

# Austria's thriving economy is fueled by lively exports and strong domestic demand

Economic outlook for Austria from 2017 to 2020  
(December 2017)

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## 1 Executive summary

The Austrian economy is on a roll: at 3.1%, real GDP growth is expected to reach levels in 2017 last seen in the two boom years of 2006 and 2007. The good performance of 2017 will be followed by another year of very robust growth in 2018 (+2.8%), before growth is forecast to lessen to 1.9% in 2019 and 1.6% in 2020.

These figures represent upward revisions of 0.9, 1.1 and 0.3 percentage points, respectively, versus the OeNB's June 2017 outlook for 2017, 2018 and 2019. The unemployment rate is forecast to decline continually from 6.0% in 2016 to 5.0% in 2020. The inflation rate is expected to rise from 1.0% in 2016 to 2.2% in 2017, with a slight decrease to 1.9% projected until 2020.

Having gained momentum in 2016, the global economy continued to strengthen in 2017. The advanced economies were instrumental in carrying growth, with all major regions (U.S.A., EU and Japan) reporting better economic performance. Economic conditions improved also in the emerging economies, but were somewhat more heterogeneous. Growth of world trade even outperformed global GDP growth in the year to date, essentially on account of the composition of global growth. Given its high import content, investment activity has been a key driver of the strong growth performance.

Against this backdrop, Austrian goods exports started to rebound toward end-2016 and continued to gain substantial momentum during 2017.

Exports of services, which had not echoed the temporary setback in goods exports, also grew markedly in the first half of 2017. The underlying assumptions about Austria's export markets show that growth in these markets peaked in mid-2017 and is set to level off slightly during the forecast horizon. The forecast of exports broadly mirrors this pattern. Following real growth of 5.6% in 2017, export growth rates are expected to gradually recede to 4.0% in 2020.

Domestic demand has remained strong, proving a key driver of growth. In this respect, investment has been playing a decisive role. The current cycle of investment in plant and equipment has been unusually long and strong. Driven first by replacement investment and then increasingly by investment in capacity expansion, investment in plant and equipment has been growing by more than 8% each in both 2016 and 2017. Residential construction investment accelerated markedly in the first half of 2017, before stagnating in the third quarter. This notwithstanding, real residential construction growth is forecast to reach 2.8% in 2017 as a whole. All in all, the OeNB expects the growth of gross fixed capital formation to decelerate from 5.1% in 2017 to 1.9% in 2020.

Private consumption will be another key driver of growth throughout the forecast horizon. In 2017 real private consumption is projected to augment by 1.5%, despite the weaker growth of real incomes as a result of rising inflation.

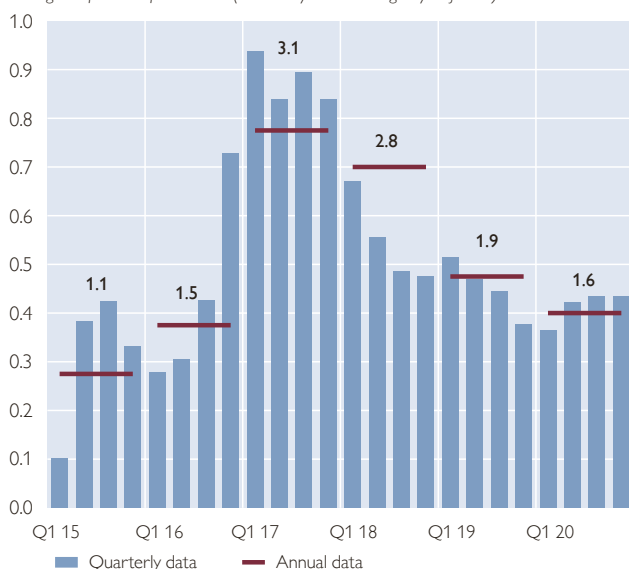
Cutoff date:  
December 7, 2017

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## Main results of the forecast

### Real GDP growth

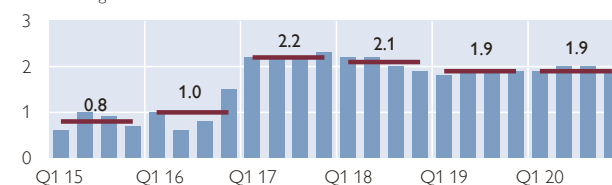
Change on previous period in % (seasonally and working day-adjusted)



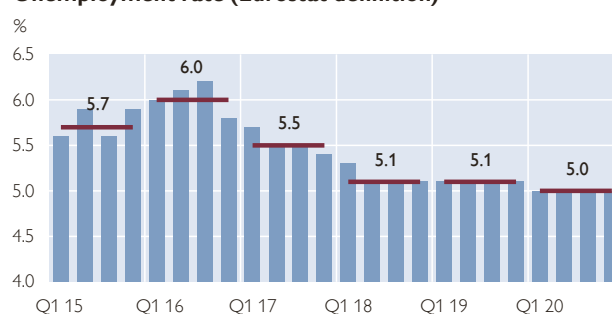
Source: WIFO, Statistics Austria, OeNB December 2017 outlook.

### Harmonised Index of Consumer Prices

Annual change in %



### Unemployment rate (Eurostat definition)



While private consumption has benefited from the 2016 tax reform in 2017, consumption growth will be mostly driven by the solid employment growth and more dynamic wage growth in 2018.

Labor market conditions have been improving markedly as a result of the thriving economy. Not only has the number of the jobs surged, but there has also been a substantial increase in full-time equivalent employment and in the number of hours worked. The boom of the Austrian economy will continue into the next year. Available leading labor market indicators, such as the number of registered vacancies or of leasing workers, do not signal a trend reversal in the months ahead. Growth of total employment is forecast to reach 1.7% in both 2017 and 2018, before leveling off to 1.0% in 2020 as the current business cycle runs its course. The unemployment rate as defined by Eurostat is expected to decline continually from 6.0% in 2016 to 5.0% in 2020.

HICP inflation will rise to 2.2% in 2017 and drop to 1.9% in 2020. The fact that inflation is set to remain comparatively stable over the forecast horizon can be attributed to two offsetting effects. The inflation rate of the HICP energy component will decline substantially, reflecting the expected drop in oil prices. Yet the commodity price-driven decline in inflation will be offset by determinants of domestic inflation, such as domestic demand or labor cost growth.

The general government budget balance is projected to improve in 2017, to  $-0.8\%$  of GDP, following a temporary deterioration in 2016 ( $-1.6\%$  of GDP). This improvement essentially reflects the highly favorable cyclical conditions and declining interest payments. At the same time, the reduction of the deficit will be slowed down by cuts in employer contributions to the family burden equalization fund, effective from January 1, 2017, the lagged effect of the

2016 tax relief measures as well as measures laid down in the government's action plan for 2017. The budget balance is expected to continue to improve substantially in the period from 2018 to 2020 given the favorable framework conditions. At the same time, the contraction of the budget deficit will be dampened, at least temporarily, by increased spending foreseen in the government's action plan for 2017 and a follow-up program adopted in the fall of 2017 (e.g. recruitment incentives to encourage new hiring and the creation of jobs for long-term unemployed, new investment subsidies, a one-off increase of small pensions and the decoupling of long-term jobless benefits from partners' incomes).

Government debt as a share of GDP started to go down again in 2016 and is expected to drop to some 70% of GDP by 2020. The decline reflects strong nominal growth and low interest rates as well as the progressive divestment of impaired assets by the government-run bad banks. This one-off effect explains above all the plunge by more than 5 percentage points in the debt ratio in 2017 in 2017, to 78.3% of GDP. The fact that the structural deficit will improve to no more than  $-0.8\%$  of GDP in 2018 even in times of a substantial decline in interest payments is attributable to the spending measures mentioned above. Since some of those spending measures are set to be phased out in 2019 and 2020, Austria will be back on track to meet the medium-term budgetary objective (a structural balance of  $-0.5\%$  of GDP) in 2019 without having to achieve additional savings.

## 2 Technical assumptions

This forecast for the Austrian economy is the OeNB's contribution to the December 2017 Eurosystem staff macroeconomic projections. The forecast hori-

zon ranges from the fourth quarter of 2017 to the fourth quarter of 2020. The cutoff date for all assumptions on the performance of the global economy, interest rates, exchange rates and crude oil prices was November 28, 2017. To prepare these projections, the OeNB used its macroeconomic quarterly model and national accounts data, adjusted for seasonal and working-day effects (trend-cycle component), provided by the Austrian Institute of Economic Research (WIFO). These data differ from the quarterly series published by Eurostat since the changeover to the European System of Accounts (ESA 2010) in fall 2014 in that the latter are solely seasonally and working-day adjusted and therefore include irregular fluctuations that – in part – cannot be mapped to specific economic fundamentals. The values for 2016 also differ from the non-seasonally-adjusted data published by Statistics Austria. National accounts data were fully available up to the third quarter of 2017. The short-term interest rate used for the forecast horizon is based on market expectations for the three-month EURIBOR:  $-0.3\%$  in 2017 and 2018,  $-0.1\%$  in 2019 and  $+0.1\%$  in 2020. Long-term interest rates, which are in tune with market expectations for government bonds with an agreed maturity of ten years, will rise from  $0.6\%$  in 2017 to  $1.2\%$  in 2020. The exchange rate of the euro vis-à-vis the U.S. dollar is assumed to remain at a constant USD/EUR 1.17 for the period from 2017 to 2020. The projected path of crude oil prices is based on futures prices, as a result of which the price of crude oil will rise from USD 54.3 USD per barrel Brent in 2017 to USD 61.6 in 2018, before receding during the remainder of the forecast horizon. The prices of commodities excluding energy are also based on futures prices over the forecast horizon.

Table 1

**OeNB December 2017 outlook for Austria – main results<sup>1</sup>**

	2016	2017	2018	2019	2020
<b>Economic activity</b>					
<i>Annual change in % (real)</i>					
Gross domestic product (GDP)	+1.5	+3.1	+2.8	+1.9	+1.6
Private consumption	+1.5	+1.5	+1.6	+1.4	+1.2
Government consumption	+2.0	+1.4	+2.0	+1.1	+0.8
Gross fixed capital formation	+3.8	+5.1	+2.9	+2.0	+1.9
Exports of goods and services	+2.4	+5.6	+5.0	+4.2	+4.0
Imports of goods and services	+3.6	+4.6	+4.1	+3.5	+3.6
<i>% of nominal GDP</i>					
Current account balance	2.1	1.9	2.1	2.6	3.1
<b>Contribution to real GDP growth</b>					
<i>Percentage points</i>					
Private consumption	+0.8	+0.8	+0.8	+0.7	+0.6
Government consumption	+0.4	+0.3	+0.4	+0.2	+0.1
Gross fixed capital formation	+0.8	+1.2	+0.7	+0.5	+0.4
Domestic demand (excluding changes in inventories)	+2.0	+2.2	+1.9	+1.4	+1.2
Net exports	-0.5	+0.7	+0.7	+0.5	+0.4
Changes in inventories (including statistical discrepancy)	+0.0	+0.2	+0.2	+0.0	+0.0
<b>Prices</b>					
<i>Annual change in %</i>					
Harmonised Index of Consumer Prices (HICP)	+1.0	+2.2	+2.1	+1.9	+1.9
Private consumption expenditure (PCE) deflator	+1.2	+2.0	+2.1	+1.9	+1.8
GDP deflator	+1.1	+1.5	+1.9	+1.9	+1.8
Unit labor costs (whole economy)	+2.1	+0.1	+1.7	+1.8	+1.5
Compensation per employee (at current prices)	+2.3	+1.5	+2.8	+2.5	+2.2
Compensation per hour worked (at current prices)	+1.7	+1.3	+2.8	+2.6	+2.4
Import prices	-1.1	+2.4	+1.2	+1.7	+1.7
Export prices	-0.6	+2.0	+1.2	+1.8	+1.8
Terms of trade	+0.5	-0.4	+0.0	+0.1	+0.1
<b>Annual change in %</b>					
Real disposable household income	+2.7	+0.6	+1.6	+1.5	+1.2
<i>% of nominal disposable household income</i>					
Saving ratio	7.9	7.2	7.2	7.2	7.1
<b>Labor market</b>					
<i>Annual change in %</i>					
Payroll employment	+1.4	+1.8	+1.9	+1.3	+1.1
Hours worked (payroll employment)	+2.1	+2.0	+1.8	+1.2	+0.9
<i>% of labor supply</i>					
Unemployment rate (Eurostat definition)	6.0	5.5	5.1	5.1	5.0
<b>Public finances</b>					
<i>% of nominal GDP</i>					
Budget balance	-1.6	-0.8	-0.5	-0.1	+0.2
Government debt	83.6	78.3	74.9	72.1	69.3

Source: 2016: WIFO, Eurostat, Statistics Austria; 2017 to 2020: OeNB December 2017 outlook.

