EUROPEAN
COMMISSION

Brussels, 24.11.2026
SWD(2026) 1228 final

COMMISSION STAFF WORKING DOCUMENT

Annex A: Methods and data for analysing tax gaps and compliance enforcement capacity in EU Member States

Accompanying the document

COMMUNICATION FROM THE COMMISSION TO THE EUROPEAN PARLIAMENT, THE COUNCIL, THE EUROPEAN ECONOMIC AND SOCIAL COMMITTEE AND THE COMMITTEE OF THE REGIONS

Mind the Gap 2026: Boosting public finances through joint efforts to reduce tax gaps and improve compliance

{COM(2026) 630 final} - {SWD(2026) 1201 final} - {SWD(2026) 1202 final} - {SWD(2026) 1203 final} - {SWD(2026) 1204 final} - {SWD(2026) 1205 final} - {SWD(2026) 1206 final} - {SWD(2026) 1207 final} - {SWD(2026) 1208 final} - {SWD(2026) 1209 final} - {SWD(2026) 1210 final} - {SWD(2026) 1211 final} - {SWD(2026) 1212 final} - {SWD(2026) 1213 final} - {SWD(2026) 1214 final} - {SWD(2026) 1215 final} - {SWD(2026) 1216 final} - {SWD(2026) 1217 final} - {SWD(2026) 1218 final} - {SWD(2026) 1219 final} - {SWD(2026) 1220 final} - {SWD(2026) 1221 final} - {SWD(2026) 1222 final} - {SWD(2026) 1223 final} - {SWD(2026) 1224 final} - {SWD(2026) 1225 final} - {SWD(2026) 1226 final} - {SWD(2026) 1227 final}

TABLE OF CONTENTS

1. INTRODUCTION AND POLICY CONTEXT 2

1.1. SNAPSHOT OF THE TAX SYSTEM 2
1.2. TAX COMPLEXITY AND SIMPLIFICATION MEASURES 3
1.2.1. Measures of tax complexity 3
1.2.2. National simplification efforts 9
1.3. MEASURES OF THE NON-OBSERVED ECONOMY AND THE SHADOW ECONOMY 9

2. COMPLIANCE TAX GAPS 12

2.1. OVERVIEW 12
2.2. COMPLIANCE TAX GAPS IN VAT 13
2.3. COMPLIANCE TAX GAPS IN CORPORATE AND PERSONAL INCOME TAX 15
2.3.1 The corporate income tax compliance gap 15
2.3.2 The personal income tax compliance gap 20
2.4. OTHER COMPLIANCE TAX GAPS 22

3. POLICY TAX GAPS – CONCEPTS AND METHODS 23

3.0. MEASUREMENT AND METHODOLOGICAL CHALLENGES OF TAX EXPENDITURE 24
3.1. TAX EXPENDITURE REPORTING AND EVALUATION 27
3.2. POLICY TAX GAPS IN VAT 29
3.2.1 The VAT gap in the EU report 29
3.2.2 Tax simulation of the VAT rate gap building on EUROMOD 31
3.3. POLICY TAX GAPS IN CORPORATE INCOME TAX 37
3.4. POLICY TAX GAPS IN PERSONAL INCOME TAXATION 37

4. EFFECTIVENESS OF TAX ADMINISTRATION 46

4.1 REGISTRATION/IDENTIFICATION OF TAXPAYERS 48
4.2. TAX FILING AND ASSESSMENT 49
4.3. COMPLIANCE RISK MANAGEMENT 52
4.4. AUDITS AND OTHER CONTROL ACTIVITIES 52
4.5. PAYMENT AND COLLECTION 53
4.6. TAX DEBT RECOVERY 54
4.7. ASPECTS RELATED TO DIRECTIVE ON ADMINISTRATIVE COOPERATION (DAC) 55

DATA - ANNEX 59

ANNEX A1 – GTETI 59
ANNEX A2 – COUNTRY OVERVIEW - TAX EXPENDITURES IN PERSONAL INCOME TAXATION (PIT) BY POLICY AREA 62

1. Introduction and policy context

This annex provides the methodological foundation of the Mind the Gap Communication and the accompanying 27 country fiches. Its main purpose is to support a consistent, evidence-based assessment of how national tax systems perform in terms of revenue mobilisation, fairness, compliance and administrative capacity, while also identifying the main policy and operational factors that shape these outcomes. The document is designed to underpin comparative country analysis and to ensure that findings across Member States are based on a coherent analytical framework and consistent concepts.

The analysis of the country fiches of the Mind the Gap Report is based on a common framework of four policy blocks: (1) Snapshot of the tax system, including tax complexity, simplification measures and measures of non-observed economy; (2) Compliance tax gaps; (3) Policy tax gaps; (4) Effectiveness of tax administration. Each country fiche includes a summary of key strengths as well as some areas where further improvements could be pursued. These areas emerge from applying the common analytical framework while taking account of national contexts and specificities. The analysis has aimed to consider all relevant public information into account that was published until 15th October 2026, unless otherwise indicated.

The analysis of the country fiches provided the foundation to distil the Union-wide challenges and design an action-based pathway for Europe to tackle the challenges, as outlined in the Mind the Gap Communication.

Overall, the document serves as a methodological guide for conducting Member State assessments in a way that is comparable, policy-relevant and analytically robust. It aims to help identify where revenue losses could arise from policy design, where they stem from enforcement weaknesses, and where reforms to tax structures, reporting practices or tax administration could improve outcomes. By combining compliance gap analyses, tax expenditure scrutiny and administrative effectiveness, it provides the basis for a comprehensive examination of the challenges and opportunities facing tax systems in the European Union.

1.1. Snapshot of the tax system

The Annual Report on Taxation 2026 ([1]) is the main reference used to prepare the section *Snapshot of the tax system* in the country fiches. In particular, its Chapter 2 contains a top-down analysis on the structure of tax revenues at EU and country level over the last decade. It starts with a presentation of the most recent data on overall tax revenues (reference year 2024), including relevant country developments. It follows with an analysis of tax revenue by economic function (labour – including social contributions, capital and consumption) as well as by category and level of government. It also includes a comprehensive survey of the most important tax types in the EU and their role in Member States, and in particular: social contributions – SC, personal income tax – PIT, corporate income tax – CIT, value added tax – VAT, environmental and property taxes. Finally, it reflects on the structural implications of underlying trends and shifts in the tax mix.

Tax revenue data used in the *Snapshot* section are based on the Taxation Trends Data. This database on tax revenues is produced by DG TAXUD from ESA table 9 and National Tax List data, as collected and validated by Eurostat. It is available online, with information per country and

[1] https://taxation-customs.ec.europa.eu/taxation/economic-analysis/annual-report-taxation_en

for the various indicators ([2]). The 2025 edition of TAXUD's Taxation Trends data was released on 31 March 2026 and had a cut-off date of 30 January 2026.

Indicators used for the analysis of tax fairness presented in the *Snapshot* section of the country fiches are based in the EU Survey on Living Conditions (EU-SILC). The percentage of people living at-risk-of-poverty or social exclusion (AROPE) is produced by Eurostat ([3]), and so the income quintile ratio (S80/S20) ([4]). The effect of the tax and benefit system (percentage points) on reducing the Gini coefficient (pensions excluded from social transfers) is an indicator calculated by European Commission's DG ECFIN also based on EU-SILC survey data.

The tax wedge measures the difference between employers' labour costs and employees' net pay. The tax wedge is an indicator of the tax burden on labour that can be assessed at different earnings levels ([5]). It is calculated as the sum of personal income tax, employee social-security contributions, employer social-security contributions and other mandatory contributions, net of cash family benefits where relevant, expressed as a percentage of total labour costs (composed of the gross wage plus employer social-security contributions). The difference in the tax wedge of high-earners and low-earners is an indicator of the progressiveness of labour taxation ([6]).

The excessive deficit procedure (EDP) aims to ensure that all member states maintain low government debt or reduce high debt to sustainable levels. There are currently nine Member States under ongoing EDP: Austria (since 2025), Belgium (since 2024), Finland (since 2026), France (since 2024), Italy (since 2024), Hungary (since 2024), Poland (since 2024), Slovakia (since 2024) and Romania (since 2020). Statistics on net lending /net borrowing and government consolidated gross debt are available on Eurostat [gov_10dd_edpt1]. The reference values set out in the EU Treaties are -3% and 60%, respectively.

All Member States but four received in 2026 country-specific recommendations (CSRs) in the area of taxation. The entire set of Council's CSRs issued in 2026 can be found online ([7]).

1.2. Tax complexity and simplification measures

1.2.1. Measures of tax complexity

Tax complexity is a multifaceted concept that cannot be observed directly and may manifest itself in different aspects of the tax system and taxpayers' compliance experience. It can therefore be approximated through indicators capturing, for example, the complexity of tax rules and administrative procedures, the frequency of legislative changes, taxpayers' perceptions of the ease of compliance and the resources devoted to meeting tax obligations. No single indicator provides a comprehensive measure of these different dimensions. The assessment in the report therefore combines four complementary indicators, covering both structural characteristics of the tax system and taxpayers' practical experience of complying with it. The indicators should be interpreted jointly rather than individually, as each captures a different dimension of complexity and is subject to specific limitations.

[2] https://taxation-customs.ec.europa.eu/taxation/economic-analysis/data-taxation-trends_en
[3] Persons at risk of poverty or social exclusion by age and sex [ilc_peps01n__custom_16918353]
[4] Income quintile share ratio S80/S20 for disposable income by sex and age group [ilc_di11__custom_21573543]
[5] Tax Wedge[tab_jrc_tw__custom_4816]
[6] Tax Wedge[tab_jrc_tw__custom_4816]
[7] https://www.consilium.europa.eu/en/press/press-releases/2026/07/10/european-semester-2026-council-adopts-country-specific-recommendations/

The first dimension is captured by the Tax Complexity Index (TCI). It provides a comparative measure of tax complexity based on the perceptions of tax professionals and distinguishes between complexity arising from the tax code and from the broader tax framework and administrative processes. Its main advantage is that it provides a harmonised cross-country measure and captures aspects of complexity that are difficult to observe otherwise, such as the complexity of tax rules and administrative processes. At the same time, it is survey-based and therefore reflects the perceptions of the professionals responding to the survey. It is particularly oriented towards the business tax environment of multinational companies and may therefore not reflect the experience of individual taxpayers or all types of businesses equally. Country rankings should consequently be interpreted as a relative indication of structural tax complexity rather than as a precise measure of compliance costs ([8]). Table 1.1 below presents the Tax Complexity Index and its components across EU Member States.

Table 1.1: Tax Complexity Index (TCI) across EU Member States

Country	Overall Tax Complexity	Tax Code Complexity	Tax Framework Complexity
EE	0.172	0.134	0.211
FI	0.273	0.341	0.206
MT	0.289	0.339	0.240
LU	0.304	0.400	0.208
IE	0.315	0.413	0.218
LV	0.324	0.333	0.315
NL	0.328	0.460	0.196
EL	0.362	0.414	0.310
HU	0.363	0.479	0.247
PT	0.364	0.492	0.235
SE	0.375	0.513	0.238
DK	0.386	0.544	0.227
AT	0.386	0.522	0.251
CY	0.387	0.464	0.310
FR	0.391	0.503	0.279
DE	0.403	0.557	0.249
CZ	0.406	0.481	0.332
SK	0.409	0.513	0.304
HR	0.410	0.450	0.371
IT	0.413	0.488	0.338
BG	0.414	0.508	0.321
BE	0.418	0.444	0.392
RO	0.422	0.475	0.368
ES	0.426	0.563	0.290
LT	0.429	0.507	0.351
SI	0.457	0.591	0.323
PL	0.465	0.585	0.346

Source: Global MNC Tax Complexity Project, Tax Complexity Index; Hoppe, T., Schanz, D., Sturm, S. and Sureth-Sloane, C. (2023), survey year 2024.

Notes: The Tax Complexity Index (TCI) is a survey-based measure of the complexity of countries' corporate income tax systems as faced by multinational corporations. It is based on responses from local tax consultants of major tax services

[8] For further information on the survey and index construction see Hoppe, Schanz, Sturm, Sureth-Sloane (2023): The Tax Complexity Index – A Survey-Based Country Measure on Tax Code and Framework Complexity, European Accounting Review, 32 (2): 239-273. We use the most recent wave of the survey from 2024.

firms and networks and combines two dimensions: tax code complexity, capturing complexity inherent in tax regulations, and tax framework complexity, capturing complexity arising from the features and processes of the tax system. The index theoretically ranges from 0 (not complex) to 1 (extremely complex), with higher values indicating greater complexity. The overall TCI is calculated as the arithmetic mean of the tax code and tax framework subindices.

A complementary perspective is provided by taxpayer perceptions of filing and the use of professional assistance, as collected in a Eurobarometer survey from 2025. Information on whether individuals find completing their tax return easy and whether they rely on professional assistance captures the practical experience of individual taxpayers, which may differ considerably from the structural complexity identified by tax professionals ([9]). In particular, extensive digitalisation, pre-filled returns and effective taxpayer support can make compliance relatively straightforward even where the underlying tax rules are complex. However, these indicators are also perception-based and are affected by differences in filing obligations across Member States. For example, a high share of taxpayers may not be required to file a tax return at all, while reliance on professional assistance can reflect income levels or established national practices rather than tax complexity alone. These indicators therefore provide evidence on perceived practical compliance burdens rather than a direct measure of the complexity of the tax system. **Table 1.2** reports, for each Member State, the share of respondents who find it very or fairly easy to complete their tax return, as well as the share who report using a professional to file their tax return.

Table 1.2: Perceived ease of completing tax returns and use of professional assistance, 2025 (% of respondents)

Country	Very/fairly easy to file tax return (%)	Use professional to file tax return (%)
BE	50	7
BG	42	5
CZ	26	14
DK	57	2
DE	37	10
EE	79	1
IE	47	5
EL	49	20
ES	51	11
FR	70	1
HR	29	4
IT	31	24
CY	52	11
LV	55	3
LT	62	4
LU	38	11
HU	35	13
MT	45	5
NL	68	9
AT	63	5
PL	55	6
PT	55	9
RO	30	2
SI	53	1
SK	25	17
FI	72	1

[9] European Commission (2025), Flash Eurobarometer 562: Citizens' attitudes towards taxation, fieldwork conducted between 9 and 17 April 2025. Available at: https://europa.eu/eurobarometer/.

SE	87	1
EU27	49	9

Source: European Commission, Flash Eurobarometer 562, Citizens' attitudes towards taxation, Q4 "How easy or difficult is it for you to complete your tax return in (YOUR COUNTRY)?", fieldwork 9–17 April 2025, all respondents, n = 25 793.

Notes: The indicator "very/fairly easy" is calculated as the sum of respondents answering "very easy" and "fairly easy". "Use professional" refers to respondents answering "I use a professional to file my tax return".

The assessment also considers the frequency of tax policy changes as an indication of legislative activity and of how frequently taxpayers may need to adapt to changes in the tax framework. The indicator draws on tax policy measures self-reported by Member States through the Joint OECD-European Commission Annual Tax Policy Reform Questionnaire, covering measures implemented, legislated or announced during the respective year ([10]). To avoid drawing conclusions from a single year, developments are considered over several years where comparable information is available and benchmarked against the corresponding EU averages. Persistent above-average legislative activity may imply greater adjustment needs and reduce predictability, whereas consistently limited activity may contribute to a more stable tax environment. However, the indicator is essentially a raw count of self-reported measures and should therefore be interpreted with caution. It does not distinguish between major tax reforms and relatively minor or technical amendments, nor does it capture differences in the scope or significance of individual measures. Although the questionnaire follows common reporting guidelines, differences in national tax structures and reporting practices may affect the number of measures reported by individual Member States. In particular, the criterion of reporting politically important systemic reforms leaves some room for interpretation, meaning that countries may differ in whether they report measures with relatively small revenue effects. Consequently, differences in the number of reported measures may partly reflect national reporting practices rather than differences in the actual frequency or significance of tax policy changes. It also does not indicate whether a reform increases or reduces complexity, as legislative changes may themselves simplify existing rules or reduce compliance burdens. Some changes may furthermore reflect the implementation of EU legislation or other policy commitments. The number of tax policy measures reported by Member States between 2022 and 2025 is presented in **Table 1.3**.

Table 1.3: Number of tax policy measures reported by Member States, 2022–2025

Country	2025	2024	2023	2022
AT	14	5	6	13
BE	43	9	15	17
BG	6	15	15	12
CY	19	19	11	16
CZ	7	1	20	12
DE	16	28	16	58
DK	15	31	27	21
EE	3	15	20	4
EL	21	34	22	25
ES	10	18	9	21
FI	22	20	13	15
FR	19		19	16

[10] All waves of the questionnaire are available at https://taxation-customs.ec.europa.eu/taxation/economic-analysis/tax-reforms-eu_en#tax-reforms-in-each-eu-country-edition-2025.

HR	7	17	8	7
HU	13	18	11	18
IE	21	33	39	15
IT	13	9	8	70
LT	30	13	6	8
LU	8	19	10	9
LV	14	27	13	8
MT	3	1	1	0
NL	6	40	53	50
PL	9	19	4	36
PT	5	14	19	42
RO	10	5	13	10
SE	22	23	25	24
SI	8	17	8	9
SK	21	21	13	11
Average	14	18	16	20

Source: Joint OECD–European Commission Annual Tax Policy Reform Questionnaire.

Notes: The questionnaire records significant tax policy measures implemented, legislated or announced during the reference year. Measures are reported if they involve a significant change in a tax rate, a tax-base change expected to have a sufficiently large revenue effect, or a politically important systemic reform. For EU Member States, the questionnaire is administered jointly by the OECD and the European Commission.

Moreover, the number of legislative changes does not capture differences in the quality of the legislative process. Member States differ in their use of regulatory impact assessments and Better Regulation frameworks, including ex-ante assessments of the effects of new legislation on businesses and, in some countries, scrutiny by dedicated regulatory oversight bodies. Such mechanisms may help identify and mitigate regulatory and compliance burdens associated with legislative changes. Their existence does not, however, imply that legislative changes necessarily entail lower compliance costs, while institutional arrangements, mandates and the binding nature of recommendations differ considerably across countries ([11]). The number of tax changes is therefore interpreted primarily as an indicator of the frequency of legislative adaptation with the corresponding short-run compliance costs, rather than as a direct measure of tax complexity.

Finally, the assessment considers demand-side evidence from the accounting, bookkeeping and tax consultancy sector as an indirect indication of the demand for specialised expertise. In particular, the sector's share of gross operating surplus provides an indication of its economic weight relative to the rest of the economy. A higher share may be consistent with greater demand for specialised tax and accounting expertise and can therefore complement the direct and survey-based indicators of complexity ([12]). **Table 1.4** presents the share of gross operating surplus generated by accounting, bookkeeping, auditing and tax consultancy activities in the business economy across Member States.

Table 1.4: Share of accounting, bookkeeping, auditing and tax consultancy activities in gross operating surplus

Country	GOS Share
AT	1.1%

[11] For an overview see, e.g., OECD (2025), Better Regulation Practices across the European Union 2025, OECD Publishing, Paris, https://doi.org/10.1787/6f007516-en.

[12] The information is retrieved from Eurostat's Structural Business Statistics (data series: sbs_sc_ovw).

BE	0.9%
BG	0.5%
CY	1.5%
CZ	0.7%
DE	1.0%
DK	0.5%
EE	0.6%
EL	0.8%
ES	0.7%
FI	0.6%
FR	0.6%
HR	0.6%
HU	1.0%
IE	0.3%
IT	1.6%
LT	0.6%
LU	1.3%
LV	0.6%
MT	1.0%
NL	1.1%
PL	0.7%
PT	0.5%
RO	0.5%
SE	0.7%
SI	0.6%
SK	0.8%
Average	0.9%

Source: Eurostat, Enterprise statistics by size class and NACE Rev. 2 activity (from 2021 onwards) (sbs_sc_ovw), gross operating surplus, million euro.

Note: The indicator is calculated as the gross operating surplus of NACE Rev. 2 group 69.2 – Accounting, bookkeeping and auditing activities; tax consultancy divided by the gross operating surplus of industry, construction and market services, excluding public administration and defence, compulsory social security and activities of membership organisations.

This indicator nevertheless requires particularly careful interpretation. The economic importance of the accounting and tax consultancy sector is influenced by many factors other than domestic tax complexity, including the structure of the economy, firm size distribution, outsourcing practices, wages and productivity and demand for services unrelated to tax compliance. In internationally oriented service hubs, activity may also partly reflect services provided to non-residents rather than purely domestic compliance needs ([13]). A relatively large sector should therefore not be interpreted mechanically as evidence of a complex tax system, nor does a small sector necessarily imply low complexity. It serves instead as supporting demand-side evidence that needs to be assessed alongside the other indicators.

Overall, the four indicators approach tax complexity from different angles. The TCI captures the views of tax professionals on structural complexity; taxpayer surveys provide information on the practical experience of individuals; legislative activity captures the frequency with which taxpayers may need to adapt to changes in the short-run; and the economic importance of tax and accounting services provides an indirect demand-side signal. Divergence between these indicators is not necessarily contradictory but can itself be informative. A country may, for example, have relatively

[13] The available evidence suggests that such flows are relatively limited. In particular, data from Eurostat's EU inter-country supply table at basic prices (reference year 2023) indicate that cross-national transactions in these services represent only a small share of overall activity, if any, suggesting that their impact on the interpretation of domestic sector size is likely to be limited.

complex tax rules but highly digitalised and user-friendly administration that limits practical burdens for individual taxpayers.

1.2.2. National simplification efforts

This section summarises, in one or two paragraphs, the simplification efforts in taxation undertaken by the Member State in 2025 and 2026 (up to end of May). Particularly relevant measures are reforms, announced or adopted, that decrease administrative burdens for businesses and citizens, such as reduced filing frequency, unified reporting portals, and automated pre-filling of returns. Measures that increase legal certainty, streamline dispute resolution mechanisms, and align local provisions with EU direct taxation standards are also noteworthy of being mentioned.

Member State reforms are assessed based on their operational impact, distinguishing between horizontal administrative simplifications, such as expanded e-invoicing ecosystems, and targeted structural reforms, including safe-harbour thresholds for small and medium-sized enterprises (SMEs). Measures can notably have been tagged by the Member State as simplification measures (in the joint EU-OECD questionnaire for tax reforms) or have been mentioned in the OECD (2025), Tax Policy Reforms 2025.

