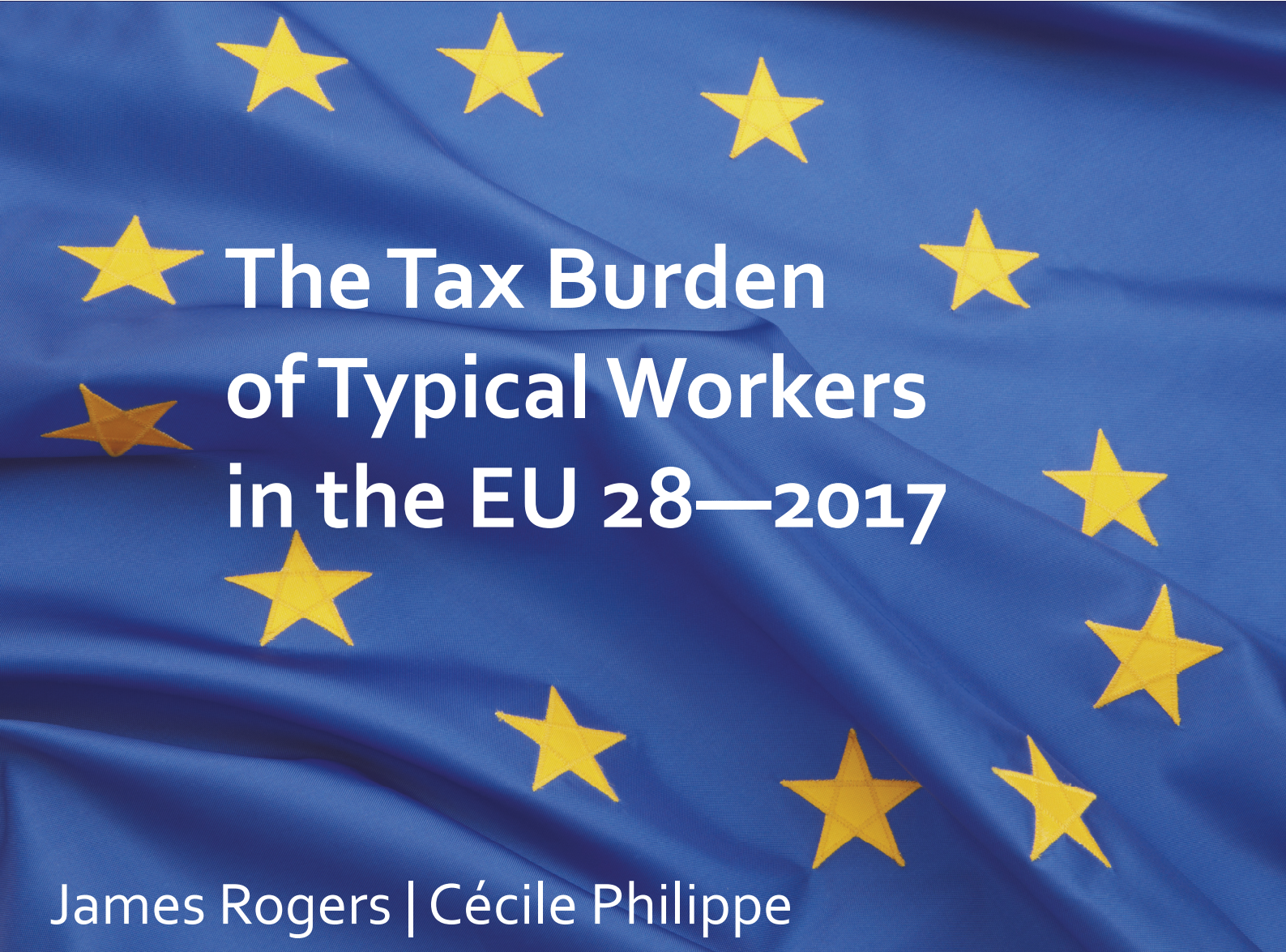




The Tax Burden of Typical Workers in the EU 28—2017

James Rogers | Cécile Philippe

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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.

