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Advancing Corporate Tax Transparency

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► **To cite this version:**

Giulia Aliprandi, Kane Borders. Advancing Corporate Tax Transparency. Eu Tax Observatory. 2024.
halshs-04947447

HAL Id: halshs-04947447

<https://shs.hal.science/halshs-04947447v1>

Submitted on 14 Feb 2025

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Advancing Corporate Tax Transparency

Giulia Aliprandi, Kane Borders

June 2024

REPORT No.5



Executive Summary

Multinational enterprises have risen to become dominant forces in the global economy, accompanied by a troubling trend of aggressive tax avoidance. In 2022 alone, an estimated \$1 trillion in profits was shifted to tax havens by multinationals, amounting to 35% of all profits booked outside their headquarters countries (Alstadsæter et al., 2023).

Despite tax avoidance being a major public concern, the specific practices employed by individual companies have remained largely opaque to the public due to a lack of transparency and public disclosure obligations. Comprehensive transparency measures promote informed policymaking, accountability, public trust, and sustainable development globally. **This report examines the current landscape of corporate tax transparency and evaluates how emerging transparency measures could shape future developments in this critical area.**

We focus on corporate tax transparency measures via Country-by-Country Reporting (CbCR), where multinationals disclose detailed financial and tax-related information for each country of operation. We collected the publicly available CbCR reports and compiled them into a single database: the Public CbCR Database.

This new data source highlights that large multinationals, particularly from Western Europe, are leading the way as primary publishers of such reports. **Overall, the large multinationals publishing public CbCR account for less than 2% of large companies, and less than 5% of global revenues and global profits.** Despite the small numbers, our research reveals an upward trend in voluntary CbCR disclosures, signalling increasing tax transparency practices. **However, significant gaps remain, as U.S. multinationals and firms from major economies like China and Russia have only a few CbCR disclosures available.**

The European Union (EU) made an important step in furthering corporate tax transparency by adopting a mandatory CbCR directive that started applying this year in many EU countries. Our simulations reveal the impact this directive will have. **Nearly one-third of large U.S. MNEs will be compelled to publish more disaggregated financial information than ever before publicly available.** The increased disclosure from these U.S. corporate giants, who have historically been opaque, could be a breakthrough in tax transparency. **However, the directive has serious limitations, as the requirements for geographical disaggregations are largely insufficient to truly evaluate the activity of multinationals.** **Broader adoption and enhancement of corporate tax transparency initiatives are crucial, we suggest several ways to improve the directive going forward.**

REPORT IN A NUTSHELL

The need for tax transparency

1. Tax avoidance by multinationals is still an issue.
2. Corporate tax transparency can be part of the solution.

The current state of tax transparency

1. Less than 2% of large multinational companies publish their country-by-country reports
2. There is an upward trend in publications.
3. Publishing multinationals are mainly European.

The evolution of tax transparency

1. The European Union's public CbCR directive introduces new mandatory public reporting requirements for multinational corporations.
2. More companies will publish, mainly Europeans but also several Americans and Chinese and Japanese.
3. Unfortunately strong limitations remain, in particular, the geographical disaggregation is not ambitious enough. We propose several improvements.

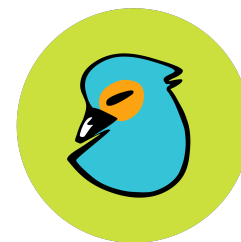
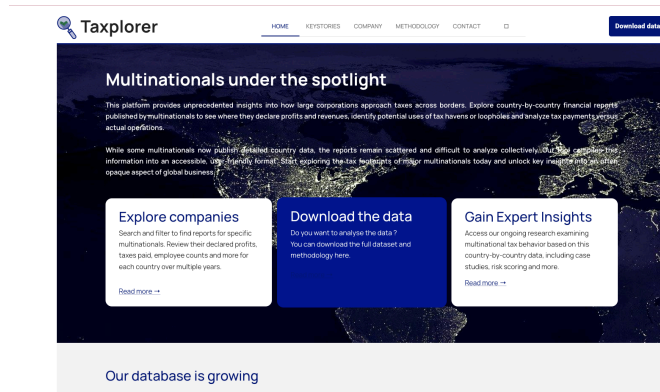
Public CbCR database:

The database can be visualised and downloaded: taxplorer.eu

TAXPLORER: NEW TOOL TO VISUALISE CbCR DATA

Together with the talented volunteers of Data for Good we have designed and built "Taxplorer" a new website to track and visualise Public CbCRs.

Data For Good is a non-profit organization bringing together a community of 5000+ tech volunteers to engage for the common good.



Data For Good

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1 The need for tax transparency

This chapter analyzes the scale and impact of corporate tax avoidance through profit shifting, outlines the limitations of existing policy measures, and presents evidence on how mandating increased corporate tax transparency can serve as an effective tool to curb such practices among multinational enterprises.

1.1 Trends in corporate tax evasion

Multinational enterprises have risen as dominant players in the global economy, accompanied by a concerning trend of tax avoidance strategies. The 100 largest MNEs had huge revenues in 2021. They equaled the combined GDP of Germany, France, Italy, and Spain (Pilgrim and Wahlgren, 2023).

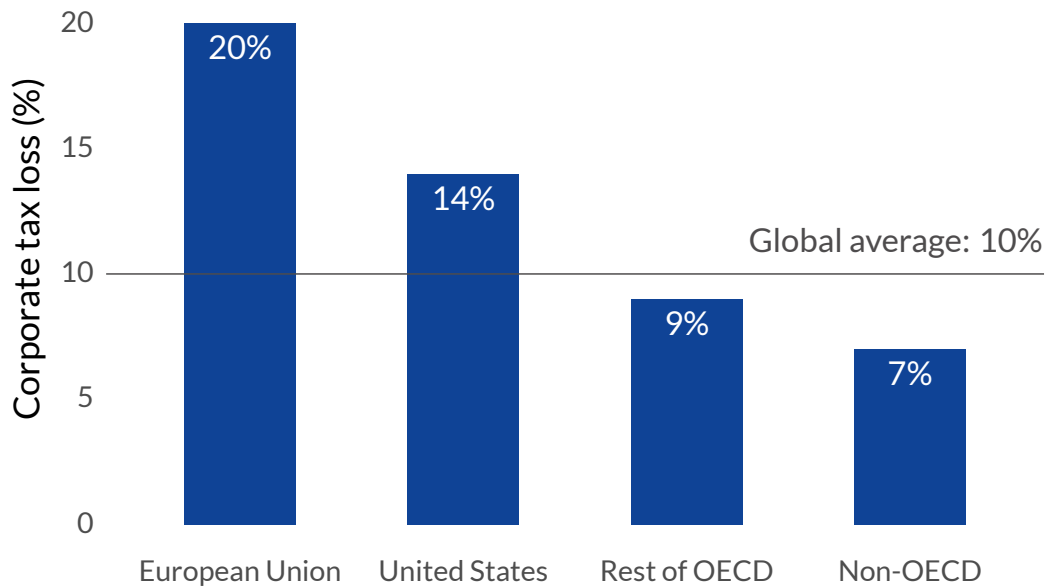
Estimates from the latest Global Tax Evasion Report, published by the EU Tax Observatory, reveal that MNEs shifted a staggering \$1 trillion in profits to tax havens in 2022. This amount is a substantial 35% of all foreign profits booked by these corporations (Alstadsæter et al., 2023). This tax avoidance persists. It has led to a big drop in corporate tax revenues. Globally, governments have lost nearly 10% of the corporate taxes they could have collected.

The impact is severe for European Union (EU) member states. Developing countries face a higher welfare cost. This is because they rely more on corporate tax for crucial public spending. For example, Alstadsæter et al. (2023) estimate that France lost about €13 billion in corporate tax revenues in 2018 due to multinationals' profit shifting. This is about 10.8% of all public spending on education in France in 2018 (INSEE, 2023). Figure 1.1 shows recent estimates of corporate tax revenue losses due to profit shifting to tax havens expressed as a percentage of total corporate tax revenue. The European Union suffers the highest losses at 20%, followed by the United States at 14%, the Rest of OECD countries at 9%, and non-OECD countries at 7%.

Looking at long-term trends, estimates suggest profit shifting has increased dramatically since the 1970s. The global tax revenue loss has risen from essentially 0 to close to 10% of global corporate tax revenue. The rise was fast in the early 2010s. This was perhaps

FIGURE 1.1

The cost of corporate profit shifting (2022), % of tax revenues collected

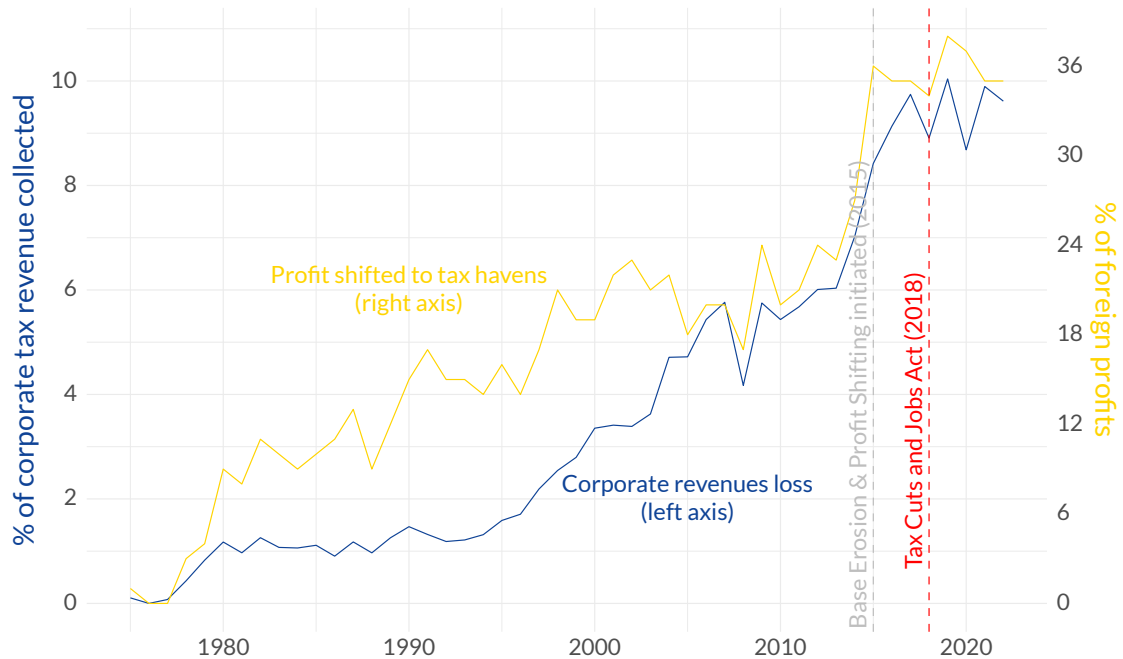


Note: This figure reports estimates of corporate tax revenue losses caused by profit shifting to tax havens, expressed as a fraction of corporate tax revenue collected. Corporate tax revenue losses are obtained by applying the statutory corporate tax rate of each country to the amount of profit estimated to be shifted out of that country.

Source: Alstadsæter et al. (2023) [Atlas of the offshore world](#).

linked to the growing digitization of the economy (Figure 1.2).

Despite concerted efforts by policymakers, such as the Organisation for Economic Co-operation and Development (OECD) Base Erosion and Profit Shifting (BEPS) initiative in 2015 and the United States legislative measures in 2017, the scale of global profit shifting has remained largely unabated. According to Wier and Zucman (2023) U.S. MNEs account for about 40% of global profit shifting. They continue to shift nearly half of their foreign profits to low-tax jurisdictions, while their non-U.S. counterparts maintain a rate of around 30% (Alstadsæter et al., 2023). Of course, it is possible that absent BEPS and the Tax Cuts and Jobs Act, profit shifting would have kept increasing. However, their effect seems, so far, to have been insufficient to lead to a reduction in the global amount of profit shifted offshore. This finding suggests that there remains scope for additional policy initiatives to significantly reduce global profit shifting.

FIGURE 1.2**Global profit shifting and associated revenue loss, 1975-2022**

Note: This figure reports the evolution of the fraction of foreign profits shifted to tax havens globally (right-axis) and the tax revenue loss caused by this shifting, as a fraction of collected tax revenue (left-axis). For reference we indicate the start of the Base Erosion and Profit Shifting process in 2015 and the Tax Cuts and Jobs Act in 2018.

Source: Alstadsæter et al. (2023) [Atlas of the offshore world](#)

1.2 The role for tax transparency

One of the most important measures to combat profit shifting that was taken in the last years was endorsed in October 2021 by close to 140 countries and territories. It consists of the principle of a global minimum tax of 15% on the profits of multinational companies, known as Pillar Two of the OECD Two-Pillar solution to profit shifting. With this landmark agreement for the first time an international consensus has been reached on setting a floor for certain corporate tax rates, marking a significant step towards addressing rampant profit shifting. However, Pillar Two has several key limitations that may hinder its effectiveness. From the outset, the agreed global minimum rate of 15% was seen by many as too low to meaningfully curb tax avoidance incentives. Moreover, as the technical details were negotiated, various loopholes gradually emerged that could allow MNEs to circumvent the rules. These include the inclusion of carve-outs for substance, generous provisions for tax credits that reduce the effective rate, and a relaxation of backstop measures.

While Pillar Two is a great achievement in multilateral cooperation on tax matters, its di-

luted provisions raise doubts about its ability to substantially curb profit shifting in its current form. To tackle this persistent issue, part of the solution could be to mandate enhanced tax transparency. Mandating comprehensive public country-by-country reporting of tax payments, profits, and real economic activities would shed much-needed light on MNEs' tax practices.

This improved transparency could enable more effective monitoring of profit shifting and pave the way for stronger countermeasures. Consequently, to complement the nascent global minimum tax regime and bolster its effectiveness, it will be helpful to institute robust tax transparency requirements for multinationals.

