

Josef Baumgartner, Serguei Kaniovski, Hans Pitlik

# Economic Growth Remains Subdued, With High Unemployment Persisting

## Medium-term Projection for the Austrian Economy until 2019

### Economic Growth Remains Subdued, with High Unemployment Persisting. Medium-term Projection for the Austrian Economy until 2019

After a cyclical downturn in 2014, the Austrian economy is set to grow at a moderate pace of 1.3 percent p.a. over the period from 2015 to 2019. Private consumption and investment will grow slowly, while the external contribution to GDP growth will remain modest. The gradual expansion of output will allow employment to rise by an average 0.8 percent p.a., which however will not prevent unemployment from rising further as growth of labour supply, both domestic and foreign, will outpace the creation of new jobs. The jobless rate (national definition) is expected to peak at 9.4 percent in 2018, before edging down by the forecast horizon. Inflationary pressure is expected to stay subdued over the medium term, with headline inflation averaging 1.6 percent. Given the expected cyclical profile and the underlying assumptions on the policy framework, a balanced general government budget (in structural as well as in nominal terms) will not be reached within the forecast period.

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## 1. Austria loses growth advantage vis-à-vis the euro area

During the fifteen years since the introduction of European Economic and Monetary Union, real GDP in Austria grew on average ½ percentage point p.a. faster than in the euro area (Breuss, 2013).

From 2014 to 2016, however, GDP growth in Austria will fall markedly behind the euro area average (Glocker, 2015). Growth is expected to catch up with Germany and the euro area average by 2017. Over the entire forecast period, Austria's average annual GDP growth of a projected 1¼ percent will be close to that for Germany and the euro area.

## 2. Exports rising at a slow pace

The present medium-term projection for the Austrian economy builds until 2016 upon the WIFO short-term forecast of December 2014 (Glocker, 2015) and is based for the first time on the revised System of European National and Regional Accounts (ESA

2010). The calculations have been carried out using the WIFO macroeconomic model and the assumptions on the international environment by Schiman (2015)<sup>1</sup>.

Table 1: Main results

	Ø 2004-2009	Ø 2009-2014	Ø 2014-2019	2014	2015	2016	2017	2018	2019
	Year-to-year percentage changes								
Gross domestic product									
Volume	+ 1.3	+ 1.3	+ 1.3	+ 0.4	+ 0.5	+ 1.1	+ 1.4	+ 1.6	+ 1.8
Value	+ 3.5	+ 2.9	+ 2.8	+ 2.2	+ 2.3	+ 2.5	+ 2.9	+ 3.0	+ 3.3
Consumer prices	+ 1.9	+ 2.2	+ 1.6	+ 1.6	+ 1.5	+ 1.6	+ 1.6	+ 1.7	+ 1.8
Gross wages and salaries per employee, volume <sup>1</sup>	+ 0.7	- 0.5	+ 0.1	- 0.1	± 0.0	± 0.0	+ 0.1	+ 0.2	+ 0.2
Employees <sup>2</sup>	+ 1.3	+ 1.2	+ 1.0	+ 0.9	+ 0.7	+ 0.7	+ 1.0	+ 1.2	+ 1.4
Persons in active dependent employment <sup>3</sup>	+ 1.0	+ 1.1	+ 0.8	+ 0.7	+ 0.4	+ 0.6	+ 0.8	+ 1.0	+ 1.2
	Ø 2005-2009	Ø 2010-2014	Ø 2015-2019	2014	2015	2016	2017	2018	2019
	In percent								
Unemployment rate									
Eurostat definition <sup>4</sup>	4.6	4.6	5.3	5.0	5.3	5.3	5.4	5.4	5.2
National definition <sup>5</sup>	6.7	7.3	9.2	8.4	8.9	9.3	9.4	9.4	9.2
	As a percentage of GDP								
Net exports	3.6	3.1	3.4	3.7	3.6	3.4	3.4	3.4	3.4
General government financial balance (Maastricht definition)	- 2.6	- 2.8	- 1.5	- 3.0	- 2.4	- 1.9	- 1.5	- 1.1	- 0.5
Cyclically-adjusted budget balance	- 2.7	- 2.4	- 1.1	- 2.4	- 1.7	- 1.2	- 1.1	- 0.8	- 0.5
Structural budget balance	-	- 1.9	- 0.9	- 1.2	- 1.4	- 1.1	- 1.0	- 0.7	- 0.5
Gross public debt	69.7	82.9	84.2	86.9	87.1	86.2	84.8	82.7	80.0
	As a percentage of disposable income								
Household saving ratio	11.5	8.1	7.6	7.1	7.1	7.4	7.6	7.8	8.0
	Ø 2004-2009	Ø 2009-2014	Ø 2014-2019	2014	2015	2016	2017	2018	2019
	Year-to-year percentage changes								
Trend output, volume	+ 1.8	+ 0.9	+ 1.1	+ 1.0	+ 0.9	+ 1.0	+ 1.0	+ 1.2	+ 1.3
	Ø 2005-2009	Ø 2010-2014	Ø 2015-2019	2014	2015	2016	2017	2018	2019
	As a percentage of trend output								
Output gap, volume	+ 0.1	- 0.6	- 0.7	- 1.0	- 1.3	- 1.2	- 0.8	- 0.4	+ 0.1

Source: Statistics Austria, WIFO calculations. – <sup>1</sup> Excluding employers' contributions, employees according to National Accounts definition, deflated by CPI. – <sup>2</sup> According to National Accounts definition. – <sup>3</sup> Excluding parental leave and military service. – <sup>4</sup> According to Eurostat Labour Force Survey, percent of total labour force. – <sup>5</sup> According to Public Employment Service Austria, percent of total labour force excluding self-employed.

During 2015 and 2016, business activity outside the euro area will regain momentum. Over the entire forecast period from 2015-2019, GDP growth in the USA may rise to nearly 3 percent p.a., whereas in the euro area it will average only 1¼ percent per year, largely due to the sustained restrictive fiscal stance required by the EMU rules.

Short-term interest rates in the euro area are expected to edge up gradually only towards the end of the forecast horizon. While financing conditions will thus remain favourable, subdued sales prospects, persistent high private sector debt and fragile labour markets will continue to weigh on aggregate demand in Austria's key export markets (the euro area accounting for about half of total Austrian exports).

<sup>1</sup> Following the transition to the National Accounts database of ESA 2010, the WIFO "Macromod" has been re-estimated in autumn 2014. The model structure is largely the one presented in Baumgartner – Breuss – Kaniowski (2005). The new estimates yield in substance similar parameters, but the results differ numerically due to new definitions adopted for a number of aggregates (e.g., investment – research and development, military weapons, delimitation of the public sector, exports and imports of goods and services, *Statistics Austria*, 2013, 2014) and because of a different observation period, since National Accounts data according to ESA 2010 are only available for the period 1995-2013.

Figure 1: Growth of real GDP

GDP volume, percentage changes from previous year



Source: Statistics Austria, WIFO calculations.

