

# **WORKING PAPER 132**

October 2024

China's Foreign Investments: Hedges Against Policy Uncertainty

**Timothy R. McDade**Department of Political Science
Duke University

#### **Abstract**

In 2020, the State Grid Corporation of China, a State-Owned Enterprise (SOE) and the second largest corporation in the world by revenue, buy a 97% of Chile's largest electric utility provider, Compañía General de Electricidad (CGE)? Existing explanations in the literature fail to offer a compelling answer. Why is this sort of economic action in the interests of the Chinese state? And why do Chinese economic influence actions occur at some times and not others? I argue that China is more likely to use economic forms of influence when the target country's policy is more uncertain. Non-economic influence activities could lose effectiveness during a period of policy uncertainty, but ownership of a key asset in the target country can serve as a hedge against the possibility that future policy in the target country will not align with China's preferences. To adjudicate my hypothesis, I rely on a novel high-frequency, cross-national, machine-coded event data set called Machine Learning for Peace (MLP), which identifies Resurgent Authoritarian Influence (RAI) events and Civic Space (CS) events in 33 target countries. This paper contributes a clear theoretical model of how China assembles its portfolio of influence operations. Furthermore, by arguing that state affiliated actors use public economic markets for strategic political purposes, I contribute an expanded conception of China's involvement in global economic markets.

#### **Author Information**

**Timothy R. McDade**Department of Political Science
Duke University
trmcdade@gmail.com

The views expressed in AidData Working Papers are those of the authors and should not be attributed to AidData or funders of AidData's work, nor do they necessarily reflect the views of any of the many institutions or individuals acknowledged in the AidData Working Paper Series.

# Contents

1	Introduction	1
2	Background  2.1 Who Are We Talking About?	2 3 4 5 6
3	The Theoretical Model	6
4	4.1 Data Description	<b>11</b> 11 12 12
5	5.1 Elections as Measures of Uncertainty	15 18 20 20 22
6	Conclusion	24
A	A.1 Alternate Election Definitions	<b>26</b> 26 28

## 1 Introduction

## 防患未然、未雨绸缪 Prepare in advance for rainy days.

In November 2020, the State Grid Corporation of China, a State-Owned Enterprise (SOE) and the second largest corporation in the world by revenue, announced a purchase of 97% of Chile's largest electric utility provider, Compañía General de Electricidad (CGE). Why would they do so? The management literature would suggest that such acquisitions could be done to shore up supply chains, in search of a new market, or to acquire an innovative technology or a particularly profitable company. But none of these explanations apply here: electricity cannot be exported from Chile to China, and CGE runs on legacy technology and has its profits tightly regulated by Chilean electric law.

CGE poses little other use to the Chinese state or economy. But this acquisition is just one of many that Chinese SOEs have made on public and private markets across the world over the last 20 years that seem to have no other explanation other than that it is part of the Belt and Road Initiative (BRI) and therefore must somehow be in the interests of the Chinese state. But, if all the aforementioned explanations fail, why is this sort of economic action in China's interest?

Most of the research on China's position in the international economy focuses on its involvement in development finance and suggests that China's investments abroad are strategic. The typical story is that investment happens over long time periods where returns are relatively high compared to risks. But China has a broad portfolio of foreign influence activities beyond development finance. Moreover, as the above example shows, even conventional explanations for Chinese overseas investment fall apart under close scrutiny. So, why does China invest in some places at some times and not others?

I offer an explanation counter to the existing narrative: China favors economic investments abroad when political uncertainty is highest as a hedge against changing political fortunes. For example, when the State Grid acquired CGE, Chile was in the midst of re-writing of its constitution after a year of civic upheaval. If it is possible that the target country's government will change policy in a way that adversely affects China, or that a policy change will occur as a result of a change in government, China will take steps to secure its influence over that policy.

China has shown itself willing to put long-term power dynamics ahead of short-term profit (Kaplan, 2018). I suggest that this long-term focus could make non-economic influence activities lose some salience during a period of policy uncertainty, which can be accompanied by transitions in government personnel or resources. For example, diplomats may rotate out of office, requiring new relationships to be formed; new regulation may be implemented that reduces the value of soft power activities; target country resources for certain policy programs can be re-allocated. On the other hand, economic actions, even in unprofitable sectors, are investments in times of uncertainty that retain their value throughout a government transition. Ownership of a key asset in the target country can serve as a hedge against the possibility that future policy in the target country will not align with China's preferences. As a result, I expect that when future policy is uncertain in

recipient countries, China increases its economic influence activity and decreases other categories of influence operations.

To adjudicate my hypothesis, I rely on a novel high-frequency, cross-national, machine-coded event data set called Machine Learning for Peace (MLP), which identifies Resurgent Authoritarian Influence (RAI) events and Civic Space (CS) events. The MLP data set was derived from over 60 million news articles scraped from Chinese, Russian, international, and domestic news websites over 122 months. A state-of-the-art Transformers-based Natural Language Processing (NLP) model then categorized the news stories into 22 RAI categories based on a corpus of 3,400 double-blind human-coded articles and 19 CS categories based on a training corpus of 2,800 stories. MLP represents a step forward in the measurement of influence events, which to date has relied on non-systematic analyses of one-off events and detailed analysis of development financial flows. In addition to economic influence events such as these, RAI includes systematic cross-national data on diplomacy, hard power, soft power, and domestic interference.

I measure policy uncertainty in two ways. First, the competitiveness of elections in target countries produces outcome uncertainty, which in turns results in uncertainty about post-election policy. Uncertainty about post-election outcomes also relates to the time until the election. But elections are not always free and fair, and do not take place in every country. To account for this, I introduce a second measure of policy uncertainty: civil space turmoil derived from the CS data set. Civil space events such as protests, violence, and government coercion occur regardless of a country's governmental institutions. Civil space turmoil breeds instability in the relationship between the government and the governed, which results in policy uncertainty.

In addition to introducing MLP, this paper has two major contributions. The first is a clear theoretical model of how China assembles its portfolio of influence operations. The second is a contribution to the literature examining China's participation in international economic markets. Because of the availability of data sets like AidData (Custer et al., 2021; Malik et al., 2021), a relatively large literature has analyzed China's participation in development finance (e.g. loans, grants, and infrastructure projects). But development finance is a relatively small piece of the global financial pie. I expand the literature's conception of China's involvement in global economic markets by arguing that state-affiliated actors use public economic markets for strategic political purposes.

The next section offers an overview of the existing literature on relevant topics and discusses questions still to be answered. The third section more clearly articulates a theoretical framework. The fourth section explains the design of the empirical research and the fifth discusses results. The final section concludes.

## 2 Background

## 2.1 Who Are We Talking About?

"China" is not a single actor. The Chinese government is not a unilateral actor, nor is the Chinese economy. The Chinese economy is composed of the vast spectrum of private and

public enterprises expected of a nation of billions of people. Many of these enterprises are disconnected from the government. However, its biggest enterprises remain subject to a certain amount of government influence, more than in any other major economy. These large enterprises fall into two categories: State-Owned Enterprises (SOEs) and Privately-Owned Enterprises (POEs). SOEs are just that: owned and controlled by the state. The state is not a monolith; it is composed of competing and varying players with divergent interests. However, on the whole, SOEs are well-positioned to carry out government policy.

However, in China the difference between a governmental and private entity is blurry (Huang and Tang, 2017; Kirkegaard, 2019). This blurred line obscures how politically motivated a company's activities can be, but it is possible to generally rank companies on their relationship with the state. At one end of the spectrum, the Chinese central government is deeply involved in the investment, management, and supervision of large banks (Chen, 2012: p. 226-7). The Chinese government owns banks tasked with financing Chinese policy overseas, such as the Export-Import Bank of China (ExIm), China Development Bank (CDB), and Agricultural Development Bank of China (ADBC). Likewise, through state-owned holding companies and government agencies, the Chinese government owns at least a majority if not the entirety of all large commercial banks.

Slightly more independent are companies like the Chinese state-owned shipping giant COSCO, Although owned by the state, COSCO is a standalone shipping company that is supposed to make its own money without being propped up by the state. COSCO's recent acquisition a majority stake in the Piraeus (Greece) Port Authority appears to be explicitly connected to Chinese policy goals: "The port has served as a transport hub linking the Maritime Silk Road with European countries" (CGTN, 2019; Xinhua, 2021).

More debatably government-influenced are Foreign Direct Investment (FDI) transactions between Chinese businesses and governmental and non-governmental entities in foreign countries. FDI can take the form of mergers, acquisitions, investments, or other transactions, and sometimes benefits from cheap loans issued by Chinese government banks or contracting processes that favor Chinese businesses. Such FDI has recently been in the news across South America, Europe, Southeast Asia, and the South Pacific.

#### 2.2 Firm Motivations

Indeed, a large body of management literature argues that Chinese businesses, both SOEs and POEs, expand internationally for the same reasons multinational corporations (MNCs) do: in pursuit of resources, technology, markets, diversification, and/or strategic assets (Deng, 2004). Like MNCs, SOE motivations for overseas acquisitions pursue either shareholder value or stakeholder utility (Florio, Ferraris and Vandone, 2018).

A subsection of this literature focuses on reasons why Chinese SOEs in particular invest in overseas companies (Baroncelli and Landoni, 2019). Chinese SOE acquisitions of companies in North America, Western Europe, and Oceania from 2009-2017 have established research and development centers in foreign markets, acquiring technology, and high returns. Such a backdrop would suggest that Chinese companies should expand

to improve technology, shore up their supply chain, provide a material gain to their bottom line, or provide some other vague strategic benefit. By this logic, Chinese investment overseas should be unrelated to political events.

So far, the literature's conclusions about Chinese economic investment are sector-agnostic, meaning that the nuances of motivations for specific deals can become lost. Moreover, most empirical assessments stop short of the time period where the BRI was in full swing, and largely neglect Chinese SOE investments in emerging market companies. But even recent studies that study the details of Chinese investment in the South American energy sector simply assert that such investment is in the interest of the Chinese state (Ellis, 2021; González Jáuregui, 2021). However, they fail to explain why. Is it because Chinese SOEs gain technology from investing in foreign companies? Is it because the power produced by these investments can fuel other Chinese investments in the target country? Is it because the investment makes enough money to produce a financial return?

Another subset of political economy literature makes a slightly different version of the conventional argument. Its general claim is that regulatory ambiguity, corruption, and inconsistent rule of law are disincentives for foreign investment because investment relies on guarantees of property rights (Mauro, 1995; Wei, 2000). But the theoretical scope of this argument is not sufficient to answer my research question for several reasons. First, I consider state actors or private actors whose behavior is influenced by a state. There is a strong linkage between Chinese government policy and Chinese outbound investment; central policy direction likely outweighs firm-level concerns about the target country governance. Second, China has in recent years taken steps to prevent expropriation of Chinese property in target countries, mitigating the main theoretical mechanism proposed in this literature. Third, I hypothesize a short-term relationship between fluctuations in investment transactions and short-term policy uncertainty, not a persistent long-term relationship between aggregate levels of investment and aspects of a target country's political-economic system.

