WIFO BULLETIN

No. 5/2015
March 2015

Angela Köppl, Margit Schratzenstaller

The Austrian Tax System – Status Quo

The Austrian Tax System – Status Quo

The tax burden in Austria is comparatively high, and the gap vis-à-vis the EU average has widened. The tax structure exhibits a number of specific features: taxes on labour are high, both from the employee's and the employer's side, following an upward trend and markedly exceeding the international average. The share of environmental taxes is below the EU average, their effective burden corresponds to an intermediate position. Revenues from tobacco and alcohol taxes, major "sin taxes" aiming at influencing private behaviour, are losing importance in the longer run. Taxation of wealth claims a rather small and – against the international trend – significantly declining share of total tax revenues. Nominal tax rates on income are high, those on returns from capital are about average, as is the nominal and effective corporate tax burden. Moreover, complexity and lack of transparency of the tax system are on the rise. These findings call for a major overhaul of the system, notably of the composition of tax revenues.

Contact:

Angela Köppl: WIFO, 1030 Vienna, Arsenal, Objekt 20, Angela.Koeppl@wifo.ac.at

Margit Schratzenstaller: WIFO, 1030 Vienna, Arsenal, Objekt 20, Margit.Schratzenstaller@wifo.ac.at

JEL codes: H20, H23, H24, H25 • **Keywords:** Tax system, tax structure, environmental taxes, wealth taxes, corporate taxes, assessed income tax, wage tax, payroll taxes

Referee(s): Karl Aiginger, Markus Leibrecht, Christine Mayrhuber, Hans Pitlik, Silvia Rocha-Akis • **Data processing:** Katharina Köberl (Katharina.Koeberl@wifo.ac.at), Andrea Sutrich (Andrea.Sutrich@wifo.ac.at)

ISSN 1605-4709 • © Austrian Institute of Economic Research 2015
Impressum: Herausgeber: Karl Aiginger • Chefredakteur: Michael Böheim (Michael.Boeheim@wifo.ac.at) • Redaktionsteam: Tamara Fellinger, Ilse Schulz, Tatjana Weber • Medieninhaber (Verleger) und Redaktion: Österreichisches Institut für Wirtschaftsforschung • 1030 Wien, Arsenal, Objekt 20 • Tel. (+43 1) 798 26 01-0 • Fax (+43 1) 798 93 86 • http://bulletin.wifo.ac.at • Verlags- und Herstellungsort: Wien

1. Introduction

The structural deficiencies of the Austrian tax system have for some time been the target of criticism (e.g., *Pesendorfer,* 2008, *Aiginger et al.,* 2008). Major concerns raised are the conduciveness of the system to growth and employment, further reorientation towards environmental objectives, but also greater consideration to be given to distributional aspects and, last but not least, a substantial simplification of the tax system. Since the beginning of the 2000s, two major tax-burden-reducing reforms (tax reform 2004-05 and tax reform 2009-10) with the focus on income and corporate tax have been implemented (for details see *Breuss – Kaniovski – Schratzenstaller,* 2004, *Schratzenstaller,* 2009). Subsequent to the reform 2009-10, two consolidation "packages" (2010 and 2012) aiming at a reversal of the crisis-related rise in public debt since 2008, provide for tax increases to a rather large extent. Together with the tax hikes adopted in early 2014, tax-related measures account for 44.4 percent of the overall consolidation amount cumulated over the period from 2013 to 2018 (for details see *Fiscal Council,* 2014, *Schratzenstaller,* 2014A). To a large part, these measures make sense also from a structural perspective: they not only generate additional revenue, but also guide private behaviour (e.g., increases in the mineral oil tax, car registration tax and tobacco tax), contribute towards simplification and restrain to some extent the scope for tax avoidance (e.g., with regard to the wholesale taxation of corporate groups). However, these sporadic structural improvements do not follow a comprehensive, long-term-oriented and internally consistent reform design. The latter is nevertheless indispensable, if society is to effectively meet the major economic and social challenges in the medium and longer run also in the area of tax policy. Such challenges are notably the retardation of

climate change and the successful implementation of energy transition, demographic developments and potential labour force shortages as well as shortfalls in the integration of women into the workforce, or a trend rise in income and wealth inequality.

2. Objectives and requirements of a forward-looking tax system

The literature on public finance and tax theory and policy cites a number of objectives and requirements to be met by a tax system, beyond the fiscal objective, i.e., the generation of sufficient revenue for the public sector to fulfil its tasks (see e.g., *Schratzenstaller,* 2013A). From an efficiency perspective, taxes shall distort economic decisions as little as possible. In this respect, negative employment incentives in general and in particular for women, given the possible medium-term shrinking of labour supply, are receiving heightened consideration (*Meghir – Phillips,* 2010, *OECD,* 2011). Taxes, on the other hand, are deemed important market-oriented instruments to correct market failures (externalities or demeritoric effects), particularly in environmental policy. An environmentally compatible design of the tax system implies not only using taxes for steering private behaviour, but also avoiding environmentally counter-productive tax exemptions. Taxes may also mitigate cyclical variations, either as automatic stabilisers or as discretionary changes. Necessarily normative distributional objectives relate, first, to an "equitable" distribution of the tax burden, whereby the ability-to-pay principle plays a key role. Second, along with the transfer system, taxes may contribute to correct a market-based distribution of income and wealth considered excessively unequal. In addition, the design of the tax system has to respect the international environment. In a dynamic perspective, the tax system should be as growth-friendly as possible, with growth being understood not only in quantitative terms, but also including criteria "beyond GDP". Finally, the tax system should be geared towards simplicity, transparency, administrative feasibility and practicability, with a view to keeping the cost of tax collection and compliance as low as possible both for the taxpayer and the tax authorities.

3. Overview of the Austrian tax system

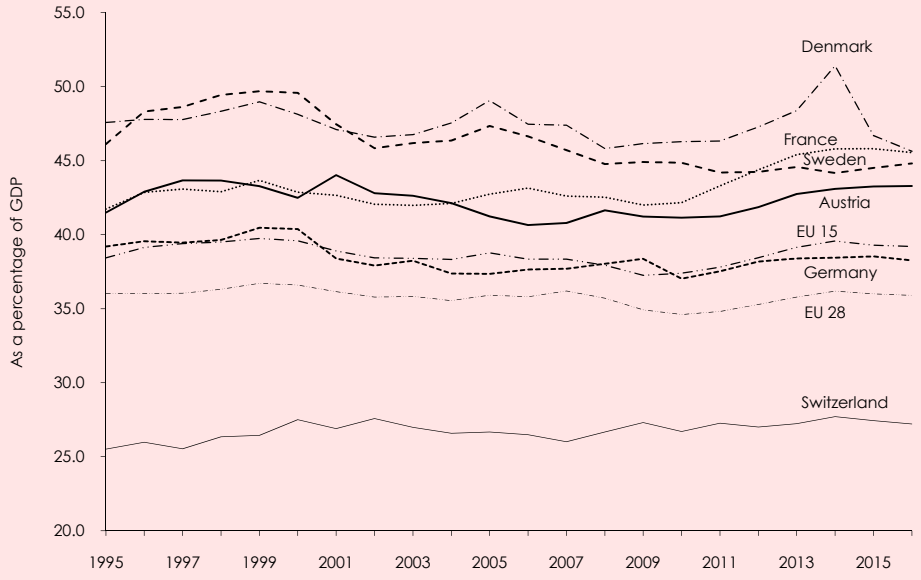
3.1 Overall tax burden

The tax burden is a key indicator of the scope of government intervention. In Austria, ranging between 41 percent and 44 percent of GDP over the period from 1995 to 2016 (Figure 1), the ratio exceeds consistently and increasingly the EU average (EU 28: 35 percent to 37 percent, EU 15: 37 percent to 40 percent). With a ratio of 43.1 percent of GDP in 2014, according to the latest winter forecast of the European Commission, Austria held rank 6 within the EU, behind Denmark, France, Belgium, Finland and Sweden. Whereas the EU average, having risen with the general move towards consolidation since 2011, is likely to have reached a peak in 2014 before heading down from now on, the Austrian tax burden is set to rise steadily until 2015 and level off in 2016.

