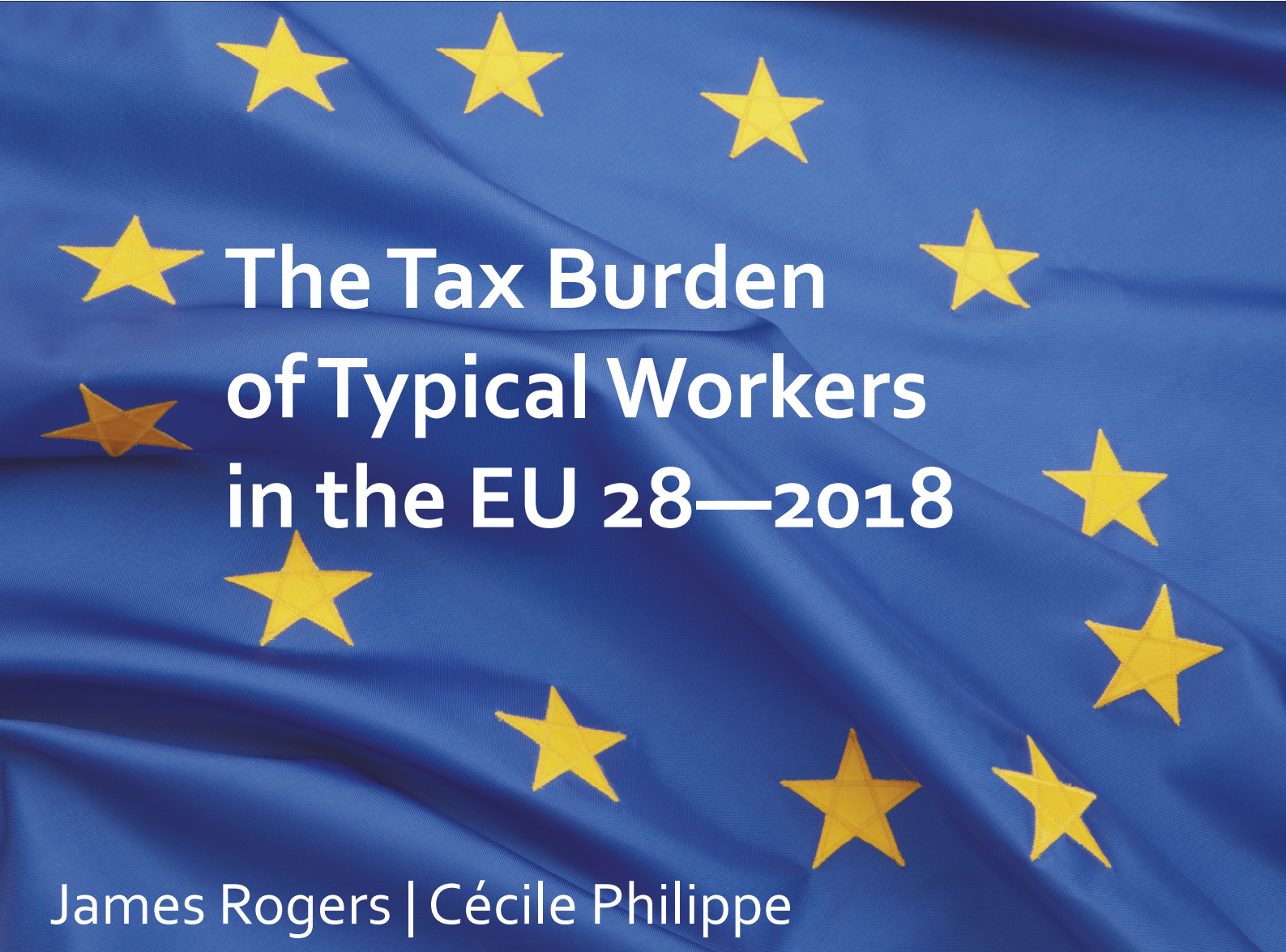




The Tax Burden of Typical Workers in the EU 28—2018

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Abstract

The purpose of this study is to compare the tax and social security burdens of individual employees earning typical salaries in each of the 28 member states of the European Union and, in doing so, to determine a “tax liberation day” – measuring how much of each year’s work is devoted to paying taxes – for workers in each country.

