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Geopolitical Tensions, Energy Crisis and Inflation Shape Economic Activity.

The Austrian Economy in 2022

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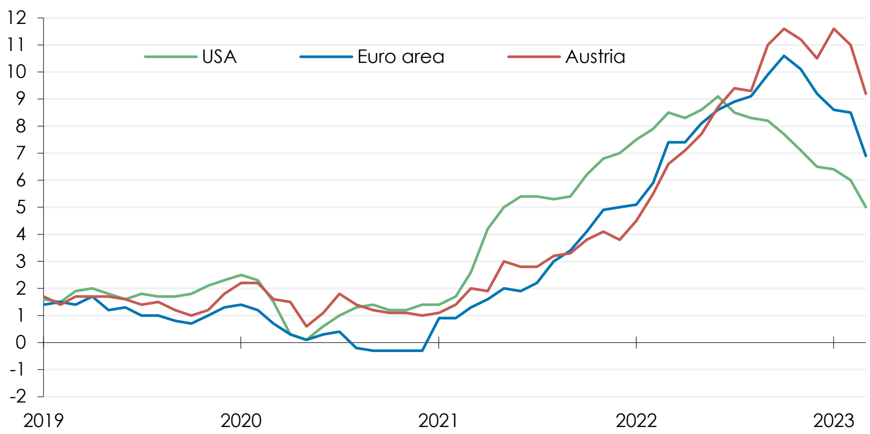
- While the impact of the COVID-19 pandemic has subsided in most countries, geopolitical changes and the energy crisis shaped the global economy in 2022.
- Due to the rise in energy prices, inflation in many places reached its highest level in several decades. This led to a rapid tightening of monetary policy.
- In Austria, inflation rose to a peak of 11 percent in autumn 2022.
- High price increases weighed on the domestic economy, although GDP still expanded strongly in the first half of 2022. However, both domestic and external demand weakened as the year progressed.
- The development of income was characterised by considerable real wage losses.
- The Austrian federal government implemented extensive relief measures, some of which took effect as early as 2022. These include the temporary energy tax reduction, the energy cost compensation and the anti-inflationary bonus.

Inflation in international comparison

Consumer price indices, percentage changes from previous year



Moderate inflation in 2019 slowed in 2020 due to weak demand resulting from the COVID-19 pandemic. With the recovery from the recession, stronger price inflation set in in 2021, which was further accelerated by the energy crisis in 2022 (source: U.S. Bureau of Labor Statistics, Eurostat. Euro area and Austria: HICP).

"The USA and Europe were at different stages of the inflation cycle in 2022. While in the USA core inflation was the main driver of inflation and headline inflation was already falling from July 2022, in the euro area energy prices were the main driver and inflation only started to decline during the fourth quarter."

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May 2023

Geopolitical Tensions, Energy Crisis and Inflation Shape Economic Activity. The Austrian Economy in 2022

Geopolitical changes and the energy crisis shaped the development of the global economy in 2022. Regionally, economic activity was heterogeneous, with rising uncertainty and supply shortages resulting in high price increases in many countries. Austria's economy continued to expand strongly in the first half of the year, but high inflation dampened consumer and investment demand as the year progressed. Consumer price inflation rose to a peak of 11 percent in the autumn of 2022, leading to, among other things, real wage losses for employees. The Austrian federal government implemented extensive temporary and permanent relief measures to cushion the social and economic impact of inflation and the energy crisis on companies and private households.

JEL-Codes: E32, E66 • **Keywords:** Business Cycle Report

This article analyses economic developments in Austria and worldwide in retrospect, with a focus on domestic wage, consumption and price developments. A detailed analysis of the monetary and financial markets can be found in Url (2023). Reports on the development of industry, foreign trade and the labour market will follow in issue 5-2023 of the WIFO-Monatsberichte.

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1. Global economy 2022 under the sign of geopolitical upheavals

The global economy was in a volatile phase in 2022. In addition to the fading COVID-19 pandemic, geopolitical changes and the energy crisis shaped economic activity. While the negative economic impact of the pandemic subsided in most countries in the first half of 2022, it persisted in China in the second half. At the same time, geopolitical tensions and the war in Ukraine increased economic uncertainty, which had a particular impact on energy markets. In addition, global climate change made itself felt in the form of heat waves and droughts in Europe as well as in Central and South Asia. As a result, the global economy expanded only weakly in 2022 and momentum declined compared to the previous year.

During the year, the global business cycle fluctuated significantly – characterised by country- and region-specific developments. In the USA, GDP shrank in the first and second quarter. However, the economic slowdown is considerably overstated by the declining development of gross domestic product in the first half of 2022. On the one hand, economic activity already picked up significantly in the second half of the year, and on the other hand, the labour market developed favourably throughout the year.

Consumer price index-based inflation rose sharply in the USA in spring 2022, peaking at +9.1 percent year-on-year in June. It then fell to 6.5 percent by December, the lowest monthly value of 2022. The Federal Reserve's preferred measure of consumer price inflation is based on the Personal Consumption Expenditures (PCE) deflator, which also fell in the second half. The Federal Reserve Bank had already initiated a tightening of monetary policy in autumn 2021 by ending "quantitative easing". From spring 2022 onwards, it reacted to the rise in inflation by means of strong key interest rate increases. In the period from March to December 2022, the federal funds rate was raised in seven steps to between 4.25 percent and 4.50 percent, with the pace of monetary tightening slowing somewhat towards the end of the year.

Driven by energy prices, inflation in many countries rose to its highest level in several decades. This led to a strong tightening of monetary policy. Fiscal policy also had a less expansionary effect.

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

	Percentage shares 2021		2019	2020	2021	2022
	Austria's exports of goods[1]	World GDP[2]	GDP volume, percentage change from previous year			
EU 27	68.1	14.8	+ 1.8	− 5.6	+ 5.4	+ 3.5
Euro area	51.9	10.5	+ 1.6	− 6.1	+ 5.4	+ 3.5
Germany	30.2	3.3	+ 1.1	− 3.7	+ 2.6	+ 1.8
Italy	6.8	1.9	+ 0.5	− 9.0	+ 7.0	+ 3.7
France	3.8	2.3	+ 1.8	− 7.8	+ 6.8	+ 2.6
CEEC 5[3]	15.3	2.2	+ 4.0	− 3.3	+ 6.0	+ 4.1
Hungary	3.7	0.2	+ 4.9	− 4.5	+ 7.1	+ 4.6
Czech Republic	3.6	0.3	+ 3.0	− 5.5	+ 3.6	+ 2.4
Poland	4.0	1.0	+ 4.4	− 2.0	+ 6.8	+ 4.9
USA	6.7	15.7	+ 2.3	− 2.8	+ 5.9	+ 2.1
Switzerland	5.2	0.5	+ 1.1	− 2.4	+ 4.2	+ 2.1
UK	2.7	2.3	+ 1.6	− 11.0	+ 7.6	+ 4.0
China	2.9	18.6	+ 6.0	+ 2.2	+ 8.4	+ 3.0
Total						
Purchasing power weighted[4]		52	+ 3.4	− 2.2	+ 6.7	+ 2.9
Export-weighted[5]	86		+ 1.9	− 5.1	+ 5.6	+ 3.3

Source: Eurostat, Macrobond, OECD, WIFO calculations. -[1] Shares in Austrian exports of goods. – [2] Shares in global 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 2021. – [5] EU 27, USA, Switzerland, UK, China; weighted with Austrian goods export shares 2021.

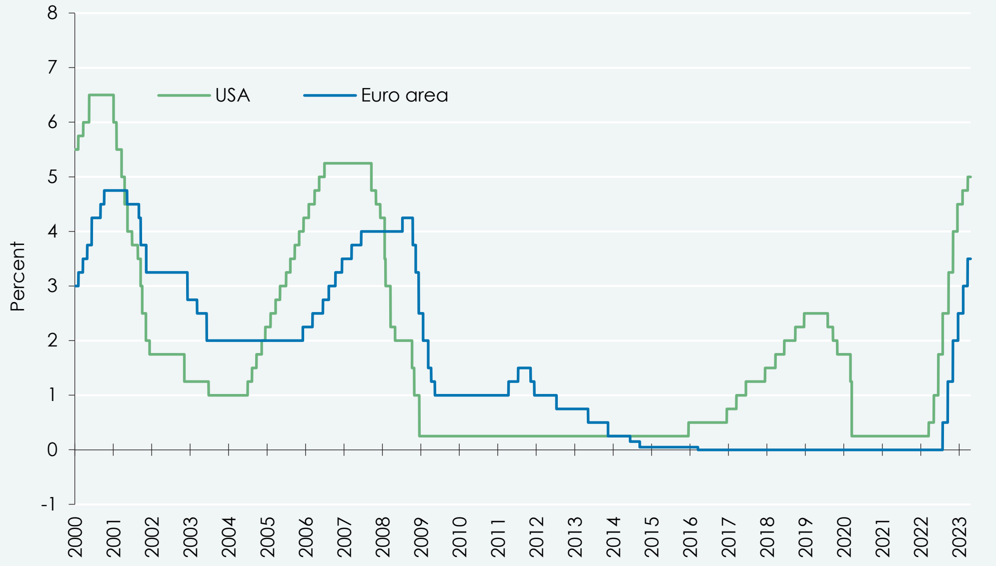
The higher nominal interest rates, together with declining real incomes, dampened the consumption demand of private households as well as the investment demand of companies. This prevented a stronger expansion of the total economy in the second half of 2022.

While the growth of real GDP in the USA increased over the course of the year, it slowed down in most European countries. In the member countries of the European Union, the business cycle was still strong in the first months of 2022. This is also due to base effects, as many industries were still affected by pandemic-related restrictions at the end of 2021. Accordingly, service sectors such as hotels and restaurants and other services in particular recorded strong growth in value added in spring 2022. Private consumption expanded noticeably in light of the removal of infection control measures and the associated return of consumption opportunities, although real incomes fell due to high inflation. In the second half of the year, momentum slowed considerably.

