

The Limits of Economic Statecraft: China's Bilateral Swap Agreements and the External Security Environment

Siyao Li* Aditi Sahasrabuddhe[†] Scott Wingo[‡]

October 20, 2023

Abstract

The People's Bank of China (PBoC) has signed forty-one bilateral renminbi (RMB) swaps with partner economies since 2009. Because the economic costs of signing these instruments are negligible, it is puzzling that the PBoC swap network is not more widespread. Why do more states not enter into these agreements? We argue that states are deterred by security considerations, specifically concerns that monetary cooperation with China will send negative signals to the US. Using elite interviews with central bankers and financial leaders as well as quantitative evidence, we demonstrate that the likelihood of signing RMB swaps is influenced by both Chinese and US security alliances. Counterintuitively, the growth of China's military power and of its ability to back its economic interests seem to constrain its choice of BSA partners in regions closer to China given existing US military alliances.

*Graduate School of Public and International Affairs, University of Pittsburgh. Email: siyao.li@pitt.edu

[†]Department of Political Science, Brown University. Email: aditi_s@brown.edu

[‡]Center For Advanced China Research.

1 Introduction

Since 2009, The People’s Bank of China (PBoC) has pursued a range of international lending and settlement initiatives, to increase the international use of the renminbi (RMB). One important instrument among these are the bilateral swap agreements (BSAs), which are RMB-denominated lines of liquidity (in exchange for foreign currency liquidity) with partner economies. Since 2009, China has entered into forty-one BSAs with partner economies across the world. These swaps have received a great deal of attention from scholars and policymakers, as they symbolize China’s growing role in the global financial system (Horn, Parks, et al., 2023) and its financial policy agenda of renminbi internationalization (RMBI) (Liao and McDowell, 2015; Prasad, 2016).

PBoC swaps bring coveted economic benefits to China and its partners. China’s growing BSA network represents its centrality as a provider of financial rescue mechanisms to several emerging and developing economies (Horn, Parks, et al., 2023). RMB swaps help boost gross reserves and provide assistance to countries with low reserve ratios. PBoC swaps thus provide these economies a lower-cost alternative to conditional loans from institutions such as the World Bank or the International Monetary Fund (IMF) when facing financial distress. As a tool for RMB internationalization (RMBI), China’s BSAs offer an alternative currency to settle international transactions (or even an alternative for global economic leadership more generally) to countries seeking to be less dollar-dependent (Broz, Zhang, and Wang, 2019). RMB swaps provide partners with non-dollar currency liquidity to promote RMB settlements in cross-border trade and investment. These benefits largely outweigh any economic costs to BSA partners, namely that China’s rescue mechanisms tend to carry higher interest rates than any other programs such as IMF loans, Fed swaps, US Treasury loans.

China’s push to internationalize its currency, and so the expansion of its swap program as a tool to achieve this goal, is often painted as its effort to dethrone the US dollar as the global reserve currency. The RMB swaps bring China many benefits, largely tied to this goal. RMBI can protect China from the vulnerabilities of being overly exposed to dollar-denominated assets (McNally and Gruin, 2017). The use of one’s currency by others reduces the issuer’s transactions in foreign currencies and avoids foreign exchange volatility. It allows states to

delay costly economic adjustments, and lowers the international costs of borrowing for the issuing states. RMB swaps have also promoted increased RMB use in trade settlements, thereby increasingly affording China the benefits of issuing an international currency.

China's growing swap network also affords China significant political benefits. The expansion of China's BSA network symbolizes its leadership status in international monetary affairs. Given states have increasingly signed RMB swaps to facilitate the international use of China's currency, this may indicate their recognition of China's rising status in global finance and financial governance. Furthermore, PBoC swap agreements also afford China greater leverage over its foreign partners, in interstate political and economic interactions.

Given that signing BSAs brings attractive benefits and few costs to both China and its partners, it is puzzling that more states have not sought to sign on to these agreements. Even more puzzling is that many of China's major economic partners, largely small states in China's immediate geographic neighbourhood, have not signed swap agreements with the PBoC, despite close economic ties with China and few lower-cost alternatives. These puzzles motivate two interrelated questions that we address in this paper: Why do more states not enter China's BSAs? And why is the reach of this program limited in China's own neighbourhood? Because China's swap program has important implications for its position and the balance of economic power in the international financial system, this question is geopolitically and geoeconomically salient.

