



# The Tax Burden of Typical Workers in the EU 27

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Study published in collaboration with



Tax calculations provided by



## OBJECTIVE OF THE STUDY

The purpose of this study is to compare the tax and social burdens of salaried employees in the 27 Member States of the European Union and, in doing so, determine a "tax freedom day" for *individuals* who are *working* in those countries.

## STUDY INTEREST

Numerous studies have ranked political systems offering low taxes and "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 think tanks 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. Further, it will gauge the true cost of hiring employees in each state.

## MAIN RESULTS

### Taxes are on the rise in Europe and are largely invisible

As a single economic entity, the European Union saw its average "real tax rate" rise slightly from 43.99% in 2010 to 44.23% in 2011. The average real tax rate for typical EU wage earners Europeans rose by 0.25% in 2011 – primarily a consequence of VAT increases in 13 EU member states since 2009.

42.8% of all payroll taxes collected in the EU – employer contributions to social security paid on top of gross salaries – are largely invisible to employees.

Retired, disabled, disenfranchised or simply too young, more than half (54.3%) of EU citizens are not in the labour force<sup>1</sup>. Tax-wise, working people most carry most of the weight – a weight that will grow heavier as populations grow even older.

### Losers and Winners

Belgium taxes labour at the highest rate in the European Union; an employer in Brussels spends 2.43 euros to put 1€ into a typical worker's pocket – and that worker's tax freedom day is August 4. Belgium takes over last place from Hungary, 2011's most severe tax collector.

On the contrary, Cyprus is the least taxed country in the EU.

In 2010, the four EU governments situated on islands – Cyprus, Malta, Ireland and the United Kingdom – took the smallest cut of their workers' earnings. This year, any geographic theories about taxation have been dispelled by a VAT hike that has forced the UK to give up fourth place to landlocked Luxembourg.

### Flat tax policies have offered considerable tax relief to workers

Flat tax policies have offered considerable tax relief to workers – notably in Hungary, where a new 16% rate has pushed that country's tax freedom day forward by 9 days. However, total taxes remain higher in "flat tax" countries (46.4%) than in "progressive" systems (43.3%) – a gap that has widened since 2010.

Many of the purported benefits of flat tax rates have been proven true: Their

simplicity facilitates compliance. Their low, "not-worth-the-crime" rates have prompted many underground dealers to emerge as "legitimate" businessmen. While providing tax relief to typical workers, they have also been successful in increasing overall tax revenues.

The flat rate is, however, only a *flat income tax rate*. As noted, social security contributions in these countries are far higher than in progressive systems. Moreover, 7 of the EU's 8 flat tax countries have raised VAT rates since 2009.

*Total Tax Rate for Typical Employees, 2011*

Flat tax countries: 46.4%

Non-flat tax countries: 43.3%

Finally, the gap between average tax burdens under these systems widened more than thirtyfold from 2010 to 2011, from 0.10% to 3.1%, due largely to the addition of high-tax Hungary to the flat tax club.

## 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 to spend that will not be paid to the state. (Other additional taxes – such as those on petrol, cigarettes, and alcohol – are not considered in this study.)

**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 Freedom Day**, the calendar date on which an employee (beginning work, in theory, on January 1<sup>st</sup>), would earn enough to pay his annual tax burden.



## 2011 TAX FREEDOM DAY CALENDAR

MARCH	13	Cyprus
APRIL	16	Malta
MAY	10	Ireland
	17	Luxembourg
	17	United Kingdom
	18	Bulgaria
	19	Spain
	29	Portugal
JUNE	03	Slovenia
	07	Poland
	07	Denmark
	10	Czech Republic
	11	Estonia
	12	Greece
	12	Finland
	15	Slovakia
	17	Netherlands
	19	Lithuania
	22	Latvia
JULY	01	Italy
	01	Romania
	10	Sweden
	11	Germany
	23	Austria
	26	France
	29	Hungary
AUGUST	04	Belgium

