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**Country Report Austria 2017**

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PARLIAMENT, THE COUNCIL, THE EUROPEAN CENTRAL BANK AND THE  
EUROGROUP**

**2017 European Semester: Assessment of progress on structural reforms, prevention and  
correction of macroeconomic imbalances, and results of in-depth reviews  
under Regulation (EU) No 1176/2011**

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## EXECUTIVE SUMMARY

This report assesses Austria's economy in the light of the European Commission's Annual Growth Survey published on 16 November 2016. In the survey the Commission calls on EU Member States to redouble their efforts on the three elements of the virtuous triangle of economic policy — boosting investment, pursuing structural reforms and ensuring responsible fiscal policies. In so doing, Member States should focus on enhancing social fairness in order to deliver more inclusive growth.

**Economic growth in Austria is gaining momentum with the support of stronger private consumption and investment.** In 2016 growth accelerated to 1.5 % after 4 years of rather modest expansion, and is expected at 1.6 % in 2017 and 2018. The 2016 tax reform stimulated private consumption as households used their higher disposable incomes to spend more. Improved domestic demand conditions have also spurred higher investment by corporations, particularly in machinery and equipment, and non-residential construction. The need for replacements after years of subdued investment, together with favourable financing conditions, has further contributed to the upturn in 2016. Following this more dynamic phase, investment dynamics are expected to slow over the coming 2 years.

**Austria's unemployment rate has increased but remains low compared with the rest of the EU.** Austria remains an attractive destination for foreign workers and is seeing a continuous inflow from EU and non-EU countries alike. This, together with the longer working lives of elder workers (due to restrictions on early retirement) and increasing female labour market participation, is helping to increase the labour supply and potential growth. Employment has also been increasing, but somewhat more slowly than the labour supply. This has led to an increase in the unemployment rate, which reached 6.1 % in the second and third quarter of 2016, slightly above its previous peak in 2004. The increase in employment since the crisis has mainly been driven by part-time jobs rather than full-time work. Work is thus distributed among more employees. This is limiting unemployment to some extent but also resulting in stagnating labour productivity per employee (while productivity per hour worked has been increasing).

**Inflation above the euro area average is pushing up wages and undermining price competitiveness.** Since the crisis, inflation in Austria has been driven by robust demand for tourism and business services. At the same time, however, rising wages in combination with slower productivity growth are reducing the price competitiveness of Austrian exporters.

**Public finances are expected to recover as bank support measures fade out.** Following the financial crisis Austria's government debt increased significantly, peaking at 85.5 % of GDP in 2015, due to the impact of support measures for the banking sector. Following the agreement reached in the HETA case (the 'bad bank' of the former Hypo Alpe Adria bank), the restructuring of the banking sector is expected to proceed smoothly and without significant risks. Government debt is projected to gradually decline to below 80 % of GDP by 2018.

**Overall, Austria has made some progress in addressing the 2016 country-specific recommendations.** In view of ensuring fiscal sustainability, some progress was made with respect to the healthcare system and limited progress with respect to the pension system. However, no progress was made in linking the statutory retirement age to life expectancy. Some progress was made towards reforming the fiscal relations between the various layers of government. On balance, in these fields Austria made some progress.

Austria made some progress in improving the labour market participation of women as well as the educational achievements of disadvantaged young people. On balance, Austria achieved in these areas some progress.

There has been some progress on improving the sustainability of the healthcare and pension systems and streamlining fiscal relations across the various levels of government. Austria has also made some progress in improving the labour market participation of women — as childcare infrastructure and services have expanded — and in taking some measures aimed at improving the educational achievements of disadvantaged young people. On reducing investment barriers in the services sector it has made only limited progress: only a narrow draft revision of the trade licence act

(*Gewerbeordnung*) was put forward, and some measures of administrative simplification.

Regarding progress in reaching the national targets under the Europe 2020 strategy, Austria has already reached its targets on tertiary education attainment and limiting early school leaving. It is on track to meet the renewable energy and the energy efficiency targets. However, more effort is needed to raise the employment rate, increase research and development expenditure, cut greenhouse gas emissions and reduce poverty and social exclusion.

The main findings of the analysis in this report, and the related policy challenges, are as follows:

- **The new financial agreement between the different levels of government is a step forward, but the fiscal framework remains complex with weak incentives for cost efficiency.** The 2017 financial equalisation law slightly simplifies the system of transfers between the various layers of government. It also creates the legal basis for benchmarks and spending reviews and ratifies the commitment to reform the responsibilities of the sub-national governments. Their spending responsibilities are nevertheless still far greater than their revenue-raising powers, while the overall organisational set-up remains overly fragmented (see also Section 3.1).
- **Despite the 2016 tax reform, the tax wedge – i.e. the burden on labour in form of taxes and social security contributions – is relatively high, while more growth-friendly sources of revenue are underutilised.** Like in the past the recent tax reform has mainly countered the effect of inflation, while the tax wedge on labour has remained significantly above the EU average. By contrast, revenues from recurrent property taxes are remarkably low, mainly because the tax base is outdated.
- **Pension and healthcare spending poses a medium risk to fiscal sustainability in the medium and long term, due to a rapidly ageing population.** This is the case for pensions partly because the effective retirement age remains relatively low despite the recent pension reforms. Furthermore, the statutory retirement age for women is particularly low and will not be aligned with that of men before 2024. This raises concerns about the sustainability and adequacy of pensions. Linking the statutory retirement age to life expectancy would help curb public spending on pensions. For healthcare, the more stringent caps on expenditure growth set by the 2017 financial equalisation law are expected to help, but they are not sufficient to ensure sustainability (see also Section 3.1).
- **The efficiency of the healthcare sector is suboptimal, with a very large hospital sector and underutilised outpatient care.** The fragmented organisational and financial structure of the healthcare sector does not encourage cost efficiency. It is characterised by a disproportionately large hospital sector with unexploited savings potential, for instance through better use of ambulatory care and improved public procurement. The 2017 financial equalisation law includes measures to strengthen outpatient care outside hospitals, which could improve cost efficiency in the medium term. Nevertheless, the success of this initiative also depends on reforming the financial arrangements between healthcare providers and social security funds (see also Section 3.1).
- **Banking sector developments point to a steady but slow improvement, but continue to require close monitoring.** The capitalisation of Austrian banks remains below that of its EU peers' and their ability to generate profits in the domestic market has been under pressure. In their Central Eastern and South-Eastern European operations, asset quality and profitability have improved further in several markets but still face some risks. At the same time, the increase in real estate prices and housing loans underscore the importance of macro-prudential measures (see also Section 3.2).
- **The labour market is performing better in Austria than in most EU countries, but challenges remain.** Despite the comparatively high female labour market participation, several indicators still point to unexploited labour potential and significant gender

inequalities. These indicators include the rates of part-time work and the gender gap in pay and pensions. While the expanded and targeted policies to get people into work are delivering good results, finding employment remains a challenge for older workers, low skilled and people with a migrant background (especially women born outside the EU). The recent inflow of migrants into Austria and the increasing number of recognised refugees makes it all the more important to integrate them into the labour market and in education successfully (see also Section 3.3).

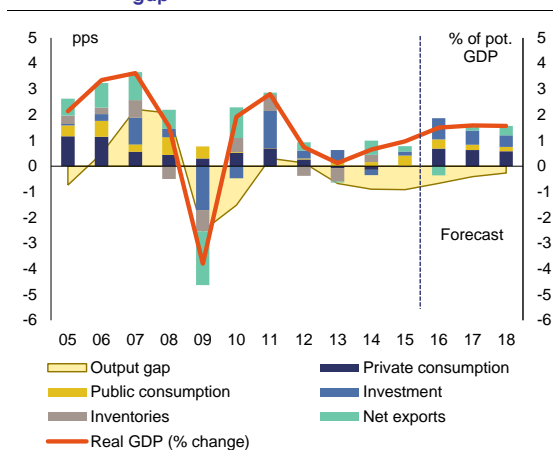
- **Education results in Austria are still in the middle of the range compared to other countries.** Basic skills in reading, writing and mathematics continue to deteriorate, hampering Austria's overall skills base and its ambition to become one of Europe's innovation leaders. Austria faces challenges in meeting the increasing demand for computer specialists and digitally skilled employees. Parents' socioeconomic status and their eventual migrant background continue to have a major influence on their children's education results. In 2015, first generation immigrant students are 3 times more likely than native born students to be low achievers in science and 3 times more likely to leave school early before completing upper secondary education (see also Section 3.3).
- **Social welfare standards are still high overall, but some groups are at greater risk of poverty and inequality is on the rise.** The proportion of the population at risk of poverty or social exclusion is one of the lowest among EU Member States. However, inequality on the labour market — reflected in the large gender gap in pay and pensions — means that women aged 65 and over are at much higher risk of poverty than men of the same age, adding to overall income inequality. Furthermore, the 'at risk of poverty' rate is higher for specific groups, such as children of foreign-born parents and the long-term unemployed (see also Section 3.3).
- **Rigidities in service markets and regulated professions are hampering competition and discouraging investment.** High access barriers and restrictive rules on the exercise of key trades and professions — such as specific shareholding requirements, extensive reserved activities and interdisciplinary restrictions — are limiting business dynamism and investment. The restrictive business environment for services is not conducive to investment and job creation in the sector. It also affects other parts of the economy for which services are an important input (see also Section 3.4).
- **Regulatory and administrative barriers are holding back company growth and the creation of start-ups.** Low interest rates, improved consumer demand and the need to renew equipment have led to an increase in investment. However, structural barriers are still significant and are constraining investment in creating and expanding businesses. Insufficient investment in business creation and expansion hampers job creation and adaptation to new opportunities of digital technology. Small and medium-sized enterprises and start-ups in Austria lack diversified financing options, notably as regards equity financing. The current fiscal rules do not contribute sufficiently to the investment climate (see also Section 3.4).

# 1. ECONOMIC SITUATION AND OUTLOOK

## GDP growth

**Austria's economy is leaving behind the 4 years of slow growth seen since 2012.** In the aftermath of the financial crisis Austria entered a phase of subdued growth, with GDP growth fluctuating between 0 % and 1 % and only reaching the upper limit in 2015. For 2016 and the coming years, the Commission 2017 winter forecast expects growth to stabilise at around 1.5 % (see Graph 1.1). The main reasons for this pick-up can be found in increased private consumption, benefiting noticeably from the income tax reform that took effect at the start of 2016 and turning positive for the first time since 2012. This has also stimulated investment activity, which recovered since the last quarter of 2015 and gained momentum throughout 2016.

Graph 1.1: Real GDP growth and contributions, output gap



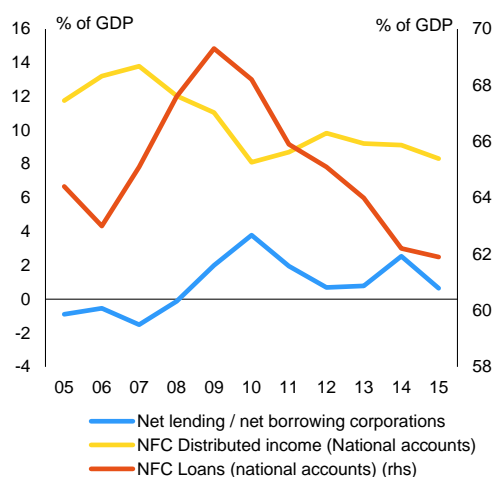
Source: European Commission

## Investment

**Investment increased in 2016 after several years of relative stagnation.** Overall investment in Austria remained relatively stable during the crisis, fluctuating around 22 % of GDP, which is only 1 percentage point (pp.) less than before the crisis. After improving in 2015, investment is forecast to continue growing, though at a declining rate (by 3.6 % in 2016, by 2.4 % in 2017 and 2.0 % in 2018) The recovery in investment activity is being driven by greater spending on equipment and non-residential construction, which is reducing the backlog of replacement investment that had been postponed. Although financing conditions are

favourable and demand is strong, housing investment remains subdued, pushing up house prices. Corporations have increased their net lending position since the crisis and the bank loans to corporations as a percentage of GDP continuously declined (see Graph 1.2). However, especially in recent years this happened through passive deleveraging, i.e. the growth in loans to corporations was outpaced by GDP growth and inflation. Dividend payments, although they have declined, remain high. It is thus not a lack of financing resources that is hampering investment activity but rather a lack of opportunities in an environment of economic and political uncertainty and subdued domestic demand dynamics (see also Section 3.4).

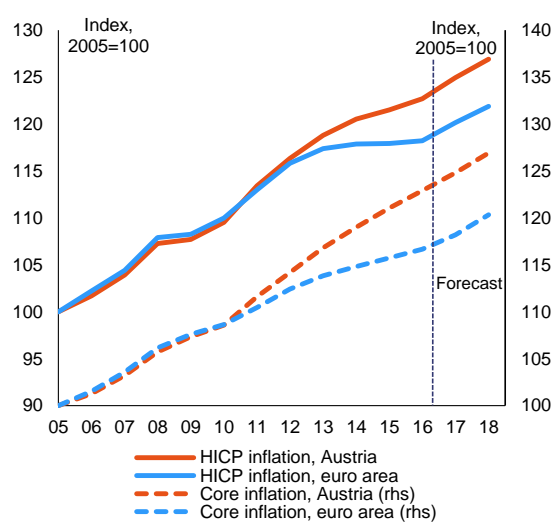
Graph 1.2: Corporate financing positions



Source: European Commission

## Inflation

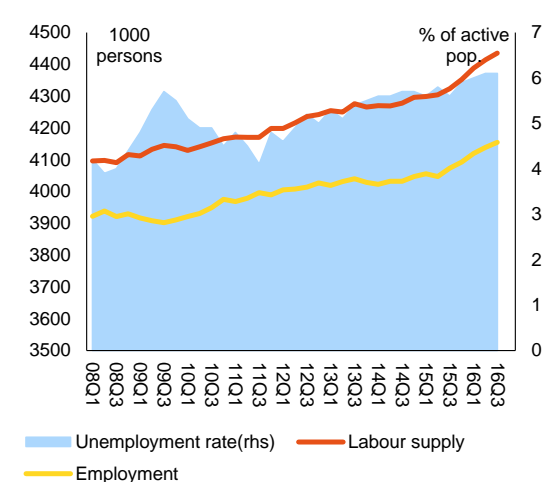
**Austria continues to experience higher inflation than the other euro area countries, widening the price gap.** Headline inflation has increased much more rapidly than in the euro area since 2012, while core inflation is growing faster since 2010 (see Graph 1.3). Due to Austria's important and thriving tourism sector, prices in accommodation and hospitality services continuously increase. This helped to counterbalance the dampening effect of low oil prices in recent years, keeping inflation positive at all times. HICP inflation in 2015 reached a low at 0.8 % and is expected to creep up to 1.0 % in 2016 before more than doubling to 1.8 % in 2017 with rising oil prices.

Graph 1.3: **Headline and core HICP (harmonised index of consumer prices)**

Source: European Commission

### Labour market

**Although employment is continuously rising, the unemployment rate is also increasing.** The economy cannot fully absorb the growth in the labour force (see Graph 1.4) also resulting from the continued inflow of foreign workers. In general, migration is expected to positively contribute to the demographic trend and potential growth. Other factors behind the increase in the labour force include longer working lives (a consequence of restricted access to early retirement and invalidity pensions) and increasing female labour market participation. While a large proportion of the increasing labour supply can still be absorbed by the continuous growth in employment, unemployment has also increased, especially for the low-skilled. The impact of refugees and asylum seekers on the labour force is expected to be limited in comparison (see also Section 3.3).

Graph 1.4: **Labour force and unemployment rate (15-64 years)**

Source: European Commission

### Social developments

**Inequality of income is low, while inequality of wealth is high.** For 2015 data, disposable income inequality in Austria with a Gini coefficient at 0.27 was among the lowest in the EU <sup>(1)</sup>. The income of the richest 20 % of households was 4.0 times greater than that of the poorest 20 % of households (S80 / S20), well below the EU average of 5.2 <sup>(2)</sup>. By contrast, Austria is among the countries with highest net wealth <sup>(3)</sup> inequality in the EU (ECB 2016). Wealth inequality is thus much more pronounced and decisive than income inequality as the tax and social benefit systems are effective in reducing market income inequality. In Austria, market income inequality before taxes and social transfers (0.50) is only marginally reduced by the tax system (0.48) and relies largely on social redistribution (0.27). These different Gini coefficients were rather stable in the period 2010 to 2015. Comparing layers of society, over 2007 to 2015 real median income increased in total by 9.6 % despite the financial and economic crisis. However, the lowest 10 % of income earners saw their real incomes hardly grow, by just 0.5 %. In general, over this period households' real income

<sup>(1)</sup> The Gini coefficient takes values between 0 and 1 and is a measure of equal or unequal distribution, with higher values indicating a higher degree of inequality.

<sup>(2)</sup> The income quintile share ratio (S80 / S20) is the ratio of total income received by the 20 % of the population with the highest income to that received by the 20 % with the lowest.

<sup>(3)</sup> Difference between total assets and total liabilities.



per capita fell while real GDP growth per capita stagnated.<sup>(4)</sup> In addition, the creation of predominantly low-paid and part-time jobs over recent years has aggravated the segmentation of the labour market and income inequalities.

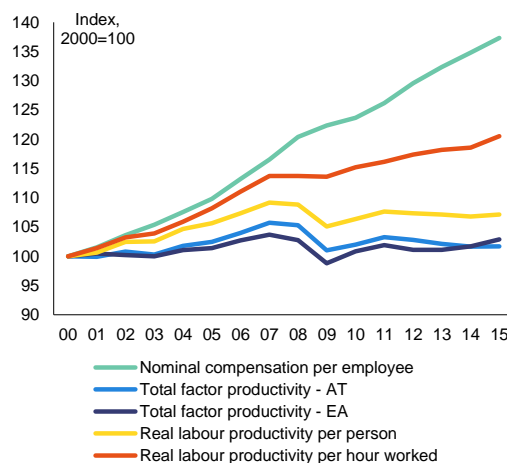
**The social situation remains good overall, although some groups are at higher poverty risk.** The proportion of the population at risk of poverty or social exclusion, at 18.3 %, is one of the lowest in the EU and below the EU average of 23.7 %. However, 15.1 % of women aged 65 and over are at risk of poverty, much higher than the 10.7 % rate for men of the same age. This is because of the large gender gap in pay and pensions and a pension system which reflects the inequality in the labour market. Possible further reforms may also consider the situation of specific groups, in particular the children of foreign-born parents, who face at-risk-of-poverty rates of 34.6 %, above the EU average of 33.2 % (see also Section 3.3).