We argue that the scope of the RMB swap network is constrained by security considerations by China and its partners. China's unfavorable global position vis-à-vis the United States' extensive network of security alliances and partnerships, and the threat of escalating US-China tensions, mediates secondary states' willingness to pivot away from the US. While swaps do not carry extraordinarily high costs for BSA counterparties, they may symbolize a state's acknowledgement of China's leadership status in the international monetary system. How this symbolism is viewed externally will depend on the states' positioning in the existing system of political and economic partnerships and alliances. This symbolism may be less favourably interpreted by the United States, and therefore may send a more costly signal to the US that a state is pivoting towards China amid the growing US-China rivalry. Given that China's immediate neighbourhood—the South and East China Seas—is the main theatre of

US-China tensions, the cost of sending these signals to the US will be greater among China's neighbours than states further away.

Any analysis of the China's expanding international monetary initiatives warrants incorporating the influence of China's role in the current international security environment. Even more, the equation on military strength and monetary power would not be complete without consideration of China's military strength in relation to that of the United States. China's choices of BSA partners are influenced not only by its own economic goals and preferences, but how its partners perceive China's global rise, and where they are positioned in the current system of security arrangements, that is, whether RMB swap partners in China's neighborhood are US allies. We find that China's choices for BSA partners decrease closer to its borders, where US allies are *more* concerned about the security threat that China poses in their region. China will have a larger number of potential swap partners in regions where it is more difficult for China to project its military power, and where U.S. allies are less concerned about the security implications of cooperating in China's monetary initiatives.

We build our argument using qualitative evidence from elite interviews with current and former financial leaders from RMB swap counterparty states.¹ We then test our argument using a cross-national panel of China's bilateral swap agreements (BSAs). We find that these agreements are constrained by the extensive network of US security alliances and partnerships in their ability to generate support for RMB use in the global reserve system. They are further constrained by China's external security environment (US-China tensions, and territorial disputes with neighbours) and limited security partnerships.

Our paper makes three broad contributions: First, in contrast to most work on this question, we consider not only China's motivations to extend RMB swaps, but also demand-side determinants of states swap agreements with China. We provide first-hand insights from RMB signatories to make our case. Second, our analysis of the security constraints on monetary cooperation complements a larger literature on the economic constraints of international monetary cooperation. Finally, our findings contribute to the study of interstate competition in international monetary affairs and highlights how secondary powers and small

¹These interviews were conducted between January and August 2023 by one co-author of this project. Per IRB protocol, the other co-authors do not have access to interview notes as IRB exemption was only received for one researcher for this project. IRB exemption was received from Brandeis University in November 2022.

states can influence the scope of China’s monetary expansion.

Next, we review the literature on the economic determinants of signing RMB swaps. In parts 3 and 4, we introduce our argument and hypotheses on the security constraints of China’s RMB swap program. In part 5 we describe the data and research design. We then present and discuss our findings in part 6 before we conclude.

2 Determinants of RMB Swaps

Broadly, three categories of economic motivations explain the expanding Chinese swap network. First, currency swaps in general provide states cooperative insurance mechanisms against volatile international capital flows. BSAs provide states access to liquidity and a line of credit even in the event that financial markets falter (McDowell, 2019a). The PBoC swap network provides an important tool for international crisis management (Horn, Parks, et al., 2023). PBoC swap are drawn upon by China’s counterparties in periods of macroeconomic distress, by countries facing low reserve rations, or poor sovereign risk or credit ratings.

Second, García-Herrero and Xia (2013) show that trade factors are important determinants for China’s choice of BSA partners, but investment interests are not. Partner countries’ degree of trade dependence on China is a more important driver of swap agreements than is China’s trade dependence on partners (Liao and McDowell, 2015). Lin, Zhan, and Cheung (2016) find that countries that have strategic partnership and free trade agreements with China are more likely to enter into swap agreements. While we recognize that facilitating trade and boosting liquidity are key reasons for signing swaps, the modest extent to which BSAs have done so reflects limitations to RMB. In fact, while China has the largest number of BSAs of any country in the world, RMB swap drawings are negligible in comparison with drawings of US Fed swap lines (Horn, Parks, et al., 2023).

