sector will hardly be affected.

In this scenario, the catering and accommodation sector would be relatively strongly affected, as the winter tourism season would break off in January instead of slowly recovering with increasing demand from domestic guests. Overall economic output would continue to decline in the first quarter of 2021 compared to the previous quarter (-1.5 percent), firstly because the measures would be more severe (full lockdown one week longer) and secondly because a relatively favourable performance was recorded in October 2020. In this scenario, the recovery would only start in the second quarter of 2021. Parallel to the development after the first lockdown, it is assumed that 73 percent of the slump since November

2020 would be compensated. For 2021 as a whole, this would result in a GDP growth rate of 2.5 percent. After +5.1 percent in 2022, GDP in 2022 would still be ½ percent lower than in the scenario without a third lockdown.

The effects of a third lockdown on the labour market would mainly be absorbed by short-time work. Employment and unemployment would be affected primarily by the abrupt end of the winter season in tourism, the demand for further seasonal workers would fail to materialise, and existing employment contracts of seasonal workers would be terminated. However, this effect would be smaller than in the first lockdown, as the employment level in January 2021 will be lower than in winter 2020 (delayed start of the season, travel warnings).

The number of persons in active dependent employment would therefore increase only slightly more moderately in 2021 than in the scenario without a third lockdown. With –5.1 percent, the decline in unemployment in 2021 would be lower than without a third lockdown (–5.4 percent) due to the slightly higher seasonal unemployment. In 2022, the negative labour market effects would balance out again.

For public budgets, a third lockdown would be reflected in higher spending on short-time work and aid measures for affected companies. At the same time, private consumption and thus revenues from indirect taxes would fall, while the decline in wage-related levies would be muted due to short-time work. Overall, a general government deficit of about 6.2 percent would thus be expected in 2021. In 2022, the effects on public budgets would be offset. However, the level of government debt at the end of 2022 is about 2.5 billion € higher than in the "no policy change" scenario.

A third lockdown would hit winter tourism particularly hard and increase seasonal unemployment