### Productivity

**Productivity in Austria remains high but is shared among a rising number of employees.** Productivity per employee grew until 2007 (see Graph 1.5) but dropped sharply during the crisis. It has remained flat at a lower level since then while the EU average has risen continuously. However, Austria's productivity per hour worked has grown constantly since 2000 and, unlike the EU average, did not drop even during the crisis years. The explanation is that the increase in employment since the crisis has created more part-time jobs and fewer full-time ones. Overall, Austria's productivity is doing well and growing above the EU average. However, as wage growth is increasing faster than productivity per hour worked since 2008, Austria is losing slightly in price competitiveness and rebalancing within the euro area. Total factor productivity incorporating technological progress and innovative capacity has been on a constant decline in Austria since 2011, staying below pre-crisis levels, while the euro area average has been rising again since 2013. Weak

growth in total factor productivity is also visible in Austria's weak GDP growth since 2011.

Graph 1.5: Labour productivity



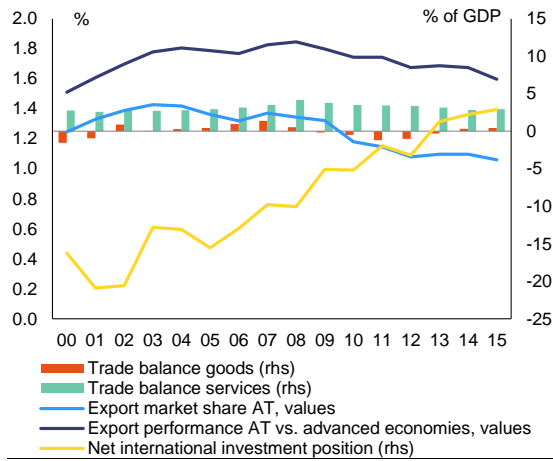
Source: European Commission

### External position

**Austria's current account and net international investment position remain in the black.** Austria has had current account surpluses for many years, thanks to its important tourism industry and the continuously growing export of business services. Despite the important role of the export industry in the Austrian economy, the trade balance in goods contributes only marginally to the current account surplus and recovered only recently from its negative contribution in the aftermath of the financial crisis. Austria has seen its export market share constantly decline since 2007, both overall as well as relative to other advanced economies (see Graph 1.6), although the decline was more limited in volume terms. Austria's non-EU trade however continues to rely heavily on markets in Central, Eastern and South-Eastern Europe, including Russia. More recently it has also come to rely on the US market, but is less present in fast-growing markets in Asia and South America. On the level of sectors, households and non-financial corporations have a positive net lending position which more than compensates for the negative net lending position of financial corporations and the government. Overall, the net international investment position, which turned positive in 2013, continues to improve (see Graph 1.6).

<sup>(4)</sup> While real GDP per capita grew annually by 0.28 % between 2007 and 2012 and shrank by -0.18 % between 2012 and 2015, real income of households per capita shrank annually by -0.28 % between 2007 and 2012 and by -0.52 % between 2012 and 2015.

Graph 1.6: Trade balance and export market share

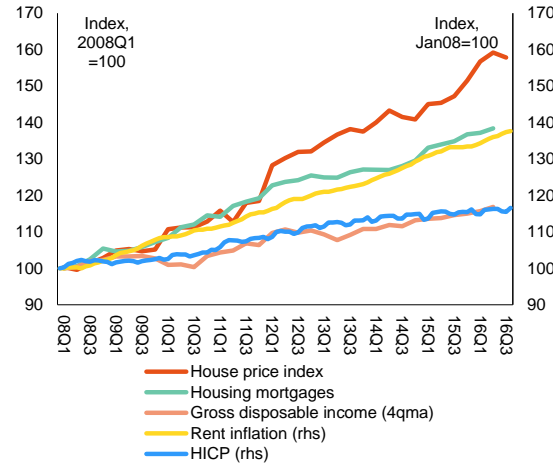


Source: European Commission

**Housing market**

**The strong growth in house prices over recent years has accelerated since mid-2015.** Austria is one of the European countries where house prices have been constantly rising since the financial crisis unlike in many other European countries (see Graph 1.7). The quarterly house price index shows accelerated growth since Q3-2015, when the year-on-year increase was 9.3 % before reaching 13.4 % in Q1-2016, 8.9% in Q2-2016 and 5.2% in Q3-2016. Unlike in 2012, when the rise in house prices could be attributed largely to Vienna, the capital, the bigger cities throughout the country are now also contributing to the acceleration in prices. Since 2011 house prices are growing faster than rental costs and income, leading to increasingly high price-to-rent and price-to-income ratios which point to considerable overvaluation. The increase in Austria’s price-to-income ratio since the crisis has been among the strongest in the EU, with the majority of Member States seeing their ratio drop (see Graph 1.8). As this trend accelerated in the first months of 2016, Austria was flagged in December by the European Systemic Risk Board (see also Section 3.2).

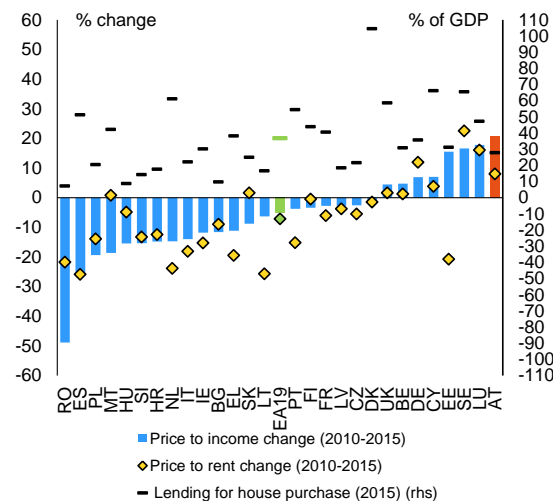
Graph 1.7: House prices and rental costs



Source: ECB, Statistics Austria, OeNB

In Austria, both rental costs and house prices are rising much more steeply than overall inflation. This could pose a risk for private consumption if the increasing living costs were to limit spending on consumption goods. Growth in housing mortgages is also accelerating, but the overall mortgage-to-GDP ratio is still relatively low.

Graph 1.8: House price to income and rent ratio



Source: European Commission, ECB

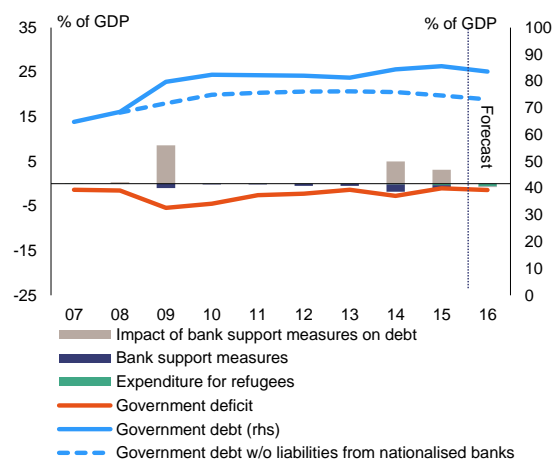
The concentration of homeowners in the higher income deciles helps to mitigate risks (Graph 3.1.3) as higher-income households have the financial resources to react to changing market conditions. The development of building supply and construction investment appears moderate compared to changes in house prices. In order to

increase housing supply the government plans several measures, such as easing investment and land provision for social housing.

**Public finances**

**Public finances are expected to improve in the coming years as the impact of bank support measures fades out.** Government debt strongly increased in 2009 due to the nationalisation of the Austrian bank Kommunalkredit and was further swollen in 2014 and 2015 by the creation of the defeasance vehicle HETA for the former bank Hypo Alpe Adria (see Graph 1.9). In 2016, an agreement was reached with HETA’s creditors on the guarantee provided by Carinthia, significantly reducing the risk of additional costs for bank support measures. Government debt peaked at 85.5 % in 2015 but is expected to decline markedly in the coming years if, as planned, the assets of nationalised banks included in government accounts are gradually sold off. Even without considering these assets government debt would have stood at around 75 % of GDP in 2016, i.e. significantly above the 60 % threshold. Exceptional spending for refugee-related costs in 2015 and 2016 added to the government deficit but is modest compared with the bank support measures.

Graph 1.9: **General government debt and deficit**

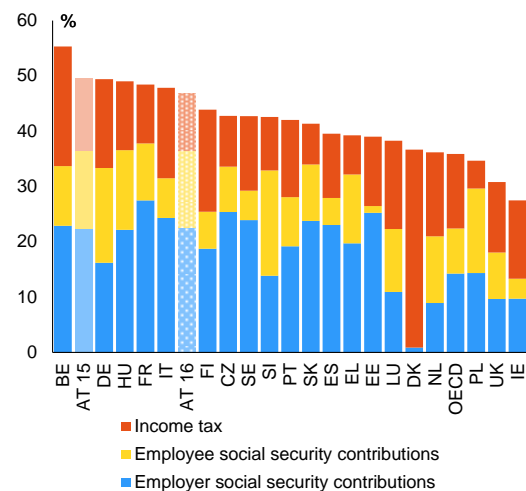


Source: European Commission

**Despite the income tax reform in 2016 the tax burden on labour remains high compared to other European countries.** Before the tax reform

Austria had one of the highest tax wedges <sup>(5)</sup> in the EU at 49.5 % (for a single earner at 100 % of average wage without children). With the reform, this has fallen to 46.7 % and Austria improved some places in EU comparison (see Graph 1.10). The government announced in January 2017 the introduction of an automatic indexation of tax brackets according to inflation for countering the effect of the fiscal drag. Together with measures to reduce non-wage labour costs for employers annually by around EUR 1 billion this will support efforts for further lowering the tax wedge on labour. The analysis in Section 3.1 shows that, in the past, tax reforms have been implemented every couple of years to counter the effect of a rising tax wedge due to fiscal drag.

Graph 1.10: **Tax wedge (% of labour costs, 2015)**



Source: OECD

**Healthcare**

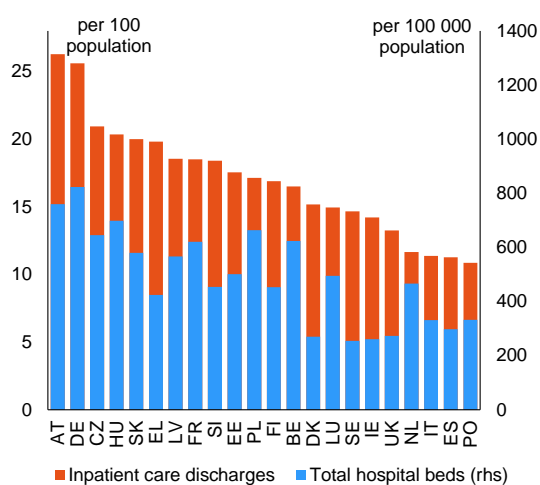
**Austria’s healthcare system is characterised by a large and costly hospital sector which, together with projected ageing of the population, threatens its long-term sustainability.** In general the accessibility and quality of healthcare provided are good but compared to other European countries Austria spends a relatively high percentage of GDP on healthcare. Equally, the proportion of hospital expenditure in overall healthcare costs is one of the

<sup>(5)</sup> The tax wedge on labour represents the difference between the total labour cost of employing a worker and the worker’s net earnings. It is defined as personal income tax and employer and employee social security contributions.

highest in the EU. The number of hospital discharges and the number of hospital beds per capita is significantly higher than in other European countries with the exception of Germany (see Graph 1.11). As an ageing society, Austria faces considerable financial challenges as healthcare, long-term care and pension costs are expected to increase markedly in future (see also Section 3.1).

strategy for the digital future till 2025. Also in the government programme 2017-18 digitalisation is addressed as one of the key priorities. Austrian businesses are doing well on many digitalisation aspects and public authorities are offering a wide range of e-government solutions. Austria, however, ranks below or merely in line with the EU average on aspects such as investment in digital skills, e-commerce, e-procurement and the deployment of high-speed broadband in rural areas (see also Sections 3.4 and 3.5).

Graph 1.11: Hospital discharges and hospital beds 2014



Source: OECD

### Education

**Austria reaches its national EU 2020 targets on tertiary education and early school leaving, which is markedly better than the EU average, however national and international tests show deficiencies in basic skills.** Weaknesses in some basic skills (reading and science) were confirmed by their deterioration in the last 2015 OECD Programme for International Student Assessment (PISA) test. For instance, the proportion of low achievers in science amounts to 20.8 % in 2015, while the proportion of high achievers ranks only in the mid-field. These results do not help Austria realise its ambition of becoming an innovation leader (see also Section 3.3).

### Digitalisation

Austria aspires to become one of the innovation leaders in Europe but remains around the EU average in key aspects of the digitalisation of its economy and society. In January 2017, Austria has adopted the Digital Roadmap Austria, its national

Table 1.1: Key economic, financial and social indicators – Austria

	2004-2008	2009	2010	2011	2012	2013	2014	2015	forecast		
									2016	2017	2018
Real GDP (y-o-y)	2.7	-3.8	1.9	2.8	0.7	0.1	0.6	1.0	1.5	1.6	1.6
Private consumption (y-o-y)	2.2	0.6	1.0	1.3	0.5	-0.1	-0.3	0.0	1.3	1.2	1.1
Public consumption (y-o-y)	2.4	2.5	0.1	0.0	0.2	0.7	0.8	2.1	1.8	1.0	0.8
Gross fixed capital formation (y-o-y)	1.7	-7.3	-2.1	6.7	1.4	2.2	-0.9	0.7	3.6	2.4	2.0
Exports of goods and services (y-o-y)	6.5	-15.0	13.8	6.0	1.7	0.5	2.3	3.6	2.7	2.9	3.1
Imports of goods and services (y-o-y)	5.2	-12.0	12.0	6.2	1.1	0.7	1.3	3.4	3.7	2.8	2.5
Output gap	0.7	-2.5	-1.5	0.3	0.1	-0.7	-0.9	-0.9	-0.7	-0.4	-0.2
Potential growth (y-o-y)	2.0	0.7	0.9	0.9	0.9	0.9	0.9	1.0	1.3	1.3	1.4
Contribution to GDP growth:											
Domestic demand (y-o-y)	1.8	-0.9	0.1	2.2	0.6	0.6	-0.2	0.6	1.9	1.4	1.2
Inventories (y-o-y)	0.2	-0.8	0.5	0.6	-0.4	-0.5	0.3	0.0	0.0	0.0	0.0
Net exports (y-o-y)	0.8	-2.1	1.2	0.1	0.3	0.0	0.5	0.2	-0.4	0.2	0.4
Contribution to potential GDP growth:											
Total Labour (hours) (y-o-y)	0.2	-0.3	0.0	0.0	0.1	0.1	0.0	0.1	0.3	0.2	0.3
Capital accumulation (y-o-y)	0.7	0.5	0.4	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
Total factor productivity (y-o-y)	1.1	0.6	0.5	0.4	0.3	0.3	0.4	0.4	0.5	0.6	0.6
Current account balance (% of GDP), balance of payments	3.2	2.6	2.9	1.6	1.5	2.0	2.4	1.8	.	.	.
Trade balance (% of GDP), balance of payments	4.0	3.6	3.0	2.3	2.4	2.9	3.2	3.4	.	.	.
Terms of trade of goods and services (y-o-y)	-0.8	2.2	-1.8	-1.7	-0.4	0.1	0.5	1.3	1.1	-0.6	-0.1
Capital account balance (% of GDP)	-0.1	0.0	0.1	-0.1	-0.1	-0.2	-0.1	-0.5	.	.	.
Net international investment position (% of GDP)	-12.3	-5.1	-5.2	-1.9	-3.2	1.3	2.2	2.9	.	.	.
Net marketable external debt (% of GDP) (1)	-15.1	-10.8	-18.0	-20.8	-23.7	-20.1	-21.1	-21.8	.	.	.
Gross marketable external debt (% of GDP) (1)	173.0	184.7	185.3	186.2	183.7	172.7	171.1	161.6	.	.	.
Export performance vs. advanced countries (% change over 5 years)	13.0	1.9	-5.5	-4.5	-12.3	-10.6	-10.0	-7.69	.	.	.
Export market share, goods and services (y-o-y)	-0.9	-1.7	-10.4	-2.4	-6.0	1.7	0.2	-3.3	.	.	.
Net FDI flows (% of GDP)	2.2	0.3	2.0	3.6	3.2	2.4	-0.6	1.9	.	.	.
Savings rate of households (net saving as percentage of net disposable income)	11.1	11.3	9.3	7.9	8.7	7.0	7.0	7.3	.	.	.
Private credit flow, consolidated (% of GDP)	5.8	1.3	0.3	3.0	1.3	0.6	0.9	2.1	.	.	.
Private sector debt, consolidated (% of GDP)	124.5	132.8	132.8	130.1	129.2	128.0	126.2	126.4	.	.	.
of which household debt, consolidated (% of GDP)	51.4	53.9	54.8	53.5	52.4	51.6	51.6	52.3	.	.	.
of which non-financial corporate debt, consolidated (% of GDP)	73.1	78.9	78.0	76.6	76.8	76.4	74.6	74.1	.	.	.
Corporations, net lending (+) or net borrowing (-) (% of GDP)	-0.2	2.0	3.8	2.0	0.7	0.8	2.5	0.6	0.9	1.3	1.8
Corporations, gross operating surplus (% of GDP)	26.8	24.7	24.9	25.1	24.2	23.6	23.5	23.4	23.8	24.3	24.8
Households, net lending (+) or net borrowing (-) (% of GDP)	5.3	5.2	3.9	2.4	3.0	2.0	2.6	2.5	3.3	2.7	2.2
Deflated house price index (y-o-y)	0.4	3.5	4.4	3.0	4.8	2.9	1.4	3.5	.	.	.
Residential investment (% of GDP)	4.2	4.4	4.4	4.4	4.3	4.4	4.3	4.3	.	.	.
GDP deflator (y-o-y)	2.1	1.9	1.0	1.9	2.0	1.6	1.8	1.9	1.7	1.4	1.6
Harmonised index of consumer prices (HICP, y-o-y)	2.2	0.4	1.7	3.6	2.6	2.1	1.5	0.8	1.0	1.9	1.6
Nominal compensation per employee (y-o-y)	2.7	1.6	1.1	2.0	2.7	2.1	1.9	1.9	1.4	1.6	1.7
Labour productivity (real, person employed, y-o-y)	1.2	-3.4	1.2	1.2	-0.3	-0.2	-0.3	0.3	.	.	.
Unit labour costs (ULC, whole economy, y-o-y)	1.5	5.2	-0.1	0.8	3.0	2.3	2.1	1.5	0.8	0.8	0.8
Real unit labour costs (y-o-y)	-0.6	3.2	-1.1	-1.1	1.0	0.8	0.4	-0.3	-0.9	-0.5	-0.8
Real effective exchange rate (ULC, y-o-y)	0.2	2.1	-2.2	-0.1	-0.6	3.2	1.7	-1.7	0.1	-0.4	-1.0
Real effective exchange rate (HICP, y-o-y)	-0.2	1.1	-3.4	0.5	-1.8	2.1	1.7	-1.9	1.6	-1.0	.
Tax rate for a single person earning the average wage (%)	33.3	32.6	32.7	33.4	33.9	34.4	34.7	34.9	.	.	.
Tax rate for a single person earning 50% of the average wage (%)	21.6*	21.0	21.2	20.9	21.7	23.1	22.8	23.1	.	.	.
Total Financial sector liabilities, non-consolidated (y-o-y)	11.6	-0.4	0.8	1.5	2.0	-1.5	1.1	0.9	.	.	.
Tier 1 ratio (%) (2)	.	9.6	10.0	10.3	11.3	11.9	12.3	13.2	.	.	.
Return on equity (%) (3)	.	1.2	6.6	1.2	4.5	1.0	-1.9	6.3	.	.	.
Gross non-performing debt (% of total debt instruments and total loans and advances) (4)	.	2.7	3.9	4.0	4.3	4.2	6.2	5.5	.	.	.
Unemployment rate	5.1	5.3	4.8	4.6	4.9	5.4	5.6	5.7	6.0	6.1	6.2
Long-term unemployment rate (% of active population)	1.3	1.2	1.2	1.2	1.2	1.3	1.5	1.7	.	.	.
Youth unemployment rate (% of active population in the same age group)	9.8	10.7	9.5	8.9	9.4	9.7	10.3	10.6	11.3	.	.
Activity rate (15-64 year-olds)	72.1	74.3	74.4	74.6	75.1	75.5	75.4	75.5	.	.	.
People at risk of poverty or social exclusion (% total population)	18.1	19.1	18.9	19.2	18.5	18.8	19.2	18.3	.	.	.
Persons living in households with very low work intensity (% of total population aged below 60)	7.6	7.1	7.8	8.6	7.7	7.8	9.1	8.2	.	.	.
General government balance (% of GDP)	-2.6	-5.4	-4.5	-2.6	-2.2	-1.4	-2.7	-1.0	-1.4	-1.2	-0.9
Tax-to-GDP ratio (%)	42.3	42.1	42.0	42.1	42.7	43.5	43.7	44.3	43.2	43.1	43.1
Structural budget balance (% of GDP)	.	.	-3.3	-2.6	-1.9	-1.2	-0.7	0.0	-0.9	-0.8	-0.7
General government gross debt (% of GDP)	66.7	79.7	82.4	82.2	82.0	81.3	84.4	85.5	83.5	81.3	79.3

(1) Sum of portfolio debt instruments, other investment and reserve assets.

