

Stefan Schiman

# Cyclical Slackening from High Level of Activity

## Economic Outlook for 2018 to 2020

### Cyclical Slackening from High Level of Activity. Economic Outlook for 2018 to 2020

From the current strong pace driven by industrial output, construction and services, economic growth in Austria is set to ease somewhat in 2019. While business investment is showing early signs of weakening, private household income and consumption will benefit from solid wage increases and a lower tax burden. With fewer jobs being created, the reduction of unemployment will lose momentum. The general government balance will turn to a surplus in the years to come.

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Austria's economy is currently in a stage of cyclical boom. Growth of GDP will reach 2.7 percent in 2018, markedly exceeding the euro area average. While industrial production is setting the pace, most other sectors also enjoy lively business activity. Firms express optimism also with respect to the short-term outlook, although the output cycle has now passed its peak, as witnessed by a gradual slackening of investment. Imports and inventory accumulation have been subdued in 2018. The cyclical downturn of aggregate demand is confirmed by different kinds of business cycle models. WIFO therefore expects robust, though decelerating GDP growth of 2.0 percent for 2019 and 1.8 percent for 2020.

Private households will enjoy substantial income gains over the forecast period: settlements in the 2018 autumn wage round turned out somewhat higher than anticipated, while an expansionary fiscal stance, notably the introduction of the "family bonus" will reduce the tax burden. Hence, private consumption should become the major force supporting GDP growth. In addition, foreign demand will provide reliable stimulus to domestic output growth, as euro area GDP is set to grow moderately, but steadily. The US economy will advance strongly also in 2019, thanks to an expansionary fiscal stance, and activity should stay lively also in Eastern Europe. Developments in Austria should even be little affected in the event of a "disorderly" withdrawal of the UK from the EU; the risk of major economic turbulence in Italy seems to have abated recently.

The present cyclical high is shaping the performance of the labour market, with employment and job vacancies rising swiftly and unemployment receding. With the projected slowdown of output growth, the outlook is turning more clouded. In addition, job search remains difficult, notably due to the continued inflow of workers from Eastern Europe and rising domestic labour force participation. Despite continued employment growth, the number of jobseekers will still be close to 300,000 in 2020. Besides the labour market, the government household is benefitting from the presently benign

cyclical situation. Thanks to buoyant tax revenues, the general government budget should be in balance already in 2018, turning to a surplus in 2019 and 2020.

Table 1: Main results

	2015	2016	2017	2018	2019	2020	
	Percentage changes from previous year						
Gross domestic product, volume	+ 1.1	+ 2.0	+ 2.6	+ 2.7	+ 2.0	+ 1.8	
Manufacturing	+ 1.3	+ 3.5	+ 4.8	+ 5.0	+ 3.0	+ 2.4	
Wholesale and retail trade	+ 1.9	+ 1.2	+ 1.1	+ 1.2	+ 1.5	+ 1.8	
Private consumption expenditure <sup>1</sup> , volume	+ 0.4	+ 1.4	+ 1.4	+ 1.7	+ 1.7	+ 1.8	
Consumer durables	+ 1.9	+ 3.0	+ 0.5	- 0.5	+ 1.0	+ 2.5	
Gross fixed capital formation, volume	+ 2.3	+ 4.3	+ 3.9	+ 3.5	+ 2.6	+ 2.0	
Machinery and equipment <sup>2</sup>	+ 4.3	+ 7.8	+ 4.2	+ 3.9	+ 3.1	+ 2.4	
Construction	+ 0.1	+ 0.4	+ 3.5	+ 3.1	+ 2.0	+ 1.6	
Exports, volume	+ 3.5	+ 2.7	+ 4.7	+ 4.7	+ 3.9	+ 3.8	
Exports of goods, fob	+ 3.5	+ 2.1	+ 4.9	+ 5.2	+ 4.2	+ 4.2	
Imports, volume	+ 3.6	+ 3.4	+ 5.1	+ 3.0	+ 3.4	+ 3.2	
Imports of goods, fob	+ 4.1	+ 3.2	+ 4.2	+ 2.9	+ 3.6	+ 3.4	
Gross domestic product, value	+ 3.3	+ 3.5	+ 3.8	+ 4.4	+ 4.1	+ 3.9	
	billion €	344.26	356.24	369.90	386.12	402.07	417.73
Current account balance as a percentage of GDP	1.7	2.5	2.0	2.3	2.3	2.4	
Consumer prices	+ 0.9	+ 0.9	+ 2.1	+ 2.0	+ 2.1	+ 2.0	
Three-month interest rate	percent	- 0.0	- 0.3	- 0.3	- 0.3	0.2	
Long-term interest rate <sup>3</sup>	percent	0.7	0.4	0.6	0.7	1.0	2.0
General government financial balance, Maastricht definition as a percentage of GDP	- 1.0	- 1.6	- 0.8	± 0.0	0.4	0.5	
Persons in active dependent employment <sup>4</sup>	+ 1.0	+ 1.6	+ 2.0	+ 2.5	+ 1.5	+ 1.2	
Unemployment rate							
Eurostat definition <sup>5</sup>	5.7	6.0	5.5	4.9	4.6	4.6	
National definition <sup>6</sup>	9.1	9.1	8.5	7.7	7.3	7.2	

Source: WIFO. 2018 to 2020: forecast. – <sup>1</sup> Including non-profit institutions serving households. – <sup>2</sup> Including weapons systems. – <sup>3</sup> 10-year central government bonds (benchmark). – <sup>4</sup> Excluding persons in valid employment contract receiving child care benefit or being in military service. – <sup>5</sup> As a percentage of total labour force, Labour Force Survey. – <sup>6</sup> As a percentage of dependent labour force, unemployed persons according to Public Employment Service Austria.

## 1. Escalation of USA–China trade dispute temporarily shelved

On 24 September 2018, the trade dispute between the USA and China escalated with the introduction of a punitive tariff of 10 percent on consumer goods imported from China totalling 200 billion \$. The impact on external trade will strike in the first half of 2019, undermining bilateral exchange between the two powers, as foreshadowed among others by the export indicator of the Chinese Purchasing Managers' Index for the manufacturing sector. A further escalation of the USA–China trade dispute has been averted for the time being, as the hike of the punitive tariff to 25 percent planned for early 2019 has tentatively been postponed by 90 days. However, it is doubtful whether any concessions made by China will suffice. Should the USA in the event decide to step up the trade conflict, it will hit not only manufacturers in China, but also suppliers in other countries of Southeast Asia. China's exports to the USA exhibit a high import content notably from Japan, Korea, Taiwan and Thailand. Austria may hardly expect any negative effects; indeed, deliveries to the USA and to China advanced particularly strongly during the first nine months of 2018.