As a whole, this literature provides useful context to the motivations of economic actors in a fragmented landscape. But it often does not acknowledge the channels of control that the Chinese government has established over companies. The first is law and regulation, such as the 2017 National Security Law; the second is institutional controls over SOEs, like the 2003 establishment of the State-Owned Assets Supervision and Administration Commission; third, state monitoring of and pressure on private companies such as establishment of company CCP cells or pressure to de-list private companies from foreign stock exchanges (Kastner and Pearson, 2021).

## 2.3 Explanations From Foreign Aid Literature

Furthermore, the management literature on Chinese overseas expansion does not make the connection between Chinese enterprises and influence operations. The literature examining China's foreign aid activities gets closer to identifying the sources and effects of economic influence. Despite the complexity of the relationships with the Chinese state and their motivations for investing abroad, scholarship has argued that Chinese entities use development finance for political purposes in three ways: chequebook diplomacy, debt trap

diplomacy, and patient capital.

Chequebook diplomacy is a term mainly used to refer to PRC and Taiwanese competing offers of aid to countries in exchange for diplomatic recognition. This mainly occurred in small countries, especially Pacific Island countries, during the 1990s and 2000s (Atkinson, 2010; Nowak, 2015; Hille, 2019; Salem, 2020). These transactions are often discussed in the context of China's proclivity to issue aid tied to conditions, backed by commodity purchases, or in exchange for trade. But, importantly, the government of the Chinese state itself is not the investor in these transactions – instead, SOEs often are.

Proponents of "debt trap diplomacy" argue that Chinese entities are so willing to loan money to countries that they ignore creditworthiness in doing so. This then results in a build-up of Chinese credit so heavy that it contributes to a debt burden the country is unable to repay, making the country beholden to Chinese interests. Bräutigam explains that this concept contains elements of truth, but these truths have not led to China extracting "unfair or strategic advantages of some kind in Africa, including 'asset seizures'" (Bräutigam, 2020: p. 6). Later scholarship has shown, however, that non-disclosure agreements are commonly included in loans from Chinese entities, especially where disclosure of the debt is not compelled by law (Gelpern et al., 2021: Ch. 3.1). Such non-disclosure can limit the transparency required to assess ability to pay before other entities issue debt to the same debtor. In so doing, Chinese overseas investment accrues political leverage for the Chinese state.

These two patterns point towards a third: the long time horizon and patience associated with China's overseas investment strategy, as opposed to the impatience usually associated with financial markets (Jacobs, 2011; Thatcher and Vlandas, 2016; Deeg and Hardie, 2016; Lin and Wang, 2017; Kaplan, 2018). It may however be the case that this patience is only a characteristic of non-tradable debt (loans and grants) issued by Chinese entities. In other influence transactions, China may be as impatient as everyone else.

The vehement disagreements in this literature obscure its takeaways, which makes it difficult to assess the veracity of its conclusions. Furthermore, this literature, by design, only considers economic influence and does not relate foreign aid distributions to other Chinese influence activities (Diamond and Schell, 2019). And it does not recognize that the main reasons a recipient country's foreign policy is likely to be similar to China's are its regime characteristics, trade linkages, and shared patterns of political globalization (Flores-Macías and Kreps, 2013; Strüver, 2016; Kastner, 2016).

#### 2.4 Analysis of the BRI

Zooming out, a large body of literature has examined the Belt and Road Initiative (BRI) and its effects on Chinese outbound investment since it was announced in 2013. The BRI has been assessed within the context of maritime transport (Lee et al., 2018), environmental challenges (Ascensão et al., 2018), outward foreign direct investment (FDI) (Sutherland et al., 2020), recipient country political economy (Loughlin and Grimsditch, 2021), national security (Ellis, 2013; Shah, 2021; Farah and Richardson, 2021), and much more. Interrogations of specific episodes of economic influence provide detailed descriptions of

Chinese investment. The main takeaway is often that BRI investments are in China's national interest, but the literature stops short of asking why. For example, why is a large Chinese presence in the Latin American energy sector in China's national interest (Ellis, 2013, 2021)?

Kastner and Pearson (2021)'s recent study of China's foreign economic influence helps set the stage for the relationship between the BRI and economic influence. Among other contributions, the authors conclude that, although the Chinese government also has other goals like supporting Chinese companies and strengthening the national economy, China intends to use economic means for political influence. The authors posit several causal mechanisms, including using economic ties as a source of coercion and inducements in bargaining power, creating vested interests, transforming public and elite opinion, and structural power (Kastner and Pearson, 2021).

But this causal chain can be hard to discern because official statements on BRI often omit discussion of its strategic policy risks and benefits (Wuthnow, 2017). The Chinese government often characterizes BRI transactions as win-win initiatives, based on non-interference and mutual benefit (Kastner and Pearson, 2021: p. 23). Indeed, the BRI itself has changed over time, perhaps because broad Chinese policy initiatives are not in fact tightly centrally planned but are coalitions of diverse actors given a leash of varying length (Huang and Tang, 2017; Kirkegaard, 2019; Kroeber, 2020).

But Kastner and Pearson's causal mechanisms can help illuminate the Chinese State Grid's recent purchase of Chilean electricity distributor CGE. Why is Chinese investment in a low-profit, tightly-regulated company that relies on legacy technology and produces a non-exportable good a "win" for the Chinese state?

#### 2.5 Questions remain

Taken as a whole, this literature has one main weakness in trying to explain why China chooses economic influence operations under different circumstances: it fails to explain why some of these influence actions are in China's national interest. In the following section, I attempt to do so.

#### 3 The Theoretical Model

Conventional accounts expect that Chinese overseas investment is driven by returns over a long time period (Kaplan, 2018) driven by target profit, technology access, or new markets (Deng, 2004; Florio, Ferraris and Vandone, 2018; Baroncelli and Landoni, 2019). This narrative has several problems. First, large-scale studies do not carefully define investment, instead implying that Chinese policy banks have a unique funding relationship with target countries, and do not explain the conditions under which investment should occur in the first place. Although the rest of the literature is more specific on both of these points, it is far from comprehensive, forgetting the connection between Chinese firms and the Chinese state. Two key questions remain unanswered. First, how does China

strategically engage in influence abroad outside development finance? Second, why are economic influence operations in its national interest?

In this paper, I fill these gaps by proposing that, contrary to the suggestions of existing literature, Chinese investments in target countries are more likely when the future policy of the target country is uncertain. Investments function as a kind of hedge for several reasons: first, the investor is entitled to rights in the target country as a property owner; second, the investor can use the property itself for strategic purposes; and third, the investment transaction provides an opportunity to transfer wealth to an entity in the target country, itself a possible vector for influence. I develop the literature in two ways. First, I contribute a clear theoretical model of how investments serve as a hedge against future policy uncertainty. Second, I explain one way that China strategically participates in global economic markets apart from development finance.

In this transaction, there are two actors: the sender (China) and the target country. Although it might seem possible that this argument could be applicable to other senders, the tight connection between China's government and its economic actors make it a special case. In countries with more tenuous connections between the government and the economy, such as the United States, it is less likely that specific firms would invest abroad in accordance with the national interests of their home government.

The target countries in this model have developing economies and developing political systems. The policy of any country fluctuates over time, but here I focus on the uncertainty that accompanies the fluctuation in target government policy surrounding different kinds of political events. Instead of focusing on the policy itself, I am interested in how uncertainty in future policy affects China's influence activities.

Accordingly, policy uncertainty derives from situations in which future policy is not foreseeable. I consider two major drivers of policy uncertainty. The first is elections: in countries with elections timelines known in advance, observers are unsure of what policy will occur after the election. This policy uncertainty derives from uncertainty over the outcome of the election. However, elections can only result in uncertainty when they are free, fair, and competitive. When these conditions are not satisfied, civil instability is another driver of policy uncertainty. For example, in countries with elections where opposition parties are excluded, the government in power will likely stay in power through an election cycle. In such a case, the policy uncertainty that I expect will affect investment actions derives from events the government controls, which are part and parcel of the government's policy and therefore could serve as bellwethers for future policy.

This model rests on one assumption: a "unified actor" model of decision-making on the part of China. While there are a range of players involved in China's foreign investment, control in recent years has been shepherded by the state. Whether the state encouraged outward investment or put guard rails on it, Chinese central government policy has, in broad strokes, driven the movements of the actors. I assume that the preferences of major Chinese investors all align around stability and predictable policy.

China undertakes influence actions every day that range from military exercises to diplomatic engagement and have magnitude ranging from a small transfer of consumer

electronics to the purchase of a major company. China is continually making decisions about which kind of influence to engage in, if any. Given the periodic nature of policy uncertainty in target countries, some of these decisions take place when future target country government policy is known and others take place in more uncertain environments. I consider economic influence events. To be more precise, I disaggregate economic influence into three subcategories: investment, trade agreements, and economic aid. Each accomplishes different goals and is executable over a different time frame.

Investment, narrowly defined, is the use of sender country capital to purchase an asset in the target country. Investment can be used in pursuit of returns or for the use of the asset, but the distinguishing feature of investment is that the investor literally owns the asset in the target country. The time frame over which an investment transaction is feasible varies depending on its type: a purchase of equity over public markets may take place over one or several days, a purchase of real estate could take weeks, and a purchase of a large company could take months to negotiate.

Trade agreements are an agreement between the sender and target country to have a freer trade relationship. Trade agreements are likely to increase commerce between the two countries and as a result could be construed as a broadly-defined "investment" in a longer-term economic relationship. Trade agreements are negotiated by the governments themselves, not by other actors in the countries, and are long and complex documents that take months or years to write and approve.

Economic aid is a grant or concessional loan issued by the sender to an entity in the target country. Often, the issuer is a sender country government agency<sup>1</sup> and the recipient is a target country government entity. Time frames over which aid can be issued vary broadly, with China at the quick end of the spectrum (Zeitz, 2019). Aid also varies in how political its motives are (Dreher et al., 2019).

Each of these sub-types of economic influence are suitable for different actors with different aims over different time periods. But, as a whole, the category of economic influence has several advantages over non-economic influence. The main advantage is that economic influence makes some entity richer. Investment in particular results in a sender country entity owning an asset in the target country and a target country entity being compensated for that asset.

