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**Fourth COVID-19 Wave Slows Strong
Upswing.** Economic Outlook for 2021

Stefan Schiman

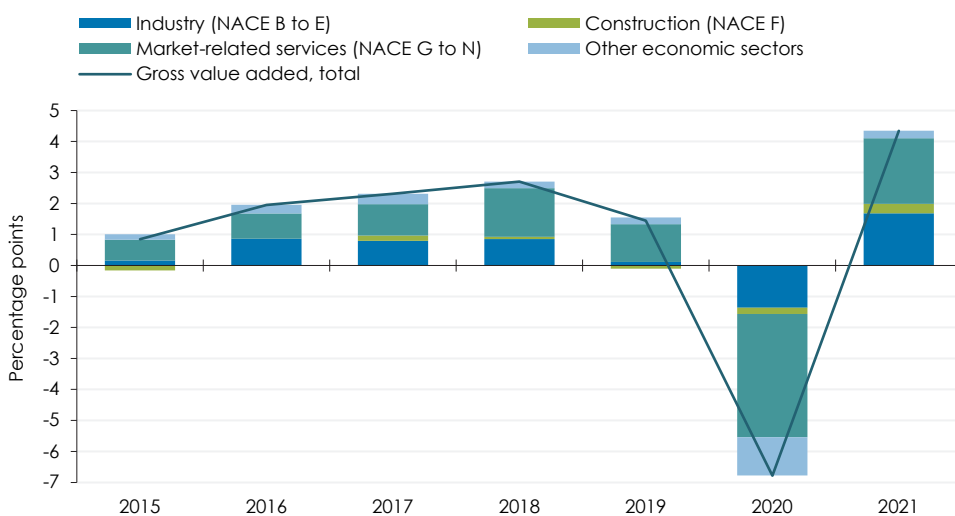
Fourth COVID-19 Wave Slows Strong Upswing

Economic Outlook for 2021

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- In an international comparison, Austria's economy grew exceptionally strongly in the second quarter of 2021. The crisis-ridden sectors in particular recorded high growth rates.
- Growth weakened again with the increase in the incidence of infection from August 2021. The fourth COVID-19 wave will again dampen value creation in certain service industries.
- Not all areas will benefit from the economic upswing, but overall it will be extremely strong. Fiscal support measures will be gradually withdrawn.
- The swift recovery in the labour market will be slowed somewhat by the fourth COVID-19 wave.
- At the same time, inflation will continue to accelerate, but monetary policy will remain expansionary.

Growth contribution of economic sectors to gross value added, volume



"Although the economic upswing is extremely strong, there are clear sectoral differences. While it is leading to material bottlenecks in the manufacturing sector, many cinema halls and hotels are still almost empty. The fourth COVID-19 wave further exacerbates this spread".

While the losses in value added in industry and construction will already be compensated for this year, this will not yet be possible in market services. In some sectors, value added in 2021 will even be somewhat lower than in the previous year (source: WIFO, Statistics Austria. 2021: forecast).

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October 2021

Fourth COVID-19 Wave Slows Strong Upswing. Economic Outlook for 2021

Value added in Austria grew significantly in the second quarter 2021, especially in the crisis-hit sectors. However, growth weakened again with the increase in the incidence of infections from August 2021. The renewed COVID-19 wave will again dampen the catch-up process in certain service sectors in the fourth quarter. The economic upswing is, hence, heterogeneous across sectors, but it is extremely strong overall. The labour market is also recovering rapidly but will suffer a temporary setback from the fourth COVID-19 wave. At the same time, inflation will continue to accelerate, while monetary policy – in line with the ECB's new strategy – will remain expansionary. The tax reform coming into force in 2022 is not taken into account in this forecast. The forecast period therefore only covers the year 2021.

JEL-Codes: E32, E66 • **Keywords:** Business cycle, economic outlook, forecast

All staff members of the Austrian Institute of Economic Research contribute to the Economic Outlook. For definitions used see "Methodological Notes and Short Glossary", <https://www.wifo.ac.at/wwadocs/form/WIFO-BusinessCycleInformation-Glossary.pdf>

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1. Introduction

As was the case after the first COVID-19 wave in spring 2020, Austria experienced a strong rebound in economic output in May 2021, when the lockdown measures were lifted. According to preliminary data, this rebound, which was driven by the crisis-ridden sectors, is likely to have been somewhat stronger than expected. At the same time, the domestic economy had slumped less than feared at the beginning of 2021. WIFO is therefore revising its forecast for 2021 upwards.

However, economic growth is weakening again with the renewed increase in the incidence of infections since mid-August 2021, especially in the food service and accommodation sector. Due to the slow progress in vaccination coverage, the COVID-19 pandemic will continue to dampen economic activity in the coming winter half-year. For 2021, the growth rate is raised to +4.4 percent, as the upward revisions in the first half

year outweigh the downward revisions in the second half.

On both the supply and demand side, the economic upswing is proceeding very heterogeneously. While the crisis in the manufacturing sector was already overcome by the end of 2020 and the strong momentum there is currently leading to considerable material shortages and price increases, value added in some service sectors could even slip below the previous year's level in 2021. On the demand side, foreign trade in goods and investment, boosted by the investment premium, expanded early and significantly. Private consumption, on the other hand, was hampered by the lockdowns and will therefore grow more hesitantly on an annual basis in 2021.

The labour market has been recovering rapidly since the beginning of 2021. Although the downward trend in seasonally adjusted

unemployment is likely to be interrupted in the coming months, overall unemployment will fall significantly year-on-year.

Economic policy will remain expansionary over the forecast period. This applies above all to monetary policy, as the ECB considers the rise in inflation to be temporary. Fiscal support measures will be gradually withdrawn.

In addition to the future direction of economic policy, possible further price-driving supply shocks on the world markets and the future course of the COVID-19 pandemic represent important forecast risks. As recent weeks have shown, the incidence of infections can increase rapidly, but it can also decrease abruptly. Accordingly, it is currently difficult to predict how winter tourism, for example, will develop.