Several studies have analyzed how firms reacted to transparency requirements in particular public country-by-country reporting requirements and whether these transparency measures impacted their tax avoidance behavior and real economic activities. The evidence suggests that disclosure can contribute to curbing tax avoidance by multinational enterprises.

Focusing on *private* tax disclosure of multinationals, two related papers (Hugger (2024) Joshi (2020)) study the private CbCR setting and find that after the implementation companies pay higher effective tax rates. Both papers also provide some limited evidence that firms reduced tax-motivated profit shifting following CbCR: reported profits became less sensitive to domestic corporate income tax rates. Simone and Olbert (2021) document that companies might change their strategies and reduce most aggressive profit shifting while increasing investment in tangible assets and employees in European countries with preferential tax regimes. They also document a reduction in organizational complexity.

Turning to *public* tax disclosures few studies analyse the implementation of the public CbCR rules for EU banks under CRD IV. Overesch and Wolff (2021) find that multinational banks with activities in European tax havens raised their effective tax rates after CbCR's introduction compared to other banks. Suggesting that country-by-country reporting can serve as an additional policy instrument to curb corporate tax avoidance, but only when the reporting exposes the firms' tax sheltering activities to public scrutiny. Joshi (2020) reports a decline in income shifting by banks' financial affiliates but no material change in overall tax avoidance at the group level. Eberhartinger et al. (2020) observe banks reducing their presence in tax havens, especially in high-secrecy jurisdictions.

More broadly, empirical research provides evidence that mandated public disclosures can incentivize firms to modify practices that could expose them to reputational risks. A broad literature has examined the real effects of financial reporting and disclosure regulations. For example, studies have found reductions in pollution levels following the mandated disclosure of corporate social responsibility (CSR) information in China (Chen

et al., 2018), as well as improvements in mining safety after mine safety records were included in financial reports, despite the information already being public (Christensen et al., 2017). In the extractive industries context, Rauter (2020) documented a positive association between the public disclosure of payments to foreign governments and the magnitude of those payments, with further analyses suggesting shaming and enforcement as potential mechanisms driving the increased payments.

Turning to capital markets, evidence on investor reactions is mixed. Johannesen and Larsen (2016) document a significant decrease in firm value around legislative events instituting public CbCR for extractive industries, suggesting that tax evasion creates considerable rents for firms in extractive industries and that disclosure rules have the potential to reduce these rents. However, Dutt et al. (2019) find no notable investor response to CbCR rules for EU banks, suggesting positive and negative effects may have offset each other. Their results confirm a relationship between publicly available information on international firm structures and the scope of international tax avoidance supporting the view that tax transparency can be an effective instrument to limit tax avoidance of multinationals.

The collective evidence indicates that tax transparency initiatives requiring public disclosure of country-by-country tax information can discourage tax avoidance among multinationals, thus playing an important role in complementing other anti-profit shifting measures.

2 Corporate tax transparency: the current state

In this chapter, first we will discuss different types of reporting standards for tax transparency. We will focus on those standards that require companies to disclose financial information on a country-by-country basis. Second, we will present the Public CbCR database and describe trends in the publication of country-by-country reports by companies.

2.1 Different reporting standard for multinationals

As public scrutiny intensifies, regulations worldwide are compelling multinational enterprises to lift the veil on their tax strategies and global distribution of tax payments. Tax transparency mandates usually come in two forms: quantitative and qualitative disclosures. Quantitative disclosures, such as public country-by-country reporting, require firms to disclose granular financial data and tax payments across jurisdictions. In contrast, qualitative disclosures only demand narrative explanations and discussions of tax policies and practices. While quantitative disclosures provide hard numbers for external stakeholders to scrutinize, qualitative disclosures allow more flexibility in communication. However, evidence suggests that mandating qualitative tax information alone may be insufficient to curb tax avoidance practices effectively. Bilicka et al. (2024) find that affected firms tend to increase boilerplate statements without substantive changes to their underlying behaviour. We therefore focus on quantitative tax disclosure measures, country-by-country-reporting in particular. The quantitative nature of these disclosures makes it harder for firms to obfuscate or misrepresent their tax practices, providing a more robust basis for assessing tax avoidance and ensuring compliance with regulations.

2.1.1 What is a country-by-country report?

Country-by-country reporting (CbCR) is a financial transparency initiative that requires multinational enterprises to disclose key financial data, including revenues, profits, taxes paid, and other relevant information, for each jurisdiction where they operate. The primary objective of CbCR is to assist tax authorities and civil society in identifying potential risks of base erosion and profit shifting practices, where multinationals may be artificially shift-

FIGURE 2.1

Country-by-country report example

OUR TAX DATA BY COUNTRY AND LOCATION

	Revenue			Profit before tax (\$)	Tax paid (\$)	Tax accrued (\$)	Tangible assets (\$)	Stated capital (\$)	Accumulated earnings (\$)	Number of employees
	Third-party revenues (\$)	Related-party revenues (\$)	Total revenues (\$)							
Albania	[59,798]	51,366	[8,432]	[44,556,420]	0	0	249,976,849	0	0	60
Argentina	203,610,685	6,370,147	209,980,832	[240,462,518]	0	0	1,695,393,602	1,844,547,775	[882,586,404]	166
Australia	2,703,081,216	6,482,788,036	9,185,869,252	[11,432,704,550]	29,163,263	10,643,085	31,169,617,198	53,590,206,563	[6,492,017,103]	2,595
Austria	660,723,773	11,922,980	672,646,753	15,267,647	1,937,390	1,853,210	169,673,120	191,890,298	167,217,399	80
Bahamas	4,879,891,735	10,977,686,202	15,857,577,937	652,624,659	0	0	714,046,322	100,000	1,706,039,036	35
Barbados	0	3,972,596	3,972,596	703,245	0	0	0	775,769,000	402,131,443	0
Belgium	571,646,793	336,931,890	908,578,683	49,969,457	11,404,479	14,070,308	324,059,054	110,244,267	86,046,699	300
Bermuda	4,000,634	70,640,734	74,641,368	36,085,318	0	0	91,277	8,918,332,750	1,764,095,161	2
Bolivia	119,622,715	502,199	120,124,914	[156,582,597]	0	[618,731]	331,112,269	380,226,459	[36,924]	60
Brazil	844,625,356	4,681,335,348	5,525,960,704	[4,032,840,539]	1,826,050	20,095,844	28,563,275,322	3,600,555,379	[7,956,726,049]	837
Brunei	92,813,553	3,409,058	96,222,611	[71,265,538]	35,069,217	33,253,155	378,824,699	333,036,458	5,008,915	6
Bulgaria	125,969,145	4,916,810	130,885,955	[6,609,290]	458,140	177,770	84,455,180	42,096,691	2,095,068	59
Canada	7,980,866,767	9,957,278,570	17,938,145,337	[1,427,027,022]	[16,358,418]	14,779,138	15,667,443,505	47,099,413,948	[5,851,707,781]	3,440
Cayman Islands	0	224,239	224,239	15,593	0	0	15,495,480	80,371,117	[111,626,136]	0
China	2,335,377,496	928,045,604	3,263,423,100	562,154,958	67,413,658	90,062,526	1,943,213,873	860,930,187	1,128,059,826	1,841
Colombia	16,415	2,129,218	2,145,633	[16,289,108]	0	0	2,504,156	40,754,934	[77,011,064]	11
Cyprus	0	11,511	11,511	[11,244,062]	0	6,606	180,260,553	0	0	0
Czech Republic	357,207,165	8,096,020	365,303,185	9,526,382	2,413,656	1,810,013	143,747,099	108,830,177	23,850,628	76
Denmark	818,200,619	453,664,703	1,271,865,322	[80,096,637]	859,483	0	284,487,213	157,822,843	[452,143,954]	257
Egypt	749,567,331	118,642,029	868,209,360	[112,334,382]	44,499,351	45,237,599	806,118,612	1,977,326	93,392,932	395
Finland	68,481,011	31,703	68,512,714	[2,718,687]	586,428	0	12,125,834	12,347,729	6,882,126	28
France	1,140,499,070	269,746,705	1,410,245,775	[59,692,564]	2,686,565	2,030,274	506,147,864	510,016,748	362,284,844	349

Source: Publicly available Shell Tax Contribution Report 2020 (Shell, 2020).

Note: Each row corresponds to a single tax jurisdiction where the multinational is active, aggregating the financial information of all the tax resident entities.

ing profits to low or no-tax jurisdictions.

To illustrate the practical implementation of CbCR, let's consider the example of Shell, a multinational energy company. As shown in Figure 2.1, Shell's CbCR for the year 2020 consists of a table with columns representing different financial variables and rows corresponding to the countries where the company operates. For example, in 2020 Shell booked over USD 600 million in profit in the Bahamas where it employs 35 employees and pays 0 tax.

Country-by-country reporting requirements vary in content, availability, and disclosure audience. These requirements can be classified as mandatory or voluntary, and public or private. The main standards are the following:

- Global Reporting Initiative (GRI) - Public and Voluntary
- OECD CbCR - Mandatory and Private
- EU Banking Sector Country-by-Country Reporting - Public and Mandatory
- EU Public Country-by-Country Reporting - Public and Mandatory (forthcoming)

While the specific requirements vary across different reporting standards, all of them require multinationals to disclose a set of key variables: their total revenues, profit/loss before tax, number of employees, and corporate income tax paid on a cash basis for each jur-

TABLE 2.1**Required variables across different reporting standards**

Variable	GRI	OECD	EU Public	EU Banks
Revenues from third-party sales	✓	✓		
Revenues from intra-group transactions	✓	✓		
Total Revenues	✓	✓	✓	✓
Profit/loss before tax	✓	✓	✓	✓
Tangible assets	✓	✓		
Number of employees	✓	✓	✓	✓
Corporate income tax paid on a cash basis	✓	✓	✓	✓
Corporate income tax accrued	✓	✓	✓	
Stated Capital		✓		
Accumulated earnings		✓	✓	

isdiction. These variables provide insights into the company's economic activities, profitability, workforce, and tax contributions across different countries. However, as illustrated in Table 2.1, there are some differences. As compared to the EU requirements, the OECD and the Global Reporting Initiative (GRI) have developed more comprehensive frameworks for CbCR. The OECD's BEPS Action 13 and the GRI 207-4 standard additionally require the disclosure of revenues from related parties, revenues from third parties, and tangible assets. Furthermore, the OECD standard mandates the reporting of stated capital and accumulated earnings, providing further details on the company's financial position in each jurisdiction.

There are also important differences concerning the scope and mandatory disclosure requirements. The OECD's BEPS Action 13 applies to multinationals with consolidated revenue exceeding €750 million in the previous year, and currently, CbCRs are submitted confidentially to tax authorities. However, some companies voluntarily publish their OECD CbCRs publicly. In contrast, the GRI 207-4 standard is specifically designed for public reporting of tax information, enabling stakeholders, such as investors, civil society organizations, and the general public, to scrutinize multinational tax practices.

The European Union has taken a proactive approach to mandating public CbCR in specific sectors. The EU Banking Sector directive requires credit institutions and investment firms operating within the EU to publicly disclose a reduced version of their CbCRs. Additionally, the EU Public Country-by-Country Reporting directive would extend this requirement to large MNEs across all sectors operating in the EU, with annual consolidated

revenue exceeding €750 million (the directive will be analysed in detail in Chapter 3).

2.1.2 Other transparency requirements: the extractive sector

In addition to the country-by-country reporting described above, there are also transparency initiatives specifically targeting the extractive industries like oil, gas, minerals, and logging. These include the Extractive Industries Transparency Initiative (EITI) introduced in 2003, as well as mandatory reporting laws passed in the U.S. (Dodd-Frank Act Section 1504), the EU (Transparency Directive) and Canada (Extractive Sector Transparency Measures Act). These require extractive companies operating in those jurisdictions to disclose payments made to governments related to their projects, to increase accountability and reduce corruption in the sector.

It is important to underline that these reporting requirements differ significantly from the CbCR reporting guidelines for MNEs. The OECD's BEPS Action 13 recommends the publication of 10 financial variables. Only one of these financial variables (income tax paid) is required by the US, Canadian, and EU transparency requirements for extractives. There is therefore significantly more disclosed information on economic activity (revenues, employees, profits, etc.) in the CbCR reporting guidelines for MNEs.

2.1.3 Timeline

The push for mandating public country-by-country reporting of corporate financial data by multinational enterprises emerged in 2003, though it initially lacked the requisite political backing for implementation.

