The Real Effects of Administrative Disclosure on Cross-Border Trade*

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Abstract

This study examines the real impact of government disclosure of aggregated administrative data on international trade. In 2015, China began publicly disclosing the names of firms awarded the top tax compliance rating, which is derived from detailed administrative records capturing firms' regulatory compliance, transactional reliability, and financial record-keeping quality. We posit that the disclosure provides a credible and easily accessible signal of firms' contractual risk to foreign business partners. Using transaction-level export data, we find that firms with a top rating relatively increase exports by 7.4% following the disclosure, with stronger effects at the extensive margin. The effect is stronger for small and young firms that lack reputation capital to support credible private information exchange, and for firms without reliable financial statements. Within-firm-year analyses confirm that the results are driven by the information channel and cannot be explained by concurrent improvements in firm fundamentals. Furthermore, we show that the disclosure leads to improved trade efficiency, as reflected in reduced relationship disruption risk and improved operational performance among customers. Overall, our findings demonstrate that government-administered disclosure complements financial reporting in alleviating information frictions that hinder cross-border trade.

Keywords: Disclosure, Administrative Data, Export, Information Friction

JEL Classification: F14, H25

1. Introduction

Improving the efficiency of cross-border trade remains a central challenge for many economies, particularly amid recent supply chain disruptions caused by the pandemic and rising geopolitical tensions (WTO 2016; Alfaro, Brussevich, Minoiu, and Presbitero 2025). Foreign buyers often face information asymmetries about domestic exporters' quality and creditworthiness, which hinder cross-border trade (Rauch 1999; Chaney 2018). While credible financial disclosures can mitigate information frictions by revealing firm performance, their efficacy varies with information credibility and accessibility (Minnis 2011). Additionally, public disclosure of audited financial statements imposes substantial costs on exporters especially smaller ones, potentially exacerbating their already disadvantaged position (Breuer 2021; Bernard, Kaya, and Wertz 2021; Glaeser and Omartian 2022; Breuer, Leuz, and Vanhaverbeke 2025). In this study, we assess the plausibility of an alternative policy tool, the disclosure of government-managed administrative data, in resolving information frictions in the international trade market.

Governments collect extensive administrative data through business registrations, tax filings, regulatory inspections, and compliance audits. These granular, point-in-time administrative records enable government agencies to assess firms' conduts with respect to regulatory compliance, business transactions, and financial record-keeping. Although administrative data are collected primarily for regulatory enforcement, their public disclosure, if any, likely generates informational spillovers in international trade. For example, Chinese exporters frequently highlight government recognition of their tax compliance on business-to-business platforms that connect domestic suppliers with foreign buyers.[1] Against this backdrop, we examine whether publicly disclosing government-assessed taxpayer compliance ratings, derived from administrative data, could serve as a credible signal that reduces information

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[1] We provide further details and examples in Section A of the Online Appendix.

asymmetry and facilitates cross-border trade. Specifically, we use the 2015 public disclosure of compliant taxpayers in China as a quasi-natural experiment and examine its impact on domestic firms' export activities.

In 2014, the State Taxation Administration (STA) introduced a unified national taxpayer compliance evaluation system, and beginning in early 2015, publicly disclosed the names of firms receiving the top ("A-type") rating for exemplary tax compliance. The rating covers behaviors ranging from tax filings and invoice management to liability payments, bookkeeping, audit cooperation, and consistency of records with third-party data (e.g., banks). This centralized program applies consistent and transparent standards to firms of all sizes, providing a broad, government-verified signal of operational and financial integrity.[2] It is worth noting that, prior to 2015, local tax authorities maintained their own honor roll systems and assigned annual compliance ratings to corporate taxpayers, but did not publicly disclose the identities of top-rated firms. Because top-rated firms are entitled to similar government-conferred privileges (e.g., preferential tax treatment and credit access) both before and after the regulation, this feature helps us mitigate concerns about confounding changes in firm fundamentals and isolate the incremental effect of public disclosure.[3]

We argue that public disclosure of top-rated taxpayers complements private due diligence in cross-border trade and facilitates exports by recognized firms. In China, tax compliance under a VAT-preeminent tax system creates a verifiable paper trail of transactions, incentivizing firms to maintain detailed documentation of sales and input purchases (Pomeranz 2015). The compliance assessments extend beyond taxes to recordkeeping, reporting accuracy, and regulatory conduct. Accordingly, the "A-type" designation indicates financial reliability,

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[2] Based on our conversations with STA officials, the rating system is managed at the national level, which sets the criteria, and all processing is conducted within a centrally maintained electronic system, leaving minimal scope for local discretion.
[3] The institutional background and implementation details of STA's taxpayer credit rating system, including the rollout timeline, scoring framework, and disclosure mechanism, are provided in Online Appendix B.

legitimate operations, and trustworthy transaction records. We thus posit that the public recognition credibly signals financial soundness (Berger, Minnis, and Sutherland 2017; Minnis and Sutherland 2017; Gallemore and Jacob 2020) and reduced regulatory risk, both are critical to firms' capacity to fulfill explicit and implicit contractual obligations. Consistent with this interpretation, advisors on China-facing cross-border transactions recommend using the taxpayer credit rating as a screening tool and triangulating credibility, especially when financial statements are unavailable or hard to interpret (CJO Global 2022; GWBMA 2025).

By increasing firm visibility and providing a credible, standardized, and easily accessible signal of firms' contractual performance risk, the disclosure alleviates information frictions and thus lowers the search costs foreign buyers face when screening potential suppliers.[4] This, in turn, enables top-rated firms to secure new foreign customers (Grossman and Helpman 2005). Moreover, the annual updating of ratings lowers post-contract monitoring costs by providing timely and credible information about a firm's contractual risk, thereby promoting inter-firm transactions at the intensive margin. Both mechanisms predict an increase in exports by top-rated taxpayers following the disclosure. Supporting this argument, Yuanhe Fine Chemicals, a Chinese chemical manufacturer, regards its "A-type" taxpayer designation as a "golden business card" that has helped the firm expand into 21 countries, establish stable partnerships with over 100 foreign customers, and nearly double its annual export contracts. Quectel, a Chinese telecom firm, notes the designation boosts its credibility in winning large bids and business with foreign firms.[5]

On the other hand, government-issued recognition may be perceived by foreign buyers

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[4] While exporters who received top rating before the disclosure regulation could exchange the information privately with foreign buyers, it is reasonable to assume that public disclosure conveys incremental information for several reasons. First, the regulatory framework standardizes taxpayer assessment criteria, thereby enhancing the comparability of ratings across regions and jurisdictions. Second, public disclosure reduces information processing costs for foreign buyers by aggregating and disseminating credible data through a centralized channel. Third, information released via public disclosure is inherently more credible than privately exchanged data.
[5] Sources: https://m.thepaper.cn/newsDetail_forward_30804234 and
 https://www.shanghai.gov.cn/nw31406/20241217/207848d47b344ec083cb997f0f914d20.html (accessed July 2025).

as indicative of heightened governmental oversight and heavily documented contractual processes. The combination of elevated compliance costs and reduced contractual flexibility might increase transaction costs and thus deter foreign buyers from transacting with top-rated firms. Moreover, the effectiveness of the disclosure may be undermined by distrust in government-administered evaluation systems, particularly in cross-border contexts where institutional trust varies (e.g., Nannestad 2008; Guiso, Sapienza, and Zingales 2009). Furthermore, to avoid revealing proprietary information, the disclosed information is highly aggregated and conveys only a coarse signal of "A-type" designation, potentially limiting its informational value for trade decisions. Therefore, the disclosure may not or even adversely affect the exports of top-rated firms.

To empirically test these competing predictions, we construct a firm-destination-year panel dataset using transaction-level export records compiled from Chinese customs filings. The data provide the universe of Chinese export transactions with mandatory reporting of shipment value for every declaration, enabling us to track firm-level export activity across destinations and over time.[6] We link these trade records to administrative data on firm-level legal and financial information for both public and private exporters. We implement a difference-in-differences (DID) design that compares changes in firm–destination exports from three years before to three years after 2015 between treated firms (i.e., those designated as A-type taxpayers in 2015) and control firms. Our final regression sample consists of 2,471,341 firm-export destination observations covering 98,338 unique firms, among which 96% are private firms.

Our results indicate that public recognition as an A-type taxpayer leads to a 7.43% increase in exports. We find no evidence of differential pre-trends, consistent with the parallel

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[6] Our aggregated shipment-level data closely resembles official macro export statistics published by the Ministry of Commerce of China (see Figure 1).

trends assumption. Using the subsample of trade with identifiable buyers, we conduct the analyses at the supplier–customer level to separate intensive versus extensive margin effects. We find that A-type recognition increases both margins, but the effect is slightly larger at the extensive margin: firms are 7.8% more likely to form new relationships, compared to a 6.7% trade expansion with existing partners.

We conduct cross-sectional tests to corroborate the reduced information frictions channel underlying the documented trade expansions. Our sample includes both public and private firms with diverse characteristics, allowing us to examine how the disclosure effects vary across firms operating in different information environments. Consistent with the idea that smaller and younger firms are less visible, and lack established reputational capital and effective channels to credibly convey information to foreign buyers (Bourveau, Kepler, She, and Wang 2024), we find that the positive export gains from public disclosure are primarily concentrated among these firms. Moreover, we further find that the disclosure effect is present only among private firms for which financial statements are not publicly available. Additionally, we document a stronger effect among exporters operating in regions with a high prevalence of accounting irregularities, which undermines the perceived credibility of privately exchanged financial data (e.g., financial statements prepared by private firms). The result, together with the documented trade expansion between existing relationships, also suggests that the disclosure influences trade not only by raising firm visibility but also by conveying information about a firm's contractual risk. Overall, these findings suggest that public disclosure of administrative data provides valuable credibility in settings when a firm's visibility is low and alternative firm-level signals are scarce or less reliable.

While our cross-sectional analyses support the reduced information frictions channel, a remaining concern is that the observed effects could reflect improvements in firm fundamentals that coincide with the A-type designation, such as improved access to credit. Conceptually, this

concern is mitigated by the implementation of analogous local honor roll systems that conferred similar benefits prior to the reform (but without disclosing top raters to the public) and the adoption of the DID research design.[7] To further isolate the reduced information frictions channel, we exploit within-firm-year variation in exports across destinations with heterogeneous information asymmetries regarding Chinese suppliers by including exporter–year fixed effects to absorb any confounding changes in firm fundamentals. We find that, for a given exporter, exports increase more to destinations without a free trade agreement, where foreign buyers lack government-maintained platforms (e.g., official trade portals, enquiry points, and customs transparency systems) that provide institutionalized access to information about domestic suppliers. The effect is also stronger for jurisdictions with a smaller ethnic Chinese presence, where informational frictions are higher due to language and cultural barriers that impede trade ex ante (Rauch 1999). These results increase the confidence that the documented export gains are partially attributable to reduced information frictions.

Having established that disclosure enhances top-rated taxpayers' exports, a natural question is whether it leads to higher international trade efficiency. If disclosure alleviates information frictions, it is expected to reduce supplier–customer mismatches and lower the risk of subsequent disruptions. Moreover, by reducing search and monitoring costs, disclosure should lower customers' supply chain management expenses and improve their inventory efficiency. To test this idea, we employ shipment-level data from U.S. Customs and Border Protection, which identifies importers and their sourcing from suppliers around the globe. We find that U.S. firms more reliant on Chinese exporters experience a decline in relationship termination risk and SG&A expense, and an increase in inventory turnover ratio. These results suggest that the disclosure of aggregated administrative data can enhance cross-border trade

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[7] Notably, our goal is not to dismiss this channel, but to establish the information mechanism underlying the observed export gains.

efficiency and generate positive spillovers for downstream customer firms.

