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Exploring Reshoring

Why multinational subsidiaries are moving closer to their parents; researching the drivers of foreign divestment

Thesis MSc Strategy Economics

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Abstract

Why do multinational enterprises relocate their subsidiaries closer to their origins? Despite seeing superstar firms implement so-called reshoring strategies over the last years, prior research has failed to pinpoint why companies are divesting their foreign subsidiaries. Reshoring strategies are expected to have serious implications for labor market dynamics and geopolitics. By extensively reviewing the literature and analyzing the divestment data of 7,397 global ultimate owners and their subsidiaries in all 195 countries, over 13 years, I study what the drivers are behind foreign divestment. The results show that these drivers differ significantly from the well-known drivers of foreign investment. Country risks, such as political stability and natural disasters, are identified as drivers of foreign divestment, albeit the results are not entirely conclusive. Company characteristics, such as prior experience in the host country and distance between the home and host country, also seem to influence foreign divestment decisions.

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1 Introduction

What motivates large corporations to invest abroad? Cost reductions, (natural) resource availability, market access, and several more factors are on the list of drivers of FDI that is familiar to many economists. Then, what motivates these same corporations to divest their foreign subsidiaries and move them closer to home? Does the absence of the previous motivations cause firms to reverse their investment decisions? This does not seem to be the case. So far, the question of what drives divestment remains unanswered for the largest part despite the topics of reshoring, friendshoring, and nearshoring gaining in popularity (Ellerbeck, 2023). Concerns over friendshoring potentially causing geopolitical fragmentation keep the international community occupied. In the US alone, reshoring initiatives resulted in 364,000 jobs being announced in 2022 which is up 53% from 2021 (Ouellette, 2023). Furthermore, American imports from Mexico have increased by 26% since COVID (Van den Bossche et al., 2022). With these numbers in mind, this research aims to explore what factors lead multinational enterprises to divest their foreign subsidiaries.

Over the past decades, location choices of multinational enterprises (MNEs) have revolved around international expansion and diversification. However, with more MNEs from developed economies reshoring parts of their supply chain, location choice strategies are altering (Burke et al., 2021). With FDI – foreign direct investment – flows continuously increasing, the vast majority of MNEs continue to offshore significant parts of their value chains. Nevertheless, superstar firms such as Intel, Tesla, Bosch and Adidas have been moving parts of their production processes closer to their origins (Busvine, 2021; DeMuth, 2022; Kessler, 2021; Shotter & Whipp, 2016; United Nations Conference on Trade and Development, 2022). This shows that, under similar external conditions, some corporations opt to divest whereas others choose to stay operational. Various factors, that differ from the driving forces behind investment, are thought to be of key importance to MNEs deciding on divestment. Examples include the risk profile of the MNE, which might change ex-post investment when the MNE actually familiarizes itself with the institutional environment. There is a substantial possibility that an MNE realizes that their expectations of institutions do not align with reality, revealing information asymmetries after investing. Another factor that plays an important role in divestment decisions vis-à-vis investment decisions, is the sunk costs the company makes after/during investment. The case of Heineken recently struggling to sell its operations in Russia clearly indicates the financial considerations companies make when deciding upon divestment (Reuters, 2023). Heineken had made substantial investments that would become largely obsolete in the event of divestment.

This process of relocating production processes, that were offshored in the past, back to the home country, is referred to as reshoring. Similar to this is nearshoring, which describes the relocation of production processes to proximate countries. Both reshoring

and nearshoring are forms of onshoring, which covers the general dynamic of MNEs relocating processes closer to their origins. Friendshoring refers to a specific form of onshoring where processes are relocated to politically and economically safe countries (Ellerbeck, 2023). On the contrary, offshoring means that a firm moves a production process overseas, usually further away from its largest consumer markets, in pursuit of achieving cost advantages (Bolter & Robey, 2020).

The relocation of supply chain components usually involves the sale of a foreign subsidiary, commonly referred to as foreign divestment (FD), and the acquisition or expansion of another (foreign) subsidiary. These definitions are important to keep in mind for the remainder of this research.

A substantial body of literature has extensively discussed the location determinants of MNEs' FDI and the firm characteristics of offshoring MNEs. Nevertheless, due to the relative novelty of reshoring strategies, the antecedents of reshoring and the inherent foreign divestments have been scarcely investigated empirically. Only a handful of authors have researched the topic of reshoring and more specifically foreign divestments, with some only covering literature reviews and others presenting inconclusive results (Arte & Larimo, 2019; Berry, 2013; Nguyen et al., 2022; Schmid & Morschett, 2020). Also, most of these papers date back to before COVID-19, after which the reshoring trend only started gaining momentum. In addition, none of the prior research on the topic compares the findings on the drivers of divestment to those of investment. This comparison is especially relevant in light of the reshoring trend, considering that this location choice strategy usually involves both a sale and an acquisition. Furthermore, the role of geographic distance has been neglected in all earlier research on the topic. Common motivations for reshoring strategies include concerns over supply chain disruptions – fueled by COVID-19 trade restrictions -, sustainability requirements, rising wages in offshore locations, product quality, and several more (Barbieri et al., 2018, 2020; Zhai et al., 2016). Larger geographic distances are anticipated to fuel many of these concerns, as institutional distances grow accordingly, transport costs will increase, and cultural differences grow further apart. Therefore, this research will zoom in on the role of geographic distance as a driver of both divestment and investment, thereby contributing to a better understanding of the reshoring trend.

Whereas some of the concerns mentioned above could be considered risks that can be managed by a firm, there are also numerous country-level risk factors exogenous to the firm that are unhedgeable. Therefore, whenever an investment location is deemed risky, managers often opt to avoid it, rather than to manage the risk. This, however, does not necessarily imply that the occurrence of country-specific risks, after having undertaken FDI in the concerned location, automatically leads to foreign divestment. Given the uncertainty over the symmetry between the drivers of investment and divestment, and considering how little we know about reshoring, it is deemed highly relevant that this paper will empirically investigate the effects of country risks on foreign divestments.

Therefore, this paper aims to answer the following research questions:

What factors contribute to the divestment of an MNE's foreign subsidiaries? And how do these differ from the drivers of foreign investment?

In doing so, this paper contributes to a better understanding of reshoring strategies, that are becoming increasingly popular amongst large corporations. In addition, it will allow for a better understanding of a potential asymmetry between the effects of certain risks on investment and divestment decisions. This contribution is considered pivotal to the academic field as conclusive empirical results on the topic of foreign divestments are lacking.

In addition to its academic contribution, this topic is also deemed of socioeconomic relevance as it allows for understanding what companies and industries are expected to reshore. Consequently, this makes it easier to estimate the effects these strategies will have on labor market dynamics in the home country. More than 200,000 jobs are expected to be created in the relatively near future in the US for example, following reshoring activity by MNEs (Kessler, 2021). This activity was also heavily incentivized in the US by subsidy programs initiated by former president Trump, promising the working class their offshored jobs back. It is however highly questionable whether these jobs, when reshored, will require similar skill intensities as before they were offshored. Due to technological advancements, such as automation in manufacturing, reshored jobs are anticipated to be more skill-demanding. Considering current skilled labor shortages in developed countries, reshoring by large MNEs could only worsen labor market conditions (European Labour Authority., 2021; Wrede, 2023). In addition, as mentioned above, concerns over geopolitical fragmentation are growing due to an increasing amount of influential MNEs friendshoring. A better understanding of the driving factors behind the trends of reshoring/friendshoring will create more clarity on whether these concerns are substantiated. In other words, it will tell us if the time of ever-intensifying globalization is indeed past us and whether we can expect more proximate localization efforts in the near future.

This paper aims to answer the research question using subsidiary-level investment and divestment data, aggregated at the level of the multinational and target country. Data from more than 2,000,000 subsidiaries was aggregated at the level of roughly 7,400 global ultimate owners and their respective investment destinations. With the data spanning over the past eleven years, the sample is expected to adequately represent the reshoring trend that has intensified over recent years. Implementing various appropriate methodologies, whilst controlling for different unobserved characteristics with different sets of dynamic fixed effects, this research offers a comprehensive set of results on the matter.

This study presents strong evidence that higher exposure to natural hazards in the host country has a positive effect on the probability that the MNE will undertake foreign divestment. This effect holds across multiple, not all, models. No prior research has focused on the role of natural hazards in foreign divestment decisions. The results do, however, not confirm the hypothesized negative effect of political stability on divestment, as both positive and negative coefficients were estimated. Berry (2013) also expected to find a negative relation between political stability and divestment, but eventually found compelling evidence for a positive relation, without being able to theoretically explain the finding. Nguyen et al. (2022) researched the effects of economic and political friction on divestment. They did not find any conclusive results regarding the role of political stability but did find an initial negative relation between economic friction and divestment. This result is similar to the results presented by this research and Berry (2013). In addition to the findings on country risks, the results of this paper also showcase that more prior experience by the MNE in the host country lowers divestment probability. Finally, regarding the moderating role of geographic distance, we find early evidence that the negative effect of political stability is perceived greater at larger distances from the home country.

The following sections will elaborately discuss recent trends in FDI and common theories that explain foreign investment. From there on, building on literature in the field of risk management, the literature review narrows down to the risk factors impacting foreign divestments. To test the hypotheses that follow from the literature review, the compiled data set will be elaborated after which the methodology and results will follow.

2 Theoretical Framework & Hypothesis Development

2.1 Theory and Trends of FDI

Before reviewing the literature on the relationship between country-specific risks and FD, it is important to elaborate on theories and trends of FDI in recent years. Recognizing motivations for investing abroad will contribute to understanding the drivers of FD. With factors responsible for attracting FDI not necessarily driving FD, one should be careful with assuming that FD is the exact reverse process of FDI. Numerous theories are important to consider in light of both FDI and FD.

The resource-based and knowledge-based view of the firm theories explain firms creating sustainable competitive advantages vis-à-vis their competitors, by gaining access to new valuable resources, such as natural minerals, human capital, and technologies. Combining newly acquired (tacit) resources with existing superior knowledge, that allowed for international expansion in the first place, has mostly strengthened MNEs' assets over the past decades. Such strategic advantages are also known as ownership advantages in Dunning's OLI paradigm (Dunning, 2009; Lockett et al., 2009; Rilla & Squicciarini, 2011). With the relative value of previously attractive resources diminishing, i.e. labor, the resource-seeking motive for FDI partially explains why MNEs are keen on moving away from formerly popular investment destinations (Huang et al., 2021).

Transaction cost theory plays a pivotal role in analyzing internationalization and internalization strategies. The more significant role foreign operations play in a firm's value chain, the more valuable it will become to integrate those foreign operations into the company's ownership structure, rather than executing relatively insecure market transactions. Various types of transactional market failures might occur, such as a lack of property right protection, potentially disrupting the feasibility of foreign operations. The high costs of reshoring are justified when overcoming these uncertainties. Simultaneously, integrating foreign operations also implies large adjustment costs, with settling into a new business - and institutional environment also draining resources. Therefore, transaction cost theory is a dominant theory in explaining internationalization strategies, capturing both the integration efficiencies and integration costs of internalizing foreign operations through wholly owned subsidiaries or international joint ventures (Arte & Larimo, 2019; Dunning & Lundan, 2008; Ellram et al., 2008; Pore, 2018). Additionally, it helps in understanding the benefits of reshoring strategies, as MNEs overcome the growing uncertainties of doing business abroad.

The aforementioned integration costs that are affiliated with discovering new institutional environments, when undertaking FDI, are perhaps better explained by the institution-based view of business strategy. Institutions are the so-called 'rules of the

game' that MNEs have to play by when operating abroad. These rules vary significantly per country and culture, as they range from regulatory to normative and cognitive rules. Regulatory institutional structures include, amongst others, the protection of property rights and the credibility of law, with cognitive and normative rules, such as cultural codes of conduct, also forming serious threats to efficient international integration of business. Institutional quality is of vital importance to economic growth and therefore to attracting businesses. Only when the benefits of innovations and resource exploration can be appropriated sufficiently by the MNE, investing abroad is a feasible strategy. To what degree MNEs are capable of maximizing the appropriation of these benefits, largely depends on the quality of the regulatory environment they operate in (Aleksynska & Havrylchyk, 2013; Pan et al., 2014). Despite abundant research on the importance of sound property right protection and other quality institutions in investment decisions, the importance of these factors in divestment choices is unknown.