Table 1: **Main results**

	2017	2018	2019	2020	2021	
	Percentage changes from previous year					
Gross domestic product, volume	+ 2.3	+ 2.5	+ 1.5	- 6.7	+ 4.4	
Manufacturing	+ 3.2	+ 4.3	+ 0.6	- 7.0	+ 8.0	
Wholesale and retail trade	- 0.1	+ 4.2	+ 2.0	- 4.2	+ 6.0	
Private consumption expenditure ¹ , volume	+ 2.0	+ 1.1	+ 0.7	- 8.5	+ 4.5	
Consumer durables	+ 2.1	+ 1.0	+ 0.3	- 2.6	+ 12.5	
Gross fixed capital formation, volume	+ 4.2	+ 4.4	+ 4.8	- 5.2	+ 8.2	
Machinery and equipment ²	+ 5.5	+ 3.4	+ 5.5	- 6.5	+ 10.6	
Construction	+ 2.7	+ 5.6	+ 4.0	- 3.7	+ 5.4	
Exports, volume	+ 4.9	+ 5.1	+ 3.4	- 10.8	+ 8.6	
Exports of goods, fob	+ 4.9	+ 4.7	+ 2.7	- 7.8	+ 12.7	
Imports, volume	+ 5.3	+ 5.3	+ 2.0	- 9.4	+ 9.9	
Imports of goods, fob	+ 4.3	+ 4.1	- 0.0	- 6.4	+ 13.0	
Gross domestic product, value	+ 3.3	+ 4.3	+ 3.1	- 4.6	+ 6.6	
	billion €	369.36	385.42	397.52	379.32	404.50
Current account balance as a percentage of GDP	1.4	0.9	2.1	1.9	- 0.1	
Consumer prices	+ 2.1	+ 2.0	+ 1.5	+ 1.4	+ 2.8	
Three-month interest rate	percent - 0.3	- 0.3	- 0.4	- 0.4	- 0.5	
Long-term interest rate ³	percent 0.6	0.7	0.1	- 0.2	- 0.2	
General government financial balance, Maastricht definition as a percentage of GDP	- 0.8	0.2	0.6	- 8.3	- 6.3	
Persons in active dependent employment ⁴	+ 2.0	+ 2.5	+ 1.6	- 2.0	+ 2.3	
Unemployment rate						
Eurostat definition ⁵	5.5	4.9	4.5	5.4		
National definition ⁶	8.5	7.7	7.4	9.9	8.2	

Source: WIFO, ECB, Federation of Social Insurances, OeNB, Public Employment Service Austria, Statistics Austria. 2021: 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. Due to a revision of the Labour Force Survey methodology planned for the end of June, a forecast of this indicator is currently waived. – ⁶ As a percentage of dependent labour force.

2. Starting situation

The COVID-19 pandemic and the accompanying regulatory measures have been shaping the economy in Austria for a year and a half. In spring 2020, value added slumped the most, because in addition to services, large parts of production also had to cease their activities. By contrast, the second and third COVID-19 waves hardly affected economic activity in the secondary sector.

By international standards, the domestic economy nevertheless contracted at an above-average rate in the winter half-year of 2020-21: real GDP in the first quarter of

2021 was 2.4 percent lower than in the third quarter of 2020 – the second strongest decline in the euro area (-0.7 percent) and in the EU (-0.3 percent). This strong impact on the domestic economy is essentially due to the high importance of winter tourism or the high share of tourism-related services¹.

Conversely, these areas and thus the overall economy recovered significantly as the seasonal effects of the pandemic subsided in the summer months. According to quarterly national accounts, real GDP in Austria grew by 4.0 percent in the second quarter of 2021 compared with the previous quarter. This

¹ See Glocker, C., & Piribauer, P. (2021). The determinants of output losses during the Covid-19 pandemic. *Economics Letters*, 204 and Schiman, S. (2021). Die

Rezession 2020: Österreich im Ländervergleich. *WIFO Research Briefs*, (4).

extremely strong momentum was almost entirely driven by the sectors previously affected by lockdowns: accommodation and food services contributed 1.6 percentage points to GDP growth, transport

0.8 percentage points, and trade 0.3 percentage points. Manufacturing, on the other hand, which had also grown in the winter of 2020-21, stagnated.

Table 2: **International economy**

	Percentage shares 2020		2017	2018	2019	2020	2021
	Austria's exports of goods	World GDP ¹					
			GDP volume, percentage changes from previous year				
EU 27	67.6	15.0	+ 2.8	+ 2.1	+ 1.8	- 5.9	+ 4.9
Euro area	52.0	12.1	+ 2.6	+ 1.9	+ 1.5	- 6.3	+ 4.8
Germany	30.5	3.4	+ 2.7	+ 1.1	+ 1.1	- 4.6	+ 2.7
Italy	6.2	1.9	+ 1.7	+ 0.9	+ 0.3	- 8.9	+ 5.8
France	4.3	2.3	+ 2.3	+ 1.9	+ 1.8	- 7.9	+ 5.4
CEEC 5 ²	14.9	1.8	+ 4.7	+ 4.7	+ 4.1	- 3.9	+ 5.1
Hungary	3.5	0.2	+ 4.3	+ 5.4	+ 4.6	- 5.0	+ 7.6
Czech Republic	3.6	0.3	+ 5.2	+ 3.2	+ 3.0	- 5.8	+ 3.2
Poland	3.9	1.0	+ 4.8	+ 5.4	+ 4.7	- 2.7	+ 5.2
USA	6.5	15.9	+ 2.3	+ 2.9	+ 2.3	- 3.4	+ 6.1
Switzerland	5.5	0.5	+ 1.6	+ 2.9	+ 1.2	- 2.4	+ 3.2
UK	2.9	2.2	+ 1.7	+ 1.3	+ 1.4	- 9.8	+ 6.7
China	2.7	18.3	+ 6.9	+ 6.7	+ 6.0	+ 2.3	+ 8.7
Total ³							
PPP-weighted ⁴		52	+ 3.9	+ 3.8	+ 3.3	- 2.4	+ 6.7
Export weighted ⁵	85		+ 2.8	+ 2.3	+ 1.9	- 5.3	+ 5.1
Market growth ⁶			+ 5.6	+ 4.0	+ 1.7	- 6.1	+ 11.0
Forecast assumptions							
Crude oil prices							
Brent, \$ per barrel			54.3	71.0	64.3	41.7	69
Exchange rate							
\$ per €			1.129	1.181	1.120	1.141	1.19
Key interest rate							
ECB main refinancing rate ⁷ , percent			0.0	0.0	0.0	0.0	0.0
10-year government bonds yields Germany, percent			0.3	0.4	- 0.3	- 0.5	- 0.5

Source: WIFO, Bureau of Economic Analysis, Eurostat, EIA, ECB, IMF, OECD, Statistics Austria. 2021: 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 2020. – ⁵ Weighted by shares of Austrian goods exports in 2020. – ⁶ Real import growth of trading partners, weighted by shares of Austrian goods exports. – ⁷ Minimum bid rate.

3. Framework conditions

This forecast is based on the information available as of mid-September 2021 in the assumptions regarding the direction of economic policy as well as the development of the global economy, exchange rates, commodity prices and interest rates. The forecast horizon ranges from the third quarter of 2021 to the fourth quarter of 2021. The forecast year 2022 is omitted as the recently enacted tax reform and its macroeconomic effects are not taken into account.

While the last WIFO forecast with regard to the further course of the COVID-19 pandemic still assumed a rapid vaccination coverage of the population, this assumption had to be revised in view of the low vaccination rate. However, the economic damage of the fourth COVID-19 wave will be

lower than that caused by the waves in winter 2020-21, when no vaccination was available.

3.1 Global economy

The global economy is currently experiencing a strong upswing. Global industrial production, which had slumped by about the same amount during the COVID-19 crisis as during the financial market and economic crisis of 2008-09 (by more than 10 percent), returned to its pre-crisis level just six months after this collapse. After the 2008-09 crisis, it had taken a good year and a half to compensate for the losses. Not only the speed but also the early onset of the recovery process came as a surprise to many market

The upturn in the global economy began so unexpectedly early and so strongly that production lagged behind, inventories were cleared and supply bottlenecks developed.

participants, partly because the seasonality of the infection had been underestimated.