Table 2: International fundamentals

	Ø 2004-2009	Ø 2009-2014	Ø 2014-2019
Year-to-year percentage changes			
Gross domestic product, volume Euro area	+ 0.7	+ 0.6	+ 1.3
Dollar per Euro			
Exchange rate	1.35	1.33	1.20
Dollar per barrel			
Oil price Brent	70.1	70.1	70.1

Source: EU, WIFO calculations.

Oil prices are assumed to move from almost \$ 100 per barrel in 2014 (December \$ 62.5, 2015 \$ 75) to \$ 105 in 2019. The forecast further assumes the euro to depreciate against the dollar from an average \$ 1.33 per euro in 2014 (December \$ 1.23) to \$ 1.18 by 2019.

Due to the close cross-country linkages, notably within the euro area and with neighbouring countries, cyclical activity in Austria is largely determined by developments abroad. For Europe, WIFO expects sluggish growth of demand and output to continue. Hence, volume exports are projected to expand by only 3.2 percent annually between 2015 and 2019, 1.2 percentage points less than over the last five-year period that in the beginning was marked by the cyclical rebound from the recession 2008-09. Austrian exporters are thus unlikely to be able to maintain their foreign market position. With volume imports showing a similar trend, foreign trade is likely to provide a positive net contribution to GDP growth also in the future. At an estimated 3.4 percent of GDP, this contribution may be ¼ percentage point higher than over the five-year period 2010-2014.

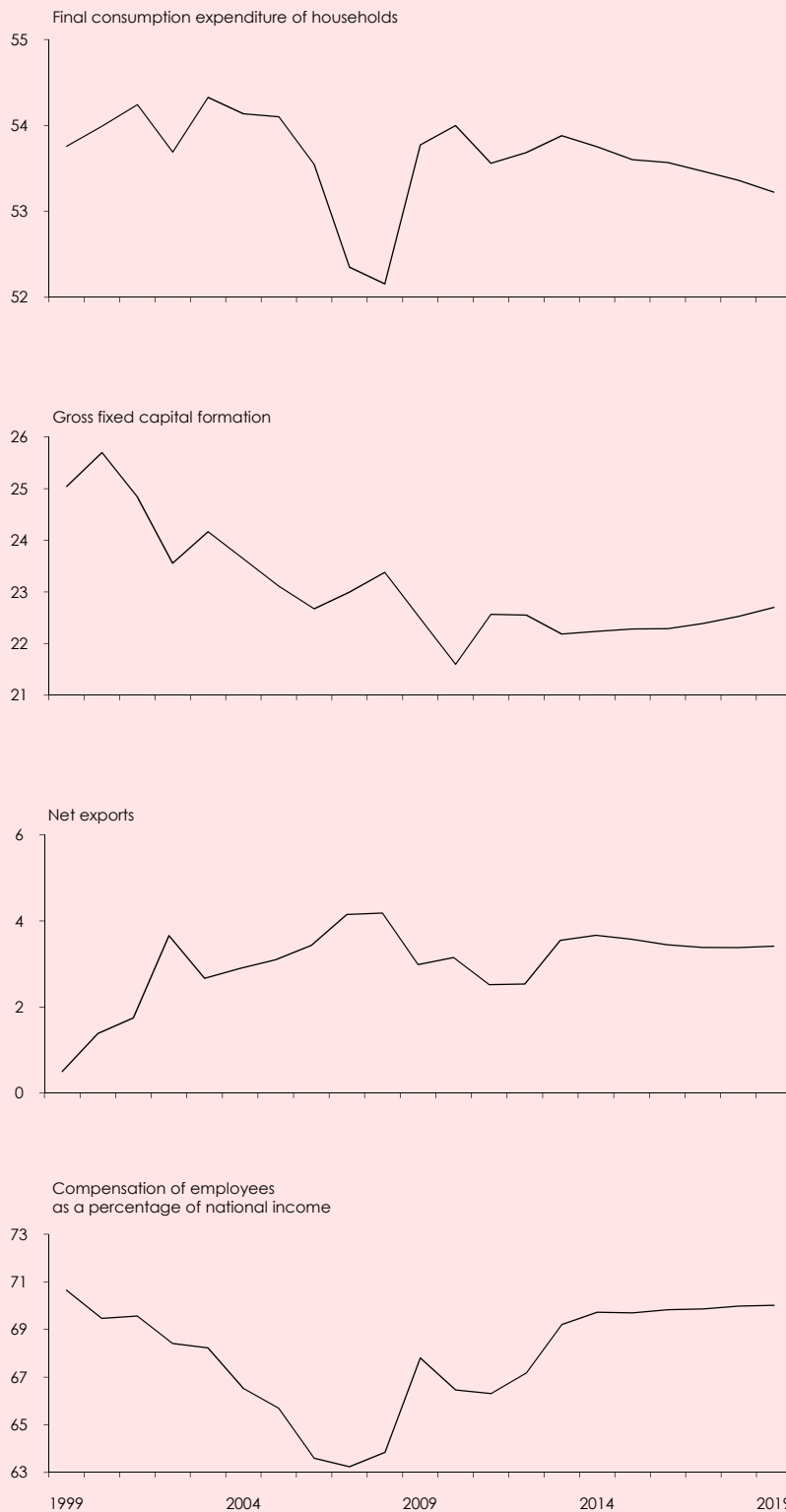
Unfavourable sales prospects at home and abroad will lead to only a moderate rise in investment in machinery and equipment (+2.1 percent p.a., 2010-2014 +1.2 percent p.a.), despite the favourable financing conditions. By contrast, population growth (of around 3 percent cumulated over the period 2015-2019), the rising number of private households (overall around +4½ percent), and high real estate prices should support residential investment. Gloomier is the medium-term outlook for civil

*Despite a revival of world trade, Austrian exports are projected to rise only by an average 3.2 percent per year, leaving GDP growth at 1¼ percent p.a. Annual real trend output growth will not exceed 1.3 percent. The output gap of -1.3 percent in 2015 is set to close by the end of the forecast period.*

engineering, given the need for consolidation of public households. Total construction output is thus set to expand at a moderate pace of 1¼ percent p.a. over the period 2015-2019.

Figure 2: Expenditure on GDP and income

As a percentage of GDP, at current prices



Source: Statistics Austria, WIFO calculations.