Labour markets remained tight in many EU countries: the share of companies reporting a shortage of suitable labour force as a primary obstacle to production reached a new high in 2022 among service providers as well as in industry.

Buoyant inflation in the euro area prompted the European Central Bank (ECB) to end its net purchases of securities under the Asset Purchase Programme (APP) on 1 July 2022. The Pandemic Emergency Purchase Programme (PEPP) had already been discontinued in the spring. Due to the significant upward pressure on prices, the prospects that inflation will remain above the target value of 2 percent for a longer period of time and further risks of price increases, the ECB initially raised the key interest rates by 50 basis points in July. Further interest rate steps followed in September and October (+75 basis points each) and in December (+50 basis points). This ended a phase of expansionary monetary policy that had lasted for more than 10 years.

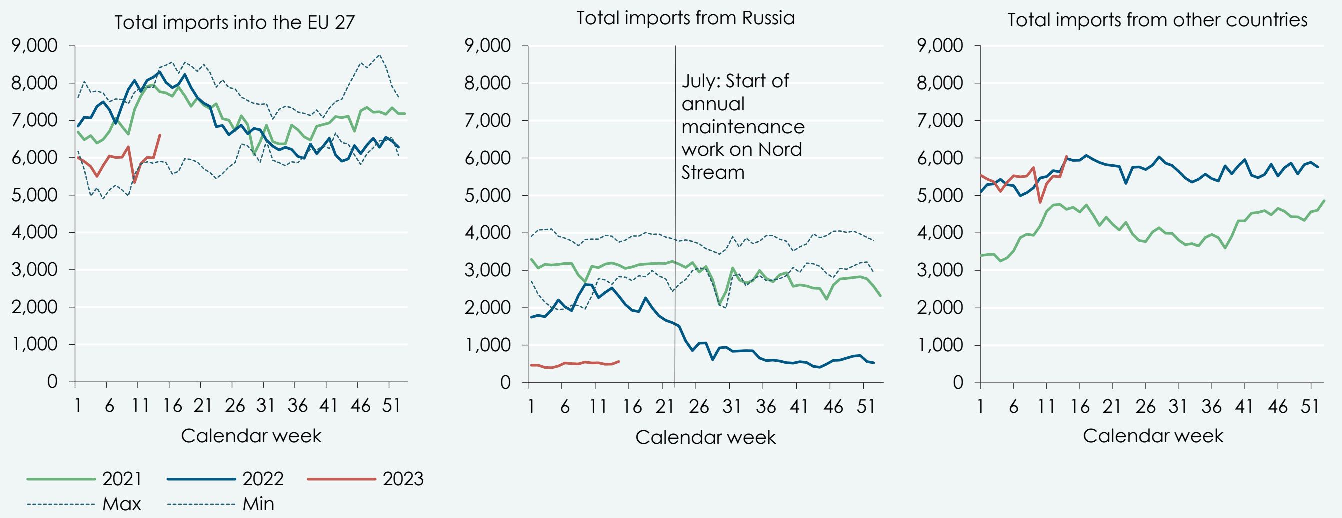
Figure 1: **Development of key interest rates in the USA and the euro area**



Source: European Central Bank, Federal Reserve Bank.

Figure 2: **European natural gas imports**

Million m³



Source: Bruegel, European Network of Transmission System Operators for Gas – ENTSO-G (https://transparency.entsog.eu), WIFO presentation. Minimum and maximum: time range 2015 to 2020.

In contrast to the economic trends in the USA and the EU countries, the development of the Chinese economy during the year continued to reflect the repeated closure and opening measures to contain the COVID-19 pandemic. In addition, the real estate sector, which suffered from price declines and high indebtedness, slowed down the overall economic momentum. In response, public infrastructure investment was increased to stabilise the construction sector and support the business cycle. In addition, the Chinese government decided on tax relief and higher subsidies for certain industries. Monetary policy was further eased and thus tended to be expansionary in 2022.

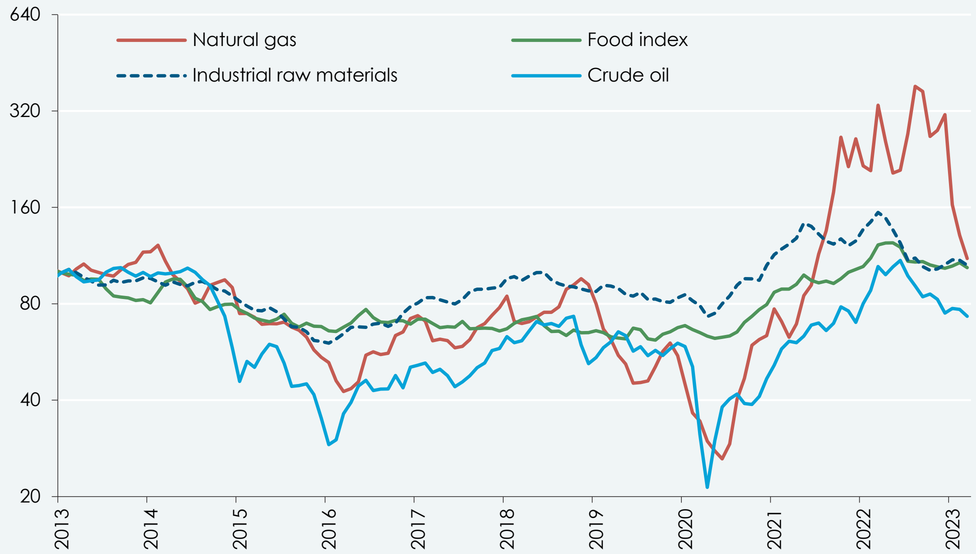
The weakening of the global economy in 2022 is also reflected in declining prices for oil, industrial raw materials and foodstuffs. The price of natural gas is a special case: gas shortages in the European Union and the UK – a consequence of Russia cutting supply volumes from the summer of 2021 – drove up wholesale prices for natural gas. With the outbreak of the Ukraine war at the end of February 2022, the shutdown of the Nord Stream I pipeline and a weather-related shortfall in European electricity production[1], gas prices and the electricity prices in Europe, which are heavily dependent on them, finally rose to unprecedented heights.

Although they fell again significantly by the end of 2022[2], high energy prices reinforced the producer and consumer price inflation that had already set in during the COVID-19 pandemic. As a result, consumer prices rose across the board. In the second half of 2022, inflation rates in many EU countries reached levels that even surpassed the high inflation periods of the 1970s and early 1980s. Although import and consumer prices usually react to wholesale prices with a considerable lag, high energy prices have already led to a significant increase in consumer price inflation and a deterioration in the EU's terms of trade, trade balance, and industrial competitiveness in 2022.

World market prices for food have also risen sharply since the outbreak of the Ukraine war. This is especially true for wheat and sunflower oil, as Ukraine and Russia are important exporters of these goods. Ukrainian grain exports initially remained severely restricted due to the blockade of the ports. With the grain agreement between Russia and Ukraine, exports have increased again since summer 2022 and world market prices have fallen significantly.

Figure 3: **Energy and raw material prices**

Dollar basis, January 2013 = 100



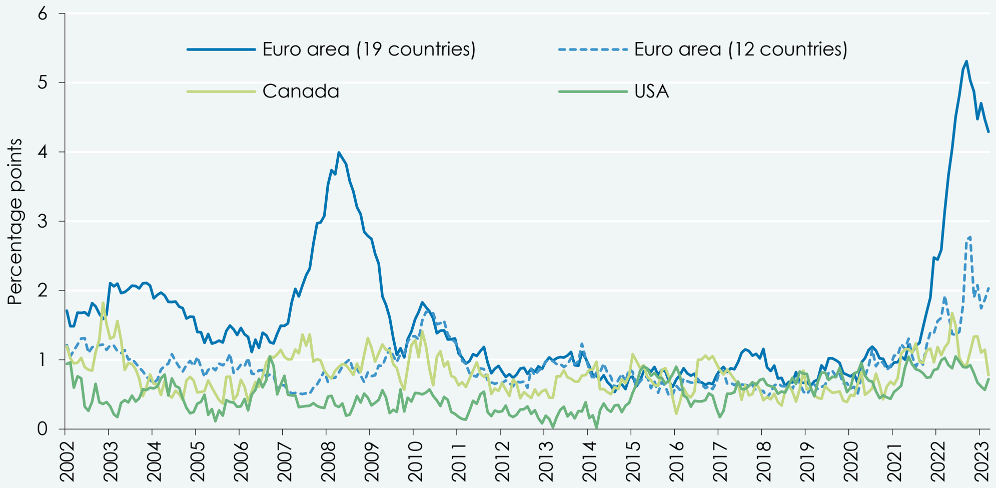
Source: Hamburgisches WeltWirtschaftsInstitut (HWWI), Macrobond. Logarithmic scaling.

The strong increase in consumer prices in the euro area was accompanied by an enormous widening of the inflation gap between the euro countries (Figure 4; Baumgartner et al., 2022). Compared to other strongly federalised economic areas, such as the USA and Canada, the spread in the euro area was much more pronounced. This is due, on the one hand, to the different structure of the CPI goods baskets, the sources of supply for energy and, above all, the policy mix to combat or cushion inflation: in the EU – a community of sovereign countries – the policy mix was significantly more heterogeneous than in the USA and Canada. Moreover, a comparison between the 19 and 12 euro countries shows that the inflation margins in the euro area are largely due to the very high inflation rates in the new member countries (especially the Baltic countries; Figure 4).

