

MAKE MONEY MOVE:
Understanding the Nexus Between Geopolitical Risk and Foreign Direct Investment

by
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ABSTRACT

The field of International Political Economy (IPE) conventionally looks at the relationship between domestic political risks and economic development, but in an international system with an increasing number of transnational challenges and crosscurrents introduced by new political forces and economic powers, the concept of geopolitical risk has become an additional salient dimension of IPE. Many traditionally domestic political risks now include a transnational facet due to rapid globalization and increased frequency of interactions between countries, propelling geopolitical risk to the forefront of economic decisions. This study verifies through empirical analysis if the most prominent discrete, regional geopolitical risks have any material impacts on investment flows, with a particular focus on foreign direct investment (FDI). This study's contribution is two-fold. First, results and analysis of this research suggest that regional geopolitical risks do not have uniform impacts across the board on all countries affected by the regional risk factor, as there are both winners and losers in terms of their respective volumes of inward FDI. Second, analysis of this study identifies that the key determinants of the winners from geopolitical risks are (1) their respective attractiveness to Chinese investors, a rising source of FDI exporter and a new class of bargain hunters that seeks to acquire global assets; and (2) investors' flight-to-safety reactions, which favour economies with better and more existing infrastructure and specialized clusters of industries.

1. INTRODUCTION

This study explores how the changing nature of the international relations system affects economic activities. The global order has been confronted with a changing landscape and the emergence of many crosscurrents – it is now in an era of disputed political changes driven by strategic rivalries between the United States and China, coupled with other great disruptions propelled by technological transformation, social inequalities, and climate change (Tiberghien 2020, 357). Undeniably, both the international political system and economic system have entered a period of enduring global change, as we observe the decline of a Western-centric world and the long-held American norms being contested by other new political forces and economic powers (Tiberghien 2020, 360-61). The dynamic interactions between the pursuits of strategic interests and economic might catapult International Political Economy (IPE) to the forefront of the debate on the changing global order. From the lens of IPE, this period of political transition and the evolving economic gravity of each player could render some conventional economic expectations obsolete (Buzan and Lawson 2014, 75-85). Against the backdrop of this historic period of global change, this study explores if the traditional expectations of the impacts of international crises and tensions on economic activities still stand despite an evolving IPE landscape, with a particular focus on geopolitical risk and foreign direct investment (FDI).

Existing expectations about political risks are often solely based on a U.S. model of global finance which assumes stable global norms and financial system, enforced by the World Bank and the International Monetary Fund. Based on this conventional model from the perspective of Western investors, it is assumed that there exists a negative causal relationship between conflicts and economic activity (Du, Ju, Ramirez and Yao 2017, 211; Massoud and Magee 2012, 2). Additionally, regional crises, such as the 1997 Asian Financial Crisis, are often assumed to result in region-wide capital outflows (van Wincoop and Yi 2000, 52). This study

proves that such conventional IPE assumptions are no longer valid during this period of geopolitical transition and norm contestation. The entry of new major investors like China who behaves differently from traditional Western investors introduces substantive nuances and disaggregates some old tenets of IPE, further proving that the preferences of Western investors and existing IPE norms are no longer the sole decisive factors of economic outcomes.

The particular dimension of international tension that this paper examines is geopolitical risk. Geopolitical risk, in broad terms, is often an outcome of unilateral foreign policy approaches in an interconnected global system experiencing disintegrating mutual trust and rapid technological transformation (World Economic Forum 2017). Amidst the crosscurrents of hyper-globalization, strained transnational ties in a multipolar world, the rise of populism and rapid growth of emerging markets, the concept of “geopolitical risk” has been gaining traction as a material dimension of economic decisions (Hoque and Zaidi 2020, 197; Cheng and Chiu 2018, 306). Major institutional investors across the world have jumped on the bandwagon and started examining the nexus between geopolitical risk and the market to inform investment decisions. In a 2017 Wells Fargo/Gallup survey involving more than 1,000 investors, three-quarters of respondents indicated they were very or somewhat worried about the impacts of geopolitical risks such as military or diplomatic conflicts (Wells Fargo 2017). Goldman Sachs Global Macro Research identified that some of the most impactful geopolitical risks – such as the U.S.-China trade war – could be a driving force behind recessionary fears (Goldman Sachs 2019). JP Morgan Research holds a similar view that geopolitical factors such as global policy uncertainty, international relations and political leadership are now feeding into financial market volatility (J.P. Morgan 2019). BlackRock Investment Institute developed its own geopolitical risk indicator that estimates the extent to which market-related content is focused on geopolitical risk and how

positive or negative market sentiments are. The common narrative of the geopolitics-investment nexuses is the concern that protracted geopolitical tensions could weaken regional economic outlook and diminish investment returns. Given the apparent salience of geopolitical risks in investment decisions, this study verifies through empirical analysis if prominent geopolitical risks had any material impacts in influencing investment flows, with a particular focus on FDI.

FDI is chosen as the focus of this study as FDI inflows into a country play a significant role in long-term economic growth and economic development. FDI generates positive effects such as technology transfer, human capital transfer, enhancing the competitiveness of business environment and creating a more attractive investment climate in general (Narula and Driffield 2012, 1-2). Furthermore, the long-term nature of FDI serves to verify if geopolitical risks have any long-run effects on foreign investments.

This study defines geopolitical risk (henceforth referred to as GPR) as a protracted, transnational event or phenomenon that relate to government policies, regulations, bilateral/multilateral relations and socio-political developments that have and/or threaten material impacts on investors' assets. This study answers the following question: *How do discrete, regional geopolitical risks (GPR) influence FDI inflows into countries of the affected region?*

This study examines six discrete, regional geopolitical risks across a range of geographies, namely, the Euro-crisis, South Asian territorial dispute, Latin America 21st century populism, Persian Gulf tensions, Taiwan sovereignty dispute and the North Korea Nuclear crisis. These six discrete risks cover a representative range of key geographies that are crucial to regional political and economic stability. They are chosen based on major institutional investors' ranking of the most prominent geopolitical risks.

The main findings of the large-N analysis in this study demonstrate a more nuanced and optimistic reality than what traditional IPE and institutional investors assume. Instead of negatively affecting the FDI inflows in all countries affected by a particular GPR, results suggest that there are both winners and losers in terms of their respective volume of inward FDI received. Why would heightened GPRs encourage FDI in some economies? How do investors differentiate between markets that are collectively facing the same GPR? To answer these questions, I turn to the Euro-crisis as a case study to illustrate that flight-to-safety reactions and the entry of China are two key determinants of FDI in times of risky geopolitical conditions. Based on the flight-to-safety mechanism, the uncertainty, disruption and instability associated with geopolitical risks could trigger investors to shift capitals from jurisdictions with higher levels of perceived geopolitical threats to more conventionally stable and/or major developed markets that are deemed to be too big to fail. Further, amidst generally uncertain market conditions caused by geopolitical risks, China's entry into the global capital market as a major FDI exporter and bargain hunter renders Chinese investors' preference a significant contributing factor to the differentiation between economies affected by the same geopolitical risk. Chinese investors tend to focus on countries that offer assets of strategic value, i.e., advanced technologies, thereby benefitting economies that specialize in sectors of strategic interests to Chinese investors.

2. LITERATURE REVIEW, THEORY & HYPOTHESE DEVELOPMENT

2.1.Existing Literature on Geopolitical Risk and Foreign Capital

The body of literature on the relationship between geopolitical risk and finance is rather nascent and limited, though several existing studies suggest that there is a dynamic relationship between geopolitical risk and capital flows. A study done by Caldara and Iacoviello on behalf of the Federal Reserve Board of Governors found two interesting relationships: (1) exogenous

changes in geopolitical risks reduce stock returns in advanced economies, but this is a result of heightened geopolitical *threats* instead of their *realization*; (2) an increase in geopolitical risk reduces capital inflows in emerging economies while increasing capital inflows in advanced economies; this relationship applies to all three subcomponents of capital inflows: portfolio flows, FDI, and other investments, but the effects are especially pronounced for portfolio flows and more muted for FDI. An increase in geopolitical risk shifts purchases of foreign capital away from emerging and toward advanced economies, implying that geopolitical risks could spark a “flight-to-safety” reaction from investors (Caldara and Iacoviello 2018, 18-21).

Other literature on the relationship between geopolitics and foreign investments focus on emerging economies of a particular region. Despite being a closed economy, North Korea-related geopolitical risk is negatively related to foreign equity investments in South Korea. When the North Korea risk is highly escalated, foreign investors turn away from the South Korean equity market while domestic investors increase the value of their South Korean portfolios (Kim, Park and Kwon 2019, 269). In the case of China, Li and Zeng (Li and Zeng 2019, 66-67) argue in their study that heightened geopolitical risks and nationalist sentiments negatively impact American public opinion on incoming Chinese FDI. The political animosity and market uncertainty associated with geopolitical risks can adversely impact FDI as they weigh on economies and firms to hold off from making major, long-term financial commitments.