At present, companies are lacking raw materials and intermediate products in many places, which is leading to striking price increases. Since March 2021, the Hamburg Institute of International Economics (HWWI) commodity price index has been over 90 percent higher on average than in the previous year (in dollar terms). In September 2021, the Harpex index for shipping costs was more than twice as high as at its previous peak in 2005 (for information on the impact of the sharp global price fluctuations on inflation in Austria, see the box entitled "Effects of the global economy on inflation in Austria").

In the EU, the economy grew by 2.1 percent in the second quarter, and by 2.2 percent in the euro area. Economic growth was particularly buoyant in Portugal (+4.5 percent), the Netherlands (+3.8 percent) and Italy (+2.7 percent), among others, but comparatively weak in Germany (+1.6 percent). In addition to the lesser importance of the crisis-ridden service sectors, the high share of the automotive sector in total value added

is responsible for this. As supply problems intensify towards the end of the supply chain (whip effect or Forrester effect), the German automotive industry, with its high proportion of final production, is suffering particularly from the shortage of intermediate products.

For this reason, GDP growth of only +2.7 percent is expected for Germany in 2021 overall, whereas growth of +4.8 percent is expected for the euro area as a whole. The US economy is expected to grow even more strongly (+6.1 percent), also due to the extremely expansive fiscal policy. In addition to the existing support programmes, a number of other fiscal policy packages are up for vote there, including an investment and infrastructure package (American Jobs Plan) and a children's and education programme (American Families Plan).

Overall, economic output in the partner countries most important for Austrian foreign trade is expected to grow by 5.1 percent in 2021 (export-weighted). Commodity prices are likely to have already peaked; an average price of 69 \$ is assumed for crude oil in the forecast period. The euro is expected to depreciate slightly against the dollar.

Germany is significantly affected by the supply bottlenecks for semi-conductors due to the high share of automotive final assembly.

Effects of the global economy on inflation in Austria

Inflation in Austria fluctuated considerably over the course of the COVID-19 crisis. After HICP inflation had fallen below 1 percent in May 2020, inflation was 3 percent a year later. In the summer of 2021, the strong price increases continued. This box will therefore examine the extent to which these price fluctuations were caused by impulses from the global economy.

As global industrial production and commodity prices interact, it is possible to identify global demand and supply shocks using a regression model (trivariate vector autoregression) and at the same time measure the effects of these shocks on Austrian consumer price inflation¹.

Global supply and demand stimuli have different effects on price dynamics in Austria (Figure 1): an increase in global demand that raises commodity prices by 10 percent raises domestic inflation by 0.3 percentage points. In contrast, a supply-side disruption that raises commodity prices by 10 percent raises inflation by 0.6 percentage points. Domestic consumer prices thus respond about twice as strongly to supply-side impulses from the global economy as they do to demand-side impulses.

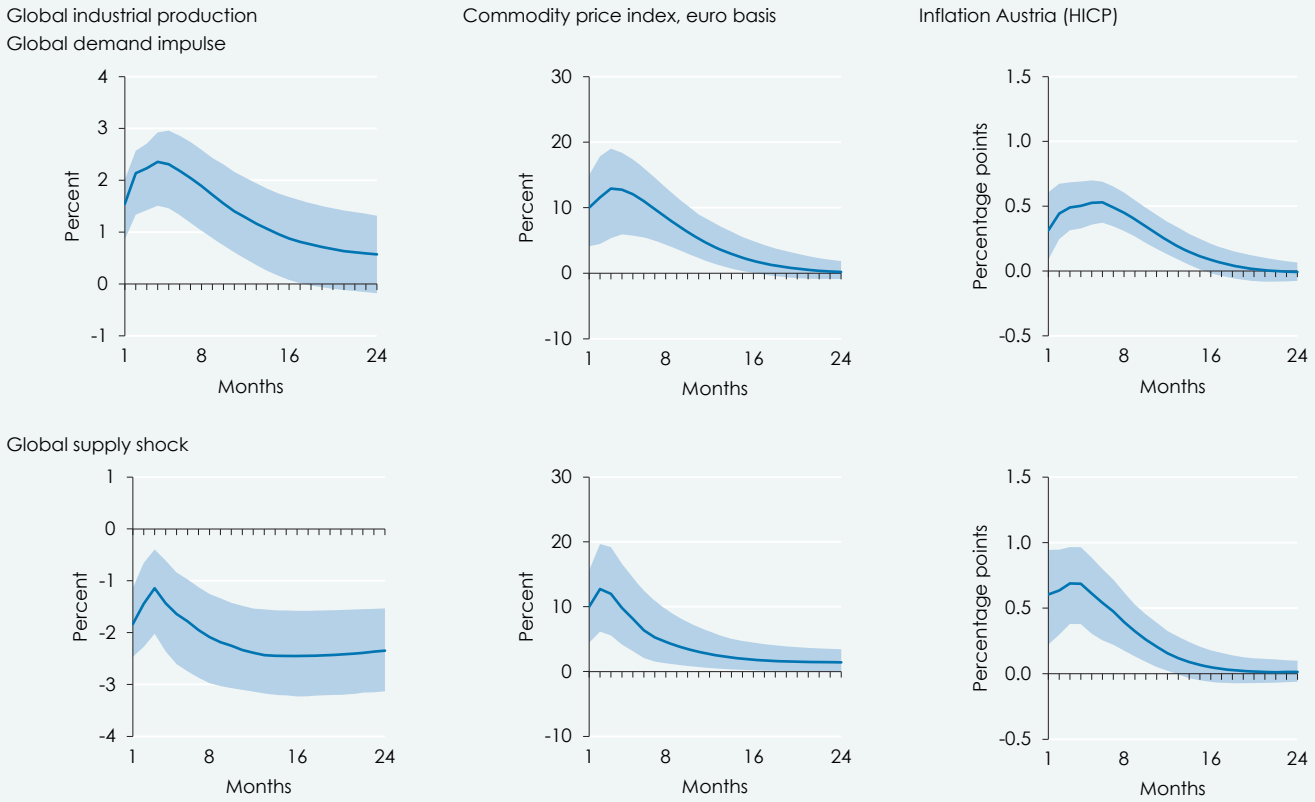
Figure 2 illustrates how global demand and supply shocks shaped the rise in Austrian consumer prices over the past one and a half years. From the outbreak of the COVID-19 crisis in January 2020 to its temporary peak in May 2020, the negative demand-side impulses continuously intensified and dampened inflation. At the same time, however, there were also supply-side distortions that counteracted this dampening, e.g. the disruption of international supply chains. Only in March 2020 did this supply-side price pressure ease briefly when OPEC temporarily expanded crude oil production sharply in the wake of an oil price dispute.

Demand-side impulses continued to shape inflation in Austria in June and July 2020; the incipient economic recovery was already driving up prices. However, inflation only picked up temporarily. From August 2020 onwards, favourable supply impulses dominated, which intensified until January 2021 and dampened inflation. By contrast, the simultaneous recovery of the international industrial economy continued to drive up prices, with the result that inflation settled at around 1 percent between September 2020 and January 2021.