Our study makes several contributions to the literature. First, we contribute to the literature on the real effects of information disclosure. Mandatory financial disclosure is a common policy tool for addressing information asymmetries between firms and external parties (see Leuz and Wysocki 2016 for a review). However, preparing financial statements imposes considerable compliance costs and risks revealing proprietary information, which limits the scope and effectiveness of this policy tool, particularly for smaller firms (Minnis 2011; Breuer 2021; Glaeser and Omartian 2022; Breuer et al. 2025). Our study examines a distinct policy design where the government acts as a de facto credit rating agency by issuing a public signal of tax compliance. This approach provides credible information to external stakeholders while minimizing compliance burdens and avoiding disclosure of sensitive data through the use of highly aggregated indicators. Our findings highlight its value as a less costly[8] tool for governments in developing economies to resolve information asymmetry concerning small firms and thereby promote their cross-border trades.

Second, we contribute to emerging research on the interplay between public disclosure and contracting along supply chains. Public disclosures can function as a verifiable and widely accessible device that complements private communication between business partners (Gigler 1994). Consistent with this view, prior studies document that firms use public disclosures to coordinate with product market partners (Bourveau, She, and Žaldokas 2020; Crawford, Huang, Li, and Yang 2020; Bourveau et al. 2024), and that the quality of the disclosures influences supply chain transactions (Bauer, Henderson, and Lynch 2018; Cheng, Sun, Ye, and Zhang 2020). Our study extends this literature by providing new evidence that in the absence of credible firm-initiated disclosures, government-managed administrative data can serve as a

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[8] As most governments have spent resources to collect extensive administrative, the incremental costs of disclosing aggregated information derived from these data are likely marginal.

credible informational substitute. In this regard, our findings also extends the literature on the real effects of tax-related disclosure (Jacob 2021; Hoopes, Robinson, and Slemrod 2024; Lester and Olbert 2025), which largely emphasized "tax shaming" disclosures that expose aggressive behavior (Hanlon, Hoopes, and Shackelford 2025). Our results provide new evidence on the real effects of "tax-honoring" disclosures on supply chain transactions and highlight the informational value in private market contracting.[9]

Lastly, our findings speak to the international economics literature on information frictions and search costs in trade (e.g., Rauch 1999; Chaney 2018). We provide evidence that a domestic administrative disclosure, though not specifically designed for export promotion, can reduce foreign buyers' search and monitoring costs, thereby expanding both the formation and depth of cross-border trading relationships. This complements evidence on the effectiveness of formal export promotion agencies in facilitating market access for domestic firms (Lederman, Olarreaga, and Payton 2010), but points to the potential of a distinct administrative tool through which governments can reveal non-proprietary information that supplements public financial disclosures (Glaeser and Omartian 2022) in mitigating informational frictions.

2. Background and Hypothesis

2.1 The Taxpayer Rating Disclosure Policy in China

Before 2014, China's taxpayer credit evaluation and recognition systems were decentralized and fragmented across local tax authorities. Local tax authorities operated their own honor roll programs to recognize compliant taxpayers, often granting local procedural benefits such as reduced audits and expedited processing. However, these programs lacked

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[9] Another stream of literature studies the real effect of private tax disclosure between jurisdictions. De Simone and Olbert (2022) show that mandatory private Country-by-Country Reporting led European firms to close tax-haven subsidiaries and shift activity to other low-tax countries, while Chow, Maydew, and She (2025) find that Tax information exchange agreements (TIEA) between U.S. and a foreign jurisdiction reduced tax-driven trade flows from that jurisdiction.

uniform standards and public disclosure of assessment outcomes, resulting in limited visibility beyond local jurisdictions. In 2014, China's State Taxation Administration (STA) implemented a landmark reform by establishing a unified national taxpayer credit evaluation system, formalized by the *Announcement of the State Administration of Taxation on Issuing the Measures for Tax Credit Administration.*[10] The reform was closely aligned with China's broader agenda of developing a nationwide social credit system aimed at strengthening market trust, enhancing regulatory efficiency, and promoting compliance. Thus, the regulatory reform is not a policy response to nationwide scandals such as tax-related controversies, which alleviates concerns that any observed changes in trade simply reflect shifts in market sentiment (Glaeser and Guay 2017).

This system evaluates corporate taxpayers annually based on a comprehensive set of criteria that extends beyond simple tax payment behavior. The evaluation covers all major tax types, including VAT and corporate income tax, and assesses a wide range of compliance dimensions: timely and accurate filing of tax returns, appropriate use of tax incentives, punctual payment of tax liabilities and penalties, proper management and issuance of VAT invoices, and responsiveness to tax audits. In addition, it incorporates indicators of broader regulatory compliance and internal control quality, including bookkeeping practices, the quality and consistency of reported financial information, and the absence of fraudulent behavior or serious administrative violations. Together, these elements provide a holistic indication of a firm's tax compliance, financial prudence, and the reliability of its transactional records. Firms are assigned a composite score that places them into one of several rating classes ranging from A (highest) to D (lowest), with "A-type" taxpayers representing the most compliant, transparent, and trustworthy entities in the eyes of the tax authority.

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[10] State Council of the People's Republic of China. (2014). Announcement of the State Administration of Taxation on Issuing the Measures for Tax Credit Administration (Announcement No. 40 [2014] of the State Administration of Taxation) [in Chinese]. Available at: https://www.gov.cn/gongbao/content/2014/content_2771092.htm (accessed July 2025).

Central to this reform is the annual public disclosure of "A-type" taxpayer names on the STA's official website starting from the beginning of 2015. This disclosure provides a transparent, credible signal of superior tax compliance and is accessible to a broad base of firm stakeholders, including investors, business partners, and regulators. Beyond the STA website, this information is also integrated into firms' broader credit profiles maintained within the state's public corporate credit information repository.[11] It is also accessible through widely used commercial credit platforms in China, enabling businesses and financial institutions to incorporate tax compliance data into their routine credit assessments and due diligence processes.[12]

Two key features distinguish China's taxpayer credit disclosure system from public tax disclosure programs in other countries.[13] First, China's system is comprehensive, encompassing all aspects of tax compliance for all taxes rather than focusing on a single tax type or limited filings. Unlike jurisdictions that publicly disclose income tax related information, China's evaluation considers a broad spectrum of tax-related behaviors, including VAT, corporate income tax, tax invoice management, and timely payments of all tax liabilities and penalties.[14] This holistic approach ensures that the "A-type" rating reflects a firm's overall tax compliance and regulatory integrity, offering a more complete and reliable signal of the firm's legitimacy and operational soundness.

Second, China's public disclosure policy preserves firms' proprietary information by

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[11] See https://www.creditchina.gov.cn.

[12] See Online Appendix B for detailed background on the STA's taxpayer credit rating system, including its introduction timeline, rating methodology, and public disclosure process.

[13] See Hoopes, Robinson, and Slemrod (2024) for a review of this literature.

[14] For example, since 2013, the Australian Taxation Office (ATO) has published select corporate tax return data for large businesses to promote public confidence and voluntary compliance (www.ato.gov.au/businesses-and-organisations/corporate-tax-measures-and-assurance/large-business/corporate-tax-transparency/report-of-entity-tax-information#ato-Overview). Similarly, the European Union mandates public Country-by-Country Reporting (CbCR) for large multinationals, requiring disclosure of income, profits, and economic activity by jurisdiction (European Union 2021). Unlike China's comprehensive and simplified taxpayer rating system covering firms of all sizes, these initiatives focus primarily on large entities and involve more detailed but less accessible information.

revealing only the names of taxpayers that receive the "A-type" designation without disclosing detailed tax return data, financial information, or sensitive business information. This contrasts with practices in some jurisdictions where public disclosures of detailed tax filings can raise concerns about confidentiality. By limiting the scope of publicly shared information, the STA's approach balances transparency and privacy, reducing firms' proprietary costs while still providing credible, verifiable signals to external stakeholders. This design is especially important for SMEs, which are often vulnerable to competitive risks from disclosing financial information (Breuer et al. 2025).

To contextualize the policy and illuminate how the STA's evaluation criteria map into observable firm characteristics, we examine which firm attributes predict receipt of an A-type rating at the onset of disclosure. Using administrative firm-level data matched to the universe of Chinese exporters during the pre-policy period (2012–2014) (we discuss our data and sample in Section 3.1), we estimate an OLS model in which the dependent variable equals one for firms disclosed as A-type in 2015 (the first disclosure year). We include a set of covariates that plausibly relate to firms' tax and business compliance: business scale and administrative capacity (*Size*, *Employees*); profitability (*ROS*); leverage (*Lev*); liquidity (*Cash*); verifiability of operations (*Tangibility*); and income tax burden (*ETR*).

As reported in Table B1 of the Online Appendix, firms with stronger financial condition (*ROS*, *Cash*), larger scale and organizational resources (*Size*, *Employees*), and that bear a higher tax burden (*ETR*) are more likely to be designated A-Type. By contrast, more highly levered firms (*Lev*) are less likely to receive the top rating, which is consistent with liquidity pressures that raise the likelihood of delayed tax remittance.

Notably, the overall predictive power is low: the adjusted R-squared is only about 15%, indicating that A-type recognition cannot be reliably inferred from aggregated financial performance. Moreover, because these firm-level financial data (particularly for private firms)

are collected by the government and not disclosed publicly, it is unlikely that foreign buyers have access to such information or can accurately anticipate which exporters will receive an A-type rating. Thus, the disclosure likely conveys incremental information to the foreign buyers.

Furthermore, while top-rated firms differ from non-top-rated firms along many dimensions, our difference-in-differences design does not require the two groups to be identical. Instead, identification relies on the assumption that, absent the disclosure, treated and control firms would have exhibited parallel export trends, which we validate empirically. We also implement matching approaches that enhance the comparability between treatment and control firms.

2.2 Information Frictions in International Trade

Information frictions constitute a fundamental barrier in international trade, influencing how efficiently cross-border transactions are conducted (Allen 2014). From buyers' perspective, these frictions reflect the difficulty they face in obtaining credible information regarding the quality, reliability, and integrity of potential foreign suppliers (Rauch 1999; Anderson and van Wincoop 2004; Chaney 2018). Uncertainty about partner quality increases both the cost of initiating new relationships and sustaining existing transactions, as foreign buyers must bear additional search and monitoring costs to mitigate transaction risks (Allen 2014; Macchiavello and Morjaria 2015).

Rauch's (1999) seminal work emphasizes the role of information asymmetry as a critical determinant of trade flows, highlighting that imperfect information limits market integration, particularly for differentiated goods that require more stringent evaluations of product quality and supplier credibility. Subsequent studies, including Anderson and van Wincoop (2004), underscore that incomplete information elevates both explicit and implicit transaction costs, thus constraining market access and reducing overall trade volumes. Chaney

(2018) further demonstrates that persistent uncertainty and incomplete information lead firms to prioritize trusted, known suppliers over potentially advantageous but unfamiliar alternatives, thereby restricting optimal market allocations.

Empirical evidence consistently supports the view that information frictions substantially impede international trade. For example, Macchiavello and Morjaria (2015) document how uncertainty and information asymmetry significantly raise contracting costs in international trade, influencing both initial relationship formation and long-term partnerships. Similarly, Allen (2014) finds that trade is disproportionately concentrated among parties with established relationships or those sharing informational proximity, underscoring the premium placed on credible information in mitigating uncertainty. Casella and Rauch (2002) further show that ethnic networks and informal reputational systems can serve as substitutes for formal enforcement mechanisms, facilitating trade in environments where legal institutions are weak or contracting costs are high.

Critically, these informational barriers are disproportionately severe for smaller and younger firms, especially those from emerging or developing markets (WTO 2016). Such firms often lack established reputations, extensive market presence, and credible third-party validations, placing them at a structural disadvantage when competing internationally (WTO 2016). Thus, the establishment of reliable, accessible, and credible information channels becomes particularly valuable for reducing buyer uncertainty, lowering transaction costs, and fostering trade expansion among firms typically hindered by informational opacity.