Institutional factors like significant tax reliefs such as for families or mandatory contributions to private health insurance in Germany, or to the privately organised compulsory health and retirement insurance in Switzerland, partly explain why the tax burden in Germany (difference up to 5.6 percentage points) and Switzerland (ratio below 30 percent) has been lower than in Austria over the entire observation period[1].

[1] For the significance and interpretation of government/GDP ratios see *Reiss – Köhler-Töglhofer* (2011), *Farny et al.* (2010) and *Schratzenstaller* (2013B).

Figure 1: Tax burden in a long-term perspective



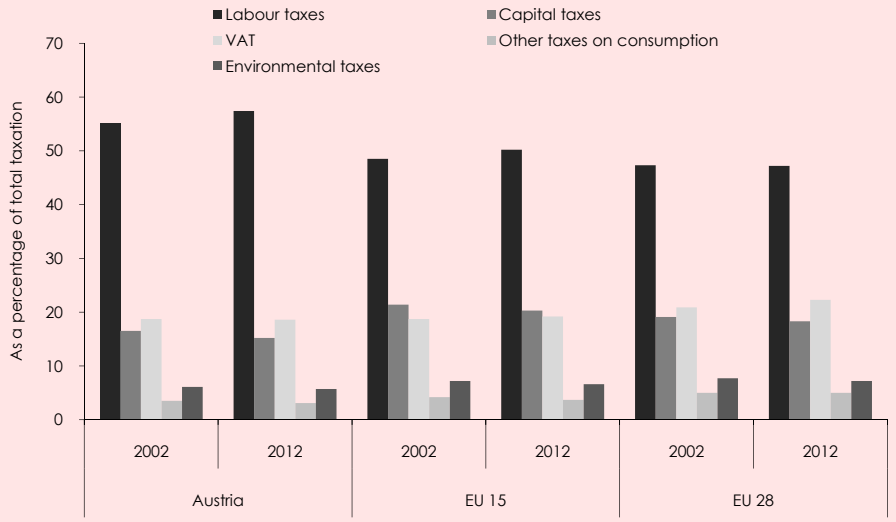
Source: *European Commission* (2015).

3.2 Tax structure

3.2.1 Financial contribution of different tax categories

The tax structure in Austria also exhibits a number of specific features when compared with other countries. As revealed by Eurostat data, the share of taxes on labour (wage tax, social security contributions and further taxes based on the wage bill, notably the so-called tax on sum of wages (Kommunalsteuer), employers' contribution of family burdens (Familienlastenausgleichsfonds) and to the residential building promotion scheme) in total tax revenues has been rising somewhat in Austria since 2002 and, with a ratio of over 57 percent in 2012, by far exceeded the EU average of 47.2 percent (EU 28) or 50.2 percent (EU 15; Figure 2).

Figure 2: Tax structure in a European comparison



Source: *European Commission* (2014A). Other taxes on consumption including residual.

Taxes on consumption (VAT, environmental and other consumption taxes) claim a slightly declining share in Austria (2012: 27.6 percent) and contribute less to overall tax revenues than in the EU 15 (29.7 percent) or the EU 28 (34.6 percent). The share

of environmental taxes (around 7 percent) abated between 2002 and 2012 both in the EU 28 and in the EU 15; in Austria, at 5.7 percent in 2012, it is markedly below the European average and lower than in 2002. Taxation of property and returns from capital accounts for over 18 percent (2012) of tax revenues in the EU 28, against some 15 percent in Austria, with a downward tendency in both cases.

3.2.2 Effective macroeconomic tax rates

Data on the tax structure and its change over time still give no clues to the effective burden imposed on different tax bases and possible shifts between them: cross-country differences and changes in the relative weight of individual taxes or tax categories may result not only from differences or changes in taxation, but also from different or changing structures of the overall tax base. Capturing the effective tax burden in a cross-country comparison or its evolution over time thus calls for additional indicators. In its annual publication "Taxation Trends in the European Union" (*European Commission,* 2014A), the European Commission presents implicit effective tax rates reflecting the average tax burden for the major macroeconomic tax bases (capital, corporate profits, labour, consumption and energy). For Austria, the revealed above-average implicit tax rate on labour confirms a relatively heavy and since 2002 rising burden on earnings from employment, even if it does not provide information on detailed structural characteristics of labour taxation such as the distribution of wage-related taxes or marginal tax rates (see below). The implicit tax rates on capital and consumption are slightly below the EU average and have diminished since 2002. Below the international average is also the effective tax rate on energy which for the EU countries has risen significantly since 2002, while it has edged down in Austria. The implicit corporate tax rate, for its part, is above the international average in Austria.

Table 1: Implicit effective macroeconomic tax rates in a European comparison

	Austria	EU 15	EU 28	Austria	EU 15	EU 28
		2012			Difference 2002-2012	
		In percent			Percentage points	
Labour	41.5	36.0	34.2	0.7	+ 0.7	– 0.5
Capital[1]	25.0	28.7	.	– 3.8	+ 0.1	.
Companies[2]	23.9	19.0	.	– 4.1	– 3.0	.
Consumption	21.3	21.7	21.6	– 1.2	– 0.2	+ 0.8
Energy[3]	145.0	181.3	142.3	– 1.7	+11.9	+17.8

Source: *European Commission* (2014A). Arithmetic mean. – [1] EU 15 excluding Greece, Luxembourg, Denmark. – [2] EU 15 excluding Germany, Denmark, Greece, Luxembourg. – [3] Energy taxes in € per t oil equivalent, deflated by the cumulative growth rate of the consumer price index (base year 2000).

4. Development of selected individual taxes

4.1 Taxation of income

The Austrian income tax schedule is characterised by high nominal tax rates also by international standards. The bottom rate is 36.5 percent, the top marginal rate 50 percent. Even when allowing for the preferential tax treatment of the 13th and 14th monthly salary, which lowers the effective bottom rate to 32.1 percent, the latter is the fourth-highest among the 28 EU member countries (*Federal Ministry of Finance,* 2014). The nominal top marginal tax rate of 50 percent was close to the EU-15 average in 2014 (50.4 percent). However, the effective top marginal rate including the tax privilege for the 13th and 14th monthly salary of 43.7 percent[2], while exceeding the EU-28 average (39.4 percent) by 4.3 percentage points, was substan-

[2] The "solidarity surcharge" on very high incomes in force since 2013 raises gradually the preferential tax rate for the 13th and 14th monthly salary. Hence, for gross annual incomes of € 190,000 and above, the marginal tax rate increases in steps to a top rate of 50 percent for a gross annual income of € 598,600 (a taxable income of € 500,000). According to simulations by Statistics Austria, about 0.1 percent of income earners liable to wage tax are subject to this solidarity surcharge (*Biricz et al.,* 2013).

tially below the EU-15 average of 50.4 percent. The high marginal tax rates (of nominally 43.2 percent and 37.9 percent in effective terms in the medium range of the tax schedule), in combination with a high basic tax allowance (taxable income of up to € 11,000) and a comparatively rather low threshold of a taxable annual income of € 60,000 beyond which the top marginal tax rate kicks in, make for a considerable degree of tax schedule progression in the lower and middle-income range, which markedly abates for higher incomes. Thus, internationally comparable calculations by the OECD show an average wage tax rate of 10.2 percent for dependent workers earning two-thirds of the average gross wage[3], rising to 16.2 percent for average-wage earners and to 22.9 percent for persons earning 167 percent of the average gross wage.

