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Strongest Slump in GDP since 1945.

The Austrian Economy in 2020

Josef Baumgartner, Jürgen Bierbaumer, Sandra Bilek-Steindl, Christine Mayrhuber, Silvia Rocha-Akis

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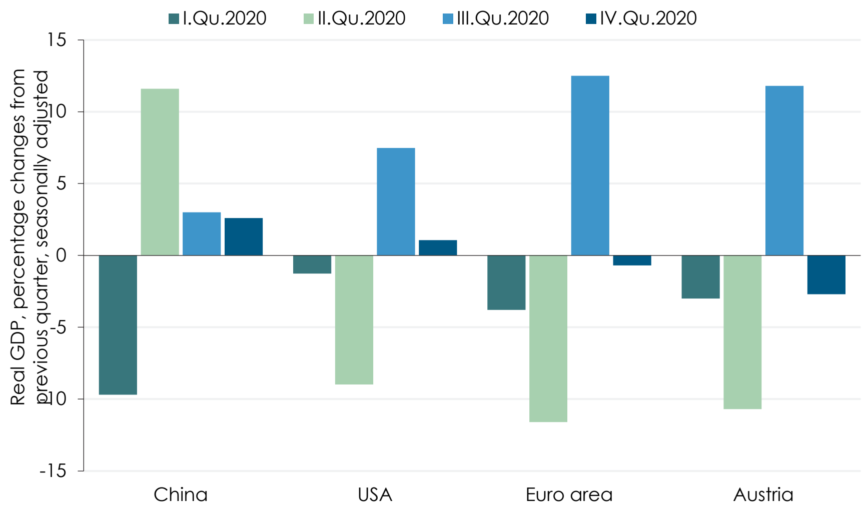
- The COVID-19 pandemic severely affected global economic activity in 2020.
- Austria experienced the strongest recession since the post-war period and a drastic increase in unemployment.
- From mid-March 2020, the Austrian federal government implemented health policy measures. In response to the infection incidence, these were alternately relaxed and tightened over the year.
- The measures restricted economic activity especially in the accommodation and food service activities, transport, trade and other services sectors. Private consumption also declined sharply in 2020.
- Industrial activity slumped in the first half of the year, but recovered from the summer onwards.
- A high take-up of short-time work dampened the rise in unemployment and stabilised the incomes of those affected.
- The inflation rate was 1.4 percent in 2020, lower than in 2018 and 2019.

Economic growth in selected regions in 2020



The COVID-19 pandemic led to a drastic slump in economic output both internationally and in Austria (source: Eurostat, OECD, Statistics Austria, Macrobond).

"Economic development in 2020 was dominated by the COVID-19 pandemic. Due to the earlier occurrence of the virus in China, GDP there already fell significantly in the first quarter; this was followed by a recovery. In the USA, the euro area and Austria, on the other hand, the trough was reached in the second quarter."

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May 2021

Strongest Slump in GDP since 1945. The Austrian Economy in 2020

Economic development in 2020 was driven by the COVID-19 pandemic and the restrictions imposed to contain it. The Austrian economy recorded a massive slump. Private consumption was hit particularly hard, as were tourism, transport, trade, personal services and cultural and leisure facilities. The expansion of short-time working regimes supported per capita incomes. The COVID-19 crisis also had an impact on inflation, with unprocessed food and services becoming more expensive, while petroleum products dampened price increases.

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1. Introduction

The COVID-19 pandemic led to a drastic slump in the global economy in 2020. The SARS-CoV-2 virus first appeared in China at the end of 2019. Economic damage was initially locally limited and due to production losses. However, the rapid spread of the virus and restrictions on economic activity due to health policy measures caused a sharp decline in global industrial production, world trade, tourism and commodity prices as early as spring 2020.

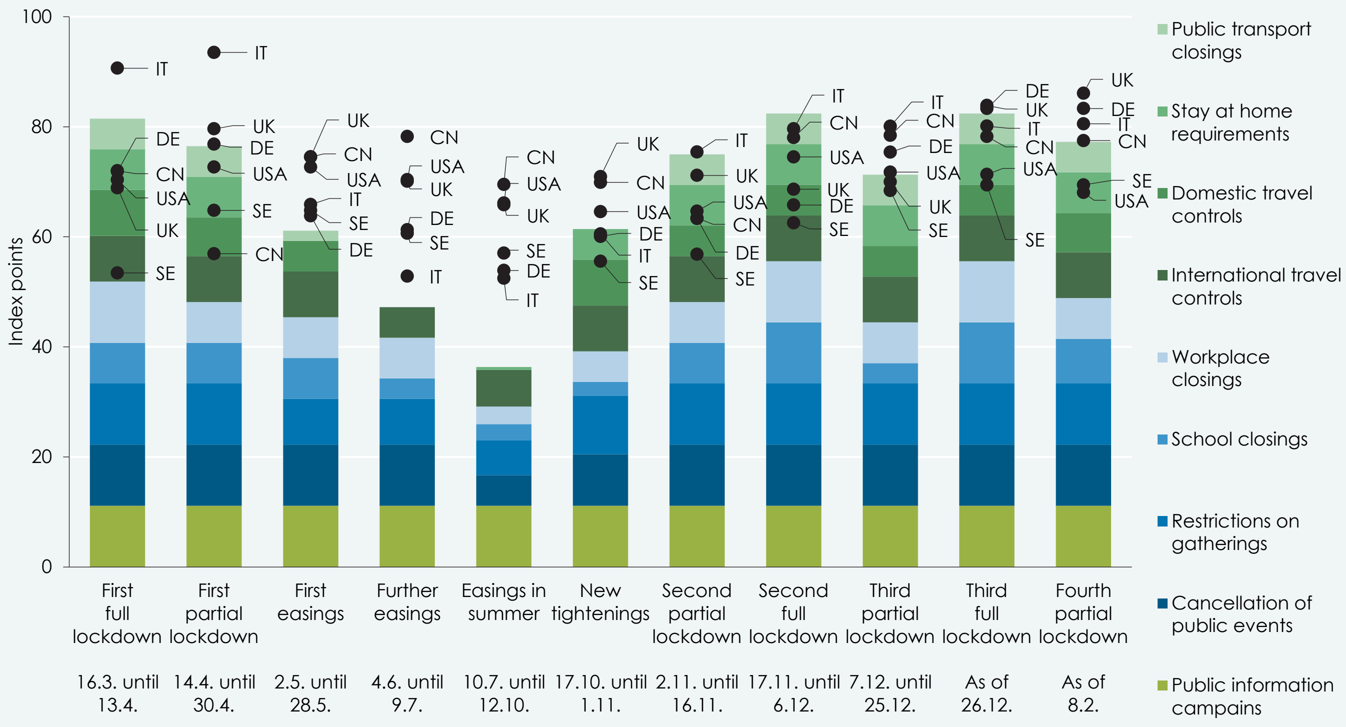
Measures taken internationally and in Austria during the first quarter of 2020 included restrictions of mobility and travel, cancellation of events, and workplaces and school closures. From early summer onwards, the measures were eased in many countries, but were tightened again in late autumn due to a renewed increase in COVID-19 infections.

As an international comparison of the intensity of official measures over time shows, the individual countries tightened or loosened the measures to a large extent in parallel (Figure 1). In doing so, they followed the wave-like development of the infection incidence. However, the intensity of the measures varied.

The respective health policy restrictions had a strong impact on economic dynamics at home and abroad and noticeably affected economic activity on both the supply and demand side, especially in the first half of 2020. A strong recovery followed in the summer.

This article provides a review of economic developments in Austria and the world with a focus on domestic wage, consumption and price developments. A detailed analysis of the monetary and financial markets can be found in Pekanov (2021b). Reports on the development of industry, foreign trade and the labour market will follow in issue 5/2021 of the WIFO-Monatsberichte (monthly reports).

Figure 1: **Intensity of lockdown measures in international comparison**



Source: University of Oxford, Blavatnik School of Government; WIFO.