The second issue dominating the current debate on global economic prospects is "Brexit", which for Austria is of greater relevance than the USA–China trade dispute. Should the negotiated draft agreement on the withdrawal of the UK from the EU be adopted by both parties, an orderly transition may be expected with no major adverse effects on Austria's economy. Such a scenario underlies the present forecast, even if it is from today's perspective by no means sure that it will actually materialise (see Box).

*Austria's export industry may benefit from diversion of trade flows caused by the USA-China trade dispute.*

*The present projection rests upon the assumption of an orderly withdrawal of the UK from the EU.*

*Trade effects of a "hard Brexit"*

The present projection rests on the assumption of a mutual agreement being achieved on an orderly withdrawal of the UK from the EU. A vote of the British Parliament on the draft agreement scheduled for 11 December 2018 has been postponed in view of its likely rejection. In the absence of an agreement and a postponement of the date of withdrawal, an unregulated or "hard" Brexit would be the result, with severe disruptions in foreign trade hurting the British economy in the first place. In that case, the UK would leave the EU customs union and conduct bilateral trade on the basis of the most-favoured-nations clause laid down in the WTO rules. Moreover, the UK would lose all bilateral trade agreements with third countries and trade only on the basis of WTO rules also with those countries, since all existing bilateral trade agreements (like e.g. CETA) had been negotiated for the EU as a whole and may not be automatically transferred to non-members. The trade partners, like say Canada, would have to formally agree to a new bilateral contract with the UK and could alter certain elements. In any case, negotiations of new settlements will take time, such that a "hard" Brexit would leave the UK in trade policy matters among the most isolated industrialised countries worldwide.

For the UK, a "hard" Brexit would imply a significant restriction of exports to and imports from the EU, and a substantial increase in internal trade, since relative prices of domestic goods would fall against foreign ones. Already in 2019, UK exports to the EU would slump between 27 percent and 48 percent<sup>1</sup>, EU exports to the UK by 22 percent to 39 percent, while domestic merchandise trade would rise by 11 percent to 28 percent. Trade diversion within the EU as well as with third countries would be relatively small. The effect for EU internal trade is estimated ranging from +0.5 to +1.8 percent.

Overall, the UK price level is set to rise and real income to fall. The losses in real income and value added would be rather unevenly distributed: for the UK it would amount to 1 to 5 percent in 2019, for the EU and for Austria it would be close to zero. Third countries would benefit only to a minor extent.

<sup>1</sup> Oberhofer, H., Pfaffermayr, M., "Estimating the Trade and Welfare Effects of Brexit. A Panel Data Structural Gravity Model", WIFO Working Papers, 2017, (546), <https://www.wifo.ac.at/www/pubid/60830>.

## 2. Pro-cyclical fiscal policy provides further stimulus to booming activity in the USA

In 2018, GDP growth in the USA accelerated to 2.9 percent. The major driver was private investment fuelled i.a. by the reform of corporate taxation. Private consumption also lent continued firm support. Fiscal policy remains expansionary also in 2019, adding up to ½ percentage point to GDP growth. Monetary policy, on the other hand, will be gradually restrained. The outcome of the mid-term election of Congress of November 2018 will have no major impact on either economic performance or policy. The cyclical upswing in the USA has moved to an advanced stage, with the unemployment rate being extremely low (3.7 percent last November), core inflation close to 2 percent and stock market values climbing to new highs. The narrow yield differential between long- and short-term government bonds foreshadows a cyclical turnaround for the next one to three years, although current data show no sign of slackening activity. Sentiment indicators keep heading up, particularly the one of consumer confidence. The long-standing economic boom is thus likely to further extend into 2019.

## 3. Subdued growth in the euro area keeps inflationary pressure down

Demand and output growth in the euro area lost momentum in 2018, slowing to a rate of 2.0 percent. Apart from cyclical factors at work i.a. in the three major economies of Germany, France and Italy, GDP growth was constrained by a supply bottleneck in the automobile industry. German car manufacturers in particular gave a lagged response to new regulations of exhaust measurement introduced last September for the certification of conformity of new cars, which delayed licensing

procedures. Thousands of passenger cars were put on stock and production stalled. Planned car purchases and shipments to other EU member countries were delayed. Not only manufacturers, but also service branches related to car production have probably been hurt. While this one-off factor dampened GDP growth in 2018, it may have the opposite effect in 2019 as production losses will at least partially be made up. Meanwhile, however, Germany's economy is less dynamic than Austria's, due to the slower growth of potential output.

Table 2: International economy

	Percentage shares 2017		2015	2016	2017	2018	2019	2020
	Austria's exports of goods	World GDP <sup>1</sup>						
			GDP volume, percentage changes from previous year					
EU 28			+ 2.3	+ 2.0	+ 2.4	+ 2.2	+ 1.8	+ 1.8
EU 27	67.0	14.2	+ 2.3	+ 2.1	+ 2.6	+ 2.3	+ 1.9	+ 1.9
Euro area	52.2	11.6	+ 2.1	+ 1.9	+ 2.4	+ 2.0	+ 1.7	+ 1.8
Germany	30.2	3.3	+ 1.7	+ 2.2	+ 2.2	+ 1.6	+ 1.6	+ 1.9
Italy	6.4	1.8	+ 0.9	+ 1.1	+ 1.6	+ 1.0	+ 1.0	+ 1.2
France	4.9	2.2	+ 1.1	+ 1.2	+ 2.2	+ 1.6	+ 1.3	+ 1.4
CEEC 5 <sup>2</sup>	14.3	1.6	+ 4.1	+ 2.8	+ 4.4	+ 4.5	+ 3.2	+ 2.5
Czech Republic	3.7	0.3	+ 5.3	+ 2.5	+ 4.3	+ 2.9	+ 2.6	+ 2.2
Hungary	3.4	0.2	+ 3.5	+ 2.3	+ 4.1	+ 4.6	+ 2.6	+ 2.1
Poland	3.1	0.9	+ 3.8	+ 3.1	+ 4.8	+ 5.1	+ 3.5	+ 2.7
USA	6.8	15.3	+ 2.9	+ 1.6	+ 2.2	+ 2.9	+ 2.5	+ 1.7
Switzerland	5.3	0.4	+ 1.3	+ 1.6	+ 1.6	+ 2.7	+ 1.6	+ 1.7
UK	2.8	2.3	+ 2.3	+ 1.8	+ 1.7	+ 1.3	+ 1.3	+ 1.5
China	2.6	18.2	+ 6.9	+ 6.7	+ 6.9	+ 6.5	+ 6.1	+ 5.7
Total <sup>3</sup>								
PPP-weighted <sup>4</sup>		50	+ 4.0	+ 3.5	+ 4.0	+ 4.0	+ 3.6	+ 3.2
Export weighted <sup>5</sup>	84		+ 2.4	+ 2.1	+ 2.6	+ 2.4	+ 2.0	+ 1.9
Market growth <sup>6</sup>			+ 3.7	+ 3.4	+ 6.5	+ 5.0	+ 4.2	+ 4.2
<i>Forecast assumptions</i>								
Crude oil prices								
Brent, \$ per barrel			52.5	43.7	54.3	72	60	60
Exchange rate								
\$ per €			1.110	1.107	1.129	1.18	1.15	1.17
Key interest rate								
ECB main refinancing rate <sup>7</sup> , percent			0.1	0.0	0.0	0.0	0.0	0.1
10-year government bonds yields Germany, percent			0.5	0.1	0.3	0.4	0.8	1.9