Nonetheless, the interaction between geopolitical risk and foreign investment is not necessarily one-directional. The existence of “cold politics and hot economics” in some regions despite heightened geopolitical conditions suggests that there exist deeper nuances in this relationship. A study by Song et al (Song et al 2020, 1485-86) focuses specifically on how Sino-Japanese geopolitical factors such as bilateral relations and foreign policies affect FDI, and it

found that bilateral geopolitical relations have both positive and negative influences on Japanese FDI in China at different timeframes, but only negative impact on Chinese FDI in Japan.

2.2. Hypotheses Development

Reflecting on the existing findings in this field and the theoretical frameworks that current literature has touched on, I draw my theories and hypotheses primarily from 4 bodies of related literature, namely, the international diversification literature, the political risk literature, the flight to safety literature and the bargain hunting literature. Each body of literature suggest a unique causal mechanism through which GPRs would affect FDI inflows.

2.2.1. International Diversification

The international diversification hypothesis is informed by the knowledge different national financial markets can perform very differently during any given period of time; losses or reduced returns in a volatile market can be offset by higher returns from other markets (Levy and Sarnat 1970, 672-673). Following this view, political and geopolitical risks are not substantive determinants of the portfolios of major institutional foreign investors in foreign assets, since their holdings are internationally diversified, and returns are usually risk-adjusted. Rugman (Rugman 1976, 79) shows that the effects of risks are rather diluted when firms maintain a risk-adjusted, internationally diversified portfolio. From this perspective, a regional GPR is not expected to significantly alter foreign investors' FDI decisions, given that they hold an internationally diversified portfolio that carries assets from other regions.

Hypothesis 0 (H0): Based on the international diversification literature, *a regional GPR has no relationship with FDI inflows into countries in the affected region*. H0 operates with the assumption that all foreign investors hold an internationally diversified portfolio. H0 is the null hypothesis in this study.

2.2.2. Extrapolation from Political Risk

Prior to the proliferation of geopolitical risk assessment in the financial industry, firms and studies have largely focused on the relationship between country-specific political risk and FDI, though such political risk assessment often incorporates transnational dimensions without identifying their geopolitical nature. Orthodox studies in this field focus on armed conflicts and terrorism as the prototypes of political risk. Since the 9/11 attacks, political risks were found to have become more important and significant determinants of FDI flows, especially in industrialized countries (Qian and Baek 2011, 4). Beyond terrorism, factors of political risk such as government stability, both internal and external conflicts, corruption and ethnic tensions, law and order, democratic accountability of government, and the quality of bureaucracy were also found to be highly influential determinants of foreign investment inflows (Busse and Hefeker 2005, 399). When looking at multinational corporations (MNC) specifically, both domestic and international political instability and violence tend to discourage MNCs from investing in a host economy that is subject to such risks (Busse and Hekefer 2005, 407). Many MNCs are weighing the overall political risk of host countries, and diplomatic, dyadic political tension between a host country and the United States when they make foreign investment decisions (Desbordes 2010, 93-94). Though implicit, several dimensions of the aforementioned political risks are geopolitical and transnational in nature, suggesting that the effects of political risks on FDI can potentially be extrapolated to the relationship between GPR and FDI inflows.

The political risk literature suggests that a negative political event tends to create a volatile political and economic environmental that enhances the uncertainty of returns in a market, prompting investors to exercise more caution when investing in the affected region/country and potentially diverting investors to other markets where returns are more

certain. The same theoretical reasoning can be extrapolated to transnational, geopolitical events. Owing to this logic, I expect a discrete, regional GPR to adversely influence foreign investment activities in countries of the same region.

Hypothesis 1 (H1): Extrapolating from the political risk literature, *a regional GPR has a negative relationship with the FDI inflows of all countries in the affected region*. H1 operates with the inherent assumption that foreign investors view all countries in an affected region equally and that there are no other differentiating factors that are determinants of FDI inflows.

2.2.3. Flight to Safety

Another strand of literature on the impacts of GPRs suggests that there is no uniform downstream effect of a GPR on all countries in the affected region. This view maintains that investors differentiate emerging economies from developed economies, which are considered by investors as ‘safe havens’ in times of economic downturn or heightened risks.

There is evidence that the patterns of capital flows during a crisis are driven by “safe haven flows” as investors tend to collectively opt for traditionally stable and familiar markets (Fratzscher 2012, 12). While higher economic uncertainty usually sparks capital flight across the board, developments of a GPR appear to shift foreign capital away from emerging economies and into developed economies such as the United States (Caldara and Iacoviello 2018, 18-20). Evidence shows that flight-to-safety reactions amongst investors will generate both winners and losers, suggesting that increases in a GPR do not necessarily have uniform impacts on FDI inflows across the board in the region.

Hypothesis 2 (H2): Based on the flight-to-safety literature, *the effects of a regional GPR on FDI inflows into countries are not consistent across the region; increases in a regional GRP*

will increase FDI inflows into the safe havens in the region, while reducing FDI inflows in other economies of the same region.

2.2.4. Entry of New Bargain Hunters – the Role of Chinese Investors

The final body of literature that I draw from focuses on the role of bargain hunting foreign investors who can mitigate the depressing effects of a GPR on FDI inflows by holding foreign assets in a country affected by the GPR at a time when market conditions are considered volatile and risky, thus pricing the assets at a cheaper price prior to acquisition (Phillips 2010). While bargain hunters have always existed, the entry of a new group of bargain hunting investors – Chinese investors – makes a considerable difference in the extent to which advanced economies benefit from a regional GPR and the vice versa, the extent to which emerging economies lose due to the same GPR. Powered by China's tremendous economic growth and supercharged by the Belt and Road Initiative, the "Going Out" strategy has substantially increased the volume of Chinese FDI outflows, benefiting markets and industries that are of strategic interest to Chinese investors (Le Corre 2018, 162).

Chinese FDI surged in European markets simultaneously with the manifestation of the euro-crisis – a classic, major geopolitical risk (Meunier 2014, 143-144). Distressed European firms that offered new technologies and organizational know-hows during the euro-crisis attracted substantial Chinese capital and saw a significant number of mergers and acquisitions by Chinese investors (Meunier 2014, 284). Interestingly, Chinese outward direct investments (ODI) were also found to be associated with high levels of political risk in host countries (Buckley, Clegg, Cross et al. 2007, 22) showing that political or geopolitical risks do not necessarily deter Chinese capital, and strengthening the notion that such risk factors could provide a bargain hunting context that draws Chinese investors.

Hypothesis 3 (H3): Based on the bargain hunting literature and the effects of China's entry as a new foreign investor into the global capital market, H3 maintains that *a regional GPR benefits countries with assets that are of strategic interest to Chinese investors, thus mediating any material, negative impacts of a GPR on FDI inflows into these countries.*

This study contributes to existing literature in three ways. First, it verifies if a relationship indeed exists between FDI inflows and the most prominent and discussed GPRs amongst major institutional investors. Second, it uses a novel method to measure geopolitical risk that is unique to each regional GPR, instead of aggregating all geopolitical risks across the world into a single index. Third, while the geopolitical risk literature has attempted explaining how GPRs affects various types of foreign investment (e.g., stock price, currency, equity and FDI), it does not sufficiently consider (1) investors' *flight to safety reaction* when confronted with a geopolitical risk, and (2) the interplay between GPRs and *the entry of bargain-hunting new investors such as Chinese investors*, whose investment profile bourgeoned consistently as China grows as a key global geopolitical player. The evidence in this paper shows that the emergence of China as a new type of bargain-hunter and flight to safety reactions both explain who the winners and losers are due to a particular GPR.

3. RESEARCH DESIGN

The research design of this study is broadly categorized into two steps. First, a large-N study is conducted to verify the existence, strength and directionality of the relationship between GPRs and FDI inflows, thus narrowing down the number of valid hypotheses. Second, a case study on one of the GPRs of interest – the Euro-crisis (which demonstrated the most interesting quantitative empirical results) – is conducted to test the remaining hypotheses.

3.1. Large-N study

3.1.1. Choosing Discrete, Regional Geopolitical Risks

Six salient geopolitical risks are examined in this study. The six discrete, regional GPRs are selected using the following definition of a GPR: a protracted, transnational event or phenomenon that relate to government policies, regulations, bilateral/multilateral relations and socio-political developments that have and/or threaten material impacts on investors' assets. They six cases are: (1) the Euro-crisis; (2) South Asian territorial dispute; (3) Latin American 21st century populism; (4) Persian Gulf tensions; (5) Taiwan sovereignty dispute; and (6) North Korea nuclear risk. These GPRs are chosen based on their frequency of appearance in the top risk reports by fund managers such as BlackRock and political risk consultancies such as Eurasia Group, thus capturing the geopolitical concerns that are most relevant to foreign investors. The six chosen cases cover a diverse range of geographies and represent the most salient GPR of each region.