<sup>1</sup> The outlook was drawn up on the basis of seasonally and working day-adjusted national accounts data (trend-cycle component: flash estimate for Q1 17). The data differ, in the method of seasonal adjustment, from the quarterly data published by Eurostat following the switch to the ESA 2010 framework in fall 2014 (the data published by Eurostat are much more volatile and do not facilitate detailed economic interpretation). The values for 2016 deviate also from the data released by Statistics Austria, which have not been seasonally adjusted.

### 3 Strengthening global growth

Having gained momentum in 2016, the global economy continued to strengthen in 2017. The advanced economies were instrumental in boosting growth, with

all major regions (the U.S.A., EU and Japan) reporting improved economic performance. Economic conditions improved also in the emerging economies, but were subject to a higher degree of

heterogeneity. Given that some risks had not materialized, these positive developments were driven by rising confidence. To begin with, fears of a sharp growth setback in China remained unfounded. The protectionist measures announced by the U.S. administration have not been adopted so far. In Europe, the economic impact of the *Brexit* vote in the U.K. has remained limited to weakened U.K. growth so far. Growth of world trade even outperformed global GDP growth in the year to date, essentially on account of the composition of global growth. Global output growth has been largely driven by investment demand, which relies heavily on imports. Monetary policy has remained highly accommodative in most regions of the world, thus supporting growth. Commodity-exporting countries finally, like Russia and Brazil, have been benefiting from a rise in commodity prices.

The economy of the *United States* regained strength in 2017. Buttressed by strong employment growth, households in particular were spending more confidently, as did businesses, which were investing more than they did in 2016. The swift adoption of protectionist measures proposed during the election campaign has yet to materialize.<sup>2</sup> In the medium run, U.S. growth is set to decline on account of ongoing demographic change and poor productivity growth.

The *Chinese economy* has been expanding at a robust pace and continues to become more consumption oriented. China's fiscal stance has been highly expansionary in recent years, thus supporting growth. In 2017, the budget deficit was not increased any further, and monetary policy rates were raised gradually. These measures stabilized the exchange rate of the Chinese renminbi

and contributed to mitigating the outflow of foreign exchange. The risks affecting the Chinese economy have abated somewhat more recently, but they remain elevated given the private sector's high and increasing level of indebtedness and the sharp increase in real estate prices. Growth rates are expected to continue to decrease gradually over the forecast horizon.

The *Japanese economy* continued its recovery. Private consumption has been expanding at a brisk pace due to the firming labor market. Investment activity has been on the increase both in the corporate and in the public sector. Growth rates are, however, set to slow down in the years to come in view of the gradual removal of fiscal stimulus and the reduction of the working-age population. In 2019, growth will be dented further by planned fiscal consolidation measures.

The *United Kingdom* experienced a marked growth setback in 2017 as a more lagged effect of the *Brexit* vote, which had initially left cyclical conditions broadly unchanged. Following the depreciation of the pound sterling, consumer prices went up noticeably, with real disposable household incomes and private consumption declining as a result. Exporters benefited from the weaker pound sterling and the strong international economy, which is why the growth downturn has remained moderate so far. Further developments over the forecast horizon very much depend on the turn the U.K.'s negotiations to leave the EU will take and are thus subject to a high degree of uncertainty.

Growth in *Central, Eastern and Southeastern European (CESEE) countries* accelerated visibly in the course of 2017. Apart from strengthening demand

<sup>2</sup> The tax reform adopted by the Senate on December 2, 2017, might bring tax cuts in the amount of USD 1.5 trillion. The tax plan is, however, subject to controversy in light of anticipated distribution effects. The Senate vote came after the cutoff date for the forecast (November 28), which is why it did not enter the forecast exercise.

Table 2

**Underlying global economic conditions**

	2016	2017	2018	2019	2020
<b>Gross domestic product</b>					
<i>Annual change in % (real)</i>					
World excluding the euro area	+3.2	+3.7	+3.9	+3.8	+3.7
U.S.A.	+1.5	+2.3	+2.5	+2.2	+1.9
Japan	+1.0	+1.5	+1.0	+0.7	+0.1
Asia excluding Japan	+6.2	+6.1	+6.1	+6.0	+5.9
Latin America	-0.9	+1.4	+2.2	+2.7	+2.8
United Kingdom	+1.8	+1.5	+1.5	+1.5	+1.5
CESEE EU Member States <sup>1</sup>	+3.1	+4.7	+3.5	+3.2	+3.2
Switzerland	+1.4	+0.8	+1.8	+1.8	+2.1
Euro area <sup>2</sup>	1.8	2.4	2.3	1.9	1.7
<b>World trade (imports of goods and services)</b>					
World	+2.0	+5.5	+4.5	+4.2	+3.8
World excluding the euro area	+1.2	+5.6	+4.5	+4.2	+3.7
Growth of euro area export markets (real)	+1.9	+5.5	+4.4	+3.8	+3.5
Growth of Austrian export markets (real)	+3.3	+5.6	+5.0	+4.4	+4.0
<b>Prices</b>					
Oil price in USD/barrel (Brent)	44.0	54.3	61.6	58.9	57.3
Three-month interest rate in %	-0.3	-0.3	-0.3	-0.1	0.1
Long-term interest rate in %	0.4	0.6	0.7	0.9	1.2
USD/EUR exchange rate	1.11	1.13	1.17	1.17	1.17
Nominal effective exchange rate of the euro (euro area index)	109.7	112.1	115.3	115.3	115.3

Source: Eurosystem.

<sup>1</sup> Bulgaria, Croatia, Czech Republic, Hungary, Poland and Romania.<sup>2</sup> 2016: Eurostat; 2017 to 2020: results of the Eurosystem's June 2017 projections.

for CESEE exports from the euro area, domestic demand has been fueled by strong employment figures and the increased uptake of EU structural funds, which had dropped in 2016. However, the current growth cycle is likely to peak in 2017. The outlook for the years ahead is characterized by a slight growth slowdown.

Growth in the *euro area* has been gaining momentum and become broad based. Performance in the year to date has been much better than anticipated even several months ago. Even the Greek economy, which had continued to shrink somewhat in 2016, reverted to positive growth this year. A number of factors are at the root of these positive developments. The ongoing recovery of the world economy has been instrumental, and monetary and fiscal policies have continued to support growth.

The structural reforms implemented by numerous countries as they emerged from the crisis are beginning to show results. Elections held in major EU Member States in 2017 were carried by pro-European parties, which caused political risks to become less pressing. Against this backdrop, private consumption has been the key growth driver, strongly supported by business investment and exports, though. In view of strong GDP growth and employment, wage developments have been subdued in most countries. This may be attributable to modest productivity growth, low inflation, changes in employment patterns as well as high – if decreasing – unemployment levels in a number of EU Member States. Unemployment is set to drop considerably over the forecast horizon, though, thus adding to wage pressures. A number of countries,

including Germany, the Netherlands, Belgium and Austria, have already started to show signs of labor shortages.

#### 4 The Austrian economy has entered a boom period

##### 4.1 Austrian exporters benefit from euro area recovery

Reflecting moderate global trade activity, Austrian export growth had remained weak in 2016. Goods exports suffered in particular, growing by just 1% in nominal terms. While exports to the euro area were relatively robust still, exports to non-euro area countries even contracted, largely because exports to the U.S.A., Russia and Asian countries decreased. In contrast, at +4.0%, growth of nominal services exports, as measured by balance of payments statistics, in 2016 even outperformed the increase recorded in 2015 (3.0%). This expansion was above all driven by buoyant growth of tourism exports.

Goods exports from Austria regained strength toward the end of 2016 and became considerably stronger in the

course of 2017. A regional breakdown of goods exports made in the first eight months of 2017 shows that the expansion has been broadly based across regions. The biggest increases in exports were reported for France (39%) – driven by large shipments of pharmaceutical goods in January – and for Russia (24%). In the first half of 2017 services exports increased by 4.7%, with other business-related services expanding by as much as 10.1%. Export statistics were led by Germany.

The underlying assumptions about Austria's export markets show that the growth in these markets peaked in mid-2017 and is set to level off slightly during the forecast horizon. Export growth broadly mirrors this pattern. Following real growth of 5.6% in 2017, export growth rates are expected to gradually recede to 4.0% in 2020. Losses of market share are set to remain limited for Austrian exporters over the forecast horizon, and their price competitiveness will suffer only marginally despite the recent appreciation of the

Table 3

#### Growth and price developments in Austria's foreign trade

	2016	2017	2018	2019	2020
<i>Annual change in %</i>					
<b>Exports</b>					
Competitor prices on Austria's export markets	-2.9	+2.2	+0.3	+1.9	+2.0
Export deflator	-0.6	+2.0	+1.2	+1.8	+1.8
Changes in price competitiveness	-2.3	+0.2	-0.9	+0.1	+0.2
Import demand on Austria's export markets (real)	+3.3	+5.6	+5.0	+4.4	+4.0
Austrian exports of goods and services (real)	+2.4	+5.6	+5.0	+4.2	+4.0
Austrian market share	-1.0	-0.1	+0.0	-0.3	+0.0
<b>Imports</b>					
International competitor prices on the Austrian market	-2.2	+1.6	+0.3	+1.7	+1.9
Import deflator	-1.1	+2.4	+1.2	+1.7	+1.7
Austrian imports of goods and services (real)	+3.6	+4.6	+4.1	+3.5	+3.6
<b>Terms of Trade</b>	+0.5	-0.4	+0.0	+0.1	+0.1
<i>Percentage points of real GDP</i>					
<b>Contribution of net exports to GDP growth</b>	-0.5	+0.7	+0.7	+0.5	+0.4
<i>% of nominal GDP</i>					
Export share	52.5	54.0	54.9	56.0	57.3
Import share	49.1	50.2	50.5	51.2	52.2

Source: 2016: WIFO, Eurosystem; 2017 to 2020: OeNB December 2017 outlook.

euro against the U.S. dollar. Projected to reach 4.6% in 2017 and 3.6% in 2020, import growth is trailing export growth somewhat. Hence, net exports will remain a key pillar of economic activity over the entire forecast horizon.