Financial and tax disclosures are central to reducing information asymmetry in business contracting, as they provide credible signals of firm quality, operational integrity, and regulatory compliance. Prior research shows that reliable financial information mitigates contracting frictions (Leuz and Wysocki 2016; Cheng et al. 2020; Minnis and Sutherland 2017). For example, Cheng et al. (2020) document that mandatory audit of financial statements

facilitates firm-level exports. Yet the effectiveness of audit-based reporting hinges on credibility, standardization, and accessibility, which vary widely across contexts (Minnis 2011; Breuer 2021). In many emerging economies, financial reporting standards are weaker, corporate transparency is limited, and audited financial statements remain prohibitively costly or inaccessible for SMEs. In such settings, alternative disclosures from trusted intermediaries, such as government authorities, can fill informational gaps and complement private reporting (Lederman et al. 2010). Our study provides evidence along these lines, drawing on a government-initiated disclosure program based on standardized taxpayer compliance ratings. This mechanism offers a credible and widely accessible signal without imposing the substantial costs associated with audited financial statements.

2.3 Hypothesis Development

Credible signals of operational and financial integrity reduce transaction costs by mitigating buyer uncertainty about supplier quality and reliability (Rauch 1999; Cheng et al. 2020). Governments often possess private information about firms, such as compliance histories, tax filings, and financial condition, that may not all be readily available through market channels. When governments choose to disclose verified indicators of firm compliance, such disclosures may reduce information asymmetry and improve the efficiency of market transactions, particularly in settings where alternative signals are weak or costly to obtain.

In our setting, China's tax authority leverages privileged access to firm-level data to evaluate corporate taxpayers and publicly recognize those with exemplary compliance as "A-type" taxpayers. This designation is particularly important in an economy where value-added tax (VAT) dominates, since VAT compliance requires transaction-level documentation that credibly reflects underlying business activity (Pomeranz 2015). Moreover, the evaluation extends beyond tax obligations to include recordkeeping, reporting accuracy, and regulatory compliance. The resulting A-type classification thus provides a standardized and government-

certified signal of operational discipline, transactional integrity, and commercial legitimacy.

Public disclosure of this signal has the potential to reduce information frictions in international trade. By improving the visibility and perceived trustworthiness of Chinese exporters, it lowers the search costs foreign buyers face when screening potential suppliers and provides a credible proxy for contractual performance risk. Although highly rated firms may have previously conveyed this information privately, public disclosure conveys incremental value for several reasons. First, government regulation standardizes assessment criteria, enhancing comparability across firms and regions. Second, disclosure reduces information processing costs by aggregating and disseminating data through an official channel. Third, signals released by a regulatory authority are inherently more credible than private communications, which can be subject to misrepresentation. Collectively, these mechanisms facilitate top-rated firms to secure new foreign customers(Grossman and Helpman 2005). Consistent with this view, Online Appendix Section A demonstrates that Chinese exporters actively advertise their A-type status on business-to-business platforms used by foreign buyers. In addition to the extensive margin effect, the annual updating of ratings may also reduce post-contract monitoring costs, fostering more stable and repeated transactions at the intensive margin. Both mechanisms, therefore, predict that the disclosure will increase exports among A-type taxpayers.

On the other hand, the government-issued recognition may also generate unintended frictions in international contracting. Foreign buyers could interpret such recognition as implying heightened governmental oversight and rigidly documented contractual processes. In contexts where flexibility and adaptability are critical to cross-border transactions, the perception of increased compliance obligations may elevate transaction costs and discourage engagement with top-rated firms. Moreover, the effectiveness of this disclosure depends on the perceived integrity of the underlying evaluation system. In cross-border settings where

institutional trust varies substantially, foreign buyers may remain skeptical of government-administered ratings and view them as less credible than privately exchanged information (Nannestad 2008; Guiso et al. 2009). Furthermore, to protect proprietary details, the recognition is highly aggregated, offering only a broad "A-type" designation rather than granular insights into firm operations or financial standing. This aggregation reduces the informational precision available to potential buyers, limiting the extent to which the disclosure can alleviate uncertainty in trade relationships.

Based on these discussions, we state our hypothesis (in alternative form) as follows:

Hypothesis: Firms publicly disclosed as A-type taxpayers do not experience changes in exports following the disclosure.

3. Data and Sample

3.1 Data Sources and Sample Selection

We obtain transaction-level export transaction data for Chinese firms from S&P Global Panjiva, a commercial provider of international trade data covering over ten countries and widely used in empirical trade research (e.g., Smirnyagin and Tsyvinski 2022; Alfaro, Brussevich, Minoiu, and Presbitero 2025; Ayyagari, Cheng, and Weinberger 2025; Bisetti, She, and Zaldokas 2025; Chow, Maydew, and She 2025). Our primary analysis uses the full set of Chinese export transactions from 2012 to 2017.[15] Each record reports the exporter's name and address, shipment date, destination jurisdiction, Harmonized System (HS) product codes, and shipment value, as required by the General Administration of Customs of China in export declarations. Figure 1 validates the comprehensiveness of our raw export data by showing that the aggregated export values derived from our dataset closely align with China's official export

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[15] Panjiva provides the universe of shipment-level export data from the General Administration of Customs of China for 2013–2017, with incomplete coverage for 2012. To fill this gap, we supplement the 2012 records with data from an alternative vendor. We assess the completeness of our dataset by benchmarking the aggregated export totals against China's official statistics, as reported in Figure 1.

statistics.[16]

A key advantage of the Chinese export data is the consistent availability of core measurement fields. Unlike U.S. bill-of-lading data, where product codes and shipment values are optional (Flaaen et al. 2023), Chinese customs filings mandate both HS code and transaction value for every export transaction. These requirements ensure standardized, reliable measures of trade flows, enabling us to track firm-level export activity over time and across destinations with precision. The key limitation, however, is that it does not contain information on the identities of foreign buyers.

We aggregate export shipment data at the firm-destination-year level, that is, we define a relationship as a firm–destination and track its trade dynamics across time. We merge it with detailed firm-level administrative data from China's National Tax Survey Database, jointly compiled by the STA and the Ministry of Finance.[17] This dataset provides a uniquely rich profile of Chinese firms, including comprehensive financial, tax, and operational characteristics. Next, we obtain the identities of exporters publicly disclosed as "A-type" taxpayers directly from the STA's official website, where the STA publishes on an annual basis an official list of firms that achieve the highest taxpayer compliance rating.

Table 1 describes our sample selection process. Our resulting final sample contains approximately 2,471,341 firm-export destination observations across approximately 98,338 unique firms from 2012 to 2017, covering a six-year window around the event year 2015. We end the sample in 2017, as this represents the last complete year of available export transaction data.

3.2 Research Design

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[16] Official statistics on China's aggregate export: https://data.mofcom.gov.cn/hwmy/imexyear.shtml (accessed August 2025).

[17] Prior studies focusing on Chinese settings have widely utilized the dataset (e.g., Liu and Mao 2019; Chen, Liu, Suárez Serrato, and Xu 2021; Chen, Jiang, Liu, Serrato, and Xu 2023) See Liu and Mao (2019) and Chen et al. (2023) for detailed discussions of the database.

Our identification strategy exploits within-firm-destination variation in export volumes around the 2015 nationwide introduction of public disclosure of A-type taxpayer status, using a difference-in-differences design. In the baseline analysis, treatment firms are defined as exporters that were designated as A-type taxpayers in 2015, the first year of disclosure. Control firms are defined as exporters that were not on the 2015 A-type list. In additional analyses, we assess the sensitivity of our results by (i) restricting the treatment group to firms that consistently retained A-type status throughout the post-disclosure period, and (ii) using a stacked DID approach and classifying firms that were newly added to the A-type list after 2016 as additional treatment firms. Across these alternative definitions, our inferences remain robust. We do not impose these conditions in our primary analyses to avoid the risk of reverse causality that disclosure-induced changes in export activity affect a firm's likelihood of subsequently obtaining A-type status.

We estimate the following DID regression model (1):

$$Export_{i,d,t} = \beta_0 + \beta_1 Treat_i \times Post_t + Controls_{i,t-1} + \eta_{i,d} + \sigma_t + \epsilon_{i,d,t} , \tag{1}$$

where i, d, t index firm, destination jurisdiction, and year, respectively. $Export_{i,d,t}$ is the export intensity, defined as the value of exports by firm i to destination jurisdiction d in year t, scaled by sales in year t-1. $Post_t$ is an indicator equal to one for years 2015 to 2017, and zero for years 2012 to 2014. $Treat_i$ is an indicator equal to one if firm i is disclosed as an A-type taxpayer in 2015 (the first year of disclosure), and zero otherwise.

We include supplier–destination jurisdiction fixed effects ($\eta_{i,d}$) to control for time-invariant attributes of a given firm–market pair that could affect export (e.g., geographic distance). We also include year fixed effects (σ_t) to control for common macroeconomic shocks common to all firms in each given year (e.g., global trade conditions). After accounting for these fixed effects, our coefficient of interest β_1 identifies differential changes in export over time for the same firm to the same destination market after receiving A-type taxpayer

recognition, compared to firms that did not receive such recognition.

We include several firm-level control variables (*Controls$_{i,t-1}$*) to account for time-varying firm characteristics that may influence exports. These controls, all lagged by one year, include: *Size* (log of total assets), *Leverage* (total debt divided by total assets), *Cash* (cash divided by total assets), and *ROS* (return on sales). We cluster standard errors at the firm level.

3.3 Descriptive Statistics

Table 2 presents the summary statistics for the key variables in our sample. The average export intensity (*Export*), defined as the firm-destination jurisdiction-level export value scaled by lagged sales, is approximately 7.089%, although substantial heterogeneity exists across firm–destination pairs. Approximately 33.5% of observations correspond to firms publicly disclosed as A-type taxpayers. The sample firms have an average operational history of 12 years, with 96% of firms privately held. The mean total sales and assets for firms in our sample are CNY 1.03 billion and CNY 0.97 billion, respectively.[18]

Panels B and C of Table 2 provide additional detail on the industry and geographic distribution of treated firms. Panel B shows that treated firms span a wide range of manufacturing and non-manufacturing sectors. Sectors with the highest treatment rates include smelting and pressing of ferrous metals (36.4%) and medical and pharmaceutical products (35.2%). Panel C reports the distribution of treated firms across provinces of firm locations. Treatment rates vary substantially by location, from over 56% in Tianjin and 35% in Sichuan to under 3% in Hainan. The wide dispersion across both industries and regions indicates that the A-type designation is broadly distributed rather than concentrated in a specific sector or locality, reflecting a diverse cross-section of China's exporting economy.

4. Results

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[18] Equivalent to USD 165 million and USD 154 million, respectively, based on the average exchange rate between CNY and USD of 6.28 in 2015.

4.1 Effects of Rating Disclosure on Firm Exports

Table 3 reports the baseline results examining the effect of disclosure on top-rated firms' exports. Column (1) includes only year and firm–destination fixed effects, thereby addressing the concern that incorporating covariates potentially influenced by the treatment could compromise causal identification (Gormley and Matsa 2014). The coefficient on *Treat×Post* is 0.501 and significant at the 1% level (t-stat = 5.33). Column (2) further includes exporter level controls. *Treat×Post* continues to be positive and significant at the 1% level (coef. = 0.527; t-stat = 6.34). Focusing on column (2), the estimate indicates that, on average, firms disclosed as A-type taxpayers in 2015 experienced a 0.527 increase in exports intensity relative to non-disclosed firms after the disclosure policy following the introduction of the disclosure policy. Given the mean export intensity of 7.09% in the sample, the estimated effect corresponds to approximately a 7.4% increase relative to the mean. Overall, our findings support the prediction that the disclosure of taxpayer ratings mitigates information frictions in international trade, thereby enabling highly rated firms to expand their exports.