1.3. Measures of the non-observed economy and the shadow economy

Estimates of economic activities outside the formal economy are relevant for gauging tax gaps. The non-observed economy (NOE) is an official figure provided by national statistical authorities. The primary purpose of national accounts is to provide a comprehensive description of the economy and cover productive activities as fully as possible. The NOE refers to economic activities that are not captured in basic data collections, such as tax surveys or statistical reports. NOE comprises underground production, illegal economy, informal economy and deficiencies in data collection. Following EUROSTAT's methodological guidelines, National Statistic Institutes use "exhaustiveness" techniques to measure these economic activities mainly comparing data on income with data on expenditures, using labour force surveys to identify unreported workers, and analysing VAT discrepancies.

At the same time, researchers have used a wide range of models and other approaches to estimate the shadow economy (SE), which is typically a subset of the NOE because, for example, it usually does not include the illegal economy. However, due to methodological limitations and differences between the two approaches, model-based estimates of the shadow economy usually result to be much higher than those of the NOE based on "exhaustiveness" techniques adjusting national accounts.

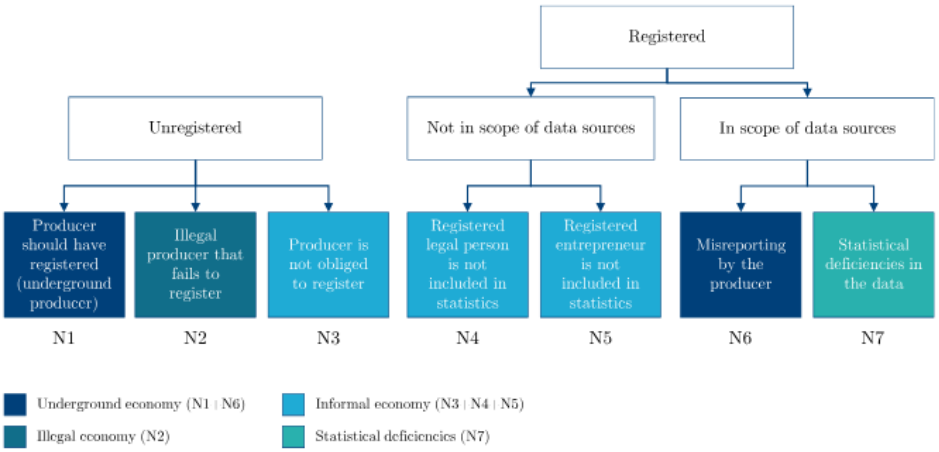
All data and documents used by TAXUD for the calculations of the NOE are available on CIRCABC (Communication and Information Resource Centre for Administered Communities) under the GNI verification cycle 2025-2030 ([14]). CIRCABC is a virtual platform hosting the Gross National Income (GNI) Inventories submitted by several EU Member States to Eurostat, detailing adjustments made for the non-observed economy based on Tabular Approach to Exhaustiveness (TAE)

[14] See CIRCABC for access to the website.

methodology ([15]). At the time of publication of this report, Luxembourg is the only country that has not provided data on its adjustment procedures for the GNI verification cycle 2025-2030 ([16]).

As shown in Figure 1.1, the NOE consists of seven different components concerning both registered and unregistered economic activities of producers: (N1) Producers deliberately not registering; (N2) Illegal economy; (N3) Producers not required to register; (N4) Registered legal persons not surveyed; (N5) Registered entrepreneurs not surveyed; (N6) Producers deliberately misreporting and (N7) Statistical deficiencies (N7) related to incomplete, not collected or not directly collectable data. The aggregation of specific components allows the quantification of the Informal economy (N3+N4+N5) and Underground economy (N1+N6). The informal economy specifically covers unregistered or small-scale unincorporated enterprises run by households.

Figure 1.1: Tabular Approach to Exhaustiveness (TAE) by EUROSTAT



Source: EUROSTAT.

Table 1.5 reports the main indicators used to quantify both the non-observed economy and the shadow economy. The unweighted EU average for the non-observed economy stands at 7.4% of GDP, with values ranging from 0.69% (Ireland) to 25% (Romania). However, given the limitations of the TAE methodology and the flexibility of its application in the context of national accounts, the figures appear to be an underestimation, particularly for some countries such as Bulgaria (4.12%) or Portugal (4.78%).

Studies quantifying the shadow economy employ diverse methodologies—often resulting in divergent findings—yet they appear capable of capturing broader economic activities that lie outside the formal economy. According to estimates by Schneider and Asllani for the European Parliament ([17]), based on a MIMIC approach ([18]), the unweighted EU average for the shadow economy stood at 17.6% of GDP in 2022, with values ranging from 6.6% (Austria) to 33.1% (Bulgaria). Several other studies provide estimates of similar magnitude for the size of the

[15] See, Eurostat. (2005). Eurostat's Tabular Approach to Exhaustiveness—Guidelines (GNIG/110). 5th meeting of the GNI Expert Group (5–6 July 2005). Eurostat/C1/GNIC/050.
[16] STATEC (Institut national de la statistique et des études économiques) estimates that, for 2021, 0.6% of the gross value added (GVA) generated by the non-financial corporations was deliberately misreported. However, this represents only a specific component of the overall non-observed economy (NOE).
[17] European Parliament (2022), Taxation of the informal economy in the EU.
[18] MIMIC stands for Multiple Indicator Multiple Cause.

shadow economy ([19]). However, using a currency demand approach (CDA), a recent study by EY ([20]) reports lower estimates for the shadow economy in 2023 with values ranging from 5.1% for Ireland to 13.1% for Romania, while the EU average is at 7.9% of GDP. The divergence in results between the two studies depends crucially on differences in methodology and assumptions. Table 1.5 reports the main indicators used to quantify non-observed economy and shadow economy.

Table 1.5: Non-observed Economy and Shadow Economy (% of GDP)

Country	Non-observed economy	Shadow Economy 2022 by Schneider and Asllani	Shadow Economy 2023 by EY
AT	4.9	6.6	6.6
BE	5.1	16.0	6.6
BG	4.1	33.1	10.5
CY	3.8	23.9	5.3
CZ	10.0	13.5	6.5
DE	5.1	8.8	6.8
DK	1.3	9.7	5.9
EE	4.6	22.7	7.4
EL	9.5	20.9	12.0
ES	5.6	15.8	7.5
FI	1.0	10.8	6.6
FR	5.5	14.2	6.7
HR	6.2	29.7	9.3
HU	9.0	25.4	9.2
IE	0.7	10.1	5.1
IT	13.0	20.3	7.8
LT	12.5	22.4	7.4
LU	-	8.3	6.1
LV	9.2	19.9	9.3
MT	8.8	23.4	7.5
NL	1.9	8.2	6.3
PL	13.4	21.9	9.7
PT	4.8	15.7	9.3
RO	25.0	29.0	13.1
SE	3.2	10.8	6.7
SI	7.5	22.1	8.0
SK	16.8	13.1	8.9
Average	**7.4**	**17.6**	**7.9**

[19] For an overview of various studies, see Fernandes, A. (2025), The non-observed economy in the national accounts: New evidence for EU and EFTA Member States, https://www.sciencedirect.com/science/article/pii/S0313592625000712

[20] The report is available at https://www.ey.com/content/dam/ey-unified-site/ey-com/en-gl/insights/tax/documents/ey-gl-shadow-economy-report-02-2025.pdf.

2. Compliance tax gaps

The compliance tax gap estimates the amount of uncollected tax revenues due to non-compliance, and it includes tax evasion, tax avoidance, bankruptcies or errors in reporting or payment ([21]). It reflects the revenue lost due to taxpayers not fulfilling their obligations under the current tax rules.

Approaches to estimate compliance tax gaps can broadly be divided into two categories: top-down and bottom-up methods.

- **Top-down methods provide a system-wide estimate of the tax gap using macroeconomic data.** Methodologies based on the top-down approach calculate the tax gap by estimating the total tax liability that should theoretically be collected based on macroeconomic data, then comparing it with the actual reported tax revenues. The difference between these two figures represents the tax gap. The success of top-down methodologies is largely dependent on the quality of the macroeconomic data used to account for the economic activity subject to taxation. Usually, national account data in combination with some corrections are used for this purpose.
- **Bottom-up methods provide detailed insights into taxpayer non-compliance using taxpayer-level data, such as individual tax returns, audit results and compliance rates.** Estimating the tax gap with bottom-up approaches involves first identifying non-compliance at a granular level for a sample group, before extrapolating the findings to the broader population. The approach is most commonly used in tax gap estimations where detailed taxpayer data is more likely to be available, such as for personal income tax or corporate income tax. However, bottom-up estimation can be a burdensome exercise for administrations as the collection and analysis of detailed microlevel data is a costly, resource-intensive activity. This is especially true for the use of random audits, which assure a representative sample. An alternative and more cost-effective approach is the use of operational audit data, which require advanced econometric methods to correct for biases in the sample. The quality of estimates based on bottom-up methodologies strongly depends on the availability and quality of the underlying microeconomic data.

Measuring the tax compliance gap could help policy makers understand the nature and magnitude of the problems related to tax collection. In addition, measuring and monitoring tax compliance gaps can support tax administration in assessing the effectiveness of their tax policy actions.

2.1 Overview

An increasing number of jurisdictions estimate tax gaps to address non-compliance and enhance fiscal transparency. In Europe, dedicated tax gap teams within national administrations began to emerge in the mid-2000s, and their number has grown steadily since ([22]). The Mind the Gap Report provides an overview of tax gap estimation activities in each Member State, including – when available – the scope of the estimation and the methodology used.

[21] Tax avoidance practices may be legal, but they are usually in contradiction with the spirit of the law. According to some interpretations, they could also be considered part of the policy gap.
[22] For further background, see Chapter 4 of the Annual Report on Taxation 2025.

For Member States with limited or no tax gap estimation activities, the information provided illustrates the current state of play. For Member States with more advanced tax gap programmes, the analysis also highlights how tax gap estimates feed into operational compliance strategies and tax administration processes. The main sources of information include the Annual Report on Taxation 2025, OECD Tax Administration Report 2024, and bilateral exchanges.

The European Commission's involvement has contributed to strengthened cooperation on tax gap analysis, as well as the development of a common EU methodology for VAT gap estimation (see Section 2.2). In particular, the Tax Administration EU Summit (TADEUS) is a forum for the heads and deputy heads of EU countries' tax administrations, which set the first working group on CIT tax gaps in 2018, and a dedicated working group on tax gap estimation, supported by the FISCALIS program, in Spring 2021. The TADEUS/FISCALIS Project Group on Tax Gap Estimation, coordinated by the Italian Revenue Agency and involving 20 national administrations on a voluntary basis, is structured around four thematic subgroups: Corporate Income Tax (CIT), Personal Income Tax and Social Security Contributions (PIT/SSC), Missing Trader Intra-Community VAT fraud (MTIC), and e-commerce VAT gap. The first cycle of the project was completed in 2025, and a second cycle has been launched in 2026. Additional information can be found in the TADEUS website, the FISCALIS programme website and the Final Report of the first cycle of the project.

2.2 Compliance tax gaps in VAT

A. Methodology

Since 2013, DG TAXUD has conducted an annual study on the VAT gap in Europe, providing estimates of the VAT compliance gap and VAT policy gap for each Member State and the EU as a whole ([23]). The 2025 edition extended the scope of the study further to include some EU candidate countries and potential candidates. The study covers a rolling five-year period (e.g., the 2026 edition will cover the years 2020–2024) and includes country chapters detailing recent economic developments and the evolution of the VAT gaps over time.

The VAT compliance gap measures overall non-compliance with VAT obligations. It reflects not only fraud and evasion but also losses arising from insolvencies, bankruptcies, administrative errors, and legal tax optimisation. It is defined as the difference between the tax revenue that would be collected under full compliance, assuming an unchanged tax base, referred to as the VAT Total Tax Liability (VTTL), and the actual VAT revenue collected.

The VAT compliance gap can be presented as a nominal value or as a percentage of the VTTL.

$$VAT\ compliance\ gap\ = VTTL - VAT\ revenue$$

$$VAT\ compliance\ gap\ (\%) = \frac{VTTL - VAT\ revenue}{VTTL}$$

The VTTL is estimated using a harmonised top-down consumption-based methodology, standardised across Member States, candidate countries, and potential candidates. It is expressed

[23] See the latest edition of the study: European Commission, Syntesia, Poniatowski, G., Bonch-Osmolovsky, M., Śmietanka, A. et al., VAT gap in Europe – Report 2025, Publications Office of the European Union, Luxembourg, 2025, https://data.europa.eu/doi/10.2778/7868422.

as the sum of the liability from final use and non-deductible VAT accrued in value-added chains. The VTTL is estimated as the sum of the liability from six main components:

- final consumption by households;
- final consumption by the government;
- final consumption by non-profit institutions serving households (NPISH);
- intermediate consumption;
- gross fixed capital formation (GFCF); and
- other, largely country-specific, adjustments.

To estimate the VTTL, around ten thousand parameters are estimated for each year. These include weighted average rates (i.e., the ratio of tax liability to net tax base) for each 2-digit CPA group of products and services, and shares of each sector's exempt and not taxable output. The estimation of the VTTL draws primarily on national accounts data (Supply and Use Tables from Eurostat), complemented by information from national administrations (e.g., effective VAT rates and exemption structures). Accurate and up-to-date national accounts data are therefore critical for reliable VAT compliance gap estimates.

B. Estimates

The 2025 report on the VAT gap in Europe ([24]) presents a comparison of the size and change in the VAT compliance gaps across Member States and for the EU as a whole between 2019 and 2023. Country chapters in the report outline the main economic developments that may explain trends in the gap in each country.

Table 2.1. VAT compliance gap (as % of the VTTL)

	2019	2020	2021	2022	2023
Belgium	13.2%	15.0%	7.2%	11.7%	12.3%
Bulgaria	9.3%	6.1%	3.0%	6.3%	8.6%
Czechia	14.6%	13.3%	11.1%	8.2%	8.0%
Denmark	11.2%	6.5%	7.4%	7.9%	8.9%
Germany	10.5%	7.2%	7.1%	6.6%	9.7%
Estonia	5.9%	5.7%	2.2%	5.2%	10.3%
Ireland	5.5%	3.3%	-3.2%	2.3%	8.3%
Greece	24.0%	21.5%	16.4%	12.4%	11.4%
Spain	7.8%	6.0%	2.8%	4.1%	7.6%
France	6.8%	7.5%	4.2%	5.1%	5.6%
Croatia	4.0%	10.4%	11.6%	11.4%	7.7%
Italy	19.3%	19.6%	15.1%	14.5%	15.0%
Cyprus	11.0%	15.5%	10.2%	6.3%	3.3%
Latvia	10.1%	11.8%	11.3%	2.0%	5.4%
Lithuania	20.9%	18.5%	13.1%	12.2%	15.1%
Hungary	10.4%	8.0%	4.1%	2.5%	7.4%
Malta	26.0%	27.6%	24.4%	23.7%	24.2%
Netherlands	11.2%	9.6%	5.8%	9.6%	7.0%

[24] See European Commission, Syntesia, Poniatowski, G., Bonch-Osmolovsky, M., Śmietanka, A. et al., *VAT gap in Europe – Report 2025*, Publications Office of the European Union, Luxembourg, 2025, https://data.europa.eu/doi/10.2778/7868422.

Austria	6.8%	6.8%	3.4%	3.0%	1.0%
Poland	14.9%	12.6%	4.8%	11.2%	16.0%
Portugal	7.9%	6.5%	3.5%	4.1%	3.6%
Romania	30.9%	31.1%	29.5%	26.7%	30.0%
Slovenia	4.8%	4.7%	3.2%	8.4%	4.9%
Slovakia	16.5%	16.3%	11.8%	11.5%	10.5%
Finland	4.7%	3.2%	0.4%	2.1%	3.0%
Sweden	1.5%	1.6%	4.2%	3.5%	5.3%
Average	10.6%	9.9%	7.2%	7.9%	9.5%

Source: European Commission, 2025. VAT gap in Europe – Report 2025.

Notes: "EU average" refers to the weighted average, calculated using each country's share in the EU VTTL as its weight.

2.3.Compliance tax gaps in corporate and personal income tax

2.3.1 The corporate income tax compliance gap

The CIT compliance gap estimates revenue losses due to non-compliance by entities subject to corporate income taxation, including large corporations, SMEs and public entities. It arises from a range of factors, including unintentional errors (e.g., unclear legislation, misinterpretation or lack of knowledge), insolvencies that prevent tax collection, and deliberate non-compliance such as underreporting, evasion or fraud ([25, 26]).

More broadly, the CIT compliance gap is influenced by factors such as tax morale, the complexity and clarity of the tax system and economic conditions, particularly through their impact on insolvencies. As a result, CIT compliance gap estimates can vary significantly across countries and over time.

Table 2.2: Type of CIT gap estimation conducted

Jurisdiction	CIT gap estimation	Registration gap	Filing gap	Reporting gap	Payment gap	Gross tax gap	Net tax gap
Czechia	Yes						
Denmark	Yes	No	Yes	Yes	Yes	Yes	No
Estonia	Yes						
France	Yes	No	No	Yes	Yes	Yes	Yes
Italy	Yes	No	Yes	Yes	Yes	Yes	No
Netherlands	Yes						
Romania	Yes	No	No	Yes	Yes	Yes	No
Slovakia	Yes	No	No	Yes	No	No	Yes
Sweden	Yes	No	No	Yes	No	Yes	Yes

Source: DG TAXUD and OECD (2024), Tax *Administration 2024: Comparative Information on OECD and other Advanced and Emerging Economies*.

[25] European Commission: Directorate-General for Taxation and Customs Union, FISCALIS Tax Gap Project Group, Nicodème, G., Pütsep, T. and Van Mierlo, A. (eds), *The concept of tax gaps. Report II, Corporate income tax gap estimation methodologies*, Publications Office, 2018, https://data.europa.eu/doi/10.2778/83206.

[26] While tax avoidance strategies are not necessarily illegal, they tend to violate the spirit of the law. This grey zone makes it difficult to clearly categorise ATP as compliance or policy gap. The work on CIT compliance gap estimation of the TADEUS group has explicitly focused on tax evasion, i.e. revenues lost due to illegal activity only.

Currently, only a limited number of Member States regularly estimate the CIT compliance gap, and even fewer publish the results (see Table 2.2). In 2026, according to the Commission's information, nine Member States produced CIT compliance gap estimates. Depending on the methodology, authorities distinguish different types of non-compliance, including registration, filing, reporting and payment gaps. Six Member States estimate the reporting gap. The payment gap is estimated by Denmark, France, Italy and Romania, and the filing gap by Denmark and Italy. In addition, two measures of the compliance tax gap are commonly used: the gross compliance tax gap (before compliance and collection actions) and the net compliance tax gap (after such actions). Estimating the net compliance tax gap is more challenging due to time lags in enforcement and collection. France and Sweden estimate both gross and net compliance tax gaps; Denmark, Italy and Romania estimate only the gross compliance tax gap, while Slovakia focuses on the net gap ([27]).

Member States apply both top-down and bottom-up methodologies. Italy, Romania and Slovakia use top-down approaches based on national accounts data. The Italian Revenue Agency publishes annual tax gap estimates, including CIT, with results calculated by sector but reported at aggregate level ([28]). Denmark, France and Sweden use bottom-up approaches based on audit data, extrapolated to the full taxpayer population. Denmark and Sweden complement risk-based operational audits with random audit programmes (see Table 2.3) ([29]). In Sweden, around 650 random audits are conducted annually by 60–70 auditors, covering CIT, VAT and payroll taxes ([30]). In Czechia, bottom-up estimates draw on various audit types, including risk-based audits and procedures leading to revised tax declarations ([31]). Slovakia is also developing a bottom-up approach to CIT gap estimation ([32]). The Netherlands also applies bottom-up approaches, combining random audit evidence with risk-based audit data. Estonia similarly applies a bottom-up approach based on risk-based audit data.

National estimates are available for Italy and Sweden. In 2023, the IMF also estimated the CIT gap for Slovenia using a top-down approach ([33]), and in 2025 it published a report on the CIT gap estimation for Sweden ([34]). This estimation was funded under the Technical Support Instrument of the European Commission ([35]). Although it is not technically equivalent to a CIT compliance gap,

[27] OECD (2024), *Tax Administration 2024*.
[28] At the time of drafting this note, the latest available report was published in 2025. See Ministero dell'Economia e delle Finanze *Relazione sull'economia non osservata e sull'evasione fiscale e contributiva*.
[29] OECD (2024), *Tax Administration 2024*.
[30] Comparable information on the number of random audits and auditors involved is not available for Denmark.
[31] European Commission (2025), Directorate-General for Taxation and Customs Union, Towards a common approach to tax gap estimation in the EU – Fiscalis Project Group 008 – Final report, Publications Office of the European Union, https://data.europa.eu/doi/10.2778/3068071.
[32] Chudý, M., R. Gábik, J. Bukovina, and L. Šrámkova (2020), *Searching for gaps: Bottom-up approach for Slovakia*, Economic Analysis–Policy Paper 54.
[33] International Monetary Fund (2023), Rep*ublic of Slovenia: Technical Assistance Report-Revenue Administration Gap Analysis Program – Corporate Income Tax Gap*, IMF Staff Country Reports 2023, 109, https://doi.org/10.5089/9798400236457.002.
[34] International Monetary Fund (2025), *Sweden: Technical Assistance Report – Corporate Income Tax Gap Estimation Based on Operational Audits*, Technical Assistance Reports 2025, 107, https://doi.org/10.5089/9798229031936.019.
[35] TSI 2021 project "Improving the administration of corporate income tax in Slovenia", 2022-2023, more information is available here https://reforms-investments.ec.europa.eu/technical-support-instrument-0/revenue-administration-and-public-financial-management/improving-administration-corporate-income-tax-slovenia_en

Finland's Grey Economy unit has recently estimated the grey economy of corporate taxation for small and medium-sized limited companies ([36]).

Table 2.3: CIT gap measurement: Approaches and methods used

Jurisdiction	No. of bottom-up approaches	No. of top-down approaches	No. of methods on risk-based data	No. of methods on random audit data
Czechia	1	0	1	0
Denmark	3	0	1	2
Estonia	1	0	1	0
France	1	0	1	0
Italy	0	1	0	0
Netherlands	2	0	1	1
Romania	0	1	0	0
Slovakia	1	1	1	0
Sweden	2	0	1	1

Source: DG TAXUD and OECD (2024), *Tax Administration 2024*.