2. International economy: broad-based slump

The global economy was dominated by the COVID-19 pandemic in 2020. Global economic activity declined significantly in the first half of the year. World trade recorded a drastic slump in the second quarter, but returned to pre-crisis levels in November – after a strong rebound in the summer (2020 –5.3 percent). Industrial production showed similar dynamics. Production outages disrupted international supply chains. In the second half of the year, however, a recovery began there as well (Figure 2).

2.1 Economic activity collapsed in most economies

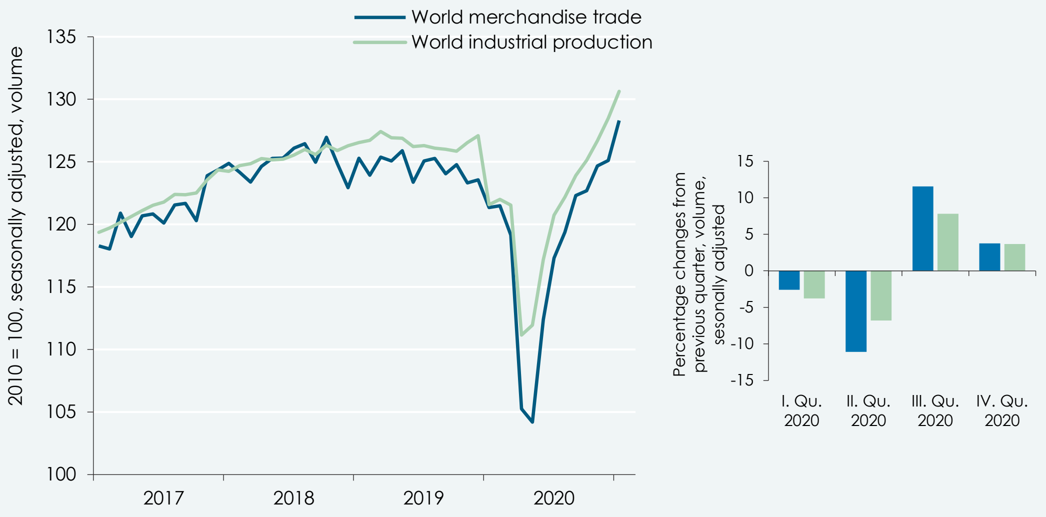
With the exception of China, all of Austria's important trading partners recorded a decline in economic output in 2020 (Table 1). In China, GDP had fallen in the first quarter, but recovered in over the year and had already returned to its pre-crisis level by the end of 2020. Other Asian countries benefitted from the rapid recovery of the Chinese economy.

The international economic development was mainly characterised by the decline in consumption in the second quarter. While industrial production began to grow again in the middle of the year, private consumption and value added in the service sector continued to decline in many countries at the end of the year.

In the USA, GDP fell by 3.5 percent in 2020. The unemployment rate rose significantly in the first half of the year, reaching 6.7 percent in December, more than 3 percentage points above the February 2020 low.

In the euro area, economic output shrank by 6.6 percent in 2020, in the EU 27 by 6.2 percent. After the historic slump in the second quarter, a strong rebound was recorded in the third quarter. In the fourth quarter, GDP stagnated. To relieve the labour market, some countries (e.g. Germany, France and Italy) introduced short-time work programmes or expanded existing programmes. This should dampen employment losses and the rise in unemployment. The unemployment rate in the euro area rose from 7.5 percent in January to 8.2 percent in December 2020. In September it was temporarily at 8.7 percent.

Figure 2: **Developments in global international trade and industrial production**



Source: CBP Netherlands, Macrobond.

Table 1: **Economic growth of Austria's most important trading partners**

	Percentage shares 2019		2016	2017	2018	2019	2020
	Exports[1]	GDP[2]	GDP volume, percentage changes from previous year				
EU 27	66.7	15.4	+ 2.0	+ 2.8	+ 2.1	+ 1.6	– 6.2
Euro area	51.5	12.5	+ 1.9	+ 2.6	+ 1.9	+ 1.3	– 6.6
Germany	29.3	3.5	+ 2.2	+ 2.6	+ 1.3	+ 0.6	– 4.9
Italy	6.4	2.0	+ 1.3	+ 1.7	+ 0.9	+ 0.3	– 8.9
France	4.4	2.4	+ 1.1	+ 2.3	+ 1.8	+ 1.5	– 8.1
CEEC 5[3]	14.7	1.8	+ 2.8	+ 4.7	+ 4.7	+ 3.8	– 3.9
Czech Republic	3.5	0.3	+ 2.5	+ 5.2	+ 3.2	+ 2.3	– 5.6
Hungary	3.6	0.2	+ 2.1	+ 4.3	+ 5.4	+ 4.6	– 5.0
Poland	3.4	1.0	+ 3.1	+ 4.8	+ 5.4	+ 4.5	– 2.7
USA	6.7	15.9	+ 1.7	+ 2.3	+ 3.0	+ 2.2	– 3.5
Switzerland	5.0	0.5	+ 2.0	+ 1.6	+ 3.0	+ 1.1	– 2.9
UK	2.9	2.4	+ 1.7	+ 1.7	+ 1.3	+ 1.4	– 9.9
China	2.9	17.4	+ 6.8	+ 6.9	+ 6.7	+ 6.0	+ 2.3
Total, PPP-weighted[4]		52	+ 4.1	+ 3.9	+ 3.8	+ 3.2	– 2.7
Total, export-weighted[5]	84		+ 2.1	+ 2.8	+ 2.3	+ 1.7	– 5.7

Source: Eurostat, Macrobond, OECD, WIFO calculations. – [1] Shares in Austrian exports of goods. – [2] Shares in world GDP, purchasing power-weighted. – [3] Czech Republic, Hungary, Poland, Slovenia, Slovakia. – [4] EU 27, USA, Switzerland, UK, China; weighted with GDP at purchasing power parities 2019. – [5] EU 27, USA, Switzerland, UK, China; weighted with Austrian goods export shares 2019.

The COVID-19 crisis affected all economies in the EU, but to different degrees.

The economic development of the EU member countries was widely uniform in 2020, with the trough being reached in the second quarter; however, the downturn and recovery of economic performance varied in strength. This is not only due to differences in the intensity of national health policy measures (as well as their change), but also to structural factors, such as the share of tourism in total value added (Schiman, 2021). For example, GDP fell comparatively sharply in Spain (–11 percent), Italy (–8.9 percent), France (–8.1 percent) and Portugal (–7.6 percent), while in Lithuania (–0.9 percent), Luxembourg (–1.3 percent), Poland (–2.7 percent) and Sweden (–2.8 percent) the slump was much milder. In Germany, GDP fell by 4.9 percent. The UK economy was also hit hard by the COVID-19 crisis and contracted by 9.9 percent. Brexit came into effect on 1 January 2020.

Expansionary fiscal and monetary policies prevented an even deeper slump in economic output in 2020 (for details see Pekanov, 2021a). The ECB expanded existing measures and introduced additional new programmes. The main refinancing rate remained unchanged at 0.0 percent in

2020, the interest rate for the deposit facility at –0.5 percent.

Inflationary pressure (HICP) decreased in the euro area in the course of the year. After prices had still risen moderately in the first half of 2020, a deflationary trend set in from August. On average, inflation was 0.3 percent for the year.

