



EVROPSKÁ UNIE  
Evropské strukturální a investiční fondy  
Operační program Výzkum, vývoj a vzdělávání



# Principles of Income and Property Taxation: Introduction to Taxation

# Required Study Materials

- Presentations in InSIS
- Other study texts in InSIS

# What is a Tax?

- **Monetary (CZK, EUR, USD, etc.)**
- **Mandatory**
- **Nonequivalent (=taxpayer receives „nothing“ concrete in return)**
- **Non-Specific charge (taxes are used for various purposes)**
- **Revenue of Public Budgets/Government Budget**
- **Enacted** by the law (e.g.: Income Tax Code)

# Functions of Taxes

- **Fiscal = tax revenues**
- **Allocation** (allocation of sources on some special purposes, theory of free market failure and lack of efficiency of free market)
- **Redistribution** of incomes  $\Rightarrow$  progressive tax rate of PIT (higher incomes are taxed more)
- **Stimulative** (lower tax rates may support a special activities in economy or
- **Macroeconomic** = stabilize tax revenues during the economic cycle (growth x recession)

# Task:

- Suggest the main principles of a tax policy.

# Principles of Tax Policy (1)

- **Neutrality** = e.g.: Taxation should seek to be neutral and equitable between forms of business activities (PIT x CIT, VAT tax rates)
- **Efficiency** = Compliance costs to business and administration costs for governments should be minimised as far as possible.
- **Certainty and simplicity** = Tax rules should be clear and simple to understand, so that taxpayers know where they stand. A simple tax system makes it easier for individuals and businesses to understand their obligations and entitlements.

# Principles of Tax Policy (2)

- **Effectiveness and fairness** = The potential for evasion and avoidance should be minimised.
  - Evasion (illegal) x avoidance (mostly legal)
- **Flexibility** = Taxation systems should be flexible and dynamic enough to ensure they keep pace with technological and commercial developments.
  - It is important that a tax system is dynamic and flexible enough to meet the current revenue needs of governments while adapting to changing needs on an ongoing basis.
- **Ability to pay** = e.g.: PIT, object of taxation is real taxpayer's salary, some taxes do not reflect this ability (e.g.: property taxes)

# Task:

- Design all components of a tax (e.g.: tax rate).



# Components of Taxes

- **Tax object**
- **Tax subject** (taxpayer)
- **Tax exemptions**
- **Tax base**
- **Tax deductions**
- **Reduced tax base**
- **Tax rate**

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- **Tax before credits**
  - **Tax credits =**
  - **Tax liability/tax overpaid**

# Objects of Taxation

- **Income** (PIT, CIT, social and health insurance contributions)
- **Property** (gifts, inheritance, real estates)
- **Consumption** (Excise taxes, VAT, road tax, ecological taxes)
- „**Head**“ (lump sum tax)
- **Task: What are advantages and disadvantages of taxing these objects?**

# Tax Base

- **Nominal** tax base (in EUR, USD, CZK etc.)
- **Specific** tax base (in physical units)
- -----
- Income taxes + VAT + Gift taxes + Inheritance taxes are expressed by **NOMINAL** tax base
- Excise taxes + Road tax + Ecological taxes + Real estate taxes are expressed by **SPECIFIC** tax base

# Tax Deductions

- Decreasing the tax base
- **Absolute** (in currency) x **relative** (in %)
- **Standard** (standard tax deduction on taxpayer) x **non-standard** (in some special cases, it has to be proved, no limit, e.g.: tax loss)

# Tax Rate

- **Single** (e.g. 19 %) x **differentiate** (e.g. 10 %, 15 %, 21 %)
- **Fixed** (e.g. CZK 10 per 1 m<sup>2</sup>) x **relative** (progressive, linear, regressive)
- **Task: Designing the progressive tax rate for PIT.**

# Progressive Tax Rate

| Salary                | Tax Rate |  |
|-----------------------|----------|--|
| CZK 0 – 100 000       | 10 %     | -  |
| CZK 100 001 – 250 000 | 25 %     | CZK 10 000 + 25 % from this tax bracket          |
| CZK 250 001 and more  | 33 %     | CZK 10 000 + 37 500 + 33 % from this tax bracket |

source: author

e.g.: salary of CZK 300 000

Tax: CZK 47 500 +  $((300\,000 - 250\,000) * 0,33)$  = **CZK 64 000**

# PIT Rates in Austria

| Income (EUR) up to | Marginal rate % |
|--------------------|-----------------|
| 11 000             | 0               |
| 18 000             | 25              |
| 31 000             | 35              |
| 60 000             | 42              |
| 90 000             | 48              |
| 1 000 000          | 50              |
| Above              | 55*)            |

\* The top marginal tax rate of 55% applies only until 2020.

source: author

# PIT Rates in Belgium

| Taxable income (EUR) | Marginal rate (%) |
|----------------------|-------------------|
| 0-11 070             | 25                |
| 11 070-12 720        | 30                |
| 12 720-21 190        | 40                |
| 21 190-38 830        | 45                |
| 38 830-and above     | 50                |

source: author



# PIT Rates in Finland

| Taxable income (EUR ) | Tax on lower limit (EUR ) | Tax on excess income in bracket (%) |
|-----------------------|---------------------------|-------------------------------------|
| 16 900-25 300         | 8                         | 6.25                                |
| 25 300-41 200         | 533                       | 17.5                                |
| 41 200-73 100         | 3 315.5                   | 21.5                                |
| 73 100                | 10 174                    | 31.5                                |

source: author

# PIT Rates in France

|             | Fraction of taxable income (1 share, in Euros) | Rate (in %) |
|-------------|--|-------------|
| 1st bracket | Up to 9 807                                    | 0           |
| 2nd bracket | From 9 807 to 27 086                           | 14          |
| 3rd bracket | From 27 086 to 72 617                          | 30          |
| 4th bracket | From 72 617 to 153 783                         | 41          |
| 5th bracket | From 153 783                                   | 45          |

