

Don't Fear the Sunlight: Tax Transparency and Multinational Investment in the Global South*

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Abstract

Whether multinationals pay their fair share of taxes in developing countries is a contested question in international tax policy. Country-by-Country Reporting (CbCR), the most far-reaching response to date, requires multinationals to disclose granular jurisdiction-level financial information to tax authorities. Whether such transparency benefits developing countries is theoretically ambiguous: stronger or more arbitrary enforcement may raise short-run tax revenue at the cost of investment, while the institutional reforms required to join the CbCR exchange network may attract it. We exploit the staggered activation of bilateral CbCR exchange agreements in a Bartik-style shift-share design. Once developing countries gain access to the CbC reports filed in the home jurisdictions of their inbound multinationals, both FDI inflows and corporate tax revenue rise. Within-multinational-year variation and the CbCR size threshold confirm this pattern at the firm level. Supplementary tests point to reduced tax enforcement uncertainty and improvements in host-country institutional quality as the operative mechanisms. The effects concentrate in lower-income, high-corruption host countries. While commonly viewed as a compliance burden, CbCR can serve as a source of tax certainty that attracts, rather than deters, cross-border investment in the developing world.

Keywords: Tax transparency, Country-by-Country Reporting, information exchange, developing countries, foreign direct investment

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1. Introduction

Multinational enterprises (MNEs) are consequential economic actors in the Global South. However, a concern is that developing countries collect too little tax revenue from them to sustain adequate development finance ([Besley and Persson, 2014](#); [Corwin et al., 2024](#)).¹ [Figure 1](#) illustrates the resulting fiscal paradox: FDI inflows to developing countries have grown steadily since 2010, reaching approximately USD 7 trillion by 2020. However, corporate tax revenues, which should track FDI if multinationals generate taxable profits there, have stagnated or even declined. Many argue that a central driver is profit shifting by multinationals, which is most severe where weak institutional capacity limits tax authorities' ability to monitor cross-border avoidance ([Laudage Teles et al., 2024](#); [Wier, 2020](#); [Johannesen et al., 2020](#); [Fuest et al., 2011](#)). Country-by-Country Reporting (CbCR) and the bilateral exchange of these reports has emerged as the leading policy response, granting developing-country tax authorities unprecedented information about multinationals' global operations. Yet stronger enforcement can help authorities collect more tax revenue but also deter the foreign investment that ultimately determines the tax base. We examine how this transparency reform affects MNE investment, corporate tax revenue, and institutional quality in developing countries.

The landmark reform we study is CbCR. Since 2016, the OECD's Base Erosion and Profit Shifting (BEPS) framework has required large multinational enterprises with consolidated revenues exceeding EUR 750 million to file CbC reports detailing the global allocation of revenues, profits, taxes paid, and economic activity across every jurisdiction in which they operate. These reports give tax authorities, for the first time, a comprehensive picture of where multinationals book income relative to where they conduct real economic activity. Whether a developing-country government actually receives this information about the full global operations of a firm that invests in its country, or whether its visibility remains restricted to local operations, depends on whether it has concluded bilateral exchange agreements with the multinational's home

¹Tax-to-GDP ratios across Africa averaged just 16% in 2022, barely half the OECD average of 34% ([OECD et al., 2024](#)).

country. As of 2025, large disparities persist: some low-income countries remain outside the information exchange network, while others have gradually gained access.

The effect of CbCR information access on multinational investment in developing countries is theoretically ambiguous. Mandated transparency can reduce investment through a *deterrence channel*: CbCR enables more effective tax enforcement, raising effective tax burdens and hence reducing after-tax returns and investment (Fuest et al., 2011; De Mooij and Ederveen, 2003; Joshi, 2020; Hugger, 2025; Lester and Olbert, 2025). In countries with weak institutions, newly available information about multinationals' global profits may also expand the scope for arbitrary enforcement or outright expropriation, raising operational costs and investment uncertainty (Wei, 2000). In contrast, CbCR transparency may also *improve* the local investment environment: joining the CbCR exchange network is conditional on meeting OECD minimum standards on confidentiality, data protection, and appropriate use of information, enforced through annual peer reviews with concrete consequences for non-compliance (OECD, 2024a). Participating jurisdictions may use CbCR data only for high-level transfer pricing risk assessment (OECD, 2024b), explicitly constraining arbitrary enforcement. Higher *tax enforcement certainty* may therefore act as a channel that attracts investment. A broader *institutional quality upgrade* may act as a second channel. Because the standards a country adopts on joining the exchange network may govern its tax administration as a whole rather than only its treatment of in-scope inbound CbC firms, and because institutional quality is a foundational determinant of foreign investment in developing countries (Acemoglu et al., 2001), these policy-induced upgrades may attract investment beyond the firms whose reports are exchanged. Multinationals may therefore view participating developing countries as more predictable and *less* risky destinations, even if effective tax burdens rise.

Our empirical analysis uses bilateral FDI, developing-country-level tax revenue, and institutional quality data, a firm–subsidiary-level panel covering multinational investment across host countries as well as survey data and FDI project information for African countries. Our identification strategy is closely tied to the institutional architecture

of CbCR information sharing: MNEs submit their global CbC reports to the parent's headquarters (or home) country tax authority, which then shares them automatically with foreign tax authorities through bilateral exchange agreements activated under the Multilateral Competent Authority Agreement (CbC MCAA) or bilaterally. Crucially, the activation of these exchanges has been staggered across time and country-pairs, creating variation in when – and whether – a developing country's tax authority gains access to any given MNE's global tax profile. Across all tests, we exploit this variation, driven by differential pre-2016 exposure to multinationals above and below the EUR 750 million threshold and from home countries with and without exchange agreements. Two developing country cases illustrate this variation: Nigeria has filed CbC reports since 2018 and exchanges information with many partner countries whose exchange relationships were activated in stages, giving its tax authority an increasingly comprehensive view of multinationals' global operations. Kenya, by contrast, only recently joined the MCAA; and until 2022, Kenyan tax authorities had visibility only into the local filings of MNEs' Kenyan subsidiaries.

Our main empirical strategy when examining bilateral FDI and country-level outcomes exploits countries' exposure to MNE information through the MNE's local footprint and the staggered activation of bilateral CbCR exchange agreements. We construct a Bartik-style exposure measure that interacts the pre-determined share of CbCR-eligible MNE activity in each developing country – capturing which fraction of total multinational presence falls above the EUR 750 million reporting threshold as of 2015 – with the time-varying activation of bilateral exchange agreements from 2016. Intuitively, the measure tracks the share of a country's corporate landscape about which its tax authority has received comprehensive global information through CbCR exchange, rising over the years as each new bilateral agreement between a developing country and an MNE's home country is activated.

At the bilateral country-pair level, we estimate how FDI inflows respond to the activation of specific exchange relationships, controlling for country-pair and host-country-by-year fixed effects. The results challenge the conventional wisdom that tax

transparency deters multinational investment. Bilateral FDI inflows increase significantly in developing-country pairs where exchange has been activated: the coefficient on our exposure measure is 0.62 ($t = 3.00$) in low-income host countries, indicating that a one-standard-deviation increase in bilateral MNE Transparency is associated with approximately a 22 percent increase in FDI inflows.

Importantly, the effect is absent in high-income host countries, where the coefficient is slightly negative and statistically insignificant. Event study estimates confirm that the increases in FDI in low-income countries emerge only after exchange activation, with no evidence of differential pre-trends and effect sizes gradually increasing up to four years after the first information exchange agreement was activated.

This pattern is consistent with the tax enforcement certainty channel: CbCR exchange reduces the scope for arbitrary tax enforcement by host country authorities and thereby lowers investment uncertainty in precisely the environments where such uncertainty is most acute. Consistent with this, cross-sectional evidence further reveals that the positive FDI effects are concentrated in developing countries with high pre-existing corruption: the coefficient is 3.26 ($t = 2.26$) in high-corruption low-income countries, compared to 1.19 ($t = 1.48$) in low-corruption low-income countries.

To provide more direct evidence on this mechanism, we examine several outcomes at the unilateral country level. Here, we aggregate the bilateral exposure measure and estimate effects on tax revenue and institutional quality. A one-standard-deviation increase in country-level access to MNE CbC reports is associated with 8 percent higher corporate income tax revenue in low-income countries. We also show improvements in the World Bank's Control of Corruption and Rule of Law indices in low-income countries, with coefficients that are statistically significant and economically meaningful.

The simultaneous increase in both tax revenue and FDI suggests that the additional tax collections enabled by CbCR do not deter multinational investment in developing countries. Instead, the institutional improvements that accompany CbCR information access – including more predictable and rule-bound tax enforcement – appear to dominate as locational factors, making these countries more attractive to foreign investors

even as effective tax burdens rise. Consistent with this interpretation, we re-estimate our specifications using firm respondent-level outcomes from the World Bank Enterprise Surveys (WBES) and find that bribery incidence among foreign-owned firms declines after CbCR exchange activation.

To corroborate these inferences from the macroeconomic level, we turn to a firm–subsidiary-level panel. At the firm-level, we exploit the EUR 750 million consolidated revenue threshold that determines which multinationals are subject to CbCR, following the approaches in [De Simone and Olbert \(2022\)](#); [Joshi \(2020\)](#); [Hugger \(2025\)](#). Following [Hoopes et al. \(2023\)](#) and [Amberger et al. \(2025\)](#), we proxy for firm-level FDI using the number of majority-owned subsidiaries that firm i maintains in host country c . Our design compares the subsidiary expansion of CbCR-scope and non-scope firms from the same headquarters country to the same host country, before and after the activation of bilateral exchange. We employ a within-firm-by-year specification that includes firm $\times$ year fixed effects, so that identification comes from the *reallocation* of a given firm’s investment across host countries that differ in whether they have gained access to the firm’s CbC report. This design absorbs all time-varying firm-level characteristics – including any differential trends between large and small multinationals – and isolates the host-country *tax enforcement certainty* channel.

The results confirm the country-level findings: CbCR-scope firms significantly expand their subsidiary presence in developing countries that gain access to their reports. The coefficient on the interaction of *CbCR Firm* and *Information Exchange* is 0.12 ($t = 3.86$) for low-income host countries, indicating that CbCR-eligible multinationals increase their subsidiary counts in newly informed developing countries relative to both non-scope firms in the same country and the same firm’s presence in countries without exchange. Event study estimates show no differential pre-trends prior to exchange activation, with effects emerging in the years following bilateral agreement. A regression discontinuity design around the EUR 750 million threshold provides further support for a causal interpretation.

Finally, we provide evidence on the broader *institutional quality upgrade* channel,

which may cause spillover effects on non-CbCR firm investment. The main firm-level tests isolate the impact of in-scope firm-specific changes related to certainty in tax enforcement. Beyond these firm-specific effects, the minimum standards required to join the exchange network aim at reducing the scope for arbitrary enforcement, rent extraction, and corruption more broadly. Because these improvements benefit all foreign investors – not only MNEs from home countries that exchange CbCRs with the host – the *institutional quality upgrade* channel should also attract investment from multinationals not directly exposed to CbCR exchange with a given host.

Again exploiting within-host-year variation, we find that once a host qualifies for the CbCR exchange network through any partner country, multinationals from home countries without an exchange agreement, as well as multinationals below the EUR 750 million threshold, also increase their investment in that host by 5.2 ($t = 2.07$) to 10.9 percent ($t = 2.64$) relative to their footprint in other developing countries without such institutional improvements. Crucially, additional tests suggest that the institutional upgrade is realized at a host's first exchange activation as a one-time step up tied to meeting the minimum standards.

Our paper makes several contributions. First, we provide the first large-scale evidence on the economic effects of intergovernmental tax information sharing on developing countries. While a growing literature studies the effects of CbCR and related tax transparency regimes on multinational tax behavior (Joshi, 2020; De Simone and Olbert, 2022; Nessa et al., 2025; Overesch and Wolff, 2021; Chow et al., 2026; Li and Ma, 2022), this work has focused on the disclosing firms' global tax strategies or resource allocation in developed industrial countries and so far sidestepped the potentially powerful mechanisms of information exchange (Lester and Olbert, 2025). We shift the lens to developing-country tax authorities as the recipients of the information and document positive aggregate effects on FDI and tax revenue in the developing world. We also provide new evidence that improvements in tax enforcement certainty and institutional quality, which are mandated as part of the international cooperation framework, are a key driver of this result. Our findings thus contribute to the broad literature on

the determinants of economic development in the Global South and directly address calls by [Besley and Persson \(2014\)](#) and [Keen and Slemrod \(2017\)](#) for evidence on how international tax cooperation affects lower-income countries.

Second, we contribute to the literature on the real effects of mandatory disclosure (see [Leuz and Wysocki, 2016](#); [Roychowdhury et al., 2019](#); [Hoopes et al., 2024](#), for reviews), in particular on regulatory spillovers to developing countries. Existing evidence on the investment effects of corporate transparency focuses predominantly on equity markets and developed-country settings. A growing body of work documents that regulation originating in industrial nations – including taxes, carbon pricing, disclosure mandates, and supply chain rules – generates ambiguous spillover effects on developing economies ([Rauter, 2020](#); [Amberger et al., 2025](#); [Chang and Christensen, 2025](#); [Kaenzig et al., 2024](#); [Hoopes et al., 2023](#)). We show that government-to-government information sharing can have substantial real effects on cross-border resource allocation through its impact on multinational investment decisions.

Third, we offer new evidence on the interaction between tax policy and the institutional environment in shaping foreign investment in developing countries. The literature on FDI determinants has documented that tax rates ([De Mooij and Ederveen, 2003](#); [Feld and Heckemeyer, 2011](#)), institutional quality ([Acemoglu et al., 2001](#); [Wei, 2000](#); [Globerman and Shapiro, 2002](#)), and tax uncertainty ([Amberger et al., 2026](#); [Ferguson et al., 2026](#); [Fox et al., 2022](#); [Guceri and Albinowski, 2021](#)) matter for investment decisions, but typically treats these as distinct channels. Our findings suggest that internationally coordinated tax transparency regulations affect all three simultaneously. By closing information gaps, CbCR exchange agreements strengthen tax enforcement and limit opportunities for profit shifting. At the same time, the institutional safeguards required for information exchange constrain arbitrary tax enforcement, which offsets the potentially adverse effect of stricter enforcement on investment. More broadly, our findings imply that international tax transparency can simultaneously strengthen revenue collection and improve the investment environment in developing countries when transparency is accompanied by credible minimum standards and institutional upgrading.

2. Institutional Details and Conceptual Underpinnings

2.1. Country-by-Country Reporting under BEPS Action 13

Country-by-Country Reporting emerged from the OECD/G20 Base Erosion and Profit Shifting (BEPS) initiative, a coordinated multilateral effort to curb aggressive international tax planning by multinational enterprises. In 2013, the OECD published an initial report outlining 15 action points, with Action 13 establishing a three-tiered transfer pricing documentation framework: a master file providing a high-level overview of the MNE group's global operations, a local file containing detailed transactional information for each subsidiary, and a CbC report.² The master file and CbC report are prepared by the MNE's headquarters entity, while the local file is produced by each subsidiary and filed directly with its domestic tax authority.

The CbC report requires MNEs with consolidated group revenues of at least EUR 750 million to disclose, for each jurisdiction in which they operate: (i) aggregate revenues from related and unrelated parties, (ii) profit or loss before income tax, (iii) income tax paid and accrued, (iv) stated capital and accumulated earnings, (v) number of employees, and (vi) tangible assets other than cash. The report also lists all constituent entities within the group, their jurisdictions of tax residence, and the nature of their business activities. Figure A1 in the Online Appendix reproduces the reporting template. The stated objective of CbCR is to provide tax authorities with a comprehensive view of multinational firms' global footprint — including the distribution of pre-tax income and taxes paid across jurisdictions — to facilitate high-level transfer pricing risk assessment (OECD, 2015).

Two features of the CbCR regime are central to our analysis. First, the EUR 750 million consolidated revenue threshold creates a sharp regulatory boundary between multinationals subject to CbCR and those that are not. This threshold is determined by firm-level revenue in the fiscal year preceding the reporting year and is thus prede-

²The OECD published the Action 13 final report in October 2015. The EU formally adopted CbCR through Council Directive 2016/881/EU, effective for fiscal years beginning on or after 1 January 2016. As of 2022, more than 100 jurisdictions had implemented CbCR requirements (OECD, 2024a; Müller et al., 2020).

terminated with respect to post-adoption economic outcomes. We exploit this threshold in our firm-level identification strategy. Second, the CbC report is a government-to-government disclosure: it is filed with the tax authority in the MNE's headquarters jurisdiction and then shared with foreign tax authorities through bilateral exchange agreements, rather than being made publicly available.³ This intergovernmental nature means that the economic effects of CbCR depend critically on which foreign tax authorities actually receive the reports. The CbC report is therefore incremental only where the local tax authority receives it. Absent the CbC report, that authority sees only the entity-specific transactional and transfer-pricing detail in the local file, not the group's jurisdiction-level distribution of profit, tax, and economic activity across all countries in which it operates.⁴

2.2. The CbCR Information Exchange Framework

While an MNE files its CbC report with a single tax authority – that of its ultimate parent entity's jurisdiction – the OECD's Multilateral Competent Authority Agreement on the Exchange of CbC Reports (CbC MCAA) provides a framework for automatic sharing of these reports across jurisdictions. As of December 2022, 95 jurisdictions had signed the CbC MCAA and over 3,300 bilateral exchange relationships had been activated.⁵

Crucially, the CbC MCAA does not establish universal exchange upon signature. Each pair of jurisdictions must bilaterally *activate* an exchange relationship by listing each other as intended exchange partners under a qualifying competent authority agreement. This bilateral activation requirement means that the timing and scope of information sharing varies substantially across country-pairs, generating the staggered variation that is central to our identification strategy.

A developing country's tax authority can access an MNE's CbC report through one of

³The European Union has since adopted Directive 2021/2101/EU, which requires public disclosure of CbC reports for large MNEs operating in the EU, effective for fiscal years starting after 22 June 2024. As this mandate post-dates our sample period, public CbCR is not part of our analysis.

⁴Under BEPS Action 13, the local file provided by the subsidiary to its host tax authority is entity-specific and contains organizational information on the local entity, its financial accounts, and a transactional analysis of its controlled transactions with foreign affiliates; it covers neither transactions among group entities that do not directly transact with the local subsidiary nor other information about the remaining affiliated group members.

⁵See <https://www.oecd.org/ctp/exchange-of-tax-information/CbC-MCAA-Signatories.pdf>.

three mechanisms: (i) automatic exchange from the ultimate parent entity's jurisdiction, if a bilateral exchange relationship has been activated; (ii) automatic exchange from a designated surrogate parent entity's jurisdiction; or (iii) direct local filing by the MNE's domestic subsidiary, permitted only under limited circumstances – specifically, when the parent's jurisdiction has not implemented CbCR, when no qualifying exchange agreement exists, or when there has been a systemic failure in the automatic exchange process.⁶ The three mechanisms are shown in Figure 3. In practice, automatic exchange from the parent's jurisdiction is the primary mechanism, making the bilateral activation of exchange relationships the binding constraint on developing countries' access to CbCR information.

For a developing country c to receive the CbC report of an MNE headquartered in jurisdiction j through the primary mechanism, three conditions must be jointly satisfied: (a) jurisdiction j must have implemented domestic CbCR filing requirements, so that the report is collected; (b) developing country c must have signed the CbC MCAA and activated a bilateral exchange relationship with j ; and (c) country c must have implemented CbCR domestically and meet the minimum standards established under BEPS Action 13, including requirements regarding confidentiality, data safeguarding, and appropriate use of CbC information. Compliance with these standards is assessed through the OECD's annual peer review process, which evaluates jurisdictions along the dimensions of adequacy of the domestic CbCR implementation framework, the operation of the exchange relationships, and the compliance with confidentiality and appropriate-use requirements (OECD, 2024a). Failure to meet these standards can limit a jurisdiction's access to CbC reports from partner countries, result in adverse public peer-review findings, and contribute to designation as a non-cooperative tax jurisdiction by the EU.⁷ Consequently, access to CbC information depends not only on the existence of an exchange relationship, but also on a jurisdiction's ability to implement and maintain the required confidentiality and administrative standards.

⁶The OECD discourages local filing outside these narrow conditions, and jurisdictions invoking it risk adverse findings in the peer review process (OECD, 2024a).