Table 2: Top tax rates for capital income and regular top marginal income tax rates

	Regular top marginal income tax rate	Interest income[1]	Dividend income[2]	Capital gains
	2014	2015	2014	2015
	Tax rate in percent			
Belgium	53.7	25.0	50.5	0.0
Bulgaria	10.0	10.0	14.5	10.0
Czech Republic	22.0	15.0	31.2	15.0
Denmark	55.6	55.8[4]	56.2	27.0 to 42.0[4]
Germany	47.5	26.4	48.6	26.4
Estonia	21.0	20.0	21.0	20.0
Ireland	48.0	41.0[4]	54.5	33.0
Greece	46.0	15.0	33.4	15.0
Spain	52.0	20.0 to 24.0[4]	48.9	20.0 to 24.0[4]
France	50.3	45.0[4]	64.4	0.0 to 49.5[4]
Croatia	47.2	12.0	57.2	0.0
Italy	47.3	26.0	42.0	26.0
Cyprus	35.0	30.0	30.0	0.0
Latvia	24.0	10.0	23.5	15.0
Lithuania	15.0	15.0	32.0	15.0
Luxembourg	43.6	10.0	43.4	0.0 to 20.0[4]
Hungary	16.0	16.0	32.0	16.0
Malta	35.0	15.0	35.0	0.0 to 35.0[4]
Netherlands	52.0	0.0[5]	43.8	8.4 to 52.0[4]
Austria	*50.0*	*25.0*	*43.8*	*25.0*
Poland	32.0	19.0	34.4	19.0
Portugal	56.5	28.0	50.7	28.0
Romania	16.0	16.0	29.4	16.0
Slovenia	50.0	25.0	37.8	25.0
Slovakia	25.0	19.0	22.0	19.0 to 25.0[4]
Finland	51.1	30.0 to 33.0[4]	41.8	30.0 to 33.0[4]
Sweden	56.7	30.0	45.4	30.0
UK	45.0	40.0[4]	45.1	18.0 to 28.0[4]
Switzerland[6]	41.7	40.0[8]	36.9	0.0
USA[7]	46.3	47.3[8]	57.6	20.0
Japan	50.8	20.0	49.8	20.0
EU 15	50.4	28.3	47.5	28.8
New member countries	26.8	17.1	30.8	16.2
EU 28	39.4	23.1	39.7	23.0

Source: *European Commission* (2014A), *Federal Ministry of Finance* (2014), Deloitte, OECD, WIFO investigations and calculations. – [1] Unless otherwise noted uniform proportional tax rates. – [2] At shareholder upon distribution; including corporate taxes. – [3] Financial assets. – [4] Progressive taxation. – [5] Instead 30 percent on fictitious return of investment of 4 percent. – [6] Interest income, dividend income: Zurich. – [7] Interest income, dividend income: State New York. – [8] 2014.

In Austria, like in most other EU member countries, the progressive income tax schedule and the nominal top marginal tax rate of 50 percent apply to only part of

[3] The average annual gross wage calculated by the OECD for persons employed full-time during 12 months in the private sector (excluding apprentices) amounts for 2013 to € 41,693 (67 percent of the average wage: € 27,795, 167 percent of the average wage: € 69,488).

taxable income. The incomes liable to wage tax of dependent employees, as shown above, are subject to an effective maximum tax rate of 43.7 percent, due to the privileged tax treatment of the 13th and 14th monthly salary, and the same holds for the incomes of individual persons from entrepreneurship on account of the profit tax allowance[4]. Capital gains (returns from the sale of securities and real estate as well as interest income and dividends) are subject to a withholding tax of 25 percent, thus tax rates on capital income in Austria range between the EU-15 and the EU-28 averages (Table 2). Finally, a large part of income from agriculture and forestry are taxed at a flat-rate charge, an option chosen by over 90 percent of the enterprises; for a considerable part of them, this is likely to imply a substantial under-estimation of actual profits (*Kofler – Schellmann,* 2011).

Looking at labour taxes in a comprehensive way needs including, apart from wage tax, the social security contributions, even if they, unlike income tax, give the right to a legally defined service in cash or in kind in return for the insurance payment in case of occurrence of the insured event (*Reiss – Köhler-Töglhofer,* 2011). Between 1976 and 2014, the contribution rates increased from 27.5 percent to 39.9 percent[5]. Over the same period, the number of employees covered by social insurance (without civil servants) rose from 2.66 million to 3.48 million (2013), the number of persons in mini-jobs from 148,800 (1996) to 306,200 (2014), of which 63 percent women. The number of dependent employees according to the national accounts climbed from 2.7 million to 3.7 million (2013).

Table 3 shows the individual tax rates (income tax[6] plus employee's social security contributions) for different gross income levels of a single dependent employee without children in the EU 15 for 2013 (OECD calculations). The marginal tax rate corresponds to the share of an additional unit of gross earnings deducted as income tax and employee's social security charges. At a ratio of 49.1 percent, the so-defined marginal tax rate for a dependent employee earning the average gross annual income of € 41,693 in Austria is markedly above the EU-15 average of 42.3 percent. Likewise, the marginal tax rate at a gross income corresponding to 67 percent of the overall average is relatively high at 44.4 percent (EU 15: 38.6 percent). Distinctly below the average is the marginal tax rate for employees earning 167 percent of the overall average gross income: because of the social security contribution ceiling, it is at 37.9 percent substantially lower than for gross earnings below that ceiling and also significantly below the EU-15 average of 48.3 percent.

The average tax rate corresponds to the proportion of gross income deducted as income tax and employee's social security contributions. By this measure, the tax burden for dependent employees is higher in Austria than on average for the EU 15, particularly for small and medium-range incomes. For the latter also, the tax schedule is highly progressive[7], more than for higher incomes where the social security contribution ceiling has an overall regressive effect (*Reiss – Köhler-Töglhofer,* 2011). While income tax and employee's social contributions account for 28.3 percent of a gross income equivalent to two-thirds of the overall average, the proportion rises to 34.3 percent for an average income and to 39 percent for an income of 167 percent of the overall average.

For almost all income levels included in the OECD calculations, the marginal a well as the average tax burden has increased in Austria since 2000. The high and altogether rising burden on labour income particularly in the lower and middle range is probably, together with other factors, responsible for the persistently significant dis-

[4] For the self-employed, the equivalent of the "solidarity surcharge" referred to above is the stepwise cut of the profit tax allowance as from 2013 for profits above € 175,000; according to simulations by Statistics Austria, about 0.1 percent of the self-employed are affected by this measure (*Biricz et al.,* 2013).

[5] Employer's and employee's contribution to health, retirement, unemployment and work accident insurance, fee for affiliation to the Chamber of Labour, contribution to the residential building promotion scheme and to the wage-protection fund in case of the employer's insolvency; excluding the employer's contribution to the Family Benefit Fund (4.5 percent).

[6] In Austria the income tax for dependent employees is better known as wage tax (*Lohnsteuer*).

[7] The degree of tax progression is defined as the ratio between marginal and average tax rate.

advantage of women and notably of mothers on the labour market and with regard to income (witnessed inter alia by their share of mini-job-holders and part-time workers, the part-time ratio or the gender pay gap; *Schratzenstaller,* 2014B). The high marginal burden on low incomes, which jumps sharply at the transition from a mini-job to regular employment due to the threshold for social security contributions and the bottom tax allowance for wage tax, acts as a barrier to the extension of weekly work hours. The high average burden restrains labour force participation of women in the first place, since their supply of labour reacts relatively strongly to (also tax-related) changes in the net wage. As calculations by the European Commission show, (*European Commission,* 2014B), secondary earners (women as a rule) are subject to a rather high marginal tax burden in Austria. When passing from non-activity to gainful employment, the marginal tax rate (including social charges) is 30.3 percent for an income equivalent to 67 percent of the average; at the transition from a job paid at 33 percent of the average wage to one offering 67 percent of the average, the marginal tax rate amounts to 41.1 percent.