In addition, the study tracks year-to-year trends in the total cost, including taxation, of hiring salaried employees in the EU-28.

Background

Numerous studies rank political systems by various measures of “economic freedom”. While valuable to economists, the aggregate data in these studies fail to shed light on the working individual’s role in financing their state and social security.

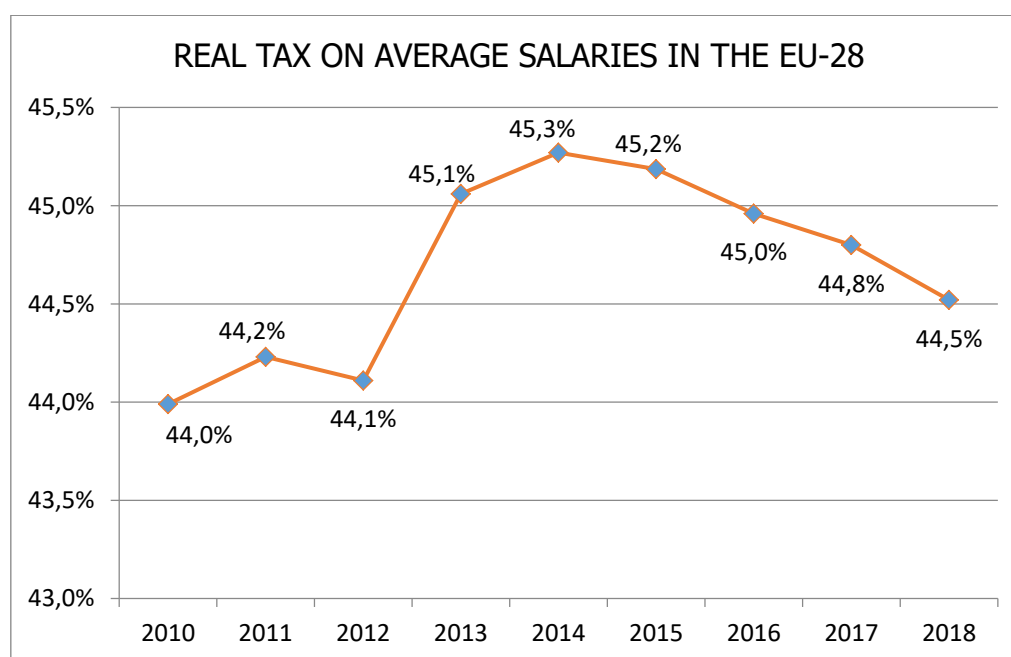
In addition, many organizations determine an annual “tax freedom day” for their countries. Unfortunately, conflicting approaches to this calculation make cross-border comparisons difficult.

This study aims to create an “apples to apples” comparison of tax rates, with data that reflect the reality experienced by real, working people in the European Union. Finally, it serves as a guide to the true cost of hiring employees in each member state.

Main Results

On average, a respite for workers from ever-rising taxes...

For the fourth consecutive year, typical workers in the European Union see their average “real tax rate” decrease (0.3%) this year, from 44.8% to 44.5%. Still, workers’ tax rates remain higher than in 2010, due in large part to VAT increases in 20 of the 28 member states during this period.



...while prevalence of “hidden” tax contributions continues

Employer contributions to social security are paid “on top” of gross salaries and do not appear on most workers’ payslips. These “invisible” taxes currently represent 43% of all payroll taxes collected in the EU – down from 44% five years ago, due largely to Belgium’s gradual reduction of these rates since 2016.

Noteworthy in 2018

France retains its position as the EU member state that taxes labour at the highest rate. 56.7% of the cost of a salary goes to the government there, making the French worker's tax liberation day the 27th of July – nine days later than in **Austria**, home of the next-highest taxed workers, where significant reductions in labour-related taxes are expected next year.