⁷See Council of the European Union, *EU List of Non-Cooperative Jurisdictions for Tax Purposes*, available at <https://www.consilium.europa.eu/en/policies/eu-list-of-non-cooperative-jurisdictions/>.

These requirements have resulted in highly uneven coverage, particularly for developing countries. For example, Nigeria implemented CbCR domestically in 2018 and activated exchange relationships with 68 partner countries via the MCAA, gaining access to CbC reports covering a substantial share of MNE activity in the country. Kenya, by contrast, joined the MCAA only in 2022 and had not activated any bilateral exchange relationships as of that date, leaving its tax authority without access to CbCR information from any foreign jurisdiction.⁸

Developing countries have strong incentives to obtain access to CbC information. The reports provide tax authorities with information on the global operations of MNEs that is otherwise unavailable, improving their ability to assess tax risks, identify areas requiring further scrutiny, and allocate scarce enforcement resources more effectively. Participation in the CbCR exchange framework may also be encouraged by broader external incentives. Adopting international tax-transparency standards can signal alignment with global norms and, in some cases, forms part of wider structural-reform commitments, including those associated with IMF-supported programs or efforts to avoid designation as a non-cooperative jurisdiction by the EU.

2.3. CbCR Information Exchange and the Investment Environment in Developing Countries

When a developing country activates CbCR exchange and begins receiving the reports of multinationals operating within its borders, its tax authority gains access to information on these firms' global operations and tax positions that was previously unavailable. By increasing in-scope multinationals' transparency to the tax authorities, CbCR increases regulatory scrutiny, consistent with the broader literature on private disclosure ([Joshi, 2020](#); [Hugger, 2025](#); [Bozanic et al., 2017](#)).

In a weak-institution setting, the same information can widen the room for discretionary or arbitrary assessment and for rent extraction by tax officials, raising both the expected tax burden and the uncertainty surrounding it ([Wei, 2000](#); [Desai et al., 2007](#)).

⁸Figure 2 visualizes the cross-country variation in the number of activated exchange relationships directed toward developing countries.

Because tax uncertainty and anticipated enforcement raise the cost and risk of investment (Jacob et al., 2022; Bloom, 2014), greater information access could deter multinational investment in those developing hosts (labeled *deterrence* channel henceforth).

However, the information exchange framework not only provides the authority with more information, but it prescribes how that information may be used. For example, a CbC report should be a high-level risk-assessment tool, used to select and de-select taxpayers for closer examination, concentrating scrutiny on riskier cases rather than applying it across the board (OECD, 2017). An analysis of a pilot project in developing countries documents that a move from discretionary to rule-based audit case selection standardizes treatment, focuses effort on higher-risk taxpayers and correspondingly reduces scrutiny for other taxpayers (Ebrahim et al., 2025). Additionally, the report may not serve on its own as the basis for a transfer-pricing adjustment. If an adjustment based on CbCR is still proposed, the availability of mutual agreement procedures provides firms with a predictable mechanism to resolve the resulting dispute (OECD, 2016). These safeguards reduce uncertainty not by insulating firms from tax examinations, but by replacing discretionary enforcement with a more predictable, risk-based process and by providing a defined mechanism for resolving disputes.

Multinationals value such predictability of tax assessment. Executives investing in developing countries rank transparency and predictability of tax-authority conduct among the most important factors in investment decisions (World Bank Group, 2018), particularly where administrative discretion is substantial (Devereux, 2022). By reducing uncertainty about how tax authorities assess firms, improvements in tax-administration quality can encourage investment even without lowering the expected tax burden (Ferguson et al., 2026) (labeled *tax enforcement certainty* channel, henceforth). As the certainty channel depends on a host country's access to a firm's CbC report, the mechanism predicts higher investment by in-scope multinationals relative to comparable out-of-scope firms in the same host country and year.

The two channels above operate at the level of individual firms and their CbC reports. Participation in the CbCR exchange framework, however, may also generate

broader improvements in the host country’s tax administration that extend beyond any individual firm’s assessment. To participate in the framework and remain eligible for exchange, host countries must implement and maintain standards governing confidentiality, appropriate use, and administrative procedures, which are monitored through the OECD peer-review process. By narrowing official discretion, these reforms aim at reducing the scope for arbitrary enforcement, rent extraction, and corruption, and are plausibly associated with broader improvements in governance that reach every firm operating in that host country. Because institutional quality of this kind is a first-order determinant of cross-border investment ([Acemoglu et al., 2001](#)), this host country-level improvement can raise investment through the general quality of the institutional environment (labeled *institutional quality upgrade* channel, henceforth).

Overall, CbCR access creates competing forces: greater information can strengthen enforcement and increase uncertainty, but the safeguards governing that information in this setting can improve the predictability of tax administration. The net effect of these forces on multinational investment is an empirical question.

3. Data and Sample

Our analysis combines administrative records on CbCR information exchange with country-level macroeconomic characteristics, bilateral FDI flows, and a global multinational subsidiary panel, complemented by the Financial Times’ fDi investment-project database and the aggregated CbCR statistics from the OECD. Variable definitions are provided in [Table A1](#), and descriptive statistics by sample are in [Table A2](#). Our analysis covers 2010–2022 and includes all countries for which data on CbCR exchange and the relevant outcomes are available.⁹

3.1. Data Sources

Bilateral CbCR exchange activation data are drawn from the OECD’s CbC MCAA Activated Relationships portal. We record the activation year of each bilateral home–

⁹The developing-country subsample used throughout is defined as countries classified as non-high-income by the World Bank in 2015. Holding the classification fixed at the pre-policy reference year avoids contamination from any post-policy changes in income status.

host exchange relationship and, separately, the year of domestic CbCR adoption. Both feed into the binary activation indicator $\mathbb{1}[\text{Exchange}_{j,c,t}]$ and the host-level domestic indicator $\mathbb{1}[\text{CbCR domestic}_{c,t}]$ underlying the Bartik shift defined in [Section 4.2](#). [Figure 2](#) visualizes the resulting cross-country variation in active CbCR exchange relationships across host countries.¹⁰

The remaining data provide the outcome measures and control variables used in our analyses, which are constructed at the bilateral, country, and firm levels. Bilateral FDI inflows are drawn from UNCTAD’s bilateral FDI dataset, with mirror flows used to fill gaps in actual reported flows. We corroborate bilateral analysis using the OECD’s aggregated Country-by-Country Report statistics, which tabulate constituent-entity counts, revenue, assets, employment, and taxes paid and accrued by host and home jurisdiction. At the country-year level, corporate tax revenue is drawn from the IMF’s World Revenue Longitudinal Database, and institutional outcomes from the World Bank’s Worldwide Governance Indicators; macro controls are drawn from the World Bank World Development Indicators, and statutory corporate income tax rates from a combined KPMG / Tax Foundation series.

For the firm-level analysis, subsidiary-level data come from Bureau van Dijk’s Orbis database. We restrict attention to majority-owned subsidiaries and assign CbCR-eligibility from each MNE’s consolidated revenue in fiscal year 2015 against the EUR 750 million threshold, held fixed throughout the sample to keep the assignment pre-determined relative to outcomes.

We add FDI-project-level information from the Financial Times’ fDi markets database on investment projects in African host countries. fDi markets is a project-level database of cross-border investment announcements of new physical operations or capacity expansions that create jobs and capital investment. The information is compiled from media and corporate sources and records each project’s origin, destination, sector, and

¹⁰Where the effective year is not directly available in the activated-relationships portal, we assign the year of the most recent signatory action. For non-reciprocal commitments – where one jurisdiction commits to send but not to receive reports – we replicate the effective year in both directions to maintain consistency.

capital expenditure and job creation.¹¹ We match FDI projects to firms in our Orbis sample using a fuzzy name-matching procedure.

Finally, supplementary analyses use survey-based firm-level evidence on bribery and tax-administration interactions comes from the World Bank Enterprise Surveys (WBES), which collect firm-level data across more than 150 economies.

3.2. Samples

Combining these sources yields three levels of analyses. The bilateral FDI flow panel comprises 30,138 host–home–year observations with non-missing FDI inflow. The bilateral panel using aggregate-CbCR data contains 1,013 host–home–year observations for developing-country hosts over 2016–2021. The unilateral country-level panel contains 1,925 country-year observations with non-missing corporate tax revenue (713 high-income hosts and 1,212 developing-country hosts). The firm-level panel using Orbis data comprises 1,790,066 firm–host–year observations, of which 702,456 belong to CbCR-eligible firms and 1,087,610 to firms below the threshold. [Table A3](#) reports the number of MNEs in our sample that operate in host countries with and without active CbCR exchange in each year illustrating the cross-host variation in CbCR exposure within firms. The project-level panel comprises 1,589 firm–host–project-year observations for matched Orbis–fDi Markets firms with at least one investment project in an African host country over 2011–2019.

4. Macroeconomic Effects of Multinational Firm Tax Transparency in Developing Countries

4.1. A Bartik-Style Exposure Design

At the macroeconomic level, we study the effect of multinational firms’ tax transparency on countries’ foreign direct investment, tax revenue, and institutional quality. We look at the bilateral and unilateral country levels, where our main empirical strategies exploit plausibly exogenous variation in the information about multinationals’ global

¹¹Where the actual capital expenditure and number of created jobs are not available, the database provides estimates. Detailed information is available on the provider’s website: [fDi markets](#).

operations and tax payments received by developing country tax authorities following the staggered global rollout of CbCR exchange agreements. We estimate the following regression at the bilateral home country–developing country-year level:

$$Y_{cjt} = \beta_0 + \beta_1 \cdot \text{MNE Transparency}_{cjt} + \gamma_t + \delta_{cj} + \varepsilon_{cjt} \quad (1)$$

and the following regression at the unilateral developing country-year level:

$$Y_{ct} = \beta_0 + \beta_1 \cdot \text{MNE Transparency}_{ct} + \gamma_t + \delta_c + \varepsilon_{ct} \quad (2)$$

where Y_{cjt} denotes bilateral FDI in host country c from home country j in year t , or single country-level outcomes of interest for country c in year t – such as tax revenue or institutional quality measures. γ_t are year fixed effects, and δ_c are host country fixed effects and δ_{cj} country-pair fixed effects. The coefficient of interest, β_1 , captures the effect of an increase in the share of MNE activity in country c about which its tax authorities receive full CbC reports.

The key independent variable, $\text{MNE Transparency}_{cjt}$ or $\text{MNE Transparency}_{ct}$, is a Bartik-style shift-share instrument constructed from granular firm-subsidiary-level data. The logic mirrors the classic Bartik framework: a predetermined *share* – reflecting the pre-existing composition of MNE activity in a country, notably incorporating a plausibly exogenous firm size threshold (EUR 750m revenue), – is interacted with an exogenous *shift* – the regulatory expansion of CbCR coverage over time. We explain the construction of this exposure measure in detail in the following subsection.

4.2. A Bartik-Style Measure of Information Exposure

Bilateral country-pair-level exposure measure. We first define the measure at the bilateral level. For a given host country c and headquarters (or home) country j , the

bilateral *MNE Transparency* measure in period t is:

$$\text{MNE Transparency}_{cjt} = \frac{\mathbb{1}[\text{CbCR domestic}_{ct}] \cdot \sum_i \mathbb{1}[\text{CbCR}]_i \cdot \mathbb{1}[i \in c] \left(\underbrace{n_{ic}}_{\substack{\text{local subs:} \\ \text{domestic} \\ \text{CbCR only}}} + \underbrace{\mathbb{1}[\text{Exchange}_{j(i),c,t}] \cdot n_{i,-c}}_{\substack{\text{foreign subs:} \\ \text{requires bilateral} \\ \text{exchange with } j(i)}} \right)}{n_{dc} + \sum_i N_i \cdot \mathbb{1}[i \in c]} \quad (3)$$

As is common for Bartik instruments, the exposure measure in [equation \(3\)](#) is constructed from data at a more granular level than the estimating equation. Specifically, we use MNE–subsidiary-level panel data that allow us to trace each subsidiary’s host-country location, the parent’s headquarters country, and the MNE’s global subsidiary footprint.

The *share* captures country c ’s potential information access regarding CbCR-eligible MNE activity. We define it as the number of global subsidiaries of in-scope CbCR MNEs with a taxable presence in country c , scaled by the total number of subsidiaries of all MNEs and all domestic firms in country c . All subsidiary counts entering the share are fixed at their pre-policy values as of 2015.

For each MNE i operating in country c , the potential information content of a full CbC report is proportional to the *global* scope of that firm’s operations – since a CbC report covers all of the firm’s worldwide subsidiaries, not just its local presence. We denote by N_i the total number of global subsidiaries of MNE i , by n_{ic} the number located in country c , and by $n_{i,-c} = N_i - n_{ic}$ the number located in the rest of the world. The denominator additionally includes n_{dc} , the number of subsidiaries of purely domestic firms in country c , to ensure that the measure captures the importance of CbCR-eligible MNE activity relative to the *entire* corporate landscape in c – not merely relative to other MNEs.¹²

¹²Without this adjustment, two countries with identical MNE compositions but vastly different domestic

An MNE is classified as CbCR-eligible ($\mathbb{1}[\text{CbCR}]_i = 1$) if its consolidated group revenue in 2015 exceeded EUR 750 million, the threshold established under OECD BEPS Action 13. Since the denominator includes all MNE subsidiaries – both CbCR-eligible and non-eligible – as well as domestic entities, while the numerator can at most include the CbCR-eligible subset, the *share* is bounded between zero and one. It captures what fraction of total corporate activity in country c could in principle be revealed by CbC reports, were all relevant exchange relationships in place.

The *shift* in [equation \(3\)](#) comes from time-varying regulatory activation. Two components enter: first, country c implements domestic CbCR filing requirements ($\mathbb{1}[\text{CbCR domestic}]_{ct} = 1$), after which the local subsidiaries n_{ic} of CbCR-eligible MNEs become visible through their local filings. Second, once a bilateral CbCR exchange agreement between c and MNE home country j is activated ($\mathbb{1}[\text{Exchange}_{j,c,t}] = 1$), all foreign subsidiaries $n_{i,-c}$ of CbCR-eligible MNEs headquartered in j also become visible through the exchanged CbC reports.

In sum, the *share* depends on how many global subsidiaries of MNEs from country j with a taxable presence in country c belong to CbCR-eligible entities, and the *shift* captures whether headquarters country j exchanges CbC reports with country c (and, implicitly, whether c has introduced domestic CbCR).¹³ A value of zero indicates that no CbCR-related information on MNEs from j is available to country c 's tax authority; a value approaching one would obtain if all MNE activity from j in c were attributable to CbCR-eligible firms and both domestic filing and bilateral exchange were in place.

Unilateral country-level exposure measure. To examine country-level outcomes, we construct an analogous measure at the unilateral level. While [equation \(3\)](#) sums over MNEs i headquartered in a specific country j , [equation \(4\)](#) sums over all MNEs i

firm sectors would receive the same transparency measure, even though CbCR-revealed information is arguably less consequential in a country where MNEs account for only a small fraction of total economic activity.

¹³Intuitively, n_{ic} captures the part of MNE i 's global footprint already visible to country c 's tax authorities through domestic tax filings. The complementary quantity $n_{i,-c}$ represents the additional information a CbC report would reveal – operations of MNE i that country c has no sight of under the pre-CbCR regime. A firm with a small local presence but a vast global network (high $n_{i,-c}$ relative to n_{ic}) therefore generates a larger information shock when its CbC report is shared.

operating in c regardless of headquarters country. The time-series variation enters as before: over time, global subsidiaries of CbCR-eligible MNEs are progressively “unlocked” as their respective headquarters countries activate exchange relationships with c . In the aggregation, we sum the numerator and denominator separately across all headquarters countries before computing the ratio, ensuring that countries with a larger MNE footprint in c receive proportionally greater weight. Like its bilateral counterpart, MNE Transparency _{ct} is bounded between zero and one:

$$\text{MNE Transparency}_{ct} = \frac{\mathbb{1}[\text{CbCR domestic}_{ct}] \cdot \sum_i \mathbb{1}[\text{CbCR}]_i \cdot \mathbb{1}[i \in c] \left(\underbrace{n_{ic}}_{\substack{\text{local subs:} \\ \text{domestic} \\ \text{CbCR only}}} + \underbrace{\mathbb{1}[\text{Exchange}_{j(i),c,t}] \cdot n_{i,-c}}_{\substack{\text{foreign subs:} \\ \text{requires bilateral} \\ \text{exchange with } j(i)}} \right)}{n_{dc} + \sum_i N_i \cdot \mathbb{1}[i \in c]} \quad (4)$$

4.3. Intuition via Example

Consider two developing countries – Nigeria and Kenya. Recall [Figure 4](#) illustrates the timeline of activation of bilateral exchange relationships for these countries. Assume each of the two countries hosts two MNEs and no pure domestic firms. MNE A (above the €750 million threshold) has 2 subsidiaries in each country and 98 further subsidiaries elsewhere in the world ($N_A = 100$). MNE B (below the threshold) also has 2 subsidiaries in each country and 98 abroad. Since only MNE A is CbCR-eligible, the potential information exposure for both countries is $\text{Share} = 100/200 = 50\%$: half of total MNE activity present in each country could in principle be revealed by CbCR exchange.

The two countries diverge, however, in the shifts they experience. Nigeria introduces domestic CbCR in 2018; because it already has an active exchange agreement with the

headquarters country of MNE A , it then receives MNE A 's full CbC report – covering all 100 worldwide subsidiaries – and its MNE Transparency jumps to 50% in 2018. Kenya, by contrast, does not introduce domestic CbCR and activate an exchange relationship with MNE A 's headquarters country until 2022. In the interim, Kenya's tax authorities observe only MNE A 's two local subsidiaries via domestic filing and tax returns – 2 out of 200 potentially informative entity-level observations across the two firms. Kenya's MNE Transparency therefore remains near zero until 2022.

The variation we exploit is this contrast: the same MNE composition, same size distribution, different exchange agreements. The source of identifying variation is the differential pace at which developing countries activate bilateral exchange relationships with specific headquarters jurisdictions, interacted with the pre-existing composition of CbCR-eligible MNE activity in each country.

[Panel 4B](#) provides an additional illustration and an exemplary quantification of the bilateral exposure measure for Nigeria in two different years. Consider two CbCR in-scope MNEs of identical size ($N = 100$), one headquartered in Germany and one in the United States, plus 50 domestic firms. In 2017, Nigeria has not implemented domestic CbCR and activated any bilateral exchange agreements yet; its tax authority observes only the 5 local subsidiaries of each CbCR-eligible MNE, yielding a bilateral MNE Transparency of 2% for each pair. In 2018, Nigeria activates exchange with Germany. The German MNE's full global footprint ($N = 100$) enters the numerator, and bilateral transparency for the Nigeria–Germany pair jumps to 40%. The Nigeria–USA pair, lacking an exchange agreement, remains at 2%. The stacked bars decompose the measure into its two components: local subsidiaries n_{ic} (visible through domestic CbCR) and foreign subsidiaries $n_{i,-c}$ (visible only after exchange activation).

4.4. Identification Assumptions

The validity of the Bartik design rests on two main conditions ([Borusyak et al., 2022](#)), both of which we argue hold in this setting.

Exogeneity of the shares. The *shares* – the pre-period composition of MNE activity and the distribution of firms above and below the €750 million threshold – must be predetermined relative to the outcomes of interest. Two features of our shares support this requirement. First, they are constructed entirely from pre-CbCR subsidiary network data as of 2015, before any behavioural response to the regime could have occurred. Second, conditional on the set of MNEs present in country c , the share varies across developing countries only through differences in which of those MNEs happen to exceed the €750 million revenue threshold – a firm-level characteristic that is plausibly orthogonal to country-level economic conditions in c .

Exogeneity of the shifts. The *shifts* – the staggered bilateral activation of exchange relationships – should be as good as randomly assigned, conditional on fixed effects. The timing of bilateral CbCR exchange agreements is driven by treaty-network diplomacy and OECD accession processes, which we argue are orthogonal to contemporaneous country-level shocks to tax revenue or FDI.