To get a sense of what investment entails, consider a few examples. In April 2014, the Colombian judiciary blocked the potential sale of the government's majority stake in power generator Isagen to investors including China's Huadian Corporation. Although this attempt at influence did not pan out – the sale eventually went to a Canadian asset management company – it would have resulted in Chinese ownership of part of the Colombian power grid. On the other side of the world, Reuters reported another investment act in August 2018: the Chinese-financed Kyauk Pyu deepwater port in Myanmar was being amended to assuage concerns about unsustainable debt practices. China's likely long-term goals for this project are to develop its southwestern region and avoid the Straits of Malacca (Asia Maritime Transparency Institute, 2018).<sup>2</sup>

<sup>&</sup>lt;sup>1</sup>Or multilateral body.

<sup>&</sup>lt;sup>2</sup>These are both investment events pulled from the MLP data set.

To better understand how investment might result in influence, I next consider the two sides of that transaction in detail. A sender country entity who now owns an asset in the target country can use that asset in several ways. The first way is overt: the owner of an asset in the target country is likely entitled to certain rights that (usually) do not change based on who is in office. The second way is more coercive. The State Grid of China might exert a very extreme kind of policy influence if it shut off electricity distribution to CGE's customers (around 70% of Chile's population) to help achieve one of China's political goals. There would be significant costs for doing so, but the capability theoretically exists. The third way to use that asset is to sell it: all the time the sender country entity owns the target country asset, the asset retains value.

The specter of expropriation or nationalization can hang over foreign investments, possibly diminishing the value of sender investment in the target country. Of course, the likelihood of expropriation varies tremendously from country to country, but it is no idle threat: Mexico created its national oil giant Petróleos Mexicanos (PEMEX) in the 1930s by expropriating and nationalizing most of the foreign oil presence in Mexico. However, in recent years, China has taken considerable steps to mitigate this threat. Recent scholarship has shown that one of the ways Chinese lenders use loans for political purposes is to structure the terms of loans so that they receive other things of value to compensate for unrealized financial returns. This alternative compensation can take many forms, but one relevant way is to trigger default or acceleration under nationalization or dissolution of a "PRC entity" in the debtor country (Gelpern et al., 2021). In other words, Chinese lenders use loans as a tool to reduce or eliminate the likelihood that Chinese investments are expropriated, thereby ensuring that they retain market value.

Choosing investment for influence is costly in both money and time. Buying assets is expensive and requires a careful matching of prospective buyers with sellers. Granted, other kinds of influence can be expensive, too: arms transfers, surveillance, and intelligence collection are all very expensive. But such actions are often funded directly by government budgets. Diplomacy, intelligence, and military functions are core to what a government does and their development is key to the functioning of the state. A large part of foreign investment, on the other hand, relies on the resources of corporations or individuals. Even though the distinction between the government and enterprise in China is blurrier than most places, the government budget serves as a back stop at best for such transactions.

But in return for the expense of investment, the sender country gets a lasting presence in the target country that persists through episodes of policy turmoil that can scuttle other diplomatic efforts, intelligence collection, or military cooperation. Alongside that presence, the investor gets rights, the ability to use the asset it owns for strategic purposes, and the ability to sell the asset if it wants to divest. This is a much more compelling long-term story than other kinds of influence operations. A change to government policy can reduce the benefits of diplomatic influence over particular politicians, quickly turn around social and cultural programs or media influence operations, or round up intelligence collection.

I argue that China is well aware of the trade-offs between certain types of influence. It is

<sup>&</sup>lt;sup>3</sup>China has created novel and effective ways of enforcing these contracts; they are not toothless.

more likely to use economic influence when when policy uncertainty is high because economic investments generally hold their strategic value through policy change. China is so aware of this, in fact, that it has taken considerable steps to prevent expropriation of its investments abroad. Although non-economic influence may be cheaper and easier than investments in the short term, their payoff is more susceptible to changes in government policy.

But Chinese investors cannot react instantaneously to policy uncertainty in the target country. Even if they could, it is not apparent that they should think one protest event should indicate sustained civil space pressure on the government, or is the first sign of a long uncertain period. As much as investors would like to be able to forecast policy uncertainty in the target country, I expect that they base their decisions on patterns that only emerge after some period of time. And even after coming to a decision, investors require still further time to act on those decisions. Consequently, I expect that policy uncertainty will have persistent ripple effects on investment behavior for weeks or months.

Moreover, the timing of this ripple effect should be different for each kind of influence act. For example, trade agreements are negotiated between governments over long periods of time; I expect that any change in trade agreements would occur behind the scenes or would take several months or years to occur. Investments, on the other hand, can be changed more quickly.

While the above logic may help explain why China chooses certain kinds of influence actions, it neglects one key actor: the target country itself. The target country government can signal openness to certain kinds of influence and preclude others. For example, while Chile allows foreign entities to own public utilities, the United States has the Committee on Foreign Investment in the United States (CFIUS) that has the power to review foreign investments in US companies or operations for national security purposes, and has blocked such transactions from occurring (McLaughlin, 2016). The target government implements such a process after weighing both the costs and benefits of foreign influence. For example, Argentina has chosen to solicit Chinese investment in its energy sector (González Jáuregui, 2021). But, after all, target government solicitation of foreign investment is itself a policy that is subject to uncertainty, and therefore one against which China could hedge.

One possible counter-argument to this theory is that Chinese investors merely enter the market at the same time any seasoned investor would: during turmoil, when valuations are volatile and there is a chance an investment's value will increase. This is merely another way of phrasing my argument. If an investment's value increases after turmoil, it could do so in two ways: in financial value or strategic value. Either way, the investor benefits. Although this strategy may seem intuitive to those familiar with financial markets, it is the opposite of the common story about China's international investment strategy, where investment is allocated abroad with a long time horizon to places with a high likelihood of return in a manner that avoids default risk (Kaplan, 2018: p. 12). Moreover, I argue that investment events are different in kind from other economic events such as trade agreements and aid, which are not likely to exhibit this pattern.

This argument leads me to expect that Chinese economic influence activity, especially investments, will be higher during periods of policy uncertainty in the target country.

Specifically, when policy is uncertain because of civil space turmoil, I expect Chinese investments to increase. I also expect investments to be higher when policy is uncertain because of closer or more competitive elections in the target country.

## 4 Research Design

#### 4.1 Data Description

To assess this hypothesis, I rely on several data sets. The first and most novel is the MLP data set, built by the DevLab@Duke team at Duke University, which collects events from news stories across the world. MLP is composed of the Resurgent Authoritarian Influence (RAI) and Civil Space (CS) event data sets, which are high-frequency, machine-generated, and cross-national. The RAI data set encompasses Russia and China's efforts to influence the politics of target countries across the world, and the CS data set focuses on movements in the relationship between government and civil society.

RAI and CS are based on over 60 million news articles scraped from Chinese, Russian, international, and domestic online news sources over 122 months. Not every article that appears in a newspaper contains a relevant event, though: the project team trained a supervised Natural Language Processing (NLP) algorithm to identify certain event types. For the RAI data set, the team constructed a training corpus of "double-blind, human-coded newspaper articles hand built for our purposes" that consists of 3,400 articles across the 22 event types, which can categorized into five broad themes: soft power, hard power, economic power, diplomacy, and domestic interference (Springman, Wibbels and Vu, 2022). The team did the same for the CS data set, using a similar process to build a training set of 2,800 articles across 19 event types that can be broadly categorized into restrictions on civil freedoms (RCF), protests, and government coercion and force (CAF).

The NLP algorithm in question, state of the art in computer science but so far under-utilized in social science research, depends on a technology called Transformers that have better context comprehension and prediction capabilities than other methods. One of the most ubiquitous Transformer models is the Bidirectional Encoder Representations from Transformers (BERT) model; the DevLab team uses a refinement of BERT called RoBERTa. By training the model on the training sets, the DevLab team achieves 80% out-of-sample classification accuracy across RAI event types and 90% accuracy for the CS event types.

In addition to the RAI data set, I also incorporate data from other sources. I use data on the timing of elections from the World Bank's Database of Political Institutions (DPI) and data on vote margins of elections from VDem to measure policy uncertainty around elections (Cruz, Scartascini and Keefer, 2020; Coppedge et al., 2022; Pemstein et al., 2022). I source bilateral trade data from the IMF's Direction on Trade Statistics database (The International Monetary Fund, 2022) and data on total trade as a percentage of GDP from the World Bank (The World Bank, 2022a). Moreover, to allow for the conventional explanation that investment is more likely when rule of law is better, I check the robustness of my results against this explanation by including the World Bank's World Governance

Indicators for Rule of Law, Government Effectiveness, and Regulatory Quality in my empirical models (The World Bank, 2022b).

## 4.2 Empirical Setting

The event data sets cover 33 target countries selected in consultation with "existing research, partners in civil society and the media, and representatives from the United States Agency for International Development" (USAID) (Springman, Wibbels and Vu, 2022).<sup>4</sup> The countries in the selection share certain attributes. For example, even though the countries represent a variety of political systems, the list generally does not contain large, well-functioning democracies or countries whose government institutions are strong enough to withstand pressure from abroad.<sup>5</sup> They are also all countries with USAID missions, and there is a large focus on Africa and Eastern Europe because of regional buy-in to the project. Nonetheless, there is considerable variation: the countries are physically located across the world and have a broad range of natural resource endowments, economic sizes and structures, and geographic features.

The event data sets consist of event counts at the country-day-event type level of granularity. The CS data set describes the state of civil society in the target country; I restrict my analysis to the portion of the RAI data set that describes actions China takes in the target country. To better observe patterns over time, I aggregate to the month level.

Because the online news ecosystem has improved over the period of time these data sets cover, one might expect that event counts would rise over time in proportion to increased information availability. To account for this, I normalize all the event counts as a percentage of the total articles published about the target country in a given month. This transforms the event count indicator into a measure of the salience of the event type in the local news cycle for the time period in question. This temporal correlation is another reason to use time-series analytical techniques.

#### 4.3 Variable Definitions

The RAI data set has 22 event types. Six of them could be construed as economic events: aid operations, corruption, transnational organized crime, investment actions, trade or financial sanctions, and trade agreements or exchanges. I exclude organized crime and corruption because even though they rely on economic incentives, both affect policy through the actions of particular policymakers, a different mechanism than I am testing. I further exclude sanctions because they are coercive; the mechanism through which they affect policy again differs from my theory.

This leaves three kinds of economic events: aid, investment, and trade agreements. All are ways of investing in the long-term health of the economy of a target country. But aid and

<sup>&</sup>lt;sup>4</sup>Albania, Belarus, Benin, Cambodia, Colombia, Congo, Ecuador, El Salvador, Ethiopia, Georgia, Ghana, Guatemala, Honduras, Jamaica, Kenya, Kosovo, Mali, Mauritania, Morocco, Niger, Nigeria, Paraguay, Philippines, Rwanda, Serbia, Tanzania, Tunisia, Turkey, Uganda, Ukraine, Zambia, and Zimbabwe.