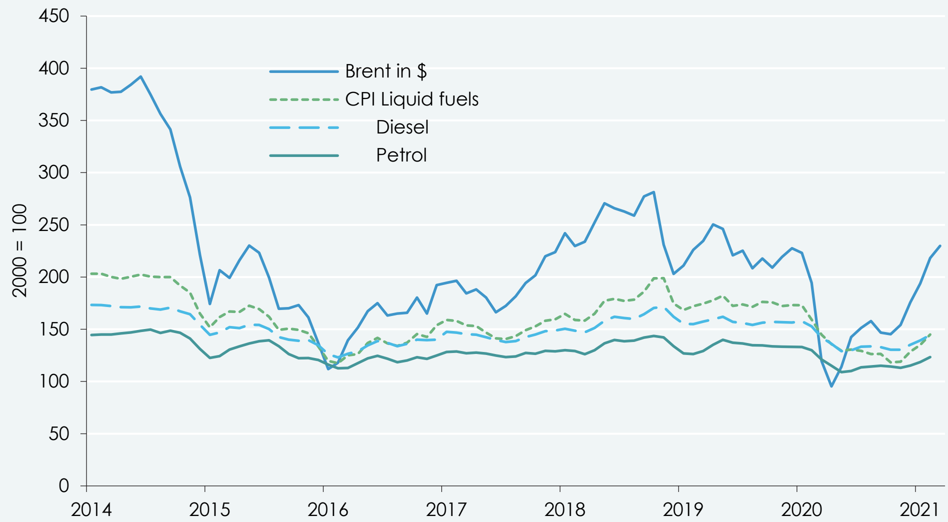
2.2 Decline in commodity prices

Since the OPEC+ countries (13 OPEC countries and 10 other important crude oil producers) could neither agree on the minimum consensus of an extension of the existing production quotas nor on a restriction of production volumes at their meeting at the beginning of March 2020, a price war broke out. Saudi Arabia announced an expansion of oil production, which led to a supply-driven drop in prices. The worldwide spread of the COVID-19 virus and the health measures taken everywhere reinforced the expectation of a global recession, which caused the demand for raw materials, especially crude oil, to plummet even further. As a result, the Brent oil price plummeted to 9 $ per barrel by 21 April 2020, its lowest level since December 1998[1]. Due to this price collapse and an intervention by the presidents of the USA and Russia, an agreement was reached at the OPEC+ meeting in April to cut production. This was to be reduced by around 10 million barrels per day (around –10 percent) from May onwards, which initiated a trend reversal in the development of crude oil prices; by the end of 2020, the price of Brent crude had risen again to 50 $ per barrel. On an annual average, the crude oil price nevertheless fell from 64.3 $ per barrel (2019) to 41.8 $ (2020) per barrel (–35 percent).

The price of crude oil fell to around 20 $ at the end of April 2020, its lowest level since 2002.

Driven by the crude oil price development, commodity prices fell by around 27 percent in 2020 according to the HWWI (euro basis; dollar basis –25.6 percent). Despite the increase in the second half of the year, the index in the fourth quarter was still 21.7 percent below the previous year's value (euro basis; dollar basis –15.6 percent). Prices for industrial raw materials increased by an annual average of 3.2 percent, falling in the first half of the year due to the economic slump and increasing again significantly in the course of the rebound from the third quarter onwards.

Figure 3: **Development of raw material and energy prices**



Source: HHWWI; Statistics Austria; WDS – WIFO Data System, Macrobond. CPI . . . consumer price index.

3. Austria

3.1 Drastic slump in economic output

With the spread of the COVID-19 pandemic in Austria and the health policy measures, domestic economic activity dropped considerably.

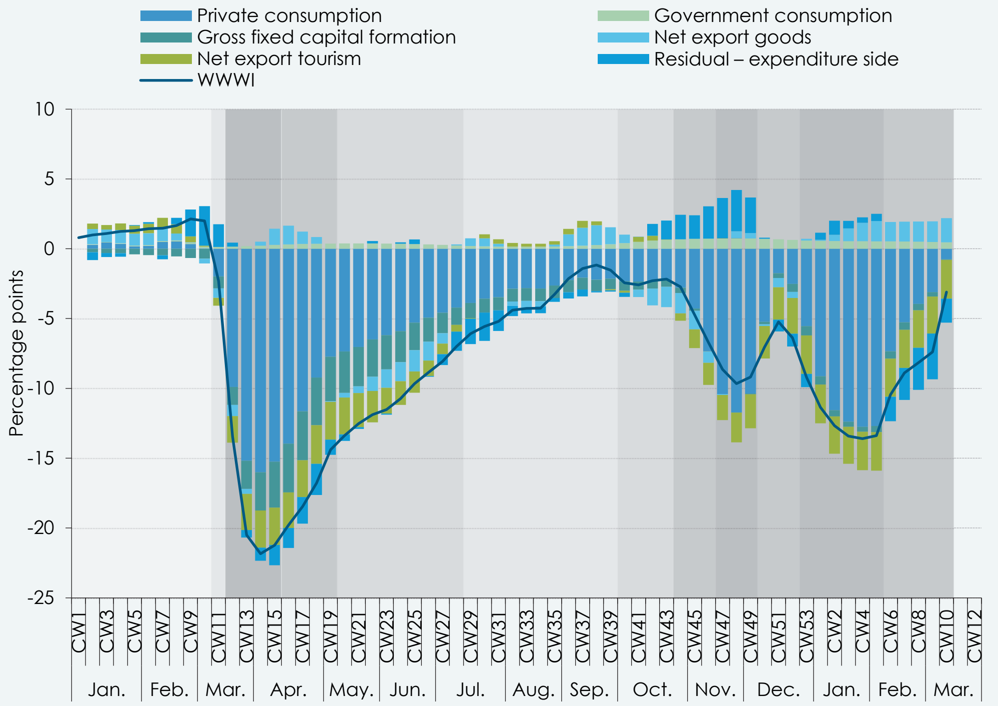
In the wake of the COVID-19 crisis, Austria's economic output in 2020 fell sharply compared to the previous year (–6.6 percent in real terms; –5.5 percent in nominal terms), even more sharply than in 2009 during the financial market and economic crisis (–3.8 percent). Due to the spread of the COVID-19 pandemic in Austria, domestic

[1] The unique event of a negative oil price occurred for West Texas Intermediate (WTI) on 20 April 2020: in the course of trading, the WTI price fell to –40 $, i.e. sellers were willing to pay buyers 40 $ in order not to be stuck with the commodity from their futures contracts for delivery in May 2020. The main reason for this was that 20 April was the last trading day for these contracts. Storage capacities were already very heavily utilised (and thus expensive).

GDP already fell noticeably in the first quarter of 2020 (–3.0 percent compared to the previous quarter). In order to contain the spread of infection, public and economic life was severely restricted from mid-March (calendar week 12) in the course of the first complete lockdown. Trade (except for grocery shops, pharmacies, drugstores and post offices) had to close, as did food service and accommodation activities, personal service providers (such as hairdressers) and schools. The measures were gradually eased in the course of the second quarter.

Consumption-relevant sectors such as tourism, transport, trade, personal services, as well as arts, entertainment and recreation were particularly hard hit by the closures. GDP fell broadly in the second quarter of 2020; the decline was –10.7 percent from the previous quarter – the sharpest slump since the post-war period. Opening steps over the summer led to a strong rebound in the third quarter (+11.8 percent). Catch-up effects supported a recovery, especially in private household consumption, but also in investment and foreign trade.

Figure 4: **Weekly WIFO Economic Index (WWWI) – subcomponents of the expenditure side**



Source: WIFO; Statistics Austria; University of Oxford, Blavatnik School of Government; Macrobond. The gray areas show the intensity of public health measures in Austria to contain the COVID-19 pandemic according to the University of Oxford, Blavatnik School of Government. Stringency Index in five grades: no or low constraints . . . light grey: under 20, 20 to 40, 40 to 60, 60 to 80, severe constraints . . . dark grey: over 80.

In autumn, the infection figures rose again, resulting in renewed restrictions in the accommodation and food service activities from the beginning of November 2020 (calendar week 45), which were subsequently tightened and extended to other sectors (second complete lockdown in calendar weeks 47 to 49). In addition to the food services[2] and accommodation activities, the closures again affected large parts of the trade and body-related services. From calendar week 50 onwards, the measures were eased in retail (Christmas shopping) and services, but the restrictions on restaurants and hotels remained in place.

From 26 December, the regulations from the second lockdown came into force again and remained in force until the beginning of February 2021 (calendar week 5; third complete lockdown). The measures again dampened economic activity at the end of the year, especially in the service sectors. Industrial production, on the other hand, stabilised. GDP fell by 2.7 percent in the fourth quarter.

The COVID-19 pandemic was also reflected in the confidence indicators of the WIFO-Konjunkturtest (monthly business cycle survey). Broadly spread across the manufacturing, construction and services sectors, both the current situation assessment index and the expectations index collapsed in April 2020. The overall index in manufacturing reached roughly the level it had during the

[2] A pick-up of food and drinks was still possible.

financial market and economic crisis of 2008-09. In the services sector, it fell significantly below this level. The mood brightened in the further course of the year.