4.2 Validation of the Parallel Trends Assumption

A crucial identifying assumption for the DID design is that, absent treatment, treated and control firms would have exhibited similar trends in the outcome variable. To assess this assumption, we estimate an event-study specification that interacts the treatment indicator with year dummies, using 2012 as the benchmark year. We plot the coefficient estimates from this specification in Figure 2. The coefficients on the interaction terms for the pre-disclosure years, 2013 and 2014, are close to zero and statistically insignificant, suggesting no differential pre-trends between treated and control firms. In contrast, the interaction terms for the post-disclosure years are all positive and statistically significant at the 1% level. These results support the parallel trends assumption and indicate that the observed increase in exports among A-type firms emerges only after the initiation of the public disclosure policy in 2015.

20

4.3 Cross-sectional Analyses

We conduct cross-sectional analyses to corroborate our findings that the disclosure of top-rated taxpayers mitigates information frictions and thereby facilitates cross-border trade. First, we show that the effect of disclosure is more pronounced for firms lacking reputational capital and reliable channels to credibly communicate with foreign buyers. Second, we highlight the signalling role of disclosure regarding exporters' financial performance by documenting that its effect varies systematically with the availability of credible, firm-initiated financial statements.

4.3.1 Reputation Capital

Banerjee and Duflo (2000) argue that larger and more established firms build reputational capital that mitigates concerns about opportunistic behaviour (e.g., information misrepresentation) in contracting, since a persistent record of opportunism would eventually force such firms out of the market due to the lack of willing counterparties. Consistent with this view, firm size and age serve as signals of information reliability, reflecting survival in the industry over an extended period. By contrast, information transmitted privately by smaller and younger exporters is more likely to be discounted by foreign buyers, given their limited reputational history, making a credible public signal particularly valuable (Bourveau et al. 2024).

To test this idea, we develop a binary variable, *Small*, which is a binary variable equal to one if the firm's average total assets during the pre-period 2012–2014 are below the sample median. We then augment our DID regression model (1) with *Small* and its interaction terms with *Treat* and *Post*. Column (1) of Table 4 shows that while *Treat×Post* continues to be positively significant (coef. = 0.241; t-stat = 2.42), *Treat×Post×Small* is significantly positive at the 1% level (coef. = 0.399; t-stat = 2.42). Results indicate that the export gain induced by the disclosure for small firms is 1.66 times greater than that for large firms.

Similarly, we classify firms as a young firm (*Young*) if the firm's establishment year is later than the sample median. Column (2) shows that *Treat×Post×Young* is significantly positive at the 1% level (coef. = 0.347; t-stat = 2.06). On average, the export gain for young firms is 0.98 times greater than that for mature firms.

Overall, the evidence is consistent with the view that public disclosure of tax compliance ratings has a disproportionately stronger effect on smaller and younger firms, which lack established reputational capital and effective channels to credibly convey information to foreign buyers.

4.3.2 Accessibility and Credibility of Financial Statements

Next, we examine heterogeneity in the availability of an alternative but critical information source, audited financial statements. As discussed in Section 2, the A-type rating serves as a credible signal of a firm's financial soundness, information that would otherwise be conveyed through audited financial statements. We therefore predict that the disclosure effect should be stronger for firms without access to credible financial reporting.

Our data allow us to test this prediction by distinguishing between public and private exporters. Public firms are required to disclose audited financial statements, whereas private firms are not subject to such mandates. Accordingly, we expect the disclosure-induced export gains to be more pronounced among private firms. To test this, we construct a binary variable, *Private*, equal to one for privately held exporters and zero for publicly listed firms, and augment equation (1) with the triple interactions of *Private*, *Treat*, and *Post*. Column (1) of Table 5 shows that $Treat \times Post \times Private$ is positive and significant at the 5% level (coef. = 0.956; t-stat = 2.13), while the main effect on $Treat \times Post$ turns statistically insignificant. The results suggest that the disclosure of A-type rating only has an impact on private firms but not on public firms, which have readily available public financial information.

Next, we examine heterogeneity in the credibility of financial information, whether

conveyed through publicly released financial statements or privately exchanged between trading partners. Intuitively, the credibility of firm-provided information hinges on accounting quality, which in turn shapes buyers' willingness to rely on such information in contracting (Bauer et al. 2018; Cheng et al. 2020). Because a substantial portion of our sample comprises private firms, for which firm-level measures of accounting quality are unavailable, we employ a regional proxy for the reporting environment. Specifically, we assume that a high fraction of public firms with accounting irregularities in a region undermines the perceived credibility of all firms operating there, reflecting fundamental deficiencies such as weak regulatory enforcement, limited accounting expertise, and cultural norms (Francis and Yu 2009; McGuire, Omer, and Sharp 2012; Lennox and Wu 2022).

We construct a binary indicator, *High Restate*, equal to one if the firm is headquartered in a province with an above-median fractions of firms detected with accounting irregularities during 2012–2014. Column (2) of Table 5 shows that *Treat × Post × High Restate* is significantly positive (coef. = 0.636; t-stat = 3.72). This result suggests that the disclosure of tax compliance ratings provides greater incremental information in environments where firm-initiated financial disclosures are perceived to be less credible.

4.4. Within-Exporter Variations

While our cross-sectional evidence based on exporters' information environments supports the information channel, a remaining concern is that the observed effects could reflect improvements in firm fundamentals (e.g., tax administrative benefits or access to credit) that coincide with the A-type designation. We note that this concern is partly mitigated by the existence of analogous local taxpayer honor roll systems that conferred similar privileges prior to the reform. Nevertheless, the nationwide rollout of the standardized tax evaluation system may have provided incremental benefits.

To further isolate the information channel from potential contemporaneous exporter-

level changes, we hold these time-varying supplier shocks constant and exploit cross-destination differences in ex ante information frictions in evaluating Chinese suppliers. Under this design, if disclosure relaxes information asymmetry, a treated supplier should exhibit larger increases in exports within the same year to destinations that ex ante face more hurdles to learn about Chinese suppliers than to other destinations. In contrast, if the export gain arises solely from improved firm fundamentals (e.g., increased credit access), we expect to observe a homogeneous impact on trade with all destinations for a given exporter.

We implement this test using a triple-difference specification that interacts the DID term in equation (1) with pre-2015 destination-level measures of information frictions. Importantly, we add exporter–year fixed effects to absorb all contemporaneous exporter-level changes. Under this stringent fixed-effects structure, identification derives solely from incremental export by the same treated supplier in the same year to destination markets facing higher ex ante information frictions.

4.4.1 Institutional Information Channels

We first examine the implementation of Free Trade Agreements (FTAs) between China and its trading partners, which routinely establish government-maintained platforms, such as trade information portals, enquiry points, and customs 'single window' systems, along with regulatory cooperation provisions and transparency rules. These mechanisms institutionalize the exchange of regulatory and supplier information, thereby reducing information frictions for foreign buyers (USITC 2021). Consequently, destinations with an FTA in force offer buyers more institutionalized information channels than destinations without one. Further, by expanding bilateral trade and fostering repeated interactions (Baier and Bergstrand 2007), FTAs enhance private information channels between buyers and suppliers (Carballo, Rodriguez Chatruc, Salas Santa, and Volpe Martincus 2022).

Building on this idea, we use the implementation of a FTA in the pre-policy period between China and a destination jurisdiction as a measure of institutional information channels. We construct a binary indicator, *No FTA*, equal to one for destinations without a free trade agreement with China in force prior to 2015 and zero otherwise. As reported in column (1) of Table 6, the triple interaction *Treat × Post × No FTA* is positive and statistically significant (coef. = 0.147; t-stat = 2.23). This finding suggests that, for a given top-rated exporter, disclosure enables it to expand more in destinations where foreign buyers previously lacked access to reliable information through institutional channels.

4.4.2 Ethnic-Network Based Information Channels

Second, we explore the heterogeneity in co-ethnic networks, which serve as private information conduits overcoming language and culture barriers, transmitting referrals and knowledge, and supporting relational enforcement via reputation interactions (Gould 1994; Casella and Rauch 2002). For example, Gould (1994) shows that immigrant stocks in the U.S. increase bilateral exports and imports with origin countries, consistent with co-ethnic networks providing market knowledge and business contacts that reduce transaction costs. Casella and Rauch (2002) develop a formal framework in which group ties substitute for anonymous-market institutions by facilitating search and sustaining contracts through reputational sanctions, which are especially valuable when product quality is hard to verify or legal enforcement is weak.

Following this logic, we hypothesize that a larger overseas Chinese presence in the destination provides buyers with stronger private information channels to learn about Chinese suppliers; conversely, where such diaspora networks are absent or small, public A-type disclosure should carry more decision-relevant information. We construct *Weak Ethnic Network*, an indicator equal to one for destinations not among the top 15 jurisdictions by the

share of overseas Chinese in the resident population and zero otherwise.[19] Consistent with our prediction, column (2) of Table 6 shows that the coefficient on *Treat × Post × Weak Ethnic Network* is positive and statistically significant (coef. = 0.147; t-stat = 2.29), indicating that disclosure facilitates cross-border trades with destinations lacking ethnic-network-based information channels with China.

5. Supplier-Customer Level Analyses

Our baseline analyses employ an exporter–destination–year panel, which is well-suited for testing our hypothesis as it allows us to trace trade dynamics within a given exporter–destination pair and examine how they vary with information frictions in international markets. A limitation of this dataset, however, is that it does not include the identity of foreign customers, preventing us from distinguishing whether trade changes arise from the initiation of new relationships or from adjustments within existing ones. To overcome this challenge, we complement the supplier–destination results with analyses at the supplier–customer level using U.S. maritime import records from S&P Global Panjiva. Panjiva compiles bills of lading released by U.S. Customs and Border Protection (CBP) through Freedom of Information Act requests and harmonizes shipper and consignee names to persistent firm identifiers, enabling longitudinal tracking of exporters and importers over time in U.S. import transactions. Because U.S. customers are identifiable, the data also allow us to examine potential downstream supply-chain implications on the customer side, complementing our baseline exporter-focused tests.

5.1 Effects of Rating Disclosure on Firm Exports at Relationship Level

Using Panjiva's U.S. import data, we first examine how public recognition as an A-type taxpayer affects trade at the relationship level between Chinese suppliers and U.S. customers. This analysis triangulates our baseline supplier–destination results using an

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[19] The top 15 jurisdictions are: Hong Kong, Taiwan, Macao, Singapore, Malaysia, Thailand, Brunei, Australia, New Zealand, Canada, Peru, Myanmar, Philippines, Cambodia, Indonesia.
Source: https://en.wikipedia.org/wiki/Overseas_Chinese (accessed August 2025)

independent data source and a different unit of analysis. We then decompose the effect into extensive and intensive margins to provide further insights into how trade relationships evolve around the public designation of A-type taxpayers.

We construct a panel of Chinese supplier–U.S. customer pairs that engage in at least one trade between 2012 and 2017, and assign zero shipments to years in which a given pair does not transact. This balanced panel allows us to track both the formation and the continuation of relationships over time. Using this panel data, we estimate the following regression:

$$Container_{i,j,t} = \beta_0 + \beta_1 Treat_i \times Post_t + Controls_{i,t-1} + \eta_{i,j} + \sigma_t + \epsilon_{i,j,t} \ , \qquad (2)$$

where *Container* is the number of containers imported by U.S. customer j from Chinese supplier i in year t. We rely on container counts rather than shipment values because U.S. bills of lading do not require importers to report transaction values (Flaaen et al. 2023).[20] $Post_t$ is an indicator equal to one for years 2015 to 2017, and zero for years 2012 to 2014. $Treat_i$ is an indicator equal to one if Chinese supplier i is disclosed as an A-type taxpayer in 2015 (the first year of disclosure), and zero otherwise.