source: author

# PIT Rates in Ireland

| Band of taxable Income (EUR) |                                |  |                     | Rate (%) |
|------------------------------|--------------------------------|--|---------------------|----------|
| Single/Widow(er)             | Married couple<br>(one income) | Married couple<br>(two incomes)  | One-parent families |          |
| Up to 33 800                 | Up to 42 800                   | Up to the lesser of: 67 600;<br>42 800 plus the amount of<br>the lowest income | 37 800              | 20       |
| Balance                      | Balance                        | Balance  | Balance             | 40       |

source: author

# PIT Rates in Korea

| Over (KRW)  | Not more than (KRW) | Marginal tax rate (%) |
|-------------|---------------------|-----------------------|
| 0           | 12 000 000          | 6                     |
| 12 000 000  | 46 000 000          | 15                    |
| 46 000 000  | 88 000 000          | 24                    |
| 88 000 000  | 150 000 000         | 35                    |
| 150 000 000 | 500 000 000         | 38                    |
| 500 000 000 |                     | 40                    |

source: author

# PIT Rates in Netherlands

| Taxable Income (EUR) | Tax Rate (%) | Social security contributions |            |
|----------------------|--------------|-------------------------------|------------|
|                      |              | < 65 years                    | > 65 years |
| 0-19 982             | 8.90         | 27.65                         | 9.75       |
| 19 982-33 791        | 13.15        | 27.65                         | 9.75       |
| 33 791-67 072        | 40.80        | -                             | -          |
| 67 072 and over      | 52           | -                             | -          |

source: author

# PIT Rates in Norway

| Rate (%) | NOK              |
|----------|------------------|
| 0        | 0-164 100        |
| 0.93     | 164 100-230 950  |
| 2.41     | 230 950-580 650  |
| 11.52    | 580 650-934 500  |
| 14.52    | 934 500 and over |

source: author

# PIT Rates in Portugal + Surtax

| Taxable income (EUR) (R) | Marginal tax rate (%) (T) | Amount to deduct (EUR) (K) |
|--------------------------|---------------------------|----------------------------|
| Up to 7 091              | 14.50                     | -                          |
| Over 7 035 up to 20 261  | 28.50                     | 992.74                     |
| Over 20 100 up to 40 522 | 37.00                     | 2 714.93                   |
| Over 40 200 up to 80 640 | 45.00                     | 5 956.69                   |
| Over 80 640              | 48.00                     | 8 875.89                   |

source: author

| Taxable income (EUR) (R) | Tax rate (%) (T) |
|--------------------------|------------------|
| Up to 20 261             | 0                |
| Over 20 261 up to 40 522 | 0.88             |
| Over 40 522 up to 80 640 | 2.75             |
| Over 80 640              | 3.21             |

source: author

# PIT Rates in Slovak Republic

| Annual taxable income (EUR)* | Rate (%) |
|------------------------------|----------|
| 0-35 022.31                  | 19       |
| 35 022.31 and over           | 25       |

\* Employee's social security contributions (see 1.12.) are deductible for income tax purposes.

source: author



# PIT Rates in Slovenia

| Taxable income (EUR) | Tax rate (%) |
|----------------------|--------------|
| Up to 8 021.34       | 16           |
| 8 021.34-20 400.00   | 27           |
| 20 400.00-48 000.00  | 34           |
| 48 000.00-70 907.20  | 39           |
| Above 70 907.20      | 50           |

source: author

# PIT Rates in Spain

| Taxable income (EUR) | Tax at the lower limit (EUR) | Tax rate on taxable income in excess of the lower limit (%) |
|----------------------|------------------------------|---|
| 0-12 450             | 0                            | 9.50  |
| 12 450-20 200        | 1 182.75                     | 12.00   |
| 20 200-35 200        | 2 112.75                     | 15.00   |
| 35 200-60 000        | 4 362.75                     | 18.50   |
| Over 60 000          | 8 950.75                     | 22.50   |

source: author

# PIT Rates in Sweden

| Taxable Income (SEK) | Tax (SEK) at lower bracket | For exceeding income, % |
|----------------------|----------------------------|-------------------------|
| 0-438 900            | 0                          | 0                       |
| 438 900-638 500      | 0                          | 20                      |
| over 638 500         | 39 120                     | 25                      |

source: author

# PIT Rates in UK

| Taxable income (GBP) | Rate % |
|----------------------|--------|
| 0-33 500             | 20     |
| 33 500-150 000       | 40     |
| Over 150 000         | 45     |

source: author

# PIT Rates in USA

## Federal Income Tax rates

| Taxable income bracket (USD) <sup>1</sup> |                                |                    | Marginal tax rate (%) |
|---|--------------------------------|--------------------|-----------------------|
| Single individual                         | Joint return of married couple | Head of household  |                       |
| 0 to 9 325                                | 0 to 18 650                    | 0 to 13 350        | 10                    |
| 9 326 to 37 950                           | 18 651 to 75 900               | 13 351 to 50 800   | 15                    |
| 37 951 to 91 900                          | 75 901 to 153 100              | 50 801 to 131 200  | 25                    |
| 91 901 to 191 650                         | 153 101 to 233 350             | 131 201 to 212 500 | 28                    |
| 191 651 to 416 700                        | 233 351 to 416 700             | 212 501 to 416 700 | 33                    |
| 416 701 to 418 400                        | 416 701 to 470 700             | 416 701 to 444 550 | 35                    |
| 418 401 and over                          | 470 701 and over               | 444 551 and over   | 39.6                  |

source: author

# Tax Credits

- Decreasing tax liability
- **Absolute** (in currency) x **relative** (in %)
- **Standard** x **non-standard** (the same like in the case of tax deductions)

# Tax Period

- Mostly it is a **calendar year** (January – December 2018) or **12 months** (April 2017 – March 2018)
- It could be a **shorter** or **longer** period (in case of CIT  $\Rightarrow$  consolidation, splitting, etc.)

# Types of Taxes

- **Direct taxes** – taxpayer is known (income taxes, property taxes, social security contributions)
- **Indirect taxes** – taxpayer is unknown (excise taxes, VAT)
- -----
- **Common taxes** (PIT, CIT, VAT, excise taxes)
- **Capital taxes** (property taxes, road tax)
- -----
- **No tax period** (tax on the acquisition of real estate)
- **With tax period** (PIT, CIT, VAT, road tax, etc.)