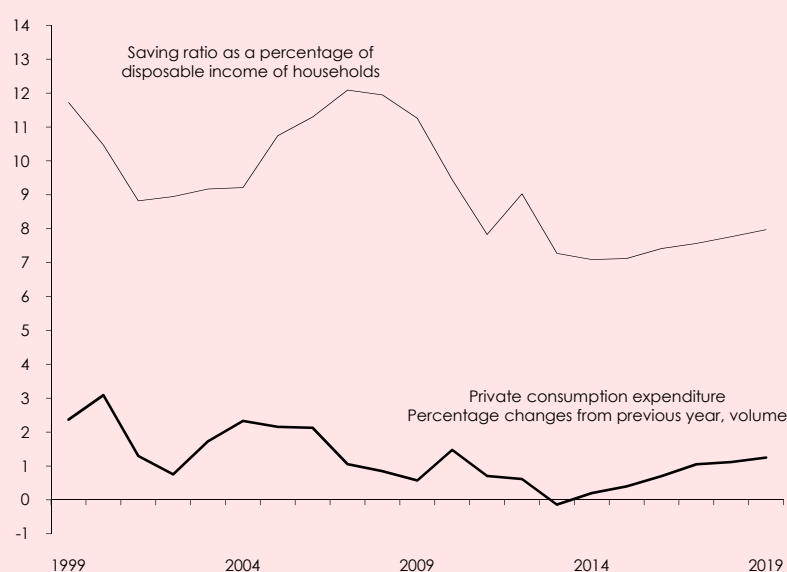
Table 3: Components of aggregate demand, volume

	Ø 2004-2009	Ø 2009-2014	Ø 2014-2019	2014	2015	2016	2017	2018	2019
	Year-to-year percentage changes								
Consumption expenditure									
Private households <sup>1</sup>	+ 1.3	+ 0.6	+ 0.9	+ 0.2	+ 0.4	+ 0.7	+ 1.0	+ 1.1	+ 1.2
General government	+ 2.6	+ 0.5	+ 1.1	+ 0.7	+ 1.0	+ 1.2	+ 1.3	+ 1.0	+ 1.0
Gross fixed capital formation	- 0.1	+ 0.9	+ 1.7	+ 1.4	+ 1.1	+ 1.3	+ 1.7	+ 2.0	+ 2.4
Machinery and equipment <sup>2</sup>	+ 0.3	+ 1.2	+ 2.1	+ 1.5	+ 1.5	+ 2.0	+ 1.9	+ 2.3	+ 2.9
Construction	- 1.7	- 0.3	+ 1.2	+ 1.2	+ 0.7	+ 0.5	+ 1.4	+ 1.7	+ 1.9
Domestic demand	+ 1.1	+ 0.8	+ 1.2	+ 0.6	+ 0.9	+ 1.0	+ 1.3	+ 1.3	+ 1.6
Exports	+ 1.3	+ 4.4	+ 3.2	+ 0.5	+ 1.9	+ 2.8	+ 3.4	+ 3.7	+ 4.1
Imports	+ 0.9	+ 3.7	+ 3.2	+ 0.9	+ 2.5	+ 2.8	+ 3.3	+ 3.4	+ 3.7
Gross domestic product	+ 1.3	+ 1.3	+ 1.3	+ 0.4	+ 0.5	+ 1.1	+ 1.4	+ 1.6	+ 1.8

Source: Statistics Austria, WIFO calculations. – <sup>1</sup> Including private non-profit institutions serving households. – <sup>2</sup> including weapon systems.

Real disposable income of private households is projected to increase by 1.1 percent p.a. over the forecast horizon, 1½ percentage points faster than on average between 2010 and 2014. The acceleration is driven, on the one hand, by the cyclically highly volatile corporate profits which are set to rebound from their fall in the post-crisis years; gross wage incomes, on the other hand, will stop receding (per capita +0.1 percent p.a. in real terms for the period 2015-2019, as compared with -0.5 percent during 2010-2014), and also the incomes of self-employed will rise somewhat more than on average during the last five years. The increase in the family allowance in 2016 and 2018 should also boost disposable income. Yet, the main driver behind the increase in private purchasing power will be the decline of inflation (-0.6 percentage points from the period 2010-2014).

Figure 3: Consumption expenditure and saving ratio of private households



Source: Statistics Austria, WIFO calculations.

Between 2008 and 2011, private households cushioned real income losses by dissaving, thereby smoothing consumer demand. During this period, the private saving ratio fell by 4.1 percentage points, from 11.9 percent in 2008 to 7.8 percent in 2011. It edged down further in the subsequent years (2014: 7.1 percent). While persistent low interest rates provide little incentive for higher saving, the assumed increase in the saving ratio to 8.0 percent by 2019 is related to precautionary behaviour in the face of the precarious labour market conditions. The self-restraint of consumers observed since the outbreak of the financial market crisis and the recession 2008-09 will therefore continue, as a result of moderate real income gains and higher savings. Private

consumption is expected to expand by an annual 0.9 percent at constant prices between 2015 and 2019.

After the "soft patch" 2012-2015 of +0.5 percent p.a., real GDP growth is expected to pick up, to an annual rate of 1¼ percent (2010-2014 +1.3 percent p.a.); in nominal terms, demand and output will expand by 2¼ percent per year (2010-2014 +2.9 percent p.a.).

Over one-third of GDP growth is accounted for by private consumption, almost one-fourth by private investment, one-fifth by public expenditure and one-tenth by net exports. Hence, the growth contribution of exports is distinctly smaller than during the period from 2010 to 2014.

### 3. Trend output and output gap

Since the onset of the financial market crisis and the recession of 2008-09, the Austrian economy has been in the cyclical stage of under-utilised productive capacities. The degree of macroeconomic capacity utilisation is measured by the difference between actual real GDP and trend output, whereby capacities are under-utilised whenever the level of real GDP is below that of trend output. This difference is called output gap (i.e., the relative deviation of actual from trend output) and is an indicator for the aggregate capacity utilisation of an economy. According to the fiscal rules governing the euro area, the output gap is used for the assessment of the general government's financial balance.

The output gap stays negative until 2018, albeit narrowing from -1.3 percent in 2015 to -0.4 percent in 2018. From 2019 onwards, it should become (slightly) positive. The only gradual closing of the output gap is the consequence of the sluggish pace of the recovery.

Calculations by the European Commission of autumn 2014 (*European Commission, 2014A, European Commission, CIRCABC*) suggest a somewhat smaller output gap. The deviation is explained by a different assessment of GDP growth and trend output for Austria: for the period 2014-2019, the European Commission assumes annual growth of real GDP at 1.5 percent, compared with 1.3 percent p.a. as projected by WIFO. Particularly for 2015 and 2016, the European Commission is significantly more optimistic (+0.7 and +0.4 percentage points vis-à-vis the WIFO forecast). Since this also leads to higher trend growth for 2015 and 2016 in the Commission forecast relative to WIFO, the trajectory of the output gap over the entire forecast period is rather similar in both projections (Table 4, Figure 4). Due to the markedly slower rate of real GDP growth estimated by WIFO, the output gap is on average 0.3 percentage points larger than according to the European Commission.