The Tax Liberation Day in **Hungary** (2 July) is now 34 days later than in the first edition of this study (2010), when Hungarian workers' salaries were the EU's highest-taxed (06 August). Despite an increase in VAT from 20% to 27% in 2017, recent reforms including lower personal income taxes and reduced employer contributions to social security have had an impact: Hungarian workers' real net pay is 55.2% in 2018 than in 2010, and Hungary's unemployment rate has fallen from a peak of nearly 12% to only 3.7% in July 2018.

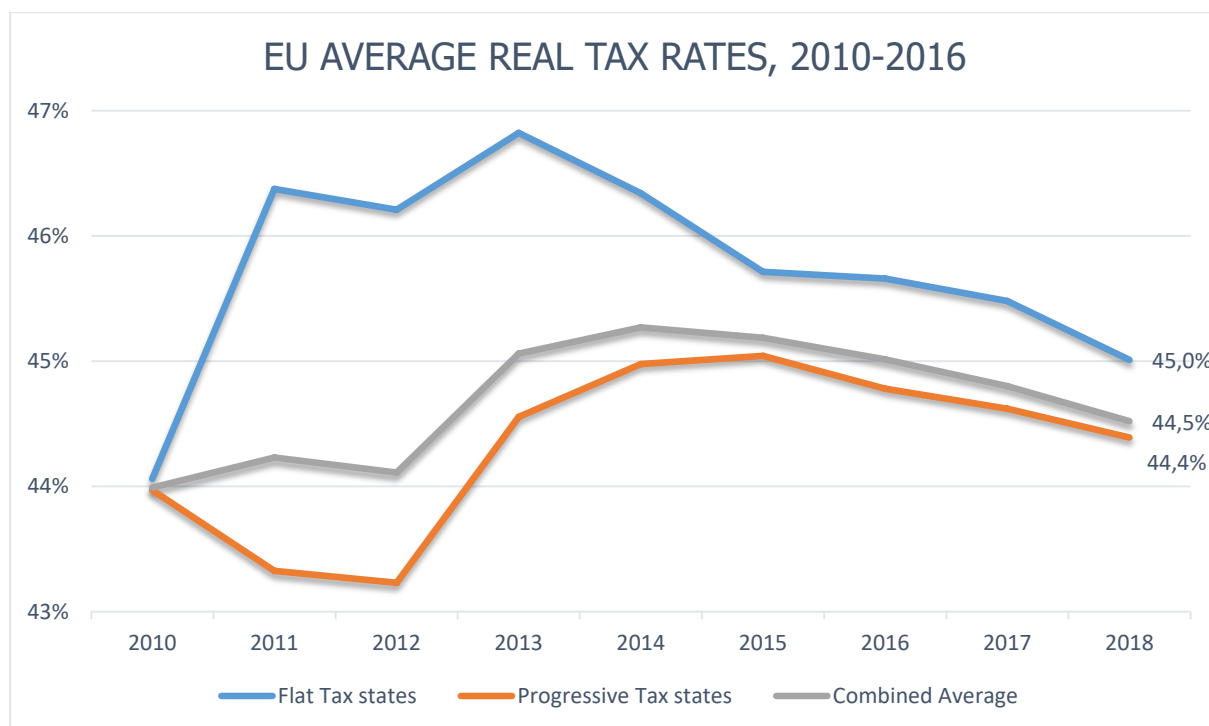
In contrast, for the second consecutive year, the Tax Liberation Day in **Greece** (10 July) is now 27 days later than in 2010 (13 June). Salaries have dropped as taxes have risen, such that a typical Greek worker's annual take-home pay has dropped 21%, (approximately 3,420 €) from 2010-2018, and he began paying a higher rate of VAT last year.

The tax liberation day for workers in **Belgium** came 10 days earlier in 2018, on 17 July. The ongoing implementation the "tax shift" provided about 500€ of income tax relief to workers in **Belgium**, who now face higher taxes on electricity, diesel fuel, alcohol and other consumables. Greater savings (approx. 2,200€) again went to their employers. Continuing implementation of the new policies are expected to reduce employees' take-home pay further in 2019 and 2020.