[1] Very stable high-pressure weather over northern, western and central Europe led to lower electricity production from wind power plants in the summer of 2022, especially in offshore plants. The low water levels in the rivers and higher water temperatures also put a strain on energy production in hydroelectric and nuclear power plants. Replacement production by coal and gas-fired power plants led to higher wholesale prices for coal and natural gas. The latter were given an additional boost by the shutdown of Nord Stream I and thus a further tightening of supply.

[2] On the one hand, the European natural gas storage facilities, which were practically completely full before the winter, contributed to the drop in prices. On the other hand, gas consumption was comparatively low due to above-average outdoor temperatures in autumn and winter as well as savings measures by private households and industrial companies. In addition, increased deliveries of liquefied natural gas (LNG) from the USA at the end of the year led to a short-term supply surplus due to the full storage facilities.

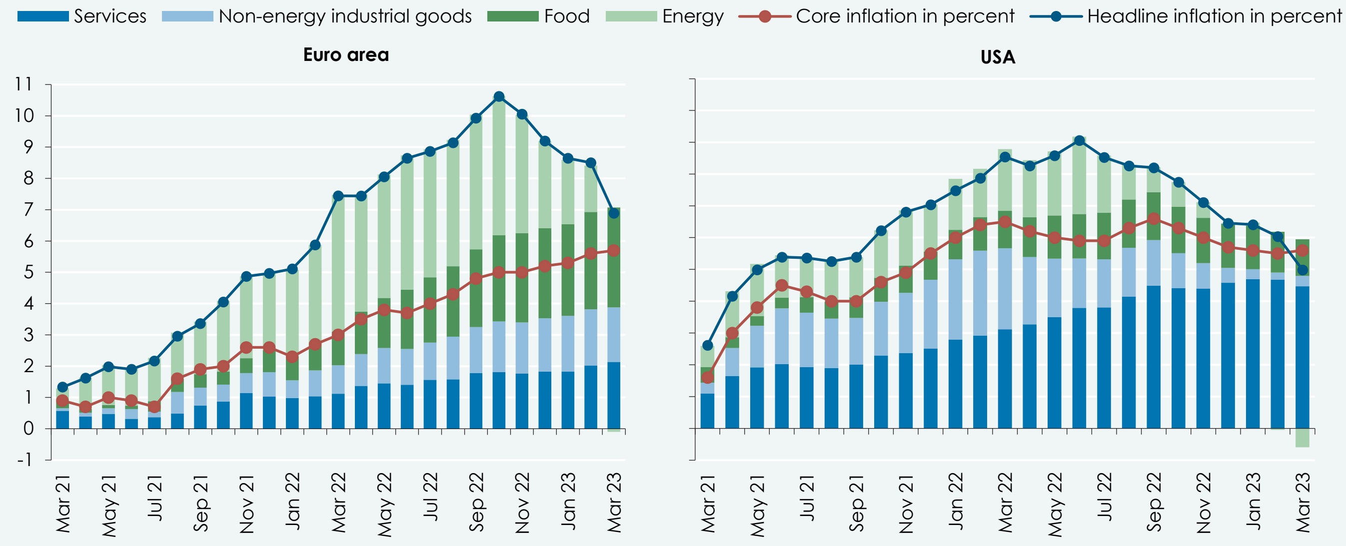
Figure 4: **International comparison of standard deviations for regional inflation rates**



Source: Eurostat, U.S. Bureau of Labor Statistics, Statistics Canada, Macrobond. Standard deviation: average deviation of regional inflation rates from the mean. Euro area (12 countries): unweighted standard deviation of the 12 member countries in 2002. Euro area (19 countries): unweighted standard deviation of the 19 member countries in 2015. USA: standard deviation of the 4 regions until 2019, then of the 9 Census Divisions. Canada: unweighted standard deviation of the 13 territories.

Figure 5: **Inflation in the euro area and the USA by component**

Contribution to headline inflation in percentage points



Source: Eurostat, U.S. Bureau of Labor Statistics, Macrobond, WIFO calculations.

Comparing the inflation trend in the euro area with that in the USA, the level of overall inflation is similar, but the causes of inflation are very different. In the euro area, the energy price shock (for oil, natural gas and electricity) was the initial main cause of inflation. From the middle of 2022, it also had an impact on core inflation. However, core inflation is not expected to peak until 2023, as higher wage settlements and thus higher unit labour costs will then be passed on to consumer prices in all economic sectors, especially in labour-intensive services.

In the USA, on the other hand, headline inflation was already mainly determined by core inflation in 2021, which does not take energy prices into account, and was thus primarily shaped by domestic developments. Above all, wage increases and, in some sectors, the widening of profit margins contributed significantly to inflation.

2. Austria: high price increases also shaped the domestic business cycle

2.1 Robust growth of real GDP in the first half of 2022

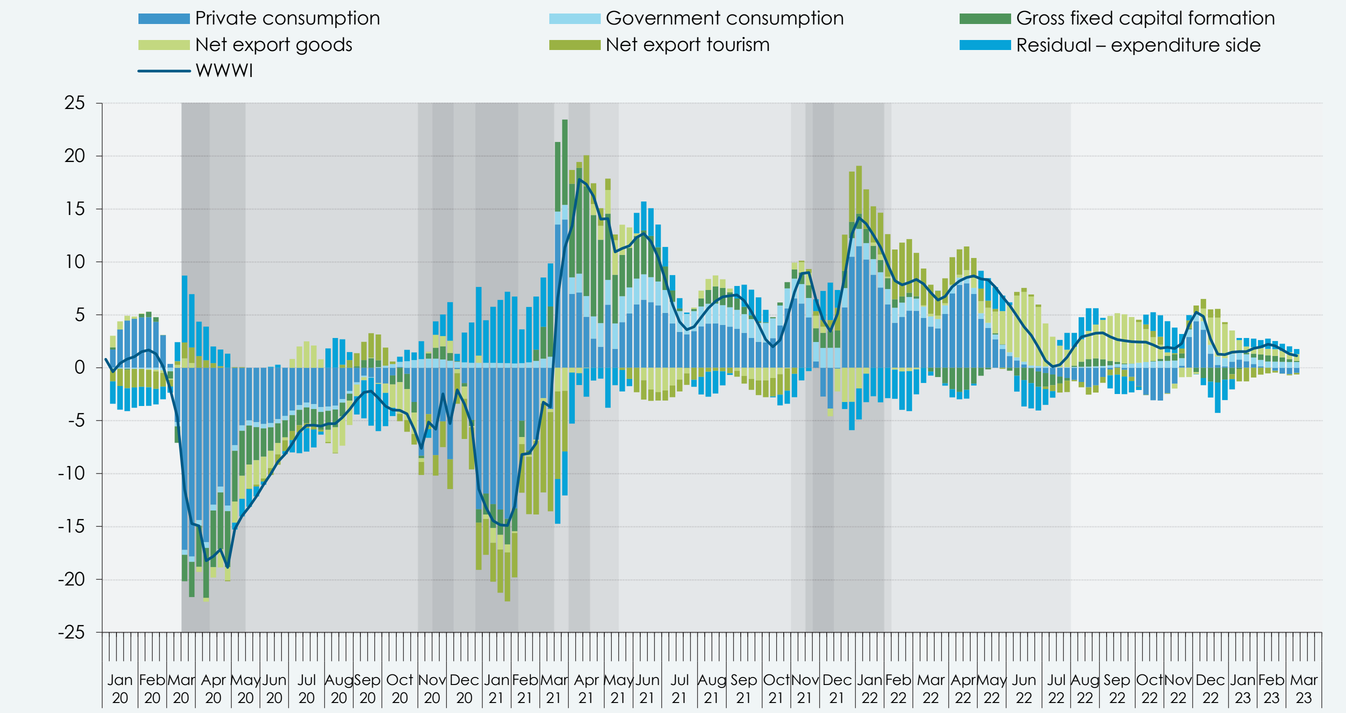
After a rapid recovery of the domestic economy from the COVID-19 crisis in 2021, geopolitical upheavals led to high uncertainty and a further rise in inflation. Against this backdrop, the business cycle in Austria cooled down from the middle of 2022. After a strong first half of the year (first quarter +0.8 percent, second quarter +2.1 percent compared to the previous quarter), economic output stagnated in the second half. Nevertheless, total GDP in 2022 grew by 5.0 percent compared to the previous year (real, nominal +10.2 percent).

The strong growth was again influenced by the COVID-19 measures in the previous year. As the year-on-year comparison based on the Weekly WIFO Economic Index (WWWI) shows, the base effects of the lockdowns in spring and late autumn 2021 resulted in partly high growth rates in the first and fourth quarters of 2022. Towards the middle of 2022, however, the underlying economic momentum slowed down, so that total economy output was only slightly higher than in the same period of the previous year. The subdued activity of the domestic economy also continued around the turn of the year and in the first quarter of 2023 (Figure 6).

GDP growth in 2022 was mainly driven by services, which had still suffered from the pandemic in the previous year.

Figure 6: **Weekly WIFO Economic Index (WWWI) – sub-components of the expenditure side**

Year-on-year change in percent (overall index) or percentage points (components)



Source: Statistics Austria; University of Oxford, Blavatnik School of Government; WIFO. The grey areas show the intensity of the health policy measures taken in Austria to contain the COVID-19 pandemic according to the Blavatnik School of Government's Stringency Index. This index is presented in five intensity levels: no or low restrictions . . . light grey: below 20, 20 to 40, 40 to 60, 60 to 80, severe constraints . . . dark grey: above 80.