We include supplier–customer fixed effects to absorb all time-invariant attributes of a given trading pair that could affect the level of shipments. We also include year fixed effects to capture aggregate shocks common in a given year. As reported in column (1) of Table 7, the coefficient on *Treat* × *Post* is 0.075 and is statistically significant at the 1% level. This implies an increase of about 7.8% in trade per supplier–customer pair for Chinese suppliers that receive the public recognition of A-type taxpayers.

We then separate the effect into extensive and intensive margins by (i) replacing the dependent variable with an indicator *I(New supplier)* for the newly formed relationship in the

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[20] Given that the outcome is a non-negative count variable, we estimate equation (2) using Poisson pseudo-maximum likelihood (Cohn, Liu, and Wardlaw 2022).

year *t*, and (ii) replacing the dependent variable with an indicator *I(Increase purchase)* for relationship with an expansion in trade volume from year *t-1* to *t* and restricting to the sample with pre-existing relationship, following Bisetti et al. (2025). For the extensive margin, column (2) suggests that the probability of forming a new relationship rises by approximately 7.8%. For the intensive margin, column (3) suggests a 6.7% increase in trade among ongoing relationships when the supplier receives the A-type designation. Among treated relationships that experience an increase in trade from the pre- to the post-period, 56% of the growth is attributable to the formation of new relationships, while the remaining 44% reflects the expansion of existing relationships. The pattern across estimated extensive and intensive margins effects is consistent with public A-type recognition easing formation of relationships when prior transaction history is thin or absent, while offering only a modest incremental signal for partners that already possess private information from repeated interactions.

5.2 Downstream Effects on U.S. Customers' Supply Chains

Having documented that the public designation of A-type firms facilitates cross-border trade by enhancing the credibility of supplier information, we next examine whether such disclosure generates efficiency gains for the relationship and the buyer. When buyers face difficulties in screening potential suppliers ex ante or monitoring them ex post, trade relationships are more likely to dissolve (Rauch and Watson 2003). By mitigating these information frictions, the disclosure of A-type status reduces supplier–customer mismatches, thereby lowering supply chain disruption risk. This reduction in disruption risk, in turn, decreases customers' supply chain management costs and enhances their ability to secure inputs necessary to meet demand. We therefore expect that customers with greater reliance on Chinese input markets experience improvements in supply chain coordination and procurement efficiency following the disclosure shock.

To test these predictions, we draw on Panjiva's U.S. import data and construct a sample

of U.S. customers during 2012–2017. We then estimate the following difference-in-differences specification, using a continuous treatment variable:

$$Outcome_{j,t} = \beta_0 + \beta_1 China\ Exposure_i \times Post_t + Controls_{j,\ t-1} + \eta_j + \sigma_t + \epsilon_{j,t}\ , \qquad (3)$$

China Exposure is defined as the share of customer *j*'s distinct suppliers located in China during the pre-disclosure period (2012–2014), capturing the customer's reliance on Chinese suppliers for input procurement and thus its exposure to the 2015 disclosure reform. *Post* is an indicator equal to one for years 2015–2017 and zero for years 2012–2014. All specifications include customer and year fixed effects.

We begin by examining the impact on the matching quality of supplier relationships. Specifically, we construct *Termination Risk*, defined as the fraction of existing suppliers that are terminated by the customer in the following three years. In essence, this measure captures the quality of the match: higher matching quality predicts longer relationship duration and, consequently, a lower risk of future termination. Column (1) of Table 8 shows that *China Exposure × Post* is negatively associated with *Termination Risk* (coef. = –0.009; t-stat = –5.54). An inter-quartile increase in *China Exposure* (0.667) is associated with a 1.3% reduction in termination risk, relative to its sample mean (= 0.667×0.009/0.447). The result suggests that U.S. customers with greater reliance on Chinese suppliers face a lower risk of supply chain disruption following the disclosure, implying an improved matching quality.

Next, we examine the impact on supply chain management costs, proxied by a customer's selling, general, and administrative expenses scaled by sales (SG&A).[21] Screening new vendors, qualifying production, and monitoring compliance are all buyer-side activities that draw on overhead resources. A standardized, government-verified compliance signal may

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[21] For the analyses of customer firm performance, we focus on the public firms to construct measures of operating performance. We also control for the lagged value of *Customer Size, Customer PPE, Customer Inventory*, and *Customer Operating Income* in the regression model.

reduce search and verification intensity, thereby lowering these costs. Consistent with this prediction, Column (2) of Table 8 shows that *China Exposure × Post* is negative and statistically significant at the 1% level (coef. = –0.006; t-stat = –2.75). An inter-quartile increase in *China Exposure* (0.667) is associated with a 0.4% reduction in SG&A to sales ratio, corresponding to 1.9% of its sample mean (= 0.667×0.006/0.215).

Finally, we assess whether the improvement in supply chain stability translates into greater inventory management efficiency. Stable supplier relationships enhance demand forecasting and replenishment planning, reducing the need for precautionary stock. If public recognition stabilizes sourcing from Chinese suppliers, U.S. buyers may operate with leaner inventories. We measure inventory efficiency using *Inventory Turnover*, defined as the ratio of cost of goods sold to average inventory. Column (3) of Table 8 shows that *China Exposure × Post* is positive and statistically significant at the 1% level (coef. = 0.666; t-stat = 3.00), indicating that the disclosure improves inventory management efficiency. An inter-quartile increase in *China Exposure* (0.667) is associated with a 5.9% reduction in inventory turnover ratio relative to its sample mean (= 0.667×0.666/7.485).

Overall, the evidence suggests that the disclosure of aggregated administrative data enhances cross-border trade efficiency and generates positive spillovers for downstream customer firms.

6. Robustness Checks

In this section, we conduct additional analyses to evaluate the robustness of our findings to (i) matching treatment and control suppliers across pre-treatment covariates, (ii) alternative measures of export, (iii) alternative definitions of treatment firms, and (iv) a stacked DID design incorporating staggered treatment timing.

6.1 Matching

Top-rated firms may differ from non–top-rated firms along many dimensions, as

discussed in Section 2. Our DID estimates do not require treatment and control firms to be identical; rather, identification relies on the assumption that their export trends would have evolved similarly absent the policy. We validate this parallel-trends assumption by showing that treated and control exporters exhibit comparable export trends prior to policy adoption. In addition, we improve comparability between the two groups using two matching approaches and show that our results remain robust.

We first implement a propensity score matching (PSM) design. Using fitted values from the pre-policy prediction model, we match treated firms to control firms via nearest neighbor matching on common support. Re-estimating equation (1) on this matched sample yields a positive and statistically significant coefficient on *Treat × Post* of 0.401 (t-stat = 4.86), as reported in column (1) of Panel A in Table 9. Next, we adopt an entropy balancing approach by reweighting the control group to exactly match the treatment group on specified moments of the covariates (Hainmueller 2012; McMullin and Schonberger 2022). As reported in panel A, column (2) of Table 9, our inferences remain robust. Taken together, the PSM and entropy-balancing estimates corroborate the baseline result and indicate that our findings are not driven by pre-treatment differences in observable firm characteristics.

6.2 Alternative Export Measure

We next re-estimate equation (1) using two alternative measures of export at the firm–destination level: *LnExport* (natural logarithm of export value) and *Export/Asset* (export value scaled by lagged total assets). As reported in Panel B of Table 9, the coefficients on *Treat × Post* under both specifications continue to be positive (0.025 and 1.205, respectively) and statistically significant at the 1% level.

6.3 Alternative Treatment Definition

Our baseline defines treatment and control using the initial disclosure year only,

regardless of rating outcomes in subsequent years. We adopt this choice to avoid conditioning on post-treatment outcomes. Because the STA updates ratings annually, exporters may respond to the 2015 disclosure by investing in compliance systems and documentation to obtain or retain A-type status in order to leverage the program in business contracting. Imposing treatment persistence ex post would therefore risk reverse causality and selection on post-policy performance.

As a robustness check, we re-estimate the model using an alternative definition of treatment and control: firms are considered treated if they received the A-type designation in all three years during 2015–2017, and control firms are those that were never disclosed as A-type during the same period. As reported in Panel C of Table 9, under this alternative design, the estimated treatment effect is 0.932, which is almost twice as large as the baseline estimate of 0.527. A larger coefficient is intuitive for at least two reasons. First, suppliers that retain A-type status for multiple years provide a stronger and longer-lasting signal to buyers, which can be more fully incorporated into contracting. Second, the stricter treatment definition removes status switchers whose transitory signals likely dilute the baseline average, thereby reducing attenuation from misclassification.

6.4 Staggered Treatment Timing

In our baseline, we define treatment by the 2015 A-type disclosure and estimate the treatment effect using a six-year window around that first disclosure year (2012–2017). We adopt this choice because the Chinese export data end in 2017, which prevents tracking later cohorts. To assess robustness to staggered treatment timing, we turn to U.S. import data, which span a longer period, and re-estimate the relationship-level effects using a stacked DID design (Cengiz, Dube, Lindner, and Zipperer 2019; Baker, Larcker, and Wang 2022).

We treat the first year a Chinese supplier appears on the STA A-type list as its cohort

event year t (cohorts $t = 2015$, 2016, or 2017). For each cohort, we build a panel consisting four years before and three years after the event year (an eight-year window). The treatment group in cohort t consists of trade relationships between U.S. customers and Chinese exporters that are first disclosed as A-type in year t; the control group includes trade relationships between U.S. firms and Chinese exporters that were never disclosed as A-type during the sample period for this analysis. Table C2 of the Online Appendix reports the stacked DID estimates, showing that the trade between treatment suppliers and their customers increases by 5% following the public disclosure of the A-type rating recognition.

7. Discussion and Conclusions

This paper examines the role of government-managed administrative disclosure in reducing information frictions in international trade. Exploiting the 2015 nationwide public release of China's A-type taxpayer ratings, we provide evidence that public recognition of tax compliance facilitates firms' exports. Treated exporters experience sizable increases in trade, with the effects concentrated in the formation of new foreign relationships. Consistent with an information mechanism, the gains are stronger among smaller and younger firms, private firms lacking audited financial statements, and firms headquartered in regions where the credibility of financial reporting is weaker. Moreover, within-firm analyses show that the disclosure effect is most pronounced in destinations with fewer institutionalized information channels and limited ethnic Chinese presence.

Beyond export growth, we document efficiency gains for downstream buyers. U.S. importers sourcing more heavily from China experience reductions in supply chain disruption risk, lower SG&A expenses, and improvements in inventory turnover following the disclosure. These results indicate that public release of aggregated administrative data not only improves supplier–customer matching, but also generates positive spillovers along global value chains.

Taken together, our findings highlight the economic importance of administrative disclosure as a policy tool. By issuing a standardized and credible signal based on data already collected for regulatory purposes, governments can enhance transparency at minimal incremental cost, particularly in settings where small and private firms face limited capacity to credibly disclose financial information. More broadly, our evidence suggests that administrative disclosure can complement traditional financial reporting regimes, support contracting across borders, and ultimately improve the efficiency of international markets.

