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ZEW policy brief

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Is Mandatory Country-by-Country Reporting Effective? – Early Evidence on the Economic Responses by Multinational Firms

Research Question and Relevance

Over the past decade, policymakers, non-profit organizations, and the media have demanded greater transparency by multinational firms regarding their global operations and tax payments. These demands are motivated by the assumption that multinational firms engage in aggressive planning strategies to minimize their global tax bill, for instance through operations in tax havens and profit shifting to low-tax jurisdictions. Accordingly, tax transparency is high on the political agenda. The political action resulted in the OECD proposal to require multinational firms to disclose their global operations and tax payments on a country-by-country basis to tax authorities. Since 2016, such country-by-country reporting (CbCR) is mandatory for firms operating in the European Union. While the EU policymakers adopted CbCR primarily in response to perceived harmful tax practices of multinational corporations, the effects of such increased disclosure on corporate decisions is an open but economically and politically relevant question as firms might not only alter their tax strategies but also change their real global footprint in terms of investment in assets or employees.

KEY MESSAGES //

- A recent study by Lisa De Simone (Stanford GSB) and Marcel Olbert (University of Mannheim) finds strong empirical evidence that multinational firms began to close down tax haven operations and shift real economic activity into European low tax countries in response to Council Directive 2016/881 mandating CbCR since 2016.
- The results also suggest that aggregate growth in employment of multinational firms reporting more than €750 million in consolidated revenue decreases, while overall tax payments do not change. This finding indicates that firms expect higher future tax burdens or, at least, tax uncertainty.
- Overall, the evidence suggests that private CbCR curbs the most aggressive forms of tax avoidance (through tax havens). However, CbCR seems to have real effects that are potentially unintended by the regulators. Specifically, firms appear to allocate more economic activity to relatively low tax but non-haven countries. This result is alarming for countries like Germany staying behind in European tax competition.

The full research paper is available at SSRN:
https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3398116

COUNTRY-BY-COUNTRY REPORTING ON THE OECD AND EU LEVEL

Combatting Harmful Tax Practices of Multinationals

Through Council Directive 2016/881, the EU formally adopted CbCR on May 25, 2016 with an effective date of January 1, 2016. Country-by-country disclosures to tax authorities arose as a recommendation from the OECD/G20's Base Erosion and Profits Shifting (BEPS) initiative. This initiative, started in 2014, is a multinational approach to combatting perceived harmful tax practices of multinational corporations. Within the EU, the CbCR requirement applies to multinational groups whose parent company is a tax resident of an EU country or if any group subsidiary is incorporated in the EU. Additionally, the parent firm's consolidated revenues must exceed €750 million in the fiscal year preceding the reporting year, with the first reporting year being 2016.
Figure 1 depicts the template for a CbC report published as part of European Council Directive 2016/881. Firms falling under the scope of CbCR in Europe must report to the tax authorities several indicators of country-level economic activity by each tax jurisdiction: unrelated party revenues, related party revenues, total revenues, profit before income tax, income tax paid (on a cash basis), current year income tax accrued, stated capital, accumulated earnings, number of employees, tangible assets other than cash and cash equivalents. Firms must also provide a list of affiliated legal entities by tax resident jurisdiction, the country of incorporation of each entity if different from the tax residence, and the main business activities of each entity.

Figure 1: CbCR Template

Table 1. Overview of allocation of income, taxes and business activities by tax jurisdiction

Name of the MNE group: Fiscal year concerned:										
Tax Jurisdiction	Revenues			Profit (Loss) Before Income Tax	Income Tax Paid (on cash basis)	Income Tax Accrued – Current Year	Stated capital	Accumulated earnings	Number of Employees	Tangible Assets other than Cash and Cash Equivalents
	Unrelated Party	Related Party	Total							

Table 2. List of all the Constituent Entities of the MNE group included in each aggregation per tax jurisdiction

Name of the MNE group: Fiscal year concerned:															
Tax Jurisdiction	Constituent Entities resident in the Tax Jurisdiction	Tax Jurisdiction of organisation or incorporation if different from Tax Jurisdiction of Residence	Main business activity(ies)												
			Research and Development	Holding or Managing intellectual property	Purchasing or Procurement	Manufacturing or Production	Sales, Marketing or Distribution	Administrative, Management or Support Services	Provision of Services to unrelated parties	Internal Group Finance	Regulated Financial Services	Insurance	Holding shares or other equity instruments	Dormant	Other[2]
	1.														
	2.														
	3.														
	1.														
	2.														
	3.														