(1) The Euro-crisis looks at the Eurozone debt crisis that started approximately in 2010, following the Great Recession. It is a case of geopolitical risk in which adverse economic consequences translated into political fragmentation, resulting in regionally widespread anti-integration sentiments and heightening regional tensions. The affected countries whose FDI inflows are studied are the EU-19 in the Eurozone, namely, Austria, Cypress, Belgium, Estonia, France, Finland, Germany, Greece, Ireland, Italy, Luxembourg, Latvia, Lithuania, the Netherlands, Malta, Portugal, Spain, Slovenia and Slovakia.

(2) The South Asian territorial dispute is primarily about sovereignty and border disputes between India, Pakistan and China. It is a case of classic geopolitics, but with substantial economic consequences. The latest border dispute between China and India in June 2020

resulted in New Delhi imposing FDI restrictions on Chinese capitals and technologies, barring investments with Chinese stakes and banning Chinese-owned apps. Countries studied as part this GPR include India, Pakistan, Sri Lanka and Bangladesh.

(3) Latin American 21st populism looks at the region-wide contagion of populism across Latin America from approximately 2008 onwards. The risk that populism presents often manifests as protectionist policies or unsustainable policies that set undeliverable expectations about the future of the economy (Dornbusch and Edwards 1990, 247; Kaufman and Stallings 1991, 15-16; Braun 2012, 30). Countries studied as part this GPR include Argentina, Brazil, Bolivia, Colombia, Chile, Ecuador, Mexico, Paraguay and Peru.

(4) Persian Gulf tensions are another recurring geopolitical risk that investors are concerned with due to its influence over oil export and oil price, a key commodity and an essential resource that practically all industries need. The Strait of Hormuz crisis from 2011-2012 illustrates the extent of influence that geopolitics in this region has over oil prices. Countries studied include Iran, Iraq, Bahrain, Kuwait, Saudi Arabia, the United Arab Emirates and Qatar.

(5) Taiwan's sovereignty dispute centres around the contested and extremely sensitive political status of the island. Beijing pursues a cross-strait reunification agenda with Taiwan, while the latter pursues an independence path and a separate political identity. Recent deterioration of U.S.-China ties spurred more intimate engagements between Washington and Taipei, provoking greater tensions in cross-strait ties. The only economy studied as part of this GPR is Taiwan.

(6) North Korea's nuclear ambition has antagonized bilateral relationship on the Korean peninsula and increased the chance of accidental conflict. Given that North Korea is a closed

economy that has rather limited interactions with foreign capital apart from Chinese investments, the North Korea nuclear risk is expected to chiefly affect FDI inflows into South Korea. The only economy studied as part of this GPR is South Korea.

All six GPRs identified are regional developments with rather localized political and economic impacts. This study intentionally excludes systemic geopolitical risks related to U.S.-China tensions and strategic rivalry due to difficulty in covering all aspects of bilateral tensions and measuring their widespread global impacts.

3.1.2. Generating GPR Indicators

The six GPRs identified above are my independent variables. While there is an authoritative geopolitical risk indicator constructed by Caldara and Iacoviello, this indicator is an aggregated indicator that does not differentiate each geopolitical risk by its geography or region of origin, assuming that each risk event has global instead of localized effects. As such, this indicator does not fully serve the purpose of my analysis which focuses on regional geopolitical risks in a non-aggregated fashion, i.e., assessing the impacts of several single regional geopolitical risks on the FDI inflows into countries in the affected region. A regional focus captures the geographical specificity of the impacts of geopolitical risks more accurately and reflects mainly localised instead of global impacts of geopolitical risks.

Furthermore, the indicator constructed by Caldara and Iacoviello limits geopolitical risk to “the risk associated with wars, terrorist acts, and tensions between states that affect the normal and peaceful course of international relations”, focusing on “geopolitical events in which power struggles over territories cannot be resolved peacefully” (Caldara and Iacoviello 2018, 2). I expand the definition of geopolitical risk beyond terrorism and armed conflicts, with a particular focus on the most salient geopolitical risks that major institutional investors are concerned with.

As such, to more accurately measure my GPRs of interest, I construct a novel indicator for each of them.

To measure the GPRs, I construct a novel indicator for each GPR of interest using the Bloomberg Terminal. Using the terminal's News Item Search function (NSE) and keywords or phrases that describe each GPR, while limiting the search scope to the GPR's region of contagion, I count the annual total number of news reports related to each GPR from 2005 to 2019. The terminal's NSE function allows the time unit of story count to be daily, weekly, monthly or quarterly. I choose to combine quarterly data into an annual story count, so that the GPR indicators maintain the same degree of freedom as annual FDI inflows. The number of news reports is then plotted against time using the News Trend function (NT).

This media-based measure is aligned with existing approaches that measure geopolitical risks. For example, the authoritative geopolitical risk index constructed by Caldara and Iacoviello is based on the content of news articles covering geopolitical tensions. I believe that media-based indicators are accurate proxies for the degree of geopolitical risk perceived by investors, who mostly depend on media reports to infer and estimate the magnitude of geopolitical risks. Given that six GPR indicators are chiefly reflections of media sentiments towards a geopolitical event, they do not differentiate between the perceived threat and the actual realization of a GPR.

3.1.3. Data and Modelling

The large-N analysis examines the relationship between each GPR and annual FDI inflows, controlling for gross domestic product (GDP), political risk (PR), the presence/absence of a widespread recession and the presence/absence of U.S.-China trade war. Annual FDI

inflows measured in terms of USD current prices is designated as the dependent variable for all the countries studied.¹

GDP is included as a control variable, since it is positively correlated with FDI inflows – the larger the market, the more investments it attracts.² The second control variable included is political risk. 12 political risk indicators were included: Government Stability, Socioeconomic Conditions, Investment Profile, Internal Conflict, External Conflict, Corruption, Military in Politics, Religion in Politics, Law & Order, Ethnic Tensions, Democratic Accountability and Bureaucracy Quality.³ Political risk is expected to be negatively related to the volume of FDI flows into a country. The third control variable considered is the presence of a widespread recession due to financial crisis. A recession is a systemic factor that is expected to reduce investments across the board, thus negatively associated with FDI inflows. The fourth control variable included in the model is the presence of U.S.-China trade war, which is also a systemic factor that is expected to dampen global economic outlook and have widespread depressing effects on global capital flows.

Interactive terms are used to capture that a GPR has varying effects across different countries in its region of contagion. Log is taken of FDI and GDP with an aim to stabilize variance and make symmetric distributions so that the respective coefficients are not influenced by extreme values. Thus, the master model is:

$$\text{Log_FDI}_{it} = \alpha + \beta_1 \text{GPR}_{it} + \beta_2 \text{Log_GDP}_{it} + \beta_3 \text{PR}_{it} + \beta_4 \text{Recession}_t + \beta_5 \text{TradeWar}_t + \beta_6 \text{GPR} * (\text{Country}_i) + \beta_7 \text{Country}_i$$

where,

- 1) *FDI* (DV) = Log of FDI measured in current USD; *it* = country *i*, year *t*.

¹ Annual FDI inflows data collected from UNCTAD.

² GDP data collected from World Bank.

³ Political risk data collected from Political Risk Services' International Country Risk Guide.

- 2) *GPR* (IV) = Log of discrete geopolitical risk story count; i = country i , year t .
- 3) *GDP* (CV) = Log of GDP measured in current USD; m refers to a specific country; i = country i , year t .
- 4) *PRk* (CV) = The Political Risk Component k of country i in year t (PR_{kit}), where i = country i , year t ; k refers to one of 12 different indices in the International Country Risk Guide: Government Stability, Socioeconomic Conditions, Investment Profile, Internal Conflict, External Conflict, Corruption, Military in Politics, Religion in Politics, Law & Order, Ethnic Tensions, Democratic Accountability and Bureaucracy Quality.
- 5) *Recession* (CV) = dummy variable to indicate the presence of systemic recession due to significant financial crisis, such as the Great Recession (2007-2009).
- 6) *TradeWar* (CV) = dummy variable to indicate the presence of U.S.-China trade war, which is considered a systemic variable that could negatively affect overall foreign investments.
- 7) *GPR*(Country_i)* (CV) = Interaction between a GPR and a particular country in the affected region; i = country i . A statistically significant and negative β_6 of a particular country supports the hypothesis that GPR reduces the FDI inflows of that country.
- 8) *Country* (CV) = A dummy variable of every country of interest in the region facing an identified geopolitical risk; i = country i .