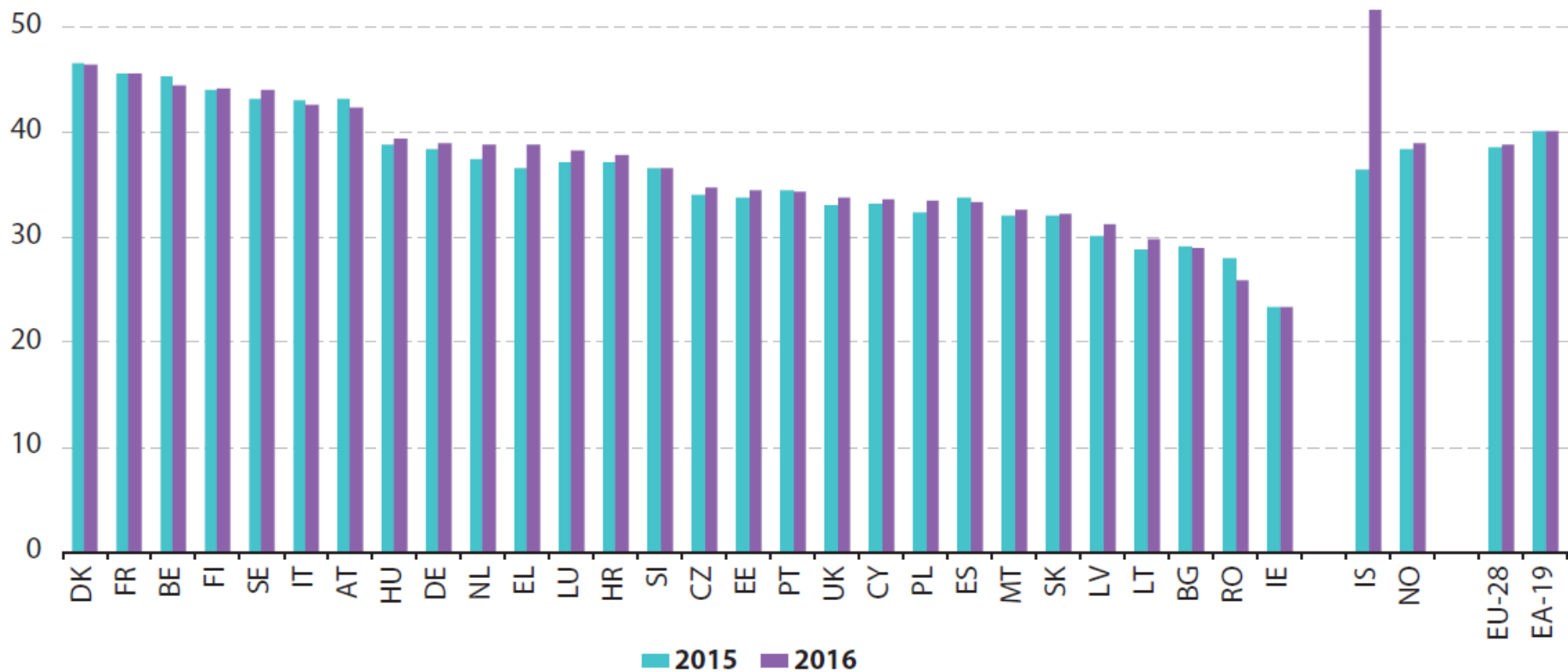
# Flat Tax

- By Robert Hall and Alvin Rabushka (1986)
- Flat tax is based on broad tax base
- and low tax rate
- Many of new-EU member countries have linear tax rates but not the concept of flat tax as it is known

# Tax Quota

- Tax revenues + social security contributions / GDP
- Total tax burden in macroeconomic point of view
- The rate of total redistribution in the economy (share of public sector and its importance in the economy)
- Planning business strategy = Where should I grow and run my business? Taxing profits, shares, taxing wages etc.