In 2025, the Joint Research Centre (JRC) of the European Commission developed a novel approach to estimate the CIT compliance gap using national accounts data and information on the undeclared economy, providing approximations for 23 Member States. The methodology is based on the ratio of exhaustiveness adjustments to the declared share of Gross Value Added (GVA), as compiled by national statistical offices to account for non-observed economic activity in the calculation of Gross National Income (GNI).

Estimates based on the previous and updated data vintages are summarised in Table 2.4 below. The updated vintage incorporates the most recent Process Tables and exhaustiveness-adjustment data available for each Member State, while the previous vintage corresponds to the data used in the initial estimation exercise ([37]). The table shows the share of adjustments to GVA reflecting non-observed activity. Results indicate substantial cross-country variation. Based on the previous data vintage, CIT compliance gap estimates are below 3% in Denmark, the Netherlands and Finland, but exceed 20% in Slovakia and 40% in Romania. Among larger Member States, estimates are around 6.7% for France and 7.6% for Germany, while Italy records a higher level of around 20%. On average, the CIT gap is estimated at 10.9% of collected CIT revenues across the 23 Member States with available estimates.

The year reported in the table refers to the reference year of the national accounts and exhaustiveness-adjustment data used for the estimate, not to the year in which the estimate was produced. As these data are compiled and validated as part of the GNI verification process, they become available only with a time lag and reference years differ across Member States. The estimates should therefore be interpreted as the most recent comparable evidence available under this methodology, rather than as real-time indicators of the current CIT compliance gap.

[36] Finnish Tax Administration (2025), *The grey economy relating to corporate income tax of small and medium-sized companies amounts to up to EUR 120 million a year*, 10 June 2025.

[37] Reference years differ across Member States. "Previous" and "updated" vintage therefore refer to successive data releases used for the estimation rather than to a common reference year.

Table 2.4: CIT gap estimates based on the JRC top-down method

Country	previous vintage (2025 study)		updated vintage (2026 update)	
Austria	2017	4.23%	2021	5.76%
Belgium	2016	5.50%	2021	6.10%
Bulgaria	2018	7.76%	2022	4.85%
Croatia	2019	7.64%	2022	8.09%
Cyprus	2017	7.17%	2022	4.44%
Czechia	2018	11.10%	2022	12.31%
Denmark	2017	1.95%	2021	1.47%
Estonia	2016	5.03%	NA	
Finland	2018	2.87%	2022	1.10%
France	2017	6.66%	2019	6.66%
Germany	2016	7.62%	2020	5.93%
Greece	2015	7.70%	2021	12.16%
Hungary	2017	12.29%	2022	11.81%
Italy	2016	19.93%	2021	17.03%
Ireland	NA		2021	0.69%
Latvia	2018	17.86%	NA	
Lithuania	NA		2021	16.30%
Luxembourg	NA		2021	0.60%
Malta	NA		2019	10.85%
Netherlands	2015	2.57%	2021	2.23%
Poland	2017	20.20%	2022	14.56%
Portugal	2018	8.32%	2021	5.85%
Romania	2019	43.61%	2021	38.26%
Slovakia	2018	26.70%	2021	23.16%
Slovenia	2017	9.56%	2023	9.35%
Spain	2016	11.94%	2021	6.62%
Sweden	2015	3.51%	2021	3.77%
EU Average	10.94%		9.20%	

Source: Brun, L., Speitmann, R., Stasio, A.L. and Stoehlker, D. (2025), *The Corporate Income Tax Gap - A European approach to measuring losses in corporate tax revenues*. JRC Working Papers on Taxation and Structural Reforms No 07/2025, European Commission, Seville. The results from the updated vintage are based on the same methodology.

Notes: Estimates are based on gross value added. The year shown refers to the reference year of the national accounts and exhaustiveness-adjustment data used in the calculation. "Previous" and "updated" vintage refer to successive data releases used for the estimation, rather than to a common reference year across Member States. Due to the compilation and validation of GNI data, estimates are subject to a time lag and should not be interpreted as real-time measures of the current CIT compliance gap. Missing Member States have not published the required exhaustiveness adjustments. The EU average is the unweighted average across Member States with available estimates.

For the updated vintage, which is based on the application of the same methodology, results continue to show substantial cross-country variation, while remaining broadly consistent with earlier estimates. CIT gap estimates remain below 3% in Denmark, the Netherlands and Finland, and above 20% in Slovakia and close to 40% in Romania, although with some reduction compared to the previous vintage. Among larger Member States, estimates remain broadly stable, with France at around 6.7% and Italy showing a somewhat lower value of around

17%. Overall, the updated estimates suggest a moderate downward revision in some countries, while preserving the overall ranking and dispersion of CIT gaps across Member States.

Part of the observed reductions in the CIT gap for several Member States may be linked to the economic support measures implemented during the COVID-19 pandemic. These measures, including wage subsidies and liquidity support, helped sustain business activity and formal employment, potentially reducing incentives for underreporting and improving overall compliance during this period.

Although the previous and updated vintages refer to different reference years, the application of the same methodology allows for an indicative assessment of developments in CIT compliance gaps over time. Changes between estimates may therefore provide preliminary indications of trends in corporate tax compliance. However, these comparisons should be interpreted with caution, as differences may also reflect revisions to national accounts data, changes in compilation methods or the coverage of exhaustiveness adjustments, rather than changes in underlying compliance alone. In particular, estimates of the non-observed economy are subject to revisions as national statistical offices incorporate new information and refine their estimation methods. Consequently, CIT compliance gap estimates for the same reference year may change between successive data vintages, even when the underlying methodology remains unchanged. Differences may also arise from the use of alternative national accounts data sources. Moreover, with only two observations available for most Member States, the estimates do not yet allow firm conclusions on sustained trends over time.

The estimates themselves should also be interpreted with caution. The method provides a harmonised proxy for the CIT compliance gap, but its reliability depends on the quality, coverage and comparability of national accounts exhaustiveness adjustments, which may differ across Member States. A further caveat is that national accounts data may not always be fully independent from tax return or administrative data, creating a risk of circularity where tax data are already used in compiling the underlying aggregates. In addition, the approach mainly captures domestic underreporting of economic activity and does not cover CIT revenue losses linked to cross-border aggressive tax planning, international profit shifting or other forms of legal tax optimisation. In particular, low estimated CIT compliance gaps should not be interpreted as evidence of the absence of cross-border tax planning risks, which require separate methodologies and counterfactual assumptions on where profits would have been reported in the absence of profit shifting.

A further limitation concerns the mapping between national accounts exhaustiveness adjustments and the CIT-relevant tax base. Exhaustiveness adjustments may include activities or institutional sectors that are not, or not fully, subject to corporate income taxation, such as parts of the household sector or adjustments related to owner-occupied housing. Similarly, not all categories of non-observed activity captured in national accounts are necessarily taxable under CIT legislation, or taxable in the same way across Member States. In principle, more granular information by institutional sector, industry or type of exhaustiveness adjustment could improve the precision of the estimates. However, such information is not available in a consistent and comparable way across all Member States. For this reason, the methodology applies a harmonised approach across countries, while recognising that country-specific institutional coverage and the composition of exhaustiveness adjustments may affect the interpretation of individual estimates ([38]).

[38] For a detailed discussion of the methodology, underlying assumptions and main caveats, including the use of national accounts exhaustiveness adjustments, data availability constraints and the possible lack of independence between

The methodology is not applied to Estonia and Latvia under the new vintage because their distributed-profit CIT systems differ fundamentally from standard accrual-based corporate income tax systems. The JRC approach relies on exhaustiveness adjustments in national accounts, which mainly capture underreported or non-observed income, and interprets these as a proxy for undeclared corporate profits giving rise to missing CIT revenues. This logic is appropriate where corporate profits are taxed when they are earned. In Estonia and Latvia, however, retained corporate profits are generally not subject to CIT until they are distributed or deemed to be distributed. As a result, underreported income in a given year does not necessarily correspond to an immediate CIT liability or a current CIT compliance gap. Applying the same approach would therefore risk measuring undeclared income rather than the actual CIT gap under these systems, and would require additional assumptions on whether, when and how such profits would have been distributed. For this reason, comparable estimates are not provided for Estonia and Latvia anymore in the current vintage. Estimates for Estonia and Latvia included in the previous vintage should be interpreted with caution for these reasons.

Applying the latest available country-specific JRC CIT compliance gap estimates to corporate income tax revenues collected in 2024, the most recent year with harmonised data for all Member States, yields an **indicative estimate of around approximately EUR 45 billion in missing CIT revenues across the 25 Member States covered**. This calculation assumes that the estimated compliance gap ratios remain unchanged from their respective reference years. Extending the calculation to Estonia and Latvia would increase the total further.

2.3.2 The personal income tax compliance gap

Personal income taxation (PIT) typically covers a range of income sources, which vary across countries. EU Member States show considerable heterogeneity in both the design of PIT systems and the definition of taxable personal income. Common income categories that may contribute to the PIT compliance gap include: (i) wages and salaries; (ii) self-employment income; (iii) investment income (e.g., dividends, interest, capital gains); (iv) rental income; (v) pension income; (vi) business income from unincorporated entities (e.g., sole proprietorships or partnerships); and (vii) other income (e.g., prizes or gambling winnings). Depending on national legislation, some income types may be partially or fully exempt. In some cases, PIT compliance gap estimates may also include gaps related to social security contributions (SSCs).

Evidence on the size of the PIT compliance gap at both Member State and EU level remains limited, largely due to the lack of publicly available data. Italy and Sweden regularly publish PIT compliance gap estimates. In addition, a recent FISCALIS study tested an experimental approach to estimating the combined PIT and SSC compliance gap in Austria and Poland ([39]), with results reported in the respective country fiches.

national accounts and tax data, see Brun, L., Speitmann, R., Stasio, A.L. and Stoehlker, D. (2025), The Corporate Income Tax Gap – A European approach to measuring losses in corporate tax revenues, JRC Working Papers on Taxation and Structural Reforms No 07/2025, European Commission, Seville.

[39] European Commission: Directorate-General for Taxation and Customs Union, *Estimation methods for the personal oncome tax gap (including social security contributions) in the EU. Part 2, An approach based on survey data*, Publications Office of the European Union, 2024, https://data.europa.eu/doi/10.2778/243161

Table 2.5: Type of PIT compliance gap estimation

Jurisdiction	PIT gap estimation	Registration gap	Filing gap	Reporting gap	Payment gap	Gross tax gap	Net tax gap
Denmark	Yes	Yes	Yes	Yes	Yes	Yes	No
Greece	Yes	No	No	Yes	No	No	No
Italy	Yes	No	Yes	Yes	Yes	Yes	No
Latvia	Yes	No	Yes	Yes	Yes	Yes	Yes
Lithuania	Yes	No	No	No	No	Yes	No
Netherlands	Yes	No	Yes	Yes	Yes	No	No
Romania	Yes	No	No	Yes	Yes	Yes	No
Spain	Yes	No	No	No	No	Yes	No
Sweden	Yes	No	No	Yes	No	Yes	Yes

Source: DG TAXUD and OECD (2024), *Tax Administration 2024*.

Only a limited number of EU tax administrations estimate the PIT compliance gap, and, as in the case of the CIT gap, results are often not publicly disclosed. According to the OECD (2024), Denmark, Greece, Italy, Latvia, Lithuania, the Netherlands, Romania, Spain and Sweden estimate PIT compliance gaps (see Table 2.5 above). Coverage varies by component: only Denmark estimates the registration gap; filing gaps are estimated by Denmark, Italy, Latvia and the Netherlands; reporting gaps by Denmark, Greece, Italy, Latvia, the Netherlands, Romania and Sweden; and payment gaps by Denmark, Italy, Latvia, the Netherlands and Romania.

In terms of measurement, Latvia and Sweden estimate both gross and net PIT compliance gaps, while Denmark, Italy, Lithuania, Romania and Spain estimate only the gross gap. As noted above, the gross gap is measured before compliance and collection actions, while the net gap accounts for these interventions. Estimating the net gap is more challenging due to time lags in enforcement and collection activities.

Methodologies vary across Member States (see Table 2.6). Denmark and Sweden apply both top-down and bottom-up approaches, with the latter based on random audit data. Greece, Italy, Romania and Spain use top-down methods, while Latvia and Lithuania rely on bottom-up approaches. In Denmark, PIT compliance gaps for employees and the self-employed are estimated using random audits, complemented by a separate estimate of undeclared work based on a labour input method. This approach compares self-reported working hours from the Labour Force Survey with hours recorded in tax data; the discrepancy is used to approximate undeclared work and the associated PIT compliance gap ([40]).

[40] OECD (2024), *Tax Administration 2024*.

Table 2.6: PIT gap measurement: Approaches and methods used

Jurisdiction	No. of bottom-up approaches	No. of top-down approaches	No. of methods on risk-based data	No. of methods on random audit data	Projections	Non-detection multiplier
Denmark	5	2	0	5	No	No
Greece	0	1	0	0	No	No
Italy	0	3	0	0	Yes	No
Latvia	1	0	0	0	No	No
Lithuania	1	0	0	0	No	No
Netherlands	3	0	0	3	No	No
Romania	0	1	0	0	No	No
Spain	0	1	0	0	No	No
Sweden	2	1	0	2	No	No

Source: DG TAXUD and OECD (2024), Tax Administration 2024.

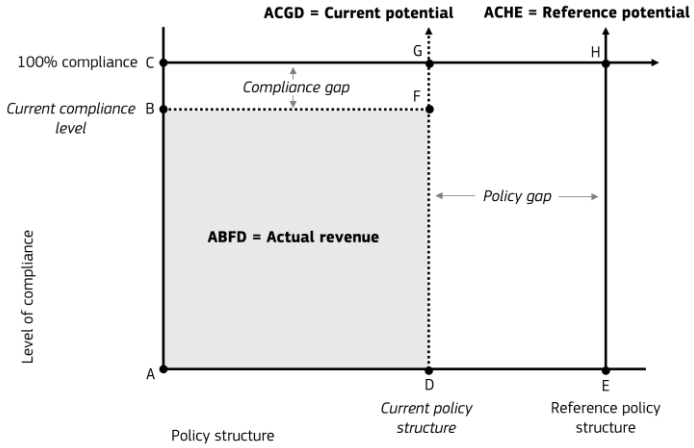
2.4.0ther compliance tax gaps

Only a few Member States perform and publish tax gap estimation in relation to other compliance gaps. Such activities include for example the estimation of the compliance gap associated to rental income and property taxes (Italy), individuals' foreign income from interests and dividends (Sweden) or cryptocurrency transactions (Finland).

3. Policy Tax Gaps – Concepts and Methods

The tax gap reflects the difference between potential revenues and actual revenues. The difference is determined by two main components, the compliance tax gap resulting from non-compliance (see Section 2), and the policy tax gap resulting from policy choices. In particular, policy tax gaps capture uncollected revenues due to policy decisions - for example reduced rates, exemptions, allowances or deductions. **Figure 3.1** depicts the relation of compliance and policy tax gaps. The policy gap is the result of a discretionary fiscal decision. It is therefore a category of forgone revenue that ought to be subject to the same democratic scrutiny as direct spending. However, for some components such as imputed rents etc. there is little realistic scope for revenue mobilisation. The IMF considers this as an efficiency gap, compared to an expenditure gap ([41]).

Figure 3.1: Relation of compliance- and policy tax gaps



Source: Hutton (2017)

A tax expenditure is tax revenue forgone through a provision that departs from a benchmark tax system, granting preferential treatment—via exemptions, deductions, credits, preferential rates, or deferrals—to certain taxpayers, activities, or transactions. It can have a fiscal effect similar to a direct budget outlay but affects the revenue side. Because it can escape the recurring parliamentary budgetary scrutiny applied to direct expenditure, tax expenditures can face a transparency deficit if no dedicated and detailed reporting is undertaken. Regular detailed reporting of the revenue impact of tax expenditures is mandated by Council Directive 2024/1265 ([42]).

Tax expenditure reporting and evaluation have a crucial policy relevance. Detailed, regular and institutionalised tax expenditure reporting, cataloguing, among other aspects, the policy rationale, increases fiscal transparency and is a first step towards the structured evaluation of costly tax provisions. Given the large fiscal implications of some provisions and potential negative implications for tax complexity, evaluations should assess their continued relevance, effectiveness, efficiency and administrative manageability of tax expenditure provisions (and the most important structural provisions).

[41] Hutton, 2017, "The Revenue Administration – Gap Analysis Program: Model and Methodology for Value-Added Tax Gap Estimation," IMF Technical Notes and Manuals 17/04.
[42] Council Directive (EU) 2024/1265 of 29 April 2024 amending Directive 2011/85/EU on requirements for budgetary frameworks of the Member States, specifies in Article 14(2) that Member States shall publish detailed information on the impact of tax expenditure on revenues.

3.0. Measurement and methodological challenges of tax expenditure

A tax expenditure is a deviation from a benchmark tax system. This benchmark needs to be defined. In a second step, the revenue implication of the tax expenditure has to be determined. Quantification is not always achieved, mostly due to data limitations. This subsection discusses details around benchmarks and revenues forgone to explain why cross-country comparisons are difficult and highlight a few of the issues related to tax expenditure reporting.

The benchmark and structural provisions

Whether a provision is a tax expenditure, and the size of the implied revenue-forgone estimate, depends on the benchmark against which provisions are compared. The benchmark is the baseline structure—rate schedule, tax base definition, accounting period, provisions against double taxation—against which departures are measured. Because it is a normative choice rather than an objective fact, what counts as a tax expenditure varies with where the benchmark is drawn. Most commonly a reference tax law approach is employed where the actual, existing tax laws and general statutory provisions in a country are taken as the standard baseline. The benchmark can also be defined using a conceptual approach where the benchmark is derived from a theoretical or normative concept of the tax base, informed by principles such as neutrality, efficiency and equity. Most governments apply a "current-law" benchmark, while academic work often refers to conceptual approaches like the Schanz–Haig–Simons comprehensive income benchmark.

Benchmark definitions vary widely across Member States. This makes comparison of revenue-forgone estimates problematic, both across tax types and, still more, across countries ([43]). While the Netherlands discusses all fiscally relevant provisions, Germany restricts the scope of TE reporting to business support only. As benchmarks also differ across tax types, several jurisdictions oppose aggregating estimates across tax types. Changes over time require the same caution: a change in revenues forgone can stem from a modification to a tax expenditure or from a change in the benchmark. An increase in the statutory CIT rate, for example, can mechanically raise the revenues forgone attributed to CIT-related tax expenditures even when those provisions remain unchanged (this applies especially to deduction, allowances and exemptions while tax credits are not affected).

Unreported structural provisions are a hindrance to fiscal transparency. Provisions treated as part of the benchmark itself, for example the basic personal income allowance or measures to prevent double taxation—are classified as structural and therefore in most cases excluded from tax expenditure reports. Therefore, provisions classified as "structural" can be removed from reporting even though they might have considerable revenue implications. When structural provisions remain completely unreported, the structural/tax-expenditure distinction creates a notable fiscal transparency deficit.

[43] The World Bank highlights similar limitations to cross-country comparability arising from differences in benchmark definitions and tax rates. For example, exempting 100 units of income from taxation results in estimated revenue forgone of 10 units in a country with a 10% tax rate, compared with 30 units in a country with a 30% tax rate. Moreover, if a country treats the same provision as part of its benchmark tax system, no tax expenditure would be recorded at all. See World Bank (2025), PFR Fundamentals: Measuring and Assessing Tax Expenditures, Section 2.1, p. 6.

Revenues forgone

Several methods exist to establish the cost of tax expenditures. To establish the cost or lost revenues due to tax expenditures, three basic approaches exist: the revenue forgone method (revenue implications without behavioural reaction), the revenue gain method (revenue implications with behavioural reactions, generally smaller than revenues forgone) and the outlay equivalence method (how much direct spending would be required to deliver the same benefit). The revenue forgone approach is most commonly used.

The revenue forgone approach disregards behavioural reactions and thus tends to overestimate the fiscal costs of a given tax expenditure. Or to be more precise, estimated revenues forgone tend to be higher than potential additional revenues the government could realise by abolishing the tax expenditure in question. Because taxation generally discourages the behaviour it targets, the revenue actually realised from revoking a tax expenditure (thereby increasing taxation) would typically be lower than the forgone-revenue estimate reported.

The volume of overall tax expenditure related revenue forgone does not by itself indicate excessive use of tax relief. Even high forgone revenues relative to the economy or the tax system may be justified and can represent an efficient or effective use of uncollected resources. Alternatively, it can simply reflect different benchmark definitions, coverage, estimation methods and reporting standards. For example, the Netherlands broadened its scope to cover all "relevant" tax provisions, sidestepping the difficulty of deciding whether a given provision is a tax expenditure or a structural part of the benchmark. This conceptual change almost doubled forgone revenues reported from about 8% of GDP to almost 15% of GDP ([44]).

Non-quantifiable provisions

About one third of relevant tax provisions remain non- or only approximately quantified. Tax expenditure reports routinely list provisions for which no revenue-forgone figure is given. In France's 2024 budget, 467 tax expenditures are listed but only 403 are estimated, and 129 of those estimates amount to no more than a rough order of magnitude. There are two distinct causes for non-quantification. Missing data can make it impossible to estimate forgone revenues, but there are also cases where the administration has deliberately chosen not to produce an estimate.

Non-quantification arises mostly where no data source is readily available or sometimes where the provision's cost cannot be forecast. The most common cause is that the relief never appears as a separate item in tax returns, so revenue forgone cannot be reconstructed from administrative data and alternative estimation is disproportionately costly. For example, the Dutch tax expenditure report (*Miljoenennota)* states plainly that the 30% ruling for posted workers is not actively monitored because the underlying data are lacking ([45]). Moreover, exempted income from

[44] Three provisions added in 2018 by themselves cause revenues forgone of about 7% of GDP. The earned-income tax credit (arbeidskorting) and (algemene heffingskorting) together amounted to about 5% of GDP (ca. EUR 55 billion), the pension premium deduction (omkeerregeling pensioenen) added another 2% of GDP (ca. EUR 17.4 billion). For details see Ministerie van Financiën. (2017). Miljoenennota 2018, Bijlage 6: Fiscale regelingen (§6.1). Kamerstuk 34775, nr. 2. Den Haag: Ministerie van Financiën. https://www.rijksfinancien.nl/miljoenennota/2018/bijlage/d17e20395; Ministerie van Financiën & Centraal Planbureau. (2022). Onderzoek fiscale regelingen. Den Haag: Ministerie van Financiën. https://open.overheid.nl/documenten/ronl-3cb72b4499b2bb07b86106b2fa051acc13765b6d/pdf; Tweede Kamer der Staten-Generaal. (2024). Evaluatie heffingskortingen en tariefstructuur. Den Haag: Tweede Kamer der Staten-Generaal. https://www.tweedekamer.nl/downloads/document?id=2024D17490.