Table 3: Personal marginal and average tax rates by income level

EU 15, single earner without children

	Gross earnings as a percentage of average level[1]							
	67 percent	100 percent	133 percent	167 percent	67 percent	100 percent	133 percent	167 percent
	2013				Change 2000-2013			
	Personal income tax rate[2], as a percentage of gross earnings				Percentage points			
Marginal tax rate								
Austria	44.4	49.1	49.1	37.9	+ 3.9	+ 7.9	+ 1.1	– 0.5
EU 15	38.6	42.3	48.0	48.3	+ 1.0	– 2.0	+ 1.5	+ 0.4
Average tax rate								
Austria	28.3	34.3	38.0	39.0	+ 2.7	+ 3.3	+ 3.2	+ 2.7
EU 15	24.8	29.9	34.1	37.2	– 1.4	– 0.9	– 0.3	+ 0.4

Source: *OECD* (2014A). – [1] Average full-time gross wage earnings of dependent employees in the private sector. – [2] Employees' taxes (income tax and employees' social security contributions).

The high tax rates on small and middle incomes, together with other related features of the tax system (single-earner tax credit and preferential income tax treatment of overtime work hours, ceiling on social security contributions, contribution-free health insurance of non-working spouses etc.) perpetuate the prevailing distinctly unequal distribution of paid work and unpaid care work between men and women within the family[8]. Against this background, the Austrian Ministry of Finance, in budget chapter "16 Taxes and Public Charges" in the context of the performance orientation for the federal budget drafts for 2014 and 2015, has formulated an equal opportunity objective as follows: "the tax system supports a better distribution of gainful employment as well as of unpaid work between men and women". Among the measures designed to meet this objective, the document quotes the phasing-out of negative employment incentives in the tax system (such as the lowering of the bottom marginal tax rate) and a review of the entire income tax system for such impediments by the Tax Reform Commission.

Employers also are subject to a high tax burden on labour, i.e., high non-wage labour cost. The total marginal tax rate (marginal tax wedge) amounts to 60.6 percent for the average gross earnings as well as for 133 percent of gross earnings, markedly above the average for the EU 15 (52.5 percent and 56.8 percent respectively). For earnings equal to 67 percent of the average level, the marginal tax wedge in Austria is 6.7 percentage points higher than the EU-15 average, whereas for earnings corresponding to 167 percent of the average level it is 12.8 percentage points lower, due to the effect of the contribution ceiling: in the latter case, the total tax wedge

[8] Further elaborated in *Schratzenstaller* (2014B).

amounts to 42.2 percent, almost 20 percentage points lower than for middle incomes.

Table 4: Total marginal and average tax rates (total tax wedges) by level of income

EU 15, single earner without children

	Gross earnings as a percentage of average[1]							
	67 percent	100 percent	133 percent	167 percent	67 percent	100 percent	133 percent	167 percent
	2013				Change 2000-2013			
	Total tax rate as a percentage of labour cost[2]				Percentage points			
Marginal tax rate								
Austria	56.9	60.6	60.6	42.2	+ 2.3	+ 5.5	+ 0.3	– 0.5
EU 15	50.2	52.5	56.8	55.0	+ 0.8	– 2.3	+ 0.8	+ 0.6
Average tax rate								
Austria	44.5	49.1	52.0	51.9	+ 1.3	+ 1.8	+ 1.8	+ 1.5
EU 15	37.6	42.1	45.6	47.9	– 2.2	– 1.4	– 0.8	– 0.2

Source: *OECD* (2014). – [1]) Average full-time gross wage earnings of dependent employees in the private sector. – [2]) Income tax plus employee and employer social security contributions, as a percentage of labour costs defined as gross wage earnings plus employer social security contributions,

The total average tax rates (average tax wedge) are in Austria across the board higher than in the EU 15, particularly so for low and middle incomes. For the average gross earnings level, income tax and social contributions account for nearly half (49.1 percent) of the employer's labour cost, for earnings of 133 percent and 167 percent of the average, the tax wedge is around 52 percent respectively. For earnings equivalent to two-thirds of the average, the total average tax wedge already reaches 44.5 percent.

Total taxes on dependent employees' earnings amounted to € 71.2 billion in 2013 (Table 5), of which € 18.66 billion were wage tax revenues, € 41.39 billion social security contributions and € 11.2 billion other charges on the wage bill (contributions to the residential building promotion scheme and employers' contribution of family burdens (Familienlastenausgleichsfonds), tax on sum of wages (Kommunalsteuer) etc.). The employers' side provided € 33.53 billion or around 47 percent of the total taxes and charges on labour; workers and employees shouldered € 37.67 billion (including wage tax – Lohnsteuer) or nearly 53 percent. Social security contributions and other charges on the wage bill were shared at 63.8 percent by the employers and 36.2 percent by the employees.

A further specific feature of the Austrian income tax code is the combination of high nominal tax rates with a tax base narrowed by numerous tax exemptions. The revenue shortfalls generated by such exemptions are relatively high in Austria, both in relation to GDP and in an international perspective. According to calculations by the European Commission (*European Commission,* 2014C), the revenues foregone on account of the major income tax concessions equalled around 2.8 percent of GDP in 2011, of which 2 percent of GDP due to the preferential tax treatment of the 13th and 14th monthly salary. According to a compilation by the Austrian Court of Auditors (*Austrian Court of Auditors,* 2013), the Austrian income tax code provides for 558 exemptions with the most different justifications and objectives, of which 326 are stipulated by law and 232 by administrative regulation. The large number of exemptions makes for a high degree of complexity and lack of transparency of the income tax system and adds to the cost for taxpayers and tax authorities alike (*OECD,* 2010). Moreover, a system which, like the Austrian, combines high nominal tax rates with generous exemptions, creates incentives for deliberate (and abusive) tax avoidance. Exemptions also have a distributional aspect, as earners of low incomes or incomes below the tax threshold benefit only marginally or not at all from them. If they are constructed as tax allowance, they grant relief that is rising in absolute and relative terms (degressive effect) and tend to benefit the well-informed and higher-income taxpayer. In addition, a number of exemptions are outdated (like the in-house beer consumption of breweries) or may have undesirable effects (like the tax privilege for overtime work which is questionable from an employment policy per-

spective, or the taxation of company cars that does not consider environmental standards).

Table 5: Taxes on labour of dependent employees

2013

	Employers' taxes	Employees' taxes	Total	Employers' taxes	Employees' taxes
	Million €			Percentage shares	
Total taxes	33,533	37,671	71,203	47.1	52.9
Wage tax		18,657	18,657	0.0	100.0
Total taxes excluding wage tax	33,533	19,014	52,546	63.8	36.2
Social security contributions	22,854	18,534	41,389	55.2	44.8
Health insurance contributions dependent employees	4,003	4,129	8,132		
Health insurance contributions unemployed	330				
Pension insurance contributions dependent employees	14,201	11,598	25,799		
Accident insurance contributions	1,513		1,513		
Unemployment insurance contributions	2,807	2,807	5,615		
Other charges on wage bill[1]	10,678	479	11,158	95.7	4.3
Residential building promotion	457	457	915		
Contributions to insolvency-funds	473		473		
Special pension contributions, nightshift and heavy worker	31		31		
Bad weather compensation	22	22	43		
Disabled persons, equalization levy	138		138		
Employee provident fund[2]	1,043		1,043		
Severance pay fund "old"[3]	380		380		
Tax on sum of wages[4]	2,742		2,742		
Employers' contribution of family burdens	5,325		5,325		
Tax on employment (Vienna underground)	67		67		

Source: Association of Austrian social security agencies, Federal Ministry of Finance, Federal Ministry of Labour, Social Affairs and Consumer Protection, Statistics Austria, Austrian Association of Insurance Companies, WIFO calculations and compilation. – [1] Excluding Chamber of Labour levy and employer's contribution surcharge (Economics Chamber levy 2). – [2] Estimate for 2012. – [3] Estimated net allocation (gross transfer minus liquidation) 2012. – [4] Kommunalsteuer.

