

2017 marked by accelerated economic growth and declining unemployment

Economic outlook for Austria from 2017 to 2019 (June 2017)

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1 Executive Summary

Austria's economy is recovering, with both domestic and foreign demand driving the rebound. Having accelerated by 1.4% in 2016, real GDP is projected to grow by 2.2% in 2017, 1.7% in 2018 and 1.6% in 2019. These figures represent upward revisions of 0.7 and 0.2 and 0.1 percentage points, respectively, versus the OeNB's December 2016 outlook. The unemployment rate is forecast to decline to 5.4% by 2019

from the historic peak of 6.0% seen in 2016. The inflation rate is expected to rise to 2.0% in 2017 and to reach 1.8% in both 2018 and 2019.

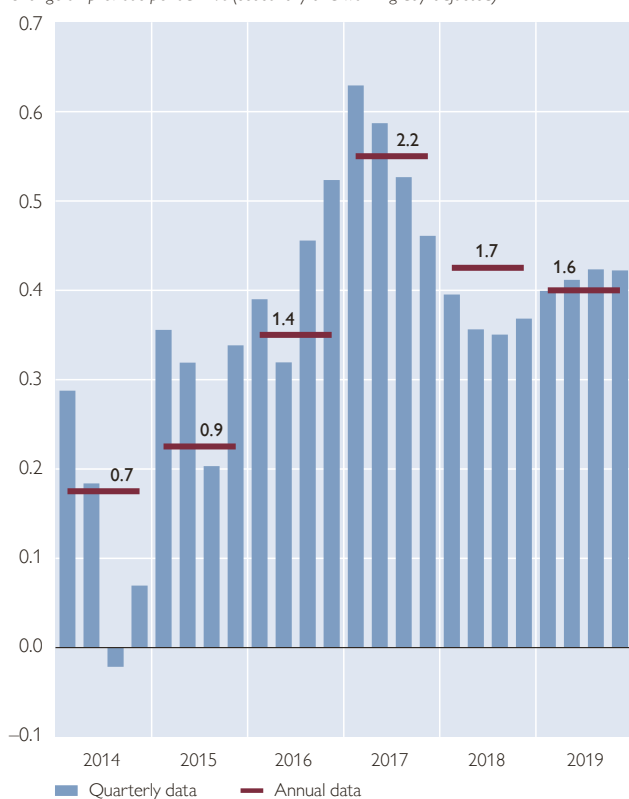
The global economy, and especially world trade, gained strong momentum in late 2016 and early 2017. Nine years after the global financial and economic crisis hit, which was followed by a sovereign debt crisis in several euro area countries and by economic recessions in a range of commodity-exporting econo-

Chart 1

Main results of the forecast

Real GDP growth

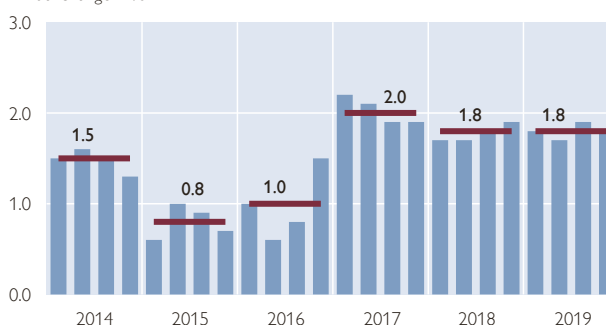
Change on previous period in % (seasonally and working day-adjusted)



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

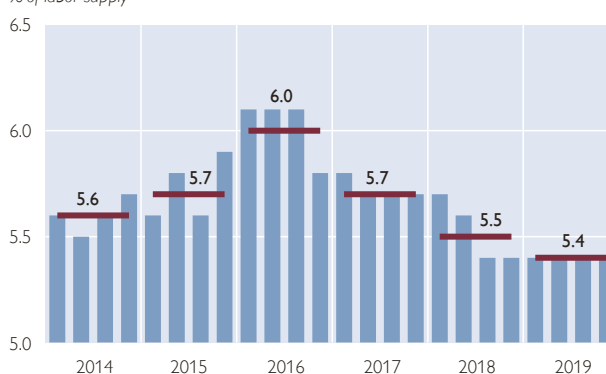
Harmonised Index of Consumer Prices

Annual change in %



Unemployment rate

% of labor supply



Cutoff date:
May 23, 2017

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mies, conditions were gradually normalizing in 2016, both in advanced and emerging economies. Lingering uncertainty about the economic repercussions of the United Kingdom's vote to leave the EU or the future course of U.S. economic policy following the unexpected presidential election outcome remained without negative effects on the economy in the short run. The United States will also be among the key drivers of global growth in the years ahead, as will be the euro area. Austria's export industries stand to benefit from these developments – as well as from the good growth performance of the CESEE economies. In 2017, domestic exports are projected to grow by 4.2% (2016: 1.8%).

The key driver of domestic growth in 2017, in addition to net exports, is the ongoing strength of domestic demand. Private consumption continues to benefit from the income tax reform that took effect in January 2016 and from the high level of employment growth. While these two factors continue to boost real disposable income growth in 2017, higher inflation has a dampening effect. Real consumption is projected to grow by 1.6% in 2017, accompanied by a slight decline of the saving ratio, to be followed by still fairly robust real consumption growth rates of 1.2% in both 2018 and 2019. Hence, private consumption remains a major pillar of growth throughout the forecast horizon. The investment cycle will peak in 2017. The cycle is driven above all by investment in plant and equipment, with extension investment gradually becoming more relevant than replacement investment. The investment ratio² is expected to inch up to 23.2% in 2017 (2016: 22.9%) and to level off thereafter.

The economic recovery fed through to the labor market already in 2016. Businesses were hiring not only in the services sector – like in previous years – but also in the industrial sector, and there was also a significant increase in the number of hours worked. With employment growth having continued in the early months of this year, employment is expected to grow further during 2017, both in terms of jobs and hours worked. As the recovery subsides in 2018 and 2019, the pace of employment growth is projected to decline somewhat, while continuing to be robust by historical standards. Given the high level of labor demand on account of the economic recovery as well as one-off labor market measures, the unemployment rate will go down again despite the continued strong labor supply growth rate. Following 6.0% seen in 2016, the unemployment rate is estimated to stand at 5.7% in 2017, 5.5% in 2018 and 5.4% in 2019.

Inflation as measured by the Harmonised Index of Consumer Inflation (HICP) is projected to rise to 2.0% in 2017 – driven above all by commodity price changes – compared with 1.0% in 2016. The projections for 2018 indicate a slight decline, to 1.8%. Despite the considerable economic recovery, the domestic drivers of inflation will generate only moderate inflation pressures.

The general government budget balance is projected to improve in 2017, to –0.9% of GDP, following a temporary deterioration in 2016 (–1.6% of GDP). This improvement essentially reflects the enhanced economic conditions and ongoing refinancing at low interest rates. However, the reduction of the deficit is being slowed down by the cuts in employer contributions to the family burden equalization fund,

² *Nominal gross fixed capital formation as a percentage of nominal GDP.*

effective from January 1, 2017, and the lagged tax relief effect. The budget balance is expected to continue to improve in 2018 and 2019 given the favorable framework conditions. At the same time, a number of measures listed in the government's work program for 2017 will drive up the deficit. These measures include bonus payments for employers creating additional jobs, the creation of 20,000 subsidized jobs for long-term unemployed people over 50 and additional investment subsidies.

Having peaked at 85.5% of GDP in 2015, the general government debt ratio declined in 2016, for the first time since the global economic crisis hit. The debt ratio is expected to decrease further and drop below 80% of GDP by 2019. The decline reflects a marked increase in the level of nominal GDP as well as the progressive divestment of impaired assets by the government-run bad banks.

Following a significant decline of the structural budget balance in 2016, to -1.0% of GDP, reflecting the tax reform among other things, 2017 is expected to see improvements. Thanks to the continued strong decline in interest payments, the Austrian budget deficit stands to become realigned with the domestic medium-term objective for Austria's budgetary position to be in balance or surplus (structural balance of -0.45% of GDP) in 2019.

2 Technical assumptions

This forecast for the Austrian economy is the OeNB's contribution to the June 2017 Eurosystem staff macroeconomic projections. The forecast horizon ranges from the first quarter of 2017 to the fourth quarter of 2019. The cutoff date for all assumptions on the performance of the global economy as well as

on interest rates, exchange rates and crude oil prices was May 17, 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, while being seasonally and working-day adjusted like the data used by the OeNB, also include irregular fluctuations that cannot be fully mapped to specific economic fundamentals. The historical annual data deviate also from the seasonally unadjusted data released by Statistics Austria. National accounts data were fully available up to the fourth quarter of 2016. The data for the first quarter of 2017 are based on the GDP flash estimate, which does not cover all national accounts aggregates, however. The short-term interest rate used for the forecast horizon is based on market expectations for the three-month EURIBOR: namely -0.3% for 2017, -0.2% for 2018 and 0.0% for 2019. Long-term interest rates, which reflect market expectations for ten-year government bonds, have been set to rise from 0.7% in 2017 to 1.2% by 2019. The exchange rate of the euro vis-à-vis the U.S. dollar is assumed to remain at a constant USD/EUR 1.09. The projected path of crude oil prices is based on futures prices, which imply very little changes in oil prices per barrel Brent from 2017 (USD 51.6) to 2019 (USD 51.5). The prices of commodities excluding energy are also based on futures prices over the forecast horizon.