[45] Ministerie van Financiën (2023). Miljoenennota 2024, Bijlage 9 — Fiscale regelingen. Den Haag. https://www.rijksfinancien.nl/miljoenennota/2024/bijlage/1843768.

certain activities will generally not be reported in tax declarations so that it is difficult for tax authorities to analyse the fiscal implications of the exemption. A second cause is erratic behaviour over time. French practice maintains an explicit *non chiffrable* (nc) category for this purpose; the *Cour des comptes* notes that the unpredictable evolution of certain expenditures leads the tax administration to prefer declaring them non-quantifiable rather than publish an unreliable figure ([46]). For 2020, the French budget anticipated 92 unquantified tax expenditures, 33 of which had been quantified the previous year.

Whether or not to pursue quantification of provisions reflects a decision on the scope of reporting, sometimes applying a threshold of significance. In some Member States, small, technical, structural, or EU-mandated provisions are described but not costed by design. The Dutch framework, for example, formalises this: a provision is quantified in the main annex only if its budgetary interest exceeds EUR 5 million, it does not follow from European legislation, data are available, and it is neither purely technical nor aimed solely at limiting administrative burden. Provisions failing these tests are moved to a descriptive annex without figures. De minimis thresholds operate similarly. France for example marks foregone revenues of less than EUR 0.5 million per item as "ε". Czechia considers only tax expenditures with forgone revenues of at least CZK 100 million (ca. EUR 4.1 million) ([47]). However, instead of not reporting revenues forgone, provisions below the de-minimis threshold are not mentioned at all.

Tax expenditures and their relation to the policy tax gap

Policy tax gaps and tax expenditures are not the same but have a large overlap. All tax expenditures could in principle be considered to contribute to the policy tax gap. However, there are multiple policy decisions which lead to revenue reductions which often are not considered as tax expenditures but might rather modify the reference benchmark tax system. In this case there is an open question if such policy decisions should be considered a policy tax gap. A reduction of the statutory tax rate, for example, should probably not be considered a policy tax gap, if there is no agreed benchmark tax rate against which to compare. The issue however is less clear for other provisions like loss-carry forward and -backward in corporate income taxation which are reported as tax expenditures by a few Member States but are considered structural provisions by most. When a national authority decides that a given beneficial tax-provision is not a deviation from the standard tax system but rather part of it, a so-called structural provision, it is no longer a tax expenditure but could or would still be considered a policy tax gap ([48]).

Tax expenditures and policy tax gaps rest on the same conceptual base. Both measure revenue foregone against a benchmark tax system. A tax expenditure is a single legislated departure from that benchmark (e.g. allowance, exemption, deduction, or tax credit) valued at its individual cost. The policy tax gap is at least the aggregate cost of all such departures. The two concepts overlap substantially but are not identical. Every TE contributes to the policy tax gap, but

[46] Cour des comptes (2024). Note d'analyse de l'exécution budgétaire 2023 — Dépenses fiscales. Paris: Cour des comptes. https://www.ccomptes.fr/sites/default/files/2024-04/NEB-2023-Depenses-fiscales.pdf.

[47] Ministerstvo financí ČR, *Kvantifikace daňových úlev v České republice za rok 2023* (14 November 2025), section 2 "Výše daňových úlev." Available at mf.gov.cz and reproduced in the 2026 State Budget bill documentation (Poslanecká sněmovna, sněmovní tisk 17/0, part 3). Note that tax expenditure items might also be omitted where the underlying data do not exist or are unavailable, regardless of size.

[48] Initiatives like Global TE Transparency Index (GTETI) consider it important that countries specify which tax benefits/reductions are considered as structural.

the policy tax gap may extend beyond TEs, since various policy decisions reduce revenue without being classified as tax expenditures and instead modify the reference benchmark itself.

The overlap is conceptual rather than operational, because although both frameworks require a benchmark, they rarely use the same one. TE reporting relies on countries' (in many cases tax specific) own benchmarks - a partly political construct that absorbs many provisions as "structural" and places them outside the reported total—whereas policy-gap analysis typically applies a more general external benchmark that often would keep those same provisions inside the count. This distinction has important consequences. When a national authority would reclassify a beneficial provision as structural rather than a deviation, it can be moved off the TE report but, under a general external benchmark, would remain inside the policy gap. The structural provision remains a discretionary revenue cost but is removed from democratic oversight and accountability unless it is subject to some form of monitoring.

The reporting and monitoring approach to structural provisions profoundly impacts the ability of TE reports to improve and sustain fiscal transparency. The boundary between structural and tax expenditure is contested in practice. For example, basic personal income allowances or loss carry-forward provisions for companies are reported as TEs by a few Member States but treated as structural provisions by most others. Also, reduced VAT rates are considered structural benchmark provisions by some Member States while they cause some of the largest categories of revenues forgone items in several Member States. Given the difficulties of defining an appropriate benchmark, the Netherlands has shifted their focus from tax provisions which are deviations to the norm/benchmark to 'fiscal arrangement'. Accordingly, the Dutch tax expenditure report contains information on all implemented fiscally relevant provisions, including those which would normally be considered part of the benchmark. This reform in 2018 caused the overall revenue forgone estimate of the Netherlands to double from about 7% of GDP to 14% of GDP. In conclusion, tax expenditure reports profit from information on structural provisions to provide a full picture of the resources routed through the tax system.

3.1. Tax expenditure reporting and evaluation

This subsection focuses on two separate issues: on the one hand tax expenditure reporting, on the other hand effectiveness and cost-benefit analysis of tax expenditures, referred to as TE evaluation ([49]). In the country fiches, the discussion of tax expenditure reporting in a given Member State is complemented by the comparative results of the Global Tax Expenditures Transparency Index (GTETI). In a second part, evaluation efforts on the stock of TEs are discussed. TE evaluation refers to an analysis of the relevance, effectiveness and efficiency of existing provisions in contrast to quantification only, which was often meant in the past. This can comprise cost-benefit analysis, the review of the policy objective, and analysis of the implied compliance costs resulting from the complexity of the provision for taxpayers and tax administrations.

Tax expenditure reporting

Without regular reporting, tax expenditures may escape the scrutiny applied to budgetary expenditures, leading to inefficiencies, inequities, or outdated policies

[49] Sometimes the assessment or evaluation of TEs refers to the estimation of revenues forgone. We take revenues forgone as a basic element of tax expenditure reporting and monitoring. Evaluation in the present context implies ex post impact assessment and cost-benefit analysis.

remaining in place. Robust reporting frameworks are the informational basis to ensure that tax expenditures are aligned with policy goals, fiscally justified, and periodically reviewed or reformed. The section discusses national tax expenditure reports. This discussion is complemented by GTETI results.

Tax expenditure reporting according to GTETI

The Global Tax Expenditures Transparency Index (GTETI), aims to capture the characteristics of national tax expenditure reporting with an indicator framework. Starting from an ideal tax expenditure report, 25 indicators are developed which allow each national tax expenditure report to be compared against the ideal and thus against each other. Indicators are grouped in five dimensions with five indicators in each dimension. The dimensions are '*Public availability*', '*Institutional framework*', '*Methodology and scope*', '*Descriptive tax expenditure data*' and '*Tax expenditure assessment*'. Table A1.1 in Annex A1 lists all indicators. Each dimension carries a maximum of 20 points so that the overall index has up to 100 points. Higher scores indicate greater transparency in TE reporting. The GTETI companion paper (2026) discusses the approach in detail.

A high GTETI score indicates transparent and comprehensive reporting practices; but does not mean that the country's tax expenditures are well designed, efficient or desirable. In terms of results for the EU, NL and DE rank highest (rank 1 and 2) and Hungary and Romania lowest (rank 25 and 26; Malta does not have a qualifying tax expenditure report and therefore receives a score of zero). All results are shown in Table A1.2 in Annex A1 and on the website.

Tax expenditure evaluation (cost-benefit analysis)

While ex-ante evaluations of new tax measures is an important element of sound policy making and better regulation, the second part of this subsection focuses mostly on ex-post evaluations of existing measures. An evaluation is a process that seeks to systematically inform policymakers about the desirability of (introducing,) maintaining or abolishing specific tax benefits by collecting and analysing available quantitative and qualitative information about their effects. Importantly, evaluation processes can be tailored to different levels of data availability and analytical capacity.

Evaluation efforts should be differentiated by the fiscal importance and type of each tax expenditure. Evaluations should systematically ask whether a measure is effective, at what direct and indirect costs, and whether similar or better results could be achieved through alternative instruments, like direct subsidies, regulation, public provision etc.

Transparent dissemination of evaluation results strengthens accountability and supports evidence-based public and parliamentary scrutiny. Regular and institutionalized evaluations rather than ad hoc exercises support continuous improvement of the tax expenditure portfolio and more coherent and transparent tax and spending policy. Countries such as Germany carry out large-scale evaluations once per legislative cycle, while others (for example Ireland) schedule reviews roughly every five years but accept that only the largest or most significant tax expenditures warrant detailed quantitative analysis. Practice is moving toward broader, sometimes thematic reviews covering multiple tax expenditures with similar objectives, greater use of ex-ante assessments to curb low-value new measures, and reliance on diverse data sources and

institutional partnerships, including cooperation between ministries of finance, audit institutions, academia, and think tanks. A growing number of countries also publish detailed reports on beneficiaries and evaluation findings.

3.2.Policy tax gaps in VAT

This subsection presents the findings of the VAT gap in the EU report and is complemented by an analysis of the VAT rate gap based on the EUROMOD household consumption tool. Many country fiches contain contextual information on VAT rates.

3.2.1 The VAT gap in the EU report

A. Methodology

As mentioned in section 2.2, DG TAXUD has been conducting an annual study on the VAT gap in Europe since 2013. It presents estimates of the VAT compliance gap and the VAT policy gap for each Member State, as well as the EU as a whole ([50]).

The VAT policy gap estimates the VAT revenues forgone due to the application of reduced VAT rates, exemptions, and zero rates. It represents the difference between the theoretically possible VAT revenue that could be collected if only the standard, uniform VAT rate was imposed, assuming full compliance (called the notional ideal VAT revenue), and the VAT Total Tax Liability (VTTL), representing the estimated VAT revenue that could be achieved under full compliance, but with the current VAT rate reductions and exemptions in place. The VAT policy gap captures the effects of applying multiple rates and exemptions on the theoretical revenue that could be levied in a given VAT system.

The VAT policy gap can be presented as a nominal value or as a percentage of the notional ideal VAT revenue.

$$VAT\ policy\ gap\ = notional\ ideal\ revenue - VTTL$$

$$VAT\ policy\ gap\ (\%) = \frac{notional\ ideal\ revenue - VTTL}{notional\ ideal\ revenue}$$

The VAT policy gap can be decomposed to assess the impact of specific types of preferential treatment or to analyse their effects on different parts of the tax base. It is made up of two additive components:

- The VAT rate gap is the portion of the VAT policy gap from the application of reduced, super-reduced, or zero VAT rates on goods and services, mainly to agricultural products, foodstuffs, beverages, accommodation and restaurant services.
- The VAT exemption gap is the portion of the VAT policy gap from the implementation of various exemptions or the exclusion of part of household final consumption from the tax base, largely composed of exemptions on the provision of public services and imputed rents.

The VAT exemption gap can further be decomposed into three components, as laid out in the 2025 edition of DG TAXUD's VAT gap in Europe study ([51]).

[50] See the latest edition of the study: European Commission, Syntesia, Poniatowski, G., Bonch-Osmolovsky, M., Śmietanka, A. et al., VAT gap in Europe – Report 2025, Publications Office of the European Union, Luxembourg, 2025, https://data.europa.eu/doi/10.2778/7868422.

- The national policy-driven VAT exemption gap consists of revenue forgone from services falling under Article 137 (such as real estate and certain financial services), from the SME scheme, and from national exemptions applied under standstill clauses or derogations.
- The EU-mandated VAT exemption gap includes exemptions required under EU law where Member States have limited discretion. These include services and activities in the public interest under Article 132, such as education, healthcare, postal services, welfare, cultural activities, and sport, as well as insurance services and gambling and betting under Article 135.
- The non-actionable VAT exemption gap covers components inherently outside the scope of VAT. These include government final consumption and other non-market transactions, such as public education and healthcare services, as well as imputed values in national accounts, such as imputed rents.

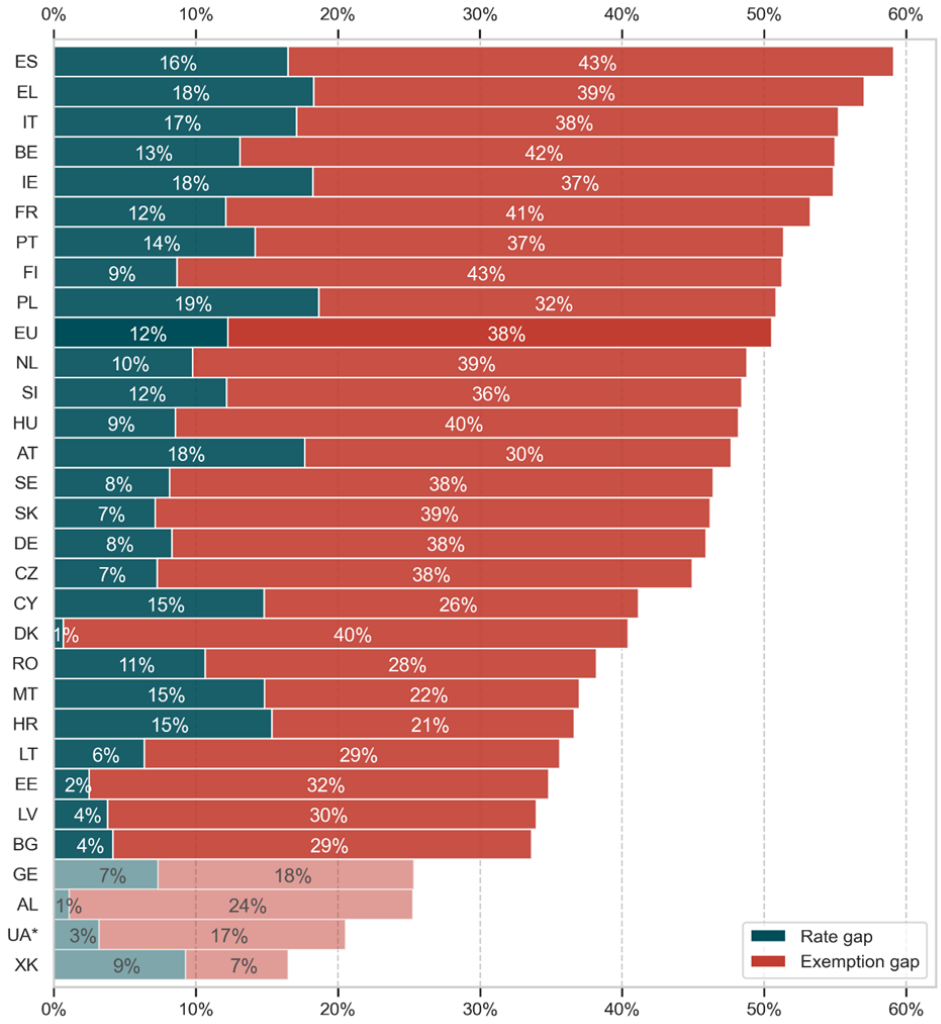
The simplicity of the VAT policy gap measure makes it possible to compare VAT systems across countries, something that is more challenging for other tax expenditure measures, which often rely on varying benchmark definitions.

B. Estimates

The estimates of the VAT policy gap for each country are shown in Figure 3.2 and can be found in the 2025 edition of the VAT gap in Europe study ([52]). The report presents a comparison of the size and change in the VAT policy gaps across Member States and with the EU as a whole, including its decomposition into the VAT rate gap, the VAT exemption gap, and its components. The size of the VAT rate gap and VAT exemption gap is also decomposed into key sectors for each country. The country chapters in the report discuss some policy developments that are likely to have influenced different components of the VAT policy gap in each country.

[51] See European Commission, Syntesia, Poniatowski, G., Bonch-Osmolovsky, M., Śmietanka, A. et al., VAT gap in Europe – Report 2025, Publications Office of the European Union, Luxembourg, 2025, https://data.europa.eu/doi/10.2778/7868422.
[52] See European Commission, Syntesia, Poniatowski, G., Bonch-Osmolovsky, M., Śmietanka, A. et al., *VAT gap in Europe – Report 2025*, Publications Office of the European Union, Luxembourg, 2025, https://data.europa.eu/doi/10.2778/7868422.

Figure 3.2: VAT policy gap (as % of notional ideal revenue, 2023)



Source: European Commission, 2025. VAT gap in Europe – Report 2025.

Factors influencing the size and development of different components of the VAT policy gap may include the introduction of reduced VAT rates on selected items, the introduction of VAT exemptions, and shifts in consumption towards sectors that benefit more or less from reduced VAT rates and/or exemptions.

3.2.2 Tax simulation of the VAT rate gap building on EUROMOD

The EUROMOD tax-benefit microsimulation model combines representative microdata on household incomes and consumption with a detailed code of the tax and benefit rules in force in each country. A detailed description is provided in Turrini et al. (2024), Ricci et al. (2026) and the accompanying method paper by Trzcinski and Amores (2026) ([53]). For each household in the sample, it applies the relevant rules to compute that household's tax liabilities and disposable income. Because the model knows what each household consumes and which VAT rate applies to each product category, it can calculate the VAT each household pays good by good. Aggregating

[53] Turrini et al. (2024), Tax Expenditures in the EU: Recent Trends and New Policy Challenges, European Commission, European Economy Discussion Paper 212; Ricci et al. (2026), Fiscal Costs and Redistributive Effects of Reduced VAT Rates in the EU, European Commission, European Economy Discussion Paper 244; Trzcinski and Amores (2026), The VAT Policy Gap and Redistribution in the European Union 2025, European Commission, Seville, JRC14876. Forthcoming.

these household-level results, weighted to represent the national population, yields economy-wide totals such as total VAT revenue.

Basic inputs for the tax simulation are the rate structure, household characteristics and consumption data. The VAT rate structure follows 2025 legislation, household characteristics come from EU-SILC 2024 which implies reference incomes from 2023. Official statistics on household consumption baskets are collected every five years in the Household Budget Survey (HBS) with the latest data available from 2020. As the year 2020 saw widespread lockdowns and other restrictions due to the COVID-19 crisis, consumption patterns from that year are heavily distorted and do not lend themselves as approximation of consumption patterns in 2023 (year of income observation). The consumption patterns thus are taken from HBS 2015. The implicit assumption here is that the basic consumption patterns have stayed constant.

The VAT rate gap is calculated by comparing two scenarios. The status quo (baseline) applies the VAT rates in force in 2025, including reduced rates, to each household's consumption basket. The counterfactual (reform) scenario removes the reduced rates and instead taxes all consumption at the country's standard rate, holding consumption patterns fixed. The difference in total VAT liabilities between the two scenarios is the revenue forgone because of reduced rates — the VAT rate gap. Because the model also tracks each household's disposable income net of VAT, the same comparison can be used to analyse the distributional impact and compute income inequality (Gini) and poverty indicators (at-risk-of-poverty rate) under each scenario. The change between baseline and counterfactual gives the effect of reduced rates on the income distribution.

Tax simulations do not account for behavioural changes. It is important to keep in mind that the tax simulations are static and do not account for behavioural adaptation. The price changes induced by rate changes would normally lead to demand changes. For example, the revenues forgone for reduced rates are overestimated as goods which currently have a reduced rate would be consumed less when a standard VAT rate would be applied. The static approach is implicit in EUROMOD but is also an assumption of revenue forgone calculations in general. EUROMOD tax simulations just offer a useful tool for estimating revenues forgone due to different tax expenditures, in this case the VAT rate gap.

Revenues forgone

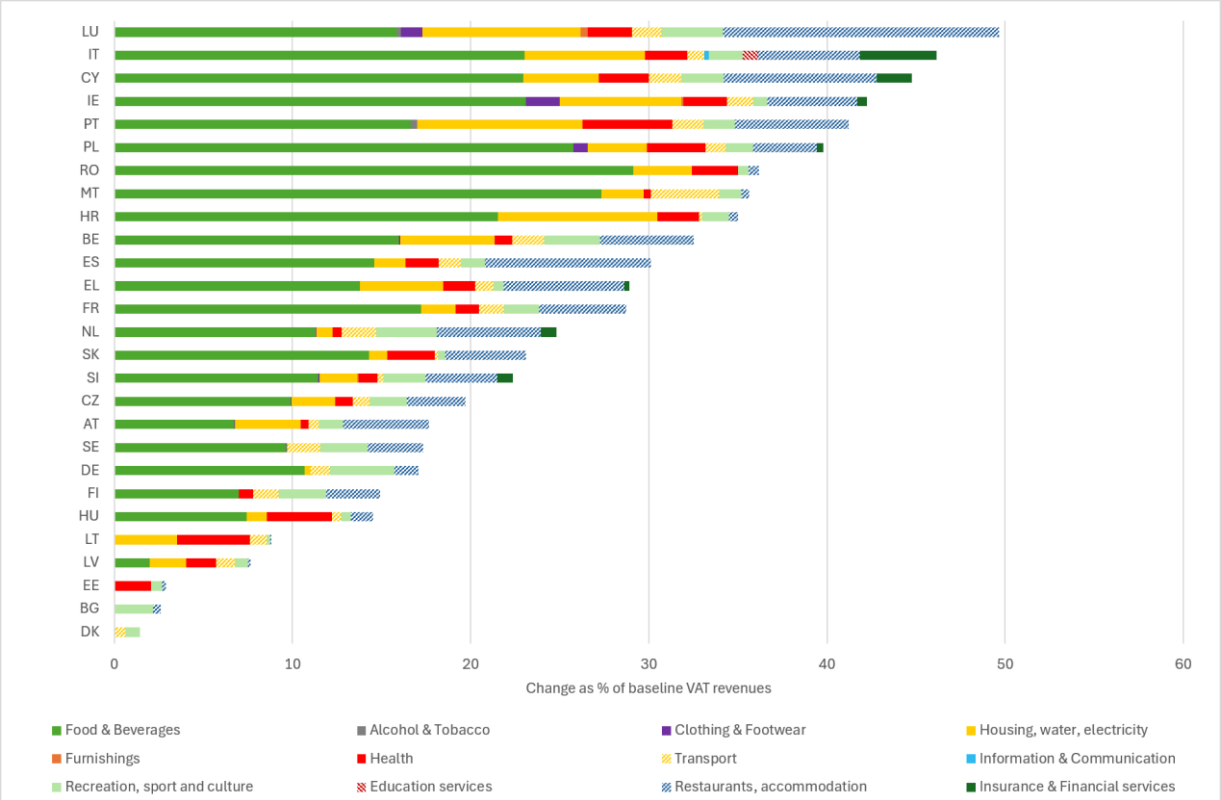
Relative revenue forgone estimates are more robust than absolute estimates. Aggregates calculated from microsimulations can be smaller than respective values recorded in national accounts. The tax simulations are thus much more robust for ratios than for levels. To understand the potential overall forgone revenue, VAT revenues forgone due to reduced rates can be expressed as share of actual VAT revenues. Recorded VAT revenues from Taxation Trends Data can be used to calculate the implied revenues forgone. (For example, assume that the EUROMOD analysis indicates revenues forgone of 12% of VAT revenues. When actual revenues collected are EUR 1 billion, the implied revenue forgone would thus amount to EUR 120 million.) These implied figures are on average around 30% higher than the model immanent estimates. The top up differs across countries.