At 2.1% of GDP, Austria's current account balance in 2016 had improved slightly, by 0.2 percentage points against the previous year. With the trade balance worsening from 3.6% to 3.2%, the improvement was driven by the balance of primary income, which in turn basically reflected a marked improvement of direct investment income. Another contributing factor was the Eurosystem's expanded asset purchase program (APP), under which the OeNB has been buying above all Austrian government bonds from foreign investors on secondary markets. As a result of those purchases, inward portfolio investment and hence income outflows decreased. The slight deterioration of the current account in 2017, to 1.9% of GDP, is attributable to a deterioration of the services balance<sup>3</sup> in the first half of the year, and to increased commodity prices in the second half. In line with the positive growth contribution of net exports, the current account surplus is expected to keep rising over the entire forecast horizon, from 1.9% in 2017 to 3.1% in 2020.

#### 4.2 Current cycle of investment in plant and equipment: exceptionally long and strong

Up to mid-2015, the post-crisis years were characterized not only by weak economic growth but also by corporate investment restraint. Uncertainty about future economic developments prompted businesses to postpone necessary replacement investment and to hold back investment projects. This led to an investment backlog. A new investment cycle did not start until the latter half of 2015 amid an improved outlook for growth. Initially, the new investment cycle was dominated by replacement investment. According to surveys by the European Commission for 2016, 46% of businesses – 9 percentage points more than two years earlier – indicated that their investment decisions were motivated by the need to replace existing capital stock. In 2016 investment in plant and equipment accelerated sharply, by more than 8%. As the economic recovery was gaining ground in 2017, investment in capacity expansion became increasingly important. As many as 22% of the businesses surveyed – 6 percentage points more than in the year earlier – saw the need to increase their production capacity. Investment in plant and equipment is thus expected to have grown by more than 8% in 2017.

Table 4

#### Austria's current account

	2016	2017	2018	2019	2020
	% of nominal GDP				
<b>Balance of trade</b>	3.2	3.1	3.3	3.9	4.4
Balance of goods	0.1	0.2	0.4	0.6	0.8
Balance of services	3.1	2.9	2.9	3.3	3.6
<b>Balance of primary income</b>	-0.1	-0.2	-0.2	-0.2	-0.2
<b>Balance of secondary income</b>	-1.0	-1.0	-1.0	-1.0	-1.1
<b>Current account balance</b>	2.1	1.9	2.1	2.6	3.1

Source: 2016: OeNB; 2017 to 2020: OeNB December 2017 outlook.

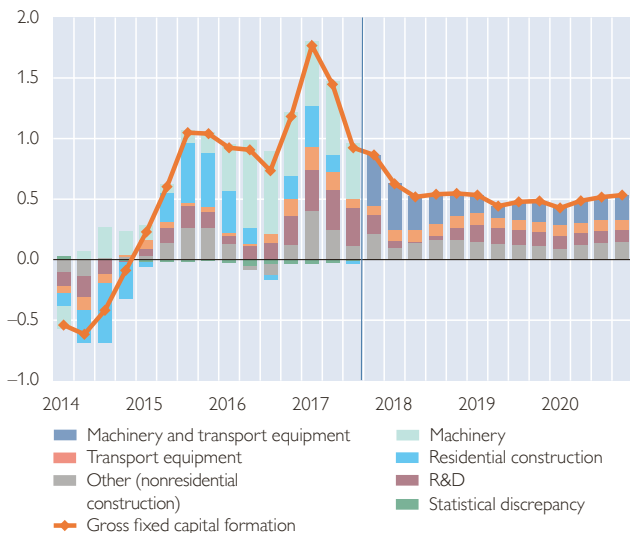
<sup>3</sup> Vigorous domestic demand fueled strong growth of imports of other business-related services (17.7%).



## Gross fixed capital formation

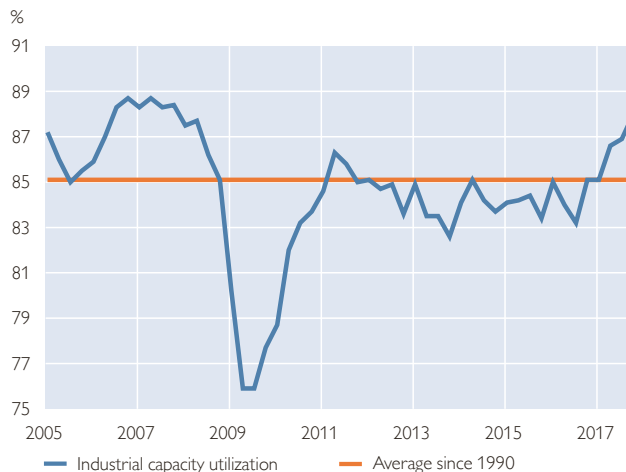
### Quarterly investment growth

Quarterly change in %, contributions to growth in percentage points



Source: Eurostat, OeNB.

### Industrial capacity utilization



Source: European Commission.

Hence, the current investment cycle is already longer than average, and it has also been stronger than previous cycles. The cumulative three-year increase of investment in plant and equipment from 2015 to 2017 will be more than 20% in real terms. This compares with growth rates ranging from 10% to 15% for the past three investment cycles.

While the latest data for the third quarter of 2017 signal slightly weakening investment growth, the investment cycle is expected to level off only gradually, given the already very high degree of capacity utilization (88% in the fourth quarter of 2017, which is the highest measure since the boom period of 2006–2007). The outlook for the first half of 2018 is continued buoyant investment growth, if somewhat weaker than in 2016 and 2017. Looking ahead, the cyclical conditions, the historically favorable conditions for external financing and businesses' high self-financing capacity are set to remain the key pillars of corporate investment activity. For

investment in plant and equipment, a gradual return to long-term average growth rates will not happen before late 2018. Thus, this type of investment is forecast to increase by no less than 4.2% in 2018, and then drop to close to 2% in the following two years. The new investment subsidy adopted by the government for small and medium-sized businesses as well as its variant for large businesses are unlikely to generate substantial additional investment during the current boom.

Residential construction investment accelerated markedly in the first half of 2017, before virtually drying up in the third quarter. This notwithstanding, real residential construction growth is forecast to reach 2.8% in 2017 as a whole. Growth rates of more than 2% were seen only twice in the past 20 years, namely in 2007 and 2011. Even so, the favorable framework conditions – sharp increases in real estate prices, strong population growth and historically low interest rates – would

Table 5

**Investment activity in Austria**

	2016	2017	2018	2019	2020
<i>Annual change in %</i>					
<b>Total gross fixed capital formation (real)</b>	+3.8	+5.1	+2.9	+2.0	+1.9
<i>of which: investment in plant and equipment</i>	+8.3	+8.3	+4.2	+1.8	+1.8
<i>residential construction investment</i>	+0.9	+2.8	+2.1	+2.1	+2.0
<i>nonresidential construction investment and other investment</i>	+1.6	+2.8	+2.3	+2.2	+1.8
<i>investment in research and development</i>	+2.5	+5.3	+2.3	+2.1	+2.1
<i>public sector investment</i>	+2.9	+2.4	+2.0	+2.0	+2.1
<i>private sector investment</i>	+3.9	+5.5	+3.1	+2.1	+1.9
<i>Contribution to the growth of real gross fixed capital formation in percentage points</i>					
Investment in plant and equipment	+2.8	+2.9	+1.5	+0.7	+0.6
Residential construction investment	+0.2	+0.5	+0.4	+0.4	+0.4
Nonresidential construction investment and other investment	+0.4	+0.8	+0.6	+0.6	+0.5
Investment in research and development	+0.5	+1.1	+0.5	+0.4	+0.4
Public sector investment	+0.4	+0.3	+0.3	+0.3	+0.3
Private sector investment	+3.4	+4.8	+2.7	+1.8	+1.6
<i>Contribution to real GDP growth in percentage points</i>					
Total gross fixed capital formation	+0.8	+1.2	+0.7	+0.5	+0.4
Changes in inventories	+0.1	+0.0	+0.2	+0.0	+0.0
<i>% of nominal GDP</i>					
<b>Investment ratio</b>	23.1	23.6	23.6	23.5	23.5

Source: 2016: WIFO; 2017 to 2020: OeNB December 2017 outlook.

have called for even stronger growth rates. The outlook for the years ahead is somewhat more than 2% on average. The growth pattern is expected to be similar for nonresidential construction investment. R&D investment, which also includes software purchases, is expected to expand along the lines of investment in plant and equipment. All in all, the OeNB expects the growth of gross fixed capital formation to decelerate from 5.1% in 2017 to 1.9% in 2020.

### 4.3 Private consumption to remain a major growth pillar over the forecast horizon

Having accelerated visibly in the latter half of 2016, the current economic recovery reached its erstwhile peak, at a growth rate of 0.9% against the previous quarter, in the first three months of 2017.

As employment and wages and hence household incomes tend to react with a lag to the ups and downs of the business cycle, private consumption typically peaks at later stages in the cycle. Yet one-off effects such as the tax reform effective from January 2016 and spending on asylum seekers caused growth of private consumption to peak already in mid-2016 and thus early in the current cycle. Following 0.5% growth in the second quarter of 2016, growth rates leveled off slightly in the following quarters. In the first three quarters of 2017, private consumption growth averaged 0.3% (quarter on quarter).

Weak productivity growth and low inflation in 2016 led to moderate wage settlements for 2017. The stronger-than-expected spike in inflation in 2017 entailed real income losses, causing gross

compensation of employees to grow by only slightly more than 1% despite dynamic employment growth. At the same time the data on property income that have become available for 2017 reflect a surprisingly weak performance, as a result of which real disposable household incomes are projected to grow by just 0.7%. Given this subdued income rise, at 1.5% in real terms, the pace of consumption growth projected for 2017 is in fact fairly high. The difference can be attributed to changes in the saving ratio, which will drop by 0.7 percentage points, to 7.2%, in 2017. Apart from weak real income growth, the contraction of the saving ratio can be pinpointed to two other effects. On the one hand, the lagged effects of the 2016 income tax reform have filtered down: additional income accruing to households is spent only with a time lag. Hence, an initial increase of the saving ratio is then followed by a decrease. On the other hand, the precautionary motive of saving has become less relevant, as

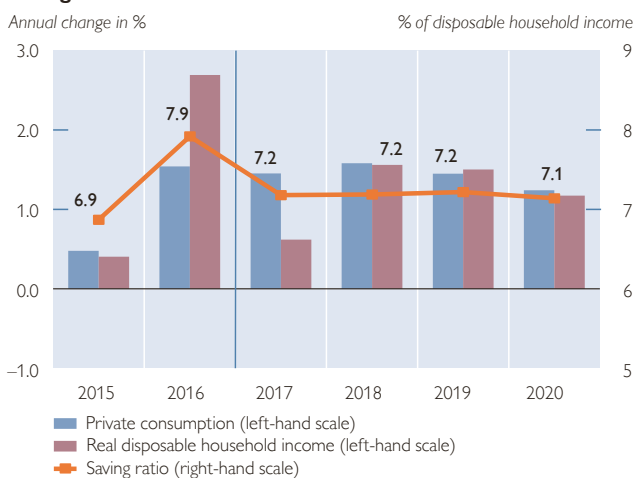
the good employment conditions add to consumer confidence.