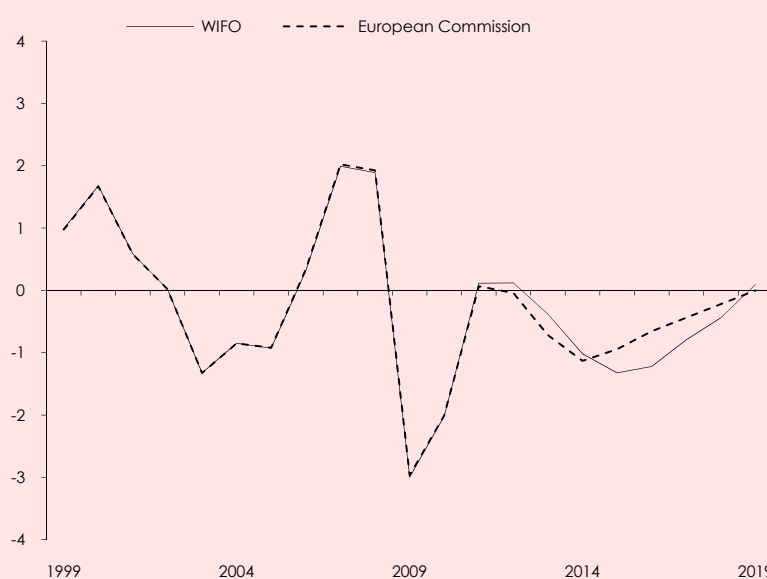
Following the method used by the European Commission, trend output is defined as the non-accelerating-wage-inflation level of output at average utilisation and efficiency of input factors, where wage gains thus remain broadly stable. This relation is derived from a neo-classical growth model providing for a stable long-term growth path. In such a model, a cyclical excess capacity utilisation leads to an increase in wages and prices of goods and services (the concept of trend output is discussed inter alia by *Horn – Logeay – Tober, 2007*, and *Bilek-Steindl et al., 2013*).

The European Commission obtains trend output using a production function approach. The "normal" degree of utilisation of the input factors physical capital and labour is estimated both by statistical smoothing procedures like the Hodrick-Prescott filter and by structural models (Kalman filter). The latter are used for the cyclical adjustment of total factor productivity and the determination of the structural rate of unemployment (NAWRU). Total factor productivity (TFP) is taken to be the part of the output level that cannot be explained by the input of capital and labour (Solow residual). The Solow residual is also adjusted for cyclical variations in capacity utilisation. To this end, structural models with capacity utilisation derived from the Business and Consumer Survey of the European Commission, DB ECFIN, are used (*Bilek-Steindl et al., 2013, Havik et al., 2014*; the approach of the European Commission is criticised inter alia by *Klär, 2013, Hers – Suyker, 2014*, and *Schulmeister, 2014*). In

order to preserve comparability with the estimates of the European Commission, WIFO also applies the Commission's production function approach to the WIFO forecast. The differences between the forecast for trend output and the output gap as from 2011 are due to different business cycle scenarios (GDP growth and development of unemployment; Figures 4 and 6) and different assumptions for hours worked per capita (Figure 7)<sup>2</sup>. A comparison of trend growth as calculated by WIFO with that of the European Commission shows highly similar growth contributions in the past (Table 4). In the years before the crisis, trend growth was largely driven by the higher TFP and investment. The contribution of labour input (in terms of hours worked) was small despite an increase in employment, due to a rising share of part-time workers leading to a reduction in average hours worked per capita.

Figure 4: Output gap, volume

As a percentage of trend output



Source: European Commission, WIFO calculations.

As a consequence of the financial market crisis and the recession 2008-09, trend growth flattened markedly. Although investment also dropped sharply in 2009-10, capital formation was nevertheless the major determinant of trend growth in the years after the crisis. Going forward, the WIFO projection assumes that productivity advances will again become the major growth driver. The labour market will hardly provide positive incentives with unemployment remaining high over the entire forecast horizon (see section 4), and the downward trend of average hours worked per employment contract likely to continue, albeit at a slower pace. All in all, WIFO expects trend growth at 1.1 percent p.a. over the projection period. In its latest estimate, the European Commission expects trend output growth at 1.2 percent per year. The difference between the two forecasts is mainly due to the Commission's more optimistic assessment of the future trend of labour input: the Commission assumes that unemployment will recede significantly until 2019 (Figure 6) and that the decline in hours worked will lose momentum. According to the projections of both

<sup>2</sup> The observed values for GDP and unemployment until 2013 are identical for the projections by WIFO and the European Commission, using the data from Statistics Austria. Projections for the period 2014-2019 are of course different. Since for the estimation of trend output and the NAWRU (non-accelerating-wage rate of unemployment) smoothing procedures have been applied that also feed into the projections, the estimates for trend output, output gap and NAWRU as well as the smoothed value for hours worked differ already as from 2010.

WIFO and the European Commission, trend output growth will recover over the medium term, without however regaining the pace recorded before the crisis, even ten years thereafter (Table 4).

Table 4: Growth contributions of the input factors to trend output

	Ø 2005-2009	Ø 2010-2014	Ø 2015-2019	2014	2015	2016	2017	2018	2019
Percentage points									
<i>WIFO estimate</i>									
Gross domestic product, volume									
Year-to-year percentage changes	+ 1.3	+ 1.3	+ 1.3	+ 0.4	+ 0.5	+ 1.1	+ 1.4	+ 1.6	+ 1.8
Trend output growth	+ 1.8	+ 0.9	+ 1.1	+ 1.0	+ 0.9	+ 1.0	+ 1.0	+ 1.2	+ 1.3
Labour	+ 0.1	+ 0.1	+ 0.2	+ 0.4	+ 0.2	+ 0.3	+ 0.2	+ 0.3	+ 0.3
Capital	+ 0.6	+ 0.5	+ 0.4	+ 0.4	+ 0.4	+ 0.4	+ 0.4	+ 0.5	+ 0.5
Total factor productivity	+ 1.0	+ 0.4	+ 0.4	+ 0.2	+ 0.2	+ 0.3	+ 0.4	+ 0.5	+ 0.5
<i>European Commission estimate</i>									
Gross domestic product, volume									
Year-to-year percentage changes	+ 1.3	+ 1.3	+ 1.5	+ 0.7	+ 1.2	+ 1.5	+ 1.4	+ 1.6	+ 1.6
Trend output growth	+ 1.8	+ 1.0	+ 1.2	+ 1.1	+ 1.0	+ 1.2	+ 1.2	+ 1.4	+ 1.4
Labour	+ 0.1	+ 0.2	+ 0.4	+ 0.4	+ 0.4	+ 0.4	+ 0.3	+ 0.4	+ 0.4
Capital	+ 0.6	+ 0.5	+ 0.5	+ 0.4	+ 0.4	+ 0.5	+ 0.5	+ 0.5	+ 0.5
Total factor productivity	+ 1.0	+ 0.4	+ 0.4	+ 0.2	+ 0.2	+ 0.3	+ 0.4	+ 0.4	+ 0.5

Source: European Commission, WIFO calculations.