Generally, internationalization strategies of MNEs stem from growth considerations, seeking strategic assets, new markets, and efficiency gains. Examples of assets that spark FDI interest for MNEs are localized tacit knowledge, natural resources, and wage differentials (Dunning & Lundan, 2008; Rugman & Verbeke, 2004). Over the last decades, the search by MNEs for suppliers of such strategic assets has become much cheaper and more efficient, thanks to the exponential growth in (digital) communication and transport infrastructures. This has led to a growing economic interdependence between nations (Bernard et al., 2019). Due to the low transaction costs of facilitating efficient buyer-supplier linkages, MNEs have been disintegrating their supply chains for a long time. Consequently, every input is produced by a specialized supplier, pushing down the marginal costs of MNEs (Grossman & Helpman, 2004). Whilst this has driven down costs significantly over the last decades, operational risks have increased significantly. Continuously balancing the savings and risks of doing business abroad is key to formulating a resilient, valuable supply chain. However, COVID-19 has exposed significant imbalances between cost savings and risk exposure in the supply chains of many MNEs.

Figure 1 shows that global FDI flows have been growing at a rapid pace over the previous decades, with economic crises excepted. Especially developing and emerging economies, such as China, have been able to attract large shares of these investments. An important factor contributing to this has been the large wage differentials, as mentioned earlier. This resulted in MNEs offshoring labor-intensive work from developed economies towards developing economies, thereby benefiting from lower wages and reducing cost prices. The relative wages of skilled workers vis-à-vis 'unskilled' workers in developed economies surged, with the demand for low-skilled labor dropping in developed economies (Figure 2). On the contrary, China has long been regarded as one of the most attractive investment destinations, especially because of its "seemingly unlimited supply of unskilled labor" (Huang et al., 2021), the country's strong economic growth is starting to trouble MNEs with cost prices increasing (Figure 3).

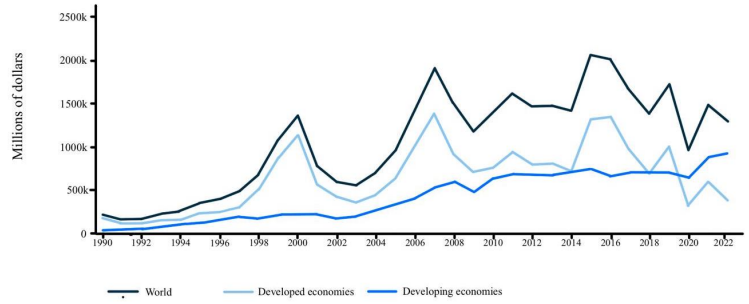

Figure 1: FDI Inflows (UNCTAD, 2022)

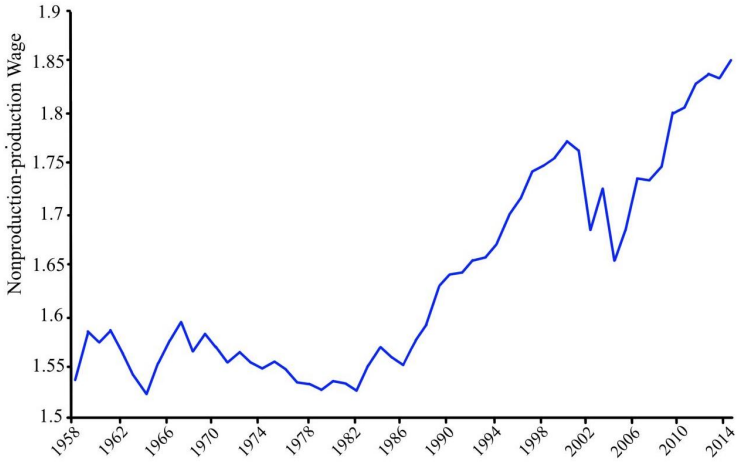

Figure 2: The relative wage of non-production workers vis-à-vis production workers in U.S. manufacturing (Feenstra, 2017)

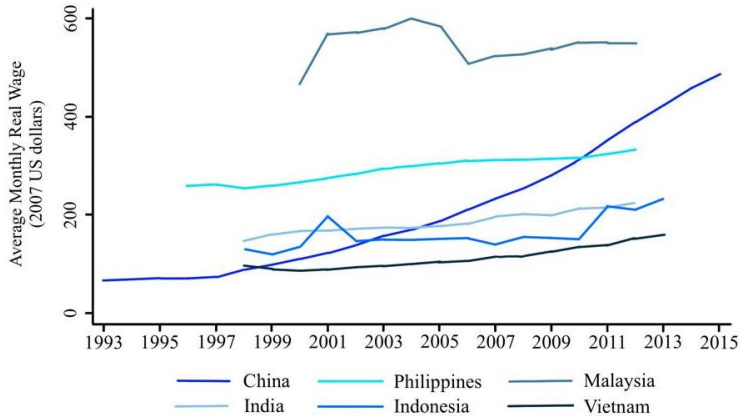

Figure 3: Comparison of manufacturing labor costs between several Asian production powerhouses (Huang et al., 2021)

Whilst this trend does not favor the feasibility of investing in distant, emerging economies, Lorentz et al. (2012) argue that international diversification of a company's supply chain ensures the management of risk exposure to economic risks. At the same time, it could be argued that such logistical complexities create friction and enlarge the supply chain's exposure to external shocks (Hesse & Rodrigue, 2004). When COVID-19 became a global pandemic in early 2020, the internationally fragmented supply chains of many MNEs were heavily disrupted, slowing down production significantly. MNEs were unable to quickly transform their operations due to previously made acquisitions or contracts purely focused on efficiencies and growth. With the fragility of geographically dispersed supply chains exposed, Barbieri et al. (2020) think supply chain managers cannot avoid risk-related practices when rethinking their production processes. Figure 4 shows early signs that managers are indeed rethinking their supply chains, with the US attracting an increasing number of investments, whilst China's popularity is in decline. Despite this observation, no prior literature has attempted to pinpoint, in a quantitative manner, the factors driving MNEs to revisit their location choice strategies.

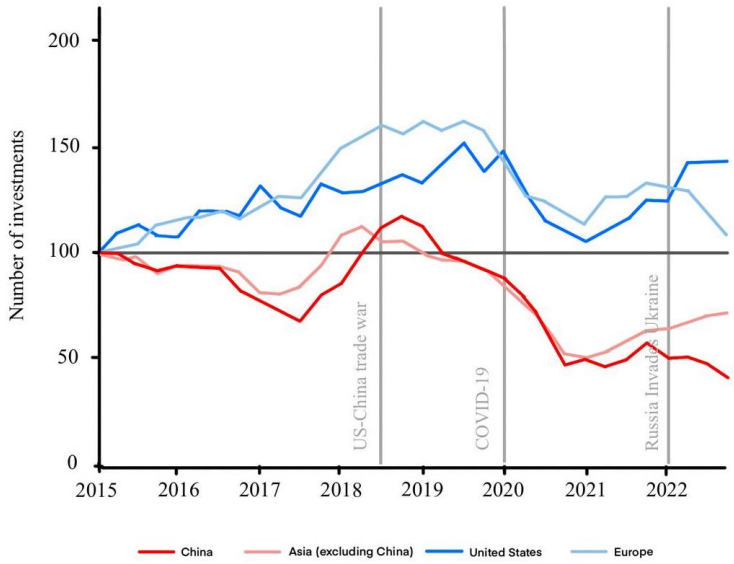

Figure 4: FDI fragmentation with flows in strategic sectors diverging across regions (IMF, 2023)

2.2 Country Risks and Foreign Divestment

That operating globally dispersed supply chains brings risks, is nothing new, not to managers and to researchers. Christopher et al. (2011) identify several types of supply chain risks that MNEs are dealing with, concerning supply, demand, control, process, and environmental issues. Whereas the first four types of risk either relate internally to a firm or its supply chain, environmental risk is external to the firm and difficult to manage. However, especially in such highly turbulent and complex business models, success depends strongly on a favorable relation between the firm and its environment. It is therefore key to understand how a firm's external environment can become a risk factor to a multinational's operations. Risks of natural and (geo)political nature, sometimes labeled operational risks, are among the most harmful, and disruptive risks for MNEs. Especially for MNEs with highly fragmented and specialized supply chains, these types of risk have the potential to be detrimental. These types of risks cannot only disrupt flows of materials, but they can bring entire supply chains to a halt and alter the future economic prospects of businesses (Kleindorfer & Saad, 2005; Tang & Nurmaya Musa, 2011).

Giambona et al. (2018) elaborate on the management of different types of corporate risk, amongst which is also geopolitical risk. In contrast to interest rate, foreign exchange, commodity, and energy risks, geopolitical risk cannot be hedged using financial derivatives. Both Buckley et al. (2020) and Giambona et al. (2018) point out that avoiding an investment location is a common form of operational hedging against geopolitical

risk. However, this does not necessarily imply that companies start relocating their business activities when country risks arise after settlement. Another type of country-specific risk that cannot be hedged, is that of natural nature. The discontinuous nature of this risk type makes it hard to predict and therefore hard to avoid. This raises the question of how an MNE manages the aftermath of, for instance, a hurricane disrupting its supply chain.

Whilst it is known that MNEs tend to avoid investment destinations that are prone to geopolitical and other unhedgeable country risks, not much is known about the risk management of political and natural risks. Prior literature has failed to explore and establish how MNEs respond to such country-specific risks arising after settlement. Therefore, to hypothesize a potential effect of such country-specific risks on foreign divestment, a significant change in risk exposure for the MNE, after settlement, needs to be assumed. The little prior literature on this topic simply assumes this change in risk exposure to occur after settlement, without any supporting evidence. The case of chip manufacturer TSMC, however, clearly demonstrates that it is fair to assume that the risk exposure of established MNEs is subject to change long after settlement. TSMC experienced this shock in risk exposure whilst experiencing exponential growth. This has forced the tech giant to diversify its operations outside its domestic Taiwanese borders to the US, closer to its largest clients ("TSMC is making the best of a bad geopolitical situation", 2023). Whereas TSMC's strategy alterations are not an example of reshoring, it does clearly show how a multinational's enormously profitable strategy can suddenly become less economically viable due to rising political tensions, forcing the company to become more geographically resilient. In addition, Bussmann et al. (2006) point out that developing economies might experience a shock in risk exposure in the short run after opening up for FDI, with social, political, and economic dynamics getting shaken up. This will most certainly negatively affect the feasibility of doing business abroad, as explained by transaction cost theory earlier. In the next section, different country-specific risks and their relation to divestment probability will be elaborated on.

2.2.1 Political Stability

Prior literature on the relationship between political stability and foreign divestment is rather inconclusive. One stream of literature argues that country-specific threats could make foreign operations significantly less profitable, due to the subsequent economic uncertainty. On the other hand, governments are believed to implement FDI-receptive policies after particular political crises have been resolved (Arte & Larimo, 2019). It is questionable, however, how quickly politically unstable countries will be able to attract new FDIs, and whether MNE operations remain sufficiently profitable in the meantime to stay operative. Coudounaris et al. (2020) and W. Gu et al. (2018) confirm this suspicion, finding that higher political risk lowers the chance of subsidiary survival. A weak institutional environment is often inherent to the political instability that drives divest-

ments. The dependence of MNEs on developing and emerging economies has intensified significantly in recent years, as operating internationally has become increasingly accessible thanks to economic and political landscape shifts. Nevertheless, especially in such countries, institutional quality tends to not be as developed as in the US or Europe (Holweg et al., 2011; Johnson, 2001). With emerging economies receiving significant flows of FDI, and overall economic growth taking flight, such countries remain prone to political instability.

The distribution of resources received is pivotal to the political development of an emerging economy, potentially giving rise to revolt in the case of disproportionate appropriation (by i.e. some political elite). The latter would hinder the political and economic prospects of a country, challenging the short- and long-term added value to an MNE's supply chain of a subsidiary in that country (Forte et al., 2013). Nguyen et al. (2022) also touch upon the role of political instability, corruption in particular, in foreign divestments, emphasizing the agency costs subsidiaries face in such conditions. Government appropriation, lack of transparent business regulations, and opportune local collaborators are common results of political instability that render unprofitable prospects for subsidiaries. Despite not going into detail, Schmid and Morschett (2020) also underline how political risks, such as bureaucracy and risk of war, are likely to accelerate MNE subsidiary divestments. Given the lack of conclusive empirical results on this topic and the lack of solid assumptions in prior literature, but building on classical theories and recent literature, this paper hypothesizes that:

H1: Higher political stability has a positive effect on the probability of foreign divestment of MNE subsidiaries.