## DATA SUMMARY (ALL FIGURES IN EUROS)

Country	REAL GROSS SALARY <sup>2</sup>	EMPLOYER SOCIAL SECURITY	GROSS SALARY <sup>3</sup>	INCOME TAX	EMPLOYEE SOCIAL SECURITY	TAKE-HOME PAY <sup>4</sup>	VAT RATE	ESTIMATED VAT	REAL NET SALARY	REAL TAX RATE	TAX FREEDOM DAY 2011
Austria	51,237	12,214	39,023	7,697	7,051	24,275	20.0%	1,578	22,697	55.70%	Jul 23
Belgium	51,295	12,636	38,659	10,966	5,027	22,665	21.0%	1,547	21,118	58.83%	Aug 04
Bulgaria <sup>†</sup>	3,083	457	2,626	229	339	2,059	20.0%	134	1,925	37.57%	May 18
Cyprus	22,778	1,468	21,310	362	1,468	19,480	15.0%	950	18,530	18.65%	Mar 13
Czech Republic <sup>†</sup>	11,337	2,877	8,461	731	931	6,799	20.0%	442	6,357	43.93%	Jun 10
Denmark	53,469	290	53,179	19,847	145	33,187	25.0%	2,696	30,491	42.97%	Jun 07
Estonia <sup>†</sup>	11,292	2,890	8,402	1,403	235	6,764	20.0%	440	6,324	43.99%	Jun 11
Finland	43,824	7,710	36,114	7,238	2,576	26,301	23.0%	1,966	24,335	44.47%	Jun 12
France	48,492	16,079	32,413	4,508	5,301	22,604	19.6%	1,440	21,164	56.36%	Jul 26
Germany	48,129	7,929	40,200	7,307	8,392	24,502	19.0%	1,513	22,989	52.24%	Jul 11
Greece <sup>5</sup>	30,650	6,716	23,934	1,705	3,829	18,399	23.0%	1,375	17,024	44.46%	Jun 12
Hungary <sup>†</sup>	11,248	2,989	8,259	1,193	1,836	5,231	25.0%	425	4,806	57.28%	Jul 29
Ireland	44,143	4,285	39,858	7,943	1,330	30,585	21.0%	2,087	28,498	35.44%	May 10
Italy <sup>6</sup>	34,158	7,854	26,304	5,392	2,496	18,416	20.0%	1,197	17,219	49.59%	Jul 01
Latvia <sup>†</sup>	9,934	1,775	8,159	1,775	734	5,649	22.0%	404	5,245	47.20%	Jun 22
Lithuania <sup>†7</sup>	9,348	2,250	7,098	1,065	639	5,395	21.0%	368	5,027	46.23%	Jun 19
Luxembourg	51,406	6,122	45,284	5,794	5,522	33,968	15.0%	1,656	32,312	37.14%	May 17
Malta	17,247	1,568	15,679	1,077	1,568	13,034	18.0%	763	12,272	28.85%	Apr 16
Netherlands	49,300	7,300	42,000	6,433	7,126	28,440	19.0%	1,756	26,684	45.87%	Jun 17
Poland	8,479	1,262	7,217	436	1,550	5,231	23.0%	391	4,840	42.92%	Jun 07
Portugal	18,989	3,644	15,345	1,480	1,688	12,178	23.0%	910	11,267	40.67%	May 29
Romania <sup>†</sup>	6,193	1,368	4,825	645	796	3,384	24.0%	264	3,120	49.62%	Jul 01
Slovakia <sup>†</sup>	11,357	2,957	8,400	617	1,126	6,657	20.0%	433	6,224	45.19%	Jun 15
Slovenia <sup>8</sup>	15,526	2,153	13,373	793	2,955	9,625	20.0%	626	8,999	42.04%	Jun 03
Spain	28,436	6,545	21,891	1,701	1,390	18,800	18.0%	1,100	17,700	37.76%	May 19
Sweden	52,090	12,454	39,636	9,644	2,775	27,217	25.0%	2,211	25,005	52.00%	Jul 10
United Kingdom	47,118	4,680	42,438	6,737	4,070	31,632	20.0%	2,056	29,576	37.23%	May 17

Flat tax countries are marked with a dagger (†). A full version of the data table is available at: <http://www.institutmolinari.org>



## RESEARCH NOTES

### 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% in Denmark to nearly 50% in France.

### Gross Salary

When available, the *average gross annual earnings in industry and services* from Eurostat served as a starting point for our calculations; other figures came from OECD's *Taxing Wages* and from government statistics offices.

In euros, gross salaries ranged from 2,626 € (Bulgaria) to 53,179 € (Denmark). The median gross salary among EU Member States was 21,891 € (Spain), and the average among these states was 24,077 €.

Gross salary figures can be misleading, especially in those countries levying high employer taxes for social security.

### Individual Contributions to Social Security

Hungary, which imposed the highest taxes overall on typical workers in 2010, now inflicts only the second heaviest burden – much thanks to a flat income tax rate, introduced in 2011, of 16%. Hungary still demands another 22.2% of a worker's earnings, however, under the rubric of "social security contribution."

### Total Contributions to Social Security

France (66%) and Hungary (58%) are the only two countries taking more than half of a typical workers' gross salary for social security contributions.

As a group (Hungary included), flat tax countries collected 42% of the average gross salaries as social security contributions; 9% more than progressive systems.

### Personal Income Taxes

In Denmark, where social security costs are lowest (as a percentage), personal income taxes are the highest (37.3%).

Notwithstanding the low rates advertised by governments imposing a flat tax, the 5 countries assessing income taxes at the lowest rates (Cyprus, Slovenia, Poland, Malta and Greece) have progressive systems.

### **Estimated Value-Added Tax (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. Thus to determine Estimated VAT we assume, conservatively, that only 32.5% of a worker's net income will be subject to VAT.

13 EU Member States have increased VAT rates since 2009, with the largest hikes implemented in the distant corners of the Union: Britain's rate rose from 15 to 20%, Greece's from 19 to 23%, Portugal's from 20 to 23%, and Lithuania's from 19 to 21%.

Only one country has lowered its standard VAT rate since 2009: Ireland. However, Dublin has announced plans to raise the rate to 22% in 2013 and to 23% in 2014.

## REFERENCES

1. CIA World Factbook, 2010 estimates of EU population and labour force.
2. Total cost of employment, social security contributions and personal income tax figures calculated by Ernst & Young from gross salary figures provided.
3. Average Gross salary figures from Eurostat's "Annual gross earnings in industry and services," unless otherwise noted.
4. Net income (gross salary, minus employee social security, minus income tax) calculated by Ernst & Young.
5. Average Gross salary figure from OECD's *Taxing Wages* (2008).
6. Average Gross salary figure from OECD's *Taxing Wages* (2008).
7. Average Gross salary for manufacturing sector from *Statistikos Departamentas* (National Statistics Office of Lithuania) database.
8. Average Gross salary for manufacturing sector from the Statistical Office of the Republic of Slovenia database.

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