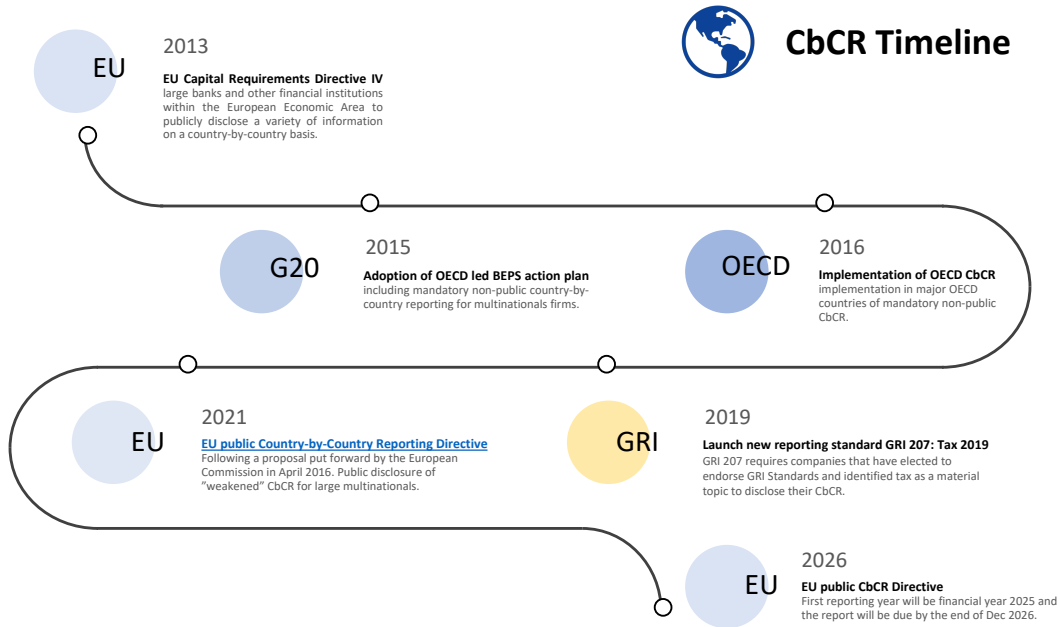
Years later, the EU CbCR regulation part of the EU Capital Requirement Directive IV (CRD IV) was one of the first international policy actions involving CbCR disclosures for multinationals. Its introduction has its roots in the Basel III regulatory framework. Developed in the aftermath of the 2007/08 financial crisis, Basel III aimed to strengthen the capital requirements and risk management practices of banks worldwide. The European Commission, however, expanded the scope of the Basel III agreement through its Capital Requirements Directive IV (CRD IV) and Regulation (EU) No. 575/2013. Notably, CRD IV included specific rules for corporate governance, remuneration policies linked to risk management, and, most importantly, an enhanced transparency initiative involving mandatory CbCR for financial institutions. Under CRD IV, multinational banks and investment firms operating within the European Economic Area (EEA) were required to publicly disclose key financial and tax information about the geographical distribution of their business activities and tax payments. All EEA countries were obligated to transpose the CbCR requirements into domestic law, with most member states implementing the

directive by mid-2014. As a result, financial institutions had to publish their profits and effective tax payments per tax jurisdiction for the 2014 financial year, enabling meaningful cross-country comparisons and increased transparency regarding their tax practices.

Following this first achievement, a series of high-profile tax avoidance scandals involving prominent multinational corporations intensified demands for enhanced transparency measures. In response, the OECD launched its expansive 15-point Base Erosion and Profit Shifting initiative in 2015, a core component of which introduced a confidential CbCR standard. Over 100 countries worldwide have assimilated the OECD standard, including its incorporation into EU law.

Nonetheless, advocacy for a public CbCR regime persisted. In the EU, an initial 2016 proposal for a cross-sector public CbCR collapsed in 2019 facing opposition from multiple member states. However, a compromise proposal in 2021 secured the requisite political consensus, paving the way for the formal adoption of the EU’s public CbCR directive (EU Directive 2021/2101) in December 2021. This landmark legislation mandates public disclosure of financial data by large multinationals operating within the EU, representing a significant step forward in the evolving landscape of corporate tax transparency, albeit with important limitations still present (detailed analysis in Chapter 3).

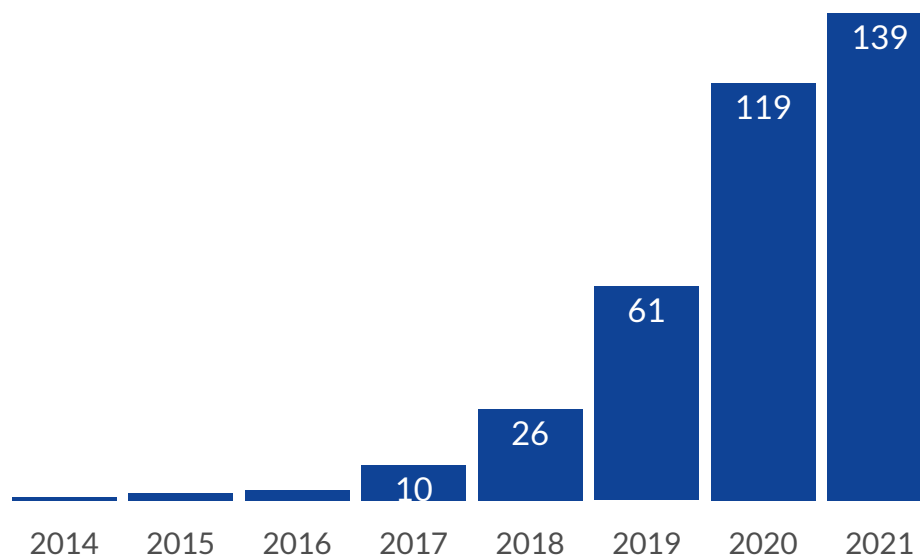
FIGURE 2.2
Timeline of transparency measures



Note: This figure summarises the main transparency measures implemented in the last decade.

FIGURE 2.3

Number of publishing multinationals over time



Source: Public CbCR database.

2.2 Voluntary publication of CbCR: the public CbCR database

Recognizing the critical importance of public Country-by-Country Reporting data for enhancing corporate tax transparency, we have curated a comprehensive database that consolidates this information from multinational enterprises worldwide.¹

Companies that voluntarily disclose their CbCRs often do so in various documents and formats, posing challenges in locating and extracting the data. For example, some multinationals use standalone tax payments reports, while others use tax transparency reports or sustainability reports and annual reports. We undertook an exhaustive search through the different annual and transparency reports of large MNEs, meticulously extracting and digitizing the relevant CbCR data. By consolidating this information into a structured format, we have created a valuable resource that provides unparalleled insights into the tax transparency practices of MNEs.

Our database surpasses any private MNE equivalent in its coverage, representing the only comprehensive public CbCR database available. To facilitate access and analysis of this rich dataset, we have developed <https://www.taxplorer.eu> a dedicated website that not only hosts the public CbCR database but also offers interactive visualizations, allow-

¹For a more detailed presentation of the database, refer to Aliprandi et al. (2023) and Aliprandi and Borders (2023).

ing users to explore and understand the information more effectively.

It is important to note that recent research ((Adams et al., 2022) and (Godar et al., 2024)) indicates that firms which are less tax aggressive are more transparent about their tax activities, often to signal their virtue. This suggests that our database most likely includes multinationals that are less aggressive in their tax strategies, as these companies are more inclined to voluntarily disclose their CbCRs in various reports. (Adams et al., 2022) finds that, while general tax disclosure decisions are influenced by the effective tax rate, the extent of CbCR is significantly determined by factors related to international tax-motivated income shifting. Additionally, headquarter-country-level institutional and societal values play a crucial role in shaping these voluntary tax disclosures.

2.2.1 Who publishes CbCRs?

Through this extensive collection of data, we have gained valuable insights into the evolving landscape of public CbCR reporting. The trend of publishing public CbCR data has been rapidly increasing, as illustrated in Figure 2.3. 139 MNEs published public CbCR data in 2021, while only 10 did in 2017. A total of 153 MNEs have published public CbCR data, with an average of 2.4 years of data per MNE.

Among the MNEs voluntarily publishing their public CbCR data, a significant portion consists of large, multinational corporations. “Large” MNEs are defined as those with global revenues exceeding €750 million, the threshold commonly used in international taxation initiatives such as the OECD CbCR and the 15% global minimum tax. Notably, multinationals exceeding this €750 million revenue threshold have been required to compile CbCR reports for private filing with tax authorities under OECD rules since 2016. As such, it is expected to be easier for these firms to disclose their CbCR data publicly, as they are already obliged to prepare the reports.

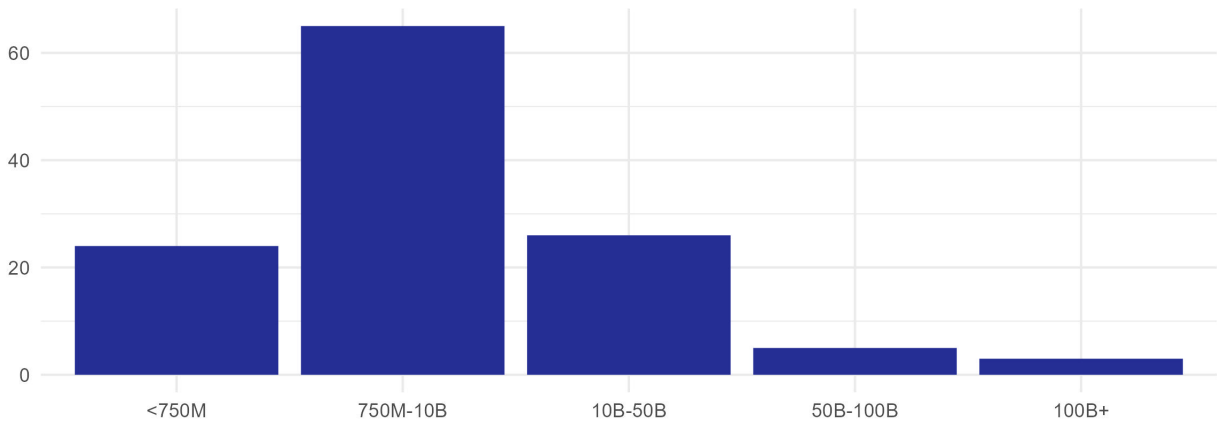
Figure 2.4 shows a breakdown of the average annual global revenues for all of the publishing MNEs. About 83% of publishing MNEs are large: they have global revenues above €750 million. The majority of MNEs have annual global revenues between €750 million and €10 billion. There are also more than 20 that have global revenues between €10 billion and €50 billion. A small number of MNEs have revenues above this.

However, when compared to the Forbes Global 2000 list of the world’s largest firms, the number of publishing MNEs is relatively modest. The Forbes Global 2000 ranks companies based on a composite index weighing sales, profits, assets, and market value, serving as a comprehensive representation of the world’s biggest corporations.

Figure 2.5 illustrates this comparison, contrasting the global revenues of publishing MNEs with those on the Forbes 2000 list. While the publishing MNEs include notable giants

such as Shell (€263 billion), British Petroleum (€198 billion), Total Energies (€164 billion), Enel (€74 billion), and AXA (€99.9 billion), about 41% of the large publishing MNEs (52 out of 126) are featured in the top 2000 Forbes list. The five largest publishing MNEs by global revenues are Shell (€263 billion), British Petroleum (€198 billion), Total Energies (€164 billion), and Enel (€74 billion).²

FIGURE 2.4
Global revenues of publishing MNEs (in € billions or millions)



Note: Data is from the public CbCR database. €750 million is the threshold generally used to define large MNEs. Global revenues are proxied by unrelated revenues (or an estimation of unrelated revenues based on total revenues). MNEs with no reported revenue data are not shown. An average is used for the MNE if it has been reported for several years.

The OECD’s anonymised and aggregated CbCR statistics on large multinationals provide a global perspective on the universe of firms required to compile CbCRs for private filing with tax authorities. This OECD dataset serves as a good basis for comparison with our database of publicly disclosed CbCR information, allowing us to assess the extent to which public disclosures represent the broader population of large MNEs and measure their importance in terms of revenues and other variables.

Since 2016, 52 countries (representing approximately 88% of global GDP from 2018 to 2022)³ have been annually reporting CbCR data on their large MNEs to the OECD. While the OECD dataset excludes some significant countries, the included nations capture the majority of the world’s large MNEs, enabling a meaningful comparison.

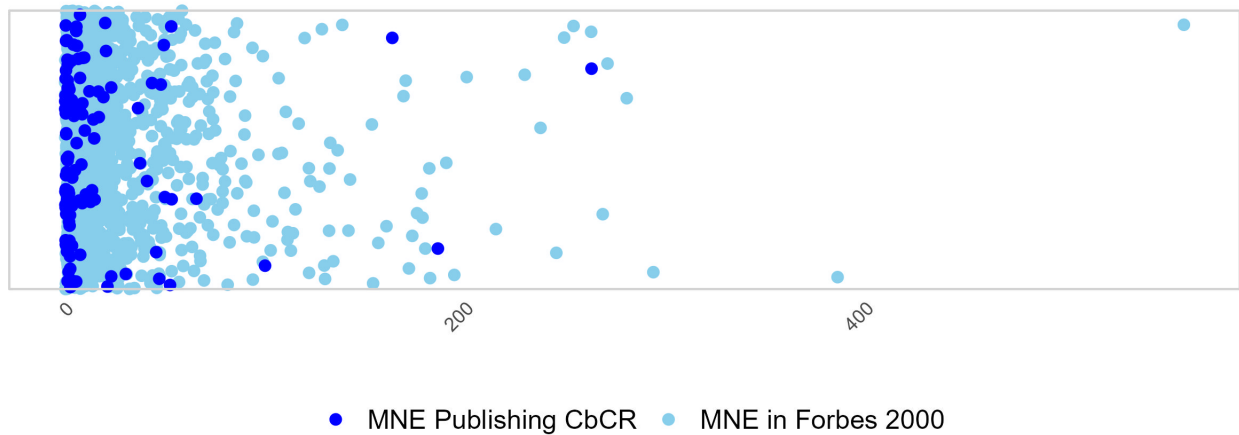
Table 2.2 presents this comparison by breaking down the coverage of our database by the headquarter regions of large MNEs. Overall, less than 2% (124 out of 7470) of global

²Some other examples of large MNEs publishing CbCRs are América Móvil (€64 billion), Vodafone (€53.1 billion), IKEA (€50 billion), and Rio Tinto (€43.4 billion).

³See Appendix A.1 for the full list of countries. We have created a website to explore this data: https://taxobservatory.shinyapps.io/CbCR_Explorer/. The latest year available is 2021 for US MNEs and 2020 for all other countries.