Recent findings by Buckley et al. (2020) prove that previous FDI experiences of MNEs, and in particular experiences with subsidiaries in institutionally distant countries, moderate the likelihood of FDI entry when risk is notable. The general understanding in the paper is that company experience in a certain country positively mitigates the negative effect an exposed risk is expected to have on firm entry in that country or culture. Reversing that reasoning, one might argue that an experienced company is less likely to divest its subsidiary in a politically unstable country, given that it might be capable of handling the situation in a financially feasible manner, in contrast to an inexperienced company. Given the findings on the moderating effect of experience on investment entry and the lack of research into the moderating role of experience in divestment probability, this paper hypothesizes that:

H2: MNEs with more international experience are less likely to undertake foreign divestment following political risk exposure, than MNEs with less international experience.

2.2.2 Natural Hazards

Another type of country- or region-specific risk that is often cited as a major source of disruption risk to global supply chains, is that of natural nature. With the climate changing at a rapid pace, various regions across the world are exposed to more extreme weather events. Consequently, supply chains are increasingly prone to operational disruptions caused by weather events such as severe drought, hurricanes, wildfires, and floodings (Kleindorfer & Saad, 2005; Tang & Nurmaya Musa, 2011). Gu and Hale (2023) recently discovered a novel pattern of MNEs lowering their FDI flows to a country that is increasingly exposed to climate-related risks. Despite the increasing academic interest in climate change and reshoring, no prior research has focused on the role of climate risk exposure in foreign divestment decision-making. The exogenous nature of climate-related shocks makes it harder for MNEs to estimate the risk. However, given that extreme weather events are occurring more frequently due to global warming, the cost savings of a geographically dispersed supply chain might not outweigh the risks associated with it for much longer (Slepniov et al., 2013). Considering the structurally deteriorating climate and similar findings with regard to the effect of climate risk on foreign entry, this paper hypothesizes that:

H3: Higher exposure to climate-related risks in a country increases the probability of foreign divestment in that country by an MNE.

2.2.3 Geographical Distance

Despite the fact that geographical distance has become significantly less relevant to investment decisions over the last decades due to technological advancements, contemporary literature argues it still plays an important role. Slepniov et al. (2013) indicate that the degree to which an MNE's supply chain is exposed to operational disruptions following the occurrence of extreme weather events is also dependent on the geographical distance between the two countries. In addition, the paper claims that an increase in perceived or institutional distance is inherent to a larger geographical distance. A larger perceived distance implies larger cultural separation, troubling the parent company in navigating a foreign country's cultural and administrative environment. Understanding local market dynamics, maintaining linkages with local suppliers, managing a local workforce, and trusting the reliability of local politics becomes increasingly difficult as geographic and perceived cultural distance increase. With cultural distance growing with geographic distance, certain components of perceived institutional instability might be correlated with an increase in geographic distance.

This is in line with findings by Ragozzino (2009), who finds that larger physical distances between the home business and foreign operations give rise to information asymmetries, with local business owners being better informed regarding host country regulations, social dynamics, and market conditions. The paper also zooms in on how

distance moderates the effect of political risk on foreign investments, and the type of ownership in particular. It concludes that the need for full ownership over foreign operations increases with distance, for a certain level of political stability. Relating these findings to the hypothesized effect of political stability on foreign divestment, one might expect physical distance to also moderate this relationship.

Another channel through which geographic distance is expected to play a role in divestment choices is that of transport costs. According to the commonly cited iceberg transport cost model, transport costs increase with geographic distance (McCann, 2005). Not only do the fuel, labor, and maintenance costs of vessels and aircrafts increase with distance, but also the (indirect) loss of products, and the number of hindering trade policies that increase with distance make moving production processes closer to home attractive. In addition, the speed with which the parent company can assist its foreign subsidiary by i.e. deploying resources, decreases with distance, hurting the competitiveness of the subsidiary. Therefore, as asymmetries, costs, and uncertainties grow with physical distance between the GUO and the subsidiary, this paper hypothesizes that:

H4: For a given level of political risk, a larger geographical distance between the MNE's home country and a subsidiary increases the probability of foreign divestment of that foreign subsidiary.

H5: For a given level of exposure to natural risks, a larger geographical distance between the MNE's home country and a subsidiary increases the probability of foreign divestment of that foreign subsidiary.

3 Data

3.1 Sample Description

To better understand the motivation for utilizing certain variables and their operationalizations, it is important to first clarify the structure of the data set. By collecting data from both Bureau van Dijk's Orbis and Orbis M&A databases an initial data set was constructed, containing data from a wide range of global ultimate owners (GUOs). A GUO is the highest-level entity of a MNE, that usually owns and controls all foreign subsidiaries of the corporation. In this data set, standard financial performance and size data of GUOs in all different sorts of manufacturing industries was compiled, alongside a list of all subsidiaries these GUOs own across the globe. The scope of the data is limited to GUOs operating in manufacturing industries, assuming that supply chains are more complex in these industries vis-à-vis for instance service-supplying industries, making supply chain disruptions more likely. This is expected to boost the observability of the hypothesized effect. In addition, by limiting the origins of the GUO to North

America and Europe, the reshoring trend is expected to be more visible in the data.

Onto this data set of these GUOs and their subsidiaries, data on the assets, number of employees and host country of all individual foreign subsidiaries was merged. In addition, data on investments and more importantly divestments by GUOs in these subsidiaries was also merged onto this data set. Consequently, all subsidiary-level data was aggregated on a country level, per year. Finally, country-specific data on political stability, distances, natural hazard exposure etc. was added. This creates final observations consisting of a GUO, data on the entire corporation, aggregated data on all the GUO's subsidiaries per country-year combination, and country-specific data for both the GUO's home country and the host countries of the GUO's different foreign operations.

For country data on historical natural disasters, data was extracted from the EM-DAT database. This database is often used in prior research on natural hazards and FDI (Gu & Hale, 2023; Nohrstedt et al., 2021). For future research into this topic, it would be feasible to utilize data from the IREUS world risk index, as this data also incorporates risk exposure based on vulnerability and coping capacity, in addition to historical disaster data. This data was, however, unfortunately, not freely available.

For country data on political stability, and general development of the home and host countries, data was collected from the Index of Economic Freedom and the World Governance and World Development databases from the World Bank. All data regarding the feasibility of the business environment, such as economic freedom and property right protection was extracted from the 2023 Index of Economic Freedom by the Heritage Foundation. The International Country Risk Guide data also contains valuable political risk data, according to prior literature, but was also unfortunately not freely available.

For all firm-destination combinations that only appeared one or a few times in the initial sample with reported divestments or assets, we assumed the subsidiary existed in all prior periods already as well. Subsidiaries that never reported any divestment, investment, assets, or employees are not included in the sample. Although you could argue that these are also valid observations of companies that don't undertake divestment, these observations would be excluded from the sample with our fixed effects strategy. Including prior years is vital to the results of this research as it allows for a change in i.e. assets in the host country, to be observed when it is the MNE's first investment in the country. By including the prior years without any presence, the change in conditions becomes observable.

3.1.1 Descriptive Statistics

Table 1 shows the summary statistics of the key variables in this research. In addition, 7,397 different GUOs are present, holding subsidiaries in all 195 countries worldwide. The observations span from 2010 to 2022. As can be deducted from Table 1, there are 1481 GUO - host country combinations in which there has been at least one divestment reported.

Table 1: Summary Statistics

	Mean	SD	Min	Max	N
MNE Divestments in host country (in 100 million USD)	12374.75	772890.03	0	172483808	453687
Log Country Divestments	23.37	10.82	2	37	1481
Number of divestments including 50% reductions in assets/workforce	1.00	0.00	1	1	56993
MNE Investments in host country (in 100 million USD)	46777.88	1550059.01	0	104545784	453687
Log Country Investments	21.49	11.01	1	37	5719
Number of investments including 50% increase in assets/workforce	1.00	0.00	1	1	65917
Number of years since incorporation of first host-country subsidiary	29.90	30.20	0	700	242587
Log MNE Experience	3.14	0.86	1	7	242587
Years between incorporation and investment	-4.49	2.80	-12	-1	26605
Economic Freedom	70.02	9.43	1	90	442255
Degree of Property Right Protection in host country	72.41	20.92	0	100	442464
Political Stability Host	0.40	0.73	-3	2	415043
Profit Margin GUO	6.13	16.35	-100	100	345106
Log Assets GUO	14.06	2.83	-5	20	366142
Log GDP per Capita	10.16	1.05	5	12	446154
Log GDP	27.46	1.85	17	31	446154
Log Unemployment	1.96	0.46	0	4	440727
Net FDI inflow	7.28	54.79	-1303	1710	445718
# Deaths Caused by Natural Disasters	441.99	2339.74	0	229566	453687
Log People dead by natural disaster	4.00	2.33	0	12	359959
Geographic Distance	5.00	4.62	0	20	444696

3.2 Dependent Variable

The main dependent variable of interest in this research is the foreign divestment of a foreign subsidiary by its global ultimate owner (GUO). This foreign divestment is operationalized in two different ways in this research. Firstly, foreign divestment is operationalized as a dichotomous variable, taking value (1) if there was a reported divestment in the form of money or if the number of assets or employees of the GUO in a specific target country decreased with 50% or more, and taking value 0 when there was no monetary divestment reported and the changes in assets and employees for subsidiaries is not deemed significant. As a robustness check, another dummy variable was computed that only takes value (1) when there was a reported divestment. Jiménez et al. (2011) also use a dichotomous variable to indicate the presence of a foreign subsidiary in their research on investment location choice. To compare the drivers of divestments with the drivers of investments, a similar dichotomous variable is computed for investments, taking value (1) when there was a reported investment or when the number of assets or employees doubled compared to the previous year in that specific GUO-destination combination.

Secondly, this research analyses the effects of different country risks on the nominal amount of money divested by a GUO in (or from) a certain country in a specific year. Despite the lack of prior empirical literature on divestments, a similar approach with monetary variables is often used in trade models and investment decision models (Hogetoorn & Gerritse, 2021; Shepherd, 2013; Yotov et al., 2016). As the nominal amounts will be automatically log-transformed when using the Poisson model, there is no need to adjust the magnitude of the divestment and investment values downwards.

3.3 Independent Variables

3.3.1 Political Stability

Political stability is among the main country-level risk factors that are believed to impact divestment decisions. It is central to the analysis of divestment decisions by MNEs as political instability is believed to alter future economic prospects and therefore the feasibility of doing business altogether (Forte et al., 2013). The main variable to proxy this risk factor is the economic freedom indicator. Although this variable does not measure political stability directly, it does capture the more general feasibility of the institutional business environment. This includes legal and regulatory dimensions that are strongly correlated to political stability. Jiménez et al. (2011) also advocate for using this proxy for political stability in the context of location choice analysis, as it captures more dimensions of the complex phenomenon of political instability. As a robustness check, the property right protection dimension of the wider economic freedom index variable was used, as this is believed to be an important channel through which political stability can foster foreign divestment.

3.3.2 Natural Hazards

The second country (or rather region) specific risk factor that is believed to play a pivotal role in both investment and divestment decisions of MNEs, is that of natural hazards. With natural hazards having the potential to disrupt global supply chains, it has received attention in prior literature regarding its relation to investment decisions. In climate-related studies, it is common to utilize the EM-DAT database, containing information about the number of different types of natural and infrastructural disasters and the number of people affected by these disasters (Gu & Hale, 2023; Nohrstedt et al., 2021). The variables indicating the number of people affected and the number of deaths caused by natural hazards contain the most variation and are therefore deemed most valuable.

3.3.3 Multinational Experience

Buckley et al. (2020) recognized the importance of an MNE's earlier experiences abroad, enabling the firm to better navigate foreign regulatory environments. However, prior

literature has failed to explore the potential role of MNE experience in divestment decisions. Whereas Buckley et al. (2020) utilize an MNE's aggregate international experience to serve as a proxy for MNE experience, research by Delios and Henisz (2003) showcases the importance of more specific proxies. Inspired by their research, this paper will proxy MNE experience by the number of years since the incorporation year of the MNE's first subsidiary in that specific target country. In doing so, the proxy captures the specific experience of an MNE in navigating the regulatory environment of the target country.