Conditional on the pre-determined share, all time variation in the measure is driven by $\mathbb{1}[\text{Exchange}_{j(i),c,t}]$ in the numerator of Equations (3) and (4). This indicator switches from zero to one when countries c and $j(i)$ activate a bilateral CbCR exchange agreement, thereby “unlocking” the foreign subsidiary component $n_{i,-c}$ of all CbCR-eligible MNEs headquartered in $j(i)$. Prior to any exchange, only the local subsidiaries n_{ic} of eligible MNEs enter the numerator. This information is already available to c ’s tax authority through domestic CbCR filings. Each new exchange agreement then discretely raises the measure by adding $\mathbb{1}[\text{CbCR}]_i \cdot n_{i,-c}$ for every eligible MNE from j operating in c . The magnitude of this shift depends on the pre-existing composition of MNE activity: an agreement with a headquarters country whose MNEs maintain large global subsidiary networks relative to their local presence in c (i.e., high $n_{i,-c}$ relative to n_{ic}) produces a larger increase in MNE Transparency than an agreement with a country whose MNEs operate primarily within c . This implies that even among countries with identical exposure shares, the same sequence of exchange agreements generates different treatment intensities. Specifically, the time path of MNE Transparency reflects the interaction

of country-specific MNE structures with the gradually expanding bilateral exchange network.

Instrument relevance. In our setting, the additional condition for instrument relevance is that the constructed exposure measure predicts actual information flows to tax authorities in the period after the regulatory changes. [Figure 5](#) plots our MNE Transparency measure against the ratio of CbCR reports actually received by each country to the number of multinationals operating there, as per the official CbCR statistics published by the OECD for fiscal years starting in 2017. The strong positive correlation confirms that the exposure variable is a relevant predictor of the actual information shock experienced by developing-country tax authorities.

Pre-trends. We provide event study evidence in [Figure 6](#) showing that the outcome evolves similarly in the treated and control group prior to the activation of CbCR exchange, with effects emerging only after exchange becomes active. The absence of differential pre-trends supports the identifying assumption and mitigates concerns that our results reflect pre-existing divergent trajectories correlated with exchange adoption.

4.5. Empirical Results

4.5.1. Bilateral FDI

We begin with the bilateral specification, which exploits within-country-pair variation in the timing and intensity of CbCR information exchange. We examine whether making a host country's tax authority better informed about the global operations of multinationals headquartered in a specific partner country j affects the volume of investment flowing from j to c .

Ex ante, the direction of this effect is ambiguous. On the one hand, greater transparency may deter investment if firms anticipate stronger tax enforcement or the loss of information rents that previously shielded aggressive tax positions. Moreover, in weak-institution settings, the newly available information about multinationals' global profits may also expand the scope for arbitrary enforcement or expropriation, raising

operational costs and investment uncertainty (i.e., a *deterrence* channel).

On the other hand, the exchange of CbC reports is embedded in a multilaterally agreed framework of confidentiality, data safeguarding, and appropriate-use requirements that constrain how local tax authorities may use the information they receive. For firms from developed countries whose reports become available to the host authority, these safeguards reduce uncertainty about future tax treatment by making enforcement more predictable, and thus more attractive, environment for foreign investment (i.e., a local authority *tax enforcement certainty* channel).¹⁴ Which force dominates is an empirical question.

Table 1 presents results from estimating Equation (1), where the dependent variable is the natural logarithm of bilateral FDI inflows from home country j to host country c . Our coefficient of interest is on $MNE\ Transparency_{cjt}$, the Bartik-style exposure measure that captures the share of MNE activity in country c originating from j about which c 's tax authority receives CbC reports in year t .

Columns (1) and (2) report estimates for the full sample. The coefficient on $MNE\ Transparency$ is positive but statistically insignificant (0.17, $t = 1.44$ in column (1); 0.16, $t = 1.29$ in column (2)). This null result in the full sample masks economically important heterogeneity across host-country income groups. Columns (3) and (4) restrict the sample to high-income host countries. The coefficient is small, negative, and insignificant (-0.06 , and -0.07). This is consistent with the tax authorities in advanced economies already maintaining extensive information infrastructures, such as multilateral exchange-of-information agreements and well-staffed audit divisions.

The picture changes markedly for developing host countries. Columns (5) and (6) show that the coefficient on $MNE\ Transparency$ is positive, economically meaningful, and significant. In the most demanding specification including country-pair fixed effects

¹⁴Accession to the exchange network requires meeting OECD minimum standards on confidentiality, data protection, and appropriate use, enforced through annual peer reviews with consequences for non-compliance. Joining countries therefore plausibly commit to broader upgrades in tax administration, making them more predictable—and thus more attractive—to all foreign investors, not only in-scope firms. Host country-by-year fixed effects absorb this *institutional quality upgrade* channel in the bilateral analysis, where it should if anything attenuate our estimates. In subsequent sections, we analyze the potential impact of this channel directly.

and host-country $\times$ year fixed effects, the estimate is 0.62 ($t = 3.00, p < 0.01$). In line with the *tax enforcement certainty* channel, the positive sign implies that, in developing countries, CbCR exchange reduces the uncertainty and arbitrariness of enforcement rather than merely increasing enforcement aggressiveness and hence tax burdens.

To gauge economic magnitude, note that *MNE Transparency* ranges from zero to one. The coefficient of 0.62 implies that moving a bilateral pair from no CbCR transparency to full transparency is associated with an approximately 86% increase in bilateral FDI inflows. At more realistic treatment intensities, a one-standard-deviation increase in bilateral transparency (0.32 in the developing-country subsample) translates into an approximately $\approx 22\%$ increase in FDI inflows.

We next examine whether the FDI response is stronger in host countries where discretionary enforcement is more likely to matter. Panel B tests this by splitting the sample at the pre-treatment top and bottom quartiles of the host country's control-of-corruption score. In line with this prediction, among developing host countries with high pre-existing corruption, the coefficient on *MNE Transparency* is 3.26 ($t = 2.26, p < 0.05$). For low-corruption developing countries, the coefficient remains positive but is statistically insignificant (1.19, $t = 1.48$). The heterogeneity is in line with the tax enforcement certainty channel: the certainty imposed by CbCR exchange should matter most where tax administration was more discretionary before the reform. Among high-income host countries, the corruption split yields no significant effects (columns (3) and (4)), consistent with the certainty channel being less consequential where institutional quality is already high.

Figure 6 presents event study estimates that trace bilateral FDI around exchange activation in developing host countries. The pre-event coefficients are close to zero and insignificant across the five years preceding activation, providing no evidence of differential pre-trends. Post-activation, the coefficients turn positive and grow over the first two to three years.

4.5.2. Country-level Tax Revenue and Institutional Quality

The bilateral results show that CbCR information exchange is followed by higher FDI inflows to developing countries. We next ask whether host governments also collect more corporate tax revenue once they gain access to this information, and whether participation in the exchange network coincides with broader improvements in institutional quality. If tax revenue rises alongside FDI growth, the evidence is difficult to square with a pure deterrence story in which stronger enforcement mainly discourages investment. And if country-level governance quality indicators also improve, this would be consistent with the institutional quality upgrade channel.

Table 2 presents results from estimating Equation (2) at the country-year level, using two alternative measures of information exposure. Panel A uses our Bartik-style *MNE Transparency_{ct}* measure interacted with a developing-country indicator. Panel B uses the raw count of active bilateral information exchange agreements in a given year as an alternative measure. This alternative measure is intuitive but leaves more room for confounding factors correlated with both the measure and the outcome.

Column (1) uses the natural logarithm of corporate income tax revenue as the dependent variable. The interaction of *MNE Transparency* with the low-income indicator is positive and significant at the 10% level (0.4222, $t = 1.81$). For low-income countries, greater CbCR information access is associated with higher corporate tax collections.

Columns (2)–(4) examine whether CbCR information access is associated with improvements in broader institutional quality, using three World Bank Worldwide Governance Indicators: Control of Corruption, Rule of Law, and Government Effectiveness. The interaction term is positive throughout. The effect is statistically significant for Control of Corruption (0.1744, $t = 1.71$) but not for Rule of Law (0.1121, $t = 1.38$). Government Effectiveness also shows a positive but insignificant coefficient (0.0687, $t = 0.61$). Panel B replaces the Bartik-style instrument with the simpler count of active information exchange agreements. The results are qualitatively similar and statistically somewhat more significant.¹⁵

¹⁵For corporate tax revenue, a positive effect of the agreement count can be expected, since each

These results are consistent with the institutional quality upgrade mechanism discussed in [Section 2.3](#): participation in the CbCR exchange network requires developing countries to meet minimum standards of confidentiality, data safeguarding, and appropriate use, enforced through the OECD’s annual peer review process. The improvements in Control of Corruption and Rule of Law suggest that these requirements have measurable effects on governance – and, in conjunction with the bilateral FDI results, that these institutional improvements might be part of what makes CbCR-participating developing countries more attractive to foreign investors, in line with a long literature documenting institutional quality as a first-order determinant of cross-border investment ([Acemoglu et al., 2001](#)).

5. Firm-level Responses to Multinational Firm Tax Transparency in Developing Countries

5.1. Evidence from a Discontinuity-based Difference-in-Differences Design

5.1.1. Empirical Strategy

While the country- and bilateral-level analyses establish aggregate effects of tax authorities’ access to multinational firm information, the firm-level analysis aims to isolate the within-firm investment responses that underlie these aggregate patterns. Our design exploits the €750 million reporting threshold that determines whether a multinational is subject to CbCR, together with variation in investment outcomes within the same multinational across potential foreign host countries. We implement a discontinuity-based difference-in-differences design and estimate

$$FDI(\#Subs.)_{ic(j)t} = \beta_0 + \beta_1 CbCRFirm_{i2015} \times InfoExchange_{cjt} + \gamma_{ic} + \delta_{ct} + \phi_{it} + \epsilon_{ijt}. \quad (5)$$

The dependent variable is the natural logarithm of the number of majority-owned

additional exchange partner adds information from different home countries for enforcement. For the governance indicators, the count result does not contradict the spillover test ([Table 4](#), Column (4)), where the number of agreements has no effect. Unlike that test, the count here also includes the extensive margin – the step-up from zero to a first agreement – which captures the one-time institutional upgrade at network entry.

subsidiaries of MNE i in host country c in year t .¹⁶ The indicator $CbCRFirm_{i2015}$ equals one if firm i 's consolidated revenue in 2015 exceeds EUR 750 million, the threshold above which multinational groups are required to file CbC reports under OECD BEPS Action 13. $Info\ Exchange_{cj(i)t}$ equals one if a bilateral CbCR exchange relationship between host country c and the headquarters country j of firm i is active in year t . The coefficient of interest, β_1 , captures whether exchange activation affects the subsidiary presence of CbCR-scope firms differently from below-threshold firms.

Every specification includes host-country $\times$ year fixed effects (δ_{ct}), absorbing shocks common to all firms investing in a given host country in a given year. This includes all host-level changes associated with CbCR participation and any accompanying institutional improvements. We also always include firm $\times$ year fixed effects (ϕ_{it}), absorbing global firm-level trends such as firm-wide investment expansions, managerial style, governance and regulation relevant to the parent entity. We include additional fixed effects: either firm $\times$ host-country fixed effects (γ_{ic}), so that identification comes from changes within a firm–host cell over time, or country-pair fixed effects, which absorb time-invariant bilateral determinants of investment while permitting comparisons across firms within the same headquarters–host pair.

As a result, the interaction coefficient isolates the firm-specific information component of CbCR exchange: whether firms whose CbC reports become available to the host authority adjust their investment differently from firms whose reports are not exchanged. We examine the broader host-level investment response associated with the institutional environment in the spillover tests below.

5.1.2. Empirical Results

Table 3 reports estimates of Equation (5). A negative coefficient β_1 would be consistent with deterrence, while a positive coefficient would suggest that CbCR-scope firms expand their presence in host countries that gain access to their CbC reports. The table reports results for the full sample, high-income host countries, and developing host

¹⁶We validate the measure against the independent, project-level data source fDi Markets from the Financial Times. We illustrate whether additions of majority-owned subsidiaries in Orbis co-move with announced investment projects in the fDi Markets database (Figure A4), indicating that it captures genuine new operations.

countries, using Ordinary Least Squares (OLS, Panel A) and Poisson Pseudo Maximum Likelihood (PPML, Panel B) regressions. Odd-numbered columns include firm $\times$ host-country fixed effects (γ_{ic}), so that identification comes from changes within a firm–host cell over time. Even-numbered columns replace these with country-pair fixed effects.

In the full sample, the interaction term is positive and significant under both fixed effects structures (0.04, $t = 2.50$ in column (1); 0.12, $t = 4.50$ in column (2)). Consistent with the bilateral results, the effect is absent for high-income host countries: columns (3) and (4) show coefficients that are small and insignificant (0.01 and 0.04). For developing host countries, the estimates are larger and highly significant: 0.07 ($t = 4.10$) and 0.12 ($t = 3.86$) depending on the fixed effects structure.

The coefficient of 0.12 in column (6) implies that, following the activation of a bilateral exchange agreement, CbCR-eligible multinationals increase their subsidiary count in developing host countries by approximately 12 log points ($\approx 13\%$) relative to non-CbCR firms from the same headquarters country operating in the same host country in the same year.

The negative standalone coefficient on *Information Exchange* may appear inconsistent with an overall positive investment effect of CbCR exchange. However, this coefficient should not be interpreted as the overall investment effect of having an exchange agreement in place. The host-country $\times$ year fixed effects absorb changes common to all firms in a given host country and year, including any broader institutional improvements associated with CbCR participation. The coefficient therefore excludes the host-level component of the investment response, which we examine separately in spillover tests in a separate section below.

Panel B re-estimates the specification using PPML, with the subsidiary count in levels as the dependent variable. This addresses two concerns: the potential selection bias from dropping zero-subsidiary observations in the log specification, and the sensitivity of OLS estimates to the functional form when the dependent variable has a skewed distribution. The results are consistent with and, in several cases, stronger than the OLS estimates. The interaction term is positive and significant across all subsamples, including high-

income host countries (0.09, $t = 3.15$ in column (3); 0.20, $t = 4.58$ in column (4)). For developing countries, the estimate under FE2 is 0.16 ($t = 3.07$), qualitatively similar to the OLS result. Because PPML retains zero-subsidary observations, these results are consistent with the response extending beyond expansions by already-present MNEs to include entry into host countries.

Table A4 reports the stacked DiD estimates, which address potential bias from heterogeneous treatment effects across cohorts by constructing cohort-specific "clean" control groups. The results closely mirror the baseline specification. For developing host countries, the interaction coefficient under FE2 is 0.18 ($t = 4.90$) in the OLS specification and 0.18 ($t = 4.09$) in the PPML specification.

To examine the dynamics of the baseline effects, Figure 7 presents event study estimates for the subsample of developing host countries. Panels 7A and 7B plot the dynamic treatment effects from the baseline staggered specification under OLS and PPML, respectively. Panels 7C and 7D report the corresponding estimates from the stacked difference-in-differences estimator. Across all four panels, the pre-event coefficients are close to zero and statistically insignificant, providing no evidence for anticipation effects. Post-activation, the coefficients turn positive and increase gradually over the first two to three years, consistent with the time required for real investment decisions to respond to a change in the information and regulatory environment.¹⁷

5.2. Evidence from a Regression Discontinuity Design

5.2.1. Empirical Strategy

The difference-in-differences design compares CbCR-scope and non-scope firms over time, exploiting the staggered activation of exchange agreements. To further foster internal validity, we focus directly on the EUR 750 million revenue threshold that determines

¹⁷We assess the sensitivity of the event-study estimates to violations of parallel trends in two ways (Figure A3). Applying the sensitivity analysis of Rambachan and Roth (2023), the estimated effect remains statistically significant under violations of parallel trends that allow post-treatment deviations to be up to roughly twice the largest deviation observed in the pre-treatment period. Following Roth (2022), the pre-treatment coefficients are small and statistically insignificant, providing no evidence of differential pre-trends. Moreover, the post-activation estimates exceed the magnitude of the pre-treatment movements, suggesting that the estimated effects are unlikely to reflect the continuation of pre-existing trends.

CbCR eligibility. Specifically, we implement a regression discontinuity design (RDD) that compares multinationals just above and just below this cutoff, restricting the sample to firm–host-country–year observations in which a bilateral exchange agreement is active ($Info\ Exchange_{c,j(i),t} = 1$). In this subsample of activated regulation, firms above the threshold have their CbC reports shared with the host-country tax authority while firms just below it do not. As in related work exploring the CbCR setting (De Simone and Olbert, 2022; Joshi, 2020; Hugger, 2025), the running variable is the firm’s consolidated revenue in 2015 relative to the EUR 750 million cutoff.

The key advantage of this design is that it isolates the causal effect of CbCR disclosure under minimal assumptions: firms in a narrow neighbourhood around the threshold are similar in size, organizational complexity, and exposure to host-country regulation, differing only in whether their global operations are disclosed to tax authorities. The identifying assumption is that potential outcomes evolve smoothly through the threshold — i.e., that there is no discontinuous change in firms’ investment behavior at EUR 750 million other than through CbCR. This assumption is plausible because the threshold was set by the OECD as a round-number administrative convention, not in response to pre-existing differences in firm behavior at that revenue level (De Simone and Olbert, 2022). However, there is room for revenue manipulation (i.e., earnings management) to avoid regulation in the post-period (Hugger, 2025).

We estimate the RDD using the bias-corrected robust inference procedure of Cattaneo et al. (2020), with MSE-optimal bandwidth selection. The dependent variable is the natural logarithm of the subsidiary count. We report specifications with linear and quadratic local polynomials, both with and without covariates (year fixed effects, lagged firm-level financials, and host-country controls). Panel A of Table A5 presents estimates for the full sample of country pairs with active exchange; Panel B restricts to developing host countries, where the bilateral results suggest the transparency mechanism is most consequential. Panel C reports placebo tests using observations from country-years *without* active exchange, where no discontinuity in the information environment exists at the threshold and hence no treatment effect should be observed. Figure A2 shows

the pattern graphically. In host countries with active exchange, subsidiary counts jump upward at the EUR 750 million eligibility threshold, whereas the placebo sample without active exchange shows no such discontinuity.

5.2.2. Empirical Results

The full-sample estimates are positive across the main specifications. In columns (1) and (2), the RD estimate is 0.074 ($p < 0.01$) without controls and 0.152 ($p < 0.01$) with year fixed effects and firm- and country-level controls. The quadratic specification in column (3) yields a similar estimate of 0.186 ($p < 0.01$). These results indicate that, among firms close to the threshold, those just above the CbCR cutoff maintain a larger subsidiary presence in host countries that receive their reports than firms just below the cutoff. The pattern is similar across polynomial choices and the inclusion of covariates.

The estimates are larger when we restrict the sample to developing host countries. The linear specification with controls yields an RD estimate of 0.237 ($p < 0.01$, column (2)), while the quadratic specification with controls gives 0.190 ($p < 0.01$, column (3)). This pattern is consistent with the bilateral and DiD results: the firm-level information channel appears more pronounced in developing countries, where tax authorities may have had less visibility into multinational operations before CbCR exchange.

Panel C reports results of placebo tests. We estimate the same RD specification in observations without active bilateral exchange, where firms above and below the threshold face the same information environment from the host authority's perspective. The placebo estimates do not show a robust positive discontinuity at the threshold, including in the subset of country pairs that eventually activate exchange but have not yet done so. This supports the interpretation that the effects in Panels A and B are tied to CbCR information sharing rather than to the revenue cutoff itself. Visual results for the main and a placebo test are shown in [A2](#).

Taken together, the RD evidence complements the DiD results. The positive investment response appears not only in comparisons between larger and smaller multinationals over time, but also locally around the regulatory threshold that determines whether

a firm’s CbC report is exchanged. This pattern is consistent with the view that access to firm-specific CbCR information affects multinational investment in developing host countries.

6. Supplementary Analyses: Mechanisms, Country-Wide Spillovers, Magnitudes, Measurement

6.1. Mechanisms: Tax Planning vs. Institutional Quality

An alternative explanation for our firm-level results would be the tax-planning channel documented in the CbCR literature. Prior studies show that private country-by-country disclosure induces in-scope multinationals to align real activity with reported profits to substantiate profit shifting structures (De Simone and Olbert, 2022). If the increase in investment we document in developing countries was driven by this substance-alignment channel, it should be more pronounced among tax-aggressive firms.

To examine this mechanism, we run a supplementary test based on the specification from Section 5.1, equation 5, and interact the *CbCR Firm* $\times$ *Information Exchange* effect with four pre-2016 proxies for tax aggressiveness: tax-haven affiliate counts based on two alternative definitions, a low effective tax rate, and a low/negative tax differential, each split at the sample median. Across all four specifications, the triple interaction is small and statistically insignificant, while the baseline treatment effect remains positive and significant. The results are reported in Table A6.