Third, China’s BSAs facilitate RMB and provide an alternative to dollar-dependence for states seeking to diversify their reserve portfolios. Until 2009, PBoC swap agreements were only made through Chiang Mai Initiative [Multilateralization] (CMIM), and primarily denominated in U.S. dollars. Since 2009, China’s BSAs have been denominated in renminbi, serving the dual purpose of providing liquidity to foreign countries and promoting its in-

ternational use (Brummer, 2017, p. 476).² RMB swaps bypass the dollar and authorize a temporary exchange between central banks of renminbi for the counterparty’s currency to promote liquidity. Companies can access renminbi at their local banks, thus facilitating trade transactions with its partners and alleviating the possibility of a crunch for foreign currency. The total value of the agreements are also non-trivial, amounting to \$554 billion in RMB as of the end of 2022. In this context, Aizenman (2015) argues that the “commercial internationalization” of the renminbi is mostly limited to China’s own “sphere” of transactions, rather than a full “financial internationalization” in which the currency would be used as a reserve or in transactions not directly involving China.

As Table 1 shows, China’s BSA partners are extremely varied in their economic and political makeup. In contrast to the US Federal Reserve swap lines, which tends to select its swap recipients based on close economic ties with the US (Aizenman and Pasricha, 2010; McDowell, 2012; Broz, 2015) and US geopolitical interests (Sahasrabudde, 2019), China’s motivations are more varied. Certainly, China’s swaps may help relieve debt and liquidity distress in economies that have close trade and financial links to China (Gallagher, 2022).

In an interview, a former Argentinian policymaker discussed at length how PBoC swaps helped bolster Argentina’s foreign exchange reserves. RMB swaps played an important window-dressing role to calm investors during the crisis in 2009. Argentina’s RMB swap was put to use following Argentina’s default on foreign bonds in 2014. After the default, these swaps were drawn on and converted to US dollars to bolster the appearance of *dollar* reserves in 2015 (after an agreement was made between both parties to allow this).³ The Central Bank of Argentina (BCRA) converted about \$3 billion of an \$8 billion swap into US dollars with no conditions attached to this arrangement. To continue serving window-dressing purposes, this line was expanded in 2018. Since 2009, the PBoC encouraged Argentina to use these swap lines for trade and investment settlements. It is beneficial for both parties. Via the swap, the BCRA can prop up reserves with available yuan, while they can also ask the PBoC to swap yuan to dollars if and when they seek to nudge the dollar-yuan position.

²China’s bilateral currency swap agreements are usually signed for a duration of three years. All of the swaps up for renewal have been renewed, sometimes after a short period of delay.

³Interview, Argentina. Horn, Parks, et al., 2023 note this agreement was made in 2015, our interview confirms that Argentina has indeed used its RMB swap for this purpose. It was noted that this agreement was made during a 3AM phone call with the PBoC’s governor Zhou Xiaochuan and the BCRA.

Table 1: China’s Bilateral Local Currency Swap Agreements, as of December 31, 2020

Partner	Initial Signing Date
Hong Kong	January 20, 2009
Malaysia	February 8, 2009
Belarus	March 11, 2009
Indonesia	March 23, 2009
Argentina	April 2, 2009
South Korea	April 20, 2009
Iceland	June 9, 2010
Singapore	July 23, 2010
New Zealand	April 18, 2011
Uzbekistan	April 19, 2011
Mongolia	May 6, 2011
Kazakhstan	June 13, 2011
Thailand	December 22, 2011
Pakistan	December 23, 2011
United Arab Emirates	January 17, 2012
Turkey	February 21, 2012
Australia	March 22, 2012
Ukraine	June 26, 2012
Brazil	March 26, 2013
United Kingdom	June 22, 2013
Hungary	September 9, 2013
Albania	September 12, 2013
European Central Bank	October 8, 2013
Switzerland	July 21, 2014
Sri Lanka	September 16, 2014
Russia	October 13, 2014
Qatar	November 3, 2014
Canada	November 8, 2014
Suriname	March 18, 2015
Armenia	March 25, 2015
South Africa	April 10, 2015
Chile	May 25, 2015
Tajikistan	September 3, 2015
Morocco	May 11, 2016
Serbia	June 17, 2016
Egypt	December 6, 2016
Iceland	December 21, 2016
New Zealand	May 19, 2017
Nigeria	April 27, 2018
Japan	October 26, 2018
Laos	May 20, 2020