4.2 Taxation of consumption

4.2.1 Value-added tax

As shown in Table 6, the share of consumption taxes in total tax revenues edged down in Austria between 2002 and 2012, from 28.5 percent to 27.6 percent. The structural shift in consumption taxes was at the expense of environmental taxes and other special excise taxes, while the share of VAT remained constant. The effective implicit macroeconomic consumption tax rate edged down from 22.5 percent in 2002 to 21.3 percent in 2012, which is broadly in line with the EU-28 average of 21.6 percent (Table 1). For a long time, until 2009, the standard VAT rate in Austria was above the international average; today, the rate of 20 percent is below the EU average of 21.5 percent (2014), as no less than 20 EU member countries have since 2009 raised the standard VAT rate, some of them in several steps, as part of their fiscal consolidation strategies (*European Commission,* 2014A).

Table 6: Structure of consumption taxes

	Austria	EU 15	EU 28	Austria	EU 15	EU 28
	2012			Change 2002-2012		
	As a percentage of total taxation			Percentage points		
Consumption taxes total	*27.6*	*29.7*	*34.6*	*– 0.9*	*– 0.5*	*+ 0.8*
VAT	18.6	19.2	22.3	– 0.1	+ 0.5	+ 1.4
Environmental taxes	5.7	6.6	7.2	– 0.4	– 0.6	– 0.5
Other consumption taxes	3.3	3.9	5.1	– 0.4	– 0.4	– 0.1

Source: *European Commission* (2014A).

As calculations by the European Commission show, the revenue potential of VAT – offered by applying the standard VAT rate to the total of private consumption – is by far not fully exhausted in any EU member country. Due to privileged tax rates and tax exemptions, the C-efficiency (i.e., actual VAT revenue in relation to the revenue

potential) was only 48.8 percent on average in the EU in 2012 (*European Commission,* 2014B). Although Austria, with a ratio of 60.6 percent, markedly exceeded the EU average, the revenue potential is still, as elsewhere, eroded to an important extent. Tax concessions are granted not only for goods and services that can be regarded as part of a socio-cultural subsistence level; hence, their socio-political justification can be questioned. Thus, according to a recent study by the *OECD* (2014B), reduced VAT rates for services predominantly consumed by well-to-do households (opera and theatre tickets, certain restaurant items and hotel overnight stays) have a regressive distributional impact. Moreover, the many exceptions render the VAT system overly complicated, difficult to administer and prone to avoidance and evasion. While reduced rates are intended as subsidies (like the rebates for cultural services, restaurant consumption, hotel stays or animal food), such kind of indirect subsidisation which normally does not appear in subsidy reports, adds to opacity and to systematic under-reporting of the entire scope of economic subsidies.

A revealed tax compliance gap of 10.7 percent is indicative of the extent of tax evasion, even if there may also be other causes beside downright fraud. This compliance gap is obtained when comparing the actual tax receipts with their target level on the basis of the legal regulations in force.

4.2.2 Taxes on the consumption of tobacco and alcohol

Table 7 illustrates the quantitative importance of taxes on tobacco and alcohol consumption – besides the environmental taxes the major steering taxes for the internalisation of negative external and demerit effects –, as measured by their revenue in relation to total tax revenue as well as to GDP. As can be seen, the weight of these two taxes in 2012 was lower in Austria than on average in the EU 15, and even more so when compared with the EU-28 average. Like for the EU 15, their weight had also declined since 2002. In the EU 28, however, the weight of tobacco tax revenues had increased over the same period. The stepwise increase notably of the tobacco tax, in Austria as in many other EU member countries enacted in the context of fiscal consolidation strategies, but also the alcohol tax hikes thus compensated only partly the loss of importance inherent in them as unit taxes, if they are not automatically adjusted for inflation[9].

Table 7: Taxes on tobacco and alcohol consumption

	Austria	EU 15	EU 28	Austria	EU 15	EU 28
		2012			Change 2002-2012	
		In percent			Percentage points	
Tobacco taxes						
As a percentage of GDP	0.53	0.66	0.91	– 0.06	– 0.07	+ 0.16
As a percentage of total taxation	1.22	1.76	2.64	– 0.13	– 0.20	+ 0.51
Alcohol taxes						
As a percentage of GDP	0.10	0.25	0.33	– 0.05	– 0.20	– 0.14
As a percentage of total taxation	0.24	0.66	0.97	– 0.11	– 0.45	– 0.33

Source: European Commission. alcohol taxes: taxes on beer, wine, sparkling wine, brandy and intermediate products. France: latest available data for 2011.

4.2.3 Environmental taxes

Although the main objective of environmental taxes is their steering effect and ecological effectiveness, they have actually evolved historically and were introduced for revenue-raising purposes. According to the polluter-pays principle, environmental taxes correspond to the price of environmental or resource consumption that as external effect does not enter into the production cost calculation. They are supposed to set incentives for more efficient and environmentally sound production and consumption behaviour, thereby correcting for market failure. Unlike with the legal measures, the economic actors can decide on the concrete measures to

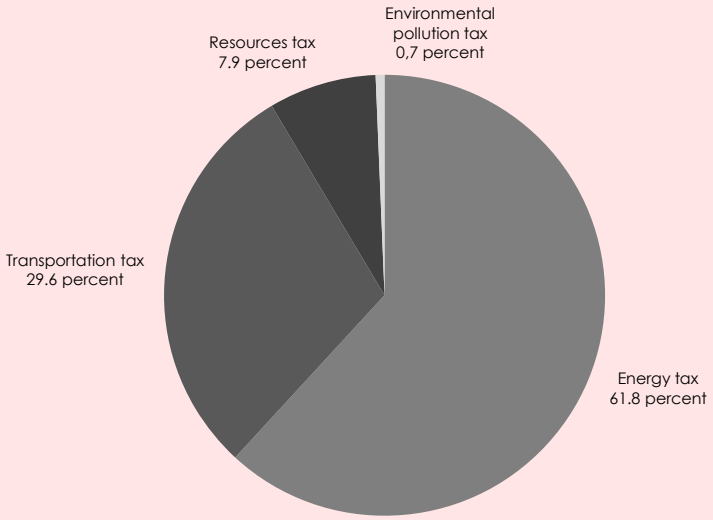
[9] More precisely, only the taxes on alcohol are genuine unit taxes (i.e., are defined by an absolute amount per unit of consumption); the tobacco tax consists of both, an *ad-valorem* and a unit tax element.

take. An advantage of environmental taxes lies in their sustained incentive to reduce emissions, since they set a price down to the last emission unit. This principle is violated if the tax amount is limited by a ceiling[10]. Environmental taxes are generally designed as unit taxes, i.e., they are based on physical units of ecologically relevant production or consumption processes or emissions. From the perspective of economic theory (*Baumol – Oates,* 1971), environmental taxes are most economically efficient and ecologically effective if they are designed at flat rate, i.e., a single tax rate applied to the tax base (e.g., energy content of a particular energy source). In reality, other considerations enter into the decision on tax rates, as witnessed by the different tax rates in force, such as for power vs. heating fuels.