To corroborate the inference that the investment response reflects firms’ responses to improvements in institutional quality, we turn to the World Bank Enterprise Surveys (WBES), which survey businesses at the local level across developing countries and record perceived institutional quality, including the incidence of bribery. For our purposes the relevant dimension is institutional quality in tax enforcement: the WBES asks firms directly about informal payments made in the course of dealings with government officials.

The database has the nature of a repeated cross-section, which we collect for our sample period and estimate a specification as close as possible to our main firm-level

design in [Section 5.1](#). Results appear in [Table 5](#). Foreign-owned firms in developing countries with active CbCR exchange report significantly lower informal payments to government officials (-0.1643 , $t = -2.69$). This pattern is consistent with CbCR participation reducing discretionary interactions between tax authorities and foreign taxpayers—the type of institutional improvement reflected in the country-level results for Control of Corruption.

6.2. Spillovers: Non-CbCR Firms and Host Country Institutional Quality Upgrades

6.2.1. Empirical Strategy

The results so far indicate that firms invest more when their own CbC reports become available to the host-country tax authority, and that these responses aggregate into the country-level effects documented above. Our analyses do not, however, rule out a second channel predicting a positive investment effect in developing countries. As discussed above, accession to the exchange network may raise the quality of a host country's tax (and related) administration in ways that benefit firms outside CbCR scope as well. Such spillovers would contribute to the aggregate effects while, despite the saturated fixed effect structure, attenuating the estimated difference-in-differences coefficients.

If CbCR participation improves the institutional environment, the response should not be confined to firms whose reports are actually exchanged: other foreign firms operating in the same host country benefit from a more predictable and less discretionary tax administration. We examine this possibility in two steps.

First, we return to the baseline firm-level sample but remove the $\text{host-country} \times \text{year}$ fixed effects. In the main DiD specification, these fixed effects absorb all changes that affect firms in the same host country and year, including institutional changes associated with CbCR participation. Without these fixed effects, we can ask whether firms invest more in host countries after the host enters the CbCR exchange network, not only whether CbCR-scope firms respond differently from other firms. The remaining fixed effects are $\text{firm} \times \text{host-country}$ and $\text{firm} \times \text{year}$.

Second, we focus on $\text{firm} \text{--} \text{host} \text{--} \text{year}$ observations in which the firm's own home–host

bilateral exchange relationship is inactive. This shuts down the direct firm-specific information channel: the host-country tax authority does not receive the firm's CbC report through an active exchange agreement with the firm's home country. The untreated sample includes firm–host-year observations from all headquarters countries for which the firm's own home–host exchange relationship is inactive. In both samples, the treatment variable is *IE Eligibility*, an indicator equal to one if host country c has at least one active CbCR exchange agreement in year t with a partner country other than firm i 's headquarters country.

In addition, participation in the CbCR exchange framework requires jurisdictions to meet the OECD's minimum standards before receiving their first CbC reports, suggesting that the principal institutional upgrade occurs when a country joins the network. Nevertheless, institutional capacity may continue to improve as the exchange network expands. We examine this possibility by restricting the sample to non-scope firms in developing hosts that have already entered the network and replacing the participation indicator with the number of active inbound exchange agreements.¹⁸ Because non-scope firms are not directly affected by CbCR exchange, any response reflects changes in the host-wide institutional environment.

6.2.2. Empirical Results

Table 4 reports the results. Panel A revisits the firm-level specification without host-country $\times$ year fixed effects. In Column(1), the standalone coefficient on *Information Exchange* is positive and statistically significant (0.052, $t = 2.23$), while the interaction with *CbCR Firm* remains positive and significant (0.111, $t = 2.93$). Restricting the sample to CbCR and non-CbCR firms in Columns (2) and (3) yields coefficients of 0.163 ($t = 3.41$) and 0.052 ($t = 2.07$), respectively. The positive standalone coefficient is the key difference relative to the baseline specification in Section 5.1. Once host-year changes are no longer absorbed by the fixed effects, firms without their own CbC reports also exhibit a positive response following exchange activation. This pattern suggests

¹⁸The variable measures the number of active inbound CbCR information exchange agreements of host country c in year t , defined as the number of home countries whose CbC reports the host receives. The variable is included as within-sample deciles.

that the investment response extends beyond firms directly exposed to CbCR exchange and is consistent with a broader host-level *institutional quality upgrade* channel.

Panel B provides a more direct test of this host-level channel by examining firms for which the own home–host exchange relationship remains inactive. The coefficient on *IE Eligibility* is positive and significant (0.074, $t = 3.69$), and remains similar when restricting the sample to CbCR firms only (0.109, $t = 2.64$) or non-CbCR firms only (0.074, $t = 3.39$). The interaction with *CbCR Firm* is small and statistically insignificant (0.035, $t = 1.14$), indicating that the response is not concentrated among firms whose own reports would become available to the host authority. Instead, firms expand their presence once the host enters the exchange network, consistent with the broader institutional requirements associated with participation in the framework. These requirements—including confidentiality, appropriate-use standards, and administrative safeguards—apply across taxpayers and may therefore improve the investment environment beyond firms directly subject to CbCR exchange.

In Column (4), the coefficient on the number of active exchange agreements is close to zero and statistically insignificant in both panels (-0.008 , $t = -0.72$ in PanelA; -0.005 , $t = -0.32$ in PanelB). This pattern suggests that the relevant institutional change occurs when a host enters the exchange network rather than accumulating additional exchange relationships. Consistent with this interpretation, the OECD standards governing confidentiality, appropriate use, and administrative safeguards represent entry requirements that jurisdictions must satisfy upon accession and maintain thereafter through peer review. The host-level response therefore appears to reflect the discrete institutional upgrade associated with network participation rather than a gradual improvement with the number of exchange partners.

Overall, these results are consistent with a host-level *institutional quality upgrade* channel partially contributing to our findings. Multinationals expand their subsidiary presence in host countries that enter the CbCR exchange network through any partner country, even when their own home country does not exchange reports with that host. The findings suggest that CbCR participation affects the investment environment not

only through the direct provision of firm-specific information, but also through the broader institutional framework required for participation.

6.3. Economic Magnitudes: How much FDI is a New Subsidiary?

Our firm-level estimates are expressed in subsidiary counts, following prior work (Hoopes et al., 2023) and reflecting the absence of granular firm-level financial or administrative data for host countries in the developing world. To provide a sense for the economic magnitudes behind our baseline results, we leverage a project-level dataset that we obtained from the Financial Times fDi Markets Database. Specifically, we relate the establishment of an additional subsidiary to the capital investment and employment associated with multinational investment projects. For this purpose, we match our firm sample to the Financial Times' fDi Markets database, which records firm-level greenfield investment projects in African host countries together with estimates of their capital expenditures and expected job creation.

We estimate the relationship between the number of new subsidiaries established by a firm in a given host-country-year and the corresponding capital expenditures and jobs reported in fDi Markets. The specification includes firm $\times$ host-country and host-country $\times$ year fixed effects, thereby comparing changes in subsidiary creation within the same firm–host relationship over time while controlling for shocks common to all firms operating in a given host country. Table A7 reports the results. Panel A presents the regression estimates, and Panel B translates the coefficients into economic magnitudes evaluated at the sample mean.

Panel A shows a positive association between subsidiary creation and both investment outcomes. An additional project-related subsidiary is associated with capital expenditures of \$1.3–1.5 million and the creation of 2.1–3.6 jobs in its first year, with all estimates statistically significant at the 1% level. These magnitudes indicate that the increase in subsidiary counts documented in our main analyses reflects economically meaningful expansions in real investment.

6.4. Bilateral CbCR Statistics

6.4.1. Empirical Strategy

Finally, we provide complementary evidence on our findings regarding multinational investment and tax revenue using the OECD's aggregated CbCR statistics as an administrative data source. These statistics provide bilateral information on the economic footprint of in-scope multinationals, including the number of constituent entities, employment, revenues, profits, assets, and taxes. Importantly, the data allow us to examine not only changes in multinational presence but also changes in the underlying scale and composition of reported economic activity, including employment, revenues, assets, profits, and taxes.¹⁹

The data cover only multinationals above the EUR 750 million reporting threshold and therefore do not permit a scope-versus-non-scope comparison. We therefore exploit the staggered activation of bilateral CbCR exchange across host–home country pairs. The variable of interest is $Info\ Exchange_{c,j(i),t}$ equal to one once home country j and host country c have activated CbCR exchange. We include country-pair fixed effects to absorb time-invariant differences across bilateral relationships and host-country $\times$ year fixed effects to account for changes affecting all home countries within a given host and year. The coefficient is thus identified by comparing the reported economic outcomes of in-scope multinationals from home countries that have activated exchange with a given host to that of home countries that have not yet activated exchange with the same host in the same year. We cluster standard errors on the country-pair level.

6.4.2. Empirical Results

Table A8 presents changes in the reported economic outcomes of in-scope multinationals following the activation of bilateral CbCR exchange. Panel A reports changes in the number and type of constituent entities that multinationals from home country j report in host country c . The coefficient on *Information Exchange* is positive and statistically

¹⁹Because the statistics are compiled by home jurisdictions from firms' CbC reports, irrespective of whether the corresponding host country receives those reports, exchange activation does not mechanically alter the measurement of reported outcomes. Any estimated changes therefore reflect changes in the reported economic footprint of in-scope multinationals rather than mechanical changes in reporting.

significant for the overall number of constituent entities ($0.398, t = 2.57$). This increase is concentrated among operating entities ($0.349, t = 1.83$) rather than passive entities ($0.211, t = 1.25$).²⁰ Panel B turns to the scale of multinational activity. Reported revenue ($0.572, t = 2.43$) and employment ($0.693, t = 3.15$) both increase following the exchange activation, whereas reported tangible assets remain unchanged ($0.097, t = 0.33$). Panel C reports results on taxes. Both taxes paid ($0.575, t = 1.80$) and taxes accrued ($0.580, t = 1.96$) increase following exchange activation, while the effective tax rate remains unchanged ($0.246, t = 0.96$). Overall, the results reinforce the evidence from our previous analyses and are consistent with an expansion in the real economic activity of CbCR firms following the activation of bilateral exchange agreements.

7. Conclusion

Developing countries face a perceived trade-off between taxing multinationals and attracting their investment. The introduction of CbCR and its information exchange network equips tax authorities with additional information that is expected to strengthen enforcement and raise tax revenue, but potentially at the cost of making multinational investment less attractive. At the same time, participation in the exchange network requires institutional reforms that may improve the investment environment and attract foreign investment.

Across bilateral, country, and firm-level analyses, the evidence points into a consistent direction. Developing countries that gain access to multinationals' CbC reports attract real and economically meaningful investment while collecting more corporate tax revenue. The effect is concentrated in host countries with lower income and higher levels of corruption, where a more predictable tax administration is likely to be most valuable. Supplementary tests point to reduced tax enforcement uncertainty as a mechanism improving the investment environment for CbCR firms. Beyond these firm-specific effects, spillover tests document higher investment even among firms outside CbCR scope and firms whose home country has not yet activated information exchange with

²⁰Operating entities perform active business functions, such as manufacturing, sales, services, research and development, and administration. Passive entities primarily perform functions related to holding shares, intellectual property, or intra-group financing.

the host, consistent with the broader institutional upgrades required to join the exchange network.

These findings carry implications for the ongoing expansion of the CbCR exchange network and for the design of international tax cooperation more broadly. The evidence suggests that the institutional requirements embedded in the exchange framework – confidentiality standards, appropriate-use restrictions, and peer review – are not merely procedural hurdles but may themselves generate economic benefits by improving the predictability of the tax environment. Our results indicate that the government-to-government exchange channel already delivers measurable benefits to developing countries, particularly those where institutional quality is weakest.

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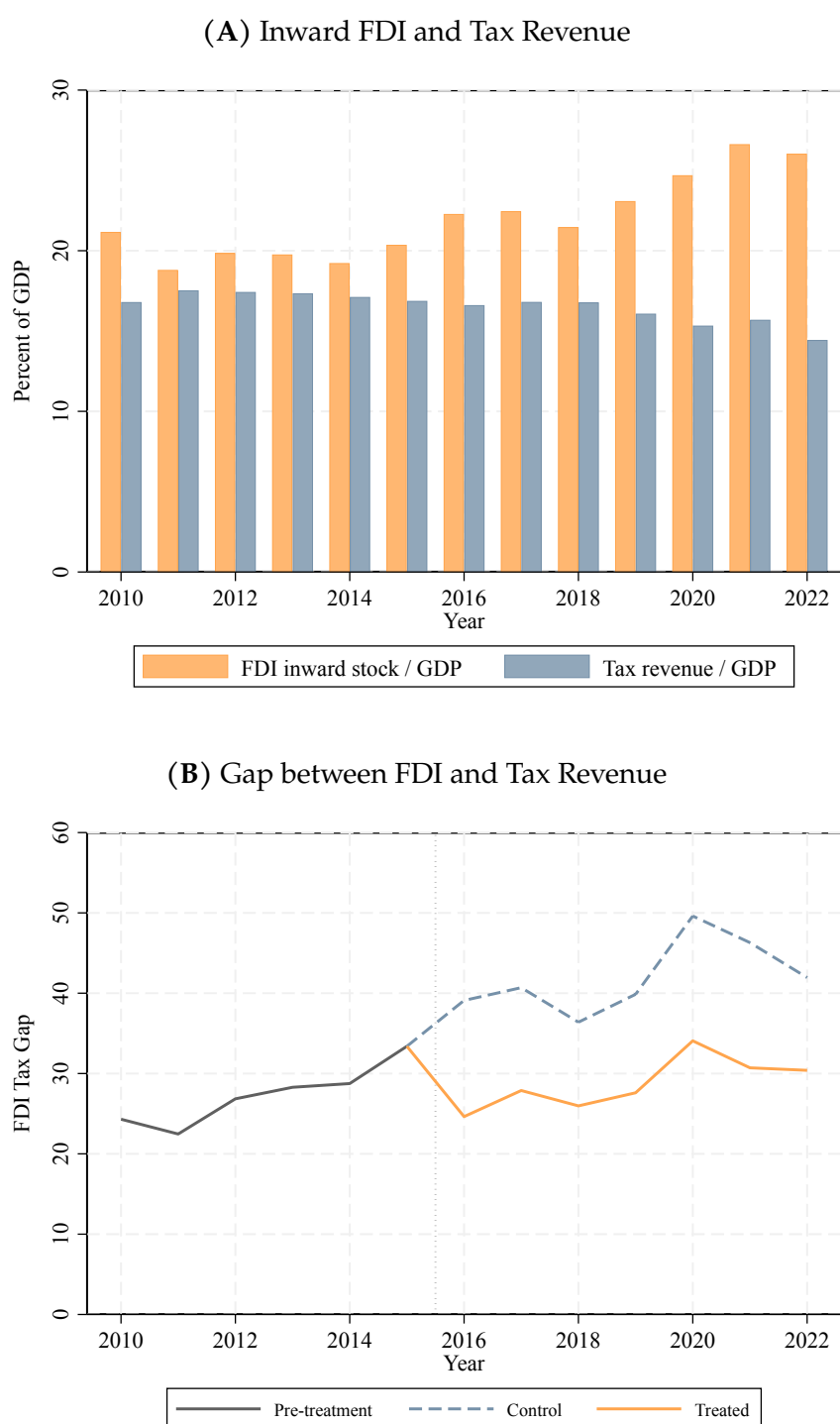
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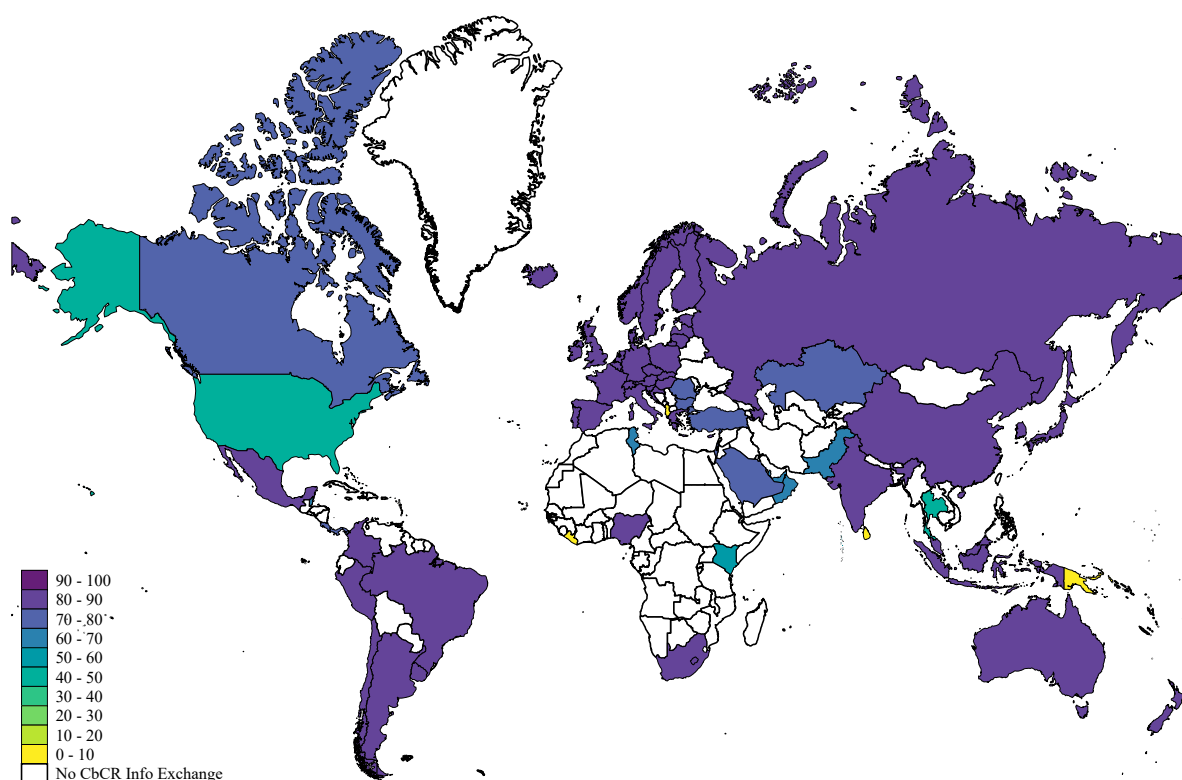
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Figure 1. FDI AND TAX REVENUES IN DEVELOPING COUNTRIES



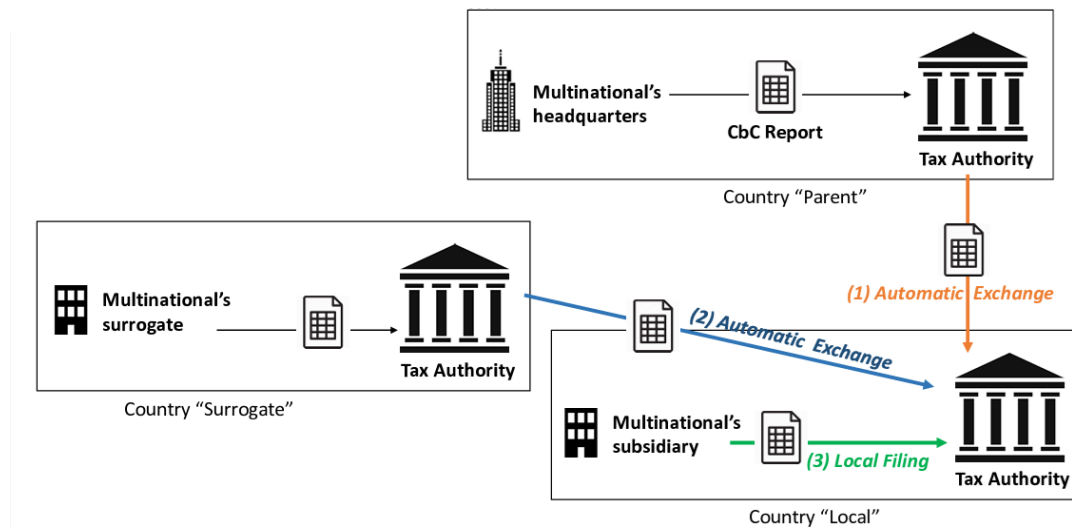
Notes: This figure captures FDI and tax revenues for developing countries from 2010–2022. Panel A presents trends in FDI inward stock and tax revenue relative to a country’s GDP. Panel B shows trends of the gap between FDI and tax revenue for treated and untreated countries before and after the information exchange is implemented. The FDI statistics are derived from the UNCTAD database, the tax data is collected from the IMF World Revenue Database, and GDP information are from the World Bank Development Indicators.