From February 2021 onwards, the supply situation on the global markets deteriorated and the first shortages of raw materials and intermediate products occurred. Both demand- and supply-side impulses now drove inflation; as a result, inflation accelerated from 1.1 percent in January 2021 to 3 percent in May 2021. Most recently, demand-side price pressures have stagnated at a high level, while the supply-side distortions are only likely to be overcome gradually. Prices are therefore expected to continue to rise strongly in the coming months.

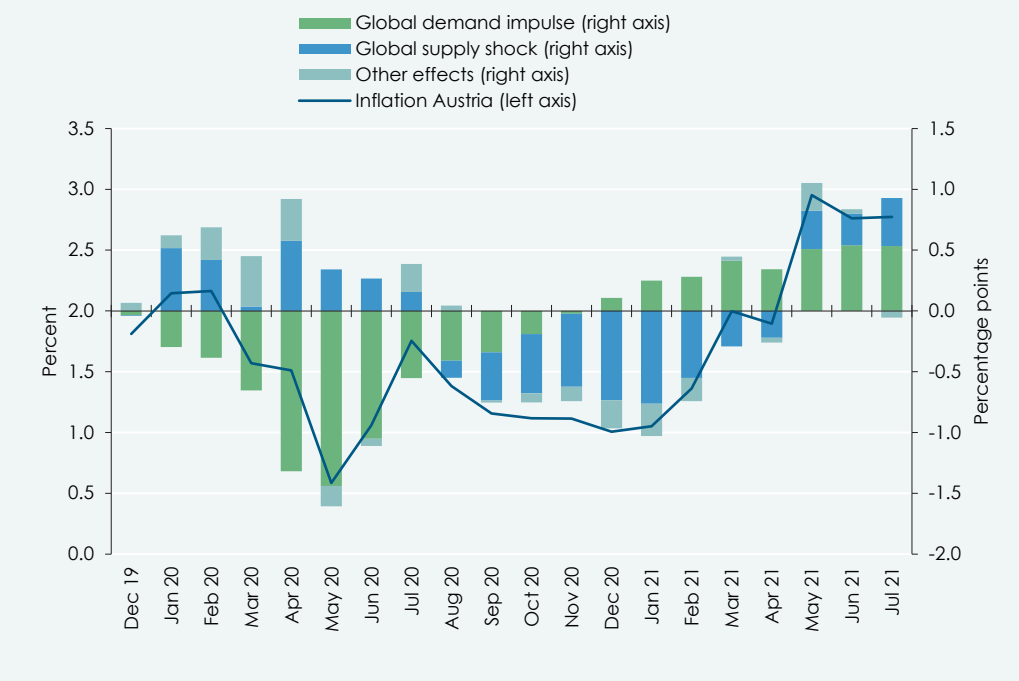
¹ The vector autoregression is estimated with 6 lags, one constant and based on a Minnesota prior; the coefficients of domestic consumer price inflation in the equations of world industrial production and commodity prices are shrunk towards zero. The estimation period is January 2006 to July 2021, with world industrial production and commodity prices entering in 100*log levels. Consumer price inflation is the change in the HICP over the respective month of the previous year. The HICP is also measured in 100*log levels.

Figure 1: **Effects of global demand and supply shocks**



Source: CPB, Eurostat, HWWI, WIFO. Impulse response functions over 24 months (solid line: median, light blue area: 68 percent confidence interval), scaled to a 10 percent increase in the commodity price index. Shocks are identified using sign restrictions on the three variables in the first six periods. Any asymmetric or threshold effects that might occur in the case of very large price increases are not taken into account.

Figure 2: **Contribution of various effects to headline inflation (HICP) in Austria**



Source: CPB, Eurostat, HWWI, WIFO.

3.2 Economic policy

This forecast takes into account all economic policy measures that have already been adopted or sufficiently specified. The recently adopted tax reform is not taken into account. Both the ECB's monetary policy and fiscal policy are assumed to be expansionary over the forecast period.

3.2.1 Monetary policy remains expansionary despite inflationary pressures

Monetary policy increasingly finds itself in an environment of tension. On the one hand, it wants to continue to exert an expansionary influence on the economy. On the other hand, inflationary tendencies are becoming increasingly apparent, which would justify a less accommodative monetary policy stance.

The key interest rates have not been changed since autumn 2019. The deposit rate, which determines the short-term money market interest rate, is –0.5 percent. In the course of its bond purchase programme, which has been effective since 2015, the ECB purchases bonds with a net volume of 20 billion € per month. Under the Pandemic Emergency Purchase Programme (PEPP), which has been running since March 2020, up to 1,850 billion € in bonds can also be purchased until provisionally March 2022.

The current strong upward pressure on prices is perceived by the ECB as temporary. Moreover, the ECB recently changed its monetary policy strategy: the inflation target was raised from "below but close to 2 percent" to 2 percent, and no longer serves as an upper limit but as a mean value (symmetry), so that inflation temporarily above this target is also permissible. WIFO therefore assumes that interest rates will not be raised before 2023.

3.2.2 Fiscal support is being scaled back

Austria's fiscal policy is expansionary in 2021 due to measures to cushion the effects of the crisis. However, subsidies to companies and expenditure on short-time work will be lower than in the previous year. By contrast, the use of the investment premium and the investments envisaged under the climate and school packages will increase the budget deficit, even though investment expenditure will be partly refunded via the EU's Recovery and Resilience Facility (RRF). Investment activity by municipalities is expected to remain subdued due to their strained financial situation.

On the revenue side, the support measures in the area of income, corporation and value-added tax (declining balance depreciation, adjustment in loss offsetting, temporary reduction of the value-added tax rate for gastronomy, accommodation and the cultural sector until the end of 2021) provide expansive impulses, which are somewhat dampened by the discontinuation of one-off payments (child bonus, family hardship compensation, unemployment benefits). Overall, this results in an improvement of the general government balance from –8.3 percent of GDP (2020) to –6.3 percent (2021).

In contrast to ordinary business cycles, a countercyclical fiscal policy that stabilises the economy has hardly been possible since the outbreak of the COVID-19 pandemic, as the losses in value added have been deliberately accepted in order to achieve health policy goals. Rather, fiscal policy stabilised the economic situation of those private households and companies that were affected by the COVID-19 crisis, thus reducing the decline in market incomes. In macroeconomic terms, this had a procyclical effect, as both household demand and the value added of the supported companies reinforced the rebound after the lockdowns.

Crisis-related support measures are being gradually withdrawn. Although fiscal policy has an income-stabilising effect, it is still inevitably procyclical.

The ECB's new symmetric inflation target allows overshooting of the target value over a longer period of time.

Table 3: **Fiscal and monetary policy – key figures**

	2017	2018	2019	2020	2021
	As a percentage of GDP				
Fiscal policy					
General government financial balance ¹	– 0.8	0.2	0.6	– 8.3	– 6.3
General government primary balance	1.0	1.8	2.0	– 7.0	– 5.1
General government total revenue	48.5	48.9	49.2	48.7	48.2
General government total expenditure	49.3	48.7	48.6	57.1	54.5
	Percent				
Monetary policy					
Three-month interest rate	– 0.3	– 0.3	– 0.4	– 0.4	– 0.5
Long-term interest rate ²	0.6	0.7	0.1	– 0.2	– 0.2

Source: WIFO, ECB, OeNB, Statistics Austria. 2021: forecast. – ¹ According to Maastricht definition. – ² 10-year central government bonds (benchmark).

