Exit or Entrench? Deglobalization and Foreign State Control in Global Value Chains

Hui Tong (IMF)[1]

Abstract

Rising geopolitical tensions and trade fragmentation are reshaping foreign state participation in global value chains (GVCs). Using around 356,000 firm–year observations for firms with controlling foreign state owners from 2007–2023, covering 60 source countries and 187 host countries, we ask whether post-2017 deglobalization leads states to exit or entrench in foreign affiliates. State adjustment is sharply segmented by GVC position: in backward-linked manufacturing, state owners in politically distant host countries raise their exit rate by about 33 percent, whereas in forward-linked resource sectors deglobalization reduces exit by roughly 40 percent, with local services showing little change. Foreign non-state owners—observed in over 7.5 million affiliate–years—provide a benchmark and exhibit a more muted, diffuse response: their exit from affiliates in politically distant hosts rises by about 6 percent, with somewhat larger increases in resource sectors, the mirror image of state behavior. Taken together, the findings indicate that deglobalization restructures, rather than uniformly reduces, foreign state control along international production networks, with important implications for global trade, investment, and geoeconomic statecraft.

[1] International Monetary Fund, 700 19th Street, NW, Washington, DC 20431 (email: htong@imf.org). The views expressed herein are those of the author and should not be attributed to the IMF, its Executive Board, or its management.

1. **Introduction**

International investment, and with it the geography of global trade, has been reshaped over the past decade by rising geopolitical tensions, trade disputes, and successive global shocks—such as Brexit, U.S.–China trade tensions, and the COVID-19 pandemic—giving rise to what is increasingly described as an "era of de-globalization" or geoeconomic fragmentation. A rapidly growing literature documents that, since 2017, trade and investment have become more sensitive to geopolitics, with flows reallocated toward politically "friendly" countries (Gopinath, Gourinchas, Presbitero and Topalova, 2025).

In this paper, we add to this literature by examining how foreign ultimate owners manage geopolitical risk at the micro level through their decisions to retain or relinquish control of foreign affiliates. Recent work on cross-border corporate structures shows that multinational enterprises are often controlled through complex, multi-layered ownership chains, with ultimate investors several steps removed from local entities (Coppola, Maggiori, Neiman and Schreger, 2021). Yet we know relatively little about how these stay-or-exit choices—who ultimately controls a foreign affiliate and with what strategic motives—adjust in response to geoeconomic fragmentation of trade and investment. This question has become especially salient in light of recent geopolitical interventions, such as the October 2025 restructuring of Chinese-owned chipmaker Nexperia's Dutch operations and the ensuing chip-supply disruptions.

This gap is particularly important for state investors, as recent investment-screening and control decisions targeting state-related cross-border investments underscore how contested their role has become.[2] Work on "new state capitalism" shows that governments have become more active as global shareholders—via state-owned enterprises, development banks, and sovereign wealth funds—using equity stakes abroad to pursue industrial and strategic objectives alongside commercial ones (Babic, 2023). In parallel, the geoeconomics and economic statecraft literature emphasizes that states increasingly deploy trade, investment, and financial instruments to achieve

[2] For example, in 2017 the US blocked Canyon Bridge, a Chinese state-backed equity fund, from acquiring Lattice Semiconductor on CFIUS national-security grounds. In 2022–23, Germany capped the Chinese state-owned COSCO's stake in a Hamburg container terminal at a non-controlling 24.9 percent and fully nationalized SEFE, Gazprom's former German gas arm, to remove Russian state control. In 2024, the US approved the acquisition of Fortress Investment by Mubadala, Abu Dhabi's sovereign wealth fund, but only with strict restrictions.

foreign policy goals (Farrell and Newman, 2019; Clayton, Maggiori and Schreger, 2025). Yet we still lack systematic firm-level evidence on how controlling foreign state owners adjust their holdings in response to de-globalization, and whether their behavior differs from that of private investors.

To address this gap, we examine how foreign—particularly foreign state—owners adjust their stay-versus-exit decisions across different positions in global value chains (GVCs), which organize much of modern international trade. Sectors occupy distinct positions in cross-border production networks—ranging from upstream suppliers of raw materials to mid-chain producers of complex components and largely local service providers—and patterns of control and coordination differ systematically across these activities (Gereffi, Humphrey and Sturgeon, 2005; Baldwin, 2016). An affiliate's position in the chain in turn shapes the risks faced by its ultimate owners, including exposure to technology denial, market-access restrictions, and security-of-supply concerns, which are central to current debates on supply-chain resilience and recent "de-risking" strategies. We therefore ask whether controlling foreign state owners adjust their holdings differently across sectors' backward and forward GVC participation.

We assemble a firm-level dataset that tracks controlling foreign state owners across around 356,000 firm–year observations from 60 home and 187 host countries between 2007 and 2023, complemented by over 7.5 million firm–years for affiliates controlled by foreign non-state owners ("foreign private owners"). Using Orbis historical ownership data from Bureau van Dijk, we trace ownership chains from immediate to ultimate owners to identify the ultimate controlling owner. Political distance between home and host is measured from United Nations voting patterns using the Ideal Point Distance methodology of Bailey, Strezhnev and Voeten (2017). Sectoral backward and forward participation in global value chains is taken from the World Bank's WITS 2020 GVC database (TiVA 50-sector classification), following the decomposition of trade in value added proposed by Borin, Mancini and Taglioni (2025). In these data, complex manufacturing sectors such as motor vehicles and electronics exhibit strong backward linkages, extractive industries such as metal ore mining and crude petroleum are strongly forward-linked, and sectors like real estate display little GVC participation. This framework allows us to link political distance, sectoral GVC position, and ownership structures in a systematic, data-driven manner.

Combining these elements, we study whether the post-2017 phase of deglobalization induces foreign state investors to exit or entrench control, and how their behavior compares with that of private owners. Our main finding is that geopolitical fragmentation does not simply reduce foreign state ownership uniformly; its impact varies sharply with GVC position. In backward-linked, complex manufacturing sectors such as electronic components and transport equipment, foreign state owners in politically distant host countries increase their exit rate by around 33 percent. In forward-linked resource sectors such as oil and mining, by contrast, deglobalization reduces the likelihood of exit by roughly 40 percent, while ownership in largely local utilities and services is little affected. Foreign non-state owners—observed in over 7.5 million affiliate–years—provide a benchmark and exhibit a more muted, diffuse response: their exit from affiliates in politically distant hosts rises by about 6 percent, with somewhat larger increases in resource sectors, the mirror image of state behavior. Together, these patterns suggest that contemporary deglobalization is reshaping where states are willing to hold foreign control—away from complex manufacturing GVCs and toward upstream resource assets—rather than triggering a general retreat of foreign capital.

These patterns suggest that deglobalization reshapes the payoff to foreign control in a GVC-specific way. In backward-linked manufacturing chains, foreign state stakes are largely motivated by technology acquisition and deep supply-chain integration; as export controls, techno-nationalist measures, and investment screening tighten, visible state control in politically distant hosts becomes costly, so states shed control there and shift activity toward domestic or politically closer locations. In forward-linked resource sectors, by contrast, the objective is security of supply over location-specific deposits with few substitutes; deglobalization raises both political risk and the value of direct control, making entrenchment potentially more attractive than exit. Private owners face the same rise in political risk but do not internalize national-security or geopolitical payoffs: in resources, expropriation risk erodes expected returns and prompts withdrawal, while in manufacturing screening frameworks focus more on state-linked, critical-technology investments than on generic private ownership, allowing private investors to retain many benefits of network integration and producing only modest additional exits.