FIGURE 2.5

Global revenues of publishing MNEs and the Forbes top 2000 firms



Note: The MNEs publishing CbCR are from the public CbCR database. Forbes 2000 refers to the Forbes Global 2000 2021 list. It is a list of the 2000 largest firms in the world based on a composite index weighing sales, profits, assets, and market value. Each dot is a MNE. Global revenues are proxied by sales for the Forbes 2000. For the publishing MNEs, global revenues are proxied by unrelated revenues (or an estimation of unrelated revenues based on total revenues). MNEs with no reported revenue data are not shown. A revenue-weighted average is used for the MNE if it has been reported for several years.

large multinationals publish public CbCR data. They represent less than 5% of global multinationals' revenues. These numbers are slightly overestimated due to the missing countries (ie. Russia). The majority of MNEs publishing public CbCR data are European: the only non-European countries among the top 10 by the percentage of publishing MNEs are South Africa and Australia. About 17% (25/143) of large Italian MNEs and 13% (18/139) of large Spanish MNEs publish public CbCR data. There are more non-European countries outside of the top 10: Chile, Brazil, India and Mexico are all among the top 15 countries by the percentage of publishing MNEs.

While our database covers a relatively small portion of global MNEs in terms of absolute numbers, there is significant heterogeneity in the level of coverage across different countries. For instance, the public CbCR disclosures in our database account for approximately 45% of the total revenues reported by large MNEs headquartered in Norway and Italy. Similarly, the coverage extends to 40% of the total revenues of large Spanish MNEs and 30% of the revenues reported by their British counterparts. For large Australian MNEs, the public disclosures in our database represent about 25% of their total revenues.

Notably, these revenue coverage rates tend to be higher than the corresponding percentages of large MNEs publishing public CbCRs within each country. This disparity arises because the MNEs that voluntarily disclose their CbCR data are often among the largest corporations in their respective countries. For example, while less than 1% of large French

TABLE 2.2**Large MNE public CbCR publishing country coverage**

HQ Country	# Publishing	# Total Large MNEs	% Publishing	% Revenues
Italy	25	143	17.48%	46.69%
Spain	18	139	12.95%	37.14%
Norway	6	66	9.09%	46.37%
South Africa	5	58	8.62%	9.33%
Denmark	5	73	6.85%	6.1%
Finland	3	52	5.77%	14.63%
Netherlands	9	162	5.56%	2.88%
Sweden	5	117	4.27%	7.59%
Australia	6	148	4.05%	23.59%
United Kingdom	14	399	3.51%	30.13%
Chile	1	31	3.23%	13.66%
Switzerland	3	159	1.89%	4.56%
Mexico	1	64	1.56%	4.51%
India	2	144	1.39%	0.47%
Brazil	1	82	1.22%	0.65%
Germany	5	419	1.19%	5.03%
Austria	1	100	1%	0.04%
France	2	235	0.85%	12.75%
Japan	7	904	0.77%	1.58%
Luxembourg	1	155	0.65%	0.14%
Canada	1	230	0.43%	0.44%
United States	3	1759	0.17%	0.06%
China	0	578	0%	0%
Korea	0	247	0%	0%
Hong Kong	0	231	0%	0%
Cayman Islands	0	135	0%	0%
Singapore	0	73	0%	0%
Bermuda	0	71	0%	0%
Belgium	0	69	0%	0%
Ireland	0	63	0%	0%
Malaysia	0	62	0%	0%
Turkey	0	57	0%	0%
Saudi Arabia	0	35	0%	0%
Argentina	0	30	0%	0%
Other	0	180	0%	0%
Total	124	7470	1.66%	4.2%

Note: Data on the number of MNEs publishing CbCR is from the public CbCR database. Data on the number and revenues of large MNEs in each country is from the 2020 OECD aggregated data. Only the 52 countries that send this data to the OECD are included (see Appendix A.1 for the full list). Other includes jurisdictions with no publishing MNEs and less than 30 large MNEs. Large is defined as a MNE having global revenues above €750 million for any publishing year. Global revenues are proxied by unrelated revenues (or an estimation of unrelated revenues based on total revenues). There are 124 large publishing MNEs (and not 126) because Colombia and Taiwan have 1 publishing MNE each, but do not send their large MNE data to the OECD. The mean annual revenue is used for large publishing MNEs that have published data for several years. 2020 annual revenue data from Orbis or online sources are used for the 23 large publishing MNEs without revenue data.

MNEs (only 2 out of 235) publish public CbCR data, these two entities—Total and AXA—account for a substantial 13% of the total revenues reported by large French MNEs.

The bottom of table 2.2, Many large countries have no large publishing MNE, such as China and South Korea. They are also several tax havens with a fairly large number of MNEs that have no MNEs publishing public CbCR data (ie. Hong Kong, Cayman Islands, Singapore, Bermuda, Ireland). Among countries with at least one publishing MNE, the United States, Canada and Luxembourg have few publishing MNEs and they account for little revenue. For example, only 3/1759 large American MNEs publish public CbCR data and they account for 0.07% of large American MNE revenues. This lack of information is problematic given that US MNEs are known for more aggressive tax avoidance strategies.

2.2.2 Sector

Table 2.3 shows the sectoral breakdown of MNEs publishing CbCR. Two sectors account for about 34% of the MNEs: business and financial services (18.3%) and oil, gas and mining (15.7%). The oil, gas, and mining sector includes many of the world's largest companies, such as Shell, Equinor, BP, and TotalEnergies (Table 2.4). The business and financial services MNEs include many of the largest European insurance companies (Allianz, Generali, Swiss Re, etc.). It is likely that the high publishing levels of oil, gas, and mining MNEs are related to the other reporting requirements they have to conform to regarding their payments to governments. We exclude banks from this MNE analysis, but it is also possible that the mandatory CbCR reporting for EU banks has affected reporting more generally in the business and financial services sector.

Some other major sectors are utilities (9.2%), communications (7.2%), transport, freight and storage (5.9%), biomedical (5.9%), and industrial, electrical, and electronic machinery (6.5%). The communications category contains 6 of the world's 25 largest telecommunications MNEs measured by total revenues. Nippon Telegraph and Telephone (NTT) is the 3rd largest, followed by Telefónica (6th), Vodafone (8th), América Móvil (11th), British Telecom (17th) and Telenor (22nd).⁴ Utilities include several large European energy utility providers (Enel, Iberdrola, and Ørsted). The transport, freight, and storage category includes several large European infrastructure companies (Ferrovial, Ferrovie dello Stato Italiane, Finnair, etc.). The biomedical category contains several large biopharmaceutical MNEs (Eisai and CSL). The industrial, electric, and electronic machinery category contains several large electronics and industrial manufacturers (Philips, Grundfos).

It is also interesting to look at the largest global MNEs. Table 2.5 shows the number of MNEs publishing public CbCR data for the firms on the Top 2000 Forbes list. The sector (excluding banks) with the highest percentage (13%) of publishing MNEs is the telecommunications sector (América Móvil, BT, TIM, NTT, Telefónica, Vodafone). The oil, gas, and

⁴Global revenue numbers for all communications MNEs are from the Forbes Global 2021 list.

mining sector is in second with 10% of MNEs publishing public CbCR data (Shell, TotalEnergies, British Petroleum, Rio Tinto, Anglo American, etc.). Three sectors have no MNE publishing public CbCR data: digital companies (Alphabet, Apple, Microsoft, Alibaba, Rakuten, etc.), technology companies (Lenovo, Cisco, Oracle, etc.), and motor vehicle manufacturers (Toyota, BMW, Stellantis, etc.)

TABLE 2.3
Publishing MNEs by sector

Sectors	% of Public CbCR MNEs
Business and Financial Services	18.3%
Oil, Gas and Mining	15.7%
Utilities	9.2%
Communications	7.2%
Industrial, Electric and Electronic Machinery	6.5%
Biomedical	5.9%
Transport, Freight and Storage	5.9%
Unclassified Manufacturing	5.9%
Chemicals, Cosmetics and Paints	5.2%
Metals and Cement	4.6%
Clothing and Luxury Goods	3.3%
Food and Beverages	2.6%
Travel, Personal and Leisure	2.6%
Construction	2%
Property Services	2%
Retail	2%
Printing and Publishing	1.3%

Note: Table shows the percentage of publishing MNEs by sector. Data is from the public CbCR database. Unclassified manufacturing contains specific manufacturing sectors (ie. wood, paper, motor vehicles) for which we have less than three publishing MNEs.

TABLE 2.4**Selection of notable publishing MNEs by sector**

Sector	Some Notable Firms
<i>Business and Financial Services</i>	Prudential, Generali, AXA, Allianz, Mapfre, Swiss Re
<i>Oil, Gas and Mining</i>	Shell, TotalEnergies, British Petroleum, Rio Tinto, Anglo American
<i>Utilities</i>	Ørsted, Iberdrola, Enel
<i>Communications</i>	América Móvil, BT, TIM, NTT, Telefónica, Telenor, Vodafone
<i>Transport, Freight and Storage</i>	Ferrovial, Ferrovie dello Stato Italiane, Finnair, Mundys
<i>Biomedical</i>	Eisai, CSL, Qiagen, Cipla, Recordati
<i>Industrial, Electric and Electronic Machinery</i>	Philips, Omron, Grundfos, Coloplast, Siltronic, Interpump
<i>Unclassified Manufacturing</i>	Leonardo, Piaggio, TKH, SOL
<i>Chemicals, Cosmetics and Paints</i>	Yara, AkzoNobel, Orica
<i>Metals and Cement</i>	Hydro, Usiminas, Buzzi Unicem, Feralpi
<i>Retail</i>	IKEA, El Corte Inglés, Kesko
<i>Construction</i>	Acciona, Bonava
<i>Food and Beverages</i>	Ajinomoto, Royal Unibrew, Meiji, Unilever
<i>Travel, Personal and Leisure</i>	Iberostar, Meliá Hotels, Parques Reunidos, NH Hotel Group
<i>Property Services</i>	Heimstaden
<i>Printing and Publishing</i>	Pearson

TABLE 2.5**Publishing MNEs For the Top 2000 Forbes MNEs**

Sectors	# MNEs	# Publishing MNEs	% Publishing
Telecommunications	50	6	12%
Oil, Gas and Mining	130	13	10%
Financial Services	208	11	5.3%
Energy	134	6	4.5%
Pharmaceuticals	47	2	4.3%
Industrial Equipment	81	3	3.7%
Retail	81	3	3.7%
Chemicals	74	2	2.7%
Transport, Freight and Storage	49	1	2%
Food and Beverage	54	1	1.9%
Construction	55	1	1.8%
Healthcare	57	1	1.8%
Real Estate	79	1	1.3%
Digital Company	41	0	0%
Motor Vehicle Manufacturer	55	0	0%
Technology	56	0	0%

Note: The table shows the percentage of publishing MNEs by sector for the Forbes top 2000 MNEs using 2023 data (excluding banks). The Forbes list ranks the largest firms in the world based on a composite index weighting sales, profits, assets, and market value. Data on MNEs publishing public CbCR data is from the public CbCR database. Only sectors with at least 40 MNEs in the Forbes top 2000 list are shown.

2.2.3 How transparent are publishing MNEs?

Multinationals, except banks, report voluntarily. The disclosed information varies a lot in terms of detail: they can limit the financial variables they disclose and aggregate information, instead of giving detailed figures for each country.

To evaluate the comprehensiveness and transparency of country-by-country reports, we have developed a transparency score. Building upon previous literature, this score measures the extent to which multinational enterprises disclose financial information across different countries and variables. The transparency score is calculated based on the disclosure of a predefined set of financial variables across various jurisdictions, with higher scores indicating greater transparency. The score ranges from 0 (lowest transparency) to 100 (highest transparency), with the geographic aggregation of data being a crucial factor in determining the score.

Specifically, the transparency score measures the percentage of data reported at the individual country level (as opposed to aggregated geographic categories) for each variable. We benchmark this score against the OECD's confidential disclosure standard, which includes ten variables (see Table 2.1 for an overview). For each variable, we calculate the percentage disclosed at the individual jurisdiction level and then take an equal-weighted average across all variables. In this framework, a score of 100 indicates a high level of transparency, where the multinational discloses information for all variables at the country level. Conversely, a score of 0 signifies low transparency, implying that all variables were disclosed at an aggregated level, obscuring the financial details for specific jurisdictions. (See AppendixA.5 for a formal definition of this score.)

Our indicator builds on the work of Adams et al. (2022), which evaluates, among other factors, the extent of multinationals' CbCR reporting, and from Dutt et al. (2021) and Kopetzki et al. (2023), who proposed a comprehensive indicator considering several disclosure aspects, including content and readability. While our indicator is less comprehensive, it remains transparent, easy to understand, and targets specifically the data content of the reports.

To better illustrate, consider the following fictitious example of a multinational company that published CbCR data in Table 2.6. There are two jurisdictions (France and Italy) and one additional category that aggregates several countries (Other Europe). The MNE included 3 of the 10 main financial variables included in the OECD standard: profits, total revenues, and employees.

The transparency score will be calculated as follows:

TABLE 2.6

Fictitious example of MNE CbCR data

Jurisdiction	Profits	Total Revenues	Employees
France	10	120	15
Italy	20	100	15
Other Europe	30	0	10
Total	60	220	40

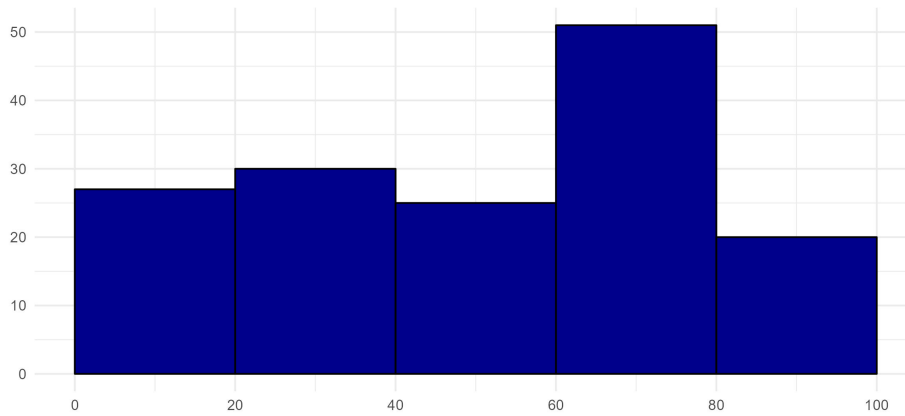
$$\begin{aligned} \text{Transparency Score} &= 0.1 \left(\frac{30}{60} * 100 \right) + 0.1 \left(\frac{220}{220} * 100 \right) + 0.1 \left(\frac{30}{40} * 100 \right) \\ &= 22.5 \end{aligned}$$

In this case, for profits 50% (30/60) of the data is reported at the jurisdiction level (France and Italy). Total revenues are reported entirely at the county level (220/220). For employees, 75% of the data is reported at the jurisdiction level (30/40). The remaining seven variables are not reported and count as zero. Giving equal weight to each variable, including those not reported results in a score of 22.5 out of 100.