Overall, the annual GDP growth rate in 2022 was mainly driven by the positive performance of services. In the 2022 summer season, tourism activities could take place without restrictions for the first time since the outbreak of the COVID-19 pandemic, so that demand increased significantly compared to the previous year despite the high price increase (overnight stays +17.2 percent; Fritz & Burton, 2022). Value added in accommodation and food service activities increased by 50.5 percent (2021 –13.2 percent); in wholesale and retail trade the increase was 2.4 percent (after +3.7 percent 2021), in transportation and storage 10.8 percent (after +2.5 percent). The industrial and construction sectors, which were still buoyant at the beginning of the year, cooled down in the middle of 2022. In addition to the international economic slowdown, the high price increases for energy and other intermediate products also dampened the momentum. Overall, value added in manufacturing increased by 3.5 percent in 2022 (after +9.5 percent in 2021). In construction, growth was 1.4 percent (after +2.6 percent).

Table 2: **Gross value added at basic prices**

Volume (chain-linked series)

	2019	2020	2021	2022
	Percentage change from previous year			
Agriculture, forestry and fishing	– 2.2	– 2.6	+ 4.5	+ 4.7
Total industry[1]	+ 1.0	– 4.8	+ 7.9	+ 3.8
Manufacturing	+ 1.0	– 5.8	+ 9.5	+ 3.5
Construction	– 1.0	– 1.9	+ 2.6	+ 1.4
Wholesale and retail trade	+ 3.0	– 5.9	+ 3.7	+ 2.4
Transportation and storage	– 0.6	– 10.7	+ 2.5	+ 10.8
Accommodation and food service activities	– 0.4	– 36.6	– 13.2	+ 50.5
Information and communication	+ 5.9	– 2.0	+ 3.5	+ 5.2
Financial and insurance activities	+ 5.1	– 2.6	+ 1.1	+ 1.9
Real estate activities	+ 0.4	– 0.0	+ 1.0	+ 2.2
Other business activities[2]	+ 3.8	– 6.5	+ 6.8	+ 6.8
Public administration[3]	+ 0.9	– 4.0	+ 5.2	+ 2.1
Other service activities[3]	+ 1.6	– 18.6	+ 2.4	+ 6.1
Total gross value added[5]	+ 1.5	– 6.5	+ 4.0	+ 5.3
Gross domestic product at market prices	+ 1.5	– 6.5	+ 4.6	+ 5.0

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 2008, sections B to E). – [2] Professional, scientific and technical activities; administrative and support service activities (NACE 2008, sections M and N). – [3] Including compulsory social security, defence; education; human health and social work activities (NACE 2008, sections O to Q). – [4] Including arts, entertainment and recreation; personal services; private households (NACE 2008, sections R to U). – [5] Before deduction of subsidies on products and attribution of taxes on products.

Concerns about sufficient gas supplies and renewed supply bottlenecks increased business uncertainty after the outbreak of the war in Ukraine and, according to the WIFO-Konjunkturtest (business cycle survey), significantly dampened the expectations of Austrian companies. Towards the end of the year, the assessments of the current business situation also deteriorated increasingly. Shortages of materials and labour force continued to play a central role as obstacles to production in 2022. In the manufacturing sector, material and capacity bottlenecks eased compared to the end of 2021. In the construction industry, however, the corresponding reports reached a record high in the first half of the year. Due to weaker global demand, supply chain problems gradually eased as the year progressed. As a result, the shortage of materials and/or capacity also became less important. The shortage of labour force, on the other hand, continued to gain importance; this only changed with the economic slowdown in the second half of the year (Figure 7).

On the expenditure side, both domestic demand and net exports contributed to GDP growth in 2022.

Private consumption (including non-profit institutions serving households), which was still partly affected by the official pandemic measures in 2021, grew by 4.1 percent in 2022. Public consumption demand increased by 2.9 percent compared to the previous year. Thus, total consumption increased by 3.8 percent. However, during the course of the year, there was a clear decline in momentum; from the second quarter onwards, consumer demand contracted quarter-on-quarter, as high price rises increasingly weighed on private households.

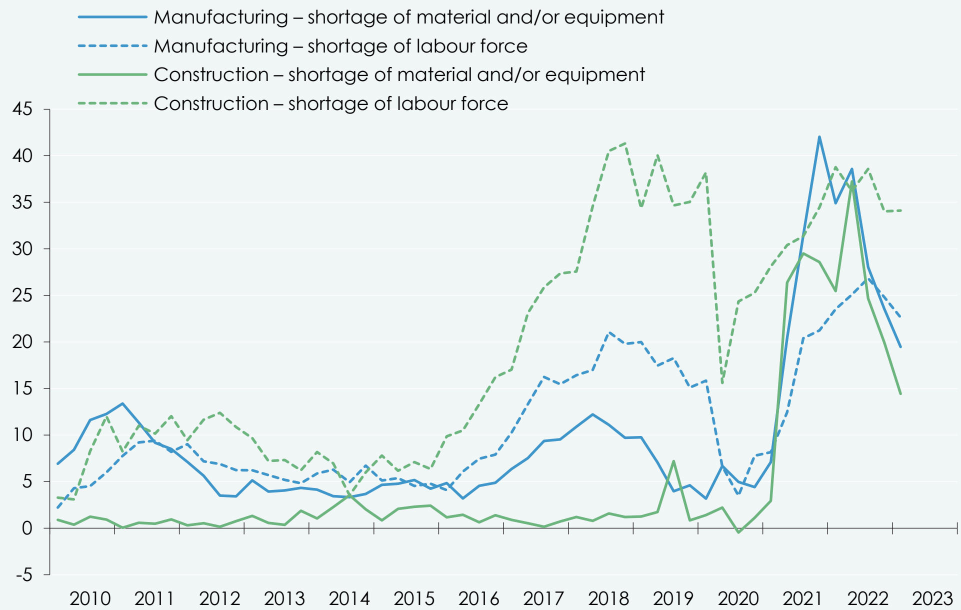
Investment demand remained weak in 2022 and was also curtailed quarter-on-quarter in the second and third quarters (2022 –0.9 percent year-on-year). Both investments in machinery and equipment and investments in construction declined, while other investments – mainly intellectual property products such as research and development and computer programmes and copyrights – increased.

Foreign trade developed dynamically in 2022. Both goods and services exports contributed to the increase in exports (+11.1 percent), with the latter benefitting from the resurgence in tourism demand. Exports of goods fell in the fourth quarter against the backdrop of the global economic gloom. At +5.7 percent, imports grew more slowly than exports. Foreign trade thus made a positive contribution to GDP growth in 2022 as a whole.

In nominal value, exports rose by 19.9 percent and imports by 18.2 percent. The strong increase in energy prices drove import prices higher than export prices, worsening the terms of trade in 2022.

Figure 7: **Production constraints in manufacturing and construction**

Share of enterprises affected as a percentage of all reporting enterprises, seasonally adjusted



Source: WIFO-Konjunkturtest (business cycle survey). In order to ensure the comparability of the time series during the year, seasonally adjusted values are shown. Negative values cannot be excluded due to the seasonal adjustment procedure "Dainties". These are statistical artefacts.

Table 3: **Development of aggregate demand**

Volume (chain-linked series)

	2019	2020	2021	2022
	Percentage changes from previous year			
Final consumption expenditure	+ 0.7	– 6.0	+ 4.8	+ 3.8
Households[1]	+ 0.5	– 8.0	+ 3.6	+ 4.1
General government	+ 1.3	– 0.5	+ 7.8	+ 2.9
Gross capital formation	– 0.7	– 4.8	+ 11.4	– 2.0
Gross fixed capital formation	+ 4.5	– 5.3	+ 8.7	– 0.9
Machinery and equipment[2]	+ 1.6	– 9.5	+ 16.0	– 4.5
Construction	+ 3.6	– 3.4	+ 5.8	– 1.0
Other investment[3]	+ 10.8	– 3.4	+ 5.1	+ 4.5
Domestic demand	+ 0.4	– 5.5	+ 6.5	+ 2.0
Exports	+ 4.0	– 10.7	+ 9.6	+ 11.1
Imports	+ 2.1	– 9.2	+ 13.7	+ 5.7
Gross domestic product	+ 1.5	– 6.5	+ 4.6	+ 5.0

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).

2.2 Government measures to cushion high inflation and energy prices

In order to cushion the social and economic effects of the high inflation and the rise in energy prices on private households and companies, extensive measures have been taken at the federal level. The total volume of federal support measures for the period 2022 to 2026 is estimated at 47.8 billion €[3].

Austria is thus implementing one of the largest relief packages in Europe (Ederer et al., 2023). 46.9 billion € will have an impact on the budget, while the suspension of the renewable subsidy flat rate and contribution (a total of 0.9 billion €) will not burden the federal budget.

The support measures at federal and regional level amount to a total of 48.4 billion € in 2022-2026.

[3] Since some comprehensive measures, in particular the energy cost subsidy for companies as well as the electricity cost subsidy for private households, depend on the development of energy prices on the international markets, the forecast of their budgetary costs is subject to great uncertainties.

The federal government's measures reach a total volume of 47.8 billion €, of which 46.9 billion € have an impact on the federal budget.

37.5 billion € or 78.5 percent of the total support package provided by the federal government[4] will benefit private households[5], of which 14.4 billion € are allocated to temporary short-term and 23.1 billion € to permanent structural measures. The largest single measure in budgetary terms is the compensation for the fiscal drag from 2023; cumulative revenue losses of 18.7 billion € are expected by 2026. Almost three quarters of the total volume of short-term relief measures are granted irrespective of recipients' income level, while about one quarter of the support volume depends on recipients' incomes. Thus the lion's share of the measures is not well targeted, as simulations by the Austrian Parliamentary Budget Office (2022) and Maidorn and Reiss (2022) show.

Companies as well as agriculture and forestry can take advantage of relief measures totalling 10.3 billion € (21.5 percent of the total federal support volume). Of this amount, 8.2 billion € are temporary short-term measures and 2.1 billion € are permanent structural measures.

The measures taken at the regional level so far amount to 0.6 billion €, and further measures are in preparation.