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Appendix A: Variable Definitions

Variable	Definition
Main variables	
Export	The ratio of a firm's export value to its lagged total sales, multiplied by 100.
Container	The number of raw shipping containers imported by a U.S. customer from a Chinese supplier in a given year, based on U.S. customs records.
Treat	Indicator variable equal to one if the firm was publicly disclosed as an A-rated taxpayer in 2015, and zero otherwise.
Post	Indicator variable equal to one for years after 2015, and zero otherwise.
Variables in cross-sectional analyses	
Small	Indicator variable equal to one if the firm's average total assets from 2012 to 2014 are below the sample median, and zero otherwise.
Young	Indicator variable equal to one if the firm's establishment year is later than the sample median, and zero otherwise.
Private	Indicator variable equal to one if the firm has no public securities issuance prior to 2015, and zero otherwise.
High Restate	Indicator variable equal to one if the firm is located in a province with an above-median incidence of financial restatements due to accounting irregularities during 2012–2014, and zero otherwise.
No FTA	Indicator variable equal to one for destination countries or regions without a free trade agreement with China in place before 2015, and zero otherwise.
Weak Ethnic Network	Indicator variable equal to one for destinations not among the top 15 jurisdictions by the share of overseas Chinese in the resident population and zero otherwise.
Control variables	
Size	Natural logarithm of total assets.
Leverage	The ratio of total debts to total assets.
Cash	The ratio of cash to total assets.
ROS	The ratio of operating income to total sales.
Variables in U.S. customer-level analyses	
Termination Risk	The fraction of existing suppliers that are terminated by the customer in the subsequent three year.
SG&A	The ratio of the customer's selling, general, and administrative expenses to sales.
Inventory Turnover	The ratio of the customer's cost of goods sold to average inventory.
China Exposure	The share of the customer's distinct suppliers located in China during the pre-disclosure period (2012–2014).
Customer Size	Natural logarithm of the customer's total assets.
Customer PPE	The customer's net property, plant, and equipment scaled by total assets.
Customer Inventory	The customer's inventory scaled by total assets.
Customer Operating Income	The customer's operating income to total sales.

Figure 1: Validate Data Accuracy Based on Official Trade Statistics

This figure compares aggregated shipment-level export data from the data source used in our sample construction with official export statistics published by the Ministry of Commerce of China for the period 2012-2017. Both series are expressed in USD billions.
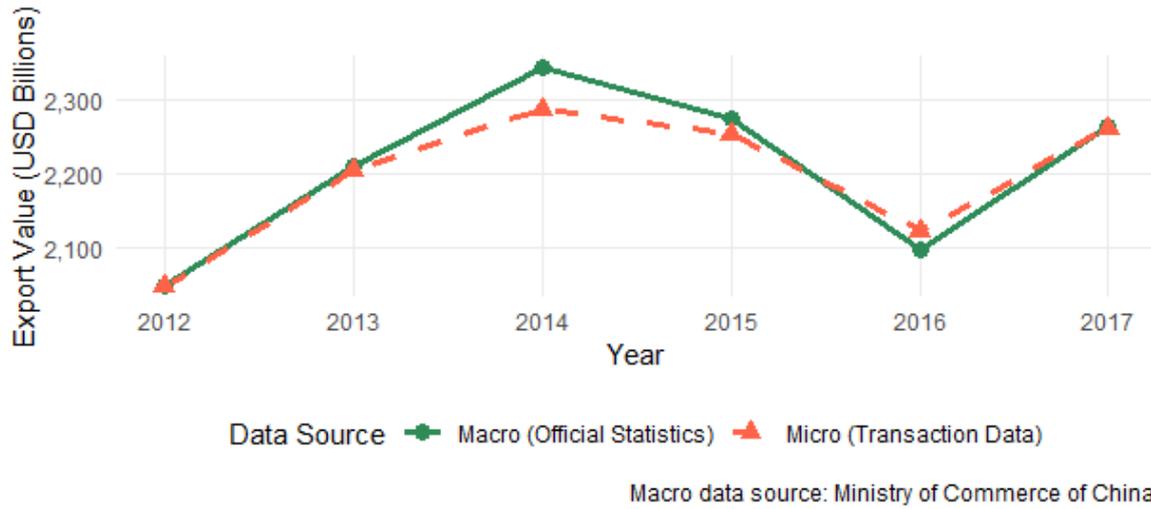
Figure 2: Dynamic Effects of Public Disclosure of A-type Taxpayer

This figure plots the estimated dynamic effects of public disclosure of A-type taxpayer status on firm exports, based on an event-study specification. The outcome variable is firm-destination jurisdiction exports scaled by lagged total sales. The year 2012 is omitted and serves as the benchmark year. The regression includes the same firm-level controls and firm-jurisdiction and year fixed effects as in column (2) of Table 3. Each point represents the coefficient on an indicator for the event year relative to 2012, and vertical bars denote 95% confidence intervals.
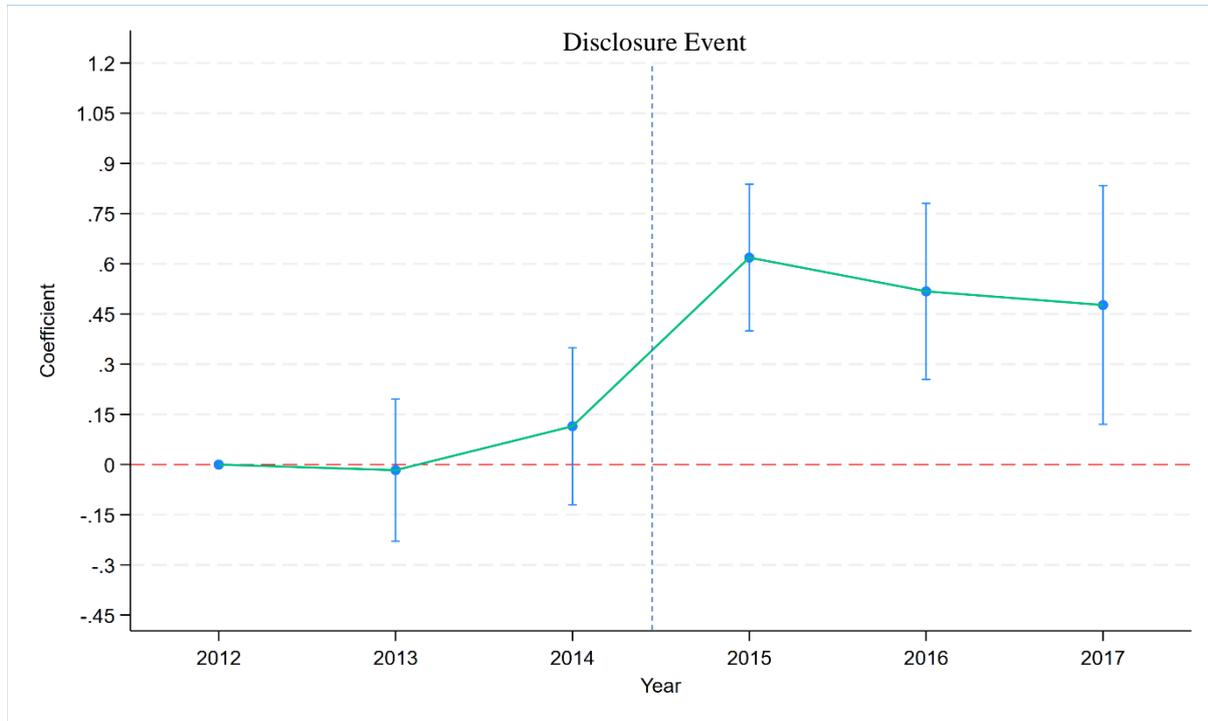
Table 1: Sample Selection

This table details our sample selection process.

		Firm-years
Enterprise taxpayers covered in both China's National Tax Survey Database and S&P Panjiva Database during our sample period from 2012 to 2017.		2,506,342
Less:	Firms with missing or negative values of assets, sales, or employees	2,480
Less:	Firms without available information on control variables	32,521
Final sample		2,471,341

Table 2: Summary Statistics

This table presents descriptive statistics for our sample. Panel A presents descriptive statistics for the variables used in our main analysis. Panel B reports the number of observations by industry and treatment status. Panel C reports the number of observations by firm local and treatment status. All continuous variables are winsorized at 1% and 99% levels. All variables are defined in Appendix A.

Panel A: Descriptive Statistics

Variable	N	Mean	SD	P25	P50	P75
Export	2,471,341	7.089	20.193	0.134	0.704	3.448
Container	477,216	2.645	8.885	0	0	1
Treat	2,471,341	0.335	0.472	0	0	1
Post	2,471,341	0.406	0.491	0	0	1
Small	2,471,341	0.464	0.499	0	0	1
Young	2,471,341	0.474	0.499	0	0	1
Private	2,471,341	0.960	0.195	1	1	1
High_Restate	2,471,341	0.473	0.499	0	0	1
No FTA	2,471,341	0.761	0.426	1	1	1
Weak Ethnic Network	2,471,341	0.760	0.427	1	1	1
Size	2,471,341	18.496	1.957	17.173	18.458	19.786
Leverage	2,471,341	0.618	0.292	0.406	0.640	0.838
Cash	2,471,341	0.150	0.152	0.042	0.099	0.205
ROS	2,471,341	0.151	0.116	0.069	0.128	0.203

Table 2: Summary Statistics (Continued)

Panel B: Distribution of Treated Firms by Industry

Industry (Unique firm)	Full Sample Freq.	Treat=1 Freq.	Percentage (%)
Agricultural & Sideline Foods Processing	2,273	398	17.5
Food Production	1,202	337	28.0
Textile Industry	4,327	1,069	24.7
Clothes, Shoes & Hat Manufacture	5,810	1,041	17.9
Leather, Furs, Down & Related Products	3,069	459	15.0
Timber, Bamboo, Cane, Palm Fiber & Straw Products	1,551	169	10.9
Furniture Manufacturing	1,487	288	19.4
Papermaking & Paper Products	764	230	30.1
Printing & Record Medium Reproduction	518	167	32.2
Cultural, Educational & Sports Articles Production	2,258	447	19.8
Raw Chemical Material & Chemical Products	3,469	1,140	32.9
Medical & Pharmaceutical Products	1,042	367	35.2
Chemical Fiber Products	342	85	24.9
Rubber and Plastic Products	5,302	1,390	26.2
Non-metal Mineral Products	2,371	621	26.2
Smelting & Pressing of Ferrous Metals	734	267	36.4
Smelting & Pressing of Non-ferrous Metals	928	303	32.7
Metal Products	5,145	1,267	24.6
General Equipment Manufacturing	5,583	1,702	30.5
Special Equipment Manufacturing	3,860	1,195	31.0
Motors Manufacturing	2,949	1,009	34.2
Other Transport Equipment Manufacturing	1,048	358	34.2
Electric Machines & Apparatuses Manufacturing	4,307	1,432	33.2
Communication Equipment, Computer & Other Electronic Equipment	7,123	2,363	33.2
Instruments Manufacture	1,418	401	28.3
Other Manufactures	5,141	1,080	21.0
Other Industries	24,317	3,558	14.6
Total	98,338	23,143	

Table 2: Summary Statistics (Continued)

Panel C: Distribution of Treated Firms by Firm Location

Province (Unique firm)	Full sample	Treat=1	
	Freq.	Freq.	Percentage (%)
Anhui	2,140	370	17.3
Beijing	3,135	878	28.0
Chongqing	901	140	15.5
Fujian	5,134	1,023	19.9
Gansu	200	21	10.5
Guangdong	16,999	5,452	32.1
Guangxi	1,112	111	10.0
Guizhou	133	21	15.8
Hainan	166	5	3.0
Hebei	4,355	165	3.8
Heilongjiang	629	72	11.4
Henan	2,186	529	24.2
Hubei	1,415	213	15.1
Hunan	1,144	103	9.0
Inner Mongolia	362	16	4.4
Jiangsu	13,840	4,670	33.7
Jiangxi	1,183	178	15.0
Jilin	655	22	3.4
Liaoning	4,616	355	7.7
Ningxia	144	28	19.4
Qinghai	48	0	0.0
Shaanxi	705	171	24.3
Shandong	11,666	2,184	18.7
Shanghai	8,635	1,752	20.3
Shanxi	509	43	8.4
Sichuan	932	329	35.3
Tianjin	1,899	1,069	56.3
Tibet	9	1	11.1
Yunnan	503	37	7.4
Zhejiang	12,983	3,185	24.5
Total	98,338	23,143	

Table 3: Public Disclosure of A-type Taxpayers and Exports

This table presents the effects of public disclosure of A-type taxpayer status on exports using a firm-destination jurisdiction-year sample. The dependent variable is *Export*, the ratio of export from the firm to the destination, scaled by lagged total sales. *Treat* is an indicator equal to one if the firm is disclosed as an A-type taxpayer in 2015 (the first year of disclosure), and zero otherwise. *Post* is an indicator equal to one for years 2015 to 2017, and zero for years 2012 to 2014. Column (1) reports baseline difference-in-differences estimates without firm-level controls. Column (2) adds firm-level controls. Both columns are estimated using OLS regressions. Both columns include firm-jurisdiction and year fixed effects. All variables are defined in Appendix A. All continuous variables are winsorized at 1% and 99% levels. The t-statistics in parentheses are based on standard errors clustered at the firm level. ***, **, and * indicate statistical significance at the 1%, 5%, and 10% levels, respectively.