For the first time since this study was published in 2010, none of the 28 EU members altered **VAT rates** in 2018.

Gap between flat-tax and progressive-tax countries continues

EU governments with “flat tax” policies continue to tax workers at higher rates than those in progressive tax countries. Six EU member states – including the EU’s five poorest – have flat tax policies.



Generally, flat tax policies impose a fixed rate on income tax, the lowest being 10% in Bulgaria – where workers have the lowest gross salaries in the EU.

Social security contribution rates in these countries are higher than in progressive systems – on average, social contributions make up 74.9% of payroll taxes collected in “flat tax” countries. (Not that the flat income tax rates are lower, either: Of the 10 countries assessing the lowest income tax rates on a typical worker’s salary, 8 have progressive income tax systems.)

Outlook

Higher pension and health care expenditures are among the primary effects of the ageing of Europe's population, and there are fewer workers to pay for these costs; despite a decrease in the unemployment rate (down from 9.7% in 2010 to 7.1% in 2018), only 239 million (47%) of the EU's 508 million citizens are in the labour force¹; this figure has risen only 1.3% since 2011.

Economic growth remains European workers' best hope against tax increases in the near term.

¹Estimates of EU population (2018) from Eurostat and labour force (2016) from CIA World Factbook.

Definitions and Methodology

The following terms are used in this study:

Real Gross Salary represents the total cost of employing an individual, including social security contributions made on top of an employee's salary.

Real Net Salary is the "bottom line" figure: How much cash a worker has left over to spend that will not be paid to the state (other additional taxes – such as those on petrol, airline tickets and alcohol – are not considered in this study).

An individual's **Real Tax Rate** is:

$$\frac{\text{Social Security Contributions} + \text{Income Tax} + \text{VAT}}{\text{Real Gross Salary}}$$

This percentage of 365 determines the **Tax Liberation Day**, the calendar date on which an employee (beginning work, in theory, on January 1st), would earn enough to pay his annual tax burden.

2018 Tax Liberation Day Calendar

MARCH	27	Cyprus
APRIL	10	Malta
	26	Ireland
MAY	8	United Kingdom
	23	Bulgaria
	30	Luxembourg
	31	Denmark
JUNE	8	Spain
	8	Estonia
	10	Slovenia
	11	Croatia
	12	Portugal
	12	Latvia
	15	Poland
	19	Romania
	19	Finland
	19	Lithuania
	21	Czech Republic
	21	Slovakia
	21	Netherlands
	23	Sweden
JULY	2	Hungary
	8	Italy
	10	Greece
	10	Germany
	17	Belgium
	18	Austria
	27	France