<sup>&</sup>lt;sup>5</sup>Nigeria is perhaps the largest democracy on the list, but has in recent years has had "repressed" political participation (Marshall and Gurr, 2018).

trade agreements are government-to-government transactions that do not result in foreign ownership of assets in the target country. My main dependent variable derives from the narrow definition of investment events, but I also test a broader definition of economic investment that encompasses trade agreements and economic aid in addition to investment. More specifically, the dependent variable will be the count of investment events that China undertakes in a target country every month divided by the sum total of all articles about a country in a given month. This normalization smooths over fluctuations in overall article output and allows for a consistent interpretation even if one news source goes offline for a period of time.

Figure 1 gives an overview of how raw Chinese influence event counts are distributed across the RAI event categories in the Philippines, Cambodia, and Nigeria. The right-hand panels show the distribution of investment events, in green, compared to non-investment events. I showcase these three countries for three reasons. First, and most broadly, the scale of the number of events is different across the three countries. Cambodia, for example, is the target of relatively few influence acts when compared to Nigeria and especially the Philippines. Second, investment is a relatively common influence tactic there are many investment events in a given month, especially when considered in proportion to the sum of all non-investment events. Moreover, the distribution of investment compared to non-investment varies across countries, implying that Chinese influence strategies vary across country and time. Third, investment counts in all three countries increase relative to non-investment events from 2016, when outbound BRI-related investment reached its peak, through the 2020 outbreak of COVID-19. This time period corresponds to high levels of Chinese outbound investment. Chinese restrictions on outbound investment, enacted in 2017 and 2018 after Beijing restricted "irrational" outflows, are reflected in dips around 2018 in Cambodia and Nigeria (although the Philippines seems not to have experienced a dip in investment around this time).

Aside from investment, the crucial measure is how to conceptualize policy uncertainty. One possibility is using elections: in countries with regular election cycles, usually presidential systems, there will be outcome uncertainty around which government will take office after the elections, which results in policy uncertainty. Countries with parliamentary systems also hold elections, but because parliamentary elections are endogenously timed, there is less ex ante public awareness of when an election will be held and therefore less opportunity to change course of action based on the timing, circumstances, and probabilistic outcome distribution of the election. In countries with no free and fair elections, such as Cambodia, it is likely that the regime in power will stay in power, and drivers of policy uncertainty will have to be found elsewhere.

I use election results as a measurement of policy uncertainty for one stage of my analysis. However, although its use is common in the political science literature, such a measure is not ideal for this analysis for several reasons. First, the 33 target countries do not all have regular, exogenously-timed elections; using such a measure drastically reduces sample size. Second, the high-frequency nature of the event data set means that, even for the countries with regular elections, there need not have been an election in a country for several years. Using such a measure for the independent variable would throw away the advantages of such a granular measure of the dependent variable.

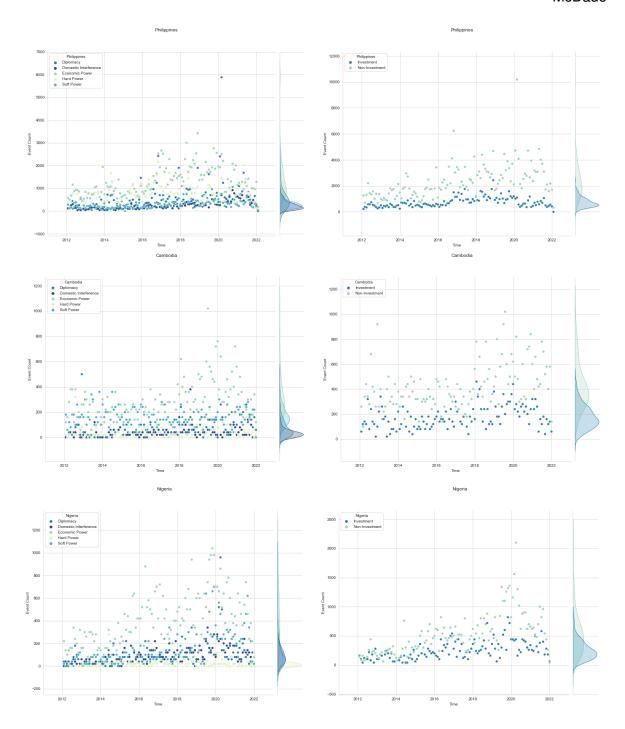


Figure 1: Raw event counts over time. The left-hand panels show all event categories and the right-hand panels show investment and non-investment influence.

So, I also consider an alternative measure of policy uncertainty. In all countries, civil space unrest is a major disruptor to policy status quo. I test the relationship between economic

investment and three different types of civic strife. The CS data set provides event counts for protests (P), restrictions on civic freedoms (RCF), and coercion and force (CAF). All are ways of measuring civil strife in a target country, but from different points of view. While protests measure population discontent with government policy, RCF and CAF focus on the supply side: tactics governments use to quell discontent. RCF focus on nonviolent and legal restrictions on legally-granted freedoms; by using CAF, the government takes a harder line. These counts serve as my dependent variables. Figure 2 shows the distribution of the normalized counts of civil space events.

Countries with different economic markets should see different investment patterns, as should countries with different economic relationships with China. For example, countries with more open economies should see more investment overall, suggesting that Chinese investment could be less effective as influence operations because of a crowding out effect. To account for this, I include the target country's Trade to GDP ratio as a measure of overall economic openness. To account for a country's economic dependence on China, I include measures of export and import dependence. China could be more likely to invest in countries who send more of their exports to China because China has a material stake in the continuity of that trade process and as a result places a higher premium on policy influence. On the other hand, China could be less likely to invest countries that get more of their imports from China because import dependence is already a measurement of economic leverage. It is possible that China could view additional investment as duplicative.

Moreover, investment in a target country is also likely related to the overall level of Chinese influence operations at a given time, of all kinds. To account for this, I include a measurement of non-investment influence events as an explanatory variable. Because it's likely that economic influence depends on prior investment, I consider a time-series analysis. For example, economic influence at time t could be higher if investment at t-1 was also high, which would indicate a trend of continued investment. On the other hand, if investment was high at t-1, there could be fewer available assets to purchase at time t. A Gourieroux, Holly and Monfort (1982) style LaGrange multiplier test of individual and time effects confirms that there are indeed significant country and time effects.

## 5 Results

## 5.1 Elections as Measures of Uncertainty

Because this specification predicts investment based on the salience of the next election, I include a scalar measure of the months until the next election (m). For robustness, I also construct binary measures of whether the next election is less than 12 months or six months away.<sup>6</sup> Moreover, I expect that the outcome uncertainty of a given election will also affect investment, so I include a scalar measure of the vote margin between the winner and the runner-up (u) as an explanatory variable. I use the following linear model to predict investment based on the uncertainty surrounding a given election:

<sup>&</sup>lt;sup>6</sup>Binary DV results in Appendix.

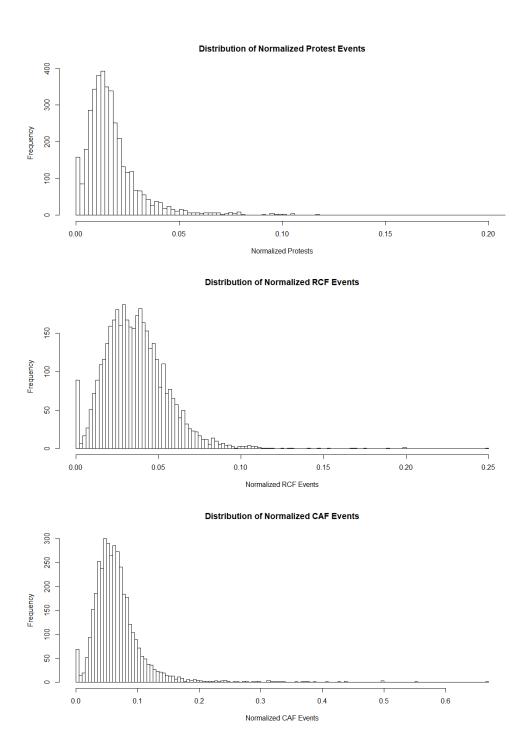


Figure 2: Histograms of the occurrence of normalized civil space events.

$$\gamma_{i,t} = \alpha + \beta_0 \gamma_{i,t-1} + \beta_1 \nu_{i,t} + \beta_2 m_{it} + \beta_3 u_{it} + \phi_i + \tau_t + \varepsilon_{it}. \tag{1}$$

My hypotheses would find support from a negative value of  $\beta_2$ , indicating increasing investment as the election gets closer, and a negative value of  $\beta_3$ , which would indicate more investment before more competitive elections.

Table 1: The Effect of Elections on Investment

	DV: Investment Events			
	Nar	row	Broad	
	(1)	(2)	(3)	(4)
Lagged DV, Narrow	0.166***	0.073**		
	(0.032)	(0.036)		
Non-Investment, Narrow	0.394***	0.367***		
	(0.031)	(0.031)		
Lagged DV, Broad	,	,	0.159***	0.065*
			(0.032)	(0.036)
Non-Investment, Broad			0.410***	0.381***
			(0.032)	(0.032)
Months To Next Election	-0.00004**	-0.00003*	-0.00004**	-0.00004**
	(0.00002)	(0.00002)	(0.00002)	(0.00002)
Executive Vote Margin	_0.0003* <sup>*</sup> *	_0.0002***	_0.0003***	_0.0002***
C	(0.0001)	(0.0001)	(0.0001)	(0.0001)
Protest Events	,	0.002	,	-0.003
		(0.017)		(0.018)
RCF Events		_0.039***		_0.039***
		(0.013)		(0.013)
CAF Events		0.034***		0.036***
		(0.007)		(0.007)
Exp. Dep.	-0.026***	-0.022***	-0.027***	-0.023***
	(0.006)	(0.006)	(0.006)	(0.006)
Imp. Dep.	0.001	0.001	0.001	0.001
	(0.003)	(0.003)	(0.003)	(0.003)
Trade/GDP	0.0001**	0.0001**	0.0001*	0.0001**
	(0.00004)	(0.00004)	(0.00004)	(0.00004)
Observations	1,177	1,177	1,177	1,177
$R^2$	0.349	0.374	0.343	0.368
Adjusted R <sup>2</sup>	0.279	0.304	0.272	0.298
F Statistic	81.425***	63.183***	79.208***	61.554***
Note:			*n/0 1·**n/0	

Note: p<0.1; \*\*p<0.05; \*\*\*p<0.01 Table 1 shows the results of this specification. The coefficient for election competitiveness

(Executive Vote Margin) is negative and statistically significant in all specifications, suggesting that investment events are more numerous before more competitive elections. Investment events also have a statistically significant and negative relationship with the amount of time until the next election, suggesting that investment increases when elections are close. These terms provide initial support for the hypothesis. These results are robust

to including binary definitions of the time until elections variable.<sup>7</sup>

The size of the coefficients helps illuminate the precise relationship between election-derived uncertainty and investment events. The portion of the media ecosystem devoted to investment events is likely to increase by three or four one-thousandths of one percent when an election becomes one month closer. The size of the coefficient for Executive Vote Margin is one order of magnitude larger: investment coverage increases by two or three one-hundredths of a percent for every percent closer an election is. Although these may seem like small numbers, it is worth keeping in mind that investment events made up less than 1% of the media ecosystem for 92.8% of the data set's 3,893 country-month combinations. So even a small change because of an election can make a big difference: the investment landscape could change appreciably between the time period immediately following an election and the time period immediately preceding the next one.