The activity level of the Austrian economy was subject to large fluctuations in 2020, not least due to the alternation of official closure and easing measures. In order to be able to cover such intra-year changes in economic performance more accurately, WIFO developed the Weekly WIFO Economic Index (WWWI). It measures the real economic activity of the Austrian economy on a weekly basis in comparison to the previous year and shows the contribution of the most important demand components (Figure 4).

The WWWI is a new tool for the weekly assessment of economic activity in Austria.

Table 2: **Development of aggregate demand**
Volume (chain-linked series)

	2017	2018	2019	2020
	Percentage changes from previous year			
Final consumption expenditure	+ 1.6	+ 1.1	+ 1.0	– 6.5
Households[1]	+ 1.9	+ 1.1	+ 0.8	– 9.6
General government	+ 0.9	+ 1.2	+ 1.5	+ 1.6
Gross capital formation	+ 4.4	+ 5.3	+ 0.8	– 5.9
Gross fixed capital formation	+ 4.1	+ 3.9	+ 4.0	– 4.9
Machinery and equipment[2]	+ 7.3	+ 3.2	+ 4.7	– 11.1
Construction	+ 2.5	+ 3.6	+ 3.6	– 3.3
Other investment[3]	+ 2.5	+ 5.7	+ 3.6	+ 1.6
Domestic demand	+ 2.5	+ 2.2	+ 1.1	– 6.4
Exports	+ 4.9	+ 5.5	+ 2.9	– 10.4
Imports	+ 5.3	+ 5.0	+ 2.4	– 10.2
Gross domestic product	+ 2.4	+ 2.6	+ 1.4	– 6.6

Source: Statistics Austria; WDS – WIFO Data System, Macrobond. – [1] Including non-profit institutions serving households. – [2] Including weapon systems. – [3] Mainly intellectual property products (research and development, computer programmes, copyrights).

Table 3: **Growth contribution of demand components to GDP, volume**

	2017	2018	2019	2020
	Percentage points			
Final consumption expenditure	+ 1.2	+ 0.8	+ 0.7	– 4.6
Households[1]	+ 1.0	+ 0.6	+ 0.4	– 4.9
General government	+ 0.2	+ 0.2	+ 0.3	+ 0.3
Gross capital formation	+ 1.1	+ 1.3	+ 0.2	– 1.5
Gross fixed capital formation	+ 1.0	+ 0.9	+ 1.0	– 1.2
Machinery and equipment[2]	+ 0.6	+ 0.3	+ 0.4	– 0.9
Construction	+ 0.3	+ 0.4	+ 0.4	– 0.4
Other investment[3]	+ 0.1	+ 0.3	+ 0.2	+ 0.1
Domestic demand	+ 2.4	+ 2.1	+ 1.1	– 6.2
Exports	+ 2.6	+ 3.0	+ 1.6	– 5.8
Imports	– 2.6	– 2.6	– 1.3	+ 5.3
Gross domestic product percent	+ 2.4	+ 2.6	+ 1.4	– 6.6

Source: Statistics Austria; WDS – WIFO Data System, Macrobond. – [1] Including non-profit institutions serving households. – [2] Including weapon systems. – [3] Mainly intellectual property products (research and development, computer programs, copyrights).

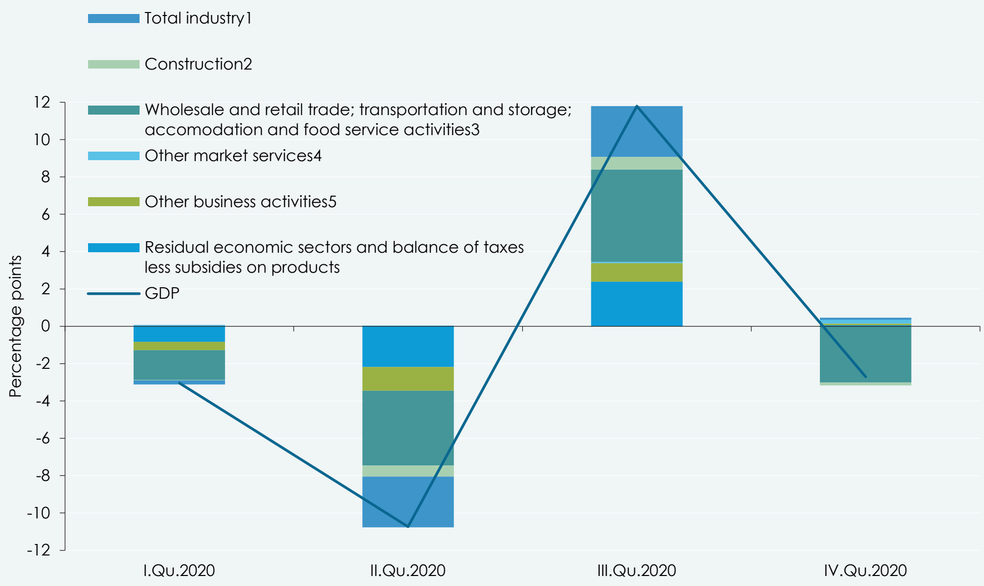
Since the first lockdown came into effect in mid-March 2020, the WWWI has been consistently below the previous year's level, with tightening of restrictions seen in the form of declines and easing steps reflected in a recovery of economic activity. In particular, private household consumption expenditure reacted sensitively to the health policy measures and contributed significantly to the decline in economic output.

Private consumption (including non-profit institutions serving households) declined by 9.6 percent in 2020. Public consumption demand, on the other hand, grew by 1.6 percent. Thus, consumption as a whole declined by 6.5 percent. Businesses also curtailed their demand. Gross fixed capital formation fell by 4.9 percent compared to the previous year. Especially the volatile investments in equipment declined strongly (–11.1 percent). Construction investments were more stable across the board and fell by only 3.3 percent. In contrast, other investments, which mainly include intellectual property such as research and development as well as computer programmes and copyrights, were expanded by 1.6 percent.

Against the backdrop of the global economic crisis, foreign trade also declined in 2020. Exports decreased by 10.4 percent. Both goods and services exports contributed to this decline. Concerning goods exports, a recovery began from the middle of the year, while service exports – due to the losses in travel during the tourist winter season – continued to slump at the end of the year. Imports fell by –10.2 percent, somewhat less than exports. Foreign trade thus contributed to the decline in GDP. In line with the international economic picture, both imports of goods and services increased in the third and fourth quarters compared to the previous quarter.

Figure 5: **Growth contribution of the economic sectors to GDP, volume**

Contribution to quarter-on-quarter growth, seasonally and working-day adjusted (according to Eurostat definition)



Source: Statistics Austria, WIFO. – [1] NACE B to E. – [2] NACE F. – [3] NACE G to I. – [4] NACE J to L. – [5] NACE M and N.

Especially in contact-intensive economic sectors, value added declined significantly in 2020.

The loss of consumer demand led to losses in value added in trade, transport, accommodation and food service activities, personal services, arts, entertainment and recreation. Especially in the second quarter of 2020, a strong decline was recorded in these sectors. After a rebound in the third quarter, value added fell again in the fourth quarter. In the accommodation and food service activities it declined by 35.2 percent in 2020 as a whole. This sector thus contributed significantly to the decline in GDP in the economy as a whole. In other services, value added shrank by 19.6 percent, but due to the small share of this sector in total value added, this decline was less significant. In transport, value added fell by 15.5 percent.

In contrast, the less contact-intensive service sectors proved to be crisis-resistant: in the areas of information and communication (+1.8 percent), financial and insurance (+2.5 percent), real estate (+1.9 percent) and public administration (NACE sections O to Q, +0.3 percent), value added increased in 2020. In the construction industry it fell by 2.3 percent. The domestic industrial cycle was in line with the international development; the trough was reached in the second quarter, followed by a recovery in the second half of the year. Overall, value added in manufacturing declined by 7.2 percent in 2020.