Other parties have used RMB swap lines to service debts. Belarus, Sri Lanka, and Mongolia specifically used RMB swaps to service debts to China. It benefits China to extend BSAs to these economic partners as it enables China's debtors to service their public and private debt obligations to China in the face of mounting financial distress. Many of these economies had grown increasingly dependent on Chinese loans (public and private) since the 2000s (Horn, Parks, et al., 2023). One former Sri Lankan policymaker affirmed the difficulties in servicing Chinese debt (alongside dollar- and euro-denominated debt). Following recent defaults, RMB swaps now have terms attached that limited Sri Lanka's ability to use these lines to settle trade with China.⁴ These financial troubles are also closely tied with poor sovereign risk and credit ratings when states face financial distress. Many PBoC swap drawings are associated with a drop in sovereign ratings, which may signal a high likelihood of default or financial collapse (Horn, Parks, et al., 2023). PBoC swaps have served to boost reserve ratios when states see a decline in their sovereign ratings.

While the use of PBoC swaps is largely geared towards mitigating financial pressures and relieving economic distress, China's selection of its swap partners does not reflect that to be its sole motivation. Many RMB swap signatories are also from advanced economies (see Table 1). States that have both signed and used these lines have not always been in distress (such as Malaysia). South Korea, the United Kingdom, and the European Central Bank (ECB) have the largest swap lines with China. For these states, the primary purpose of these lines is to support China's goal of RMBI. A former British policymaker noted that this swap line was something that was pushed by the Treasury in 2013, when Britain and the ECB signed BSAs with the PBoC. The UK Treasury believed that being a clearing center for the yuan will be a lucrative financial service.⁵ Until then, most offshore RMB activity was largely concentrated in Hong Kong (and Singapore, to a lesser degree) (SWIFT, 2023). Closer to China, Singapore's RMB swap is less directed for its own financing needs than to meet global market needs. This line facilitates RMB clearing and settlements in Singapore as they have steadily increased among ASEAN neighbours.⁶

⁴Interview, Sri Lanka.

⁵Interview, United Kingdom

⁶Interview, Singapore.

3 Argument

Given the advantages of RMB swaps to states with extremely different economic and political profiles, why is China’s BSA network not more widespread? We find that this current literature overlooks the broader context of economic cooperation: the international security environment. While the economic costs of signing BSAs with China are minimal, there are *political* costs to its partner signatories, and geopolitical constraints that China faces in expanding its bilateral swap network.

Studies have shown that security partnerships and alliances support inter-state cooperation in trade and finance. Political allies trade with one another more than they do with non-allies (Gowa and Mansfield, 1993; Gowa, 1994). Military and security ties also shape *monetary* cooperation, such as lending agreements or international currency use (Strange, 1971; Kirshner, 1995; Cohen, 2015; Norrlof, 2020). The key determinants for international currencies (Helleiner, 2008)—confidence, liquidity, and transactional networks—are linked to states’ economic relations, as well as their security and military ties. Eichengreen, Mehl, and Chițu (2019) and Eichengreen (2011) identify a quid pro quo in terms of US allies supporting the greenback in exchange for American security assurances.

In contrast to earlier dollar challengers, China is the “first newcomer ... that can be seen as a potential adversary,” with the political authority to back a dollar rival (Helleiner and Kirshner, 2014). China’s efforts to create an alternative to the US liberal order will attract followers whose preferences diverge from the US (Liao and McDowell, 2016). Given that monetary cooperation is inextricably linked to security ties, economic factors alone cannot fully explain the limits of China’s swap program.

We argue that cooperation with China via its swap program is constrained by China’s limited security partnerships and military alliances, and the extensive network of US alliances. We analyze how China’s choice of swap partners is influenced by security considerations: the extensive global network of US security guarantees and the security threat that China poses to “secondary powers”⁷ in its neighbourhood. These influences play out differently between

⁷We use “secondary powers” or “secondary states” to refer to small and medium states that are neither ‘great’ nor ‘superpowers’. They are differentiated from “small” or “weak” powers by their significant material capabilities that affords them a degree of agency in international politics (Wilkins, 2023, p. 95).

states that rely on both rival powers, where choosing one entails security and economic risks (Pempel, 2020), and those relatively insulated from the emergent superpower rivalry. We draw on Lobell, Jesse, and Williams (2015) who find that how secondary states respond to rising regional powers is in part influenced by how engaged the *global* hegemon is in the region. Thus, US presence in Asia will influence neighboring states’ engagement with China.

Taking these considerations together, we build our argument below. We provide a brief overview of China’s limited military power relative to the US, and the security tensions that have emerged alongside China’s rise. We then discuss the motivations and concerns over China’s monetary initiatives among swap partners, China, and the US.

