

# No Country for Dirty Money? The Economic Footprint of Anti-Money Laundering Standards

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*We provide the first comprehensive causal analysis of the economic footprint of international anti-money laundering (AML) standards. Leveraging the staggered timing of Financial Action Task Force (FATF) mutual evaluations as an exogenous shock, we find that strengthening AML policies has a mixed impact on international economic activity. While bilateral cross-border trade declines by 4% on average, this adverse effect is substantially reduced for countries whose AML policies become more harmonized with their trading partners. Furthermore, we find that these policies result in an 8% increase in foreign direct investments. FATF assessments also significantly increase the detection of money laundering cases by 31% but show no measurable impact on other illegal activities like drug trafficking, human trafficking, or fraud. Our findings highlight the tradeoff faced by anti-money laundering policies, and the benefits of global coordination to minimize the costs associated with AML compliance.*

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Illegal laundering of funds from criminal activities like drug trafficking and fraud is estimated to be 2–5% of global GDP annually (IMF, 1998).<sup>1</sup> In response, international standard-setting bodies have worked to strengthen and harmonise Anti-Money Laundering (AML) standards, requiring financial institutions to enforce strict customer due diligence and monitor transactions. However, this has come at a significant cost, with direct expenses ranging from \$200–\$400B annually (Forrester Consulting, 2023) and indirect costs potentially being even higher, impacting trade, privacy rights, and financial innovation. This paper is the first to measure the causal effect of these AML standards on economic activity and illicit activities.

Despite the significant financial burden and the extensive efforts invested in AML compliance, there remains a lack of empirical evidence on its overall effectiveness and costs in combating money laundering and crime in general (Judge and Kashyap, 2024). Estimates about the share of illicit funds that are intercepted, seized, and forfeited by authorities fall between 0.1% and 1.1% (UNODC, 2011; Europol, European Police Office; Pol, 2018; GCFFC, 2025). However, these figures do not capture the crucial deterrent effect of AML policies, which likely discourages some criminal activity and forces criminals to adopt more complex and costly laundering methods, potentially reducing the overall volume of illicit financial flows that would otherwise occur.

Several challenges arise when comparing the effectiveness of AML policies across countries. First, finding comparable data across countries on AML policies and outcomes is difficult due to variations in regulatory frameworks and reporting practices. Second, while a strong correlation exists between countries' compliance with AML practices and wealth and low crime, this does not imply causation as wealthier

<sup>1</sup>In 2023, \$3.1T in illicit funds were estimated to have flowed through the global financial system funding crimes such as human trafficking (estimated around \$346.7B), drug trafficking activity (estimated around \$782.9B), as well as terrorist financing (estimated around \$11.5B) (Nasdaq, 2024). The World Economic Forum's Global Coalition to Fight Financial Crime finds that out of \$3.6T estimated global proceeds of financial crime (3.6% of Global GDP), \$2.7T are estimated to be laundered money (2.7% of Global GDP) (GCFFC, 2025).

countries usually have greater resources to invest in complex AML regimes, while poorer countries may struggle to do so. Finally, the dynamic nature of criminal activity and the constant adaptation of money laundering techniques require ongoing evaluation and refinement of AML policies to ensure that they remain effective in combating evolving threats.

We use data from the Financial Action Task Force (FATF), the leading international standard-setting body established in 1989 by the G7 to combat money laundering, terrorist financing, and other threats to the integrity of the international financial system. Its primary framework consists of 40 recommendations that establish global standards for anti-money laundering and counter-terrorism financing policies, covering areas such as due diligence of customers, transparency of beneficial ownership, reporting suspicious transactions and international cooperation, and of 11 Immediate Outcomes (IOs) that gauge the effectiveness of AML enforcement. The FATF periodically assesses the implementation and effectiveness of its recommendations for each country, with the results documented in a Mutual Evaluation Report (MER). Following the initial evaluation, jurisdictions undergo follow-up reviews during the three years after the MER, where progress is monitored and reassessed based on remedial actions taken to address deficiencies. Even though FATF does not have formal legal authority to force countries to change their AML policies, it wields significant soft power that makes non-compliance costly: FATF publicly identifies countries with large AML deficiencies by placing them on a “gray list” (increased monitoring) or “blacklist” (high-risk jurisdictions). These listings carry serious reputational and financial consequences, such as reduced access to international financial markets, loss of correspondent banking relationships, and diminished foreign investment. FATF’s influence is reinforced by partnerships with global institutions like the IMF, World Bank, and UN, which may condition financial assistance or trade access on compliance with FATF standards. As a re-

sult, while countries are not legally bound to follow FATF recommendations, the economic and diplomatic consequences of weak AML compliance put pressure on them to align with its standards.

We begin our analysis by investigating the determinants of AML compliance across countries. We find that country wealth and size are the main factors influencing the variation in AML compliance levels globally. This likely stems from the substantial investment and fixed costs associated with AML compliance, which may be prohibitive for smaller or less wealthy nations lacking the necessary financial capacity or scale to implement effectively. We also find that countries with civil laws appear to have better AML compliance, possibly due to the fact that civil law jurisdictions adhere to written rules and regulations, which might foster a stronger culture of compliance, including with AML obligations.

Next, we look at the effect of AML on international economic activity. FATF's primary objective is to standardize and enhance AML compliance globally. Uniform AML policies offer two key benefits: First, they mitigate criminals' exploitation of AML system vulnerabilities for money laundering by eliminating weak links in the chain. Second, they reduce the costs and complexity associated with varying AML regulations for businesses and financial institutions, potentially increasing international economic exchanges.

To test the effects of AML policy harmonization, we employ a gravity model, a widely used econometric tool in international trade analysis. We find that there is a statistically significant positive relationship between the similarity of AML compliance regimes and the volume of bilateral trade and foreign direct investments (FDIs) supporting the view that AML policy standardization not only strengthens the global fight against financial crime but also facilitates and promotes international economic activity.

Enhanced AML policies foster a secure financial system, but incurs substantial

compliance costs: On one hand, robust AML standards can increase a country's international reputation, creating a safer and more transparent business environment that attracts foreign investment. Furthermore, they are a vital tool in the fight against crime. On the other hand, The direct and indirect costs associated with AML compliance can be substantial: Enhanced due diligence for high-risk clients or transactions can delay client on-boarding and payment processing, potentially harming customer relationships and operational efficiency. Increased risk aversion among financial institutions might lead to reduced engagement with specific sectors or jurisdictions considered higher risk for money laundering.

Measuring the effect of enhancing AML compliance on international economic activity is challenging because AML compliance levels are endogenous. Unobservable factors such as changes in a country's institutions might influence AML compliance and economic activity, or increased trade could drive changes in a country's AML policy (reverse causality). Therefore, we need a shock to AML compliance that is independent of economic activity. We address this challenge by leveraging the staggered timing of FATF's assessment process. Because of limited resources, FATF assesses countries only once per round ( $\sim 10$  years) according to a pre-determined schedule. We thus compare the economic activity of countries that undergo a FATF's evaluation relative to countries which do not.

The validity of using FATF's evaluation as an identification strategy relies on two main assumptions: (i) The timing of the assessment should be random or uncorrelated with the outcome variable; and (ii) countries should improve their AML compliance more during FATF's assessment periods compared to non-assessment periods. We provide evidence to support these two assumptions: first, the country schedule of the MER assessment is set at the beginning of the assessment round, and is primarily driven by when the country was reviewed during the previous round. Second, over 85% of the improvement in AML compliance occurs during the 3-year

assessment period, and less than 15% during the 7-year non-assessment period.

We use a generalized stacked difference-in-differences model to test whether strengthening AML policies impacts international economic activity. First, we find that as countries go through the FATF's assessment, overall cross-border trade drops by 3.7% in the four years following the assessment. However, the effect is less pronounced for countries whose AML policies become more harmonized with their trading partners. These findings are consistent with the fact that enhancing AML compliance can increase both direct and indirect costs, but AML harmonization can reduce such costs. Second, we study the AML impact on FDIs. Unlike cross-border trade, these investments are long-term bets on the business environment of a country, and thus can be affected differently by enhanced AML regulation. We find that going through a FATF's evaluation increases FDIs by 8.1% in the four years following the assessment, supporting the view that FDIs are more sensitive to the structural integrity and long-term stability fostered by a robust AML system.

Finally, we test whether AML policies have an impact on criminal activities, the ultimate goal of all anti-money laundering efforts. We find a large increase of 31% in the detection and enforcement of money laundering episodes for countries undergoing a FATF's assessment compared to countries which do not, suggesting FATF's assessments improve AML effectiveness. However, we find no measurable impact on drug and human trafficking, corruption, or fraud in the four years following the finalization of Mutual Evaluation Reports. This lack of observed change should not be taken as conclusive evidence that AML compliance is ineffective against these crimes. First, the absence of a statistically significant finding does not confirm the absence of a real effect. Second, stringent AML policies could either deter crime, or improve the detection of crime, making the overall effect uncertain. Third, the available crime data contains considerable noise, potentially obscuring any actual changes. Finally, data limitations restrict the analysis to a four-year window after

the MER, while the impact on criminal activity may require a longer time-frame, given the time needed for AML policy changes to be enacted, enforced, and for criminal behavior to adapt.

This paper contributes to the limited research examining the impact of AML efforts on economic and criminal activities. Existing studies explore the effects of AML compliance on bank lending: Agca, Slutzky and Zeume (2023) demonstrates that stringent AML regulations in the US caused a shift in lending from smaller to larger banks. Slutzky, Villamizar-Villegas and Williams (2020) indicates that increased AML enforcement in Colombia resulted in decreased deposits by criminal entities, and a subsequent reduction in lending to other unrelated businesses. Lastly, Gao et al. (2020) suggests that declining bank profits incentivize banks to relax AML compliance, leading to more criminal clients and a higher volume of reported suspicious activity. Other research investigates the variations in AML regulation across nations: Arnone and Padoan (2008) is the first paper to describe the efforts of international organizations to harmonize AML policies across the globe. Chong and Lopez-De-Silanes (2015) finds a correlation between stricter money laundering regulations and lower levels of money laundering internationally. Morse (2019) shows that the inclusion of countries on the Financial Action Task Force's (FATF) non-compliant list leads to a significant decrease in cross-border liabilities.

Furthermore, this paper contributes to the ongoing discussion on barriers to economic activities across borders. Helpman, Melitz and Rubinstein (2008) show that credit constraints and contract enforcement issues limit the ability of firms to engage in foreign markets. Ahern, Daminelli and Fracassi (2015) shows that differences in cultural values negatively affect cross-border mergers. Borchert et al. (2024) highlights the importance of correspondent bank relationships on international trade.

## **I. Financial Action Task Force**

The Financial Action Task Force (FATF) is an inter-governmental organization, established in 1989 by the G7 to combat money laundering. It sets international standards and develops policies to combat money laundering, terrorist financing, and the financing of proliferation of weapons of mass destruction. The organization monitors the implementation of these standards in its member countries through peer-based mutual evaluations.

FATF employs a system of periodic evaluation rounds to comprehensively assess each member country's level of compliance and effectiveness with FATF recommendations. During each round, FATF first revises and updates AML standards and assessment methodology, and then FATF or FATF-style regional body assessors (FSRB) conduct in-depth reviews of a country's legal and regulatory framework, the effectiveness of its institutional measures, and its practical implementation of anti-money laundering policies. These evaluations involve on-site visits, interviews with relevant stakeholders from the public and private sectors, and detailed analysis of a wide range of documentation and data. The findings of these assessments are summarized in Mutual Evaluation Reports (MERs) that identify areas of strength and weakness, and provide recommendations for enhancing a country's AML/CFT regime. Once a report is finalized, it is presented at a FATF plenary meeting. The report is typically published a month after FATF's plenary approves the report. Three years following the release of a MER, FATF conducts a subsequent assessment to examine the progress made by the evaluated jurisdiction in addressing the identified deficiencies and implementing the recommended actions. A Follow-Up Report (FUR) is published at the end of the assessment. Countries identified with major weaknesses through the MER process may face increased scrutiny. This can involve yearly follow-up assessments or placement on non-compliant lists, often re-



ferred to as gray and black lists.

The timeline in Figure 1 illustrates FATF’s assessment process, which occurs in rounds. Each country undergoes a three-year assessment period (from MER to FUR) during which it is expected to improve its AML policies. Subsequently, there is typically a roughly seven-year period where the country is not under assessment. Since its creation in 1989, the Financial Action Task Force (FATF) has completed four rounds of assessments. At the start of each round, FATF decides the order in which countries will be evaluated, ensuring countries are aware of their scheduled review well in advance. Our identification strategy for demonstrating the causal effect of AML policies will critically depend on the detailed timeline and predetermined schedule.

The paper focuses on FATF third and fourth rounds. The third round, which ran from 2004 until 2014, predominantly concentrated on assessing the technical compliance of member jurisdictions with FATF comprehensive 40 Recommendations concerning the prevention of money laundering, and 9 special recommendations on terrorist financing. In contrast, the fourth round, which ran from 2014 to 2024, placed a much greater emphasis on the effectiveness of the implemented measures. This involved evaluating not just whether the required laws and regulations were on the books, but also how effectively these measures were being implemented in practice and whether they were achieving the desired outcomes in combating money laundering and the financing of terrorism. To measure this effectiveness, the FATF introduced 11 Immediate Outcomes. Furthermore, the fourth round consolidated the technical AML recommendations and the special terrorist financing recommendations into a revised set of 40 technical recommendations, grouped into 7 categories, from AML coordination, to confiscation, preventive measures, transparency, powers and responsibilities, and others. Tables B1 and B2 in the online appendix list the fourth round technical recommendations and immediate outcomes.

## II. Data

We collect data on the FATF ratings of all MERs and FURs for the third and fourth rounds from FATF’s website.<sup>2</sup> If summary ratings are absent, we review the full reports to find them. Technical Compliance ratings for each recommendation use a four-level scale: Compliant (C), Largely Compliant (LC), Partially Compliant (PC), and Not Compliant (NC). Immediate Outcome ratings also use a four-level scale: High Effectiveness (HE), Substantial Effectiveness (SE), Moderate Effectiveness (ME), and Low Effectiveness (LE). We convert these qualitative ratings to a numerical scale from 1 (Not Compliant/Low Effectiveness) to 4 (Compliant/High Effectiveness).<sup>3</sup> Overall, 187 jurisdictions were assessed by FATF or FSRB in the third round, and 194 in the fourth round, representing almost all countries in the world, except “High-Risk Jurisdictions subject to a Call for Action” (i.e. blacklisted) like North Korea, Iran, and Myanmar.

We then proceed to aggregate the ratings by country and year. As each assessment lasts several months from the on-site visit until the official release of the report, we use the year of the report publication as our reference year for the assessment. If more than one report is published in the same year, we use the latest one. Overall country compliance with FATF standards is measured by averaging ratings across the 49 third-round recommendations and the 40 fourth-round recommendations, along with its 11 immediate outcomes. In analyses where the technical compliance recommendations are combined across the two rounds, we use the mapping provided by FATF to link third recommendations to fourth round recommendations.<sup>4</sup>

Panel A of Table 1 indicates an average technical recommendation compliance of

<sup>2</sup><https://www.fatf-gafi.org/en/publications/Mutualevaluations/Assessment-ratings.html>, downloaded as of May 9, 2025

<sup>3</sup>This numerical transformation assumes a linear progression in the scale, meaning that the difference in effectiveness or compliance between each numerical point is perceived as equal.

<sup>4</sup>See <https://www.fatf-gafi.org/en/publications/Fatfrecommendations/Fatf-recommendations.html> for the detailed cross-round references.

2.5, falling between Partially and Largely Compliant. However, compliance varied considerably, ranging from a low of 1.2 to a high of 3.95.