#### 4. Labour market conditions to worsen further

The projected growth of real GDP of 1¼ percent p.a. during the period 2015-2019 will allow dependent active employment to expand by an average 0.8 percent per year. Since supply of domestic and foreign labour will rise somewhat faster, unemployment is set to increase further. Employment growth will be driven by the private sector, whereas the number of public sector employees will edge up by a marginal 1,100 persons over the whole period, reflecting the efforts at fiscal consolidation.

The rise in labour supply of 0.9 percent or 34,500 persons per year is explained by a growing number of foreign workers (+23,000 persons per year), the sustained increase in female labour force participation and the restrictions of access to early retirement and invalidity pensions introduced on 1 January 2014. The inflow into early retirement is expected to abate from over 38,000 persons in 2013 to an annual 29,600 over the forecast period, despite the parallel population increase in the relevant age bracket<sup>3</sup>.

The number of foreign workers continued to grow strongly in 2014, by 31,970 to a total 588,722. The majority of newcomers are from the new EU member countries since their access was fully liberalised in 2011, although the regions of origin have changed: in 2014, half of the increase was accounted for by workers from those countries which had acceded to the EU in 2004 (+15,191), with Hungary (+7,216) still being the most important country of origin, whose share had been at almost two-thirds in 2013<sup>4</sup>. With unrestrained access being granted to workers from Romania and Bulgaria (EU members since 2007) as from 1 January 2014, their number has increased significantly. Romanians and Bulgarians accounted for one-third of the increase in foreign labour in 2014 (+10,998, of which +8,528 from Romania), with the inflow from these two countries rising steadily during the first few months after labour

*The unemployment rate (following the Labour Market Service definition) will rise to 9.4 percent in 2018 and trend down only slowly thereafter. The number of registered unemployed is expected at 372,000 in 2018.*

<sup>3</sup> The relevant age group for entitlement to early retirement benefits is defined as women of age 50-59 and men between 55 and 64. According to the main scenario of the population projections by Statistics Austria of November 2014, the population in this age group will in 2015 be 6 percent and in 2019 16 percent higher than in 2013 (the year before tighter eligibility criteria for early retirement were introduced). The share of persons receiving early retirement benefits in the age-groups defined above will fall from 3.5 percent in 2013 to 2.3 percent in 2019.

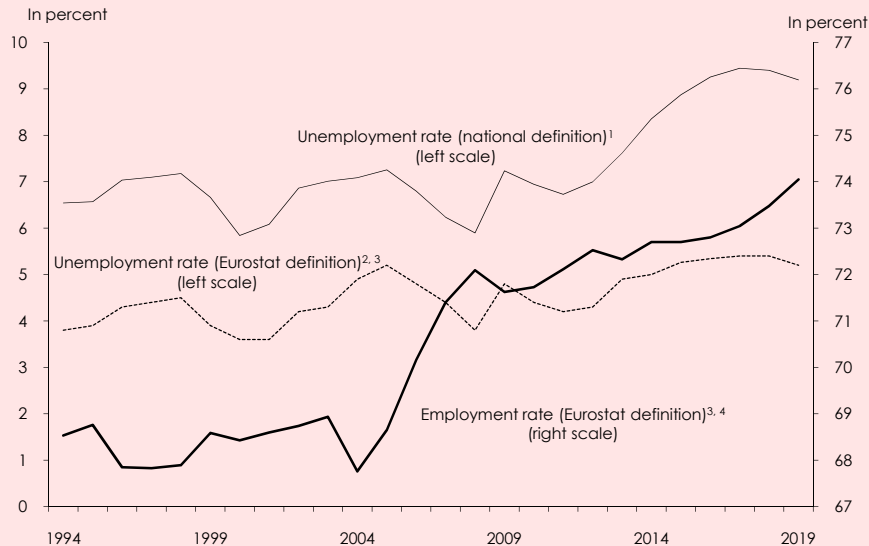
<sup>4</sup> On 1 May 2004, the following ten countries acceded to the EU: Czech Republic, Estonia, Cyprus, Latvia, Lithuania, Hungary, Malta, Poland, Slovenia and Slovakia. On 1 May 2011, at the end of a seven-year transition period, all workers from these countries obtained full access to the Austrian labour market.



market opening and stabilising as from August 2014 at +13,000 per month. At the same time, labour inflow from the EU accession countries of 2004 subsided.

In the medium term, the inflow of foreign workers should slacken somewhat (2014 +32,000 persons, 2019 +24,000). The cyclical revival in the East-Central-European neighbour countries may also have a dampening effect on labour migration.

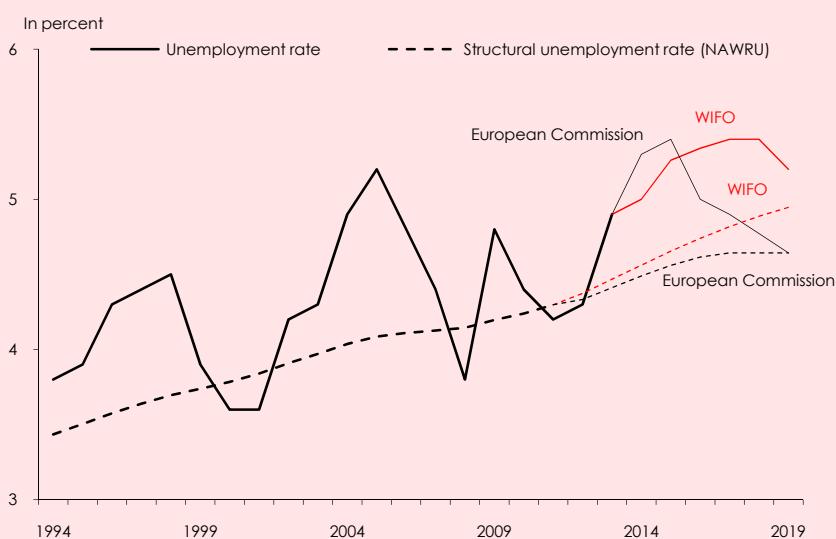
Figure 5: Labour market, income



Source: Public Employment Service Austria, Eurostat, WIFO calculations. – <sup>1</sup> As a percentage of total labour force excluding self-employed; according to Public Employment Service Austria. – <sup>2</sup> As a percentage of total labour force. – <sup>3</sup> According to Eurostat Labour Force Survey. – <sup>4</sup> Persons in employment as a percentage of population of working age (15 to 64 years).