Table 1 also shows that investment is correlated with past investment and other non-investment influence events: investment is likely to continue where it already exists, and it usually takes place alongside other influence events. Moreover, investment is more likely in countries that are less export-dependent on China and countries with more open economies.

But there is a caveat: the sample size of this analysis is relatively small because elections are intermittent and do not occur in every country. To get a better sense of the hypothesized relationship, I move on to study civil space turmoil as a measure of policy uncertainty.

## 5.2 Civil Space Turmoil Measuring Uncertainty

I next focus on predicting narrowly-defined investment using civic space turmoil as a measure of policy uncertainty. But changes in investment events likely need some time to occur in reaction to policy uncertainty. Therefore, I expect civil space conditions at time t to correspond to influence events at time t-n, where n varies based on the kind of influence. Using a time-series estimator, I regress the dependent variable, investment  $\gamma$ , on civil strife  $cs \in [P, RCF, CAF]$  with within-country effects  $\phi_i$  and time effects  $\tau_i$ . Because influence activities are a portfolio, I also include as explanatory variables a lagged dependent variable, non-economic influence events in the country i in month t as  $v_{i,t}$ , and a vector of controls  $\zeta$  that includes a country's trade to GDP ratio as a proxy for its economic openness and its export and import dependence on China.

$$\gamma_{i,t} = \alpha + \beta_0 \gamma_{i,t-1} + \beta_1 v_{i,t} + \beta_2 c s_{i,t} + \beta_3 c s_{i,t-n} + \beta_3 \zeta_{i,t} + \phi_i + \tau_t + \varepsilon_{it}$$
(2)

My hypothesis would find support from positive values of  $\beta_2$  and/or  $\beta_3$ , which would signify that economic investment increases during or after policy uncertainty.

Table 2 shows the regression results predicting investment. Present investment is strongly and positively correlated with concurrent non-investment influence events. In other words, investment events occur at the same time as other influence events. But the precise

<sup>&</sup>lt;sup>7</sup>See Tables 5 and 6 in the Appendix.

Table 2: Baseline Results: The Effect of Civil Space Turmoil on Investment.

	DV: Investment Events				
	No Lags	1 Lag	2 Lags	3 Lags	
	(1)	(2)	(3)	(4)	
Lagged DV	-0.08***	-0.07***	-0.07***	-0.08***	
	(0.01)	(0.01)	(0.01)	(0.01)	
Non-Investment Events	0.44***	0.45***	0.45***	0.45***	
_	(0.01)	(0.01)	(0.01)	(0.01)	
Protest Events	$-0.05^*$	$-0.05^*$	-0.04	-0.03	
DOE E	(0.03)	(0.03)	(0.03)	(0.03)	
RCF Events	-0.002	-0.01	-0.02	0.004	
CAF Events	(0.03) 0.15***	(0.03) 0.17***	(0.03) 0.18***	(0.03) 0.18***	
CAF EVENIS	(0.01)		(0.01)		
Protest, $t-1$	(0.01)	(0.01) -0.02	(0.01) -0.02	(0.01) 0.02	
1 101631, t = 1		(0.03)	(0.03)	(0.03)	
RCF, $t-1$		0.03	0.02	0.03)	
1101,1		(0.03)	(0.03)	(0.03)	
CAF, $t-1$		-0.04***	-0.02	-0.01	
- , .		(0.01)	(0.01)	(0.01)	
Protest, $t-2$		,	_0.05 <sup>*</sup>	-0.02	
			(0.03)	(0.03)	
RCF, $t-2$			$0.06^{*}$	0.07**	
			(0.03)	(0.03)	
CAF, $t-2$			-0.04***	-0.04***	
			(0.01)	(0.01)	
Protest, $t-3$				-0.18***	
DOE / 2				(0.03)	
RCF, $t-3$				-0.04 (0.03)	
CAF, $t-3$				0.03)	
OAI, t 3				(0.01)	
Exp. Dep.	0.03***	0.03***	0.03***	0.03***	
	(0.01)	(0.01)	(0.01)	(0.01)	
Imp. Dep.	-0.02***	-0.02***	-0.02**	-0.02**	
· ·	(0.01)	(0.01)	(0.01)	(0.01)	
Trade to GDP	0.0000	0.0000	0.0000	0.0001	
	(0.0001)	(0.0001)	(0.0001)	(0.0001)	
Observations	3,293	3,293	3,262	3,231	
$R^2$	0.42	0.43	0.43	0.44	
Adjusted R <sup>2</sup>	0.40	0.40	0.40	0.41	
F Statistic	290.22***	212.44***	167.28***	141.25***	

*Note:* \*p<0.1; \*\*p<0.05; \*\*\*p<0.01

relationship between investment and policy uncertainty varies by the way policy uncertainty is measured. The regression coefficients show that CAF has a positive and statistically significant relationships with investment, even in specifications three and four, which include lagged values for civic space turmoil. RCF and protest appear to have no notable relationship with investment. Substantively, this suggests that Chinese economic influence actions are more likely in the wake of government use of force but are unrelated to government restrictions on civic freedoms or to public demonstrations.

Specification two shows that the first month's lagged value of CAF events has a positive and statistically significant relationship with investment events. Substantively, this suggests that more investment occurs while or immediately after target governments clamp down on civil spaces via coercion and force. More specifically, specification two shows that a one-percentage-point increase in the target country's media coverage of CAF events corresponds to a 0.17% increase in coverage of investment transactions. The magnitude and sign for same-month effects remain consistent even when incorporating further lags. This is strong evidence supporting my hypothesis.

The first and second month lags of CAF also have statistically significant relationships with investment, but the sign is negative. Notwithstanding turmoil at t=t, turmoil from two months beforehand still corresponds to a decrease in investment. Even if there is no turmoil in month t, Chinese entities are less likely to invest if there was turmoil one or three months prior. Perhaps this is a return to normal investment patterns after an increase during turmoil.

#### 5.3 Robustness and Placebo Tests

#### 5.3.1 Robustness

To further isolate the relationship between investment and civil space turmoil, I run the same baseline civil space turmoil analysis using a broader definition of investment events. Results are virtually identical, providing further support that the nature of investment itself is driving the results.<sup>8</sup>

To allow for the conventional explanation that investment is more likely when rule of law is better, I check the robustness of my results against this explanation by including the World Bank's World Governance Indicators for Rule of Law, Government Effectiveness, and Regulatory Quality in my empirical models. I find that investment has statistically significant relationships with rule of law and regulatory quality. But the interpretation is challenging. Table 3 shows the results. The negative sign of the rule of law coefficient implies that investment is higher when rule of law is worse, which is the opposite of the traditional literature's predictions. But the coefficient for the regulatory quality is positive, suggesting that investment is higher when regulation is better.

While the inclusion of these measures increases the standard errors of the time until election coefficient, it does not reduce the effect of the competitiveness of the election on investment. Moreover, if the story in the traditional literature were to hold true, the signs of

<sup>&</sup>lt;sup>8</sup>See Table 7 in the Appendix.

the rule of law and regulatory quality coefficients should align. But they do not. These results suggest that Chinese investment is higher when the rule of law is worse, but when regulatory quality is better. The coefficients conflict; it is hard to argue that these results provide support for the existing narrative. Moreover, the inconclusiveness intensifies when these variables have no explanatory power over the relationship between investment and civil space turmoil.<sup>9</sup>

Table 3: The Effect of Elections and Governance on Investment

DV: Investment Events			
Nar	row	Broad	
(1)	(2)	(3)	(4)
0.142***	0.063*		
(0.032)	(0.036)		
0.384***	0.359***		
(0.031)	(0.031)		
		0.137***	0.057
		(0.032)	(0.036)
		0.399***	0.373***
		(0.032)	(0.032)
-0.00001	-0.00001	-0.00001	-0.00001
(0.00002)	(0.00002)	(0.00002)	(0.00002)
	-0.0002**	$-0.0003^{***}$	-0.0002**
(0.0001)	(0.0001)	(0.0001)	(0.0001)
	-0.004		-0.008
			(0.017)
	-0.036***		-0.035***
	(0.013)		(0.013)
			0.032***
			(0.007)
			-0.020***
` ,	` ,	` ,	(0.006)
			0.0005
` ,	` ,	` ,	(0.003)
			0.0001**
` ,	` ,	,	(0.00004)
			0.00003
			(0.0001)
			$-0.0003^{***}$
			(0.0001)
			0.0003***
(0.0001)	(0.0001)	(0.0001)	(0.0001)
1,177	1,177	1,177	1,177
0.364	0.383	0.356	0.376
0.293	0.313	0.285	0.305
60.552***	50.464***	58.667***	49.000***
	;	*p<0.1; **p<0.0	05; ***p<0.01
	(1)  0.142*** (0.032) 0.384*** (0.031)  -0.00001 (0.00002) -0.0003*** (0.0001)  -0.0004 (0.003) 0.0004 (0.003) 0.0001* (0.00002 (0.0001) -0.0004*** (0.0001) 0.0003*** (0.0001) 1,177 0.364 0.293	Narrow (1) (2)  0.142*** 0.063* (0.032) (0.036) 0.384*** 0.359*** (0.031) (0.031)  -0.00001 -0.00001 (0.00002) (0.00002) -0.0003*** -0.0002** (0.001) (0.001) -0.036*** (0.013) 0.031*** (0.007) -0.021*** (0.006) 0.0004 (0.006) 0.0004 (0.006) 0.00004 (0.006) 0.00004 (0.003) 0.0001* (0.0001) (0.0001) -0.0004** -0.0001* (0.00002 (0.0001) -0.0004** -0.0003*** (0.0001) (0.0001) -0.0004** -0.0003** (0.0001) (0.0001) 1,177 1,177 0.364 0.383 0.293 0.313 60.552*** 50.464***	Narrow

<sup>&</sup>lt;sup>9</sup>Because there is no relationship, I have omitted this table from the write-up.