Regional governments have so far adopted relief measures totalling 0.6 billion € for the years 2022 and 2023. Further measures are in preparation, for example in Lower Austria or Burgenland.

A number of the measures are problematic from an ecological perspective because they impair the steering effect of energy prices and/or are not or not very strictly linked to ecological requirements. This applies, for example, to the temporary reduction of the electricity tax and natural gas tax for private households and companies, the energy cost subsidy for companies, and the electricity price subsidy and the temporary extension of the commuter subsidy for households (Kletzan-Slamanig et al., 2022; Köppl et al., 2023).

The general government deficit fell to 3.2 percent of GDP in 2022.

Public expenditure increased by 3.7 percent or 8.3 billion € in 2022, as COVID-19 measures were significantly scaled back, but substantial relief measures to counter high inflation and energy prices were implemented. However, despite a slowdown in the business cycle and revenue shortfalls due to the next step of the eco-social tax reform, the increase in expenditure was more than offset by a strong inflation-related rise in government revenues: these grew by 8.6 percent or 17.5 billion €. In particular, tax revenues, but also social security contributions increased strongly. The public deficit fell to 3.2 percent of GDP in 2022 (after –5.8 percent in 2021). Public debt rose again in 2022, by 16.4 billion €, to 350.8 billion €. With nominal GDP rising, the debt ratio fell by 3.9 percentage points to 78.4 percent of GDP.

2.3 Weak real wage development

In general, the economic development in 2022 had a supporting effect on earned income. The strong growth of real GDP was accompanied by a significant decline in the unemployment rate to 6.3 percent and a further increase of persons in active dependent employment to 3.84 million. However, the after-effects of the pandemic and, in particular, Russia's war against Ukraine, led to a noticeable acceleration of inflation in the course of the year.

In wage negotiations, the realised inflation of the past 12 months usually serves as the starting point for the particular wage round. This institutional peculiarity leads to the fact, that in times of rapidly increasing inflation rates, such as in 2022 with +8.6 percent, current inflation is significantly higher than the wage agreements. The results are considerable real wage losses, as also occurred in 2022 after 2021.

The wage agreements relevant for 2022 in autumn 2021 and January 2022, were based on the still moderate inflation rates of 2021. Against this background, the social partners agreed on wage increases for 2022 in the range of about 3 percent to 3.5 percent. In the associations of the metal industry, whose wage agreements traditionally kick off the autumn wage round, the bargaining partners agreed on an increase of 3.55 percent in nominal actual wages and salaries for 2022. The increase was thus about 0.05 percentage points above the minimum wage increases. In the public sector, the settlement achieved 3 percent on average, and in the trade 2.8 percent on average. The settlements of the spring wage round, e.g., in the construction industry and building trade (+4.2 percent) and the electrical and electronics industry (+5.0 percent) on 1 May 2022, were then already significantly higher. However, in relation to 2022 as a whole, these agreements were also noticeably below the inflation rate of 8.6 percent.

[4] Taking into account the measures taken at regional level, which exclusively benefit private households, this ratio changes only slightly.

[5] Due to a lack of detailed information, not all measures could be clearly allocated; the measures in question were therefore attributed to private households, as they account for the greater part of the relief in each case.

Table 4: **Relief and anti-inflationary measures by the federal government and the regional governments for private households and firms**

	2022	2023	2024	2025	2026	2022-2026
			Million €			
Total	**8,669**	**11,971**	**10,109**	**8,007**	**9,666**	**48,422**
Federal government	**8,076**	**11,929**	**10,109**	**8,007**	**9,666**	**47,787**
Total private households	**6,251**	**8,639**	**6,139**	**7,430**	**9,074**	**37,533**
Short-term temporary measures	**6,251**	**6,738**	**1,266**	**174**	**10**	**14,439**
One-off payment to compensate for inflation in Relief Package I	227	.	.	.	.	227
One-off payment Increase in inflation compensation in Relief Package III	205	.	.	.	.	205
One-off payment for pensioners and recipients of the equalisation supplement	440	600	.	.	.	1,040
One-off price increase tax credit	.	1,000	.	.	.	1,000
Protection against eviction ("housing umbrella") including extensions 2023	5	70	40	15	10	140
Energy cost compensation	628	.	.	.	.	628
Suspension of renewable subsidy flat rate and contribution[1]	400	.	.	.	.	400
Subsidies for energy efficiency measures	15	.	.	.	.	15
Reduction of the electricity tax and natural gas tax	281	229	– 103	.	.	407
Public transport price reductions and service expansion	150	153	156	159		618
Increase in commuter allowance, euro, deductible amount	120	220	80	.	.	420
Anti-inflationary bonus and increase of the climate bonus	2,800	.	.	.	.	2,800
One-off payment special family allowance	330	.	.	.	.	330
Earlier start of increase of the Family Bonus Plus and the multiple children supplementary bonus	100	200	.	.	.	300
Postponement of introduction of CO_2 pricing from July to October 2022	250	.	.	.	.	250
Tax and social security contribution-free cost-of-living bonus for employees	300	300	.	.	.	600
Electricity cost subsidy[2]	.	2,733	1,093	.	.	3,826
Compensation for grid loss costs[3]	.	558	.	.	.	558
Increase in heating subsidies by regional governments via the federal government	.	450	.	.	.	450
Increase in housing and heating allowances (one-off payment)	.	225	.	.	.	225
Structural, permanent measures	**.**	**1,900**	**4,873**	**7,256**	**9,064**	**23,094**
Abolition of the fiscal drag	.	1,480	3,850	5,900	7,500	18,730
Indexation of social benefits[4]	.	363	815	1,079	1,287	3,544
Increase in children supplementary allowance	.	50	50	50	50	200
Tax allowance for e-mobility for employees[5]	.	8	8	8	8	30
Facilitation of pension adjustment factoring[6]			150	220	220	590
Firms and agriculture and forestry in total	**1,825**	**3,290**	**3,970**	**577**	**592**	**10,254**
Firms total	**1,715**	**3,133**	**3,957**	**567**	**582**	**9,954**
Short-term temporary measures	**1,715**	**2,650**	**3,458**	**55**	**55**	**7,933**
Suspension of renewable subsidy flat rate and contribution[1]	500	.	.	.	.	500
Reduction of the electricity and natural gas tax[7]	325	272	– 97	.	.	500
Investment campaign energy independence	30	55	55	55	55	250
Promotion of alternative decarbonised forms of propulsion	60	60	.	.	.	120
Reduction of advance payments for income and corporation tax	350	.	.	.	.	350
Electricity price compensation[8], Electricity Consumption Reduction Act	.	333	.	.	.	333
Energy cost subsidy 1[9]	450	850	.	.	.	1,300
Extension of energy cost subsidy 1[10] and energy cost subsidy 2[10]	.	1,000	3,500			4,500
One-off health insurance contribution credit	.	80	.	.	.	80
Structural, permanent measures	**.**	**483**	**499**	**512**	**527**	**2,021**
Reduction of the family burden equalisation fund contribution rate	.	353	369	382	397	1,501
Reduction of the accident insurance contribution rate	.	130	130	130	130	520
Total agriculture and forestry	**110**	**157**	**13**	**10**	**10**	**300**
Short-term temporary measures	**110**	**147**	**3**	**0**	**0**	**260**
Agricultural diesel cost compensation	.	27	3	.	.	30
Pension guarantee contribution for agriculture	110	.	.	.	.	110
Electricity subsidy for agriculture and forestry	.	120	.	.	.	120
Structural, permanent measures	**.**	**10**	**10**	**10**	**10**	**40**
Increase of flat-rate limits for agriculture and forestry	.	10	10	10	10	40
Regional governments	**593**	**42**	**.**	**.**	**.**	**635**

Source: Pitlik & Schratzenstaller (2022), updated on 11 April 2023. – [1] Extrabudgetary; according to the Parliamentary Budget Office, the requirements are not met in 2023, therefore not included. – [2] According to the Federal Budget Law; an additional overrun authorisation of 3 billion € is not included here. – [3] For lack of more detailed information, this was allocated entirely to private households. – [4] Families benefits (family allowance, children supplementary bonus, children allowance, family time bonus), child tax credit, sickness, rehabilitation, reintegration and retraining allowance, study allowance. – [5] Per year 7.5 million €, rounding differences. – [6] According to calculations by the Federal Ministry of Social Affairs, Health, Care and Consumer Protection; without adjustment of women's pension age; 2026 update. – [7] For the total share of self-employed. – [8] 233 million €; parliamentary resolution pending. – [9] Energy cost subsidy 1 and 2 total initially 5.8 billion €, extension to up to 7 billion € possible. – [10] Additional measures are in preparation (e.g., Lower Austria, Burgenland). Not included are the 150 million € increase in "Photo voltaic fast track", as allocation between private households and companies is unknown, the energy cost compensation for rail transport (100 million €) and gas diversification measures (no direct support measure).

Table 5: **Development of the collectively agreed minimum wages**

	Weighting	Index of Agreed Minimum Wages 2016[1] Total employees 2021	2022
		Percentage changes from previous year	
Overall Index of Agreed Minimum Wages	1,000,000	+ 1.7	+ 3.1
Excluding civil servants	837,726	+ 1.8	+ 3.1
Craft and trades	196,327	+ 1.8	+ 3.4
Industry	163,994	+ 1.9	+ 3.7
Trade and commerce	127,187	+ 1.5	+ 2.8
Transport and traffic	54,763	+ 2.2	+ 3.4
Tourism and leisure	49,712	+ 1.7	+ 2.9
Banking and insurance	37,035	+ 1.6	+ 2.9
Information and consulting	67,321	+ 1.5	+ 3.0
Civil servants	162,274	+ 1.4	+ 3.1

Source: Statistics Austria; WDS – WIFO Data System, Macrobond; WIFO. – [1] Due to roundings, growth rates may differ slightly from the index values, published by Statistics Austria.