POTENTIAL RESPONSES BY MULTINATIONAL COMPANIES

CbCR Might Allow for Better Assessment of Tax Practices of Firms

The EU adopted CbCR primarily in response to perceived harmful tax practices of multinational corporations (Financial Times 2016; OECD 2013). Although tax authorities previously received significant information about a multinational's operations within their own jurisdiction, they had only limited visibility to the location and magnitude of economic activities, profits, and tax payments outside their jurisdiction. The intent of CbCR therefore is to provide tax authorities with several indicators of country-level economic activity for every tax jurisdiction a multinational operates in to allow them to better make a high-level assessment of the tax practices of the firm (OECD 2015).
While some of this information is publicly disclosed under local reporting rules in some jurisdictions, the aggregation of these data across all tax jurisdictions was generally not available to tax authorities, and some information required by the reports (in particular for tax haven subsidiaries) was typically not publicly available at all (OECD 2015).[1] If CbCR disclosures are informative to tax authorities, reporting firms face an increased risk that the tax authority will be able to detect and challenge tax avoidance activities. Firms could therefore reduce tax avoidance in response to CbCR. Evidence of reduced tax avoidance includes a reduction in the number of tax haven subsidiaries, increased consolidated tax payments, and reduced evidence of tax-motivated income shifting. Further, firms could reduce investments if they expect higher tax burdens in the future as documented in the empirical literature on taxes and investment (see, e.g., Desai, Foley, and Hines Jr 2004; Djankov et al. 2010; Feld and Heckemeyer 2011).

Book Tax Avoidance versus Real Economic Activity

There is also a different potential response that has been largely ignored in the policy debate. Multinational firms might engage in activities intended to better substantiate their existing tax avoidance practices in response to increased detection and enforcement risk (Hanlon 2018; Spengel 2018). Spengel (2018) notes that the items required to report in the CbC disclosures resemble the typical factors that have been considered in the policy discussion on formulary apportionment. If firms expect tax authorities to use the information contained in the CbC reports to enforce the allocation of taxable income in line with formulary apportionment instead of the existing arm's length principle, they might increase revenues, tangible assets, and employment in low-tax but non-haven jurisdictions to better substantiate pre-tax profits allocated to these jurisdictions. These increased investments in non-haven low-tax jurisdictions could be made at the expense of incremental investments in high-tax jurisdictions.

EMPIRICAL EVIDENCE ON THE EFFECTS OF CBCR

The empirical approach in De Simone and Olbert (2019) is a regression discontinuity design (RDD) that exploits the size-based threshold of €750 million of the CbCR mandate, including firms with consolidated revenues in excess of the threshold in the year prior to implementation in the treatment group, and firms with consolidated revenues below the threshold in the control group.
The study uses financial statement and ownership information from fiscal years 2016 and 2017 on multinational groups operating in the EU from Bureau van Dijk (BvD) to analyze the effects of the CbCR regime on corporate transparency and economic activity of multinational firms both on an aggregate basis and on the level of a firm's subsidiaries. In particular, the study links each