3.3.4 Distance

To research the moderating role of geographic distances on the relation between country-level risk factors and divestment decisions, data on bilateral distances was included from CEPII (Mayer & Zignago, 2011). Slepniov et al. (2013) emphasize the relevance of geographic and the inherent perceived distance in the forming of nearshoring strategies. Distance between the headquarters and a regional subsidiary has major implications for the organizational structure, which plays a pivotal role in managing risk exposure (Ragozzino, 2009).

3.4 Control Variables

In this section, the chosen control variables in the regressions are justified. Controlling for certain confounding variables allows for a more precise and effective estimation of the intended causal relation, thereby reducing omitted variable bias. Two types of control variables will be utilized to establish such a valid and accurate relationship between the variables of interest. On the one hand, MNE-specific variables are introduced to the model to control for firm-specific advantages and traits, similar to (Coudounaris et al., 2020; Jiménez et al., 2011). These variables include size (proxied by total assets) and profitability. On the other hand, a selection of variables is added to control for both the economic and institutional development of the host country, as usual in investment decision literature (Buckley et al., 2020; Gu & Hale, 2023; Hogetoorn & Gerritse, 2021; Jiménez et al., 2011). Both GDP and GDP per capita are included to control for the state of economic development. To control for the country's receptiveness towards FDI, FDI inflows as a percentage of GDP is added to the model. Furthermore, to account for labor market dynamics potentially influencing divestment decisions, the unemployment rate is controlled for. The aforementioned Index of Economic Freedom and the other institutional quality indicators provided by the World Bank are not included as controls as they are found to correlate too strongly with other variables of interest, such as political stability and GDP per capita. Of some variables that do not follow a normal distribution, the log form will be included in the various models.

4 Methodology

4.1 Model Choices

Due to the nature of the data set, with many observations taking value zero for divestments, two methodological approaches are adequate to incorporate the value of these zeros into the regression. Firstly, using the dichotomous variable that indicates divestment (1) or no divestment (0), the hypotheses are tested using a linear probability model (LPM), estimating the following equations:

$$DivestmentChoice = \beta_0 + \beta_1 \cdot \text{Country Risk}_{gct} + \gamma \cdot \text{X}_{gct} + u_{gct} \quad (1, 3)$$

$$DivestmentChoice = \beta_0 + \beta_1 \cdot \text{Country Risk}_{gct} + \beta_2 \cdot \text{Log MNE Experience}_{gct} + \beta_3 \cdot \text{Country Risk x Log MNE Experience}_{gct} + \gamma \cdot \text{X}_{gct} + u_{gct} \quad (2)$$

$$DivestmentChoice = \beta_0 + \beta_1 \cdot \text{Country Risk}_{gct} + \beta_2 \cdot \text{Distance}_{gct} + \beta_3 \cdot \text{Country Risk x Distance}_{gct} + \gamma \cdot \text{X}_{gct} + u_{gct} \quad (4, 5)$$

Secondly, using the number of dollars divested, a Poisson Pseudo Maximum Likelihood estimator is utilized, effectively estimating the following equations:

$$Divestments = e^{\beta_0} + e^{\beta_1 \cdot \text{Country Risk}_{gct}} + e^{\gamma \cdot \text{X}_{gct}} + u_{gct} \quad (1, 3)$$

$$Divestments = e^{\beta_0} + e^{\beta_1 \cdot \text{Country Risk}_{gct}} + e^{\beta_2 \cdot \text{Log MNE Experience}_{gct}} + e^{\beta_3 \cdot \text{Country Risk x Log MNE Experience}_{gct}} + e^{\gamma \cdot \text{X}_{gct}} + u_{gct} \quad (2)$$

$$DivestmentChoice = e^{\beta_0} + e^{\beta_1 \cdot \text{Country Risk}_{gct}} + e^{\beta_2 \cdot \text{Distance}_{gct}} + e^{\beta_3 \cdot \text{Country Risk x Distance}_{gct}} + e^{\gamma \cdot \text{X}_{gct}} + u_{gct} \quad (4, 5)$$

G indicates the GUO, C indicates the host-country of the subsidiary and T indicates the year. X represents a set of control variables and U represents the error term. The model numbers correspond to the models in the results tables. Models 1, 3, 4, and 5 include GUO-Host country and year-fixed effects, thereby controlling for year-specific events and MNE strategies specific to the investment destination, both potentially biasing the results. Model 2 only includes firm and year-fixed effects, as firm-destination fixed effects would take away a lot of variation in the MNE experience variable. By not including firm-destination fixed effects, MNE strategies specific to a certain destination might bias the effect of political stability on divestment strategies.

In this research, despite the caveats of the model, the LPM is regarded of greater value due to the amount of remaining observations. In the sample, there are many singleton groups - firm-destination combinations with only 1 value for divestment. Stata automatically drops these groups, as incorporating them in the regression would "overstate the statistical significance of the regression coefficients" (Correia, 2015). Given the low number of reported divestment amounts, as indicated in **??**, it makes sense that many firm-destination combinations only have 1 divestment reported in the past 11 years. Therefore, Poisson is less applicable to this sample, given the desired strict fixed-effects. This strictness of fixed effects is, however, possible with a linear probability model. A major caveat of the model is, however, that the predicted probabilities can take values outside the [0,1] range, potentially biasing certain predicted probabilities. Nevertheless, this model is preferred over a logit model, which does not allow for as strict, multi-dimensional fixed effects. Whereas LPM is an ordinary least squares model that demeans the data when fixed effects are added to a model, a logit model would create a dummy variable for every group that you want to control for. Any set of fixed effects that includes an interaction with the GUO or the destination is therefore computationally too intensive, given that there are 196 countries and over 7,000 unique GUOs present in the sample. Utilizing a logit model would, therefore, not generate reliable enough results that can be explained by an array of other unobserved factors. To account for the caveat of LPM, a distribution of the estimated probabilities will be provided to analyze the adequacy of the estimations.

4.2 Clustered Standard Errors

Furthermore, across all models the standard errors are clustered at the destination-year level, to tackle any potential heteroskedasticity. As this research is mostly concerned with explaining the effect of host-country characteristics on divestment choices, it is important to account for any potential correlation between observations in that cluster. With many of the country characteristics of interest varying over time, the clusters are at the destination-year level.

4.3 Endogeneity

Regarding endogeneity concerns, no reverse causality is anticipated with natural hazards and distance being purely exogenous, and political instability is a multifaceted problem that is not expected to be affected significantly by one company's decision to divest assets. Once many multinationals start divesting, it might have an effect on the long-term economic prospects of the country, but as the data shows, this is not the case. Analyzing the endogeneity of the control variables, this research concludes that the profitability and size of the GUO are not expected to cause problematic endogeneity, as one subsidiary divestment choice won't significantly impact these overarching measures. In addition, size and profitability prove to not cause multicollinearity problems (Table 8). Furthermore, GDP and GDP per capita also do not correlate strongly and

are also generally seen as factors exogenous to one company's investment choices. The openness of the economy, proxied by the stock of FDI as a percentage of GDP should not cause any endogeneity issues with the major determinants of FDI and GDP itself incorporated in the model. Unemployment could, however, introduce some bias as one could argue that a major multinational investing divesting from a country will impact unemployment. This effect is, nevertheless, expected to be marginal. Especially since all regressions include very strict levels of fixed effects at the variation levels of the control variables, it is unlikely that the error term will include driving factors of divestments that pose reverse causality issues.

In addition, no omitted variable bias is expected to pose any major endogeneity issues. To elaborate, there certainly are numerous factors that are not included in the models that might be related both to the dependent and the explanatory variable. Examples include some dimensions of the legal and regulatory setting that influence both the divestment probability and the degree of economic freedom. However, even if these factors were not accounted for by the destination fixed effects, these are factors that explain the overarching effect of the institutional setting which is still relevant to this research. Therefore, it is not regarded as harmful to the efficacy of the results if the economic freedom would be somewhat inflated due to these dimensions being excluded. On the contrary, the cultural distance between the home and host country is also not accounted for in the model, and might influence both the degree of economic freedom and divestment probability. Although the fixed effects are expected to account for this for the largest part, this could introduce some omitted variable bias to the model. Other factors, such as infrastructure-related disruptions, are not covered by the fixed effects as no host country-year fixed effects are added, but are assumed to be captured by geographic distance. Whereas such supply-chain-related factors are meant to be captured by geographic distance, other unobserved factors that might impact divestment choices and are possibly correlated with distance, could introduce bias to our model. Variables like costs of doing business abroad and the aforementioned cultural distance are anticipated to be correlated with distance, with costs often being lower further from home and cultural distance growing with geographic distance. Nevertheless, by including firm-destination fixed effects, a large part of that variation is expected to be absorbed.

5 Results

5.1 Main Regression Results

Table 2: Divestment Choice Linear Probability Regressions

	(1) Divestment Choice	(2) Divestment Choice	(3) Divestment Choice	(4) Divestment Choice	(5) Divestment Choice
Economic Freedom	0.00817***	-0.00133		0.00756**	
	(0.00248)	(0.00107)		(0.00308)	
Log MNE Experience		-0.02925*			
		(0.01606)			
Economic Freedom × Log MNE Experience		0.00030			
		(0.00024)			
Log People dead by natural disaster			0.00623**		0.00947***
			(0.00243)		(0.00288)
Geographic Distance				0.00000	0.00000
				(.)	(.)
Economic Freedom × Geographic Distance				0.00011	
				(0.00040)	
Log People dead by natural disaster × Geographic Distance					-0.00074**
					(0.00035)
Profit Margin GUO	0.00000	0.00008	0.00001	0.00001	0.00001
	(0.00005)	(0.00009)	(0.00006)	(0.00005)	(0.00006)
Log Assets GUO	0.01151***	0.01361***	0.01009***	0.01143***	0.01011***
	(0.00214)	(0.00319)	(0.00254)	(0.00208)	(0.00256)
Log GDP	-0.53228***	0.00802**	-0.63141***	-0.54201***	-0.64511***
	(0.11379)	(0.00346)	(0.14049)	(0.11137)	(0.14396)
Log GDP per Capita	0.47641***	0.00401	0.61449***	0.48449***	0.62783***
	(0.13476)	(0.00529)	(0.16466)	(0.13265)	(0.16816)
Log Unemployment	-0.03093	-0.00505	-0.03237	-0.03241	-0.03339
	(0.02060)	(0.00764)	(0.02533)	(0.02205)	(0.02542)
Net FDI inflow	-0.00009	-0.00003	-0.00022**	-0.00009	-0.00022**
	(0.00009)	(0.00010)	(0.00011)	(0.00009)	(0.00011)
Constant	9.24131***	-0.13820	11.39216***	9.43486***	11.65122***
	(1.90142)	(0.11581)	(2.32661)	(1.86128)	(2.38787)
Observations	329656	199130	267049	327784	265510
Fixed Effects	GUO x Host + Year	GUO + Year	GUO x Host + Year	GUO x Host + Year	GUO x Host + Year

Linear probability model (OLS). Standard errors in parentheses, clustered at the host country-year level.
* $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

Table 2 presents the results of the most comprehensive set of regressions that can be run given the data set created. The set of formulated hypotheses is tested using an LPM, which allows for very strict fixed effects and standard error clustering at the desired level, whilst maintaining a large amount of observations. All models include firm-destination and year-fixed effects, except for model 2 where firm-destination fixed effects would take away the variation in MNE experience in the host country. The dependent variable is the aforementioned dichotomous variable indicating divestment (1) or no divestment (0).

Surprisingly, models 1 and 4 estimate a positive effect of economic freedom on divestment probability. More specifically, 1 standard deviation in economic freedom is related to respective increases in the divestment probability of 7.7 and 7.1 percentage points. Both estimated effects are statistically significant, contradicting hypothesis 1 which reads that lower stability is expected to boost divestment probability. Moreover, model 4 presents the estimated coefficient for the interaction term between economic freedom and geographic distance between the GUO and the subsidiary. Despite a lack of statistical significance, its positive sign does indicate that the positive effect of economic freedom on divestment probability increases with distance. This is in line with the hypothesis that a firm's location decision is more prone to institutional changes at

a greater geographic distance from the GUO. Model 2, in contrast to models 1 and 4, presents a statistically insignificant negative coefficient for economic freedom. Although the sign is in line with the hypothesis, no conclusion can be drawn from this considering the lack of statistical significance. It would, however, entail that a one standard deviation decrease in economic freedom boosts divestment probability by 1.25 percentage points.