Figure 2. CbCR Information Exchange to Developing Countries



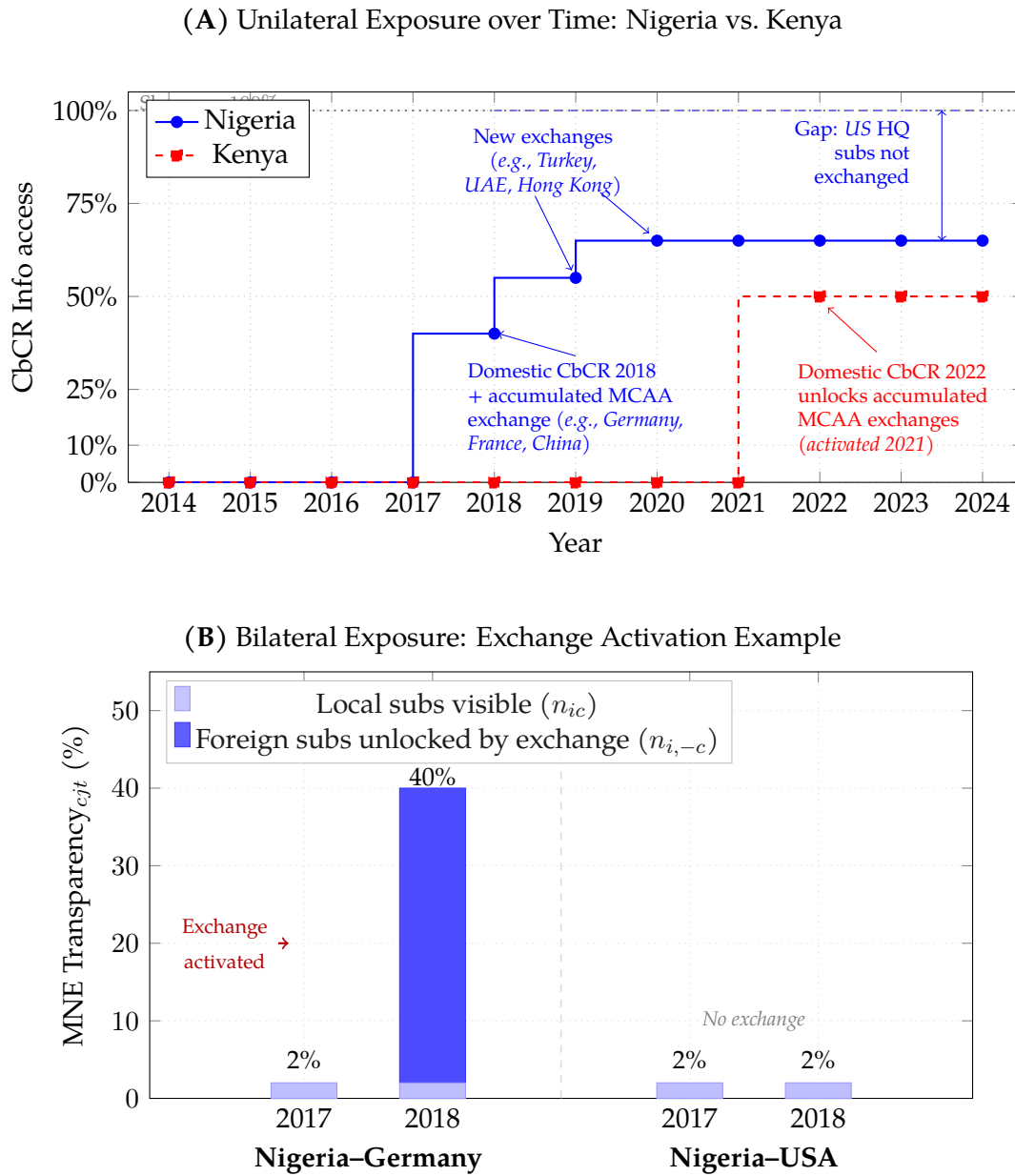
Notes: This figure shows a world map depicting the number of bilateral exchange relationships directed toward developing countries on a per-country basis. A total of 95 countries are included in the coverage as part of the CbCR information exchange, as of 2022.

Figure 3. CbC Report Access Mechanisms for Local Host Countries



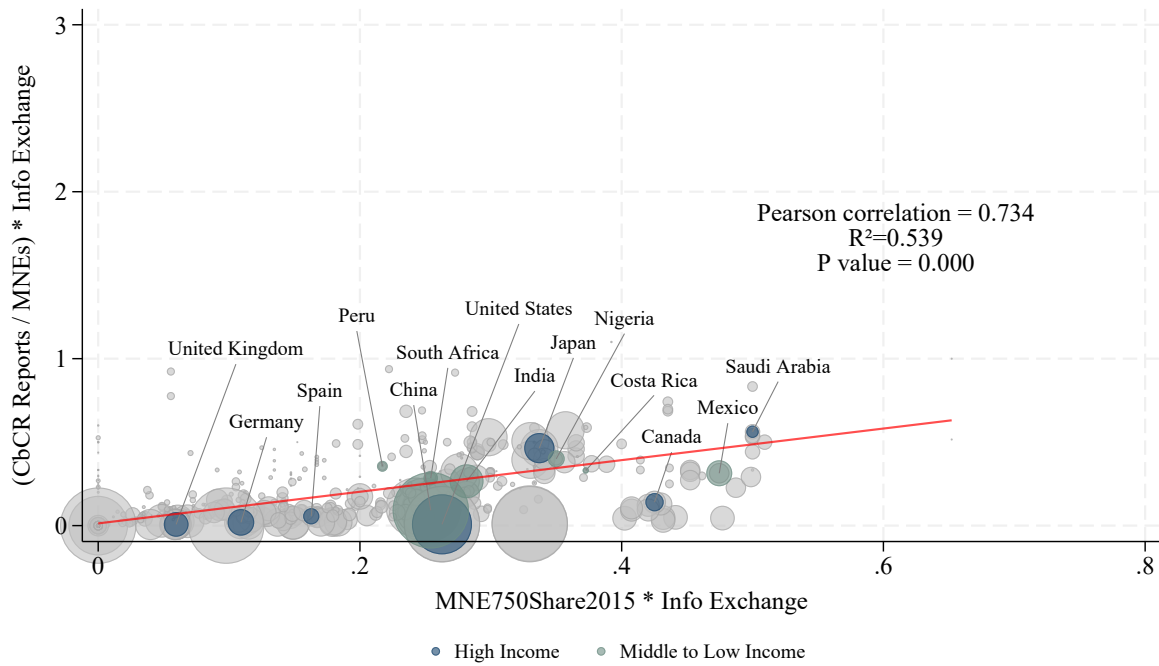
Notes: This figure shows ways in which the local tax authority of the subsidiary's country can receive CbC report of a multinational firm. [Credits: Tax Justice Network](#)

Figure 4. Illustrating MNE Transparency under CbCR Information Exchange



Notes: Panel A illustrates the evolution of unilateral access to information from CbC reports for Nigeria and Kenya. Nigeria introduces domestic CbCR only in 2018; because exchange relationships with many headquarters jurisdictions are already active by then, its information exposure jumps to (an exemplary) 40% of total MNE activity as soon as domestic filing begins, and climbs to about 65% over 2019–2020 as further exchange relationships are activated (for example with Turkey, the United Arab Emirates, and Hong Kong); the remaining gap corresponds to MNEs headquartered in jurisdictions (notably the United States) with which Nigeria has no active exchange relationship. Kenya introduces domestic CbCR in 2022, at which point the exchange relationships it activated via the MCAA in 2021 become usable. The dotted line at 100% denotes the theoretical ceiling $Share_c$, attained only if all in-scope MNEs' reports were exchanged. Panel B illustrates the bilateral MNE Transparency c_{jt} measure for a stylized example. The setup assumes one CbCR-eligible MNE per headquarters country (Germany and the United States), each with $N = 100$ subsidiaries (5 in Nigeria, 95 abroad), plus 50 domestic Nigerian firms, yielding a denominator of 250. In 2017, Nigeria has domestic CbCR but no bilateral exchange agreements; only local subsidiaries of CbCR-eligible MNEs are visible (n_{ic}), producing bilateral transparency of 2% for each pair. In 2018, Nigeria activates exchange with Germany, unlocking the German MNE's 95 foreign subsidiaries ($n_{i,-c}$) and raising bilateral transparency for the Nigeria–Germany pair to 40%. The Nigeria–USA pair remains at 2% absent an exchange agreement. Light bars represent local subsidiaries visible through domestic tax return filing; dark bars represent foreign subsidiaries revealed only through bilateral exchange.

Figure 5. MNE SHARES AND ACTUAL CbCR INFORMATION EXCHANGE BY COUNTRY



Notes: This figure shows the correlation between the exogenous Bartik-style exposure variable and the endogenous measure of actual CbCR information flows. The x-axis plots the product of the pre-determined 2015 share of multinational firms exceeding the EUR 750 million CbCR threshold and the bilateral information exchange indicator ($MNE750Share_{c,j,2015} \times InfoExchange_{c,j,t}$). The y-axis plots the ratio of actual CbCR reports received to the number of multinationals in the host country, conditional on active information exchange. Each circle represents a country, with circle size proportional to GDP as of 2015. High-income countries are shown in blue and developing countries in green. The positive correlation supports the relevance of the exposure variable as a predictor of actual CbCR information flows.

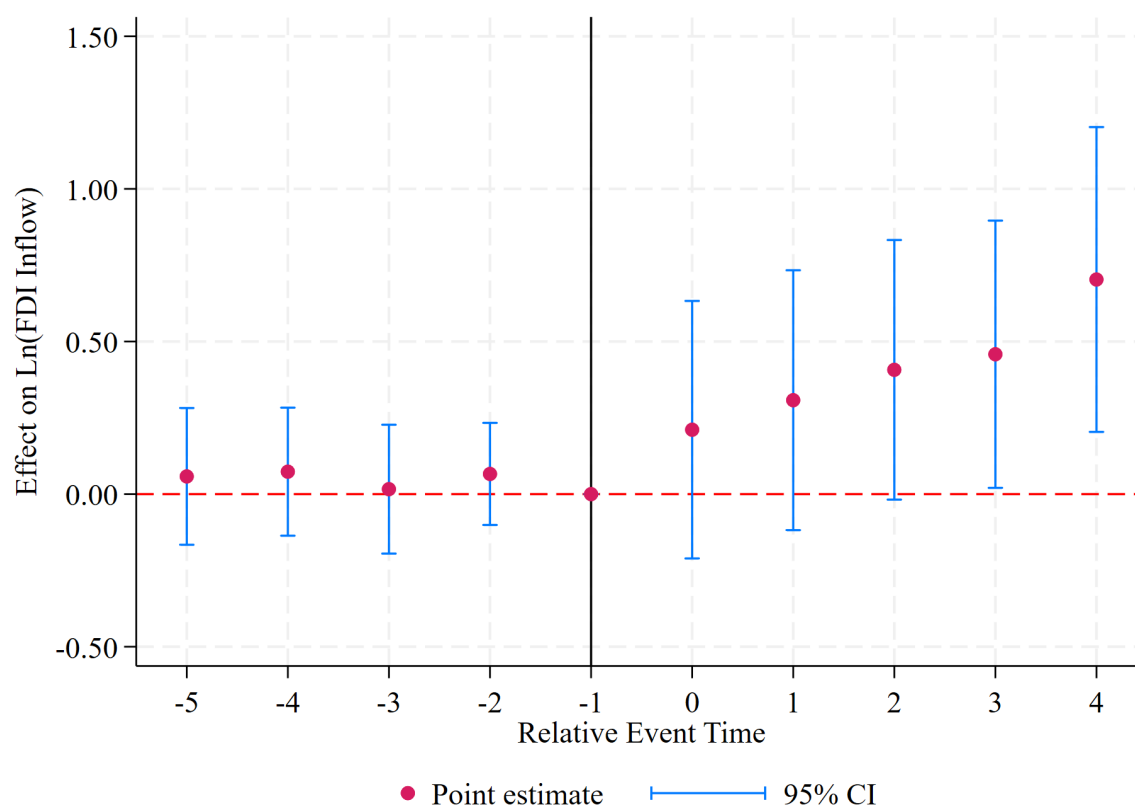
Table 1. INFORMATION EXCHANGE AND BILATERAL FDI

Panel A	Full Sample		High Income		Low Income	
Model: OLS	FE1	FE2	FE1	FE2	FE1	FE2
DV: Ln(FDI Inflow)	(1)	(2)	(3)	(4)	(5)	(6)
<i>MNE Transparency</i>	0.17 (1.44)	0.16 (1.29)	−0.06 (−0.41)	−0.07 (−0.49)	0.60*** (2.84)	0.62*** (3.00)
<i>Information Exchange</i>	−0.01 (−0.13)	−0.06 (−0.45)	0.20 (1.35)	0.24 (1.59)	−0.41** (−2.17)	−0.62*** (−2.95)
Observations	24,804	24,576	11,212	11,177	13,592	13,399
Adj. R ²	0.713	0.725	0.693	0.694	0.712	0.735
Control Variables	Yes	Yes	Yes	Yes	Yes	Yes
Country-Pair FE	Yes	Yes	Yes	Yes	Yes	Yes
Host-Country × Year FE	No	Yes	No	Yes	No	Yes
Year FE	Yes	No	Yes	No	Yes	No

<i>Cross-Section: Level of Corruption in Host Country c</i>						
Panel B	Full Sample		High Income		Low Income	
Model: OLS	High	Low	High	Low	High	Low
DV: Ln(FDI Inflow)	(1)	(2)	(3)	(4)	(5)	(6)
<i>MNE Transparency</i>	0.44 (1.38)	−0.07 (−0.38)	−0.02 (−0.06)	0.26 (1.09)	3.26** (2.26)	1.19 (1.48)
<i>Information Exchange</i>	−0.00 (3.67)	0.31 (2.88)	−0.06 (−0.22)	0.28 (1.12)	−2.64** (−2.00)	−0.73 (−0.97)
Observations	3,961	8,065	2,747	3,425	1,663	2,455
Adj. R ²	0.681	0.704	0.667	0.722	0.630	0.719
Control Variables	Yes	Yes	Yes	Yes	Yes	Yes
Country-Pair FE	Yes	Yes	Yes	Yes	Yes	Yes
Host-Country × Year FE	No	No	No	No	No	No
Year FE	Yes	Yes	Yes	Yes	Yes	Yes

Notes: This table reports the results of estimating the effect of CbCR information exchange on bilateral FDI inflows using OLS. The dependent variable is the natural logarithm of bilateral FDI inflows from home country j to host country c in year t . *Information Exchange* is a binary indicator equal to one if a bilateral CbCR information exchange agreement between countries c and j is active in year t . *MNE Share* denotes the pre-determined share of multinational firms with consolidated revenues exceeding EUR 750 million headquartered in country j with subsidiaries in country c as of 2015. Panel A presents the baseline results for the full sample, high-income host countries, and low-income host countries under two fixed effects specifications: FE1 includes country-pair and year fixed effects; FE2 includes country-pair and host-country×year fixed effects. Panel B splits the sample by the pre-event corruption level of host country c (bottom vs. top quartile). All specifications include bilateral control variables (log GDP, log population, and corporate income tax rates for both host and home countries). Standard errors are clustered at the country-pair level; t -statistics are reported in parentheses. * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$. Columns (5) and (6) use only the bottom and top quartiles of control of corruption, not the full developing-country sample. The baseline effect on that restricted sample is itself about 1.3–1.6.

Figure 6. EVENT STUDY: BILATERAL FDI IN DEVELOPING COUNTRIES



Notes: This figure presents event study estimates of the effect of CbCR information exchange on bilateral FDI inflows to developing host countries c . The dependent variable is the natural logarithm of bilateral FDI inflows from home country j to host country c . The coefficients and 95 percent confidence intervals are plotted relative to the year prior to CbCR exchange activation ($t - 1$). The specification includes country-pair and year fixed effects, bilateral control variables (log GDP and log population for both host and home countries, and corporate income tax rates), and standard errors clustered at the country-pair level. The red circles display the point estimates, the blue lines indicate the 95 percent confidence intervals, and the black line indicates the relative pre-event year ($t - 1$).

Table 2. COUNTRY-LEVEL RESULTS: TAX REVENUE AND INSTITUTIONAL QUALITY

Panel A	Ln(Corporate Tax Revenue) (1)	Control of Corruption (2)	Rule of Law (3)	Governance Effectiveness (4)
<i>MNE Transparency</i> $\times$ <i>Low Income</i>	0.4222*	0.1744*	0.1121	0.0687
	(1.81)	(1.71)	(1.38)	(0.61)
<i>MNE Transparency</i>	-0.1642	-0.0685	-0.0770	-0.0187
	(-1.65)	(-1.18)	(-1.50)	(-0.30)
Observations	1,716	2,228	2,234	2,228
Adj. R ²	0.989	0.975	0.979	0.967
Control Variables	Yes	Yes	Yes	Yes
Country FE	Yes	Yes	Yes	Yes
Year FE	Yes	Yes	Yes	Yes
Panel B	Ln(Corporate Tax Revenue) (1)	Control of Corruption (2)	Rule of Law (3)	Governance Effectiveness (4)
<i>Total Number of Information Exchanges</i> $\times$ <i>Low Income</i>	0.2370**	0.1202*	0.1201**	0.1307*
	(2.01)	(1.88)	(2.27)	(1.80)
<i>Total Number of Information Exchanges</i>	-0.1825**	-0.0489	-0.0876**	-0.0417
	(-2.21)	(-1.09)	(-2.28)	(-0.89)
Observations	1,716	2,228	2,234	2,228
Adj. R ²	0.989	0.975	0.979	0.968
Control Variables	Yes	Yes	Yes	Yes
Country FE	Yes	Yes	Yes	Yes
Year FE	Yes	Yes	Yes	Yes

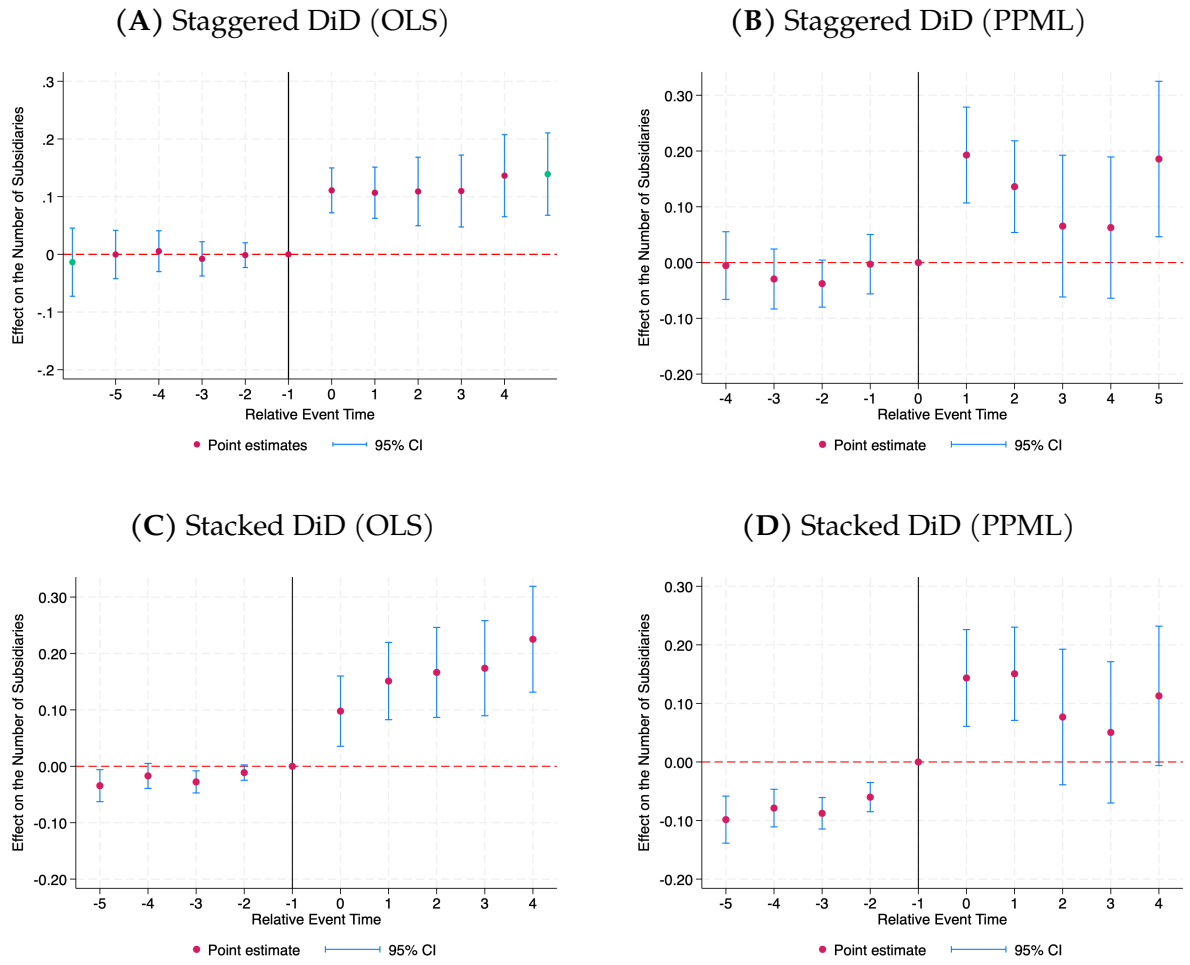
Notes: This table reports the results of estimating the effect of CbCR information exchange on country-level outcomes using OLS. The unit of observation is the country-year. Column (1) uses the natural logarithm of corporate income tax revenue as the dependent variable. Columns (2)–(4) use institutional quality indicators from the World Bank Worldwide Governance Indicators: Control of Corruption, Rule of Law, and Government Effectiveness, respectively. *Information Exchange* $\times$ *MNE Share* is the Bartik-style exposure variable, defined as the product of the pre-determined 2015 share of multinational firms with consolidated revenues exceeding EUR 750 million and the number of active bilateral CbCR information exchange agreements in year t . *Low Income* is a binary indicator equal to one for countries classified as non-high-income by the World Bank. Panel A uses the Bartik-style composite instrument; Panel B uses the total number of active information exchange agreements as an alternative measure. All specifications include country and year fixed effects and control for log population, log GDP, and corporate income tax rates (all lagged one year). Standard errors are clustered at the country level; t -statistics are reported in parentheses. * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$.