**Graph 3: Tax revenue (including compulsory actual social contributions), 2015-2016**  
(% of GDP)

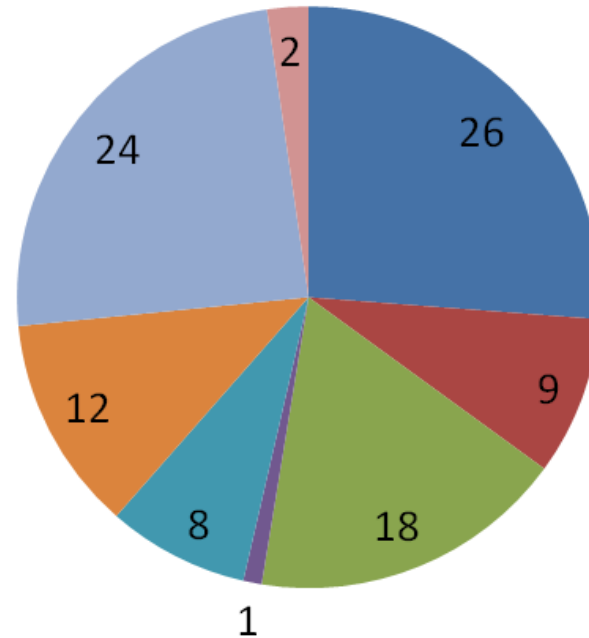


Source: DG Taxation and Customs Union, based on Eurostat data

# Structure of Tax Revenues

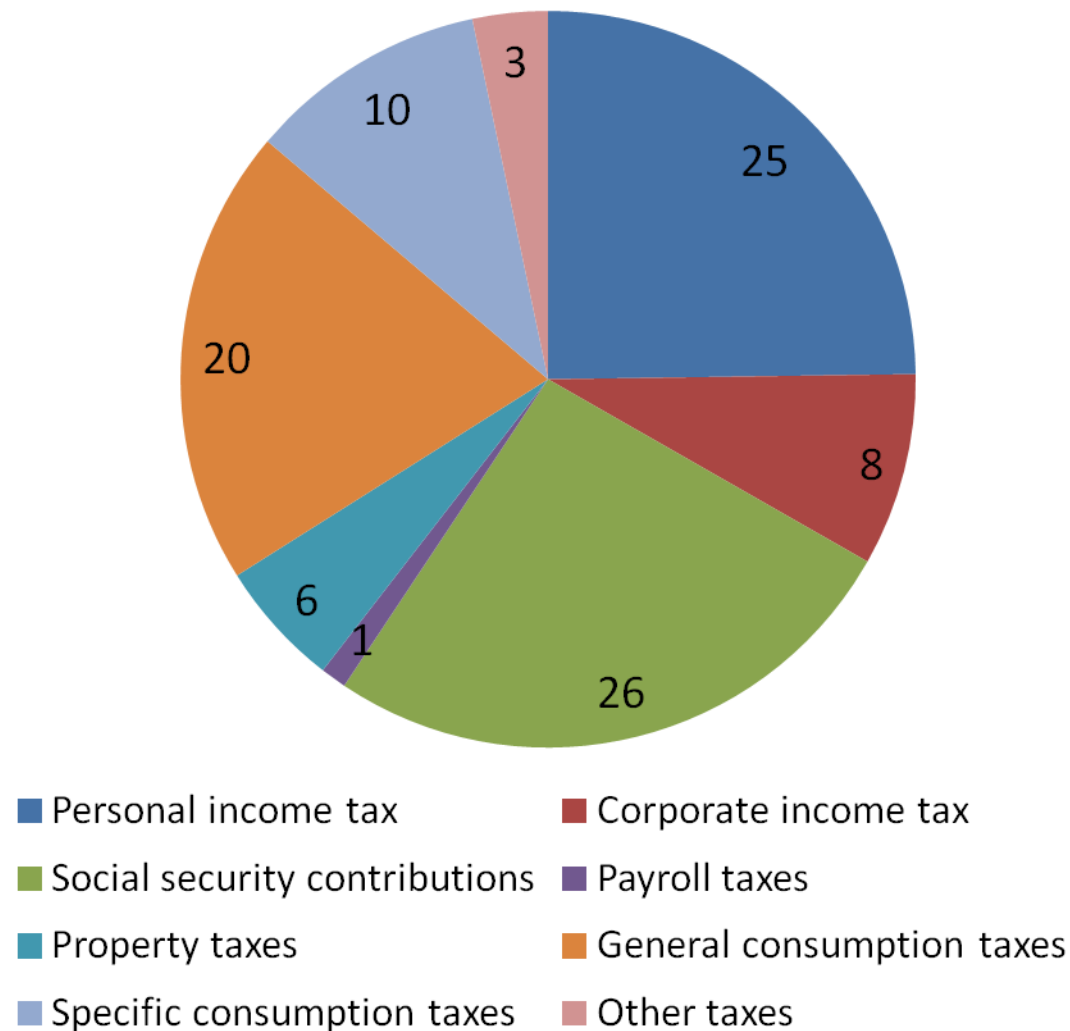
- Tax mix
- Share of each tax on the total tax revenues

# Tax Mix in the OECD - 1965



- Personal income tax
- Corporate income tax
- Social security contributions
- Payroll taxes
- Property taxes
- General consumption taxes
- Specific consumption taxes
- Other taxes