Table 1

OeNB June 2017 outlook for Austria – main results¹

	2016	2017	2018	2019
Economic activity				
<i>Annual change in % (real)</i>				
Gross domestic product (GDP)	+1.4	+2.2	+1.7	+1.6
Private consumption	+1.4	+1.6	+1.2	+1.2
Government consumption	+1.9	+0.9	+1.8	+0.8
Gross fixed capital formation	+3.1	+3.3	+2.0	+1.7
Exports of goods and services	+1.8	+4.2	+4.0	+3.9
Imports of goods and services	+3.5	+3.7	+3.8	+3.4
<i>% of nominal GDP</i>				
Current account balance	1.7	2.1	2.4	2.8
Contribution to real GDP growth				
<i>Percentage points</i>				
Private consumption	+0.7	+0.8	+0.6	+0.6
Government consumption	+0.4	+0.2	+0.4	+0.2
Gross fixed capital formation	+0.7	+0.8	+0.5	+0.4
Domestic demand (excluding changes in inventories)	+1.8	+1.8	+1.4	+1.2
Net exports	-0.8	+0.4	+0.3	+0.4
Changes in inventories (including statistical discrepancy)	+0.4	+0.0	+0.0	+0.0
Prices				
<i>Annual change in %</i>				
Harmonised Index of Consumer Prices (HICP)	+1.0	+2.0	+1.8	+1.8
Private consumption expenditure (PCE) deflator	+1.3	+1.9	+1.7	+1.7
GDP deflator	+1.4	+1.6	+1.9	+1.8
Unit labor costs (whole economy)	+1.2	+0.4	+1.8	+1.4
Compensation per employee (at current prices)	+1.3	+1.3	+2.2	+1.9
Compensation per hour worked (at current prices)	+1.8	+1.5	+2.5	+2.3
Import prices	-1.2	+2.6	+1.9	+1.8
Export prices	-0.5	+2.7	+2.1	+1.9
Terms of trade	+0.7	+0.1	+0.2	+0.2
Income and savings				
<i>% of nominal disposable household income</i>				
Real disposable household income	+2.3	+1.0	+1.4	+1.2
<i>% of nominal disposable household income</i>				
Saving ratio	8.2	7.9	7.9	7.9
Labor market				
<i>Annual change in %</i>				
Payroll employment	+1.5	+1.5	+1.5	+1.2
Hours worked (payroll employment)	+1.0	+1.3	+1.1	+0.8
<i>% of labor supply</i>				
Unemployment rate (Eurostat definition)	6.0	5.7	5.5	5.4
Public finances				
<i>% of nominal GDP</i>				
Budget balance	-1.6	-0.9	-0.9	-0.5
Government debt	84.6	80.2	78.0	75.8

Source: 2016: WIFO, Eurostat, Statistics Austria; 2017 to 2019: OeNB June 2017 outlook.

¹ 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.

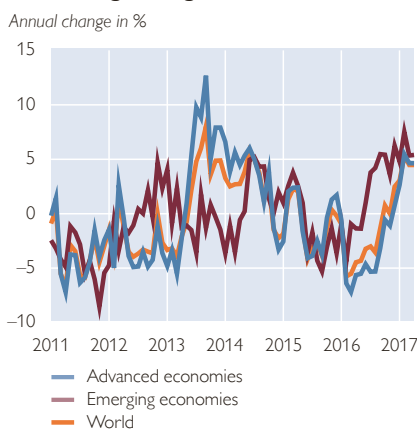
3 World economy and world trade buoyed by tailwinds in early 2017

The *global economy*, and especially world trade, gained strong momentum in late

2016 and early 2017. Nine years after the global financial and economic crisis hit, which was followed by a sovereign debt crisis in several euro area countries and by economic recessions in a

Upward trend in world GDP and world trade in early 2017

Purchasing Managers' Index



Source: Markit.

Note: Composite PMI = manufacturing and services.

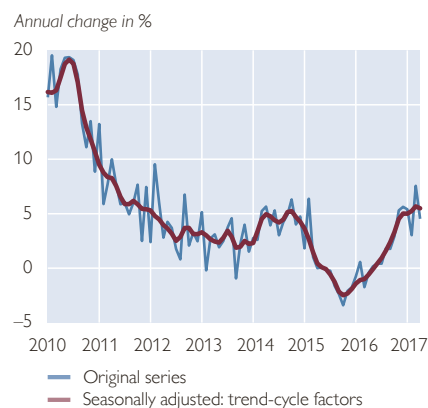
Volume of world trade



Source: CPB Netherlands Bureau for Economic Policy Analysis.

Note: Seasonally adjusted data.

Container Throughput Index



Source: RWI – Leibniz Institute for Economic Research.

range of commodity-exporting economies, suffering, above all, under the setback of commodity prices, conditions were gradually normalizing in 2016, both in advanced and emerging economies. Following an agreement on cutting crude oil production,³ oil prices rose to a level of around EUR 50 per barrel of Brent oil in late 2016. Rising oil prices drove up inflation, thus easing the risk of deflation in advanced economies.

The United Kingdom's vote to leave the EU and the unexpected outcome of the U.S. presidential elections remained without adverse short-term effects on the economy; both U.S. growth and U.K. growth exceeded the expectations serving as the basis for the OeNB's December 2016 outlook. This notwithstanding, the implementation of the Brexit vote as well as a potential reversal of U.S. economic policy do constitute a risk for the future development of the world economy. So far, the continued tensions in the Middle and Far East as well as the political upheaval in

Turkey have not affected global sentiment and world economic growth but continue to pose a risk to the global economy.

Central bank policies have been mirroring the robust economic performance. The United States abandoned its quantitative easing policies already in 2014. Since 2015, the U.S. Fed has increased its policy rates in three steps, to a level of between 0.75% and 1%, and further interest rate hikes have been signaled for 2017. The Bank of Japan, in contrast, has so far not seen any need for changing its monetary policy stance. The same holds true for the Eurosystem at present. At its meeting of April 27, 2017, the Governing Council of the ECB continued to expect the key policy rates to remain at present or lower levels for an extended period of time, and well past the horizon of the net asset purchases.

Rising oil prices benefited the budgets of commodity-exporting economies in 2016. The recovery observed in advanced economies fueled demand for commodities,

³ At its Algiers meeting in September 2016, OPEC committed itself to reducing output to between 32.5 to 33 million barrels per day. This ratio required OPEC members to cut production by some 1.3 million barrels per day but also hinged on a self-commitment of Russia not to increase its own production.

above all oil. Both of these factors have helped commodity-exporting countries – including Russia and Brazil – to emerge from recession. The rebalancing of China’s economic policy to ensure the long-term sustainability of growth (which entails shifting from investment to consumption on the demand side) has not been a burden on commodity-exporting economies and the global economy at large.

The advanced economies returned to accelerating growth in mid-2016 and have since returned to a sustainable growth path. Moreover, the global economic recovery has been accompanied by a recovery of global trade. Most recently annual global trade growth accelerated to exceed 5% – for the first time since 2011. Leading indicators for world trade, such as the RFI/ISL Container Throughput Index, are also indicative of increased momentum in world trade.

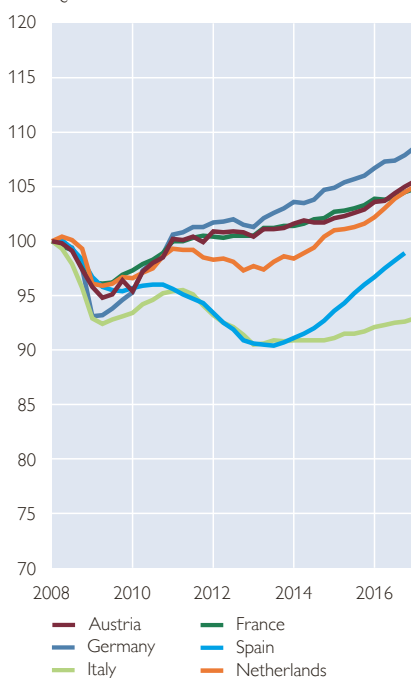
The United States will be among the key drivers of global growth in the years ahead, as will be the euro area. At quarterly (quarter-on-quarter) growth rates of 0.5% in late 2016 and early 2017, economic activity in the euro area has surpassed potential output growth. Consequently, the negative output gap has been shrinking steadily. Robust GDP growth has benefited from the nonstandard monetary policy measures, which had caused the interest rate differential between the peripheral and core euro area countries to contract to below 50 basis points by end-2016. Lending to nonfinancial corporations returned into positive territory already in early 2016, and growth of housing loans likewise accelerated throughout 2016. In the euro area, domestic demand continues to be the main driver of the economy. On the back of strong employment growth and real wages pushed up by low inflation,

Chart 3

Positive GDP growth but ongoing regional divergence in the euro area

Real GDP

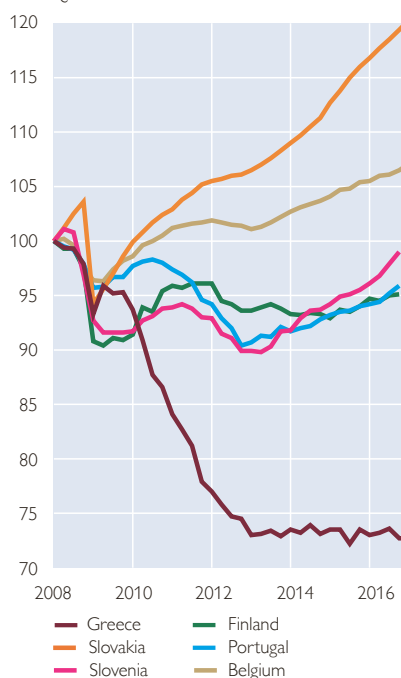
Index: Q1 2008=100



Source: Eurostat.

Real GDP

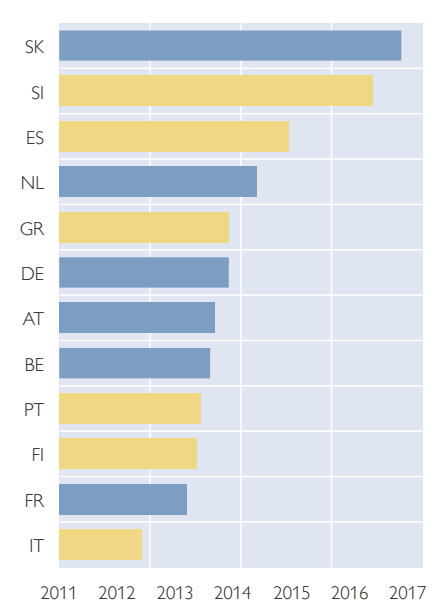
Index: Q1 2008=100



Source: Eurostat.

Cumulative GDP growth 2017–2018

%



Source: OECD spring forecast, June 2017.

Note: Yellow highlighting indicates countries which had not yet regained GDP levels measured in early 2008 by the end 2016.

private consumption considerably boosted growth already in 2016. In contrast, gross fixed capital formation has contributed only little to growth even though financing conditions have remained excellent in the euro area. The acceleration of global economic growth, and world trade in particular, has, however, resulted in a positive contribution from net exports. Labor market conditions have seen a steady improvement, with employment continuously increasing since mid-2015. At about 9.5%, the unemployment rate has declined by more than 2.5 percentage points from its mid-2013 record high. This reduction has been driven particularly by developments in Ireland, Spain and Portugal.

However, the positive growth climate in the euro area as a whole masks

the persistent strong heterogeneity of GDP growth across the individual member countries, as evidenced in chart 3 with data from 2008 onward for the twelve largest euro area economies which together account for over 96% of the euro area's output.⁴ Six of these countries – namely Greece, Italy, Finland, Portugal, Slovenia and Spain, – were still short of their respective pre-crisis GDP levels at the end of 2016. After four years of weak economic growth of below 1% per year, Austria's GDP growth is almost on a par with that of France and the Netherlands and not quite as strong as that of Belgium and Germany. Slovakia recorded a marked increase in economic output until early 2017.