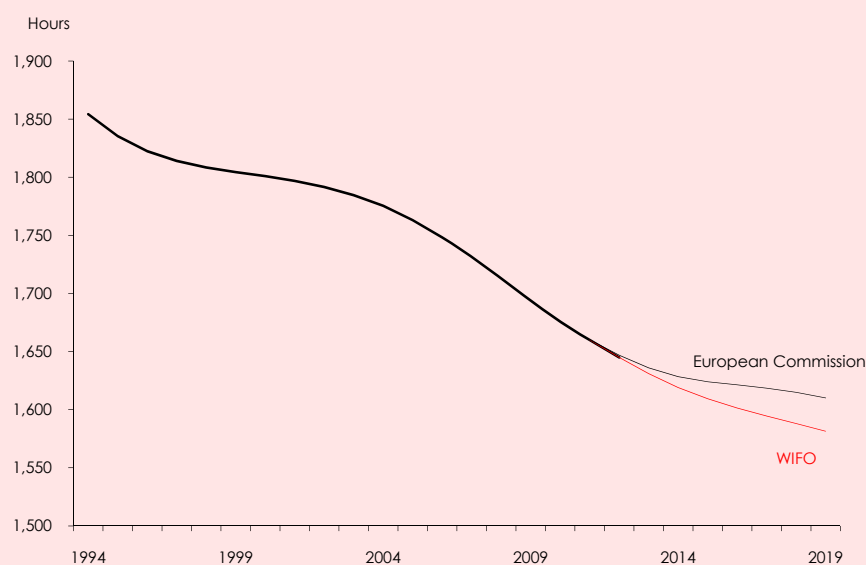
Figure 6: Unemployment rate (according to Eurostat) and structural unemployment rate (NAWRU)

As a percentage of total labour force



Source: European Commission, WIFO calculations.

Figure 7: Hours worked per capita



Source: European Commission, WIFO calculations.

For demographic reasons, growth of the population of working age will be slow in the next couple of years (+0.3 percent p.a.); the gap between active and the retired population will widen further as the first stronger age cohorts (of the early and mid-1950s) exit the labour force<sup>5</sup>.

Table 5: Labour market, income

	Ø 2005-2009	Ø 2010-2014	Ø 2015-2019	2014	2015	2016	2017	2018	2019
	In percent								
Unemployment rate									
Eurostat definition <sup>1</sup>	4.6	4.6	5.3	5.0	5.3	5.3	5.4	5.4	5.2
National definition <sup>2</sup>	6.7	7.3	9.2	8.4	8.9	9.3	9.4	9.4	9.2
	Ø 2004-2009	Ø 2009-2014	Ø 2014-2019	2014	2015	2016	2017	2018	2019
	Year-to-year percentage changes								
Employees <sup>3</sup>	+ 1.3	+ 1.2	+ 1.0	+ 0.9	+ 0.7	+ 0.7	+ 1.0	+ 1.2	+ 1.4
Persons in active dependent employment <sup>4</sup>	+ 1.0	+ 1.1	+ 0.8	+ 0.7	+ 0.4	+ 0.6	+ 0.8	+ 1.0	+ 1.2
Self-employed <sup>5</sup>	+ 2.0	+ 1.4	+ 1.0	+ 1.4	+ 1.1	+ 1.1	+ 1.0	+ 1.0	+ 1.0
Registered unemployed	+ 1.3	+ 4.2	+ 2.8	+11.1	+ 7.2	+ 5.3	+ 2.9	+ 0.4	- 1.4
Productivity <sup>6</sup>	+ 0.1	+ 0.2	+ 0.3	- 0.7	- 0.1	+ 0.3	+ 0.5	+ 0.4	+ 0.5
Gross wages and salaries <sup>7</sup>	+ 4.0	+ 3.0	+ 2.7	+ 2.4	+ 2.2	+ 2.4	+ 2.7	+ 3.1	+ 3.4
Per employee, volume <sup>8</sup>	+ 0.7	- 0.5	+ 0.1	- 0.1	± 0.0	± 0.0	+ 0.1	+ 0.2	+ 0.2
Unit labour costs, total economy	+ 2.4	+ 1.7	+ 1.4	+ 2.7	+ 1.6	+ 1.2	+ 1.3	+ 1.5	+ 1.4

Source: Federation of Austrian Social Security Institutions, Statistics Austria, WIFO calculations. – <sup>1</sup> According to Eurostat Labour Force Survey, percent of total labour force. – <sup>2</sup> According to Public Employment Service Austria, percent of total labour force excluding self-employed. – <sup>3</sup> According to National Accounts definition. – <sup>4</sup> Excluding parental leave and military service. – <sup>5</sup> According to WIFO. – <sup>6</sup> Real GDP per employment (dependent and self-employed according to National Accounts definition). – <sup>7</sup> Excluding employers' contributions. – <sup>8</sup> Employees according to National Accounts definition, deflated by CPI.

<sup>5</sup> Whereas in 2013 the ratio between persons in the retired age group (women of 60 and above and men of 65 and above) and persons in active employment (dependent and self-employed) was 1 : 2.2, it is likely to rise to 1 : 2.0 by 2019.

The number of unemployed will increase to a total 372,000 by 2018 (+53,000 from 2014; +159,900 from the pre-crisis year 2008), corresponding to an unemployment rate of 9.4 percent of the dependent labour force (Labour Market Service definition) and of 5.4 percent of the total labour force (Eurostat definition). By the end of the forecast period, cyclical conditions may allow the unemployment rate to edge down to 9.2 percent.

## 5. Modest inflation

Price dynamics in the last few years were largely shaped by the volatility of world market quotations for oil, food and agricultural raw materials. The forecast assumes that the reference oil price recorded at \$ 100 per barrel on annual average 2014 (December 2014: \$ 62.5) will rise moderately to \$ 105 per barrel in 2019, and that the euro exchange rate vis-à-vis the Dollar will ease slightly from \$ 1.33 per Euro on annual average 2014 (December 2014: \$ 1.23) to \$ 1.18 in 2019, implying an annual depreciation by 2¼ percent). World market prices for manufactures (on a dollar basis) are assumed to head up by only 0.8 percent p.a.

Table 6: Prices

	Ø 2004-2009	Ø 2009-2014	Ø 2014-2019	2014	2015	2016	2017	2018	2019
	Year-to-year percentage changes								
Consumer prices	+ 1.9	+ 2.2	+ 1.6	+ 1.6	+ 1.5	+ 1.6	+ 1.6	+ 1.7	+ 1.8
Implicit price indices									
Private consumption	+ 1.9	+ 2.3	+ 1.7	+ 1.8	+ 1.6	+ 1.7	+ 1.6	+ 1.7	+ 1.8
Exports	+ 1.2	+ 1.8	+ 1.1	+ 0.4	+ 0.0	+ 1.2	+ 1.5	+ 1.3	+ 1.5
Imports	+ 1.5	+ 2.4	+ 1.3	- 0.3	- 0.5	+ 1.6	+ 2.0	+ 1.7	+ 1.9
Gross domestic product	+ 2.1	+ 1.6	+ 1.5	+ 1.9	+ 1.7	+ 1.4	+ 1.4	+ 1.4	+ 1.5

Source: Statistics Austria, WIFO calculations.

Apart from energy and commodity prices, the pace of inflation is determined by wage costs and indirect taxes and public charges. The consumption tax increases of March 2014 will still have some impact on the annual inflation rate for 2015. From 2015 to 2017, further hikes of the tobacco tax are likely, raising annual headline inflation by about 0.1 percentage point.