Figure 2.6 shows the distribution of the transparency score over the sample. About 50% of MNEs have scores between 60 and 80 for the period while around 25% of MNEs with a score below 20 and 20% of MNEs with a score above 80.

MNEs report between 55% and 65% of the 10 financial variables from 2018 to 2022 and MNEs only reported between 0% and 10% of financial data at aggregated geographic levels over the period.

It is important to mention that the reporting of financial variables is far from perfect. The percentage of reports that disclose each financial variable is shown in Table 2.7. There is a significant variation in the reporting. More than 90% of reports include the tax paid variable from 2019 to 2021. More than 85% of MNEs also report the profits before tax variable across the period. About 75% of MNEs report their employees and total revenues over the period. Reporting is significantly lower for some financial variables: 50% to 60% of MNEs report unrelated revenues, related revenues, and tangible assets, while less than 30% of MNEs report their stated capital and accumulated earnings.

FIGURE 2.6**Distribution of transparency scores**

Note: The transparency score is the percentage of jurisdiction-level data for all reported financial variables.

TABLE 2.7**Percentage of reports including each variable**

Variable	2019	2020	2021
Profit Before Tax	87	87	88
Tax Accrued	62	70	73
Tax Paid	98	93	94
Employees	74	75	76
Unrelated Revenues	49	57	58
Related Revenues	49	55	56
Stated Capital	20	13	17
Accumulated Earnings	26	16	21
Tangible Assets	48	57	57
Total Revenues	74	74	76

Note: This table shows the percentage of multinationals included in the sample that for each year publish a certain variable. Taking the first value as an example, 87% of companies in the Public CbCR database included the variable Profit before tax in their public CbCR in 2019.

2.3 How do publishing MNEs compare to other large MNEs?

As firms which are less tax aggressive are more transparent about their tax activities ((Adams et al., 2022) and (Godar et al., 2024)) we will analyze these aspects by comparing multinationals with aggregated CbCR data. We start by providing some descriptive evidence on of tax haven usage.

Table 2.8 shows how large publishing MNEs compare to large global MNEs regarding the percentage of foreign jurisdictions' profits reported in tax havens.

Significant amounts of foreign profit are reported in tax havens. 38% of all foreign profits are reported in tax havens. Tax haven usage is lower for EU countries: they report about 24% of their profits in tax havens compared to 43% for non-EU countries. In the EU, Greece has about 64% of its foreign profits in tax havens (mostly in Cyprus and Ireland). There were about 18 MNEs based in Greece from 2016 to 2020. Portugal follows Greece at around 40%, as well as Belgium and Luxembourg at around 30%. France, Germany, and Denmark have about 25% of their foreign profit in tax havens. Romania and Spain have the least amount in tax havens. Non-EU countries generally have higher levels of tax haven usage: MNEs in China, Singapore, and the US all have over 55% of their foreign profits in tax havens (figures might be overestimated due to intracompany dividends in OECD data).

Large publishing MNEs have generally significantly lower levels of profits in tax havens: 14.9% for all large MNEs, 13% for EU MNEs, and 20.6% for non-EU MNEs. That said, there are still countries with comparable levels of tax haven usage among the publishing MNEs. Denmark, France, and German large publishing MNEs have between 20% and 31% of their profits in tax havens. Spain and Italy have the lowest levels (besides Luxembourg which has only 1 publishing MNE). There are many countries for which we do not have enough data to do this analysis for large publishing MNEs (either there are no reporting MNEs or they do not report their data at the jurisdiction level for profits).

Table 2.9 presents a comparison using the profitability of employees. The general pattern is similar to that of foreign profits in tax havens. In non-tax havens, about €40 thousand are reported for every employee. Employees are about 10 times more profitable in tax havens (€386 thousand) and almost 40 times more profitable (€1.5 million) in small tax havens.⁵ The differences are larger for non-EU countries: tax haven employees are about 12 times more profitable and small tax haven employees are about 48 times more prof-

⁵These are the small tax havens reported in the OECD country-level data: Andorra, Anguilla, Antigua and Barbuda, Aruba, Bahamas, Bahrain, Barbados, Belize, Bermuda, British Virgin Islands, Cayman Islands, Cook Islands, Cyprus, Dominica, Gibraltar, Grenada, Guernsey, Isle of Man, Jersey, Liechtenstein, Luxembourg, Macau, Maldives, Malta, Marshall Islands, Mauritius, Monaco, Netherlands Antilles, Saint Kitts and Nevis, Saint Lucia, Saint Martin, Saint Vincent and the Grenadines, Samoa, Seychelles, Vanuatu.

itable than employees in non-tax havens. MNEs in EU countries report employees that are about five times more profitable in tax havens and 13 times more profitable in small tax havens. The large publishing MNEs show overall lower profitability differences. Employees are 2-3 times more profitable in tax havens (compared to 10 for all large MNEs) and 10 times more profitable in small tax havens (compared to 40). These results concord with Adams et al. (2022) who find that companies that disclose more tax information are less tax aggressive than the others.

TABLE 2.8
% of foreign profits in tax havens for large MNEs

Headquarter Country	% Large MNEs	# Large MNEs	% Publishing MNEs	# Publishing MNEs
<i>Top 10 EU Countries</i>				
Greece	63.6%	17		0
Portugal	38.5%	23		0
Belgium	28.4%	69		0
Luxembourg	28.2%	155	0%	1
France	25.8%	235	21.4%	2
Germany	25.2%	419	20.3%	5
Denmark	24.9%	73	31.1%	5
Italy	19%	143	5.4%	20
Romania	10.6%	4		0
Spain	8.8%	139	7.7%	15
All EU Countries	24.1%	1290	13%	48
<i>Top 10 Non-EU Countries</i>				
China	67%	578		0
Singapore	60.3%	73		0
United States	56.7%	1759		0
Indonesia	54.6%	27		0
Tunisia	52.6%	3		0
Türkiye	46.1%	57		0
Malaysia	45.7%	62		0
Saudi Arabia	39%	35		0
Bermuda	38.4%	71		0
Brazil	37.5%	82		0
All Non-EU Countries	42.6%	4957	20.6%	25
All Countries	38%	6247	14.9%	73

Notes : Data on large MNEs is from the 2016-2020 OECD country-level data. Only the 37 countries that send data disaggregated at the jurisdiction level for profits are included (see Appendix A.1 for the full list). The Netherlands is excluded as they have a high percentage of data in aggregated geographic categories. Data on large publishing MNEs is from the public CbCR database. Only large MNEs with disaggregated country-level data on foreign profits are used. Tax havens are the combined list of Hines and Rice (1994) and Tørsløv et al. (2022). Loss-making jurisdictions and aggregate categories are excluded

TABLE 2.9**Profits per employee (in € thousands) for large EU and non-EU MNEs**

Tax Haven Group	Large MNEs	Large Publishing MNEs
<i>EU Countries</i>		
No Tax Havens	40.8	86.2
All Tax Havens	190.1	179.1
Large Tax Havens	170.6	165.2
Small Tax Havens	527.0	668.3
<i>Non-EU Countries</i>		
No Tax Havens	38.5	154.4
All Tax Havens	480.9	465.2
Large Tax Havens	351.5	407.5
Small Tax Havens	1834.7	2392.8
<i>All Countries</i>		
No Tax Havens	39.2	120.0
All Tax Havens	385.7	286.7
Large Tax Havens	290.8	256.3
Small Tax Havens	1528.2	1338.4

Notes : Profit per employee is profit-weighted, in € thousands and only includes jurisdictions with positive profits. Data on large MNEs is from the 2016-2020 OECD country-level data. Only the 37 countries that send data disaggregated at the jurisdiction level for profits are included (see Appendix A.1 for the full list). Data on large publishing MNEs is from the public CbCR database. Tax havens are the combined list of Hines and Rice (1994) and Tørsløv et al. (2022). Large tax havens are tax havens with over 2 million inhabitants. This definition comes from Hines and Rice (1994) who initially defined large havens as having over 1 million inhabitants. We have increased this threshold to 2 million due to global population growth since 1994. All aggregate categories excluded.

2.4 What can we learn from public CbCRs?

2.4.1 Tax avoidance behavior of comparable MNEs

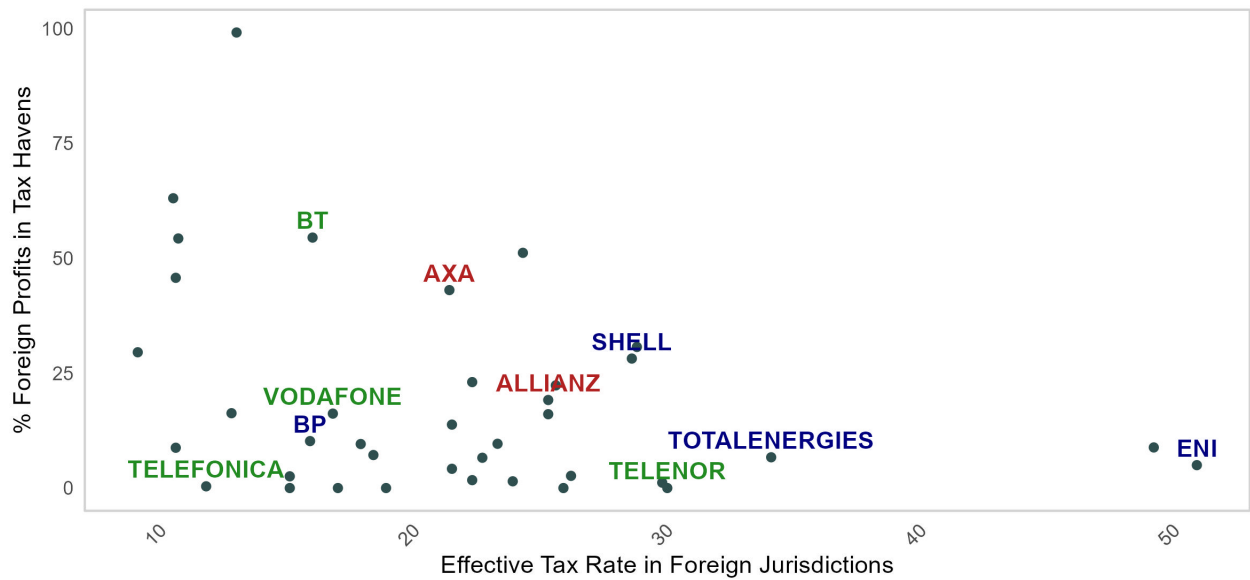
The OECD country-level data is useful for country-level analyses, but cannot be used for any MNE-specific tax avoidance analyses. This is a real limit because there may be significant variation in tax avoidance behavior among large comparable European MNEs. The low number of large MNEs publishing public CbCR data is a major limit to understanding this, but the little data available can be used to understand the importance of having more public MNE-level CbCR data.

Figure 2.7 presents two indicators: the percentage of foreign profits in tax havens and the effective tax rate (ETR). There are notable differences between some comparable MNEs. ENI has little profits in tax havens and pays the highest ETR among the oil and gas MNEs. Shell has about 25% of its profits in tax havens and pays an ETR of about 30%. BT has around 50% of its profits in tax havens and pays an ETR below 20%, while Telenor has little foreign profits in tax havens and pays an ETR of about 30%. It is difficult to draw conclusions from this limited data, but mandatory public CbCR data would create a better understanding of different tax avoidance behaviors among similar large MNEs.

Figure 2.8 shows the profit per employee and the ETR by jurisdiction for the publishing MNEs. Bermuda stands out as having a very high profitability per employee and a low ETR for publishing MNEs. Luxembourg, Singapore, and Switzerland also have low ETRs and high employee profitability.