On a weighted average, the wage settlements led to an increase in the Index of Agreed Minimum Wages of 3.1 percent; compared to the previous year, the increase was about twice as strong (Table 5). The public sector, which is included in the index with a weight of about one-sixth, recorded an increase of 3.1 percent, in industry (weight also about one-sixth) it was 3.7 percent. In the service areas, the rates of increase were mostly below average, except in transportation with an increase of 3.4 percent. However, this sector is only included in the index with a weight of 5.5 percent.

The collective wage agreements determine the development of the collectively agreed minimum wages, from which the actual wages and salaries can deviate. After 2021, this so-called wage drift was also clearly positive in 2022 (Table 6). In total, nominal gross wages and salaries per capita increased by 4.4 percent in 2022 and thus significantly more than the collectively agreed minimum wages. However, the enormous increase in consumer prices resulted in real wage losses of 3.9 percent. According to the WIFO Economic Outlook of March 2023, net wages and salaries per capita will also shrink significantly in price-adjusted terms (–3.4 percent), but at a slightly lower rate than in the gross view, due to government support measures.

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

	2020	2021	2022
		Percentage changes from previous year	
Wages and salaries, total			
Gross	– 0.2	+ 4.8	+ 7.7
Net[1]	+ 0.5	+ 4.0	+ 8.2
Employees[2]	– 2.4	+ 2.2	+ 3.2
Wages and salaries per capita[3]			
Gross nominal	+ 2.2	+ 2.5	+ 4.4
Gross real[4]	+ 0.8	– 0.3	– 3.9
Net nominal[1]	+ 3.0	+ 1.7	+ 4.9
Net real[1, 4]	+ 1.6	– 1.1	– 3.4
Hours worked per capita[3]	– 7.2	+ 3.2	– 0.3
Wages and salaries per hour worked			
Gross nominal	+10.1	– 0.7	+ 4.6
Gross real[4]	+ 8.6	– 3.4	– 3.6
Net nominal[1]	+11.0	– 1.5	+ 5.1
Net real[1, 4]	+ 9.4	– 4.1	– 3.2

Source: Statistics Austria; WDS – WIFO Data System, Macrobond. – [1] 2022: according to the WIFO Economic Outlook of March 2023. – [2] National Accounts definition (jobs). – [3] Per employee (according to National Accounts definition). – [4] Deflated by the Consumer Price Index (CPI).

Net real incomes fell significantly in 2022.

In 2022, the development of wages and salaries was positively influenced by the renewed strong expansion of dependent employment by 3.2 percent compared to the previous year. In contrast, the effective per capita working time hardly changed.

Across all sectors, the average weekly working time of dependent employees in 2022 was 27.6 hours – a slight decrease of 0.3 percent compared to 2021.

If the working hour is chosen as the reference point for the analysis of income development, there will be a further significant decline in wages and salaries in 2022, both in the gross and net view, with real –3.6 percent and –3.2 percent respectively (according to the WIFO Economic Outlook of March 2023) compared to the already declining development of the previous year. In contrast to 2021, the dynamics of hourly wages was hardly driven by the change in hours worked, but was essentially based on the strong acceleration of inflation.

2.4 Consumer demand almost reaches pre-crisis level – inflation burdens private households and increases uncertainty

After a strong rebound in 2021, domestic private household consumption expenditure (including non-profit institutions serving households) also expanded strongly in 2022: according to preliminary data from Statistics Austria, expenditure was 4.1 percent higher in real terms than in 2021 (Table 7). This means that private consumer demand has already almost reached the pre-crisis level (price-adjusted –1.6 billion € compared to 2019). In nominal terms, private consumption rose by a remarkable 12.0 percent year-on-year and was already 22.1 billion € higher than in 2019. The strong nominal expansion was due not only to solid demand (especially for services), but also to brisk price increases in almost all areas of daily life (see chapter 2.5).

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 2010-2014	+3.0	+ 0.5	+ 2.4	–0.1	+ 0.6
Ø 2014-2018	+ 3.0	+ 1.3	+ 3.1	+ 1.3	– 0.1
Ø 2018-2022	+ 3.2	– 0.1	+ 3.5	+ 0.3	– 0.3
2019	+ 2.3	+ 0.5	+ 3.4	+ 1.6	– 1.0
2020	– 6.6	– 8.0	– 1.4	– 2.9	– 5.3
2021	+ 5.9	+ 3.6	+ 4.3	+ 1.9	+ 1.6
2022	+12.0	+ 4.1	+ 8.2	+ 0.6	+ 3.6

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.

Short-term relief and anti-inflationary measures by the federal and state governments supported disposable household incomes in 2022. However, the high price increase in the year dampened real development. The savings rate remained high in 2022.

Relief and anti-inflation measures were introduced to cushion the impact of high inflation on domestic households (see chapter 2.2). The federal government provided a total of 6.3 billion € for private households in 2022 within the framework of short-term measures, and another 600 million € came from the federal provinces. The most extensive federal measures were the increase of the climate bonus as well as the anti-inflationary bonus (2.8 billion €), the energy cost compensation (630 million €), the inflation compensation (430 million €) as well as one-off payments within the framework of the family allowance (330 million €). Most of the assistance was granted in the form of monetary transfers, a small part in the form of tax relief, which significantly supported disposable household incomes. In total, disposable incomes in 2022 were 8.2 (nominal) and 0.6 percent (real) higher than in the previous year. The high price increases noticeably dampened real income growth. After two years in double digits (2020: 13.3 percent, 2021: 12.0 percent), the household savings rate fell to an expected 8.8 percent in 2022. In comparison since 2010, it thus remained above average.

Looking at the development of consumer demand in 2022 in detail, some noticeable facts can be identified:

- The consumption of durable consumer goods (according to the national concept), which are typically more expensive (e.g., vehicles, furniture or electrical appliances), declined strongly (–3.9 percent, real). Accordingly, the number of new car registrations by private households also fell sharply again (–8.9 percent compared to the previous year).
- In contrast, the spending on services, such as recreation and leisure activities or accommodation and food service activities, developed very dynamically despite the high inflation that also affected these areas. Compared to the previous year, service consumption rose by 15.3 percent (in real terms). After the two pandemic years 2020 and 2021 with numerous restrictions, this also reflects a certain catch-up effect. This can also be seen in the high growth rates of consumption expenditure by Austrian residents abroad (2022 +44.6 percent). After

a strong rebound in 2021, this category increased significantly again in 2022.

- A noticeable decline in demand was observed in non-durable consumer goods (–6.6 percent). In addition to food and beverages, these also include energy and fuels. For such goods, high inflation has a direct dampening effect on private households' scope for spending. The income support measures prevented an even greater collapse in demand in these areas, although not all households benefitted from the measures to the same extent (Budgetdienst, 2022; Maidorn & Reiss, 2022).

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

	Ø 2010-2014	Ø 2014-2018	Ø 2018-2022	2019	2020	2021	2022
	Year-to-year percentage changes						
Domestic consumption	**+ 0.5**	**+ 1.2**	**– 0.6**	**+ 0.6**	**– 8.9**	**+ 0.5**	**+ 6.1**
Durable consumer goods	– 0.1	+ 1.6	– 0.6	+ 0.0	– 2.6	+ 4.3	– 3.8
Semi-durable consumer goods	+ 1.6	+ 1.3	– 0.8	– 0.3	– 10.5	+ 3.3	+ 4.9
Non-durable consumer goods	– 0.6	+ 1.0	– 0.9	+ 0.6	+ 1.1	+ 1.5	– 6.6
Services	+ 1.0	+ 1.3	– 0.4	+ 0.8	– 14.3	– 1.2	+ 15.3
Consumption by non-residents in Austria	+ 0.4	+ 3.3	– 7.8	+ 2.3	– 44.0	– 32.5	+ 86.6
Consumption abroad by Austrian residents	– 1.6	+ 4.9	– 3.8	+ 2.0	– 63.7	+ 60.0	+ 44.6
National consumption[1]	**+ 0.4**	**+ 1.2**	**– 0.1**	**+ 0.5**	**– 8.3**	**+ 3.6**	**+ 4.2**
Consumption by non-profit institutions serving households	+ 2.4	+ 2.4	+ 1.4	+ 1.6	– 1.1	+ 3.5	+ 1.7
National consumption including non-profit institutions serving households	**+ 0.5**	**+ 1.3**	**– 0.1**	**+ 0.5**	**– 8.0**	**+ 3.6**	**+ 4.1**
Durable consumer goods	– 0.1	+ 1.7	– 0.4	+ 0.2	– 2.2	+ 4.4	– 3.9
National consumption excluding durable consumer goods	+ 0.6	+ 1.2	– 0.0	+ 0.6	– 8.6	+ 3.5	+ 5.0

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

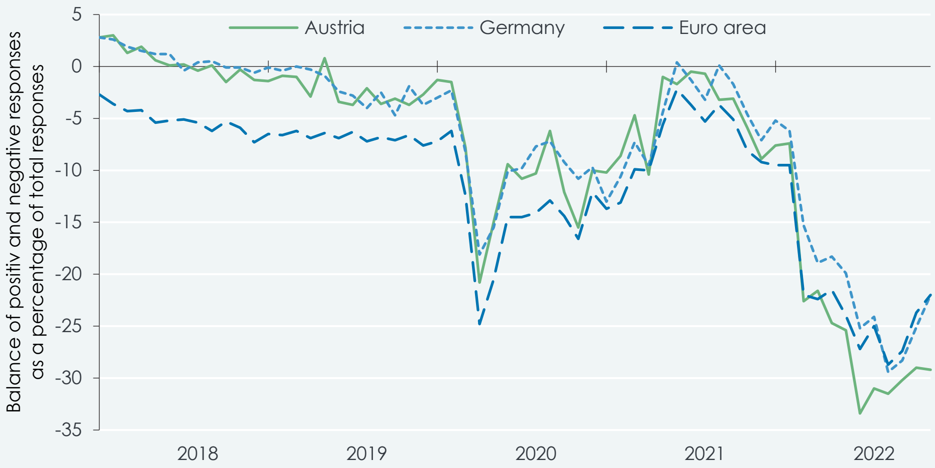
Consumer confidence (based on the seasonally adjusted balance of the harmonised EU consumer confidence indicator) had improved after the slump at the beginning of the COVID-19 pandemic until autumn 2021, but subsequently declined again even before the outbreak of the Ukraine war. The decline accelerated in the months immediately after the outbreak of the war, when the high level of uncertainty also became clearly visible among private households in the surveys. In July 2022, consumer confidence in Austria reached –33.4 points on balance, a new low. In the further course of the year, the values then settled at around –30 points. This contrasts somewhat with the development in Germany and in the euro area. There, the low was recorded somewhat later, while the increase towards the end of the year was stronger (Figure 8).