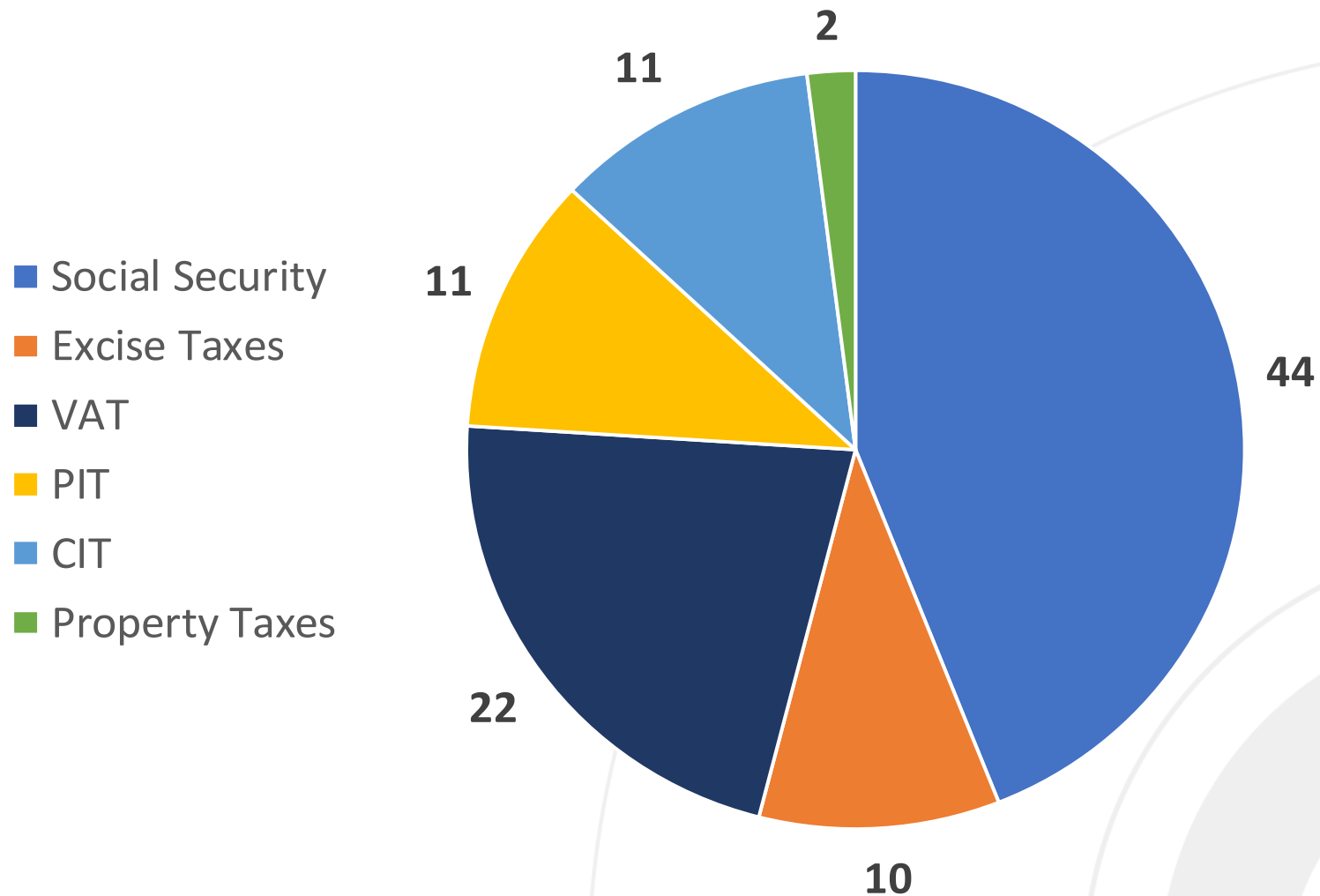
# Tax Mix in the OECD - 2013



# Trends in Taxation in OECD (1965 – 2013) in p.p.

|                                      | 1965       | 2013       | Difference |
|--------------------------------------|------------|------------|------------|
| Personal income tax                  | 26         | 25         | -1         |
| Corporate income tax                 | 9          | 8          | -1         |
| <b>Social security contributions</b> | <b>18</b>  | <b>26</b>  | <b>9</b>   |
| Payroll taxes                        | 1          | 1          | 0          |
| Property taxes                       | 8          | 6          | -2         |
| General consumption taxes            | 12         | 20         | 8          |
| <b>Specific consumption taxes</b>    | <b>24</b>  | <b>10</b>  | <b>-14</b> |
| Other taxes                          | 2          | 3          | 1          |
| <b>Total</b>                         | <b>100</b> | <b>100</b> | <b>-</b>   |

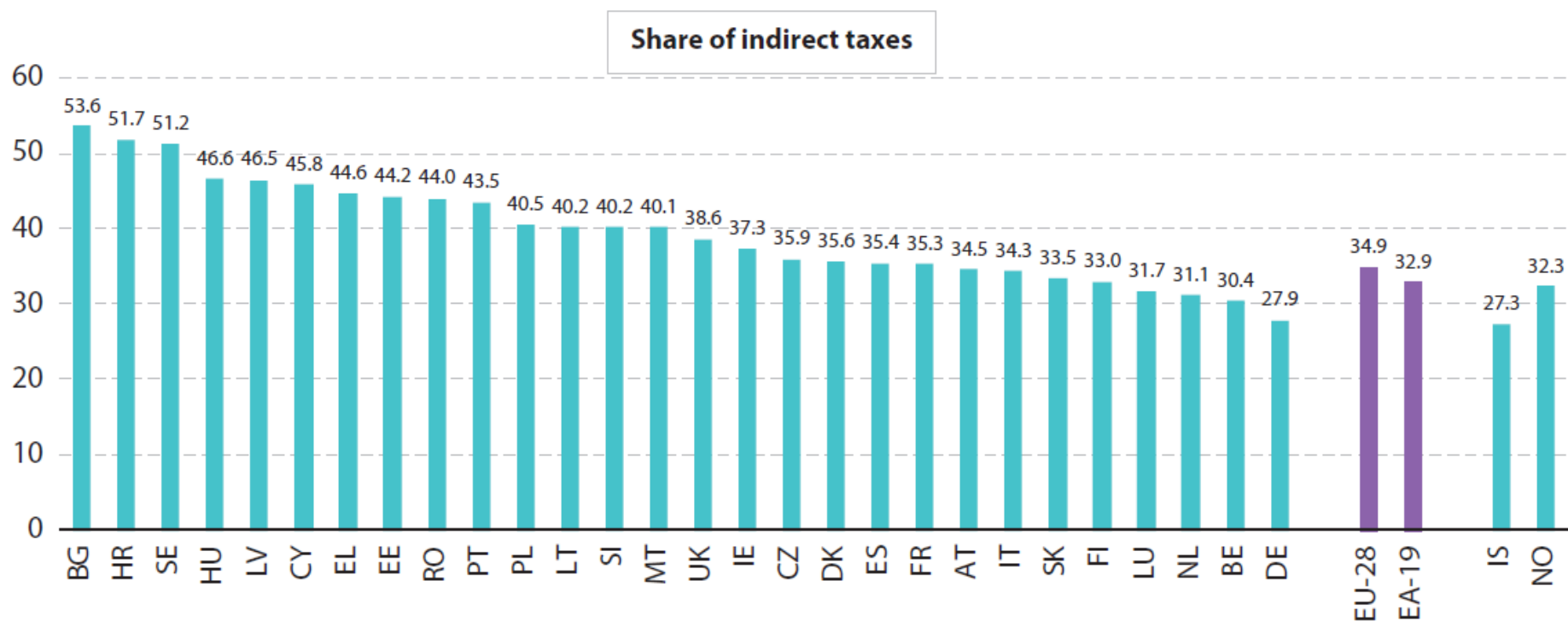
# Tax Mix in the Czech Republic in 2016 (in %)