Source: WIFO. 2018 to 2020: forecast. – <sup>1</sup> PPP-weighted. – <sup>2</sup> Czech Republic, Hungary, Poland, Slovenia, Slovakia. – <sup>3</sup> EU 27, UK, USA, Switzerland, China. – <sup>4</sup> Weighted by GDP at purchasing power parities in 2017. – <sup>5</sup> Weighted by shares of Austrian goods exports in 2017. – <sup>6</sup> Real import growth of trading partners, weighted by shares of Austrian goods exports. – <sup>7</sup> Minimum bid rate.

Sentiment indicators for the euro area reached a peak in 2018, from which they are now trending down. They nevertheless remain comfortably in positive territory, signalling robust growth, albeit down from the pace recorded in 2018. Compared with the USA, the business cycle upturn in the euro area is still at an earlier stage: unemployment remains quite high in countries such as France, Italy or Spain, and core inflation is well below the target set by the ECB. The latter has terminated its purchases of government bonds in support of business activity; still, first interest rate hikes now seem unlikely to be taken already in 2019, as assumed so far, but rather not before 2020. This should diminish financial market risks for particularly exposed countries like Italy.

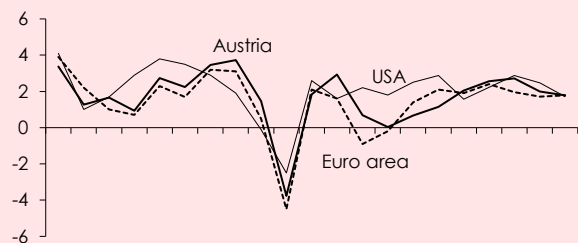
#### 4. Oil price assumption significantly revised down

In October 2018, the reference price for internationally-traded crude oil climbed above 80 \$ per barrel. The increase was largely motivated by speculation, as markets expected supply cuts due to sanctions imposed last November against Iran and raised inventory levels. However, such concerns proved unfounded as the sanctions turned out milder than anticipated. Oil prices have therefore eased substantially since last October. As the worldwide abundant supply should put a ceiling on prices in the

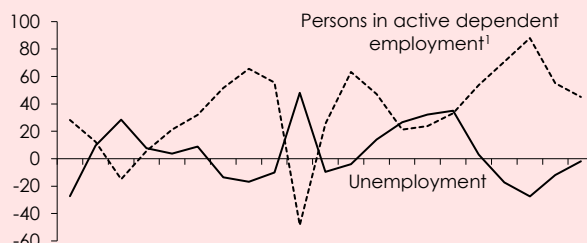
near future, WIFO is revising down its oil price assumption for 2019 from 75 \$ last October to 60 \$ per barrel.

Figure 1: Indicators of economic performance

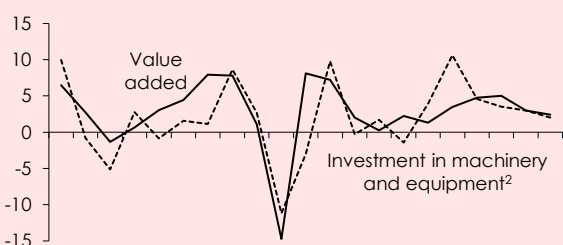
Growth of real GDP  
Percent



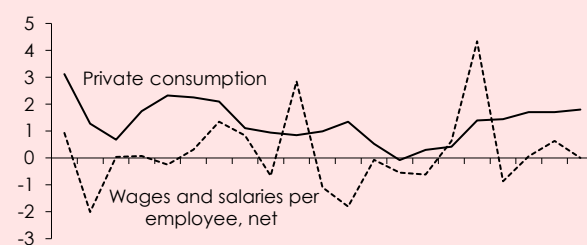
Employment and unemployment  
Change from previous year in 1,000



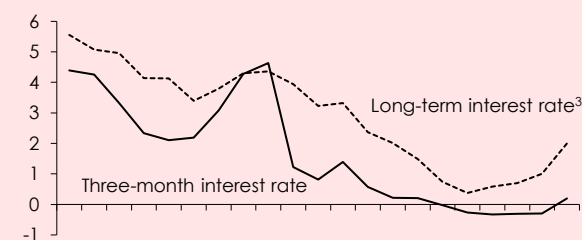
Manufacturing and investment  
Percentage changes from previous year, volume



Consumption and income  
Percentage changes from previous year, volume



Short-term and long-term interest rates  
Percent



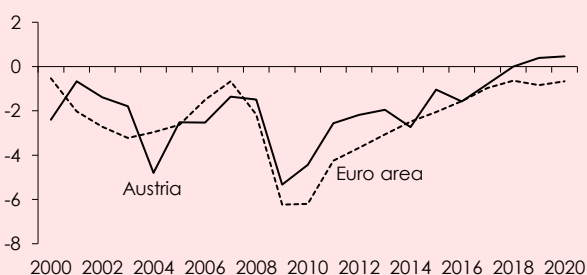
Inflation and unit labour costs  
Percentage changes from previous year



Trade (according to National Accounts)  
Percentage changes from previous year, volume



General government financial balance  
As a percentage of GDP



Source: WIFO. 2018 to 2020: forecast. – <sup>1</sup> Excluding persons in valid employment contract receiving child care benefit or being in military service, and unemployed persons in training; break in 2007-08 due to changes in the employment statistics. – <sup>2</sup> Including weapons systems. – <sup>3</sup> 10-year central government bonds (benchmark).