(2,3) Domestic banking groups and stand-alone banks.

(4) Domestic banking groups and stand-alone banks, EU and non-EU foreign-controlled subsidiaries and EU and non-EU foreign-controlled branches.

(\*) Indicates BPM 5 and/or ESA 95

Source: European Commission, ECB

## 2. PROGRESS WITH COUNTRY-SPECIFIC RECOMMENDATIONS

**Progress with the implementation of the recommendations addressed to Austria in 2016<sup>(6)</sup> has to be seen in a longer term perspective since the introduction of the European Semester in 2011.** Austria has undertaken several reforms since then.

**By increasing financial surveillance and implementing targeted measures,** Austria managed to restructure most of its nationalised and partly nationalised banks by 2016 so that remaining risks are contained and relate to legacy issues. By activating several macro-prudential measures, it also reduced risks related to the quality of foreign assets.

**The 2017 financial equalisation law helped simplify the financial relations between the different layers of government.** The agreement also introduced several new elements which have the potential to increase the efficiency and adaptability of Austria's fiscal framework. Nevertheless, the framework remains overly complex and still suffers from a misalignment between limited revenue-raising powers and broader spending responsibilities.

**Several measures were taken to reduce taxation on labour,** such as the 2016 income tax reform and the reduction of non-wage labour costs for employers. Austria nonetheless still has one of the highest tax wedges in Europe.

**Austria has managed to increase the effective retirement age** by limiting access to early retirement and invalidity pension schemes as from 2014. Earlier harmonisation of the pension age of men and women as well as a linking of the statutory pension age to life expectancy have been recommended several times but have not been implemented.

**The 2013 healthcare reform comprised several measures to improve the efficiency of the healthcare sector,** including a cost-containment path up to 2016. The 2017 financial equalisation law established more stringent expenditure ceilings up to 2021 and also took some steps to strengthen the provision of outpatient care outside hospitals.

Nevertheless, the organisational and financing structure of the healthcare sector remains overly complex and ensuring its sustainability in the medium and long term remains a challenge.

**The labour market participation of women has increased** in recent years but this is mainly due to part-time employment. Women would gain more from the labour market if the gender gap in pay and pensions were narrowed and childcare and long-term care facilities expanded.

**Measures have been taken to improve the educational achievements of disadvantaged young people** — including those from a migrant background — but education outcomes have so far not improved, rather deteriorated.

**Austria has made some efforts to improve competition and investment in the services sector** by reducing regulatory and administrative barriers. These efforts have focused notably on administrative simplification (such as the introduction of an electronic trade register). This reduces compliance costs and mitigates some of the negative effects of regulation without, however, resolving the underlying issue of restrictiveness. Austria also removed some regulatory obstacles in reaction to national court rulings or EU infringement procedures. It has recently tabled a proposal for a limited revision of the trade licence act (*Gewerbeordnung*). Austria participated actively in the mutual evaluation of professional regulation at EU level which took place between 2014 and 2016. The action plan it presented as part of this exercise was however unambitious and has not yet resulted in a systematic attempt to remove administrative and regulatory obstacles across professions and trades.

**Overall, Austria has made some<sup>(7)</sup> progress in addressing the 2016 country-specific recommendations (CSRs).** Some progress was made on CSR1 in addressing the sustainability of the pension and healthcare system together with streamlining the fiscal framework. Some progress was made on CSR2 in improving the labour

<sup>(6)</sup> For the assessment of other reforms implemented in the past, see in particular Section 3.

<sup>(7)</sup> Information on the level of progress and actions taken to address the policy advice in each respective subpart of a CSR is presented in the Overview Table in the Annex. This overall assessment does not include an assessment of compliance with the Stability and Growth Pact.

market participation of women and the educational achievements of disadvantaged young people. Limited progress was made on CSR3 on reducing barriers to investment in the services sector.

Table 2.1: Summary table on 2016 CSR assessment

Austria	Overall assessment of progress with 2016 CSRs: Some progress
<p><b>CSR 1:</b> <i>Ensure that the deviation from the medium-term budgetary objective in 2016 and in 2017 is limited to the allowance linked to the budgetary impact of the exceptional inflow of refugees in 2015, and to that effect achieve an annual fiscal adjustment of 0,3 % of GDP in 2017 unless the medium-term budgetary objective is respected with a lower effort. Ensure the sustainability of the healthcare system, and of the pension system by linking the statutory pension age to life expectancy. Simplify, rationalise and streamline fiscal relations and responsibilities across the various layers of government.</i></p>	<p><b>Some progress*</b></p> <ul style="list-style-type: none"> <li>• Some progress in ensuring the financial sustainability of the healthcare system</li> <li>• Limited progress in ensuring the financial sustainability of the pension system</li> <li>• No progress in linking the statutory retirement age to life expectancy</li> <li>• Some progress in reforming fiscal relations between the various layers of government</li> </ul>
<p><b>CSR 2:</b> <i>Improve the labour market participation of women. Take steps to improve the educational achievements of disadvantaged young people, in particular those from a migrant background.</i></p>	<p><b>Some progress</b></p> <ul style="list-style-type: none"> <li>• Some progress in improving the labour market participation of women</li> <li>• Some progress in improving the educational achievements of disadvantaged young people</li> </ul>
<p><b>CSR 3:</b> <i>Reduce, in the area of services, administrative and regulatory barriers for investments, such as restrictive authorisation requirements and restrictions on legal form and shareholding, and impediments to setting up interdisciplinary companies.</i></p>	<p><b>Limited progress</b></p> <ul style="list-style-type: none"> <li>• Limited progress in reducing administrative and regulatory barriers to investment in services</li> <li>• No progress in reducing impediments to setting up interdisciplinary services companies</li> </ul>

\* This overall assessment of CSR1 does not include an assessment of compliance with the Stability and Growth Pact.

Source: European Commission

**Box 2.1: Contribution of the EU budget to structural change in Austria**

Austria receives up to EUR 4.9 billion from the European Structural and Investment Funds (ESIF) for the period 2014-2020. This is equivalent to around 0.2 % of GDP annually (over 2014-2017) and 5 % of national public investment <sup>(1)</sup>. By 31 December 2016, an estimated EUR 1.4 billion, which represents about 28 % of the total allocation for ESI Funds, have already been allocated to concrete projects.

Financing under the European Fund for Strategic Investments, Horizon 2020, the Connecting Europe Facility and other directly managed EU funds is additional to the ESI Funds. By end 2016, Austria has signed agreements for EUR 738 million for projects under the Connecting Europe Facility. The EIB Group approved financing under EFSI amounts to EUR 188 million, which is expected to trigger nearly EUR 492 million in total investments (as of end 2016).

**All necessary reforms and strategies as required by the ex-ante conditionalities <sup>(2)</sup> have been met**, thus ensuring a timely and efficient up-take of the funds.

**All relevant CSRs were taken into account when designing the 2014-2020 programmes.** The European Regional Development Fund (ERDF) will contribute to stimulating private investments in research and development and to improve the cooperation between public and private investments actors. Furthermore, Austria already improved with the help of the ERDF the coordination between the regional and Federal levels through the national Smart Specialisation Strategy.

A considerable part of the ESI Funds (EAFRD EUR 3.9 billion) addresses rural development, with the aim of improving competitiveness in the agricultural sector, preserving eco-systems with a view to ensuring biodiversity and supporting the socio-economic regeneration of rural areas. The ESI Funds also support various labour market policies, particularly skills upgrading and contribute to increasing the employability of the labour force. Austria also uses ESI Funds assistance for different social policies supporting social inclusion measures, especially for minorities and migrants. Specifically, the ESF supports the implementation of country specific recommendations, by assisting measures to improve the employability of women, older workers and workers with migrant background in particular.

<https://cohesiondata.ec.europa.eu/countries/AT>

<sup>(1)</sup> National public investment is defined as gross capital formation + investment grants + national expenditure on agriculture and fisheries.

<sup>(2)</sup> At the adoption of programmes, Member States are required to comply with a number of ex-ante conditionalities, which aim at improving framework and investment conditions for the majority of areas of public investments. For Members States that do not fulfil all the ex-ante conditionalities by the end 2016, the Commission has the possibility to propose the temporary suspension of all or part of interim payments.



## 3. REFORM PRIORITIES

### 3.1. PUBLIC FINANCES AND TAXATION

#### 3.1.1. FISCAL FRAMEWORK

**The 2017 financial equalisation law takes some steps to reduce the complexity of the fiscal framework.** In 2016, representatives of the central government, the federal states and the municipalities agreed on a new financial equalisation law, which will govern financial relations between the different layers of government from January 2017 for 5 years. Several inter-sector transfers have been abolished and integrated into the general revenue-sharing system. A first step has also been taken to make the revenue-sharing system itself more task-oriented: starting in 2018 the funds for childcare will be allocated to municipalities based on the services provided rather than the number of inhabitants. From 2019, the same system will also apply to compulsory schooling. The law also introduced a uniform formula for calculating the maximum amount of liabilities and guarantees for each sub-sectoral government, at the same time implementing a general ban on financial speculation. Nevertheless, the responsibilities of each government subsector towards other sectors' liabilities remain unclear.

**The new agreement also introduces several elements to improve the efficiency and flexibility of the fiscal framework.** The legal basis has been created for regular reviews of tasks and expenditure in individual areas in order to consider progress, results and the potential for savings or redistribution of tasks. By the end of 2018, a system of benchmarks will also be developed to compare federal states' performance in several areas in order to encourage efficiency and improve monitoring. These include administration, hospitals, long-term care and compulsory schools. The three government subsectors (central government, federal states and municipalities) also committed to reform the distribution of their respective competencies, for which an agreement will have to be reached by the end of 2018. The reform will aim at unbundling competencies both in the legislative and executive field, and will include subsequent changes in the financial arrangements. The legal basis for

spending reviews and benchmarks improves the adaptability of the fiscal framework, while the reform of competencies could make it possible to tackle the complexity of the system at its roots. However, the effectiveness of these measures will depend on their thorough implementation.

**The 2017 financial equalisation law does little to correct the misalignment of revenue-raising powers and spending responsibilities across the different layers of government.** The new agreement slightly increases tax autonomy at the sub-national level, leaving the federal states free to set the tariff for the housing subsidy contribution from 2018. While this measure has the potential to increase federal states' revenues from autonomous taxes from EUR 500 million to around EUR 1.5 billion, this would be still low compared to their overall budget of around EUR 30 billion in 2015. At the same time, the law increases yearly transfers to federal states and municipalities by EUR 300 million, which will raise their spending capacity, thus widening the misalignment with their revenue-raising powers.

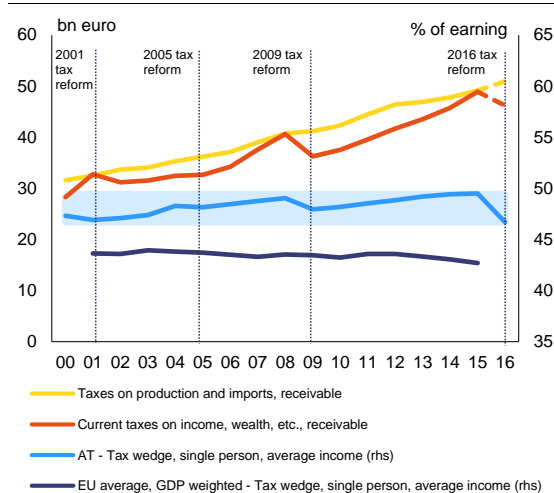
**Regarding the implementation of the national fiscal rules, the complexity of the 2012 Austrian Stability Pact makes an effective monitoring at the sub-national level difficult.** The 2012 Austrian Stability Pact introduced several numerical rules for the budgets of each government subsector. As part of these rules, federal states and municipalities were required not to exceed a specific share of the general government structural budget deficit. For this purpose they should keep a structural balance control account from 2017 onwards where deviations from targets would be recorded. Similarly, increases in expenditure at the sub-national level have been made subject to the same rules as set at EU level (Council Regulation (EC) No 1175/2011). Both the structural budget control account and the implementation of the expenditure rule are very difficult and resource-consuming at the sub-national level, especially for municipalities. This is particularly relevant given the current heterogeneity of the accounting standards and practices across sub-national governments (accounting standards will be fully

harmonised only from 2020 onwards) as well as the complexity of intergovernmental transfers and subsidies. Similar conclusions are shared by the Fiscal Advisory Council (Fiskalrat, 2016), which since 2013 has the mandate to analyse the sustainability and the quality of budgetary policies.

### 3.1.2. TAXATION

**Despite the 2016 tax reform, the tax wedge on labour in Austria remains comparatively high.** The tax reform implemented from January 2016 has reduced the tax wedge on labour. Tax brackets for personal income tax have been adjusted, with a substantial reduction of the entry rate. The tax wedge for a single person with average income has decreased by 2.8 percentage points, from 49.5 % to 46.7 %. The reform also provided work incentives, with a significant reduction of the low-wage trap for second earners (from 43.9 % to 37.7 %)<sup>(8)</sup>.

Graph 3.1.1: The effect of the fiscal drag in Austria



(1) The dashed values are Commission forecast  
**Source:** OECD, European Commission

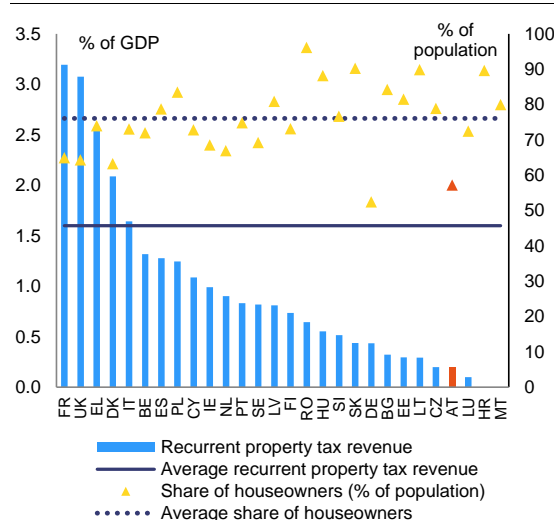
Nevertheless, even after the reform the tax wedge on labour in Austria is among the highest in the EU, and far above the EU average of 40.6 %. Similarly, at 37.7 % the low-wage trap for second

<sup>(8)</sup> The low-wage trap shows the share of a family's additional earnings arising from an increase in work productivity which are wiped out by increasing taxes and benefit withdrawal. The family considered here has two-earners with two children, where the principal earner earns the average wage and the second earner increases its gross wage from 33 % of the average wage to 67 %.

earners remains significantly above the EU average of 33.5 %.

**In the absence of an indexation of tax brackets, the tax burden on personal income tends to increase over time as an effect of the fiscal drag.** The Austrian tax system currently does not envisage any mechanism to automatically adjust tax brackets to inflation. Consequently, as wages grow to adjust for inflation, taxpayers progressively move to higher tax brackets with a corresponding increase in their tax liability. To some extent, the income tax reforms implemented in recent years countered the effect of the fiscal drag and did not reduce the tax wedge on labour in a structural way. For this reason, since the early 2000s the tax wedge on labour in Austria has fluctuated between 47 % and 49 %, always remaining far above the EU average (Graph 3.1.1). In January 2017, the government agreed to automatically index the two lowest income tax brackets when the cumulative inflation reaches 5%. If adopted, this measure would provide for a more stable reduction of the tax burden on labour from 2019 onwards.

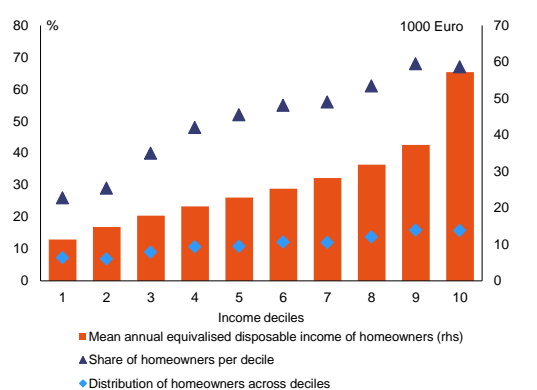
Graph 3.1.2: Revenues from recurrent property taxes (2014)



**Source:** OECD

**Austria has potential scope to shift the tax burden from labour to recurrent property taxes.** Revenues from recurrent property taxes are significantly lower in Austria than the rest of the EU: in 2014 they amounted to 0.2 % of GDP versus an EU average of 1.6 % of GDP (Graph 3.1.2). Empirical research shows that recurrent

Graph 3.1.3: Share of homeowners by deciles of equivalised disposable income



(1) Homeowners are defined as outright owners and owners paying a mortgage.