In the EU, revenues forgone from reduced VAT are about 25% of actual VAT revenues ([54]). The revenue forgone ratios and actual VAT revenues from the taxation trend data indicate EU wide

[54] Weighted and simple averages (26.7% and 25.4% respectively) are relatively similar.

revenues forgone of about 25% or about EUR 340 billion due to reduced rates ([55]). **Figure 3.3** below shows revenues forgone as share of actual VAT revenues per COICOP consumption group (i.e. Classification of individual consumption by purpose) across counties.

Figure 3.3: Revenues forgone due to reduced rates as share of realised VAT revenues



Source: JRC calculations based on EUROMOD. Data not calibrated to national accounts.

'Food & beverages' is the most important consumption group as regards revenue forgone. 'Food & beverages', 'Restaurants, accommodation', 'Recreation, sport and culture', 'Housing, water, electricity', 'Health' and 'Transport' are the most prominent consumption categories (also see **Table 3.1** below).

Table 3.1: EU-27 revenue forgone from reduced VAT rates, by consumption group

Consumption group	2023 (€ bn)	Share 2023
'Food & Beverages'	154.8	48.0%
'Restaurants, accommodation'	70.0	21.7%
'Recreation, sport and culture'	31.0	9.6%
'Housing, water, electricity'	23.8	7.4%
'Health'	19.3	6.0%
'Transport'	14.0	4.3%

Source: JRC calculations based on EUROMOD.

Notes: The six consumptions groups shown make up together 97% of all revenue forgone. 'Insurance & Financial services', 'Education services', 'Clothing & Footwear', 'Information & Communication', 'Alcohol & Tobacco', 'Furnishings'

[55] Estimates of the rate gap from the 'VAT gap in the Europe 2025' report and those implied by EMOD can deviate across countries but come to the same EU-wide estimate of about 1.85% of GDP or more than EUR 300 billion. For details see Annex 2, Figure A2.1 and related explanation.

together account for €9.7 bn (3.0%) in 2023. revenue forgone = EMOD National-Accounts-corrected share of VAT revenue (COICOP_revenues_relative_NA) applied to TAXUD VAT revenue, per Member State and category, then summed across the EU-27.

Distributional analysis

The tax simulation allows for distributional analysis of reduced rates per consumption categories or COICOP. The impact of reduced rates on income inequality (Gini) and risk of poverty (AROP, at risk of poverty) ([56]) can be analysed on the country level and for each consumption category separately, albeit effects are often very small or inexistent for specific consumption categories. Comprehensive distributional analysis can also be found in Ricci et al. (2026) ([57]).

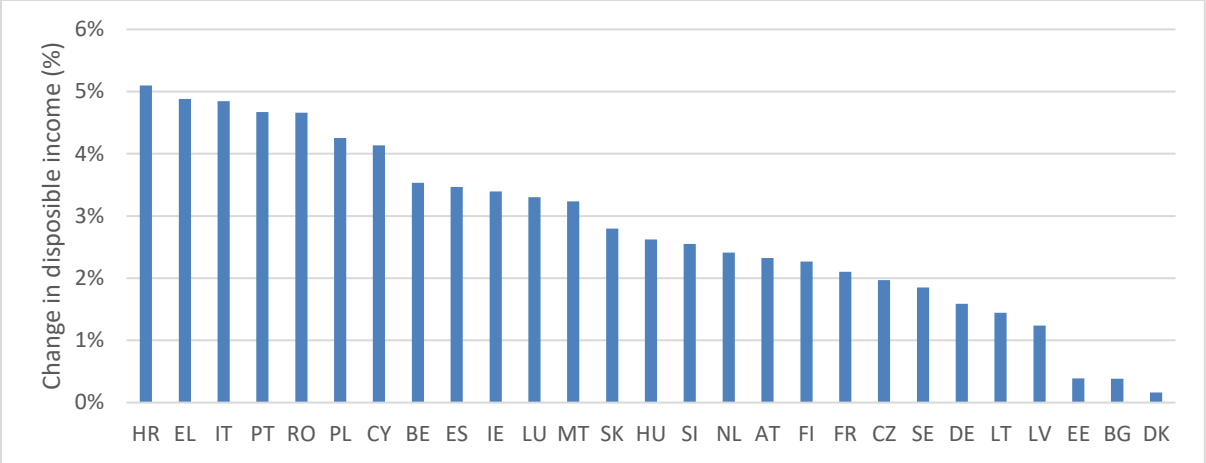
Reduced VAT rates are a relatively costly and untargeted redistributive tool. Because higher-income households spend more in absolute terms on most goods subject to reduced rates, including many necessities, a large share of the revenue forgone accrues to households more well of. A reduced rate is therefore progressive relative to income levels but expensive per unit of support delivered to lower-income households, since much of its cost is spent on households that do not need it. The Mirrlees Review (2011) concludes that rate differentiation is an inefficient way to achieve progressivity and recommends a broad-based, single-rate VAT with redistribution delivered through the personal tax and benefit system ([58]).

Member States may use tax expenditures (in this case reduced rates) for other policy objectives than equality and poverty reduction. The study focuses on Gini and AROP because these are the outcomes we can evaluate. This implies that poor performance from a country in the below analysis does not necessarily imply reform demand since the distributional impacts of tax expenditures might have been secondary to other policy objectives, when the tax expenditure provisions were adopted.

The introduction of reduced VAT rates increases total disposable income of households in all Member States, but to varying degrees. **Figure 3.4** shows the change in disposable income due to reduced rates. Reduced VAT rates increase disposable income of households by more than 5% in Croatia (HR) and by close to 5% in Greece and Italy, while the lowest increases are observed for Denmark, Bulgaria, and Estonia.

[56] The Gini coefficient is a measure between 0 and 1 (or 0 and 100) with zero implying full equality and 1 full inequality (all income accrues to one person). AROP provides the share of the population at risk of poverty.
[57] Ricci et al. 2026, Fiscal Costs and Redistributive Effects of Reduced VAT Rates in the EU: A Detailed Analysis by Product and Population Groups, European Economy Discussion Paper 244.
[58] In economies with the administrative capacity to operate targeted transfers, direct transfers reach lower-income households at substantially lower fiscal cost than reduced VAT rates. See Mirrlees et al. (2011), Tax by Design: The Mirrlees Review, and de la Feria et al. (2024), Designing a Progressive VAT, IMF Working Paper 24/78.

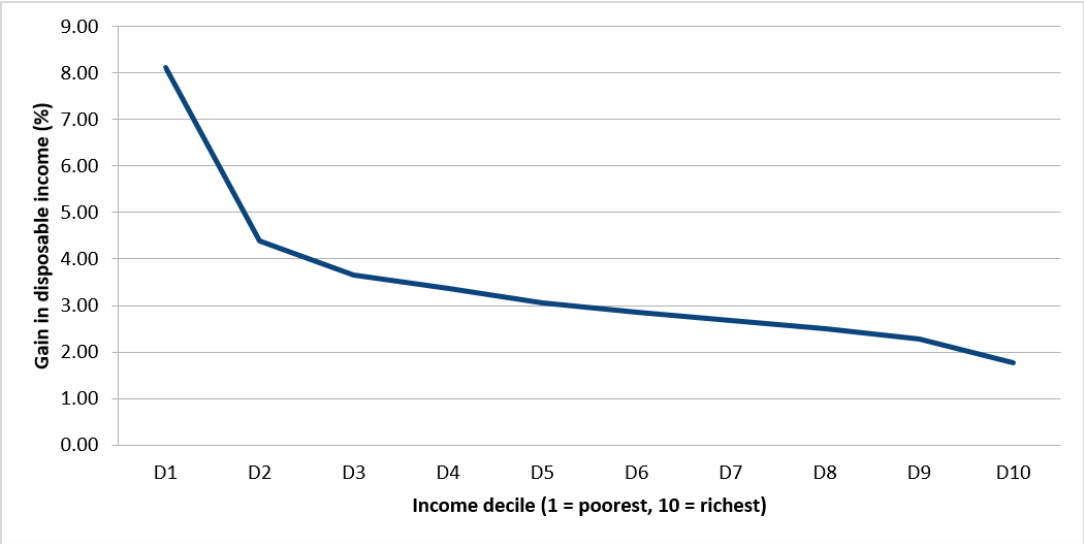
Figure 3.4: Change in disposable income due to reduced rates (when introduced)



Source: JRC calculations based on EUROMOD. Data not calibrated to national accounts.

In relative terms, poorer households profit more from reduced VAT rates. Figure 3.5 depicts the EU-average change in disposable income due to reduced VAT rates. The higher increase for lower income deciles indicates that reduced rates profit households in lower income deciles relatively more. On a country level perspective, reduced rates can be mostly considered progressive in the sense of relatively higher income gains for lower income groups. Country level figures are summarised in Panel A2.1 in Annex 2. In absolute amounts, it will often be the case that higher income groups profit more from reduced rates than households in lower income deciles.

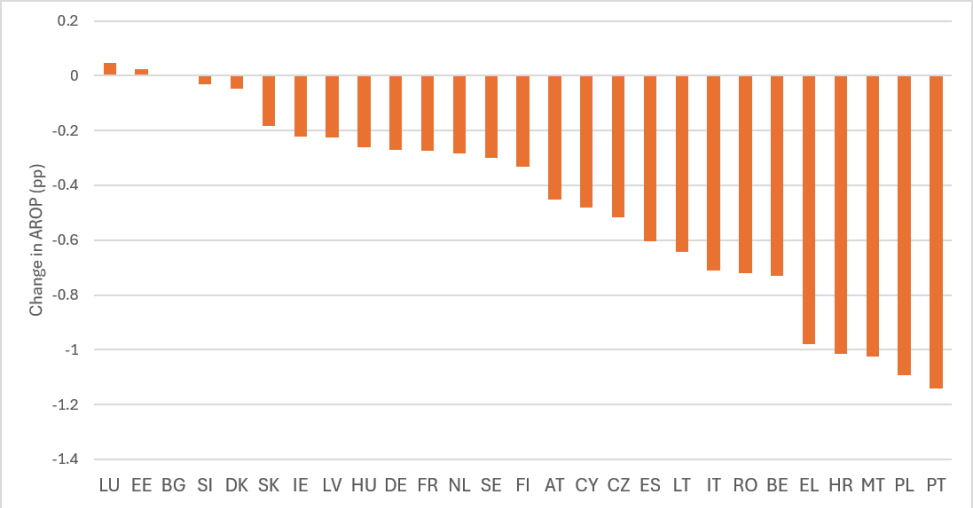
Figure 3.5: Change of disposable income across income deciles with reduced rates



Source: JRC calculations based on EUROMOD

Reduced VAT rates reduce risk of poverty (AROP) in most Member States. **Figure 3.6** depicts the change in AROP rates due to reduced rates. Reduced VAT rates have the strongest effect on reducing poverty in PT, PL and MT, while they slightly increase AROP in LU and EE.

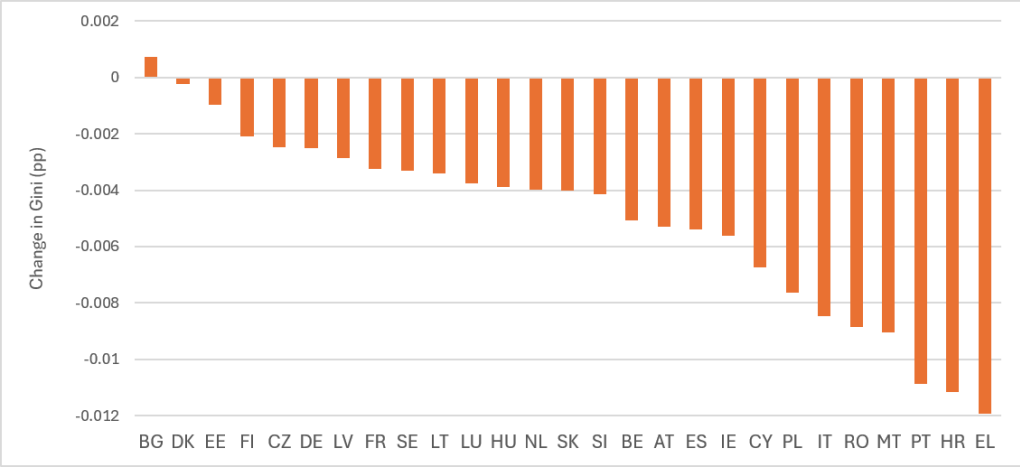
Figure 3.6: Change of AROP (due to reduced rates)



Source: JRC calculations based on EUROMOD.

Reduced VAT rates reduce income inequality as measured by the Gini in most Member States. The VAT overall is estimated to have a regressive distributive effect with respect to income, i.e., households with low incomes pay relatively more VAT as a proportion of their income than households with higher incomes. Reduced VAT rates are estimated to reduce this regressivity on average, albeit to a small degree. **Figure 3.7** depicts the change in Gini rates due to reduced rates. Income inequality of disposable income would be somewhat higher without reduced rates in all Member States but Bulgaria. Reduced VAT rates have the strongest effect on reducing risk of poverty in EL, HR and PT.

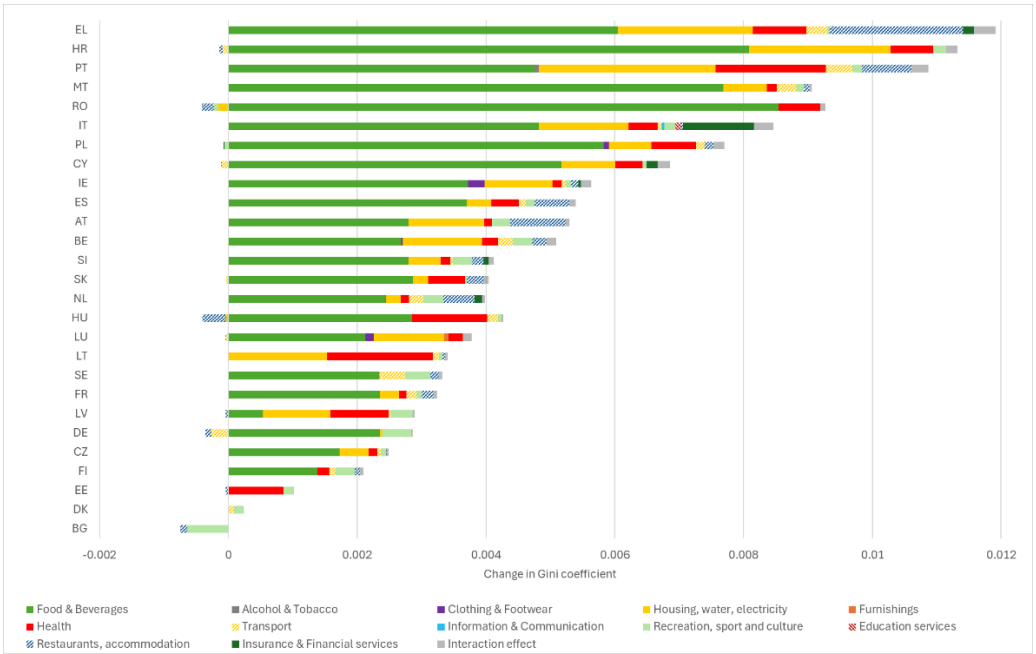
Figure 3.7: Change in Gini coefficient (due to reduced rates)



Source: JRC calculations based on EUROMOD.

Reduced rates on Food and Beverages are in most Member States the consumption category with the strongest redistributive effect. **Figure 3.8** depicts the change of income inequality per consumption group. For several countries, there are reduced rates with regressive effects increasing inequality in some consumption categories that may warrant further scrutiny. Overall changes in the Gini are modest, compared to considerable revenues forgone. A similar figure could be shown for changes in AROP by COICOP category but is omitted for space reasons.

Figure 3.8: Distributional impact per COICOP consumption category (pp change in Gini coefficient)



Source: JRC calculations based on EUROMOD.

3.3.Policy tax gaps in corporate income tax

This section in the country fiches assesses the CIT policy tax gap, focusing on revenue forgone due to tax expenditures and preferential provisions in the corporate tax system. Primary sources are national tax expenditure reports which at times might be complemented with information from existing third-party sources such as the Global tax expenditure database (GTED).

3.4.Policy tax gaps in personal income taxation

Overview. Section 3.4 in the country fiches discusses the PIT related policy tax gap and presents information on the largest PIT related tax expenditure provisions from the national tax expenditure report. This information is then complemented with results from tax simulations by EUROMOD which analyse the impact of tax expenditures on disposable income, income inequality (Gini coefficient) and risk of poverty (AROP) for provisions that can be modelled in EUROMOD. Some methodological considerations and basic results of the tax simulations are discussed in the following. For more details on assessing the impacts of tax expenditures in the PIT with EUROMOD, see Turrini et al. (2024) and Leventi et al. (2026) ([59]).

The EUROMOD tax-benefit microsimulation model combines representative microdata on household incomes with detailed tax and benefit rules. For each individual in the sample, the model calculates the taxes and benefits resulting from household characteristics and income. The implemented PIT rules follow 2025 legislation, household characteristics come from EU-SILC 2024. The analysis only considers those tax expenditures that can be modelled in EUROMOD, omitting a

[59] Turrini, A., Guigue, J., Kiss, Á., Leodolter, A., Van Herck, K., Neher, F., Leventi, C., Papini, A., Picos, F., Ricci, M. and Lanterna, F. (2024). *Tax Expenditures in the EU: Recent Trends & New Policy Challenges*. Discussion Paper 212, Publications Office of the European Union; Leventi, C., Navarro, S., Neher, F., Picos, F. Trzcinski, K., Personal Income Tax Expenditures in the EU, European Commission, Seville, 2026, JRC148748.

number of important tax expenditures and tax provisions due to data limitations ([60]). The simulation is static and disregards any behavioural reaction to policy changes.

The impact of tax expenditures is calculated by comparing two scenarios. Analysts have identified provisions in the tax code which reduce PIT liabilities. In a counterfactual scenario, these tax expenditure provisions are excluded and tax liabilities for households are calculated without tax expenditures. Without the tax expenditure provisions in place, the tax liabilities of households increase and as a consequence their disposable incomes decrease. Summing up the population weighted differences in tax liabilities across all households provides an estimate of the revenues forgone due to tax expenditures. Calculating Gini and AROP with and without tax expenditures allows an understanding of the related changes in income inequality and risk of poverty.

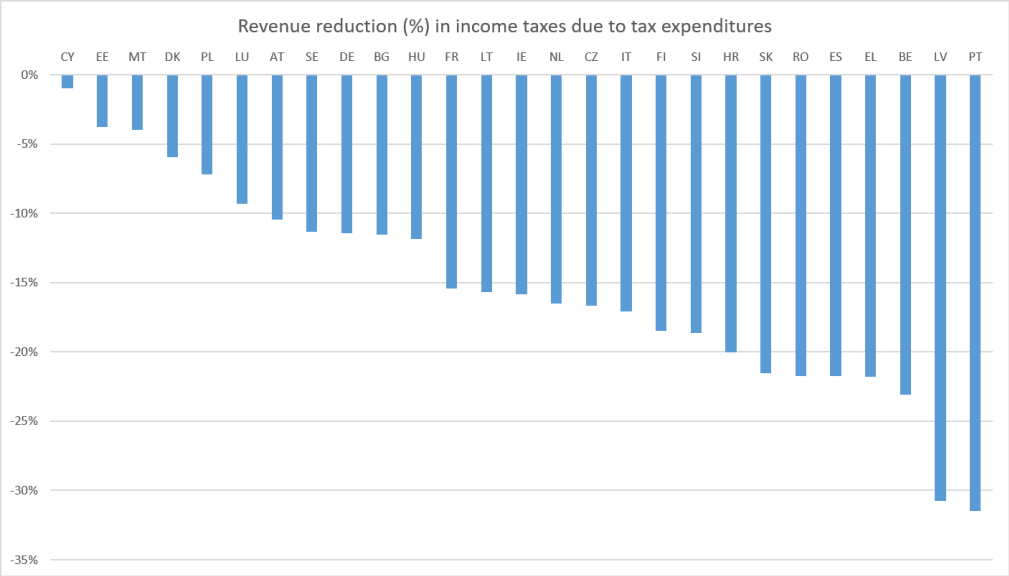
For a more detailed analysis, tax expenditures are categorized in policy areas according to the underlying policy objectives. The analysis considers seven policy areas, namely family, work, housing, education, health, pensions and others. Table A2.1 in Annex A2 provides an overview of related provisions per country and policy area.

Revenues forgone

There is substantial variation in the impact of tax expenditures on PIT revenues across Member States. **Figure 3.9** depicts the change of tax revenues as resulting from PIT related tax expenditures compared to the situation without tax expenditures. In Cyprus, the simulated tax expenditures have a small impact. In others, simulated tax expenditures have a sizeable impact on revenues. For example, in Portugal, tax expenditures reduce PIT revenues by more than 30%. If tax revenues including TEs are taken as a base to calculate relative revenues forgone, the share increases from around 30% to more than 45%. This is shown in **Figure 3.10**. Differences in revenue impacts across Member States can be attributed to the combined effect of (1) the extent to which tax expenditures are used in the PIT and (2) the overall tax burden associated with PIT in the country.