FIGURE 2.7

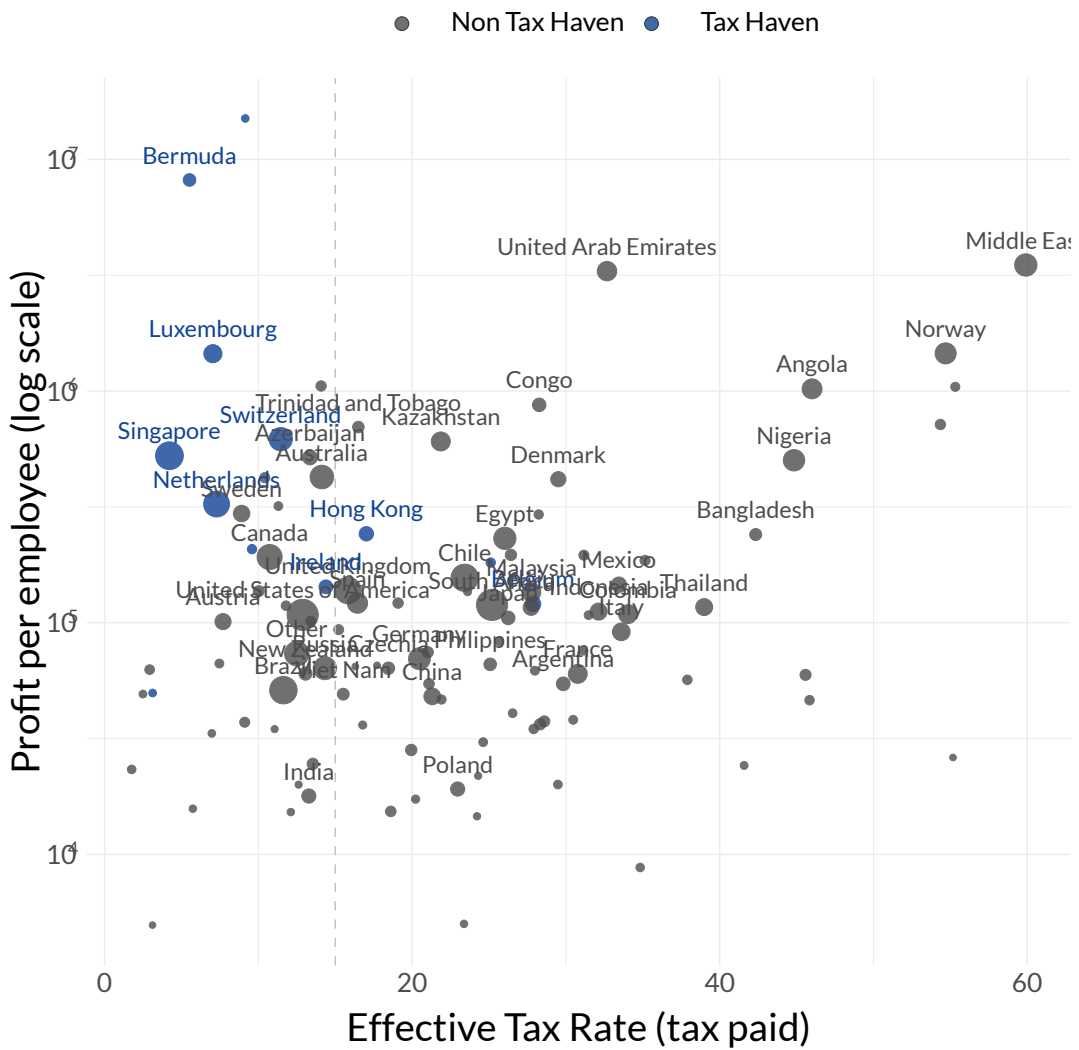
Foreign ETR and % of foreign profits in tax havens for large publishing MNEs



Note: The ETR is a tax-paid ETR over the full reporting period using only profit-making foreign jurisdictions. Only MNEs with at least 3 reporting years are included to improve the robustness of the measure. Comparable MNEs in the same sector are highlighted with different colors. Large is defined as having global revenues (proxied by unrelated revenues) above €750 million for at least one reporting year. Data is from the public CbCR database.

FIGURE 2.8

Profit per employee and ETR in public CbCRs



Note: The ETR is a tax-paid ETR over the full reporting period using only profit-making foreign jurisdictions. Tax havens are the combined list of Hines and Rice (1994) and Tørsløv et al. (2022). Data is from the public CbCR database. Source: Public CbCR database.

3 The evolution of the tax transparency landscape

This chapter centres on the European Union's public country-by-country reporting directive for multinational enterprises. It evaluates whether this directive and similar initiatives are ambitious enough to facilitate meaningful public oversight of multinational activities.

3.1 An important shift: the EU public CbCR directive

This directive aims to increase transparency around the corporate income taxes paid by large multinational companies operating in the European Union. By requiring these companies to publicly report financial information like revenues, profits, and taxes on a country-by-country basis, the EU wants to empower the public to better scrutinize the tax practices of multinationals. The directive is intended to promote corporate accountability, restore trust in the fairness of national tax systems, and allow for more informed public debate on the tax compliance and real economic impacts of major multinationals.

The directive crucially applies to both EU and non-EU headquartered multinational enterprises that meet certain criteria. It covers MNEs with global consolidated revenues exceeding €750 million, provided they have a substantial "qualifying" presence in the EU. This qualifying presence is defined as having a subsidiary or branch in the EU that meets at least two of the following three size thresholds: total assets above €5 million, net turnover above €10 million, or over 50 employees.

Under the public CbCR requirements, MNEs must disclose some financial information, including the ultimate parent entity's name, details on subsidiaries, the nature of activities, number of employees, revenues, and crucially - tax-related figures like profits and taxes paid and accrued.

This reporting must be disaggregated on a country-by-country basis for a limited number of countries: EU member states and jurisdictions on the EU's list of non-cooperative tax havens. An important drawback is that the information can be provided in an aggregated format for all other countries (ie. not in the EU and not on the EU's list of non-cooperative tax havens), in the next section we estimate the effects of this constraint.

The directive itself is not immediately effective but requires transposition into the national laws of the 27 EU member states, which provides flexibility in implementation and timelines. This flexibility, while allowing countries to adapt to their specific situations, risks leading to an uneven patchwork of differing rules and requirements across the EU as highlighted by Gundert et al. (2024) and Loureiro (2022).

As of early 2024, 20 member states have successfully enacted transposing legislation (Table 3.1), while 2 have bills in progress and 4 have not yet finalized rules, potentially delaying full implementation. Regarding timelines, most EU countries opted for MNEs to start reporting after June 22, 2024 - implying the first public country-by-country reports would be published by late 2026 for calendar year filers. The directive allows for the possibility of a temporary “safeguard” exemption deferring disclosure of commercially sensitive information for up to 5 years, except for the EU list of non-cooperative jurisdictions. Most finalized legislations include this option. This clause has the potential to undermine the purpose of the directive if the majority of multinationals use it and decide to delay the disclosure for several years.

Jurisdictions can also set their own language rules and sanctions for non-compliance, adding to the potential lack of harmonization (see Gundert et al. (2024) for a detailed analysis).

TABLE 3.1
EU Public CbCR directive implementation summary

Criteria	Total Countries
Final Legislation	20
Draft Legislation	2
No Activity Seen Yet	4
Early Application Available	3
Safeguard Clause Included	19
<i>Duration (5 years)</i>	18
<i>Duration (4 years)</i>	1
Safeguard Clause Not Included	3

Note: Information as of 20 March 2024.
Source: EU Public Country By Country Reporting Developments Tracker, EY.

3.1.1 Public disclosure requirements in other countries

AUSTRALIA

Australia is currently facing its own challenges and pushback as it works to introduce its legislation mandating large multinationals to publicly disclose tax information.¹ The government missed its own deadline in June 2023 to pass the bill before the legislative break, delaying implementation.

NGOs have voiced concerns that there was substantial lobbying against Australia's ambitious proposal that goes further than the EU directive. Multinationals have expressed apprehensions about compliance burdens and potential misinterpretation of disclosed data. While the proposal initially went far beyond EU CbCR rules, the Australian government recently released a revised draft legislation that reduces its scope and defers its introduction by a year. With the updated proposal, CbCR would only apply to Australia and an initial list of 41 specified jurisdictions (including Hong Kong, Singapore, and Switzerland).

Despite delays and pushback, the government remains committed to engaging stakeholders and refining the proposal over the coming months.

UNITED STATES

Also, the United States has seen a movement towards greater tax transparency, though less ambitious than the EU and Australian proposals. Towards the end of 2023, the US Financial Accounting Standards Board (FASB) finalized long-awaited rules mandating greater disaggregation of income taxes paid and other key tax information from U.S. companies. While falling short of full public country-by-country reporting, these changes require the disclosure of income taxes paid (net of refunds received), disaggregated by federal, state, and individual jurisdictions where such taxes constitute 5% or more of the total income taxes paid. As reported by the FACT coalition,² this move was widely supported by investors, who have long sought additional information about the tax practices of multinational enterprises in their portfolios to better assess risks related to corporate governance, regulatory compliance, tax enforcement, and other areas. However, the disclosure of tax variables without the corresponding tax base will most probably be of little use to detect tax evasion strategies.

¹<https://treasury.gov.au/consultation/c2024-488354>

²FACT Coalition, Consultation on Draft Amendments Regarding Public Country-by-Country Reporting, March 2024

UK TAX STRATEGY PUBLICATION REQUIREMENTS

Since 2016, MNEs operating in the UK are required to publish their global tax strategy online. (Finance Act 2016, Schedule 19). The tax strategy must include details on the MNE's approach to tax risk management, governance, tax planning, and its relationship with HMRC. This requirement applies to MNEs with either a UK company or UK permanent establishment, and with a combined revenue of £200 million or more, or a UK company with revenue over £2 billion. However, this kind of qualitative disclosure seems of little use. Bilicka et al. (2024) finds that while the mandate led firms to increase the volume of tax strategy disclosures, this additional disclosure contained more boilerplate language and lacked substantive details. The qualitative nature of these disclosures made it difficult for outside stakeholders to verify firms' claims about their tax practices, limiting the effectiveness of the mandate in driving real behavioral changes in corporate tax planning.

3.2 How will the transparency landscape change?

3.2.1 Increased number of publishing multinationals worldwide

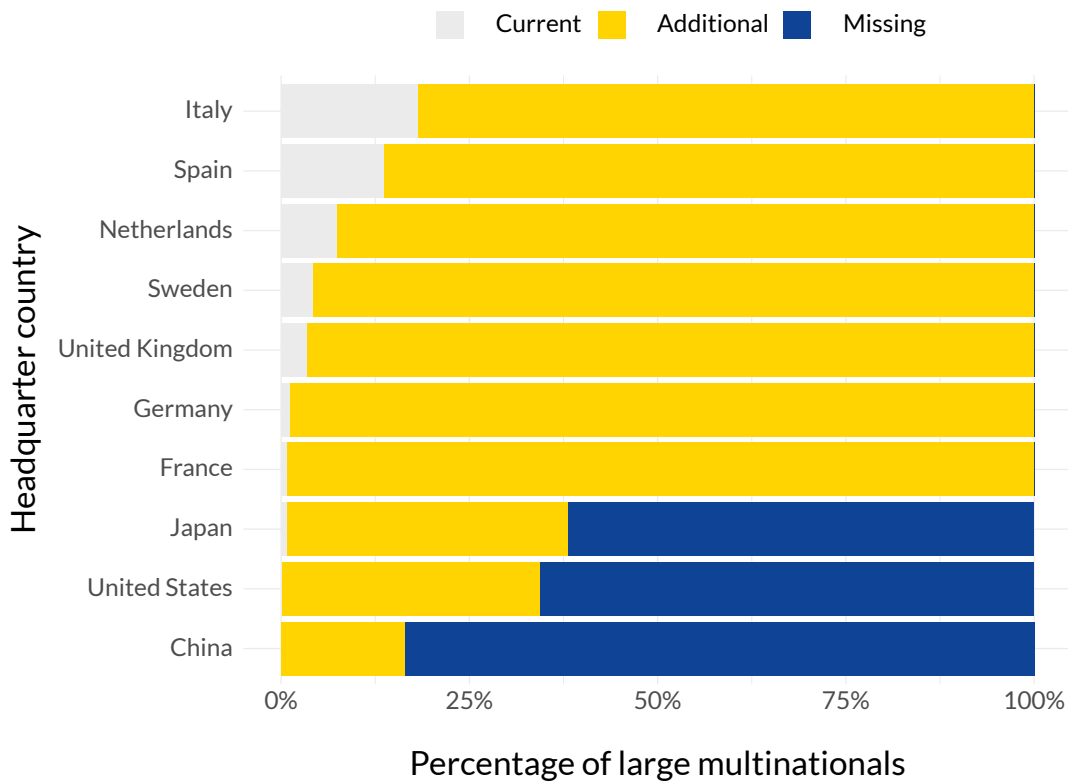
An important feature of the EU directive is that it will make it compulsory not only for European multinationals to publish their CbCR but also for foreign multinationals. Assuming companies will not extensively use the "safeguard clause", there will be an increase in the information available for multinationals headquartered across the globe, including US, Chinese and Japanese multinationals (Figure 3.1).

While a considerable number of large MNEs headquartered in EU member states like Italy, Spain, and the Netherlands already publicly report some level of country-by-country data as we saw in the previous section, the directive will compel an overwhelming majority to enhance their disclosures. For instance, in Italy, only 25 out of 143 large MNEs currently provide public CbCR, but the directive will require an additional 117 Italian MNEs (81.8%) to begin public reporting. Similarly, in Spain and the Netherlands, a staggering 87.1% and 92.6% of large MNEs, respectively, will be newly subject to these transparency requirements.

The directive's impact extends beyond the EU's borders, with major economies like the United States, Japan, and China also experiencing a surge in the number of MNEs obligated to publicly disclose country-by-country data. While the United States currently has only 3 out of 1,759 large MNEs providing public CbCR, according to Gundert et al. (2024) an additional 603 (34.3%) will be covered under the new rules. Japan faces an even more substantial increase, with 338 MNEs (37.4% of the large MNE total) newly required to

FIGURE 3.1

Coverage change with the introduction of EU public CbCR directive



Note: Current indicates multinationals included in the Public CbCR database, Additional the additional multinationals that will be affected by the directive and Missing those that will not be affected. We excluded banks' CbCR. Estimates of expected changes in coverage for multinationals headquartered in selected countries. For EU countries covered multinationals are the number of multinationals in aggregated OECD statistics.

Source: Public CbCR database, Gundert et al. (2024) for covered multinationals in US Japan and China, OECD Aggregated CbCR.

report publicly. Notably, China stands out with (to the best of our knowledge) none of its large MNEs currently disclosing publicly, but the directive will compel 95 Chinese MNEs (16.4%).

While there will be a significant increase in the number of multinationals publishing, including US ones, the disaggregation of the information will probably be very limited. The weak geographical reporting requirements could have serious negative effects on the level of geographic detail, resulting in an important aggregation of the information.