(2) EUROMOD simulates benefit entitlements and tax liabilities (including social security contributions) of individual and households. The simulations are based on representative survey data from the European Statistics on Income and Living Conditions (EU-SILC).

Source: European Commission, Joint Research Centre based on the EUROMOD model

taxes on immovable property are the least distortive to growth (Arnold *et al.*, 2011), and other studies indicate that shifting the tax burden from labour to consumption or property would have positive effects on GDP and employment (European Commission, 2013). While the design of such a shift would need to avoid potential negative distributional impacts, in the case of Austria these would be limited by the comparatively low share of house-owners in the overall population (Graph 3.1.2) and their concentration in the higher income deciles (Graph 3.1.3). As recurrent property taxes are one of the few sub-national own taxes in Austria, increasing the corresponding revenues would also reduce the transfer dependency of sub-national governments. For this reason, the 2017 financial equalisation law established a working group with the specific mandate to propose a reform of the property tax by mid-2017. Austria is also one of the few Member States without an inheritance tax, which was suspended in 2008.

**The outdated tax base for recurrent taxes on immovable property leads to low revenues and distortive distributional effects.** In Austria the rates of recurrent property taxes are relatively high, ranging up to 1 % depending on the municipality (EU average of 0.36 % in 2012) (European

Commission, 2014)<sup>(9)</sup>. However, the tax base is extremely low, as the last assessment of property values for tax purposes occurred in 1973 and the assessed values bear little correlation with today's market values. This misalignment affects revenues, limits the stabilising role that property taxation can play in the housing market, and may produce a regressive distributional effect as the market values of properties have evolved very differently across the country. The 2016 tax reform introduced several measures to update the assessed values of immovable properties for tax purposes, in order to better reflect their market values. Nevertheless, the new tax base applies only to taxes on gratuitous transfers, not to recurrent taxes.

### 3.1.3. AGE RELATED SPENDING

**Austria faces a medium risk to its fiscal sustainability in the medium- and long-term, mainly due to the effects of ageing.** Based on a debt sustainability analysis by Commission staff (European Commission 2017a) as updated following the Commission 2017 winter forecast, in a no-policy-change scenario Austria's public debt is projected to decrease by about 18 pps of GDP between 2016 and 2027, reaching 65.5 % of GDP. A cumulative gradual improvement in the structural primary balance of 0.5 % of GDP over 5 years (starting from the year after the forecasts, currently 2019) would be required in order to reach the 60 % debt-to-GDP ratio by 2031. This is mainly due to the unfavourable current level of debt and, to a lesser extent, to an age-related effect over the medium term. In the long-term, the projections point to a required fiscal adjustment of 2.2 % of GDP to ensure the sustainability of public finances, qualifying Austria as facing medium fiscal sustainability. This is mainly due to the stronger projected impact of age-related spending (2.5 % of GDP) over the longer term.

### 3.1.4. PENSIONS

**Austria's public expenditure on pensions is relatively high compared to the rest of Europe and is expected to increase significantly due to a rapidly ageing population.** According to the

<sup>(9)</sup> Data refer to 2012 and to tax rates on the possession of a dwelling with a value of EUR 213 000.

2015 Ageing Report (European Commission, 2015a), for the period 2013-2060, Austria is expected to be among the EU Member States with the largest predicted increase in pensions. The report projects that by 2060 Austria's spending on pensions will increase by 0.5 pps of GDP (vs EU average of a 0.2 pps reduction).

**The government's budgetary support for pensions is still increasing.** In its Budget Report 2017 and Strategy Report 2017-2020 (BMF, 2017), the Ministry of Finance projects an increase of 30.3 % in federal contributions to the pension insurance (excluding civil servants) over 2015-2020 (from EUR 10.2 billion in 2015 to EUR 13.3 billion in 2020). Similarly, pension expenditure for public servants (including expenditure for long-term care) is expected to increase in the same period by 15.6 % (from EUR 9 billion in 2015 to EUR 10.4 billion in 2020).

**Increasing life expectancy and the low effective retirement age are the main drivers of higher pension expenditure.** Significant changes in the age structure of the Austrian population are expected by 2040 due to the persistently low fertility rate and rising life expectancy. As a result, the population aged over 65 is expected to increase from 1.6 million in 2015 to 2.8 million in 2060. In contrast, the number of potential workers is expected to gradually decrease after 2025, so that in 2060 the ratio between the population aged 65 and more as a percentage of the population aged 15-64 will be 0.5 (old-age dependency ratio). At the same time, given the low effective retirement age, the number of pensioners as a share of the 65+ population (coverage ratio) is projected to remain far above the EU average up to 2060, though the gap is expected to decrease (148 % vs 133 % in 2013, 116 % vs 105 % in 2060). The gradual decline in the working-age population from 2020 and the simultaneous increase in pensioners will have a dampening effect on economic growth and change the public revenue and expenditure structure.

**Although pension reform measures launched since 2014 led to an increase, the effective retirement age is still relatively low.** Reducing access to invalidity pensions, better transparency created by the individual pension accounts, the higher penalties for entering retirement earlier and the higher benefits resulting from longer working

lives led to an increase in the effective retirement age. In the first half of 2015, the effective retirement age increased by 13 months compared to the same period in 2014<sup>(10)</sup> and by additional 2 months in the first half of 2016, reaching 60 years and 3 months (BMASK, 2016).<sup>(11)</sup> However, this figure still appears low compared to the EU average, which in 2014 stood at 63 and 6 months for men and 62 years and 6 months for women. For men, the gap from the statutory retirement age of 65 years also remains significant. For women, the current statutory retirement age of 60 years is among the lowest in the EU, and it will start to be aligned with the statutory retirement age for men only in 2024. In its programme 2017-18, the government is planning to further harmonise the pension system of civil servants with the general pension system (ASVG).

**The low labour market participation of women and the high gender pay gap, combined with lower pension contributions, led to less adequate pensions for women.** Austria continues to face a challenge in terms of pension adequacy for women, particularly those aged 65+. The gender pension gap increased from 35 % in 2008 to 39 % in 2015.

### 3.1.5. HEALTHCARE

**Public expenditure on healthcare in Austria poses a sustainability challenge, as it is expected to rise significantly in the medium and long term from already high levels.** At 7.9 % of GDP, the public expenditure for healthcare in Austria is among the highest in the EU (EU average of 7.2 % of GDP, 2014 data). On the basis of the 2015 Ageing Report, healthcare expenditure is projected to increase by 1.3 pps of GDP from 2013 to 2060, significantly above the average projected increase for the EU (0.9 pps of GDP). Together with the projected rise in spending on pensions and long-term care, this projected increase represents a medium risk to fiscal sustainability in the medium and long term.

<sup>(10)</sup> Part of the increase in the effective retirement age recorded in 2015 is due to a change in the criteria for classification.

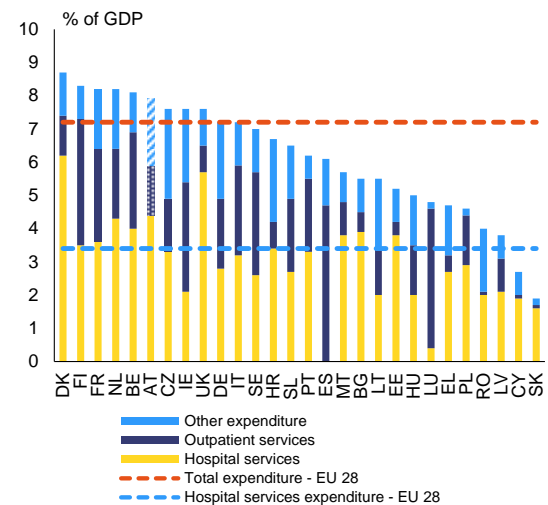
<sup>(11)</sup> This figure does not consider civil servants. The effective retirement age of civil servants of the federal administration was 61 years and 2 months in 2015.

**The financial targets set by the 2013 healthcare reform and the 2017 financial equalisation law are not sufficient to ensure the sustainability of the healthcare system.** With the 2013 healthcare reform the annual increase in healthcare expenditure has been limited to 3.6 % from 2013 to 2016, a level which had been set to match future nominal GDP growth as estimated by the government. Although it is being met (GÖG and BMGF, 2016), the expenditure ceiling lacked ambition and did not imply significant changes in the existing trend. For health insurance institutions, this was confirmed by the joint monitoring report issued on July 2016 (Rechnungshof, 2016). The 2017 financial equalisation law has set more stringent financial targets, as the cap on healthcare expenditure growth will be gradually decreased from 3.6 % in 2016 to 3.2 % in 2021. The new targets are likely to play a positive role in containing the overall spending path and encouraging efficiency. Nevertheless, the projections of the 2015 Ageing Report pointed to medium risks for fiscal sustainability even though they assumed lower growth rates for healthcare expenditure over the same years. Therefore, Austria will still face a sustainability challenge even if the financial targets are met.

**Despite the high costs, the outcomes of the healthcare system are around the EU average, pointing to unexploited efficiency gains.** The Austrian healthcare system does not seem to suffer from problems of accessibility: according to the EU statistics on income and living conditions, Austria consistently scores as one of the Member States with the lowest self-reported unmet needs for medical care due to costs, distance and waiting times. However, recent evidence at the local level suggests some inefficiencies and long waiting times in specific sectors (Stadtrechnungshof Wien, 2017a/b). Life expectancy is above the EU average, both for females and males (84 and 79.1 respectively, versus an EU average of 83.6 and 78.1). Nevertheless, the number of healthy life years is significantly below the EU average (57.8 for females and 57.6 for males, versus an EU average of 61.8 and 61.4 respectively). This indicates that although the Austrians are living longer than the EU average, they tend to live fewer years in sound health conditions. Overall, the outcomes of the healthcare system, although of good level, do not appear to fully reflect the high costs.

**The main driver of the high healthcare spending is the large hospital sector, while the less costly outpatient care is underutilised.** Several indicators point to the over-utilisation of hospital care in Austria. The number of available acute care beds (535 per 100 000 inhabitants in 2013), is 50 % higher than the EU average (356). At the same time, even if the average length of curative care stays, at 6.5 days, is at about the EU average in 2013, the number of inpatient discharges<sup>(12)</sup> per 100 000 inhabitants (26.6) is among the highest in the EU and more than 50 % above the EU average (16.5). Consistently, the number of day-case discharges is lower than average (6 595 in Austria versus 7 031 in the EU in 2013). Accordingly, public expenditure for the hospital sector is among the highest in the EU (Graph 3.1.4), while Austria is below the EU average in terms of public expenditure for outpatient care (Austria 1.5 % of GDP, EU 2.2 %).

Graph 3.1.4: Public expenditure for healthcare (2014)



Source: European Commission

**The financial and organisational structure of the healthcare sector is complex and fragmented.** The Austrian taxpayer contributes to the healthcare system directly through compulsory contributions to social security funds and indirectly through taxes. While outpatient care is mainly financed by social security funds, which have direct agreements with healthcare providers, the financing of inpatient care is more complex. Public

<sup>(12)</sup> An inpatient discharge is the discharge of a patient at the end of an inpatient care service.

hospitals are financed through nine healthcare funds associated with the federal states, which collect contributions from the three government layers and the social security institutions. For each government subsector, different forms of contributions exist which depend on different legislation and relate to different funds. In general, the complexity of the system does not provide any stakeholder with full control over the financing or strong incentives to reduce costs. In addition, managing and financing responsibilities are not fully aligned, with federal states owning and running most of the public hospitals but contributing to less than half of the hospital sector's financing. This set-up provides federal states with weak incentives to pursue efficiency within the hospital sector or at health system level by shifting services to the less costly outpatient care.

**The 2017 financial equalisation law takes steps to promote efficiency, by reducing the incentives for hospitals to treat outpatient cases as inpatient ones.** The system of reimbursement for hospitals based on the diagnosis-related groups introduced in 1997 has applied so far only to inpatient cases. As the ambulatory care department of hospitals were reimbursed under a different and less generous regime, hospitals had an incentive to treat ambulatory cases as inpatients. From 2017, the diagnosis-related groups reimbursement system will also apply to the ambulatory departments. This is likely to promote a shift of excess capacity from the inpatient to the outpatient sector and a consequent reduction in acute care beds.

**The 2017 financial equalisation law strengthens the provision of outpatient care outside hospitals.** To provide patients with an effective alternative to hospital services, a legal framework for planning outpatient multi-disciplinary primary care centres has been created. The framework also provides for the creation of networks of primary care providers, which is particularly relevant for the more scarcely populated areas. Compared to the traditional single-handed practices, the new centres would offer a wider range of care services and more patient-friendly conditions. Although the establishment of the care centres is subject to the local supply of outpatient care (which includes single-handed practices), it was agreed to implement 75 care centres by 2021, and EUR 200 million have been earmarked. So far, the low

development of outpatient care outside hospitals was also due to the contracts agreed between healthcare providers and social security funds,<sup>(13)</sup> combining lump-sum with fee-for-service payments. The success of the multi-disciplinary primary care centres depends on the implementation of new payments schemes ensuring the involvement of both practitioners and social security funds.

**Austria's hospital sector makes insufficient use of effective public procurement such as EU-wide tendering, procurement aggregation and non-price award criteria.** Effective public procurement has the highest benefits in healthcare systems, like Austria's, which rely in particular on institutional players such as hospitals. Based on the EU's TED database, however, Austria's public and confessional hospitals make little use of EU-wide tendering. The value of health-related tenders published EU-wide by the Austrian health sector is 0.23 % of GDP, compared to an EU average of 0.62 %; the total amount is EUR 0.78 billion compared for example to Sweden's EUR 3.59 billion for a population of similar size. A related issue is that in a significant number of tenders only one bid was received (41 % in medical imaging equipment tenders in 2012-2015), indicating a lack of competition. Furthermore, Austria's hospitals forego volume savings for commoditised inputs and the amortisation of costly expertise for complex products by not aggregating their tenders. In addition, Austrian hospitals used price as the sole award criterion in 54 % of tenders in 2012-2015, which points to a lack of sophistication in tendering practices.

### 3.1.6. LONG-TERM CARE

**Austria has an ageing society whose long-term care costs are expected to increase significantly.** Austria ranks in the middle of the EU on long-term care costs as a percentage of GDP. However, it is one of the countries with the highest projected increase, with costs expected to double from 1.4 % of GDP in 2013 to 2.7 % of GDP by 2060 (projected increase of 1.3 pps of GDP versus 1.1 pps for the EU average).

<sup>(13)</sup> Contracts for physicians are negotiated centrally between the Medical Chamber and the main association of social security funds (*Hauptverband*).

## 3.2. FINANCIAL SECTOR

**Banking sector capitalisation improved in 2016, but pockets of vulnerability still remain.** Capital adequacy (including the capitalisation of CESEE subsidiaries)<sup>(14)</sup> strengthened further and reached 16.5 % in June 2016 compared with 16.3 % in 2015. The common equity Tier 1 (CET 1) ratio rose to 13.2 % in June 2016, up by 0.4 percentage points compared with December 2015. Notwithstanding efforts to strengthen their capital buffers, the largest Austrian banking groups still have lower capital ratios than European peers, as shown also by the results of the 2016 EU-wide stress test performed by the European Banking Authority. One of the two Austrian banks included in the stress test sample (i.e. Erste Bank Group and Raiffeisen) was among the banks with the weakest results. The two banks had lower starting point capital ratios for the stress test and experienced high credit losses, in particular for their CESEE operations. Meanwhile, due to their traditional business model, Austrian banks continue to have lower leverage ratios than their European peers.

**To increase the risk-bearing capacity and overall resilience of the banking sector, Austria activated several macro-prudential measures in 2016.** Following a recommendation from the Austrian macro-prudential body (Financial Market Stability Board), the Financial Market Authority identified seven banks as 'other systemically important institutions' ('O-SIIs') and set the applicable O-SII buffers at 1 % and 2 %, depending on the banking group.<sup>(15)</sup> The O-SII buffers will be gradually phased in between 1 June 2016 and 1 January 2019. Since 1 January 2016, the Financial Market Authority has also implemented a systemic risk buffer (SRB) of 1 % and 2 % for 12 banks,<sup>(16)</sup> depending on the

banking group. The SRB will be gradually phased in between 1 January 2016 and 1 January 2019 for the institutions directly supervised by the ECB. For those not directly supervised by the ECB, the Authority set a SRB of 1 % from 1 January 2016, which is applied without a phase-in period.<sup>(17)</sup> Only the higher of the O-SII buffer and the SRB applies.

**The increase in real estate prices coupled with the recent trends in housing loans underscores the importance of macro-prudential measures.** Against the background of growth in housing loans, especially over the last year, and signs of real estate price overvaluation in some parts of the country, the Financial Market Stability Board called for the introduction of additional macro-prudential instruments. In June 2016, the Board recommended to the Ministry of Finance the development of a legal basis for introducing limits on the loan-to-value ratio, the debt-to-income ratio or the debt service-to-income ratio for new real estate lending. The Financial Market Stability Board issued in September 2016 a communication on sustainable lending standards in real estate lending, which is crucial for maintaining stability and growth. Furthermore, the European Systemic Risk Board, which in 2016 conducted an EU-wide forward-looking assessment of vulnerabilities relating to residential real estate, issued a warning to Austria on vulnerabilities in this sector and made it public on 16 December 2016.

**Austrian banks continue to have liquid balance sheets.** The increase in deposits that has exceeded loan growth has allowed banks to maintain a sound funding profile. Their reliance on wholesale funding has been moderate, but developments linked to HETA Asset Resolution, the 'bad bank' of the former Hypo Alpe Adria, have hurt investor confidence and led to an increase in the cost of funding for senior unsecured debt issued by banks. However, the cost of these instruments declined again after the acceptance by creditors of the buy-back program offered by Carinthia. The cross-

<sup>(14)</sup> The CESEE (Central, Eastern and South-eastern Europe) region includes Turkey and the following sub-regions: i) Central and Eastern Europe (CEE), consisting of the Czech Republic, Hungary, Poland, the Slovak Republic and Slovenia; ii) South-eastern Europe (SEE), consisting of Albania, Bosnia & Herzegovina, Bulgaria, Croatia, Kosovo, FYR of Macedonia, Montenegro, Romania and Serbia; iii) the Baltic region, consisting of Estonia, Latvia and Lithuania; Russia, Ukraine and other countries in the Commonwealth of Independent States.

<sup>(15)</sup> The 2 % O-SII buffer applies to: Erste Group Bank, Raiffeisen Zentralbank, Raiffeisen Bank International, UniCredit Bank Austria; the 1 % O-SII buffer applies to: Raiffeisenlandesbank Oberösterreich, Raiffeisenlandesbank Niederösterreich-Wien, BAWAG P.S.K.