From a policy perspective, our results suggest that both the extent and the location of state ownership along global value chains matter for understanding geoeconomic fragmentation and its

implications for the international trading system. States reconfigure their foreign commercial presence differently in upstream resource activities, mid-chain manufacturing, and locally oriented services, implying that risk-assessment frameworks and trade and investment policy instruments should incorporate sector- and position-specific analysis. A more granular view of how state ownership interacts with value-chain linkages can help authorities calibrate safeguards in line with security and resilience objectives, while greater transparency on ultimate ownership and the role of state-linked entities can support more predictable policy responses and lower uncertainty for firms and partner countries.

Related literature

Our paper contributes to the literature on geoeconomic fragmentation and shifting global linkages, such as Alfaro and Chor (2023), Goldberg and Reed (2023), Benguria and Saffie (2024), Gopinath et al. (2025), and Mohr and Trebesch (2025). Gopinath et al. (2025), for instance, document how geopolitical tensions fragment trade and capital flows, while Mohr and Trebesch (2025) survey geoeconomics as a framework for understanding this fragmentation. Fernández-Villaverde, Mineyama, and Song (2024) construct a measure of geopolitical fragmentation and show that shocks to it depress trade and capital flows. Historical evidence from Xu (2022) shows that major disruptions to international finance can durably reshape global trade patterns. Relatedly, Juhász and Lane (2024) show that industrial policies increasingly reflect geopolitical competition and supply-chain resilience, offering broader context for how governments and firms adjust ownership structures. Complementing this work, Niepmann and Shen (2025) show that geopolitical risk reshapes global banks' cross-border and affiliate lending, while Correa, di Giovanni, Goldberg, and Minoiu (2023) show that rising trade protectionism tightens bank credit to trade-exposed borrowers, providing a financial channel for deglobalization.

Within this broader agenda, we speak directly to recent work on geoeconomic statecraft, particularly the framework developed by Clayton, Maggiori, and Schreger (2025), who formalize mechanisms of geoeconomic coercion and show how coercive strategies reshape cross-border connections. Frieden (2025) underscores the political constraints on the effectiveness of such strategies. Moreover, Coppola, Krishnamurthy, and Xu (2025) show that a parallel offshore dollar system can be deployed as an instrument of financial statecraft, while Bahaj, Fuchs, and Reis (2024)

demonstrate that central-bank swap and liquidity lines similarly extend states' monetary influence abroad. We contribute by focusing on direct corporate control as a distinct form of geoeconomic statecraft: using firm-level data on foreign state-owned affiliates, we show that rising geopolitical tensions lead states to reconfigure where they maintain or relinquish corporate control along global value chains, providing a micro-level complement to this literature.

A further related strand is the literature on global value chains and the organization of international production. Antràs and Chor (2021) survey macro and micro approaches to measuring and modeling GVCs, emphasizing how trade in intermediates and value-chain position shape patterns of trade and multinational activity. Within this framework, Blanchard, Bown, and Johnson (2025) develop a value-added approach to trade policy, while Qiu, Shin, and Zhang (2023) document lengthening GVCs and the rise of Asian hubs, and Conconi, García-Santana, Puccio, and Venturini (2018) show that rules of origin can distort firms' sourcing along GVCs. Handley, Limão, Ludema, and Yu (2024) show that WTO commitments reduce trade-policy uncertainty and deepen global supply-chain integration. In parallel, Lind and Ramondo (2023), Lee and Yi (2018), and di Giovanni and Hale (2022) show how global production networks transmit real, distributional, and financial shocks. At the firm level, Antràs, Fort, and Tintelnot (2025) show that sourcing costs and scale economies make trade and foreign production strongly complementary, and Tang, Wang, and Wang (2020) document how state capitalism shapes China's domestic segment of GVCs. From a more theoretical perspective, Mrázová and Neary (2019) highlight how selection among heterogeneous firms determines which producers operate along global production networks. Our analysis shows how foreign state owners reconfigure corporate control along global value chains in response to deglobalization and how their behavior compares to that of private multinationals across value-chain positions.

Moreover, our study relates to work examining how multinational groups structure ownership to optimize global investments under tax, regulatory, and financial considerations (Alfaro and Charlton, 2009; Coppola, Maggiori, Neiman, and Schreger, 2021; Fonseca, Nikalexi, and Papaioannou, 2022; Tørsløv, Wier, and Zucman, 2023; Beck, Coppola, Lewis, Maggiori, Schmitz, and Schreger, 2024). Coppola et al. (2021) show how multinationals route ownership through tax havens; Tørsløv, Wier, and Zucman (2023) quantify the global scale of profit shifting; and Beck et al. (2024) examine how onshore and offshore financial centers shape financial

integration in the euro area. In line with this work, we show that our main results are robust to excluding affiliates located in tax-haven hosts, indicating that the patterns we document are not driven by ownership chains routed through offshore financial centers. Against this backdrop, we add a geopolitical-risk dimension to this literature by examining how foreign state owners and private multinationals adjust their ownership structures in response to rising geopolitical tensions, and how the geography and sectoral composition of their cross-border control stakes change.

The remainder of the paper is structured as follows. Section 2 describes the data, Section 3 presents the main results, Section 4 reports robustness analyses, and Section 5 concludes.

2. Data

In this section, we present the data sources and variables related to state and private ownership, the political distance index, and the sectoral measures of backward and forward GVC linkages.

2.1 State Ownership

Our main data source of firm-level foreign investment is the BvD's Orbis historical ownership database. BvD collects firm-level ownership data from firms' reports, stock exchange releases, company websites, press news, private correspondence, and agencies. The Orbis database has been used in identifying ownership controls (e.g., Fons-Rosen et al. (2021) and Kalemli-Ozcan et al. (2023)).[3] The data covers around 17 million firms in 187 countries from 2007 to 2023.

In the ownership data from Bureau van Dijk's historical Orbis files, each ultimate owner is classified by an entity type. We identify *state owners* as those cases where the global ultimate owner at the 25% threshold (the GUO 25 link in the Links file) is coded as type S ("Public authorities, States, Governments"), a category that comprises states, governmental agencies, governmental departments, and local authorities. Using the country ISO code attached to this GUO,

[3] This work shows that Orbis-based measures of international investment track aggregate statistics reasonably well in countries and sectors with good coverage, underscoring the value of micro-level ownership data for studying macroeconomic trends.

we assign the home country of the state owner. All other GUO 25 types are treated as privately controlled or non-state owners, including B (banks), F (financial companies), C (industrial and other non-financial companies), A (insurance companies), E (mutual & pension funds/nominee/trust/trustee), J (foundations and research institutes), I (one or more known individuals or families), M (employees/managers/directors), P (private equity firms), V (venture capital), Y (hedge funds), and the remaining residual categories for unnamed private or corporate shareholders.