According to an internationally agreed definition[11], environmental taxes are those the base of which has a proven specific negative impact on the environment (*Eurostat,* 2001). This concept moves the purpose of the tax (introduction) to the background (e.g., introduction for revenue-raising purposes). Environmental taxes may be classified as follows:

- energy taxes (in Austria e.g., mineral oil tax, energy levy),
- transportation taxes (motor car tax, car registration tax, engine-capacity-related car insurance tax, standardised fuel consumption levy, road traffic charge, airline ticket levy),
- environmental pollution taxes (waste disposal charge),
- resource taxes (real estate tax[12], hunting and fishing permit levy, landscape conservation and nature protection levy).

Figure 3: Composition of environmental tax revenues



Source: Statistics Austria, federal final account statement, WIFO database, WIFO calculations.

[10] For energy-intensive producers in Austria, the tax burden is limited to 0.5 percent of the net output value (energy tax refund).

[11] Environmental taxes as defined by Eurostat Doc. Eco-taxes/98/1: "A tax whose tax base is a physical unit that has a proven specific negative impact on the environment." This definition does not provide for the earmarking of revenues to the benefit of the environment.

[12] International statistics do not classify the real estate tax as environmental tax. For this reason, the harmonised Eurostat data for Austria differ somewhat from the environmental tax revenues as released by Statistics Austria.

The composition of the environmental tax revenues according to the internationally harmonised definition, but following the national classification (Figure 3), shows for Austria a dominance of energy taxes, due also to the inclusion of the mineral oil tax with the energy taxes. Taken together, energy and transportation taxes accounted for more than 90 percent of all environmental tax revenues in 2013. The share of resource taxes consists almost entirely of real estate tax revenues, supplemented by levies of altogether marginal revenue, imposed by the Länder.

In 2013, the government received revenues from environmental taxes to the tune of around € 8.3 billion (Table 8). The most important single tax is the mineral oil tax which contributes about half of the total. The bulk of mineral oil tax revenues originates from transport; together with the standardised fuel consumption levy and the engine-capacity-related car insurance tax, almost three-quarters of Austrian environmental tax revenues (2013: 73 percent) are related to transportation activity. The energy levy accounts for some 10 percent of total environmental tax revenue. As referred to above, the national definition includes among the environmental taxes also the real estate tax which contributes slightly over 7 percent to total environmental tax revenues.

Table 8: Environmental taxes in terms of the national accounts

According to EU and OECD definitions and national classification

	2005	2006	2007	2008	2009	2010	2011	2012	2013
	Tax revenues in million €								
Entirely federal and shared taxes									
Mineral oil tax	3,565	3,553	3,689	3,894	3,800	3,854	4,213	4,181	4,166
Motor car tax[1]	177	175	164	77	68	70	59	45	48
Car registration tax	151	151	148	150	153	158	168	177	175
Engine-capacity-related insurance tax	1,325	1,376	1,410	1,475	1,521	1,554	1,662	1,728	1,782
Standard fuel consumption levy	486	490	456	472	437	452	481	507	457
Road traffic charge	1	1	0	0	0	0	0	0	0
Special levy on oil	0	0	0	0	0	0	0	0	0
Energy levy[2]	785	669	764	709	655	726	792	831	886
Waste disposal charge	46	72	72	64	57	51	53	53	53
Air ticket levy							59	107	98
Real estate tax	512	517	529	552	568	583	595	607	623
Länder-regulated charges									
Hunting and fishing permit levy	11	11	10	10	10	10	10	10	11
Vienna tree protection charge	3	0	1	1	2	2	1	2	1
Landscape and nature protection levy	9	7	10	11	10	9	9	10	9
Environmental taxes (NA), total, million €	*7,071*	*7,022*	*7,253*	*7,415*	*7,282*	*7,469*	*8,102*	*8,260*	*8,309*
As a percentage of GDP, nominal	2,9	2,7	2,7	2,6	2,7	2,6	2,7	2,7	2,7
As a percentage of total taxation[3]	6,8	6,5	6,3	6,1	6,2	6,2	6,4	6,3	6,1
Cologically relevant traffic charges	*1,192*	*1,250*	*1,435*	*1,516*	*1,387*	*1,512*	*1,561*	*1,622*	*1,687*
Special toll[4]	113	115	119	118	122	124	131	136	147
Lorry toll	775	825	984	1,062	926	1,031	1,062	1,103	1,134
Motorway tax disc	304	310	332	336	338	357	368	383	406

Source: Statistics Austria, federal final account statement, WIFO database, WIFO calculations. Definition by EU and OECD: Eurostat Doc. Ecotaxes/98/1: "A tax whose tax base is a physical unit that has a proven specific negative impact on the environment". – [1] For motor vehicles with a total weight limit above 3.5 t. – [2] Electricity, natural gas and coal levy, net. – [3] Tax revenue: taxes according to National Accounts (NA) plus actual social security contributions. – [4] As from 2004: only motor vehicles with a total weight limit up to 3.5 t.

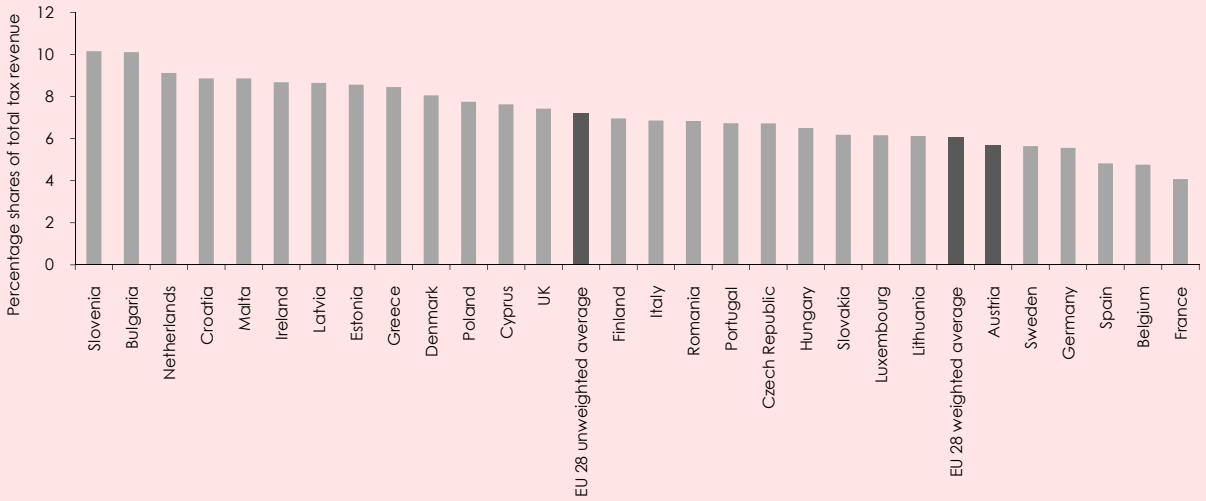
In 2013, environmental taxes (including real estate tax) contributed 6 percent to total tax revenues. The share varies slightly over the years, without following an upward trend. Among the 28 EU member countries, Austria held rank 23 in 2012, with a share of environmental taxes below the EU-28 average (Figure 4). The share of 5.7 percent recorded in 2012 corresponded to the (weighted) average[13] for the euro area countries, which has been steadily declining since 2003. Since the majority of envi-

[13] The weighted average is the share of aggregate EU environmental tax revenues in total aggregate EU tax revenues.

ronmental taxes are unit taxes, the decline may partly be explained by the absence of adjustment for inflation.

Figure 4: Environmental tax revenues as a share of total taxation

2012



Source: Eurostat.