#### 5.3.2 Placebo Analyses

In order for there to be a truly meaningful relationship between policy uncertainty and investment, investment should have a different relationship with civil space turmoil than other kinds of influence. Accordingly, I conduct several placebo analyses. First, I conduct the same baseline analysis using civil space turmoil as a measure of policy uncertainty, but I predict non-investment influence events. I expect the coefficients to have the opposite signs from the baseline analysis above: the coefficients should have negative signs, implying that non-investment influence events decrease with turmoil.

Table 4 shows the results using civil space turmoil to predict non-investment influence events. These results share some similarities with those predicting investment. For example, non-investment influence events and investment events are strongly positively correlated. However, the relationship between civic space turmoil and non-investment events is completely different.

First, there is a statistically significant positive relationship between protest and non-investment influence. Heightened public demonstrations appear to correspond with higher non-investment influence. This makes intuitive sense, as public protests are opportunities to sow and foment unrest among the target country's population and present an opportunity to influence target country policy accordingly. This relationship is strongest at the same time as the unrest; it appears to swing back to a negative relationship one month after the protests and then increase again two and three months after. This could signify a reversion to the mean over the course of four months. This is a marked change from the relationship between protest and investment, which is statistically indistinguishable from zero.

Second, restrictions on civic freedoms are negatively correlated with concurrent non-investment influence. This relationship again deviates from the relationship between RCF and investment, and could represent hesitancy on the part of the Chinese government to interfere in the domestic policy of the target country. This could perhaps be evidence of China's longstanding "non-interference" policy, where it vows to stay out of the domestic politics of other countries. Although the MLP data set and this paper provide much evidence to the contrary, Chinese entities may see target governments exercising legally-based restrictions as categorically different from civil space actions based in coercion. The RCF coefficient also displays changes in sign throughout the lag periods, again possibly showing reversion to the mean.

Third, despite being positively correlated with investment, CAF events are negatively correlated with non-investment influence. Substantively, this means that non-investment influence decreases when CAF events occur, much like RCF, and are possibly subject to the same explanations.

Before moving on, it is worth spending a moment to note other trends among the event analysis results. Investment predicts non-investment, meaning that influence operations go up and down as a unit. But these two analyses make clear how that distribution changes in response to different kinds of civil space turmoil. Moreover, investment and non-investment influence are more common in countries less import dependent on China. This could

Table 4: Predicting Non-Investment

	DV: Non-Investment Events			
	No Lags	1 Lag	2 Lags	3 Lags
	(1)	(2)	(3)	(4)
Lagged DV	-0.11***	-0.10***	-0.12***	-0.12***
	(0.01)	(0.01)	(0.01)	(0.01)
Investment Events	0.93***	0.88***	0.88***	0.88***
	(0.02)	(0.02)	(0.02)	(0.02)
Protest Events	0.10***	0.14***	0.13***	0.10**
DOE 5 .	(0.04)	(0.04)	(0.04)	(0.04)
RCF Events	-0.16***	-0.23***	-0.23***	-0.23***
CAF Events	(0.04) -0.15***	(0.04) -0.24***	(0.04) -0.26***	(0.04) -0.27***
CAF Events		-	(0.02)	
Protest, $t-1$	(0.02)	$(0.02) \\ -0.03$	-0.03	(0.02) -0.10**
t = 1		-0.03 (0.04)	-0.03 (0.04)	(0.04)
RCF, $t-1$		0.23***	0.28***	0.28***
1.01,7		(0.04)	(0.04)	(0.04)
CAF, $t-1$		0.25***	0.20***	0.19***
- , .		(0.02)	(0.02)	(0.02)
Protest, $t-2$		, ,	-0.004	-0.01
			(0.04)	(0.04)
RCF, $t-2$			-0.11***	$-0.13^{***}$
			(0.04)	(0.04)
CAF, $t-2$			0.11***	0.07***
5			(0.02)	(0.02)
Protest, $t-3$				0.27***
DCE 4 2				(0.04) 0.05
RCF, $t-3$				(0.04)
CAF, $t-3$				0.12***
<b>Ο</b> <i>τ</i> (1, <i>t</i> = 3				(0.02)
Exp. Dep.	0.0002	0.01	0.01	0.01
11	(0.02)	(0.02)	(0.02)	(0.02)
Imp. Dep.	$-0.02^{**}$	$-0.02^{*}$	-0.02**	$-0.03^{**}$
	(0.01)	(0.01)	(0.01)	(0.01)
Trade to GDP	0.0001	0.0000	0.0000	-0.0001
	(0.0001)	(0.0001)	(0.0001)	(0.0001)
Observations	3,293	3,293	3,262	3,231
$R^2$	0.42	0.45	0.46	0.48
Adjusted R <sup>2</sup>	0.39	0.43	0.44	0.45
F Statistic	280.11***	235.99***	191.53***	165.43***

Note:

\*p<0.1; \*\*p<0.05; \*\*\*p<0.01

perhaps be because import dependence is already a version of economic leverage, and thus additional investment could be duplicative.

I also perform placebo analyses predicting the relationship between policy uncertainty and aid events and trade agreement events. Because aid and trade are undertaken on long-term, ad-hoc bases and are negotiated by the governments themselves, I expect null results.

I first focus on the association between policy uncertainty arising from elections and aid events or trade agreements. I find no statistically significant relationship between the competitiveness of an upcoming election and aid events or trade agreement events. Although there is a statistically significant relationship between the number of months to an election and aid events, Table 8 shows that the sign is the reverse of the expectation for investment: aid events decrease close to elections. Lastly, Table 8 shows the very small but statistically significant relationship between the time until an upcoming election and trade events. But because there is no relationship between trade events and the competitiveness of an election, it is tough to make the case that policy uncertainty derived from uncertainty about the outcome of elections affects trade events.

The results of the placebo analyses show that aid and trade events have different relationships with policy uncertainty than investment does. For example, aid events are more likely during times of increased protest and less likely when the target government restricts civil freedoms. Because aid is aimed at governments instead of private society and results in little to no ownership or revenue streams for the sender, it likely does not function as insurance against policy uncertainty. Trade has inconsistent results. Perhaps the one significant relationship is a negative association between CAF and trade, but the coefficient is very small and negative in sign. Even though the substantive suggestion of these results is in line with the theoretical expectation for investments, the weakness of the results corresponds to my expectation that trade is a less suitable than investment to hedge against policy uncertainty.

#### 6 Conclusion

In conclusion, I find evidence that China is more likely to choose economic investment as a hedge against policy uncertainty in the target country. I use two measures of policy uncertainty: elections and civil space turmoil. Policy after elections is inherently uncertain because the outcome is uncertain, and movements in civil spaces, especially those undertaken by governments, can indicate instability in the target country and suggest that the target government policy could be uncertain moving forward. I suggest that economic influence is favored under such circumstances because its value is more durable than non-economic influence under policy uncertainty: owning an asset in the target country can serve as a hedge against the possibility that future policy will be unfavorable to China's interests.

This paper uses a new, high-frequency, cross-national, machine-coded event data set

<sup>&</sup>lt;sup>10</sup>See Tables 9 and 10 in the Appendix.

called Machine Learning for Peace (MLP), which identifies Resurgent Authoritarian Influence (RAI) events and Civic Space (CS) events by applying the latest in NLP technology to over 60 million news articles scraped from the internet over 122 months. The measurement of influence events has to date relied on non-systematic analyses of one-off events and detailed analysis of development financial flows, but MLP represents a step forward.

Taken as a whole, this paper's empirics find a notable and robust relationship between investment and policy uncertainty that supports the notion that China uses investments as a hedge against policy uncertainty in target countries. These results are not spurious; the results of the robustness and placebo tests suggest that the way investment relates to uncertainty is different from how it relates to other economic events.

This paper has two theoretical contributions. The first is a clear theoretical model of how China assembles its portfolio of influence operations. The second is a contributes to the literature examining China's participation in international economic markets. Because of the availability of data sets like AidData (Custer et al., 2021; Malik et al., 2021), a relatively large literature has analyzed China's participation in development finance (e.g. loans, grants, and infrastructure projects). But development finance is a relatively small piece of the global financial pie. I expand the literature's conception of China's involvement in global economic markets by arguing that state-affiliated actors use other economic markets for strategic political purposes.

Future work could include an examination of the relationships between different event types across different countries. Does China implement its portfolio of influence activities differently in different target countries? If so, how and why? Because MLP pulls from a broad variety of news sources, it also permits analysis of how news is reported differently by different media outlets. Future research could examine, for example, if there is a systematic way that news reporting varies between sender and target countries.

# A Appendix

## A.1 Alternate Election Definitions

Table 5: The Effect of Elections on Investment

	DV: Investment Events			
	Narrow		Bro	oad
	(1)	(2)	(3)	(4)
Lagged DV, Narrow	0.159*** (0.032)	0.068* (0.036)		
Non-Investment, Narrow	0.388*** (0.031)	0.362*** (0.031)		
Lagged DV, Broad			0.153*** (0.032)	0.241*** (0.035)
Non-Investment, Broad			0.404*** (0.032)	, ,
Months To Next Election	-0.0001*** (0.00002)	-0.0001*** (0.00002)	-0.0001*** (0.00002)	-0.0001*** (0.00002)
Election Within One Year	-0.002*** (0.001)	-0.002*** (0.001)	-0.002*** (0.001)	-0.002*** (0.001)
Executive Vote Margin	-0.0003*** (0.0001)	-0.0002*** (0.0001)	-0.0003*** (0.0001)	-0.0003*** (0.0001)
Protest Events	, ,	0.001 (0.017)	,	0.004 (0.019)
RCF Events		-0.037*** (0.013)		-0.049*** (0.014)
CAF Events		0.033*** (0.007)		0.043*** (0.008)
Exp. Dep.	-0.029*** (0.006)	-0.024*** (0.006)	-0.029*** (0.006)	-0.023*** (0.007)
Imp. Dep.	0.001 (0.003)	0.001 (0.003)	0.001 (0.003)	0.0002 (0.004)
Trade/GDP	0.0001** (0.00004)	0.0001** (0.00004)	0.0001* (0.00004)	0.0001** (0.00004)
Observations R <sup>2</sup>	1,177 0.356	1,177 0.379	1,177 0.349	1,177 0.290
Adjusted R <sup>2</sup> F Statistic	0.287 73.419***	0.310 58.750***	0.279 71.164***	0.211 43.162***