Step 2 of the model analyses the relationship between the GPR indicator and a specific country. With the *Country* dummy variable, a subset data is created for every country from the master data. The subset data contains only the data of one country. Thus, the subsequent model is:

$$\text{Log_FDI}_t = \alpha + \beta_1 \text{GPR}_t + \beta_2 \text{Log_GDP}_t + \beta_3 \text{PRk}_t + \beta_4 \text{Recession}_t + \beta_5 \text{TradeWar}_t + \beta_6 \text{GPR}^*(\text{Country})$$

4. EMPIRICAL RESULTS AND DISCUSSION

4.1. Eurozone Crisis

Table 1 presents the coefficients, β_6 , indicating the relationship between the Euro-crisis GPR indicator and FDI inflows into Eurozone countries. FDI inflows into the following countries demonstrate a negative relationship with the GPR indicator: Malta, Estonia, Lithuania, Slovenia, Cyprus, Luxembourg, Latvia, Greece, Slovakia, Austria, Spain and Portugal. The same relationship is positive for Germany, Netherlands, Italy and France. The coefficients of Belgium, Finland and Ireland did not obtain statistical significance.

[Insert Table 1 here]

The empirical results demonstrate a more nuanced reality than the hypothesis. Instead of showing a negative relationship between regional GPR indicators and all countries affected in the region, the results demonstrate that the Eurozone Crisis GPR has a negative relationship with FDI inflows of some countries, and a positive relationship with others. The mixed directionality of the relationship between GPR and FDI amongst Eurozone countries suggests that there could be country-specific characteristics that determine how and the extent to which GPR influences FDI. The strength of the positive relationships is weaker in comparison with the strength of most negative relationships.

4.2. South Asian Territorial Dispute

The relationship between FDI and the South Asian Territorial Dispute GPR indicator also demonstrates mixed directionality. India has a negative coefficient of 1.015; the positive coefficients of Pakistan and Sri Lanka are 0.5943 and 0.5089 respectively. The estimates of Bangladesh did not obtain statistical significance.

[Insert Table 2 here]

4.3. Persian Gulf Tensions

The Persian Gulf Tension GPR indicator shows a similar trend. Both Iran and Iraq demonstrate a negative relationship with the GPR indicator, while a positive relationship is observed for Qatar and the United Arab Emirates. The estimates of Bahrain, Kuwait and Saudi Arabia did not achieve statistical significance.

[Insert Table 3 here]

The strengths of both positive and negative relationships here are comparable, but weaker in comparison to that of countries affected by the Euro-crisis. Weaker coefficients here suggest that different GPRs have varying degrees of influence on FDI in its region of influence.

4.4. Latin America 21st Century Populism

The LatAm 21st Century Populism GPR indicator demonstrates a negative relationship with Brazil, and a positive relationship with Colombia, Ecuador and Chile. The strengths of both positive and negative relationships are comparable, with the negative coefficient being 2.600 and the positive coefficients ranging between 4.690 to 6.649. The estimates of Argentina, Bolivia, Mexico, Paraguay and Peru did not obtain statistical significance.

[Insert Table 4 here]

4.5. Taiwan Sovereignty Dispute

The Taiwan Sovereignty Dispute GPR indicator is tested against only the FDI inflows of Taiwan. β_6 here is 0.0016708, demonstrating a relatively weak but positive correlation between the FDI inflows and the GPR indicator.

[Insert Table 5 here]

4.6. North Korea Nuclear Risk

The North Korea Nuclear Risk is tested against only the FDI inflows of South Korea, given that North Korea does not have an open economy and there is limited data available. β_6 here did not achieve statistical significance.

[Insert Table 6 here]

4.7. Discussion

The results of four out of six GPRs in the large-N analysis point to a common trend – a discrete, regional GPR has inconsistent impacts on the countries in the affected region. The mixed directionality of β_6 suggests that some countries experience an increase in FDI inflows as a GPR manifests, while others experience a decrease in FDI inflows. This common trend suggests that a regional GPR produces both winners and losers in the region. Table 7 summarizes both winners and losers from each GPR. It is important to note that in the two GPRs (Taiwan Sovereignty Dispute and North Korea Nuclear Crisis) where the same trend does not exist, the absence of the trend is due to insufficient number of countries tested in each GPR, as both engage with only one country in the region in this study.

Overall, the large-N analysis shows that there is a relationship between regional GPRs and FDI inflows, thus rejecting H0 which maintains that there is no relationship. Furthermore, the mixed directionality of the relationship shows that a regional GPR does not negatively affect all countries in the region, thus rejecting H1 which maintains that there is a consistent negative relationship across all countries in the region.

TABLE 7 Summary of the winners and losers from each regional geopolitical risk

<i>Geopolitical Risk</i>	<i>Winners (positive β_6)</i>	<i>Losers (negative β_6)</i>
Euro-crisis	Germany, Netherlands, Italy, France	Malta, Estonia, Lithuania, Slovenia, Cyprus, Luxembourg, Latvia, Greece, Slovakia, Austria, Spain, Portugal
South Asian Territorial Dispute	Pakistan, Sri Lanka,	India
Persian Gulf Tension	United Arab Emirates, Qatar	Iran, Iraq
LatAm 21 st Century Populism	Chile, Colombia, Ecuador	Brazil
Taiwan Sovereignty Dispute	Taiwan	-
North Korea Nuclear Risk	-	-

4.8. Limitations

The quantitative results of this study are obtained under 2 major limitations. First, the accuracy of the GPR indicators based on story count is limited due to the short life span of some GPRs. For example, the Euro-crisis GPR indicator has a value of 0 from year 2005 to 2009 since it only became a salient geopolitical issue from approximately 2010 onward, effectively limiting the time span of the analysis to ten years (2010-2019). Second, the dependent variable is the total volume of FDI inflows into a country; this measurement of FDI is not nuanced enough capture how geopolitical risks influence different types of FDI (i.e., horizontal versus vertical FDI; FDI in different sectors).

5. CASE STUDY – THE EURO-CRISIS GPR & FDI INFLOWS

Given that four out of the six GPR cases tested above demonstrate a similar trend of generating both winners and losers, any one of the four cases with such a trend would be a representative case study. The Euro-crisis is chosen as the case study for two reasons: (1) a common monetary union controls the regulatory landscape across the Eurozone and macroeconomic factors such as monetary policy and currency; (2) the Euro-crisis includes the largest number of affected countries, which allow more room for data collection and analysis.

Focusing on the most prominent winners and losers of Euro-crisis GPR, this section tests H2 and H3 by examining the extent to which flight to safety reactions amongst foreign investors (H2) and the entry of Chinese investors as a new cluster of bargain hunters in Europe (H3) contributed to the emergence of Germany, France, the Netherlands and Italy as the winners of the Euro-crisis.

In this case study, I begin by providing a background context of the Euro-crisis GPR, Next, I test the flight-to-safety hypothesis with two key determinants of inward FDI – infrastructure and agglomeration externalities, thus explaining the winning status of Germany, France, the Netherlands and Italy. Finally, by examining the impact of Chinese FDIs in these four countries, I explain how Chinese investors' bargain hunting behaviours cemented their status as the winners of the Euro-crisis GPR.

5.1. Context of the Euro-Crisis

The European Union is generally recognized as an advanced regional economy with reliable infrastructures, robust regulatory standards and stable growth rates that steadily attract considerable FDI. While core EU economies such as Germany, France and the Netherlands are traditionally popular amongst foreign investors primarily for their gravitational pull as core EU economies, peripheral EU economies, too, saw significant increase in their respect FDI inflows since the Euro came into full force in 2002 (Sondermann and Vansteenkiste 2019, 5). Steady FDI inflows into the Eurozone reached an unprecedentedly high volume at US\$1,316,281 million in 2007 (OECD data bank).

In the wake of the Great Recession that first ensued as a bursting housing bubble and a mortgage crisis in the United States between 2007 and 2008, the banking system crisis and severe sovereign debt crisis in several EU Member States gradually morphed into what is known as the Euro-crisis, which saw a period of high government debt, collapse of financial institutions

and steep plunge of financial activities. The EU saw a staggering FDI growth rate of -33.7% between 2007 and 2008, and a consistent, stark decrease of FDI inflows between 2008 and 2012 (UNCTAD 2019, 6). The depressing effects of the Euro-crisis GPR on FDI inflows, as proven by the large-N analysis above, were not uniform across all Eurozone countries. Evidence suggests there were both winners and losers in terms of their respective volume of FDI inflows.