All euro area countries are forecast to post positive annual growth rates in

Table 2

Underlying global economic conditions

	2016	2017	2018	2019
<i>Annual change in % (real)</i>				
Gross domestic product				
World excluding the euro area	+3.2	+3.5	+3.8	+3.8
U.S.A.	+1.6	+2.2	+2.5	+2.3
Japan	+1.0	+1.3	+0.7	+0.6
Asia excluding Japan	+6.1	+6.0	+6.0	+5.9
Latin America	-1.3	+0.9	+2.4	+2.7
United Kingdom	+1.8	+1.8	+1.5	+1.6
CESEE EU Member States ¹	+3.1	+3.7	+3.1	+3.1
Switzerland	+1.3	+1.6	+1.8	+1.9
Euro area ²	1.7	1.9	1.8	1.7
World trade (imports of goods and services)				
World	-1.8	+3.4	+2.3	+2.7
World excluding the euro area	-3.9	+2.3	+2.9	+3.4
Growth of euro area export markets (real)	-1.9	+3.4	+3.0	+3.1
Growth of Austrian export markets (real)	+2.9	+4.4	+4.2	+4.1
Prices				
Oil price in USD/barrel (Brent)	44.0	51.6	51.4	51.5
Three-month interest rate in %	-0.3	-0.3	-0.2	0.0
Long-term interest rate in %	0.4	0.7	0.9	1.2
USD/EUR exchange rate	1.11	1.08	1.09	1.09
Nominal effective exchange rate of the euro (euro area index)	110.4	109.9	110.3	110.3

Source: Eurosystem.

¹ Bulgaria, Croatia, Czech Republic, Hungary, Poland and Romania.

² 2016: Eurostat; 2017 to 2019: Results of the Eurosystem's June 2017 projections.

⁴ Instead of Ireland, which is currently struggling with calculating its national accounts, this list includes Slovenia.

2017 and 2018.⁵ While economic growth will be buoyant in this period in Slovakia and Ireland, the recovery will be subdued in Italy and France. Greece managed to stabilize its economy in recent years, but continues to lag behind its euro area peers with regard to the pace of economic recovery. The new austerity measures currently under discussion are set to dampen the recovery again, but the current growth outlook for Greece nevertheless remains robust. Spain managed to return to relatively solid GDP growth rates in recent years, and is expected to repeat its strong economic performance also this and next year. The German economy, finally, exhibited strong growth rates over the past three years but is expected to be slightly less dynamic in the years ahead.

4 Austrian economy back on solid growth path

4.1 Europe's economic recovery underpins growth of Austrian exports

Bogged down by weak international demand, real growth of Austrian goods and services exports came to less than 2% and that of nominal goods exports alone (national accounts data) to 0.5% in 2016. Nominal goods exports to non-EU countries even shrank somewhat, largely on the back of decreasing exports to the U.S.A. and to Asia (especially to the Middle East). The real expansion of services exports, by contrast, contracted only minimally over the previous years amid highly dynamic tourism exports. Travel reve-

nues increased by 6.2% in 2016, with the income surplus running to EUR 8.8 billion. With countries and regions like Turkey and North Africa faced with political uncertainty, even more tourists have flocked to Austria in recent years. As a result, Austria's tourist industry increased its market share. In contrast to travel receipts, the contribution of business services to net exports went down also in 2016. The balance of business services exports and imports came to a mere EUR 1.4 billion (compared with a record high of EUR 5.2 billion in 2007). This decline is above all attributable to increased imports of (mainly transportation) services from CESEE countries. Exports of business services have traditionally been closely aligned with exports of goods. Given that goods exports are on the rise, exports of business services are expected to rebound in due course.

In contrast to exports, imports jumped by 3.5% in real terms in 2016, which was due to rising domestic demand for consumer and capital goods. Private consumption, which grew by 1.4% in 2016, accounts for 31%⁶ of imports – in other words, about one-third of households' demand is met by imports. Changes in company car taxation⁷ likewise boosted imports in 2016. Car imports (SITC 781) surged by 16% in 2016, thus accounting for some two-thirds of total goods imports growth last year and 5.1% of total Austrian goods imports (Comext data⁸). In light of the weak export and comparatively strong import growth, net exports made a negative contribution

⁵ In light of the cutoff date, this outlook reflects the OECD economic outlook released in June 2017 instead of the June 2017 Eurosystem staff macroeconomic projections.

⁶ Source: World Input-Output Table for 2014.

⁷ Following the tax reform, the monthly taxable value for the private use of company cars was raised from 1.5% of acquisition costs (hitherto irrespective of the CO₂ emission limit set by the EU) to 2% of the acquisition costs for cars whose emission levels exceed the target of 130 grams of CO₂ per kilometer.

⁸ Comext data are used to calculate national accounts data despite methodological differences. In 2016, goods imports grew by 1.8% according to national accounts data and by 1.2% according to Comext data (in nominal terms, year on year).

to GDP growth in 2016 (−0.8 percentage points).

As import demand had increased markedly in some of Austrian exporters' major target markets (e.g. Germany, the CESEE countries and countries in Eastern Asia) toward the end of 2016, Austrian exports strengthened significantly in early 2017. The annual growth rate of nominal goods exports (as published by Statistics Austria) surged by 18.3% – partly thanks to one-off effects⁹ – in January 2017. Real goods and services exports grew at 2.1% (quarter on quarter) in the first three months of 2017.

With world trade rebounding, exports to both euro area and non-euro area countries will increase further. This is why real exports are projected to accelerate sharply, by 4.2%, in 2017 and to keep growing largely in sync with the growth rates expected for export markets in 2018 (4.0%) and 2019 (3.9%). As to Austrian exporters' price competitiveness, no substantial

change is on the horizon. This translates into negligible losses of market shares in the forecasting period. Import growth, which is determined by the development of demand components and their import elasticities, will lag behind export growth in this period. The contribution of net exports to growth will therefore turn positive again.

At 1.7% of GDP, Austria's current account balance in 2016 had deteriorated by 0.2 percentage points against the previous year. This was due to a special effect related to company car purchases, which significantly boosted car imports and weighed on the goods balance. The balance of goods contracted from 0.4% of GDP in 2015 to −0.1% of GDP in 2016. The balance on income, by contrast, improved slightly in 2016. In 2017, the goods balance will be back in positive territory. Together with an improved balance on services, this will have a favorable effect on the current account, and this uptrend will continue into 2018 and 2019.

Table 3

Growth and price developments in Austria's foreign trade

	2016	2017	2018	2019
	<i>Annual change in %</i>			
Exports				
Competitor prices on Austria's export markets	−2.9	+3.7	+1.9	+2.0
Export deflator	−0.5	+2.7	+2.1	+1.9
Changes in price competitiveness	−2.4	+1.0	−0.2	+0.1
Import demand on Austria's export markets (real)	+2.9	+4.4	+4.2	+4.1
Austrian exports of goods and services (real)	+1.8	+4.2	+4.0	+3.9
Austrian market share	−1.1	−0.2	−0.2	−0.2
Imports				
International competitor prices on the Austrian market	−2.2	+2.7	+1.7	+1.8
Import deflator	−1.2	+2.6	+1.9	+1.8
Austrian imports of goods and services (real)	+3.5	+3.7	+3.8	+3.4
Terms of Trade	+0.7	+0.1	+0.2	+0.2
	<i>Percentage points of real GDP</i>			
Contribution of net exports to GDP growth	−0.8	+0.4	+0.3	+0.4
	<i>% of nominal GDP</i>			
Export share	52.3	53.9	55.3	56.6
Import share	48.7	49.9	51.0	51.9

Source: 2016: WIFO, Eurosystem; 2017 to 2019: OeNB June 2017 outlook.

⁹ For one thing, January 2017 had two working days more than January 2016, and for another, a major shipment of goods was made to France.

Box 1

Public finances from 2016 to 2019¹

In 2016, the general government deficit rose by 0.5 percentage points to 1.6% of GDP. The higher deficit was above all due to revenue-side shortfalls: as a result of the tax reform, wage tax receipts dropped significantly in 2016 and the envisaged funding measures fell short of the targeted volume. Considerable shortfalls were also attributable to the fact that anticipatory effects in the area of capital gains tax on dividends had run their course. These effects were only partly offset by the surge in corporate income tax revenue. On the expenditure side, additional expenses resulted in particular from refugee-related spending. On balance, the government expenditure ratio sank in light of ongoing refinancing at decreasing interest rates and in the absence of capital transfers to ailing financial institutions. Austria's structural budget balance adjusted for the economic cycle and one-off effects amounted to around -1% of GDP in 2016, hence falling considerably short of Austria's medium-term objective of -0.45% of GDP. Yet the European Commission gave special consideration in its assessment to net extra costs originating directly from refugee migration and counter-terrorism measures, hence allowing for a temporary deviation from the adjustment path toward the medium-term budgetary objective. Austria's general government debt ratio edged down by 0.9 percentage points, to 84.6% of GDP, in 2016.

The general government deficit ratio will improve considerably in 2017, namely to 0.9% of GDP. This is attributable to the improved economic conditions, ongoing refinancing at low interest rates and the measures taken to fund the 2016 tax reform.² However, the reduction of the deficit is being slowed down by the cuts in employer contributions to the family burden equalization fund, effective from January 1, 2017, and the lagged tax relief effect. Slowing down somewhat in 2017, government consumption is set to contribute only marginally to the economic expansion. By contrast, the lagged tax relief effect fuels real private consumption, one of the pillars of economic recovery. The general government debt ratio is forecast to drop noticeably, to just above 80% of GDP, on the back of a marked increase in the level of nominal GDP as well as the progressive divestment of impaired assets by the government-run bad banks.

The budget balance is expected to improve further also in 2018 and 2019 thanks to continued favorable cyclical developments and decreasing interest payments. At the same time, a number of measures listed in the government's work program for 2017 that have already been agreed will dampen deficit reduction in the coming years.³ These measures include bonus payments for employers creating new jobs, additional investment subsidies and the creation of 20,000 subsidized jobs for long-term unemployed people over 50. As debt continues to be refinanced at low interest rates, the structural budget balance will go down, too, however. At present, Austria is expected to reach its domestic medium-term budgetary objective of -0.45% of GDP in 2019. The general government debt ratio is set to shrink further, to about 76% of GDP by 2019.

¹ Compiled by Paul Eckerstorfer, Economic Analysis Division, paul.eckerstorfer@oenb.at.

² Some of the funding measures (e.g. adjustments to the depreciation of real estate) will not be fully reflected in the budget before 2017.

³ The forecast reflects all measures for which sufficient details were available by May 23, 2017.