Our sample comprises roughly 7.9 million firm–year observations with an identified controlling GUO 25 from about 60 home and 187 host countries between 2007 and 2023. Of these, around 356,000 firm–years (about 4.5%) are ultimately controlled by states or public authorities, while the remaining 7.5 million firm–years (roughly 95.5%) are privately controlled. Among state-controlled firm–years, 71,954 involve a loss of controlling ownership by the GUO 25, implying an exit ratio of roughly 20%; among privately controlled firm–years, about 1.43 million involve giving up control, corresponding to an exit ratio of about 19%. For completeness, we also observe an additional 7.86 million firm–years with private individual or family ultimate owners (not reported in the main tables), for which the exit rate is about 6.8%.[4]

Foreign state-owned firm-years in our data are distributed across many home countries, with the ten largest being France, China, Germany, Singapore, Italy, the United Arab Emirates, Norway, Japan, the Russian Federation, and the United Kingdom. France accounts for about one-fifth of all foreign state firm-years, China for around 15 percent, Germany and Singapore for roughly 8 percent each, Italy and the United Arab Emirates for about 5 percent each, Norway and Japan for around 4 percent, and Russia and the United Kingdom for about 3 percent each. France's large share is consistent with its long-standing state-shareholder model and the extensive international footprint of French state-influenced multinationals in sectors such as energy, transport, and infrastructure. Moreover, these figures refer to the stock of foreign state-controlled affiliates (firm-years), not to new investment flows, so it is not surprising that a mature and active state owner like

[4] We exclude private owners classified as individuals or families so that the comparison focuses on private institutional investors relative to state owners.

France stands out. Later robustness checks show that our main results remain essentially unchanged when we exclude French state owners, Chinese state owners, or both from the sample.

2.2 Political distance

Our measure of geopolitical distance is based on United Nations General Assembly (UNGA) voting patterns, using the Ideal Point Distance (IPD) methodology developed by Bailey, Strezhnev, and Voeten (2017). This approach calculates political distance through alignment in voting behavior, allowing us to quantify the inferred political preferences of countries during UNGA sessions from 1946 to 2023. The IPD is derived by estimating an ordered logit model over three voting options—yes, abstain, or no—where each country's vote is influenced by both model parameters and an underlying country-specific preference in that year. This latent preference process is estimated with a Bayesian prior, employing a Metropolis-Hastings/Gibbs sampler algorithm to derive the logit model's parameters. The geopolitical distance between any two countries is then represented by the absolute difference in their inferred preference scores, capturing annual shifts in their political alignment. In the analysis, we use two measures of political distance: contemporary political distance and the average political distance over the sample period, both of which produce similar results.

2.3 GVC linkage

We measure sectoral participation in global value chains using the World Bank's WITS GVC database for 2020, based on the TiVA 50-sector classification and the Borin, Mancini, and Taglioni (2025) decomposition of trade in value added. Our main indicator is *pure backward* GVC participation, denoted BGVC, defined as a sector's backward participation expressed as a share of world output. We also construct an analogous *pure forward* measure, FGVC.

The cross-sectoral dispersion in these indicators is large and lines up well with standard narratives about GVCs (see Appendix Table 1). On the backward side, participation is especially pronounced in complex manufacturing: motor vehicles (BGVC ≈ 8.6), other transport equipment and shipbuilding (BGVC around 6.5), as well as computers, electronics and optical products, electrical equipment, and machinery (BGVC between roughly 5 and 7). By contrast, more traditional industries such as food products and textiles and apparel exhibit only moderate

backward participation (BGVC around 3), while services such as health, education, and public administration show relatively small but still positive backward linkages. On the forward side, extractive and resource-based industries dominate: mining of metal ores (FGVC ≈ 12.0) and crude petroleum and natural gas (FGVC ≈ 11.0), indicating that they are primarily upstream suppliers of inputs into other countries' exports rather than intensive users of foreign intermediates. Finally, some activities occupy a more "balanced" position in GVCs: for example, real estate services have BGVC ≈ 0.5 and FGVC ≈ 0.6, suggesting that neither backward nor forward participation is strongly dominant.

To bring the sectoral GVC information into our firm-level analysis, we construct a discrete indicator of net backward GVC exposure, NBGVC, based on U.S. 2-digit SIC industries. In our baseline specification, we take a narrow definition and set NBGVC = 1 only for two strongly backward, GVC-intensive manufacturing sectors—Electronic and Other Electrical Equipment and Components (SIC 36) and Transportation Equipment (37)—and NBGVC = −1 for mining industries (SIC 10–14: Metal Mining, Coal Mining, Oil and Gas Extraction, and Mining and Quarrying of Nonmetallic Minerals). All remaining sectors are coded NBGVC = 0 and serve as the reference group.

In robustness checks, we broaden this classification by setting NBGVC = 1 for a wider set of backward-oriented activities with strongly positive net backward GVC in our data. These include Food and Kindred Products (SIC 20), Tobacco Products (21), Textile Mill Products (22), Apparel (23), Chemicals and Allied Products (28), Industrial and Commercial Machinery and Computer Equipment (35), Electronic and Other Electrical Equipment and Components (36), Transportation Equipment (37), Measuring, Photographic, Medical and Optical Goods, and Clocks (38), and Miscellaneous Manufacturing Industries (39). We set NBGVC = −1 for forward-oriented sectors with strongly negative net backward GVC, namely mining industries (SIC 10–14) and Primary Metal Industries (SIC 33). This trichotomous coding allows us to distinguish empirically between firms operating in GVC-intensive backward manufacturing, forward resource suppliers, and more domestically oriented or GVC-neutral activities.

3. Main results

3.1 Methodology

Our empirical model is as follows:

$$(1) \quad Exit_{i,k,s,h,t} = \alpha Political\ Distance_{s,h.t} * NBGVC_k + Controls \quad + \varepsilon$$

Here $Exit_{i,k,s,h,t}$ captures the firm–year exit of state control for firm i in sector k, with the ultimate owner located in country s, the affiliate in host country h, in year t. It is measured as a binary dummy.

We examine the effect of political distance on exit by interacting political distance at the country-year level with the net backward GVC at the sector level, i.e., $Political\ Distance_{s,h.t} * NBGVC_k$.

We include host country fixed effects, final owner country fixed effects, year fixed effects, and 2-digit sector fixed effects to account for unobservable factors. Standard errors are clustered at the host country–final owner country–sector level.

There are some methodological advantages to include the above interaction terms. In a pure cross-country analysis, it is challenging to control for all macro shocks, leaving the possibility that the impact attributed to political distance would be confounded by the unobserved factors. Hence controlling for industry-specific technological characteristics regarding GVC linkage mitigates concerns about reverse causality. While it is typically difficult to identify causal effects using aggregate data, it is more likely that political distance affects firm-level ownership than the other way around. Furthermore, the industry-specific GVC linkage is obtained from the global level data at year 2020, which makes it less plausible that the causality runs from foreign ownership in other countries to the global index of GVC linkage.

3.2 Exits of Foreign State Owners

The baseline results for the exit of foreign state owners are reported in Table 1. Column (1) focuses on the pre-2017 period (2007–2016) and shows that the interaction between political distance and net backward GVC intensity is negative and statistically significant at the 10 percent level. In sectors with high net backward GVC exposure (NBGVC = 1), such as electronic components and transport equipment, greater political distance is therefore associated with a *lower* probability that state owners relinquish control. By contrast, the implied slope for sectors with low net backward GVC exposure (NBGVC = –1), such as mining and oil and gas extraction, is positive, indicating a higher exit rate in more politically distant host countries. For sectors with zero net backward GVC exposure (NBGVC = 0), such as local utilities and non-tradable services, the effect of political distance is close to zero and statistically insignificant. The pre-2017 estimates thus suggest that in the hyper-globalization era, political distance did not generally push state owners out of foreign affiliates, and in complex GVC manufacturing it may even have encouraged them to maintain control in more remote jurisdictions, especially relative to upstream resource sectors.