To estimate the extent of this aggregation, we can leverage the OECD's aggregated CbCR data, which provides a reasonable approximation of the information that would be disclosed under the directive's rules. As shown in Table 3.2, the directive's geographical limitations imply that a substantial portion of large multinational enterprises' foreign financial variables, such as revenues, profits, employees, and taxes paid, would still be repor-

ted at an aggregated level. For instance, large US-headquartered MNEs would report for their foreign activities approximately 67.3% of their revenues, 70.6% of profits, 79.1% of employees, and 70.7% of taxes paid in an aggregated fashion, obscuring the granular jurisdictional details. The situation is even more concerning for MNEs based in Japan, China, and several other major economies, where over 85% of their foreign financial variables could potentially be aggregated under the directive's current scope. While we cannot precisely isolate the specific MNEs included in the OECD data, this analysis highlights the substantial lack of jurisdictional transparency that would persist, even after the directive's implementation.

TABLE 3.2
Percentage of foreign activities aggregated in EU directive

HQ Country	# Large MNEs	Revenues	Profits	Employees	Tax Paid
<i>Non-EU Countries</i>					
United States	1759	67.3%	70.6%	79.1%	70.7%
Japan	904	86.9%	85.1%	86.7%	87.1%
China	578	91.1%	91%	73.1%	92.4%
Canada	230	97.1%	95.9%	95.2%	94.5%
Switzerland	159	68.6%	76%	66.9%	77%
Australia	148	92.1%	91.7%	86.9%	88.9%
India	144	84.5%	83.9%	86.6%	84.7%
Cayman Islands	135	96.9%	97.1%	97.6%	97.1%
All Non-EU Countries	4962	79.6%	79.4%	83.6%	80.5%
<i>EU Countries</i>					
Germany	419	61.6%	55.7%	58.3%	60.3%
France	235	60.7%	57.6%	63.7%	61.6%
Luxembourg	155	62.5%	44.9%	58.8%	51.7%
Italy	143	47.4%	41.2%	59.7%	72%
Spain	139	79.4%	80%	81.5%	80.6%
All EU Countries	1321	62.2%	60.4%	62.9%	63.8%
All Countries	6283	74.9%	74.7%	77.3%	76.3%

Note: Countries with at least 100 large MNEs are shown. Data on large MNEs is from the 2016-2020 OECD country-level data. The number of large MNEs is for 2020. Only the 37 countries that send data disaggregated at the jurisdiction level for profits are included (see Appendix A.1 for the full list). The Netherlands is excluded as they have a high percentage of data in aggregated geographic categories.

3.2.2 Changes in multinationals’ transparency

In this section, we aim to determine if the directive’s requirements are ambitious enough to push companies beyond their current disclosure practices. We analyze two key aspects: the geographical disaggregation requirements and the mandated reporting variables.

We conducted a simulation exercise using the data collected in the Public CbCR Database to evaluate how the standard proposed in the directive compares with current transparency practices. We calculated transparency scores as in Section 2.2.3 based on the current disclosure practices of 339 large multinational-year observations (214 EU-based and 125 non-EU-based) included in our database. We then simulated the transparency scores that would result if these corporations were to comply with the directive’s requirements for geographical disaggregation and reporting of specific variables.

Table 3.3 presents summary statistics for the transparency scores under different scenarios. The current transparency scores (“Total Score Standard”) for EU multinationals (58) and non-EU multinationals (60) are relatively similar. However, when we simulate the transparency scores under the directive’s requirements, we see a substantial decrease, particularly for the geographical disaggregation aspect.

We start with Figure 3.2 presents the current transparency score of the observations in our sample together with “Total Score EU-GEO” which simulates the transparency scores if companies adopted the directive’s geographical disaggregation requirements while reporting the same variables as current. The multinationals included in our sample are generally far more transparent than what is required by the directive as for the large majority of them the score would decrease by implementing the mandated geographical disaggregation. The score would improve only in a few cases, where the variables are currently

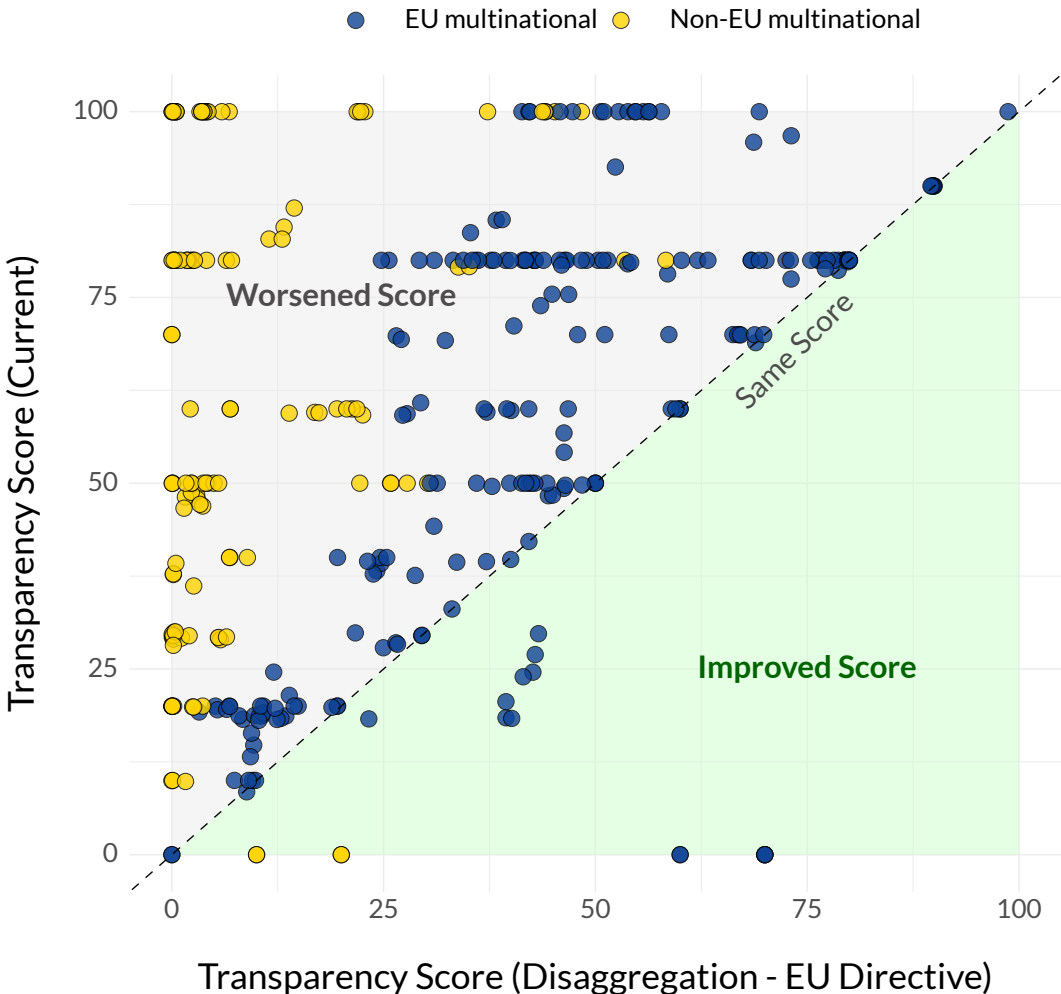
TABLE 3.3
Summary Statistics of Transparency Scores

	EU multinational	Non-EU multinational	Total
N. observations	214	125	339
Total Score Standard	58	60	59
Total Score EU_VAR	54	57	55
Total Score EU_GEO	44	9	31
Total Score EU_GEO_VAR	41	9	29

Note: This table presents the current transparency score, the simulated score including only the variables of the directive, the simulated score applying the minimum geographical disclosure, and the full directive (variables and geographical aggregation)

reported at the continent level. The "Total Score EU-GEO" row of Table 3.3 reports the average score, we see a significant drop to 44 for EU multinationals and a drastic decrease to 9 for non-EU multinationals. This suggests that the geographical disaggregation aspect of the directive is not particularly ambitious and would require companies to disclose information at a less granular level than their current practices, non-EU multinationals in particular.

FIGURE 3.2
Simulated change in the Transparency Score with the introduction of EU public CbCR directive (Geographical)



Note: Data is from the public CbCR database. MNEs with more simulated geographic aggregation after applying the EU public CbCR directive reporting requirements are in the grey zone. Those with less simulated geographic aggregation are in the green zone.

Figure 3.3 presents the current transparency score together with "Total Score EU-VAR" which reflects the simulated scores if the corporations were to report the same variables specified in the directive while maintaining their current geographical aggregation. In this case, we can see that the score will improve for a certain number of observations

as in certain cases not all the variables required by the directive are reported. However, when considering the averages reported in Table 3.3 for “Total Score EU-VAR” there is on average a small decrease (54 for EU multinationals and 57 for non-EU multinationals). This implies that the variable reporting requirements are on average close to the current reporting practices.

FIGURE 3.3
Simulated change in the Transparency Score with the introduction of EU public CbCR directive (Variables)



Note: Data is from the public CbCR database. MNEs with less simulated financial variable reporting after applying the EU public CbCR directive reporting requirements are in the grey zone. Those with more simulated financial variable reporting are in the green zone.

When we combine both aspects in the “Total Score EU-GEO-VAR” which represents the simulated scores if the corporations were to fully comply with the directive’s requirements for both geographical disaggregation and reporting of specified variables, we see the lowest transparency scores of 41 for the EU multinationals and 9 for non-EU multinationals. Figure 3.4 shows that for the majority of observations, the score would decrease.

This indicates that the directive's requirements as a whole would decrease the transparency of companies' operations and tax practices, particularly so for non-EU multinationals.

Table 3.4, which shows the changes in transparency scores, further reinforces these conclusions. The mean and median changes for the "EU-GEO" and "EU-GEO-VAR" rows are substantially larger than those for the "EUVAR" row, highlighting the significant negative impact of the geographical disaggregation aspect.

Table 3.4 summarizes the changes in transparency scores that would result from adopting the directive's requirements. The "Mean Change EU-VAR" and "Median Change EUVAR" rows show the average and median changes, respectively, in transparency scores if the corporations were to report the directive's specified variables while maintaining their current geographical aggregation. The "Mean Change EU-GEO" and "Median Change EU-GEO" rows reflect the average and median changes if the corporations were to adopt the directive's geographical disaggregation requirements while reporting the same variables as they currently do. Finally, the "Mean Change EU-GEO-VAR" and "Median Change EU-GEO-VAR" rows represent the average and median changes in transparency scores if the corporations were to fully comply with the directive's requirements for both geographical disaggregation and reporting of specified variables.

The results indicate that, on average, full compliance with the directive's minimum requirements would lead to a substantial decrease in transparency scores, particularly for non-EU multinational corporations. This suggests that the directive's requirements are less ambitious than the current disclosure practices of most corporations in our sample. It emerges that the limited variable and geographical requirements are key limitations. There is a high probability that companies involved in more aggressive tax avoidance behaviors will aggregate a large part of their information, as shown by Akamah et al. (2018) in the case of U.S. disclosure. In the next and final section, we propose several simple ways to improve the current directive.

TABLE 3.4

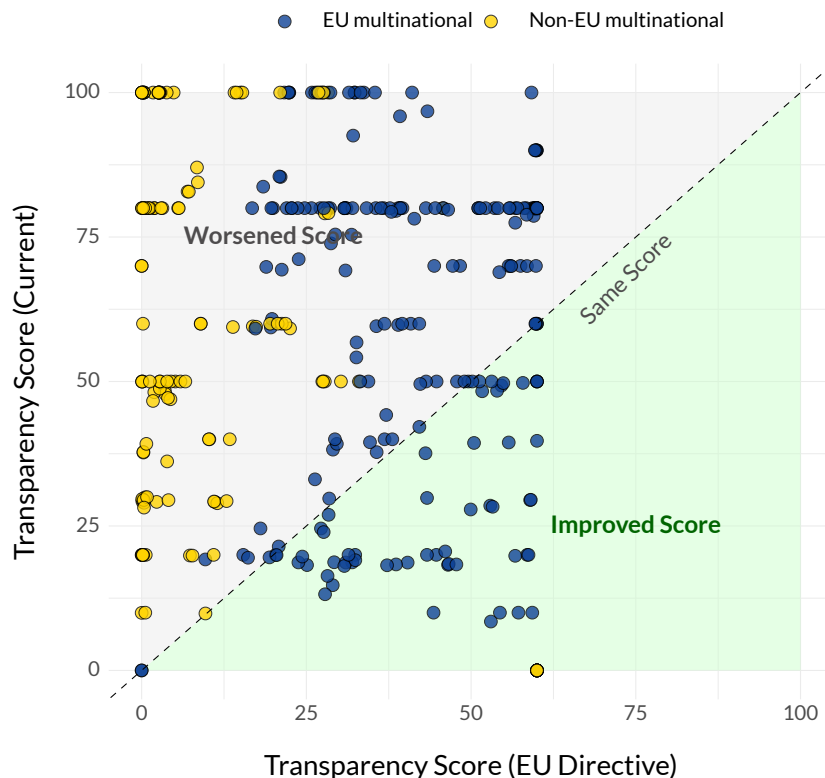
Summary Statistics of Changes in Transparency Scores

	EU multinational	Non-EU multinational	Total
N.Observations	214	125	339
Mean Change EU_VAR	-4	-3	-4
Median Change EU_VAR	-10	0	-10
Mean Change EU_GEO	-14	-52	-28
Median Change EU_GEO	-9	-46	-23
Mean Change EU_GEO_VAR	-17	-51	-30
Median Change EU_GEO_VAR	-20	-46	-29

Note: This table presents the changes in the current transparency score when applying the directive. We show the change including only the variables of the directive, the simulated score applying the minimum geographical disclosure, and the full directive (variables and geographical aggregation)

FIGURE 3.4

Simulated change in the Transparency Score with the introduction of EU public CbCR directive



Note: Data is from the public CbCR database. MNEs with a worsened simulated transparency score after applying the EU public CbCR directive reporting requirements are in the grey zone. Those with an improved simulated transparency score are in the green zone.

Conclusion

Corporate tax transparency through public country-by-country reporting is still in its nascent stages, with only a small fraction of large multinational enterprises voluntarily disclosing comprehensive financial information broken down by country.