Figure 3: Indicators of economic performance

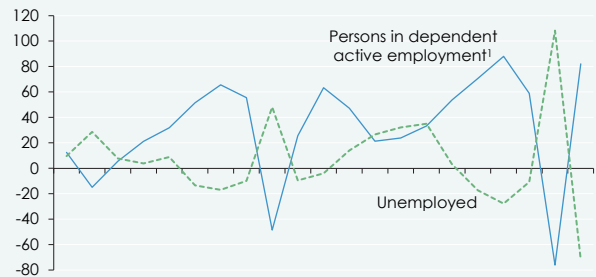
Growth of real GDP

Percent



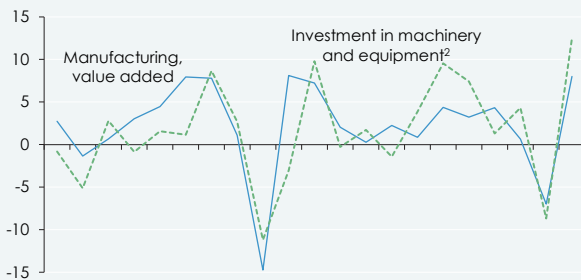
Employment and unemployment

Change from previous year in 1,000



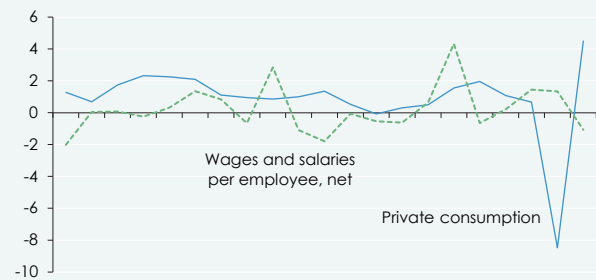
Manufacturing and investment

Percentage changes from previous year, volume



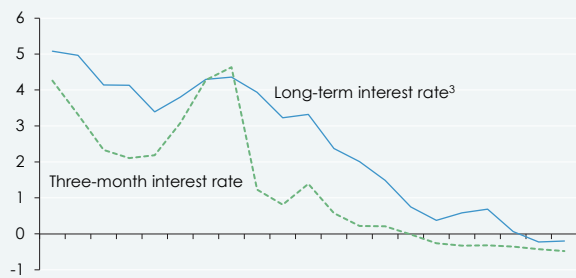
Consumption and income

Percentage changes from previous year, volume



Short-term and long-term interest rates

Percent



Inflation and unit labour costs

Percentage changes from previous year



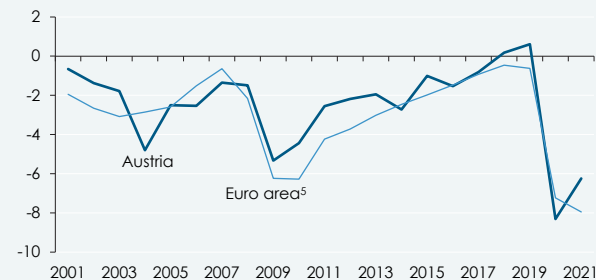
Trade (according to National Accounts)

Percentage changes from previous year, volume



General government financial balance

As a percentage of GDP



Source: WIFO. 2021: 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.

4. Prospects for the Austrian economy

The end of the lockdown measures in May 2021 gave the domestic economy a strong boost. The strong momentum continued until mid-August, but has since lost some of its impetus. This is due to the renewed increase in the incidence of infection, which is having a particularly negative impact on the retail, accommodation and food service sectors.

The picture of an extremely strong upswing, which is currently being held back by the crisis-ridden services sector, is also reflected in the company surveys: according to the WIFO-Konjunkturtest (business cycle survey) of September, business expectations for the coming months have dimmed, especially in the services sector, and here above all in accommodation and food services. In the manufacturing and construction sectors, on the other hand, assessments remained optimistic despite supply bottlenecks, both with regard to the current situation and developments in the coming months.

The deterioration in sentiment in the service industries is primarily due to fears of renewed COVID-19-related restrictions on business activity. This also explains differences within the services sector: while business expectations remained mostly positive in areas such as

professional, scientific and technical services, they were predominantly pessimistic again in accommodation and food services for the first time since April 2021.

4.1 Strong economic growth in 2021

Data revisions for 2020 and for the first quarter of 2021 require an upward revision of the GDP forecast for 2021. The underutilisation of hospitals as a result of cancelled treatments and operations was considerably stronger in 2020 than previously assumed, with corresponding negative GDP effects. On the other hand, the overall loss of value added in the winter half-year 2020-21 was lower than previously calculated. These revisions increase the growth carry-over and thus the annual growth rate in 2021.

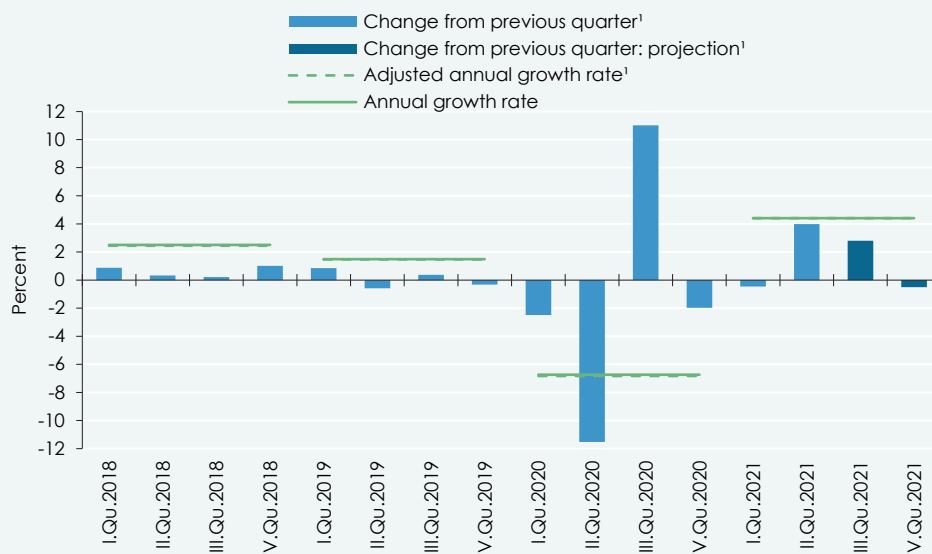
A further upward revision results from the forecast error for the second quarter of 2021. In the last WIFO forecast, the economy was already expected to pick up strongly after the end of the lockdown measures in May 2021. However, at +4.0 percent quarter-on-quarter (according to preliminary data), realised growth in the second quarter of 2021 further exceeded the optimistic expectations.

The slowdown in economic activity observed since mid-August is attributable to the retail, accommodation and food service sectors and is closely linked to the increase in the incidence of infection.

After the crisis-induced slump of 6.7 percent in 2020, GDP will grow by 4.4 percent in 2021.

Figure 4: Cyclical profile of Austria

GDP volume



Source: WIFO, Statistics Austria. – ¹ Seasonally and working-day adjusted according to Eurostat.