Note: \*p<0.1; \*\*p<0.05; \*\*\*p<0.01

Table 6: The Effect of Elections on Investment

	DV: Investment Events				
	Narrow		Broad		
	(1)	(2)	(3)	(4)	
Lagged DV, Narrow	0.161***	0.069*			
	(0.032)	(0.036)			
Non-Investment, Narrow	0.393***	0.367***			
	(0.031)	(0.031)			
Lagged DV, Broad			0.155***	0.245***	
			(0.032)	(0.035)	
Non-Investment, Broad			0.408***		
			(0.032)		
Months To Next Election	-0.0001***	-0.00004**	-0.0001***	-0.0001***	
	(0.00002)	(0.00002)	(0.00002)	(0.00002)	
Election Within Six Months	-0.001**	$-0.001^{'}$	-0.001*	$-0.001^{'}$	
	(0.001)	(0.001)	(0.001)	(0.001)	
Executive Vote Margin	-0.0003***	-0.0002***	-0.0003***	-0.0003***	
-	(0.0001)	(0.0001)	(0.0001)	(0.0001)	
Protest Events		0.001		0.004	
		(0.017)		(0.019)	
RCF Events		-0.036***		$-0.049^{***}$	
		(0.013)		(0.014)	
CAF Events		0.034***		0.044***	
		(0.007)		(0.008)	
Exp. Dep.	-0.028***	_0.023***	-0.028***	_0.021***	
	(0.006)	(0.006)	(0.006)	(0.007)	
Imp. Dep.	0.001	0.001	0.001	0.0002	
	(0.003)	(0.003)	(0.003)	(0.004)	
Trade/GDP	0.0001**	0.0001**	0.0001 <sup>*</sup>	0.0001 <sup>**</sup>	
	(0.00004)	(0.00004)	(0.00004)	(0.00004)	
Observations	1,177	1,177	1,177	1,177	
R <sup>2</sup>	0.352	0.375	0.345	0.284	
Adjusted R <sup>2</sup>	0.281	0.305	0.274	0.205	
F Statistic	71.950***	57.714***	69.824***	41.955***	

Note:

\*p<0.1; \*\*p<0.05; \*\*\*p<0.01

# A.2 Robustness and Placebo Analyses

Table 7: The effect of civil space turmoil on broadly-defined economic investment influence events.

	DV: Investment Events				
	No Lags	1 Lag	2 Lags	3 Lags	
	(1)	(2)	(3)	(4)	
Lagged DV	-0.09***	-0.08***	-0.08***	-0.08***	
	(0.01)	(0.01)	(0.01)	(0.01)	
Non-Investment Events	0.44***	0.45***	0.45***	0.45***	
	(0.01)	(0.01)	(0.01)	(0.01)	
Protest Events	0.001	0.002	0.01	0.01	
	(0.03)	(0.03)	(0.03)	(0.03)	
RCF Events	-0.03	-0.03	-0.04	-0.01	
0455	(0.03)	(0.03)	(0.03)	(0.03)	
CAF Events	0.14***	0.16***	0.17***	0.16***	
Drotoot 4 1	(0.01)	(0.01)	(0.01)	(0.01)	
Protest, $t-1$		-0.04	-0.04	-0.01	
RCF, $t-1$		(0.03) -0.0001	(0.03) 0.001	(0.03) -0.01	
$\Gamma$ $\Gamma$ $\Gamma$ $\Gamma$		(0.03)	(0.03)	-0.01 (0.03)	
CAF, $t-1$		-0.05***	(0.03) -0.02*	-0.02	
OAI, t-1		(0.01)	(0.01)	(0.01)	
Protest, $t-2$		(0.01)	-0.03	0.004	
1101001, 1 2			(0.03)	(0.03)	
RCF, $t-2$			0.04	0.05	
			(0.03)	(0.03)	
CAF, $t-2$			_0.05***	_0.06***	
			(0.01)	(0.01)	
Protest, $t-3$				-0.19***	
				(0.03)	
RCF, $t-3$				-0.04	
				(0.03)	
CAF, $t-3$				0.05***	
		O O O strategi	O O O steate	(0.01)	
Exp. Dep.	0.03***	0.03***	0.03**	0.03***	
Inna Dan	(0.01)	(0.01)	(0.01)	(0.01)	
Imp. Dep.	-0.03***	-0.03***	-0.03***	-0.03***	
Trade to GDP	(0.01) 0.0000	(0.01) 0.0000	(0.01) 0.0001	(0.01) 0.0001	
Trade to GDF	(0.0001)	(0.0001)	(0.0001)	(0.0001)	
Observation -					
Observations R <sup>2</sup>	3,293 0.41	3,293	3,262 0.42	3,231 0.43	
	0.41	0.42 0.39	0.42	0.43	
Adjusted R <sup>2</sup> F Statistic	0.39 276.82***	203.11***	0.39 159.83***	137.37***	
	210.02				
<i>Note:</i> *p<0.1; **p<0.05; ***p<0.01					

Table 8: Robustness: The Effect of Elections on Aid and Trade Events

	DV: Investment Events			
	A	Aid		ıde
	(1)	(2)	(3)	(4)
Lagged Aid	-0.010	-0.007		
	(0.030)	(0.030)		
Non-Aid	0.009***	0.010***		
	(0.002)	(0.002)		
Lagged Trade			0.026	0.016
			(0.031)	(0.031)
Non-Trade			-0.002	-0.006**
			(0.002)	(0.003)
Months To Next Election	0.00000**	0.00000**	-0.00001***	-0.00001***
	(0.00000)	(0.00000)	(0.00000)	(0.00000)
Executive Vote Margin	0.00001	0.00001	-0.00001	-0.00001
	(0.00001)	(0.00001)	(0.00001)	(0.00001)
Protest Events		-0.003		-0.001
		(0.002)		(0.003)
RCF Events		0.0005		-0.001
		(0.002)		(0.002)
CAF Events		-0.0003		0.003***
		(0.001)		(0.001)
Exp. Dep.	0.0004	0.0003	-0.002**	-0.002**
	(0.001)	(0.001)	(0.001)	(0.001)
Imp. Dep.	0.0001	0.0001	-0.0002	-0.0002
	(0.0004)	(0.0004)	(0.001)	(0.001)
Trade/GDP	-0.00000	-0.00000	0.00000	0.00000
	(0.00000)	(0.00000)	(0.00001)	(0.00001)
Observations	1,177	1,177	1,177	1,177
$R^2$	0.028	0.029	0.022	0.030
Adjusted R <sup>2</sup>	-0.076	-0.078	-0.083	-0.078
F Statistic	4.347***	3.213***	3.430***	3.241***

Note: \*p<0.1; \*\*p<0.05; \*\*\*p<0.01

Table 9: The Effect of Civic Space Turmoil on Aid Events.

		DV: Aid	Events	
	No Lags	1 Lag	2 Lags	3 Lags
	(1)	(2)	(3)	(4)
Lagged DV	-0.01	0.02	0.03*	0.05***
	(0.02)	(0.02)	(0.02)	(0.02)
Non-Aid Events	-0.001**	-0.001*	-0.001*	-0.001
	(0.001)	(0.001)	(0.001)	(0.001)
Protest Events	0.05***	0.05***	0.04***	0.05***
	(0.002)	(0.002)	(0.002)	(0.002)
RCF Events	-0.01***	-0.01**	-0.01**	-0.01**
0 A F F	(0.002)	(0.002)	(0.002)	(0.002)
CAF Events	-0.001	-0.001	-0.001	-0.001
Protest, $t-1$	(0.001)	(0.001) -0.01***	(0.001) -0.01***	(0.001) -0.01***
Fiblest, $t-1$		-0.01 (0.002)	-0.01 (0.002)	-0.01 (0.002)
RCF, $t-1$		-0.002	-0.002)	-0.002)
1101, 1		(0.002)	(0.002)	(0.002)
CAF, $t-1$		-0.0004	-0.0003	0.0003
<b>Ο</b> , , ν Ι		(0.001)	(0.001)	(0.001)
Protest, $t-2$		( )	0.02***	0.02***
,			(0.002)	(0.002)
RCF, $t-2$			-0.003	-0.003
			(0.002)	(0.002)
CAF, $t-2$			-0.001	-0.001
			(0.001)	(0.001)
Protest, $t-3$				-0.01***
505				(0.002)
RCF, $t-3$				-0.001
CAE				(0.002)
CAF, $t-3$				-0.002
Exp. Dep.	0.001	0.001	0.001	(0.001) 0.001
схр. Бер.	(0.001)	(0.001)	(0.001)	(0.001)
Imp. Dep.	-0.0003	-0.0003	-0.0003	-0.0002
ппр. Бор.	(0.001)	(0.001)	(0.001)	(0.001)
Trade to GDP	-0.0000	-0.0000	-0.0000	-0.0000
	(0.0000)	(0.0000)	(0.0000)	(0.0000)
Observations	3,293	3,293	3,262	3,231
R <sup>2</sup>	•			0.19
Adjusted R <sup>2</sup>				0.15
F Statistic	66.93***		49.79***	43.47***
R <sup>2</sup> Adjusted R <sup>2</sup>	0.15 0.11	0.15 0.11 50.47***	0.18 0.14	0.19 0.15

Note:

\*p<0.1; \*\*p<0.05; \*\*\*p<0.01

Table 10: The Effect of Civic Space Turmoil on Trade Events.

	DV: Trade Events			
	No Lags	1 Lag	2 Lags	3 Lags
	(1)	(2)	(3)	(4)
Lagged DV	-0.01	-0.01	-0.01	-0.01
	(0.02)	(0.02)	(0.02)	(0.02)
Non-Trade Events	-0.003	-0.002	-0.002	-0.005**
Protest Events	(0.002) $-0.01$	(0.002) -0.01	(0.002) -0.01	(0.002) 0.01*
Protest Events	-0.01 (0.01)	-0.01 (0.01)	-0.01 (0.01)	-0.01° (0.01)
RCF Events	-0.01**	-0.01	-0.01	-0.004
TIOI EVOING	(0.01)	(0.01)	(0.01)	(0.01)
CAF Events	-0.01**	-0.005	-0.004	-0.01***
	(0.003)	(0.003)	(0.003)	(0.003)
Protest, $t-1$		-0.01	-0.01	-0.01
		(0.01)	(0.01)	(0.01)
RCF, $t-1$		-0.01*	-0.01	-0.01
045 . 1		(0.01)	(0.01)	(0.01)
CAF, $t-1$		-0.004 (0.003)	-0.003 (0.003)	-0.004 (0.003)
Protest, $t-2$		(0.003)	-0.003	0.003)
1101031, 1 2			(0.01)	(0.01)
RCF, $t-2$			-0.01*	-0.02**
,			(0.01)	(0.01)
CAF, $t-2$			$-0.01^*$	$-0.02^{***}$
			(0.003)	(0.003)
Protest, $t-3$				0.002
DOE				(0.01)
RCF, $t-3$				-0.001
CAF, $t-3$				(0.01) 0.03***
OAI, t-3				(0.003)
Exp. Dep.	-0.001	-0.001	-0.001	-0.001
e = e e	(0.003)	(0.003)	(0.003)	(0.003)
Imp. Dep.	$-0.004^{**}$	$-0.004^{**}$	$-0.004^{**}$	-0.004**
	(0.002)	(0.002)	(0.002)	(0.002)
Trade to GDP	0.0000	0.0000	0.0000	0.0000
	(0.0000)	(0.0000)	(0.0000)	(0.0000)
Observations	3,293	3,293	3,262	3,231
$R^2$	0.01	0.01	0.01	0.04
Adjusted R <sup>2</sup>	-0.04	-0.04	-0.04	-0.01
F Statistic	2.15**	1.99**	1.98**	6.79***