[60] The input data for EUROMOD provides information on household characteristics and incomes and is closely linked to EU-SILC. Several tax expenditures are granted conditional on aspects which are not recorded in the input data and can thus also not be modelled. The provisions analysed are summarised in Table A2.1 in Annex A2.

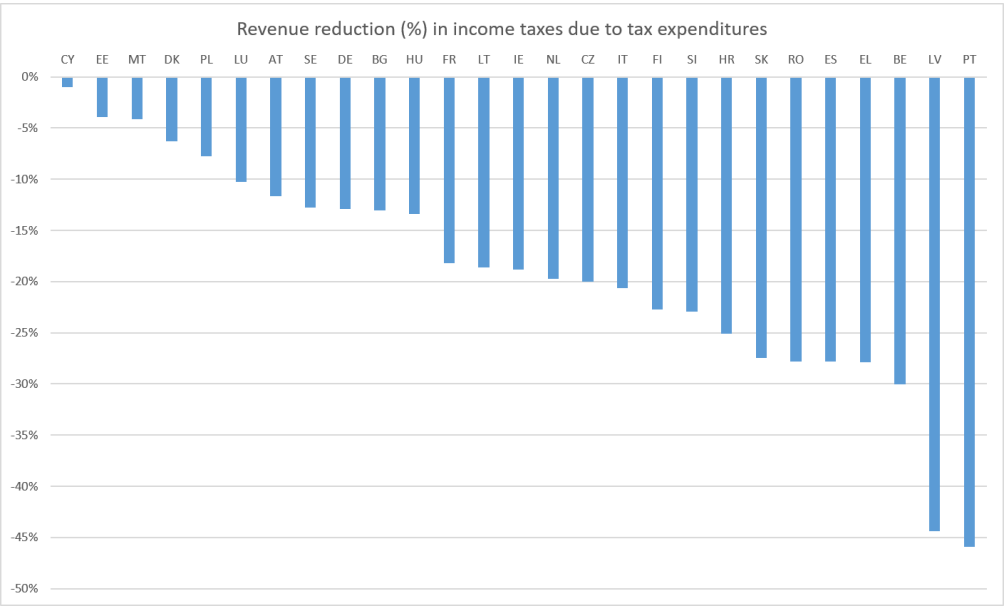
Figure 3.9: Tax revenues forgone due to PIT related tax expenditures



Source: own elaboration based on JRC simulations using EUROMOD Version J2.0

Notes: Values are computed as the revenue reduction due to tax expenditures divided by total revenue before applying tax expenditures, in percentage.

Figure 3.10: Tax revenues forgone due to PIT related tax expenditures

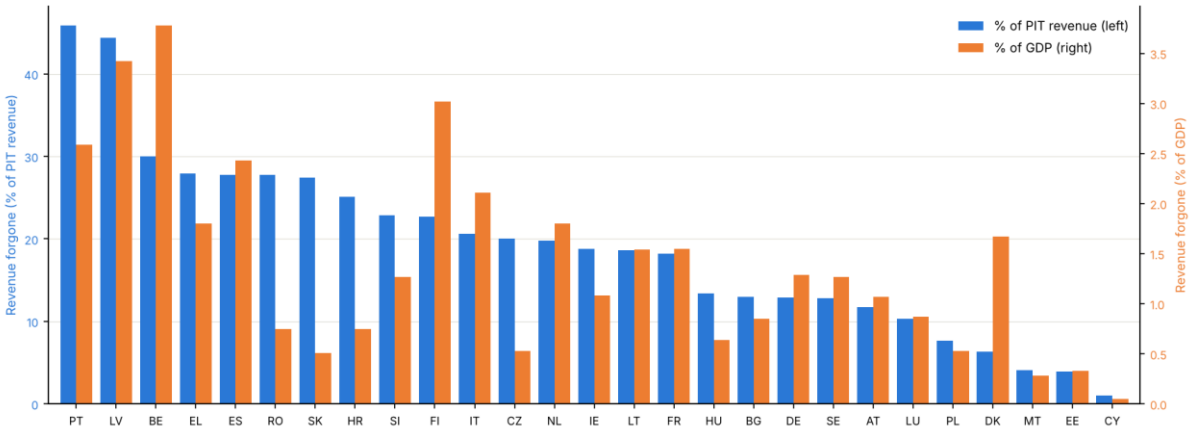


Source: own elaboration based on JRC simulations using EUROMOD Version J2.0

Notes: Values are computed as the revenue reduction due to tax expenditures divided by total revenue after applying tax expenditures, in percentage.

Differences in the overall tax burden and in the importance of PIT in the tax mix strongly influence the impact of tax expenditures on the budget. The role of PIT revenues differs widely across Member States. The comparison of revenues forgone due to tax expenditures should thus consider the role of PIT in a country. This could be achieved by considering revenues forgone as share of total tax revenues or alternatively as share of GDP. **Figure 3.11** depicts both values. Denmark, Belgium, Finland, Romania, Slovakia and Italy stand out with relatively large differences when revenues forgone are expressed as share of PIT revenues or alternatively as share of GDP.

Figure 3.11: Tax revenues forgone due to PIT related tax expenditures (as % of PIT and % of GDP)



Source: own elaboration based on JRC simulations using EUROMOD Version J2.0.

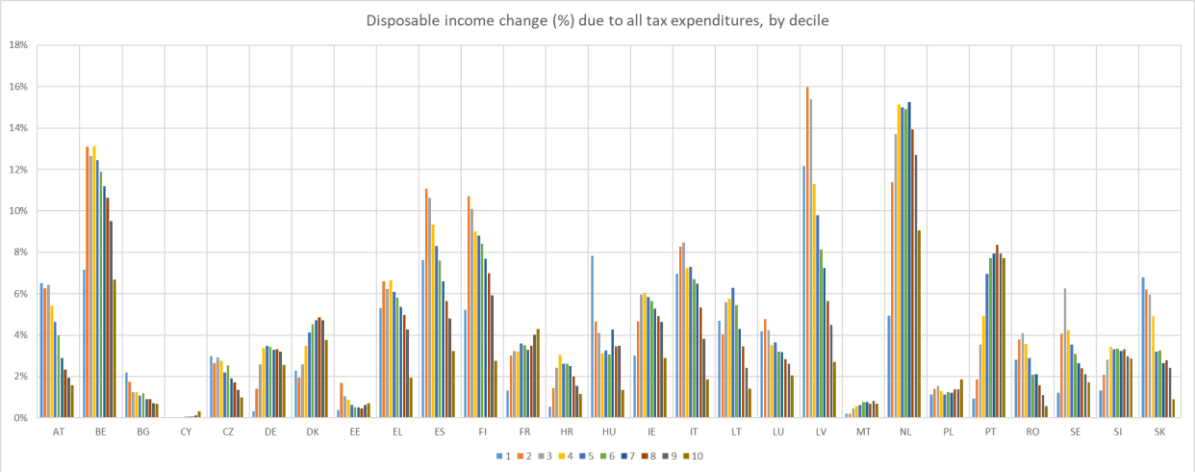
Distributional implications

Member States might use tax expenditures for other policy objectives than equality and poverty reduction. The following analysis focuses on changes in Gini and AROP because these are the outcomes we can evaluate. This implies that an inequality- or risk of poverty-increasing effect should not by itself be interpreted as evidence that a provision is ineffective, since redistribution may not be its primary objective. However, these distributional effects remain relevant and should be transparently reported.

PIT related tax expenditures are progressive in most countries. While PIT related tax expenditures are often progressive in the sense that the relative increase in disposable income is higher for lower income groups, this is not true for all Member States. Lower-income households with no positive PIT liability may benefit little or not at all from deductions, allowances and non-refundable tax credits, although refundable credits can also benefit households with no pre-credit PIT liability. **Figure 3.12** depicts the changes in disposable income across income deciles for all Member States due to tax expenditures that can be modelled. The figure provides a first understanding of the relative importance of tax expenditures for increasing disposable income (higher bars, higher income change) and on the progressivity of this effect (higher bars for lower deciles -to the left- than for higher deciles -to the right- indicate a progressive effect). A progressive effect is observed, for example in Austria or Slovakia. France ([61]) and Poland are examples where PIT related tax expenditures have a rather regressive effect ([62]).

[61] For France the effect might be driven by the fact that only half of the adult population has a positive PIT liability.
[62] Note that even where the effect is progressive, it only means that relative income increases decline with income. In absolute terms like Euro amounts, a well-off household in the ninth income decile could still profit much more than a poorer household, say in the third decile, for example.

Figure 3.12: Change in disposable income by equivalised income decile across Member States (in %)

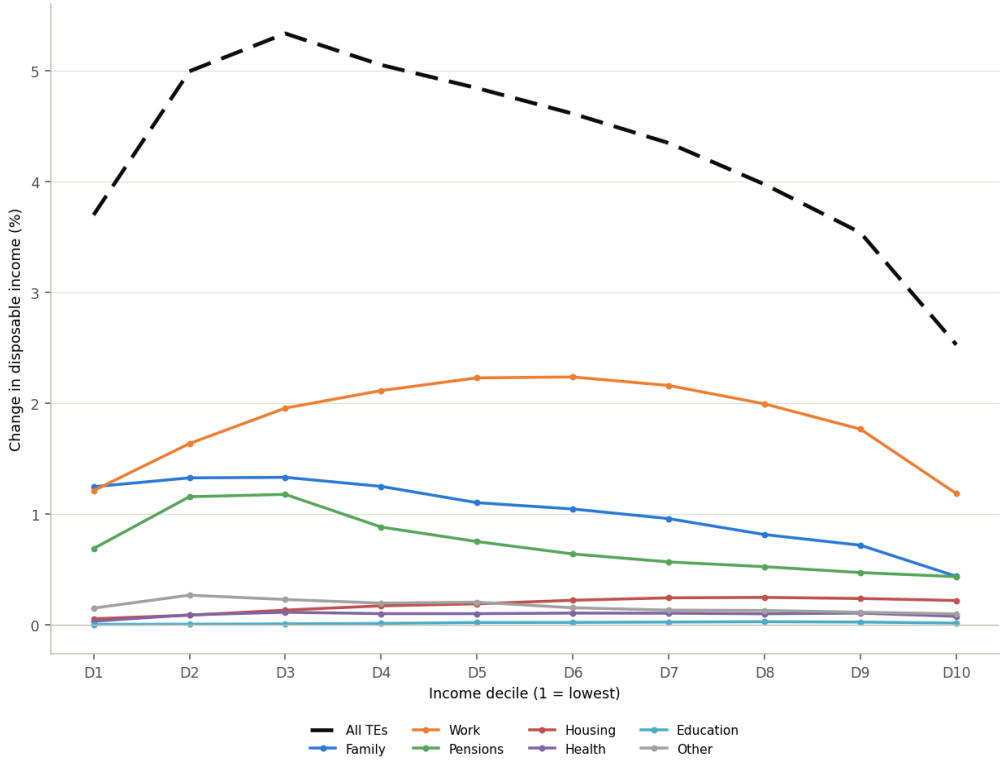


Source: JRC calculations based on EUROMOD. **Notes**: The distributional results capture the first-order effects of the simulated tax provisions, holding market incomes, employment and household characteristics constant. They therefore illustrate the mechanical incidence of the provisions rather than behavioural or general-equilibrium effects.

Relative income changes differ across policy areas. The tax expenditures analysed have been grouped into seven policy fields or areas (Family, Housing, Health, Work, Education, Pensions and others). **Figure 3.13** shows the change of disposable income by income decile for the different policy fields for the EU as a whole ([63]). All tax expenditures combined have a maximum impact for Decile 3 and are declining from then. Work related tax expenditures show the largest average effect but are less progressive than overall PIT related tax expenditures. As incomes are distributed unequally, the absolute change in income in higher income deciles will often be larger than in lower ones, even when a policy change is progressive.

[63] EU values are calculated by averaging each decile's percentage income change across the 27 countries. Deciles are not harmonised across countries in income level. A household at Bulgaria's D3 and one at Luxembourg's D3 sit at very different absolute incomes. The aggregation is an unweighted mean of percentages.

Figure 3.13: Change in disposable income due to tax expenditures by policy area (EU, in %)



Source: based on JRC simulations using EUROMOD Version J2.0

Notes: The distributional results capture the first-order effects of the simulated tax provisions, holding market incomes, employment and household characteristics constant. They therefore illustrate the mechanical incidence of the provisions rather than behavioural or general-equilibrium effects.

Lower-income households with no positive PIT liability may benefit little or not at all from many tax expenditures, although refundable tax credits can also benefit households with no pre-credit PIT liability. Nevertheless, income gains are mostly concentrated in the second to fourth income decile, while they are substantially smaller in the lowest decile (again Figure 3.13). This probably results from the fact that low-income households cannot fully benefit from tax expenditures because they have a low (or zero) tax liability to start with. In a few Member States, the simulated tax expenditures lead to an increase in income inequality as measured by the Gini coefficient. This is the case in PT, DK, FR and to a limited degree in DE, PL, MT, CY and SI. Again, it is important to note that tax expenditures might not have been implemented primarily to reduce income inequality. In addition, in some of the countries where income inequality increases due to tax expenditures, almost half of the population do not have positive PIT liabilities so that tax benefits only accrue to households with a positive PIT liability which tend to be better off ([64]). In such contexts, the change in income inequality seems to be mostly driven by the structural characteristics of the tax system as opposed to the design feature of the tax benefits under consideration ([65]).

PIT related tax expenditures reduce income inequality in most but not all Member States. Figure 3.14 presents the change in the Gini coefficient due to the simulated tax expenditures. These

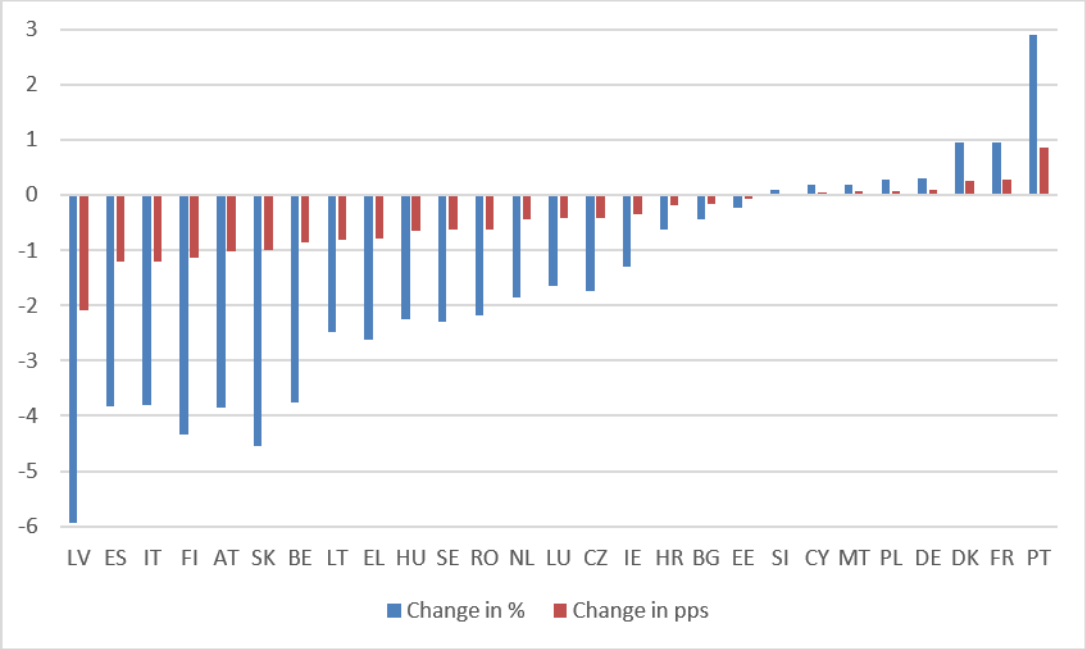
[64] In France, the share of households paying positive PIT has recently increased but remains below 50% (DGFIP, French fiscal statistics). A similar situation can be observed in Portugal, see for example this website.

[65] This is not true for refundable tax credits which change disposable income irrespective of the initial PIT liability of the taxpayer.

findings suggest that in many Member States individuals or households in lower- and middle-income deciles gain relatively more from the simulated tax expenditures, than those at the top of the income distribution.

As inequality levels differ across countries, changes to income inequality have to be seen in perspective. Figure 3.14 depicts changes in the Gini coefficient in percent and percentage points (Gini points) to consider the level effect. A given absolute change in Gini is relatively larger if the initial level of inequality is lower. Consider for example Austria and Slovakia. Tax expenditures reduce the Gini by one percentage point in both countries. As Slovakia has initially a lower Gini than Austria, the relative change in Slovakia (4.5%) is higher than in Austria (3.8%).

Figure 3.14: Change in Gini due to tax expenditures (in % and pps)



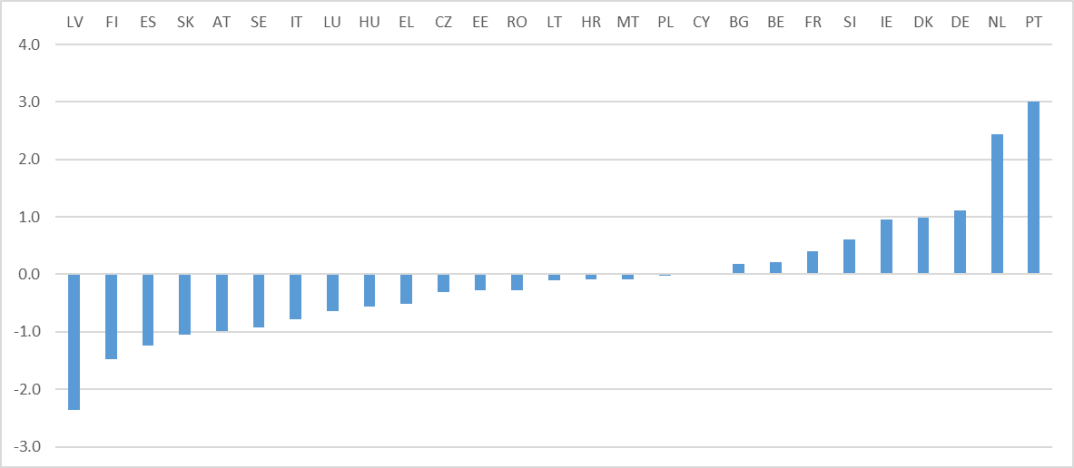
Source: own elaboration based on JRC simulations using EUROMOD Version J2.0

Notes: Full data in Annex A3.4.

Similar to income inequality, PIT related tax expenditures show mixed results in terms of AROP (at risk of poverty indicator) across Member States ([66])**.** Tax expenditures for PIT have a mixed effect on risk of poverty as captured by the at risk of poverty indicator (AROP). **Figure 3.15** shows the change of AROP in pp across Member States due to tax expenditures. While PIT related tax expenditures reduce AROP in most countries, reductions are below 1pp for most counties. Only LV, FI and ES see reductions of more than 1 pp. On the other hand, there are nine Member States with increasing AROP rates and increase of more than 2 pp in PT and NL. Note, however that the AROP indicator has to be carefully interpreted in the context of PIT related tax expenditures. AROP uses a relative poverty threshold: persons below 60% of the national median equivalised disposable income are considered at risk of poverty. The introduction of tax expenditures can increase equivalised disposable income and thereby also increase the AROP threshold. Depending on the distributional effects of the tax expenditures, more households could be classified as at risk of poverty, albeit the measure increased the disposable income of all AROP households.

[66] https://ec.europa.eu/eurostat/statistics-explained/index.php?title=Glossary:At-risk-of-poverty_rate

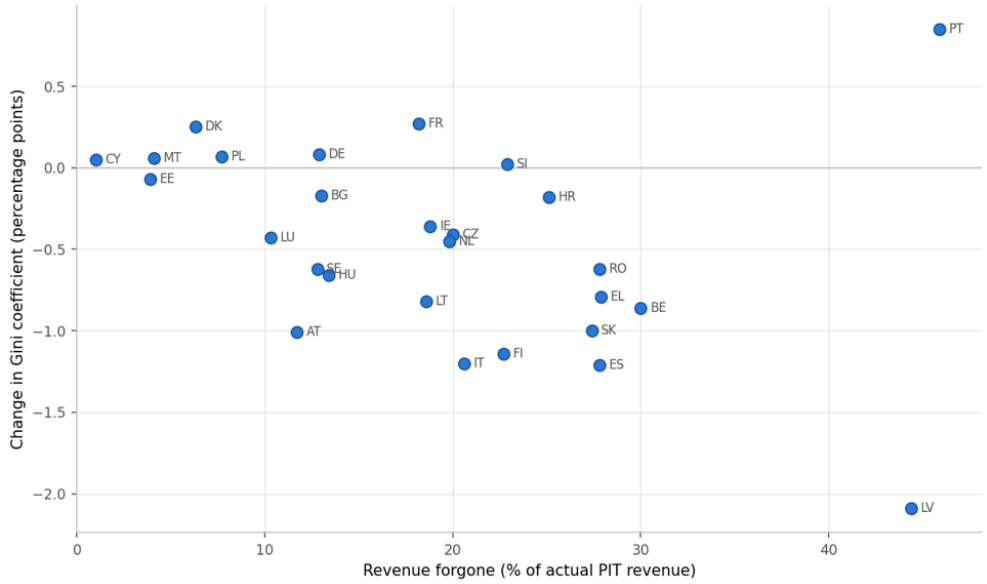
Figure 3.15: Change in AROP due to tax expenditures (in pp)



Source: own elaboration based on JRC simulations using EUROMOD Version J2.0

Overall, higher levels of revenues forgone is associated with a larger reduction in inequality. Figure 3.16 depicts revenues forgone against Gini changes in pp. The scatterplot indicates a negative relationship. In Latvia, PIT related tax expenditures cause the largest decline in Gini, however at considerable revenues forgone. All countries above the zero-line face increasing inequality. The case of Portugal is a noteworthy outlier with very high revenues forgone and the largest increase in Gini. However, changes in Gini are still relatively small in all cases.