Bilateral trade data is from Center for Prospective Studies and International Information's (CEPII) BACI (Base pour l'Analyse du Commerce International) product-level dataset. We aggregate product-level exports and imports to calculate the total bilateral trade for a given country pair-year. We only consider trading pairs where the average import or export trade during the sample period is at least \$1 million, ensuring that only meaningful economic interactions are included. Static control variables specific to a country pair (e.g., sharing a common religion, sharing a common language, sharing a common legal origin, etc.) are also taken from CEPII's Gravity data set. Bilateral foreign direct investment data is from IMF Coordinated Direct Investment Survey (CDIS). Similarly to trade, we also require that the average inflow and outflow during the sample period is at least \$1 million.

For measures of criminal activity, we rely on data provided by United Nations Office on Drugs and Crime (UNODC). We collect annual cases of money-laundering, corruption, bribery, fraud, and cyber-related fraud incidents from the Corruption and Economic Crime database. We obtain the counts of prosecutions, convictions, offenses, and detected victims of human trafficking from the Trafficking in Persons/GLOTIP data. We collect data on treatment by drug types and drug prices from the statistical annexes of the World Drug Report. In addition to the UNODC data, we add country-year estimates of drug-use disorder incidence and mortality rates from the Institute for Health Metrics and Evaluation's Global Burden of Disease project.

We also collect country-level control variables from multiple sources. A country's yearly total population and gross domestic product come from the World Bank's World Development Indicators database. A country's legal origin is obtained from Rafael La Porta's website. We construct a binary indicator for drug-producing status

based on the International Narcotics Control Strategy Reports published by the United States Department of State. We acquire data on a country’s political regime from Our World in Data. Each country is classified into one of four political regimes defined by Lührmann, Tannenberg and Lindberg (2018).<sup>5</sup> As a final control, we collect Index of Economic Freedom from Heritage Foundation’s website. A detailed description of the data sources, coverage of data, and the variables collected is provided in Table A1 in the online appendix.

### III. Predictors of AML Compliance to FATF’s Standards

We begin by investigating the determinants of AML compliance to FATF standards. Several factors may influence the adherence of countries to such standards. Firstly, compliance with AML requires significant investments in infrastructure, monitoring, and personnel across financial institutions, government agencies, and businesses. Countries with limited resources may struggle to implement these policies. Secondly, the nature of a country’s legal system (civil vs. common law) and its democratic processes can affect the ease with which legislative changes required for new AML policies can be enacted. For example, countries with civil law systems emphasize written rules and regulations, potentially cultivating a stronger culture of compliance, including adherence to AML obligations. Thirdly, a country’s level of international trade can impact its AML policies. Lastly, the extent of drug trafficking within a country, a major source of money laundering, can impact its commitment to AML compliance.

To represent a country’s wealth and size, we utilize GDP per capita, population, and OECD membership as indicators of economic development. The extent of international trade is indicated by the ratio of total trade (exports plus imports) to

<sup>5</sup>The four regimes include (1) closed autocracy, (2) electoral autocracy, (3) electoral democracy, and (4) liberal democracy. See Herre (2021) for concise definitions of each regime.

GDP. The intensity of drug trafficking is measured using a dummy variable indicating whether the country is classified as drug producer or transit. Finally, we employ four classifications for legal systems: UK common law, French civil law, German civil law, and Nordic law (a system often referred to as a hybrid between civil and common law). Political systems are categorized as closed autocracy, electoral autocracy, electoral democracy, or liberal democracy. Lastly, the Heritage Foundation’s economic freedom index assesses a country’s rule of law, government efficiency, and market openness.

We examine country compliance and effectiveness using assessments from the third and fourth rounds MER scores. For each country, we calculate the average of the 40 technical compliance recommendations and 9 special recommendations from the third round. Similarly, for the fourth round, we average the 40 technical recommendations and 11 effectiveness immediate outcomes. These three averages serve as our outcome variables.

Table 2 shows the coefficient of an OLS regression of AML compliance and effectiveness over the variables discussed above. We adjust standard errors using the Huber-White sandwich estimator to control for heteroskedasticity. We find that wealthier and larger countries exhibit significantly higher AML compliance with FATF standards. Specifically, a doubling of GDP per capita is associated with an approximate 0.16-0.27 point increase in compliance (on a scale from 1 to 4), equivalent to about half of a standard deviation in compliance. Country size is also an important determinant of AML compliance, even if the magnitude is smaller compared to GDP per capita: a doubling of population is associated with a 0.05-0.15 point increase in compliance. Nordic Law countries (the reference group) show lower AML compliance and effectiveness compared to common and civil law countries. The other variables did not demonstrate a statistically significant impact on AML compliance or effectiveness.

These results suggest a relationship between AML compliance and its determinants, but it is important to note that these are correlations, not causal relationships. Subsequent sections will leverage features of the FATF assessment process to establish causality between AML compliance and real outcomes.

#### IV. The Effect of AML Compliance on Cross-border Economic Activity

In this section, we examine how compliance with FATF’s AML standards affects bilateral cross-border trade and FDI. We test two hypotheses: a direct effect, whereby a country’s own AML compliance influences international economic activity, and a harmonization effect, whereby the similarity of AML standards across countries shapes the intensity of cross-border flows.

The direct effect arises because cross-border trade and FDI are significant conduits for money laundering. The international nature of large-scale criminal activity, the complexity of trade regulations, and the difficulty of tracking transactions across jurisdictions make them attractive channels. Criminal organizations often exploit these vulnerabilities through Trade-Based Money Laundering (TBML)—for example, misrepresenting the source, value, or quantity of goods—or by channeling illicit funds into FDI to reintegrate them as legitimate wealth. AML efforts therefore focus heavily on monitoring international economic activity. At the same time, stronger AML compliance carries implications for licit trade and investment: on the one hand, robust standards signal credibility in combating financial crime, fostering trust and encouraging foreign investors. On the other hand, compliance requirements are costly and can lead financial institutions to “de-risk” by withdrawing from high-risk clients or jurisdictions, inadvertently reducing legitimate FDI and trade.

The harmonization effect arises because the frictions in international transactions depend not only on the absolute strength of a country’s AML framework but also on its alignment with those of its partners. The large variation in AML compliance

across countries highlighted in the previous section implies that greater similarity in standards can reduce verification costs and cross-border frictions, thereby promoting trade and investment. We therefore test whether greater convergence in compliance with FATF standards promotes international flows, suggesting that divergence in AML policies across jurisdictions can itself hinder trade and investment.

#### *A. Gravity Model*

To investigate the potential impact of adherence to FATF’s AML standards on international flows, we will initially employ a gravity model framework. Gravity models have become a standard and widely accepted methodological tool within the field of international trade economics for analyzing the determinants of FDI and bilateral trade volumes between countries (Bergstrand, 1985). These models use log functions to test whether the FDI and trade between two countries is positively or negatively correlated with differences in country characteristics.

To measure differences in AML compliance between countries, we quantify each country’s compliance using three vectors: a 49-element vector of third-round Technical Compliance scores, a 40-element vector of fourth-round Technical Compliance scores, and an 11-element vector of fourth-round Immediate Outcome scores.<sup>6</sup> For each country pair, we use these vectors to calculate the similarity in their AML compliance with two metrics: Proximity (L1-Norm) and Cosine Similarity.

<sup>6</sup>In rare instances where a country lacks a score for certain recommendations (because those recommendations are not applicable to their specific situation), the missing score is imputed. This imputation is performed by calculating the average score of all other applicable recommendations for that country within the same assessment.

$$\text{Proximity}_{i,j} = \frac{1}{|R_i - R_j|} = \frac{1}{\sum_k |r_{k,i} - r_{k,j}|}$$

$$\text{Cosine Similarity}_{i,j} = \cos(\theta) = \frac{\mathbf{R}_i \cdot \mathbf{R}_j}{\|\mathbf{R}_i\| \cdot \|\mathbf{R}_j\|} = \frac{\sum_k r_{k,i} r_{k,j}}{\sqrt{\sum_k r_{k,i}^2} \sqrt{\sum_k r_{k,j}^2}}$$

where  $i$  and  $j$  identify the pair of countries and  $k$  the elements of the compliance vector. On average, the absolute difference between the recommendation or immediate outcome scores of any two countries is 3/4 of a compliance level, on a scale from 1 to 4 (see Panel B of Table 1 for summary statistics).

To determine the total compliance level for each country pair, we sum the scores for all technical compliance recommendations and immediate outcomes from each evaluation. The main outcome of interest is the level of FDI (inflow and outflow) and trade of goods and services (import and export) between country pairs.

We construct a pair-wise dataset where the unit of observation is a sending-country-receiving country pair for each FATF's assessment round. We compute the average FDI and trade from the sending to the receiving country during the assessment round, and restrict the sample only to country pairs with at least \$1 million in total annual average import or export or FDI to only capture meaningful trade between country pairs.

We then estimate the following log OLS fixed effect model:

$$(1) \quad \begin{aligned} \log(y_{r,i,j}) = & \beta_1 \log(\text{AML Similarity}_{r,i,j}) + \beta_2 \text{AML Compliance Sum}_{r,i,j} \\ & + \gamma X_{r,i,j} + \delta_{r,i} + \delta_{r,j} \end{aligned}$$

where  $y$  is average trade or FDI from origin country  $i$  to destination country



$j$  in round  $r$ . AML Similarity is TC Proximity/Cosine Similarity, or IO Proximity/Cosine Similarity, AML Compliance Sum is the sum of the scores across all TC recommendations or Immediate Outcomes for the country pair.  $Xc$  are control variables commonly used in trade gravity models (log of absolute difference in GDP/Capita and physical distance, sum of GDP/Capita and GDP, dummies for shared border, common religion, common language, and common legal origin).  $\delta_{r,i}$  and  $\delta_{r,j}$  are round-origin country fixed effects, and round-destination country fixed effects.<sup>7</sup> To control for correlations in the error term, we adjust standard errors double clustering at the origin country and destination country level.

Table 3 shows the results of the gravity model for cross-border trade. We find a positive correlation between similar AML compliance with FATF standards and increased bilateral trade, as the majority of AML similarity coefficients are statistically and economically significant, with IO Cosine Similarity being the only exception. The estimated elasticity of trade with respect to technical compliance proximity ranges from 0.7 to 1. Smaller, yet still significant, elasticity effects are found for immediate outcomes proximity, ranging between 0.4 and 0.7. The elasticity of trade on cosine similarity is much higher, for the most part because the similarity measure has most values close to 1, and thus a 1% increase is a significant change in cosine similarity. These initial empirical findings point to the fact that the harmonization of AML policies and regulations by FATF plays a crucial role in reducing compliance frictions that can impede cross-border trade.

We also find a significant positive correlation between the level of AML compliance within trading countries and the volume of their trade. The coefficient of the variable “Compliance Sum,” which represents the aggregate level of AML compliance of the

<sup>7</sup>In the main specification, we add either origin or destination country fixed effects, because including both would absorb AML Compliance Sum, one of the main variables of interest. However, in the online appendix, we also present results from a traditional gravity model using a two-way fixed effects approach. To further control for distributional assumptions and functional form misspecification, we also estimate a Poisson pseudo-maximum likelihood (PPML) model, following Santos Silva and Tenreiro (2006).

participating nations, is positive and statistically significant, implying that enhanced adherence to AML regulations is correlated with greater trade activity between countries.

The rest of the coefficients in the regressions are consistent with the results found in the international flows literature: countries that are closer together, with shared borders, religion, language, and legal origin, as well as larger and wealthier countries, have greater bilateral trade.

We then repeat the analysis, using FDI as the dependent variable to further explore the relationship between AML alignment and economic flows. The results, presented in Table 4, closely mirror those observed with cross-border trade as the outcome. Both statistical significance and economic magnitude of the coefficients indicate that nations with greater similarity in their adoption and implementation of FATF AML standards have greater levels of FDI between them. Furthermore, countries with higher degrees of AML compliance are also found to have greater FDI. Consequently, the observed correlation suggests that a robust and aligned AML framework is not only conducive to increasing short term exchange of goods and services, but also to fostering long-term deeper, and more integrated economic relationships through FDI.

In online appendix tables, we show that the results are generally robust to including both round-origin country FE and round-destination FE in the same regression (tables C1 and C4), as well as a Poisson pseudo-maximum likelihood estimation (tables C2 and C5).

Interpreting these results requires careful consideration. The gravity model's findings should not be viewed as proving a direct causal link between AML compliance and international economic activity. Numerous unobserved factors might simultaneously influence both cross-border trade and FDI, as well as the observed measures of AML similarity and overall compliance, such as changes in institutions or political

effectiveness. To address this potential endogeneity bias, the next section uses an external shock to AML compliance to provide more conclusive causal evidence of such relationship.

### *B. Difference-in-Differences*

The evaluation process implemented by FATF provides an ideal setting for studying the causal effect of AML measures on international economic activity. This is because it allows us to analyze situations where countries are incentivized to alter their AML policies due to external pressures that are independent of other economic factors.

As detailed in Section I, FATF conducts sequential evaluation rounds, assessing countries against established standards in a staggered manner. Each country undergoes a period of FATF evaluation, followed by a non-evaluation period, as illustrated in Figure 1. Our experimental design compares countries undergoing FATF evaluation (treated group)—and thus incentivized to enhance their compliance with FATF Anti-Money Laundering (AML) standards—with comparable countries not undergoing this process (control group). For the identification strategy to be valid, two critical issues need to be addressed.

One possible concern is that the timing of FATF assessments might be correlated with a country’s economic condition. For example, if a country experiences rapid growth in trade or foreign direct investments, FATF could verify the adequacy of its AML policies with an unexpected assessment. This could create a situation of reverse causality, where increased trade triggers adjustments to AML policies. However, it is important to note that assessment schedules are set at the beginning of each round, which limits FATF’s ability to change timings as conditions evolve. Nonetheless, we conduct an OLS regression analysis to examine the determinants of the timing of the third and fourth round Mutual Evaluation Reports. Table 5

indicates that the primary determinant of the order in which countries are assessed during the fourth round is its assessment order during the third round. A secondary and less significant determinant is the compliance score of the previous round. In summary, countries assessed early in one round are highly likely to be assessed early in the subsequent round. In addition, a poor score in one round slightly accelerates their assessment in the next. No other variables, such as wealth, size, trade, or legal origin, are found to predict the timing of the assessment.

A second possible concern is whether improvements in countries' AML policies occur independently of FATF assessments or are influenced by them. It is possible that countries constantly improve their AML policies, and FATF assessments have no bearing on this. Alternatively, countries might enhance their AML policies in anticipation of an upcoming FATF review. Figure 2 displays the variation in technical compliance scores across countries (Panel A) and across recommendations (Panel B), revealing three key facts. First, as FATF has conducted more rounds, scores have improved considerably over time. Second, the score distribution has narrowed over time, indicating greater similarity in country ratings. Finally, and crucially for our identification strategy, the most significant increases in scores are observed during the evaluation period, specifically between the Mutual Evaluation Report (MER) and the Follow-Up Report (FUR). In contrast, minimal improvement occurs during the non-assessment period, which spans from the third-round FUR to the fourth-round MER. To quantify these rating changes, average scores for each assessment are presented in Table 6. During the three-year assessment period (MER to FUR), compliance scores increase by 0.34-0.44 points of a compliance level. Conversely, during the seven-year non-assessment period, the change is only 0.07, which is one-fifth of the improvement seen during assessment periods. This difference in improvement between evaluation and non-evaluation periods is statistically significant at the 1% level. This evidence supports the assumption that FATF

assessments serve as a significant incentive for countries to strengthen their AML policies during the evaluation period.

Our analysis focuses on two primary effects: First, we aim to quantify the overall effect of a FATF assessment on a country’s cross-border exchanges. Enhanced AML policies resulting from an assessment could improve a country’s reputation and reduce the risk of illicit transactions. Conversely, stricter AML regulations may increase compliance burdens and the cost of doing business, potentially hindering international economic activity.