4.2 Investment cycle to peak in 2017

The quarterly growth rates of the Austrian economy have been accelerating steadily since early 2015.¹⁰ This gradual improvement was accompanied by an investment cycle preceding the eco-

nomical recovery, as is typically the case. In early 2015, the quarterly growth rate of gross fixed capital formation had turned positive again and from then onward, it gradually moved upward, to reach 1.1% in the fourth quarter of

¹⁰ The second and third quarter of 2015 as well as the second quarter of 2016 represent temporary exceptions.

Table 4

Austria's current account

	2016	2017	2018	2019
	% of nominal GDP			
Balance of trade	2.9	3.3	3.6	4.0
Balance of goods	-0.1	0.2	0.3	0.5
Balance of services	2.9	3.1	3.3	3.5
Balance of primary income	-0.2	-0.2	-0.2	-0.2
Balance of secondary income	-1.0	-1.0	-1.0	-1.0
Current account balance	1.7	2.1	2.4	2.8

Source: 2016: OeNB; 2017 to 2019: OeNB June 2017 outlook.

2016. Investment in equipment largely carried the investment cycle in 2015 and 2016, with investment in motor vehicles (see footnote 7) being a determining factor. Over the course of 2016, investment in machinery was gaining importance as well. Yet, the new rules on company car taxation will positively impact on investment growth also in 2017. According to the statistics on new vehicle registrations, the number of new registrations increased once again in early 2017.¹¹

Gross fixed capital formation is expected to expand at a rapid pace also in 2017. The latest quarterly survey published by the European Commission bodes well for Austria: (1) capacity utilization in manufacturing outperforms the long-term average, as last seen in late 2011; (2) a marked decrease in unused production capacity goes hand in hand with an increase in the number of months' production assured by orders on hand and continued high orders (from abroad); (3) rising demand

Chart 4

Gross fixed capital formation

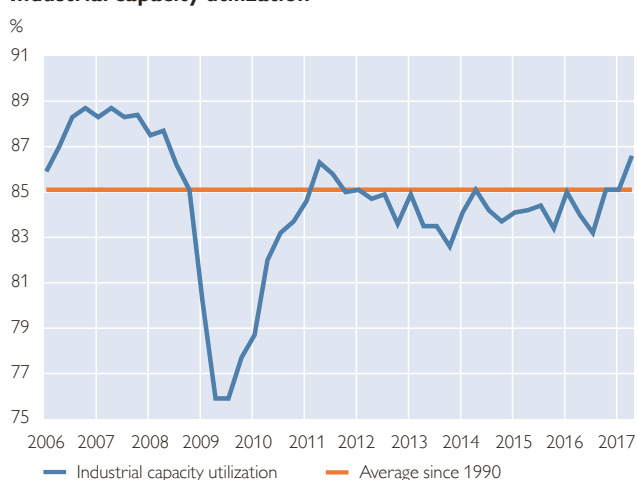
Quarterly investment growth

Growth in %, contributions to growth in percentage points



Source: Eurostat, OeNB.

Industrial capacity utilization



Source: European Commission.

¹¹ The registration of new passenger cars increased by 14.3% against the fourth quarter of 2016 and by 12.8% year on year.

was indicated as the main driver influencing industrial investment; and (4) investment is now mainly aimed at increasing output rather than at replacing existing machinery, which was still the case in 2016.

These favorable developments have already fed through to the economy (e.g. strong industrial output growth in the area of intermediate and capital goods) and to the confidence indicators (e.g. manufacturing purchasing managers' index, business outlooks of the Austrian Institute of Economic Research and the Federation of Austrian Industries). This notwithstanding, growth in equipment investment is expected to slow down over the forecast horizon. Historical data show that equipment investment cycles are typically short, yet very dynamic.

In light of the rising demand for residential housing and continued favorable financing conditions, growth of residential construction investment is forecast to increase from 0.4% in 2016 to 2.0% in 2018. Signs of a modest recovery in residential construction investment were already evident in late 2016, early 2017. In addition, the residential housing initiative launched by the government in 2015 is expected to have positive effects on residential construction investment in the years ahead.¹²

To buttress the upturn, the federal government, introduced an investment stimulus package in late October 2016, to be implemented in 2017 and 2018.

This package comprises additional investment subsidies¹³ and investment incentives for municipalities.¹⁴ The OeNB expects the investment package to boost GDP growth by some 0.1 percentage point each in both 2017 and 2018. R&D investment has developed in sync with equipment investment in recent years, albeit at lower growth levels. A similar pattern is expected for the 2017–2019 period.

In sum, the OeNB projects overall gross fixed capital formation to expand by 3.3% in 2017, by 2.0% in 2018 and by 1.7% in 2019. The investment ratio is thus expected to climb slightly from 22.9% in 2016 to 23.2% in 2017.

4.3 Private consumption is driving growth

In the period of low real growth (2012 to 2015), the development of households' real disposable income was very volatile. Real disposable income grew in 2012 (1.3%), shrank in 2013 (–1.9%) and thereafter stagnated in 2014 (–0.1%) and 2015 (0.2%). A noticeable increase (2.3%) was recorded in 2016, as a result of the income tax reform. Real disposable income growth is influenced by a combination of factors, including the changes in the inflation rate, wages, employment and property income (mixed income of the self-employed, interest and dividend income) as well as income tax design and public transfers to households. 2013 and 2014 were characterized by relatively weak growth of households' nominal dispo-

¹² Funding is organized by the Residential Investment Bank (WBIB), which was established in September 2016.

¹³ The subsidies are made available for investment in excess of the average of the past three years. Large companies (with a staff of over 250) are eligible for 10% of the eligible investment volume, and small and medium-sized enterprises (SMEs) for 15%, subject to a cap of EUR 70,000 for medium-sized companies and EUR 67,000 for small companies. The total volume of this measure, which is meant to provide an incentive for investments worth EUR 1.2 billion, equals EUR 175 million. The 2017 subsidy program for SMEs has already been exhausted, but new applications will be accepted under the 2018 program. The subsidy program for large companies is limited to 2017 and will be opened for applications once the funding guidelines have been finalized. The fiscal impact of these programs is unlikely to materialize before 2018, because the subsidies will be rewarded retroactively.

¹⁴ For municipalities, investment incentives amounting to EUR 175 million have been appropriated for 2017 under the investment stimulus package.

Table 5

Investment activity in Austria

	2016	2017	2018	2019
<i>Annual change in %</i>				
Total gross fixed capital formation (real)	+3.1	+3.3	+2.0	+1.7
<i>of which: investment in plant and equipment</i>	+6.6	+5.8	+2.1	+2.0
<i>residential construction investment</i>	+0.4	+1.2	+2.0	+2.0
<i>nonresidential construction investment and other investment</i>	+1.7	+1.5	+2.1	+1.5
<i>investment in research and development</i>	+1.9	+3.2	+1.6	+1.3
<i>public sector investment</i>	+2.0	+1.5	+1.0	+1.0
<i>private sector investment</i>	+3.3	+3.6	+2.2	+1.8
<i>Contribution to the growth of real gross fixed capital formation in percentage points</i>				
Investment in plant and equipment	+2.3	+2.1	+0.8	+0.7
Residential construction investment	+0.1	+0.2	+0.4	+0.4
Nonresidential construction investment and other investment	+0.5	+0.4	+0.5	+0.4
Investment in research and development	+0.4	+0.6	+0.3	+0.3
Public sector investment	+0.3	+0.2	+0.1	+0.1
Private sector investment	+2.9	+3.1	+1.9	+1.6
<i>Contribution to real GDP growth in percentage points</i>				
Total gross fixed capital formation	+0.7	+0.8	+0.5	+0.4
Changes in inventories	+0.3	+0.0	+0.0	+0.0
<i>% of nominal GDP</i>				
Investment ratio	22.9	23.2	23.2	23.2

Source: 2016: WIFO; 2017 to 2019: OeNB June 2017 outlook.

able income and relatively high HICP inflation, causing the real disposable income of households to contract. The modest increase in nominal disposable income was attributable to (1) the pattern of employment growth, which was largely driven by part-time work and by job growth in areas characterized by low productivity, (2) falling property income as well as (3) bracket creep dampening income. Growth in real disposable household income in 2016 benefited from the income tax reform effective from 2016,¹⁵ low inflation, an increase of the number of full-time jobs and increased hiring in the manufacturing industry.

Given the sluggish development of real disposable household income, real private consumption contracted in 2013

and 2014, and stagnated in 2015, before starting to accelerate in 2016.

In 2017, nominal household income growth is set to be somewhat weaker than in 2016, yet still comparatively robust. The full impact of the income tax reform is going to manifest itself in 2017, thus benefiting household income growth this year. Employment growth will stay high, too, with the increase in the compensation of employees matching that of last year. At the same time, the HICP inflation rate will accelerate to 2%, thus clearly dampening the increase in real household income (1.0%). 2018 will bring a comparatively strong rise in the compensation of employees, as the higher inflation rates recorded in 2017 and productivity gains will translate into higher collective

¹⁵ In 2016, the tax reform reduced taxes by some EUR 4.2 billion. Ultimately, the tax burden will be lowered by around EUR 5 billion (some of the effects will not materialize until 2017).

wage and salary settlements for 2018. Growth in income of the self-employed will, by contrast, slow down in 2018. At the same time, the slight deceleration of inflation year on year will benefit real disposable household income. Likewise, property income will rebound somewhat in 2018–2019 on the back of more dynamic economic growth.

The saving ratio edged up slightly in 2016 on account of the income tax reform, as households did not spend all the money they saved in taxes in the same year. The forecast is based on the assumption that households faced with strong income gains step up consumption only with a certain lag. For this reason, the saving ratio is expected to edge down in 2017 and remain unchanged in the next few years.

The income gains fueled private consumption already in 2016. The quarterly growth rates of private consumption, ranging from 0.4% to 0.5%, were well above the long-term average (2000–2016: 0.3%). Growth remained at a high 0.4% quarter on quarter also

in the first three months of 2017. For 2017 as a whole, private consumption growth is pegged at 1.6% (2016: 1.4%). In the two subsequent years, households' demand will slow down somewhat to 1.2% per annum. Private consumption is therefore a major pillar of growth throughout the forecast horizon.