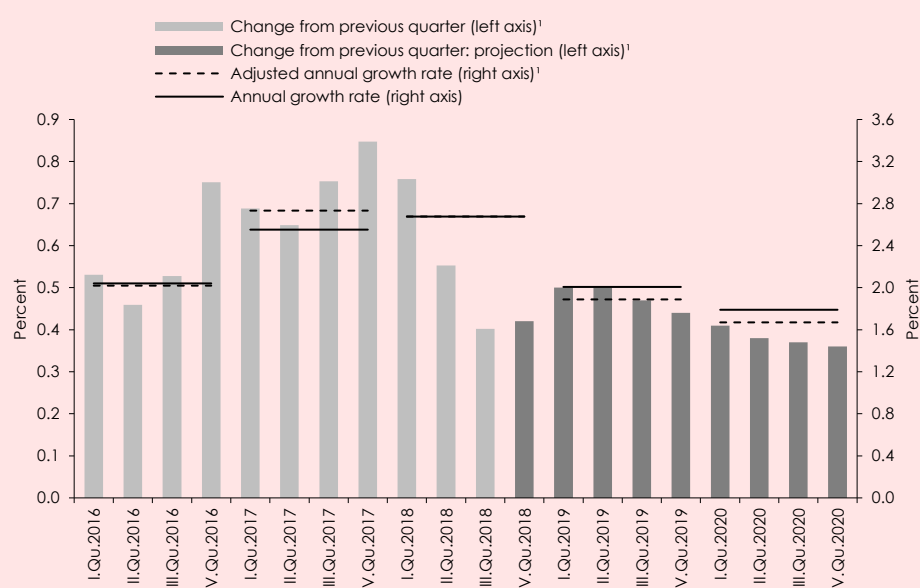
## 5. Austria: cyclical slackening from high level of activity

From a strong pace of expansion, industrial activity in Austria eased in the third quarter 2018, when manufacturing value added edged up by only 0.2 percent from the

previous period. A closer analysis suggests that the slowdown cannot be explained by a one-off effect such as in Germany for the motor car industry. In an annual comparison, industrial activity is still robust (+2.3 percent from the third quarter 2017), which is confirmed by surveys among firms. In the regular WIFO-Konjunkturtest (business cycle survey), a large majority of companies expresses satisfaction with current business conditions, even if the share of positive responses has declined slightly since the beginning of 2018. The majority of firms is also optimistic for the near future. Unlike in manufacturing industry which has enjoyed growth rates above the EU average in the last two years, activity in construction and services did not slacken in the third quarter and provided substantial contributions to GDP growth, both in the annual and quarterly comparison. Companies in both sectors are similarly confident as industrial manufacturers for the current situation (fourth quarter of 2018) as well as for the next few months; among construction firms, optimism for the short-term outlook has even increased.

Figure 2: Cyclical profile Austria

GDP, volume



Source: WIFO. – <sup>1</sup> Trend-cycle component.

WIFO employs several models for its short-term forecasts, i.e. theory-based DSGE models and data-driven factor models. For 2018, some models suggest a growth rate of real GDP of 2.7 percent, others a somewhat lower rate. For an annual rate less than 2.7 percent, GDP growth in the fourth quarter must have slowed to 0.3 percent or below, after +0.40 percent in the third, +0.55 in the second and +0.76 percent in the first quarter. Such slackening in the final three-months period of 2018, while not being excluded in view of the downward trend of confidence indicators, would nevertheless be rather sharp given the still high level of the latter and the improving labour market in October and November. WIFO therefore expects an annual GDP growth rate of 2.7 percent for 2018.

Considering the strong momentum and the downward trend of leading indicators, a further acceleration of activity appears unlikely. Indeed, all models signal for 2019 a deceleration of growth. Adding the calendar effect of some 0.1 percentage point (one extra working day), model calculations yield an annual growth rate between 1.5 percent and 2.3 percent, with an average of 1.9 percent. WIFO maintains its earlier growth projection of +2.0 percent for 2019. Arguments for the slightly more optimistic outlook are the expansionary fiscal stance, notably with the introduction of the "family bonus", and the expectation that the recent setback of motor car sales will be offset.

*The Austrian economy is enjoying a phase of cyclical boom that exceeds the euro area average.*

*For 2019, all models signal a cyclical downswing.*

Table 3: Technical breakdown of the real GDP growth forecast

		2017	2018	2019	2020
Growth carry-over <sup>1</sup>	percentage points	+ 0.9	+ 1.2	+ 0.7	+ 0.7
Growth rate during the year <sup>2</sup>	percent	+ 3.0	+ 2.1	+ 1.9	+ 1.5
Annual growth rate	percent	+ 2.6	+ 2.7	+ 2.0	+ 1.8
Adjusted annual growth rate <sup>3</sup>	percent	+ 2.7	+ 2.7	+ 1.9	+ 1.7
Calendar effect <sup>4</sup>	percentage points	- 0.4	± 0.0	+ 0.1	+ 0.1

Source: WIFO. 2018 to 2020: forecast. – <sup>1</sup> Impact of year-earlier growth dynamics on growth in the current year. Equals the annual growth rate in the current year, if the level of GDP in the current year remains constant from the fourth quarter of the previous year; trend-cycle component. – <sup>2</sup> Reflects the growth dynamics during a calendar year. Equals the year-on-year growth rate for the fourth quarter; trend-cycle component. – <sup>3</sup> Trend-cycle component. – <sup>4</sup> Impact of the annual number of working days and the leap day.

For 2020, the model calculations offer a wider range for GDP growth from 1.3 percent to 2.5 percent, with the average declining to 1.7 percent. Already included is a calendar effect of +0.1 percentage point due to another additional working day in 2020. The majority of models signal for 2020 a cyclical easing as a result of the present boom. At the same time potential GDP growth increased, not least due notably to the strong labour immigration from the eastern EU member countries. According to the WIFO Medium-term Forecast of October 2018, trend growth will pick up to over 2 percent per year starting from 2020. The growth projection of 1.8 percent for 2020 in the present forecast takes these trends on board, but signals at the same time a cyclical downswing. Fiscal policy is assumed to provide a further expansionary incentive as the "family bonus" takes full effect.