Due to the drastic increase in government spending and the decline in revenues, the government deficit rose to 8.9 percent of nominal GDP in 2020 – the highest value since start of record in 1954. This abruptly ended the favourable development of previous years (surplus in 2019: 0.6 percent of GDP). Public debt rose again and was 34.8 billion € higher at the end of 2020 than at the end of 2019, at 315.2 billion € (83.9 percent of GDP). On the expenditure side, expansionary fiscal policy measures such as short-time work, the fixed-cost subsidy or the turnover substitute increased the deficit. On the revenue side, direct tax revenue, taxes on production and imports and social contributions fell.

The COVID-19 crisis also burdened the domestic labour market. In 2020, the number of employed persons fell by 2.0 percent. The declines were particularly high in tourism (–19.2 percent) and in other economic services (–7.5 percent; Bock-Schappelwein et al., 2021). The unemployment rate rose by 2.5 percentage points to a new high of 9.9 percent. The expansion of short-time work prevented an even greater decline in employment (Huemer et al., 2021). With over 1.0 million short-time work cases settled, the peak of use was reached in April 2020. By the end of October, the number of people in short-time work had fallen to around 80,000 and rose again in the wake of the lockdown in November. At the end of December, short-time work had been approved for around 420,000 people (Budget Service, 2021).

Table 4: **Gross value added, at basic prices**
Volume (chain-linked series)

	2017	2018	2019	2020
	Percentage changes from previous year			
Agriculture, forestry and fishing	+ 5.3	+ 3.5	– 0.8	– 2.9
Total industry[1]	+ 4.0	+ 4.9	+ 1.0	– 6.9
Manufacturing	+ 3.7	+ 5.3	+ 0.7	– 7.2
Construction	+ 3.3	+ 1.8	+ 2.7	– 2.3
Wholesale and retail trade	+ 0.1	+ 2.9	+ 0.6	– 5.6
Transportation and storage	+ 4.0	+ 1.4	+ 1.6	– 15.5
Accommodation and food service activities	+ 0.7	+ 1.3	+ 2.1	– 35.2
Information and communication	+ 2.1	+ 9.8	+ 3.7	+ 1.8
Financial and insurance activities	+ 5.6	+ 2.9	+ 3.0	+ 2.5
Real estate activities	+ 1.3	+ 1.1	+ 1.2	+ 1.9
Other business activities[2]	+ 3.6	+ 3.6	+ 2.1	– 11.6
Public administration[3]	+ 1.2	+ 0.8	+ 0.6	+ 0.3
Other service activities[4]	+ 2.1	– 0.4	+ 0.7	– 19.6
Total gross value added[5]	+ 2.5	+ 2.8	+ 1.4	– 6.4
Gross domestic product at market prices	+ 2.4	+ 2.6	+ 1.4	– 6.6

Source: Statistics Austria; WDS – WIFO Data System, Macrobond. – [1] Mining and quarrying, manufacturing, electricity, gas, steam and air conditioning supply, water supply, sewerage, waste management and remediation activities (NACE B to E). – [2] Professional, scientific and technical activities, administrative and support service activities (NACE M and N). – [3] Including compulsory social security, defence, education, human health and social work activities (NACE O to Q). – [4] Including arts, entertainment, sport and recreation, personal services, private households (NACE R to U). – [5] Before deduction of subsidies and attribution of taxes on products.

3.2 Short-time work supported labour incomes

Collectively agreed minimum wages rose significantly more strongly than effective wages per capita in 2020.

The lockdown measures shaped labour market developments in 2020. The number of employed persons declined, the hours of work decreased overall as well as per capita. In addition, a considerable share of the employees was on short-time work. The aforementioned factors had an impact on wage development in 2020. In addition to the collectively agreed minimum wages, the crisis-related reduction in actual working hours per capita and the instrument of short-time work influenced the wage development of employees. Accordingly, wage dynamics varied, both in the course of the year and between the sectors, especially from the second quarter onwards. While sectors with relatively stable employment figures (energy supply, construction, public administration, education and social work activities) recorded wage increases, these were absent in sectors in which a high proportion of the lost hours was covered by short-time work (accommodation and food service activities, other service activities, wholesale and retail trade).

The collective wage bargaining agreements, themselves influenced by the economic environment in 2019, were therefore only responsible for part of the effective wage development in 2020. Due to the weakening of the economy in 2019, the social partners agreed on significantly lower wage settlements compared to the wage bargaining rounds for 2019. In the associations of the metal industry, whose collective wage agreements traditionally set a guiding framework for agreements negotiated in other sectors, the bargaining partners agreed on an increase in actual wages of +2.6 percent to +2.8 percent which took effect at the beginning of 2020. The agreement was thus 0.8 percentage points below the previous year's value. Employees could choose between a reduction in working time (and unchanged wage) and a wage increase; in the case of full-time employment, the additional monthly time off entitlement corresponded to 3 hours and 45 minutes. The wage agreement for 2020 was the same for all metal industry trade unions. In addition, the collectively agreed minimum wage in the metal industry was raised by 4.46 percent to a uniform 2,000 €. A pay agreement was also reached for the civil servants; salary increases were between 2.25 and 3.05 percent. For the trade sector, a staggered increase of 2.2 to 2.5 percent was agreed. The 2020 spring wage rounds were already overshadowed by the influence of the COVID-19 crisis. The bargaining parties agreed on settlements close to the inflation rate. The agreement in the tourism and leisure industry, which was strongly affected by the COVID-19 regulatory measures, was valid until 30 April 2020. In the supplementary collective wage bargaining agreement, a one-time Corona bonus of 100 € net was set for November 2020.

Table 5: **Development of collectively aggreed minimum wages**

	Index of Agreed Minimum Wages 2016		
	Weighting	Total employees	
		2019	2020
		Percentage changes from previous year	
Index of Agreed Minimum Wages, total	1,000,000	+ 3.0	+ 2.4
Excluding civil servants	837,726	+ 3.0	+ 2.3
Craft and trades	196,327	+ 3.1	+ 2.5
Industry	163,994	+ 3.2	+ 2.4
Trade and commerce	127,187	+ 2.6	+ 2.3
Transport and communication	54,763	+ 3.6	+ 2.0
Tourism and leisure	49,712	+ 2.6	+ 1.1
Banking and insurance	37,035	+ 2.9	+ 2.2
Information and consulting	67,321	+ 2.9	+ 2.3
Civil servants	162,274	+ 3.1	+ 2.4

Source: Statistics Austria, WIFO calculations.

Table 6: **Development of wages and salaries**

	2018	2019	2020
	Percentage changes from previous year		
Wages and salaries, total			
Gross	+ 5.0	+ 4.4	− 1.8
Net[1]	+ 4.5	+ 4.5	− 1.2
Employees[2]	+ 2.2	+ 1.5	− 2.3
Wages and salaries per capita[2]			
Gross nominal	+ 2.7	+ 2.9	+ 0.6
Gross real[3]	+ 0.7	+ 1.3	− 0.8
Net nominal[1]	+ 2.2	+ 2.9	+ 1.2
Net real[1,3]	+ 0.2	+ 1.4	− 0.2
Hours worked per capita[2]	− 0.1	+ 0.6	− 7.3
Wages and salaries per hour worked			
Gross nominal	+ 2.8	+ 2.3	+ 8.5
Gross real[3]	+ 0.8	+ 0.8	+ 7.0
Net nominal[1]	+ 2.3	+ 2.4	+ 9.1
Net real[1,3]	+ 0.3	+ 0.9	+ 7.6

Source: Statistics Austria; WDS – WIFO Data System, Macrobond. – [1] According to the WIFO Economic Outlook of March 2021. – [2] Per dependent employment relationship. – [3] Deflated by the consumer price index (CPI).

The short-time work subsidy clearly supported per capita incomes.

According to the Index of Agreed Minimum Wages, minimum wages rose by a weighted average of 2.4 percent in 2020 (Table 5). In the areas of craft and trades (weight one fifth), industry and civil servants (weight one sixth each), the index values rose between 2.4 percent and 2.5 percent. At +1.1 percent, the minimum wage development in the tourism and leisure industry was clearly below average, as no new agreements were concluded as of 1 May 2020 due to the crisis.