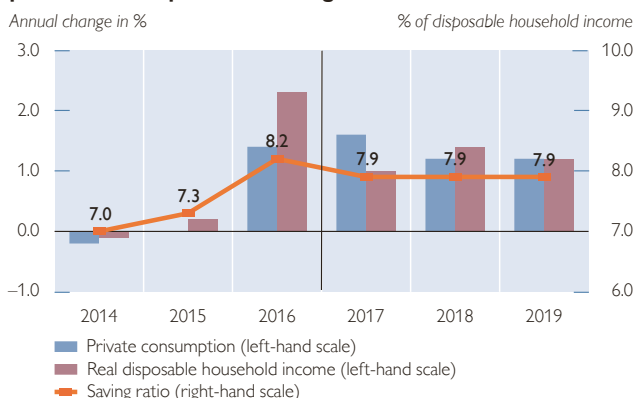
5 Unemployment goes down for the first time since 2011

In the past few years, both the number of employed individuals¹⁶ and the number of registered unemployed individuals increased in tandem. Payroll employment grew at an annual 1.1% between 2012 and 2016, subdued economic activity notwithstanding. In comparison, the number of hours worked rose by a mere 0.4% per annum. Employment growth came mainly on the back of new part-time jobs, which explains this discrepancy. From 2012 to 2016, the share of part-time workers in payroll employment advanced by close to 3 percentage points to 28.9%.

Chart 5

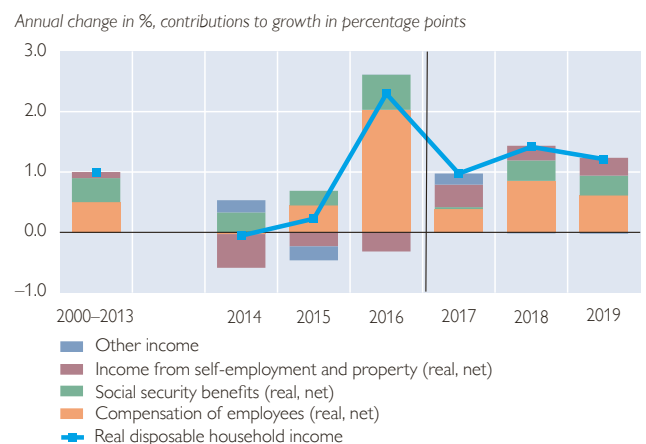
Private consumption

Disposable household income, private consumption and saving ratio



Source: WIFO, Statistics Austria, OeNB.

Net contributions to growth of real disposable net household income



Source: WIFO, Statistics Austria, OeNB.

¹⁶ In terms of employment growth, the national accounts refer to the number of jobs rather than the number of employed individuals.

Table 6

Determinants of nominal household income and private consumption growth in Austria

	2016	2017	2018	2019
<i>Annual change in %</i>				
Payroll employment	+1.5	+1.5	+1.5	+1.2
Wages and salaries per employee	+1.3	+1.3	+2.2	+1.9
Compensation of employees	+2.8	+2.8	+3.7	+3.2
Property income	-11.0	+1.4	+3.1	+3.2
Self-employment income and operating surpluses (net)	+6.0	+6.0	+3.4	+3.5
<i>Contribution to households' disposable income growth in percentage points</i>				
Compensation of employees	+2.4	+2.4	+3.1	+2.7
Property income	-1.3	+0.1	+0.3	+0.3
Self-employment income and operating surpluses (net)	+1.0	+1.0	+0.6	+0.6
Net transfers less direct taxes ¹	+1.3	-0.8	-1.0	-0.8
<i>Annual change in %</i>				
Disposable household income (nominal)	+3.6	+2.9	+3.1	+2.9
Consumption deflator	+1.3	+1.9	+1.7	+1.7
Disposable household income (real)	+2.3	+1.0	+1.4	+1.2
Private consumption (real)	+1.4	+1.6	+1.2	+1.2
<i>% of disposable income growth</i>				
Saving ratio	8.2	7.9	7.9	7.9
<i>% of nominal GDP</i>				
Consumption ratio	52.6	52.5	52.1	51.9

Source: 2016: WIFO, Statistics Austria; 2017 to 2019: OeNB June 2017 outlook.

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

As economic growth picked up speed in 2016, employment rose not only in the services, but also in the industrial sector. Moreover, the number of hours worked also accelerated, leading to a trend reversal. This positive momentum will continue in 2017: The number of payroll employees is projected to rise at a rate of 1.5%, and the number of hours worked is set to accelerate by 1.3%, even more vividly than in 2016 (1.0%). In 2018, employment growth will be buttressed not only by economic activity, but also by special labor market measures laid down in the government's 2017 work program (above all the 50+ employ-

ment initiative helping 20,000 long-term unemployed individuals back to work). As the recovery subsides in 2018 and 2019, the pace of job growth is projected to decline somewhat, while continuing to be robust by historical standards.

At 1.6%, labor supply expanded in 2016 at a rate last seen in 2004. Its growth will slide somewhat from 2017 (1.1%) onward, but still amount to 0.9% in 2019. According to the OeNB outlook (based on the national accounts framework), a total of 142,000 individuals will newly enter the Austrian job market from 2017 to 2019.¹⁷ Labor migration (i.e. immigrants excluding refugees)

¹⁷ The change in labor supply may be broken down into a population effect (change in population at unchanged participation rates) and a participation effect (change in participation rates at 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 labor migration (i.e. traditional immigration) and immigration motivated by a search for refuge.

Table 7

Labor market development in Austria

	2016	2017	2018	2019
	Annual change in %			
Total employment (heads)	+1.3	+1.3	+1.3	+1.1
Payroll employment	+1.5	+1.5	+1.5	+1.2
of which: public sector employment	+0.4	+0.3	+2.3	-0.8
Self-employment	+0.0	+0.1	+0.2	+0.0
Total hours worked	+0.9	+1.1	+1.0	+0.6
of which: Payroll employment	+1.0	+1.3	+1.1	+0.8
Self-employment	+0.2	+0.0	+0.1	-0.3
Labor supply	+1.6	+1.1	+1.1	+0.9
Registered unemployment	+7.2	-2.3	-3.7	-2.5
	% of labor supply			
Unemployment rate (Eurostat definition)	6.0	5.7	5.5	5.4

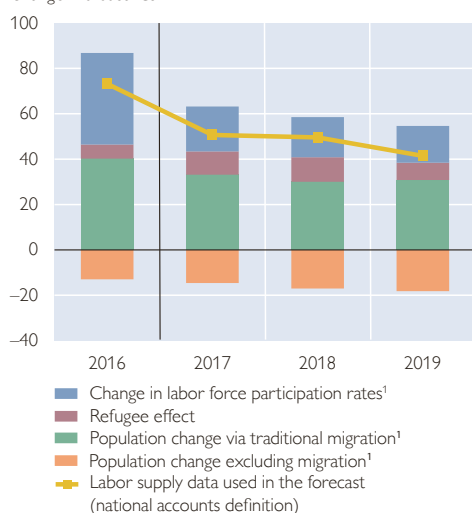
Source: 2016: WIFO, Statistics Austria; 2017 to 2019: OeNB June 2017 outlook.

Chart 6

Structure of labor supply

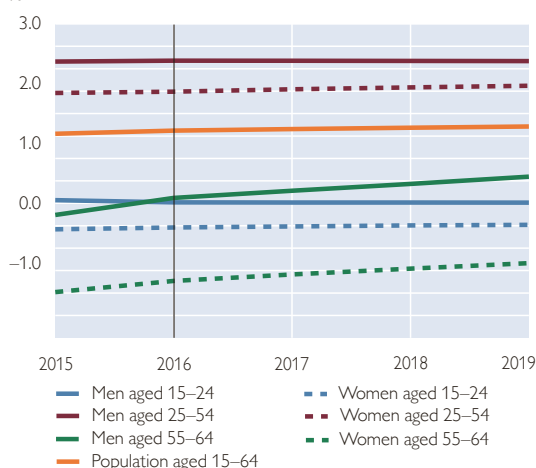
Contributions to the change in labor supply (resident population)¹

Change in thousands



Labor force participation (resident population)¹

%



Source: Statistics Austria, OeNB.

¹ 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, October 2016). The labor supply data used in the forecast (national accounts definition) may differ from the microcensus-based equivalent.

in particular accounts for the rising labor supply. Between 2017 and 2019, the number of labor migrants is pegged at some 94,000 individuals. By end-

2019, the influx of refugees will also have contributed to labor supply growth, namely on a scale of some 29,000 individuals.¹⁸ On the other

¹⁸ The OeNB forecast is based on the assumption that the political benchmarks for the intake of asylum applications set by the government for the years 2017 (35,000), 2018 (30,000) and 2019 (25,000) are met. Not all asylum seekers will enter into the labor supply figures, however.

hand, domestic demographic change will result in a labor supply reduction, with the working-age population in Austria (excluding migration) set to decline by almost 50,000 individuals over the forecast horizon. This negative demographic effect will be balanced out by the rising labor force participation of older people – an extra 54,000 individuals will push up labor supply in cumulative terms during this period. This effect is due to subside with time, however, and in 2019 the higher participation rate will fail to compensate for the shrinking domestic labor force.

2016 saw a turnaround in seasonally adjusted unemployment (Eurostat definition), which has declined since the closing quarter of that year. The national unemployment rate is likewise

on the decline, having shrunk from 9.1% (2016, seasonally adjusted) to 8.6% in April 2017. The OeNB expects unemployment (Eurostat definition) to go down further over the forecast horizon by dropping from 6.0% (2016) to 5.7% (2017). Supported by labor market measures, it will decline further to 5.5% (2018) and 5.4% (2019).¹⁹

6 Inflation to rise to 2.0% in 2017

Austrian HICP inflation accelerated markedly between September 2016 and February 2017 (2.4%) and stood at 2.3% in April. The price growth was driven by energy, unprocessed food and industrial goods excluding energy. Moreover, unexpected one-off effects (e.g. weather-linked price hikes of unprocessed food) came into play. In

Table 8

Price, cost, productivity and profit indicators for Austria

	2016	2017	2018	2019
<i>Annual change in %</i>				
Harmonised Index of Consumer Prices (HICP)	+1.0	+2.0	+1.8	+1.8
HICP energy	-4.6	+1.9	-0.8	+0.0
HICP excluding energy	+1.5	+2.0	+2.0	+1.9
Private consumption expenditure (PCE) deflator	+1.3	+1.9	+1.7	+1.7
Investment deflator	+1.0	+1.6	+1.7	+1.7
Import deflator	-1.2	+2.6	+1.9	+1.8
Export deflator	-0.5	+2.7	+2.1	+1.9
Terms of trade	+0.7	+0.1	+0.2	+0.2
GDP deflator at factor cost	+1.3	+1.6	+1.8	+1.8
Collective wage and salary settlements	+1.6	+1.5	+2.6	+2.2
Compensation per employee	+1.3	+1.3	+2.2	+1.9
Hourly compensation per employee	+1.8	+1.5	+2.5	+2.3
Labor productivity per employee	+0.1	+0.8	+0.3	+0.5
Labor productivity per hour	+0.6	+1.1	+0.7	+0.9
Unit labor costs	+1.2	+0.4	+1.8	+1.4
Profit margins ¹	+0.1	+1.1	+0.0	+0.4

Source: 2016: WIFO, Statistics Austria; 2017 to 2019: OeNB June 2017 outlook.