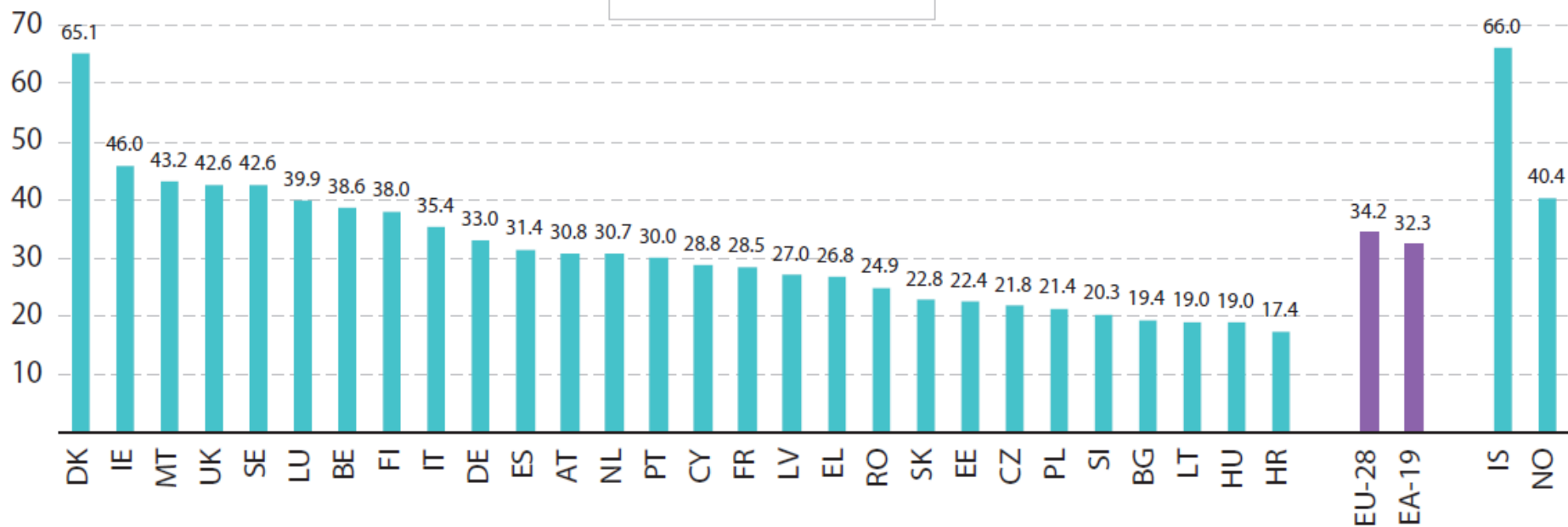
**Graph 5: Structure of tax revenues by major type of taxes, 2016 (1)**

(% of total taxes)