5.2. Unpacking FDI inflows: Who are the winners and losers?

Results of my large-N analysis mostly corroborates with what existing literatures suggests regarding economic performance of Eurozone countries during the Euro-crisis, with the exception of Italy. Much literature on the Euro-crisis suggests that the hardest hit countries were part of the PIIGS group – Portugal, Italy, Ireland, Greece and Spain – an acronym that became synonymous with the poorly performing EU periphery which was later forced into structural adjustments and austerity in order to address their challenges with public debt (Petry 2013, 5-10; Brazys and Hardiman 2015, 23-24; Brazys and Regan 2017, 412). Nonetheless, it is crucial to note that poor macroeconomic fundamentals did not translate into plunging FDI inflows in all PIIGS countries. Italy is the exception according to my empirical findings as it saw an increase of FDI inflows despite the Euro-crisis and being part of the hardest-hit PIIGS group.

Other winners include Germany, the Netherlands and France, all three of which have traditionally been top FDI destinations. Historical data across various bodies of statistics show that all three countries have been the top 15 recipients of FDI consistently from 2010 to 2019, despite the Euro-crisis peaking from 2010 to 2012.⁴

Comparing the observation suggested by literature, official data and my empirical results, I ask the following questions. What explains foreign investors' preference for Germany, France,

⁴ Various data collected from UNCTAD, OECD.

the Netherlands and Italy in the wake of the Great Recession and the Euro-crisis GPR? Why was Italy a winner of FDI inflows despite being part of the hard-hit PIIGS group?

In non-EU competitive markets, countries can entice foreign investors with regulatory incentives, raising the problem of ‘a race to the bottom’. Through regulatory changes such as deregulation of the business environment, fiscal incentives such as cutting corporate tax rate, and financial incentives such as grants and loans, governments compete for foreign capital. The same type of incentives cannot explain the different amount of FDI inflows in EU countries as EU membership limits the strategies available to compete for foreign investment (Lindeboom and Meunier 2020, 2). Under the Lisbon Treaty signed in 2007, competence for FDI is classified as a Union-wide directive. Furthermore, given that the EU-19 are part of the Eurozone and share a common interest rate, interest rate is not a FDI determinant in this case. Thus, individual country’s investment incentives and interest rate are not valid reasons that explain why there is a distinction between winners and losers. I now turn to flight-to-safety reactions and the role of Chinese investors to explain why some Eurozone countries saw an increase in inward FDI while others experienced a reduction during the Euro-crisis.

5.3.Flight to safety

The flight-to-safety reaction, or flight-to-quality, is commonly applied to a specific type of asset (e.g., gold, Swiss Franc) in the equity, bond and currency markets as investors seek to reduce holdings of risky assets in favor of safe and more liquid claims during periods of economic downturn and uncertainty (Baele et al. 2013, 1). The same logic can be extrapolated to FDI investments in countries that are considered as ‘safe haven’ destinations in times of widespread and heightened risks. In this section, I address how flight to safety reactions as a result of the Euro-crisis GPR benefitted the four winners through the following two factors: (1)

the attractiveness of physical infrastructure, and (2) clustering effect in a safety zone with agglomeration externalities.

5.3.1. Physical Infrastructure

Much literature suggests that the quality of physical infrastructure proves to be a crucial determinant of the volume of FDI inflows. Infrastructure indicators such as fixed telephone, fixed broadband, mobile cellular, railways, air transport and liner shipping connectivity have been proven to directly influence the volume of FDI inflows into a country (Koyuncu and Unver 2016, 814). In addition, higher quality of physical infrastructure enhances the competitiveness of a national economy through cost reduction in attracting FDI, since investors are not required to build basic infrastructure from scratch to start on new projects (Walsh and Yu 2010, 14). In sum, a country with more and better infrastructure would likely attract more FDI.

Applying this logic to FDI inflows in Eurozone countries in the wake of the Euro-crisis, it does shed some light on why Germany, France, the Netherlands and Italy are on the winning side of FDI inflows. According to the World Bank's data, in 2010 Germany ranked 1st place in a global infrastructure ranking, followed by the Netherlands in the 2nd place. France was ranked in the 14th place and Italy took the 20th place. The ranking remained roughly consistent in 2012, with Germany being the 1st, the Netherlands being the 3rd, France being the 14th and Italy being the 23rd.

[Insert Table 8.1 and Table 8.2 here]

In addition to the fact that the four winners have better and more infrastructure than the rest of their Eurozone counterparts, it is critical to surface that countries part of the PIIGS group were compelled to undergo austerity measures which imply long-term infrastructure decay. Austerity, in broad terms, is a set of economics policies that aim to shrink government deficits by

reducing government spending and/or increasing tax (Traynor and Allen 2010). Reduced government spending implies that there is less government-led basic infrastructure projects in the long-run, thereby surfacing the possibility that the austerity measures in PIIGS countries could have long-term implications on their basic infrastructure necessary to attract FDI. In Greece, Petrova and Prodromidou (Petrova and Prodromidou 2019, 1381) found that the situation of growing numbers of Greek households being unable to secure adequate levels of energy services in their homes can largely be attributed to Greece's austerity measures following the Great Recession and the Euro-crisis. While not immediately related to the countries of interest here, data suggest that nearly two years after an IMF-backed austerity plan was implemented in Egypt in 2016, FDI in Egypt's non-oil economy fell to its lowest level in the second quarter of 2018 (Reuters 2018), thus reinforcing the conjecture that austerity policies could have adverse impacts on FDI inflows. Though Italy is part of the PIIGS group that underwent austerity as well, I outline below further reasons that explain Italy's relatively stronger FDI standing.

5.3.2. Clustering Effect & Agglomeration Externalities

The second dimension of the flight-to-safety argument hinges on the theory of regional agglomeration, in which a region of established industrial ecosystem provides a relatively more familiar and stable market that encourages FDI inflows in times of crises. Economist Paul Krugman first introduced the concept of "geographical economics" in a 1991 essay. According to Krugman, countries benefit from regional agglomeration as much as from the specialization of comparative advantages derived from national factor endowments (Krugman 1991, 5-6). To this end, Krugman made a novel argument about regional economic clusters which not only provide the advantages of a scale economy, but also create regional specializations by industry at reduce transaction costs (Krugman 1991, 10). Building on Krugman's idea of regional clustering, I

surface the theoretical explanations from various bodies of literature to rationalize why FDI inflows flocked to Germany, France, the Netherlands and Italy during the Euro-crisis.

The most immediate positive outcome of regional agglomeration is the formation of an ecosystem comprising a few specific types of industries that enhance firms' profits. In an IMF working paper, Yehoue (Yehoue 2005, 5) argues that the combination of establishing a cluster and implementing policy reforms is a key driver for attracting FDI, as the emergence of clusters would render investments so profitable that investors can even afford to tolerate more policy-induced distortions than otherwise. Apart from profits, the international business literature on the determinants of multinational corporations' location choice argues that there can be knowledge externalities when the proximity of research facilities or production plants in a cluster generates regionally bound knowledge spillovers, thereby attracting FDI projects motivated by knowledge acquisition (Driffield et al. 2016, 2-3). Finally, literature on technology transfer similarly suggests that there exists a positive causality between geographical industry clusters and FDI inflows as investors are drawn to the technological externalities of clusters (Thompson 2002, 886; Propriis and Driffield 2005, 287).

Many regions and cities in Europe were found to have devised policies that support the development of clusters. The European Commission (EC) and the Organization for Economic Co-operation and Development (OECD) have also initiated projects to promote the creation of regional clusters (OECD 2000, 13). The OECD reported in 2000 that clustering existed in most prosperous regions such as North-Central Italy, Baden-Württemberg and Bavaria in Southern Germany and other OECD regions (OECD 2000, 8). Other European countries such as the Netherlands and Denmark have also adopted a cluster approach to attract inward FDI. In the case of Italy, Papalia and Bertarelli (Papalia and Bertarelli 2009, 163) in fact found that

agglomeration in sectoral and regional specificities are indeed relevant in attracting inward FDI into Italy.

To further confirm that the clustering effect did contribute to the FDI inflows recovery in leading European economies during and in the post-Euro-crisis years, a 2018 report by the European Spatial Planning Observation Network (ESPON) ranks the strength of industry clusters as the top driver of FDI inflows into European markets with pre-existing clusters during the recovery years from the Euro-crisis (ESPON 2018, 14).

In sum, this section presents physical infrastructure and the regional clustering as two critical determinants in flight-to-safety destinations, thus partially explaining why Germany, France, the Netherlands and Italy emerged as the winners of the Euro-crisis GPR in terms of their respective amount of FDI inflows. Future research could leverage this finding using quantitative method to analyze infrastructure and regional clusters as two additional variables to compare their strengths of relationship with FDI with that between geopolitical risks and FDI. Due to time constraint, this time to unable to commit to a large-N analysis incorporating infrastructure and regional clusters.

Additionally, it is important to note that the mechanisms presented as part of the flight-to-safety reactions are not exhaustive. There remain other mechanisms such as the size effect which contributes substantively to the flight-to-safety reaction. Bertrand Badré, former Managing Director of the World Bank Group and Chief Financial Officer, pointed out that the relative success of Italy throughout the Euro-crisis is an outcome of the belief that Italy is too big to fail (TBTF) (Tiberghien, 2019). Given that there is limited literature on the TBTF argument currently, this is an area of research that deserves the attention of future studies.