Per-capita nominal wages are projected to advance by 1.7 percent p.a. between 2015 and 2019. Unit labour cost for the whole economy, the major determinant of domestic cost pressure, is expected to increase by 1.4 percent p.a. Gross real wages per capita are likely to remain broadly constant (+0.1 percent p.a.). Hence, real wages per head will lag behind labour productivity growth, with the differential likely to widen to 0.3 percentage points by 2019. In this environment, overall inflation should stay restrained. The forecast for the period 2015-2019 is for an average increase in the GDP deflator by 1.5 percent and for the consumer price index of 1.6 percent per year.

## 6. Adverse macroeconomic conditions inhibit fiscal consolidation in compliance with EMU rules

Over the period 2015-2019, general government finances will be driven by a gradual pick-up of business activity, and by the obligations of the new EU fiscal rules for the consolidation of budget balances and public debt (*Fiscal Council, 2014A, 2014B*).

Due to sluggish activity, WIFO expects for 2014 a general government deficit (in the Maastricht definition) of 3.0 percent of GDP, up from -1.5 percent in 2013. It includes one-off effects of € 4 billion in net terms (deficit-increasing bank subsidies of € 4.3 billion; revenues from the tax agreement with Liechtenstein of € 0.3 billion). The general government deficit is set to narrow to 2.4 percent of GDP in 2015 and 1.9 percent of

GDP in 2016. By the forecast horizon in 2019, the deficit is expected at 0.5 percent of GDP.

The government expenditure ratio, estimated at 52.6 percent of GDP for 2014, will decline only slowly to 51.1 percent of GDP by 2019. Nominal expenditure growth 2015-2019 will average 2.2 percent per year, largely in line with the +2.3 percent p.a. recorded for the period 2010-2014. The forecast implies an overall restraint on spending on retirement benefits, subsidies, administration and public health in compliance with the consolidation course pursued since 2011. However, many expenditure-saving measures are as yet insufficiently specified and can thus only be quantified by approximation. In particular the planned savings on health expenditure are highly uncertain. Moreover, consolidation on the expenditure side is accompanied by several "pro-active" measures of budgetary reinforcement, such as the family subsidies "package" of 2014, additional funds for higher education or the envisaged "broadband initiative", designed to strengthen potential growth and employment over the medium and longer term. Some of these measures, like the extension of pre-school or full-day child care facilities as well as the increase in family allowances will raise public spending permanently. Likewise, high and rising unemployment will exert upward pressure on public spending. Further budgetary risks derive from the still unresolved issue of recognition of years of service accumulated by civil servant before joining the public sector.

Government revenues will increase by an annual 3.2 percent in nominal terms over the period 2015-2019; the revenue ratio will increase from 49.6 percent of GDP in 2014 to over 50 percent of GDP for the first time since 2001 and remain above this level until 2019 (50.7 percent of GDP). Notably revenues from wage and assessed income tax will grow strongly due to the progressive tax schedule, the high income elasticity persisting. Social contributions should also expand at an above-average pace. In 2015-16, further revenue-raising measures will take effect (especially the tobacco tax hike; in 2015 also the last increase in the car registration and the engine-power-based insurance tax will have some effect on year-on-year revenue growth). Revenues from VAT and other indirect taxes may prove less dynamic on account of moderate consumption growth.

An income tax reform as announced by the political authorities is not included in the projections, nor are potential revenues from a financial transaction tax to be introduced by co-ordinated action among EU member countries. On the expenditure side, the agreed limitation of health expenditure and moderate cuts in discretionary spending have been taken into account. Any savings possibly generated in the longer run by structural reforms still to be designed and implemented – such as a review of federal fiscal relations, better co-ordination between the actions at different government levels in health care, public subsidies and education – have not been anticipated in the present forecast.

The Excessive Deficit Procedure against Austria having been abrogated in 2014, the fiscal rules of the preventive arm of the Stability and Growth Pact (SGP) will henceforth apply. In particular, the structural budget balance shall improve by at least 0.5 percent of GDP per year as long as the government debt ratio exceeds 60 percent of GDP and the Medium-Term Budgetary Objective (MTO) of a structural balance no worse than –0.45 percent of GDP is not reached. The Austrian Stability Programme of April 2014 provides for the MTO to be met by 2016, and the Budget Preview of October 2014 foresees for a structural deficit of 1 percent of GDP in 2015. In addition, the real annual increase in government expenditure is to be limited to the growth rate of Potential Output, unless offsetting extra revenues are found. As from 2017 also the "rule of one-twentieth" applies for the reduction of public debt. During the period 2014-2016, Austria must achieve an annual improvement in the structural balance of at least 0.1 percent of GDP.

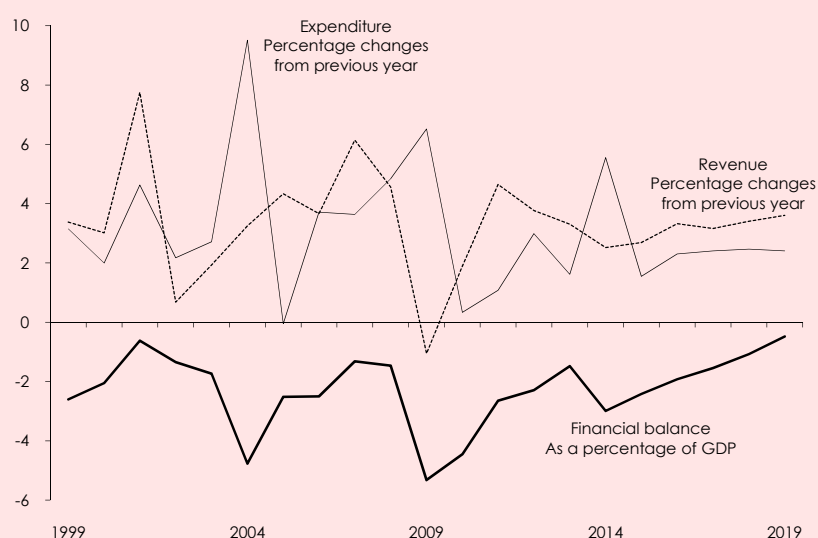
According to the WIFO projections, the structural budget balance will improve significantly slower than stipulated by the EU fiscal rules. It will still be around –0.5 percent of GDP even by 2019. A balanced budget in structural terms by 2016, as sought by the federal government, is unlikely to be achieved on the basis of current revenue and expenditure plans and the underlying cyclical profile. While in 2015 the

structural deficit is expected to widen from 1.2 percent of GDP (2014) to 1.4 percent of GDP, a turnaround in the subsequent years remains tentative. The obligation arising from the preventive arm of the SGP of cutting the structural deficit each year by 0.5 percent of GDP will not be honoured either in 2016 or 2017. For the calculation of the structural balance, net one-off effects of € 4 billion (2014), € 1 billion (2015) and € 0.4 billion (2016) have been assumed.