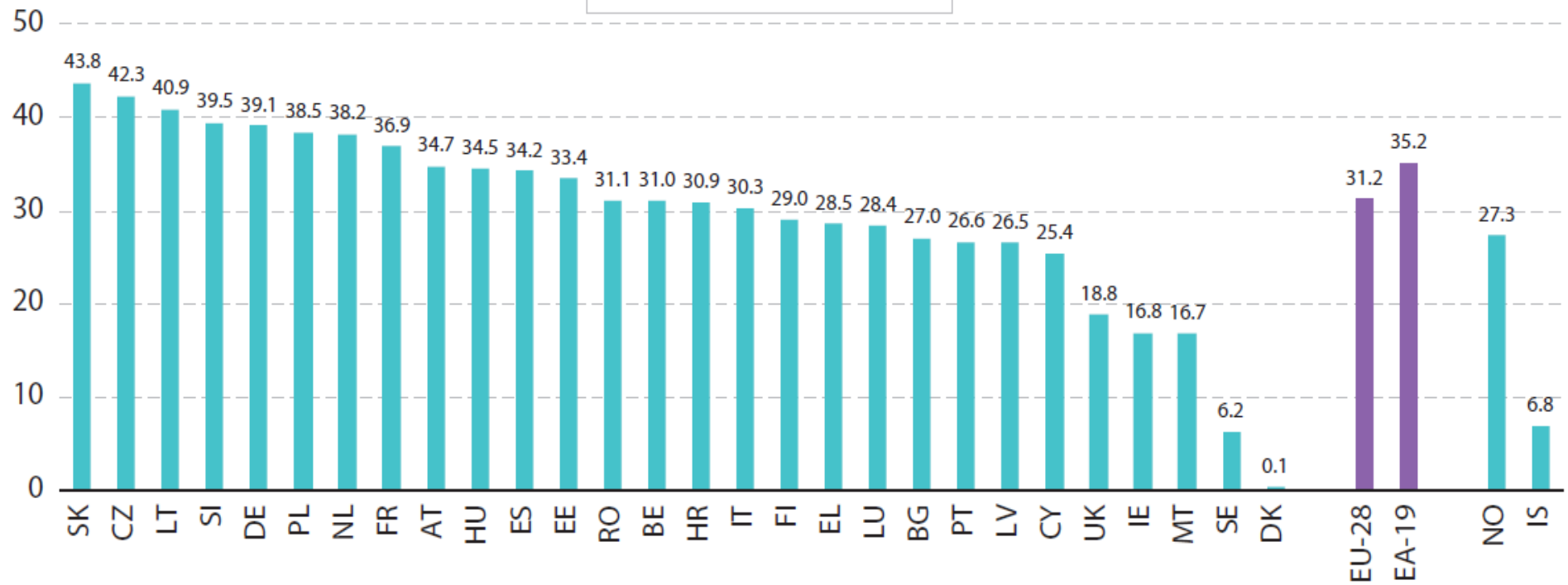
source: eurostat

Share of direct taxes



source: eurostat

## Share of social contributions



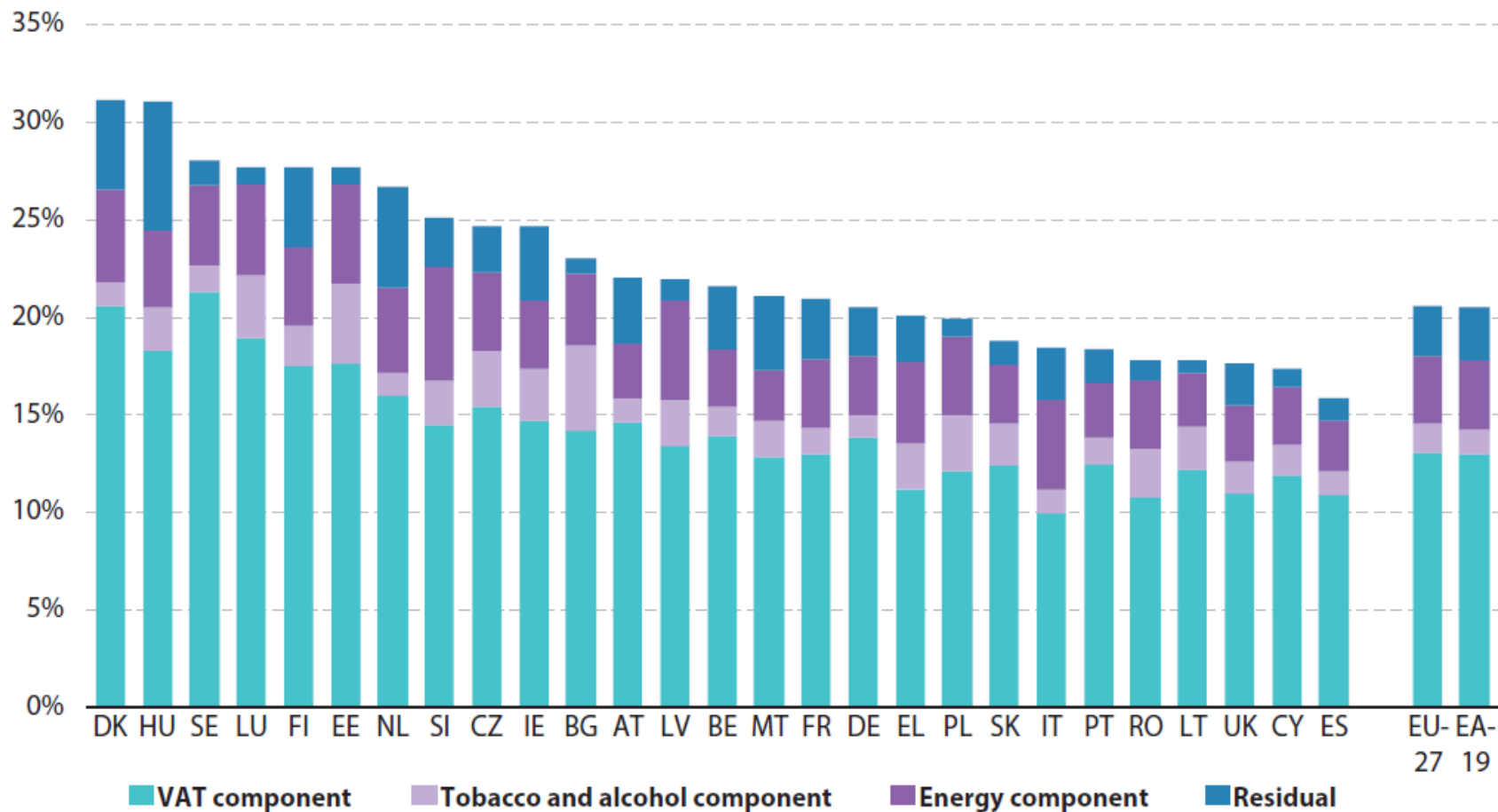
source: eurostat

# Implicit Tax Rate x Effective Tax Rate

- Almost the same: implicit tax rate (Eurostat), effective tax rates (OECD)
- $ITR (ETR) = \text{tax} / \text{gross disposable income}$   
(or other value e.g.: consumption)
- **Note:** Make a difference between the nominal (statutory) tax rate and effective (or implicit) tax rate. What is more relevant?

**Graph 9: Decomposition of the ITR on consumption 2016**

(%)