The current strength of the economy – following the first peak of consumption growth in mid-2016 – will lead to a second peak in early 2018. The wage settlements that have been concluded so far would imply a marked acceleration of wage growth in early 2018. At the same time the leading indicators point to continued strong employment growth. In addition, other components of income, such as the mixed income of the self-employed and investment income, are going to grow more strongly on account of the business cycle. Real consumption growth is projected to accelerate again in early 2018, to 0.4% quarter on quarter, before gradually dropping to slightly below 0.3% during the remainder of the forecast horizon. On balance, real consumption stands to increase by 1.6% in 2018, followed by somewhat weaker growth rates of 1.4% in 2019 and 1.2% in 2020. The saving ratio is forecast to remain stable, following

Chart 3

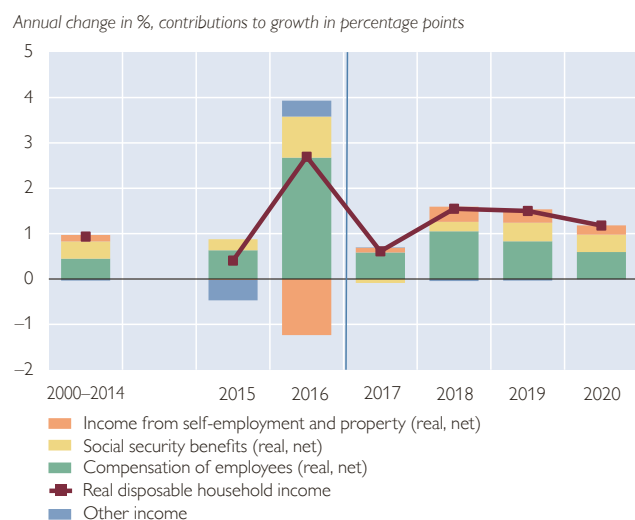
## Private consumption

### Disposable household income, private consumption and saving ratio



Source: WIFO, Statistics Austria, OeNB.

### Contributions to growth of real disposable net household income



Source: WIFO, Statistics Austria, OeNB.

Table 6

### Determinants of nominal household income and private consumption growth in Austria

	2016	2017	2018	2019	2020
<i>Annual change in %</i>					
Payroll employment	+1.4	+1.8	+1.9	+1.3	+1.1
Wages and salaries per employee	+2.3	+1.5	+2.8	+2.5	+2.2
Compensation of employees	+3.8	+3.4	+4.7	+3.9	+3.2
Property income	-16.7	+1.3	+4.1	+3.9	+3.2
Self-employment income and operating surpluses (net)	+5.9	+5.1	+4.3	+3.4	+3.1
<i>Contribution to households' disposable income growth in percentage points</i>					
Compensation of employees	+3.2	+2.8	+4.0	+3.3	+2.8
Property income	-2.2	+0.1	+0.4	+0.4	+0.3
Self-employment income and operating surpluses (net)	+1.0	+0.8	+0.7	+0.6	+0.5
Net transfers less direct taxes <sup>1</sup>	+2.0	-1.2	-1.4	-0.9	-0.7
<i>Annual change in %</i>					
Disposable household income (nominal)	+3.9	+2.6	+3.7	+3.4	+3.0
Consumption deflator	+1.2	+2.0	+2.1	+1.9	+1.8
Disposable household income (real)	+2.7	+0.6	+1.6	+1.5	+1.2
Private consumption (real)	+1.5	+1.5	+1.6	+1.4	+1.2
<i>% of disposable income growth</i>					
Saving ratio	7.9	7.2	7.2	7.2	7.1
<i>% of nominal GDP</i>					
Consumption ratio	52.7	52.1	51.6	51.4	51.1

Source: 2016: WIFO, Statistics Austria; 2017 to 2020: OeNB December 2017 outlook.

<sup>1</sup> Negative values indicate an increase in (negative) net transfers less direct taxes; positive values indicate a decrease.

the contraction in 2017, and hover slightly above 7.0% in the period from 2018 to 2020. Private consumption thus remains a major pillar of growth throughout the forecast horizon.

### 5 Unemployment rate to drop to as low as 5%

The period from 2012 to 2015 saw a solid rise in employment despite weak cyclical growth. As measured by the national accounts, the annual growth rate of payroll employment averaged 1.0%<sup>4</sup> in this period, thus even surpassing the 0.7% GDP growth rate. However, employment growth came mainly on the back of new part-time jobs in the services industry, where wages are

typically lower. The number of hours worked stagnated.

This pattern has now changed with the current economic recovery. Since 2016, the number of new full-time jobs has been on a par with the number of new part-time jobs. Buoyant growth in the manufacturing industry caused the number of jobs to rise in this high-productivity sector, and the number of hours worked in payroll employment grew at a faster rate on balance than the number of jobs – as has typically been the case during boom periods of the Austrian economy. And these developments are ongoing. Following a 1.5% increase in 2016, in payroll employment is projected to rise by 1.8% in 2017.

<sup>4</sup> In terms of employment growth, the national accounts refer to the number of jobs rather than the number of employed individuals.

Table 7

**Labor market development in Austria**

	2016	2017	2018	2019	2020
	<i>Annual change in %</i>				
<b>Total employment (heads)</b>	+1.2	+1.7	+1.7	+1.3	+1.0
Payroll employment	+1.4	+1.8	+1.9	+1.3	+1.1
of which: public sector employment	+0.9	+0.6	+2.4	-0.5	-1.2
Self-employment	-0.2	+0.9	+0.7	+0.7	+0.6
<b>Total hours worked</b>	+1.9	+1.8	+1.6	+1.1	+0.8
of which: payroll employment	+2.1	+2.0	+1.8	+1.2	+0.9
self-employment	+0.8	+0.6	+0.7	+0.5	+0.4
Labor supply	+1.5	+1.2	+1.3	+1.2	+1.0
Registered unemployment	+7.2	-7.7	-5.6	-0.4	+0.4
	<i>% of labor supply</i>				
<b>Unemployment rate (Eurostat definition)</b>	6.0	5.5	5.1	5.1	5.0

Source: 2016: WIFO, Statistics Austria; 2017 to 2020: OeNB December 2017 outlook.

Having grown by 2.1% in 2016, the total number of annual hours worked is forecast to increase by 2% in 2017, thus again outpacing employment growth.

The boom of the Austrian economy will continue into the year 2018. The available labor market leading indicators, such as the number of registered vacancies or of leasing workers, do not signal a trend reversal in the months ahead. The favorable development is thus likely to continue. In 2018, employment growth will be boosted further by recruitment incentives aimed at helping long-term unemployed persons back to work. These incentives are expected to create some extra 15,000 jobs. Growth in payroll employment is thus forecast to inch up to 1.9% despite the gradual slowdown of the economic recovery. The number of hours worked is projected to grow at a slightly slower pace of 1.8%.

In 2019 and 2020 the growth rates of the Austrian economy are expected

to decelerate, thus gradually reverting to the long-term trend. Employment growth is thus set to decline, also in view of the phasing out of the employment initiative for the long-term jobless.

The unemployment rate (Eurostat definition) was rising until 2016, climbing to 6.0%, despite the high employment growth rate, because labor supply was expanding unusually fast. The boom year of 2017 will bring a trend reversal, with the unemployment rate dropping to 5.5% (annual average). Employment growth is set to remain strong in the following years, and the unemployment rate is forecast to drop to 5.0% in 2020. The stronger improvement of the job market will coincide with undented strong growth of the labor supply. On average, some 55,000 individuals will newly enter the Austrian job market per year in the period from 2018 to 2020.<sup>5</sup> Labor supply growth will be fueled by migration, the rising labor force participation rate of

<sup>5</sup> The change in labor supply may be broken down into a population effect (change in population with unchanged participation rates) and a participation effect (change in participation rates with unchanged population figures). The population effect, in turn, may be decomposed into a change in population excluding immigration (based on population statistics underlying the Statistics Austria forecast excluding migrations) and a change in population including immigration (Statistics Austria – baseline forecast minus forecast excluding migration effects). As to immigration, a distinction may be made between “traditional” immigration and immigration motivated by a search for refuge.

older workers and the procyclical response of the labor market supply (idle labor capacity). Net migration is forecast to stabilize at about 30,000 individuals per year in the period from 2018 to 2020. In addition, the labor supply stands to rise by another 15,000 older workers per year, reflecting the gradual increase of the retirement age adopted in the

context of previous pension reforms. At the same time, in 2018, demographic change (change in population excluding immigration) is set to turn negative for the first time, thus pushing down labor supply by close to 20,000 individual in 2020. In sum, labor supply growth is set to go down from more than 60,000 in 2018 to slightly over 45,000 in 2020.

Box 1

### Has the economic boom led to labor shortages?<sup>1</sup>

Any economy will be short of workers in a particular trade or industry from time to time. Even in times of weak economic growth some job vacancies may remain unfilled despite large numbers of jobless individuals, either because the latter lack the required skills or because they are not able or willing to take on advertised jobs on account of the geographical distance. When the economy is thriving, such problems are more widespread, as the number of job seekers per position declines.

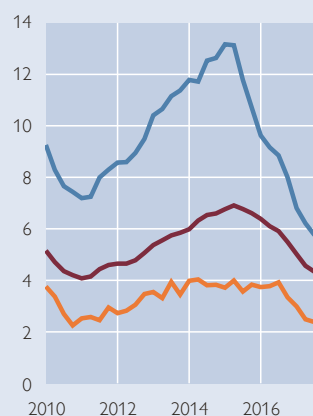
In recent quarters, the number of job seekers per position has contracted sharply, to roughly the levels observed in early 2011 (see the left panel of chart 4). This pattern is more pronounced when we look at the data provided by the Austrian Public Employment Service (AMS) – in particular the data on immediate vacancies<sup>2</sup> – than when we analyze the number

Chart 4

### Job seekers per position, vacancies in shortage occupations and Beveridge curves

#### (1) Job seekers per position

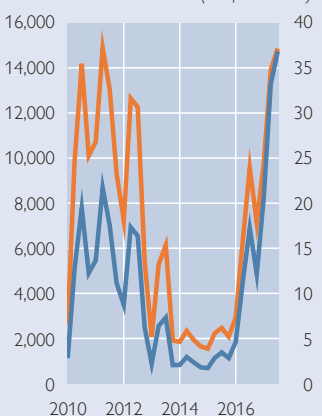
Jobless per vacancy



— Immediate vacancies only (AMS)  
— All vacancies (AMS)  
— Labor force/vacancy survey

#### (2) Vacancies in shortage occupations

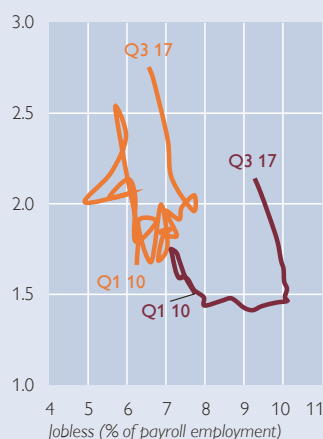
absolute Absolute figures (% of vacancies)



— Vacancies in shortage occupations  
— Vacancies in shortage occupations in % of all vacancies (right-hand scale)

#### (3) Beveridge curves

Vacancies (% of payroll employment)



— All vacancies (AMS)  
— Labor force/vacancy survey

Source: Statistics Austria, Public Employment Service Austria (AMS), OeNB. Panels (1) and (3): seasonally adjusted data. Panel (2) is based on data for immediate job openings for which job seekers must have completed an apprenticeship or attained a higher training level.

<sup>1</sup> Author: Alfred Stiglbauer, Oesterreichische Nationalbank, Economic Analysis Division, [alfred.stiglbauer@oenb.at](mailto:alfred.stiglbauer@oenb.at).