¹ GDP deflator divided by unit labor costs.

¹⁹ Given that Eurostat's compilation of unemployment figures is survey-based and migrants might hence be underrepresented, it is difficult to predict how quickly and to what extent unemployment among recognized asylum-seekers will actually be reflected in Eurostat's unemployment rate. The national unemployment rate is based on data provided by the Austrian Public Employment Service (AMS), reflecting the number of registered unemployed individuals. On account of the methodological difference, the reduction in the unemployment rate according to the national definition (which is not taken into account in this outlook) might be smaller than the reduction in the unemployment rate as defined by Eurostat.

2017 as a whole, HICP inflation will run to 2.0%.²⁰ This translates into a significant increase over 2016 (1.0%). Compared with the OeNB's December 2016 outlook, the inflation forecast has been revised upward by 0.5 percentage points. This revision is ascribable to the increase in commodity prices, especially oil prices, in early 2017, and a considerably better economic performance. In 2018, the HICP inflation rate is expected to come in at 1.8%. The decline of inflation in 2018 primarily reflects constant assumptions regarding the development of oil prices and thus a shrinking contribution to inflation growth from energy.

Domestic factors only play a subordinate role in determining inflationary developments in 2017. The output gap will contract until 2019, but continue to be negative. The wage settlements concluded in late 2016 and early 2017 are set to influence wage developments in 2017. According to these settle-

ments, collectively agreed wages and salaries in the metal industry will be raised by 1.7%, in trade by an average 1.4%, in the public sector by 1.3% and in most other industries by 1.3% to 1.4%. The economic recovery of 2017 is therefore hardly reflected in wage developments. At 1.5%, the average collectively agreed wages and salaries will even increase slightly less in 2017 than in 2016 (1.6%). Wage settlements are likely to be higher in 2018 and 2019, reflecting increased inflation as well as productivity gains. In particular, the high level of inflation in 2017 will result in comparatively high wage settlements in 2018. Unit labor costs are expected to rise markedly in 2018, without, however, surpassing average ULC growth measured in the period from 2012 to 2015. The wage drift – the difference between the collectively agreed increase in wages and the increase in actual wages – is essentially the result of structural factors and will remain

Table 9

Compensation of employees

	2016	2017	2018	2019
<i>Annual change in %</i>				
Gross wages and salaries¹				
In nominal terms	+2.8	+2.8	+3.7	+3.2
Consumption deflator	+1.3	+1.9	+1.7	+1.7
In real terms	+1.5	+0.9	+2.1	+1.5
Per person employed (nominal)				
Collectively agreed wages and salaries ¹	+1.6	+1.5	+2.6	+2.2
Wage drift	-0.2	-0.2	-0.4	-0.3
Per person employed (gross) ²	+1.3	+1.3	+2.2	+1.9
Per person employed (gross, real)	+0.1	-0.6	+0.5	+0.3
Per hour (gross, nominal)	+1.8	+1.5	+2.5	+2.3
Per hour (gross, real)	+0.5	-0.4	+0.9	+0.7
<i>% of nominal GDP</i>				
Wage ratio	48.1	47.6	47.7	47.6

Source: 2016: WIFO, Statistics Austria; 2017 to 2019: OeNB June 2017 outlook.

¹ Overall economy.

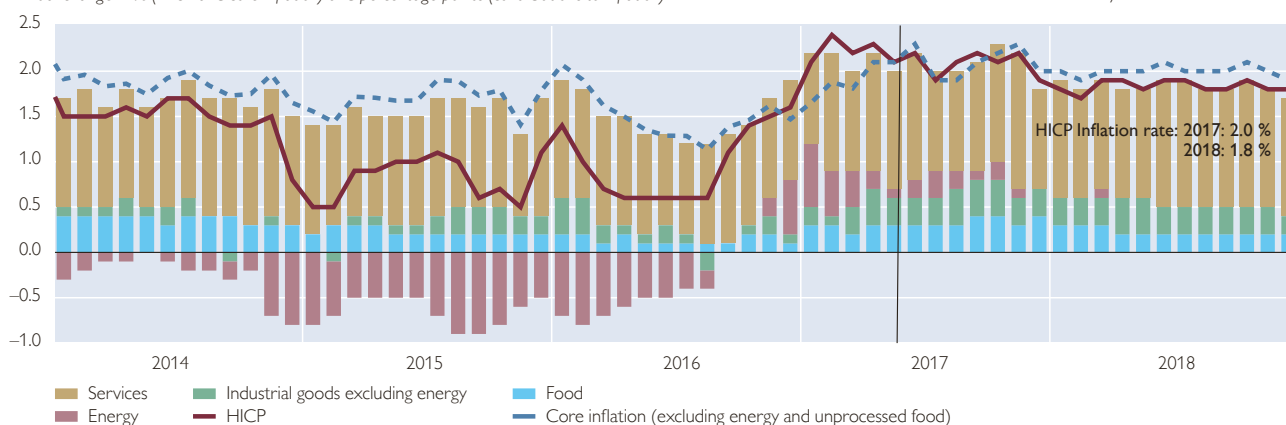
² Including employers' social security contributions.

²⁰ In early 2017, the OeNB had pegged the 2017 annual inflation rate at well above 2%. As oil prices have gone down again and the oil price is expected to remain at about USD 51.5 per barrel over the forecast horizon, the inflation rate projected for 2017 has been revised downward.

Austrian HICP inflation rate and contributions of subcomponents

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

Forecast May 2017 to December 2018



Source: Statistics Austria, OeNB.

negative throughout the forecast horizon. The wage share²¹ was countercyclical in recent years, rising to 48.1% in 2015, i.e. against the backdrop of GDP growth rates of below 1% in the period from 2012 to 2015. In 2017, the wage share is expected to drop to 47.6%; thereafter, it should remain broadly unchanged.

7 Forecast risks broadly balanced

The *external risks* to the forecast are balanced. Neither the Brexit vote in the U.K. nor the unexpected presidential election outcome in the U.S.A. had a negative impact on the economy in the short run. Much to the contrary, economic growth exceeded expectations in both the United States and the United Kingdom. Regarding Austria, risks to the upside stem from an expansionary shift in U.S. fiscal policies, and risks to the downside from a potential protectionist turn in U.S. trade policies. A further intensification of existing geopolitical tensions (tensions with and in Turkey, ISIS terrorism, the Syria conflict and related refugee migration)

continue to represent a serious risk to the performance of the world economy. In contrast, the risk of a disorderly correction of imbalances in China's lending and housing markets is now lower than it was in 2016.

The balance of *domestic risks* to the economy is likewise on the upside. Based on the results of the OeNB's export indicator for May 2017, continued vivid export growth would appear to be likely in the second quarter of 2017. This notwithstanding, the OeNB's spring forecast is based on more conservative expectations. Our forecast anticipates a sharp drop in investment in plant and equipment, even though a lengthier cycle of investment is not be ruled out according to survey results (the European Commission's quarterly survey). Given continued high housing demand and continued favorable financing conditions, housing investment is also subject to upside risks. The saving ratio of households increased temporarily in 2016 on the back of economic recovery and the income tax reform. Should households

²¹ Gross compensation of employees as a share of GDP.

dissave at a stronger rate than expected – for instance if consumer sentiment were to rise more strongly than anticipated due to the economic recovery – the growth of private consumption could accelerate as well.

8 Major upward revision of GDP growth and inflation compared with December 2016 forecast

Since the OeNB's December 2016 outlook, the forecast's underlying assumptions about the expected growth of Austrian export markets in 2017 have increased markedly, namely by almost 1 percentage point. In contrast, the assumptions for interest rates have remained broadly unchanged, and the assumptions for oil prices were revised upward slightly for 2017 but revised downward somewhat for 2018 and 2019. Compared with the December 2016 outlook, the current assumptions with regard to the euro area exchange

rate reflect a slight appreciation. All in all, these revised assumptions for the period from 2017 to 2019 did not have a major impact on economic growth.

The revisions to the outlook reflect changed external assumptions, new historical data and a residual. The influence of new data includes the effects of the revisions of both the historical data already available at the time of the previous economic outlook (i.e. data up to the third quarter of 2016) and the forecasting errors of the previous outlook for the periods now published for the first time (i.e. data for the fourth quarter of 2016 and the first quarter of 2017). The residual includes revised expert judgment regarding domestic variables, such as government consumption, wage settlements as well as any changes to the model.

For 2017, GDP growth has been revised up by close to 0.7 percentage points. The upward revision essentially

Table 10

Change in external economic conditions since the OeNB December 2016 outlook

	June 2017			Dec. 2016			Difference		
	2017	2018	2019	2017	2018	2019	2017	2018	2019
<i>Annual change in %</i>									
Growth of Austria's export markets	+4.4	+4.2	+4.1	+3.5	+4.0	+4.0	+0.9	+0.2	+0.1
Competitor prices on Austria's export markets	+3.7	+1.9	+2.0	+2.2	+2.0	+1.9	+1.5	-0.1	+0.1
Competitor prices on Austria's import markets	+2.7	+1.7	+1.8	+1.7	+1.8	+1.8	+1.0	-0.1	+0.0
<i>USD per barrel (Brent)</i>									
Oil price	51.6	51.4	51.5	49.3	52.6	54.6	+2.3	-1.2	-3.1
<i>Annual change in %</i>									
Nominal effective exchange rate (exports)	+0.7	-0.2	+0.0	+0.2	+0.0	+0.0	+0.5	-0.2	+0.0
Nominal effective exchange rate (imports)	+0.2	-0.1	+0.0	+0.0	+0.0	+0.0	+0.2	-0.1	+0.0
%									
Three-month interest rate	-0.3	-0.2	0.0	-0.3	-0.2	0.0	+0.0	+0.0	+0.0
Long-term interest rate	0.7	0.9	1.2	0.7	0.9	1.1	+0.0	+0.0	+0.1
<i>Annual change in %</i>									
U.S. GDP (real)	+2.2	+2.5	+2.3	+2.0	+2.0	+2.0	+0.2	+0.5	+0.3
<i>USD/EUR</i>									
USD/EUR exchange rate	1.08	1.09	1.09	1.09	1.09	1.09	-0.01	+0.00	+0.00

Source: Eurosystem.

reflects a stronger increase in economic activity in the fourth quarter of 2016 and the first quarter of 2017 (0.4 percentage points). Moreover, the leading indicators have improved significantly, as has the general assessment of the

ongoing economic recovery. This caused an additional upward revision. The upward revisions of 0.2 percentage points for 2018 and of 0.1 percentage point for 2019 reflect the reassessment of the economic cycle.