3.1 China’s External Security Environment

China has been labeled a “partial power” (Shambaugh, 2013). Despite its pronounced economic power, its capacity and ability to project its military power globally is dwarfed by the United States. China has a single treaty ally, North Korea, while the United States has fifty-eight (Gibler, 2009); China has a single overseas military base in Djibouti, while as of 2017, the United States military maintains overseas posts in thirty-five countries and six territories (United States Department of Defense, 2017); China has two aircraft carriers, one of which is predominantly used for training purposes; the United States has twelve, not counting nine more ships which are technically classified as “amphibious assault ships” but boast conspicuously flat decks with fighter jets aboard (United States Navy, 2018).⁸ Kardon (2022) notes further that although China has developed increased great power-projection capability through its Navy’s increased global maritime access, its military footprint is limited by its continental geography, technological disadvantages of its current military basing, and the extensive network of American alliances and partnerships.

While the United States’ might is spread across the globe, China’s is concentrated in one region.⁹ China’s strategy for naval expansion has been to focus on the near seas first and

⁸For more on this controversy regarding the classification of “amphibious assault ships,” see Farley (2014).

⁹This has led to some debate about the precise nature of the military balance in the Western Pacific. For instance, Goldstein (2017) see asymmetric weapons such as conventional missiles, submarines, and sea mines as giving China the ability to compete with the United States in East Asia; others believe that talk of a Chinese ability to deny others access to seas in its neighborhood is premature (Christensen, 2015).

only incrementally to boost its power projection capabilities in further-away areas of interest such as Indian Ocean shipping lanes (Cole, 2012, pp. 176–78). Overall, the military power balance between China and United States is undoubtedly closer in East Asia than elsewhere, where the United States remains dominant.

Monetary cooperation such as signing bilateral swaps is underwritten by both the economic power and military strength of a state. China’s BSA network has evolved and expanded since the Global Financial Crisis (GFC). The post-GFC period, however, has seen both growing territorial disputes in the Indo-Pacific *and* increased security cooperation to its west, within a context of escalating US-China rivalry. In response to this emergent rivalry, Obama’s pivot to Asia in 2012 “raised the US profile in Southeast Asia” to strengthen military ties and aid in the region. China has also increased its military presence in the region (Shambaugh, 2018).

This development has had important implications for secondary powers in the region. They are also located in what today is the main theatre for increasing tensions and fears of great power conflict. China’s rise has come with an increased threat or incidence of military disputes near its eastern and south-eastern borders. How secondary states closer to China respond to its expansive efforts will influence the scope of the PBoC swap network. To better understand the geopolitical implications of US-China tensions, a growing literature has emerged on how secondary states, especially in China’s neighbourhood, respond to the changing balance of power and the increasing US-China rivalry. Japan, Korea, or Singapore, continue to rely on the US for their security guarantees, but increasingly rely on China for their economic prosperity (Wilkins, 2023). So far, they have retained the ability to cooperate with both major powers, and avoided having to choose between them (Chong, 2023; Pempel, 2020). Largely, secondary states near China have chosen a strategy of hedging to develop strong relations with the great power rivals, protect against risks and uncertainties, and maintain all options as long as possible (Jones and Jenne, 2021). For these states, hedging is a costly signal of “ambiguity over the extent of shared security interests with great powers” (Lim and Cooper, 2015).

China’s neighbours perceive its military power differently depending on their preexisting

political and military alliances, while also balancing¹⁰ their economic interests, on which they now rely increasingly on China. Although a US ally, a neutral, or China-leaning country may have similar assessments of the People’s Liberation Army’s (PLA) raw capabilities, they will likely perceive what that means for their own interests very differently. How states perceive China’s monetary ambitions will depend on China’s external security environment, whether states are in a dispute with China, and the existing network of US security treaties and partnerships, in addition to economic ties with China. We focus on signing PBoC swaps as an indicator of economic cooperation with China.

3.2 Perceptions of Signing RMB Swaps

A key, overlooked aspect of PBoC swaps is that, unlike swap lines extended by the US Fed or the Bank of Japan, China’s swap lines are signed by counterparties’ finance ministries or treasuries, and not by the central bank. They require the approval of the signatory’s government, and are not signed solely between the central banks. These monetary ties must be supported and approved by political leaders in the partner country. Deterrents to signing China’s BSAs are then not economic, but geopolitical: first, signing BSAs may symbolize the counterparty’s recognition of China’s rising status in the international economic and political system. Second, signing BSAs with China grants China increased political leverage over the signatory. Third, this symbol may be costly to the counterpart, depending on how engagement with China is perceived by the US. This cost increases for US allies and states most vulnerable to China’s increasing military might.