<sup>2</sup> Note a bias in the data, given the fact that, in 2015, the AMS changed its conceptual framework to differentiate between immediate vacancies and jobs that will become available at a later stage. This change led to a shift toward the first category. For this reason, the number of immediate vacancies grew particularly strongly in the past few quarters, which in turn caused the number of job seekers per position to drop particularly sharply.

of job seekers per position based on the labor force survey (LFS) and the vacancy survey conducted by Statistics Austria. The number of vacancies evidenced by the vacancy survey is higher than the vacancies registered by the AMS, whereas the number of jobless individuals evidenced by the labor force survey is lower than the number registered by the AMS.<sup>3</sup>

The AMS regularly publishes a shortage occupation list based on the number of job seekers per position for individual trades and professions. A shortage occupation is defined as an occupation for which the number of job seekers per job is less than or equal to 1.5. In its latest shortage occupation list, published in fall 2017, the AMS reported a marked increase in the number of shortage occupations.<sup>4</sup> The middle panel of chart 4 summarizes the analysis of AMS data on job seekers per position for 518 occupations. An occupation will qualify for the shortage occupation list if the number of job seekers per position is less than or equal to 1.5 and if at least 100 unemployed jobseekers have been registered for a particular trade or profession. Moreover, the list reflects only immediate vacancies and jobless workers who have completed at least an apprenticeship. The analysis shows that the number of vacancies in shortage occupations has been on a sharp rise since 2016, following very low figures between 2013 and 2015 (with the increase probably being too pronounced due to the bias inherent in the AMS data). According to the above criteria<sup>5</sup> the most sought-after shortage occupations in quantitative terms are trades such as electrical engineers, plumbers, locksmiths, motor mechanics, turning machine operators and skilled woodworkers as well as jobs in the tourism industry.

The sharp increase in vacancies in shortage occupations is a result of the booming economy, but it may also reflect a decline in matching efficiency (the rate at which vacancies may be filled with jobless per period). Changes in matching success can be studied with the Beveridge curve, which plots unemployment on the horizontal axis and the vacancy rate on the vertical axis. The Beveridge curve is downward sloped as a rule. Tracking the business cycle, the chart plots movement from the lower right-hand corner (low GDP growth with few job openings and many jobless) to the upper left-hand corner (business cycle peak with a lot of job openings and few jobless). As the matching efficiency changes, the Beveridge curve may also shift as a whole. The right-hand panel of chart 4 shows two Beveridge curves, based on the different data sources mentioned above. A shift of the curve toward the right, as observed in the period from 2013 to 2015, implies a decline in matching efficiency. A right-hand shift is evident when we use AMS or labor force/vacancy survey data (with the shift being less pronounced for the latter). Since early 2016 there has been movement on a new Beveridge curve, placed further to the right, toward the upper left, reflecting the pattern that is typically observed during a business cycle. At the same time, filling vacancies has become more difficult, given the solid current cyclical situation and lower matching success. Today's very high rate of employment growth shows that potential labor shortages have not yet started to clearly limit economic growth. However, labor shortages might have a dampening effect on economic growth, should they increase in the years ahead. Wage development and inflation could receive a boost.

<sup>3</sup> The labor force survey does not classify as unemployed seasonal workers with a job offer as unemployed, whereas the AMS does. The vacancy survey lists job openings before they may have been registered with the AMS. Moreover, the vacancy survey is better at capturing job openings for workers with higher levels of educational attainment, whereas the AMS underreports such openings (Edelhofer, E. and K. Knittler. 2013. Offene-Stellen-Erhebung 2009 bis 2012. In: Statistische Nachrichten 11. 1033–1040).

<sup>4</sup> The definition of shortage occupations has been laid down in article 13 paragraph 1 of the Austrian foreign labor act (Ausländerbeschäftigungsgesetz). Based on the list of shortage occupations the minister for social affairs will issue skilled labor regulations on an annual basis, spelling out all occupations to which non-EU citizens holding an Austrian greencard may gain easier access.

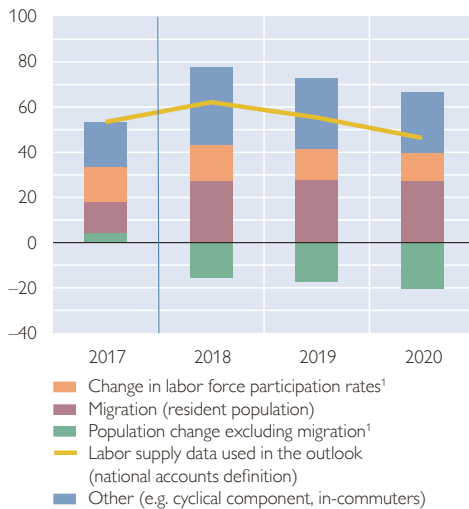
<sup>5</sup> A meaningful approach to determining actual skilled labor shortages would be to analyze changes in employment, labor turnover, hours worked and wages (see Fink, M., G. Titlbach, S. Vogtenhuber and H. Hofer. 2015. Gibt es in Österreich einen Fachkräftemangel? Institute for Advanced Studies).

Chart 5

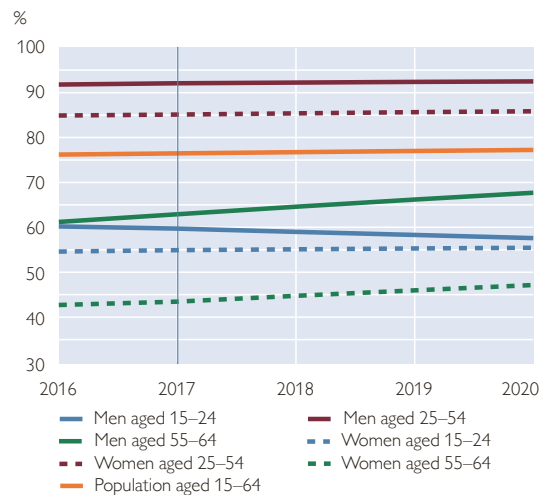
## Structure of labor supply

### Contributions to the change in labor supply (resident population)<sup>1</sup>

Change in thousands



### Labor force participation (resident population)<sup>1</sup>



Source: Statistics Austria, OeNB.

<sup>1</sup> Resident population: Domestic households according to microcensus data; forecast extrapolated from projected labor force participation rates and the population forecast of Statistics Austria (baseline scenario, November 2017). The labor supply data used in the outlook (national accounts definition) may differ from the microcensus-based equivalent.

## 6 Inflation to remain slightly above 2.0% in 2018

Domestic inflation was very stable in 2017, despite some volatility in several months. In each of the first three quarters, inflation as measured by the HICP equaled 2.2%; in October it reached 2.3%. At the same time, core inflation (HICP excluding energy) increased from 1.8% in the first quarter to 2.3% in the third quarter of 2017, to 2.4% in October. While the contribution of energy to inflation dropped in the first three quarters, the contributions of food and industrial goods excluding energy increased.

Starting from December 2017, HICP inflation is forecast to slow down moderately, thus resulting in a rate of 2.2% for 2017 as a whole. Thereafter, HICP inflation is expected to stabilize at slightly more than 2% until the fall of 2018. A decline to below 2% is not in store until the fourth quarter of 2018.

This pattern essentially reflects changes in energy prices and food prices. In fall 2018, the inflation rate of the energy component of the HICP will decline markedly, reflecting the anticipated drop in oil prices and the base effect related to the latest price increases. At the same time, domestic drivers of inflation, such as domestic demand or labor cost growth, should be offsetting the commodity price-driven decrease in inflation. In 2018 as a whole, inflation will run to 2.1%. Looking further ahead, inflation is expected to edge down, to amount to 1.9% in 2019 as well as 2020.

At 2.1%, HICP inflation excluding energy is forecast to equal headline inflation in 2018. In 2019 and 2020 core inflation is expected to total 2.0%, thus exceeding headline inflation. Compared with the OeNB's economic outlook of June 2017, HICP inflation has been revised upward by 0.2 percentage points



Table 8

**Price, cost, productivity and profit indicators for Austria**

	2016	2017	2018	2019	2020
	<i>Annual change in %</i>				
Harmonised Index of Consumer Prices (HICP)	+1.0	+2.2	+2.1	+1.9	+1.9
HICP energy	-4.6	+2.9	+1.3	+0.2	+0.8
HICP excluding energy	+1.5	+2.2	+2.1	+2.0	+2.0
Private consumption expenditure (PCE) deflator	+1.2	+2.0	+2.1	+1.9	+1.8
Investment deflator	+1.4	+1.6	+1.8	+1.7	+1.6
Import deflator	-1.1	+2.4	+1.2	+1.7	+1.7
Export deflator	-0.6	+2.0	+1.2	+1.8	+1.8
Terms of trade	+0.5	-0.4	+0.0	+0.1	+0.1
GDP deflator at factor cost	+1.1	+1.5	+2.0	+1.9	+1.8
Collective wage and salary settlements	+1.6	+1.5	+2.6	+2.5	+2.2
Compensation per employee	+2.3	+1.5	+2.8	+2.5	+2.2
Hourly compensation per employee	+1.7	+1.3	+2.8	+2.6	+2.4
Labor productivity per employee	+0.3	+1.4	+1.0	+0.7	+0.6
Labor productivity per hour	-0.4	+1.3	+1.1	+0.8	+0.8
Unit labor costs	+2.1	+0.1	+1.7	+1.8	+1.5
Profit margins <sup>1</sup>	-1.0	+1.3	+0.2	+0.0	+0.3

Source: 2016: WIFO, Statistics Austria; 2017 to 2020: OeNB December 2017 outlook.

<sup>1</sup> GDP deflator divided by unit labor costs.

for 2017 and by 0.3 percentage points for 2018. On the supply side, the upward revisions are attributable to the marked rise in commodity prices, on the demand side to the strengthening of the economic recovery.

Austria's inflation differential has increased vis-à-vis both Germany and the euro area since early 2017, totaling 0.8 and 0.9 percentage points, respectively, in October. The services sector continues to account for the bulk of the inflation differential. Inflation has been higher in Austria above all in the tourism sector (e.g. hotels and restaurants) as well as with regard to administered prices. In the period from 2018 to 2020 labor shortages in Germany are going to considerably push up wage settlements, and wage pressures are set to increase also in many other euro area countries on account of the advanced stage of the business cycle. As a result, Germany's inflation differential to

Austria in the labor-intensive services sector should contract.

Collective wages are set to go up by 1.5% in 2017. Given a projected HICP inflation rate of 2.2%, this implies real wage losses. The wage settlements for 2018 that have been concluded so far point to higher wage growth looking ahead. Given higher inflation and productivity gains, the metal industry is going to see a 3.0% rise in collective wages, while an increase by 2.45% was agreed for retail workers, and an increase by 2.3% for public sector employees. On average, collective wages are expected to rise by 2.6% – i.e. by 0.4 percentage points above the projected HICP inflation rate. Real wage growth is set to remain positive also in 2019 and 2020. Against the backdrop of the strong economy and inflation rates of close to 2%, wages are forecast to grow by 2.5% (2019) and 2.2% (2020). Wage drift will be neutral over the entire

Table 9

**Compensation of employees**

	2016	2017	2018	2019	2020
<i>Annual change in %</i>					
<b>Gross wages and salaries<sup>1</sup></b>					
In nominal terms	+3.8	+3.4	+4.7	+3.9	+3.2
Consumption deflator	+1.2	+2.0	+2.1	+1.9	+1.8
In real terms	+2.6	+1.4	+2.5	+2.0	+1.5
<b>Collectively agreed wages and salaries<sup>1</sup></b>	+1.6	+1.5	+2.6	+2.5	+2.2
<b>Wage drift</b>	+0.8	+0.0	+0.1	+0.0	+0.0
<b>Per person employed (gross, nominal)</b>					
Per person employed (gross) <sup>2</sup>	+2.3	+1.5	+2.8	+2.5	+2.2
Per person employed (real)	+1.1	-0.5	+0.6	+0.7	+0.4
<b>Per person employed (gross, real)</b>					
Per hour (gross, nominal)	+1.7	+1.3	+2.8	+2.6	+2.4
Per hour (gross, real)	+0.5	-0.7	+0.6	+0.8	+0.6
<i>% of nominal GDP</i>					
<b>Wage share</b>	48.1	47.5	47.5	47.5	47.4

Source: 2016: WIFO, Statistics Austria; 2017 to 2020: OeNB December 2017 outlook.