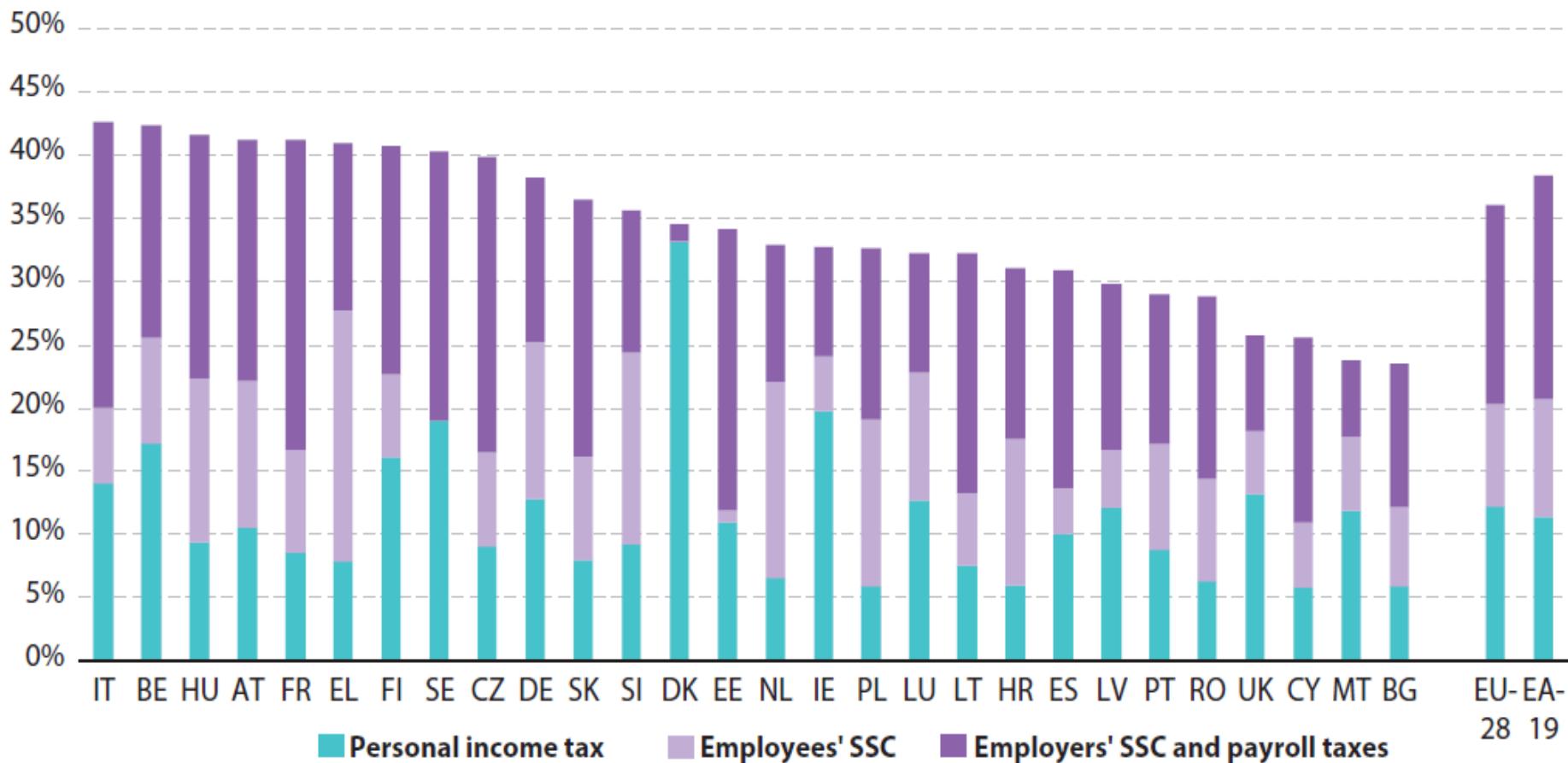


Source: DG Taxation and Customs Union, based on Eurostat data

(<sup>9</sup>) The ITR on consumption is the ratio of the revenue from all consumption taxes to the final consumption expenditure of households.

**Graph 13: Composition of the implicit tax rate on labour, 2016**

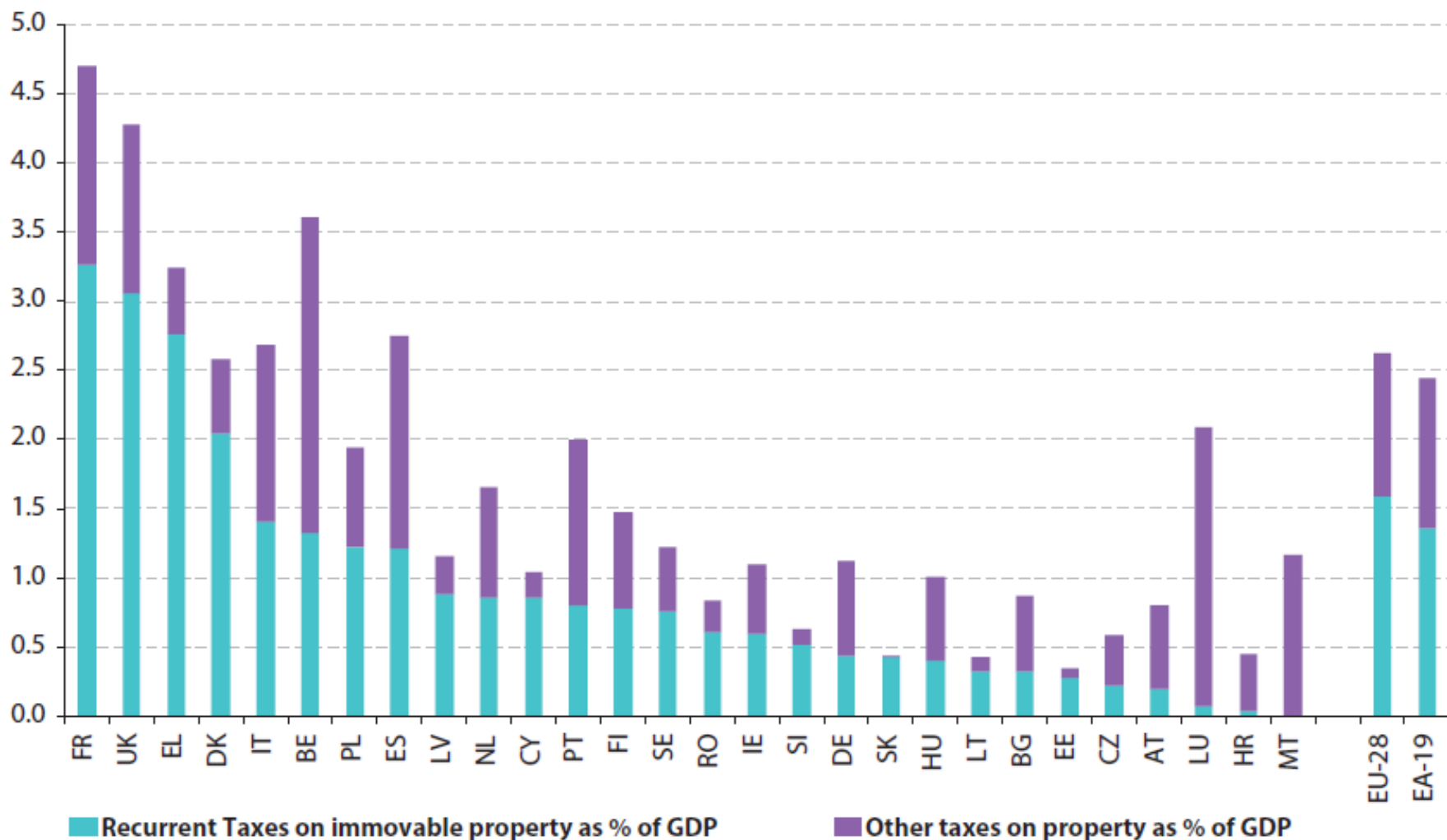
(%)



Source: DG Taxation and Customs Union, based on Eurostat data

**Graph 22: Composition of property taxes by Member State, 2016**

(% of GDP)



# Optional Reading

- <http://www.oecd-ilibrary.org/docserver/download/2314251ec005.pdf?expires=1456174372&id=id&accname=guest&checksum=2CFA194BB1FFB91F02C8423AD01029B2>
- [http://ec.europa.eu/taxation\\_customs/resources/documents/taxation/gen\\_info/economic\\_analysis/tax\\_structures/2014/report.pdf](http://ec.europa.eu/taxation_customs/resources/documents/taxation/gen_info/economic_analysis/tax_structures/2014/report.pdf)