Our argument hinges on two variables, US ally (or not), and distance from China (see Table 2). Below, we discuss perceptions and costs of cooperation with China by party—China and its swap partners—and break them down by our main variables of interest. We also elaborate on how the US perceives China’s economic expansion and its implication for states’ engagement in China’s monetary initiatives. In short, we argue that US allies neighboring China will hedge between the rivals, but their economic engagement with China will depend on the security environment. Monetary cooperation with China by signing BSAs will be contingent on stable relations with China, and will be impeded in the event

¹⁰Not in the international relations sense of the word.

	US Ally	Non-US Ally
China Neighbor	Contingent and Limited Cooperation	Cooperation with China (China's regional expansion)
China Distant	Cooperation with US <i>and</i> China	Cooperation with China

Table 2: Geopolitical variation in cooperation with China (RMB swap) by US Ally and Distance from China.

of territorial disputes with China. We speculate that in the event that tensions escalate, they will revert to their ties with the US and limit engagement with China. Non-US allies in the region who cannot rely on US security guarantees will be less sensitive to the growing superpower rivalry and will be more likely to pivot towards China, either because they cannot afford to stand up to Beijing or because they stand to benefit from better relations with the regional power. US allies further away from China will be least concerned by the security threat and will also be attracted the non-dollar alternative that China presents. Their engagement with both powers will not be affected by security considerations. Patterns of monetary engagement with China's currency initiatives will also be influenced by China's preferences to engage differently with US allies near and far.

3.2.1 China Neighbor: US Ally

We expect that secondary states that are US allies will perceive China's growing military power as a threat to their own security. Traditional international relations theory tells us that these states will therefore seek to balance against China (Walt, 1987). Balancing may include avoiding monetary interdependence for fear of being left exposed in a crisis. Today, however, despite the security risk, these states rely more and more on China rather than the US for their economic prosperity, and have instead adopted a strategy of hedging.

We suggest that secondary states in China's neighborhood that are US allies will engage in a strategy of *contingent* hedging. That is, they will engage in economic cooperation with China as long as they enjoy stable relations with China. US allies will primarily rely on US

security support and continue to cooperate with the US in economic affairs. In fact, China's regional military expansion has pushed secondary states to reaffirm ties with the US (Selden, 2013). As long as the US maintains a stable security presence in the region, such countries are likely to continue engaging in the quid pro quo of supporting the dollar in exchange for security assurances from the US, alongside economic engagement with China. However, when faced with real security threats, such as territorial disputes, or diplomatic disagreements with China, secondary states' security ties with the US will prevail over economic cooperation with China. US allies in China's neighbourhood will choose to hedge between the rival powers, but prioritise economic and security ties with the US. Their willingness to enter a swap agreement with China will be mediated by the degree of their security concerns.

Japan's swap agreement with China in 2018 illustrates how BSAs are not simply monetary instruments but also political instruments. This agreement was signed at a time when US-Japanese relations were fractured and Sino-Japanese relations had warmed up. As US support for the Asia Pacific economy and security waned, Japan reached agreement on a local currency swaps with China that bypassed the dollar. Before this, Japan and China had not reached an agreement on a bilateral swap that is denominated in local currencies due to general strategic distrust fueled by issues such as territorial dispute over the Senkaku Islands.¹¹ The *Global Times*, a semi-official outlet of the Chinese government, read great significance into the event, posting a news report online titled "Revived Beijing-Tokyo currency swap could be key to ending US dollar's domination."¹² The *South China Morning Post*, a reputable English-language news source based in Hong Kong, ran a headline titled "China and Japan sign US\$29 billion currency swap to forge closer ties." More recently however, with tensions in East Asia on the rise, Japan and South Korea have *increased* their holdings of US dollar assets.

Monetary and financial policymakers confirmed that geopolitics influences economic cooperation. One former policymaker in Japan discussed the territorial dispute with China as a major hurdle to pursuing stronger economic and financial relations with China until 2018.