Furthermore, model 2 estimates a weakly statistically significant parameter for the relation between the MNE's experience in the host country and divestment. Despite the fact that no direct effect was hypothesized, this effect could be explained by the sunk cost fallacy. The more an MNE has invested, either time or money, in a certain asset (subsidiary), the less likely the company becomes to divest (Guenzel, 2020). The interaction effect between economic freedom and MNE experience turns out to be not statistically significant. The estimated coefficient implies that the negative effect of economic freedom on divestment probability in this model increases with the MNE's prior experience in the host country. On the contrary, it was hypothesized that the negative effect of economic freedom would be moderated by more experienced, having more expertise to navigate troubled institutional environments. Considering the lack of statistical significance, no conclusion can be drawn from this estimated parameter.

Model 3 presents a statistically significant, at a 95% confidence interval, coefficient for the effect of natural hazards on divestment probability. The coefficient signifies that a 1% increase in the number of deaths caused by a natural disaster boosts divestment probability by 0.6 percentage points. Taking the extreme and infrequent nature of such disasters into account, the number of deaths caused by natural disasters often increases by multiple percentages at once. Model 5 presents extra evidence that exposure to natural hazards is likely to boost divestment probabilities. According to this model, a 1% increase in the number of deaths increases the probability of divestment by 0.95 percentage points, statistically significant at a 99% confidence interval. Interestingly, the interaction term between deaths caused by natural disasters and geographic distance is negative and statistically significant at a 95% confidence interval. This would imply that the positive effect of natural hazard exposure on divestment decreases with the distance between the GUO and the subsidiary. This could be explained by the idea that MNEs anticipate more disasters to happen further away from home and therefore do not react as directly as when something occurs close to its home operations.

5.1.1 Estimated Probability Distribution

Figure 7, Figure 8, and Figure 9 present the distribution of the estimated probabilities of models 1, 2, and 4. The aforementioned limitation of a LPM, that estimated probabilities can reach beyond the [0,1] range, becomes visible in Figure 7 and Figure 9. In these tables, the majority of the estimated probabilities fall outside the [0,1] range, strongly

limiting the reliability of the estimated coefficients in the corresponding models. Figure 8 on the contrary, shows how the vast majority of the predicted probabilities of divestment fall within the required. This makes the estimated coefficients in this model, amongst which the negative coefficient for economic freedom, more reliable.

Table 3: Divestment Choice Linear Probability Alternative Regressions

	(1) Divestment Choice	(2) Divestment Choice	(3) Divestment Choice	(4) Divestment Choice	(5) Divestment Choice
Economic Freedom	-0.00080	-0.00175*		-0.00257***	
	(0.00063)	(0.00105)		(0.00089)	
Log MNE Experience		-0.03422**			
		(0.01597)			
Economic Freedom × Log MNE Experience		0.00036			
		(0.00024)			
Log People dead by natural disaster			0.00614*		0.00903**
			(0.00315)		(0.00397)
Geographic Distance				-0.02554***	-0.00181
				(0.00532)	(0.00158)
Economic Freedom × Geographic Distance				0.00030***	
				(0.00007)	
Log People dead by natural disaster × Geographic Distance					-0.00054
					(0.00037)
Profit Margin GUO	0.00087	0.00000	0.00191	0.00089	0.00199
	(0.00184)	(.)	(0.00223)	(0.00184)	(0.00225)
Log Assets GUO	-0.02060	0.00000	-0.02930	-0.01798	-0.02577
	(0.04784)	(.)	(0.05281)	(0.04768)	(0.05292)
Log GDP	0.01202***	0.00791**	0.00784	0.01433***	0.00894*
	(0.00247)	(0.00348)	(0.00493)	(0.00251)	(0.00487)
Log GDP per Capita	0.01894***	0.00639	0.02040***	0.00914*	0.01413**
	(0.00434)	(0.00516)	(0.00672)	(0.00473)	(0.00623)
Log Unemployment	0.00089	-0.00704	-0.00155	-0.00962	-0.01004
	(0.00714)	(0.00784)	(0.00791)	(0.00741)	(0.00839)
Net FDI inflow	-0.00007	-0.00000	-0.00012	-0.00007	-0.00008
	(0.00012)	(0.00012)	(0.00014)	(0.00013)	(0.00014)
Constant	-0.03596	0.07791	0.11509	0.13268	0.12348
	(0.69607)	(0.09965)	(0.76792)	(0.69286)	(0.76835)
Observations	311224	178118	251118	309321	249582
Fixed Effects	GUO x Year	GUO x Year	GUO x Year	GUO x Year	GUO x Year

Linear probability model (OLS). Standard errors in parentheses, clustered at the host country-year level.
* $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

5.2 Regressions with Relaxed Fixed-Effects

Table 3 shows the results of similar regressions as above, but with relaxed fixed effects, not controlling for the unobserved host-country characteristics.

Models 1 and 2 present a statistically insignificant and weakly significant coefficient for economic freedom. The negative direction of the two coefficients is in line with the hypotheses though. Interestingly, just like in Table 2, model 2 shows a negative coefficient for MNE experience in the host country, statistically significant at a 95% confidence level. No direct effect of experience on divestment was hypothesized, and with host-country fixed effects not present in these models, this effect might well be explained by the behavior of some firms in some specific countries. However, considering the statistically significant coefficient for experience in the previous set of regression results, it may as well provide evidence in favor of the sunk cost fallacy. In a similar fashion to the previous set of results, the interaction term is not statistically significant

and in the opposite direction of what was hypothesized.

Models 3 and 5 present results that are in line with the hypothesis that increased exposure to natural hazards increases the likelihood of divestment. The result in model 3 implies that a 1% increase in the number of deaths caused by natural disasters increases the probability of divestment by 0.6 percentage points, statistically significant at a 90% confidence level, ceteris paribus. Model 5 implies that a 1% increase in the number of deaths increases the probability of divestment by 0.9 percentage points, statistically significant at a 95% confidence level, ceteris paribus. Model 5 does not provide support for the hypothesis that a greater distance between the GUO and the subsidiary amplifies the effect of natural disasters on divesting.

Model 4 does present strong evidence that greater geographic distance amplifies the effect of economic freedom on divestment, besides also providing evidence in support of a direct effect of economic freedom. First, the negative coefficient for Economic Freedom, proxying institutional quality, implies that a one standard deviation decrease in economic freedom increases the probability of divestment by 2.4 percentage points, statistically significant at a 99% confidence level, ceteris paribus. This effect has to be considered with some caution as the model does not control for unobserved firm-destination or destination characteristics. This means that the coefficient could be capturing other country-specific unobserved heterogeneity that has nothing to do with institutional quality, despite the control variables present.

Second, the model presents a positive moderating effect of geographic distance on the former relation, meaning that the positive effect of economic freedom on divestment increases with geographic distance. The distance coefficient itself is however moving in the opposite direction, with divestment probabilities decreasing with distance. The increased cultural distance that is inherent to a larger geographic distance, as explained in the literature review, might explain this effect. It could be that this increased distance in itself makes it harder to decide upon divestment, whilst the increased distance does expose the subsidiary more to the negative effects of less economic freedom. This could follow from the GUO having more trouble providing the subsidiary with resources in case of economic instability, the larger the distance is. This result is in line with the result from model 4 in Table 2, providing early evidence that geographic distance positively moderates the effect institutional quality has on divestment probability.

5.2.1 Estimated Probability Distribution

Figure 10, Figure 11, and Figure 12 present the distribution of the estimated probabilities of models 1, 2, and 4. In contrast to the previous set of divestment probability distributions, the majority of the estimated probabilities across all three models fall within the [0,1] range, adding credibility to the findings in these models.

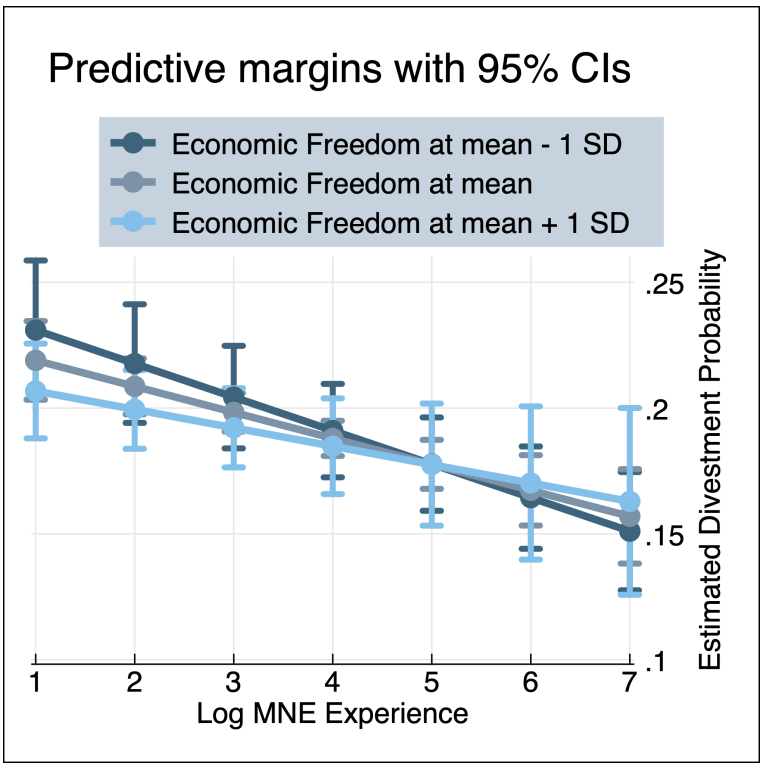

Figure 5: Plotted effects of coefficients of model 2 in Table 3

5.2.2 Interaction Terms Extension

Considering the aforementioned lack of reliable estimates and lack of statistical significance for the majority of the coefficients of interest in Table 2, we extend this research by computing two plots based on results in Table 3. Figure 5 presents the slope of the effect of MNE experience on divestment probability, and how this slope differs for different levels of economic freedom. As explained by the coefficients already, we observe that more prior experience in the host country reduces divestment probability. Also, we find that without any prior experience, the divestment probability is higher in host countries with low levels of economic freedom. The small difference in the slopes, however, indicates that there is no significant interaction effect between the institutional environment and the MNE's gained experience.

Figure 6 presents the slope of the effect of geographic distance on divestment, and how this slope differs across various levels of economic freedom. It shows that lower economic freedom is related to higher divestment probability at smaller distances between the GUO and the subsidiary. At greater geographic distances, however, lower economic freedom is associated with lower divestment probabilities. Judging by the significant differences in slopes, we observe that the interaction effect between the institutional environment and distance is significant. Divestment probabilities were hypothesized

to be greater at larger geographic distances, considering the increased costs and risks of disruption further from home. However, as shown by Figure 6, we find that larger distances decrease divestment probabilities, especially so at lower levels of economic freedom. This could be explained by the MNE struggling to orchestrate the divestment in a more troubling institutional environment, that is even harder to understand given the greater distance. Also, the MNE might have incurred more sunk costs to be able to operate in the troubled institutional environment or has specifically targeted the location for certain resources, creating a barrier to leave.