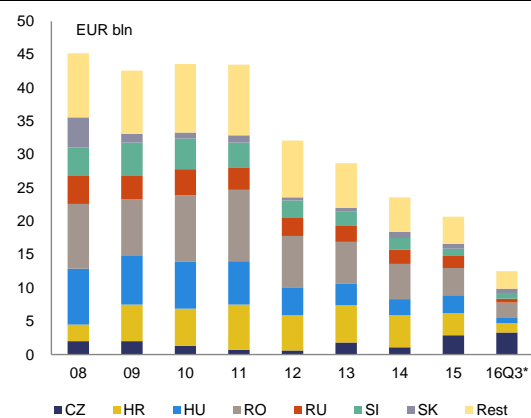
<sup>(16)</sup> The 2 % SRB applies to: Erste Group Bank, Raiffeisen Zentralbank, Raiffeisen Bank International, UniCredit Bank Austria; 1 % SRB applies to: Raiffeisenlandesbank

Oberösterreich, Raiffeisenlandesbank Niederösterreich-Wien, BAWAG P.S.K., Hypo NOE Gruppe Bank, Vorarlberger Landes- und Hypothekenbank, Hypo Tirol Bank, Oberösterreichische Landesbank, Sberbank.

<sup>(17)</sup> These banks are: Hypo NOE Gruppe Bank, Vorarlberger Landes- und Hypothekenbank, Hypo Tirol Bank, Oberösterreichische Landesbank.

border intra-group financing of the largest Austrian banks with international operations has declined steadily since 2011 (Graph 3.2.1), as the funding profile of the CESEE subsidiaries has continued to improve. Supported by the increase in funding on the local market due to the rise in customer deposits but also by an orderly deleveraging process, the funding gap of the CESEE subsidiaries continued to decline. Consequently, the loan-to-deposit ratio of these subsidiaries fell to 81.0 % in Q3 2016 from 96.7 % in 2014.

Graph 3.2.1: Intra-group liquidity to CESEE subsidiaries



Note: Liquidity transfers to credit institutions only  
Source: OeNB (central bank of Austria)

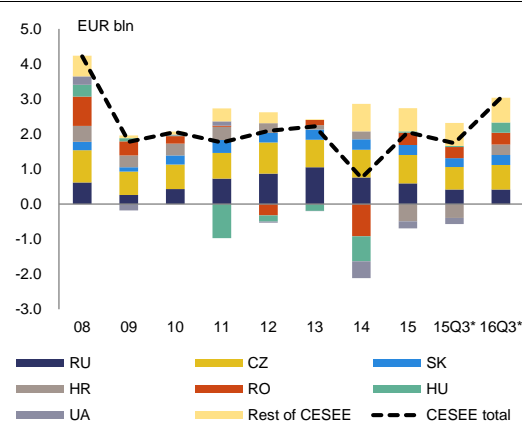
**Notwithstanding recent positive developments, banks' capacity to generate profits in the domestic market remains under pressure.** The low interest rate environment continues to limit the generation of net interest income by Austrian banks which, like German banks, rely heavily on interest income. Several credit institutions have implemented cost-cutting measures in the domestic market, but overall banks continue to have very dense branch networks. The cost-to-income ratio of Austrian banks declined in 2015 to 66.2 % from 69.7 % in 2014. However, it is higher than the cost-to-income ratio for the CESEE subsidiaries, which fell to 51 % in 2015 from 53 % in 2014. Return on average equity at unconsolidated level reached 4.9 % in June 2016, some 0.9 pps lower than in the same period in 2015. Profitability continues to be supported mainly by lower loan-loss provisions than in previous years. Overall, operating income decreased in the first half of 2016, compared with the same period in 2015, due to the reduction in net interest income, lower fee and commission income as well as lower trading

income. The reduction of the bank levy in 2017 will support profitability.

**Although on a declining trend, foreign currency loans to households remain a matter of concern.**

The steady decline in foreign exchange-denominated loans, in particular Swiss franc loans, to Austrian households is a corollary of several supervisory measures to curb foreign exchange lending adopted by the Austrian supervisors since 2008. Swiss franc loans account for roughly 96 % of foreign currency-denominated loans granted to the private sector. At the end of 2015, the outstanding stock of Austrian banks' foreign currency loans to households amounted to EUR 24.4 billion, some EUR 14.7 billion lower than in 2008. About two thirds of these loans are 'bullet loans', most of them linked to repayment vehicles, which are sensitive to financial market developments. Roughly 80 % of the outstanding foreign currency loans to households are set to mature from 2021 onwards.

Graph 3.2.2: Net profits of Austrian subsidiaries in CESEE



\* Q3 data not comparable with yearly data

Source: OeNB (central bank of Austria)

**The exposure of the Austrian banking sector to the CESEE region increased slightly in 2015.**

Based on data from the Bank for International Settlements, the total exposure of Austrian banks to the CESEE countries stood at EUR 187.6 billion in June 2016, up from EUR 184.8 billion in 2014 but roughly EUR 12 billion below the level registered in 2008. Due to the transfer in ownership of the CESEE subsidiaries of UniCredit Bank Austria to the UniCredit Group, the exposure of Austrian banks to the CESEE region has declined considerably (however, this is not yet



reflected in the June 2016 data). The exposure to the region accounts for roughly 64 % of the consolidated foreign claims of majority-owned Austrian banks. The CESEE exposure has remained diversified and dominated by operations in the EU Member States. Exposure to EU Member States in the CEE region has been prominent, the highest being to the Czech Republic and Slovakia. In recent years, operations in Ukraine, Russia and Turkey have been increasingly hit by adverse economic and political developments as well as the international commodities cycle.<sup>(18)</sup>

**Whereas CESEE operations have benefited from improved asset quality and profitability, several challenges remain.** In most CESEE countries non-performing loans either remained unchanged or declined significantly (i.e. in Bulgaria, Romania, Slovenia) in 2015 on the back of efforts to clean up balance sheets. Meanwhile, subsidiaries operating in Ukraine and Russia experienced a further deterioration in asset quality in 2015. The profitability of CESEE operations improved considerably in 2015, but the subsidiaries in Ukraine and Croatia reported losses, whereas the Russian subsidiaries remained profitable (Graph 3.2.2). The aggregated net profit after tax of the CESEE subsidiaries (excluding the profits of UniCredit Bank Austria subsidiaries in CESEE) stood at EUR 1.4 billion in June 2016 compared with EUR 0.9 billion a year earlier. Austrian banks operating in CESEE have been increasingly impacted by legislative initiatives in several host countries (e.g. Hungary and Croatia) aimed at converting foreign currency loans, in particular Swiss franc loans, into local currency or another foreign currency. Although declining, the outstanding stock of foreign currency loans granted abroad remains sizeable. The total foreign currency loans granted by the Austrian subsidiaries stood at roughly EUR 32.7 billion in June 2016. This was down from EUR 69.3 billion in 2015 due to the transfer of ownership of the CESEE subsidiaries of UniCredit Bank Austria to the UniCredit Group.

<sup>(18)</sup> Operations in Turkey are no longer part of Austria's exposure to CESEE since October 2016.

### 3.2.1. NATIONALISED BANKS

**Following a first unsuccessful offer, the creditors of HETA accepted a second settlement offer by the state of Carinthia.** In September 2016, Carinthia made a second offer to the creditors of HETA to acquire certain the HETA debt instruments for which Carinthia is statutorily liable as deficiency guarantor (for the State aid decision, see Commission 2016b). The offer, which had to be accepted by a two-thirds majority of HETA creditors in order to be implemented, was accepted by creditors representing EUR 10.7 billion or 98.71 % of all HETA debt instruments. The central government's financial contribution is substantial, leaving Carinthia with a minor share of up to EUR 1.2 billion of the total cost, which will be funded by a loan from the federal government via its financing agency OeBFA. As all HETA liabilities were already included in the government accounts, honouring the offer is not expected to imply additional costs for the general government.

**The remaining assets of the three public financial defeasance vehicles are being progressively divested, with different time horizons and limited risks overall.** The liabilities of HETA, KA Finanz and Immigon had been recorded as part of government debt, increasing it significantly over 2009-2015 (see Graph 1.10, and Commission, 2016c). The impaired assets of the three vehicles are being divested over time in order to cover the respective liabilities and allow a corresponding reduction in government debt. In the case of HETA, the impaired assets amounted to around EUR 14.3 billion at the end of 2015. The wind-down of HETA's assets is expected to be completed by 2020, but the bulk of assets is likely to be divested already by 2018. The assets have undergone different valuations, with the last performed by the Financial Market Authority in April 2016. As this valuation took a rather conservative approach, risks that yields will be lower than the expected values are limited. The impaired assets of Immigon, a wind-down entity created from the split of Österreichische Volksbanken, amounted to around EUR 3 billion at the end of 2015. Their resolution is expected to be completed by 2017. In the case of KA Finanz, the winding-down period of the remaining assets amounting to EUR 12.9 billion is much longer. However, the overall risk is limited as the rating of the assets is relatively positive.

### 3.3. LABOUR MARKET, EDUCATION AND SOCIAL POLICIES

#### 3.3.1. LABOUR MARKET

**The labour market in Austria, although affected by increased unemployment, remains one of the best-performing in the EU.** Because of weaker economic performance the labour market has recently faced some difficulty in absorbing the increased labour supply. Although among the lowest in Europe, the unemployment rate of 6.1 % (in Q3 2016) was the highest Austria has seen, at least since 1968. However, this historical peak is just above the earlier peak of 2004, and the increase in unemployment stopped by the summer of 2016 as GDP growth picked up. At the same time some groups of the working-age population still suffer from weaker labour market outcomes, notably older workers, low skilled workers, women and people with a migrant background.

**The increasing labour supply has improved growth potential and demographic trends, but has not been fully absorbed by employment.**

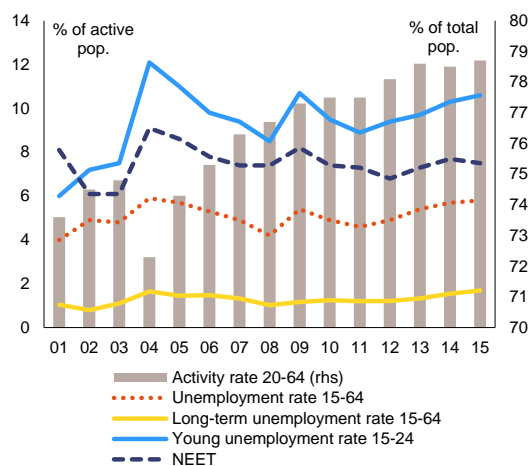
Labour immigration and an increasing activation of older workers and women have been expanding labour supply. Austria had one of the highest net migration rates in the EU between 2000 and 2015. Annually some 42 000 more people immigrated to Austria than emigrated. Furthermore, Austria was one of the main destinations of posted workers and received, in net terms, about 60 000 such workers in 2014. Since 2000, immigration has more than compensated the effect of demographic ageing, and the working-age population has expanded by 370 000 (6.9 %). The activity rate for older workers rose from 47.2 % in 2000 to 62.9 % in 2015. For women it increased from 65.1 % to 74.0 % in the same period. In addition, economic growth of less than 1 % in real terms between 2012 and 2015 was too weak to absorb the increasing labour supply.

**An increasing labour supply is not necessarily in contradiction with lower unemployment.**

Until 2011 unemployment fell from its 2004 peak even though the labour supply was already expanding. In addition, even if unemployment started to increase in 2011, the long-term unemployment rate has remained relatively low, at 1.7 % compared with the EU average of 4.5 % in 2015, and turnover on the labour market has remained high. This is also explained by the high seasonality of economic sectors like tourism and

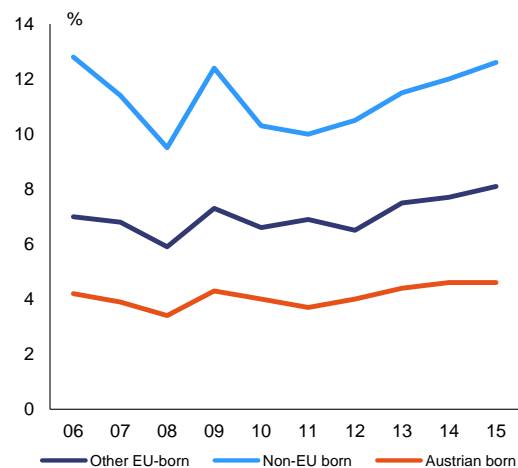
construction. Most of the jobs created in recent years are part-time (full-time employment has picked up only recently) and a majority of the new positions are in the low-wage sector.

Graph 3.3.1: Labour market — key indicators



Source: European Commission

Graph 3.3.2: Unemployment rate by country of birth



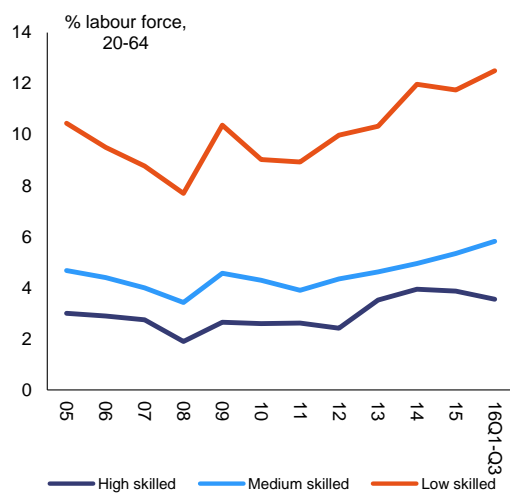
Source: European Commission

**The current increase in unemployment is concentrated in certain groups.**

It affected in particular non-EU born people, whose unemployment rate in 2015 was 12.6 % compared to 4.6 % for native-born people (see Graph 3.3.2). The increase also particularly hit the low-skilled, 11.2 % of whom were unemployed in 2015, compared to 5.7 % for all skill levels. By contrast, the labour market situation of better-skilled workers remained good. People with low

qualifications also face the highest risk of long-lasting unemployment (see Graph 3.3.3). Projections show that supply and demand are going to diverge even further for low-qualified labour (CEDEFOP, 2015). The labour force with the lowest skills is expected to shrink, but the number of such jobs is expected to shrink by far more.

Graph 3.3.3: **Unemployment rate by educational attainment**



Note: Unemployment rates ages 20-64 (% of labour force), non-seasonally adjusted

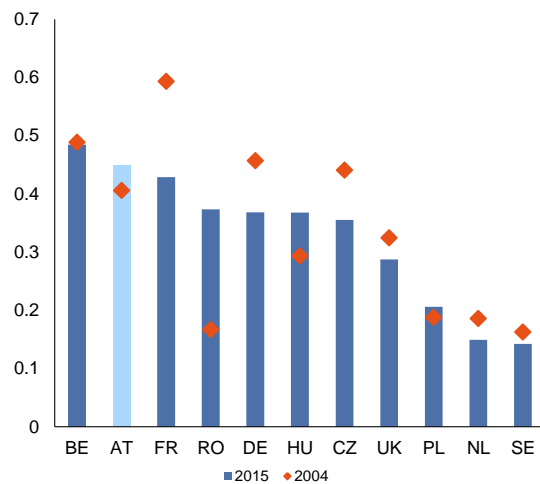
Source: European Commission

**Labour market performance also varies across regions.** Compared to the unemployment peak of 2004, the regional distribution of unemployment in Austria has increased (see Graph 3.3.4). A regional comparison of unemployment data shows an east-west gap, with a stronger increase in unemployment over recent years in the eastern part of the country (Vienna, Lower Austria, Upper Austria, Burgenland). Vienna is especially affected by the strong increase in unemployment (particularly long-term unemployment). In its programme 2017-18 the government proposes several measures for increasing mobility on the Austrian labour market.

**Expenditure on labour market policies has increased somewhat as unemployment has risen.** The budget for active and passive labour market policies is projected to reach EUR 8.6 billion in 2017, up from EUR 6.1 billion in 2012. In September 2016 the government took a number of measures to strengthen labour market

policy in response to the rise in unemployment. It increased the staff of the Public Employment Service Austria, reintroduced skilled workers grants, stepped up initial and job-related training and introduced a training guarantee for persons up to the age of 25. Furthermore, non-wage labour costs are being reduced by nearly EUR 1 billion in several steps from 2016 to 2018 and further reductions in form of an employment bonus is announced in the government programme 2017-18.

Graph 3.3.4: **Regional dispersion of unemployment**



Note: Dispersion is measured as the coefficient (between 0 and 1) of variation of unemployment rates across NUTS2 regions

Source: European Commission

**Getting older workers into work remains a challenge, although increasing and targeted activation measures are delivering good results.**

The employment rate of older workers has been continuously increasing as a result of government measures targeting this age group, but still only 49.7 % of people aged 55-64 were employed in the third quarter of 2016, below the EU average of 55.6 %. The employment rate of older women (41.5 % in the third quarter of 2016) remained significantly lower than that of men (58.3 %). Those over 50 face a comparatively lower risk of becoming unemployed, but once they lose their job they tend to remain unemployed for a relatively long period. Over the last few years, the Austrian government has increased efforts to deliver active labour market policies targeting these groups, and employers are encouraged to provide age-friendly working conditions and employ older workers. These measures are helping to increase their

employability and keep them longer in employment. Furthermore, the government programme 2017-18 announces an employment initiative of yearly up to 20 000 new jobs for long-term unemployed above the age of 50. In this programme, the government also announced its intention to modify the current provisions in the field of dismissal protection to facilitate hiring older workers.

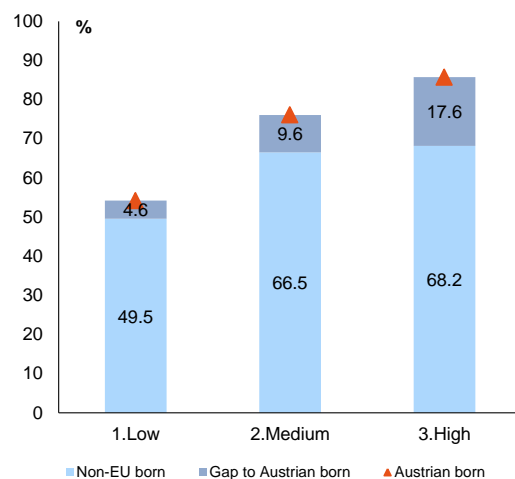
**Women’s labour market potential is underused, as reflected in the high share of part-time employment and the high gender pay gap.** While the employment rate of women aged 20-64 is above the EU average (70.8 % vs 65.3 % in the second quarter of 2016), taking full-time equivalents into account brings it back to average levels (55.1 % v the EU average of 55.3 % in 2015). The gender gap in pay remains wide (22.2 % in 2014, compared to the EU average of 16.1 %) but has narrowed slightly (from 24 % in 2010). The high and above-average proportion of women working part-time is not decreasing and is largely driven by care responsibilities. In 2015, 52.2 % of young Austrian women (aged 15-39) working part-time mentioned caring for children or the elderly as their main reason for part-time work. This is well above the EU average of 33.6 %.