Table 3. FIRM-LEVEL RESULTS: CbCR INFORMATION SHARING AND MNE INVESTMENT

Panel A OLS	Full Sample		High Income		Low Income	
DV: Ln(MNE Subs.)	(1)	(2)	(3)	(4)	(5)	(6)
<i>Info Exchange</i> $\times$ <i>CbCR Firm</i>	0.04** (2.50)	0.12*** (4.50)	0.01 (0.46)	0.04 (0.90)	0.07*** (4.10)	0.12*** (3.86)
<i>Information Exchange</i>	-0.10*** (-6.47)	-0.18*** (-8.31)	-0.08*** (-4.91)	-0.15*** (-6.14)	-0.09*** (-4.08)	-0.13*** (-5.36)
Observations	1,478,274	1,500,122	995,637	1,010,682	375,018	381,655
Adj. R ²	0.881	0.523	0.884	0.537	0.847	0.501
Control Variables	Yes	Yes	Yes	Yes	Yes	Yes
Firm $\times$ Host FE	Yes	No	Yes	No	Yes	No
Host $\times$ Year FE	Yes	Yes	Yes	Yes	Yes	Yes
Firm $\times$ Year FE	Yes	Yes	Yes	Yes	Yes	Yes
Country-Pair FE	No	Yes	No	Yes	No	Yes
Panel B PPML	Full Sample		High Income		Low Income	
DV: MNE Subs.	(1)	(2)	(3)	(4)	(5)	(6)
<i>Info Exchange</i> $\times$ <i>CbCR Firm</i>	0.08*** (3.38)	0.19*** (4.72)	0.09*** (3.15)	0.20*** (4.58)	0.06** (2.30)	0.16*** (3.07)
<i>Information Exchange</i>	-0.03* (-1.82)	-0.18*** (-6.34)	-0.01 (-0.45)	-0.16*** (-5.06)	-0.09*** (-3.16)	-0.22*** (-4.99)
Observations	1,478,274	1,500,122	995,637	1,010,682	375,018	381,655
Pseudo R ²	0.952	0.878	0.960	0.892	0.814	0.735
Control Variables	Yes	Yes	Yes	Yes	Yes	Yes
Firm $\times$ Host FE	Yes	No	Yes	No	Yes	No
Host $\times$ Year FE	Yes	Yes	Yes	Yes	Yes	Yes
Firm $\times$ Year FE	Yes	Yes	Yes	Yes	Yes	Yes
Country-Pair FE	No	Yes	No	Yes	No	Yes

Notes: This table reports the results of estimating the effect of CbCR information exchange on multinational firms' subsidiary presence using firm-level panel data. The unit of observation is the firm–host-country–year. In Panel A (OLS), the dependent variable is the natural logarithm of the number of majority-owned subsidiaries of firm i in host country c in year t . In Panel B (PPML), the dependent variable is the count of subsidiaries. *Information Exchange* is a binary indicator equal to one if a bilateral CbCR information exchange agreement between the firm's home country and host country c is active in year t . *CbCR Firm* is a binary indicator equal to one if the firm's consolidated revenue in 2015 exceeds EUR 750 million. The coefficient on the interaction term captures the differential effect of information exchange for CbCR-scope firms relative to firms below the threshold. FE1 includes firm $\times$ host-country, host-country $\times$ year, and firm $\times$ year fixed effects. FE2 includes country-pair, host-country $\times$ year, and firm $\times$ year fixed effects. Standard errors are clustered at the country-pair level; t -statistics are reported in parentheses. * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$.

Figure 7. EVENT STUDY: CbCR INFORMATION EXCHANGE AND MNE INVESTMENT IN DEVELOPING COUNTRIES



Notes: This figure presents event study estimates of the effect of CbCR information exchange on multinational firms' subsidiary counts in developing countries. The dependent variable is the natural logarithm of subsidiaries (OLS, Panel A and Panel C) or the count of subsidiaries (PPML, Panel B and Panel D). The coefficients capture the differential effect for CbCR firms (consolidated revenue exceeding EUR 750 million in 2015) relative to non-CbCR firms, plotted for each year relative to the activation of bilateral CbCR information exchange ($t - 1$ as the omitted baseline). Panel A and Panel B show baseline estimates with country-pair, host-country $\times$ year, and firm $\times$ year fixed effects in a staggered DiD estimation. Panel C and Panel D present stacked cohort estimates following Gormley and Matsa (2011) to address potential negative weighting bias from staggered treatment adoption. The red circles display point estimates and the blue lines represent 95% confidence intervals based on standard errors clustered at the country-pair or the country-pair-cohort level, respectively.

Table 4. INSTITUTIONAL SPILLOVER: CbCR INFORMATION EXCHANGE AND MNE INVESTMENT IN DEVELOPING COUNTRIES

Panel A		Full Sample		
Model: OLS	All firms	CbCR	Non-CbCR	IE Intensity
DV: Ln(MNE Subs.)	(1)	(2)	(3)	(4)
<i>Info Exchange × CbCR Firm</i>	0.111*** (2.93)			
<i>Information Exchange</i>	0.052** (2.23)	0.163*** (3.41)	0.052** (2.07)	
<i>Number of IE Agreements</i>				−0.008 (−0.72)
Observations	375,100	225,695	149,405	49,252
Adj. R ²	0.825	0.812	0.865	0.901
Firm × Host-Country FE	Yes	Yes	Yes	Yes
Firm × Year FE	Yes	Yes	Yes	Yes
Panel B		Untreated Country-Pairs		
Model: OLS	All firms	CbCR	Non-CbCR	IE Intensity
DV: Ln(MNE Subs.)	(1)	(2)	(3)	(4)
<i>IE Elig. × CbCR Firm</i>	0.035 (1.14)			
<i>IE Eligibility</i>	0.074*** (3.69)	0.109*** (2.64)	0.074*** (3.39)	
<i>Number of IE Agreements</i>				−0.005 (−0.32)
Observations	239,306	157,469	81,837	2,746
Adj. R ²	0.853	0.836	0.900	0.925
Firm × Host-Country FE	Yes	Yes	Yes	Yes
Firm × Year FE	Yes	Yes	Yes	Yes

Notes: This table reports OLS estimates for the effect of information exchange agreements and the institutional spillover it triggers on multinational firms' investment in developing host countries. The unit of observation is the firm–host-country–year, and the sample is restricted to developing host countries. The dependent variable is the natural logarithm of the number of majority-owned subsidiaries of firm i in host country c in year t . *CbCR Firm* is a binary indicator equal to one if firm i 's consolidated revenue in 2015 exceeds EUR 750 million; *Information Exchange* (Panel A) is a binary indicator equal to one if the bilateral CbCR information exchange agreement between firm i 's home country and host country c is active in year t ; *IE Eligibility* (Panel B) is a binary indicator equal to one if host country c has any active exchange agreement with a home country other than firm i 's own in year t ; and *Number of IE Agreements* is the host-year count of active inbound exchange partners (in deciles). Panel A reports results across all country-pairs, while Panel B reports spillover tests on untreated country-pairs–firm–host-year cells where host country c already receives CbC reports from at least one home country, but not from firm i 's own home country j . Columns (1) uses all sample firms, respectively, and includes the interaction with *CbCR Firm*; Columns (2) restricts the sample to CbCR firms and Columns (3) to non-CbCR firms; and Columns (4) restricts the sample to non-CbCR firms in host countries already receiving from at least one partner. All specifications include firm × host-country and firm × year fixed effects. Standard errors are clustered at the country-pair level in Panel A columns (1)–(3) and at the host-country level in Panel A column (4) and throughout Panel B. * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$.

Table 5. TAX ADMINISTRATION QUALITY: EVIDENCE FROM WORLD BANK ENTERPRISE SURVEYS

	Full Sample		Low Income Countries	
Model: OLS				
DV: Bribes	(1)	(2)	(3)	(4)
<i>Info Exchange</i> $\times$ <i>CbCR Firm</i> $\times$ <i>Foreign Owned</i>	−0.0804** (−2.10)		−0.1643*** (−2.69)	
<i>Total Info Exchanges</i> $\times$ <i>Foreign Owned</i>		−0.0003** (−2.29)		−0.0006** (−2.03)
Observations	1,705	2,921	1,517	2,320
Adj. R ²	0.037	0.044	0.046	0.044
Control Variables	Yes	Yes	Yes	Yes
<i>Host-Country</i> $\times$ <i>Year FE</i>	Yes	Yes	Yes	Yes
<i>Sector FE</i>	Yes	Yes	Yes	Yes

Notes: This table reports estimates of the effect of CbCR information exposure on firms' informal payments to government officials, using firm-level data from the World Bank Enterprise Surveys (WBES). The unit of observation is a firm surveyed in a given country and year; the sample covers firms surveyed between 2010 and 2023 that answered the bribery question, which is asked of firms reporting a tax inspection in the preceding 12 months. The dependent variable is the share of contract value typically paid as informal gifts to government officials (WBES question J.6, scale 0–100). *Foreign Owned* equals one if the firm has at least 10% foreign private ownership. In Columns (1) and (3), the treatment is the triple interaction of the Bartik-style exposure measure ($MNE Transparency_{c,t} \times CbCR Firm$) with *Foreign Owned*; in Columns (2) and (4), it is the host country's number of active bilateral CbCR exchange agreements interacted with *Foreign Owned*. All specifications include host-country $\times$ survey-year and sector fixed effects, so identification comes from differences between foreign-owned and domestic firms within the same country, year, and sector. Standard errors are clustered at the country level and *t*-statistics are reported in parentheses. * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$.

Don't Fear the Sunlight: Tax Transparency and Multinational Investment in the Global South

Online Appendix

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Marcel Olbert

July 28, 2026

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A.1. Additional Institutional Details

Figure A1. Country-by-Country Disclosure Template

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

Name of the MNE Group: Fiscal Year concerned: Currency used:										
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 ⁽¹⁾
	1.														
	2.														
	3.														
	1.														
	2.														
	3.														

⁽¹⁾ Please specify the nature of the activity of the Constituent Entity in the "Additional information"

Table 3. Additional information

Name of the MNE Group: Fiscal Year concerned:	
Please include any further brief information or explanation you consider necessary or that would facilitate the understanding of the compulsory information provided in the country-by-country report	

Notes: This figure depicts the template report firms are required to submit to local tax authorities under the CbCR mandate as of 1 January 2016 that was published as part of the European Council Directive 2016/881/EU. Source: <https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32016L0881&from=EN>.

A.2. Variables and Summary Statistics

A.2.1. Variable Definitions

Table A1. Variable Definitions and Data Sources

A.3

Variable	Definition	Source
<i>Panel A: Treatment and policy variables</i>		
Information Exchange _{<i>c,j,t</i>}	Binary indicator equal to one if host country <i>c</i> and home country <i>j</i> have an active bilateral CbCR automatic information exchange agreement in year <i>t</i> , and zero otherwise. Activation requires both jurisdictions to have signed the CbCR Multilateral Competent Authority Agreement (MCAA) and to have listed each other as intended exchange partners.	OECD CbCR Exchange Relationships
MNE750 Share _{<i>c,j,2015</i>}	Share of multinational firms headquartered in country <i>j</i> with at least one majority-owned subsidiary in host country <i>c</i> whose consolidated revenue in fiscal year 2015 exceeds EUR 750 million (the CbCR filing threshold), measured as of 2015. Used as the pre-determined “share” component in the Bartik-style instrument.	Orbis
MNE Transparency _{<i>c,t</i>} (country-level)	Bartik-style exposure variable at the country level. Defined as the product of <i>MNE750 Share_{c,j,2015}</i> and the number of active bilateral CbCR information exchange agreements of country <i>c</i> in year <i>t</i> , aggregated across all partner jurisdictions <i>j</i> .	Orbis; OECD
MNE Transparency _{<i>c,j,t</i>} (bilateral)	Bartik-style exposure variable at the bilateral level. Defined as <i>MNE750 Share_{c,j,2015}</i> × <i>Information Exchange_{c,j,t}</i> .	Orbis; OECD
CbCR Firm _{<i>i</i>}	Binary indicator equal to one if firm <i>i</i> ’s consolidated revenue in fiscal year 2015 exceeds EUR 750 million, the regulatory threshold for mandatory Country-by-Country Reporting under OECD BEPS Action 13.	Orbis
Information Exchanges _{<i>c,t</i>}	Count of active bilateral CbCR information exchange agreements of country <i>c</i> in year <i>t</i> . Used as an alternative (reduced-form) treatment variable in the unilateral country-level regressions.	OECD

Table A1. Variable Definitions and Data Sources (continued)

Variable	Definition	Source
IE Eligibility _{<i>i,c,t</i>}	Binary indicator equal to one if host country <i>c</i> has an active bilateral CbCR information exchange agreement with at least one home country <i>other than</i> firm <i>i</i> 's own in year <i>t</i> , and zero otherwise. Treatment in the firm-level institutional-spillover test on untreated country-pairs.	OECD
Number of IE Agreements _{<i>c,t</i>}	Host-year count of active inbound CbCR information exchange agreements of host country <i>c</i> in year <i>t</i> (the number of home countries whose reports the host receives), entered as within-sample deciles. Intensive-margin treatment in the firm-level spillover test.	OECD
<i>Panel B: Outcome variables</i>		
Ln(MNE Subs.) _{<i>i,c,t</i>}	Natural logarithm of the number of majority-owned subsidiaries of multinational firm <i>i</i> incorporated in host country <i>c</i> in year <i>t</i> . Majority ownership is defined as direct or indirect equity stakes exceeding 50% (unlogged for PPML).	Orbis
Ln(FDI Inflow) _{<i>c,j,t</i>}	Natural logarithm of bilateral foreign direct investment inflows from home country <i>j</i> to host country <i>c</i> in year <i>t</i> (in current USD millions).	UNCTAD Bilateral FDI
Ln(Corporate Tax Revenue) _{<i>c,t</i>}	Natural logarithm of corporate income tax revenue of country <i>c</i> in year <i>t</i> , denominated in local currency units.	UNU-WIDER GRD; IMF WoRLD
Control of Corruption _{<i>c,t</i>}	Estimate of the extent to which public power is exercised for private gain, including petty and grand corruption. Ranges from −2.5 (weak) to 2.5 (strong governance).	World Bank WGI
Rule of Law _{<i>c,t</i>}	Estimate of confidence in and adherence to the rules of society, including contract enforcement, property rights, and the courts. Ranges from −2.5 to 2.5.	World Bank WGI
Government Effectiveness _{<i>c,t</i>}	Estimate of the quality of public services, civil service independence, policy formulation, and credibility of government commitment. Ranges from −2.5 to 2.5.	World Bank WGI
Political Stability _{<i>c,t</i>}	Estimate of the likelihood of political instability or politically motivated violence, including terrorism. Ranges from −2.5 to 2.5.	World Bank WGI
<i>Panel C: Control variables — Country-level</i>		

Table A1. Variable Definitions and Data Sources (continued)

Variable	Definition	Source
$\text{Ln}(\text{GDP})_{c,t}$	Natural logarithm of gross domestic product of country c in year t (in current USD). Lagged one year in regressions.	World Bank WDI
$\text{Ln}(\text{Population})_{c,t}$	Natural logarithm of total population of country c in year t . Lagged one year in regressions.	World Bank WDI
$\text{CIT Rate}_{c,t}$ (%)	Statutory corporate income tax rate of country c in year t , including surcharges and sub-central rates where applicable.	KPMG; Tax Foundation
Regulatory Quality $_{c,t}$	Estimate of the government's ability to formulate and implement sound policies and regulations that promote private sector development. Ranges from -2.5 to 2.5 .	World Bank WGI
Low Income $_c$	Binary indicator equal to one for countries not classified as "High income" by the World Bank, and zero otherwise. Time-invariant based on the World Bank income classification as of 2015.	World Bank
<i>Panel D: Control variables — Bilateral</i>		
$\text{Ln}(\text{GDP})_{j,t}$	Natural logarithm of gross domestic product of home country j in year t (in current USD). Lagged one year in regressions.	World Bank WDI
$\text{Ln}(\text{Population})_{j,t}$	Natural logarithm of total population of home country j in year t . Lagged one year in regressions.	World Bank WDI
$\text{CIT Rate}_{j,t}$ (%)	Statutory corporate income tax rate of home country j in year t .	KPMG; Tax Foundation
<i>Panel E: Control variables — Firm-level</i>		
$\text{Ln}(\text{Revenue})_{i,t}$	Natural logarithm of consolidated operating revenue of firm i in year t (in EUR). Lagged one year in regressions. Winsorized at the 1st and 99th percentiles.	Orbis
Fixed Asset Growth $_{i,t}$ (%)	Year-over-year percentage change in tangible fixed assets of firm i . Lagged one year in regressions. Winsorized at the 1st and 99th percentiles.	Orbis
Liquidity $_{i,t}$	Current ratio of firm i , defined as current assets divided by current liabilities. Lagged one year in regressions. Winsorized at the 1st and 99th percentiles.	Orbis

Table A1. Variable Definitions and Data Sources (continued)

Variable	Definition	Source
$ROA_{i,t}$	Return on assets of firm i , defined as EBIT scaled by total assets (in %). Lagged one year in regressions. Winsorized at the 1st and 99th percentiles.	Orbis
$Leverage_{i,t}$ (%)	Financial leverage of firm i , defined as non-current liabilities (long-term debt) scaled by total assets (in %). Lagged one year in regressions. Winsorized at the 1st and 99th percentiles.	Orbis
$Tax\ Aggressive_i$	Binary indicator equal to one if firm i falls in the more tax-aggressive half of a pre-reform (pre-2016) median split, and zero otherwise. Each column of the tax-aggressiveness table uses a different proxy: the number of haven-country affiliates under an inclusive haven list (1) or the “dot-list” definition (2), a low effective tax rate (3), or a low/negative differential between the effective and statutory tax rate (4). Used as a moderator in the firm-level heterogeneity test.	Orbis
<i>Panel F: Corroborating-analysis variables</i>		
<i>FDI projects</i>		
$New\ Subsidiaries_{i,c,t}$	Number of Orbis subsidiary additions of firm i in host country c attributed to a project year, summed over the project year and the following three years and truncated at the next project.	Orbis
$Capital\ Expenditures_{i,c,t}$	Capital expenditure of firm i 's investment project(s) in host country c (in US\$ millions).	fDi Markets
$Jobs_{i,c,t}$	Number of jobs created by firm i 's investment project(s) in host country c .	fDi Markets
<i>Aggregate CbCR statistics</i>		
$\ln(Overall\ Entities)_{c,j,t}$	Natural logarithm of the total number of constituent entities that country j 's multinationals report in host country c in year t .	OECD Aggregate CbCR
$\ln(Operating\ Entities)_{c,j,t}$	Natural logarithm of the number of reported entities engaged in operating business functions (e.g., manufacturing, sales, services, R&D, and administration).	OECD Aggregate CbCR
$\ln(Passive\ Entities)_{c,j,t}$	Natural logarithm of the number of reported entities engaged in passive functions (holding of shares, intellectual property, and intra-group finance).	OECD Aggregate CbCR

Table A1. Variable Definitions and Data Sources (continued)

Variable	Definition	Source
$\text{Ln}(\text{Total Revenue})_{c,j,t}$	Natural logarithm of total revenues reported by country j 's multinationals in host country c in year t (in USD).	OECD Aggregate CbCR
$\text{Ln}(\text{Tangible Assets})_{c,j,t}$	Natural logarithm of tangible assets other than cash and cash equivalents reported in host country c (in USD).	OECD Aggregate CbCR
$\text{Ln}(\text{Employees})_{c,j,t}$	Natural logarithm of the number of employees reported in host country c .	OECD Aggregate CbCR
$\text{Ln}(\text{Tax Paid})_{c,j,t}$	Natural logarithm of corporate income tax paid on a cash basis in host country c (in USD).	OECD Aggregate CbCR
$\text{Ln}(\text{Tax Accrued})_{c,j,t}$	Natural logarithm of corporate income tax accrued in host country c (in USD).	OECD Aggregate CbCR
Effective Tax Rate $_{c,j,t}$	Corporate income tax paid divided by profit before tax in host country c . Enters in levels.	OECD Aggregate CbCR

Notes: This table defines all variables used in the empirical analyses. Panel A describes the treatment and policy variables. Panel B lists the outcome variables. Panels C–E describe the control variables at the country, bilateral, and firm levels, respectively, together with the firm-level tax-aggressiveness indicator. Panel F describes the variables used in the corroborating analyses (the fDi Markets and the aggregate CbCR statistics). All controls are lagged by one year relative to the dependent variable. Subscripts: c = host country; j = home country; i = firm; t = year. GRD = Government Revenue Dataset; WDI = World Development Indicators; WGI = Worldwide Governance Indicators; WoRLD = World Revenue Longitudinal Database.