Note:

\*p<0.1; \*\*p<0.05; \*\*\*p<0.01

## References

- Ascensão, Fernando, Lenore Fahrig, Anthony P Clevenger, Richard T Corlett, Jochen AG Jaeger, William F Laurance and Henrique M Pereira. 2018. "Environmental challenges for the Belt and Road Initiative." *Nature Sustainability* 1(5):206–209.
- Asia Maritime Transparency Institute. 2018. "KyaukPyu: Connecting China to the Indian Ocean." *Center for Strategic and International Studies*.
- Atkinson, Joel. 2010. "China–Taiwan diplomatic competition and the Pacific Islands." *The Pacific Review* 23(4):407–427.
- Baroncelli, Alessandro and Matteo Landoni. 2019. Chinese State-Owned Enterprises in the Market for Corporate Control. Evidences and Rationalities of Acquisition in Western Countries. In *Chinese Acquisitions in Developed Countries*. Springer pp. 17–36.
- Bräutigam, Deborah. 2020. "A critical look at Chinese 'debt-trap diplomacy': The rise of a meme." *Area Development and Policy* 5(1):1–14.
- CGTN. 2019. "Chinese investment turns Piraeus Port into an international hub." *China Global Television Network*.
- Chen, Zhenyun. 2012. The corporate governance reform of state-owned commercial banks in China PhD thesis University of Leicester.
- Coppedge, Michael, John Gerring, Carl Henrik Knutsen, Staffan I. Lindberg, Jan Teorell, Nazifa Alizada, David Altman, Michael Bernhard, Agnes Cornell, M. Steven Fish, Lisa Gastaldi, Haakon Gjerløw, Adam Glynn, Sandra Grahn, Allen Hicken, Garry Hindle, Nina Ilchenko, Katrin Kinzelbach, Joshua Krusell, Kyle L. Marquardt, Kelly McMann, Valeriya Mechkova, Juraj Medzihorsky, Pamela Paxton, Daniel Pemstein, Josefine Pernes, Oskar Rydén, Johannes von Römer, Brigitte Seim, Rachel Sigman, Svend-Erik Skaaning, Jeffrey Staton, Aksel Sundström, Eitan Tzelgov, Yi-ting Wang, Tore Wig, Steven Wilson and Daniel Ziblatt. 2022. "VDem[Country–Year/Country–Date] Dataset v12 Varieties of Democracy (V-Dem) Project."
- Cruz, Cesi, Carlos Scartascini and Philip Keefer. 2020. "The database of political institutions 2020 (DPI2020)." *Washington, International Development Bank*.
- Custer, S, A Dreher, TB Elston, A Fuchs, S Ghose, J Lin, A Malik, BC Parks, B Russell, K Solomon et al. 2021. "Tracking Chinese Development Finance: An Application of AidData's TUFF 2.0 Methodology." *Williamsburg, VA: AidData at William & Mary*.
- Deeg, Richard and Iain Hardie. 2016. "What is patient capital and who supplies it?" *Socio-Economic Review* 14(4):627–645.
- Deng, Ping. 2004. "Outward investment by Chinese MNCs: Motivations and implications." *Business horizons* 47(3):8–16.
- Diamond, Larry and Orville Schell. 2019. *China's Influence and American Interests: Promoting Constructive Vigilance*. Hoover Press.

- Dreher, Axel, Andreas Fuchs, Roland Hodler, Bradley C Parks, Paul A Raschky and Michael J Tierney. 2019. "African leaders and the geography of China's foreign assistance." *Journal of Development Economics* 140:44–71.
- Ellis, R Evan. 2021. "China's Bid to Dominate Electrical Connectivity in Latin America." *The Jamestown Foundation China Policy Brief* 21(10).
- Ellis, Robert Evan. 2013. The Strategic Dimension of Chinese Engagement with Latin America. Technical report William J. Perry Center for Hemispheric Defense Studies.
- Farah, Douglas and Marianne Richardson. 2021. "The PRC's Changing Strategic Priorities in Latin America: From Soft Power to Sharp Power Competition.". Copyright Copyright National Defense University Press Oct 2021; Last updated 2021-11-20.
- Flores-Macías, Gustavo A and Sarah E Kreps. 2013. "The foreign policy consequences of trade: China's commercial relations with Africa and Latin America, 1992–2006." *The Journal of Politics* 75(2):357–371.
- Florio, Massimo, Matteo Ferraris and Daniela Vandone. 2018. "Motives of mergers and acquisitions by state-owned enterprises: A taxonomy and international evidence." *International Journal of Public Sector Management*.
- Gelpern, Anna, Sebastian Horn, Scott Morris, Brad Parks and Christoph Trebesch. 2021. How China Lends: A Rare Look into 100 Debt Contracts with Foreign Governments. Peterson Institute for International Economics, Kiel Institute for the World Economy, Center for Global Development, and AidData at William & Mary.
- González Jáuregui, Juliana. 2021. How Argentina Pushed Chinese Investors to Help Revitalize Its Energy Grid. Technical report Carnegie Endowment for International Peace.
- Gourieroux, Christian, Alberto Holly and Alain Monfort. 1982. "Likelihood ratio test, Wald test, and Kuhn-Tucker test in linear models with inequality constraints on the regression parameters." *Econometrica: journal of the Econometric Society* pp. 63–80.
- Hille, Kathrin. 2019. "Pacific islands: a new arena of rivalry between China and the US." *Financial Times*.
- Huang, Zixin and Heiwai Tang. 2017. Why China is Curbing Outbound Direct Investment. Policy Brief, Peterson Institute of International Economics.
- Jacobs, Jack B. 2011. "Patient Capital": Can Delaware Corporate Law Help Revive It?" Wash. & Lee L. Rev. 68:1645.
- Kaplan, Stephen B. 2018. "The rise of patient capital: The political economy of Chinese global finance." *Institute for International Economic Policy Working Paper Series, Elliott School of International Affairs and the George Washington University*.
- Kastner, Scott L. 2016. "Buying influence? Assessing the political effects of China's international trade." *Journal of Conflict Resolution* 60(6):980–1007.

- Kastner, Scott L and Margaret M Pearson. 2021. "Exploring the parameters of China's economic influence." *Studies in Comparative International Development* 56(1):18–44.
- Kirkegaard, Jacob Funk. 2019. Chinese Investments in the US and EU Are Declining for Similar Reasons. China Economic Watch, Peterson Institute of International Economics.
- Kroeber, Arthur R. 2020. *China's Economy: What Everyone Needs to Know®*. Oxford University Press.
- Lee, Paul Tae-Woo, Zhi-Hua Hu, Sang-Jeong Lee, Kyoung-Suk Choi and Sung-Ho Shin. 2018. "Research trends and agenda on the Belt and Road (B&R) initiative with a focus on maritime transport." *Maritime Policy & Management* 45(3):282–300.
- Lin, Justin Y and Yan Wang. 2017. "The new structural economics: Patient capital as a comparative advantage." *Journal of Infrastructure, Policy and Development (2017) Volume* 1:4–23.
- Loughlin, Neil and Mark Grimsditch. 2021. "How local political economy dynamics are shaping the Belt and Road Initiative." *Third World Quarterly* 42(10):2334–2352.
- Malik, A, Bradley Parks, Brooke Russell, Joyce Lin, Katherine Walsh, Kyra Solomon, Sheng Zhang, Thai-Binh Elston and Seth Goodman. 2021. "Banking on the Belt and Road: Insights from a new global dataset of 13,427 Chinese development projects." *AidData at William & Mary*.
- Marshall, Monty G and Ted Robert Gurr. 2018. "Polity V Political Regime Characteristics and Transitions, 1800-2018: Dataset users' manual." *College Park: University of Maryland*.
- Mauro, Paolo. 1995. "Corruption and growth." *The quarterly journal of economics* 110(3):681–712.
- McLaughlin, David. 2016. "Obama Blocks Chinese Takeover of Aixtron as U.S. Security Risk." *Bloomberg*.
- Nowak, Wioletta. 2015. "China's development aid strategies." *Chinese Business Review* 14(4):201–209.
- Pemstein, Daniel, Kyle L. Marquardt, Eitan Tzelgov, Yi-ting Wang, Juraj Medzihorsky, Joshua Krusell, Farhad Miri and Johannes von Römer. 2022. "The V-Dem Measurement Model: Latent Variable Analysis for Cross-National and Cross-Temporal Expert-Coded Data." V-Dem Working Paper (21).
- Salem, Saber. 2020. "Sino-Taiwan Chequebook Diplomac yin the Pacific." E-IR.
- Shah, Abdur Rehman. 2021. "Revisiting China threat: The US'securitization of the 'Belt and Road Initiative'." *Chinese Political Science Review* pp. 1–21.
- Springman, Jeremy, Erik Wibbels and Huong Vu. 2022. Resurgent Authoritarian Influence: New Machine-Generated, High-Frequency, Cross-National Data. Working paper Duke University and DevLlab@Duke.

- Strüver, Georg. 2016. "What friends are made of: Bilateral linkages and domestic drivers of foreign policy alignment with China." *Foreign Policy Analysis* 12(2):170–191.
- Sutherland, Dylan, John Anderson, Nicholas Bailey and Ilan Alon. 2020. "Policy, institutional fragility, and Chinese outward foreign direct investment: An empirical examination of the Belt and Road Initiative." *Journal of International Business Policy* 3(3):249–272.
- Thatcher, Mark and Tim Vlandas. 2016. "Overseas state outsiders as new sources of patient capital: Government policies to welcome Sovereign Wealth Fund investment in France and Germany." *Socio-Economic Review* 14(4):647–668.

The International Monetary Fund. 2022. "Direction of Trade Statistics.".

The World Bank. 2022a. "World Bank Data.".

The World Bank. 2022b. "Worldwide Governance Indicators.".

- Wei, Shang-Jin. 2000. "How taxing is corruption on international investors?" *Review of economics and statistics* 82(1):1–11.
- Wuthnow, Joel. 2017. *Chinese perspectives on the Belt and Road Initiative: strategic rationales, risks, and implications.* National Defense University Press Washington, DC.
- Xinhua. 2021. "COSCO investment in Piraeus port an example of cooperation with mutual benefits: former Greek PM." *Xinhua News*.
- Zeitz, Alexandra Olivia. 2019. The financial statecraft of debtors: the political economy of external finance in Africa PhD thesis University of Oxford.