Despite new lockdowns, turnover in the trade sector developed robustly in 2021 (nominal +11.2 percent, real +4.7 percent compared to the previous year). This was primarily due to the massive sales losses in the crisis year 2020. In 2022, on the other hand, the result was primarily dampened by high inflation and uncertainty due to the geopolitical situation. Although nominal sales growth was still in double digits (+11.6 percent), considering the rapid price increase (trade overall: 2022 +13.0 percent, 2021 +6.1 percent), there was a real sales decline of 1.2 percent. The high price increase affected all areas of trade in the year; it was strongest in wholesale trade (excluding motor vehicles and motorcycles) with +15.7 percent. This led to an above-average increase in nominal turnover in this sector (+17 percent), while in volume terms only 1.1 percent growth remained. Trade and repair of motor vehicles and motorcycles had a weak year. Here nominal turnover fell by 1.5 percent, resulting in a real decline of 10.8 percent.

In the retail trade (excluding motor vehicles and motorcycles), sales rose by 8.1 percent in nominal terms, but when high price increases are considered, the sales volume fell by 0.8 percent. This pattern of nominal growth coupled with a real decline was found in several major retail sectors in 2022.

Employment in trade as a total developed very robustly in 2022, with growth of +1.5 percent, twice as strong as in the previous year. The strong losses from the first pandemic year 2020 (–1.7 percent) could thus be compensated. Wholesale trade recorded a significant increase in employment in 2022 (+2.2 percent), and employment in the retail trade rose by over 1 percent for the second year in a row. Trade and repair of motor vehicles and motorcycles also expanded its workforce (+1.0 percent).

Figure 8: **Development of the seasonally adjusted consumer confidence indicator**



Source: European Commission, WIFO. Arithmetic average of the balance of positive and negative responses as a percentage of total responses on the past and expected financial situation of households, the expected general economic situation and the intentions to make major purchases. Seasonally adjusted by Eurostat using Tramo-Seats.

Table 9: **Development in trade**

	Total (wholesale and retail trade; repair of motor vehicles and motorcycles)	Wholesale and retail trade and repair of motor vehicles and motorcycles	Wholesale trade (excluding motor vehicles and motorcycles)	Retail trade (excluding motor vehicles and motorcycles)
	Percentage change from previous year			
Turnover, nominal				
2020	– 5.3	– 10.7	– 7.0	+ 0.1
2021	+ 11.2	+ 12.1	+ 14.9	+ 5.1
2022	+ 11.6	– 1.5	+ 17.0	+ 8.1
Turnover, real				
2020	– 4.8	– 12.5	– 5.3	– 0.2
2021	+ 4.7	+ 9.2	+ 4.6	+ 3.0
2022	– 1.2	– 10.8	+ 1.1	– 0.8
Prices (Ø 2015 = 100)				
2020	– 0.5	+ 2.0	– 1.8	+ 0.4
2021	+ 6.1	+ 2.7	+ 9.7	+ 1.9
2022	+ 13.0	+ 10.3	+ 15.7	+ 9.0
Employment				
2020	– 1.7	– 1.8	– 1.5	– 1.8
2021	+ 0.7	– 0.6	+ 0.4	+ 1.1
2022	+ 1.5	+ 1.0	+ 2.2	+ 1.3

Source: Statistics Austria.

2.5 Highest inflation since the 1970s

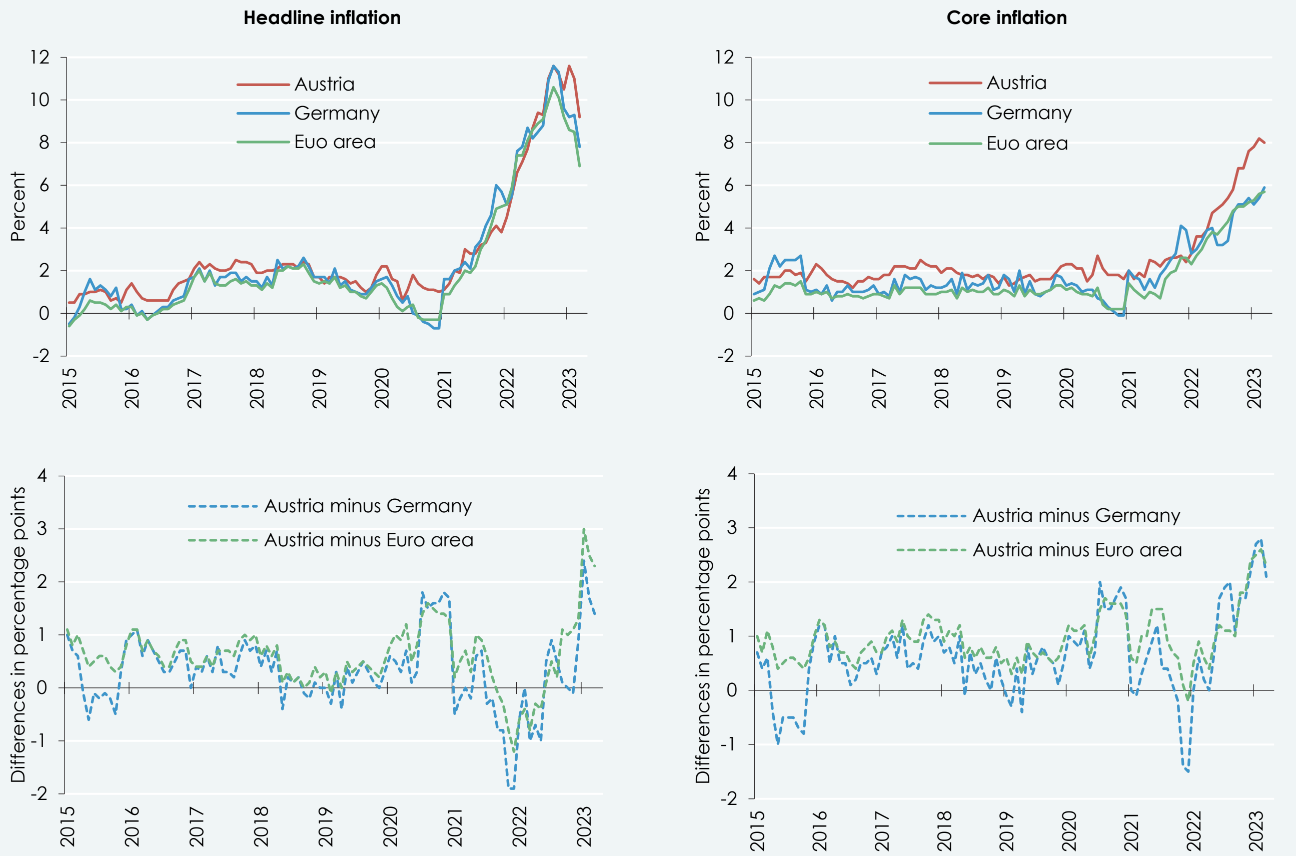
The rise in consumer prices (according to CPI) in 2022 in Austria, as in other European countries, was mainly due to the strong increase in energy and food prices until the summer. From the summer onwards, the different mix of measures in the euro countries in response to inflation caused (core) inflation to rise more strongly in Austria than in Germany or on average in the euro area (Sgaravatti et al., 2023; Arregui et al., 2022; Baumgartner et al., 2022). While a number of countries (especially Spain, Portugal, France) intervened directly in pricing, especially of household energy tariffs, Austria focused its measures on cushioning the impact of inflation on purchasing power. In Austria, the suspension of the green electricity subsidy (from the beginning of 2022), the reduction of the energy levy for gas and electricity (from spring) and the electricity price brake (from December) had a slight dampening effect on the inflation trend

The inflation rate averaged 8.6 percent in 2022; it rose from 5 percent in January to 11 percent in October and decreased again slightly at the end of the year. Above all, energy rose very strongly by +39.2 percent.

(–¼ percentage point). Prammer and Reiss (2023) estimate that this inflation-dampening effect was roughly offset by the demand-induced higher inflation contribution resulting from the income supports.

As higher costs (especially for energy) were passed on to end consumers, their indirect effects became increasingly important in the course of the year, which was reflected in a rise in core inflation. At the end of the year, industrial goods (3 percentage points) and services (3.2 percentage points) again contributed more to headline inflation (+10.2 percent) than energy prices (2.0 percentage points), the impact of which will be dampened by the electricity price brake effective from December 2022.

Figure 9: **Inflation in Austria, Germany and the euro area**



Source: Macrobond, Eurostat, WIFO calculations. Core inflation excluding energy and food (including alcohol and tobacco).