1 Depending on the European tax jurisdictions' procedural tax law, firms may have to inform tax authorities when acquiring or establishing ultimate majority ownership in foreign corporations in the year of the event (see, e.g., Par. II of Sec. 138 in the German General Tax Code (Abgabenordnung)). However, information on foreign subsidiary ownership is not disclosed on an annual basis. For example, if a German multinational acquired or established a subsidiary in a tax haven in fiscal year 2000, long before the OECD's and EU's progressive work on corporate tax avoidance, it would have reported this event to the German tax authorities in 2001 together with its corporate tax returns of fiscal year 2000. Since then, no further reporting was required. Also, the tax authorities generally have no knowledge about (tax haven) operations of other affiliated but not controlled entities of the same firm (i.e., if a French multinational firm has a German subsidiary and further tax haven subsidiaries not owned through the German subsidiary, the German tax authorities have no knowledge about this multinational firm's tax haven operations).

multinational firm in each year to their global subsidiaries through up to 12 levels of hierarchical structure (i.e., the consolidated firm as the parent entity and a maximum of 11 tiers of subsidiaries). This approach tracks a firm's global subsidiary ownership over time, including subsidiaries incorporated in tax haven countries, independent of whether financial information for these subsidiaries are available. The final sample includes about 25,000 multinational firms from 95 countries with more than 121,000 European subsidiaries ultimately owned by these firms potentially falling under the CbCR mandate.

Firms Closed Down Tax Haven Subsidiaries

The empirical results provide strong evidence that firms affected by the CbCR mandate in Europe closed down tax haven subsidiaries. The economic magnitude of our results suggests that affected firms close down at least one tax haven subsidiary, an economically strong effect given firms at the 75th percentile of the sample used for estimation have, on average, only between one and two tax haven subsidiaries. Aggregated across the around 1,700 firms in our sample, De Simone and Olbert (2019) estimate a closure of 850 to 5,100 tax haven subsidiaries by CbCR firms following implementation of the disclosure rule.

Firms Affected by CbCR Experience Lower Employee Growth

Further, the study finds that affected firms' investments in employees grow 5 to 14 percentage points less relative to firms just below the CbCR threshold. This finding suggests that firms are expecting increased tax uncertainty or even a larger tax burden due to greater tax detection and enforcement risk following CbCR, thereby reducing investment overall. In stark contrast to the legislators' goal, CbCR (if anything) seems to have a negative impact on consolidated corporate tax payments.

Firms Shift Their Activities to European Countries With Below-Median Corporate Income Tax Rates

Last, the authors provide novel evidence that firms indeed adjust their real economic activity after the introduction of CbCR (Hanlon 2018; Spengel 2018) based on two different outcome measures. Using subsidiary-level economic factors aggregated at the country level, the study finds that affected firms shift revenues and employees into European countries with below-median corporate income tax rates. There is also limited evidence of reduced investment in high tax countries. Using affected firms' weighted-average tax rates faced by international subsidiaries, the study finds multinational firms' subsidiaries report relatively more revenue, employees, and total assets in European countries with relatively low tax rates. Specifically, the authors document a decrease of 0.5 to 3 percentage points in weighted tax rates for treated firms using revenue, employees, and total assets as indicators of economic activity. Consistently, firms also experience a significant decrease in tax-expense-weighted tax rates of 2.2 to 4.7 percentage points, suggesting that tax bases (and thus, tax payments) increase in European low tax countries relative to high tax countries. Taken together with our other subsidiary-level results, these findings support the inference that firms subject to CbCR responded by allocating real economic activities to relatively low-tax European countries.

POTENTIAL POLICY IMPLICATIONS

The results of the study suggest firms expect private CbC disclosures provide incremental information to tax authorities, leading presumably to increased detection and enforcement risk. The novel evidence provided by De Simone and Olbert (2019) suggests that increased reporting and transparency provided by multinationals to tax authorities worldwide appear to have both intended and unintended effects. On the one hand, firms plausibly cut back on their most aggressive tax planning strategies by reducing tax haven operations, which is in line with the OECD's and European Commission's intention when proposing CbCR. On the other hand, the nature of the firm response in the form of increased investment in low-tax jurisdictions – plausibly to justify tax-efficient income shifting – might come at the cost of lower investment in high-tax countries within Europe. This real response is clearly not a favorable outcome for policymakers in countries with high tax rates. Overall, the evidence suggests that increased enforcement could pressure high-tax jurisdictions within Europe to enter into the "race to the bottom" by reducing their tax rates. CbCR might thus be another driving force of within-Europe or even international tax competition, as recently evidenced by the United Kingdom's remarkable downward trend in corporate income tax rates since 2010 and the United States' recent tax reform effective since 2018.