<sup>1</sup> Overall economy.

<sup>2</sup> Including employers' social security contributions.

forecast horizon. While the increase in the share of part-time jobs will have a dampening effect, overpayments are expected to rise in view of initial signs of labor shortages in individual industries. The wage share (gross compensation of employees as a share of GDP) is expected to remain stable at 47.5% over the forecast horizon.

## 7 Balance of forecast risks on the upside in the short run

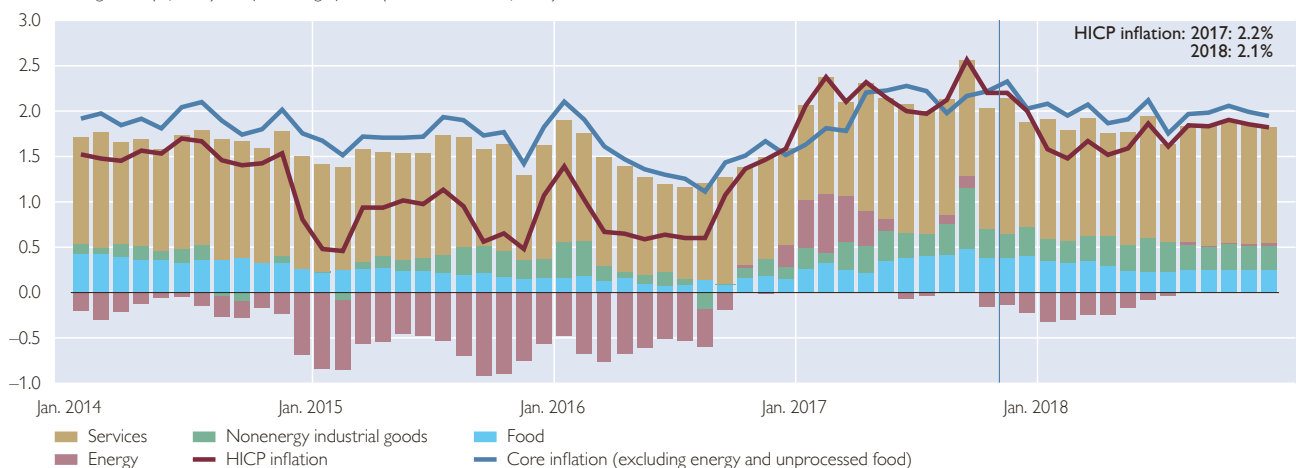
The external risks to the growth forecast are balanced. The procyclical behavior of the elasticity between global trade growth and global GDP growth might be more pronounced than expected, thus leading to stronger demand on Austria's export markets. Given good

Chart 6

**Contributions to HICP inflation and core inflation**

Annual change in % (inflation) and percentage points (contributions to inflation)

Forecast: November 2017 to December 2018.



Source: Statistics Austria, OeNB.

leading indicators, the balance of risks is also on the upside for the short-term outlook for euro area growth. At the same time, political uncertainties continue to weigh on the outlook. These uncertainties include a number of geopolitical risks, such as the turn the North Korea conflict may take. In the United States, uncertainties prevail with regard to the planned tax reform and the evolution of trade policies. In Europe, uncertainties relate to the composition of the new government in Germany, to the forthcoming parliamentary elections in Italy as well as to the eventual outcome of the Brexit negotiations.

The balance of *domestic risks* is likewise on the upside, in particular with regard to short-term growth expectations. The available leading indicators for the domestic economy do not signal any reversal. On the contrary, numerous leading indicators are close to their historical peaks. Some indicators, such as the purchasing managers' index compiled by Bank Austria, which stagnated at high levels in the summer, surprisingly improved further after the cutoff date for the projections. Hence, growth might turn out to be even higher in the first quarters of the forecast than expected. Upside risks also prevail for the investment outlook. Businesses continue to report high demand for investment in capacity expansion and above-average capacity utilization. Therefore, the extended and pronounced investment cycle for machinery and transport equipment may well last until the second half of 2018. Finally, residential construction investment is also subject to upside risks, given the acute need for housing and continued favorable financing conditions. In contrast, downward risks to the outlook might emanate from labor shortages as evidenced by some indicators, should those shortages intensify.

The risks surrounding the outlook for *inflation* are also strongly tilted toward the upside. The path for oil prices implied by forward markets might turn out to have been underestimated, as has happened occasionally in the past. Further upside risks to inflation stem from the upside risks to the outlook for GDP growth, as well as from the labor shortages that is clearly on the horizon, in case these shortages should lead to heightened wage pressures.

## 8 Major upward revision of economic outlook

The external environment has significantly improved since the OeNB June 2017 outlook. The good outlook for the global economy in general and for Austria's key export markets (the euro area and CESEE countries) in particular have led to a marked revision of the growth outlook for Austria's export markets compared with the projections made in June. In contrast, the assumption of higher oil prices has an offsetting effect on the outlook for growth. Markets currently expect oil prices to rise to USD 61.6 per barrel Brent in 2018, 20% more than the level projected in June 2017. However, the appreciation of the euro against the U.S. dollar weakens this impact to 12%. The assumptions with regard to the euro area exchange rate against the U.S. dollar were revised upward by 7½% for the forecast horizon. Short-term and long-term interest rates were again revised downward slightly, thus supporting investment growth. In sum, the revised assumptions for 2018 and 2019 have led to upward revisions of both the outlook for GDP growth and for inflation.

Table 11 provides detailed reasons for revising the outlook. Apart from the impact of changed external assumptions, they are attributable to the impact of new data and a residual. The influ-

Table 10

**Change in external economic conditions since the June 2017 outlook**

	December 2017				June 2017			Difference		
	2017	2018	2019	2020	2017	2018	2019	2017	2018	2019
	<i>Annual change in %</i>									
Growth of Austria's export markets	+5.6	+5.0	+4.4	+4.0	+4.4	+4.2	+4.1	+1.2	+0.8	+0.3
Competitor prices on Austria's export markets	+2.2	+0.3	+1.9	+2.0	+3.7	+1.9	+2.0	-1.5	-1.6	-0.1
Competitor prices on Austria's import markets	+1.6	+0.3	+1.7	+1.9	+2.7	+1.7	+1.8	-1.1	-1.4	-0.1
	<i>USD per barrel (Brent)</i>									
Oil price	54.3	61.6	58.9	57.3	51.6	51.4	51.5	+2.7	+10.2	+7.4
	<i>Annual change in %</i>									
Nominal effective exchange rate (exports)	-0.5	-1.4	+0.0	+0.0	+0.7	-0.2	+0.0	-1.2	-1.2	+0.0
Nominal effective exchange rate (imports)	-0.6	-0.9	+0.0	+0.0	+0.2	-0.1	+0.0	-0.8	-0.8	+0.0
	%									
Three-month interest rate	-0.3	-0.3	-0.1	0.1	-0.3	-0.2	0.0	+0.0	-0.1	-0.1
Long-term interest rate	0.6	0.7	0.9	1.2	0.7	0.9	1.2	-0.1	-0.2	-0.3
	<i>Annual change in %</i>									
U.S. GDP (real)	+2.3	+2.5	+2.2	+1.9	+2.2	+2.5	+2.3	+0.1	+0.0	-0.1
	<i>USD/EUR</i>									
USD/EUR exchange rate	1.13	1.17	1.17	1.17	1.08	1.09	1.09	+0.05	+0.08	+0.08

Source: Eurosystem.

ence of new data includes the effects of the revisions of both the historical data already available at the time of the OeNB's June 2017 economic outlook (i.e. data up to the first quarter of 2017) and the forecasting errors of the previous outlook for the periods now published for the first time (i.e. data for the second and third quarters of 2017). The residual includes new expert assessments regarding domestic variables, such as government consumption or wage settlements, as well as any changes to the model.

For 2017, GDP growth has been revised up by 0.9 percentage points. The bulk of this change (0.5 percentage points) is attributable to revisions of historical data. Moreover, the projections for GDP growth for the second and the third quarters of 2017 turned out to be too conservative, which explains 0.4 percentage points of the revision for 2017. A carry-over effect stemming from the higher growth rates in the

second and third quarters of 2017 add another 0.2 percentage points to the upward revision of GDP growth by 1.1 percentage points for 2018. The improved external assumptions add another 0.6 percentage points to growth in 2018. Finally, today's thriving economy underpins a more positive outlook on the economy in general than warranted in June, which explains 0.3 percentage points of the upward revision for 2018 (table 11). Looking ahead to 2019, the forecast was revised upward by 0.2 percentage points.

Compared with the economic outlook, the revisions to inflation outlook have been only marginal. The inflation outlook for 2018 has been revised upward by 0.3 percentage points, with the higher oil prices accounting for 0.2 percentage points and the cyclical momentum for 0.1 percentage points of the revision. The upward revision by 0.1 percentage points for 2019 is attributable to higher wage settlements.

Table 11

**Breakdown of revisions to the outlook**

	GDP			HICP		
	2017	2018	2019	2017	2018	2019
	<i>Annual change in %</i>					
<b>December 2017 outlook</b>	+3.1	+2.8	+1.9	+2.2	+2.1	+1.9
<b>June 2017 outlook</b>	+2.2	+1.7	+1.6	+2.0	+1.8	+1.8
<b>Difference</b>	+0.9	+1.1	+0.3	+0.2	+0.3	+0.1
	<i>Percentage points</i>					
<b>Caused by:</b>						
External assumptions	+0.0	+0.6	+0.1	+0.1	+0.3	+0.0
New data <sup>1</sup>	+0.9	+0.2	+0.0	+0.1	x	x
of which: revisions to historical data up to Q1 17	+0.5	x	x	+0.0	x	x
projection errors for Q2 and Q3 17	+0.4	+0.2	x	+0.1	+0.0	+0.0
Other changes <sup>2</sup>	+0.0	+0.3	+0.2	+0.0	+0.0	+0.1

Source: OeNB December 2017 and June 2017 outlooks.

Note: Due to rounding, the sum of growth contributions subject to individual revisions may differ from the total revision.

<sup>1</sup> "New data" refer to data on GDP and/or inflation that have become available since the publication of the preceding OeNB outlook.

<sup>2</sup> Different assumptions about trends in domestic variables such as wages, government consumption, effects of tax measures, other changes in assessments and model changes.