Conversely, the economy has been slowing down again with the increase in infection since mid-August 2021, which contradicts the assumptions of the WIFO forecast from June. The dampening effects of the fourth COVID-19 wave are likely to persist and

intensify in the fourth quarter. However, the downward revision to the 2021 annual growth rate required as a result is smaller than the upward revision resulting from the data revisions and the forecast error described above.

Table 4: **Technical breakdown of the real GDP growth forecast**

		2019	2020	2021
Growth carry-over ¹	percentage points	+ 0.9	- 0.2	+ 0.6
Growth rate during the year ²	percent	+ 0.3	- 6.1	+ 5.9
Annual growth rate	percent	+ 1.5	- 6.7	+ 4.4
Adjusted annual growth rate ³	percent	+ 1.5	- 6.8	+ 4.4
Calendar effect ⁴	percentage points	+ 0.0	- 0.0	± 0.0

Source: WIFO. 2021: 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. Comparative figure to the OeNB's economic 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.

In Austria, foreign trade in goods and manufacturing are the main beneficiaries of the favourable global industrial climate.

After the slump in the previous year (-6.7 percent), real GDP will thus grow by 4.4 percent in 2021. Compared to the WIFO forecast of June 2021, this corresponds to a correction of +0.4 percentage points. The strong expansion in 2021 is mainly due to the high growth rate during the year (+5.9 percent). Due to the same number of working days, calendar effects do not play a role.

4.2 Shortage of materials in the industry slows down the upswing

Industrial production in Austria depends to a large extent on the global economy and thus on foreign trade. The latter already recovered strongly in 2020 and should already be 4 percent above the pre-crisis level in

2021. At 84.5 percent, capacity utilisation in manufacturing was already well above the long-term average of 82 percent in spring 2021.

At the same time, around one-fifth of the companies surveyed reported a shortage of materials and capacity as a primary obstacle to production in April 2021 – a new record; previously, this proportion had never exceeded 15 percent, even in upswing phases. The long-term average is only 7 percent. In the summer of 2021, the proportion rose further to just under one-third of the companies surveyed. At the same time, however, capacity utilisation also increased to 86 percent.

Table 5: **Gross value added**

At basic prices

	2019	2020	2021	2019	2020	2021
	Billion € (reference year 2015)			Percentage changes from previous year		
Volume (chain-linked series)						
Agriculture, forestry and fishing	4.33	4.20	4.31	- 0.1	- 3.1	+ 2.5
Manufacturing including mining and quarrying	66.04	61.37	66.28	+ 0.4	- 7.1	+ 8.0
Electricity, gas and water supply, waste management	9.81	9.67	10.35	+ 1.0	- 1.4	+ 7.0
Construction	19.58	18.98	19.82	- 1.6	- 3.0	+ 4.4
Wholesale and retail trade	40.07	38.40	40.70	+ 2.0	- 4.2	+ 6.0
Transportation	18.81	16.36	17.50	+ 0.4	- 13.0	+ 7.0
Accommodation and food service activities	16.34	9.79	9.50	+ 0.6	- 40.1	- 3.0
Information and communication	13.43	13.21	13.47	+ 7.9	- 1.7	+ 2.0
Financial and insurance activities	15.31	16.08	16.56	+ 4.4	+ 5.1	+ 3.0
Real estate activities	31.08	31.17	31.23	+ 0.3	+ 0.3	+ 0.2
Other business activities ¹	33.72	30.98	33.92	+ 4.3	- 8.1	+ 9.5
Public administration ²	56.37	54.30	55.17	+ 1.1	- 3.7	+ 1.6
Other service activities ³	9.00	7.23	6.98	+ 0.8	- 19.7	- 3.5
Total gross value added ⁴	333.69	311.08	324.60	+ 1.4	- 6.8	+ 4.3
Gross domestic product at market prices	373.52	348.36	363.61	+ 1.5	- 6.7	+ 4.4

Source: WIFO, Statistics Austria. 2021: 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.

Although the upswing in industry will be slowed by the shortage of materials, it is nevertheless very strong, so that the slump in 2020 will already be compensated for this

year. In line with the global economy, momentum will weaken in the second half of 2021.

While the manufacturing sector is only surveyed on a quarterly basis with regard to production constraints, monthly and therefore more up-to-date data is available in the case of construction. The share of construction companies whose production is primarily hampered by a lack of materials and capacity rose rapidly from 5 percent to 32 percent between March and May 2021. Although the situation eased somewhat over the summer (August 2021: 28 percent), the share rose again to 30 percent in September.

At the same time, construction companies continue to complain about the shortage of labour; for 30 percent it was the primary obstacle to production recently. The shortage of labour and capital is a sign of exceptionally strong demand. In construction, too, the crisis-induced slump in 2020 will therefore already be compensated for this year: both value added and investment should be 1 percent to 1½ percent above the pre-crisis level as early as 2021.

The production factors labour and capital became scarcer in the course of the strong increase in demand, also in the construction industry.

Table 6: **Productivity**

	2017	2018	2019	2020	2021
	Percentage changes from previous year				
Total economy					
Real GDP	+ 2.3	+ 2.5	+ 1.5	- 6.7	+ 4.4
Hours worked ¹	+ 1.0	+ 1.9	+ 1.6	- 8.7	+ 6.4
Productivity ²	+ 1.2	+ 0.5	- 0.1	+ 2.1	- 1.9
Employment ³	+ 1.7	+ 1.8	+ 1.3	- 1.9	+ 1.9
Manufacturing					
Production ⁴	+ 3.2	+ 4.3	+ 0.6	- 7.0	+ 8.0
Hours worked ⁵	+ 1.0	+ 2.4	+ 0.8	- 6.2	+ 5.8
Productivity ²	+ 2.2	+ 1.9	- 0.1	- 0.8	+ 2.1
Employees ⁶	+ 1.3	+ 2.8	+ 1.5	- 1.5	+ 0.5

Source: WIFO, Statistics Austria. 2021: 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).

4.3 Strong investment boom

Investment demand is also expanding extremely strongly. Gross fixed capital formation will already be 2½ percent higher this year than before the COVID-19 crisis. The strong increase in capacity utilisation in industry requires not only replacement

investments but increasingly also expansion investments. In addition, the government investment premium triggered pull-forward effects, but also ensured additional investments that would not have been made without this fiscal incentive.

Due to its high take-up rate, the investment premium is likely to provide a significant stimulus to the economy.