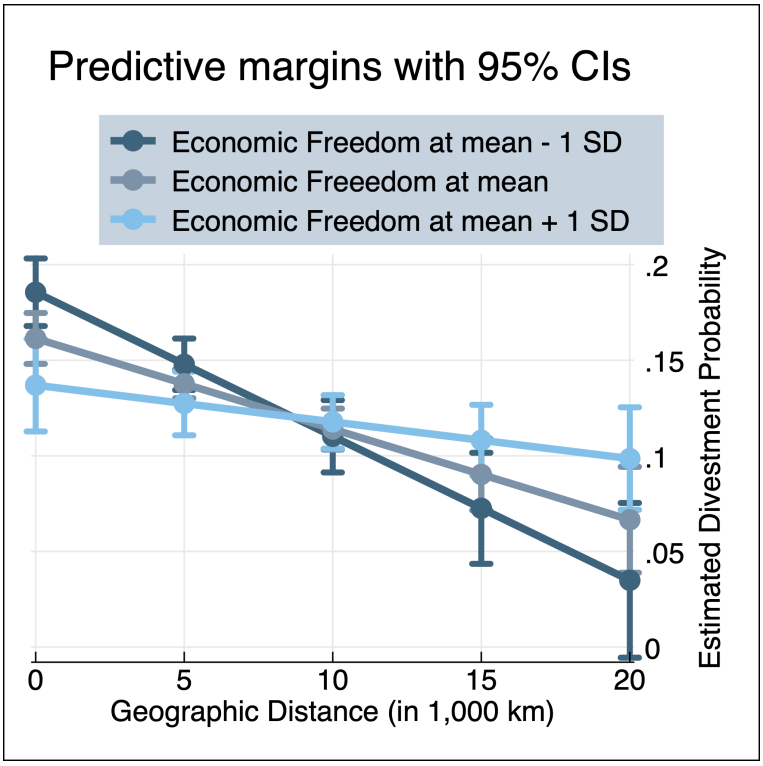

Figure 6: Plotted effects of coefficients of model 4 in Table 3

5.3 Robustness Checks

Table 5, Table 6, and Table 7 present the regression results of three additional robustness checks. The regressions in Table 5 are the Poisson Pseudo Maximum Likelihood models, where the nominal value of GUO-host country aggregated divestments is the dependent variable. The amounts of divested assets in different subsidiaries by MNEs are aggregated at the level of the GUO and host country. The sample size was significantly smaller using this methodology due to the methodological nature of the model, as explained in the Methodology section. Only model 2 of this table contains one weakly statistically significant result, namely the negative effect experience has on divestment probabilities. The results do not support the hypotheses and are not in line with any

earlier theory.

Table 6 presents the same regression models as Table 2 except for the alternative choice of dependent variable. In these models, the dichotomous variable only takes value (1) when there has been a reported divestment amount in the Orbis M&A database. In earlier models, it would also take value (1) when the MNE's number of assets or workforce in a host-country was halved year-on-year. Model 2 of this table presents statistically significant results that support hypothesis 1 and that contradict hypothesis 2. It indicates that, given a level of economic freedom, more MNE experience in the host country increases the probability of divestment. Whereas it was expected that more experience decreases the effect of bad institutional quality, the result could be explained by MNEs being able to oversee the consequences of certain institutional uncertainties better, thereby boosting divestment probabilities.

Table 4: Investment Choice Drivers

	(1) Investment Choice	(2) Investment Choice	(3) Investment Choice	(4) Investment Choice	(5) Investment Choice
Economic Freedom	-0.00642**	-0.00464**		-0.01363***	
	(0.00257)	(0.00200)		(0.00403)	
Log MNE Experience		-0.10651***			
		(0.02925)			
Economic Freedom × Log MNE Experience		0.00086**			
		(0.00043)			
Log People dead by natural disaster			-0.00203		-0.00059
			(0.00321)		(0.00392)
Geographic Distance				0.00000	0.00000
				(.)	(.)
Economic Freedom × Geographic Distance				0.00109***	
				(0.00037)	
Log People dead by natural disaster × Geographic Distance					-0.00030
					(0.00046)
Profit Margin GUO	-0.00001	-0.00001	-0.00001	-0.00001	-0.00001
	(0.00006)	(0.00010)	(0.00007)	(0.00006)	(0.00007)
Log Assets GUO	0.02859***	0.02041***	0.02933***	0.02761***	0.02931***
	(0.00232)	(0.00402)	(0.00273)	(0.00225)	(0.00273)
Log GDP	0.27952**	0.01434***	0.39735***	0.24399**	0.40305***
	(0.11394)	(0.00538)	(0.14331)	(0.11686)	(0.14518)
Log GDP per Capita	-0.31870**	0.03092***	-0.45766***	-0.29764**	-0.46340***
	(0.12407)	(0.00844)	(0.15067)	(0.12639)	(0.15265)
Log Unemployment	0.02949	0.00788	0.04315	0.02375	0.04383
	(0.02643)	(0.01135)	(0.03163)	(0.02627)	(0.03184)
Net FDI inflow	0.00007	-0.00011	0.00009	0.00005	0.00009
	(0.00010)	(0.00018)	(0.00010)	(0.00010)	(0.00010)
Constant	-4.30063**	-0.31756	-6.77693***	-3.42687	-6.88081***
	(2.04431)	(0.21112)	(2.61247)	(2.10954)	(2.64544)
Observations	329656	199130	267049	327784	265510
Fixed Effects	GUO x Host + Year	GUO + Year	GUO x Host + Year	GUO x Host + Year	GUO x Host + Year

Linear probability model (OLS). Standard errors in parentheses, clustered at the host country-year level.
* $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

5.4 Comparison Investment Drivers

Table 4 presents the counterfactual regression results of Table 2 with the dependent variable being a dichotomous variable indicating investment(1) or no investment(0), and with stricter fixed effects. We surprisingly find, across various models, that higher degrees of economic freedom lower the investment probability. This shows that a driver of divestment is not simply the mirrored driver of investment. Along that reasoning,

with lower degrees of freedom incentivizing divestment, you would expect to see that higher degrees of freedom boost investment probabilities. Model 2 also shows that more prior experience in the country lowers investment probability, which makes sense from a resource-seeking motive. The longer an MNE has already been active in a country, the fewer new resources are expected to be extracted from the host country. In the same model, we find that, given a level of economic freedom, more prior experience increases the effect economic freedom has on the investment probability. This is the mirrored effect of the hypothesized moderating effect for divestments, where more experience given a level of freedom was expected to decrease divestment probabilities. This hypothesized effect was, however, not found in the presented results.

Furthermore, model 4 shows that geographic distance also moderates the role between economic freedom and investments. However, where larger distances were expected to boost divestment probabilities, larger distances were expected to decrease investment probabilities, considering the trend of reshoring, the results indicate otherwise. A larger geographic distance would namely boost investment probabilities. This could be explained by the common resource-seeking motive behind FDI, thereby arguing that there are more resources to discover further away from home. This effect is, however, most likely already captured by the firm-destination fixed effects. From this small set of results, we can preliminarily conclude that divestment drivers are not simply the mirrored drivers of investments. In addition, this set of results does not confirm the trend of reshoring.

6 Discussion

Considering the different statistically significant coefficients found, using varying proxies and fixed effects combinations, it is hard to conclude that compelling evidence was found supporting all the hypotheses. With the coefficients for the effect of economic freedom on divestment varying across the different sets of results, the hypothesis that an institutional environment of lower quality fosters divestment cannot be accepted. By plotting the distributions of the estimated probabilities, we were able to establish that the LPM made the first set of results less reliable (Table 2). The next set of results (Table 3) did, though, predict most probabilities within the [0,1] range, boosting the credibility of these results. Those results supported the hypothesis that lower institutional quality increases divestment probabilities.

Regarding the moderating role of an MNE's prior experience, no clear-cut conclusion can be drawn. Across all regressions, more experience in the host country tends to lower divestment probabilities. However, the interaction effect between political stability/economic freedom and MNE experience is mostly statistically insignificant. This indicates that, in divestment decisions, there is no moderating role for a company's earlier experiences when navigating an institutional environment. That moderating role is found by prior research in investment decision-making and is confirmed by our results on the drivers of investment. Despite MNE experience playing a role, hypothesis 2 is not accepted.

The role of natural hazards in the location strategies of MNEs is becoming more apparent following the results of this research. Despite the lack of statistically significant results in the robustness checks, multiple models reported statistically significant coefficients that are in line with hypothesis 3. Considering this, the lack of opposing results, and the efficacy of the utilized proxies, this research accepts the hypothesis that increased natural hazard exposure increases the probability of foreign divestment.

Additionally, this research has presented early evidence that geographic distance plays a role in how companies perceive the risk of lacking institutional quality. We find across multiple models that a greater distance between the MNE's home country and the subsidiary increases the effect institutional quality has on the divestment probability. Future research could look into exploring the channels through which distance has this moderating role. The importance of increasing transport and logistics costs would be interesting to explore. Considering the few statistically significant coefficients that support the hypothesis and the lack of opposing evidence, this research accepts hypothesis 4. For hypothesis 5, no support was found in any of the results, indicating that the moderating role of geographic distance in the risk perception of companies, differs per type of risk. There is, however, no theoretical underpinnings for this finding. Therefore, the role of distance in recent location choice strategies should be researched

more thoroughly in future research. Furthermore, future research can consider the role of distance in divestment in light of the proximity-concentration trade-off. Theory on this topic explains investment decisions based on the benefits and costs of doing business further away from home (Ramondo et al., 2013). As divestments far away are often connected to an investment closer to home, there might be more benefits correlated with divestment than only the avoidance of risk, potentially introducing bias to the results of this paper.

This research has delved into a relatively novel topic that deserves more attention in the academic field. In doing so, it has established both from a theoretical and empirical line of reasoning that there is an asymmetry between the drivers of foreign divestment and foreign investment. Prior literature on the topic of risk management had assumed these drivers to be symmetrical up till now. Furthermore, this research has indicated the significance of the reshoring trend and the socioeconomic implications it might potentially have.

6.1 Limitations

Despite these clear contributions, there are also certain limitations to this research. First of all, the data used does not capture the reshoring trend as well as depicted in Figure 4. Figure 13 & Figure 14 show a recent increase in investments in Eastern Europe and South America, providing evidence for the phenomenon of nearshoring, as these are investments by GUOs from North America and Europe. However, the US and Europe appear to not have received as many investments as theory and Figure 4 would suggest. The absence of the trend in our data is a possible explanation for the lack of statistical significance among some results. Due to the lack of data on reported divestments, this research was limited in its methodological approaches, making Poisson less feasible and eventually running LPMs, which has methodological drawbacks as mentioned before. More divestment data from the same MNE would have made the PPML model more efficient and thereby the results of this research more reliable. Another limitation of the research is that it has failed to present statistically significant coefficients for all control variables. This either indicates that the endogeneity issues are not as small as anticipated, or that the chosen fixed effects were too strict given the properties of the sample. Also, by aggregating the investment and divestment data at the host country level, this research ignored substantial amounts of subsidiary-level variation. In doing so, this research has assumed only country risks to affect divestment choices, whilst the individual performance of a subsidiary might equally well play a role. Another possible driver of divestments that was ignored in this research is that of the public opinion pressurizing companies to divest, as illustrated by the Heineken example in the introduction (Reuters, 2023). Lastly, it is fair to criticize the choice of proxy for the phenomenon of political stability, as economic freedom measures a far broader concept than just political stability.

6.2 Future Research Recommendations

In addition to the aforementioned recommendations for future research on the topic, it would be interesting to see more theoretical and empirical analysis into how certain risks, like i.e. political instability, impact the location choice strategies of MNEs. This would allow for more adequate proxies, which could be considered another limitation of this research. For instance, it would be interesting to delve more deeply into the role of property right protection. Furthermore, the role of rising wages in emerging economies as a growing concern for established MNEs has been mentioned throughout this paper. It would be valuable to the further understanding of the reshoring trend to look into what MNE characteristics, such as factor intensity, make some companies more prone to these risks than others. This research has shown that prior experience in the country is not necessarily it. Our findings have shown that divestment probabilities decrease as the distance between the GUO and the subsidiary increases. It would be interesting to see future research delve into the theoretical underpinnings for this research's findings. For instance, what costs are involved with undertaking divestment, and how do these weigh up to the benefits of reshoring? The proximity-concentration trade-off should also be considered when rethinking the role of geographic distance in location choice strategies. This research has failed to incorporate that theory.

7 Conclusion

To summarize, this research has contributed to a novel stream of literature within the widely discussed stream of literature on MNE location choice strategy. By means of an extensive literature review, it has distinguished the relatively unknown drivers of foreign divestment from the widely discussed drivers of FDI. Aiming to find out what factors exactly influence a company's decision to divest its foreign assets, this research has constituted a large sample of GUOs and their subsidiaries. An extensive set of regression results was presented by analyzing divestments by means of two methodological approaches. The results indicate that institutional quality, natural hazards, prior experience, and geographic distance indeed play an important role in the new location choice strategies of MNEs. Hopefully, this research can set in motion more research into the topic to better understand this phenomenon of MNEs rethinking location choice strategies.