However, actual wages in 2020 developed noticeably weaker than the collectively agreed minimum wages and very heterogeneously. Especially in sectors strongly affected by working time reductions, the actual wage development deviated from the collective wage agreements. Per capita incomes rose nominally by an average of 0.6 percent and thus significantly weaker than according to the Index of Agreed Minimum Wages (+2.4 percent). Such a high negative wage drift (1.8 percentage points) was last seen in 2009.

Gross wages and salaries amounted to 156.2 billion € in 2020. Compared to the previous year, they fell by –1.8 percent (Table 6), less than the number of dependent employees (–2.3 percent), with short-time work dampening the decline. In 2020, Austrian companies received short-time work subsidies for about 1.2 million employees, of which 43 percent were women and 57 percent men (settled cases as of 26 January 2021, Public Employment Service Austria, 2021). From March to November 2020, an average of 11.8 percent of employees were on short-time work. The average time lost amounted to 43 percent of the respective normal working hours (Public Employment Service Austria, 2021). The net replacement rate for the hours lost depends on the gross earnings of the employees: for gross earnings before short-time work of less than 1,700 € it is 90 percent, between 1,700 € and 2,685 € 85 percent and for higher earnings 80 percent (up to the maximum contribution base of 5,370 € in 2020). Thus, for many employees, the short-time work benefit cushioned the loss of earnings associated with the reduced working hours and supported per capita incomes as well as the overall economic wage bill. Since short-time work benefits are a part of monthly pay, incomes per hour actually worked and compensated by the employer rose exceptionally strongly in 2020, by +8.5 percent.

Due to the progressive income tax rate, net wages tend to grow more slowly than gross wages. While gross and net wages per capita increased by almost the same amount in 2019 (+2.9 percent), the tariff reform (reduction in the tax rate for the lowest income tax bracket) the family bonus and short-time work are likely to have contributed to dampening the crisis-induced decline in net wage growth compared to gross wage growth: nominal per capita growth was 1.2 percent net (+0.6 percent gross). As consumer prices rose by 1.4 percent in 2020, employees had to accept slight net real wage losses of 0.2 percent on average.

3.3 Strong slump in consumer demand

According to preliminary figures from Statistics Austria, in 2020 the expenditure of domestic private households (including non-profit institutions serving households) was –9.6 percent below the previous year's level in real terms (Table 7). In nominal terms, this corresponds to a reduction of 8.6 percent. Thus, the decline in consumer demand by 17.6 billion € is responsible for about four-fifths of the total GDP slump.

On the one hand, the decline in demand was the result of a negative supply shock: temporary closures of most retail and service businesses during the lockdown phases triggered a kind of forced saving by private households. On the other hand, the uncertain environment had a clear dampening effect on consumer spending (negative demand shock): private households increasingly reacted with precautionary saving, both to the high uncertainty on the labour market, which often affected the individual income situation, and to the uncertainty about the further course of the pandemic. The savings rate rose from 8.2 percent in 2019 to 14.5 percent in 2020 (+13.5 billion €) – a very high value in a long-term comparison.

The drastic loss of consumption combined with relatively stable disposable household incomes caused the savings rate to rise to 14.5 percent. The short-time work subsidy and other fiscal policy measures supported household incomes.

Income-supporting measures such as short-time work assistance or support, subsidies for unemployment benefits, the Corona family hardship fund, the hardship fund for the self-employed or the early reduction of the entry tax rate for wage and income tax could not fully compensate for the income losses in 2020[3]. Disposable household income also fell nominally for the first time since 1995 (–1.9 percent; –3.0 percent in real terms)[4].

As the presentation of consumer demand by type of goods shows (Table 8), the decline was strongest in the area of services (–14.7 percent in real terms). This is mainly due to consumption cuts in gastronomy, travel and in the areas of sports, culture and leisure as well as personal services. Consumer spending on everyday goods (especially food) increased strongly. Demand for non-durable consumer goods, which includes food, nevertheless declined in 2020 (–5.5 percent in real terms), mainly due to significantly lower spending on fuel as a result of reduced household mobility. Expenditure on semi-durable and durable consumer goods, on the other hand, fell only slightly in 2020. For these areas, a significant decline would have been expected due to the weak income development, as private households usually postpone expensive purchases in economically uncertain phases. While this was true for new car purchases, in 2020 consumer spending on furniture, furnishings, household appliances, IT equipment or sports equipment increased, in some cases sharply – reflecting the change in consumer behaviour due to the increased stay at home. In the aggregate, domestic consumption declined by 9.6 percent (in real terms). National consumption fell by 9.8 percent in real terms. To calculate this, domestic consumption is expanded to include expenditures made abroad by Austrian residents and reduced by the consumption expenditures of non-residents in

In 2020, expenditure on services (e.g. restaurant visits and travel) and on goods that are not part of daily needs (e.g. clothing and shoes, cars) declined sharply.

[3] For an ex-ante analysis of the effects of the measures adopted in the course of the COVID-19 crisis to support income and investment at the micro, macro and sectoral-regional levels, see Baumgartner et al. (2020).
[4] According to preliminary calculations by Statistics Austria (as of 1 April 2021), compensation of employees fell by 1.8 percent in nominal terms in 2020. The operating surplus and mixed income declined by 2.0 percent. The balance of property income decreased by a good 40 percent, monetary social benefits paid out to private households rose by 8.9 percent and income and wealth tax revenue fell by 7.2 percent. The social contributions of private households almost stagnated (+0.2 percent). In a long-term comparison, the rates of change mentioned are all lows or highs.

Austria. Due to travel restrictions and closed accommodation facilities, both declined sharply (–69.6 percent and –39.5 percent in real terms, respectively, compared to 2019, Table 8).

Table 7: **Private consumption, personal disposable income, consumption rate**

	Private consumption[1]		Personal disposable income		Consumption rate[2]
	Nominal	Real[3]	Nominal	Real[3]	
	Year-to-year percentage changes				
Ø 2008-2012	+ 2.8	+ 0.9	+ 1.8	– 0.1	+ 1.0
Ø 2012-2016	+ 2.3	+ 0.6	+ 2.1	+ 0.3	+ 0.3
Ø 2016-2020	+ 0.1	– 1.5	+ 2.0	+ 0.3	– 1.9
2017	+ 3.8	+ 1.9	+ 3.4	+ 1.6	+ 0.3
2018	+ 3.2	+ 1.1	+ 3.5	+ 1.4	– 0.3
2019	+ 2.7	+ 0.8	+ 3.2	+ 1.3	– 0.5
2020	– 8.6	– 9.6	– 1.9	– 3.0	– 6.8

Source: Statistics Austria, WIFO calculations. – [1] Domestic consumption including non-profit institutions serving households. – [2] Consumption as a percentage of personal disposable income. – [3] Chain-linked series.

Table 8: **Development of private consumption in a longer-term comparison**
Volume (chain-linked series)