Column (2) shows that this pattern reverses after 2017. For the post-2017 period (2017–2023), the coefficient on the interaction between political distance and net backward GVC intensity turns positive (about 0.026) and is statistically significant at the 5 percent level, implying that state owners in high net backward GVC sectors (NBGVC = 1) become more likely to exit politically distant host countries. The main effect of political distance is now positive and significant at the 10 percent level, so even zero–net-backward GVC sectors (NBGVC = 0) exhibit a higher exit probability in politically distant hosts, although the implied marginal effect is only about one third as large as in high net backward GVC sectors. In contrast, for low net backward GVC sectors (NBGVC = –1), the combination of coefficients implies a negative association between political distance and exit, indicating that in mining and oil-related activities state owners are, if anything, less likely to withdraw from politically distant locations after 2017. Taken together, the post-2017 estimates point to a sharp reorientation of state exit behavior in complex manufacturing, with a more muted and partly opposite adjustment in upstream resource sectors.

Column (3) pools the full 2007–2023 sample and introduces a triple interaction between the post-2017 dummy, political distance, and net backward GVC intensity. The coefficient on this triple interaction is positive (around 0.057) and statistically significant at the 1 percent level, indicating a discrete change in how political distance and value-chain position jointly shape state

exit after 2017. The implied slopes confirm the earlier period-specific estimates: before 2017, political distance is associated with lower exit probabilities in high net backward GVC sectors (NBGVC = 1) and higher exit probabilities in low net backward GVC sectors (NBGVC = –1), with essentially no effect in NBGVC = 0 sectors. After 2017, the slope becomes strongly positive in high net backward GVC sectors, modestly positive (or close to zero) in NBGVC = 0 sectors, and significantly negative in low net backward GVC sectors, where state owners increasingly retain control in politically distant hosts. This pooled specification thus confirms that the post-2017 regime shift is both statistically and economically significant, and that it operates asymmetrically across complex manufacturing, local services, and upstream resource sectors.

These patterns are consistent with an interpretation in which value-chain position governs how geopolitical tensions are translated into state ownership decisions. Prior to 2017, when cross-border production networks were expanding, states appear to have treated foreign affiliates in complex backward-linked manufacturing as strategic footholds in global supply chains, maintaining control even in politically distant jurisdictions, while being somewhat more willing to divest from politically remote mining and oil assets. After 2017, rising geopolitical frictions, sanctions risks, and policy scrutiny over critical technologies make holding GVC-intensive manufacturing affiliates in politically distant countries increasingly costly and fragile, encouraging exit from these positions. At the same time, heightened concerns over energy and resource security make upstream resource assets in mining and oil fields more strategic, so that states become less inclined to relinquish control in politically distant hosts. In this sense, the results point to a dual geoeconomic logic: deglobalization in complex manufacturing GVCs coexists with renewed entrenchment in politically remote resource sectors.

To gauge economic significance, we now quantify what the column (3) coefficients imply for changes in exit probabilities across the distribution of political distance. For high-NBGVC manufacturing sectors (NBGVC = 1), moving from the 25th to the 75th percentile of political distance (0.26 to 1.56) before 2017 reduces the predicted exit probability by about 1.8 percentage points, from an average exit rate of roughly 20% to about 18%—around 9% of the mean. After 2017, the sign flips: the same change in political distance raises the predicted exit probability by about 4.6 percentage points, from roughly 20% to around 25%, or about 23% of the mean. The

implied shift in the marginal effect of political distance between the pre- and post-2017 periods is therefore about 6.4 percentage points, nearly one-third of the average exit rate.

For upstream resource sectors (NBGVC = −1), the pattern reverses. Before 2017, moving from the 25th to the 75th percentile of political distance increases the predicted exit probability by about 3.7 percentage points, from roughly 20% to just under 24%—about 19% of the mean. After 2017, the same change instead reduces the exit probability by about 4.6 percentage points, from roughly 20% down to about 15%, again on the order of 23% of the mean in absolute value. The swing in the marginal effect of political distance is thus roughly 8.3 percentage points, a bit more than 40% of the average exit rate, highlighting a sharp shift from pruning to entrenchment in politically distant resource affiliates.

For sectors with NBGVC = 0—largely local or GVC-neutral activities—the effect of political distance is much smaller and essentially disappears after 2017. Before 2017, moving from the 25th to the 75th percentile of political distance raises the predicted exit probability by only about 0.9 percentage points, from roughly 20% to about 21%—around 5% of the mean exit rate. After 2017, the same change in political distance alters exit probabilities by less than 0.1 percentage point, effectively zero. The swing between the pre- and post-2017 periods is therefore under 1 percentage point, roughly 5% of the average exit rate, an order of magnitude smaller than the shifts observed in high- and low-NBGVC sectors.

3.3 Exits of Foreign Private Owners

We now conduct a parallel analysis of exits by foreign private owners to compare their behavior with that of foreign state owners. Results are presented in Table 2. Column (1) of Table 2 examines the pre-2017 period (2007–2016) and shows that political distance is positively associated with exit for privately controlled affiliates: the coefficient on political distance is 0.0044 and statistically significant at the 1 percent level. This baseline effect applies to sectors with zero net backward GVC exposure (NBGVC = 0), such as local utilities and non-tradable services. The interaction with net backward GVC intensity is negative but statistically insignificant, implying only modest heterogeneity across value-chain positions.

Column (2) shows that the sensitivity of private exits to political distance increases after 2017 and becomes sharply differentiated by value-chain position. For the post-2017 period (2017–2023), the coefficient on political distance rises to about 0.0098 and remains significant at the 1 percent level, so that in NBGVC = 0 sectors private owners are substantially more likely to exit from politically distant host countries. At the same time, the interaction between political distance and net backward GVC intensity turns negative (around –0.0137) and is statistically significant at the 1 percent level. This implies that in high net backward GVC sectors (NBGVC = 1) the overall slope with respect to political distance becomes mildly negative, while in low net backward GVC sectors (NBGVC = –1) it becomes strongly positive, with a much higher exit propensity from politically distant mining and oil-related affiliates. Thus, after 2017, private owners concentrate their political-distance-driven retrenchment in upstream resource sectors, not in complex manufacturing GVCs.

Column (3), which pools the full 2007–2023 sample, reinforces this pattern. The triple interaction between post-2017, political distance, and net backward GVC intensity is negative (about –0.011) and statistically significant at the 10 percent level, indicating a discrete post-2017 reweighting of political-distance effects across value-chain positions. Before 2017, political distance has a modest positive association with private exits in NBGVC = 0 sectors and a somewhat stronger positive association in NBGVC = –1 resource sectors, but essentially no effect in NBGVC = 1 complex manufacturing. After 2017, the implied slope steepens markedly in low net backward GVC sectors and in zero-NBGVC sectors, while turning slightly negative in high net backward GVC sectors. The pooled regression thus confirms a post-2017 shift in how political distance shapes private exit decisions, with the main adjustment occurring in resource-based and local sectors rather than in GVC-intensive manufacturing.