5.4. New bargain hunter – the entry of China as a new foreign investor in Europe

In a 1998 essay titled “Fire Sale FDI”, Paul Krugman asks “Why should direct investment surge at a time when foreign capital in general is fleeing a country? What does this tell us about the nature of such crises? (Krugman 1998, 44)” Krugman raised this question in direct response to the 1997 Asian Financial Crisis (AFC), which saw widespread, rapid capital exodus from emerging Asian markets following speculative attacks of the Thai baht. Despite the contagion of the AFC raising the specter of a global economic meltdown, there was a surge of acquisitions by foreign investors in South Korea. The South Korean won’s devaluation due to the AFC provided considerable bargains for investors. Apart from institutional investors and corporations, the flurry of foreign acquisition of South Korean assets also attracted many individual foreign investors, with Michael Jackson reportedly negotiated to acquire a ski resort from its owner, a bankrupt Korean underwear maker (Krugman 1998, 43-57). A similar type of bargain hunting can be expected for other types of crises, including a GPR such as the Euro-crisis but involving a different group of investors that have not traditionally dominated the FDI market. Chinese investors are central to the discussion of FDI bargain hunting during the Euro-crisis.

Since the announcement and implementation of the “going out” strategy in 2000, Chinese outward FDI (OFDI) rapidly flocked to major foreign markets, expanding to more than US\$10 billion in volume in 2005 (Wang 2011, 5). Despite the Great Recession from 2008 to 2009, Chinese OFDI increased during the same period. In 2011 and 2012 – the peak of the Euro-crisis – the EU became one of the largest recipients of Chinese OFDI as Chinese investors continued to dominate key markets across the world (Rhodium Group 2014, 7). In 2014, Chinese OFDI in the EU represented nearly 40 per cent of its total OFDI volume (Andreosso-O’Callaghan 2016, 144).

Between 2008 and 2016, Chinese FDI in the EU burgeoned nearly 50 times, from less than \$840 million to \$42 billion (Rhodium Group 2018). Though China proved to be not just a crisis buyer as Chinese OFDI continued to burgeon in Europe beyond the crisis years as shown in Table 9. The role of the Chinese investors as bargain hunters during the Euro-crisis is central to explaining the increase of inward FDI in Germany, France, the Netherlands and Italy.

[Insert Table 9 here]

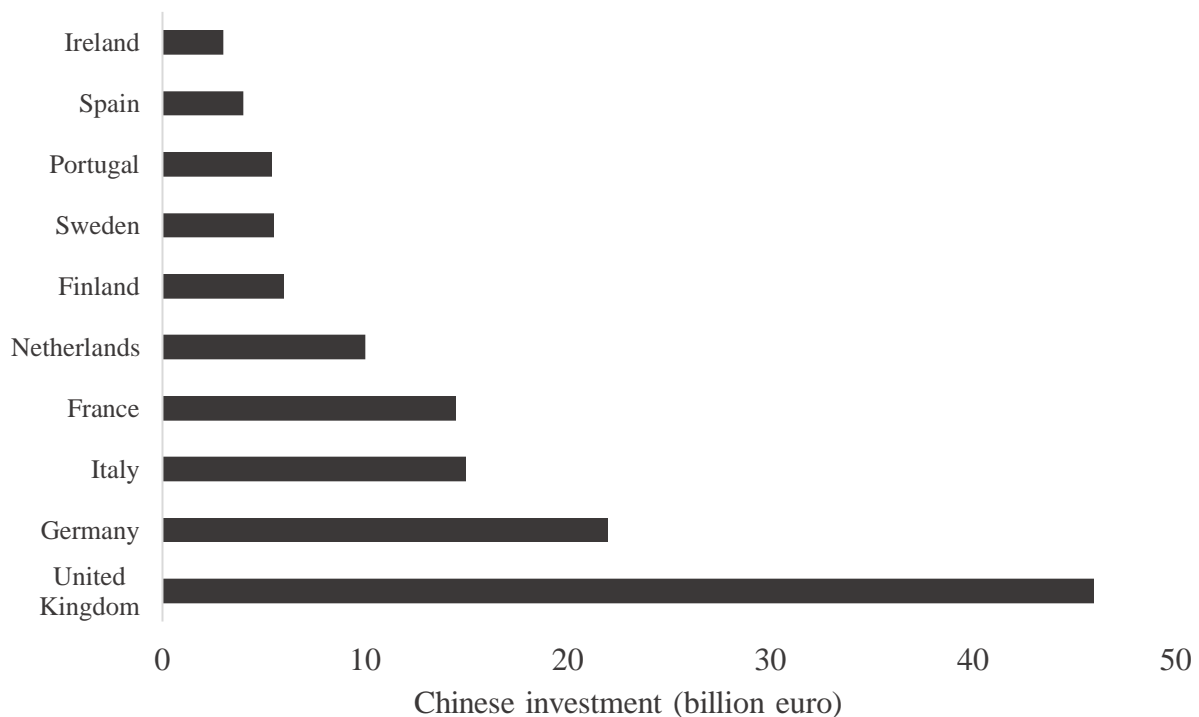
Between developed, core EU economies and the EU periphery, Chinese FDI mostly concentrated in bigger, established markets as Chinese investors were motivated by the acquisition of Western technology and know-how, mainly seeking after opportunities in energy distribution, high technology, mergers and acquisitions for brand names, and infrastructure. In particular, Chinese OFDI concentrated in core economies such as Germany, France and the UK (Andreosso-O'Callaghan 2016, 146). Germany, Italy and the UK proved to be the three largest recipients of Chinese OFDI in Europe in 2016 (Le Corre 2018, 168). In airport infrastructure alone, China took 49.9% of France's Toulouse Airport in 2014 and 82.5% of Germany Hahn airport near Frankfurt in the same year (Le Corre 2018, 162). A few examples of high-profile investments in the industrial sector involving Chinese investors include the Zoomlion-Cifa in Italy, Sany-Putzmerister in Germany and DongfengPSA Peugeot-Citroën in France (Le Corre and Sepulchre 2020, 30-38). Table 10 shows that the distribution of Chinese OFDI in the EU between 2005 to the first half of 2015 mainly concentrated in Germany, France, the Netherlands, Italy and the UK.

[Insert Table 10 here]

Expanding the timeline to a longer period from 2000 to 2018, Rhodium Group's data in Figure 1 show that Chinese investments from 2000 to 2018 mostly flocked to the UK, Germany,

Italy, France and the Netherlands, confirming that these five countries have consistently benefitted from Chinese OFDI even as the Euro-crisis developed.

FIGURE 1 Chinese investment by top 10 EU countries, 2000-2018



Source: Rhodium Group

Though intra-European direct investment and OFDI from the United States generally dominate the share of FDI inflows in major European economies, Chinese FDI proved to be a crucial source that FDI inflows in Germany, France, the Netherlands and Italy during a period of global FDI retrenchment.

5.5. Evaluating Clustering Effect and Chinese FDI Holistically

Each of the winning countries possesses clusters that are of value and strategic interest to Chinese investors. In Italy, clusters tend to specialize in sectors such as automotive, textile and clothing, machinery and home appliances, all of which have been proven to be attractors for Chinese investors (Pieteobelli et al. 2010, 3-4). German clusters center around energy technology,

automotive, industrial machinery and information technology. Rhodium Group (Rhodium Group 2020, 16) reports that Germany was the top recipient of Chinese investment in automotive and industrial machinery in 2014. Similarly, in the Netherlands where clusters are focused on high-tech sectors, the largest Chinese FDI here concentrated in the same sectors (Clingendael Policy Brief 2017, 1). In the case of France, clusters that specialize in communication and information technology, as well as industrial machinery have also benefited significantly from Chinese FDI (Magdalena, and Kahancová 2017, 99-119). Table 11 below shows Chinese investments in top destination sectors and top destination countries from 2003 to 2011. When evaluated together, it is evident that the clustering effect and the role of Chinese investors have worked in tandem to benefit Germany, France, the Netherlands and Italy.

TABLE 11 Chinese investments in top destination sectors and top destination countries (number of deals and %) (2003-2011)

<i>Sector</i>	<i>France</i>	<i>Germany</i>	<i>Italy</i>	<i>Netherlands</i>	<i>Spain</i>	<i>UK</i>	<i>Total</i>
Automotive	0 (0.0)	19 (12.7)	8 (29.6)	3 (21.4)	0 (0.0)	16 (34.8)	46 (16.7)
Communications	12 (48.0)	12 (11.4)	8 (29.6)	4 (28.6)	5 (35.7)	16 (34.8)	62 (22.6)
Electronics	4 (16.0)	45 (30.3)	9 (33.3)	4 (28.6)	9 (64.3)	5 (10.9)	76 (27.6)
Machinery & Engines	9 (36.0)	68 (45.6)	2 (7.5)	3 (21.4)	0 (0.0)	9 (19.5)	91 (33.1)
Total	25 (100)	149 (100)	27 (100)	14 (100)	14 (100)	46 (100)	275 (100)

Sources: fDi Markets and BvD Zephyr.