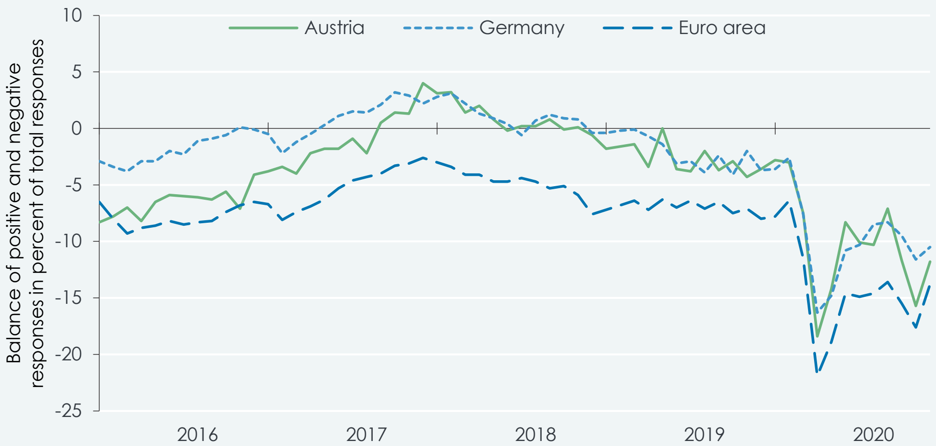
	Ø 2008-2012	Ø 2012-2016	Ø 2016-2020	2017	2018	2019	2020
	Year-to-year percentage changes						
Domestic consumption	**+ 0.8**	**+ 0.6**	**– 1.6**	**+ 1.6**	**+ 0.9**	**+ 1.0**	**– 9.6**
Durable consumer goods	+ 2.4	– 0.2	+ 0.5	+ 1.9	+ 1.0	– 0.4	– 0.5
Semi-durable consumer goods	+ 1.1	+ 1.9	+ 0.5	+ 0.9	+ 0.4	+ 1.0	– 0.4
Non-durable consumer goods	– 0.2	+ 0.1	– 0.8	+ 1.3	+ 0.7	+ 0.6	– 5.5
Services	+ 1.0	+ 0.7	– 2.8	+ 1.8	+ 1.1	+ 1.5	– 14.7
Consumption by non-residents in Austria	– 1.0	+ 2.0	– 9.7	+ 2.6	+ 4.1	+ 3.1	– 39.5
Consumption abroad by Austrian residents	– 1.4	+ 0.8	– 22.5	+ 9.3	+ 8.5	+ 0.0	– 69.6
National consumption[1]	**+ 0.9**	**+ 0.5**	**– 1.7**	**+ 1.8**	**+ 1.0**	**+ 0.8**	**– 9.8**
Consumption by non-profit institutions serving households	+ 1.8	+ 3.0	+ 1.0	+ 3.8	+ 3.3	+ 1.9	– 4.6
National consumption including non-profit institutions serving households	**+ 0.9**	**+ 0.6**	**– 1.5**	**+ 1.9**	**+ 1.1**	**+ 0.8**	**– 9.6**
Durable consumer goods	+ 2.5	– 0.1	+ 0.5	+ 2.0	+ 1.1	– 0.4	– 0.5
National consumption excluding durable consumer goods	+ 0.7	+ 0.6	– 1.8	+ 1.9	+ 1.1	+ 1.0	– 10.5

Source: Statistics Austria, WIFO calculations. – [1] Domestic consumption reduced by consumption of non-residents in Austria and expanded by consumption abroad of Austrian residents.

Consumer confidence fluctuated significantly in the course of 2020: at the beginning of the year, the seasonally adjusted balance of the harmonised EU consumer confidence indicator stood at –2.8 percentage points. During the first lockdown, the value deteriorated as low as –18.4 percentage points in April. This was followed by a recovery until September (–7.1 percentage points), before consumer confidence fell again to just under –16 percentage points in the second lockdown. The assessments of consumers in Austria were like those in Germany. However, during the lockdown phases – especially in autumn – the indicator in Austria slumped more sharply. This reflects the different lockdown intensities (Figure 6).

The areas of trade relevant to consumption also suffered losses in turnover and volume, some of them drastic, as a result of the COVID-19 pandemic in 2020. For the wholesale and retail trade (including repair of motor vehicles), this means a sharp drop in sales (–4.8 percent in volume, –5.3 percent in turnover). This was particularly severe for trade and repair of motor vehicles due to the slump in demand for new cars (car registrations decreased especially in the months of March to August; –24.5 percent or around –80,000 units compared to 2019). Wholesale trade also declined (–5.3 percent in volume, –7.0 percent in turnover). In particular, the closures of catering and accommodation establishments had a negative impact on business activity in wholesale trade. Turnover in retail trade stagnated, but this was due to two opposing developments: food retail trade (including e.g. drugstores, tobacconists), which provides goods for basic supply, was not affected by closure measures and achieved strong, in some cases double-digit increases in turnover. Turnover in non-food retail trade, especially in the area of clothing and shoes, declined significantly (–22.8 percent in volume, –24.0 percent in turnover compared to 2019). Other sub-sectors such as DIY stores, furniture retailing or sports retailing (especially in the summer months) developed positively. The development was also favourable in retail sale via mail order houses and in particular for online shopping. At –1.7 percent, employment in the wholesale and retail sector declined less sharply in 2020 than in the economy (–2.0 percent dependent active employees, Table 9).

Figure 6: **Development of the seasonally adjusted consumer confidence indicator**



Source: Eurostat. Arithmetic average of the balance of positive and negative responses in percent of total responses on the past and future financial situation of the household, the view on the future general economic situation and on planned major purchases. Seasonally adjusted by Eurostat using dainties.

Table 9: **Development in trade**

	Wholesale and retail trade	Wholesale and retail trade, repair of motor vehicles	Wholesale trade (excluding motor vehicles)	Retail trade (excluding motor vehicles)
	Percentage changes from previous year			
Turnover of sales				
2018	+ 3.7	+ 2.1	+ 4.9	+ 2.4
2019	+ 1.2	+ 0.6	+ 0.9	+ 2.1
2020	– 5.3	– 10.7	– 7.0	+ 0.1
Volume of sales				
2018	+ 1.3	+ 0.7	+ 2.1	+ 0.3
2019	+ 0.6	– 1.2	+ 0.6	+ 1.2
2020	– 4.8	– 12.5	– 5.3	– 0.2
Prices (Ø 2015 = 100)				
2018	+ 2.3	+ 1.4	+ 2.7	+ 2.1
2019	+ 0.7	+ 1.8	+ 0.4	+ 0.9
2020	– 0.5	+ 2.0	– 1.8	+ 0.4
Employment				
2018	+ 1.3	+ 2.2	+ 2.0	+ 0.8
2019	+ 0.2	+ 0.9	+ 0.9	– 0.4
2020	– 1.7	– 1.8	– 1.5	– 1.8

Source: Statistics Austria.

3.4 Energy and services determined price dynamics in 2020

The inflation trend in 2020 was partly influenced by the COVID-19 crisis. The fall in crude oil prices triggered by the recession led to a decline in prices for petroleum products from March onwards (–13.9 percent on average for the year, inflation contribution –0.5 percentage points). Energy prices, however, fell by only 5.6 percent, as electricity prices rose by more than 5.5 percent.

The inflation rate was 1.4 percent in 2020. Unprocessed food and services in particular rose at an above-average rate. Mineral oil products, on the other hand, significantly dampened the overall price increase.

Food demand increased due to COVID-19 regulatory measures: output restrictions, closed restaurants, home office and distance learning made higher self-supply necessary compared to the previous year. Due to border closures, there was a shortage of labour from Eastern Europe (harvest workers, butchers) in spring, which meant that in some cases the harvests could not be harvested in full and meat could not be processed, leading to a shortage of supply. Prices for unprocessed food rose by 3.5 percent on average for the year.

Table 10: **Development of the consumer price index**
Breakdown according to the purpose of consumption

	2010	2015	2018	2019	2020
	Percentage changes from previous year				
Total consumer price index	+ 1.9	+ 0.9	+ 2.0	+ 1.5	+ 1.4
Core inflation rate[1]	+ 1.2	+ 1.8	+ 1.8	+ 1.6	+ 1.9
Micro basket of goods and services (daily shopping)	+ 0.6	+ 1.1	+ 2.6	+ 0.3	+ 2.9
Mini basket of goods and services (weekly shopping)	+ 3.4	– 1.3	+ 4.2	+ 0.7	– 0.6
Administrated prices and tariffs	+ 0.9	+ 2.5	+ 1.8	+ 1.5	+ 1.6
COICOP main headings					
Food and non-alcoholic beverages	+ 0.5	+ 0.8	+ 1.6	+ 1.1	+ 2.3
Alcoholic beverages, tobacco	+ 2.0	+ 3.1	+ 3.8	+ 1.0	+ 1.2
Clothing and footwear	+ 1.1	+ 0.2	+ 0.6	+ 0.8	– 0.1
Housing, water, electricity, gas and other fuels	+ 2.6	+ 1.2	+ 2.2	+ 2.8	+ 2.3
Furnishing, household equipment and routine maintenance of the house	+ 1.2	+ 1.3	+ 2.3	+ 1.1	+ 0.9
Health	+ 1.6	+ 1.6	+ 2.2	+ 1.1	+ 2.0
Transport	+ 3.4	– 3.0	+ 2.9	+ 0.3	– 1.7
Communication	+ 1.9	+ 0.8	– 2.8	– 3.2	– 3.0
Recreation and culture	+ 0.8	+ 1.8	+ 0.5	+ 1.4	+ 1.7
Education	– 4.7	+ 2.6	+ 2.3	+ 2.7	+ 2.0
Restaurants and hotels	+ 1.1	+ 2.9	+ 3.1	+ 2.9	+ 3.1
Miscellaneous goods and services	+ 2.8	+ 2.0	+ 2.1	+ 1.7	+ 2.1
Special breakdown					
Unprocessed food[2]	+ 2.0	+ 1.3	+ 1.0	+ 1.3	+ 3.5
Processed food[3]	+ 0.1	+ 1.4	+ 2.5	+ 0.9	+ 1.3
Energy	+ 7.6	– 7.3	+ 5.2	+ 1.0	– 5.6
Industrial goods	+ 1.2	+ 0.5	+ 1.2	+ 1.1	+ 1.3
Services	+ 1.5	+ 2.5	+ 2.0	+ 2.0	+ 2.4