Data Summary

Country	Real Gross Salary ²	Employer Social Security	Gross Salary ³	Income Tax	Employee Social Security	Take-home Pay (Net Income)	VAT Rate	Estimated VAT	Real Net Salary	Real Tax Rate	Tax Liberation Day 2015
Austria	57,887	13,478	44,409	8,080	8,047	28,282	20.0%	1,838	26,444	54.32%	18-Jul
Belgium	57,443	10,873	46,570	12,304	6,056	28,210	21.0%	1,925	26,285	54.24%	17-Jul
Bulgaria⁴	6,862	1,106	5,756	496	793	4,466	20.0%	290	4,176	39.15%	23-May
Croatia⁵	14,623	2,146	12,477	1,095	2,495	8,887	25.0%	722	8,165	44.16%	11-Jun
Cyprus⁶	25,134	2,592	22,542	257	1,758	20,527	19.0%	1,268	19,259	23.37%	27-Mar
Czech Republic	17,336	4,399	12,937	1,626	1,423	9,888	21.0%	675	9,213	46.86%	21-Jun
Denmark	55,725	305	55,420	19,691	153	35,576	25.0%	2,891	32,685	41.35%	31-May
Estonia[†]	18,141	4,501	13,640	2,198	491	10,951	20.0%	712	10,239	43.56%	08-Jun
Finland	53,590	9,774	43,816	8,594	4,088	31,134	24.0%	2,428	28,705	46.44%	19-Jun
France	56,815	18,766	38,049	2,485 ⁷	9,273	26,291	20.0%	1,709	24,582	56.73%	27-Jul
Germany	57,072	9,263	47,809	8,871	9,813	29,125	19.0%	1,798	27,326	52.12%	10-Jul
Greece	25,105	5,031	20,074	3,817	3,212	13,045	24.0%	1,017	12,027	52.09%	10-Jul
Hungary[†]	12,962	2,250	10,712	1,607	1,982	7,124	27.0%	625	6,498	49.86%	02-Jul
Ireland	39,418	3,826	35,592	5,005	1,424	29,163	23.0%	2,180	26,983	31.55%	26-Apr
Italy	39,792	9,150	30,642	6,969	2,908	20,765	22.0%	1,485	19,280	51.55%	08-Jul
Latvia⁸	12,791	2,483	10,308	1,583	1,134	7,483	21.0%	511	6,972	44.65%	12-Jun
Lithuania⁹	12,309	3,026	9,283	1,381	835	7,067	21.0%	482	6,585	46.51%	19-Jun
Luxembourg	64,632	8,435	56,197	8,944	6,913	40,340	17.0%	2,229	38,111	41.03%	30-May
Malta¹⁰	21,273	1,934	19,339	996	1,934	16,409	18.0%	960	15,449	27.38%	10-Apr
Netherlands	60,495	9,642	50,853	9,671	6,799	34,383	21.0%	2,347	32,037	47.04%	21-Jun
Poland	13,844	2,366	11,478	824	2,465	8,189	23.0%	612	7,577	45.27%	15-Jun
Portugal	21,682	4,161	17,521	2,581	1,927	13,013	23.0%	973	12,041	44.47%	12-Jun
Romania¹¹	8,368	1,590	6,779	906	1,118	4,755	19.0%	294	4,461	46.69%	20-Jun
Slovakia	14,353	3,737	10,616	1,024	1,423	8,170	20.0%	531	7,639	46.78%	20-Jun
Slovenia	21,024	2,916	18,109	1,377	4,002	12,730	22.0%	910	11,820	43.78%	09-Jun
Spain	34,111	7,851	26,259	3,838	1,667	20,754	21.0%	1,416	19,337	43.31%	08-Jun
Sweden	58,059	13,881	44,178	10,939	0	33,240	25.0%	2,701	30,539	47.40%	23-Jun
United Kingdom	47,066	4,687	42,379	5,770	3,933	32,677	20.0%	2,124	30,553	35.08%	09-May

All figures in euros. Flat tax countries are marked with a dagger (†).

² Total cost of employment, social security, income tax and net income calculated by EY. Other calculations by Institut Économique Molinari.

³ Unless otherwise noted, Average Gross Salary figures are from OECD's *Taxing Wages* or Eurostat's *Annual gross earnings in industry and services*.

⁴ Average Gross Salary figure for Bulgaria from the national statistics office: <http://www.nsi.bg>

⁵ Average Gross Salary figure for Croatia from the national statistics office: <http://www.dzs.hr>

⁶ Average Gross Salary figure for Cyprus from the national statistics office: www.mof.gov.cy

⁷ *Année de transition*: Income tax for 2017 is collected in 2018. Income tax will be deducted "at the source" (as in other countries) beginning in 2019.

⁸ Average Gross salary for Latvia from the national statistics office: <http://csb.gov.lv>

⁹ Average Gross salary for Lithuania from the national statistics office: <http://osp.stat.gov.lt>

¹⁰ Average Gross salary for Malta from the national statistics office: <http://nso.gov.mt>

¹¹ Average Gross salary for Romania from the national statistics office: <http://insse.ro>

Research Notes

Gross Salary

When available, salary figures come from the OECD's *Taxing Wages* and from Eurostat's *Average gross annual earnings in industry and services*. Others are sourced from government statistics offices (see footnotes on page 9).

In euros, gross salaries ranged from 5,756€ (Bulgaria) to 56,197€ (Luxembourg). The average gross salary among the 28 states was 27,250€.