Second, we investigate whether adhering to stringent international AML standards has a differential effect depending on the similarity in AML compliance between trading partners. Our previous findings indicate that trade and FDIs are higher for country pairs with similar AML policies. Therefore, as a country undergoes a FATF assessment and presumably improves its AML policies, it should reduce its AML distance to more compliant trading partners and increase it relative to less compliant ones. We would thus expect that the effect of FATF assessment on trade and FDI to be more beneficial for trading pairs where the trading partner has a greater AML compliance than the country undergoing the MER assessment.

We can now proceed to measure the causal effect of FATF assessments on country’s international economic activity using a staggered generalized cohort difference-in-differences approach. We define a cohort as a country (treated unit) undergoing a FATF assessment, paired with five countries (control units) not assessed by FATF within a  $[-2, +4]$  years window around the treated unit’s MER. We select these five control countries by finding the closest matches based on GDP per capita, population, and average 3rd-round AML compliance, measured the year prior to the treated unit’s MER. We use Abadie and Imbens (2006) metric to determine distance. To ensure the reliability of our test, which relies on FATF AML assessment scores from the third round, we restrict our sample exclusively to 4th round eval-

uations. Additionally, for each cohort, we only include observations within the  $[-2, +4]$  year window surrounding the treated unit's MER year. For each cohort, we also restrict the sample to observations  $[-2, +4]$  years around the MER year of the treated unit. For each treated and control country, we analyze bilateral cross-border trade (imports + exports) and Foreign Direct Investment (FDI) flows with all 170 FATF-evaluated countries not part of the treated or control sets.

We then estimate the following fixed-effect OLS regressions, where equation (2) examines the main effect of FATF assessment on trade and FDIs, and equation (3) investigates how the FATF assessment differentially affects trade and FDIs, contingent on the trading partner's level of compliance:

$$(2) \quad \log(y_{i,j,t}) = \beta_1 \text{Treat}_{i,j,c} \times \text{Post}_{r,i,j,t,c} + \gamma_{c,t} + \delta_{c,i,j}$$

$$(3) \quad \begin{aligned} \log(y_{i,j,t}) = & \beta_1 \text{Treat}_{i,j,c} \times \text{Post}_{r,i,j,t,c} + \beta_2 \text{Post}_{r,i,j,t,c} \times \Delta \text{Compliance}_{i,j,t} + \\ & + \beta_3 \text{Treat}_{i,j,c} \times \text{Post}_{r,i,j,t,c} \times \Delta \text{Compliance}_{i,j,t} + \gamma_{c,t} + \delta_{c,i,j} \end{aligned}$$

where the unit of observation is unique for each round  $r$ , year  $t$ , cohort  $c$ , and trading pairs  $i$  and  $j$ .  $y$  is the directed bilateral trade (import or export) or FDI (inflow or outflow) between a treated or control country, and any other trading partner, from origin country  $i$  to destination country  $j$  in year  $t$ .  $\text{Treat}$  equals one if either the origin or destination country is the treated unit in cohort  $c$ .  $\text{Post}$  equals one if year  $t$  is after the treated unit's MER year.  $\Delta \text{Compliance}$  is the signed difference in compliance between the trading partner and the treated/control country. A positive  $\Delta \text{Compliance}$  indicates that the trading partner has a higher compliance score than the treated/control country, which is crucial for interpreting

the regression results.  $\gamma$  are cohort-year fixed effects, and  $\delta$  are cohort-trading pair fixed effects. Standard errors are clustered at the cohort-country-pair level to account for serial correlation in the error terms.<sup>8</sup>

Table 7 presents the causal impact of AML policies on cross-border trade, revealing a 3.7% decline in trade for countries undergoing FATF’s mutual evaluation review (column 1). To assess parallel trends in the pre-period and determine the duration of trade decline, we dis-aggregate the *Post* variable into time dummies spanning from -2 to +4 years relative to the MER year (with  $t = -1$  as the reference year). Column 2, and Panel (a) of Figure 3 indicate a relatively stable pre-period, followed by a significant decline in years 3 and 4, reaching 10% below pre-MER levels. This delayed response is expected, as  $t = 0$  indicates the year of the MER, which serves as the initial assessment, with most AML policy improvements occurring in the three years after the MER, as illustrated in Figure 2. Panel (b) of Figure 3 suggests that exports from the treated country experience a comparatively larger decline than imports. This is also expected, given that most AML policies aim to prevent the over-invoicing of exports, a typical trade-based money laundering strategy, thereby restricting the movement of illicit funds into the country.

Column 3 of Table 7 examines how adherence to international AML standards heterogeneously affects cross-border trade, depending on the signed difference in AML compliance between trading partners. According to the harmonization hypothesis, if the country undergoing FATF’s assessments has worse AML compliance than its trading partner, trade is expected to decline less. This is because the FATF assessment improves the country’s AML compliance, thereby reducing the compliance distance between the partners. Conversely, if the treated country has better compliance than its trading partner at the outset of the evaluation, the compliance

<sup>8</sup>The cohort-country pair fixed effects in the regression already adjusts for cross-sectional correlations in the error term.

distance will increase during the FATF evaluation, leading to greater AML disparity and consequently lower trade between the pair. The positive and statistically significant coefficient on the triple interaction ( $\beta_3$ ) supports the harmonization hypothesis. The magnitude of this coefficient is substantial, comparable to the magnitude of the regular difference-in-differences coefficient. This suggests that for pairs with initial large differences in AML compliance, FATF's assessment could actually lead to an increase in cross-border trade.

Finally, we repeat the same diff-in-diff analysis, but using FDIs as the outcome variable. AML policies aim to balance the benefits of a stable and transparent business environment, characterized by low levels of illicit funds and criminal activity, against compliance costs. FDIs represent long-term investments in a country, entailing substantial commitments of funds and reputation, often in the form of greenfield investments or mergers and acquisitions. Consequently, we expect FDI to be more sensitive to the structural integrity and long-term stability fostered by a robust AML system.

Furthermore, compliance costs are less significant for FDI, as these investments involve a much smaller number of transactions, but with a much higher value. While due diligence for an FDI is extensive, it is typically a one-time or infrequent event for a specific, large-scale investment. In contrast, cross-border trade inherently involves a large volume of individual transactions, necessitating financial institutions to conduct extensive due diligence, sanction screening, and suspicious activity monitoring on a vast scale. In summary, we expect FDI to respond more positively to improvements in AML policies than cross-border trade, and to be less influenced by differences in AML compliance costs between countries.

Table 8 reveals that FDI flow increases on average by 8.1% after a country undergoes a FATF evaluation (column 1). Column 2, and Panel (a) of Figure 4 show a relatively flat pre-period, and a steady increase after the MER, peaking at a 16%



increase in year 3 relative to pre-MER levels. In columns 3 and 4, we further investigate whether the effect varied based on the partner country’s AML compliance. However, the triple interaction coefficient is insignificant, suggesting that FDI is more responsive to overall improvements in AML compliance rather than the similarity in compliance between countries.

Overall, the impact of AML policies on cross-border economic activity presents a mixed picture. On one hand, stricter AML policies impose compliance costs that can lead to a decline in international trade. However, this decline can be mitigated or even completely offset when adherence to international AML standards results in harmonized AML policies across countries, thereby limiting the impact of increased compliance costs for businesses. On the other hand, stronger AML policies significantly boost FDI flow. This is possibly because foreign investors, concerned about reputational risks, are more inclined to invest in countries with a robust and secure business environment.

## V. The Effect of AML Compliance on Illegal Activity

Ultimately, the goal of anti-money laundering is to detect and prevent crime. While the costs of compliance and the impact on legitimate business are important considerations, the true measure of any AML policy’s effectiveness is its success in disrupting criminal networks and reducing the volume of illicit funds flowing through the financial system. Policies that fail to achieve this core mission, regardless of their complexity or cost, are not serving their intended purpose.

Unfortunately, analyzing the effect of anti-money laundering on crime is inherently difficult. First, AML measures both deter and detect crime, which can complicate the measurement of its overall impact. Effective AML policies may lead to a higher number of detected crimes in the short term, as more suspicious activities are identified and reported to law enforcement. This could give the false impression that

crime is increasing, when in reality, the system is simply becoming more adept at finding existing criminal activity. At the same time, the preventative aspect of AML—making it harder for criminals to legitimize their illicit proceeds—may be silently deterring crime. These two opposing effects can obscure the true impact of AML when looking at crime statistics alone, making it challenging to isolate and quantify the preventative effect.

Second, the response of crime to changes in AML policy is not immediate, making it challenging to measure its long-term effects. Criminal organizations may take time to adapt their methods in the face of new regulations. Therefore, a change in AML policy today might not lead to a noticeable drop in crime for several years. Analyzing data over a couple of years might be insufficient to capture this delayed effect, as criminals may initially absorb the higher costs or find new loopholes before eventually being deterred. This temporal lag means that short or medium term studies might mistakenly conclude that AML policies are ineffective, when in fact, their true impact has not yet had time to materialize.

A third significant challenge in measuring the impact of AML is the “weakest link in the chain” phenomenon. Money laundering is a global activity, and criminals will naturally seek out jurisdictions with the least stringent regulations to process their illicit funds. As a result, a country with a strong AML framework may succeed in preventing crime within its own borders, but this success might be offset by a corresponding increase in financial crime in a neighboring country or another part of the world with weaker controls. This means that a country’s AML policies can only be truly effective when they are harmonized and robustly implemented on a global scale. Without this international cooperation, the true impact of any single country’s efforts may simply be to shift the problem elsewhere rather than to reduce it overall.

Using the same difference-in-differences strategy used in section IV.B, we analyze

the causal impact of exogenous changes in AML policy on illegal activities. We compare countries undergoing FATF assessments with a matched control group that does not. We categorize illegal activities into three primary groups: crime, drug trafficking, and human trafficking.

Panel (a) of Table 9 presents the findings for economic crime, revealing a notable increase in the detection of money laundering activity. Countries undergoing FATF assessments experience a 31.4% rise in detected money laundering cases. Figure 5 illustrates a steady increase in money laundering cases throughout the FATF evaluation period. This finding further validates the assumption that FATF assessments effectively enhance money laundering detection, either by improving the financial system’s detection capabilities through AML policy changes, or by compelling countries to strengthen enforcement of existing AML laws due to FATF’s presence. However, the detection frequency of other economic crimes, such as corruption, bribery, and fraud, does not show significant changes during the sample period.

Panel (b) of Table 9 focuses on drug-related outcomes. AML efforts heavily target drug trafficking, which is a major source of illicit funds globally, accounting for approximately one-fifth of all criminal proceeds worldwide and an estimated 0.4% to 0.6% of global GDP (UNODC, 2011). Indeed, the FATF was established in 1989 by G7 leaders specifically to address the escalating problem of global drug trafficking and the substantial financial flows it generated. Despite the emphasis on drug trafficking in AML policies, we do not observe any significant effect of FATF assessments on the retail price of drugs, overdoses, or drug treatments.

Finally, Panel (c) of Table 9 examines human trafficking, a growing concern in anti-money laundering efforts due to its profitability and the human exploitation involved. The FATF has issued specific guidance and “red flag indicators” to assist institutions in identifying signs of human trafficking, making it a crucial component of modern AML strategies alongside drug trafficking and terrorist financing (FATF,

2018). Our analysis of human trafficking prosecutions, convictions, offenses, victims, and smuggling cases reveals no measurable impact from FATF assessments across these outcomes.

## VI. Conclusions

This paper provides the first comprehensive analysis of the economic footprint of AML standards by leveraging the staggered, sequential nature of FATF assessments as an exogenous shock to AML compliance. Our findings shed light on the complex relationship between AML policies, international economic activity, and criminal behavior, offering critical insights into the costs and benefits of a standardized global AML framework.

We first establish that AML compliance is not uniform across countries, and is primarily driven by wealth and size. This suggests that the substantial fixed costs associated with implementing and enforcing a robust AML regime may be prohibitive for smaller and less wealthy nations. Next, using a gravity model, we find strong evidence of an AML “harmonization effect,” where greater similarity in AML compliance between countries promotes bilateral trade and FDI. This finding suggests that a key benefit of FATF’s harmonization efforts is the reduction of compliance friction and complexity for businesses engaged in cross-border commerce and investment.

To establish causality, we use a difference-in-differences approach centered on FATF’s evaluation, which we show significantly improve a country’s AML compliance. Our results present a nuanced picture of the impact on international economic activity. We find that a country undergoing a FATF assessment experiences a significant decline in overall cross-border trade, indicating that the increased compliance burden and associated costs likely outweigh the benefits of enhanced reputation and reduced risk. However, this negative effect is mitigated or even reversed when AML

policies become more harmonized, providing further support for the harmonization hypothesis. In a stark contrast to trade, we find that FDI inflows increase substantially after a country improves its AML compliance. This suggests that for large, long-term investors, the enhanced security and stability of a transparent financial system are far more valuable than the potential costs of increased transactional friction.

Finally, our analysis on the ultimate goal of AML—the reduction of crime—yields inconclusive results. We find that FATF assessments significantly increase the detection of money laundering cases, a direct validation of the assessments' effectiveness. However, we find no statistically significant impact on drug trafficking, human trafficking, or other economic crimes in the four years following the assessment. As we have discussed, this lack of a measurable effect does not necessarily prove ineffectiveness. The inherent delays in criminal behavior adapting to new regulations, the data interference between detection and deterrence, and the potential for a "weakest link" effect where crime simply shifts to a less-regulated area, all make a definitive causal link incredibly difficult to establish. Our findings highlight the need for a longer-term perspective and more refined data to fully understand the true preventative impact of AML policies.

In conclusion, our research demonstrates that AML standards have a tangible and measurable economic footprint. While they may impose costs that impede cross-border trade, they also significantly boost FDI by fostering a more stable and trustworthy business environment. The ultimate effectiveness of these policies in fighting crime remains a subject for further research, but we show that they do succeed in improving the detection of illicit financial flows. This provides an important first step toward a more complete cost-benefit analysis of global AML efforts, which will be essential for creating smarter, more targeted, and more effective policies in the future.