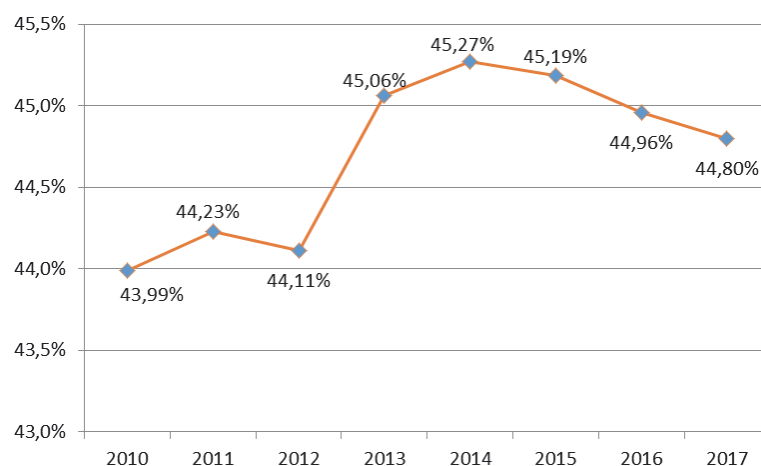
This study aims to create an “apples to apples” comparison of tax rates, with data that reflect the reality experienced by real, working people in the European Union. Finally, it serves as a guide to the true cost of hiring employees in each member state.

MAIN RESULTS

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

For the third consecutive year, typical workers in the European Union see their average “real tax rate” dip slightly (0.16%) this year, from 44.96% to 44.80%. Still, workers’ taxes remain nearly 1% higher than in 2010, due in large part to VAT increases in 20 of the 28 member states during this period.

Real tax rate for typical workers in the EU-28



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

Employer contributions to social security, which are paid on top of gross salaries and do not appear on most workers’ payslips, now represent 44.4% of all payroll taxes collected in the EU. Belgium substantially reduced this rate in 2016 (and is expected to do so further from 2018-2020), but other countries have increased their use of this “invisible” tax to the extent that the aggregate EU figure increased by 0.2% over the past three years.

Noteworthy in 2017

France retains its position as the EU member state that taxes labour at the highest rate. 57.41% of the cost of a salary goes to the government there, making the French worker’s tax liberation day the 29th of July. The French date has not changed in three years.

The Tax Liberation Day in **Hungary** (5 July) is now 31 days earlier than in the first edition of this study (2010), when Hungarian workers’ salaries were the

EU's highest-taxed (06 August) on labour. This year's reforms, which include lower personal income taxes and reduced employer contributions to social security, are expected to be followed by additional cuts in 2018. Despite the offsetting increase in VAT from 20% to 27%, Hungarian workers have seen their real net pay increase 42.8% since 2010.

In contrast, 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 3,300 €) during this period.

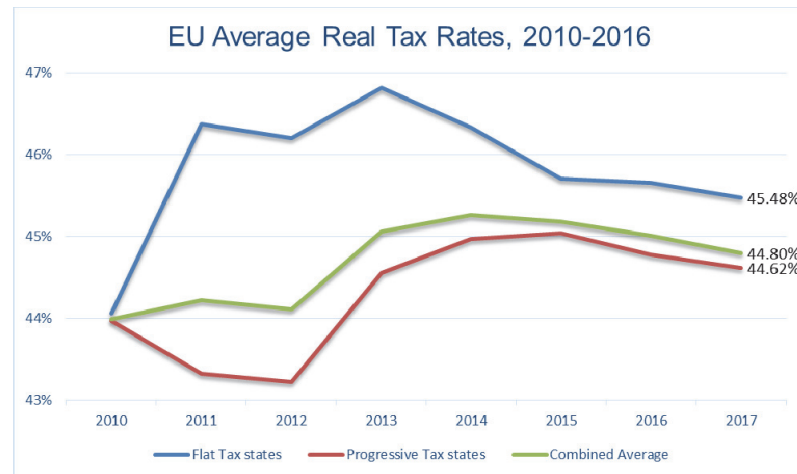
The "tax shift" in **Belgium** produces no new gains for its workers this year; their tax liberation day is again the 27th of July. In 2016, the real tax rate for Belgian workers dropped by 2.6%, accelerating the arrival of their tax liberation day by nine days. Unfortunately for workers, most of the tax savings went to employers, while workers faced higher taxes on electricity, diesel fuel, alcohol and other consumables. On the bright side, new policy implementations are expected to reduce employment costs and increase employees' take-home pay in 2018, 2019 and 2020.