Source: Statistics Austria, WIFO calculations. – [1] Excluding energy and unprocessed food (meat, fish, fruit, vegetables). – [2] Seasonal goods, meat and sausage products. – [3] Including alcoholic beverages and tobacco.

Industrial goods (without energy) rose only slightly by 1.3 percent, partly due to stagnation in the prices of clothing and shoes (–0.1 percent). Due to the first lockdown, shops were closed immediately after the changeover to spring and summer collections. In the course of the opening, the summer sales started practically as early as May instead of June as usual, which lasted until August due to sluggish demand. In the course of the opening after the second lockdown, prices were already reduced in December.

As in previous years, service prices (+2.4 percent) made a disproportionate contribution to inflation in 2020: with a share of almost 50 percent of the basket of goods and services, they were responsible for more than three quarters of the total price increase. This development was again driven by housing costs (+3 percent; rents +4.1 percent) and catering services (+3.5 percent). These two service components explain 65 percent of the price increase in services and over 50 percent of the total price increase.

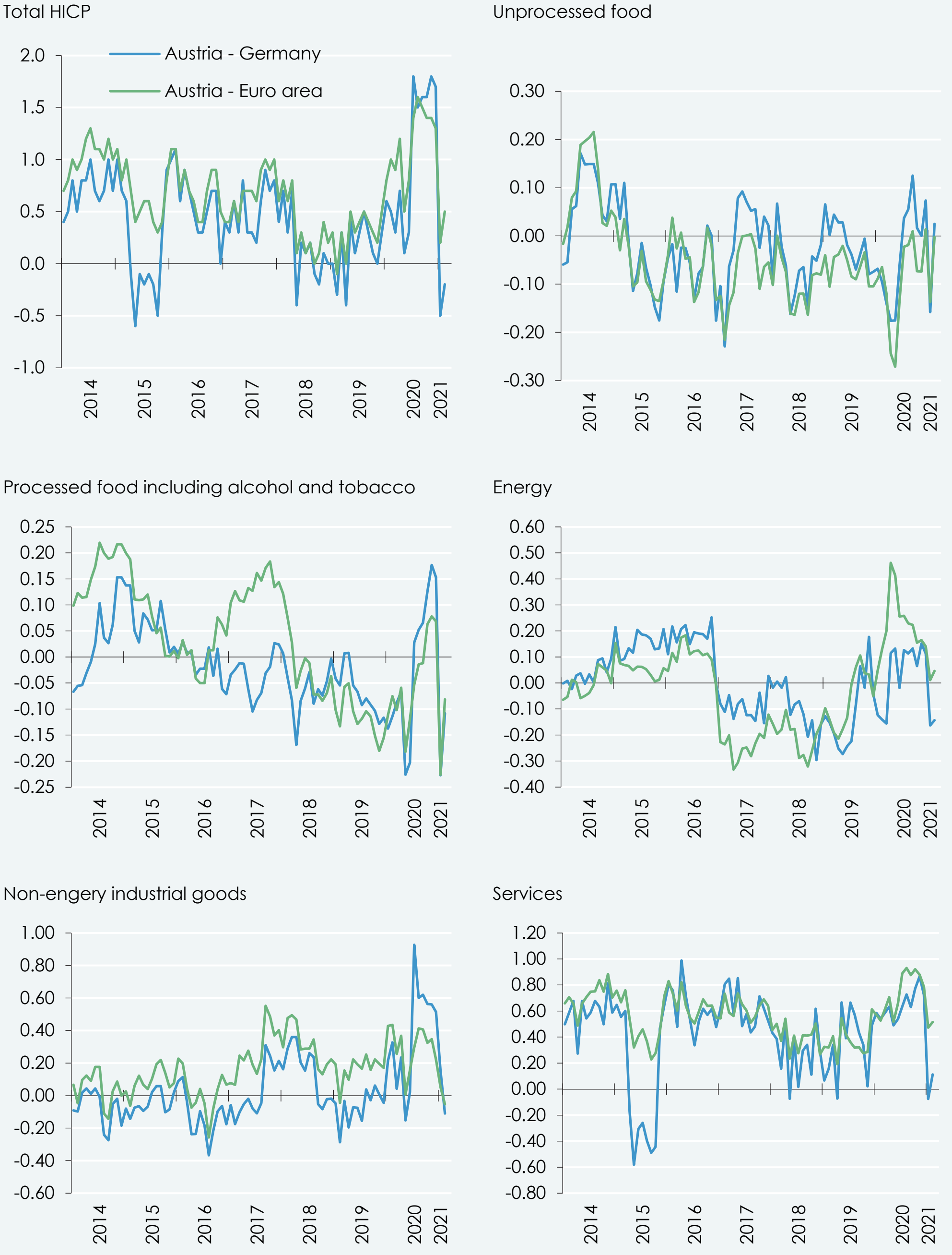
The core inflation rate (overall inflation excluding unprocessed food and energy, according to the CPI) was slightly higher than the inflation rate according to the CPI at 1.9 percent due to the relatively higher inflation contribution of services. Administered prices (tariffs and fees included in the CPI that are determined by the public sector) rose by 1.6 percent in 2020.

According to the HICP, price inflation in Austria was significantly higher in 2020 (+1.4 percent) than in Germany and on average in the euro area, also due to a large reduction in value-added tax in Germany.

According to the Harmonised Index of Consumer Prices (HICP), the inflation rate in Austria was 1.4 percent in 2020, considerably higher than in Germany (+1.0 percentage point) and the euro area average (+1.1 percentage points). Compared to the previous years, the gap to Germany and the euro area widened again. This is essentially due to the different scope as well as the different intention of the VAT cuts in Germany and Austria, which came into effect in both countries as of 1 July 2020. In Germany, VAT rates were lowered for all categories with the aim of reducing prices. This was intended to support the purchasing power of private households and stimulate consumer demand. In Austria, VAT was only reduced for sectors particularly affected by the pandemic and introduced as a measure to support the liquidity of these companies; price reduction effects were neither expected nor observed.

Figure 7: **Contributions to the inflation differential versus Germany and the euro area**

Percentage points



Source: Macrobond, Eurostat.

The inflation differential vis-à-vis Germany and the euro area average was still 0.4 and 0.8 percentage points respectively in the second quarter of 2020 and widened significantly in the second half of the year to 1.7 and 1.4 percentage points. In addition, the larger inflation gap in the area of entertainment and accommodation, which had already been considerable before the VAT cut, continues to have an effect. In addition, the weight of these items in Austria, at 16 percent, is considerably greater than in Germany (5.8 percent) or on average in the euro area (10.1 percent), making their contribution to inflation in Austria higher.

Based on the relative price level indices, consumer goods (actual individual consumption) were 10 percent more expensive in Austria than in Germany and 11.6 percent more expensive than the euro area average in 2019. The price level in Austria was thus the fifth highest in the euro area; food and non-alcoholic beverages were only more expensive in Luxembourg than in Austria in 2020.

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