### 5.1 Manufacturing activity peaked in 2018

As evidenced by the performance of the individual branches, activity in the manufacturing industry rose to a peak during the cyclical boom of 2018. Output growth is nevertheless revised down from the WIFO forecast of October 2018, as the production cycle turns out flatter than anticipated. In the year-on-year comparison, the growth rate increased further from 2017, both for industrial production (+5.0 percent) and for commercial services closely related to industry (+4.1 percent). In 2019, growth is expected to decelerate to +3.0 percent and +2.3 percent respectively, and further in 2020. Yet, this profile should not be taken as cyclical downturn since such growth rates are still at or above the medium-term average. From today's perspective, the expectation of a downturn in manufacturing seems premature, since company responses give no evidence in this respect. The WIFO indicator for the manufacturing sector has been heading down since early 2018, but only slightly and from a high level. The large majority of companies express confidence and are more concerned about sufficient production capacities and qualified personnel available, rather than fearing a slump in demand.

Construction value added expanded more strongly in 2018 than so far expected, likely matching the strong performance of 2017. Business surveys confirm the strong optimism prevailing among firms as regards the short-term outlook, notably for the building sector. Many companies are, however, facing capacity constraints and, unlike industrial manufacturers, cannot respond as flexibly to demand peaks with productivity advances. This is also reflected by price developments: in 2018, construction investment recorded an inflation rate of 3.5 percent. Hence, the deceleration of construction output and investment growth to 2.0 percent respectively in 2019 should be seen as a consequence of capacity limits; accordingly, construction prices are set to rise at an unabated lively pace.

### 5.2 Investment loses momentum, exports maintain solid growth

Whereas industrial production expanded again strongly in 2018, private investment (with the exception of construction) had already passed the cyclical peak. Corporate spending on machinery and equipment and stockbuilding lost momentum, making for a smaller contribution of total domestic demand to GDP growth. After a strong increase in 2017, import growth also eased in 2018, and more so than what can be

*Business activity in manufacturing reached a peak in 2018. Yet, the output cycle exhibits a flatter profile than assumed so far.*

*Construction firms increasingly face capacity limits, with prices rising swiftly.*

explained by cooling investment and lower car purchases. Hence, total demand translated to a high degree into domestic production. Easing imports also indicate a saturation of investment needs. While production still expanded strongly in 2018, demand of domestic firms decelerated already.

While corporate investment eased in 2018, domestic production benefitted from a sizeable external contribution to GDP growth, as strong exports were accompanied by subdued imports.

Table 4: Gross value added

At basic prices

	2017	2018	2019	2020	2017	2018	2019	2020
	Billion € (reference year 2010)				Percentage changes from previous year			
<i>Volume (chain-linked series)</i>								
Agriculture, forestry and fishing	4.28	4.28	4.28	4.28	+ 3.1	± 0.0	± 0.0	± 0.0
Manufacturing including mining and quarrying	61.26	64.33	66.26	67.85	+ 4.7	+ 5.0	+ 3.0	+ 2.4
Electricity, gas and water supply, waste management	9.72	10.35	10.61	10.88	+ 7.4	+ 6.5	+ 2.5	+ 2.5
Construction	16.52	17.00	17.34	17.62	+ 3.1	+ 2.9	+ 2.0	+ 1.6
Wholesale and retail trade	36.29	36.73	37.28	37.95	+ 1.1	+ 1.2	+ 1.5	+ 1.8
Transportation	16.02	16.82	17.32	17.84	+ 3.0	+ 5.0	+ 3.0	+ 3.0
Accommodation and food service activities	13.50	14.04	14.39	14.65	+ 1.4	+ 4.0	+ 2.5	+ 1.8
Information and communication	10.15	10.45	10.71	10.98	+ 2.6	+ 3.0	+ 2.5	+ 2.5
Financial and insurance activities	12.39	12.29	12.58	12.85	+ 3.4	- 0.8	+ 2.4	+ 2.1
Real estate activities	26.57	27.13	27.62	28.12	+ 1.3	+ 2.1	+ 1.8	+ 1.8
Other business activities <sup>1</sup>	28.36	29.53	30.21	30.78	+ 3.5	+ 4.1	+ 2.3	+ 1.9
Public administration <sup>2</sup>	49.36	50.00	50.65	51.31	+ 1.3	+ 1.3	+ 1.3	+ 1.3
Other service activities <sup>3</sup>	7.74	7.78	7.82	7.86	- 0.1	+ 0.5	+ 0.5	+ 0.5
Total gross value added <sup>4</sup>	291.77	300.18	306.46	312.28	+ 2.6	+ 2.9	+ 2.1	+ 1.9
Gross domestic product at market prices	326.75	335.62	342.33	348.45	+ 2.6	+ 2.7	+ 2.0	+ 1.8

Source: WIFO. 2018 to 2020: forecast. – <sup>1</sup> Professional, scientific and technical activities; administrative and support service activities (NACE M and N). – <sup>2</sup> Including defence, compulsory social security, education, human health and social work activities (NACE O to Q). – <sup>3</sup> Arts, entertainment and recreation; other service activities; activities of households (NACE R to U). – <sup>4</sup> Before deduction of subsidies and attribution of taxes on products.

Table 5: Productivity

	2015	2016	2017	2018	2019	2020
	Percentage changes from previous year					
<i>Total economy</i>						
Real GDP	+ 1.1	+ 2.0	+ 2.6	+ 2.7	+ 2.0	+ 1.8
Hours worked <sup>1</sup>	- 0.4	+ 2.1	+ 1.6	+ 1.8	+ 1.2	+ 1.2
Productivity <sup>2</sup>	+ 1.6	- 0.0	+ 0.9	+ 0.9	+ 0.8	+ 0.6
Employment <sup>3</sup>	+ 0.7	+ 1.4	+ 1.7	+ 1.9	+ 1.2	+ 0.9
<i>Manufacturing</i>						
Production <sup>4</sup>	+ 1.3	+ 3.5	+ 4.8	+ 5.0	+ 3.0	+ 2.4
Hours worked <sup>5</sup>	- 0.1	+ 0.4	+ 1.5	+ 2.1	+ 0.6	+ 0.2
Productivity <sup>2</sup>	+ 1.5	+ 3.1	+ 3.2	+ 2.8	+ 2.4	+ 2.2
Employees <sup>6</sup>	+ 0.5	+ 0.6	+ 1.6	+ 2.1	+ 0.8	+ 0.4

Source: WIFO. 2018 to 2020: forecast. – <sup>1</sup> Total hours worked by persons employed, National Accounts definition. – <sup>2</sup> Production per hour worked. – <sup>3</sup> Employees and self-employed, National Accounts definition (jobs). – <sup>4</sup> Gross value added, volume. – <sup>5</sup> Total hours worked by employees. – <sup>6</sup> National Accounts definition (jobs).