Table 7: **Expenditure on GDP**

Volume (chain-linked series)

	2019	2020	2021	2019	2020	2021
	Billion € (reference year 2015)			Percentage changes from previous year		
Final consumption expenditure	262.80	246.32	255.87	+ 0.9	- 6.3	+ 3.9
Households ¹	191.06	174.88	182.75	+ 0.7	- 8.5	+ 4.5
General government	71.74	71.41	73.13	+ 1.5	- 0.5	+ 2.4
Gross capital formation	94.73	90.33	96.92	- 0.2	- 4.6	+ 7.3
Gross fixed capital formation	92.95	88.12	95.32	+ 4.8	- 5.2	+ 8.2
Machinery and equipment ²	31.10	28.40	31.95	+ 4.3	- 8.7	+ 12.5
Construction	41.21	39.70	41.84	+ 4.0	- 3.7	+ 5.4
Other investment ³	20.64	19.97	21.57	+ 7.3	- 3.2	+ 8.0
Domestic demand	358.12	337.18	353.68	+ 0.7	- 5.8	+ 4.9
Exports	214.69	191.59	208.11	+ 3.4	- 10.8	+ 8.6
Travel	16.71	9.38	7.90	+ 2.3	- 43.9	- 15.7
Minus imports	199.28	180.59	198.49	+ 2.0	- 9.4	+ 9.9
Travel	9.19	3.35	4.05	+ 2.0	- 63.6	+ 21.0
Gross domestic product	373.52	348.36	363.61	+ 1.5	- 6.7	+ 4.4
Value	397.52	379.32	404.50	+ 3.1	- 4.6	+ 6.6

Source: WIFO, Statistics Austria. 2021: forecast. – ¹ Including non-profit institutions serving households. – ² Including weapon systems. – ³ Mainly intellectual property products (research and development, computer programmes, copyrights).

Due to the lockdown measures that remained in place until May 2021, the recovery in the case of private consumption started later than in the case of investment.

2021, there will be an anticyclical reduction in inventories, contrary to the usual business cycle pattern. According to the WIFO-Konjunkturtest (business cycle survey), the share of companies that consider their inventories of finished goods to be insufficient has never been as high as it has been since April 2021 since the survey began in 1996. The highest value to date was measured in September 2021. This anomaly is related to the force of the upswing and the fact that the enormous increase in demand cannot be fully covered.

4.4 Shift in consumer demand

The recovery in private household consumption is lagging behind that of investment. In 2021, it will therefore still be a good 4 percent below the pre-crisis level. Services

consumption will not be fully compensated: on the one hand, consumption of many services will not catch up, while on the other hand lockdown measures were still in place for long stretches in 2021.

By contrast, consumption of durable goods is recovering much more strongly than services consumption. As this is more in line with investment in nature, a strong recovery is not unusual. However, the momentum is also being boosted by the fact that demand from private households shifted from services towards durable consumer goods during the lockdowns. In 2021, consumption of such goods is likely to be almost 10 percent higher than before the crisis, while demand for services and non-durable goods will be just under 6 percent lower.

Table 8: Private consumption, income and prices

	2017	2018	2019	2020	2021
Percentage changes from previous year					
Private consumption expenditure ¹	+ 2.0	+ 1.1	+ 0.7	- 8.5	+ 4.5
Durable goods	+ 2.1	+ 1.0	+ 0.3	- 2.6	+ 12.5
Non-durable goods and services	+ 1.9	+ 1.1	+ 0.7	- 9.1	+ 3.6
Private household disposable income	+ 1.7	+ 1.2	+ 1.6	- 2.0	- 0.2
As a percentage of disposable income					
Household saving ratio					
Including adjustment for the change in pension entitlements	7.5	7.7	8.5	14.4	10.4
Excluding adjustment for the change in pension entitlements	6.9	7.0	7.9	13.9	9.8
Percentage changes from previous year					
Loans to domestic non-banks (end of period)	+ 0.7	+ 4.9	+ 4.4	+ 3.8	+ 4.5
Consumer prices					
National	+ 2.1	+ 2.0	+ 1.5	+ 1.4	+ 2.8
Harmonised	+ 2.2	+ 2.1	+ 1.5	+ 1.4	+ 2.8
Core inflation ²	+ 2.2	+ 1.9	+ 1.6	+ 2.0	+ 2.2

Source: WIFO, OeNB, Statistics Austria. 2021: forecast. – ¹ Private households including non-profit institutions serving households. – ² Excluding energy and unprocessed food (meat, fish, fruits, vegetables).

4.5 Boom and supply dislocations create price pressure

Price increases according to the consumer price index will be strong in 2021. As has been shown, this is mainly due to stimuli from the global economy. In 2020, demand-side and supply-side factors were still working in different directions. Since June 2020, inflation in Austria has been fuelled by the recovery of the global economy, and since February 2021 additionally by supply-side distortions. The price-driving impulses from the global economy are not abating at the current edge. Therefore, inflation will accelerate in the coming months.

4.6 Sectoral differences in wage developments

Against the backdrop of price buoyancy, some high nominal wage settlements are likely to be achieved in the current autumn wage round, although not in all sectors. In manufacturing, wages are likely to rise strongly, as gross value added per employee is already 1.5 percent above the pre-crisis level in 2021 and the shortage of skilled workers strengthens the union's negotiating position.

Wage settlements are expected to be high in industry this year and lower in the public sector.

Both demand- and supply-side factors are driving up prices.

Table 9: **Earnings, international competitiveness**

	2017	2018	2019	2020	2021
Percentage changes from previous year					
Wages and salaries per employee¹					
Nominal, gross	+ 1.6	+ 2.7	+ 2.9	+ 2.0	+ 1.8
Real²					
Gross	- 0.5	+ 0.7	+ 1.4	+ 0.6	- 1.0
Net	- 0.7	+ 0.2	+ 1.4	+ 1.3	- 1.1
Wages and salaries per hour worked¹					
Real, net ²	+ 0.2	+ 0.3	+ 0.9	+ 9.2	- 4.9
Percent					
Wage share, adjusted ³	68.9	68.8	69.1	70.2	69.6
Percentage changes from previous year					
Unit labour costs, nominal⁴					
Total economy	+ 1.1	+ 2.4	+ 2.3	+ 7.6	- 0.4
Manufacturing	- 0.5	+ 1.7	+ 3.3	+ 6.2	- 5.2
Effective exchange rate – manufactured goods⁵					
Nominal	+ 0.7	+ 1.7	- 0.7	+ 1.4	+ 0.7
Real	+ 1.0	+ 1.7	- 1.1	+ 1.8	+ 0.7

Source: WIFO, Statistics Austria. 2021: 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.

Table 10: **Labour market**

	2017	2018	2019	2020	2021
Change from previous year in 1,000					
Demand for labour					
Persons in active employment ¹	+ 76.8	+ 91.6	+ 61.4	- 79.1	+ 86.0
Employees ^{1,2}	+ 70.7	+ 88.0	+ 58.9	- 76.1	+ 82.0
National employees	+ 23.8	+ 33.7	+ 12.3	- 53.9	+ 27.0
Foreign employees	+ 46.8	+ 54.4	+ 46.6	- 22.2	+ 55.0
Self-employed ³	+ 6.1	+ 3.6	+ 2.5	- 3.0	+ 4.0
Labour supply					
Population of working age					
15 to 64 years	+ 23.0	+ 13.2	+ 11.4	+ 9.9	+ 2.4
Labour force ⁴	+ 59.4	+ 63.8	+ 50.6	+ 29.2	+ 14.0
Labour surplus					
Unemployed ⁵	- 17.3	- 27.9	- 10.8	+ 108.3	- 72.0
Unemployed persons in training	+ 4.9	- 3.4	- 6.8	- 4.9	+ 13.0
Percent					
Unemployment rate					
As a percentage of total labour force (Eurostat) ⁶	5.5	4.9	4.5	5.4	
As a percentage of total labour force ⁵	7.6	6.9	6.6	8.9	7.3
As a percentage of dependent labour force ⁵	8.5	7.7	7.4	9.9	8.2
Percentage changes from previous year					
Labour force ⁴	+ 1.4	+ 1.4	+ 1.1	+ 0.6	+ 0.3
Persons in active dependent employment ^{1,2}	+ 2.0	+ 2.5	+ 1.6	- 2.0	+ 2.3
Unemployed ⁵	- 4.9	- 8.2	- 3.5	+ 35.9	- 17.6
Persons (in 1,000)	340.0	312.1	301.3	409.6	337.6

Source: WIFO, Eurostat, Federation of Social Insurances, Public Employment Service Austria, Statistics Austria. 2021: forecast. – ¹ Excluding persons in valid employment contract receiving child care benefit or being in military service. – ² According to the Federation of Social Insurances. – 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. Due to a revision of the Labour Force Survey methodology planned for the end of June, a forecast of this indicator is currently waived.