Table 9: Distribution of environmental tax revenues by sector, 2011

	Households	Manufacturing	Services	Transport	Agriculture	Other sector
	Percentage shares					
Slovenia	64.4	14.5	6.0	4.5	0.0	10.6
Spain	59.7	7.9	9.9	18.2	0.7	4.2
Netherlands	59.2	8.3	19.2	6.2	1.7	7.0
Ireland	59.1	5.9	13.6	12.5	1.1	8.9
Denmark	58.4	5.0	16.8	4.7	1.7	15.2
Germany	56.7	9.7	14.0	9.6	3.0	9.9
Greece	56.6	9.1	18.8	3.3	1.0	12.1
Hungary	56.6	2.8	15.0	14.4	4.8	11.2
Belgium	53.2	3.1	18.0	14.5	0.2	11.3
Italy	52.5	6.4	21.1	9.7	1.7	10.3
Austria	51.9	7.8	16.8	13.8	4.1	9.8
UK	49.7	10.5	17.2	11.1	2.2	11.5
Portugal	49.6	4.0	18.4	16.5	1.7	11.6
Lithuania	48.0	13.4	7.2	16.0	7.1	15.4
Sweden	45.2	3.9	18.9	12.4	3.6	19.5
Latvia	45.1	5.7	12.6	18.4	6.9	18.1
Romania	39.6	27.9	0.1	22.6	1.5	9.7
Finland	38.8	10.7	23.5	14.5	2.4	12.4
Luxembourg	35.8	1.1	9.2	0.0	0.5	53.9
Bulgaria	35.5	11.5	10.1	22.4	5.1	20.5
Estonia	31.2	6.1	14.3	26.3	3.6	22.2
Malta	26.1	7.2	10.2	12.8	3.7	43.8
Czech Republic	19.5	20.3	21.4	17.5	3.7	21.3
Average	47.5	8.8	14.5	13.1	2.7	16.1

Source: Eurostat.

In most EU member countries, energy and transportation taxes are the two most important environmental tax categories, although their relative weight varies. A classification of environmental tax revenues by sector is available for most EU member countries (latest data are for 2011). In about half the countries surveyed, more than 50 percent of environmental tax revenues were collected from private households;

in Austria the share was close to 52 percent in 2011[14]. The contribution of the manufacturing sector to the total of environmental tax revenues is below 10 percent in almost all countries since, for example, a ceiling imposed for energy-intensive producers (as granted in Austria and several other countries) exempts part of the tax-relevant activities from actual tax liability. The service sector contributes on average 14.5 percent to overall environmental tax revenues, while the share is somewhat higher in Austria. The proportion is similar for the transportation sector (without private households). However, the distribution of tax payments by sector gives no clue, to what extent a particular sector can shift the tax burden downstream (or upstream).

4.3 Corporate taxation

The level of nominal and effective corporate tax rates and the international tax burden differentials influence various corporate decisions (choice of location, scope of investment, financing structure etc.). A rich empirical literature investigates into the impact of corporate taxation in a host country on investment by multinational companies. In a meta-analysis, *Heckemeyer – Overesch* (2012) find corporate taxation to be of significant influence: first, on activity and decisions in the real economy (aggregate cross-border investment in general and in material assets in particular, probability of settlement, number of foreign subsidiaries of multi-national enterprises, size of invested capital at a given location); second, on tax-burden-shaping activities like the shift of profits towards lower-tax jurisdictions by deliberately designing transfer prices and intra-company financial relations.

At 25 percent, the statutory corporate tax rate in Austria is slightly lower than the EU-15 average and somewhat above the average EU-28 level (Table 10). Also the forward-looking microeconomic marginal (EMTR) and average (EATR) tax rates for model investment projects, as calculated by the ZEW Institute in Mannheim, are a bit lower in Austria than the EU-15 average, but higher than for EU 28 (*European Commission,* 2013). However, the backward-looking macroeconomic implicit business tax rate of nearly 24 percent, according to calculations by the European Commission (*European Commission,* 2014A), was 5 percentage points above the EU-15 average. In relation to GDP, business tax revenues[15] amounted to 2.4 percent in 2012, unchanged from 2002 and slightly below the EU average[16]. The step-by-step reduction of nominal corporate tax rates within the EU has continued during the years since 2002, although the need for unwinding the jump in government debt in the course the crisis set tight limits to such "race to the bottom". At the same time, the notional forward-looking effective corporate tax rates declined; the revenue shortfalls implied by the tax rate cuts have thus probably only partly been offset by enlarging the tax base through phasing-out of tax exemptions (tax-cuts-cum-base-broadening). The decline in the implicit corporate tax rates (obtained on the basis of actual tax revenues) between 2002 and 2012 has likely been driven by three factors that may have played a different role across countries: the repeated cuts in the tax rate, the fall in corporate profits following the financial market and economic crisis, and the transfer of profits by multi-national companies from countries with relatively high to such offering low nominal business tax rates or specific tax concessions. These factors also explain why business tax revenues have declined EU wide as percent of GDP, though the introduction of bank levies (like in Austria) that in most countries are classified as business taxes may act as a revenue-stabilising force.

While the (effective) business tax rates in Austria are somewhat above the international average, though supplemented by a number of attractive tax exemptions and reliefs (notably for research expenditure or group taxation), the business tax en-

[14] As referred to above, the national data for Austria deviate from the Eurostat classification.

[15] In compliance with the definition adopted by the European Commission, business taxes include, apart from corporate tax, capital gains taxes, the Financial Institutions Stability Fee and contributions to the statutory special interest groups (Chambers).

[16] The below-average figure for Austria is explained by the relatively small share of companies liable to corporate tax within the business sector.

vironment has been impaired in recent years by frequent changes in the tax code which undermines companies' long-term planning (e.g., the introduction of a limited-liability company "light" with subsequent restrictions or the stepwise retreat from the favourable taxation of multinational groups).

Table 10: Nominal and effective business tax rates for incorporated enterprises

	Austria	EU 15	EU 28	Austria	EU 15	EU 28
	2013			Percentage change 2002-2013[1]		
	In percent			Percentage points		
Statutory corporate tax rate	25.0	27.0	23.2	– 9.0	– 5.6	– 5.8
Effective average tax rate (EATR)	23.0	24.8	21.1	± 0.0	– 3.0	– 1.9
Effective marginal tax rate (EMTR)	18.4	18.8	15.5	± 0.0	– 3.7	– 2.1
Implicit corporate tax rate[2,3]	23.9	19.0	.	– 4.1	– 3.0	.
Corporate income tax as a percentage of GDP[2]	2.4	2.6	2.6	± 0.0	– 0.7	– 0.3

Source: *European Commission* (2013, 2014A). Arithmetic mean. – [1] EATR and EMTR: difference from 2005. – [2] Last available data: 2012. – [3] EU 15 excluding Germany, Greece, Denmark, Luxembourg.

4.4 Taxes on property

The share of taxes on property in total tax revenues remained almost constant in Austria between 2002 and 2012, at 1.3 percent, whereas for the EU 15 it climbed to 5 percent, and to 3.7 percent for the EU 28 (Table 11). As a fraction of GDP of 0.6 percent in 2012, the tax burden on property was markedly lower in Austria than in the EU 15 at 2 percent of GDP or the EU 28 at 1.4 percent of GDP. Among the OECD countries, only four of them exhibited a lower property tax/GDP ratio than Austria (*OECD,* 2014C).

Table 11: Taxes on property

	Austria	EU 15	EU 28	Austria	EU 15	EU 28
	2012			Change 2002-2012		
	In percent			Percentage points		
As a percentage of GDP	0.6	2.0	1.4	+ 0.1	+ 0.1	+ 0.1
As a percentage of total taxation	1.3	5.0	3.7	+ 0.1	+ 0.2	+ 0.2

Source: *European Commission* (2014A). Arithmetic mean.