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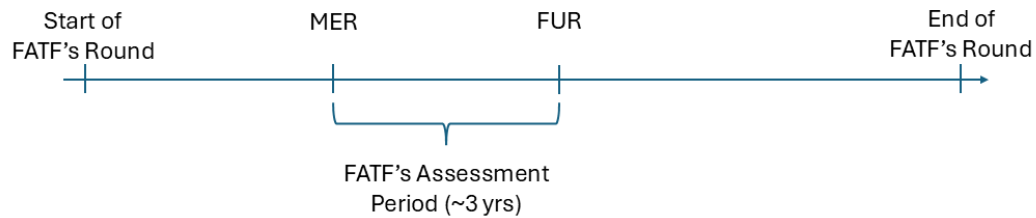
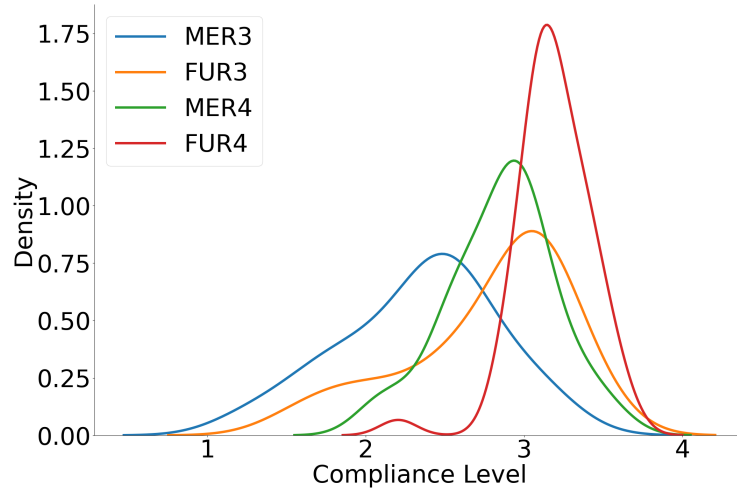
**Figures**

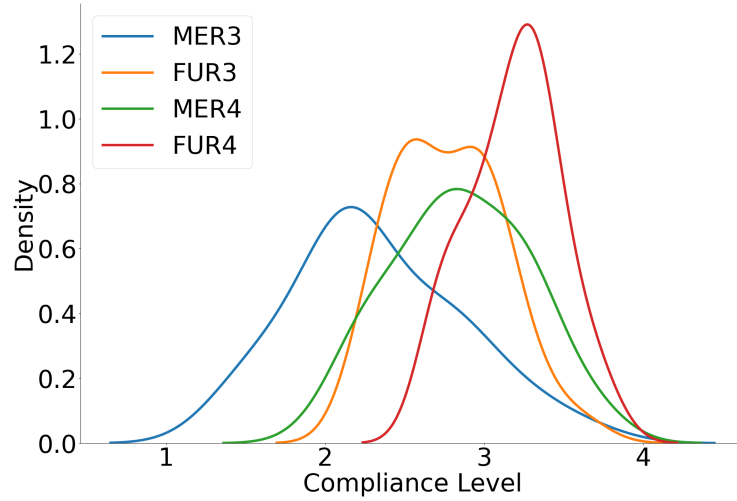
Figure 1. : Timeline of FATF assessment for each round

This figure provides a conceptual illustration of FATF assessment process for a hypothetical country. The left-end indicates the start of FATF round of evaluations and the right-end indicates the end. The period in between approximately corresponds to ten years. MER denotes the timing of a country's mutual evaluations, which can fall within any point on the line. A typical assessment concludes with a Follow Up Report, denoted by FUR, approximately three years following the publication of the Mutual Evaluations Report.





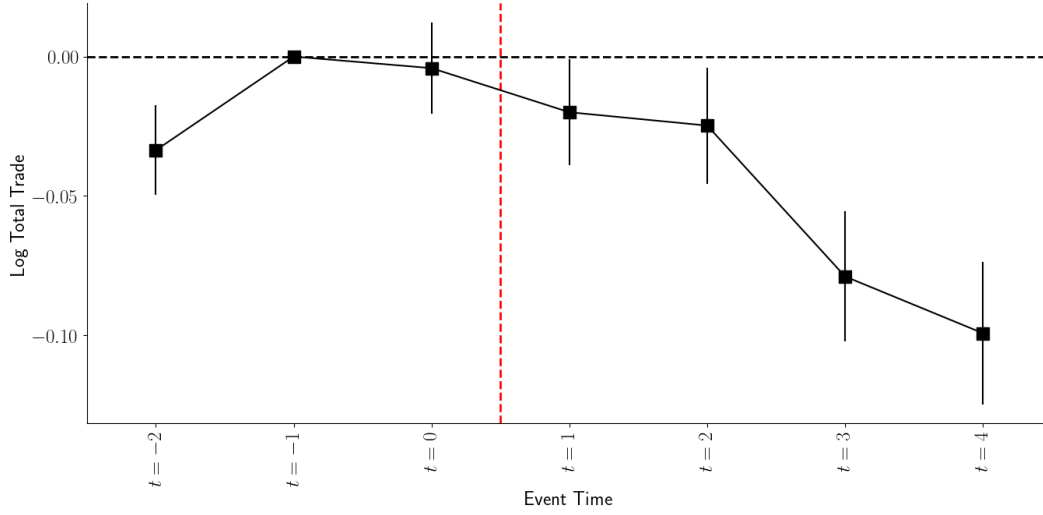
(a) by Country



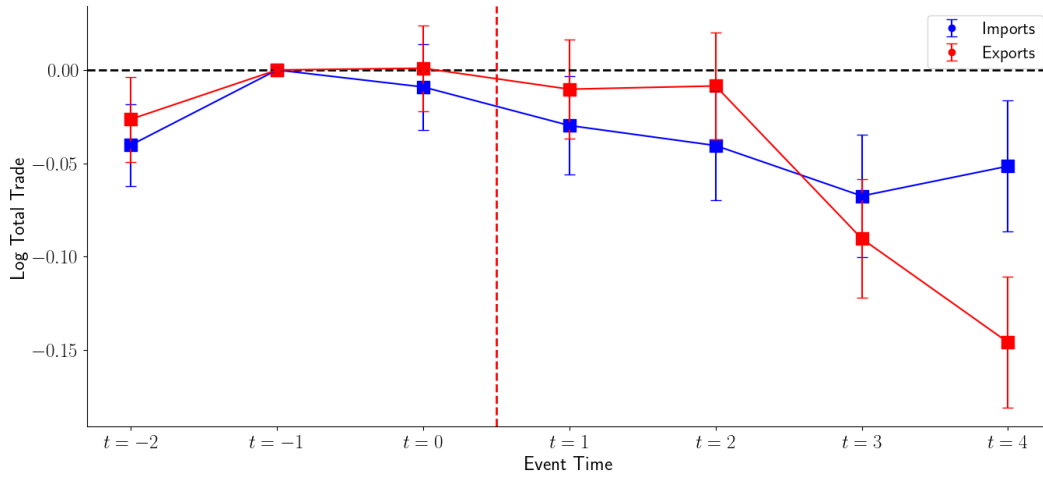
(b) by Recommendation

Figure 2. : Technical Compliance Score Distribution

The figure displays the density function of the technical compliance recommendations score for the four main assessments in the sample period: third-round Mutual Evaluation Report (MER3), third-round Follow Up Report (FUR3), fourth-round Mutual Evaluation Report (MER4), and fourth-round Follow Up Report (FUR4). Panel (a) plots the dispersion of country-level Technical Compliance score averaged across recommendations. Panel (b) plots the dispersion of recommendation-level Technical Compliance score averaged across countries.



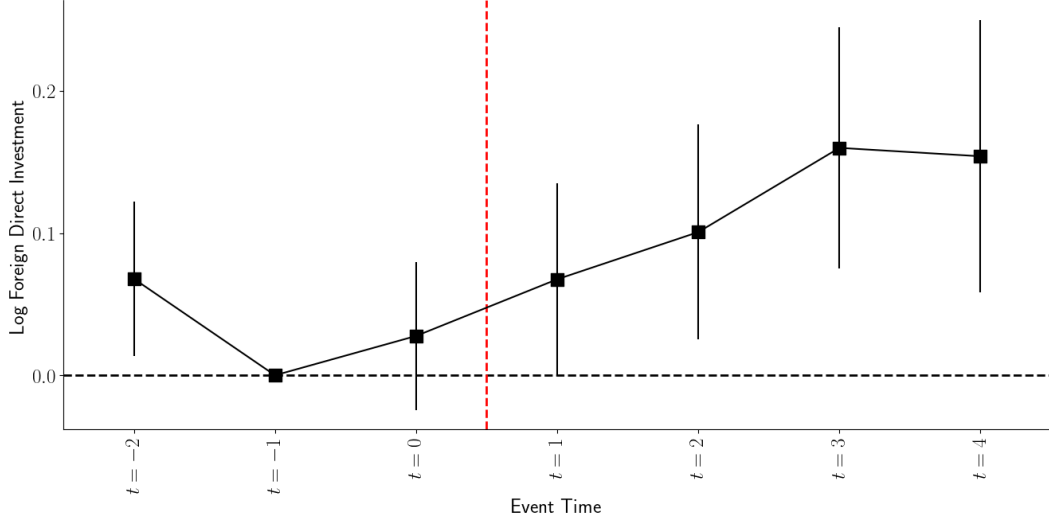
(a) All Trade Flows



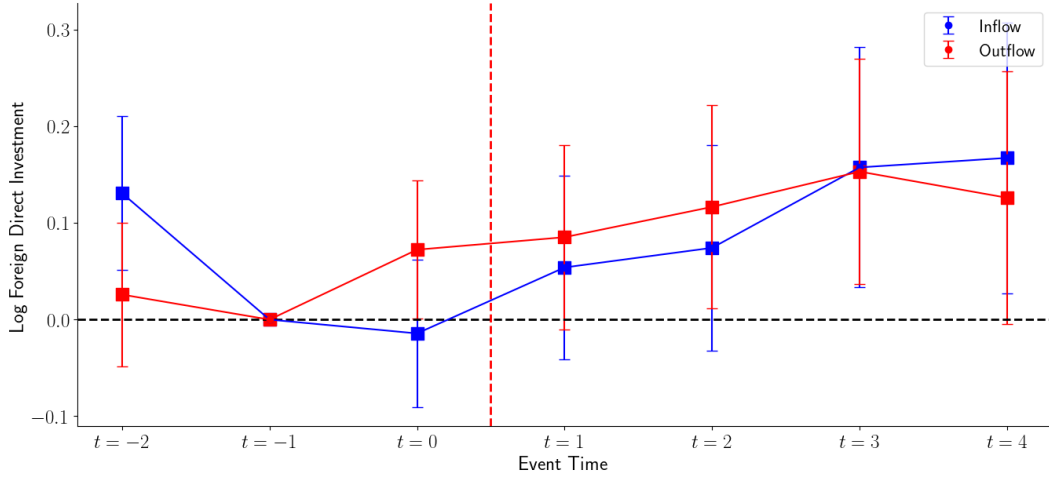
(b) Imports and Exports

Figure 3. : Dynamic Difference-in-Differences for Total Trade

This figure presents the dynamic version of the difference-in-differences analysis on bilateral trade flows. The dependent variable is the natural logarithm of the trade flow between an origin and a destination country in a given year. Each cohort consists of one country that is evaluated by FATF in the fourth round evaluations and five control countries matched using Abadie and Imbens (2006) distance based on average compliance score in the third round, GDP per capita and population. The control countries must not be concurrently evaluated by FATF in the  $[-2, 4]$  window of the treated country's assessment. For each country in a cohort, we collect the bilateral trade flows with its trading partners, excluding partner countries in the same cohort. Panel (a) plots the coefficient point estimates on  $Treat_{i,j,c} \times \mathbb{1}(t = \bar{t})$  for  $\bar{t} = -2, -1, \dots, 4$ . Panel (b) repeats the analysis using country pairs where cohort-member countries are importers (blue line) or exporters (red line). Vertical bars denote 95% confidence intervals calculated using standard errors clustered at the cohort-country pair level.



(a) All FDI Flows



(b) Inflow and Outflow

Figure 4. : Dynamic Difference-in-Differences for Foreign Direct Investment

This figure presents the dynamic version of the difference-in-differences analysis on bilateral foreign direct investment flows. The dependent variable is the natural logarithm of the FDI flow between an origin and a destination country in a given year. Each cohort consists of one country that is evaluated by FATF in the fourth round evaluations and five control countries matched using Abadie and Imbens (2006) distance based on average compliance score in the third round, GDP per capita and population. The control countries must not be concurrently evaluated by FATF in the  $[-2, 4]$  window of the treated country's assessment. For each country in a cohort, we collect the bilateral trade flows with its trading partners, excluding partner countries in the same cohort. Panel (a) plots the coefficient point estimates on  $Treat_{i,j,c} \times \mathbb{1}(t = \tilde{t})$  for  $\tilde{t} = -2, -1, \dots, 4$ . Panel (b) repeats the analysis using country pairs where cohort-member countries receive FDI inflow (blue line) or outflow (red line). Vertical bars denote 95% confidence intervals calculated using standard errors clustered at the cohort-country pair level.

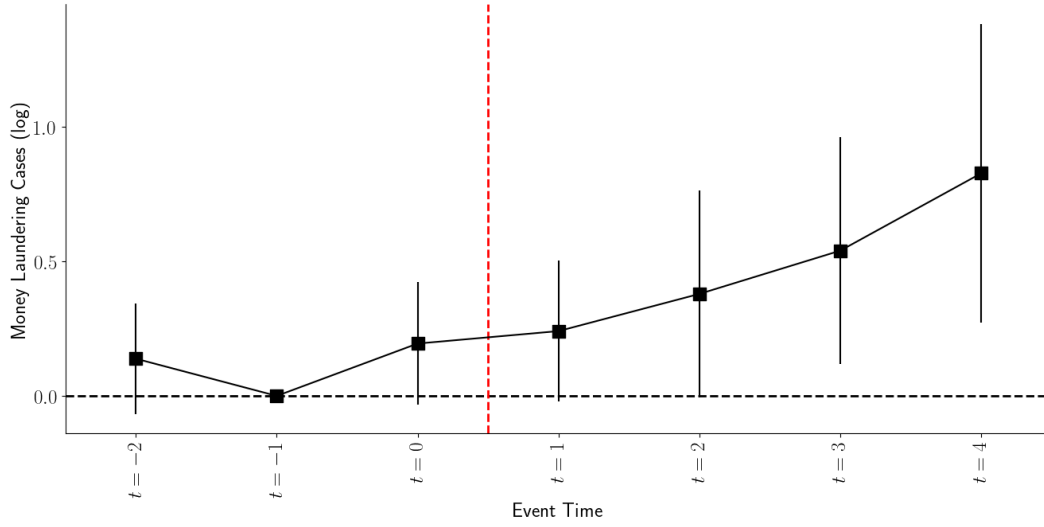


Figure 5. : Dynamic Difference-in-Differences for Money Laundering Cases

This figure presents the dynamic version of the difference-in-differences analysis on money laundering cases. The dependent variables are the natural logarithm of money laundering cases. Each cohort consists of one country that is evaluated by FATF in the fourth round evaluations and five control countries matched using Abadie and Imbens (2006) distance based on average compliance score in the third round, GDP per capita and population. The control countries must not be concurrently evaluated by FATF in the  $[-2, 4]$  window of the treated country's assessment. We further require that the country has at least one non-missing value for the pre-treatment ( $t < 0$ ) and post-treatment period ( $t > 0$ ). A cohort is removed if either the treated country is removed or there are no control countries remaining due to this criterion. Points indicate the coefficient point estimates on  $Treat_{i,j,c} \times \mathbb{1}(t = \tilde{t})$  for  $\tilde{t} = -2, -1, \dots, 4$ . Vertical bars denote 95% confidence intervals calculated using standard errors clustered at the cohort-country level.

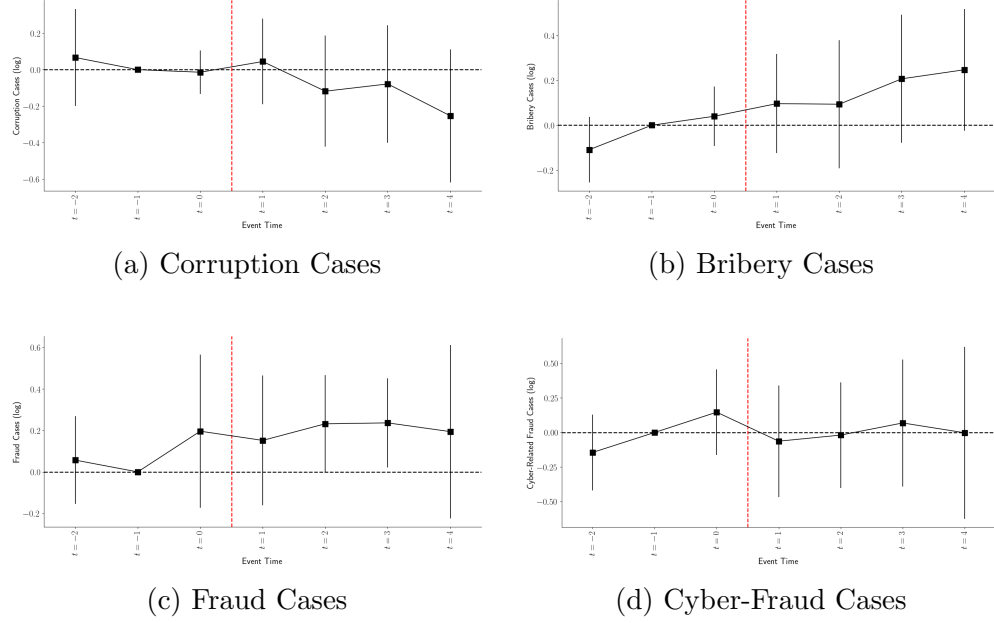


Figure 6. : Difference-in-Differences Analysis of Other Economic Crime

This figure presents the dynamic version of the difference-in-differences analysis on economic crime cases other than money laundering. The dependent variables are the natural logarithm of corruption cases for Panel (a), bribery cases for Panel (b), fraud cases for Panel (c), and cyber-related fraud for Panel (d). Each cohort consists of one country that is evaluated by FATF in the fourth round evaluations and five control countries matched using Abadie and Imbens (2006) distance based on average compliance score in the third round, GDP per capita and population. The control countries must not be concurrently evaluated by FATF in the  $[-2, 4]$  window of the treated country's assessment. We further require that the country has at least one non-missing value for the pre-treatment ( $t < 0$ ) and post-treatment period ( $t > 0$ ). A cohort is removed if either the treated country is removed or there are no control countries remaining due to this criterion. Points indicate the coefficient point estimates on  $Treat_{i,j,c} \times \mathbb{1}(t = \tilde{t})$  for  $\tilde{t} = -2, -1, \dots, 4$ . Vertical bars denote 95% confidence intervals calculated using standard errors clustered at the cohort-country level.