Table 12

**Comparison of the OeNB December 2017 outlook and the June 2017 outlook**

	Actual figures	December 2017 outlook			Revision since June 2017 outlook		
	2016	2017	2018	2019	2017	2018	2019
<b>Economic activity</b>							
<i>Annual change in % (real)</i>							
Gross domestic product (GDP)	+1.5	+3.1	+2.8	+1.9	+0.9	+1.1	+0.3
Private consumption	+1.5	+1.5	+1.6	+1.4	-0.1	+0.4	+0.2
Government consumption	+2.0	+1.4	+2.0	+1.1	+0.5	+0.2	+0.3
Gross fixed capital formation	+3.8	+5.1	+2.9	+2.0	+1.8	+0.9	+0.3
Exports of goods and services	+2.4	+5.6	+5.0	+4.2	+1.4	+1.0	+0.3
Imports of goods and services	+3.6	+4.6	+4.1	+3.5	+0.9	+0.3	+0.1
<i>% of nominal GDP</i>							
Current account balance	+2.1	+1.9	+2.1	+2.6	-0.2	-0.3	-0.2
<b>Contribution to real GDP growth</b>							
<i>Percentage points</i>							
Private consumption	+0.8	+0.8	+0.8	+0.7	+0.0	+0.2	+0.1
Government consumption	+0.4	+0.3	+0.4	+0.2	+0.1	+0.0	+0.0
Gross fixed capital formation	+0.8	+1.2	+0.7	+0.5	+0.4	+0.2	+0.1
Domestic demand (excluding changes in inventories)	+2.0	+2.2	+1.9	+1.4	+0.4	+0.5	+0.2
Net exports	-0.5	+0.7	+0.7	+0.5	+0.3	+0.4	+0.1
Changes in inventories (including statistical discrepancy)	+0.0	+0.2	+0.2	+0.0	+0.2	+0.2	+0.0
<b>Prices</b>							
<i>Annual change in %</i>							
Harmonised Index of Consumer Prices (HICP)	+1.0	+2.2	+2.1	+1.9	+0.2	+0.3	+0.1
Private consumption expenditure (PCE) deflator	+1.2	+2.0	+2.1	+1.9	+0.1	+0.4	+0.2
GDP deflator	+1.1	+1.5	+1.9	+1.9	-0.1	+0.0	+0.1
Unit labor costs (whole economy)	+2.1	+0.1	+1.7	+1.8	-0.3	-0.1	+0.4
Compensation per employee (at current prices)	+2.3	+1.5	+2.8	+2.5	+0.2	+0.6	+0.6
Compensation per hour worked (at current prices)	+1.7	+1.3	+2.8	+2.6	-0.2	+0.3	+0.3
Import prices	-1.1	+2.4	+1.2	+1.7	-0.2	-0.7	-0.1
Export prices	-0.6	+2.0	+1.2	+1.8	-0.7	-0.9	-0.1
Terms of trade	+0.5	-0.4	+0.0	+0.1	-0.5	-0.2	-0.1
<b>Income and savings</b>							
Real disposable household income	+2.7	+0.6	+1.6	+1.5	-0.4	+0.2	+0.3
<i>% of nominal disposable household income</i>							
Saving ratio	7.9	7.2	7.2	7.2	-0.7	-0.7	-0.7
<b>Labor market</b>							
<i>Annual change in %</i>							
Payroll employment	+1.4	+1.8	+1.9	+1.3	+0.3	+0.4	+0.1
Hours worked (payroll employment)	+2.1	+2.0	+1.8	+1.2	+0.7	+0.7	+0.4
<i>% of labor supply</i>							
Unemployment rate (Eurostat definition)	6.0	5.5	5.1	5.1	-0.2	-0.4	-0.3
<b>Public finances</b>							
<i>% of nominal GDP</i>							
Budget balance	-1.6	-0.8	-0.5	-0.1	+0.1	+0.4	+0.4
Government debt	83.6	78.3	74.9	72.1	-1.9	-3.1	-3.7

Source: 2016 (actual figures): WIFO, Statistics Austria, OeNB; OeNB December 2017 and June 2017 outlooks.

## Annex: detailed result tables

Table 13

**Demand components (real)**

Chained volume data (reference year = 2010)

	2016	2017	2018	2019	2020	2016	2017	2018	2019	2020
	EUR million					Annual change in %				
Private consumption	164,960	167,357	170,003	172,468	174,608	1.5	1.5	1.6	1.4	1.2
Government consumption	63,805	64,702	65,977	66,700	67,209	2.0	1.4	2.0	1.1	0.8
Gross fixed capital formation	72,822	76,541	78,774	80,387	81,921	3.8	5.1	2.9	2.0	1.9
of which: investment in plant and equipment	25,184	27,264	28,402	28,924	29,442	8.3	8.3	4.2	1.8	1.8
residential construction investment	13,124	13,495	13,774	14,066	14,352	0.9	2.8	2.1	2.1	2.0
nonresidential construction investment and other investment	19,679	20,231	20,696	21,152	21,533	1.6	2.8	2.3	2.2	1.8
Changes in inventories (including statistical discrepancy)	4,959	5,562	6,064	5,984	5,992	x	x	x	x	x
Domestic demand	306,546	314,161	320,819	325,540	329,730	2.1	2.5	2.1	1.5	1.3
Exports of goods and services	178,268	188,189	197,686	205,925	214,195	2.4	5.6	5.0	4.2	4.0
Imports of goods and services	167,182	174,883	181,999	188,451	195,294	3.6	4.6	4.1	3.5	3.6
Net exports	11,085	13,306	15,688	17,474	18,901	x	x	x	x	x
<b>Gross domestic product</b>	<b>317,631</b>	<b>327,467</b>	<b>336,506</b>	<b>343,014</b>	<b>348,631</b>	<b>1.5</b>	<b>3.1</b>	<b>2.8</b>	<b>1.9</b>	<b>1.6</b>

Source: 2016: Eurostat; 2017 to 2020: OeNB December 2017 outlook.

Table 14

**Demand components (nominal)**

	2016	2017	2018	2019	2020	2016	2017	2018	2019	2020
	EUR million					Annual change in %				
Private consumption	186,289	192,715	199,961	206,631	212,877	+2.8	+3.4	+3.8	+3.3	+3.0
Government consumption	70,534	72,259	75,130	77,522	79,725	+3.1	+2.4	+4.0	+3.2	+2.8
Gross fixed capital formation	81,601	87,141	91,275	94,683	97,989	+5.2	+6.8	+4.7	+3.7	+3.5
Changes in inventories (including statistical discrepancy)	3,137	3,815	4,251	4,192	4,212	x	x	x	x	x
Domestic demand	341,560	355,931	370,617	383,028	394,803	+3.0	+4.2	+4.1	+3.3	+3.1
Exports of goods and services	185,612	199,906	212,522	225,355	238,638	+1.8	+7.7	+6.3	+6.0	+5.9
Imports of goods and services	173,543	185,884	195,755	206,061	217,126	+2.5	+7.1	+5.3	+5.3	+5.4
Net exports	12,069	14,023	16,767	19,294	21,511	x	x	x	x	x
<b>Gross domestic product</b>	<b>353,629</b>	<b>369,954</b>	<b>387,384</b>	<b>402,322</b>	<b>416,314</b>	<b>+2.6</b>	<b>+4.6</b>	<b>+4.7</b>	<b>+3.9</b>	<b>+3.5</b>

Source: 2016: Eurostat; 2017 to 2020: OeNB December 2017 outlook.

Table 15

**Demand components (deflators)**

	2016	2017	2018	2019	2020	2016	2017	2018	2019	2020
	2010 = 100					Annual change in %				
Private consumption	112.9	115.1	117.6	119.8	121.9	+1.2	+2.0	+2.1	+1.9	+1.8
Government consumption	110.5	111.7	113.9	116.2	118.6	+1.1	+1.0	+2.0	+2.1	+2.1
Gross fixed capital formation	112.1	113.8	115.9	117.8	119.6	+1.4	+1.6	+1.8	+1.7	+1.6
Domestic demand (excluding changes in inventories)	112.2	114.1	116.4	118.6	120.7	+1.2	+1.7	+2.0	+1.9	+1.8
Exports of goods and services	104.1	106.2	107.5	109.4	111.4	-0.6	+2.0	+1.2	+1.8	+1.8
Imports of goods and services	103.8	106.3	107.6	109.3	111.2	-1.1	+2.4	+1.2	+1.7	+1.7
Terms of trade	100.3	99.9	99.9	100.1	100.2	+0.5	-0.4	+0.0	+0.1	+0.1
<b>Gross domestic product</b>	<b>111.3</b>	<b>113.0</b>	<b>115.1</b>	<b>117.3</b>	<b>119.4</b>	<b>+1.1</b>	<b>+1.5</b>	<b>+1.9</b>	<b>+1.9</b>	<b>+1.8</b>

Source: 2016: Eurostat; 2017 to 2020: OeNB December 2017 outlook.

Table 16

**Labor market**

	2016	2017	2018	2019	2020	2016	2017	2018	2019	2020
	Thousands					Annual change in %				
Total employment	4,337.6	4,411.8	4,487.8	4,544.1	4,589.5	+1.2	+1.7	+1.7	+1.3	+1.0
of which: private sector	3,604.3	3,674.0	3,732.5	3,792.8	3,847.2	+1.3	+1.9	+1.6	+1.6	+1.4
Payroll employment (national accounts definition)	3,787.1	3,856.3	3,928.4	3,980.9	4,023.1	+1.4	+1.8	+1.9	+1.3	+1.1
	% of labor supply									
Unemployment rate (Eurostat definition)	6.0	5.5	5.1	5.1	5.0	x	x	x	x	x
	EUR per real unit of output x 100									
Unit labor costs (whole economy) <sup>1</sup>	61.3	61.4	62.5	63.6	64.6	+2.1	+0.1	+1.7	+1.8	+1.5
	EUR thousand per employee									
Labor productivity (whole economy) <sup>2</sup>	73.2	74.2	75.0	75.5	76.0	+0.3	+1.4	+1.0	+0.7	+0.6
	EUR thousand									
Compensation per employee (real) <sup>3</sup>	39.8	39.6	39.8	40.1	40.2	+1.1	-0.5	+0.6	+0.6	+0.4
	At current prices in EUR thousand									
Compensation per employee (gross)	44.9	45.6	46.8	48.0	49.1	+2.3	+1.5	+2.8	+2.5	+2.2
	At current prices in EUR million									
Total gross compensation of employees	170,051	175,759	183,987	191,141	197,335	+3.8	+3.4	+4.7	+3.9	+3.2

Source: 2016: Eurostat; 2017 to 2020: OeNB December 2017 outlook.

<sup>1</sup> Gross wages and salaries divided by real GDP.<sup>2</sup> Real GDP divided by total employment.<sup>3</sup> Gross wages and salaries per employee divided by private consumption expenditure deflator.



Table 17

**Current account**

	2016	2017	2018	2019	2020	2016	2017	2018	2019	2020
	EUR million					% of nominal GDP				
<b>Balance of trade</b>	11,350.0	11,564.5	12,840.0	15,594.8	18,199.5	3.2	3.1	3.3	3.9	4.4
Balance of goods	240.9	655.7	1,431.9	2,304.5	3,307.8	0.1	0.2	0.4	0.6	0.8
Balance of services	11,109.1	10,908.8	11,408.1	13,290.3	14,891.7	3.1	2.9	2.9	3.3	3.6
<b>Balance of primary income</b>	-180.0	-883.7	-811.3	-802.0	-786.3	-0.1	-0.2	-0.2	-0.2	-0.2
<b>Balance of secondary income</b>	-3,687.0	-3,619.2	-3,902.0	-4,170.3	-4,428.4	-1.0	-1.0	-1.0	-1.0	-1.1
<b>Balance on current account</b>	7,483.0	7,061.6	8,126.6	10,622.5	12,984.8	2.1	1.9	2.1	2.6	3.1

Source: 2016: Eurostat; 2017 to 2020: OeNB December 2017 outlook.