Since the first edition of this study, 20 of the 28 EU members have raised VAT rates — but in 2017, **Romania** becomes the first to cut its standard VAT rate back to its 2010 level (19%); this follows a cut in 2016 from 24% to 20%. Greece, which also had a 19% standard rate in 2010, raised its rate again in 2017, from 23% to 24%.

Effective in 2017, a temporary budget-balancing tax of 0.5% was abolished in **Luxembourg**, moving that country's Tax Liberation Day forward nearly a week and back into the month of May. At Mat 29th, employees in the Grand Duchy are still working two weeks longer to pay taxes than they did in 2010.

Gap between flat-tax and progressive-tax countries widens

The gap widens this year: Europe's governments with "flat tax" policies continue to tax workers at higher rates than those in progressive tax countries. Six member states — all among the EU's ten poorest — have flat tax policies.



Generally, flat tax policies impose a fixed rate on income tax, the lowest being 10% in Bulgaria. Social security contribution rates in these countries are higher than in progressive systems — on average, social contributions make up 72% 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 workers, 9 have progressive income tax systems.) In addition, 4 of the EU's 6 flat tax countries (Bulgaria and Romania being the exceptions) have higher standard VAT rates than in 2009.

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 8.9% to 8.2% in 2016), only 45.4% of EU citizens were in the labour force in 2016, 0.3% lower than when the first edition of this study was released in 2010. Once again, budget cuts and economic growth remain workers' best hopes against tax increases in the near term.

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:

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

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.

2017 TAX FREEDOM DAY CALENDAR

MARCH	27	Cyprus
APRIL	19	Malta
	26	Ireland
MAY	9	United Kingdom
	21	Bulgaria
	29	Luxembourg
JUNE	1	Denmark
	8	Spain
	9	Estonia
	9	Slovenia
	11	Portugal
	12	Croatia
	14	Poland
	19	Finland
	20	Lithuania
	20	Czech Republic
	20	Romania
	20	Netherlands
	20	Latvia
	20	Slovakia
	23	Sweden
JULY	5	Hungary
	8	Italy
	10	Greece
	10	Germany
	18	Austria
	27	Belgium
	29	France

DATA SUMMARY (ALL FIGURES IN EUROS)

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 2017
Austria	56,942	13,458	43,484	7,761	7,879	27,844	20.0%	1,810	26,034	54.28%	18-Jul
Belgium	59,775	13,082	46,693	12,868	6,072	27,753	21.0%	1,894	25,858	56.74%	27-Jul
Bulgaria ⁴	6,256	970	5,286	458	705	4,123	20.0%	268	3,855	38.39%	21-May
Croatia ⁵	14,768	2,167	12,601	1,147	2,520	8,934	25.0%	726	8,208	44.42%	12-Jun
Cyprus ⁶	25,189	2,598	22,591	266	1,762	20,564	19.0%	1,270	19,294	23.40%	27-Mar
Czech Republic	15,763	4,000	11,764	1,445	1,294	9,024	21.0%	616	8,409	46.66%	20-Jun
Denmark	54,901	306	54,596	19,434	153	35,009	25.0%	2,844	32,165	41.41%	01-Jun
Estonia [†]	16,649	3,723	12,926	1,937	219	10,770	20.0%	700	10,070	39.51%	25-May
Finland	53,247	9,711	43,536	8,496	4,062	30,978	24.0%	2,416	28,562	46.36%	19-Jun
France	56,499	18,707	37,792	2,542	9,516	25,735	20.0%	1,673	24,062	57.41%	29-Jul
Germany	56,180	9,138	47,042	8,785	9,679	28,578	19.0%	1,765	26,813	52.27%	10-Jul
Greece	25,383	5,086	20,296	3,862	3,247	13,187	24.0%	1,029	12,159	52.10%	10-Jul
Hungary [†]	12,682	2,413	10,269	1,540	1,900	6,829	27.0%	599	6,230	50.88%	05-Jul
Ireland	38,593	3,746	34,847	4,992	1,394	28,461	23.0%	2,127	26,334	31.77%	26-Apr
Italy	39,880	9,170	30,710	6,990	2,914	20,806	22.0%	1,488	19,318	51.56%	08-Jul
Latvia ^{†7}	12,132	2,316	9,816	1,855	1,031	6,930	21.0%	473	6,457	46.77%	20-Jun
Lithuania ^{†8}	11,363	2,793	8,569	1,285	771	6,513	21.0%	444	6,068	46.60%	20-Jun
Luxembourg	63,836	8,273	55,563	8,699	6,837	40,027	17.0%	2,211	37,815	40.76%	29-May
Malta ⁹	18,497	1,934	16,563	2,062	1,934	12,567	18.0%	735	11,832	36.03%	12-May
Netherlands	58,609	9,374	49,235	9,043	6,695	33,497	21.0%	2,286	31,211	46.75%	20-Jun
Poland	12,483	2,133	10,350	734	2,223	7,393	23.0%	553	6,840	45.20%	14-Jun
Portugal	21,384	4,104	17,280	2,512	1,901	12,867	23.0%	962	11,905	44.33%	11-Jun
Romania ^{†10}	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 contributions, personal income tax figures 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. Average Gross salary for Latvia from the national statistics office: <http://csb.gov.lv>
8. Average Gross salary for Lithuania from the national statistics office: <http://osp.stat.gov.lt>
9. Average Gross salary for Malta from the national statistics office: <http://nso.gov.mt>
10. Average Gross salary for Romania from the national statistics office: <http://insse.ro>