Between 1990 and 2012, the composition of property-based tax revenues shifted markedly (Table 12). Regular taxation of land and real estate property (primarily via the real estate tax) contributes more than half to total property-based tax revenues in the EU 15 (less than one-third in 1990), against 60.9 percent in the OECD (1990: 39.2 percent) and about 40 percent in Austria (1990: 24 percent). Only very few countries collect nowadays a net wealth tax; accordingly, revenues have declined to 8.1 percent of total asset-based tax revenues in the EU 15 and to 8.7 percent in the OECD. The contribution from inheritance and gift taxes (still in force in 19 of the 28 EU member countries) edged down in the EU 15 (to a share of 10.1 percent of total asset-based tax revenues) as well as in the OECD (to about 6.7 percent). In Austria, taxes on financial and capital transactions claim a major share of 58 percent (tax on real estate acquisition and capital transaction tax); in the EU 15, such taxes account for around one-quarter, in the OECD for some 22 percent of total property-based tax revenues.

The long-term decline in importance of property-based tax revenues in Austria stems from the step-by-step abolition of most of these taxes (securities tax, stock exchange turnover tax, net wealth tax, inheritance and gift tax, trade capital tax). Meanwhile, property-based tax revenues are primarily generated by the real estate acquisition tax, the real estate tax (which, however, due to the problem of adjusting the assessed tax value, generates revenues lagging behind the growth of the tax base) and the capital transfer tax (which, however, will be phased out in 2016).

Table 12: Composition of property-based tax revenues

	Austria	EU 15	OECD	Austria	EU 15	OECD
	2012 Percentage shares			Change 1990-2012 Percentage points		
Recurrent taxes on immovable property	40.1	54.6	60.9	+ 16.0	+ 23.0	+ 21.7
Recurrent taxes on net wealth	0.0	8.1	8.7	– 43.6	– 4.9	– 3.8
Inheritance and gift taxes	1.2	10.1	6.7	– 4.0	– 1.6	– 2.4
Taxes on financial and capital transactions	58.0	25.2	22.4	+ 30.9	– 17.4	– 15.9
Other wealth-related taxes	0.7	2.0	1.3	+ 0.7	+ 0.9	+ 0.3

Source: *OECD* (2014C), WIFO calculations.

5. Conclusion

The present analysis has revealed that the tax burden in Austria is comparatively high and that the gap vis-à-vis the EU average has widened. The Austrian tax structure exhibits a number of specific features: taxes on labour are high, both from the employee's and the employer's perspective, they follow an upward trend and markedly exceed the international average. The share of environmental taxes is below the EU average, their effective burden is in the middle range. Revenues from tobacco and alcohol taxes, major "sin taxes" intended to influence private behaviour, are losing importance in the longer run. Taxes on property claim a rather small and – against the international trend – significantly declining share of total taxation. Nominal tax rates on income are high, those on returns from capital are about average, as is the nominal and effective corporate tax burden. Moreover, complexity and lack of transparency of the tax system are on the rise. These findings call for a major overhaul of the system, notably of the composition of tax revenues (see on this *Köppl – Schratzenstaller,* 2015).

6. References

Aiginger, K., Handler, H., Schratzenstaller, M., Tichy, G., et al., Ziele und Optionen der Steuerreform. Plädoyer für einen anspruchsvollen Ansatz, WIFO, Vienna, 2008, http://www.wifo.ac.at/wwa/pubid/33939.

Austrian Court of Audit, Transparenz von Begünstigungen im Einkommensteuerrecht, Bund 2013/3, Vienna, 2013.

Baumol, W., Oates, W., "The Use of Standards and Prices for Protection of the Environment", The Swedish Journal of Economics, 1971, 73(1), pp. 42-54.

Biricz, J., Fischer, F., Milz, J., Mitterlehner, A., Rainer, A., "Ausmaß und Verteilung der Steuer-Minderungen durch Ausnahmeregelungen bei der Lohn- und Einkommensteuer 2010", Statistische Nachrichten, 2013, (12).

Breuss, F., Kaniovski, S., Schratzenstaller, M., "Steuerreform 2004/05 – Maßnahmen und makroökonomische Effekte", WIFO-Monatsberichte, 2004, 76(8), pp. 627-643, http://monatsberichte.wifo.ac.at/25204.

European Commission (2014A), Taxation Trends in the European Union, Brussels, 2014.

European Commission (2014B), Tax Reforms in EU Member States 2014, Brussels, 2014.

European Commission (2014C), "The Use of Tax Expenditures in Times of Fiscal Consolidation", European Economy, Economic Papers, 2014, (523).

European Commission, DG ECFIN, Winter Forecast, Brussels, 2015.

European Commission, Effective Levels of Company Taxation within an Enlarged EU, Studie des ZEW, Mannheim, 2013.

Eurostat, Environmental Taxes – A Statistical Guide, Luxembourg, 2001.

Farny, O., Innreiter, P., Lunzer, G., Mühlböck, V., Saringer, M., Führen höhere Abgabenquoten zu geringerem Wirtschaftswachstum?, Kammer für Arbeiter und Angestellte für Wien, Vienna, 2010.

Federal Ministry of Finance, Die wichtigsten Steuern im internationalen Vergleich, Berlin, 2014.

Fiscal Council, Bericht über die öffentlichen Finanzen 2013, Vienna, 2014.

Heckemeyer, J.H., Overesch, M., "Auswirkungen der Besteuerung auf Entscheidungen international tätiger Unternehmen", Die Betriebswirtschaft, 2012, 72(6), pp. 451-472.

Kofler, G., Schellmann, G., Verfassungsrechtliche Aspekte der land- und forstwirtschaftlichen Vollpauschalierung, Studie im Auftrag der Bundesarbeitskammer, Wien, 2011, http://emedien.arbeiterkammer.at/viewer/resolver?urn=urn:nbn:at:at-akw:g-24152.

Köppl, A., Schratzenstaller, M., "The Austrian Tax System – Perspectives for Reform", WIFO Bulletin, 2015, 20(6), pp. 72-79, http://bulletin.wifo.ac.at/57902.

Meghir, C., Phillips, D., "Labour Supply and Taxes", in Mirrlees, J., et al. (Eds.), Dimensions of Tax Design, Oxford, 2010, pp. 202-274.

OECD (2014A), Taxing Wages, Paris, 2014.

OECD (2014B), The Effectiveness of Reduced VAT Rates as a Redistributional Tool, Paris, 2014.

OECD (2014C), Revenue Statistics 1965-2013, Paris, 2014.

OECD, Choosing a Broad Base – Low Rate Approach to Taxation, Paris, 2010.

OECD, Taxation and Employment, Paris, 2011.

Pesendorfer, K., "Steuern und Wachstum in Austria", Geldpolitik und Wirtschaft, 2008, (2008/Q3), pp. 22-43.

Reiss, L., Köhler-Töglhofer, W., "Austrias Steuerstruktur im internationalen Vergleich – Eine statistisch-ökonomische Analyse", Geldpolitik und Wirtschaft, 2011, (2011/Q1), pp. 22-43.

Schratzenstaller, M. (2013A), "Gesellschaftliche Steuerung durch Steuern", Aus Politik und Zeitgeschichte, 2013, 63(10-11), pp. 20-25.

Schratzenstaller, M. (2013B), "Staatsquoten – Definitionen, Grenzen der Vergleichbarkeit und Aussagekraft", Wirtschaftsdienst, 2013, 93(3), pp. 204-206.

Schratzenstaller, M. (2014A), "Short- and Medium-Term Prospects of Fiscal Policy. Draft Federal Budget 2014-15 and Federal Medium-Term Expenditure Framework 2015-2018", WIFO Bulletin, 2014, 20(3), pp. 31-46, http://bulletin.wifo.ac.at/50943.

Schratzenstaller, M. (2014B), Familienpolitik in ausgewählten europäischen Ländern im Vergleich, WIFO, Vienna, 2014, http://www.wifo.ac.at/wwa/pubid/50840.

Schratzenstaller, M., "The Tax Reform 2009-10", WIFO Austrian Economic Quarterly, 2009, 14(4), pp. 217-232, http://www.wifo.ac.at/wwa/pubid/37881.