**Childcare provision is improving but Austria is still below the Barcelona target for children under 3 years of age.** The number of early childcare places for children under 3 has been increased, but the current level of 25.5 % in 2015/2016 is still below the Barcelona target for this group of 33 %. Moreover, there are still major regional differences in the level, e.g. Vienna 45.1 %, Upper Austria 14.5 %, Styria 13.4 %, Carinthia 20.6 % (Statistik Austria 2016). Furthermore, the percentage of children staying in formal childcare for 30 hours or more is far below the EU average for all age groups from 0 to 12 years. A nationwide needs assessment of additional care places is so far lacking. Women are still interrupting their professional career for a relatively long period after giving birth, supported by the relatively generous system of parental leave allowances. The share of dependents cared for by family members in their own or their family’s home is relatively high. The vast majority of care givers are working-age women. No high-quality, recent data exist on the share of informal provision in the total provision of long-term care, or on the

share of working-age women providing informal and/or unpaid care.

**The proportion of the population with a migrant background is increasing, while their labour market potential is underused.** Some 9.3 % of the Austrian population was born outside the EU, and with an employment rate of 60.6 % in 2015 they are much less likely to be in employment than native-born people, whose rate was 76.4 %. By contrast, people born in other EU countries have an employment rate that is similar to the native-born population. Since 2011 the gap has widened as the employment rate of native-born people has increased by 0.6 pps while that of non-EU-born people has declined by 3.6 pps. Employment rates for those born outside the EU lag behind those for native-born people at all qualification levels (see Graph 3.3.5) but some groups appear to face particular challenges. The female employment rate differs according to the country of origin. Women born in other EU countries have similar employment rates to native-born women (69.5 % v 72.2 % in 2015), while women born outside the EU have significantly lower rates (47.6 %).

Graph 3.3.5: Employment rate by qualifications and country of birth (2015)



Source: European Commission

**People born outside the EU are often underemployed and face a high risk of being overqualified when employed.** According to data of the ad hoc module of the Labour Force Survey 2014 (Statistik Austria, 2015a), 23.5 % of foreign-

born people in Austria reported being overqualified for their current job against 8.8 % of the native-born population. Especially for some groups of non-EU nationals this combines with insufficient knowledge of German, a sometimes relatively low level of formal education and the lack of recognition of formal qualifications obtained abroad. According to the survey mentioned above, around 75 % of the non-EU nationals received their qualifications outside Austria but only around 25 % of them applied for them to be recognised. The recently adopted Recognition Act provides various tools to facilitate the recognition of qualifications of non-EU nationals. The legal entitlement to recognition and to an assessment procedure should lead to better labour market integration of non-EU nationals with qualifications obtained abroad and help them find jobs corresponding to their qualification levels more quickly.

### 3.3.2. SOCIAL POLICIES

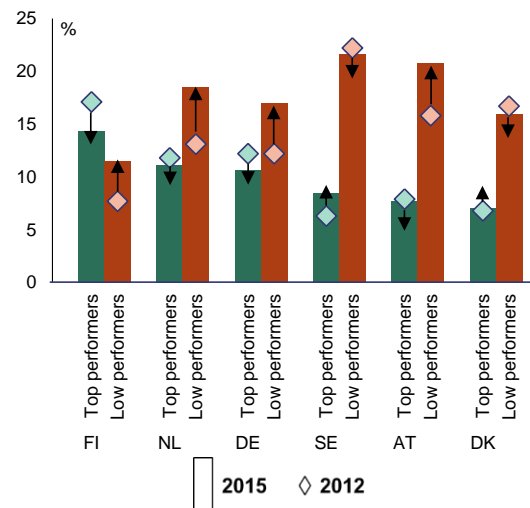
**The social situation is overall good.** The proportion of the population at risk of poverty or social exclusion decreased in 2015 and is one of the lowest in the EU (18.3 % in 2015 against the EU average of 23.7 %). The wide gender gaps in pay, working hours and length of working life persist, impacting pension adequacy and leading to a substantial difference between the at-risk-of-poverty rate for women aged 65 and over (15.1 %) and that of men of the same age (10.7 %). Although the effective retirement age is continuously increasing, harmonising the retirement ages for men and women by increasing the statutory retirement age for women, combined with respective job creation policies, would reduce the gender gap in pay and pensions and reduce the risk of poverty for women aged 65 and over. In addition, the situation of specific groups at risk of poverty in Austria remains a concern. This applies in particular to the children of foreign-born parents, with poverty rates of 34.6 %, above the EU average of 33.2 %, and the long-term unemployed.

### 3.3.3. EDUCATION

**School education in Austria produces only average outcomes in terms of basic skills**

**achievements and the influence of socioeconomic status remains important.** The performance of 15-year-olds in mathematics, reading and science worsened compared to 2012 as measured by the 2015 PISA test (OECD Programme for International Student Assessment) (see Graph 3.3.6). The proportion of low achievers reached 21 % in science and 22 % in reading and maths. The share of top performers in science decreased from 10 % in 2006 to 8 % in 2015. These developments may hinder future potential to innovate. Education outcomes for those with an immigrant background remained significantly below those of the population without an immigration background. The share of low achievers in science for both first generation immigrants and children of immigrants in Austria is among the most pronounced among EU countries even when adjusted for socioeconomic status. Between 2012 and 2015, in Austria the share of low performers in science increased by 5 pps, more than in Finland and Germany, while for instance Denmark and Sweden registered a decrease.

Graph 3.3.6: PISA performance 2012 -2015 in science - share of top and low performers



Source: OECD (2016) PISA 2015, table 1.2.2a

The amount of science instruction available differs significantly between advantaged and disadvantaged schools; in addition both grade repetition and truancy have increased. Austria has halved the gender gap in reading but boys continue to outperform girls in both maths and science.

**Recent measures aim at improving skill levels.**

The recently adopted Act on an education and training obligation until the age of 18 (*Ausbildungspflichtgesetz*) provides a framework for upgrading the skills of disadvantaged young people. In addition, planned standardised forms of partial qualifications aim at improving the educational achievement of learners. Though participation in lifelong learning in Austria, at 14.4 %, almost reaches the EU benchmark of 15 %, the ‘Educational guidance and counselling Austria’ (*Bildungsberatung Österreich*) initiative is promoting the extension and further development of cost-free educational guidance and counselling for adults (CEDEFOP, 2016). This is intended to increase their employability.

**The government is starting to implement the first package of the November 2015 education reform plan.**

It provides for a better transition by linking the last compulsory year of childhood education and the first 2 years of primary school. This allows for a more intensive exchange of information between the institutions and more tailor-made support to students, including language support, if needed. Education outcomes are recorded in the ‘education compass’ and the system of grading has been adapted in primary schools. The government programme 2017-18 proposes increasing autonomy of schools and further strengthening early childhood education and care through a pilot project exploring compulsory attendance from age 4 on. The number of all-day school places more than doubled between 2007 and 2016 from 77 000 to approximately 160 000. About 40 % of school locations now offer all-day schooling, but only 5 % of schools have a curriculum with classes during the whole day (OECD, 2016a). Austria already has a EUR 375 million investment programme to increase the number of all-day schools between 2015 and 2019. A further EUR 750 million from federal funding has been made available for the coming 8 years, with a particular focus in the first 2 years on increasing the number of schools with an integrated curriculum. Simplifying the administration of these funds will help regions to use them fully, which has not always been the case in the past.

**Austrian teachers do not make sufficient use of digital teaching tools yet.** According to the Austrian Education Report 2015 nearly all teachers

— 90 %, irrespective of their age — use digital means and the internet for preparing lessons but much less often during the lessons themselves. The report finds that teachers do not know enough about relevant digital teaching methods. A new digitalisation strategy in the government programme 2017-18 envisages equipping all schools with broad band and wireless internet access by 2020/21 and introducing teaching basic digital skills into the regular curriculum of primary and lower secondary schools.

**Austria faces challenges in meeting the growing demand of ICT specialists, digital skills among the general workforce and e-entrepreneurs.**

The share of ICT specialists in the Austrian workforce of around 4 % is only around the EU average. Students' motivation to engage in science has further deteriorated since 2006 and is now at one of the lowest levels in the EU. Even if interest in science topics has risen back to the OECD average again (Bifie, 2016), this comparative lack of motivation does not help achieve the increase in human resources devoted to science, technology, engineering and mathematics that is needed for Austria to become an innovation leader. Education and digital skills is one of the 12 focus areas of the Digital Roadmap Austria.

**Funding remains an issue in the higher education system and is preventing Austria from improving education outcomes.**

Austria's tertiary attainment rate was 38.7 % in 2015, the same as the EU average. Austria reached its Europe 2020 national target of 38 %. Austria has a comparatively larger share of studies on ISCED 5 level (OECD 2016b). In 2014, per 1 000 population in the age group 20-29 Austria had 22.5 graduates in science, mathematics, computing, engineering, manufacturing & construction, above the EU average of 18.7 graduates. However, it has a lower proportion of graduates at higher qualification levels (i.e. master's degrees and PhDs) than those countries it aims to join in its ambition to become an innovation leader. The big increases in student numbers over recent years have not been matched by corresponding staff or funding increases (EUA, 2016). A concept for capacity based financing of university places is planned in the government programme 2017-18 and to be implemented by 2019. The government's university development plan for 2016-2021 had already identified a

funding gap of EUR 500 million, in addition to the EUR 600 million generally available for 2016-2018 to implement such a scheme based on capacity oriented financing. The additional EUR 116 million granted to higher education in 2016 falls short of covering this. Adequate funding and supportive student/staff ratios are a precondition for realising the ambition of having a higher education system that is characterised by excellence. In addition, Austria has developed a

strategy in 2016 to improve the social dimension in higher education and therefore make better use of the human capital available.

#### Box 3.3.1: Integration of refugees

**Austria has made considerable efforts to accommodate and integrate refugees.** The Austrian government decided in 2016 to implement a programme containing a variety of measures to swiftly integrate refugees and to some extent also those asylum seekers considered to have prospects of being granted residency. Key features of this programme are an expansion of German-language and orientation courses, including education on Austrian values and integration requirements. The package also supports initiatives for community services to be performed by asylum seekers. For those asylum seekers, with high prospects of being granted residency, a compulsory integration year together with language classes is planned. The recently adopted Recognition Act aims to speed up recognition of the qualifications of non-EU nationals and to introduce more flexible procedures for those who have no formal evidence (certificates) of their qualifications. Several organisations and the social partners are proposing initiatives for developing an integration process that starts at the moment of the asylum application, including faster and broader access to the labour market. Overall, it can be expected that integrating migrants and refugees who entered the country in 2015-2016 into the labour market quickly and successfully could also help Austria's social cohesion and growth as well as generate additional tax revenues.

**Asylum seekers and refugees are entering the labour market only gradually.** Asylum seekers can enter the Austrian labour market after a waiting period of 3 months, based on a labour market test that allows entry into a number of sectors (e.g. tourism and agriculture as well as apprenticeships in occupations facing shortages). Recognised refugees have full access to the labour market, but face considerable difficulties in finding a job because of their insufficient knowledge of German, their skills and discrimination (see Country Report 2016). Overall, there appears to be further room for increasing the number and reach of language courses — German language courses for refugees often do not go beyond B1 level (BMEIA, 2016). The process of identifying and registering the qualification level based on competency checks has improved, but it is still difficult to give an overall assessment of refugees' qualification levels.

**Austria faces a challenge to integrate a large number of asylum seekers and refugees into its education system.** In 2015, 88 851 people applied for asylum in Austria and by September 2016 a further 35 000 had done so. The 2015 level was three times the 2014 figure and included 9 331 unaccompanied minors under 18 years and 663 under 14. Integrating over 9 000 pupils (about 1 % of the total school population) into compulsory schools is a challenge, particularly since refugees tend to concentrate in metropolitan areas, with a focus on Vienna. This means there is a need to create additional classes and to allocate additional resources for teaching German as a second language, for integrating pupils from a variety of language backgrounds and for dealing with traumatised children.

**The federal and regional governments have taken several measures to address the integration of refugees.** In all nine regions, a total of 99 specific transition classes for approximately 1 900 young asylum seekers/refugees were created. To expand the language training available to refugees additional resources are being invested in 2016 and 2017, respectively. About 1 150 additional teachers and mobile intercultural teams with a staff of 80 have been engaged, with most of them in compulsory education. Additional funds are being made available to finance one-year transition levels in vocational education and training schools and colleges that allow refugees to catch up on language and other skills. For younger refugees above the compulsory school age, approximately 2 400 offers for basic education courses focusing on literacy are available within the Initiative for Adult Education.

## 3.4. INVESTMENT

### 3.4.1. GENERAL INVESTMENT SITUATION

**Investment growth returned in 2016, but with continued weaknesses of investment by SMEs and in the service sector.** Investment increased by 3.6 % in 2016 after an extended period of stagnation since the crisis, but is expected to grow more slowly in 2017 (2.4 %) and 2018 (2.0 %). On a quarterly basis, investments picked up in Q4 of 2015 (0.8 %), peaked in Q1 of 2016 (1.3 %) and then declined in the two next quarters (1.2 % in Q2 and 0.9 % in Q3), according to WIFO (Austrian Institute of Economic Research). The good investment growth in 2016 is mostly driven by strong equipment investment as firms work through a backlog of necessary replacements. Business expansion is the key driver for investment only for a minority of businesses (39 %), which cited digitalisation and expected improvements in market conditions as their main motives to invest. Investment plans are strong in the manufacturing and exporting sectors, while businesses in the service sector (other than tourism) and SMEs in general are more hesitant (WKÖ, 2016). Increased investment by Austrian businesses, notably investment in business expansion, is crucial for sustained growth and to absorb the increasing labour supply (see Section 3.3).

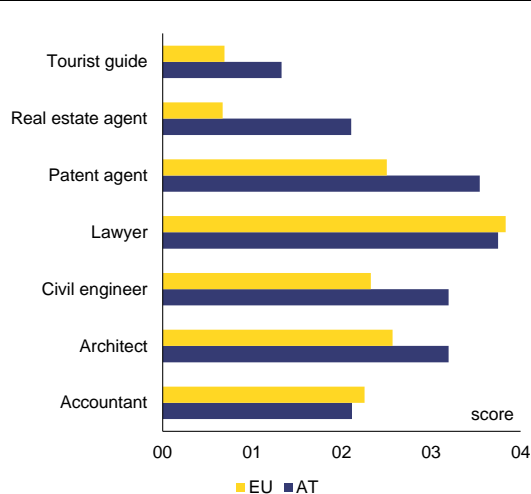
### 3.4.2. REGULATORY FRAMEWORK IN THE SERVICES SECTOR

**Austria remains one of the Member States with the highest regulatory barriers in the services sector.** In Austria, market services<sup>(19)</sup> directly account for 50 % of GDP and 45 % of employment (European Commission, 2016d, pp. 2-3). Furthermore, around 35 % of the value created by Austrian manufacturing is created by service inputs (ECSIP, 2014, p. 59). Better performance in the services provided to firms (business services) would therefore have positive productivity effects on Austrian manufacturing too. In key business services, such as legal, accounting, architectural and engineering services, Austrian regulation is restrictive and, except for lawyers and accountants, significantly more restrictive than the EU average (European Commission, 2016e/f and see Graph

<sup>(19)</sup> Market services are defined as NACE sectors G to N.

3.4.1)<sup>(20)</sup>. The number of trades subject to a particular access requirement is twice as high in Austria as, for example, in Germany. This high level of regulation has gone hand in hand with declining wage-adjusted labour productivity and negative levels of allocative efficiency in this area (European Commission, 2016a, p. 67). It also limits employment and contributes to wage inequalities. Around 22 % of the Austrian labour force works directly in regulated professions.

Graph 3.4.1: Regulatory restrictiveness indicator 2016 Austria and the EU



Source: European Commission

**The Austrian government announced a revision of the trade licence act in late 2016 which will bring welcome improvements but falls short of removing key barriers.** The trade licence act (*Gewerbeordnung*) regulates access to and exercise of currently around 540 trades. Apart from administrative simplification aspects, the draft revision removes specific access requirements for 19 of these trades (*Teilgewerbe*) but maintains specific access requirement for 80 trades (*reglementierte Gewerbe*). This compares to 41 of such trades in, for example, Germany and includes trades which typically present low risks to consumers. The planned reform also increases the scope of activities a tradesperson can exercise in other trades without being required to obtain an additional licence. As a consequence of the current

<sup>(20)</sup> For civil engineers Austria has the most restrictive regulation among EU Member States, for architects the second most restrictive and for patent/trademark agents the third most restrictive.



requirement to hold separate licences, there are one third more licences than licence holders. The scope increase will mitigate but not remove this issue.

**Other efforts to lower access and exercise barriers in business services and regulated professions are not progressing.** Austria has not yet used the mutual evaluation of regulated professions to systematically lower regulatory barriers. By way of numerical example, reducing the restrictiveness for patent agents in Austria to the EU average could raise the number of firms by around 1 % and reduce the profession's gross operating rate by 3 %, thus lowering the input costs of its customers (European Commission, 2016f). Restrictions on interdisciplinary firms between regulated professions remain in force in Austria and particularly affect architects, engineers and patent/trademark agents. Efforts to systematically review such restrictions started in November 2015 but have not resulted in changes, despite a genuine business demand to receive interdisciplinary services from one provider. A similar limiting effect can result from shareholding, company form or exclusivity requirements, such as exist in Austria notably for architects, engineers and patent/trademark agents. Professions such as architects, engineers, accountants, tax advisers, patent/trademark agents and tourist guides also have a particularly wide scope of activities reserved to them in Austria. In combination with access requirements or high training obligations, this can limit competition and investment in the activities covered.

### 3.4.3. INVESTMENT IN BUSINESS CREATION AND SCALING UP

**Austria's rate of creating new businesses is growing in line with the recovering economy, but from a comparatively low level.** Austrian start-ups create on average 2.4 jobs in the first year and 7.4 jobs in the first 3 years (BMFWF, 2015, p. 7), which shows the importance of business creation for employment. Austria's business environment has traditionally been difficult for starting a business. Its enterprise birth rate<sup>(21)</sup> was 7.4 % compared to an EU average of 10.8 % in 2013, the last year of EU-wide data (European

Commission, 2016i). More recently start-up numbers have been increasing, by 3.5 % from 2015 to 2016 (WKÖ, 2017), partly reflecting the general recovery of the economy. Implementing its 2015 start-up strategy (*Land der Gründer*) (BMFWF, 2015), in July 2016 Austria announced a package of measures to facilitate the creation of new businesses, comprising financial support and administrative simplification measures.