Employer Contributions to Social Security

These taxes – which are invisible to most employees, who see only deductions from their gross salaries on their pay slips – vary to a great degree. For typical workers, these costs range from less than 1% of gross salary (Denmark) to 49% (France).

Individual Contributions to Social Security

Visible on employees' payslips, the lower and upper reaches of these deductions are set, respectively, by Sweden and Denmark (less than 1 %) and Romania (35%).

Total Contributions to Social Security

France (74%) is the only country taking more than half of a typical worker's gross salary for social security contributions. Slovakia (49%) and Austria (48%) collect the next-largest shares.

As a group, flat tax countries collected 37.2% of average gross salaries as social security contributions, 2.7% more than in progressive systems.

Personal Income Taxes

In Denmark, where combined social security contributions remain the lowest (as a percentage), personal income taxes are the highest (35.5%). At 1.1% of gross salary, typical workers in Cyprus have the lowest income tax rates in the EU.

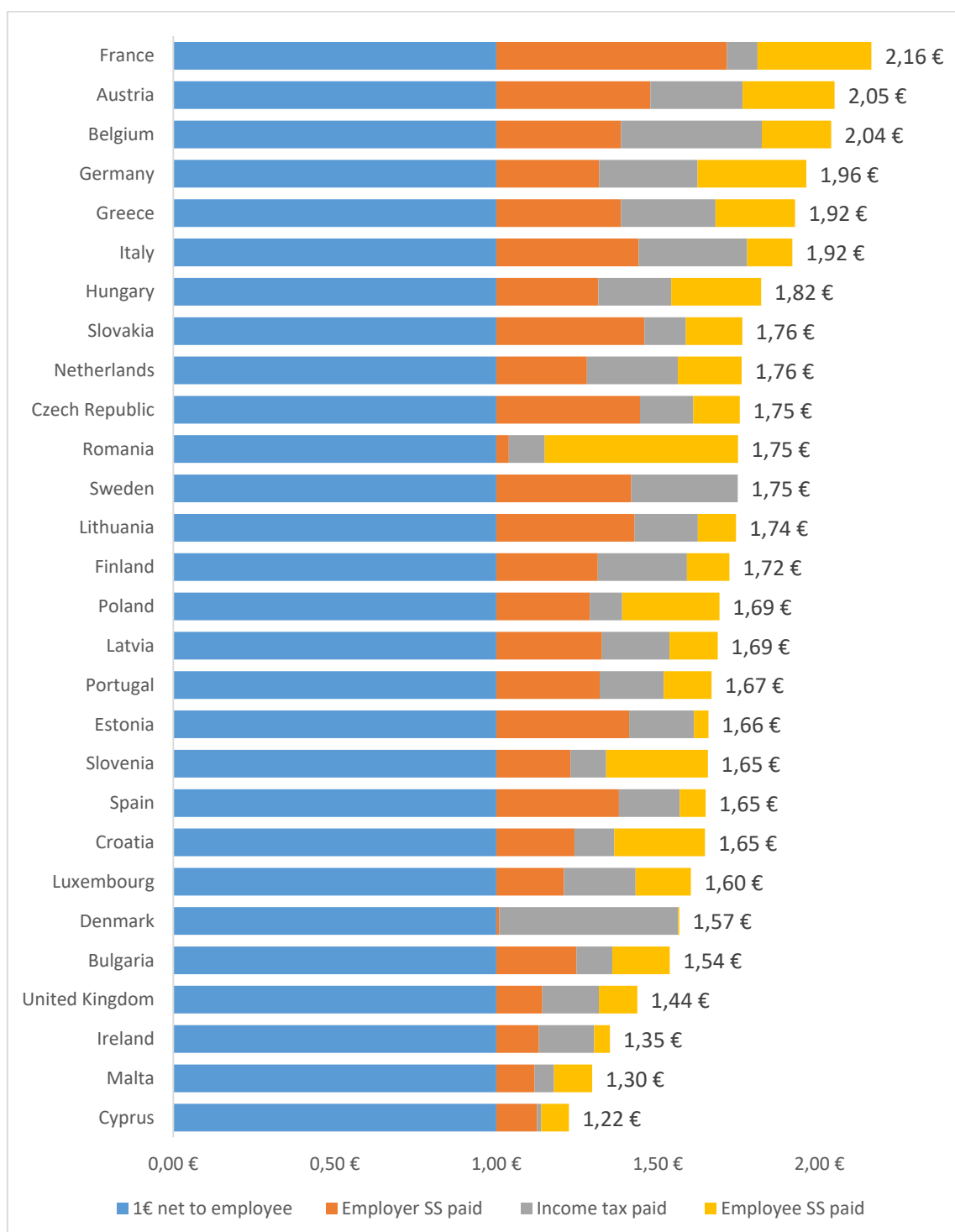
Estimated Value-Added Tax (VAT)