Table 11

Breakdown of revisions to the OeNB outlook

	GDP			HICP		
	2017	2018	2019	2017	2018	2019
	<i>Annual change in %</i>					
June 2017 outlook	+2.2	+1.7	+1.6	+2.0	+1.8	+1.8
December 2016 outlook	+1.5	+1.5	+1.5	+1.5	+1.7	+1.8
Difference	+0.7	+0.2	+0.1	+0.5	+0.1	+0.0
	<i>Percentage points</i>					
Caused by:						
External assumptions	+0.0	+0.0	+0.0	+0.3	-0.1	-0.1
New data ¹	+0.4	+0.0	+0.0	+0.0	+0.1	x
<i>of which: revision to historical data up to Q3 16</i>	+0.0	x	x	+0.0	x	x
<i>projection errors for Q4 16 and Q1 17</i>	+0.4	x	x	+0.2	+0.1	+0.0
Other changes ²	+0.2	+0.2	+0.1	+0.0	+0.1	+0.1

Source: OeNB June 2017 and December 2016 outlooks. Due to rounding, the sum of growth contributions subject to individual revisions may differ from the total revision.

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

² 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 June 2017 outlook and the December 2016 outlook

	Actual figures	June 2017 outlook			Revision since June 2016 outlook		
	2016	2017	2018	2019	2017	2018	2019
Economic activity							
<i>Annual change in % (real)</i>							
Gross domestic product (GDP)	+1.4	+2.2	+1.7	+1.6	+0.7	+0.2	+0.1
Private consumption	+1.4	+1.6	+1.2	+1.2	+0.5	+0.1	+0.1
Government consumption	+1.9	+0.9	+1.8	+0.8	+0.0	+0.5	-0.3
Gross fixed capital formation	+3.1	+3.3	+2.0	+1.7	+1.5	+0.5	+0.1
Exports of goods and services	+1.8	+4.2	+4.0	+3.9	+0.7	+0.1	-0.2
Imports of goods and services	+3.5	+3.7	+3.8	+3.4	+0.6	+0.2	-0.2
<i>% of nominal GDP</i>							
Current account balance	+1.7	+2.1	+2.4	+2.8	-0.4	-0.3	-0.2
Contribution to real GDP growth							
<i>Percentage points</i>							
Private consumption	+0.7	+0.8	+0.6	+0.6	+0.2	+0.1	+0.1
Government consumption	+0.4	+0.2	+0.4	+0.2	+0.0	+0.1	+0.0
Gross fixed capital formation	+0.7	+0.8	+0.5	+0.4	+0.4	+0.1	+0.0
Domestic demand (excluding changes in inventories)	+1.8	+1.8	+1.4	+1.2	+0.6	+0.2	+0.1
Net exports	-0.8	+0.4	+0.3	+0.4	+0.1	+0.0	+0.0
Changes in inventories (including statistical discrepancy)	+0.4	+0.0	+0.0	+0.0	-0.1	+0.0	+0.0
Prices							
<i>Annual change in %</i>							
Harmonised Index of Consumer Prices (HICP)	+1.0	+2.0	+1.8	+1.8	+0.5	+0.1	+0.0
Private consumption expenditure (PCE) deflator	+1.3	+1.9	+1.7	+1.7	+0.3	+0.0	-0.1
GDP deflator	+1.4	+1.6	+1.9	+1.8	+0.2	+0.3	+0.1
Unit labor costs (whole economy)	+1.2	+0.4	+1.8	+1.4	-0.4	+0.7	+0.3
Compensation per employee (at current prices)	+1.3	+1.3	+2.2	+1.9	-0.1	+0.4	+0.0
Compensation per hour worked (at current prices)	+1.8	+1.5	+2.5	+2.3	-0.1	+0.4	+0.2
Import prices	-1.2	+2.6	+1.9	+1.8	+0.8	+0.2	+0.1
Export prices	-0.5	+2.7	+2.1	+1.9	+1.2	+0.5	+0.2
Terms of trade	+0.7	+0.1	+0.2	+0.2	+0.4	+0.3	+0.2
Income and savings							
Real disposable household income	+2.3	+1.0	+1.4	+1.2	+0.0	+0.5	+0.4
<i>% of nominal disposable household income</i>							
Saving ratio	8.2	7.9	7.9	7.9	-1.0	-0.8	-0.5
Labor market							
<i>Annual change in %</i>							
Payroll employment	+1.5	+1.5	+1.5	+1.2	+0.4	+0.5	+0.3
Hours worked (payroll employment)	+1.0	+1.3	+1.1	+0.8	+0.4	+0.4	+0.1
<i>% of labor supply</i>							
Unemployment rate (Eurostat definition)	6.0	5.7	5.5	5.4	-0.6	-0.8	-0.8
Public finances							
<i>% of nominal GDP</i>							
Budget balance	-1.6	-0.9	-0.9	-0.5	+0.3	+0.0	+0.1
Government debt	84.6	80.2	78.0	75.8	-1.4	-1.7	-1.7

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

Annex: detailed result tables

Table 13

Demand components (real)

Chained volume data (reference year = 2010)

	2016	2017	2018	2019	2016	2017	2018	2019
	EUR million				Annual change in %			
Private consumption	162,568	165,203	167,169	169,163	1.4	1.6	1.2	1.2
Government consumption	63,485	64,053	65,183	65,721	1.9	0.9	1.8	0.8
Gross fixed capital formation	72,617	75,028	76,566	77,887	3.1	3.3	2.0	1.7
of which: investment in plant and equipment	26,068	27,571	28,157	28,713	6.6	5.8	2.1	2.0
residential construction investment	13,085	13,246	13,514	13,785	0.4	1.2	2.0	2.0
nonresidential construction investment and other investment	19,149	19,435	19,845	20,139	1.7	1.5	2.1	1.5
Changes in inventories (including statistical discrepancy)	5,376	5,328	5,338	5,271	x	x	x	x
Domestic demand	304,046	309,613	314,255	318,042	2.3	1.8	1.5	1.2
Exports of goods and services	175,628	183,045	190,322	197,675	1.8	4.2	4.0	3.9
Imports of goods and services	164,421	170,577	177,037	183,017	3.5	3.7	3.8	3.4
Net exports	11,207	12,468	13,285	14,658	x	x	x	x
Gross domestic product	315,253	322,081	327,540	332,700	1.4	2.2	1.7	1.6

Source: 2016: Eurostat; 2017 to 2019: OeNB June 2017 economic outlook.

Table 14

Demand components (nominal)

	2016	2017	2018	2019	2016	2017	2018	2019
	EUR million				Annual change in %			
Private consumption	183,977	190,499	195,961	201,571	+2.7	+3.5	+2.9	+2.9
Government consumption	70,076	71,576	74,038	75,878	+3.5	+2.1	+3.4	+2.5
Gross fixed capital formation	80,093	84,077	87,296	90,347	+4.1	+5.0	+3.8	+3.5
Changes in inventories (including statistical discrepancy)	2,898	2,279	2,531	2,613	x	x	x	x
Domestic demand	337,044	348,432	359,827	370,409	+3.4	+3.4	+3.3	+2.9
Exports of goods and services	182,857	195,710	207,832	220,030	+1.3	+7.0	+6.2	+5.9
Imports of goods and services	170,325	181,254	191,753	201,731	+2.3	+6.4	+5.8	+5.2
Net exports	12,532	14,456	16,080	18,299	x	x	x	x
Gross domestic product	349,576	362,888	375,906	388,708	+2.8	+3.8	+3.6	+3.4

Source: 2016: Eurostat; 2017 to 2019: OeNB June 2017 economic outlook.

Table 15

Demand components (deflators)

	2016	2017	2018	2019	2016	2017	2018	2019
	2010 = 100				Annual change in %			
Private consumption	113.2	115.3	117.2	119.2	+1.3	+1.9	+1.7	+1.7
Government consumption	110.4	111.7	113.6	115.5	+1.6	+1.2	+1.6	+1.6
Gross fixed capital formation	110.3	112.1	114.0	116.0	+1.0	+1.6	+1.7	+1.7
Domestic demand (excluding changes in inventories)	111.9	113.8	115.7	117.6	+1.3	+1.7	+1.7	+1.7
Exports of goods and services	104.1	106.9	109.2	111.3	-0.5	+2.7	+2.1	+1.9
Imports of goods and services	103.6	106.3	108.3	110.2	-1.2	+2.6	+1.9	+1.8
Terms of trade	100.5	100.6	100.8	101.0	+0.7	+0.1	+0.2	+0.2
Gross domestic product	110.9	112.7	114.8	116.8	+1.4	+1.6	+1.9	+1.8

Source: 2016: Eurostat; 2017 to 2019: OeNB June 2017 economic outlook.

Table 16

Labor market

	2016	2017	2018	2019	2016	2017	2018	2019
	<i>Thousands</i>				<i>Annual change in %</i>			
Total employment	4,345.9	4,402.7	4,462.1	4,510.1	+1.3	+1.3	+1.3	+1.1
<i>of which: private sector</i>	3,659.2	3,714.0	3,757.4	3,810.8	+1.4	+1.5	+1.2	+1.4
Payroll employment (national accounts definition)	3,792.1	3,848.3	3,906.5	3,954.4	+1.5	+1.5	+1.5	+1.2
	<i>% of labor supply</i>							
Unemployment rate (Eurostat definition)	6.0	5.7	5.5	5.4	x	x	x	x
	<i>EUR per real unit of output x 100</i>							
Unit labor costs (whole economy) ¹	61.1	61.4	62.5	63.4	+1.2	+0.4	+1.8	+1.4
	<i>EUR thousand per employee</i>							
Labor productivity (whole economy) ²	72.5	73.2	73.4	73.8	+0.1	+0.8	+0.3	+0.5
	<i>EUR thousand</i>							
Compensation per employee (real) ³	39.2	38.9	39.1	39.2	+0.1	-0.6	+0.5	+0.3
	<i>At current prices in EUR thousand</i>							
Compensation per employee (gross)	44.3	44.9	45.9	46.7	+1.3	+1.3	+2.2	+1.9
	<i>At current prices in EUR million</i>							
Total gross compensation of employees	168,040	172,743	179,168	184,849	+2.8	+2.8	+3.7	+3.2

Source: 2016: Eurostat; 2017 to 2019: OeNB June 2017 economic outlook.

¹ Gross wages and salaries divided by real GDP.

² Real GDP divided by total employment.

³ Gross wages and salaries per employee divided by private consumption expenditure deflator.