The downward trend in unemployment since the beginning of 2021 will only be temporarily interrupted in the coming months.

In the services sector there are also recruitment difficulties, but the COVID-19 crisis weakened the earnings situation of many companies, especially in tourism. Wages in the public sector will also tend to develop in a subdued manner, similar to the past after periods of economic slowdown and high spending increases.

In 2021, real wages will fall due to the combination of low wage settlements in 2020 and high inflation. The wage share also declines, in line with the usual countercyclical pattern.

4.7 Unemployment falling rapidly

The dynamic upswing is leading to an unprecedented recovery on the labour market. Seasonally adjusted, the number of job vacancies expanded by around two-thirds in the first three quarters of 2021 and unemployment fell by one-fifth (see box "Unemployment and job vacancy trends"). In the coming winter, unemployment will rise again somewhat in the wake of the fourth COVID-19 wave, but it will decline on an annual average. The number of persons in active dependent employment has already exceeded the pre-crisis level this year. The increase in employment is largely attributable to foreign workers.

Unemployment and job vacancy trends

The number of job openings increased from 50,600 in December 2020 to 113,800 in August 2021 – a new high. In terms of total labour supply, the share of job vacancies was only temporarily higher during the boom in the early 1970s (June 1973: 2.92 percent vs. 2.74 percent in August 2021). At the same time, unemployment fell sharply, from 468,300 in January 2021 to 269,300 in September 2021.

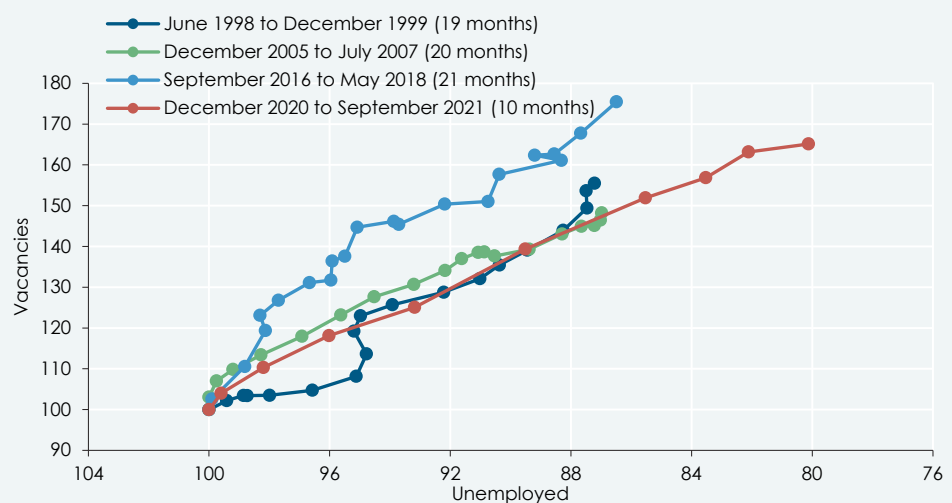
Part of this strong dynamic is seasonal: economic activity is generally livelier in summer than in winter, which means that the number of job vacancies is higher in summer and the number of unemployed is lower. However, the developments in the first three quarters of 2021 were also exceptional in seasonally adjusted terms: job vacancies increased from 63,700 to 105,100 (+41,500), while unemployment fell from 385,100 to 308,500 (-76,500).

These movements basically correspond to a typical cyclical pattern (Figure 5). If the current development of unemployment and job vacancies is compared with that in previous upswings, similar patterns emerge. However, the current recovery in the labour market is much faster than after previous crises. Typically, it would take around one and a half to two years after a slump for unemployment to fall as sharply and job vacancies to rise as much as in the first half of 2021.

The strength of the current upswing results from a special interplay of supply, demand and economic policy: first, companies resumed their activities simultaneously and within a very short period of time after the end of the lockdowns, whereas supply usually increases gradually and production capacities are expanded step by step. Second, the lockdowns did not weaken household purchasing power to the same extent as "conventional" economic downturns. Rather, private consumption demand piled up during the lockdowns. Third, crisis-hit households and firms were supported by generous economic policy measures. This dampened the negative economic consequences of the COVID-19 crisis for individuals and is now giving the economy additional momentum.

Figure 5: **Development of unemployment and job supply in strong upswings**

Respective start month = 100, seasonally adjusted



Source: Public Employment Service Austria, WIFO. The periods shown range from those months in which unemployment did not increase further and the number of job vacancies did not fall further to those months followed by at least two months of rising unemployment or falling job vacancies.

5. Forecast risks

Uncertainty about the further course of the COVID-19 pandemic remains high. However, the economic damage caused by an increase in the incidence of infection will be lower than in previous COVID-19 waves due to the full immunisation of large parts of the population. Nevertheless, a renewed flare-up of the pandemic cannot be ruled out, especially if new virus mutations occur.

However, this uncertainty represents not only a downside but also an upside risk. After an increase in the incidence of infection from mid-August 2021, the situation eased again by the end of September 2021. If, despite the sluggish progress in vaccination, mild measures such as mandatory FFP2 masks and the increased use of PCR testing succeed in preventing an increase, value creation in the catering and hotel industry would develop more favourably than forecast.

Renewed supply shocks on the global commodity markets pose a further risk to the forecast. According to the HWWI, the price of natural gas rose by almost a third in September 2021 compared with the previous

month. The currently very high global demand makes scarce raw materials a bargaining chip for producing countries and thus increases the risk of supply restrictions.

In the USA, the national debt ceiling (28.4 trillion \$, or about 136 percent of 2020 GDP), which is set in nominal dollar terms, will soon be reached again. The Republican Party has so far not agreed to raise it. In the final analysis, this would threaten a default on US government bonds and thus a global financial crisis. However, in similar situations in the past (2011, 2013) the debt ceiling was always raised just in time.

In Austria, there is still uncertainty about how the solvency of crisis-hit companies will develop once public support measures are scaled back and debt moratoria are ended. In the worst case scenario, the volume of non-performing loans could increase significantly and bank lending could decline.

Forecast risks exist with regard to the further course of the COVID-19 pandemic, the development of global commodity prices, the debt ceiling in the USA and the solvency of companies in Austria.