In sum, the case study on the Euro-crisis presents supporting evidence that verifies H2 and H3. Both flight-to-safety reactions and the role of China as a class of new bargain hunter (1) demonstrate that the effects of the Euro-crisis GPR on country-specific FDI inflows are not uniform across the Eurozone region, and (2) illustrate the reasons behind the emergence of Germany, France, the Netherlands and Italy as the winners of the Euro-crisis GPR.

5.6. Generalizability of Key Findings

The key findings of this study are generalizable patterns that can be applied elsewhere. Flight-to-safety is a mechanism that can be observed in four out of six GPRs studied in the large-N analysis. Apart from the Euro-crisis, three other GPRs (South Asian Territorial Dispute, Persian Gulf Tensions, LatAm 21st Century Populism) have also shown that there are winners in each region that benefit from flight-to-safety reactions. Geopolitical risks essentially highlight the stability of these regional anchors.

Furthermore, Chinese investors' interests are not limited to Europe as they extend their financial footprint globally through the Belt and Road Initiative and the Asian Infrastructure Investment Bank. Countries in other regions with assets that match Chinese investors' demand will also benefit from China's rise as a global FDI exporter. Beyond strategic sectors related to advanced technologies, Chinese investors have also shown strong interest in acquiring strategic locations such as ports (Karreman et al. 2016, 154-55). Coastal countries in regions beyond Europe can expect to benefit from China's burgeoning capital export capacity.

6. CONCLUSION

Focusing on the most prominent investor-identified GPRs, this study has shown consistently in both large-N analysis and the case study on Euro-crisis that there is a relationship with mixed directionalities between GPR and FDI inflows. Due to factors such as flight-to-safety reactions and the rise of China as a global FDI exporter, a GPR will positively affect FDI inflows in countries considered as regional safety destinations and/or favoured by Chinese investors. Table 12 summarizes the statuses of all hypotheses tested in this study.

TABLE 12 Summary of the statuses of all hypotheses tested

<i>Hypotheses</i>	<i>Status</i>
H0: A regional GPR has a negative relationship with the FDI inflows of all countries in the affected region.	Rejected
H1: A regional GPR has a negative relationship with the FDI inflows of all countries in the affected region.	Rejected
H2: The effects of a regional GPR on FDI inflows into countries are not consistent across the region; increases in a regional GRP will increase FDI inflows into the regional safe havens, while reducing FDI inflows in other economies of the same region.	Proven
H3: A regional GPR benefits countries with assets that are of strategic interest to Chinese investors, thus mediating any material, negative impacts of a GPR on FDI inflows into these countries.	Proven

The results and analyses of this study highlight the dynamic interactions between international, regional and domestic variables. A GPR creates an uncertain regional environment that underscores the domestic conditions needed to offset the negative impacts of such uncertainty. Varying domestic conditions, such as the quality of basic infrastructure, the existence of specialized clusters and the size of the economy, are determinants of regional winners and losers against the backdrop of a common regional geopolitical challenge.

As the global order enters a protracted period of norm contestation and strategic rivalry that turbocharges geopolitical tensions, the increasing quantity of geopolitical risks will not necessarily translate to FDI retrenchment across the board. This study has proven that regional anchors that qualifies as safety destinations and/or favoured by Chinese investors will likely gain from widespread regional geopolitical tensions. Contrary to the alarmist, conventional assumption in IPE that international tensions are negatively related to economic outcomes, the dynamic interactions between crosscurrents at a juncture of historical global change render such traditional economic expectations obsolete, as new political actors and economic forces introduce new patterns and different behaviours. Different from the past few decades when the

patterns in a unipolar international system propped up mostly by the United States alone were stable and predictable, new forces have begun reinventing such patterns. This study serves to better understand the novel drivers of economic development in this new era of transformation and disruption.

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Appendix

TABLE 1 Summary of results of country-specific estimates of Eurozone Crisis GPR indicators on FDI

Results of Euro-zone Crisis		
*** indicates significance at <1% significance level ** indicates significance at 1% significance level * indicates significance at 5% significance level		
GPR Indicator	Significant β_6^1	Insignificant β_6
Euro-zone crisis	<u>Negative coefficients:</u> Malta: -16.95** Estonia: -16.47* Lithuania: -15.44* Slovenia: -15.23** Cyprus: -14.19* Luxembourg: -13.89* Latvia: -13.21* Greece: -7.338* Slovakia: -0.002092* Austria: -0.0006803* Spain: -0.00004897* Portugal: -0.00003286* <u>Positive coefficients:</u> Germany: 0.08887* Netherlands: 0.001524* Italy: 0.001372* France: 0.0002183*	Belgium: -0.00001281 Finland: -0.001144 Ireland: 0.0002285

¹Coefficients are ranked according to the strength of the relationship.

TABLE 2 Summary of results of country-specific estimates of South Asian Territorial Dispute GPR indicators on FDI

Results of South Asian Territorial Dispute		
*** indicates significance at <1% significance level ** indicates significance at 1% significance level * indicates significance at 5% significance level		
GPR Indicator	Significant β_6	Insignificant β_6
South Asian Territorial Dispute	<u>Negative coefficients:</u> India: -1.015***	Bangladesh: -0.001920

	<u>Positive coefficients:</u> Pakistan: 0.5943** Sri Lanka: 0.5089*	
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TABLE 3 Summary of results of country-specific estimates of Persian Gulf Tension GPR indicators on FDI

Results of Persian Gulf Tensions		
*** indicates significance at <1% significance level ** indicates significance at 1% significance level * indicates significance at 5% significance level		
GPR Indicator	Significant β_6	Insignificant β_6
Persian Gulf Tensions	<u>Negative coefficients:</u> Iran: -0.0003563* Iraq: -0.00004825* <u>Positive coefficients:</u> UAE: 0.0002715* QAT: 0.0001756*	Bahrain: -0.0001846 Kuwait: -0.0002427 Saudi Arabia: 0.00009568

TABLE 4 Summary of results of country-specific estimates of Latin America 21st Century Populism GPR indicators on FDI

Results of Latin America 21st Century Populism		
*** indicates significance at <1% significance level ** indicates significance at 1% significance level * indicates significance at 5% significance level		
GPR Indicator	Significant β_6	Insignificant β_6
LatAm 21 st Century Populism	<u>Negative coefficients:</u> Brazil: -2.600*** <u>Positive coefficients:</u> Colombia: 6.649* Ecuador: 4.886* Chile: 4.690*	Argentina: 1.422 Bolivia: 0.7457 Mexico: -0.0002874 Paraguay: 4.521 Peru: -0.0003856

TABLE 5 Summary of results of country-specific estimates of Taiwan Sovereignty Dispute GPR indicators on FDI

Results of Taiwan Sovereignty Dispute		
*** indicates significance at <1% significance level ** indicates significance at 1% significance level * indicates significance at 5% significance level		
GPR Indicator	Significant β_6	Insignificant β_6
Taiwan Sovereign Dispute	Taiwan: 0.0016708*	-

TABLE 6 Summary of results of country-specific estimates of North Korea Nuclear Risk indicators on FDI

Results of North Korea Nuclear Risk		
*** indicates significance at <1% significance level ** indicates significance at 1% significance level * indicates significance at 5% significance level		
GPR Indicator	Significant β_6	Insignificant β_6
North Korea Nuclear Risk	-	South Korea: -2.7646

TABLE 7 Summary of the winners and losers from each regional geopolitical risk

<i>Geopolitical Risk</i>	<i>Winners (positive β_6)</i>	<i>Losers (negative β_6)</i>
Euro-crisis	Germany, Netherlands, Italy, France	Malta, Estonia, Lithuania, Slovenia, Cyprus, Luxembourg, Latvia, Greece, Slovakia, Austria, Spain, Portugal
South Asian Territorial Dispute	Pakistan, Sri Lanka,	India
Persian Gulf Tension	United Arab Emirates, Qatar	Iran, Iraq
LatAm 21 st Century Populism	Chile, Colombia, Ecuador	Brazil
Taiwan Sovereignty Dispute	Taiwan	-
North Korea Nuclear Risk	-	-