Tax calculations provided by



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 8).

In euros, gross salaries ranged from 5,286€ (Bulgaria) to 55,563€ (Luxembourg). The average gross salary among the 28 states was 26,790€.

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 50% (France).

Individual Contributions to Social Security

Visible on employees' payslips, the lower and upper reaches of these deductions are also set, respectively, by Sweden and Denmark (less than 1%) and France (nearly 25%).

Total Contributions to Social Security

France (75.4%) is the only country taking more than half of a typical worker's gross salary for social security contributions. Austria and Slovakia, at 49%, collect the next-largest share.

As a group, flat tax countries collected 37.7% of average gross salaries as social security contributions, 2.9% 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 (35.6%). At 1.2% 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.

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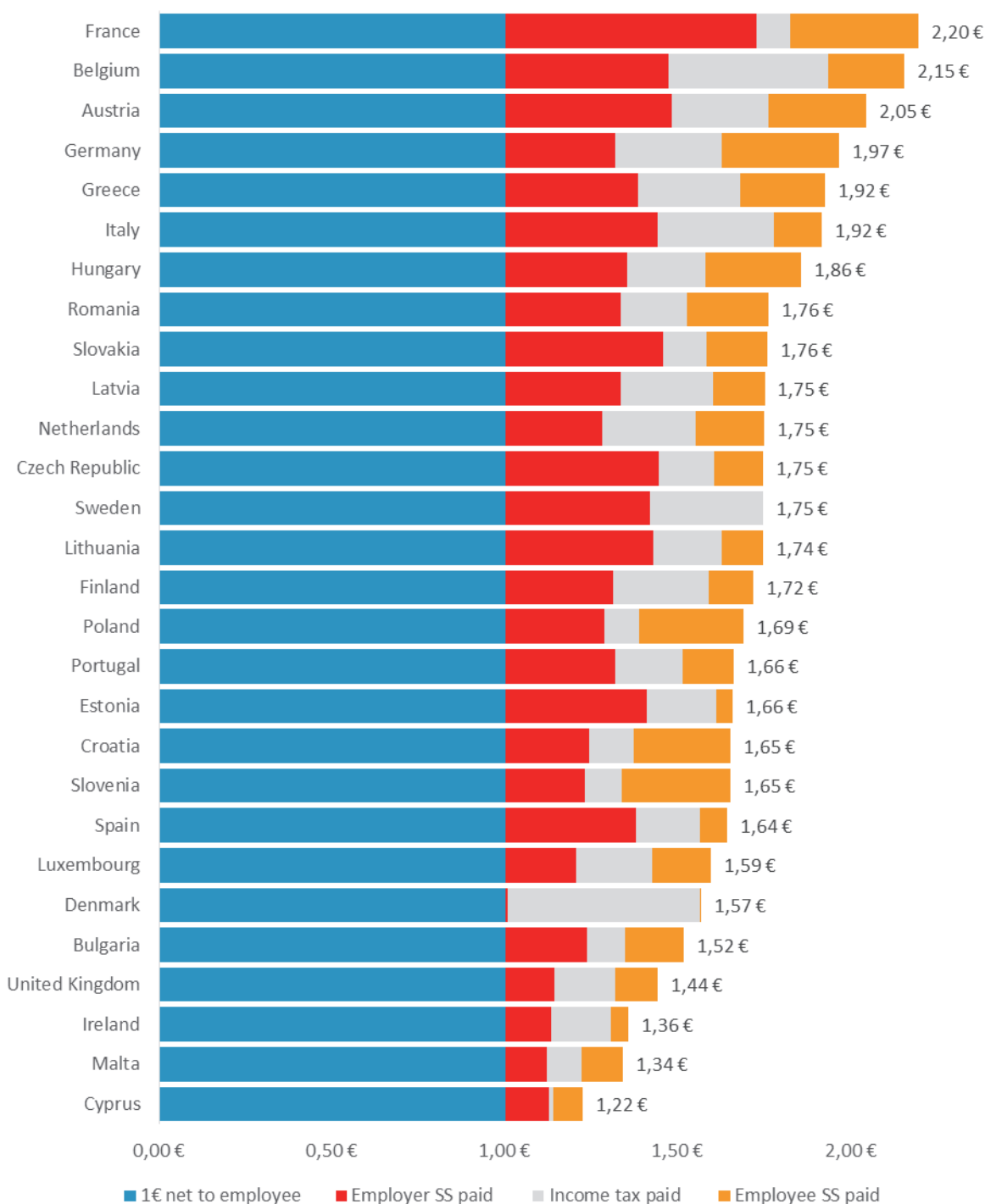
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APPENDIX 1: COST TO EMPLOYER OF €1 NET TO EMPLOYEE

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 SALARY*

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

Rank	TOTAL EMPLOYMENT COST		TOTAL TAX BURDEN		REAL NET SALARY	