CbCR Might Become Another Driving Force of Tax Competition

The finding that increased monitoring by high-tax jurisdictions may not reduce tax avoidance in general but rather induces firms to take actions to better substantiate tax avoidance accomplished in non-haven low-tax jurisdictions has also implications for other regulatory shifts in the tax transparency landscape. In particular, additional private mandatory reporting for intermediaries of cross-border transactions as recently required under the EU Directive on Administrative Cooperation in the Field of Taxation (DAC 6, effective July 2020) might have further consequences beyond increasing tax transparency and reducing tax avoidance.[2] Further, evidence that firms respond to private tax authority disclosures also suggests making such disclosures public may not be necessary, as some proponents of public CbCR claim (European Commission 2016a, 2016b; Transparency International 2016).[3]

REFERENCES

De Simone, Lisa and Marcel Olbert. 2019. "Real Effects of Private Country-by-Country Disclosure." Working Paper. https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3398116 (June 3, 2019).

Desai, Mihir A., C. Fritz Foley, and James R. Hines Jr. 2004. "Foreign Direct Investment in a World of Multiple Taxes." Journal of Public Economics 88(12): 2727–44. https://www.sciencedirect.com/science/article/pii/S0047272703001452 (May 20, 2019).

Djankov, Simeon et al. 2010. "The Effect of Corporate Taxes on Investment and Entrepreneurship." American Economic Journal: Macroeconomics 2(3): 31–64.

European Commission. 2016a. "European Commission Proposes Public Tax Transparency Rules for Multinationals." Press release. http://europa.eu/rapid/press-release_IP-16-1349_en.htm?locale=en (May 20, 2019).

European Commission. 2016b. Impact Assessment Assessing the Potential for Further Transparency on Income Tax Information. https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A52016SC0118.

Feld, Lars P., and Jost H. Heckemeyer. 2011. "FDI and Taxation: A Meta-Study." Journal of Economic Surveys 25(2): 233–72.

Financial Times. 2016. "Brussels to Force Big Companies to Disclose More Tax Details | Financial Times Online." https://www.ft.com/content/d525b786-ef86-11e5-9f20-c3a047354386 (May 20, 2019).

Hanlon, Michelle. 2018. "Country-by-Country Reporting and the International Allocation of Taxing Rights." Bulletin for International Taxation 72(4/5): 209–2017. https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3118531 (May 20, 2019).

OECD. 2013. Action Plan on Base Erosion and Profit Shifting. OECD. https://www.oecd-ilibrary.org/taxation/action-plan-on-base-erosion-and-profit-shifting_9789264202719-en (May 20, 2019).

2 See https://home.kpmg/xx/en/home/insights/2019/02/etf-394-eu-mandatory-disclosure-requirements-update.html
3 See also Hanlon (2018) and Spengel (2018) for a discussion on the potential costs of public CbC disclosure.

OECD. 2015. Transfer Pricing Documentation and Country-by-Country Reporting, Action 13 - 2015 Final Report. OECD. https://www.oecd-ilibrary.org/taxation/transfer-pricing-documentation-and-country-by-country-reporting-action-13-2015-final-report_9789264241480-en (May 20, 2019).

Spengel, Christoph. 2018. "Country-by-Country Reporting and the International Allocation of Taxing Rights: Comments to Michelle Hanlon." Bulletin for International Taxation 72(4/5). https://research.ibfd.org/#/doc?url=/collections/bit/html/bit_2018_04_int_10.html (May 20, 2019).

Transparency International. 2016. "Why Public Country-by-Country Reporting for Large Multinationals Is a Must." https://financialtransparency.org/wp-content/uploads/2016/02/Joint_Civil_Society_QA_pCBCR.pdf.

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