Domestic production continues to receive strong impetus from abroad. Sales of Austrian goods was lively in 2018, both in the industrialised countries and in the Emerging Markets, resulting in rising export market shares. Demand from Germany, Austria's most important foreign market, was lively, despite the problems affecting the motor car industry. Car exports were most buoyant towards Italy and the USA. Deliveries to Poland and China also posted above-average gains. It seems that Austria's companies can comfortably maintain their foreign market position in a rapidly changing global environment. Our forecast thus assumes export market shares to remain constant, despite a slight deterioration of price competitiveness, as measured by the real-effective exchange rate. According to the external assumptions underlying the forecast, foreign market growth will moderate somewhat in 2019.



Table 6: Expenditure on GDP

Volume (chain-linked series)

	2017	2018	2019	2020	2017	2018	2019	2020
	Billion € (reference year 2010)				Percentage changes from previous year			
Final consumption expenditure	231.14	234.50	237.92	241.56	+ 1.4	+ 1.5	+ 1.5	+ 1.5
Households <sup>1</sup>	166.93	169.77	172.66	175.77	+ 1.4	+ 1.7	+ 1.7	+ 1.8
General government	64.22	64.74	65.26	65.78	+ 1.5	+ 0.8	+ 0.8	+ 0.8
Gross capital formation	82.05	84.94	86.85	87.62	+ 5.6	+ 3.5	+ 2.3	+ 0.9
Gross fixed capital formation	77.14	79.86	81.93	83.59	+ 3.9	+ 3.5	+ 2.6	+ 2.0
Machinery and equipment <sup>2</sup>	27.59	28.56	29.42	30.00	+ 4.6	+ 3.5	+ 3.0	+ 2.0
Construction	33.28	34.31	34.99	35.55	+ 3.5	+ 3.1	+ 2.0	+ 1.6
Other investment <sup>3</sup>	16.44	17.18	17.73	18.24	+ 3.7	+ 4.5	+ 3.2	+ 2.9
Domestic demand	315.37	320.91	326.26	330.69	+ 2.7	+ 1.8	+ 1.7	+ 1.4
Exports	187.86	196.68	204.27	212.09	+ 4.7	+ 4.7	+ 3.9	+ 3.8
Travel	13.86	14.21	14.49	14.71	+ 2.9	+ 2.5	+ 2.0	+ 1.5
Minus Imports	176.44	181.71	187.85	193.85	+ 5.1	+ 3.0	+ 3.4	+ 3.2
Travel	7.27	7.67	7.94	8.15	+ 8.6	+ 5.5	+ 3.5	+ 2.7
Gross domestic product	326.75	335.62	342.33	348.45	+ 2.6	+ 2.7	+ 2.0	+ 1.8
Value	369.90	386.12	402.07	417.73	+ 3.8	+ 4.4	+ 4.1	+ 3.9

Source: WIFO. 2018 to 2020: forecast. – <sup>1</sup> Including non-profit institutions serving households. – <sup>2</sup> Including weapon systems. – <sup>3</sup> Mainly intellectual property products (research and development, computer programmes, copyrights).

### 5.3 Solid wage growth strengthens private consumption

The upward drift of wages and salaries will accelerate once again in 2019. Settlements in the wage round of last autumn were somewhat higher than implied in the WIFO economic outlook of October 2018. Net of taxes and adjusted for inflation, wage earners enjoyed real gains both on a per-capita basis and per work hour. In 2019 and 2020, the tax burden will be reduced by the introduction of the new "family bonus" and (in 2019) by the cut in the unemployment insurance contribution rate. Net real wage gains will thus be strongest in 2019. In line with the cyclical easing of business activity, wage settlements are assumed to turn out lower in 2020; in addition, fiscal drag will again eat into net wages. On the whole, the development of private purchasing power remains favourable and will allow solid gains in private consumption over the forecast horizon. The setback in demand for durable goods (which account for some 10 percent of total private consumption) in the third quarter 2018 was mainly due to the slump in car purchases and should be made up during 2019 and 2020.

Table 7: Private consumption, income and prices

	2015	2016	2017	2018	2019	2020
	Percentage changes from previous year, volume					
Private consumption expenditure <sup>1</sup>	+ 0.4	+ 1.4	+ 1.4	+ 1.7	+ 1.7	+ 1.8
Durable goods	+ 1.9	+ 3.0	+ 0.5	- 0.5	+ 1.0	+ 2.5
Non-durable goods and services	+ 0.3	+ 1.2	+ 1.5	+ 1.9	+ 1.8	+ 1.7
Household disposable income	- 0.2	+ 2.5	+ 0.5	+ 2.0	+ 1.7	+ 1.6
	As a percentage of disposable income					
Household saving ratio						
Including adjustment for the change in pension entitlements	6.8	7.8	6.8	7.1	7.2	7.0
Excluding adjustment for the change in pension entitlements	6.1	7.1	6.2	6.5	6.6	6.4
	Percentage changes from previous year					
Loans to domestic non-banks (end of period)	+ 1.8	+ 1.8	+ 0.9	+ 3.0	+ 1.6	+ 2.0
	Percent					
Inflation rate						
National	0.9	0.9	2.1	2.0	2.1	2.0
Harmonised	0.8	1.0	2.2	2.1	2.1	2.0
Core inflation <sup>2</sup>	1.7	1.5	2.2	1.9	2.0	2.1

Source: WIFO. 2018 to 2020: forecast. – <sup>1</sup> Private households including non-profit institutions serving households. – <sup>2</sup> Excluding energy and unprocessed food (meat, fish, fruits, vegetables).