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9 Appendix

Table 5: Divestment Drivers Robustness Check

	(1) Divestments	(2) Divestments	(3) Divestments	(4) Divestments	(5) Divestments
Economic Freedom	0.07582	0.07248		0.10366	
	(0.07140)	(0.05819)		(0.08257)	
Log MNE Experience		2.23270*			
		(1.16444)			
Economic Freedom × Log MNE Experience		-0.02136			
		(0.01574)			
Log People dead by natural disaster			0.03487		0.02487
			(0.05621)		(0.05852)
Geographic Distance				0.00000	0.00000
				(.)	(.)
Economic Freedom × Geographic Distance				-0.00706	
				(0.01501)	
Log People dead by natural disaster × Geographic Distance					0.00823
					(0.01803)
Profit Margin GUO	-0.00220	-0.00606	-0.00110	-0.00257	-0.00100
	(0.00721)	(0.00797)	(0.00869)	(0.00729)	(0.00867)
Log Assets GUO	0.48534*	0.52745	0.34218	0.49245*	0.33583
	(0.27681)	(0.37949)	(0.24099)	(0.27145)	(0.23811)
Log GDP	-6.15463	0.31543***	-7.15191	-4.44091	-6.54139
	(8.90653)	(0.09332)	(10.70378)	(8.92006)	(10.75762)
Log GDP per Capita	3.61190	0.04268	4.65219	1.94884	4.12322
	(9.30808)	(0.18845)	(11.16562)	(9.62644)	(11.26066)
Log Unemployment	0.14425	0.38507	0.12626	0.16389	0.16077
	(0.74713)	(0.29317)	(0.88294)	(0.83586)	(0.88854)
Net FDI inflow	-0.01967	-0.00689**	-0.01127	-0.01971	-0.01147
	(0.01301)	(0.00307)	(0.01290)	(0.01322)	(0.01282)
Constant	156.30361	6.60429	183.27507	124.25931	171.40298
	(155.12937)	(7.23902)	(189.60817)	(152.63200)	(190.35490)
Observations	9875	74126	8117	9850	8107
Fixed Effects	GUO x Host + Year	GUO + Year	GUO x Host + Year	GUO x Host + Year	GUO x Host + Year

Poisson Pseudo Maximum Likelihood estimator. Standard errors in parentheses, clustered at the host country-year level.
* $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

Table 6: Divestment Choice Linear Probability Robustness Check

	(1) Divestment Choice	(2) Divestment Choice	(3) Divestment Choice	(4) Divestment Choice	(5) Divestment Choice
Economic Freedom	0.00003	-0.00030***		0.00010	
	(0.00005)	(0.00008)		(0.00012)	
Log MNE Experience		-0.00858***			
		(0.00223)			
Economic Freedom × Log MNE Experience		0.00017***			
		(0.00003)			
Log People dead by natural disaster			0.00003		0.00006
			(0.00007)		(0.00013)
Geographic Distance				0.00000	0.00000
				(.)	(.)
Economic Freedom × Geographic Distance				-0.00001	
				(0.00001)	
Log People dead by natural disaster × Geographic Distance					-0.00001
					(0.00002)
Profit Margin GUO	-0.00001	-0.00002	-0.00001	-0.00001	-0.00001
	(0.00001)	(0.00002)	(0.00002)	(0.00001)	(0.00002)
Log Assets GUO	0.00093***	0.00195***	0.00102***	0.00096***	0.00102***
	(0.00029)	(0.00059)	(0.00033)	(0.00029)	(0.00034)
Log GDP	0.00752***	0.00299***	0.00812**	0.00846***	0.00841**
	(0.00284)	(0.00042)	(0.00361)	(0.00297)	(0.00367)
Log GDP per Capita	-0.00699**	0.00011	-0.00799**	-0.00787***	-0.00829**
	(0.00278)	(0.00028)	(0.00343)	(0.00289)	(0.00348)
Log Unemployment	-0.00087	0.00165***	-0.00107	-0.00082	-0.00108
	(0.00071)	(0.00048)	(0.00081)	(0.00072)	(0.00082)
Net FDI inflow	-0.00000	-0.00000	-0.00000	-0.00000	-0.00000
	(0.00000)	(0.00001)	(0.00000)	(0.00000)	(0.00000)
Constant	-0.14579***	-0.09932***	-0.15396**	-0.16416***	-0.15914**
	(0.05190)	(0.01470)	(0.06653)	(0.05511)	(0.06775)
Observations	329656	199130	267049	327784	265510
Fixed Effects	GUO x Host + Year	GUO + Year	GUO x Host + Year	GUO x Host + Year	GUO x Host + Year

Linear probability model (OLS). Alternative dependent variable: divestment takes value 1 only when divestment was reported. Standard errors in parentheses, clustered at the host country-year level.
* $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

Table 7: Divestment Choice Driver Robustness Check

	(1) Divestment Choice	(2) Divestment Choice	(3) Divestment Choice	(4) Divestment Choice	(5) Divestment Choice
Property right protection host	0.00102*	-0.00067		0.00192**	
	(0.00059)	(0.00042)		(0.00076)	
Log MNE Experience		-0.03652***			
		(0.00794)			
Property right protection host × Log MNE Experience		0.00037***			
		(0.00012)			
Log # Victims Natural Disaster			-0.00062		0.00119
			(0.00114)		(0.00167)
Geographic Distance				0.00000	0.00000
				(.)	(.)
Property right protection host× Geographic Distance				-0.00013	
				(0.00009)	
Log # Victims Natural Disaster × Geographic Distance					-0.00034
					(0.00023)
Profit Margin GUO	0.00000	0.00008	0.00001	0.00000	0.00001
	(0.00005)	(0.00009)	(0.00006)	(0.00005)	(0.00006)
Log Assets GUO	0.01126***	0.01403***	0.01025***	0.01162***	0.01015***
	(0.00216)	(0.00318)	(0.00253)	(0.00215)	(0.00256)
Log GDP	-0.55158***	0.00894**	-0.64578***	-0.53173***	-0.65480***
	(0.11258)	(0.00391)	(0.14393)	(0.11645)	(0.14713)
Log GDP per Capita	0.50440***	-0.00573	0.61956***	0.49063***	0.62821***
	(0.13062)	(0.00608)	(0.16759)	(0.13446)	(0.17096)
Log Unemployment	-0.04359*	-0.00267	-0.03739	-0.04009*	-0.03851
	(0.02339)	(0.00696)	(0.02625)	(0.02309)	(0.02633)
Net FDI inflow	-0.00016	-0.00005	-0.00025**	-0.00016	-0.00026**
	(0.00011)	(0.00010)	(0.00011)	(0.00011)	(0.00011)
Constant	10.01244***	-0.11616	11.77665***	9.58528***	11.95401***
	(1.86105)	(0.13291)	(2.39837)	(1.92102)	(2.45445)
Observations	329805	199134	267049	327933	265510
Fixed Effects	GUO x Host + Year	GUO + Year	GUO x Host + Year	GUO x Host + Year	GUO x Host + Year

Linear probability model (OLS). Alternative proxies for institutional quality and natural risk exposure. Standard errors in parentheses, clustered at the host country-year level.
* $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

Table 8: Cross-correlation table

Variables	MNE Divestments in host country (in 100 million USD)	MNE Investments in host country (in 100 million USD)	Political Stability Host	Economic Freedom	Degree of Property Right Protection in host country	Log # Victims Natural Disaster	Log People dead by natural disaster	Log MNE Experience	Geographic Distance	Profit Margin GUO	Log Assets GUO	Log GDP per Capita	Log GDP	Log Unemployment	Net FDI inflow
MNE Divestments in host country (in 100 million USD)	1.000														
MNE Investments in host country (in 100 million USD)	0.005	1.000													
Political Stability Host	0.003	0.009	1.000												
Economic Freedom	0.001	0.011	0.676	1.000											
Degree of Property Right Protection in host country	0.003	0.014	0.718	0.841	1.000										
Log # Victims Natural Disaster	-0.002	-0.008	-0.425	-0.358	-0.384	1.000									
Log People dead by natural disaster	-0.000	-0.005	-0.446	-0.307	-0.229	0.611	1.000								
Log MNE Experience	0.009	0.011	0.044	0.090	0.140	-0.022	0.021	1.000							
Geographic Distance	-0.010	-0.016	-0.171	-0.055	-0.238	0.310	0.069	-0.102	1.000						
Profit Margin GUO	-0.003	0.001	-0.034	-0.060	-0.069	-0.002	-0.019	0.070	0.052	1.000					
Log Assets GUO	-0.001	-0.015	-0.136	-0.181	-0.219	0.020	-0.020	0.138	0.264	0.289	1.000				
Log GDP per Capita	0.003	0.012	0.748	0.748	0.822	-0.400	-0.234	0.145	-0.317	-0.068	-0.229	1.000			
Log GDP	0.004	0.008	-0.050	0.148	0.270	0.301	0.415	0.193	-0.139	-0.091	-0.273	0.324	1.000		
Log Unemployment	0.002	0.004	-0.072	-0.223	-0.093	-0.080	-0.053	0.013	-0.228	0.006	-0.016	-0.086	-0.079	1.000	
Net FDI inflow	-0.001	-0.002	0.090	0.116	0.057	-0.040	-0.117	-0.039	0.015	0.004	0.012	0.062	-0.178	-0.008	1.000