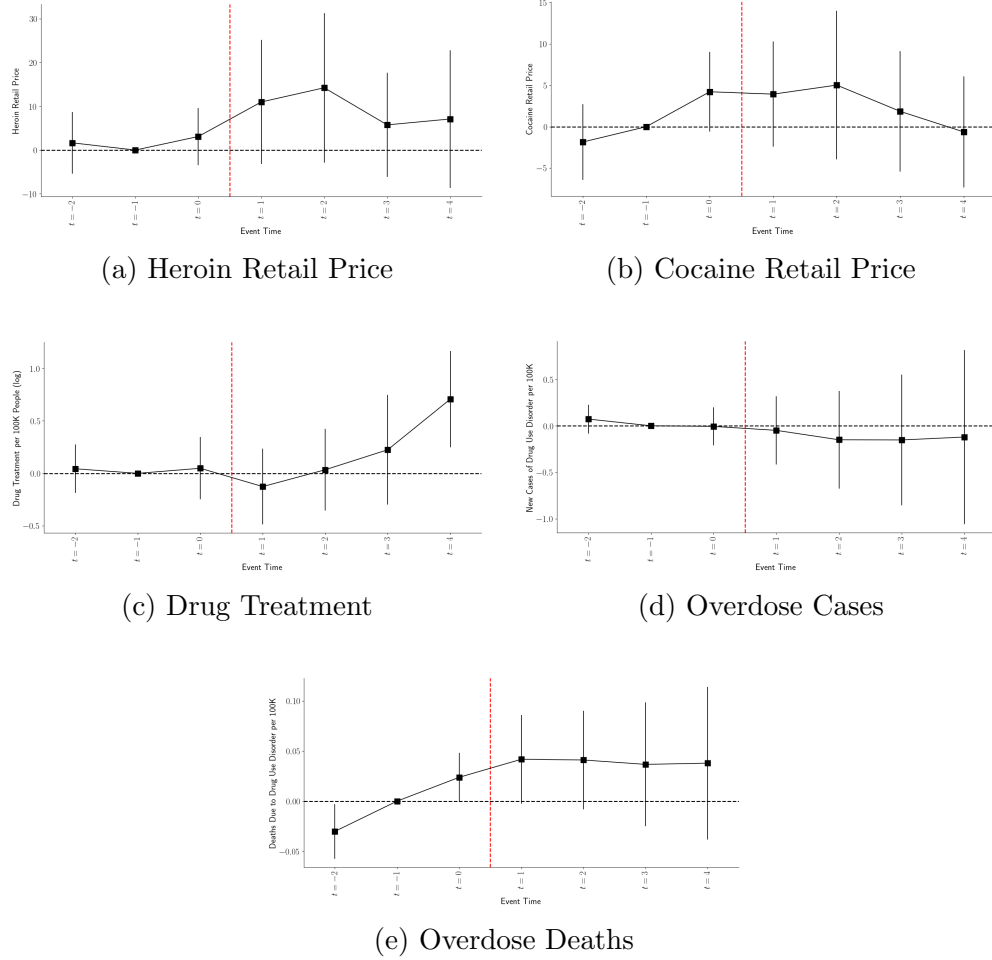


Figure 7. : Difference-in-Differences Analysis of Drug-related Outcomes

This figure presents the dynamic version of the difference-in-differences analysis on drug-related outcome variables. The dependent variables are retail price of heroin for Panel (a), retail price of cocaine for Panel (b), the natural logarithm of drug treatment cases for Panel (c), drug overdose incidences for Panel (d), and drug overdose deaths for Panel (e). Each cohort consists of one country that is evaluated by FATF in the fourth round evaluations and five control countries matched using Abadie and Imbens (2006) distance based on average compliance score in the third round, GDP per capita and population. The control countries must not be concurrently evaluated by FATF in the  $[-2, 4]$  window of the treated country's assessment. We further require that the country has at least one non-missing value for the pre-treatment ( $t < 0$ ) and post-treatment period ( $t > 0$ ). A cohort is removed if either the treated country is removed or there are no control countries remaining due to this criterion. Points indicate the coefficient point estimates on  $Treat_{i,j,c} \times \mathbb{1}(t = \tilde{t})$  for  $\tilde{t} = -2, -1, \dots, 4$ . Vertical bars denote 95% confidence intervals calculated using standard errors clustered at the cohort-country level.

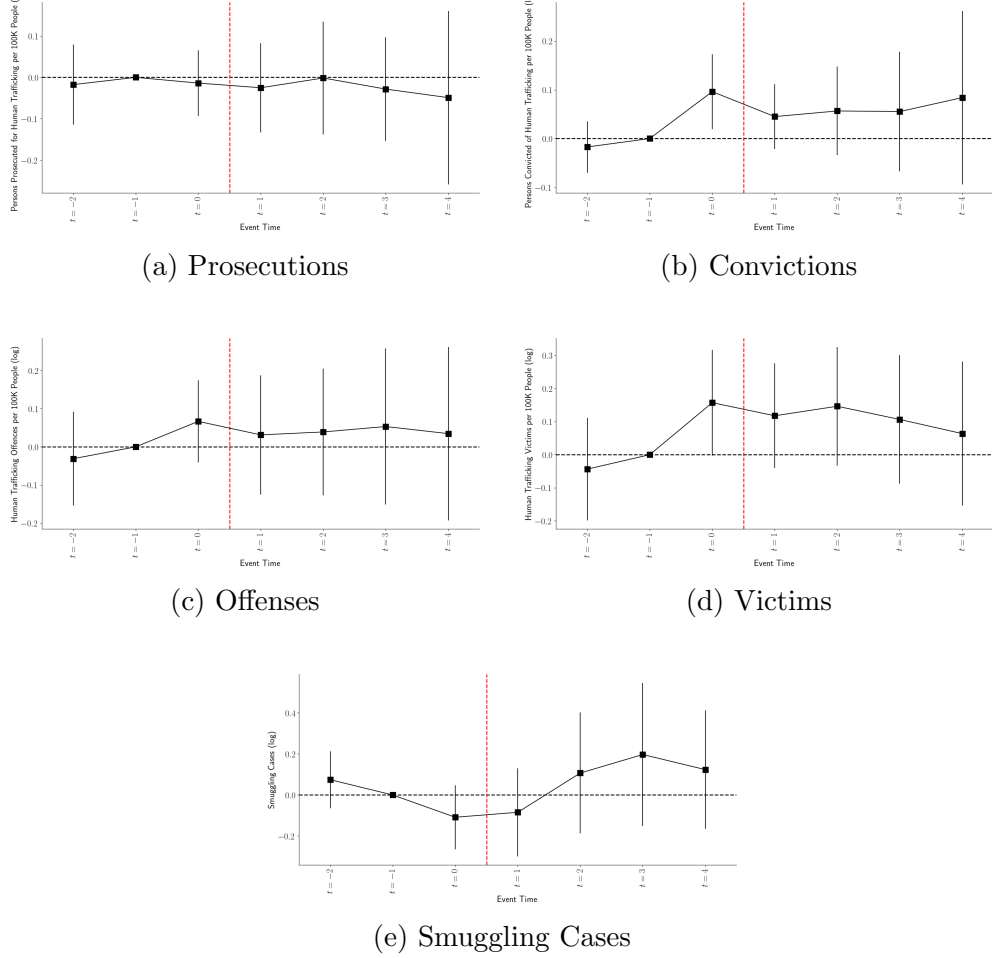


Figure 8. : Difference-in-Differences Analysis of Human Trafficking

This figure presents the dynamic version of the difference-in-differences analysis on human trafficking. The dependent variables are the natural logarithm of human trafficking prosecutions for Panel (a), convictions for Panel (b), documented offenses for Panel (c), number of victims for Panel (d), and cases of smuggling in persons for Panel (e). Each cohort consists of one country that is evaluated by FATF in the fourth round evaluations and five control countries matched using Abadie and Imbens (2006) distance based on average compliance score in the third round, GDP per capita and population. The control countries must not be concurrently evaluated by FATF in the  $[-2, 4]$  window of the treated country's assessment. We further require that the country has at least one non-missing value for the pre-treatment ( $t < 0$ ) and post-treatment period ( $t > 0$ ). A cohort is removed if either the treated country is removed or there are no control countries remaining due to this criterion. Points indicate the coefficient point estimates on  $Treat_{i,j,c} \times \mathbb{1}(t = \tilde{t})$  for  $\tilde{t} = -2, -1, \dots, 4$ . Vertical bars denote 95% confidence intervals calculated using standard errors clustered at the cohort-country level.

## Tables

Table 1—: Summary Statistics

This table presents the summary statistics of the variables used in the analysis. Panel A reports the summary of variables used in the analysis of determinants in AML compliance. Panel B reports the summary of variables used in the cross-sectional gravity model analysis. Panel C reports the summary of variables used in the difference-in-difference analysis. Panel D reports the summary of variables used in the matched cohort difference-in-differences analysis of crime-related outcomes. For Panels B and C, the presented summary is prior to conditioning on average flow larger than \$1 million, as the criterion differs for trade and FDI.

Panel A: Determinants Cross Section

	N	Mean	Std Dev	Min	Q1	Med	Q3	Max
Jurisdictions (Both Rounds)	202							
Jurisdictions (4th Round)	194							
Jurisdictions (3rd Round)	187							
MER Year (Both Rounds)	381	5.113	2.66	0.0	3.0	5.0	7.0	11.0
Total Technical Compliance Score	381	2.49	0.564	1.196	2.085	2.55	2.925	3.95
Total Immediate Outcome Score	194	1.848	0.698	0.917	1.167	1.833	2.396	3.583
MER Year in 3rd Round	179	3.151	1.936	-1.0	2.0	3.0	4.0	9.0
3rd Round Avg. Compliance Score	179	2.193	0.505	1.196	1.792	2.174	2.573	3.333
Log GDP per capita	361	8.407	1.591	4.988	7.105	8.367	9.734	12.016
Log Population	367	15.303	2.332	9.219	14.003	15.69	16.873	21.026
1(OECD)	381	0.199	0.4	0.0	0.0	0.0	0.0	1.0
(Total Exports + Imports) / GDP	310	0.883	0.515	0.204	0.551	0.778	1.095	4.306
1(Legal Origin = SC)	339	0.029	0.169	0.0	0.0	0.0	0.0	1.0
1(Legal Origin = UK)	339	0.345	0.476	0.0	0.0	0.0	1.0	1.0
1(Legal Origin = FR)	339	0.501	0.501	0.0	0.0	1.0	1.0	1.0
1(Legal Origin = DE)	339	0.118	0.323	0.0	0.0	0.0	0.0	1.0
1(Electoral Autocracy)	315	0.327	0.47	0.0	0.0	0.0	1.0	1.0
1(Electoral Democracy)	315	0.305	0.461	0.0	0.0	0.0	1.0	1.0
1(Liberal Democracy)	315	0.263	0.441	0.0	0.0	0.0	1.0	1.0
Economic Freedom Index	313	60.481	10.763	15.6	53.8	60.6	67.9	89.9
1(Drug Producer/Transit)	381	0.113	0.317	0.0	0.0	0.0	0.0	1.0



## Panel B: Gravity Cross Section

	N	Mean	Std Dev	Min	Q1	Med	Q3	Max
Unique Country Pairs	14365							
Log Total Trade	51837	14.507	4.21	0.0	11.34	14.657	17.673	26.918
Log AML-Related Trade	45136	12.857	4.296	0.0	9.669	12.73	16.062	25.755
Log Foreign Direct Investment	14888	16.681	4.062	-23.043	14.001	16.831	19.585	28.017
Log Bank Credit Flow	11773	24.483	3.515	13.816	22.024	24.587	26.925	34.713
Log TC Proximity	57458	-3.47	0.371	-4.615	-3.711	-3.446	-3.205	-1.792
Log IO Proximity	28526	-1.958	0.59	-3.135	-2.398	-2.079	-1.609	-0.0
Log TC Cosine Similarity	57460	-0.055	0.03	-0.24	-0.072	-0.048	-0.032	0.0
Log IO Cosine Similarity	28730	-0.061	0.036	-0.251	-0.079	-0.054	-0.035	0.0
Country-pair TC Sum	57460	228.762	29.623	125.845	211.25	231.75	248.5	324.753
Country-pair IO Sum	28730	40.978	8.384	22.0	35.0	41.0	47.0	68.0
Log Absolute Diff in GDP/Capita	57460	9.132	1.625	-2.342	8.121	9.395	10.471	12.067
Log Sum of GDP/Capita	57460	9.941	1.12	6.744	9.095	10.049	10.835	12.587
Log Sum of GDP	57460	25.824	1.885	19.105	24.432	25.95	27.043	31.205
Log Physical Distance	56784	8.753	0.817	4.007	8.425	8.958	9.334	9.894
1(Shares Border)	56784	0.017	0.129	0.0	0.0	0.0	0.0	1.0
1(Common Religion)	50880	0.16	0.239	0.0	0.005	0.047	0.196	0.991
1(Common Language)	56112	0.155	0.361	0.0	0.0	0.0	0.0	1.0
1(Common Legal Origin)	56780	0.373	0.484	0.0	0.0	0.0	1.0	1.0

## Panel C: Diff-in-Diff Panel

	N	Mean	Std Dev	Min	Q1	Med	Q3	Max
Unique Country Pairs	14364							
Log Total Trade	1457082	15.099	4.567	0.0	11.997	15.521	18.486	27.028
Log AML-Related Trade	1144408	13.637	4.659	0.0	10.316	13.837	17.188	26.04
Log Foreign Direct Investment	675155	10.404	9.302	0.0	0.0	13.377	18.73	28.309
Diff in Compliance	1838320	-0.121	0.797	-2.373	-0.664	-0.1	0.406	2.398