The solid wage increases will exert upward pressure on manufactures prices in 2019 and beyond. The overall wage ratio (i.e. the share of labour in net national income at factor cost) will nevertheless head down over the forecast period. The reason for the divergent trends is the productivity gap between industry and services. Demand is currently lively across all branches and sectors. This leads to strong price increases in most service branches, like in the construction sector, that cannot be accommodated by productivity gains. Hence, overall inflation is almost entirely driven (and compensated in the wage rounds) by rising services prices. In manufacturing industry, the cost pressure is neutralised by above-average productivity advances. However, the latter will abate with the cyclical slowdown, such that rising inflation will also partly feed into manufactures prices.

The wage ratio is set to fall over the forecast horizon.

Table 8: Earnings, international competitiveness

	2015	2016	2017	2018	2019	2020
	Percentage changes from previous year					
<i>Wages and salaries per employee<sup>1</sup></i>						
Nominal, gross	+ 2.0	+ 2.3	+ 1.4	+ 2.4	+ 2.6	+ 2.2
Real <sup>2</sup>						
Gross	+ 1.1	+ 1.4	- 0.7	+ 0.4	+ 0.5	+ 0.2
Net	+ 0.6	+ 4.3	- 0.9	+ 0.1	+ 0.6	± 0.0
<i>Wages and salaries per hour worked<sup>1</sup></i>						
Real, net <sup>2</sup>	+ 2.0	+ 3.6	- 0.8	- 0.0	+ 0.8	+ 0.2
	Percent					
Wage share, adjusted <sup>3</sup>	69.3	68.4	67.9	67.4	67.1	66.5
	Percentage changes from previous year					
<i>Unit labour costs, nominal<sup>4</sup></i>						
Total economy	+ 1.7	+ 1.6	+ 0.6	+ 1.3	+ 2.0	+ 1.8
Manufacturing	+ 0.9	- 0.5	- 1.2	- 0.2	+ 1.0	+ 0.5
<i>Effective exchange rate – manufactured goods<sup>5</sup></i>						
Nominal	- 2.9	+ 1.2	+ 0.7	+ 1.9	- 0.5	+ 0.4
Real	- 2.9	+ 1.3	+ 1.0	+ 1.7	- 0.7	+ 0.3

Source: WIFO. 2018 to 2020: forecast. – <sup>1</sup> National Accounts definition. – <sup>2</sup> Deflated by CPI. – <sup>3</sup> Compensation of employees as a percentage of national income, adjusted for the change in the share of employees in total employment from base year 1995. – <sup>4</sup> Labour costs in relation to productivity (hourly compensation per employee divided by GDP per employed persons' hours worked). – <sup>5</sup> Weighted by exports and imports, real value adjusted by relative HCPI.

#### 5.4 Decline in unemployment losing pace

The labour market situation continued to improve in October and November, confirming the resilience of business activity in the fourth quarter of 2018. Total employment and the number of vacancies kept heading up and unemployment declined. The unemployed per vacancy ratio, which has trended down with the economic upswing since mid-2015, dropped to 4 unemployed persons per vacancy, the lowest figure since the boom of the early 1990s. At that time, however, the unemployment rate had been over 2 percentage points lower than today. Taking into account the current cyclical situation, unemployment is thus still comparatively high. The persistently strong expansion of labour supply due to inflow from abroad and rising labour force participation complicates a successful job search. In addition, demand for low-qualified labour is receding.

Due to these influence factors, the share of long-term unemployed rose markedly in the last few years. The swift decline in overall unemployment in 2018 will decelerate with the downswing of the economic cycle. Competition among jobseekers will further intensify when in mid-2020 the access to the Austrian labour market will be liberalised for workers from Croatia. Eventually the fall of unemployed will come to a halt, at a projected level of just under 300,000 on annual average 2020.

The number of unemployed will fall only just under 300,000 until 2020.

Table 9: Labour market

	2015	2016	2017	2018	2019	2020
	Change from previous year in 1,000					
<i>Demand for labour</i>						
Persons in active employment <sup>1</sup>	+ 42.5	+ 62.3	+ 76.4	+ 93.0	+ 60.0	+ 50.0
Employees <sup>1,2</sup>	+ 33.2	+ 53.7	+ 70.7	+ 88.0	+ 55.0	+ 45.0
National employees	+ 6.3	+ 17.7	+ 23.8	+ 33.0	+ 18.0	+ 13.0
Foreign employees	+ 27.0	+ 36.0	+ 46.8	+ 55.0	+ 37.0	+ 32.0
Self-employed <sup>3</sup>	+ 9.3	+ 8.6	+ 5.7	+ 5.0	+ 5.0	+ 5.0
<i>Labour supply</i>						
Population of working age						
15 to 64 years	+ 52.3	+ 65.8	+ 23.0	+ 16.2	+ 9.4	+ 5.8
Labour force <sup>4</sup>	+ 77.5	+ 65.3	+ 59.0	+ 65.5	+ 48.0	+ 48.0
<i>Labour surplus</i>						
Unemployed <sup>5</sup>	+ 35.0	+ 3.0	- 17.3	- 27.5	- 12.0	- 2.0
Unemployed persons in training	- 10.2	+ 2.1	+ 4.9	- 3.5	- 8.0	± 0.0
	Percent					
<i>Unemployment rate</i>						
As a percentage of total labour force (Eurostat) <sup>6</sup>	5.7	6.0	5.5	4.9	4.6	4.6
As a percentage of total labour force <sup>5</sup>	8.1	8.1	7.6	6.9	6.5	6.4
As a percentage of dependent labour force <sup>5</sup>	9.1	9.1	8.5	7.7	7.3	7.2
	Percentage changes from previous year					
Labour force <sup>4</sup>	+ 1.8	+ 1.5	+ 1.4	+ 1.5	+ 1.1	+ 1.1
Persons in active dependent employment <sup>1,2</sup>	+ 1.0	+ 1.6	+ 2.0	+ 2.5	+ 1.5	+ 1.2
Unemployed <sup>5</sup>	+ 11.0	+ 0.8	- 4.9	- 8.1	- 3.8	- 0.7
Persons (in 1,000)	354.3	357.3	340.0	312.5	300.5	298.5

Source: WIFO. 2018 to 2020: forecast. – <sup>1</sup> Excluding persons in valid employment contract receiving child care benefit or being in military service. – <sup>2</sup> According to the Organisation of Austrian Social Security. – <sup>3</sup> According to WIFO, including liberal professions and unpaid family workers. – <sup>4</sup> Persons in active employment plus unemployed. – <sup>5</sup> According to Public Employment Service Austria. – <sup>6</sup> Labour Force Survey.