A.2.2. Summary Statistics

Table A2. SUMMARY STATISTICS

Panel A: Country-Level Sample												
	Full Sample						High-Income			Developing		
	N	Mean	SD	P25	P50	P75	N	Mean	SD	N	Mean	SD
MNE Transparency _{c,t}	2,664	0.08	0.20	0.00	0.00	0.00	871	0.18	0.27	1,793	0.03	0.13
Information Exchanges _{c,t}	2,664	0.15	0.31	0.00	0.00	0.00	871	0.33	0.40	1,793	0.06	0.21
Ln(Corporate Tax Revenue) _{c,t}	1,925	7.57	3.51	5.42	7.73	9.77	713	7.12	2.95	1,212	7.83	3.77
Control of Corruption _{c,t}	2,565	−0.05	1.00	−0.80	−0.28	0.65	835	1.02	0.76	1,730	−0.56	0.63
Rule of Law _{c,t}	2,598	−0.05	0.99	−0.80	−0.20	0.69	869	1.01	0.63	1,729	−0.58	0.65
Government Effectiveness _{c,t}	2,590	−0.03	1.00	−0.76	−0.14	0.72	861	1.06	0.61	1,729	−0.58	0.65
Ln(GDP) _{c,t}	2,567	24.24	2.31	22.73	24.15	26.06	845	25.25	2.36	1,722	23.74	2.12
Ln(Population) _{c,t}	2,625	15.43	2.27	14.10	15.80	17.08	845	14.84	2.33	1,780	15.71	2.19
CIT Rate _{c,t} (%)	2,520	23.28	8.83	19.00	25.00	30.00	864	20.53	9.33	1,656	24.71	8.21

Notes: This table reports summary statistics for the three samples used in our analysis. Panel A presents country-level statistics. *MNE Transparency_{c,t}* is the Bartik-style exposure variable, defined as the product of the pre-determined 2015 share of multinationals exceeding the EUR 750 million CbCR threshold (*MNE750 Share_{c,2015}*) and the number of active bilateral CbCR information exchange agreements in year *t*. *Information Exchanges_{c,t}* is the count of active bilateral exchange agreements. *Corporate Tax Revenue* is from the UNU-WIDER Government Revenue Dataset (in local currency units). Institutional quality variables are from the World Bank Worldwide Governance Indicators (scale: −2.5 to 2.5). GDP and population data are from the World Bank. CIT rates are statutory corporate income tax rates. The sample covers 2010–2022. Income classification follows the World Bank. For subsamples, we report N, Mean, and SD only.

Panel B: Bilateral Country-Pair-Level Sample

	Full Sample						High-Income Host			Developing Host		
	N	Mean	SD	P25	P50	P75	N	Mean	SD	N	Mean	SD
MNE Transparency _{c,j,t}	59,900	0.22	0.41	0.00	0.00	0.11	28,234	0.33	0.46	31,666	0.12	0.32
Information Exchange _{c,j,t}	65,441	0.23	0.42	0.00	0.00	0.00	30,198	0.37	0.48	35,243	0.11	0.31
MNE750 Share _{c,j,2015}	59,900	0.72	0.37	0.58	0.92	1.00	28,234	0.71	0.35	31,666	0.73	0.38
Ln(FDI Inflow) _{c,j,t}	30,138	3.75	3.21	2.08	4.04	5.82	13,262	4.41	3.24	16,876	3.24	3.09
Ln(GDP) _{c,t}	63,366	25.45	2.12	23.87	25.44	26.88	29,666	26.11	2.04	33,700	24.87	2.01
Ln(Population) _{c,t}	64,677	16.11	2.13	15.13	16.17	17.61	29,666	15.63	2.02	35,011	16.52	2.13
CIT Rate _{c,t} (%)	64,687	22.71	8.72	18.50	25.00	30.00	30,184	21.01	9.17	34,503	24.19	8.02
Ln(GDP) _{j,t}	63,492	27.00	1.92	26.26	27.07	28.31	29,195	26.80	1.93	34,297	27.18	1.89
Ln(Population) _{j,t}	64,304	16.71	2.22	15.53	16.99	18.02	29,611	16.51	2.27	34,693	16.87	2.16
CIT Rate _{j,t} (%)	64,945	23.54	8.53	20.00	25.00	29.94	29,861	22.97	8.51	35,084	24.02	8.51
Control of Corruption _{c,t}	64,150	0.23	1.04	-0.59	0.02	1.13	30,123	1.11	0.75	34,027	-0.54	0.52

Notes: Panel B presents statistics at the bilateral country-pair level (host country c , home country j , year t). $MNE\ Transparency_{c,j,t}$ is the bilateral Bartik-style instrument, defined as the product of the pre-determined bilateral MNE750 share and the information exchange indicator. $Information\ Exchange_{c,j,t}$ is a binary indicator equal to one if a CbCR exchange agreement between c and j is active. $MNE750\ Share_{c,j,2015}$ is the share of MNEs headquartered in j with subsidiaries in c that exceed the EUR 750 million revenue threshold, measured as of 2015. Bilateral FDI data are from UNCTAD. Subscript c denotes host-country variables; subscript j denotes home-country variables. The sample covers 2010–2022.

Panel C: Firm-Level Sample

	All Firms						CbCR Firms (Rev $\geq$ 750m)			Non-CbCR (Rev < 750m)		
	N	Mean	SD	P25	P50	P75	N	Mean	SD	N	Mean	SD
<i>Dependent and treatment variables</i>												
Subsidiary Count $_{i,c,t}$	1,790,066	13.08	149.44	1.00	2.00	5.00	702,456	23.55	234.75	1,087,610	6.32	32.38
Ln(Subsidiary Count) $_{i,c,t}$	1,790,066	0.97	1.18	0.00	0.69	1.61	702,456	1.02	1.36	1,087,610	0.93	1.05
CbCR Firm $_i$	1,790,066	0.39	0.49	0.00	0.00	1.00	702,456	1.00	0.00	1,087,610	0.00	0.00
Information Exchange $_{c,j,t}$	1,790,066	0.28	0.45	0.00	0.00	1.00	702,456	0.35	0.48	1,087,610	0.24	0.43
<i>Firm-level controls</i>												
Ln(Revenue) $_{i,t}$	1,790,066	19.76	2.86	17.98	19.86	21.83	702,456	22.47	1.32	1,087,610	18.01	2.14
Fixed Asset Growth $_{i,t}$ (%)	1,455,210	−3.05	43.17	−9.03	0.80	10.92	576,402	0.58	27.52	878,808	−5.43	50.74
Liquidity $_{i,t}$	1,744,833	14.93	14.62	4.92	10.36	19.77	698,931	11.93	9.87	1,045,902	16.93	16.78
ROA $_{i,t}$	1,479,047	2.64	13.53	0.50	3.65	7.58	579,338	4.96	7.09	899,709	1.14	16.21
Leverage $_{i,t}$ (%)	1,731,564	15.50	16.27	1.14	11.48	23.93	697,344	19.89	14.99	1,034,220	12.54	16.43
<i>Host-country controls</i>												
Ln(Population) $_{c,t}$	1,761,147	17.22	2.06	15.99	17.45	18.23	693,206	17.11	2.04	1,067,941	17.29	2.06
Regulatory Quality $_{c,t}$	1,763,002	0.99	0.82	0.41	1.23	1.71	693,864	0.86	0.86	1,069,138	1.08	0.79
Ln(GDP) $_{c,t}$	1,733,341	27.41	1.81	26.47	27.46	28.62	683,743	27.13	1.86	1,049,598	27.60	1.76
CIT Rate $_{c,t}$ (%)	1,787,880	24.16	7.84	20.00	25.00	29.94	701,450	24.23	8.04	1,086,430	24.11	7.70

Notes: Panel C presents statistics at the firm–host-country–year level. The unit of observation is firm i (headquartered in country j) with subsidiaries in host country c in year t . *Subsidiary Count* $_{i,c,t}$ is the number of majority-owned subsidiaries of firm i in country c . *CbCR Firm* $_i$ is a binary indicator equal to one if firm i 's consolidated revenue in 2015 exceeds EUR 750 million. *Information Exchange* $_{c,j,t}$ is a binary indicator for an active bilateral CbCR exchange agreement. Firm-level financial variables are from Orbis consolidated accounts (lagged one year in regressions). *ROA* is return on assets; *Liquidity* is the current ratio; *Leverage* is total debt to total assets. Host-country controls are from the World Bank. Regulatory Quality is from the Worldwide Governance Indicators (scale: −2.5 to 2.5). The sample covers 2010–2022. For subsamples, we report N, Mean, and SD only.

Panel D: FDI Projects Sample

	N	Mean	SD	P25	P50	P75
New Subsidiaries _{<i>i,c,t</i>}	1,589	1.19	10.01	0.00	0.00	1.00
Capital Expenditures (US\$ m) _{<i>i,c,t</i>}	1,589	122.73	530.24	6.80	24.60	85.00
Jobs _{<i>i,c,t</i>}	1,589	255.20	532.27	23.00	71.00	230.00

Notes: Panel D presents statistics for the project level sample ([Table A7](#)), covering matched Orbis and fDi Markets firms with at least one FDI project in an African host over 2011–2019. The unit of observation is the firm–host-country–project-year level. *New Subsidiaries* is the number of Orbis subsidiary additions attributed to the project year, and capital expenditure and jobs are from fDi Markets.

Panel E: Aggregate CbCR Sample

	N	Mean	SD	P25	P50	P75
Information Exchange _{c,j,t}	1,013	0.55	0.50	0.00	1.00	1.00
Ln(Overall Entities) _{c,j,t}	1,013	4.80	1.24	3.97	4.75	5.48
Ln(Operating Entities) _{c,j,t}	1,013	4.88	1.29	4.01	4.86	5.61
Ln(Passive Entities) _{c,j,t}	1,013	2.69	1.47	1.61	2.77	3.66
Ln(Total Revenue) _{c,j,t}	1,013	22.14	1.80	20.93	22.18	23.37
Ln(Tangible Assets) _{c,j,t}	1,013	21.25	1.88	19.96	21.38	22.62
Ln(Employees) _{c,j,t}	1,013	9.87	1.73	8.66	9.99	11.03
Ln(Tax Paid) _{c,j,t}	1,013	17.97	1.98	16.55	18.05	19.45
Ln(Tax Accrued) _{c,j,t}	1,013	17.92	2.00	16.49	17.96	19.39
Effective Tax Rate _{c,j,t}	1,013	0.27	0.68	0.12	0.23	0.38

Notes: Panel E presents statistics for the aggregate CbCR sample (Table A8), at the host-country–home-country–year level and restricted to developing hosts over 2016–2021. Variables enter as used in the regressions, with entity counts, revenue, assets, employees, and taxes in natural logarithms and the effective tax rate in levels. *Information Exchange* equals one once the host receives the home country’s CbC reports and its own domestic CbCR framework is in force. Only the full sample is reported.

A.2.3. Treatment Variation at the MNE Level

Table A3. MNE-LEVEL VARIATION IN SUBSIDIARY PRESENCE ACROSS INFORMATION EXCHANGE REGIMES

Year	All MNEs			CbCR MNEs (Rev $\geq$ 750m)			Non-CbCR MNEs (Rev < 750m)		
	Unique MNEs	MNEs in IE & non-IE ctys.	Avg. subs. per MNE	Unique MNEs	MNEs in IE & non-IE ctys.	Avg. subs. per MNE	Unique MNEs	MNEs in IE & non-IE ctys.	Avg. subs. per MNE
2010	10,885	1,827	6.6	2,468	1,026	14.9	8,417	801	4.2
2011	12,194	2,071	6.7	2,666	1,130	15.4	9,528	941	4.2
2012	14,006	2,495	6.9	2,892	1,287	16.7	11,114	1,208	4.4
2013	15,969	2,909	7.3	3,174	1,514	18.4	12,795	1,395	4.6
2014	19,451	3,387	7.2	3,439	1,675	18.7	16,012	1,712	4.7
2015	24,707	4,152	8.5	3,810	1,884	25.6	20,897	2,268	5.3
2016	23,166	4,142	9.1	3,674	1,859	27.0	19,492	2,283	5.7
2017	21,405	4,279	10.2	3,652	1,939	29.2	17,753	2,340	6.2
2018	20,138	4,266	11.9	3,559	1,939	33.8	16,579	2,327	7.2
2019	19,249	4,290	16.8	3,476	1,922	50.2	15,773	2,368	9.4
2020	18,467	4,277	18.0	3,393	1,938	54.1	15,074	2,339	9.9
2021	17,421	4,208	19.7	3,305	1,901	59.0	14,116	2,307	10.5
2022	14,994	3,899	19.0	3,120	1,819	49.6	11,874	2,080	10.9

Notes: This table presents descriptive statistics on multinational firms' subsidiary presence across host countries with and without active CbCR information exchange agreements. The unit of observation is the MNE-year. *Unique MNEs* is the number of distinct multinational parent firms with at least one majority-owned subsidiary in the sample in a given year. *MNEs in IE & non-IE ctys.* counts the subset of MNEs that simultaneously maintain subsidiaries in at least one host country with an active information exchange agreement and at least one host country without such an agreement. *Avg. subs. per MNE* is the mean number of majority-owned subsidiaries per multinational across all host countries. The left panel reports statistics for all MNEs; the center panel restricts to CbCR-mandated firms with consolidated revenue of at least EUR 750 million in 2015; the right panel reports statistics for firms below this threshold. Subsidiary ownership data are from Orbis; revenue data are from consolidated financial statements as of fiscal year 2015.

A.3. Additional Firm-Level Analyses

A.3.1. Stacked Difference-in-Differences

Table A4. STACKED DIFFERENCE-IN-DIFFERENCES: CbCR INFORMATION SHARING AND MNE INVESTMENT

Panel A		Full Sample		High Income		Low Income	
Model: OLS		FE1	FE2	FE1	FE2	FE1	FE2
DV: Ln(MNE Subs.)		(1)	(2)	(3)	(4)	(5)	(6)
<i>Info Exchange</i> × <i>CbCR Firm</i>		0.02*	0.21***	−0.00	0.14*	0.05***	0.18***
		(1.72)	(3.80)	(−0.05)	(1.65)	(4.04)	(4.90)
<i>Information Exchange</i>		−0.07***	−0.15***	−0.06***	−0.14***	−0.05***	−0.07***
		(−12.48)	(−16.76)	(−9.60)	(−12.70)	(−7.43)	(−7.00)
Observations		6,012,990	6,215,428	3,864,282	4,007,658	1,580,803	1,637,390
Adj. R ²		0.915	0.554	0.917	0.567	0.879	0.519
Firm × Host FE × Cohort		Yes	No	Yes	No	Yes	No
Host × Year FE × Cohort		Yes	Yes	Yes	Yes	Yes	Yes
Firm × Year FE × Cohort		Yes	Yes	Yes	Yes	Yes	Yes
Country-Pair FE × Cohort		No	Yes	No	Yes	No	Yes
Panel B		Full Sample		High Income		Low Income	
Model: PPML		FE1	FE2	FE1	FE2	FE1	FE2
DV: MNE Subs.		(1)	(2)	(3)	(4)	(5)	(6)
<i>Info Exchange</i> × <i>CbCR Firm</i>		0.07***	0.16***	0.08***	0.13**	0.03**	0.18***
		(3.91)	(3.36)	(3.73)	(2.19)	(2.10)	(4.09)
<i>Information Exchange</i>		−0.03***	−0.12***	−0.02***	−0.07***	−0.04***	−0.06***
		(−6.64)	(−5.98)	(−3.51)	(−2.63)	(−4.49)	(−3.53)
Observations		6,012,990	6,215,428	3,864,282	4,007,658	1,580,803	1,637,390
Pseudo R ²		0.963	0.911	0.970	0.922	0.801	0.729
Firm × Host FE × Cohort		Yes	No	Yes	No	Yes	No
Host × Year FE × Cohort		Yes	Yes	Yes	Yes	Yes	Yes
Firm × Year FE × Cohort		Yes	Yes	Yes	Yes	Yes	Yes
Country-Pair FE × Cohort		No	Yes	No	Yes	No	Yes

Notes: This table reports stacked difference-in-differences estimates of the effect of CbCR information exchange on multinational firms' subsidiary presence. All fixed effects are interacted with cohort indicators; observations are weighted by the inverse of their frequency in the stacked sample, which corrects for control units that appear in more than one cohort. In Panel A (OLS), the dependent variable is the natural logarithm of the number of majority-owned subsidiaries. In Panel B (PPML), the dependent variable is the count of subsidiaries. *Information Exchange* is a binary indicator for an active bilateral CbCR exchange agreement. *CbCR Firm* equals one if the firm's consolidated revenue in 2015 exceeds EUR 750 million. FE1 includes firm×host-country, host-country×year, and firm×year fixed effects. FE2 includes country-pair, host-country×year, and firm×year fixed effects. Standard errors are clustered at the country-pair-cohort level; *t*-statistics are reported in parentheses. **p* < 0.1, ***p* < 0.05, ****p* < 0.01.