20 of the 28 EU member states have increased VAT rates since 2009, with the largest hikes implemented in Hungary (from 20% to 27%), the United Kingdom (from 15% to 20%), Spain (from 16% to 21%), Romania (from 19% to 24%, then back to 19%) and Greece (from 19% to 23%). The countries without VAT increases since 2009 are: Austria, Belgium, Bulgaria, Denmark, Germany, Latvia, Malta, and Sweden.

To determine estimated VAT we assume, conservatively, that only 32.5% of a worker's net income will be subject to VAT. *Estimated Rent* is assumed to be 35% of the employee's net (take-home) income. After subtracting rent, remaining net income is divided in half to estimate the sum left over that will be subject to VAT when spent.

Appendix 1: Cost to employer of €1 net to employee

The chart below shows what employers must spend to pay each net euro to an employee. The figures do not include VAT.



Appendix 2: Rankings by total cost of employment, total tax burden and real net salary¹²

Rank	TOTAL EMPLOYMENT COST		TOTAL TAX BURDEN		REAL NET SALARY	
1	Luxembourg	64,632	France	32,233	Luxembourg	38,111
2	Netherlands	60,495	Austria	31,443	Denmark	32,685
3	Austria	57,887	Belgium	31,159	Netherlands	32,037
4	Belgium	57,443	Germany	29,745	United Kingdom	29,807
5	Germany	57,072	Netherlands	28,459	Sweden	29,683
6	France	56,815	Sweden	26,771	Finland	28,705
7	Sweden	56,454	Luxembourg	26,521	Germany	27,326
8	Denmark	55,725	Finland	24,884	Ireland	26,983
9	Finland	53,590	Denmark	23,039	Austria	26,444
10	United Kingdom	45,793	Italy	20,512	Belgium	26,285
11	Italy	39,792	United Kingdom	15,986	France	24,582
12	Ireland	39,418	Spain	15,077	Spain	19,619
13	Spain	34,696	Greece	13,077	Italy	19,280
14	Cyprus	25,134	Ireland	12,435	Cyprus	19,259
15	Greece	25,105	Portugal	9,642	Malta	15,449
16	Portugal	21,682	Slovenia	9,321	Portugal	12,041
17	Malta	21,273	Czech Republic	8,123	Greece	12,027
18	Slovenia	21,237	Estonia	7,902	Slovenia	11,916
19	Estonia	18,141	Slovakia	6,925	Estonia	10,239
20	Czech Republic	17,336	Hungary	6,463	Czech Republic	9,213
21	Slovakia	14,761	Croatia	6,458	Croatia	8,165
22	Croatia	14,623	Poland	6,267	Slovakia	7,836
23	Poland	13,844	Cyprus	5,875	Poland	7,577
24	Hungary	12,962	Malta	5,824	Latvia	6,972
25	Latvia	12,791	Lithuania	5,724	Lithuania	6,585
26	Lithuania	12,309	Latvia	5,711	Hungary	6,498
27	Romania	7,618	Romania	3,529	Bulgaria	4,176
28	Bulgaria	6,862	Bulgaria	2,686	Romania	4,089

¹² All figures in Euros (€). Results include social charges, income taxes and estimated VAT.

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July 2018

Printed in Belgium

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