## 5.5 General government household from 2019 in surplus

Thanks to buoyant revenues, i.a. from corporation tax and capital gains tax, the general government budget is in balance already in 2018. The cuts in employers' contribution rates for the Family Benefit Fund and the contributions for the unemployment insurance dampened the revenue increase. The introduction of the "family bonus" will lead to a loss in tax revenues of 0.6 billion € in 2019 and 1.1 billion € in 2020. The difference is explained by the fact that the tax reduction in 2019 is applied via firms' payroll administration only, from 2020 also via individual income tax assessments. The forecast also includes the cut in the work accident insurance contribution as from 2019 (100 million €) and the reduction of the VAT rate on hotel overnight stays from 13 percent to 10 percent (120 million €).

Table 10: Fiscal and monetary policy – key figures

	2015	2016	2017	2018	2019	2020
	As a percentage of GDP					
<i>Fiscal policy</i>						
General government financial balance <sup>1</sup>	- 1.0	- 1.6	- 0.8	± 0.0	0.4	0.5
General government primary balance	1.3	0.5	1.0	1.6	1.8	1.8
General government total revenue	50.1	48.7	48.4	48.3	47.9	47.3
General government total expenditure	51.1	50.3	49.2	48.3	47.5	46.9
	Percent					
<i>Monetary policy</i>						
Three-month interest rate	- 0.0	- 0.3	- 0.3	- 0.3	- 0.3	0.2
Long-term interest rate <sup>2</sup>	0.7	0.4	0.6	0.7	1.0	2.0

Source: WIFO. 2018 to 2020: forecast. – <sup>1</sup> According to Maastricht definition. – <sup>2</sup> 10-year central government bonds (benchmark).

In line with overall wage developments, public service salaries posted substantial gains in 2018. Additional staff was hired notably for the public security administration and in the context of Austria's takeover of the EU Council Presidency. Relatively high wage settlements for 2019 will result in a further acceleration of the pace of

employees compensation. Public gross investment increases less in 2018 and 2019 than in 2017, as large-scale projects of Austrian Federal Railways (ÖBB) have been postponed to 2020. The increase in the Research Premium from 12 to 14 percent of corporate research spending will add to subsidy outlays; the latter will on the other hand be dampened by the abolition of the "employment bonus" in 2020. The decline in interest cost that has provided budgetary relief already in the last few years will continue during the forecast period. Spending on social benefits in kind will increase markedly, reinforced by the termination of the recovery of public nursing care cost from patients' family members. Retirement expenditure is also likely to gather pace as stronger age cohorts enter retirement and rising wages and salaries will feed into benefit levels of the new retirees and into the annual adjustment of benefits for the total pension stock.

Budgetary relief is provided by the future indexation of the family allowance for children living abroad, although the compatibility of this move with EU Law needs to be confirmed. The projections do not include any extra cost or potential savings from the organisational merger of social security agencies. A possible increase in Austria's contribution to the EU Budget after "Brexit" would not take effect within the projection horizon.

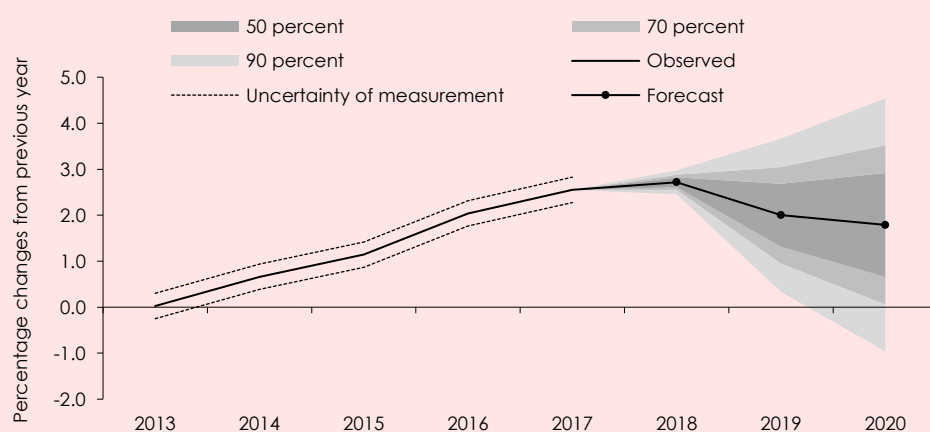
## 6. Risks to the projections

At present, business activity in Austria rests on a solid base. Export industry was successful in many regions in 2018. Demand is increasingly hitting against production capacity limits, such that reversals on certain markets can be offset on others. Such regional trade compensation may have played a role in 2018 when production was delayed in the German motor car industry without domestic suppliers having suffered substantial losses.

The trade dispute between the USA and China should not be a major risk for future developments, not even in the case of further escalation. Austria may indeed have benefited so far from the implicit diversion of trade flows. The trade policy threats of the USA against Europe have subsided, but a revival of the conflict would hit the Austrian economy, the more so as it is running a bilateral trade surplus vis-à-vis the USA.

The imminent withdrawal of the UK from the EU remains a factor of uncertainty, even if all simulations suggest only a moderate effect for the Austrian economy. However, a model simulation cannot capture such an unprecedented event in all its dimensions. Moreover, an unregulated leave of the UK could trigger unforeseeable chain reactions on international financial markets with the accompanying adverse effects on business conditions.

Figure 3: Margins of uncertainty for GDP, CPI and unemployment rate



Source: WIFO. Margins of uncertainty calculated on the basis of ex-post revealed forecast errors.

The strongest negative impact on the domestic economy would probably derive from a crisis in Italy that may be triggered by a bank rush. Italian investors already transfer their savings increasingly abroad in order to protect them from being captured by the government. The latter has lately appeared more conciliatory in its conflict with the European Commission. With a further escalation at present not being in sight, popular distrust should abate.

On the domestic front, a forecast risk surrounds the performance of private investment that in our scenario should slacken only slightly. Yet, the investment cycle is highly volatile, and the strong increase in purchases of machinery and equipment since 2016 may soon turn around to a pronounced decline. The latest business survey conducted by the Austrian Economic Chamber ("WKÖ-Wirtschaftsbarometer") suggests that firms have already trimmed their investment plans; on certain indicators for the manufacturing sector, the outlook has become negative, such as for order levels and capacity utilisation. Should these adverse harbingers be confirmed, the cyclical downswing may prove sharper than presaged in our main scenario.