With the changeover to the revised ESA 2010 in autumn 2014, a larger number of institutional units have been included into the public sector, such as Austrian Railways infrastructure and passenger transport (ÖBB-Infrastruktur und Personenverkehr), KA Finanz AG, Federal Real Estate Agency (Bundesimmobiliengesellschaft BIG), Vienna public transport (Wiener Linien), public hospitals and several holdings for the administration of public assets. Although the implicit effects are of minor importance for the assessment of current deficits, the re-classification matters much more for the size of gross government debt. Compared with the calculations on the basis of ESA 1995, government debt in 2013 is now € 28.7 billion higher, or 81.2 percent of GDP rather than 74.5 percent. WIFO estimates government debt at the end of 2014 at 86.9 percent of GDP. A major reason for the increase is the takeover of liabilities from Hypo-Alpe-Adria to the amount of € 17.8 billion. Until 2019, the government debt ratio is projected to abate to 80.0 percent of GDP. Yet, the projection of the stock-flow-adjustment, i.e., of possible debt redemption via asset sales or privatisation revenues which according to the Maastricht definition are deficit-neutral (e.g., the Heta Asset Resolution AG as the Bad Bank for Hypo-Alpe-Adria) is subject to high uncertainty.

The medium-term budgetary projection carries further uncertainties. It is not clear whether the announced consolidation measures will generate savings to the amount expected. This goes particularly for the measures designed to raise the effective retirement age and boost the employment ratio of older workers. Long-term structural reforms in other areas (federalism, financial relations between government levels, health and nursing care system, education, subsidies) may provide relief for public finances in the medium run, but any plans in this regard have so far not been sufficiently specified. The budgetary impact of the subsidies for banks and of the recognition of previous years of service for public employees can at present not be fully anticipated. Finally, the scope of the envisaged income tax reform and the financing of the implicit revenue losses are still undecided at the cut-off date of the present forecast.

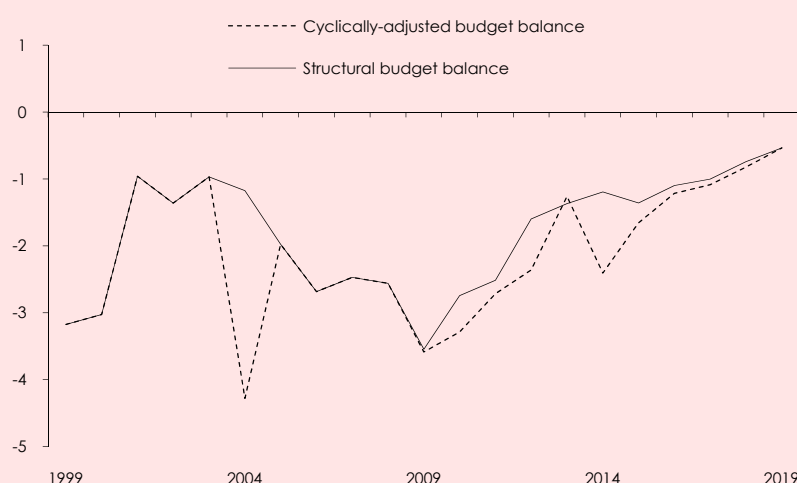
Figure 8: Revenue, expenditure and financial balance (according to Maastricht) of general government



Source: Statistics Austria, WIFO calculations.

Figure 9: Cyclically-adjusted and structural budget balance

As a percentage of GDP



Source: WIFO calculations.

## 7. Risks to the medium-term forecast

The economic outlook for the EU and the euro area remains highly uncertain. A possible exit of the UK from the EU or of Greece from EMU may trigger new confidence crises. The geo-political scenario (conflict between the Ukraine and Russia) holds further risks for European external trade and particularly for energy supply, which may undermine demand and output growth.

Table 7: Government sector

	Ø 2004-2009	Ø 2009-2014	Ø 2014-2019	2014	2015	2016	2017	2018	2019
	Year-to-year percentage changes								
Current revenue	+ 3.5	+ 3.2	+ 3.2	+ 2.5	+ 2.7	+ 3.3	+ 3.2	+ 3.4	+ 3.6
Current expenditure	+ 3.7	+ 2.3	+ 2.2	+ 5.6	+ 1.5	+ 2.3	+ 2.4	+ 2.5	+ 2.4
Gross domestic product	+ 3.5	+ 2.9	+ 2.8	+ 2.2	+ 2.3	+ 2.5	+ 2.9	+ 3.0	+ 3.3
	Ø 2005-2009	Ø 2010-2014	Ø 2015-2019	2014	2015	2016	2017	2018	2019
	As a percentage of GDP								
General government financial balance (Maastricht definition)	- 2.6	- 2.8	- 1.5	- 3.0	- 2.4	- 1.9	- 1.5	- 1.1	- 0.5
Cyclically-adjusted budget balance	- 2.7	- 2.4	- 1.1	- 2.4	- 1.7	- 1.2	- 1.1	- 0.8	- 0.5
Structural budget balance	-	- 1.9	- 0.9	- 1.2	- 1.4	- 1.1	- 1.0	- 0.7	- 0.5
Gross public debt	69.7	82.9	84.2	86.9	87.1	86.2	84.8	82.7	80.0

Source: Statistics Austria, WIFO calculations.

The problem of mutual dependency of financial intermediaries and public authorities has not been solved by the introduction of a European Banking Union. Definitive solutions that would lower the potential cost of financial market crises for the public have not yet been found. The regulatory constitution of the euro area therefore remains fragile and the vulnerability to external shocks high, adding to the margin of forecast uncertainty.

On the other hand, low oil prices over an extended period and a marked depreciation of the euro may create a more favourable economic environment for growth in the euro area and Austria. Higher price competitiveness may boost foreign demand, and lower energy cost may release additional resources for private consumption and investment. Low oil prices would also keep a lid on inflation in 2015 and 2016 and thereby strengthen real private purchasing power.

The European Investment Initiative (*European Commission, 2014B*), while being a positive signal, is too small in overall scope to give substantial impetus to European business activity. The main problem in the EU is the persistent high indebtedness of the private sector. The problem has so far been addressed only half-heartedly, so as not to further burden on fragile key banks in several major EU member countries (Germany, France, Italy and Spain). The focus is on government debt (fiscal rules), which prevents the public sector from playing a more active role. In such conditions, the European economy will regain strength only gradually and major stimulus for demand for Austrian goods and services will be lacking for still some time.

An income tax reform that lowers the fiscal burden for private households may boost disposable income and private consumption, thereby strengthening economic growth. Options for offsetting the implicit revenue losses without being harmful to growth include the phasing out of exemptions in VAT and income tax, a fundamental reform of federal fiscal relations and cuts to redundant bureaucracy or obsolete subsidies. In this way, the demand-enhancing effect of the tax reform may be enhanced by structural reform. The uncertainty still prevailing about the counter-financing of the tax cuts does not allow at present a thorough assessment of the macroeconomic impact of the tax reform.

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