1	Luxembourg	63 836	Belgium	33 916	Luxembourg	37 815
2	Belgium	59 775	France	32 437	Denmark	32 165
3	Netherlands	58 609	Austria	30 908	Netherlands	31 211
4	Sweden	58 059	Germany	29 367	United Kingdom	30 553
5	Austria	56 942	Sweden	27 520	Sweden	30 539
6	France	56 499	Netherlands	27 399	Finland	28 562
7	Germany	56 180	Luxembourg	26 021	Germany	26 813
8	Denmark	54 901	Finland	24 685	Ireland	26 334
9	Finland	53 247	Denmark	22 737	Austria	26 034
10	United Kingdom	47 066	Italy	20 562	Belgium	25 858
11	Italy	39 880	United Kingdom	16 513	France	24 062
12	Ireland	38 593	Spain	14 774	Spain	19 337
13	Spain	34 111	Greece	13 224	Italy	19 318
14	Greece	25 383	Ireland	12 259	Cyprus	19 294
15	Cyprus	25 189	Portugal	9 479	Malta	12 786
16	Portugal	21 384	Slovenia	9 205	Greece	12 159
17	Slovenia	21 024	Estonia	7 489	Portugal	11 905
18	Malta	18 219	Czech Republic	7 355	Slovenia	11 820
19	Estonia	17 191	Slovakia	6 715	Estonia	9 702
20	Czech Republic	15 763	Croatia	6 560	Czech Republic	8 409
21	Croatia	14 768	Hungary	6 453	Croatia	8 208
22	Slovakia	14 353	Cyprus	5 895	Slovakia	7 639
23	Hungary	12 682	Latvia	5 674	Poland	6 840
24	Poland	12 483	Poland	5 643	Latvia	6 457
25	Latvia	12 132	Malta	5 433	Hungary	6 230
26	Lithuania	11 363	Lithuania	5 295	Lithuania	6 068
27	Romania	8 368	Romania	3 907	Romania	4 461
28	Bulgaria	6 256	Bulgaria	2 402	Bulgaria	3 855