Table 17

Current account

	2016	2017	2018	2019	2016	2017	2018	2019
	<i>EUR million</i>				<i>% of nominal GDP</i>			
Balance of trade	10,085.0	11,902.8	13,431.1	15,560.4	2.9	3.3	3.6	4.0
Balance of goods	-185.0	645.9	1,070.5	2,016.0	-0.1	0.2	0.3	0.5
Balance of services	10,270.0	11,256.9	12,360.5	13,544.5	2.9	3.1	3.3	3.5
Balance of primary income	-610.0	-716.3	-650.3	-625.6	-0.2	-0.2	-0.2	-0.2
Balance of secondary income	-3,473.0	-3,618.4	-3,872.7	-3,924.7	-1.0	-1.0	-1.0	-1.0
Balance on current account	6,002.0	7,568.1	8,908.1	11,010.2	1.7	2.1	2.4	2.8

Source: 2016: Eurostat; 2017 to 2019: OeNB June 2017 economic outlook.

Table 18

Quarterly outlook results

	2017	2018	2019	2017				2018				2019			
				Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
Prices, wages and costs															
<i>Annual change in %</i>															
HICP	+2.0	+1.8	+1.8	+2.2	+2.1	+1.9	+1.9	+1.7	+1.7	+1.8	+1.9	+1.8	+1.7	+1.9	+1.8
HICP excluding energy	+2.0	+2.0	+1.9	+1.8	+2.2	+2.0	+2.2	+2.0	+2.0	+2.0	+2.0	+1.9	+1.9	+2.0	+1.9
Private consumption expenditure deflator	+1.9	+1.7	+1.7	+2.0	+2.0	+1.9	+1.7	+1.6	+1.6	+1.7	+1.7	+1.7	+1.7	+1.6	+1.6
Gross fixed capital formation deflator	+1.6	+1.7	+1.7	+1.3	+1.5	+1.7	+1.8	+1.7	+1.8	+1.7	+1.7	+1.7	+1.7	+1.7	+1.8
GDP deflator	+1.6	+1.9	+1.8	+2.0	+1.6	+1.5	+1.4	+1.5	+1.8	+2.0	+2.1	+1.9	+1.8	+1.8	+1.7
Unit labor costs	+0.4	+1.8	+1.4	+0.6	+0.5	+0.4	+0.4	+1.0	+1.6	+2.2	+2.5	+2.3	+1.7	+1.1	+0.6
Nominal wages per employee	+1.3	+2.2	+1.9	+1.1	+1.3	+1.4	+1.5	+1.9	+2.1	+2.3	+2.4	+2.3	+2.0	+1.8	+1.6
Productivity	+0.8	+0.3	+0.5	+0.5	+0.8	+1.0	+1.1	+0.9	+0.5	+0.1	-0.1	+0.0	+0.3	+0.7	+1.0
Real wages per employee	-0.6	+0.5	+0.3	-0.9	-0.8	-0.5	-0.2	+0.3	+0.4	+0.6	+0.7	+0.6	+0.3	+0.1	+0.1
Import deflator	+2.6	+1.9	+1.8	+2.3	+2.5	+2.7	+2.8	+2.2	+2.0	+1.9	+1.7	+1.7	+1.8	+1.8	+1.8
Export deflator	+2.7	+2.1	+1.9	+2.2	+2.8	+3.0	+2.7	+2.0	+2.1	+2.2	+2.2	+2.1	+1.9	+1.9	+1.8
Terms of trade	+0.1	+0.2	+0.2	-0.1	+0.2	+0.4	-0.1	-0.2	+0.1	+0.4	+0.5	+0.3	+0.2	+0.1	+0.1
Economic activity															
<i>Annual and/or quarterly changes in % (real)</i>															
GDP	+2.2	+1.7	+1.6	+0.6	+0.6	+0.5	+0.5	+0.4	+0.4	+0.4	+0.4	+0.4	+0.4	+0.4	+0.4
Private consumption	+1.6	+1.2	+1.2	+0.4	+0.3	+0.3	+0.3	+0.3	+0.3	+0.3	+0.3	+0.3	+0.3	+0.3	+0.3
Government consumption	+0.9	+1.8	+0.8	+0.5	-0.8	+0.6	+0.7	+0.5	+0.5	+0.4	+0.3	+0.0	+0.1	+0.2	+0.2
Gross fixed capital formation	+3.3	+2.0	+1.7	+0.9	+0.6	+0.6	+0.5	+0.5	+0.4	+0.5	+0.5	+0.5	+0.4	+0.3	+0.4
Exports	+4.2	+4.0	+3.9	+2.1	+1.4	+1.2	+1.0	+0.9	+0.9	+0.9	+0.9	+1.0	+1.0	+1.0	+1.0
Imports	+3.7	+3.8	+3.4	+1.8	+0.7	+1.0	+1.0	+0.9	+0.9	+0.9	+0.9	+0.8	+0.8	+0.8	+0.8
<i>Contribution to real GDP growth in percentage points</i>															
Domestic demand	+1.8	+1.4	+1.2	+0.5	+0.2	+0.4	+0.4	+0.4	+0.4	+0.3	+0.3	+0.3	+0.3	+0.3	+0.3
Net exports	+0.4	+0.3	+0.4	+0.2	+0.4	+0.1	+0.1	+0.0	+0.0	+0.0	+0.1	+0.1	+0.1	+0.2	+0.1
Changes in inventories	+0.0	+0.0	+0.0	-0.1	+0.0	+0.0	+0.0	+0.0	+0.0	+0.0	+0.0	+0.0	+0.0	+0.0	+0.0
Labor market															
<i>% of labor supply</i>															
Unemployment rate (Eurostat definition)	5.7	5.5	5.4	5.8	5.7	5.7	5.7	5.7	5.6	5.4	5.4	5.4	5.4	5.4	5.4
<i>Annual and/or quarterly changes in %</i>															
Total employment	+1.3	+1.3	+1.1	+0.4	+0.3	+0.2	+0.2	+0.4	+0.4	+0.4	+0.4	+0.3	+0.2	+0.1	+0.1
of which: private sector	+1.5	+1.2	+1.4	+0.4	+0.2	+0.1	+0.1	+0.3	+0.4	+0.5	+0.5	+0.4	+0.3	+0.2	+0.1
Payroll employment	+1.5	+1.5	+1.2	+0.5	+0.3	+0.3	+0.3	+0.4	+0.5	+0.5	+0.4	+0.3	+0.2	+0.2	+0.1
Additional variables															
<i>Annual and/or quarterly changes in % (real)</i>															
Disposable household income	+1.0	+1.4	+1.2	+0.7	+0.3	+0.1	+0.1	+0.3	+0.6	+0.6	+0.6	+0.3	+0.0	+0.0	+0.0
<i>% of real GDP</i>															
Output gap	-0.3	-0.2	-0.1	-0.5	-0.3	-0.2	-0.1	-0.1	-0.1	-0.2	-0.2	-0.2	-0.1	-0.1	-0.1

Source: OeNB June 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	
	June 2017			Mar. 2017		Mar. 2017		June 2017		April 2017		May 2017	
	2017	2018	2019	2017	2018	2017	2018	2017	2018	2016	2017	2017	2018
<i>Annual change in %</i>													
Main results													
GDP (real)	+2.2	+1.7	+1.6	+2.0	+1.8	+1.7	+1.5	+2.2	+1.7	+1.4	+1.3	+1.7	+1.7
Private consumption (real)	+1.6	+1.2	+1.2	+1.3	+1.2	+1.2	+0.9	+2.0	+1.3	x	x	+1.3	+1.2
Government consumption (real)	+0.9	+1.8	+0.8	+1.1	+1.0	+0.8	+0.6	+1.5	+1.6	x	x	+1.0	+0.9
Gross fixed capital formation (real)	+3.3	+2.0	+1.7	+2.6	+2.4	+2.9	+2.2	+2.2	+3.0	x	x	+2.5	+2.1
Exports (real)	+4.2	+4.0	+3.9	+3.6	+3.4	+3.5	+3.4	+5.6	+4.6	+2.2	+2.3	+3.2	+3.1
Imports (real)	+3.7	+3.8	+3.4	+3.3	+3.0	+3.4	+3.1	+6.2	+5.0	+2.1	+2.2	+3.0	+2.7
GDP per employee ¹	+0.8	+0.3	+0.5	+0.8	+0.8	+0.3	+0.3	+0.5	+0.1	x	x	+0.7	+0.8
GDP deflator	+1.6	+1.9	+1.8	+1.4	+1.5	+1.4	+1.6	+2.0	+2.0	+1.9	+2.2	+1.4	+1.5
CPI	x	x	x	+1.7	+1.7	+1.9	+1.9	x	x	x	x	x	x
HICP	+2.0	+1.8	+1.8	+1.8	+1.7	+2.0	+1.9	+2.1	+1.8	+2.1	+1.8	+1.8	+1.6
Unit labor costs	+0.4	+1.8	+1.4	+1.2	+1.4	+1.1	+1.5	+1.4	+2.5	x	x	+1.1	+1.1
Payroll employment	+1.3	+1.3	+1.1	+1.6	+1.3	+1.4	+1.2	+1.7	+1.5	+0.7	+0.6	+1.0	+0.9
<i>% of labor supply</i>													
Unemployment rate (Eurostat definition)	5.7	5.5	5.4	5.9	5.9	5.9	6.0	5.7	5.5	+5.9	+5.9	+5.9	+5.9
<i>% of nominal GDP</i>													
Current account balance	2.1	2.4	2.8	1.6	1.6	x	x	1.9	1.9	2.4	2.2	2.0	2.2
Budget balance (Maastricht definition)	-0.9	-0.9	-0.5	-1.2	-0.7	-1.4	-1.1	-1.0	-0.7	-1.0	-0.7	-1.3	-1.0
External assumptions													
Oil price in USD/barrel (Brent)	51.6	51.4	51.5	57.0	59.0	57.0	60.0	51.3	50.0	55.2	55.1	55.5	55.9
Short-term interest rate in %	-0.3	-0.2	0.0	-0.3	-0.1	-0.3	-0.1	-0.30	-0.30	-0.3	-0.2	-0.3	-0.2
USD/EUR exchange rate	1.08	1.09	1.09	1.05	1.05	1.06	1.06	1.09	1.09	1.06	1.06	1.06	1.06
<i>Annual change in %</i>													
Euro area GDP (real)	x	x	x	+1.9	+1.7	+1.6	+1.6	+1.8	+1.8	+1.7	+1.6	+1.7	+1.8
U.S. GDP (real)	+2.2	+2.5	+2.3	+2.2	+2.1	+2.5	+2.7	+2.1	+2.4	+2.3	+2.5	+2.2	+2.3
World GDP (real)	+3.3	+3.6	+3.5	x	x	+3.3	+3.5	+3.5	+3.6	+3.5	+3.6	+3.4	+3.6
World trade	+3.4	+2.3	+2.7	x	x	+3.3	+3.5	+4.6	+3.8	+3.8	+3.9	+3.4	+3.8

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

¹ GDP per hour worked.