TABLE 8.1 Infrastructure ranking and score of countries in 2010

<i>Country</i>	<i>Year</i>	<i>Infrastructure Ranking</i>	<i>Infrastructure Score</i>
Germany	2010	1	4.34
Netherlands	2010	2	4.25
Norway	2010	3	4.22
Singapore	2010	4	4.22
Japan	2010	5	4.19
Switzerland	2010	6	4.17
United States	2010	7	4.15
Finland	2010	8	4.08
Luxembourg	2010	9	4.06
Sweden	2010	10	4.03
Canada	2010	11	4.03
Belgium	2010	12	4.01
Hong Kong, China	2010	13	4
France	2010	14	4
Denmark	2010	15	3.99
United Kingdom	2010	16	3.95
United Arab Emirates	2010	17	3.81
Australia	2010	18	3.78
Ireland	2010	19	3.76
Italy	2010	20	3.72

TABLE 8.2 Infrastructure ranking and score of countries in 2012

<i>Country</i>	<i>Year</i>	<i>Infrastructure Ranking</i>	<i>Infrastructure Score</i>
Germany	2012	1	4.26
Singapore	2012	2	4.15
Netherlands	2012	3	4.15
United States	2012	4	4.14
Sweden	2012	5	4.13
Finland	2012	6	4.12
Hong Kong, China	2012	7	4.12
Belgium	2012	8	4.12
Japan	2012	9	4.11
Denmark	2012	10	4.07
Austria	2012	11	4.05
Canada	2012	12	3.99
Switzerland	2012	13	3.98
France	2012	14	3.96

United Kingdom	2012	15	3.95
Norway	2012	16	3.86
United Arab Emirates	2012	17	3.84
Australia	2012	18	3.83
South Africa	2012	19	3.79
Luxembourg	2012	20	3.79
Taiwan	2012	21	3.77
Korea, Rep.	2012	22	3.74
Italy	2012	23	3.74

TBALE 9 China's FDI in EU-27 by Country, 2000-2011

	<i>Country</i>	<i>Investment Value (USD million)</i>	<i>Rank Compared to FDI from the Rest of the World</i>	<i>Total Number of Deals</i>
1	France	5,722	+2	70
2	United Kingdom	3,684	-1	95
3	Germany	2,543	-1	146
4	Sweden	2,251	+4	20
5	Hungary	2,065	+14	18
6	Netherlands	1,164	0	47
7	Belgium	847	-3	15
8	Greece	714	+14	5
9	Italy	554	-2	47
10	Austria	391	+1	11
11	Romania	299	+4	14
12	Poland	190	-3	16
13	Spain	187	-8	23
14	Czech Rep.	76	0	11
15	Finland	48	+1	5
16	Portugal	47	+1	5
17	Bulgaria	47	+1	7
18	Luxembourg	46	-5	2
19	Ireland	44	-9	7
20	Denmark	30	-7	7
21	Latvia	3.8	+5	1
22	Cyprus	3	-1	1
23	Estonia	0	-	0
24	Lithuania	0	-	0
25	Malta	0	-	0
26	Slovakia	0	-	0
27	Slovenia	0	-	0
		20,957	-	573

Sources: Rhodium Group, UNCTAD

TABLE 10 Chinese direct investment stock in Europe (2005-first half of 2015, million euro)

	<i>Agriculture</i>	<i>Energy</i>	<i>Finance</i>	<i>Real estate</i>	<i>Tech-nology</i>	<i>Trans-port</i>	<i>Other</i>	<i>Sum</i>
Austria	-	-	-	-	-	101	-	101
Belgium	-	202	233	-	-	-	-	436
Britain	2,669	2,313	519	-	-	1,351	1,089	10,155
France	382	2,694	-	-	233	1,370	2,241	6,921
Germany	-	397	105	1,655	481	783	93	3,516
Greece	-	-	-	-	-	-	86	86
Hungary	-	-	-	-	-	-	1,193	1,193
Italy	-	2,303	-	357	-	6,261	-	8,921
Luxembourg	-	-	-	-	-	166	-	166
Netherlands	941	-	1334	-	204	296	1,089	3,863
Poland	-	727	-	-	-	78	-	804
Portugal	-	3,289	1,024	-	444	-	-	4,827
Spain	-	-	-	-	-	-	-	233
Sum	3,992	12,021	3,716	4,126	1,362	10,450	6,100	41,222

Sources: American Enterprise Institute and Heritage Foundation (2015), China Global Investment Tracker.

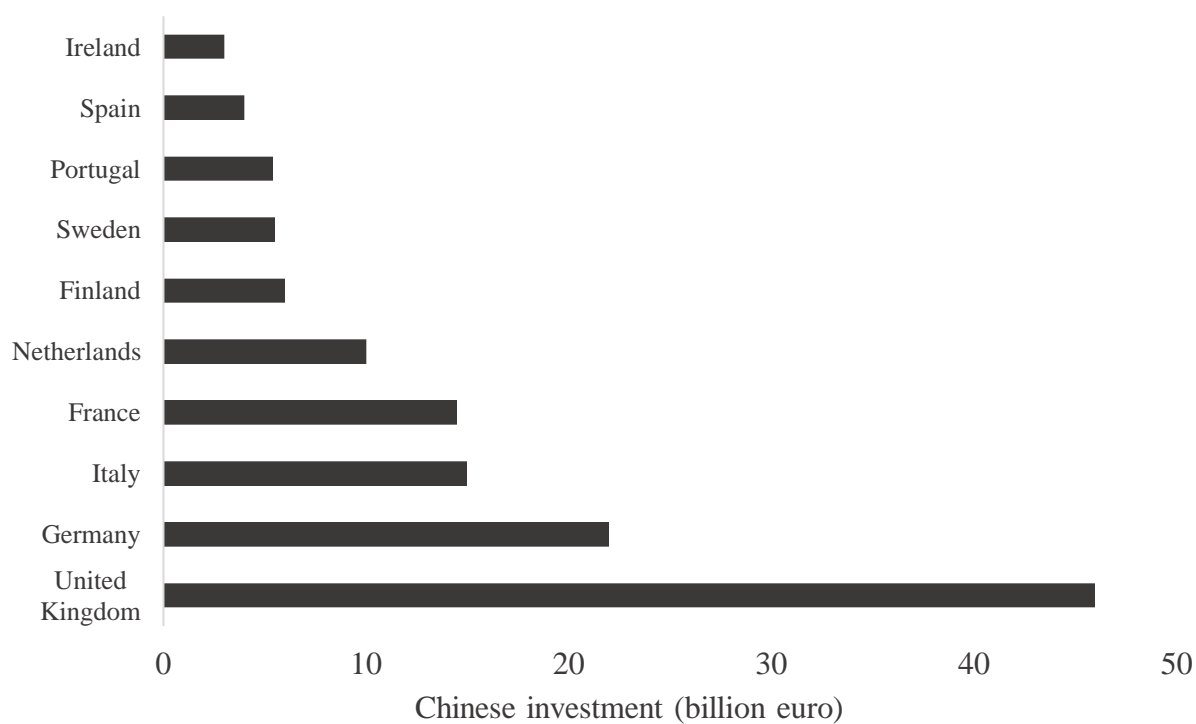
TABLE 12 Summary of the statuses of all hypotheses tested

<i>Hypotheses</i>	<i>Status</i>
H0: A regional GPR has a negative relationship with the FDI inflows of all countries in the affected region.	Rejected
H1: A regional GPR has a negative relationship with the FDI inflows of all countries in the affected region.	Rejected
H2: The effects of a regional GPR on FDI inflows into countries are not consistent across the region; increases in a regional GRP will increase FDI inflows into the regional safe havens, while reducing FDI inflows in other economies of the same region.	Proven
H3: A regional GPR benefits countries with assets that are of strategic interest to Chinese investors, thus mediating any material, negative impacts of a GPR on FDI inflows into these countries.	Proven

TABLE 11 Chinese investments in top destination sectors and top destination countries (number of deals and %) (2003-2011)

<i>Sector</i>	<i>France</i>	<i>Germany</i>	<i>Italy</i>	<i>Netherlands</i>	<i>Spain</i>	<i>UK</i>	<i>Total</i>
Automotive	0 (0.0)	19 (12.7)	8 (29.6)	3 (21.4)	0 (0.0)	16 (34.8)	46 (16.7)
Communications	12 (48.0)	12 (11.4)	8 (29.6)	4 (28.6)	5 (35.7)	16 (34.8)	62 (22.6)
Electronics	4 (16.0)	45 (30.3)	9 (33.3)	4 (28.6)	9 (64.3)	5 (10.9)	76 (27.6)
Machinery & Engines	9 (36.0)	68 (45.6)	2 (7.5)	3 (21.4)	0 (0.0)	9 (19.5)	91 (33.1)
Total	25 (100)	149 (100)	27 (100)	14 (100)	14 (100)	46 (100)	275 (100)

Sources: fDi Markets and BvD Zephyr.

FIGURE 1 Chinese investment by top 10 EU countries, 2000-2018

Source: Rhodium Group