To gauge economic significance for private owners, we again compare hosts at the 25th and 75th percentiles of political distance (0.26 vs. 1.56). For high-NBGVC manufacturing sectors (NBGVC = 1), the implied effects are tiny and go in the opposite direction to those for states. Before 2017, moving from a politically proximate to a politically distant host reduces the predicted exit probability by only about 0.1 percentage point, from an average exit rate of roughly 19% to about 18.9%—well under 1% of the mean. After 2017, the same change in political distance lowers the predicted exit probability by about 0.4 percentage points, to roughly 18.5%, still only about 2%

of the mean. The swing between the pre- and post-2017 periods is therefore only around 0.3 percentage points, less than 2% of the average exit rate, indicating that private exits in complex manufacturing are essentially insensitive to political distance and, if anything, become slightly less likely in more distant hosts.

For upstream resource sectors (NBGVC = -1), private owners show a much stronger response to political distance. Before 2017, moving from the 25th to the 75th percentile of political distance *increases* the predicted exit probability by about 0.7 percentage points, from around 19% to roughly 19.7%—about 4% of the mean. After 2017, the same change raises the exit probability by about 3.3 percentage points, from roughly 19% to about 22%, or around 17% of the mean. The implied swing between the pre- and post-2017 periods is thus on the order of 2.6 percentage points, roughly 14% of the average exit rate, consistent with private capital becoming substantially more inclined to withdraw from politically distant resource affiliates over time.

For sectors with NBGVC = 0—largely local or GVC-neutral activities—the effects lie in between. Before 2017, moving from the 25th to the 75th percentile of political distance raises the predicted exit probability by about 0.3 percentage points, from roughly 19% to about 19.3%—around 1.5% of the mean. After 2017, the same change increases exit by roughly 1.5 percentage points, to about 20.5%, or nearly 8% of the mean. The swing across periods is therefore about 1.2 percentage points, roughly 6% of the average exit rate. Overall, these patterns confirm that, for private owners, political distance matters most in resource and GVC-neutral sectors, while the effect in complex manufacturing is both small and of opposite sign to that for state owners.

Taken together with the state-owner results, these patterns suggest that deglobalization reshapes the payoff to foreign control in a GVC-specific way and generates a systematic divergence between public and private geoeconomic logics. In backward-linked manufacturing GVCs, foreign state stakes are often motivated by technology acquisition and deep supply-chain integration. As export controls, techno-nationalist measures, and investment screening tighten, visible state control in politically distant hosts becomes a liability: shedding control is effectively the price of staying in the chain. Accordingly, state owners retrench from politically distant affiliates in high net backward GVC sectors—especially complex manufacturing tied into critical supply chains—while entrenching in politically distant resource sectors, where the core objective is long-run security of supply and bargaining power over location-specific deposits with few

substitutes. Private owners, by contrast, behave more like risk–return optimizers: their adjustment in manufacturing GVC positions in politically distant countries is modest—post-2017 exit in these sectors is muted or slightly reversed—suggesting that they do not systematically reconfigure these holdings on geopolitical grounds. In resource sectors, however, the same rise in political and regulatory risk translates directly into lower risk-adjusted returns: heightened expropriation, contract instability, and sanctions risk prompt them to increase exit from politically distant mining and oil affiliates. The result is that deglobalization in complex manufacturing appears primarily state-driven, whereas in upstream resource sectors geopolitical risk is internalized much more aggressively by private capital.

4. Robustness Checks

4.1. Sectoral Robustness

In this section, we present several robustness checks on our main findings. Column (1) of Table 3 restricts the sample to tradable sectors with 2-digit US SIC codes below 40. The pattern of coefficients closely mirrors the baseline specification in Table 1 (column 3). In particular, the triple interaction between Post-2017, political distance, and net backward GVC intensity remains positive and highly significant, with a coefficient of 0.0583 (significant at the 1 percent level), essentially identical to the 0.0565 estimate in Table 1. The interaction between political distance and net backward GVC intensity is negative and significant, while Post-2017*Net BGVC is also negative and significant, again reproducing the earlier finding that, after 2017, state owners in politically distant, high-NBGVC tradable sectors become more likely to exit than before.

Column (2) expands the sample in the opposite direction, by adding firms with missing US SIC information and assigning them a net backward GVC value of zero. Despite the large increase in observations, the main result is unchanged: the triple interaction term remains positive, statistically significant at the 1 percent level, and almost identical in magnitude (0.0564) to both the baseline estimate in Table 1 and the tradable-sector estimate in column (1). The stability of this coefficient across the baseline sample, the tradable subsample, and the augmented sample with imputed zero-NBGVC sectors indicates that the core result—a post-2017 strengthening of the

positive effect of political distance on exit in high net backward GVC sectors—is robust to alternative sector definitions and sample compositions.

4.2. GVC Measure Robustness

Table 4 examines robustness to a broader classification of net backward GVC intensity. In earlier tables, we assigned NBGVC = 1 only to Electronic and Other Electrical Equipment and Components (SIC 36) and Transportation Equipment (SIC 37), and NBGVC = −1 to mining and oil-related activities (SIC 10–14), with all remaining sectors coded as zero. In Table 4 we generalize this classification: NBGVC = 1 is now given to a wider set of backward, GVC-intensive manufacturing industries with strongly positive NBGVC in our data—Food and Kindred Products (SIC 20), Tobacco (21), Textiles (22), Apparel (23), Chemicals (28), Machinery and Computers (35), Electronic Equipment (36), Transportation Equipment (37), Instruments (38), and Miscellaneous Manufacturing (39). NBGVC = −1 is assigned to a broader group of forward-linked sectors with strongly negative NBGVC—mining industries (SIC 10–14) and Primary Metal Industries (SIC 33)—while the remaining sectors continue to be coded as zero. This richer partition tests whether the baseline results are driven by a narrow subset of "headline" sectors or hold more generally across the value chain.

For state owners (column 1 of Table 4), the triple interaction term Post-2017 × Political Distance × Net BGVC remains positive (0.0308) and statistically significant at the 5 percent level. Compared with the baseline pooled specification for state exits in Table 1, column 3 (coefficient = 0.0565), the magnitude is somewhat smaller, and while the coefficient remains statistically significant (now at the 5% level rather than the 1% level), its sign and substantive interpretation are unchanged. Even under the expanded NBGVC coding, state owners become more likely after 2017 to exit politically distant affiliates in backward, GVC-intensive manufacturing sectors relative to other parts of the value chain. This confirms that the core state-owner result—a post-2017 strengthening of the positive effect of political distance on exit in high-NBGVC sectors—is not an artifact of a narrowly defined set of manufacturing industries.

For private owners (column 2 of Table 4), the triple interaction term is small (−0.0024) and statistically insignificant, in contrast to the negative and weakly significant coefficient found in

the pooled private-exit specification in Table 2, column 3. Once the NBGVC measure is broadened to include a wider range of downstream and upstream sectors, there is no longer clear evidence that private owners systematically reweight their exit response to political distance across high- and low-NBGVC sectors after 2017. Taken together, these results indicate that the asymmetric post-2017 adjustment by value-chain position is a robust feature of state behavior, whereas the corresponding pattern for private owners is more sensitive to how we define net backward GVC intensity.