Figure 3.16: Cost-outcome scatter plot: Change in Gini (in pp) and revenues forgone

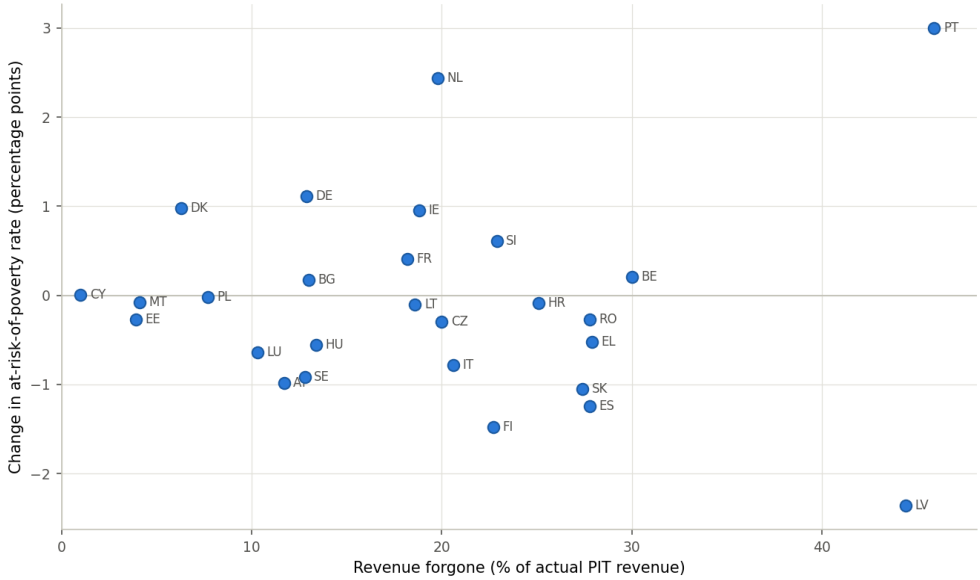


Source: own elaboration based on JRC simulations using EUROMOD Version J2.0

Notes: Revenues forgone are expressed as share of PIT revenues with tax expenditures in place.

Figure 3.17 depicts changes in AROP against revenues forgone. The scatterplot shows no clear cross-country association between the magnitude of revenue forgone and the change in AROP. Portugal and Latvia are again outliers.

Figure 3.17: Change in AROP (in pp) and revenues forgone



Source: Own elaboration based on JRC simulations using EUROMOD Version J2.0

Notes: Revenues forgone are expressed as share of PIT revenues with tax expenditures in place.

4. Effectiveness of tax administration

Empirical evidence suggests that stronger tax administration performance leads to lower tax compliance gaps ([67]). **Section 4 of the country fiches discusses the effectiveness of tax administration by analysing six key areas**: (1) taxpayer registration and identification, (2) tax filing and assessment, (3) compliance risk management, (4) audits and other control activities, (5) payment and collection, and (6) tax debt recovery. Each of these components is critical to enhancing the efficiency, fairness, and revenue integrity of tax systems, while addressing evolving challenges such as tax complexity and policy reforms.

This year's analysis adopts an integrated approach, incorporating digitalisation, artificial intelligence (AI), voluntary compliance mechanisms, and administrative cooperation tools to discuss recent changes, strengths, progress, and areas for improvement in these six areas.

Scope and Framework

In terms of **tax coverage**, the assessment focuses on the **three major tax categories**:

- Personal Income Tax (PIT),
- Corporate Income Tax (CIT), and
- Value-Added Tax (VAT).

The analysis supports **three key action points**:

- Deepening digital transformation;
- Optimising data processing and use;
- Improving tax collection and recovery.

To ensure a comprehensive assessment, the analysis combines both quantitative and qualitative indicators, including performance metrics (e.g. e-filing or recovery rates), the adoption of digitalisation and AI (e.g. use, scope and maturity of pre-filling, automated risk assessment and AI-driven compliance tools) and administrative cooperation tools (e.g. use of DAC ([68]) or CESOP ([69])).

The assessment also considers the broader policy context, including recent legislative changes, simplification efforts, and taxpayer support tools, to provide a holistic view of tax administration effectiveness.

Data Sources

The analysis draws on various data sources to ensure robustness and comparability including:

[67] Baer, K., Barra, P., Benitez, J. C. (2025). Closing the gap: How tax administration performance shapes compliance. IMF Working Paper, WP/25/209. International Monetary Fund, Washington, DC.

[68] Directive on Administrative Cooperation (DAC) establishes the EU framework for administrative cooperation between national tax authorities, including the exchange of information through automatic, on-request and spontaneous exchange mechanisms. The information exchanged is used by EU countries' tax authorities to enrich their risk analysis and carry out tax investigations and audits, thus generating additional resources.

[69] The central electronic system of payment information (CESOP) is an EU-wide system established under Directive (EU) 2020/284 to support the fight against VAT fraud in e-commerce. It requires payment service providers to report cross-border payment data on a quarterly basis to national tax authorities, which then transmit the information to CESOP. The system centralises and analyses this data, enabling Member States to detect undeclared online sales, identify fraudulent traders, and enhance administrative cooperation in combating cross-border VAT fraud.

- OECD (2025), Tax Administration 2025: Comparative Information on OECD and other Advanced and Emerging Economies, OECD Publishing, Paris, https://doi.org/10.1787/cc015ce8-en;
- OECD (2025), Tax Administration Digitalisation and Digital Transformation Initiatives, OECD Publishing, Paris, https://doi.org/10.1787/c076d776-en;
- Mind the Gap – Challenges and opportunities for tax compliance and tax expenditures in the EU – country reports (2025), Directorate-General for Taxation and Customs Union, European Commission, Publications Office of the European Union, Luxembourg, Mind the Gap Report - Taxation and Customs Union - European Commission;
- Latest available (2024) International Survey on Revenue Administration (ISORA) data that are published on the ISORA data portal at https://isoradata.org;
- Member States' annual reports (mostly 2025-2026) under Article 12, Regulation (EEC, Euratom) No 1553/89 on VAT own resources collection;
- Yearly assessment (2025) of Member States' use of data obtained through the automatic exchange of information (AEOI), under the Directive on administrative cooperation in the field of taxation (DAC);
- Annual statistics (2024) on Member States' activity in VAT administrative cooperation, provided pursuant to Commission Implementing Regulation 79/2012 (Annex IV) and presented to the Standing Committee on Administrative Cooperation (SCAC);
- Statistics (2023-2025) on the use of instruments of advanced international administrative cooperation (AIAC);
- Member States' replies to the 2025 survey launched under Article 27(3) of Directive 2010/24 on mutual assistance for the recovery of claims relating to taxes, duties and other measures;

Where data was unavailable or incomplete, qualitative assessments from country-specific reports were used, as detailed in the relevant country fiches.

Metrics and Indicators

Quantitative and qualitative indicators are organised by the six key areas, as shown in **Table 4.1**.

Table 4.1: Overview of metrics and indicators used

Key Area	Highlighted metrics
Registration/Identification	Level of digitalisation of the registration process and the database including automation and integration; risk-based VAT registration; e-commerce oversight and VAT deregistration
Tax Filing/Assessment	Availability, scope and maturity of pre-filling; data integration and automated processing; e-filing rates; taxpayer support tools; the use of the relevant administrative cooperation tools for both direct taxes and VAT

Compliance Risk Management (CRM)	Level of CRM framework integration; data sources and data analytics methods; use of behavioural insights and proactive compliance tools; DAC and CESOP utilisation; use of tax gaps estimates for CRM if applicable
Audits/Control Activities	Audit coverage; use of AI/advanced analytics; taxpayer segmentation; use of advanced cooperation tools
Payment/Collection	Payment compliance rates; level of digital payment adoption; VAT payment, refund and penalty framework
Debt Recovery	Tax arrears and debt recovery; cooperation and coordination in tax debt recovery, including cross-border assistance.

Analytical Approach

The analysis employs multiple methods. It includes among others: (i) comparative benchmarking, comparing performance against EU averages to identify relative strengths and weaknesses; (ii) trend analysis, examining changes over time to assess progress (e.g. change in e-filing rates); (iii) qualitative analysis, considering country-specific reforms or issues to explain improvements or persistent gaps; and (iv) assessment of digitalisation and AI development, examining the availability, scope and maturity of digital tools (e.g. pre-filling and real-time data integration) and AI applications in compliance or debt recovery. The analysis also considers the legal framework supporting tax administration, including the use of relevant EU legislative instruments.

Limitations and Caveats

While comprehensive, the analysis has several limitations:

1. **Data availability**: Not all Member States provide complete or accurate data.
2. **Comparability challenges**: Differences in economic, institutional, structural contexts or other country-specific factors may affect the assessment.
3. **External factors**: Shifts in compliance or revenue collection may reflect broader economic or policy developments, rather than changes in tax administration. Policy reforms and other factors may also affect year-on-year comparisons.

To mitigate these limitations, the analysis relies on multiple sources (e.g. ISORA, OECD, and Member State reports) and qualitative insights contextualise quantitative findings.

4.1 Registration/identification of taxpayers

Section 4.1 of the country fiches examines how taxpayers are registered and identified within national tax systems, focusing on the degree of digitalisation, risk-based approaches, e-commerce oversight and deregistration processes.

For **digitisation and automation**, the analysis evaluates whether registration processes are fully online and automated or require manual intervention. It considers the use of (real-time) validation, including cross-checks with company registers, social security databases, or customs systems. Systems requiring manual steps are noted as less efficient. The approach also examines whether

registration is automatically triggered by other processes, such as company incorporation, or requires separate applications.

In assessing **risk-based registration**, the methodology reviews how authorities screen high-risk applicants. This includes the use of background checks on founders and executives or third-party data matching. Risk indicators, such as inconsistent contact details, unusually high intra-EU trade volumes, or links to carousel fraud, are analysed where disclosed. The analysis acknowledges data gaps where risk criteria are unpublished, relying instead on qualitative descriptions of procedural steps.

The **oversight of e-commerce** is evaluated based on the existence of dedicated systems or units for monitoring e-commerce traders, as well as the integration of OSS/IOSS data into national VAT databases with further national examples included where appropriate. The methodology also considers the use of customs collaboration and sector-specific risk assessments to identify non-compliant traders.

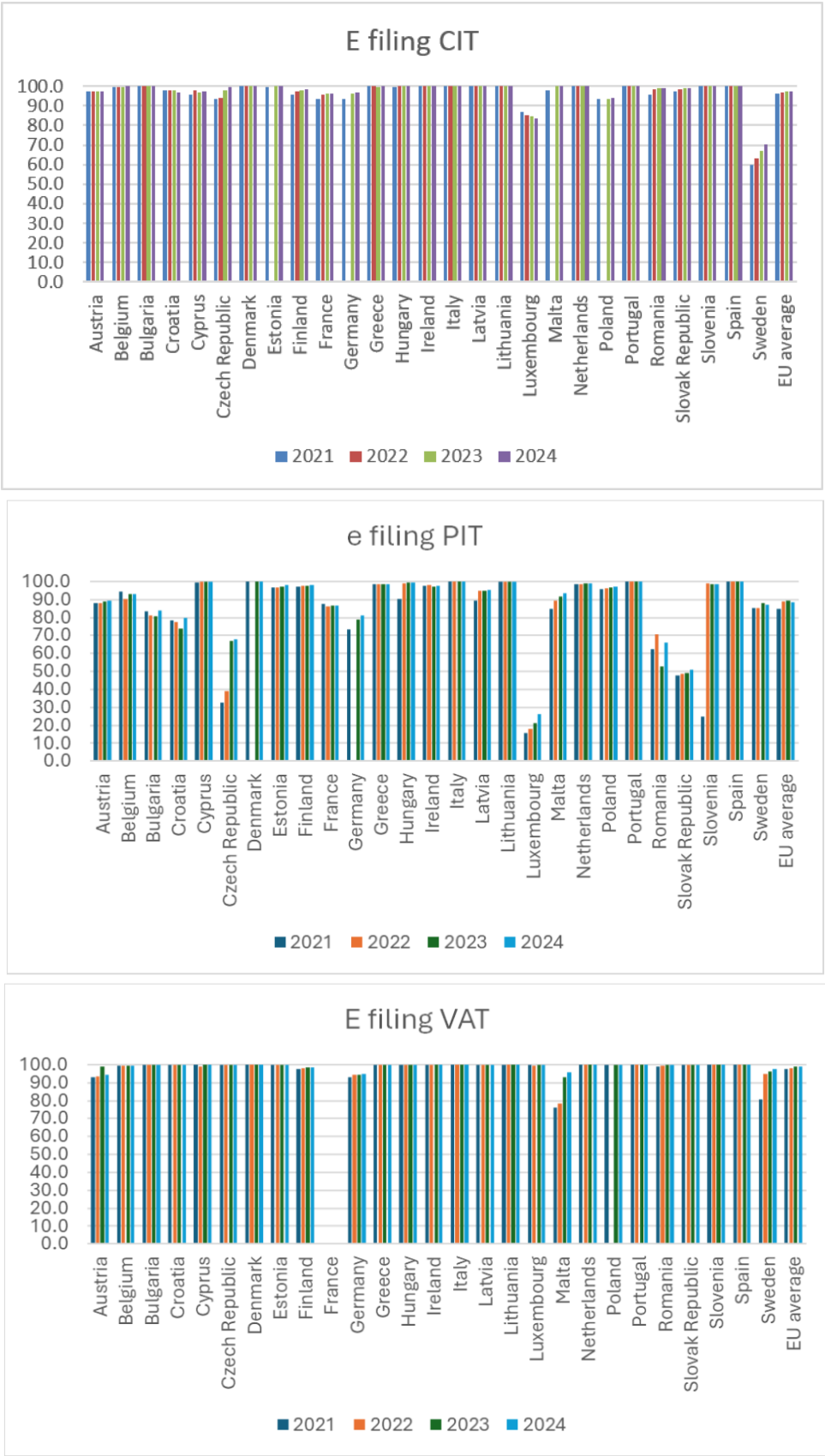
Finally, **deregistration processes** are examined, focusing on the speed of removing fraudulent VAT numbers and the responsiveness to Eurofisc alerts. The analysis notes whether temporary suspension of VAT numbers is possible or if full deregistration is required, as well as the appeals processes available to taxpayers. Where data on invalidation timelines is unclear qualitative reports are used to describe procedural steps.

4.2. Tax filing and assessment

Section 4.2 of the country fiches evaluates how taxpayers submit returns and how tax administrations process this information, focusing on filing processes, degree of digitalization, pre-filling capabilities, data integration, taxpayer support and the use of administrative cooperation mechanisms. The analysis also considers the extent to which **compliance by design** is embedded in filing and assessment processes, where tax compliance is integrated into systems and processes so that the correct tax treatment occurs as part of the transaction, as well as progress towards **seamless taxation**, whereby taxation is increasingly integrated into taxpayers' business activities, reducing the administrative burden and making compliance more straightforward.

The methodology examines **filing processes** by analysing the percentage of taxpayers using electronic filing (where data is available, see **Figure 4.1**) and the availability of streamlined digital processes for major taxes. Trends over time are analysed to assess progress in digital adoption. The analysis highlights differences between digitalized systems and those still relying on paper submissions for certain taxes.

Figure 4.1: E-filing trends across Member States in 2024 (in %)



Source: ISORA data.
Notes: data based on self-reporting by tax authorities or relevant ministries.

For pre-filling systems, the assessment examines the scope of pre-filled data and the maturity of implementation across different tax types (see **Table 4.2**). It evaluates which data sources are integrated into pre-filled returns, such as employer reports, pension data, and third-party information. The analysis notes significant variations in coverage e.g. in PIT pre-filling from comprehensive systems to more limited implementations. For VAT, where pre-filling exists, it typically relies on transaction-level data from mandatory e-invoicing systems or periodic digital reporting. The approach acknowledges that pre-filling maturity varies not only between countries but also between different tax types within the same country, with VAT pre-filling generally more advanced in countries with mandatory e-invoicing systems.

Table 4.2: Pre-filling across Member States in 2024

Member State	CIT	PIT	VAT
Belgium	NO	YES	NO
Bulgaria	NO	YES	NO
Czechia	NO	NO	NO
Denmark	NO	YES	NO
Germany	PARTIAL	YES	YES
Estonia	PARTIAL	YES	NO
Ireland	NO	YES	NO
Greece	NO	YES	YES
Spain	PARTIAL	YES	YES
France	NO	YES	YES
Croatia	NO	NO	NO
Italy	NO	YES	YES
Cyprus	NO	NO	NO
Latvia	NO	YES	YES
Lithuania	NO	YES	NO
Luxembourg	NO	NO	NO
Hungary	NO	YES	YES
Malta	NO	YES	NO
Netherlands	NO	YES	NO
Austria	NO	YES	NO
Poland	NO	NO	NO
Portugal	NO	YES	YES
Romania	NO	NO	NO
Slovenia	NO	YES	NO
Slovakia	NO	NO	NO
Finland	NO	YES	NO
Sweden	NO	YES	NO

Source: ISORA data, Notes: based on self-reporting

Data integration capabilities are evaluated by examining whether systems enable automated cross-checks with third-party data sources. This includes assessing the integration of employer reports, bank transactions, and VAT transaction data, though most countries still rely on batch processing rather than real-time data sharing**.**

Taxpayer support tools are evaluated qualitatively, focusing on chatbots, calculators, dedicated portals and multi-channel access. The assessment considers whether support systems provide proactive guidance or primarily reactive assistance.

For the outcome and use of **administrative cooperation mechanisms**, the analysis addresses VAT administrative cooperation metrics where quantitative data exists, including the number of information requests exchanged and the allocation of VAT identification numbers to non-established entities. As regards the DAC, the analysis is based on matching rates and the operational use of the exchanged information.

4.3. Compliance risk management

Section 4.3 of the country fiches examines national approaches to identifying, assessing, and addressing tax compliance risks, focusing on the framework, data sources, analytics methods, behavioural and other proactive compliance tools, and use of administrative cooperation mechanisms and tax gaps estimates.

The methodology evaluates **risk management frameworks** by examining whether countries have formal strategies or rely on fragmented approaches.

It assesses the **data sources used for risk analysis**, including internal tax records, third-party data and EU administrative cooperation mechanisms (DAC, CESOP). The analysis notes where countries use Big Data platforms to analyse large datasets, while others rely more on traditional tax filings and financial statements.

National approaches to analytics are examined by looking at the use of AI and machine learning, predictive analytics and manual cross-checks where automation is limited. The methodology describes whether risk assessment relies on real-time analytics or periodic batch processing, noting that most countries still combine automated tools with human oversight.

The use of **behavioural insights and proactive compliance tools** is assessed qualitatively, examining whether countries apply nudging techniques tailored messaging, digital tools or simplified processes to encourage voluntary compliance. The analysis notes that while some countries use behavioural tools experimentally or systematically, others focus primarily on process simplification rather than structured behavioural interventions.

For **administrative cooperation mechanisms**, the methodology examines how countries use DAC (DAC3, DAC4, DAC6) and CESOP data for risk assessment. It includes the percentage of taxpayers identified through DAC mechanisms, where available, but refers to the dedicated administrative cooperation section for detailed analysis. The assessment also considers whether countries use CESOP data systematically or primarily for case-by-case investigations.

Use of tax gap analysis is included where available, examining how countries use gap estimates to guide compliance strategies. The methodology notes that while some countries regularly publish and use VAT gap analyses to target key risks, others lack such comprehensive gap estimates or make limited use of them.

4.4. Audits and other control activities

Section 4.4 of the country fiches examines national audit systems and control activities, focusing on the range of audit types, use of technology, taxpayer segmentation, and the use of the advanced cooperation tools, such as multilateral controls and cross-border inspections.

The approach evaluates the **range of audit and other control activities**. It also notes variations in audit coverage, from comprehensive systems targeting all taxpayer segments to more selective

approaches. The analysis considers whether audit selection is primarily risk-based and examines the balance between preventive measures and post-filing activities.

Technology use in audits is assessed by examining the application of AI, machine learning, and data analytics. The analysis notes where countries use predictive analytics for case selection, web scraping for fraud detection or robotic process automation for routine checks. It acknowledges that while some countries have implemented advanced AI tools, others rely more on traditional methods with limited automation.

Taxpayer segmentation is evaluated by examining whether countries have specialized units for different taxpayer categories. This includes Large Taxpayer Offices and e-commerce departments. The analysis notes how resources are allocated across segments, with some countries dedicating significant staff to high-revenue taxpayers.

Finally, the analysis in this subsection examines the participation in and use of **advanced cooperation tools** provided for in Directive on administrative cooperation in the field of taxation and Regulation 904/2010 to facilitate cooperation on specific cross-border VAT issues. Such instruments entail multilateral controls such as simultaneous controls, joint audits and presence in administrative offices and administrative enquiries. Synergies between participating Member States arising from these coordinated activities can contribute to higher amounts of tax assessed and, therefore, to reducing the tax gap.

4.5.Payment and collection

Section 4.5 of the country fiches evaluates national systems for tax payment and collection, focusing on electronic payment adoption, on-time compliance, cash payment regimes, VAT refund processes, and penalty systems. The methodology notes that while some countries have highly centralized and digitalized collection systems, others maintain more decentralized approaches with varying degrees of automation. The assessment highlights that payment and collection practices are particularly influenced by the broader digital infrastructure and cultural attitudes toward tax compliance in each country.

The methodology examines **electronic payment adoption** by analysing the percentage of tax payments made electronically across major tax types (PIT, CIT, VAT). It notes significant variations, with near-universal e-payment adoption in some countries. The analysis considers whether e-payment is mandatory or voluntary for VAT.

On-time payment compliance is assessed by examining available data on timely payments. It is mentioned when countries do not report this information. The analysis also considers whether countries use reminders or incentives to improve compliance, noting that some administrations issue automatic notifications for late payments.

The **VAT refund process** is evaluated by examining processing times, risk-based assessments, and automation levels. The methodology notes variations from accelerated refunds for low-risk taxpayers to standard processing times and considers whether refunds are integrated with compliance risk management systems. It also examines whether countries use dedicated VAT refund units or process refunds through general tax offices.

VAT penalty systems are considered with particular focus on their structure, proportionality and enforcement. The analysis examines whether penalties are applied automatically or require manual intervention, and notes variations in penalty reduction mechanisms for voluntary disclosures or first-time offenses.

4.6. Tax debt recovery

Section 4.6 of the country fiches examines the national tax recovery framework and the level and the structure of tax arrears, the cooperation between tax (recovery) authorities and insolvency administrators, write-off policies and the conditions under which they are applied, time needed for dispute resolution, cross-border recovery assistance under Directive 2010/24/EU, both as requested and as requesting ("applicant") authority; and the integration of AEOI/DAC data into national recovery strategies if applicable.

On **insolvency cooperation,** this section takes account of the exchange of information and cooperation between tax (recovery) authorities and the administrators of insolvency proceedings, concerning assets that could be used for the recovery of unpaid (tax) claims in the insolvency proceedings. Responses are categorised on a descriptive basis (e.g., "systematic cooperation," "no established mechanism") rather than scored numerically, given the absence of a standardised EU-wide framework for this cooperation. On this basis, the report highlights Member States where cooperation appears well-established and those where cooperation with insolvency authorities could be improved.