Table 18

**Quarterly outlook results**

	2017				2018				2019				2020			
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
<i>Annual change in %</i>																
<b>Prices, wages and costs</b>																
HICP	+2.2	+2.2	+2.2	+2.3	+2.2	+2.2	+2.0	+1.9	+1.8	+1.9	+1.9	+1.9	+1.9	+2.0	+2.0	+1.9
HICP excluding energy	+1.8	+2.2	+2.3	+2.4	+2.3	+2.2	+2.0	+2.1	+2.0	+2.1	+2.1	+2.0	+2.1	+2.1	+2.1	+2.0
Private consumption expenditure deflator	+1.7	+1.9	+2.0	+2.2	+2.2	+2.2	+2.0	+1.9	+1.9	+1.8	+1.8	+1.8	+1.8	+1.8	+1.8	+1.8
Gross fixed capital formation deflator	+1.4	+1.5	+1.7	+1.8	+1.8	+1.8	+1.8	+1.8	+1.7	+1.7	+1.6	+1.6	+1.5	+1.5	+1.6	+1.6
GDP deflator	+1.1	+1.4	+1.7	+1.6	+1.8	+1.9	+2.0	+2.0	+1.8	+1.8	+1.9	+2.0	+2.0	+1.9	+1.8	+1.6
Unit labor costs	+0.9	+0.2	-0.3	-0.3	+0.5	+1.4	+2.2	+2.7	+2.3	+1.9	+1.6	+1.5	+1.8	+1.7	+1.5	+1.1
Nominal wages per employee	+1.6	+1.4	+1.4	+1.6	+2.0	+2.6	+3.1	+3.3	+2.9	+2.6	+2.3	+2.3	+2.4	+2.3	+2.1	+1.7
Productivity	+0.7	+1.1	+1.8	+1.8	+1.5	+1.2	+0.8	+0.5	+0.5	+0.6	+0.7	+0.7	+0.6	+0.6	+0.6	+0.7
Real wages per employee	-0.1	-0.6	-0.6	-0.6	-0.1	+0.4	+0.8	+1.2	+0.9	+0.7	+0.5	+0.5	+0.6	+0.6	+0.4	+0.0
Import deflator	+3.4	+3.0	+2.1	+1.2	+0.4	+0.9	+1.7	+1.8	+1.7	+1.6	+1.7	+1.7	+1.7	+1.7	+1.7	+1.7
Export deflator	+2.1	+2.5	+2.1	+1.5	+0.8	+0.9	+1.4	+1.6	+1.7	+1.8	+1.8	+1.8	+1.8	+1.8	+1.8	+1.8
Terms of trade	-1.2	-0.6	+0.0	+0.3	+0.5	+0.0	-0.3	-0.2	+0.1	+0.2	+0.2	+0.1	+0.1	+0.1	+0.1	+0.1
<i>Annual and/or quarterly changes in % (real)</i>																
<b>Economic activity</b>																
GDP	+0.9	+0.8	+0.9	+0.8	+0.7	+0.6	+0.5	+0.5	+0.5	+0.5	+0.4	+0.4	+0.4	+0.4	+0.4	+0.4
Private consumption	+0.3	+0.3	+0.4	+0.4	+0.4	+0.4	+0.4	+0.4	+0.3	+0.4	+0.3	+0.3	+0.3	+0.3	+0.3	+0.3
Government consumption	+0.2	+0.2	+0.4	+0.8	+0.4	+0.5	+0.4	+0.4	+0.2	+0.2	+0.2	+0.2	+0.2	+0.2	+0.2	+0.2
Gross fixed capital formation	+1.8	+1.4	+0.9	+0.9	+0.6	+0.5	+0.5	+0.5	+0.5	+0.4	+0.5	+0.5	+0.4	+0.5	+0.5	+0.5
Exports	+2.1	+1.5	+0.9	+1.4	+1.4	+1.2	+1.1	+1.0	+1.0	+1.0	+1.0	+1.0	+1.0	+1.0	+1.0	+0.9
Imports	+1.7	+1.4	+0.8	+0.8	+1.1	+1.1	+1.0	+0.9	+0.7	+0.8	+0.9	+0.9	+1.0	+0.9	+0.8	+0.8
<i>Contribution to real GDP growth in percentage points</i>																
Domestic demand	+0.6	+0.6	+0.5	+0.6	+0.4	+0.4	+0.4	+0.4	+0.3	+0.3	+0.3	+0.3	+0.3	+0.3	+0.3	+0.3
Net exports	+0.3	+0.1	+0.1	+0.4	+0.2	+0.1	+0.1	+0.1	+0.2	+0.2	+0.1	+0.1	+0.1	+0.1	+0.1	+0.1
Changes in inventories	+0.0	+0.2	+0.3	-0.1	+0.0	+0.0	+0.0	+0.0	+0.0	+0.0	+0.0	+0.0	+0.0	+0.0	+0.0	+0.0
<i>% of labor supply</i>																
<b>Labor market</b>																
Unemployment rate (Eurostat definition)	5.7	5.5	5.5	5.4	5.3	5.1	5.1	5.1	5.1	5.1	5.1	5.1	5.0	5.0	5.0	5.0
<i>Annual and/or quarterly changes in %</i>																
Total employment	+0.4	+0.5	+0.4	+0.5	+0.4	+0.4	+0.4	+0.3	+0.3	+0.3	+0.3	+0.2	+0.2	+0.3	+0.2	+0.3
of which: private sector	+0.5	+0.4	+0.3	+0.4	+0.4	+0.4	+0.5	+0.4	+0.4	+0.4	+0.4	+0.4	+0.4	+0.4	+0.4	+0.4
Payroll employment	+0.4	+0.6	+0.4	+0.5	+0.5	+0.5	+0.4	+0.4	+0.3	+0.3	+0.3	+0.3	+0.3	+0.3	+0.3	+0.3
<i>Additional variables</i>																
<i>Annual and/or quarterly changes in % (real)</i>																
Disposable household income	-0.2	+0.2	-0.1	-0.4	+0.8	+0.8	+0.8	+0.5	+0.2	+0.2	+0.2	+0.3	+0.4	+0.3	+0.2	+0.1
<i>% of real GDP</i>																
Output gap	-0.6	-0.3	0.1	0.5	0.6	0.7	0.7	0.7	0.7	0.7	0.7	0.6	0.5	0.5	0.5	0.4

Source: OeNB December 2017 outlook. Quarterly values based on seasonally and working day-adjusted data.

Table 19

**Comparison of current economic forecasts for Austria**

	OeNB				WIFO		IHS		OECD			IMF		European Commission		
	December 2017				September 2017		September 2017		November 2017			October 2017		November 2017		
	2017	2018	2019	2020	2017	2018	2017	2018	2017	2018	2019	2016	2017	2017	2018	2019
<i>Annual change in %</i>																
<b>Main results</b>																
GDP (real)	+3.1	+2.8	+1.9	+1.6	+2.8	+2.8	+2.6	+2.1	+3.0	+2.5	+1.8	+2.3	+1.9	+2.6	+2.4	+2.3
Private consumption (real)	+1.5	+1.6	+1.4	+1.2	+1.5	+1.7	+1.5	+1.2	+1.3	+1.7	+1.2	x	x	+1.4	+1.5	+1.3
Government consumption (real)	+1.4	+2.0	+1.1	+0.8	+1.1	+0.9	+0.8	+1.3	+1.3	+1.5	+1.6	x	x	+1.3	+1.2	+1.1
Gross fixed capital formation (real)	+5.1	+2.9	+2.0	+1.9	+4.2	+3.0	+4.2	+2.4	+4.6	+3.2	+2.0	x	x	+3.9	+2.7	+2.4
Exports (real)	+5.6	+5.0	+4.2	+4.0	+5.5	+4.8	+5.4	+4.0	+6.1	+5.3	+4.4	+4.6	+3.6	+5.3	+4.5	+4.3
Imports (real)	+4.6	+4.1	+3.5	+3.6	+5.1	+3.9	+4.8	+3.2	+5.2	+4.5	+4.1	+5.2	+6.4	+4.3	+3.3	+3.0
GDP per employee <sup>1</sup>	+1.4	+1.0	+0.7	+0.6	+1.1	+1.1	+0.7	+0.7	+1.3	+1.0	+0.6	x	x	+1.1	+1.1	+1.2
GDP deflator	+1.5	+1.9	+1.9	+1.8	+1.9	+2.0	+1.6	+1.7	+1.6	+2.0	+2.2	+1.6	+1.7	+1.8	+1.6	+1.7
CPI	x	x	x	x	+1.9	+1.8	+2.0	+2.1	x	x	x	x	x	x	x	x
HICP	+2.2	+2.1	+1.9	+1.9	+2.0	+1.9	+2.1	+2.1	+2.1	+2.1	+2.3	+1.6	+1.8	+2.0	+1.6	+1.7
Unit labor costs	+0.1	+1.7	+1.8	+1.5	+0.9	+1.7	+0.8	+1.8	+0.6	+2.2	+2.5	x	x	+1.2	+1.2	+1.1
Payroll employment	+1.7	+1.7	+1.3	+1.0	+2.0	+1.8	+1.9	+1.4	+1.2	+1.6	+1.2	+1.6	+1.1	+1.5	+1.3	+1.1
<i>% of labor supply</i>																
Unemployment rate (Eurostat definition)	5.5	5.1	5.1	5.0	5.6	5.4	5.6	5.4	5.4	5.0	4.8	5.4	5.3	5.6	5.5	5.4
<i>% of nominal GDP</i>																
Current account balance	1.9	2.1	2.6	3.1	2.7	2.9	x	x	2.3	3.0	3.0	2.1	2.2	2.2	2.9	3.7
Budget balance (Maastricht definition)	-0.8	-0.5	-0.1	0.2	-0.6	-0.3	-0.7	-0.6	-0.7	-0.3	0.2	-0.9	-0.6	-1.0	-0.9	-0.6
<b>External assumptions</b>																
Oil price in USD/barrel (Brent)	54.3	61.6	58.9	57.3	53.0	53.0	52.8	54.0	52.6	55.0	55.0	50.3	50.2	53.6	55.7	54.7
Short-term interest rate in %	-0.3	-0.3	-0.1	0.1	-0.3	-0.1	-0.3	-0.2	-0.3	-0.2	-0.1	-0.3	-0.3	-0.3	-0.3	-0.1
USD/EUR exchange rate	1.13	1.17	1.17	1.17	1.10	1.20	1.10	1.17	1.10	1.10	1.10	1.10	1.20	1.10	1.18	1.18
<i>Annual change in %</i>																
Euro area GDP (real)	+2.4	+2.3	+1.9	+1.7	+2.3	+2.4	+2.0	+2.1	+2.2	+2.0	+1.8	+2.1	+1.9	+2.2	+2.1	+1.9
U.S. GDP (real)	+2.3	+2.5	+2.2	+1.9	+2.2	+2.1	+2.2	+2.3	+2.1	+2.4	+2.1	+2.2	+2.3	+2.2	+2.3	+2.1
World GDP (real)	+3.6	+3.6	+3.6	+3.5	x	x	+3.6	+3.7	+3.5	+3.7	+3.6	+3.6	+3.7	+3.5	+3.7	+3.7
World trade	+5.5	+4.5	+4.2	+3.8	x	x	+4.2	+4.0	+5.0	+4.1	+4.1	+4.2	+4.0	+4.3	+4.1	+4.0

Source: OeNB, WIFO, IHS, OECD, IMF, European Commission.

<sup>1</sup> WIFO: GDP per hour worked.