	(1)	(2)
Dependent Variable	Export	Export
Treat×Post	**0.501*****	**0.527*****
	(5.33)	**(6.34)**
Size		-5.783***
		(-13.75)
Leverage		-0.876***
		(-2.63)
Cash		0.056
		(0.10)
ROS		12.112***
		(7.65)
Firm-Jurisdiction FE	Yes	Yes
Year FE	Yes	Yes
Observations	2,471,341	2,471,341
Adjusted R^2	0.746	0.758

Table 4 Cross-sectional Test: Reputation Capital

This table reports the effects of public disclosure of A-type taxpayer status on exports, conditional on the reputation capital of exporting firms. We use a firm-destination jurisdiction-year sample. The dependent variable is *Export*, the ratio of export from the firm to the destination, scaled by lagged total sales. *Treat* is an indicator equal to one if the firm is disclosed as an A-type taxpayer in 2015 (the first year of disclosure), and zero otherwise. *Post* is an indicator equal to one for years 2015 to 2017, and zero for years 2012 to 2014. *Small* is an indicator equal to one if the firm's average total assets in the pre-period are below the sample median, and zero otherwise. *Young* is an indicator equal to one if the firm's establishment year is later than the sample median, and zero otherwise. Both columns are estimated using OLS regressions. Both columns include firm-jurisdiction and year fixed effects. The coefficients associated with the interactions between *Post* and the partition variables are omitted for brevity. All variables are defined in Appendix A. All continuous variables are winsorized at 1% and 99% levels. The t-statistics in parentheses are based on standard errors clustered at the firm level. ***, **, and * indicate statistical significance at the 1%, 5%, and 10% levels, respectively.

	(1)	(2)
Dependent Variable	Export	Export
Treat×Post	0.241**	0.356***
	(2.42)	(3.53)
Treat×Post×Small	**0.399****	
	(2.42)	
Treat×Post×Young		**0.347****
		(2.06)
Size	-5.771***	-5.769***
	(-13.71)	(-13.60)
Leverage	-0.859***	-0.873***
	(-2.58)	(-2.62)
Cash	0.083	0.063
	(0.15)	(0.11)
ROS	12.111***	12.108***
	(7.65)	(7.65)
Post×Partition Var.	Yes	Yes
Firm-Jurisdiction FE	Yes	Yes
Year FE	Yes	Yes
Observations	2,471,341	2,471,341
Adjusted R^2	0.758	0.758

Table 5 Cross-sectional Test: Availability of Credible Financial Disclosure

This table reports the effects of public disclosure of A-type taxpayer status on exports, conditional on the availability and credibility of financial statements. We use a firm-destination jurisdiction-year sample. The dependent variable is *Export*, the ratio of export from the firm to the destination scaled by lagged total sales. *Treat* is an indicator equal to one if the firm is disclosed as an A-type taxpayer in 2015 (the first year of disclosure), and zero otherwise. *Post* is an indicator equal to one for years 2015 to 2017, and zero for years 2012 to 2014. *Private* is an indicator equal to one if the firm has no public securities issuance prior to 2015, and zero otherwise. *High Restate* is an indicator equal to one if the firm is located in a province with an above-median incidence of financial restatements due to accounting irregularities during 2012–2014, and zero otherwise. Both columns are estimated using OLS regressions. Both columns include firm-jurisdiction and year fixed effects. The coefficients associated with the interactions between *Post* and the partition variables are omitted for brevity. All variables are defined in Appendix A. All continuous variables are winsorized at 1% and 99% levels. The t-statistics in parentheses are based on standard errors clustered at the firm level. ***, **, and * indicate statistical significance at the 1%, 5%, and 10% levels, respectively.

	(1)	(2)
Dependent Variable	Export	Export
Treat×Post	-0.447	0.242**
	(-1.01)	(2.07)
Treat×Post×Private	**0.956****	
	(2.13)	
Treat×Post× High Restate		**0.636****
		(3.72)
Size	-5.797***	-5.783***
	(-13.78)	(-13.73)
Leverage	-0.884***	-0.861***
	(-2.65)	(-2.58)
Cash	0.080	0.073
	(0.14)	(0.13)
ROS	12.135***	12.101***
	(7.66)	(7.64)
Post×Partition Var.	Yes	Yes
Firm-Jurisdiction FE	Yes	Yes
Year FE	Yes	Yes
Observations	2,471,341	2,471,341
Adjusted R^2	0.758	0.758

Table 6: Within-firm Heterogeneity: Information Access of Customer Countries

This table reports the results on the effects of public disclosure of A-type taxpayer status, conditional on the availability of alternative information channels in customer countries. We use a firm-destination jurisdiction-year sample. The dependent variable is *Export*, the ratio of export from the firm to the destination scaled by lagged total sales. *Treat* is an indicator equal to one if the firm is disclosed as an A-type taxpayer in 2015 (the first year of disclosure), and zero otherwise. *Post* is an indicator equal to one for years 2015 to 2017, and zero for years 2012 to 2014. *No FTA* is an indicator equal to one for destinations without a free trade agreement with China in place before 2015, and zero otherwise. *Weak Ethnic Network* is an indicator equal to one for destinations not among the top 15 jurisdictions by the share of overseas Chinese in the resident population and zero otherwise. Both columns are estimated using OLS regressions. Both columns include firm-jurisdiction and firm-year fixed effects. All variables are defined in Appendix A. All continuous variables are winsorized at 1% and 99% levels. The t-statistics in parentheses are based on standard errors clustered at the firm level. ***, **, and * indicate statistical significance at the 1%, 5%, and 10% levels, respectively.

	(1)	(2)
Dependent Variable	Export	Export
Treat×Post×No FTA	**0.147****	
	(2.23)	
Treat×Post×Weak Ethnic Network		**0.147****
		(2.29)
Post×Partition Var.	Yes	Yes
Firm-Jurisdiction FE	Yes	Yes
Firm-Year FE	Yes	Yes
Observations	2,471,341	2,471,341
Adjusted R^2	0.878	0.878

Table 7: Effects at the Supplier–Customer Pair Level

This table reports the effects of public disclosure of A-type taxpayer status on trade outcomes at the supplier-customer relationship level. We use a relationship-year sample covering relationships between U.S. customers and Chinese suppliers, sourced from the U.S. customs data. In column (1), the dependent variable is *Container*, the number of shipping containers imported by a U.S. customer from a Chinese supplier in a given year. In column (2), the dependent variable is *I(New supplier)*, a dummy equal to one for a relationship newly formed in year *t*. In column (3), the dependent variable is *I(Increase purchase)*, a dummy equal to one for a relationship with trade growth from *t*-1 to *t*, and we require the relationship to exist in the pre-period. *Treat* is an indicator equal to one if the firm is disclosed as an A-type taxpayer in 2015 (the first year of disclosure), and zero otherwise. *Post* is an indicator equal to one for years 2015 to 2017, and zero for years 2012 to 2014. All columns are estimated using Poisson regressions. All regressions include firm-customer and year fixed effects. All variables are defined in Appendix A. All continuous variables are winsorized at 1% and 99% levels. The t-statistics in parentheses are based on standard errors clustered at the supplier firm level. ***, **, and * respectively indicate statistical significance at the 1%, 5%, and 10% levels.

Dependent Variable	(1) Container	(2) I(New Supplier)	(3) I(Increase Purchase)
Sample	Full	Full	Existing Supplier
Treat×Post	**0.075***	**0.075****	**0.065****
	(2.64)	**(2.48)**	**(2.34)**
Size	0.194***	0.204***	0.105***
	(8.38)	(8.49)	(6.04)
Leverage	-0.026	-0.012	0.070*
	(-0.67)	(-0.21)	(1.68)
Cash	0.151**	-0.026	0.131**
	(2.21)	(-0.31)	(1.99)
ROS	0.216*	-0.035	0.201
	(1.94)	(-0.25)	(1.53)
Firm-Customer FE	Yes	Yes	Yes
Year FE	Yes	Yes	Yes
Observations	477,216	352,945	303,499
Pseudo R^2	0.631	0.012	0.115

Table 8: Effects on Customers' Supply Chains

This table reports the downstream effects of the disclosure of A-type firms on customers' supply chains. We use a firm-year sample for U.S. importers in Panjiva. In column (1), the dependent variable is *Termination Risk*, defined as the fraction of existing suppliers that are terminated by the customer in the subsequent three years. In columns (2) and (3), we use the public firms in order to calculate operating efficiency measures. And we require the public firms to be registered and have their headquarters in the United States. In column (2), the dependent variable is *SG&A*, defined as the selling, general, and administrative expenses scaled by sales. In column (3), the dependent variable is *Inventory Turnover*, defined as the ratio of cost of goods sold to average inventory. *China Exposure* is defined as the share of the U.S. customer distinct suppliers located in China during the pre-disclosure period (2012–2014). *Post* is an indicator equal to one for years 2015-2017 and zero for years 2012-2014. All columns are estimated using OLS regressions. All columns include customer and year fixed effects. All variables are defined in Appendix A. All continuous variables are winsorized at 1% and 99% levels. The t-statistics in parentheses are based on standard errors clustered at the customer firm level. ***, **, and * indicate statistical significance at the 1%, 5%, and 10% levels, respectively.

	(1)	(2)	(3)
Dependent Variable	Termination Risk	SG&A	Inventory Turnover
China Exposure×Post	**-0.009*****	**-0.006*****	**0.666*****
	(-5.54)	**(-2.75)**	**(3.00)**
Customer Controls	No	Yes	Yes
Customer FE	Yes	Yes	Yes
Year FE	Yes	Yes	Yes
Observations	1,910,410	27,360	27,360
Adjusted R^2	0.304	0.934	0.952

Table 9: Robustness Tests

This table reports results from a series of robustness tests to validate the baseline findings. Panel A reports the results using matching approaches. Column (1) adopts a propensity score matching approach, and column (2) adopts an entropy balancing approach. The dependent variable is *Export*, the ratio of export from the firm to the destination scaled by lagged total sales. Panel B assesses the robustness of baseline results using alternative measures of export. Columns (1) and (2) use the log of export value and export value scaled by lagged assets as the dependent variables, respectively. Panel C uses alternative definition of treatment and control groups. In this panel, *Treat* is set to one for firms consistently receive the A-type taxpayer status in all three years from 2015 to 2017 and to zero for firms that never receive the A-type taxpayer status in the sample period. The dependent variable is *Export*, the ratio of export from the firm to the destination scaled by lagged total sales. Column (1) reports the difference-in-differences estimate without control variables. Column (2) reports the results with the same controls as in Table 3. All specifications are estimated using OLS regressions and include firm-jurisdiction and year fixed effects. All variables are defined in Appendix A. All continuous variables are winsorized at 1% and 99% levels. The t-statistics in parentheses are based on standard errors clustered at the firm level. ***, **, and * indicate statistical significance at the 1%, 5%, and 10% levels, respectively.