Panel D: Matched Cohorts Panel

	N	Mean	Std Dev	Min	Q1	Med	Q3	Max
Money Laundering (log)	2016	1.265	1.195	-6.244	0.447	1.149	1.934	5.187
Corruption (log)	2303	2.133	1.356	0.0	0.938	2.089	3.34	5.435
Bribery (log)	2279	0.849	0.855	0.0	0.144	0.568	1.401	4.19
Fraud (log)	2176	4.404	1.817	-3.099	3.465	4.568	5.825	7.995
Cyber-Related Fraud (log)	1231	2.489	2.19	0.0	0.276	1.803	4.641	7.438
Heroin Retail Price	876	87.501	55.781	19.49	48.91	68.0	102.0	306.0
Cocaine Retail Price	876	89.495	24.74	37.0	68.367	89.0	105.0	170.0
Drug Treatment (log)	2521	3.644	1.582	-2.435	2.794	3.638	4.774	7.257
Overdose Cases	11228	42.704	23.053	13.66	31.525	37.969	47.858	188.232
Overdose Deaths	11228	0.851	1.296	0.004	0.129	0.377	0.919	20.14
HT Victims (log)	5808	0.683	0.619	0.0	0.172	0.534	1.024	4.625
HT Offences (log)	4253	0.448	0.505	0.0	0.03	0.295	0.681	4.569
HT Convictions (log)	5294	0.194	0.274	0.0	0.0	0.079	0.304	3.371
HT Prosecutions (log)	5056	0.405	0.455	0.0	0.031	0.243	0.641	4.377
HT Smuggling (log)	2196	0.961	0.938	0.0	0.249	0.667	1.497	5.358
Log GDP per Capita	12961	8.757	1.363	5.293	7.818	8.638	9.842	12.19
Log Population	12972	15.447	2.127	9.211	14.518	16.04	16.95	21.087

Table 2—: Determinants of AML Compliance and Effectiveness

This table reports the results of predicting country-level anti-money laundering compliance and effectiveness as defined by the Financial Action Task Force. The dependent variable for columns (1) and (2) is the country's average AML compliance score to FATF recommendations. For column (3), the dependent variable is the country's average AML effectiveness score in the FATF Immediate Outcome criteria, which was introduced in the fourth round evaluations. Column (1) uses the scores from the third round mutual evaluations, which ran from 2004 to 2014. Columns (2) and (3) use the scores from fourth round mutual evaluations, which ran from 2014 to 2024. The country-level predictors include the natural logarithm of GDP per capita, the natural logarithm of population, indicator for whether the country is a member of the OECD, the sum of total exports and imports scaled by GDP, indicators for legal origin (with Scandinavian law being the dropped reference group), indicators for political regime as defined by Lüthmann, Tannenber and Lindberg (2018) (with closed autocracy being the dropped reference group), Index of Economic Freedom constructed by the Heritage Foundation, and indicator for whether the country is designated as a drug producer or a drug transit country by the US State Department's International Narcotics Control Strategy Reports. All columns control for evaluation-year fixed effects. Heteroskedasticity-robust standard errors are reported in parentheses below each coefficient. \*, \*\*, \*\*\* denote statistical significance at 10%, 5%, 1% levels, respectively.

	Avg Compliance		Avg Effectiveness
	3rd Round	4th Round	4th Round
	(1)	(2)	(3)
log(GDP per capita)	0.2379*** (0.0303)	0.1625*** (0.0425)	0.2761*** (0.0652)
log(Population)	0.0504** (0.0160)	0.0515** (0.0224)	0.1576*** (0.0247)
1(OECD)	0.0151 (0.1307)	-0.0110 (0.1567)	0.2148 (0.1716)
(Total Exports + Imports) / GDP	0.1320* (0.0661)	0.0588 (0.0480)	0.0249 (0.0754)
1(Legal Origin = UK)	0.2095 (0.1322)	0.3437* (0.1617)	0.5030** (0.2122)
1(Legal Origin = FR)	0.2788* (0.1317)	0.4698*** (0.1278)	0.5663** (0.1890)
1(Legal Origin = DE)	0.3116*** (0.0736)	0.2280* (0.1029)	0.3384* (0.1616)
1(Electoral Autocracy)	0.1427 (0.1550)	-0.0007 (0.1449)	-0.0198 (0.1938)
1(Electoral Democracy)	0.1034 (0.1250)	0.1495 (0.1466)	0.0161 (0.1362)
1(Liberal Democracy)	-0.0101 (0.1785)	0.0426 (0.2147)	0.0083 (0.1776)
Economic Freedom Index	0.0004 (0.0041)	0.0049 (0.0050)	0.0120* (0.0054)
1(Drug Producer/Transit)	0.0008 (0.0974)	-0.1137 (0.0929)	-0.0171 (0.1442)
Observations	131	143	143
Adjusted R <sup>2</sup>	0.52455	0.31433	0.60349
Evaluation Year fixed effects	Yes	Yes	Yes

Table 3—: Gravity Model of Trade

This table reports the results of estimating the cross-sectional gravity model for trade flow. The observations are unique at the origin country-destination country-FATF evaluation round level. The dependent variable is the natural logarithm of the average trade flow between an origin and a destination country for the duration of each round, i.e., 2004–2013 for the third round and 2014–2024 for the fourth round. The variables of interest are the natural logarithm of proximity and cosine similarity measures. The proximity between two countries is calculated as the inverse of L-1 norm-induced distance for the vector of average compliance or effectiveness scores. The cosine similarity between two countries is calculated as the inner product of the average compliance or effectiveness score vectors divided by the L-2 norm of compliance or effectiveness score vectors for the two countries. We control for the sum of the average compliance or effectiveness scores of the given country-pair, the natural logarithm of the absolute difference in GDP per capita, the natural logarithm of the sum of two countries' GDP and GDP per capita, the natural logarithm of the physical distance between the two countries measured as the population-weighted average of major cities, and indicators for whether the countries share a borderline, a common religion, a common language and a common legal origin. Columns (1)–(4) additionally control for round-origin fixed effects, whereas columns (5)–(8) control for round-destination fixed effects. Standard errors are two-way clustered at the origin and destination country levels.  $t$  statistics are reported in parentheses below each coefficient. \*, \*\*, \*\*\* denote statistical significance at 10%, 5%, 1% levels, respectively.

	Log Total Trade Flow							
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Log Technical Compliance Proximity	0.655*** (4.761)				1.077*** (6.215)			
Log Immediate Outcome Proximity		0.429*** (4.911)				0.732*** (6.739)		
Log Cosine Similarity in Technical Compliance			7.946*** (3.260)				16.742*** (5.296)	
Log Cosine Similarity in Immediate Outcome				-0.392 (-0.235)				-0.904 (-0.353)
Log Country-pair Technical Compliance Sum	2.816*** (3.768)		2.147*** (2.693)		3.280*** (3.448)		1.761* (1.674)	
Log Country-pair Immediate Outcome Sum		1.941*** (2.828)		2.061*** (2.943)		3.593*** (4.314)		3.856*** (4.255)
Log Absolute Difference in GDP/Capita	-0.146*** (-3.544)	-0.095** (-2.390)	-0.173*** (-3.984)	-0.145*** (-3.233)	-0.224*** (-4.260)	-0.138*** (-2.801)	-0.264*** (-4.822)	-0.222*** (-4.096)
Log Sum of GDP/Capita	0.228* (1.737)	0.209 (1.275)	0.231* (1.757)	0.213 (1.290)	0.499*** (3.322)	0.319* (1.902)	0.503*** (3.341)	0.328* (1.901)
Log Sum of GDP	1.081*** (19.698)	1.002*** (15.069)	1.084*** (19.878)	0.960*** (14.163)	1.277*** (17.615)	1.183*** (13.789)	1.283*** (17.711)	1.114*** (12.003)
Log Physical Distance	-1.227*** (-19.586)	-1.173*** (-18.824)	-1.239*** (-19.616)	-1.204*** (-19.235)	-1.136*** (-14.819)	-1.091*** (-14.818)	-1.148*** (-14.755)	-1.145*** (-15.164)
1(Shares Border)	0.955*** (7.263)	0.986*** (7.216)	0.971*** (7.324)	1.041*** (7.588)	1.295*** (8.575)	1.252*** (8.224)	1.314*** (8.684)	1.356*** (8.650)
1(Common Religion)	0.074 (0.439)	0.030 (0.175)	0.071 (0.420)	0.034 (0.190)	-0.016 (-0.070)	-0.045 (-0.202)	-0.015 (-0.067)	-0.030 (-0.131)
1(Common Language)	0.547*** (4.405)	0.537*** (4.270)	0.556*** (4.482)	0.530*** (4.083)	0.248* (1.712)	0.198 (1.399)	0.270* (1.865)	0.188 (1.225)
1(Common Legal Origin)	0.134** (2.140)	0.120* (1.802)	0.120* (1.905)	0.099 (1.511)	0.099 (1.398)	0.082 (1.170)	0.075 (1.055)	0.048 (0.668)
Observations	31,782	15,857	31,784	15,914	31,782	15,857	31,784	15,914
Within R <sup>2</sup>	0.445	0.426	0.442	0.415	0.450	0.453	0.447	0.434
Round-Origin fixed effects	Yes	Yes	Yes	Yes				
Round-Destination fixed effects					Yes	Yes	Yes	Yes

Table 4—: Gravity Model of Foreign Direct Investment

This table reports the results of estimating the cross-sectional gravity model for foreign direct investment. The observations are unique at the origin country-destination country-FATF evaluation round level. The dependent variable is the natural logarithm of the average FDI flow between an origin and a destination country for the duration of each round, i.e., 2004–2013 for the third round and 2014–2024 for the fourth round. The variables of interest are the natural logarithm of proximity and cosine similarity measures. The proximity between two countries is calculated as the inverse of L-1 norm-induced distance for the vector of average compliance or effectiveness scores. The cosine similarity between two countries is calculated as the inner product of the average compliance or effectiveness score vectors divided by the L-2 norm of compliance or effectiveness score vectors for the two countries. We control for the sum of the average compliance or effectiveness scores of the given country-pair, the natural logarithm of the absolute difference in GDP per capita, the natural logarithm of the sum of two countries' GDP and GDP per capita, the natural logarithm of the physical distance between the two countries measured as the population-weighted average of major cities, and indicators for whether the countries share a borderline, a common religion, a common language and a common legal origin. Columns (1)–(4) additionally control for round-origin fixed effects, whereas columns (5)–(8) control for round-destination fixed effects. Standard errors are two-way clustered at the origin and destination country levels.  $t$  statistics are reported in parentheses below each coefficient. \*, \*\*, \*\*\* denote statistical significance at 10%, 5%, 1% levels, respectively.

	Log Foreign Direct Investment Flow							
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Log Technical Compliance Proximity	0.682*** (2.899)				1.026*** (4.095)			
Log Immediate Outcome Proximity		0.527*** (3.728)				0.622*** (3.585)		
Log Cosine Similarity in Technical Compliance			10.213** (2.527)				10.817** (2.600)	
Log Cosine Similarity in Immediate Outcome				0.714 (0.279)				-0.604 (-0.231)
Log Country-pair Technical Compliance Sum	3.693*** (2.905)		3.129** (2.407)		5.869*** (4.460)		4.676*** (3.526)	
Log Country-pair Immediate Outcome Sum		2.014* (1.824)		2.212** (2.100)		1.711 (1.519)		1.713 (1.570)
Log Absolute Difference in GDP/Capita	-0.275*** (-3.880)	-0.269*** (-4.122)	-0.294*** (-3.995)	-0.319*** (-4.686)	-0.425*** (-5.208)	-0.482*** (-5.667)	-0.457*** (-5.271)	-0.532*** (-5.909)
Log Sum of GDP/Capita	0.758*** (2.875)	0.736*** (2.630)	0.746*** (2.866)	0.725** (2.546)	1.837*** (8.922)	2.108*** (8.963)	1.853*** (8.966)	2.077*** (9.091)
Log Sum of GDP	0.480*** (4.242)	0.403*** (3.469)	0.484*** (4.340)	0.348*** (2.883)	0.603*** (6.711)	0.617*** (6.331)	0.605*** (6.847)	0.558*** (5.667)
Log Physical Distance	-0.882*** (-9.465)	-0.816*** (-8.243)	-0.890*** (-9.606)	-0.854*** (-8.781)	-0.862*** (-9.068)	-0.841*** (-9.011)	-0.878*** (-9.279)	-0.899*** (-9.709)
1(Shares Border)	1.111*** (6.657)	0.966*** (5.704)	1.123*** (6.645)	0.985*** (5.913)	0.877*** (4.424)	0.768*** (3.598)	0.907*** (4.553)	0.784*** (3.718)
1(Common Religion)	0.991*** (3.483)	0.971*** (3.523)	0.998*** (3.512)	0.971*** (3.474)	0.732** (2.575)	0.640** (2.139)	0.715** (2.494)	0.648** (2.145)
1(Common Language)	0.894*** (3.893)	1.094*** (4.627)	0.894*** (3.858)	1.092*** (4.576)	1.077*** (5.496)	1.102*** (5.285)	1.062*** (5.384)	1.079*** (5.044)
1(Common Legal Origin)	0.258*** (2.403)	0.298*** (2.737)	0.252** (2.367)	0.271** (2.467)	0.004 (0.043)	0.055 (0.553)	-0.003 (-0.037)	0.035 (0.358)
Observations	11,259	6,302	11,261	6,326	11,260	6,303	11,262	6,327
Within R <sup>2</sup>	0.259	0.267	0.257	0.256	0.339	0.349	0.334	0.337
Round-Origin fixed effects	Yes	Yes	Yes	Yes				
Round-Destination fixed effects					Yes	Yes	Yes	Yes

Table 5—: Determinants of FATF Assessment Timing

This table reports the results of predicting the country's timing of mutual evaluations by the Financial Action Task Force. The dependent variable for all columns is the country's year of assessment relative to the start of the round, e.g., 3 if a country is evaluated in 2007 in the third round which started in 2004. Columns (1) and (2) use the timing of third round mutual evaluations, which ran from 2004 to 2014. Columns (3) and (4) use the timing of fourth round mutual evaluations, which ran from 2014 to 2024. The country-level predictors include the natural logarithm of GDP per capita, the natural logarithm of population, indicator for whether the country is a member of the OECD, the sum of total exports and imports scaled by GDP, indicators for legal origin (with Scandinavian law being the dropped reference group), indicators for political regime as defined by Lüthmann, Tannenberg and Lindberg (2018) (with closed autocracy being the dropped reference group), Index of Economic Freedom constructed by the Heritage Foundation, and indicator for whether the country is designated as a drug producer or a drug transit country by the US State Department's International Narcotics Control Strategy Reports. For the fourth round predictions (columns (3) and (4)), we also include the country's relative timing and average compliance score in the third round evaluations. Heteroskedasticity-robust standard errors are reported in parentheses below each coefficient. \*, \*\*, \*\*\* denote statistical significance at 10%, 5%, 1% levels, respectively.

	3rd Round MER Year		4th Round MER Year	
	(1)	(2)	(3)	(4)
log(GDP per capita)	-0.3781*** (0.0971)	-0.0345 (0.2028)	0.1703 (0.1464)	0.6829*** (0.2068)
log(Population)	-0.1789*** (0.0614)	0.0991 (0.1060)	-0.0337 (0.0782)	-0.0262 (0.1820)
1(OECD)		-0.9050 (0.7041)		-1.010 (0.6781)
(Total Exports + Imports) / GDP		-0.1033 (0.4218)		-0.3773 (0.4162)
1(Legal Origin = UK)		0.5796 (0.5913)		0.5248 (0.8447)
1(Legal Origin = FR)		1.530** (0.6103)		1.162 (0.8513)
1(Legal Origin = DE)		0.6127 (0.5817)		1.963** (0.8909)
1(Electoral Autocracy)		-0.8146 (0.7919)		-0.1967 (0.5414)
1(Electoral Democracy)		-1.300* (0.7407)		0.6084 (0.5801)
1(Liberal Democracy)		-0.8498 (0.8537)		-0.0672 (0.7681)
Economic Freedom Index		-0.0055 (0.0245)		-0.0283 (0.0247)
1(Drug Producer/Transit)		-0.7472 (0.4662)		0.1960 (0.7396)
3rd Round MER Year			0.8152*** (0.1029)	0.6692*** (0.1223)
3rd Round Avg. Compliance Score			-1.345*** (0.4728)	-1.720*** (0.5534)
Constant	9.900*** (1.451)	3.099 (2.733)	5.193*** (1.779)	3.042 (2.976)
Observations	176	131	171	133
Adjusted R <sup>2</sup>	0.08582	0.13554	0.40172	0.38734

Table 6—: Differences in Average Compliance Ratings across Rounds

This table presents the comparison of average compliance level for each of the four main assessments in our sample period: third-round Mutual Evaluation Report (MER3), third-round Follow Up Report (FUR3), fourth-round Mutual Evaluation Report (MER4), and fourth-round Follow Up Report (FUR4). Panel A reports the average compliance levels for each of the four assessments. ‘Per Recommendation’ refers to the recommendation-level Technical Compliance score averaged across countries, whereas ‘Per Country’ refers to the country-level Technical Compliance score averaged across recommendations. The difference arises from some countries having missing values for a small number of recommendations. Panel B reports the paired  $t$  test of difference in means between FUR3 and MER3, MER4 and FUR3, and FUR4 and MER4. The difference in means and the corresponding  $t$  statistic is reported in parentheses. \*, \*\*, \*\*\* denote statistical significance at 10%, 5%, 1% levels, respectively.