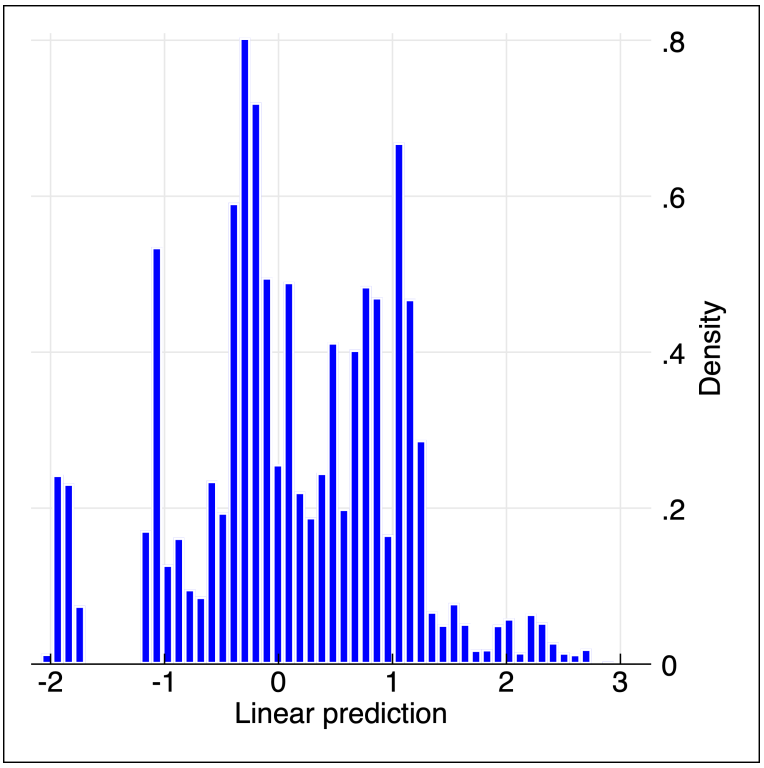

Figure 7: Estimated probability distribution of model 1 in Table 2

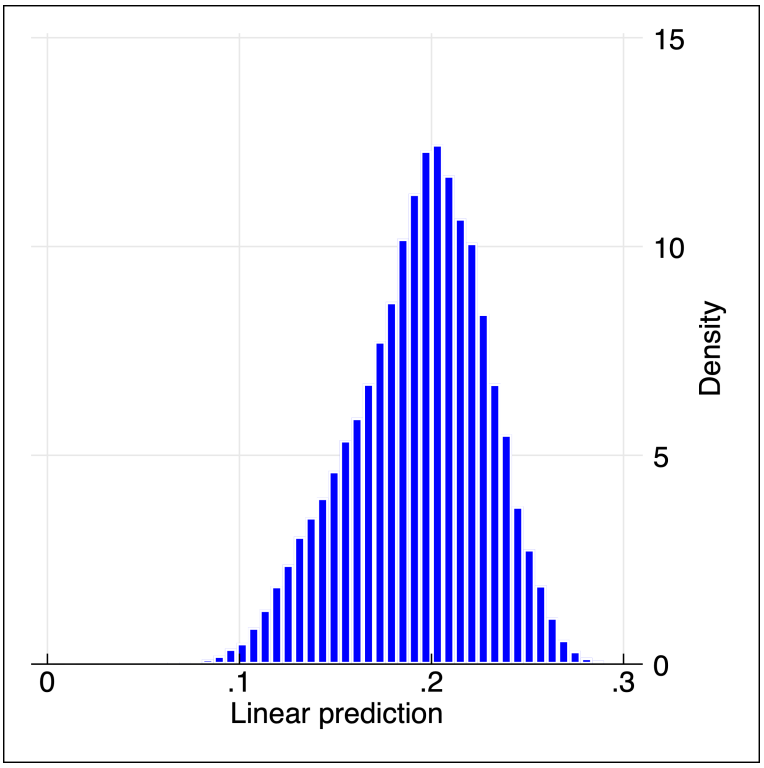

Figure 8: Estimated probability distribution of model 2 in Table 2

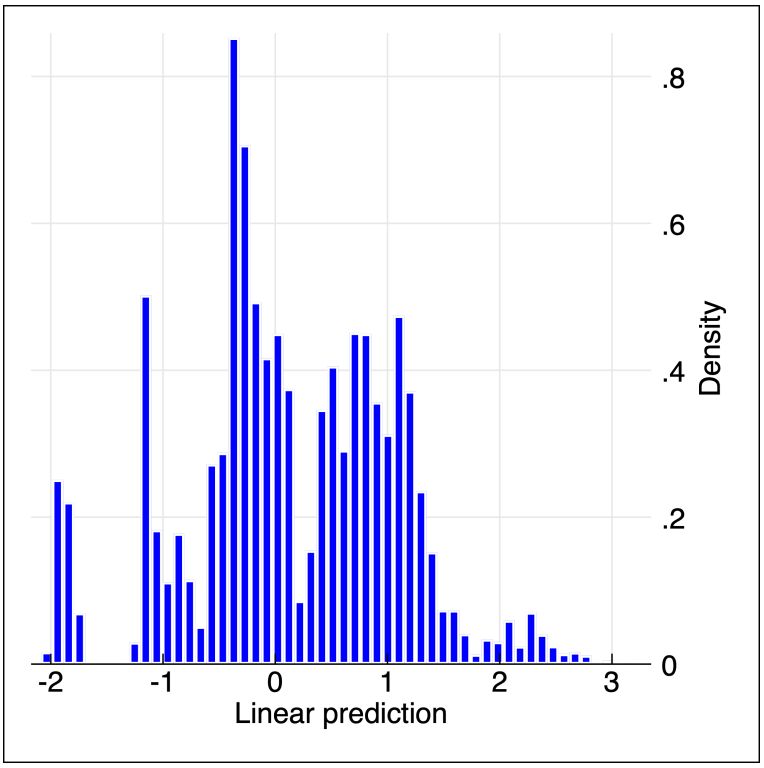

Figure 9: Estimated probability distribution of model 4 in Table 2

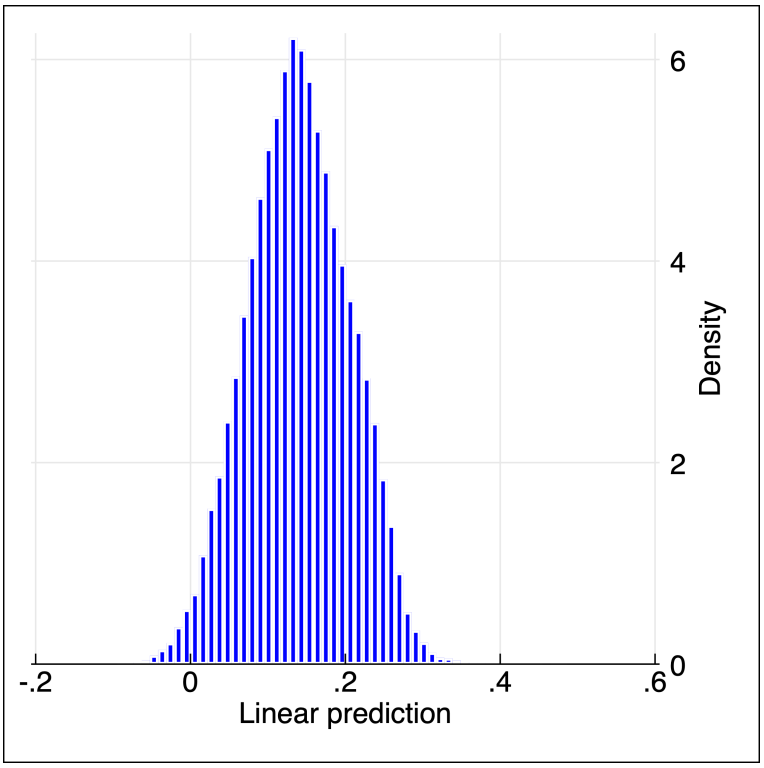

Figure 10: Estimated probability distribution of model 1 in Table 3

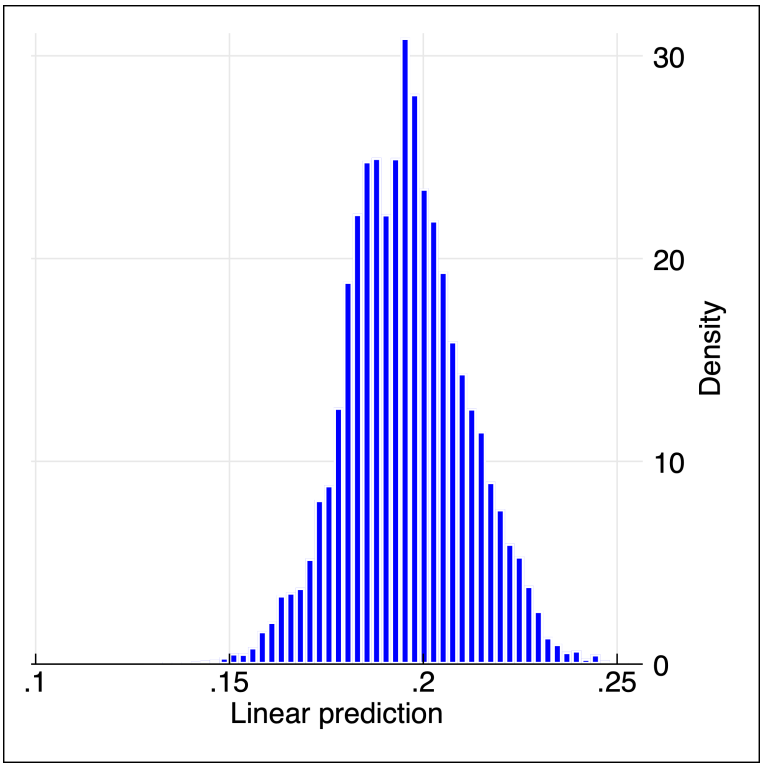

Figure 11: Estimated probability distribution of model 2 in Table 3

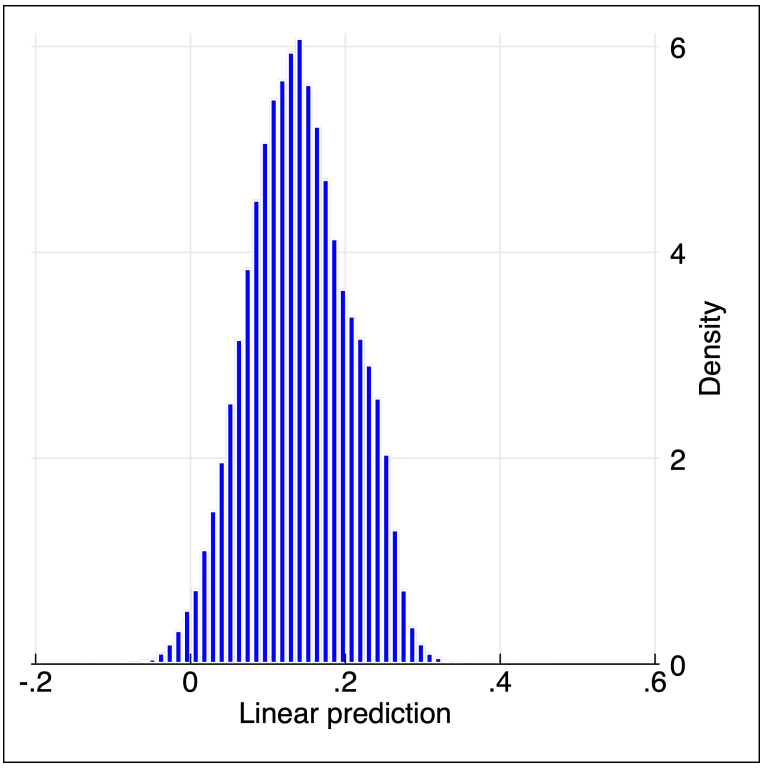

Figure 12: Estimated probability distribution of model 4 in Table 3

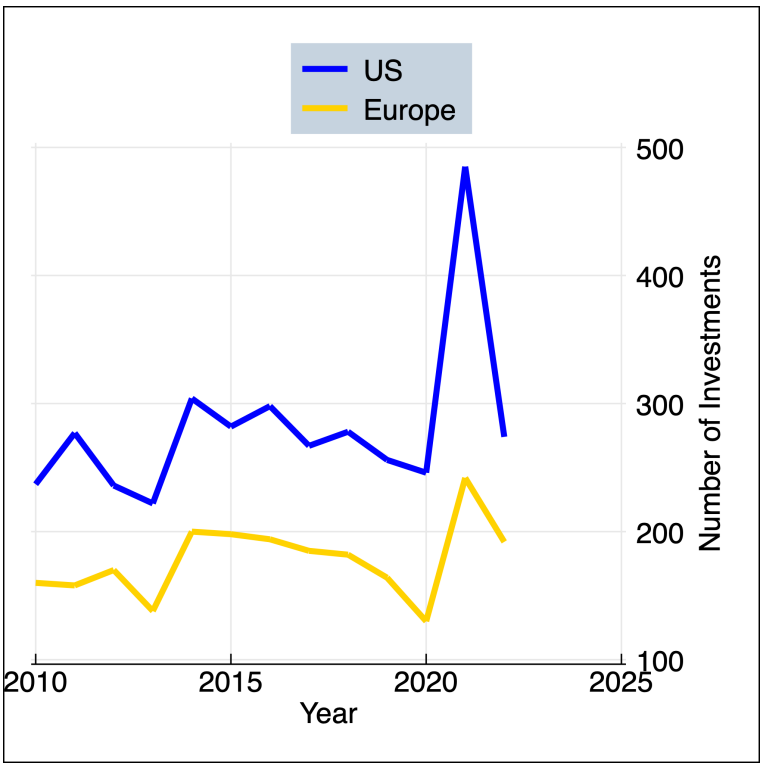

Figure 13: Number of Investments in US and EU

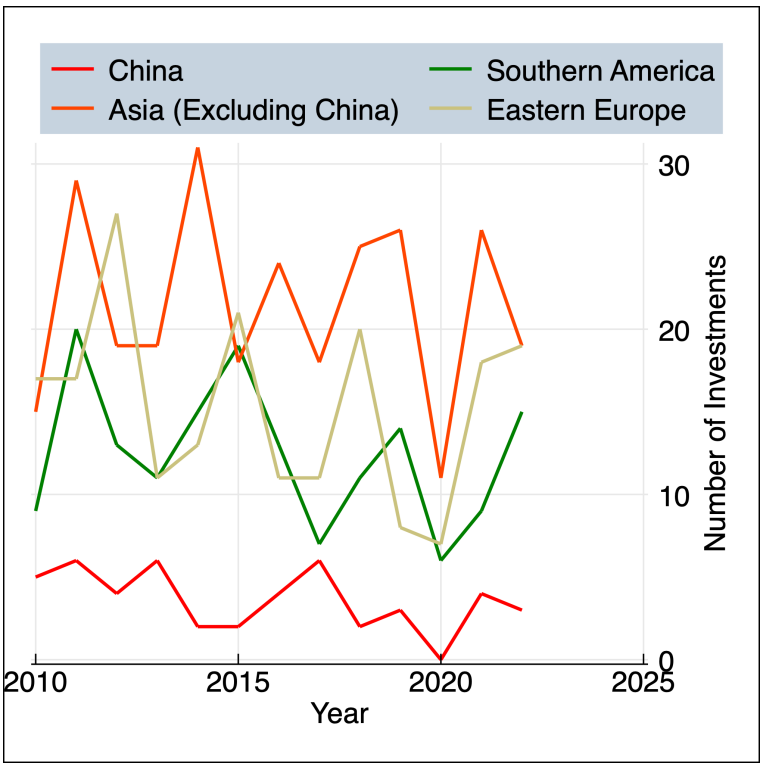

Figure 14: Number of Investments in Different World Regions