4.3. Dominant State Owners

Table 5 tests whether the baseline results on state exits are driven by a handful of very large foreign state owners. The specification is identical to Table 1, column (3), but column (1) drops all affiliates ultimately controlled by the French state, which accounts for about 20.5 percent of state-owned firm–years in the sample; column (2) instead drops affiliates controlled by the Chinese state (around 15 percent of state-owned observations); and column (3) excludes both French and Chinese state owners simultaneously. Reassuringly, the triple interaction between the post-2017 dummy, political distance, and net backward GVC intensity remains positive, statistically significant, and very close in magnitude to the baseline coefficient in Table 1, column (3), where it equals 0.0565. When France is excluded (column 1), the triple-interaction coefficient is 0.0567 and significant at the 1 percent level; when China is excluded (column 2), it rises modestly to 0.0672 and remains significant at the 5 percent level; and when both French and Chinese state owners are dropped (column 3), the coefficient again equals 0.0672 and is significant at the 5 percent level. In all three cases, the implied post-2017 change in the slope of exit with respect to political distance in high-NBGVC sectors is essentially unchanged relative to the baseline.

These results indicate that the core finding—a post-2017 strengthening of the positive effect of political distance on the likelihood that state owners exit high net backward GVC sectors—is not driven by the behavior of a single large state investor. Removing France or China individually, or even excluding both together, leaves the triple interaction term both economically and statistically very similar to the baseline estimate. In particular, state owners continue to be significantly more likely after 2017 to relinquish control in politically distant hosts when affiliates are located in backward-linked, complex manufacturing sectors, relative to other parts of the value

chain. This robustness check therefore supports the interpretation that the pattern we document reflects a broad reconfiguration of foreign state control along GVCs, rather than a "France story" or a "China story" tied to the exit behavior of one or two large home states.

4.4. Tax Haven Hosts

Table 6 examines whether our results are driven by affiliates located in tax-haven hosts. Following Tørsløv, Wier, and Zucman (2023), we classify Bermuda, the Cayman Islands, the British Virgin Islands, Hong Kong, Ireland, Luxembourg, the Netherlands, Puerto Rico, Singapore, and Switzerland as tax havens and drop all affiliates whose host country is in this group. Since many entities incorporated in these jurisdictions function mainly as tax or financing conduits rather than sites of substantial real production, their exit decisions may not reflect the same geopolitical and GVC-related considerations as exits from operating affiliates. In column (1), excluding tax-haven hosts reduces the state-owner sample from 266,101 to 212,872 firm–years—roughly 20 percent fewer observations—yet the triple interaction between Post-2017, political distance, and net backward GVC intensity remains virtually unchanged. The coefficient is 0.0565, significant at the 5 percent level, with the same sign and very similar magnitude as in Table 1, column (3), and the overall pattern of the other interaction terms and the R-squared (0.085 versus 0.086) is also stable. This confirms that our main state-owner result—a post-2017 strengthening of the positive effect of political distance on exits in high-NBGVC sectors—is not driven by affiliates routed through tax havens.

Column (2) performs the same exercise for private owners. Dropping tax-haven hosts reduces the sample from 7,527,462 to 6,114,951 observations (about 19 percent fewer), but the triple interaction term remains negative and significant at the 10 percent level: −0.0128, compared with −0.0110 in Table 2, column (3), which is also significant at the 10 percent level. The magnitude is slightly larger in absolute value, and the surrounding coefficients display a similar pattern to the baseline—political distance and the Post-2017 * Political Distance interaction remain positive and highly significant, while the main and two-way interactions involving Net BGVC are small. Overall, focusing on affiliates located in non–tax-haven host countries leaves our qualitative conclusions intact for both state and private owners, and reinforces the interpretation that the core

patterns we document reflect the behavior of operating affiliates rather than artifacts of holding-company structures in tax havens.

5. Conclusion

Overall, the paper shows how rising geopolitical fragmentation reshapes foreign state control along global value chains. Empirically, we combine a large firm-level panel—around 356,000 firm–year observations for firms with controlling foreign state owners and over 7.5 million with private foreign owners in 60 home and 187 host countries from 2007 to 2023—with sector-level measures of backward and forward GVC linkages constructed from World Bank global value chain indicators. The results indicate that fragmentation is not associated with a simple withdrawal of foreign state capital, but with a reallocation of control across sectors and value-chain positions.

In politically distant host countries, foreign state owners become about 33 percent more likely to relinquish control in backward-linked, complex manufacturing segments such as electronic components and transport equipment, whereas their likelihood of exit from forward-linked resource activities falls by roughly 40 percent; positions in local utilities and services change little. These shifts are quantitatively meaningful. By contrast, private foreign owners adjust in a more uniform but milder way: exit rates from politically distant hosts rise by about 6 percent on average, with somewhat larger increases in resource sectors. Taken together, the evidence points to a form of geoeconomic adjustment in which states reconfigure where they hold control along global production networks, rather than uniformly scaling back their cross-border presence.

These findings suggest that discussions of fragmentation and state ownership may benefit from looking beyond aggregate measures of integration or overall exposure to state-linked investors, and instead considering how control is distributed across different segments of value chains. A more granular view of ultimate ownership and of the role of state entities within cross-border corporate structures can help inform policy choices that balance security and resilience objectives with the benefits of participation in well-functioning global production networks.

References

1. Alfaro, Laura, and Davin Chor, 2023. "Global Supply Chains: The Looming “Great Reallocation”", NBER Working Papers 31661.
2. Alfaro, Laura, and Andrew Charlton. 2009. "Intra-industry Foreign Direct Investment." *American Economic Review* 99(5): 2096-2119.
3. Alviarez, Vanessa, Javier Cravino, and Andrei A. Levchenko. 2017. "The Growth of Multinational Firms in the Great Recession." *Journal of Monetary Economics* 85 (C): 50-64.
4. Antràs, Pol, and Davin Chor. 2021. “Global Value Chains.” *NBER Working Paper* 28549. Cambridge, MA: National Bureau of Economic Research.
5. Antràs, Pol, Teresa C. Fort, and Felix Tintelnot. 2025. “Global Value Chains: A Firm-Level Approach.” *NBER Reporter*, no. 3.
6. Babić, Milan. 2023. *The Rise of State Capital: Transforming Markets and International Politics*. Newcastle upon Tyne: Agenda Publishing.
7. Bahaj, Saleem, Marie Fuchs, and Ricardo Reis. 2024. *The Global Network of Liquidity Lines.* CEPR Discussion Paper 19070.
8. Baldwin, Richard. 2016. *The Great Convergence: Information Technology and the New Globalization*. Cambridge, MA: Harvard University Press.
9. Benguria, F., Saffie, F., 2024. Escaping the trade war: Finance and relational supply chains in the adjustment to trade policy shocks. J. Int. Econ. 152, 103987.
10. Beck, Roland, Antonio Coppola, Angus J. Lewis, Matteo Maggiori, Martin Schmitz and Jesse Schreger, 2024, "The Geography of Capital Allocation in the Euro Area", NBER Working Paper 32275
11. Blackwill, Robert D., and Jennifer M. Harris. 2016. *War by Other Means: Geoeconomics and Statecraft*. Cambridge, MA: Harvard University Press.
12. Blanchard, Emily J., Chad P. Bown, and Robert C. Johnson. 2025. “Global Value Chains and Trade Policy.” *Review of Economic Studies*.
13. Borin, A., Mancini, M., & Taglioni, D. (2025). Economic consequences of trade and global value chain integration: A measurement perspective. The World Bank Economic Review,
14. Chari, Anusha. 2020. "The International Market for Corporate Control." NBER Working Papers 26843.
15. Clayton, Christopher, Matteo Maggiori and Jesse Schreger (2025), “Putting Economics Back into Geoeconomics”, In *NBER Macroeconomics Annual 2025, Volume 40*.