The European Union's recent directive mandating public CbCR represents a significant step forward, compelling many large U.S. multinationals to publicly disclose more disaggregated financial data. However, the EU directive has notable limitations, particularly in its insufficient geographical reporting requirements to fully evaluate the activities of multinational corporations across their operating locations.

As corporate tax avoidance remains a pressing global issue, broader adoption and enhancement of tax transparency measures are crucial going forward. Policymakers should continue pushing for expanded public CbCR requirements that provide more granular geographical breakdowns and comprehensive disclosure of key financial variables. Robust transparency initiatives allowing public scrutiny are vital for promoting accountability, informed policymaking, and restoring public trust in the corporate tax practices of powerful multinational enterprises. Strengthening tax transparency through enhanced public CbCR will be an important step towards combating profit shifting to tax havens and ensuring multinational corporations pay their fair share globally.

Bringing transparency a step forward

Based on the identified shortcomings, going forward we suggest implementing several measures to strengthen the EU public country-by-country reporting directive and enhance its effectiveness. These measures include:

Complete country-by-country reporting: The current geographical disaggregation proposed by the directive seems to be insufficient to fully understand the global footprint of multinationals. The requirement should be changed to have full country-by-country disclosure. This will also level the playing field between foreign and European multinationals (Gundert et al., 2024).

Inclusion of additional variables: The current directive falls short of several variables.

The information needs to be expanded to include as a minimum the variables required by the OECD standard. In addition, considering the evolution of the minimum tax agreement it will be crucial to include additional information on wages, destination-based sales and subsidies received by governments (see also Delpeuch et al. (2019)).

Expansion of the directive's scope: To mitigate the potential discriminatory impact on EU multinational enterprises and promote a level playing field, the directive's scope should be expanded. One approach could be to extend the personal scope to include all non-EU domiciled MNEs with an EU representation, regardless of their size. Under this adjustment, the sole determining factor for both EU- and non-EU domiciled MNEs would be the global turnover threshold, ensuring a more equitable application of the directive's requirements.

Establishment of a common repository: As noted by Loureiro (2022), there is a missed opportunity in the directive to require a central repository across member states. Introducing a common repository could improve accessibility, comparability, and transparency by consolidating the reported information in a centralized location.

Removal of the "safeguard clause": The directive currently grants firms and tax authorities considerable discretion in determining whether specific information is deemed harmful, thereby permitting the temporary omission of such information from the country-by-country reports. We recommend clarifying the undefined term "seriously prejudicial" to provide greater guidance and reduce the potential for misuse or inconsistent application of this clause.

Standardization: To strengthen the EU's public CbCR directive, we suggest standardizing the sanctions measures across member states through a harmonized framework for penalties in cases of non-compliance. This would ensure consistent enforcement and incentivize compliance. Additionally, providing more comprehensive guidance and restricting options available to member states during the transposition of the directive into national laws could promote stronger standardization. A more harmonized framework with limited variability would ensure consistent interpretation and implementation across jurisdictions, addressing potential inconsistencies arising from the current flexibility granted to member states.

By implementing these measures, the proposed public country-by-country reporting directive could be strengthened, promoting greater transparency, consistency, and fairness in the disclosure of multinational corporations' operations and tax practices across different jurisdictions.

A Appendices

A.1 List of jurisdictions reporting data to the OECD

52 jurisdictions report data on their large multinational enterprises (MNEs) to the OECD, which then publishes this information for public use. Of these, 40 jurisdictions provide data disaggregated at the jurisdiction level. For instance, France submits detailed data on its large MNEs, including economic activity (such as employees, revenues, profits, etc.) and taxes paid, broken down by each jurisdiction globally. 12 jurisdictions report data aggregated at a geographic level above the jurisdiction level. For example, the UK provides data on its large MNEs, but this information is aggregated at the continent level, such as "Asia" or "Africa."

Of the 40 countries providing disaggregated data at the jurisdiction level, 3 (Latvia, Panama, and Poland) do not provide this information for profit-making jurisdictions. Therefore, only 37 countries can be used when working with profits. We also exclude the Netherlands for country-level analyses because a large percentage of their activity is reported in aggregated geographic categories.

TABLE A.1**Countries reporting data to the OECD**

Report to OECD at Jurisdiction-Level	
Argentina	
Australia	
Belgium	
Bermuda	
Brazil	
Bulgaria	
Canada	
Cayman Islands	
Chile	
China	
Denmark	
France	
Germany	
Greece	
Hong Kong	
India	
Indonesia	
Italy	
Japan	
Latvia	
Lithuania	
Luxembourg	
Malaysia	
Mexico	
Netherlands	
Norway	
Panama	
Peru	
Poland	
Portugal	
Romania	
Saudi Arabia	
Singapore	
Slovenia	
South Africa	
Spain	
Switzerland	
Tunisia	
Türkiye	
United States	

Report to OECD at Aggregated-Level	
Austria	
Czechia	
Finland	
Hungary	
Ireland	
Isle of Man	
Korea	
Macau	
Mauritius	
New Zealand	
Sweden	
United Kingdom	

A.2 List of tax havens

Tax havens are the combined list of Hines and Rice (1994) and Tørsløv et al. (2022). Large tax havens are tax havens with over 2 million inhabitants. This definition comes from Hines and Rice (1994) who initially defined large havens as having over 1 million inhabitants. We have increased this threshold to 2 million due to global population growth since 1994.

TABLE A.2
Tax haven list

Small Tax Haven Jurisdictions	
Andorra	
Anguilla	
Antigua and Barbuda	
Aruba	
Bahamas	
Bahrain	
Barbados	
Belize	
Bermuda	
Cayman Islands	
Cook Islands	
Cyprus	
Dominica	
Gibraltar	
Grenada	
Guernsey	
Isle of Man	
Jersey	
Liechtenstein	
Luxembourg	
Macao	
Maldives	
Malta	
Marshall Islands	
Mauritius	
Monaco	
Montserrat	
Netherlands Antilles	
Saint Kitts and Nevis	
Saint Lucia	
Saint Martin (French)	
Saint Vincent and the Grenadines	
Samoa	
Seychelles	
Turks and Caicos Islands	
Vanuatu	
British Virgin Islands	

Large Tax Haven Jurisdictions	
Belgium	
Hong Kong	
Ireland	
Jordan	
Lebanon	
Liberia	
Netherlands	
Panama	
Puerto Rico	
Singapore	
Switzerland	

A.3 Public CbCR directive implementation

TABLE A.3
Summary of EU PCbCR Developments

Country	Status	Early App.	Early App. Date	Safeguard Clause	Duration	Deadline (months)
Austria	No activity	-	-	-	-	-
Belgium	Final	No	-	Yes	5 years	12
Bulgaria	Final	No	-	Yes	5 years	12
Croatia	Final	Yes	01/01/24	Yes	5 years	12
Cyprus	No activity	-	-	-	-	-
Czechia	Final	No	-	Yes	5 years	12
Denmark	Final	No	-	Yes	5 years	12
Estonia	Final	No	-	No	-	12
Finland	Draft	No	-	Yes	5 years	12
France	Final	No	-	Yes	5 years	12
Germany	Final	No	-	Yes	4 years	12
Greece	Final	No	-	No	-	12
Hungary	Final	No	-	No	-	5
Ireland	Final	No	-	Yes	5 years	12
Italy	No activity	-	-	-	-	-
Latvia	Final	No	-	Yes	5 years	12
Lithuania	Final	No	-	Yes	5 years	12
Luxembourg	Final	No	-	Yes	5 years	12
Malta	No activity	-	-	-	-	-
Netherlands	Final	No	-	Yes	5 years	12
Poland	Final	No	-	Yes	5 years	12
Portugal	Final	No	-	Yes	5 years	12
Romania	Final	Yes	01/01/23	Yes	5 years	12
Slovakia	Final	No	-	No	-	12
Slovenia	Draft	No	-	Yes	5 years	12
Spain	Final	No	-	Yes	5 years	6
Sweden	Final	Yes	31/05/24	Yes	5 years	12

Note: Information as of 20 March 2024.

Source: EU Public Country By Country Reporting Developments Tracker, EY.

A.4 Variables included in the EU Public CbCR directive

EU Directive 2021/2101 European Union (2021)

1. The information referred to in paragraph 1 shall consist of:
 - (a) the name of the ultimate parent undertaking or the standalone undertaking, the financial year concerned, the currency used for the presentation of the report and, where applicable, a list of all subsidiary undertakings consolidated in the financial statements of the ultimate parent undertaking, in respect of the relevant financial year, established in the Union or in tax jurisdictions included in Annexes I and II to the Council conclusions on the revised EU list of non-cooperative jurisdictions for tax purposes;
 - (b) a brief description of the nature of their activities;
 - (c) the **number of employees** on a full-time equivalent basis;
 - (d) **revenues**, which are to be calculated as:
 - (i) the sum of the net turnover, other operating income, income from participating interests, excluding dividends received from affiliated undertakings, income from other investments and loans forming part of the fixed assets, other interest receivable and similar income as listed in Annexes V and VI to this Directive; or
 - (ii) the income as defined by the financial reporting framework on the basis of which the financial statements are prepared, excluding value adjustments and dividends received from affiliated undertakings;
 - (e) the amount of **profit or loss before income tax**;
 - (f) the amount of **income tax accrued** during the relevant financial year, which is to be calculated as the current tax expense recognised on taxable profits or losses of the financial year by undertakings and branches in the relevant tax jurisdiction;
 - (g) the amount of **income tax paid on a cash basis**, which is to be calculated as the amount of income tax paid during the relevant financial year by undertakings and branches in the relevant tax jurisdiction; and
 - (h) the amount of **accumulated earnings** at the end of the relevant financial year.

A.5 Methodology for calculating transparency scores

This appendix outlines the methodology used to calculate the transparency score of multinationals' public country-by-country reports, designed to measure the extent to which multinationals disclose financial information across different jurisdictions.

The transparency score is calculated based on the disclosure of a set of predefined financial variables across different jurisdictions with higher scores indicating greater transparency (0 is the lowest score and 100 is the highest). The transparency score calculation follows the general formula:

$$\text{Transparency Score} = \sum_{i=1}^n w_i \times \frac{\sum_{j \in J_i} |x_{ij}|}{\sum_j |x_{ij}|} \times 100 \quad (\text{A.1})$$

Where:

- n is the number of financial variables
- w_i is the weight assigned to the i -th financial variable (in this case, all variables are equally weighted, with $w_i = 1/n$)
- J_i is the set of jurisdictions for which the i -th financial variable is disclosed (excluding the aggregated categories)
- x_{ij} is the value of the i -th financial variable for jurisdiction j

A.5.1 Variants of transparency score calculation

Several variants of the transparency score calculation are considered to assess the potential impact of the EU directive on public country-by-country reporting:

1. Standard Transparency Score: This score is calculated using the OECD financial variables and the current level of geographical disaggregation reported by multinationals.
2. Transparency Score with EU Variables: This score is calculated assuming that out of the 10 OECD variables, multinationals will disclose only the financial variables specified in the EU directive while maintaining the current level of geographical disaggregation reported.
3. Transparency Score with EU Geographical Disaggregation: This score is calculated using the current disclosure of financial variables but with the minimum geographical disaggregation required by the EU directive. Specifically, EU member states and non-cooperative jurisdictions are treated as separate jurisdictions, while all other jurisdictions are aggregated into one single category.

4. Transparency Score with EU Variables and Geographical Disaggregation: This score is calculated assuming that multinationals will disclose only the financial variables specified in the EU directive and the minimum geographical disaggregation required by the directive.

A.6 Website: Taxplorer

The screenshot shows the homepage of the Taxplorer website. The header includes the Taxplorer logo, a navigation menu with links for HOME, KEYSTORIES, COMPANY, METHODOLOGY, and CONTACT, and a 'Download data' button. The main content area features a dark background with a world map and the heading 'Multinationals under the spotlight'. Below this, there are three white boxes with blue accents: 'Explore companies', 'Download the data', and 'Gain Expert Insights'. Each box contains a brief description and a 'Read more' link. At the bottom of the main content area, there is a light grey box with the text 'Our database is growing'.

The screenshot shows a section of the Taxplorer website where a user can select a company to view its report. The header is identical to the previous screenshot. The main content area has a light grey background and features a search bar with 'SHELL' entered. Below the search bar, there is a message: 'Can't find a company? We might have missed out in its report. Reach out, if you found it.' To the right of the search bar is a photograph of a modern glass skyscraper. Below the search bar, the name 'SHELL' is displayed in large blue letters. Underneath, there are four white boxes with blue accents, each containing a specific data point: 'Sector: Mining & Extraction', 'Headquarter: United Kingdom', 'Number of reports: 4', and 'Transparency Score: average over all reports: 100/100'.

A.7 HQ country and region for all CbCR publishing MNEs

TABLE A.4

Publishing MNEs by Headquarter (HQ) Country and Region

HQ Country or Region	% of Public CbCR MNEs
<i>Top 5 Regions</i>	
Europe	76.5%
Asia	8.5%
Americas	7.8%
Oceania	3.9%
Africa	3.3%
<i>Top 5 Countries</i>	
Italy	23.5%
Spain	14.4%
United Kingdom	9.8%
Netherlands	6.5%
Japan	4.6%
<i>Other Selected OECD Countries</i>	
Australia	3.9%
Germany	3.3%
Canada	2%
United States	2%
France	1.3%

Note: There are 29 countries (only 10 shown) that have at least one publishing MNE. Data is from the public CbCR database.

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This report has received funding from the European Union (GA No. TAXUD/2022/DE/310) and Meliore Foundation. The views expressed in this note are those of the authors and do not necessarily reflect the views of the European Commission.

We thank the members of the EU Tax Observatory for their helpful comments and suggestions. In particular, we thank Sarah Godar, Quentin Parrinello, Gabriel Zucman, Pierre Bachas and Sebastien Lafitte.



**Co-funded by
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