Food prices accelerated from +4.9 percent in January to +16.3 percent in December due to high agricultural and energy commodity costs. On average, food prices rose by 10.7 percent in 2022 (2021 +0.8 percent).

The GDP deflator as an indicator of price changes in total economy output is expected to have risen by 5 percent in 2022 (2021 +1.9 percent)[6]. Around a quarter of this price increase is attributable to growth in compensation of employees and gross operating surpluses, and around half to growth in taxes on production excluding subsidies (Figure 10). The share of the latter was very high in 2022 in a long-term comparison[7]. By economic sector, significant increases in operating surpluses in 2022 are likely to have occurred above all in the energy sector (NACE 2008, sections B, D and E), construction (section F) and agriculture and forestry (section A; Figure 11).

[6] According to preliminary data based on the Quarterly National Accounts for the fourth quarter 2022, published on 28 February 2023 by Statistics Austria.
[7] It should be noted that the data of the Quarterly National Accounts will be revised several times until the presentation of the annual accounts in September 2023. The deflators of value added and taxes on products and subsidies on products have seen the largest revisions in the past.

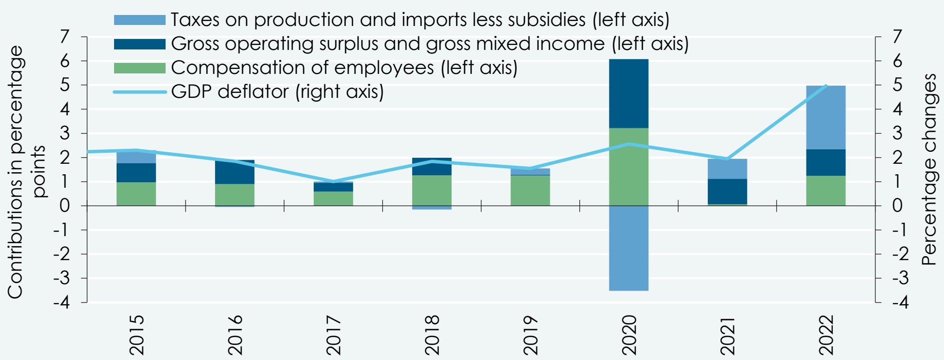
Table 10: **Development of the (harmonised) Consumer Price Index**

Breakdown according to the purpose of individual consumption

	2021	2022	First quarter of 2022	Second quarter of 2022	Third quarter of 2022	Fourth quarter of 2022
	Percentage changes from previous year					
Total consumer price index	**+ 2.8**	**+ 8.6**	**+ 5.8**	**+ 7.9**	**+ 9.8**	**+ 10.6**
Core inflation rate[1]	+ 2.2	+ 5.6	+ 3.9	+ 4.8	+ 6.1	+ 7.4
Micro basket of goods and services (daily shopping)	+ 2.6	+ 9.9	+ 5.6	+ 8.9	+ 11.0	+ 14.1
Mini basket of goods and services (weekly shopping)	+ 5.7	+ 14.5	+ 10.7	+ 16.2	+ 17.0	+ 13.9
Administrated prices and tariffs	+ 1.1	+ 2.2	+ 1.4	+ 1.9	+ 2.1	+ 3.4
COICOP main headings						
Food and non-alcoholic beverages	+ 0.8	+ 10.7	+ 5.0	+ 9.6	+ 13.1	+ 15.2
Alcoholic beverages and tobacco	+ 2.4	+ 3.5	+ 2.3	+ 3.7	+ 3.9	+ 4.3
Clothing and shoes	+ 0.7	+ 1.8	+ 1.5	+ 1.1	+ 0.1	+ 4.5
Flat, water, energy	+ 3.6	+ 12.6	+ 7.6	+ 9.7	+ 15.4	+ 17.7
Household effects and ongoing maintenance of the house	+ 1.8	+ 7.7	+ 4.3	+ 6.3	+ 8.4	+ 11.6
Health care	+ 1.7	+ 2.8	+ 2.7	+ 2.2	+ 2.5	+ 3.6
Traffic	+ 6.6	+ 16.2	+ 12.6	+ 19.7	+ 18.7	+ 13.9
Messaging	– 2.9	– 0.6	+ 1.3	– 0.1	– 1.4	– 2.5
Leisure and culture	+ 2.4	+ 3.8	+ 4.5	+ 3.2	+ 4.1	+ 3.3
Education and teaching	+ 1.9	+ 2.7	+ 1.9	+ 2.1	+ 2.9	+ 3.9
Restaurants and hotels	+ 3.4	+ 8.9	+ 6.6	+ 7.4	+ 9.9	+ 11.7
Miscellaneous goods and services	+ 1.3	+ 3.0	+ 1.8	+ 2.0	+ 2.8	+ 4.9
CPI breakdown						
Unprocessed food[2]	+ 1.5	+ 10.1	+ 4.7	+ 10.1	+ 11.6	+ 13.9
Processed food[3]	+ 1.0	+ 8.5	+ 4.2	+ 7.2	+ 10.5	+ 12.1
Energy	+ 12.3	+ 39.2	+ 30.0	+ 39.3	+ 47.3	+ 39.6
Industrial goods	+ 2.0	+ 7.4	+ 5.0	+ 6.5	+ 8.0	+ 9.7
Services	+ 2.2	+ 4.6	+ 3.2	+ 3.8	+ 5.0	+ 6.0
Harmonised Index of Consumer Prices (HICP)						
Total						
Austria	+ 2.8	+ 8.6	+ 5.5	+ 7.9	+ 9.9	+ 11.1
Germany	+ 3.2	+ 8.7	+ 6.1	+ 8.3	+ 9.4	+ 10.8
Euro area	+ 2.6	+ 8.4	+ 6.1	+ 8.0	+ 9.3	+ 10.0
Core inflation						
Austria	+ 2.3	+ 5.1	+ 3.3	+ 4.5	+ 5.5	+ 7.1
Germany	+ 2.2	+ 3.9	+ 3.1	+ 3.7	+ 3.8	+ 5.2
Euro area	+ 1.5	+ 3.9	+ 2.7	+ 3.7	+ 4.4	+ 5.1

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

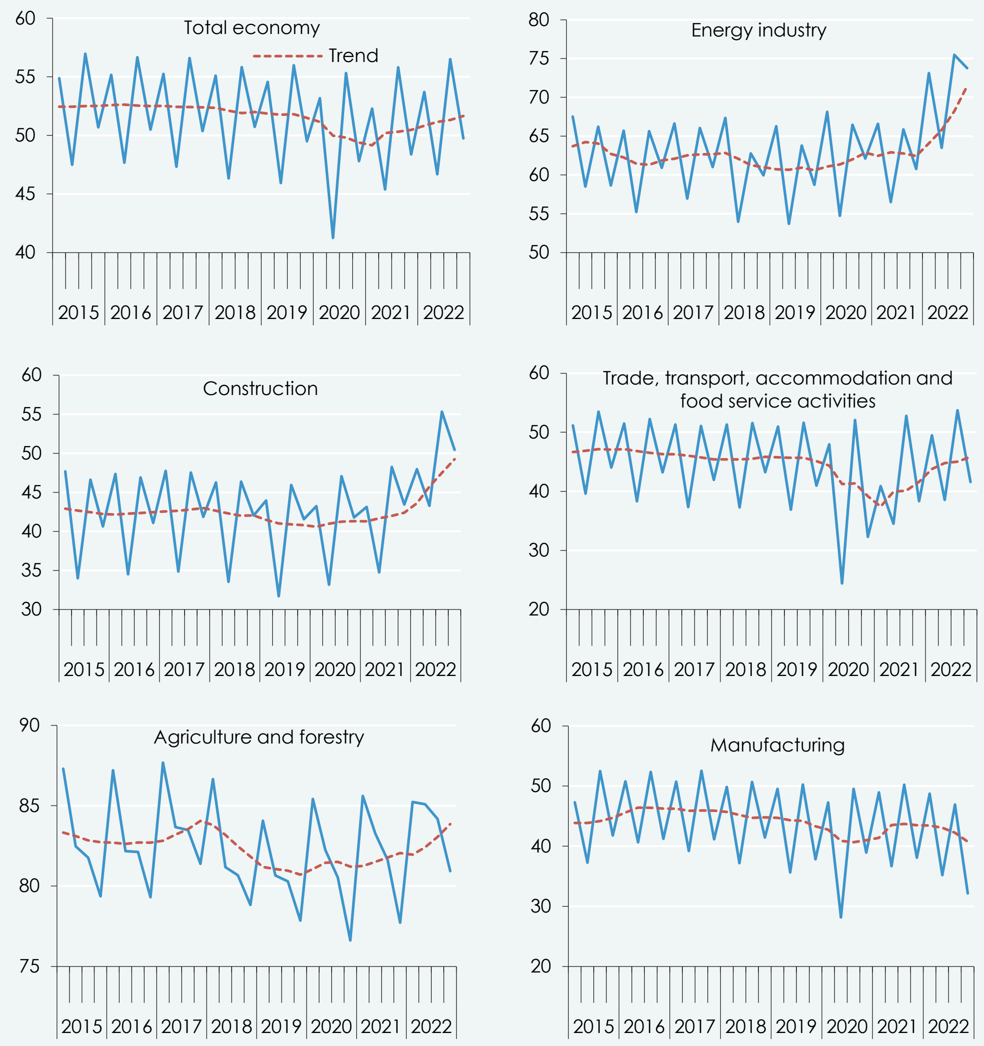
Figure 10: **Decomposition of the GDP deflator**



Source: Statistics Austria, WIFO calculations.

Figure 11: **Extended gross operating surplus as a share of gross value added at basic prices in Austria**

Percent



Source: Statistics Austria, WIFO calculations. Gross operating surplus and mixed income including net taxes = Gross value added less compensation of employees.

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