16. Conconi, Paola, Manuel García-Santana, Laura Puccio, and Roberto Venturini. 2018. “From Final Goods to Inputs: The Protectionist Effect of Rules of Origin.” *American Economic Review* 108 (8): 2335–2365.

17. Coppola, Antonio, Matteo Maggiori, Brent Neiman and Jesse Schreger, 2021, "Redrawing the Map of Global Capital Flows: The Role of Cross-Border Financing and Tax Havens," *Quarterly Journal of Economics* 136(3), pages 1499-1556.

18. Coppola, Antonio, Arvind Krishnamurthy, and Chenzi Xu. 2025. "Currency Development through Liquidity Provision." *AEA Papers and Proceedings* 115: 599–604.

19. Correa, Ricardo, Julian di Giovanni, Linda S. Goldberg, and Camelia Minoiu. 2023. *Trade Uncertainty and U.S. Bank Lending*. Staff Report 1076. New York: Federal Reserve Bank of New York

20. Cravino, Javier and Andrei A. Levchenko. 2017. "Multinational Firms and International Business Cycle Transmission." *The Quarterly Journal of Economics* 132(2): 921-962.

21. Del Prete, Davide and Armando Rungi. 2017. "Organizing the global value chain: A firm-level test." *Journal of International Economics* 109(C): 16-30.

22. di Giovanni, Julian, and Galina Hale. 2022. “Stock Market Spillovers via the Global Production Network: Transmission of U.S. Monetary Policy.” *Journal of Finance* 77 (6): 3373–3421.

23. Farrell, Henry, and Abraham L. Newman. 2019. “Weaponized Interdependence: How Global Economic Networks Shape State Coercion.” *International Security* 44 (1): 42–79.

24. Fernández-Villaverde, Jesús, Tomohide Mineyama, and Dongho Song. 2024. *Are We Fragmented Yet? Measuring Geopolitical Fragmentation and Its Causal Effect.* NBER Working Paper 32638. Cambridge, MA: National Bureau of Economic Research.

25. Fonseca, Luıs, Katerina Nikalexi, and Elias Papaioannou. 2022. “The Globalization of Corporate Control,” *Journal of International Economics*.

26. Fons-Rosen, Christian, Sebnem Kalemli-Ozcan, Bent E. Sørensen, Carolina Villegas-Sanchez, and Vadym Volosovych. 2021. "Quantifying productivity gains from foreign investment." *Journal of International Economics* 131(C).

27. Frieden, Jeffry. 2025. “Comment on *Putting Economics Back into Geoeconomics*.” In *NBER Macroeconomics Annual 2025, Volume 40*.

28. Gereffi, Gary, John Humphrey, and Timothy Sturgeon. 2005. “The Governance of Global Value Chains.” *Review of International Political Economy* 12 (1): 78–104.

29. Goldberg, P.K., Reed, T., 2023. Is the Global Economy Deglobalizing? If So, Why? And What Is Next? Brook. Pap. Econ. Act. 2023 (1), 347–423.

30. Gopinath, Gita & Gourinchas, Pierre-Olivier & Presbitero, Andrea F. & Topalova, Petia, 2025. "Changing global linkages: A new Cold War?," Journal of International Economics, Elsevier, vol. 153(C)

31. Handley, Kyle, Nuno Limão, Rodney D. Ludema, and Zhi Yu. 2024. “Firm Input Choice under Trade Policy Uncertainty.” *Journal of International Economics* 150 (July): 103909.

32. Juhász, Réka, and Nathan Lane. 2024. "The Political Economy of Industrial Policy." *Journal of Economic Perspectives* 38 (4): 27–54**.**

33. Kalemli-Ozcan, Sebnem, Bent Sorensen, Carolina Villegas-Sanchez, Vadym Volosovych, and Sevcan Yesiltas. 2023. "How to Construct Nationally Representative Firm Level Data from the Orbis Global Database: New Facts and Aggregate Implications." *American Economic Journal-Macro* forthcoming.

34. Lee, Eunhee, and Kei-Mu Yi. 2018. “Global Value Chains and Inequality with Endogenous Labor Supply.” *Journal of International Economics* 115: 223–241.

35. Lind, Nelson, and Natalia Ramondo. 2023. “Trade with Correlation.” *American Economic Review* 113 (2): 317–53.

36. Mohr, Cathrin and Christoph Trebesch. 2025. “Geoeconomics,” Kiel Working Papers 2279, Kiel Institute for the World Economy.

37. Mrázová, Monika, and J. Peter Neary. 2019. “Selection Effects with Heterogeneous Firms.” *Journal of the European Economic Association* 17 (4): 1294–1334.

38. Musacchio, Aldo, Sergio G. Lazzarini, and Ruth V. Aguilera. 2015. “New Varieties of State Capitalism: Strategic and Governance Implications.” *Academy of Management Perspectives* 29 (1): 115–131.

39. Niepmann, Friederike, and Leslie Sheng Shen. 2025. *Geopolitical Risk and Global Banking*. International Finance Discussion Papers 1418. Washington, DC: Board of Governors of the Federal Reserve System.

40. Qiu, Han, Hyun Song Shin, and Leanne Si Ying Zhang. 2023. “Mapping the Realignment of Global Value Chains.” BIS Bulletin, no. 78.

41. Tang, Heiwai, Fei Wang, and Zhi Wang. 2020. “Domestic Segment of Global Value Chains in China under State Capitalism.” *Journal of Comparative Economics* 48 (4): 797–821

42. Tørsløv, Thomas, Ludvig Wier, and Gabriel Zucman, 2023, “The Missing Profits of Nations,” *Review of Economic Studies* 90 (3), 1499–1534.

43. Xu, Chenzi. 2022. "Reshaping Global Trade: The Immediate and Long-Run Effects of Bank Failures." *Quarterly Journal of Economics* 137 (4): 2107–2161.

44. Zucman, Gabriel, 2013, “The missing wealth of nations: Are Europe and the US net debtors or net creditors?,” *Quarterly Journal of Economics* 128 (3), 1321–1364.