Panel A. Average Compliance				
	MER3	FUR3	MER4	FUR4
Per Recommendation	2.334	2.772	2.851	3.186
Per Country	2.335	2.775	2.851	3.185

Panel B. Differences			
	FUR3–MER3	MER4–FUR3	FUR4–MER4
Per Recommendation	0.438*** (10.372)	0.079*** (2.778)	0.335*** (9.503)
Per Country	0.44*** (7.109)	0.075 (0.958)	0.335*** (9.579)

Table 7—: Difference-in-Differences Analysis of Trade

This table reports the results of the stacked cohort difference-in-differences analysis for trade flow. The dependent variable is the natural logarithm of the trade flow between an origin and a destination country in a given year. Each cohort consists of one country that is evaluated by FATF in the fourth round evaluations and five control countries matched using Abadie and Imbens (2006) distance based on average compliance score in the third round, GDP per capita and population. The control countries must not be concurrently evaluated by FATF in the  $[-2, 4]$  window of the treated country's assessment. For each country in a cohort, we collect the bilateral trade flows with its trading partners, excluding partner countries in the same cohort. Treat is a binary variable equal to one if the country is the treated country within the cohort,  $t$  denotes event time relative to the treated country's evaluation, and Post is defined as  $1(t > 0)$ . Difference in compliance is defined as the trading partner's average compliance score minus the cohort member country's average compliance score. Column (1) reports the static version of the difference-in-differences, whereas column (2) reports the dynamic version. Column (3) reports the static version of the triple-differences estimation, using difference in compliance, and column (4) reports the dynamic version. All columns control for cohort-year fixed effects and cohort-origin-destination pair fixed effects. Standard errors are clustered at the cohort-country pair level and are reported in parentheses below each coefficient. \*, \*\*, \*\*\* denote statistical significance at 10%, 5%, 1% levels, respectively.

	Log Total Trade Flow			
	(1)	(2)	(3)	(4)
Treat $\times$ Post	-0.037*** (-5.038)		-0.039*** (-5.163)	
Treat $\times 1(t = -2)$		-0.034*** (-4.104)		-0.032*** (-3.790)
Treat $\times 1(t = 0)$		-0.004 (-0.496)		-0.005 (-0.549)
Treat $\times 1(t = 1)$		-0.020** (-2.070)		-0.021** (-2.113)
Treat $\times 1(t = 2)$		-0.025** (-2.332)		-0.026** (-2.398)
Treat $\times 1(t = 3)$		-0.079*** (-6.618)		-0.079*** (-6.543)
Treat $\times 1(t = 4)$		-0.099*** (-7.628)		-0.099*** (-7.525)
Post $\times$ Difference in Compliance			0.002 (0.353)	
Treat $\times$ Post $\times$ Difference in Compliance			0.031*** (3.108)	
$1(t = -2) \times$ Difference in Compliance				-0.011* (-1.944)
$1(t = 0) \times$ Difference in Compliance				-0.012** (-1.969)
$1(t = 1) \times$ Difference in Compliance				-0.010 (-1.425)
$1(t = 2) \times$ Difference in Compliance				-0.007 (-0.851)
$1(t = 3) \times$ Difference in Compliance				-0.001 (-0.127)
$1(t = 4) \times$ Difference in Compliance				-0.005 (-0.562)
Treat $\times 1(t = -2) \times$ Difference in Compliance				0.012 (1.110)
Treat $\times 1(t = 0) \times$ Difference in Compliance				0.025** (2.318)
Treat $\times 1(t = 1) \times$ Difference in Compliance				0.031** (2.452)
Treat $\times 1(t = 2) \times$ Difference in Compliance				0.052*** (3.603)
Treat $\times 1(t = 3) \times$ Difference in Compliance				0.045*** (2.765)
Treat $\times 1(t = 4) \times$ Difference in Compliance				0.039** (2.265)
Observations	1,061,759	1,061,759	1,061,629	1,061,629
Within R <sup>2</sup>	0.000	0.000	0.000	0.000
Cohort-Year fixed effects	Yes	Yes	Yes	Yes
Cohort-Origin-Destination fixed effects	Yes	Yes	Yes	Yes



Table 8—: Difference-in-Differences Analysis of Foreign Direct Investment

This table reports the results of the stacked cohort difference-in-differences analysis for foreign direct investment flow. The dependent variable is the natural logarithm of the trade flow between an origin and a destination country in a given year. Each cohort consists of one country that is evaluated by FATF in the fourth round evaluations and five control countries matched using Abadie and Imbens (2006) distance based on average compliance score in the third round, GDP per capita and population. The control countries must not be concurrently evaluated by FATF in the  $[-2, 4]$  window of the treated country's assessment. For each country in a cohort, we collect the bilateral FDI flows with its trading partners, excluding partner countries in the same cohort. Treat is a binary variable equal to one if the country is the treated country within the cohort,  $t$  denotes event time relative to the treated country's evaluation, and Post is defined as  $\mathbb{1}(t > 0)$ . Difference in compliance is defined as the trading partner's average compliance score minus the cohort member country's average compliance score. Column (1) reports the static version of the difference-in-differences, whereas column (2) reports the dynamic version. Column (3) reports the static version of the triple-differences estimation, using difference in compliance, and column (4) reports the dynamic version. All columns control for cohort-year fixed effects and cohort-origin-destination pair fixed effects. Standard errors are clustered at the cohort-country pair level and are reported in parentheses below each coefficient. \*, \*\*, \*\*\* denote statistical significance at 10%, 5%, 1% levels, respectively.

	Log Foreign Direct Investment Flow			
	(1)	(2)	(3)	(4)
Treat $\times$ Post	0.081*** (2.749)		0.089*** (3.009)	
Treat $\times \mathbb{1}(t = -2)$		0.068** (2.460)		0.060** (2.133)
Treat $\times \mathbb{1}(t = 0)$		0.028 (1.042)		0.031 (1.143)
Treat $\times \mathbb{1}(t = 1)$		0.068* (1.953)		0.077** (2.206)
Treat $\times \mathbb{1}(t = 2)$		0.101*** (2.614)		0.110*** (2.855)
Treat $\times \mathbb{1}(t = 3)$		0.160*** (3.690)		0.166*** (3.826)
Treat $\times \mathbb{1}(t = 4)$		0.154*** (3.147)		0.153*** (3.109)
Post $\times$ Difference in Compliance			-0.059*** (-2.895)	
Treat $\times$ Post $\times$ Difference in Compliance			0.018 (0.416)	
$\mathbb{1}(t = -2) \times$ Difference in Compliance				0.028 (1.373)
$\mathbb{1}(t = 0) \times$ Difference in Compliance				-0.017 (-0.843)
$\mathbb{1}(t = 1) \times$ Difference in Compliance				-0.067*** (-2.709)
$\mathbb{1}(t = 2) \times$ Difference in Compliance				-0.087*** (-3.007)
$\mathbb{1}(t = 3) \times$ Difference in Compliance				-0.057* (-1.824)
$\mathbb{1}(t = 4) \times$ Difference in Compliance				0.016 (0.455)
Treat $\times \mathbb{1}(t = -2) \times$ Difference in Compliance				-0.004 (-0.082)
Treat $\times \mathbb{1}(t = 0) \times$ Difference in Compliance				-0.001 (-0.022)
Treat $\times \mathbb{1}(t = 1) \times$ Difference in Compliance				0.034 (0.614)
Treat $\times \mathbb{1}(t = 2) \times$ Difference in Compliance				0.024 (0.396)
Treat $\times \mathbb{1}(t = 3) \times$ Difference in Compliance				0.028 (0.425)
Treat $\times \mathbb{1}(t = 4) \times$ Difference in Compliance				-0.026 (-0.338)
Observations	362,585	362,585	362,540	362,540
Within R <sup>2</sup>	0.000	0.000	0.000	0.000
Cohort-Year fixed effects	Yes	Yes	Yes	Yes
Cohort-Origin-Destination fixed effects	Yes	Yes	Yes	Yes

Table 9—: Difference-in-Differences Analysis of Illegal Activity

This table reports the results of the stacked cohort difference-in-differences analysis for various types of illegal activities. Panel A presents the results using economic crime. The dependent variables are the natural logarithm of money laundering cases for column (1), corruption cases for column (2), bribery cases for column (3), fraud cases for column (4), and cyber-related fraud for column (5). Panel B displays the results for drug-related outcomes. The dependent variables are the retail price of heroin for column (1), retail price of cocaine for column (2), the natural logarithm of drug treatment cases for column (3), drug overdose incidences for column (4), and drug overdose deaths for column (5). Panel C reports the results for human trafficking. The dependent variables are the natural logarithm of human trafficking prosecutions for column (1), convictions for column (2), documented offenses for column (3), number of victims for column (4), and cases of smuggling in persons for column (5). Each cohort consists of one country that is evaluated by FATF in the fourth round evaluations and five control countries matched using Abadie and Imbens (2006) distance based on average compliance score in the third round, GDP per capita and population. The control countries must not be concurrently evaluated by FATF in the  $[-2, 4]$  window of the treated country's assessment. We further require that the country has at least one non-missing value for the pre-treatment ( $t < 0$ ) and post-treatment period ( $t > 0$ ). A cohort is removed if either the treated country is removed or there are no control countries remaining due to this criterion. Treat is a binary variable equal to one if the country is the treated country within the cohort,  $t$  denotes event time relative to the treated country's evaluation, and Post is defined as  $\mathbb{1}(t > 0)$ . All columns include cohort-country fixed effects and cohort-year fixed effects. Standard errors are clustered at the country level and are reported in parentheses below each coefficient. \*, \*\*, \*\*\* denote statistical significance at 10%, 5%, 1% levels, respectively.

Panel A. Economic Crime					
	Money Laundering (log) (1)	Corruption (log) (2)	Bribery (log) (3)	Fraud (log) (4)	Cyber-Related Fraud (log) (5)
Treat $\times$ Post	0.314** (2.527)	-0.080 (-0.609)	0.157 (1.437)	0.109* (1.734)	-0.043 (-0.324)
GDP/capita	0.001 (0.094)	-0.013 (-0.973)	0.000 (0.021)	0.005 (1.089)	-0.007 (-0.861)
Population (log)	3.598 (1.187)	-2.697 (-1.291)	-2.705 (-1.008)	-0.157 (-0.082)	2.360 (0.241)
N. Obs.	635	918	881	760	258
Within R <sup>2</sup>	0.064	0.015	0.033	0.013	0.008
Cohort-Country fixed effect	Yes	Yes	Yes	Yes	Yes
Cohort-Year fixed effect	Yes	Yes	Yes	Yes	Yes

Panel B. Drug-Related Outcomes					
	Heroin Retail Price (1)	Cocaine Retail Price (2)	Drug Treatment (log) (3)	Overdose Cases (4)	Overdose Deaths (5)
Treat $\times$ Post	7.949 (1.597)	1.795 (0.697)	0.069 (0.463)	-0.138 (-0.478)	0.042 (1.495)
GDP/capita	0.424 (1.432)	0.056 (0.286)	0.017 (1.175)	0.045 (0.924)	0.001 (0.241)
Population (log)	-342.162* (-1.894)	-13.156 (-0.139)	2.190 (0.613)	9.193** (2.496)	0.584*** (2.652)
N. Obs.	832	832	450	10,215	10,215
Within R <sup>2</sup>	0.032	0.002	0.010	0.024	0.016
Cohort-Country fixed effect	Yes	Yes	Yes	Yes	Yes
Cohort-Year fixed effect	Yes	Yes	Yes	Yes	Yes

Panel C. Human Trafficking					
	Prosecutions (log) (1)	Convictions (log) (2)	Offenses (log) (3)	Victims (log) (4)	Smuggling Cases (log) (5)
Treat $\times$ Post	-0.013 (-0.285)	0.025 (0.576)	0.023 (0.327)	0.067 (1.002)	0.078 (0.717)
GDP/capita	-0.004 (-1.039)	-0.001 (-0.291)	0.011 (0.662)	0.003 (0.452)	-0.009 (-1.252)
Population (log)	1.784* (1.849)	1.206 (1.087)	-0.226 (-0.175)	-1.030 (-0.707)	0.439 (0.291)
N. Obs.	1,442	1,375	1,022	2,268	869
Within R <sup>2</sup>	0.017	0.020	0.004	0.005	0.013
Cohort-Country fixed effect	Yes	Yes	Yes	Yes	Yes
Cohort-Year fixed effect	Yes	Yes	Yes	Yes	Yes

## ONLINE APPENDIX: DATA COLLECTION

Table A1—: Description of Data Source and Collected Variables

This table describes the data sources, coverage of each data set, and variables collected from each source.

Source	Coverage	Data Collected
Financial Action Task Force	2004–2024	AML Compliance and Effectiveness ratings from Mutual Evaluation Report (3rd and 4th rounds)
World Bank World Development Indicators	1960–2023	Population, Gross Domestic Product, domestic credit to private sector, personal remittances received, number of bank branches per 100,000 adults.
International Monetary Fund CDIS	2009–2022	Foreign direct investment by counterparty country
United Nations Office on Drugs and Crime World Drug Report	2014–2022	Treatment by drug type, drug prices (Western Europe only)
United Nations Office on Drugs and Crime Corruption and Economic Crime Data	2003–2022	Corruption, bribery, burglary, theft, fraud, money laundering, cyber-related fraud cases
United Nations Office on Drugs and Crime Trafficking in Persons Data/GLOTIP	2003–2022	Human trafficking prosecutions, convictions, offences, detected victims
Rafael La Porta’s website	Time-invariant	Country’s legal origin
State Department International Narcotics Control Strategy Reports	Time-invariant	List of drug producing countries
CEPII BACI	1995–2023	Bilateral trade values at the product level
Heritage Foundation	1995–2025	Index of Economic Freedom
Our World in Data	1789–2024	Political regime classified by Lührmann, Tanenberg and Lindberg (2018)
Institute for Health Metrics and Evaluation Global Burden of Disease data	2000–2021	Drug use disorder incidences and deaths

## ONLINE APPENDIX: FATF INTERNATIONAL STANDARDS

**A: AML/CFT Policies and Coordination**

- R1: Assessing risks & applying a risk-based approach.
- R2: National cooperation and coordination.

**B: Money Laundering and Confiscation**

- R3: Money laundering offence.
- R4: Confiscation and provisional measures.

**C: Terrorist Financing and Financing of Proliferation**

- R5: Terrorist financing offence.
- R6: Targeted terrorism financial sanctions.
- R7: Targeted financial sanctions related to proliferation.
- R8: Non-profit organisations.