A.3.2. Regression Discontinuity Design

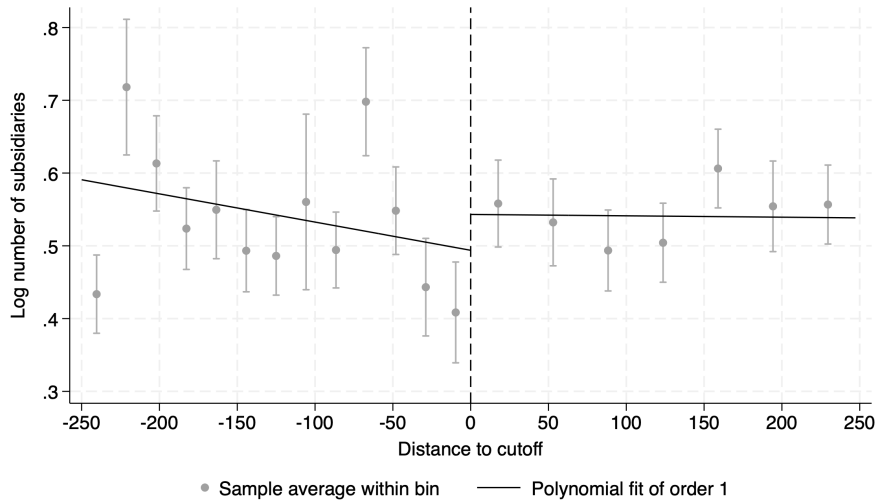
Table A5. REGRESSION DISCONTINUITY: CbCR INFORMATION SHARING AND MNE INVESTMENT

Panel A (Full Sample)	(1)	(2)	(3)
<i>RD-Estimate</i>	0.074*** (0.024)	0.152*** (0.026)	0.186*** (0.030)
Orig. Observations	447,888	339,165	339,165
Bandwidth	184.7	170.9	240.7
Obs. In Bandwidth	30,238	21,625	31,663
Polynomials	Linear	Linear	Quadratic
Firm & Country Controls	No	Yes	Yes
Fixed Effects	No	Year	Year
Panel B (Low Income)	(1)	(2)	(3)
<i>RD-Estimate</i>	0.212*** (0.040)	0.237*** (0.041)	0.190*** (0.037)
Orig. Observations	104,838	77,719	77,719
Bandwidth	117.9	111.9	288.7
Obs. In Bandwidth	4,721	3,425	9,506
Polynomials	Linear	Linear	Quadratic
Firm & Country Controls	No	Yes	Yes
Fixed Effects	No	Year	Year
Panel C (Placebo)	IE = 0 (1)	IE = 0 (2)	IE = 0 & Ever = 1 (3)
<i>RD-Estimate</i>	−0.019 (0.022)	0.050 (0.032)	0.035 (0.034)
Orig. Observations	252,680	115,130	39,399
Bandwidth	265.6	184.2	264.0
Obs. In Bandwidth	22,192	7,712	4,622
Polynomials	Linear	Linear	Linear
Firm & Country Controls	No	Yes	Yes
Fixed Effects	No	Year	Year

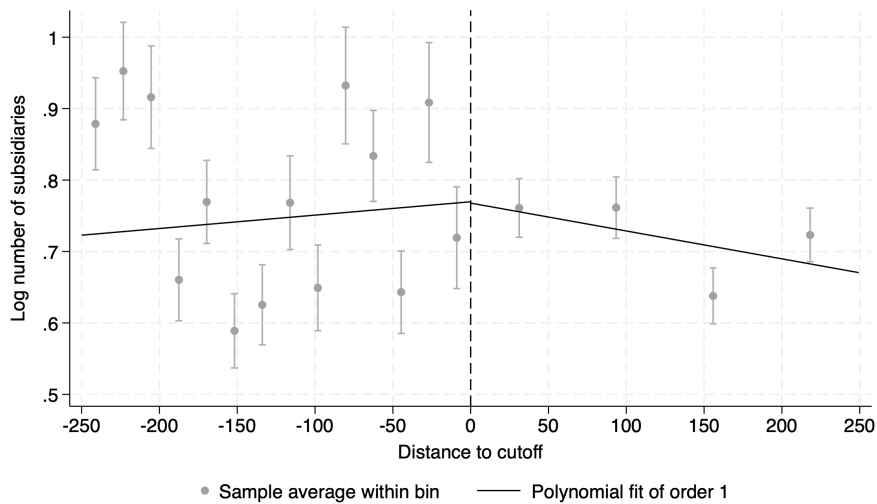
Notes: This table reports regression discontinuity (RD) estimates of the effect of mandatory CbC reporting on multinational firms' subsidiary presence. The running variable is the firm's consolidated revenue in 2015 relative to the EUR 750 million CbCR threshold. The dependent variable is the natural logarithm of the number of majority-owned subsidiaries in host countries with active CbCR information exchange agreements. Panel A reports results for the full sample. Panel B restricts the sample to low-income host countries. Panel C presents placebo tests: Columns (1)–(2) restrict the sample to country-pair-years without active information exchange (IE = 0), and Column (3) further restricts to country-pairs that eventually activate exchange but are observed only in pre-exchange years. Bandwidths are selected using the data-driven procedure of Cattaneo et al. (2020). Column (1) reports local linear estimates without controls; Columns (2) and (3) add firm and country controls with year fixed effects. In Panels A and B, Column (3) uses a local quadratic polynomial. Robust bias-corrected standard errors are reported in parentheses. * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$.

Figure A2. REGRESSION DISCONTINUITY: CbCR THRESHOLD AND MNE INVESTMENT

(A) Main RDD Plot



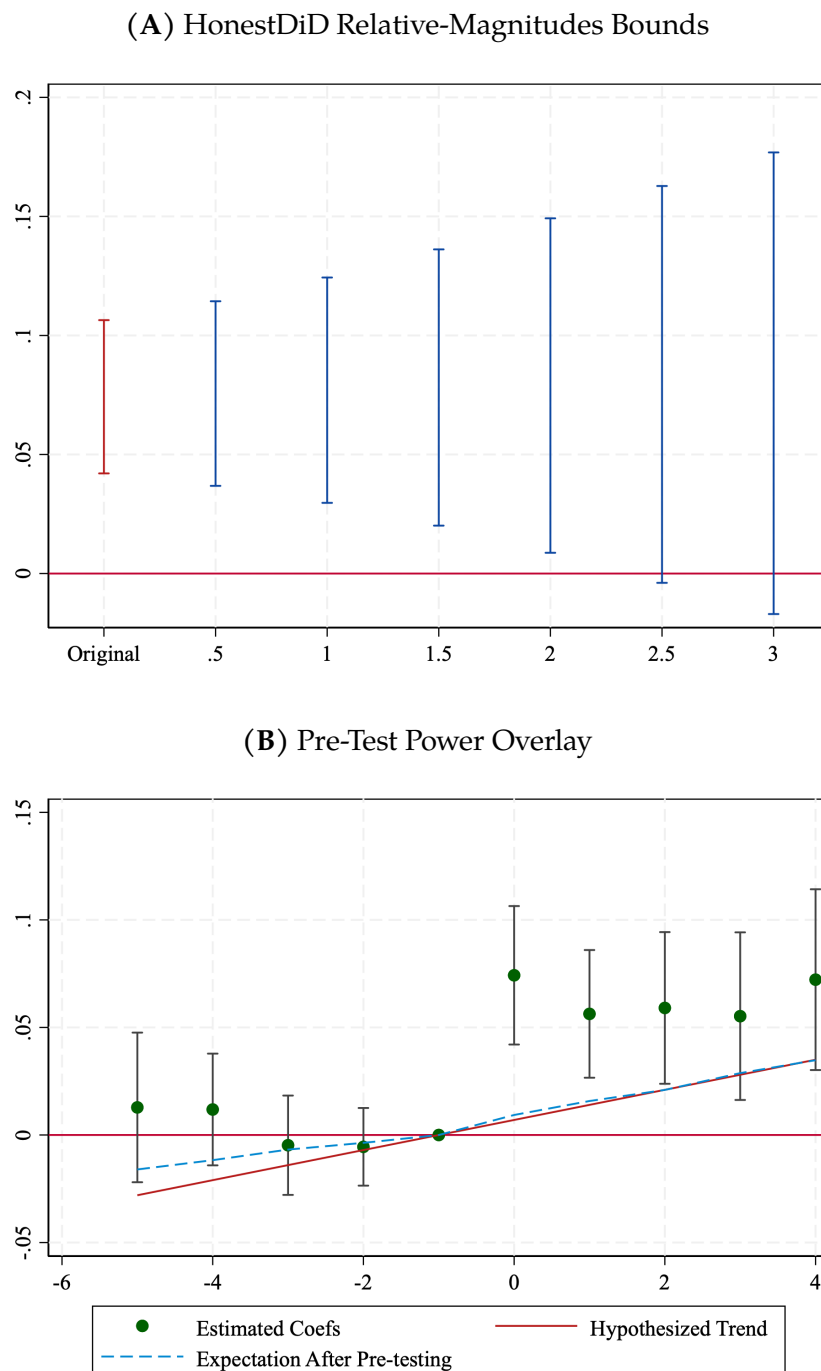
(B) Placebo RDD



Notes: This figure presents regression discontinuity plots around the EUR 750 million consolidated revenue threshold that determines mandatory CbC reporting. The running variable is firm revenue in 2015 relative to the threshold (in EUR millions). The sample is restricted to firm–host-country–year observations with active bilateral CbCR information exchange agreements. Panel A shows the main RD estimate for the dependent variable (natural logarithm of the number of majority-owned subsidiaries) using a local linear polynomial with a data-driven bandwidth following [Cattaneo et al. \(2020\)](#). Panel B presents a placebo test using observations from country-pair-years without active information exchange, where no discontinuity should be observed. The dots represent binned averages and the solid lines represent fitted local polynomial estimates with 95% confidence intervals.

A.3.3. Parallel-Trends Sensitivity

Figure A3. PARALLEL-TRENDS SENSITIVITY OF THE FIRM-LEVEL EVENT STUDY



Notes: This figure probes the sensitivity of the baseline firm-level event study to violations of parallel trends. The underlying specification is estimated by OLS on developing-host firm–host-country–year observations. The outcome variable is the natural logarithm of majority-owned subsidiaries in host country c of firm i headquartered in home country j . Both estimations in Panel A and Panel B include host-country $\times$ year, firm $\times$ host-country, and firm $\times$ year fixed effects, and standard errors clustered at the country-pair level. Panel A reports the HonestDiD sensitivity analysis of [Rambachan and Roth \(2023\)](#). Panel B shows the pre-trends test following [Roth \(2022\)](#).

A.3.4. Tax Aggressiveness

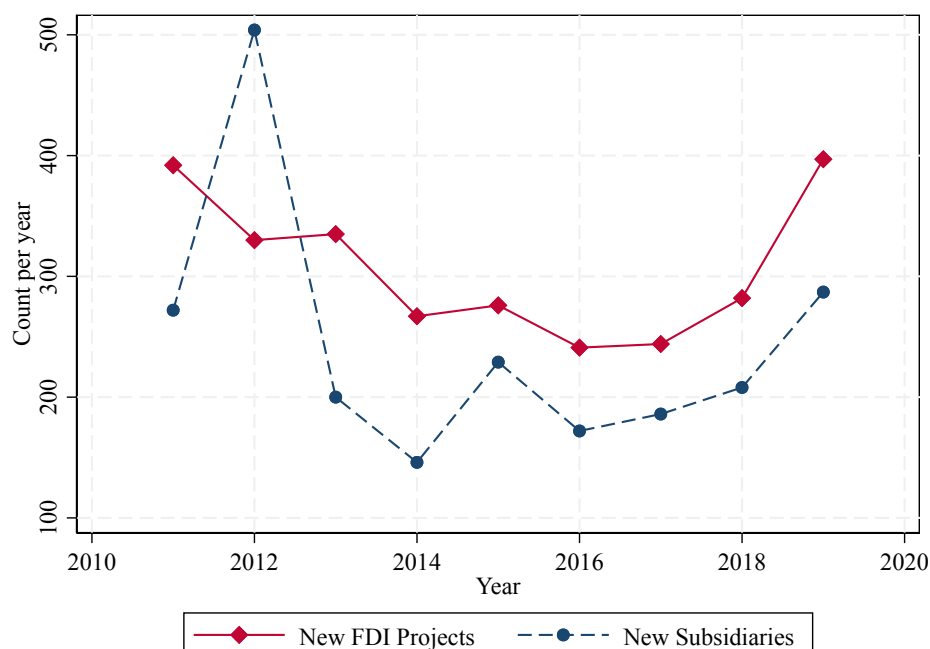
Table A6. FIRM-LEVEL RESULTS: HETEROGENEITY BY PRE-REFORM TAX AGGRESSIVENESS

Model: OLS DV: Ln(MNE Subs.)	(1) Havens (all)	(2) Havens (dot)	(3) Low ETR	(4) Low tax diff.
<i>Info Exchange</i> × <i>CbCR Firm</i> × <i>Aggressive</i>	0.061 (1.32)	0.038 (0.80)	−0.001 (−0.03)	0.002 (0.05)
<i>Info Exchange</i> × <i>CbCR Firm</i>	0.103* (1.78)	0.140*** (2.86)	0.160*** (3.72)	0.160*** (3.76)
<i>Info Exchange</i>	−0.216*** (−4.53)	−0.189*** (−5.65)	−0.149*** (−4.35)	−0.152*** (−4.52)
Observations	381,655	381,655	381,655	381,655
Adj. R ²	0.501	0.501	0.501	0.501
Country-pair FE	Yes	Yes	Yes	Yes
Firm × Year FE	Yes	Yes	Yes	Yes
Host × Year FE	Yes	Yes	Yes	Yes

Notes: This table reports OLS estimates for a mechanism test on the firm-level tax aggressiveness. The unit of observation is the firm–host-country–year, restricted to developing host countries. The dependent variable is the natural logarithm of the number of majority-owned subsidiaries of firm i in host country c in year t . *Info Exchange* is a binary indicator equal to one if a bilateral CbCR information exchange agreement between the firm’s home country and host country c is active in year t . *CbCR Firm* is a binary indicator equal to one if the firm’s consolidated revenue in 2015 exceeds EUR 750 million. *Aggressive* is a binary indicator equal to one if the firm falls in the more tax-aggressive half of a pre-reform (pre-2016) median split, measured by a different proxy in each column. Column (1) uses the number of haven-country affiliates under an inclusive haven list, Column (2) the “dot-list” definition, Column (3) a low effective tax rate, and Column (4) a low (negative) gap between the effective and statutory tax rate. The coefficient of interest is the triple interaction *Info Exchange* × *CbCR Firm* × *Aggressive*, which tests whether the baseline effect for CbCR-scope firms is larger among tax-aggressive firms. All specifications include country-pair, firm×year, and host-country×year fixed effects and no additional controls. Standard errors are clustered at the country-pair level and t -statistics are reported in parentheses. * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$.

A.3.5. Corroborating the Subsidiary Data

Figure A4. CO-MOVEMENT OF NEW PROJECTS AND NEW SUBSIDIARIES IN AFRICA



Notes: This figure compares descriptive time trends in the Orbis subsidiary data with an independent measure of foreign investment activity from the Financial Times *fDi Markets* database. The sample includes all firm–host-country pairs with at least one investment project recorded in *fDi Markets* during the sample period in Africa. For these pairs, the figure plots the number of new FDI projects (red solid line with squares) alongside the number of new majority-owned subsidiaries from Orbis (blue dotted line with circles) for the same matched firm in the same African host country. To align the two data sources, subsidiary additions are assigned to investment projects. Specifically, for each project undertaken by firm i in host country c in year t , we count all new majority-owned subsidiaries established by the same firm in c between years t and $t + 3$ and attribute them to the project year t . The forward-looking window accounts for differences in recording timing: *fDi Markets* records projects at announcement, whereas subsidiaries appear in Orbis only after legal registration and financial reporting, often with a lag of one or more years. The window is truncated at the firm’s next project in the same host country to ensure that each subsidiary is counted only once and assigned to the most recent preceding project. Project years for which the full $t-t + 3$ window extends beyond the sample period are excluded.

A.4. Corroborating Analyses from Complementary Data Sources

A.4.1. The Economic Magnitude of a New Subsidiary

Table A7. REAL INVESTMENT ASSOCIATED WITH A NEW SUBSIDIARY

Panel A Regression estimates						
Model: PPML	Capital Investment			Employment		
	(1)	(2)	(3)	(4)	(5)	(6)
<i>New subsidiaries</i>	0.0115*** (25.47)	0.0112*** (4.09)	0.0096*** (3.45)	0.0102*** (6.22)	0.0116*** (3.71)	0.0054*** (2.70)
Observations	613	708	1,589	613	708	1,589
Pseudo R ²	0.862	0.845	0.840	0.772	0.702	0.742
Firm-country FE	Yes	Yes	No	Yes	Yes	No
Firm FE	No	No	Yes	No	No	Yes
Host × Year FE	Yes	No	Yes	Yes	No	Yes
Year FE	No	Yes	No	No	Yes	No
Panel B Implied investment per new subsidiary (firm-country + year)						
Semi-elasticity (β)	0.0115			0.0102		
Mean project-year	\$118.7m			281 Jobs		
⇒ per new subsidiary	\$1.3–1.5m			2.1–3.6 new jobs		

Notes: This table reports estimates on the association between a new Orbis subsidiary and capital expenditure/employment after information exchange agreements are in place (Panel A). In Panel B, the coefficients are translated into an implied economic magnitude per new subsidiary. Due to data limitations on financial information in many developing countries, we exploit financial information from the Financial Times fDi markets database which includes data on the number, the capital invested, and the jobs created of firms' projects in African host countries between 2011 and 2019. The unit of observation is the firm–host-country–project-year. All columns are estimated using a PPML model. In Columns (1)–(3) and (4)–(6), the dependent variables are the capital investment in million \$US and the number of created jobs, respectively. *New subsidiaries* is the number of Orbis subsidiary additions attributed to the project year, summed over the project year and the following two years and truncated at the next project. Columns vary the fixed-effect structure across firm-country, firm, host-country×year, and year effects, as indicated. Panel B translates the coefficients for capital investment Column (1) and for employment Column (4) into the implied capital investment and employment associated with one new subsidiary, evaluated at the mean project-year, with the reported range giving its 90% confidence interval. Standard errors are clustered at the host-country level and *t*-statistics are reported in parentheses. * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$.

A.4.2. Aggregate Country-by-Country Reporting Evidence

Table A8. AGGREGATE CbCR: REPORTED ACTIVITY, SIZE, AND TAXES AND INFORMATION EXCHANGE

Panel A Entity counts	Ln(Overall Entities)	Ln(Operating Entities)	Ln(Passive Entities)
Model: OLS	(1)	(2)	(3)
<i>Information Exchange</i>	0.398** (2.57)	0.349* (1.83)	0.211 (1.25)
Observations	1,013	1,013	1,013
Adj. R ²	0.949	0.936	0.893
Host × Year FE	Yes	Yes	Yes
Country-pair FE	Yes	Yes	Yes
Panel B Economic size	Ln(Total Revenue)	Ln(Tangible Assets)	Ln(Employees)
Model: OLS	(1)	(2)	(3)
<i>Information Exchange</i>	0.572** (2.43)	0.097 (0.33)	0.693*** (3.15)
Observations	1,013	1,013	1,013
Adj. R ²	0.959	0.926	0.930
Host × Year FE	Yes	Yes	Yes
Country-pair FE	Yes	Yes	Yes
Panel C Reported taxes	Ln(Tax Paid)	Ln(Tax Accrued)	ETR
Model: OLS	(1)	(2)	(3)
<i>Information Exchange</i>	0.575* (1.80)	0.580* (1.96)	0.246 (0.96)
Observations	1,013	1,013	1,013
Adj. R ²	0.902	0.900	0.014
Host × Year FE	Yes	Yes	Yes
Country-pair FE	Yes	Yes	Yes

Notes: This table reports corroborative OLS estimates relating firms' own country-by-country reported activity, size, and taxes to the activation of CbCR information exchange. The unit of observation is the host-country–home-country–year, restricted to developing host countries over 2016–2021. In Panel A, the dependent variables are entity counts: all reporting entities (Column (1)) and the split into entities in operating business functions (Column (2)) versus passive holding, intellectual-property, and financial functions (Column (3)). In Panel B, the dependent variables are total revenue (Column (1)), assets (Column (2)), and employees (Column (3)). In Panel C, the dependent variables are tax paid (Column (1)), tax accrued (Column (2)), and the effective tax rate, defined as tax paid over profit (Column (3)). All outcomes enter in natural logarithms except the effective tax rate. *Information Exchange* is a binary indicator equal to one once the host country receives the home country's CbC reports and its own domestic CbCR framework is in force. All specifications include host-country×year and country-pair fixed effects, so the coefficient compares, within a host country and year, home partners whose reports the host does and does not receive. Standard errors are clustered at the country-pair level and *t*-statistics are reported in parentheses.

p* < 0.1, *p* < 0.05, ****p* < 0.01.