Table 1. Exit of Foreign State Owners

	(1) Pre-2017	(2) Post-2017	(3) All years
Political Distance	-0.00349	0.0102*	0.00725
	(0.00565)	(0.00589)	(0.00519)
Net BGVC*Political Distance	-0.0235*	0.0257**	-0.0212
	(0.0127)	(0.0122)	(0.0136)
Post-2017*Net BGVC			-0.0521***
			(0.0201)
Post-2017*Political Distance			-0.00742
			(0.00621)
Post-2017*Political Distance*Net BGVC			0.0565***
			(0.0192)
Observations	127,745	138,345	266,101
R-squared	0.093	0.139	0.086

Robust standard errors in parentheses
*** p<0.01, ** p<0.05, * p<0.1

Table 2. Exit of Foreign Private Owners

	(1) Pre-2017	(2) Post-2017	(3) All years
Political Distance	0.00438***	0.00981***	0.00234
	(0.00167)	(0.00246)	(0.00180)
Net BGVC*Political Distance	-0.00356	-0.0137***	-0.00330
	(0.00387)	(0.00527)	(0.00410)
Post-2017*Net BGVC			0.00825
			(0.00625)
Post-2017*Political Distance			0.00892***
			(0.00136)
Post-2017*Political Distance*Net BGVC			-0.0110*
			(0.00578)
Observations	3,992,587	3,534,871	7,527,462
R-squared	0.024	0.039	0.029

Robust standard errors in parentheses
*** p<0.01, ** p<0.05, * p<0.1

Table 3. Exit of Foreign State Owners-- Sectoral Robustness

	(1) Tradable Sectors	(2) Additional Sectors
Political Distance	0.00436	0.00861*
	(0.00907)	(0.00482)
Net BGVC*Political Distance	-0.0273**	-0.0220
	(0.0130)	(0.0141)
Post-2017*Net BGVC	-0.0534**	-0.0523***
	(0.0208)	(0.0196)
Post-2017*Political Distance	0.0150	-0.00114
	(0.0107)	(0.00689)
Post-2017*Political Distance*Net BGVC	0.0583***	0.0564***
	(0.0182)	(0.0192)
Observations	49,941	356,133
R-squared	0.113	0.082

Robust standard errors in parentheses
*** p<0.01, ** p<0.05, * p<0.1

Table 4. Exit of Foreign Owners-- GVC Measure Robustness

	(1) State owners	(2) Private owners
Political Distance	0.00836	0.00290
	(0.00522)	(0.00181)
Net BGVC*Political Distance	-0.0154*	-0.00577***
	(0.00904)	(0.00216)
Post-2017*Net BGVC	-0.0252	-0.00182
	(0.0168)	(0.00370)
Post-2017*Political Distance	-0.00965	0.00906***
	(0.00626)	(0.00147)
Post-2017*Political Distance*Net BGVC	0.0308**	-0.00240
	(0.0134)	(0.00309)
Observations	266,101	7,527,462
R-squared	0.086	0.029

Robust standard errors in parentheses
*** p<0.01, ** p<0.05, * p<0.1

Table 5. Exit of Foreign State Owners—Dropping Dominant State Owners

	(1) Dropping France	(2) Dropping China	(3) Dropping France and China
Political Distance	0.0183***	0.00690	0.0173**
	(0.00653)	(0.00641)	(0.00789)
Net BGVC	0.0367**	0.0609***	0.0397***
	(0.0145)	(0.0162)	(0.0146)
Net BGVC*Political Distance	-0.0318***	-0.0182	-0.0230
	(0.0122)	(0.0188)	(0.0166)
Post-2017*Net BGVC	-0.0109	-0.0602**	-0.00884
	(0.0213)	(0.0259)	(0.0267)
Post-2017*Political Distance	-0.0131*	-0.0130	-0.0193**
	(0.00685)	(0.00820)	(0.00880)
Post-2017*Political Distance*Net BGVC	0.0567***	0.0672**	0.0672**
	(0.0191)	(0.0324)	(0.0341)
Observations	211,009	225,681	170,588
R-squared	0.088	0.088	0.099

Robust standard errors in parentheses
*** p<0.01, ** p<0.05, * p<0.1

Table 6. Exit of Foreign Owners--Dropping Tax Haven Hosts

	(1) State Owners	(2) Private Owners
Political Distance	0.00418	-0.00129
	(0.00563)	(0.00189)
Net BGVC	0.0512***	-0.00155
	(0.0182)	(0.00450)
Net BGVC*Political Distance	-0.0271	0.000835
	(0.0165)	(0.00504)
Post-2017*Net BGVC	-0.0350	0.00960
	(0.0239)	(0.00720)
Post-2017*Political Distance	-0.00247	0.0106***
	(0.00741)	(0.00149)
Post-2017*Political Distance*Net BGVC	0.0565**	-0.0128*
	(0.0230)	(0.00675)
Observations	212,872	6,114,951
R-squared	0.085	0.033

Robust standard errors in parentheses
*** p<0.01, ** p<0.05, * p<0.1

Appendix Table 1. Global Backward and Forward GVC Linkages by Sector (Share of Total Output)		
	BGVC	FGVC
1-Agriculture and hunting	0.9	1.0
2-Forestry and logging	0.3	2.3
3-Fishing and aquaculture	0.8	0.5
4-Mining of coal and lignite	0.1	3.3
5-Extraction of crude petroleum and natural gas	0.2	11.0
6-Mining of metal ores	0.0	12.0
7-Other mining and quarrying	0.2	3.7
8-Mining support service activities	0.8	4.7
9-Manufacture of food products, beverages and tobacco products	3.0	0.3
10-Manufacture of textiles, wearing apparel, leather and related products	3.5	1.3
11-Manufacture of wood and of products of wood and cork	0.7	1.4
12-Manufacture of paper and paper products; Printing and reproduction of recorded media	1.1	1.8
13-Manufacture of coke and refined petroleum products	2.8	1.5
14-Manufacture of chemicals and chemical products	2.0	3.9
15-Manufacture of basic pharmaceutical products and pharmaceutical preparations	3.9	1.6
16-Manufacture of rubber and plastic products	1.7	2.9
17-Manufacture of other non-metallic mineral products	0.4	0.9
18-Manufacture of basic iron and steel	0.1	1.9
19-Manufacture of basic precious and other non-ferrous metals	0.3	4.3
20-Manufacture of fabricated metal products	1.8	2.2
21-Manufacture of computer, electronic and optical products	7.2	4.3
22-Manufacture of electrical equipment	5.2	2.2
23-Manufacture of machinery and equipment n.e.c.	5.5	2.1
24-Manufacture of motor vehicles, trailers and semi-trailers	8.6	1.4
25-Building of ships and boats	6.4	1.0
26-Manufacture of other transport equipment	6.8	2.2
27-Manufacture of furniture; other manufacturing; repair and installation of machinery and equipment	4.6	1.6
28-Electricity, gas, steam and air conditioning supply	0.7	1.4
29-Water supply; sewerage, waste management and remediation activities	0.8	1.6
30-Construction	2.2	0.2
31-Wholesale and retail trade; repair of motor vehicles and motorcycles	1.3	2.6
32-Land transport and transport via pipelines	1.1	2.6
33-Water transport	1.6	2.7
34-Air transport	3.8	2.2
35-Warehousing and support activities for transportation	0.7	3.3
36-Postal and courier activities	0.4	3.7
37-Accommodation and food service activities	1.8	0.3
38-Publishing, Motion picture, video, television programme production and broadcasting activities	1.7	2.3
39-Telecommunications	1.4	1.3
40-Computer programming and information service activities	2.6	3.9
41-Financial and insurance activities	1.2	2.5
42-Real estate activities	0.5	0.6
43-Professional, scientific and technical activities	0.8	3.2
44-Administrative and support service activities	0.4	4.5
45-Public administration and defense, compulsory social security	1.1	0.2
46-Education	0.7	0.2
47-Human health and social work activities	1.3	0.1
48-Arts, entertainment and recreation activities	2.2	0.5
49-Other service activities	1.3	0.5

Source: World Bank (WITS GVC); author's compilation. See Section 2.3 for definitions.