Panel A: Matched Sample of Suppliers

	(1)	(2)
Dependent Variable	Export	Export
Matching Method	Propensity Score Matching	Entropy Balancing
Treat×Post	**0.401***	**0.229***
	(4.86)	**(2.62)**
Controls	Yes	Yes
Firm-Jurisdiction FE	Yes	Yes
Year FE	Yes	Yes
Observations	1,714,359	2,471,341
Adjusted R^2	0.775	0.753

Panel B: Alternative Export Measure

	(1)	(2)
Dependent Variable	LnExport	Export/Asset
Treat×Post	**0.025***	**1.205***
	(2.97)	**(7.50)**
Controls	Yes	Yes
Firm-Jurisdiction FE	Yes	Yes
Year FE	Yes	Yes
Observations	2,471,341	2,471,341
Adjusted R^2	0.777	0.804

Panel C: Alternative Treatment Definition

	(1)	(2)
Dependent Variable	Export	Export
Treat × Post	**0.804***	**0.932***
	(4.76)	**(7.59)**
Controls	No	Yes
Firm-Jurisdiction FE	Yes	Yes
Year FE	Yes	Yes
Observations	1,492,654	1,492,654
Adjusted R^2	0.755	0.755

Online Appendix to

# "The Real Effects of Administrative Disclosure on Cross-Border Trade"

Section A: Anecdotal Evidence on Use of the Taxpayer Credit Rating in Cross-Border Trades
B1. Supplier-Side Signaling on B2B Platforms

We searched Made-in-China.com using targeted keywords to identify Chinese supplier pages that reference firms' taxpayer credit status. Founded in 1998, Made-in-China.com is a long-standing, multilingual Business-to-Business marketplace that connects overseas buyers with Chinese suppliers. The platform hosts more than 84 million product listings, and independent traffic estimates indicate roughly 19 million monthly visits, placing it among the most visited China-sourcing portals.[22]

Within this platform, we observe that export-oriented SMEs prominently advertise an "A-level taxpayer" designation in their company profiles and/or product pages, often in parallel to their product or innovation quality. Below, we provide several examples with emphasis added on the A-type taxpayer status mentions.

Figure A1: Homepage of Made-in-China.com
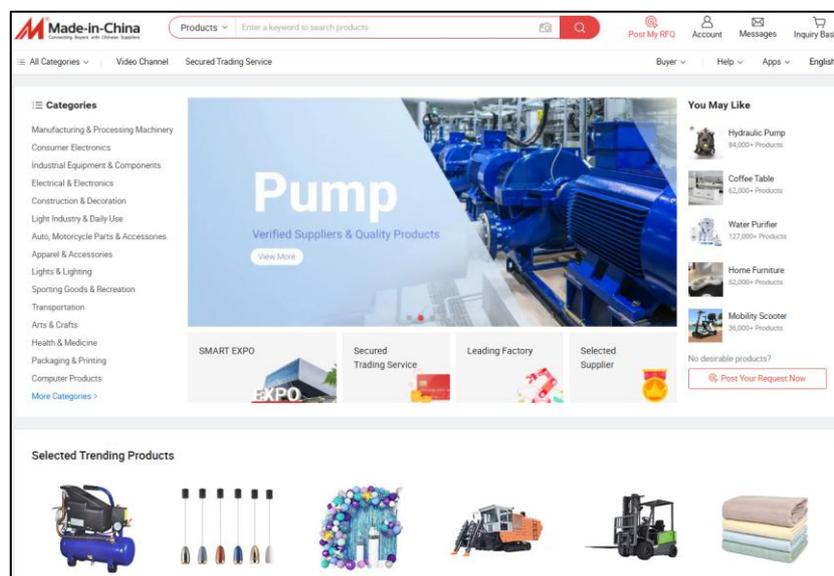
1. Zhongshan Zhanhong Adhesive Products Co., Ltd.

   - Year of Establishment: 2009
   - Number of Employees: N/A

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[22] Source: https://www.similarweb.com/website/made-in-china.com/#overview. Accessed August, 2025.

- Offering: Packaging & Printing

Company Profile: …The company has more than 10 years of deep technical foundation in product manufacturing and application, and the core technicians have more than 20 years of experience. The enterprise is managed and developed in good faith according to law, and has been awarded "Guangdong Province **A-level taxpayer**" by the state organs and "gold customer" and "star quality customer" by various banks. This is an affirmation to us...

2. Hubei Skega Rubber Products Co., Ltd.

- Year of Establishment: 2007
- Number of Employees: N/A
- Offering: Auto, Motorcycle Parts & Accessories, Tools & Hardware

Company Profile: …At present, it has developed into a high-tech enterprise in Hubei Province, a AAA credit enterprise and **A-level taxpayer**...

3. Linqu Jiaxing Plastic Co., Ltd.

- Year of Establishment: 2006
- Number of Employees: 79
- Offering: Plastic Products

Company Profile: The company has a strong technical foundation of 20 years in the manufacturing and application of products, with core technicians having over 20 years of experience. The enterprise has been awarded the title of "**A-level taxpayer**" for its lawful and honest management and development...

4. Guangzhou Bedford Electric Equipment Co., Ltd.

- Year of Establishment: 2007
- Number of Employees: 142
- Offering: Inverter; Controller; Multi-Function Energy-Saving Controller; Water Supply Equipment

Company Profile: [How can I trust you?] We are a certified high-tech enterprise in China. Our company has been audited and approved ISO, CE and are a China Honest Management Enterprise, **Class A taxpayer**.

5. Qingdao Fineyear Industry Co., Ltd.

- Year of Establishment: 2012
- Number of Employees: N/A
- Offering: Rubber Track Machine, Tire Machine, Belt Machine, Rubber Machine, Kneader

Company Profile: Qingdao Fineyear Rubber & Plastic Co., Ltd. is located in the beautiful coastal city of Qingdao west coast, is a collection of scientific research, development, production, installation, commissioning services and sales as one of the shot blasting machine, shot blasting machine track and shot blasting machine accessories production enterprises. From 2015 to 2020, it has been rated as a **Grade A taxpayer** by the State Administration of Taxation for six consecutive years. The company adopts a strict management model, has a rich industry experience of the staff, engineers, with a good scientific research foundation, experimental conditions and production base…

Section B: Institutional Background of STA's A-Level Taxpayer Disclosure Policy

B1. Timeline of the Rollout of the Tax Credit Rating System

Table B1 below summarizes the key milestones in the rollout of China's taxpayer credit rating system. The State Taxation Administration (STA) introduced the framework in mid-2014 and implemented it for the 2014 tax year, with the first public disclosure of A-level taxpayers in April 2015.

Table B1. Key Milestones in the Rollout of the Tax Credit Rating System

Date	Document / Action	Key Content
July 4, 2014	Announcement No. 40: *Measures for Tax Credit Management (Trial)*	Established the A–D tax credit grading framework.
August 25, 2014	Announcement No. 48: *Tax Credit Evaluation Indicators and Method (Trial)*	Defined detailed scoring indicators and evaluation methodology.
September 12, 2014	Official Guideline on the Credit Evaluation System	Provided background, objectives, and design rationale.
April 2015	Public Disclosure of A-Level Taxpayers	First public release of A-level taxpayer identities based on 2014 assessments.

B2. Details of the Tax Credit Rating Framework

The STA evaluates taxpayers' compliance using a grid-based credit rating framework that incorporates a comprehensive set of 95 indicators across all major dimensions of tax administration. These indicators capture taxpayers' behavior in the filing, payment, reporting, and record-keeping processes, as well as their cooperation with tax authorities and other government agencies. The framework aims to provide a holistic assessment of a taxpayer's compliance history and credibility within China's tax system. Specifically, the indicators cover the following areas of tax administration:

- Compliance in filing value-added tax (VAT) and income tax returns
- Accuracy and truthfulness of tax incentive and deduction claims
- Timeliness of tax payments and settlement of arrears or other dues
- Fulfilment of tax withholding and remittance obligations

- Accuracy of taxpayer registration and information maintenance
- Preparation and retention of accounting and tax records
- Management and use of VAT invoices
- Cooperation with tax investigations, audits, and information requests
- Engagement in tax avoidance or evasion behaviors
- Disclosure of business status changes that affect tax obligations
- Consistency between reported tax information and data obtained from banks, customs, and business registries

To quantify compliance, the STA applies a demerit-based scoring system. Each of the 95 indicators is assigned a score ranging from 1 to 11, which is deducted from an initial score of 100 depending on the severity of non-compliance in each category. The resulting total score determines the taxpayer's annual credit grade:

Table B2. Scoring and Rating Thresholds

Rating	Score Range
A	≥ 90 points
B	70–89 points
C	40–69 points
D	< 40 points

In addition to the numerical scoring system, the STA identifies a set of "serious dishonest behaviors" that automatically trigger the lowest rating (Grade D), regardless of the total score. Such behaviors include, but are not limited to:

- Falsifying applications for tax incentives or refunds
- Forging or illegally issuing VAT invoices
- Failing to settle unpaid taxes following administrative adjustments
- Refusing to cooperate with tax authorities or obstructing enforcement
- Evading taxes above specified monetary or proportional thresholds

B3. Public Dissemination of the A-Level Taxpayer Status

The STA publicly discloses the list of A-level tax credit taxpayers on its official website. The list is accessible through the "Tax Services" section of the STA's homepage. Figure A1 illustrate the navigation path from the STA homepage to the final list view.

Figure B1. Public Dissemination of A-Level Taxpayer Status via the STA Website

Entry point to the "Tax Services" section on the STA website

Public list of A-level tax credit taxpayers

Source: STA's website (content translated into English using Google Translate for presentation clarity.

Beyond the STA website, this information is also integrated into firms' broader credit profiles maintained within the state's public corporate credit information repository. It is further disseminated through commercial enterprise information platforms widely used in

China, enabling businesses and financial institutions to incorporate taxpayer credit data into their routine credit assessments, supplier screening, and due diligence processes.

Section C: Additional Results
Table C1: Prediction of A-Type Firm Designation

This table reports the prediction of A-type taxpayer status. The dependent variable is *A-Type Firm,* an indicator equal to one if the firm is disclosed as an A-type taxpayer in 2015, zero otherwise. We keep the unique firm in 2015. All independent variables are measured using 2014 data. The regression is estimated using the OLS model and includes industry and province fixed effect. All continuous variables are winsorized at 1% and 99% levels. The *t*-statistics in parentheses are based on standard errors clustered at the province level. The superscripts ***, **, and * respectively indicate statistical significance at the 1%, 5%, and 10% levels using two-tailed tests.

	(1)
Dependent Variable	A-Type Firm
Size	0.037***
	(6.07)
Leverage	-0.025**
	(-2.26)
Cash	0.052***
	(2.78)
ROS	0.236***
	(6.23)
Tangibility	-0.036
	(-1.39)
ETR	1.117***
	(6.99)
Employee	0.040***
	(4.88)
Industry FE	Yes
Province FE	Yes
Observations	65,554
Adjusted R^2	0.153

Table C2: Stacked DID at Relationship Level Based on U.S. Import Data

This panel documents the regression results of a stacked difference-in-differences design at the supplier-customer relationship level, using U.S. customs data. In this design, we construct a separate cohort around the [t-4, t+3] period for each disclosure years of 2015, 2016, and 2017. For each cohort, the treatment group consists of trade relationships between US customers and Chinese suppliers that are disclosed as an A-level taxpayer for the first time in year t; the control group consists of trade relationships between US customers and Chinese suppliers that are never disclosed as an A-level taxpayer before 2020. The dependent variable is *Container*, the number of raw shipping containers imported by a U.S. customer from a Chinese supplier in a given year. The regression is estimated using Poisson and includes firm-customer-cohort and year-cohort fixed effects. The t-statistics in parentheses are based on standard errors clustered at the firm-cohort level. ***, **, and * respectively indicate statistical significance at the 1%, 5%, and 10% levels.

	(1)
Dependent Variable	Container
Treat×Post	**0.037****
	(2.27)
Firm-Customer-Cohort FE	Yes
Year-Cohort FE	Yes
Observations	3,578,056
Pseudo R^2	0.486