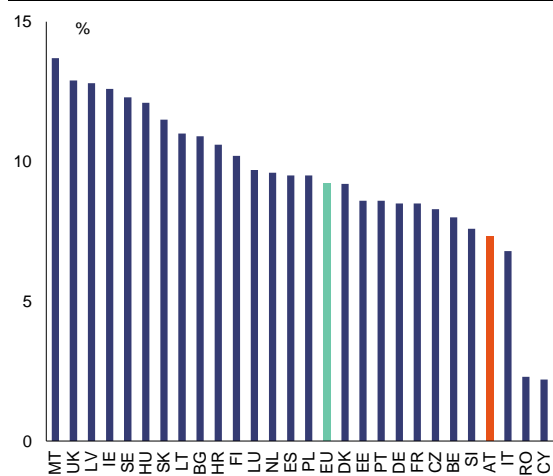
**Austrian start-ups have a good chance of surviving but face difficulties in scaling up.** The business survival rate in Austria is above the EU average (74 % compared to 65 %, both 2013; European Commission, 2016i). However, in Austria the share of high-growth firms among active companies with at least 10 employees is at 7.3 % considerably below the EU average of 9.2 % (see Graph 3.4.2). This lack of high-growth firms presents Austria with a productivity challenge, as company productivity is highly correlated with firm size. While studies have shown that start-ups making the transition to become bigger firms create a disproportionate number of new jobs (European Commission 2016g), fast-growing innovative firms represented only about 2.1 % of employment in the Austrian business economy compared with an EU average of 3.3 % (2014; European Commission 2016i).

**Business creation and enterprise growth are held back by a combination of regulatory and cultural obstacles.** Starting a business in Austria takes 8 days (the second longest in the EU) and costs EUR 305 on average, which does not meet the EU targets of 3 days and EUR 100 set by the Council in 2011 (figures refer to limited liability companies) (European Commission, 2016h). In the composite indicator-set of framework conditions for high-growth innovative enterprises (European Commission, 2016i), entrepreneurial culture is an area where Austria scores below the EU average (0.32 compared to 0.42). Fear of failure, for example, is an important deterrent for would-be entrepreneurs in Austria, which is among the few European countries where resolving insolvencies (and thus preparing the ground for an entrepreneur to get a second chance) has become more difficult in recent years (European Commission, 2016j,

<sup>(21)</sup> The number refers to newly created enterprises as a percentage of the total number of active enterprises.

p. 58)<sup>(22)</sup>. In addition, direct transfers of registered offices from Austria abroad or vice-versa are still not possible under national legislation, except for companies which use the Societas Europaea legal form. This lack of a suitable framework makes it more difficult and costly for Austrian companies and companies from other European countries alike to scale up on a cross-border basis and take advantage of business opportunities offered by the single market.

Graph 3.4.2: **High-growth enterprises as % of all active enterprises with at least 10 employees**





### Box 3.4.1: Investment challenges and reforms in Austria

#### Section 1. Macroeconomic perspective

Investment in Austria (see also Section 1) held up fairly well throughout the financial crisis. Compared to the EU average the decline was less severe and the recovery quicker. Since the end of 2015 investment activity by the corporate sector has picked up, partly due to replacement needs. Higher private consumption triggered by the 2016 tax reform has also helped increase investment.

Austrian companies have sufficient financial resources so it is not the availability of bank credit that is acting as a macroeconomic constraint on investment but rather the lack of opportunities in a climate of uncertainty and subdued consumption. Regarding public investment, housing demand in Austria is high due to continuing immigration and a growing population. This calls for higher investment in social housing, but the availability of fiscal space can constitute a macroeconomic constraint.

#### Section 2. Assessment of barriers to investment and ongoing reforms

Public administration/ Business environment	Regulatory/ administrative burden	CSR	Financial Sector / Taxation	Taxation	
	Public administration			Access to finance	
	Public procurement / PPPs		R&D&I	Cooperation btw academia, research and business	
	Judicial system			Financing of R&D&I	
	Insolvency framework		Sector specific regulation	Business services / Regulated professions	CSR
	Competition and regulatory framework			Retail	
Labour market/ Education	EPL & framework for labour contracts			Construction	
	Wages & wage setting			Digital Economy / Telecom	
	Education			Energy	
				Transport	

**Legend:**

	No barrier to investment identified		Some progress
CSR	Investment barriers that are also subject to a CSR		Substantial progress
	No progress		Fully addressed
	Limited progress		

Barriers to investment in Austria exist but are relatively modest overall, as the European Commission's assessment confirms (European Commission, 2015). Some reforms have been adopted in the area of labour taxation (see Section 3.1) as well as regulated professions and administrative simplification (see Section 3.4). Continued efforts and further reform measures to improve the business environment and better meet consumption and housing demand will help strengthen overall investment in Austria.

#### Main barriers to investment and priority actions underway:

1. Taxes on labour as well as the overall tax wedge remain high despite the 2016 tax reform. Fiscal drag tends to increase the tax wedge overtime, for which the announced indexation of tax brackets can help to counter this effect (see Sections 1 and 3.1). Reducing labour costs for companies in general like the reduction of non-wage labour costs for employers by around EUR 1 billion annually and shifting taxation to more growth-friendly sources like property or environmental taxes can incentivise investment activities.
2. The high degree of regulation of the services sector as well as of trade licences constitutes a barrier to investment and competition. While the reform of the trade licence act presented in 2016 brings some improvements, restrictions on access to trades and professions, and to exercising them, continue to hinder market access and business development (see Section 3.4).
3. Despite recent efforts, the business environment in Austria can benefit from more start-ups and scaling up. The enterprise birth rate, while improving, is still on a low level as is the proportion of high-growth companies. Business creation and growth are key triggers of investment and job creation (see Section 3.4).

## 3.5. SECTORAL POLICIES

### 3.5.1. INNOVATION POLICY

**Austria ranks second among Member States on public and private R&D spending but has not yet achieved a matching performance in innovation.**

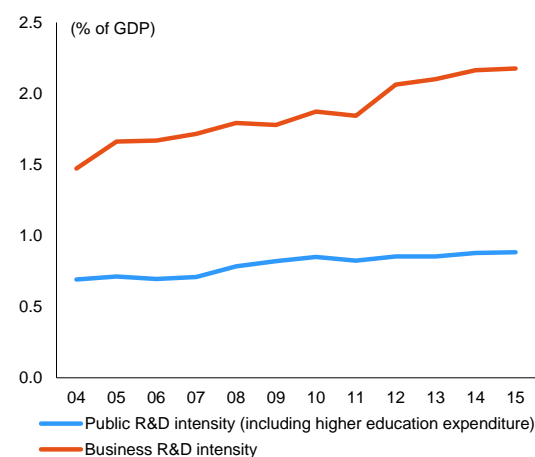
In Austria R&D spending as a percentage of GDP amounted to 3.07 % in 2015 (Eurostat), the second-highest level in the EU. Austria is also among the EU countries with the strongest increase in R&D intensity since 2000, as a result of increases in both public and business R&D expenditure. However, like in other comparable Member States, progress on R&D intensity has slowed in recent years, especially for public expenditure. Despite the high overall spending levels, funding of basic research remains low and there is scope to increase excellence in research, a field where Austria scores only near the EU average (11.7 % of publications are highly cited, compared to an EU average of 10.5 % in 2013). The increase in the budget for universities by EUR 615 million for the period 2016-2018 is an important step. Public spending on R&D co-financed by private companies, an indicator of the level of public-private cooperation in R&D, accounted for 0.042 % of Austria's GDP in 2013, compared with an EU average of 0.052 %. Austria's performance on innovation outputs leaves room for improvement in some areas. These include: the sales shares of new product innovations (9.8 % in 2012, below the EU average of 12.4 %); licence and patent revenues from abroad (0.25 % of GDP in 2014, below the EU average of 0.54 %); and medium- and high-tech product exports (57.4 % in 2015, only slightly above the EU average of 56.1 %).

**Since formulating its innovation leadership ambition in 2011, Austria has tabled a multitude of initiatives and programmes but has not yet evaluated their overall effectiveness.**

In 2011 Austria formulated a comprehensive national strategy to boost the performance of its research and innovation system (*Der Weg zum Innovation Leader*). Among the more recent follow-up measures are the research action plan published in 2015 and new guidelines for research, technology and innovation funding which entered into force on 1 January 2015. In line with a shift from direct to indirect support such as tax incentives, the research premium was increased from 10 % to 12 % in January 2016. In early 2017 Austria announced a further increase to 14 %

effective as of January 2018. There has also been a growing number of initiatives in recent years focusing on improving knowledge transfer and cooperation between public research (including research at universities) and business. The ongoing evaluation of the effectiveness of the research premium could help to further optimise its impact.

Graph 3.5.1: Evolution of business and public R&D intensity



Source: European Commission

### 3.5.2. TELECOMMUNICATION INDUSTRY

**Austria faces particular challenges in ensuring that next-generation broadband coverage also extends to rural areas.**

In 2016, 89 % of all households in Austria were covered by a high-speed broadband (next-generation access) network, which is above the EU average. Austria increased the coverage of high-speed broadband in rural areas from 26 % in 2015 to 41 % in 2016 reducing the 'digital divide' between urban and rural areas. However, it only ranks at EU average in providing adequate access in rural areas for individuals and businesses to the digital economy and digital society. In response to the challenge of financing the high cost of high-speed roll out in rural and mountainous areas, Austria has started in 2016 to implement an ambitious funding scheme from the proceeds of spectrum revenues – distribution of the so-called Broadband Billion (*Breitbandmilliarde*). In January 2017, Austria announced an increase of its national targets of availability and take-up of high-speed broadband, including connecting all schools, SMEs and 75 % of citizens with high-speed broadband by 2020. In addition, Austria has



volume was not indicated. Furthermore, in 2016 Austria used central purchasing bodies on joint procurement among public authorities for only 5 % of tenders, which constitutes no improvement over the 2011 value and is markedly below the EU average of 9 % (European Commission, 2016o). The principles of good public procurement practices also hold for public-private partnerships and mixed rental and public works agreements.

**Austria scores highly in providing e-government to businesses and citizens but risks problems in rolling out e-procurement.**

The vast majority (98 %) of the most-used public services are available online, notably via the platform ‘Digitales Österreich’. Of these, 58 % are mobile friendly. The usability of these services also scores high in terms of support and interactive feedback functionalities. Austria plans to introduce the right for citizens and businesses to digitally contact public administration (*Recht auf elektronischen Verkehr mit Behörden*). It also plans to upgrade the existing e-ID card to an

electronic proof of identity (*elektronischer Identitätsnachweis*) and to further expand the mobile accessibility of online public services. In January 2017, Austria announced that the platform ‘data.gv.at’ will be expanded by 2020 to include open data from the private sector and enable access to all public data as open data. In contrast, Austria has not yet fully transposed the e-procurement provisions of the 2014 Procurement Directives (<sup>26</sup>). Individual public authorities (e.g. Lower Austria, Vienna) are beginning to introduce e-procurement systems but these differ from each other. Ways exist for the Austrian authorities to ensure that, even with several technical solutions, bidders throughout the EU could participate in calls for tender. The authorities could do so by implementing the principles from the e-government action plan such as ‘once-only’ submitting information on the (winning) bidder and ‘interoperability by default’, and by using harmonised technical standards.

**Box 3.5.1: Selected highlights**

**A comprehensive income tax reform**

The 2016 tax reform is a good example of how a comprehensive approach to reducing the cost of labour can have a very positive effect on growth and economic activity. By lowering taxes for the large majority of low- and medium-income earners and at the same time increasing the tax rate for the highest tax bracket, it gave an impulse to private consumption and investment without putting too much strain on public finances. The question is not merely about raising or lowering taxes but rather how to find the right mix of measures that have a positive impact on growth without excessively undermining the fiscal position. The introduction of a ‘negative tax’, in the form of a partial repayment of social security contributions, enabled low-income earners with no taxable income to benefit from the reform as well.

The income tax reform took effect at the beginning of 2016 and increased households’ disposable income. This gave a strong boost to private consumption, which grew by 1.5 % in 2016 after stagnating for 3 years between -0.3 % and 0.0 %. This in turn spurred a 7.0 % jump in investment in machinery and equipment as companies tried to keep up with the increased domestic demand. GDP growth in 2016 was thus driven largely by the tax reform and its stimulating effect on private consumption and investment. Moreover, the reduction in the tax wedge from 49.5 % to 46.7 % helped employment and investment further by lowering the cost of labour in Austria and increasing the country’s attractiveness to foreign investors.

Regarding the social dimension, the tax reform is a step towards improving equality and social cohesion. The implicit tax rate on labour decreased by around 2 pps (European Commission, 2017c). This reduction has been more pronounced in the lower half of the income distribution, amounting to around 2.4 pps for the first five income deciles. The reform also contributed to reducing the poverty rate by about one pp. to 12.5 %. Before the reform 13.3 % of the population had an equivalised disposable income below the poverty line of EUR 1 117 (60 % of median equivalised disposable income at the individual level).

Overall, the tax reform has increased economic growth and investment as well as social inclusion and cohesion in Austria. These positive trends could be maintained in the future by continuing to reform the taxation and social welfare system in order to further reduce the cost of labour.

## ANNEX A

### Overview table

#### Commitments

#### Summary assessment <sup>(27)</sup>

2016 Country-specific recommendations (CSRs)	
<p><b>CSR 1:</b> Ensure that the deviation from the medium-term budgetary objective in 2016 and in 2017 is limited to the allowance linked to the budgetary impact of the exceptional inflow of refugees in 2015, and to that effect achieve an annual fiscal adjustment of 0.3 % of GDP in 2017 unless the medium-term budgetary objective is respected with a lower effort. Ensure the sustainability of the healthcare system, and of the pension system by linking the statutory pension age to life expectancy. Simplify, rationalise and streamline fiscal relations and responsibilities across the various layers of government.</p> <ul style="list-style-type: none"> <li>• Ensure that the deviation from the medium-term budgetary objective in 2016 and in 2017 is limited to the allowance linked to the budgetary impact of the exceptional inflow of refugees in 2015, and to that effect achieve an annual fiscal adjustment of 0.3 % of GDP in 2017 unless the medium-term budgetary objective is respected with a lower effort.</li> </ul>	<p>Austria has made <b>some progress</b> in addressing CSR 1 (this overall assessment of CSR 1 does not include an assessment of compliance with the Stability and Growth Pact):</p> <ul style="list-style-type: none"> <li>• The compliance assessment with the Stability and Growth Pact will be included in Spring when final data for 2016 will be available.</li> </ul>

<sup>(27)</sup> The following categories are used to assess progress in implementing the 2016 country-specific recommendations:

**No progress:** The Member State has not credibly announced nor adopted any measures to address the CSR. Below a number of non-exhaustive typical situations that could be covered under this, to be interpreted on a case by case basis taking into account country-specific conditions:

- no legal, administrative, or budgetary measures have been announced in the National Reform Programme or in other official communication to the national Parliament / relevant parliamentary committees, the European Commission, or announced in public (e.g. in a press statement, information on government's website);
- no non-legislative acts have been presented by the governing or legislator body;
- the Member State has taken initial steps in addressing the CSR, such as commissioning a study or setting up a study group to analyse possible measures that would need to be taken (unless the CSR explicitly asks for orientations or exploratory actions), while clearly-specified measure(s) to address the CSR has not been proposed.

**Limited progress:** The Member State has:

- announced certain measures but these only address the CSR to a limited extent;
- and/or
- presented legislative acts in the governing or legislator body but these have not been adopted yet and substantial non-legislative further work is needed before the CSR will be implemented;
  - presented non-legislative acts, yet with no further follow-up in terms of implementation which is needed to address the CSR.

**Some progress:** The Member State has adopted measures that partly address the CSR

and/or

- the Member State has adopted measures that address the CSR, but a fair amount of work is still needed to fully address the CSR as only a few of the adopted measures have been implemented. For instance: adopted by national parliament; by ministerial decision; but no implementing decisions are in place.

**Substantial progress:** The Member State has adopted measures that go a long way in addressing the CSR and most of which have been implemented.

**Full implementation:** The Member State has implemented all measures needed to address the CSR appropriately.









<b>Europe 2020 (national targets and progress)</b>	
Employment rate target: 77-78 %	<p>Employment rate for the population aged 20 to 64:</p> <p>74.4 % in 2012,</p> <p>74.6 % in 2013,</p> <p>74.2 % in 2014 and</p> <p>74.3 % in 2015.</p> <p>Given the current trend in the Austrian employment rate, it remains a challenge to meet the national target of 77-78 % by 2020.</p>
R&D target: 3.76 % of GDP	<p>Austria continued to make progress in increasing R&amp;D intensity. R&amp;D expenditure as a percentage of GDP increased from 2.97 % in 2013 to 3.06 % in 2014 and 3.07 % in 2015, the second-highest level in the EU. However, progress needs to be accelerated to meet the ambitious 2020 target.</p>
<p>National greenhouse gas (GHG) emissions target:</p> <p>-16 % in 2020 compared with 2005 (in sectors not included in the Emissions Trading Scheme)</p>	<p>Although complying with its annual emission reduction target in 2015 [EEA approximated data], Austria is among the five Member States which are expected to miss their greenhouse gas emission reduction target for 2020. In the light of the latest projections submitted by Austria, the emission target for sectors not covered by the Emissions Trading Scheme is expected to be exceeded by 4 percentage points (12 % emission reduction by 2020 compared to 2005 instead of a 16 % reduction target). Austria may therefore need to take additional measures to meet its target or make use of the flexibility mechanisms provided in the Effort Sharing Decision.</p>
2020 Renewable energy target: 34 %	<p>Austria remains on track towards meeting its 2020 target for promoting the use of renewable energy. Energy from renewable sources represented 33.6 % of Austria's energy consumption in 2015 (proxy), close to its 2020 target of 34 %<sup>(28)</sup>. Austria ranks fourth in the EU on the share of energy obtained from renewable sources.</p>

<sup>(28)</sup> Renewable energy shares for 2015 are approximations and not official data, reflecting the available data (04.10.2016).