As regards **duration of tax dispute resolution,** the section examines whether information is available on the duration of tax disputes (at the administrative or judicial level), as such disputes usually prevent or suspend the recovery of contested tax claims and thus have a negative effect on the efficiency and effectiveness of tax recovery. The time considered is that elapsed between the lodging of a tax dispute (administrative appeal or judicial proceeding) and the final decision, insofar as this data is tracked and reported by the national authority. On the rationale for inclusion of the tax dispute duration indicator, disputes that suspend the enforceability of a claim mechanically reduce the collectable arrears ratio and inflate the closing stock of total arrears. The duration indicator should therefore be read in conjunction with the arrear's indicators rather than in isolation.

From a methodological point of view, no attempt is made to standardise dispute duration figures across Member States into a single EU indicator, given differences in the structure of administrative and judicial appeal systems, the number of appeal instances, and whether tax claims are suspended automatically or only on request pending a dispute.

On **write-off policy**, the section assesses the write-off practice in place in Member States. Survey replies on the following items are analysed:

- Do written, codified conditions govern when a tax debt may be written off (as opposed to informal or discretionary practice)?
- What grounds are recognised for write-off (e.g., debtor insolvency with no recoverable assets, debtor death with no estate, expiry of statutory recovery periods, disproportionate cost of continued enforcement relative to the amount due)?
- Does the write-off requires a decision at a specific administrative level, and whether it is subject to internal audit or external oversight?

The country fiches do not quantify amounts written off across Member States (this data is not systematically collected under the current sources) but instead characterises whether the write-off framework is strict and conditions-based, or more discretionary. The underlying assumption is that a properly conditioned write-off policy is a sign of accurate arrears reporting, rather than a sign of recovery underperformance, since it prevents genuinely uncollectable amounts from artificially inflating the arrears stock.

This section also addresses **cross-border recovery assistance (Directive 2010/24/EU).** Data for this dimension is drawn from national statistics reported under Article 27 of the Directive and covers 2025 activity. Two distinct roles are analysed separately, as the Directive's obligations differ by role as requested or applicant authority.

If a Member States is in the role of requested authority, the following Indicators have been used:

- Timeliness of acknowledgment: percentage of incoming requests for precautionary measures and for recovery for which acknowledgment was sent to the applicant authority within the deadlines set by the Directive's implementing provisions (7 days).
- Timeliness of follow-up communication: percentage of incoming requests for which the requested authority communicated the action taken within the applicable timeframe (6 months).

If the Member States is applicant authority, the following indicators have been used:

- Compliance of outbound requests with the Directive's substantive conditions (in particular, that the underlying claim is sufficiently well-established, i.e., not seriously contested, before a cross-border recovery request is sent).
- Suspension rate recovery requests in 2025: the number and, where volumes allow, the proportion of recovery requests sent by the Member State that were suspended in 2025 (e.g., because the underlying claim became contested, or conditions for recovery were no longer met).

A high suspension rate is treated as an indicator that requests may have been sent prematurely, before the underlying claim was sufficiently well-established, which in turn generates avoidable administrative burden on the requested authority.

In terms of comparability, deadlines referenced for "timeliness" follow the standard periods set out in the Directive's implementing framework; any national derogation or reported practical difficulty in meeting them is noted narratively rather than adjusted for in the calculated rate.

Absolute request volumes vary considerably across Member States; where volumes are very low, percentage rates are flagged as based on a small number of cases and should be interpreted with corresponding caution.

4.7.Aspects related to Directive on Administrative Cooperation (DAC)

The inclusion, in the Mind The Gap country fiches, of specific sections (as part of 4.2, 4.3 and 4.5) on how Member States use the data exchanged under the Directive on Administrative Cooperation (DAC) and the tracking of total matching rates, reflect a shift toward **evaluating tax administrative capacity through actionable intelligence and data exploitation**.

This is assessed, qualitatively, based on survey responses from Member States on whether, and how, Automatic Exchange of Information data received under the DAC arrangements is used operationally in: i) tax filing and risk assessment and compliance risk management (e.g. to prepopulate tax returns with data related to foreign accounts held by a tax resident taxpayers, or to include the data in an overall risk analysis of the taxpayer); ii) audits and control activities under the multilateral instruments provided for in the DAC and the Regulation 904/2010 (e.g. multilateral controls); and iii) recovery activity (e.g. to identify assets or income streams held abroad by debtors with outstanding domestic tax arrears, as opposed to being used solely for assessment/audit purposes upstream of recovery).

As to the relevance of DAC Data in the 'Mind the Gap' Country Fiches, incorporating DAC data (spanning DAC1 through DAC8/DAC9) into individual country fiches provides essential analytical context.

Compliance gaps also stem from cross-border tax evasion, hidden offshore wealth, digital platform earnings, and aggressive tax planning. Domestic reporting alone cannot capture these tax-bases; automatic exchange of information (AEOI) under DAC support tax authorities to compensate for the missing cross-border visibility.

The inclusion of DAC metrics in section 4.3 of the country fiches enable to assess whether a tax administration actively integrates foreign data into risk management, automated pre-filling, and targeted tax audits, and has a pro-active use of the information received. .

Beyond automatic data exchange, country fiches track Member States' reliance on administrative tools (e.g., joint audits, simultaneous controls, presence in administrative offices in other Member States), providing a comparative benchmark of cross-border enforcement across the Single Market.

On the relevance of the total matching rate indicator, this matching rate measures the percentage of incoming cross-border data records (such as foreign financial account details, employment income, or platform sales) that a tax administration successfully matches to a specific domestic taxpayer record in its own database. The matching rates are collected by the European Commission through the 'Yearly Assessment questionnaire'. Providing information to the Commission, via the Yearly Assessment questionnaire ([70]), on the results of their assessment of the effectiveness of administrative cooperation is an obligation for Member States under the DAC ([71]). The questionnaire also covers the use of information over the previous year (e.g. matching the data received in 2025), which may also include the use of exchanges from previous years (e.g. results from an audit).

The current Yearly Assessment is based on the Commission Implementing Regulation (EU) 2025/2263 of 12 November 2025 amending article 2c of Implementing Regulation (EU) 2015/2378 as regards the standard forms and computerised formats for the communication of the yearly assessment and the list of statistical data to be provided by Member States under Council Directive 2011/16/EU, which refers to annex VIII as following:

[70] Member States are requested to fill in this questionnaire on a yearly basis and to return it by the end of March at the latest. The reporting period is the previous calendar year, focusing on information exchanged from 1st January to 31st December of the relevant year, and Member States tax authorities' actions and state of play concerning that year.

[71] Article 23(3) of Directive 2011/16/EU stipulates that each Member State shall monitor and assess, in relation to itself, the effectiveness of administrative cooperation in accordance with this Directive, including in combating tax evasion and tax avoidance, and shall communicate the results of its assessment to the Commission once a year. The Commission shall, by means of implementing acts, adopt the form and the conditions of communication for that yearly assessment.

ANNEX VIII

Form referred to in Article 2c

The form for the communication pursuant to Article 23(3) of Directive 2011/16/EU covers the following information:

(a) identification of the Member State replying to the questionnaire;

(b) general information on organisation and resources for automatic exchange of information purposes, including administrative and other relevant costs for development and implementation; administrative costs for recurring operations; other relevant costs for tax compliance operations;

(c) litigation and Court proceedings;

(d) availability of information in the Member State, including description of management process for ensuring the collection of data including identification elements, and the timeliness of information sent;

(e) effectiveness of exchanges as the Receiving Member State, including processing of the information received, total matching rate percentage, and percentage of reports identified successfully;

(f) quality of the information received including identification of relevant taxpayers/parties, percentage of valid tax identification numbers (TIN) provided by the Sending Member State;

(g) use of information received including categories of usage, tax area, other administrative cooperation induced;

(h) estimation of outcome of use of information, including increase in tax assessed and / or increase in tax base adjusted, percentage of reports used in tax investigations;

(i) monitoring whether bilateral annual feedback as per Article 14(2) of Directive 2011/16/EU was sent;

(j) monitoring, implementation and outcome of follow-up actions related to specific projects relevant to the functioning of the Directive; and

(k) any other relevant information related to points (a) to (j), or issues encountered by the Member States.

The metrics serve as **key performance indicators** for administrative efforts and revenue mobilisation.

Unmatched DAC data cannot be used: without establishing a definitive link between incoming foreign records and a domestic taxpayer identification number (TIN) or any other identification feature that is actionable to match the file with a specific taxpayer (e.g. first name, surname, date of birth, address), tax authorities cannot issue assessments, pre-fill tax returns, or initiate dedicated procedures like administrative enquiries or tax audits. As for DAC1, DAC2, and DAC7 high matching rate converts information into collectible tax revenue. As regard DAC3, DAC4 and DAC6, the data available should be used in the risk assessment process in place.

Moreover, high matching rates reflect modern IT architecture, automated fuzzy-matching algorithms, and clean registry management. Low matching rates may indicate technical bottlenecks, poor TIN validation practices, or outdated back-end databases. Achieving a high matching rate requires proactive effort, including using feedback to Member States when issues are detected (e.g. report inaccurate TINs), as well as manually reviewing ambiguous entries where necessary.

Finally, higher matching rates systematically reduce the non-compliance gap by catching undeclared foreign assets and offshore income, especially using DAC1, DAC2 and DAC7 data as they inform on income and assets that may be unknown to recovery agencies or departments. It transforms cross-border transparency mechanisms into direct, measurable fiscal resources for public budgets.

On data on multilateral controls (simultaneous controls and joint audits) and PAOE (presence in administrative offices and administrative enquiries), this data is collected through the dashboard established under the FISCALIS FPG/009 'EU Advanced instruments in administrative cooperation'. This dashboard collects the number of simultaneous controls, joint audits and PAOEs initiated by the Member States and the number of these initiatives they participated in. The dashboard is completed by an annual statistical report presented to the European Commission. Assessing simultaneous controls over a three-year window rather than a single calendar year is necessary because single-year metrics misrepresent administrative effort, operational capacity, and fiscal results due to the multi-year lifecycle of cross-border tax inquiries. In practice a simultaneous control or a joint audit takes longer than one year, the average being closer to two years.

General limitations include:

- Self-reported data: the survey-based components of this section (insolvency cooperation, dispute duration, write-off policy, DAC data use) rely on Member States' own characterisation of their practices and are not independently verified against case-level evidence.
- Definitional heterogeneity: concepts such as "collectable arrears," "well-established claim," and "systematic cooperation" are applied by national authorities according to domestic legal and administrative concepts that are not fully harmonised at EU level; cross-country comparisons should therefore be read as indicative rather than strictly equivalent.

Data - Annex

Annex A1 – GTETI

Table A1.1: GTETI — 25 indicators across five dimensions

No.	Indicator	Description	Maximum score
Dimension 1: Public availability			
1.1	**Frequency and regularity**	Evaluates publication frequency and gaps over the last 10 years.	Published annually, regularly, without gaps; publication date disclosed.
1.2	**Timeliness**	Assesses whether the report contains data for the most recent fiscal year (t−1) at time of publication.	Data for the most recent fiscal year.
1.3	**Visibility**	Measures promotion by authorities (press releases, online repository).	Dedicated press release and online repository hosting all tax expenditure reports.
1.4	**Online accessibility**	Evaluates ease of finding tax expenditure reports and underlying data on official websites.	Reachable in <5 clicks from homepage, data in analysis format (xls, csv), findable via site search.
1.5	**Reader-friendliness**	Assesses consolidation, summary, acronym explanation, and accessibility for visually impaired.	Consolidated in one document, with summary, explained acronyms, and accessible format.
Dimension 2: Institutional framework			
2.1	**Legal reporting requirement**	Assesses whether a legal basis requires periodic tax expenditure reporting.	Government legally required to periodically report on tax expenditures.
2.2	**Submission to parliament**	Verifies if the tax expenditure report is required to be submitted to parliament.	Legal requirement to submit, clearly indicated in report or publication format.
2.3	**Reporting responsibility**	Assesses clear attribution of tax expenditure reporting to a specific institution.	Responsibility attributed both in law and in the tax expenditure report.
2.4	**Budget cycle integration**	Assesses whether the main tax expenditure report or substantive tax expenditure information is included in the Executive's Budget Proposal.	EBP contains or references the tax expenditure report with disaggregated revenue forgone for budget year (t+1).
2.5	**Medium-term strategy integration**	Assesses if tax expenditure information is included in the medium-term fiscal strategy.	MTS includes tax expenditure policy goals and revenue forgone forecasts under expenditure ceilings.
Dimension 3: Methodology and scope			
3.1	**Information on tax expenditure coverage**	Assesses coverage of different tax types (CIT, PIT, VAT, excise, etc.) at national level.	Exhaustive inventory of all tax expenditures with no tax type missing.
3.2	**Tax benchmark**	Analyses the definition of the benchmark tax system and consideration of international treaties.	Benchmark specified at individual tax expenditure level; international treaties considered.
3.3	**Structural tax provisions**	Captures whether the report distinguishes structural from non-structural provisions (tax expenditures).	Clear distinction, classification criteria, individual listing, and revenue forgone for each structural provision.
3.4	**Revenue forgone estimation method**	Assesses disclosure of estimation methods and underlying economic assumptions.	Methods clearly stated (by tax expenditure, type of tax, or overall); relevant economic assumptions disclosed.
3.5	**Data sources**	Assesses disclosure of data sources used to compute revenue forgone estimates.	All data sources clearly disclosed throughout the report.
Dimension 4: Descriptive tax expenditure data			
4.1	**Policy objective**	Assesses the share of total revenue forgone for which policy objectives are disclosed at tax expenditure level.	Policy objectives at provision level for all tax expenditures (100% of revenue forgone).

No.	Indicator	Description	Maximum score
4.2	**Type of tax and type of tax expenditure**	Assesses specification of tax type and tax expenditure mechanism (deduction, credit, reduced rate, etc.).	Type of tax and type of tax expenditure specified at individual provision level.
4.3	**Beneficiaries**	Measures information on targeted beneficiary groups and number of beneficiaries.	Targeted beneficiaries and number of beneficiaries at provision level for all tax expenditures (100%).
4.4	**Timeframe**	Assesses information on implementation date, sunset clauses, and relevant changes.	Timeframe systematically provided at individual provision level.
4.5	**Legal reference**	Covers legal provision references (tax code, article, section) for each tax expenditure.	Legal basis provided for all tax expenditures (100% of revenue forgone).
Dimension 5: Tax expenditure assessment			
5.1	**Disaggregation of revenue forgone**	Assesses the share of revenue forgone reported at individual tax expenditure provision level.	Revenue forgone at provision level for all tax expenditures (100%).
5.2	**Backward revenue forgone estimates**	Assesses backward time series of revenue forgone in the latest report.	Backward estimates for at least the last 5 years (t−5).
5.3	**Revenue forgone forecasts**	Assesses forward projections of revenue forgone included in the latest report.	Projections for at least the next 5 years (t+4).
5.4	**tax expenditure evaluation framework**	Captures whether the report describes or references an evaluation framework.	Evaluation framework (ex-ante and ex-post) described or clearly referenced.
5.5	**Availability of tax expenditure evaluations**	Assesses the share of revenue forgone for which evaluations are included or referenced.	Impact analysis for all tax expenditures, included or referenced in the last 5 years of reports.

Source: GTETI companion paper (2026), Tables 2.1–2.5. Descriptions and maximum score criteria condensed for readability.

Table A1.2: GTETI v2.1 EU dimension scores (max 20 points per dimension; max 100 total)

Rank	ISO2	Country	Dim 1 S1.1–1.5	Dim 2 S2.1–2.5	Dim 3 S3.1–3.5	Dim 4 S4.1–4.5	Dim 5 S5.1–5.5	Total (max 100)
1	NL	Netherlands	17.33	12.00	13.20	17.00	16.00	75.53
2	DE	Germany	16.00	18.00	11.20	16.20	10.80	72.20
3	FR	France	13.00	16.00	13.67	19.00	7.20	68.87
4	PT	Portugal	11.33	18.67	15.33	12.20	11.20	68.73
5	IT	Italy	9.33	20.00	11.33	16.20	10.40	67.27
6	GR	Greece	13.33	18.67	10.67	18.20	4.80	65.67
7	SE	Sweden	13.33	17.33	11.67	16.20	6.40	64.93
8	LV	Latvia	12.00	18.67	11.73	10.27	12.00	64.67
9	BE	Belgium	11.00	16.00	12.67	11.40	9.60	60.67
10	IE	Ireland	13.33	12.67	12.00	8.27	12.00	58.27
11	SK	Slovakia	10.33	20.00	10.13	6.67	8.80	55.93
12	FI	Finland	11.00	10.67	14.67	10.87	8.00	55.20
13	BG	Bulgaria	13.33	12.00	13.87	10.60	4.80	54.60
14	SI	Slovenia	11.33	15.33	13.07	8.27	6.40	54.40
15	AT	Austria	14.33	14.67	1.60	13.53	7.20	**51.33**
16	LU	Luxembourg	6.33	18.67	11.07	6.80	4.80	47.67

Rank	ISO2	Country	Dim 1 S1.1–1.5	Dim 2 S2.1–2.5	Dim 3 S3.1–3.5	Dim 4 S4.1–4.5	Dim 5 S5.1–5.5	Total (max 100)
17	ES	Spain	1.00	13.33	11.73	13.20	5.60	44.87
18	CZ	Czechia	9.33	14.00	7.60	9.40	4.00	44.33
19	LT	Lithuania	10.33	16.00	2.80	9.27	4.80	43.20
20	EE	Estonia	11.00	12.00	0.80	9.33	6.40	39.53
21	CY	Cyprus	7.00	14.67	5.60	8.27	4.00	39.53
22	DK	Denmark	10.33	4.67	4.40	11.20	7.20	37.80
23	HR	Croatia	9.00	8.00	6.00	9.13	4.80	36.93
24	PL	Poland	5.33	2.00	9.73	9.60	6.40	33.07
25	HU	Hungary	4.00	16.67	0.00	6.67	4.00	**31.33**
26	RO	Romania	3.00	8.00	4.93	5.47	3.20	24.60
—	**—**	**EU Average**	**10.27**	**14.18**	**9.29**	**11.28**	**7.34**	**52.35**

Source: GTETI 2.1 full data

Annex A2 – Country overview - tax expenditures in personal income taxation (PIT) by policy area

Table A2.1: Types of tax expenditures by area in the EUROMOD simulations for PIT (2025)

Country	Family	Work	Housing	Education	Health	Pensions	Other
BE	TA for dependents (main & supplementary) child TA refundable TC for children	professional expenses TA refundable TC for low activity income	mortgage interest TC		disability TA		maintenance payments TA replacement incomes TC
BG	child TA	freelancer income TA	rent TA		disability TA	private pension contributions TA	
CZ	spouse TC child TC		mortgage interest TA		disability TC	complementary pension insurance TA	
DK		Earned Income Tax Credit	mortgage interest TA			private pension plans TA additional deduction of pension contributions (public and private)	investment income TA
DE	lone parents TA child TA spouse TA childcare expenses TA	agricultural earnings TA private health SIC TA non-pension incomes TA minijobs TC income-related expenses TA				pension income TA	capital income TA
EE	income-dependent basic allowance - additional amount for the elderly		deduction of rental payments	deduction of education expenses		deduction of voluntary pension contributions	
IE	home carer TC age TC widowed TC lone parent TC low income TC	employee TC EITC self-employed TC	Mortgage interest relief TC Rent TC		health related TC		
EL		Employment income TC	mortgage interest TC		disability TC	pensioners' solidarity contributions TA	charitable donations TC

Country	Family	Work	Housing	Education	Health	Pensions	Other
ES	family TC (dependent children and parents) maternity TC	employment TA large working families TC single working parent TC deduction for earned income from employment	mortgage interest TC				
FR	ascendants & children over 18 TA widows TC tax rebate capital income tax tax rebate general income tax child tax credit	TA for C1 income		TC for children in high-school/tertiary education	disability TA complementary disability TC	private pension contributions TA	
HR	dependent children TA dependent relatives TA				disability TA		
IT	dependent children TC	employment income TC self-employment income TC low income earners bonus TC	mortgage interest TC rent TC	education expenses TC	health expenses TC	private pensions TA	maintenance payments TA
CY						private pension contributions TA	property income TA
LV	dependent child TA dependent parent TA dependent spouse TA			education expenses TC	health expenses TC	private pension contributions TA non-taxable minimum for pensioners TA	
LT		self-employed TC employment-related income basic TA	mortgage interest TC	education expenses TC	disability TA	private pension contributions TC	

Country	Family	Work	Housing	Education	Health	Pensions	Other
LU	lone parent TC	extra-professional TA salaried income TA agricultural income TA employees TC self-employed TC TC for social minimum wage TC for CO2 applied for employees TC for CO2 applied for self-employed	rental income TC mortgage interest TA			private pension contributions TA public pension income TA private pension income TA pensioners TC TC for CO2 applied for pensioner	maintenance payments TC income from movable assets TA social assistance benefit TA
HU	family TA young people under 25 TA mothers under 30 TA women with 4 children TC				serious disability TC		
MT	child care fees TA	TC for women returning to employment tax exemption for individuals earning the min wage only	self-employed rent TA	education expenses TA		private pension income - single TC private pension income - married TC private pension income - parent TC Pension income TA	Alimonies TA
NL		self-employment TA work credit TC	mortgage interest TA			Old age TC	maintenance payment TA

Country	Family	Work	Housing	Education	Health	Pensions	Other
AT	family TC additional family TC single earner TC lone parent TC child TC	cost of earnings TA self-assessment income TA self-employment profits TA			private healthcare expenses TA	pensioners TC	
PL	spouse TA child TC	revenue costs TA TA for under 26	mortgage interest TA				donations to charities TA
PT	youngsters TA child TC	employee TA self-employed TA	rent TC mortgage interest TC	students TA education and training TC	employment, self-employment and pension income TA for individuals with disability	pensioners TA	household general expenses TC
RO	supplementary TA for children	employee TA young employees supplementary TA				pensioners TA private pension contributions TA	
SI	child TA other dependent family members TA			students TA		private pensions contributions TA pensions TC	
SK	spouse TA child TC	employee TC	mortgage interest TC				
FI		TA for work-related expenses low earned income TA entrepreneurial income TA low earned income TC		student grant TA		pension income TA	deficit capital income TC special deficit TC
SE					disability TC	pensioners TA	negative capital income TC