**D: Preventive Measures**

- R9: Financial institution secrecy laws.
- R10: Customer due diligence.
- R11: Record keeping.
- R12: Politically exposed persons.
- R13: Correspondent banking.
- R14: Money or value transfer services.
- R15: New technologies.
- R16: Wire transfers.
- R17: Reliance on third parties.
- R18: Internal controls and foreign branches and subsidiaries.
- R19: Higher-risk countries
- R20: Reporting of suspicious transactions.
- R21: Tipping-off and confidentiality.
- R22: DNFBPs: Customer due diligence.
- R23: DNFBPs: Other measures.

**E: Transparency and Beneficial Ownership of Legal Persons and Arrangements**

- R24: Transparency and beneficial ownership of legal persons.
- R25: Transparency and beneficial ownership of legal arrangements.

**F: Powers and Responsibilities of Competent Authorities and Other Institutional Measures**

- R26: Regulation and supervision of financial institutions.
- R27: Powers of supervisors.
- R28: Regulation and supervision of DNFBPs.
- R29: Financial intelligence units.
- R30: Responsibilities of law enforcement and investigative authorities.
- R31: Powers of law enforcement and investigative authorities.
- R32: Cash couriers.
- R33: Statistics.
- R34: Guidance and feedback.
- R35: Sanctions.

**G: International Cooperation**

- R36: International instruments.
- R37: Mutual legal assistance.
- R38: Mutual legal assistance: freezing and confiscation.
- R39: Extradition.
- R40: Other forms of international cooperation.

Table B1—: FATF Fourth Round 40 Technical Recommendations.

<b>IO1: Risk, Policy, and Coordination (Rec. 1, 2, 36)</b> <ul style="list-style-type: none"> <li>Assessing risks and applying a risk-based approach</li> <li>National cooperation and coordination</li> </ul>	<b>IO6: Preventive Measures (Rec. 10, 11, 17, 18, 21)</b> <ul style="list-style-type: none"> <li>Customer due diligence and record-keeping</li> <li>Reporting of suspicious transactions</li> </ul>
<b>IO2: International Cooperation (Rec. 35, 37, 40)</b> <ul style="list-style-type: none"> <li>Mutual legal assistance and other cooperation</li> </ul>	<b>IO7: Financial Intelligence Units (FIUs) (Rec. 29, 30, 31)</b> <ul style="list-style-type: none"> <li>Effective FIUs receiving, analyzing, and disseminating information</li> </ul>
<b>IO3: Confiscation (Rec. 4, 5, 38)</b> <ul style="list-style-type: none"> <li>Confiscation of criminal proceeds</li> </ul>	<b>IO8: Law Enforcement (Rec. 31)</b> <ul style="list-style-type: none"> <li>Powers and resources to investigate and prosecute ML/TF</li> </ul>
<b>IO4: Terrorist Financing (Rec. 6, 7, 8)</b> <ul style="list-style-type: none"> <li>Criminalization of terrorist financing and targeted sanctions</li> </ul>	<b>IO9: Legal Persons (Rec. 22, 24)</b> <ul style="list-style-type: none"> <li>Transparency of beneficial ownership and control</li> </ul>
<b>IO5: Financial Sanctions (Rec. 7, 9)</b> <ul style="list-style-type: none"> <li>Implementation and enforcement of financial sanctions</li> </ul>	<b>IO10: Legal Arrangements (Rec. 23, 25)</b> <ul style="list-style-type: none"> <li>Transparency of beneficial ownership and control</li> </ul>
	<b>IO11: Non-Profit Organizations (Rec. 8)</b> <ul style="list-style-type: none"> <li>Measures to prevent terrorist financing abuse</li> </ul>

Table B2—: FATF Fourth Round 11 Immediate Outcomes.

## ONLINE APPENDIX: ADDITIONAL RESULTS

Table C1—: Gravity Model OLS Estimation – Origin and Destination Fixed Effects

	Log Total Trade			
	(1)	(2)	(3)	(4)
Log Technical Compliance Proximity	0.095 (1.199)			
Log Immediate Outcome Proximity		0.201*** (3.390)		
Log Technical Compliance Cosine Similarity			2.084* (1.796)	
Log Immediate Outcome Cosine Similarity				0.971 (1.452)
Log Absolute Diff in GDP/Capita	-0.045* (-1.856)	-0.019 (-0.717)	-0.049* (-1.942)	-0.046* (-1.732)
Log Physical Distance	-1.260*** (-24.439)	-1.202*** (-22.981)	-1.261*** (-24.373)	-1.220*** (-23.384)
1(Shares Border)	0.680*** (5.234)	0.736*** (5.459)	0.681*** (5.236)	0.736*** (5.445)
1(Common Religion)	0.296** (2.369)	0.261** (2.042)	0.296** (2.362)	0.246* (1.917)
1(Common Language)	0.540*** (6.132)	0.494*** (5.798)	0.539*** (6.130)	0.503*** (5.806)
1(Common Legal Origin)	0.159*** (3.653)	0.155*** (3.380)	0.158*** (3.630)	0.150*** (3.292)
N. Obs.	31,782	15,857	31,784	15,914
Within R <sup>2</sup>	0.347	0.341	0.347	0.338
Round-Origin FE	Yes	Yes	Yes	Yes
Round-Destination FE	Yes	Yes	Yes	Yes

Table C2—: Gravity Model Poisson Estimation

	(1)	(2)	(3)	Total Trade		(6)	(7)	(8)
	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
Log Technical Compliance Proximity	1.112*** (4.021)				1.226*** (3.588)			
Log Immediate Outcome Proximity		0.294*** (3.014)				0.427*** (4.297)		
Log Technical Compliance Cosine Similarity			21.792*** (3.156)				24.815*** (2.998)	
Log Immediate Outcome Cosine Similarity				3.500 (1.463)				2.530 (0.847)
Country-pair Technical Compliance Sum	0.010*** (3.360)		0.005 (1.376)		0.005 (1.567)		0.001 (0.182)	
Country-pair Immediate Outcome Sum		0.072*** (3.284)		0.068*** (3.487)		0.039* (1.896)		0.043** (2.110)
Log Absolute Diff in GDP/Capita	-0.075* (-1.955)	-0.041 (-1.173)	-0.089** (-2.410)	-0.047 (-1.291)	-0.073* (-1.922)	-0.065*** (-2.720)	-0.089** (-2.402)	-0.075*** (-2.636)
Log Sum of GDP/Capita	0.461*** (2.772)	0.231 (1.463)	0.477*** (2.724)	0.236 (1.406)	0.281 (1.313)	0.187 (1.012)	0.288 (1.306)	0.174 (0.841)
Log Sum of GDP	1.295*** (15.266)	1.188*** (9.841)	1.301*** (15.221)	1.177*** (9.431)	1.286*** (9.927)	1.261*** (8.595)	1.295*** (9.836)	1.228*** (7.883)
Log Physical Distance	-0.749*** (-10.927)	-0.756*** (-10.893)	-0.745*** (-10.669)	-0.770*** (-11.055)	-0.710*** (-6.968)	-0.718*** (-7.376)	-0.704*** (-6.505)	-0.742*** (-7.537)
1(Shares Border)	0.640*** (3.553)	0.614*** (3.283)	0.637*** (3.644)	0.622*** (3.373)	0.859*** (2.698)	0.813** (2.312)	0.846*** (2.697)	0.845** (2.335)
1(Common Religion)	-0.243 (-0.947)	-0.166 (-0.601)	-0.179 (-0.692)	-0.186 (-0.651)	-0.400 (-1.129)	-0.321 (-0.849)	-0.314 (-0.938)	-0.339 (-0.854)
1(Common Language)	0.058 (0.492)	0.038 (0.282)	0.039 (0.327)	0.040 (0.282)	-0.234 (-1.629)	-0.246 (-1.565)	-0.250* (-1.708)	-0.291* (-1.663)
1(Common Legal Origin)	0.110* (1.791)	0.103** (2.268)	0.104* (1.797)	0.106** (2.322)	0.096 (1.190)	0.101 (1.296)	0.087 (1.084)	0.110 (1.351)
N. Obs.	31,782	15,857	31,784	15,914	31,782	15,857	31,784	15,914
Pseudo R <sup>2</sup>	0.804	0.802	0.802	0.800	0.767	0.762	0.765	0.757
Round-Origin FE	Yes	Yes	Yes	Yes				
Round-Destination FE					Yes	Yes	Yes	Yes

Table C3—: Gravity Model Poisson Estimation – Origin and Destination Fixed Effects

	Total Trade			
	(1)	(2)	(3)	(4)
Log Technical Compliance Proximity	0.304*** (2.618)			
Log Immediate Outcome Proximity		0.029 (0.635)		
Log Technical Compliance Cosine Similarity			8.033*** (2.771)	
Log Immediate Outcome Cosine Similarity				0.840 (1.213)
Log Absolute Diff in GDP/Capita	-0.002 (-0.117)	-0.019 (-0.942)	-0.008 (-0.436)	-0.020 (-1.030)
Log Physical Distance	-0.680*** (-13.485)	-0.679*** (-13.677)	-0.678*** (-13.491)	-0.679*** (-13.679)
1(Shares Border)	0.479*** (4.789)	0.451*** (4.251)	0.475*** (4.796)	0.446*** (4.283)
1(Common Religion)	0.058 (0.437)	0.115 (0.834)	0.062 (0.458)	0.108 (0.763)
1(Common Language)	0.226*** (3.411)	0.215*** (3.257)	0.219*** (3.282)	0.218*** (3.311)
1(Common Legal Origin)	0.050 (0.699)	0.034 (0.462)	0.047 (0.663)	0.033 (0.452)
N. Obs.	31,782	15,857	31,784	15,914
Pseudo R <sup>2</sup>	0.932	0.930	0.932	0.930
Round-Origin FE	Yes	Yes	Yes	Yes
Round-Destination FE	Yes	Yes	Yes	Yes



Table C4—: Gravity Model with Foreign Direct Investment – Origin and Destination  
Fixed Effects

	Log Foreign Direct Investment Inflow			
	(1)	(2)	(3)	(4)
Log Technical Compliance Proximity	0.450*** (2.749)			
Log Immediate Outcome Proximity		0.493*** (5.167)		
Log Cosine Similarity in Technical Compliance			7.137** (2.322)	
Log Cosine Similarity in Immediate Outcome				2.895** (2.303)
Log Absolute Difference in GDP/Capita	-0.149*** (-3.269)	-0.148*** (-3.015)	-0.164*** (-3.423)	-0.200*** (-3.929)
Log Physical Distance	-1.206*** (-16.527)	-1.139*** (-15.945)	-1.213*** (-16.744)	-1.183*** (-16.396)
1(Shares Border)	0.423*** (2.672)	0.417*** (2.693)	0.436*** (2.748)	0.407*** (2.646)
1(Common Religion)	1.302*** (6.081)	1.214*** (6.191)	1.295*** (6.037)	1.182*** (5.890)
1(Common Language)	0.846*** (5.793)	0.851*** (5.710)	0.836*** (5.686)	0.872*** (5.662)
1(Common Legal Origin)	0.200*** (2.632)	0.247*** (3.039)	0.200*** (2.660)	0.238*** (2.857)
Observations	11,259	6,302	11,261	6,326
Within R <sup>2</sup>	0.276	0.304	0.275	0.296
Round-Origin fixed effects	Yes	Yes	Yes	Yes
Round-Destination fixed effects	Yes	Yes	Yes	Yes

Table C5—: Gravity Model of Foreign Direct Investment with Poisson Estimation

	Foreign Direct Investment Inflow							
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Log Technical Compliance Proximity	0.143 (0.414)				0.364 (0.746)			
Log Immediate Outcome Proximity		0.254 (1.605)				0.296 (1.201)		
Log Cosine Similarity in Technical Compliance			5.138 (1.477)				9.663 (1.213)	
Log Cosine Similarity in Immediate Outcome				1.773 (0.584)				7.045 (1.412)
Log Country-pair Technical Compliance Sum	2.587** (2.110)		2.234* (1.915)		3.092* (1.952)		2.390 (1.612)	
Log Country-pair Immediate Outcome Sum		4.201 (1.518)		4.227 (1.548)		5.278** (2.529)		4.654** (2.356)
Log Absolute Difference in GDP/Capita	-0.088 (-1.002)	-0.028 (-0.306)	-0.087 (-0.959)	-0.033 (-0.374)	-0.218*** (-3.380)	-0.173*** (-2.760)	-0.219*** (-3.341)	-0.181*** (-2.864)
Log Sum of GDP/Capita	1.663** (2.460)	1.499** (2.355)	1.660** (2.464)	1.532** (2.349)	2.380*** (6.601)	2.194*** (6.061)	2.382*** (6.614)	2.257*** (6.434)
Log Sum of GDP	0.706*** (3.718)	0.588** (2.181)	0.713*** (3.758)	0.564** (2.089)	0.807*** (7.385)	0.609*** (5.128)	0.815*** (7.562)	0.623*** (5.585)
Log Physical Distance	-0.480*** (-3.408)	-0.435*** (-3.100)	-0.477*** (-3.336)	-0.433*** (-3.066)	-0.563*** (-5.144)	-0.498*** (-4.414)	-0.559*** (-5.081)	-0.503*** (-4.409)
1(Shares Border)	0.429 (1.064)	0.467 (1.217)	0.421 (1.070)	0.497 (1.301)	0.225 (0.631)	0.334 (1.047)	0.220 (0.626)	0.306 (1.048)
1(Common Religion)	0.718** (2.384)	0.769** (2.247)	0.735** (2.478)	0.783** (2.273)	0.465 (1.615)	0.424 (1.509)	0.476* (1.648)	0.383 (1.305)
1(Common Language)	0.219 (0.807)	0.315 (1.094)	0.221 (0.798)	0.309 (1.052)	0.365 (0.925)	0.418 (1.081)	0.367 (0.943)	0.479 (1.159)
1(Common Legal Origin)	-0.006 (-0.031)	-0.106 (-0.619)	-0.007 (-0.034)	-0.109 (-0.595)	-0.057 (-0.349)	-0.117 (-0.711)	-0.055 (-0.341)	-0.137 (-0.763)
Observations	12,829	6,840	12,831	6,866	12,829	6,840	12,831	6,866
Pseudo R <sup>2</sup>	0.683	0.701	0.684	0.700	0.709	0.723	0.709	0.724
Round-Origin fixed effects	Yes	Yes	Yes	Yes				
Round-Destination fixed effects					Yes	Yes	Yes	Yes

Table C6—: Gravity Model Poisson Estimation with Foreign Direct Investment – Origin and Destination Fixed Effects

	fdi_in			
	(1)	(2)	(3)	(4)
Log Technical Compliance Proximity	-0.078 (-0.362)			
Log Immediate Outcome Proximity		0.210** (2.415)		
Log Cosine Similarity in Technical Compliance			0.799 (0.145)	
Log Cosine Similarity in Immediate Outcome				5.283** (2.001)
Log Absolute Difference in GDP/Capita	-0.125** (-2.544)	-0.100* (-1.681)	-0.124** (-2.545)	-0.105* (-1.811)
Log Physical Distance	-0.455*** (-4.513)	-0.424*** (-4.608)	-0.451*** (-4.555)	-0.431*** (-4.729)
1(Shares Border)	0.455** (2.097)	0.448** (1.996)	0.450** (2.065)	0.420** (1.964)
1(Common Religion)	1.700*** (4.782)	1.674*** (4.995)	1.707*** (4.779)	1.687*** (5.098)
1(Common Language)	0.580*** (3.161)	0.630*** (3.371)	0.587*** (3.150)	0.639*** (3.446)
1(Common Legal Origin)	-0.279 (-1.639)	-0.302* (-1.736)	-0.282* (-1.657)	-0.325* (-1.813)
Observations	12,829	6,840	12,831	6,866
Pseudo R <sup>2</sup>	0.876	0.878	0.876	0.879
Round-Origin fixed effects	Yes	Yes	Yes	Yes
Round-Destination fixed effects	Yes	Yes	Yes	Yes