<p>Energy efficiency target:</p> <p>AT's 2020 energy efficiency target is 31.5 Mtoe expressed in primary energy consumption (25.1 Mtoe expressed in final energy consumption)</p>	<p>Austria is stepping up efforts, however increased its primary energy consumption from 30.45 Mtoe in 2014 to 31.33 Mtoe in 2015. Final energy consumption increased as well from 26.74 Mtoe in 2014 to 27.37 Mtoe in 2015. Austria has set an ambitious energy efficiency target, requiring a real reduction of 20 % in energy consumption compared to a sound and updated forecast. The target is underpinned by comprehensive implementation and monitoring. Maintaining the rate of reduction of primary energy consumption (2005-2014) would be sufficient for staying below the primary energy consumption target for 2020 (31.5 Mtoe). However, it would not be sufficient for meeting the final energy consumption target for 2020 (25.1 Mtoe).</p>
<p>Early school/training leaving target: 9.5 %</p>	<p>Austria is already outperforming the Europe 2020 targets:</p> <p>8.5 % in 2011</p> <p>7.6 % in 2012</p> <p>7.3 % in 2013</p> <p>7.0 % in 2014</p> <p>7.3 % in 2015.</p> <p>However, efforts to reduce the early school leaving rate among young people with a migrant background need to be maintained.</p>
<p>Tertiary education target: 38 %</p>	<p>The target has been fulfilled, with a tertiary education rate of 38.7 % in 2015.</p>
<p>Risk of poverty or social exclusion target: -235 000</p>	<p>In the baseline year 2008, the number of people at risk of poverty and social exclusion was 1 699 000. The respective number for 2015 was 1 551 000, i.e. 147 000 less, requiring additional efforts to meet the target.</p>

## ANNEX B

### MIP Scoreboard

Table B.1: The MIP Scoreboard for Austria

			Thresholds	2010	2011	2012	2013	2014	2015
External imbalances and competitiveness	Current account balance, (% of GDP)	3 year average	-4%/6%	3.3	2.4	2.0	1.7	1.9	2.1
	Net international investment position (% of GDP)		-35%	-5.2	-1.9	-3.2	1.3	2.2	2.9
	Real effective exchange rate - 42 trading partners, HICP deflator	3 years % change	±5% & ±11%	-2.0	-1.9	-4.7	0.7	1.9	1.8
	Export market share - % of world exports	5 years % change	-6%	-12.3	-12.1	-21.1	-17.8	-16.3	-9.6
	Nominal unit labour cost index (2010=100)	3 years % change	9% & 12%	8.9	5.9	3.7	6.3	7.7	6.1
Deflated house prices (% y-o-y change)			6%	4.4be	3.0	4.8	2.9	1.4	3.5
Private sector credit flow as % of GDP, consolidated			14%	0.3	3.0	1.3	0.7	0.9	2.1
Private sector debt as % of GDP, consolidated			133%	132.9	130.1	129.2	128.0	126.2	126.4
General government sector debt as % of GDP			60%	82.8	82.6	82.0	81.3	84.4	85.5
Unemployment rate			10%	4.7	4.9	4.8	5.0	5.3	5.6
Total financial sector liabilities (% y-o-y change)			16.5%	-1.9	1.5	0.4	-3.2	-1.1	0.6
Activity rate - % of total population aged 15-64 (3 years change in p.p)			-0.2%	0.9	0.7	0.8	1.1	0.8	0.4
New employment indicators	Long-term unemployment rate - % of active population aged 15-74 (3 years change in p.p)		0.5%	-0.1	0.2	0.0	0.1	0.3	0.5
	Youth unemployment rate - % of active population aged 15-24 (3 years change in p.p)		2%	0.1	0.4	-1.3	0.2	1.4	1.2

1) House price index: e = source NCB.

2) b: break in time series, e: estimated.

Note: Figures highlighted are those falling outside the threshold established in the European Commission's Alert Mechanism Report. For real effective exchange rate and unit labour costs, the first threshold applies to euro area Member States.

Source: European Commission, Eurostat and Directorate General for Economic and Financial Affairs (for real effective exchange rate), and International Monetary Fund

## ANNEX C

### Standard tables

Table C.1: **Financial market indicators**

	2011	2012	2013	2014	2015	2016
Total assets of the banking sector (% of GDP)	327.3	307.4	283.3	265.1	251.3	238.5
Share of assets of the five largest banks (% of total assets)	38.4	36.5	36.7	36.8	35.8	-
Foreign ownership of banking system (% of total assets)	20.9	22.2	23.1	24.8	26.6	-
Financial soundness indicators: <sup>1)</sup>						
- non-performing loans (% of total loans)	4.0	4.3	4.2	6.2	5.5	4.9
- capital adequacy ratio (%)	13.6	14.2	15.4	15.6	16.2	16.5
- return on equity (%) <sup>2)</sup>	1.4	4.1	-0.7	1.1	7.6	4.0
Bank loans to the private sector (year-on-year % change)	2.0	0.8	-1.0	0.5	0.6	1.7
Lending for house purchase (year-on-year % change)	3.8	2.6	2.2	3.0	4.3	4.3
Loan to deposit ratio	108.8	107.4	103.4	100.5	99.6	98.5
Central Bank liquidity as % of liabilities	2.3	2.7	1.6	1.8	2.1	1.7
Private debt (% of GDP)	130.1	129.2	128.0	126.2	126.4	-
Gross external debt (% of GDP) <sup>1)</sup> - public	57.3	61.2	66.6	74.7	70.1	70.8
- private	37.5	40.0	33.2	35.1	36.9	36.7
Long-term interest rate spread versus Bund (basis points)*	71.1	87.8	44.0	32.4	25.0	28.7
Credit default swap spreads for sovereign securities (5-year)*	76.8	78.9	19.8	20.1	16.4	18.0

1 Latest data Q2 2016.

2 Quarterly values are not annualised.

\* Measured in basis points.

**Source:** European Commission (long-term interest rates); World Bank (gross external debt); Eurostat (private debt); ECB (all other indicators).

Table C.2: Labour market and social indicators

	2011	2012	2013	2014	2015	2016 <sup>4</sup>
Employment rate (% of population aged 20-64)	74.2	74.4	74.6	74.2	74.3	74.7
Employment growth (% change from previous year)	1.6	1.0	0.3	0.9	0.6	1.3
Employment rate of women (% of female population aged 20-64)	69.2	69.6	70.0	70.1	70.2	70.8
Employment rate of men (% of male population aged 20-64)	79.2	79.3	79.1	78.3	78.4	78.7
Employment rate of older workers (% of population aged 55-64)	39.9	41.6	43.8	45.1	46.3	49.0
Part-time employment (% of total employment, aged 15-64)	24.5	25.2	26.0	26.9	27.3	27.7
Fixed-term employment (% of employees with a fixed term contract, aged 15-64)	9.6	9.3	9.2	9.2	9.1	9.0
Transitions from temporary to permanent employment	42.5	50.4	44.5	48.9	44.3	:
Unemployment rate <sup>1</sup> (% active population, age group 15-74)	4.6	4.9	5.4	5.6	5.7	6.1
Long-term unemployment rate <sup>2</sup> (% of labour force)	1.2	1.2	1.3	1.5	1.7	1.9
Youth unemployment rate (% active population aged 15-24)	8.9	9.4	9.7	10.3	10.6	11.3
Youth NEET <sup>3</sup> rate (% of population aged 15-24)	7.3	6.8	7.3	7.7	7.5	:
Early leavers from education and training (% of pop. aged 18-24 with at most lower sec. educ. and not in further education or training)	8.5	7.8	7.5	7.0	7.3	:
Tertiary educational attainment (% of population aged 30-34 having successfully completed tertiary education)	23.6	26.1	27.1	40.0	38.7	:
Formal childcare (30 hours or over; % of population aged less than 3 years)	3.0	7.0	8.0	7.0	:	:

1 The unemployed persons are all those who were not employed but had actively sought work and were ready to begin working immediately or within 2 weeks.

2 Long-term unemployed are people who have been unemployed for at least 12 months.

3 Not in education, employment or training.

4 Average of first three quarters of 2016. Data for total unemployment and youth unemployment rates are seasonally adjusted.

**Source:** European Commission (EU Labour Force Survey).



Table C.3: Labour market and social indicators (continued)

Expenditure on social protection benefits (% of GDP)	2010	2011	2012	2013	2014	2015
Sickness/healthcare	7,3	7,2	7,3	7,3	7,4	:
Disability	2,2	2,1	2,1	2,1	2,0	:
Old age and survivors	14,2	14,0	14,3	14,6	14,8	:
Family/children	3,1	2,9	2,8	2,8	2,8	:
Unemployment	1,6	1,5	1,5	1,6	1,6	:
Housing	0,2	0,1	0,1	0,1	0,1	:
Social exclusion n.e.c.	0,4	0,4	0,4	0,4	0,5	:
<b>Total</b>	<b>29,0</b>	<b>28,2</b>	<b>28,5</b>	<b>28,9</b>	<b>29,2</b>	<b>:</b>
of which: means-tested benefits	2,4	2,3	2,3	2,4	2,5	:
Social inclusion indicators	2010	2011	2012	2013	2014	2015
People at risk of poverty or social exclusion <sup>1</sup> (% of total population)	18,9	19,2	18,5	18,8	19,2	18,3
Children at risk of poverty or social exclusion (% of people aged 0-17)	22,4	22,1	20,9	22,9	23,3	22,3
At-risk-of-poverty rate <sup>2</sup> (% of total population)	14,7	14,5	14,4	14,4	14,1	13,9
Severe material deprivation rate <sup>3</sup> (% of total population)	4,3	4,0	4,0	4,2	4,0	3,6
Proportion of people living in low work intensity households <sup>4</sup> (% of people aged 0-59)	7,8	8,6	7,7	7,8	9,1	8,2
In-work at-risk-of-poverty rate (% of persons employed)	7,5	7,6	8,1	7,9	7,2	7,9
Impact of social transfers (excluding pensions) on reducing poverty	43,5	46,5	44,2	44,4	44,5	45,7
Poverty thresholds, expressed in national currency at constant prices <sup>5</sup>	11929	11957	11730	11576	11920	11774
Gross disposable income (households; growth %)	0,7	2,9	3,8	0,4	2,1	1,6
Inequality of income distribution (S80/S20 income quintile share ratio)	4,3	4,1	4,2	4,1	4,1	4,1
GINI coefficient before taxes and transfers	50,7	49,9	49,7	49,5	49,9	49,8
GINI coefficient after taxes and transfers	28,3	27,4	27,6	27,0	27,6	27,2

1 People at risk of poverty or social exclusion: individuals who are at risk of poverty and/or suffering from severe material deprivation and/or living in households with zero or very low work intensity.

2 At-risk-of-poverty rate: proportion of people with an equivalised disposable income below 60% of the national equivalised median income.

3 Proportion of people who experience at least four of the following forms of deprivation: not being able to afford to i) pay their rent or utility bills, ii) keep their home adequately warm, iii) face unexpected expenses, iv) eat meat, fish or a protein equivalent every second day, v) enjoy a week of holiday away from home once a year, vi) have a car, vii) have a washing machine, viii) have a colour TV, or ix) have a telephone.

4 People living in households with very low work intensity: proportion of people aged 0-59 living in households where the adults (excluding dependent children) worked less than 20% of their total work-time potential in the previous 12 months.

5 For EE, CY, MT, SI and SK, thresholds in nominal values in euros; harmonised index of consumer prices = 100 in 2006 (2007 survey refers to 2006 incomes).

**Source:** For expenditure for social protection benefits ESSPROS; for social inclusion EU-SILC.

Table C.4: Product market performance and policy indicators

Performance indicators	2010	2011	2012	2013	2014	2015
Labour productivity (real, per person employed, year-on-year % change)						
Labour productivity in industry	5.74	3.26	1.55	2.04	1.13	1.20
Labour productivity in construction	-5.52	-2.04	-1.22	0.52	-1.22	-1.18
Labour productivity in market services	0.61	1.36	-0.69	0.08	0.36	1.08
Unit labour costs (ULC) (whole economy, year-on-year % change)						
ULC in industry	-5.43	0.23	2.96	1.73	1.20	1.48
ULC in construction	3.95	4.29	4.72	3.35	4.75	1.84
ULC in market services	0.88	1.24	4.05	3.75	2.22	2.58
<b>Business environment</b>	<b>2010</b>	<b>2011</b>	<b>2012</b>	<b>2013</b>	<b>2014</b>	<b>2015</b>
Time needed to enforce contracts <sup>1</sup> (days)	397.0	397.0	397.0	397.0	397.0	397.0
Time needed to start a business <sup>1</sup> (days)	25.0	25.0	25.0	25.0	22.0	22.0
Outcome of applications by SMEs for bank loans <sup>2</sup>	0.23	0.24	0.23	0.35	0.41	0.49
<b>Research and innovation</b>	<b>2010</b>	<b>2011</b>	<b>2012</b>	<b>2013</b>	<b>2014</b>	<b>2015</b>
R&D intensity	2.74	2.68	2.93	2.97	3.06	3.07
Total public expenditure on education as % of GDP, for all levels of education combined	5.91	5.80	5.62	5.66	na	na
Number of science & technology people employed as % of total employment	37	38	39	41	46	47
Population having completed tertiary education <sup>3</sup>	16	16	17	18	27	28
Young people with upper secondary education <sup>4</sup>	86	85	86	87	90	89
Trade balance of high technology products as % of GDP	-0.10	-0.03	0.13	0.19	0.50	0.09
<b>Product and service markets and competition</b>				<b>2003</b>	<b>2008</b>	<b>2013</b>
OECD product market regulation (PMR) <sup>5</sup> , overall				na	1.37	1.19
OECD PMR <sup>5</sup> , retail				3.50	3.30	2.40
OECD PMR <sup>5</sup> , professional services				3.21	3.08	2.71
OECD PMR <sup>5</sup> , network industries <sup>6</sup>				2.47	1.84	1.55

<sup>1</sup> The methodologies, including the assumptions, for this indicator are shown in detail at

<http://www.doingbusiness.org/methodology>.

<sup>2</sup> Average of the answer to question Q7B\_a. '[Bank loan]: If you applied and tried to negotiate for this type of financing over the past six months, what was the outcome?'. Answers were scored as follows: zero if received everything, one if received most of it, two if only received a limited part of it, three if refused or rejected and treated as missing values if the application is still pending or if the outcome is not known.

<sup>3</sup> Percentage population aged 15-64 having completed tertiary education.

<sup>4</sup> Percentage population aged 20-24 having attained at least upper secondary education.

<sup>5</sup> Index: 0 = not regulated; 6 = most regulated. The methodologies of the OECD product market regulation indicators are shown in detail at <http://www.oecd.org/competition/reform/indicatorsofproductmarketregulationhomepage.htm>

<sup>6</sup> Aggregate OECD indicators of regulation in energy, transport and communications.

**Source:** European Commission; World Bank — Doing Business (for enforcing contracts and time to start a business); OECD (for the product market regulation indicators); SAFE (for outcome of SMEs' applications for bank loans).

Table C.5: **Green growth**

<b>Green growth performance</b>		<b>2010</b>	<b>2011</b>	<b>2012</b>	<b>2013</b>	<b>2014</b>	<b>2015</b>
<b>Macroeconomic</b>							
Energy intensity	kgoe / €	0,12	0,11	0,11	0,11	0,11	0,11
Carbon intensity	kg / €	0,31	0,30	0,29	0,29	0,27	-
Resource intensity (reciprocal of resource productivity)	kg / €	0,68	0,69	0,68	0,66	0,67	0,66
Waste intensity	kg / €	0,13	-	0,12	-	0,20	-
Energy balance of trade	% GDP	-2,9	-3,7	-3,9	-3,5	-3,0	-
Weighting of energy in HICP	%	7,86	8,89	9,09	9,41	9,75	8,86
Difference between energy price change and inflation	%	1,4	2,2	1,1	-0,1	-1,8	-3,0
Real unit of energy cost	% of value added	13,8	13,7	14,1	13,7	12,6	-
Ratio of environmental taxes to labour taxes	ratio	0,10	0,11	0,10	0,10	0,10	-
Environmental taxes	% GDP	2,3	2,4	2,4	2,4	2,4	-
<b>Sectoral</b>							
Industry energy intensity	kgoe / €	0,17	0,16	0,15	0,16	0,15	0,15
Real unit energy cost for manufacturing industry excl. refining	% of value added	12,8	14,1	13,7	13,1	12,7	-
Share of energy-intensive industries in the economy	% GDP	10,53	11,44	11,33	10,09	10,20	10,33
Electricity prices for medium-sized industrial users	€ / kWh	0,11	0,11	0,11	0,11	0,11	0,10
Gas prices for medium-sized industrial users	€ / kWh	0,04	0,04	0,04	0,04	0,04	0,04
Public R&D for energy	% GDP	0,01	0,01	0,01	0,02	0,02	0,02
Public R&D for environmental protection	% GDP	0,01	0,02	0,02	0,02	0,01	0,01
Municipal waste recycling rate	%	59,4	56,7	57,7	57,7	56,3	56,0
Share of GHG emissions covered by ETS*	%	38,7	39,3	37,8	37,3	36,8	37,4
Transport energy intensity	kgoe / €	0,68	0,65	0,65	0,67	0,66	0,68
Transport carbon intensity	kg / €	1,75	1,65	1,65	1,75	1,69	-
<b>Security of energy supply</b>							
Energy import dependency	%	62,9	70,3	64,5	61,6	66,1	60,8
Aggregated supplier concentration index	HHI	28,9	34,6	40,5	25,2	36,3	-
Diversification of energy mix	HHI	0,28	0,26	0,27	0,27	0,27	-

All macro intensity indicators are expressed as a ratio of a physical quantity to GDP (in 2005 prices).

Energy intensity: gross inland energy consumption (in kgoe) divided by GDP (in EUR).

Carbon intensity: greenhouse gas emissions (in kg CO<sub>2</sub> equivalents) divided by GDP (in EUR).

Resource intensity: domestic material consumption (in kg) divided by GDP (in EUR).

Waste intensity: waste (in kg) divided by GDP (in EUR).

Energy balance of trade: the balance of energy exports and imports, expressed as % of GDP.

Weighting of energy in HICP: the proportion of 'energy' items in the consumption basket used for the construction of the HICP

Difference between energy price change and inflation: energy component of HICP, and total HICP inflation (annual % change).

Real unit energy cost: real energy costs as a percentage of total value added for the economy.

Environmental taxes over labour taxes and GDP: from European Commission's database, 'Taxation trends in the European Union'.

Industry energy intensity: final energy consumption of industry (in kgoe) divided by gross value added of industry (in 2005 EUR).

Real unit energy costs for manufacturing industry excluding refining: real costs as a percentage of value added for manufacturing sectors.

Share of energy-intensive industries in the economy: share of gross value added of the energy-intensive industries in GDP.

Electricity and gas prices for medium-sized industrial users: consumption band 500-20 000MWh and 10 000-100 000 GJ; figures excl. VAT.

Recycling rate of municipal waste: ratio of recycled and composted municipal waste to total municipal waste.

Public R&D for energy or for the environment: government spending on R&D for these categories as % of GDP.

Proportion of greenhouse gas (GHG) emissions covered by EU Emissions Trading System (ETS) (excluding aviation): based on greenhouse gas emissions (excl. land use, land use change and forestry) as reported by Member States to the European Environment Agency.

Transport energy intensity: final energy consumption of transport activity (kgoe) divided by transport industry gross value added (in 2005 EUR).

Transport carbon intensity: greenhouse gas emissions in transport activity divided by gross value added of the transport sector.

Energy import dependency: net energy imports divided by gross inland energy consumption incl. consumption of international bunker fuels.

Aggregated supplier concentration index: covers oil, gas and coal. Smaller values indicate larger diversification and hence lower risk.

Diversification of the energy mix: Herfindahl index over natural gas, total petrol products, nuclear heat, renewable energies and solid fuels.

\* European Commission and European Environment Agency

**Source:** European Commission (Eurostat) unless indicated otherwise

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