¹¹Tetsushi Kajimoto. October 26, 2018. "China-Japan sign three-year FX swap deal to strengthen financial stability, business activity." *Reuters*.

¹²Xiao Xin. October 21, 2018. "Revived Beijing-Tokyo currency swap could be key to ending US dollar's domination." *Global Times*.

Japan's engagement with China is significantly determined by its relations with Beijing at a given time.¹³ Similarly, a Singaporean policymaker noted their tenuous position in the region, as a small city state with deep economic and financial ties with both the US and China, but also strong security ties with the US. These security ties are especially important given Singapore's fears of the threat of a US-China conflict in its backyard. As such, Singapore continues to lean heavily on US security support and also on the dollar anchor, while engaging with China in the trade and monetary spheres "in peacetime."¹⁴ While the question of ethnicity and economic cooperation is not the focus of our paper, it is interesting also that Singaporean policymaker also noted that ethnic ties between Singapore and China help generate support for increased engagement and cooperation in trade and finance between the two states.¹⁵

China itself may be wary of greater engagement with neighbors that are US allies. At the very least, China sees monetary initiatives as a potential bargaining chip in influencing security balance in the region. China is also less likely to extend swaps to states with which it has a territorial or diplomatic dispute and may use the swap line leverage or to retaliate to increasing tensions with neighboring states. For example, in 2017, China allowed its swap line with US-allied South Korea to expire for one week during a diplomatic row over THAAD (Terminal High Altitude Area Defense), an American-built missile defense system.

3.2.2 China Neighbor: Non-US Ally

Non-US allies will be more likely than US allies to perceive Chinese military power to be relatively benign. Shambaugh (2018, pp. 97–98) notes, many smaller states have "moved into the Chinese orbit without fanfare" as they can no longer afford to stand up to Beijing on their own and see the decision to tilt towards China as pragmatic. While regional allies will hedge against the risks of escalating US-China tensions, regional non-allies will pivot toward China. Many smaller Southeast Asian states have grown to view the US pivot to be "more hype than reality." On the other hand, China offers them access to an alternative reserve currency and liquidity to settle cross-border transactions.

¹³Interview, Japan.

¹⁴Interview, Singapore.

¹⁵Interview, Singapore.

Indonesia has no formal alliance or partnership with the US. As such, Indonesia's position vis-a-vis China's might and history of conflict in the region is less contingent on perceptions of a security threat. Recently, ASEAN states, which includes Indonesia, have sought to resolve disputes in the South China Sea and the development of a "code of conduct" to set norms in the region to prevent a clash in disputed waters (Karmini, 2023; Yeo, 2023). While Indonesia has expressed opposition to China's claims over the northern parts of the Natuna Islands, it has not actively challenged China's territorial and maritime claims along with its ASEAN counterparts. Both parties, despite disagreements and unyielding positions on security and territorial issues, as well as on religious grounds, remain committed to deepening security ties. China plays a central role in helping smaller states in the region generate economic prosperity, and also relies on its neighbours' mutual trust over security concerns (Zou, 2023).

A former financial policymaker in Indonesia talked of the importance of keeping in China's good books and maintain and strengthening economic ties, despite concerns among the Indonesian public of China's growing influence in the region and tensions between ethnic Chinese expats and Indonesian Muslims within Indonesia. Indonesia's swap with the PBoC had to be very carefully announced when it was first signed, to get the politics right.¹⁶

Non-US allies also present China with the opportunity to expand its regional orbit. China will be more likely to increase monetary engagement to capitalize on the absence of a strong US security presence among non-US allies. In these countries, China will not be deterred by the threat of US security interference to the same degree as it would be in its engagement with US allies. These potential partners also afford China greater economic and political leverage in the region. For instance, Sri Lanka is portrayed as a key site of Sino-Indian tensions. Following Sri Lanka's recent defaults and growing Sino-Indian tensions over a ship visit in Sri Lanka's Hambantota Port, China has threatened Sri Lanka that any further diplomatic slights would impact bilateral discussions on restructuring Sri Lanka's Chinese loans, which Sri Lanka cannot get out of without China's assistance (Ramachandran, 2022). China's increased monetary cooperation with Pakistan has been seen in New Delhi as China's efforts to limit India's influence in the region (Khan, 2023).

The expansion of China's regional orbit is also facilitated by China's own military and

¹⁶Interview, Indonesia.

security partnerships. As in the case of US dollar support, or international trade, security partnerships with China will make room for economic cooperation. With regards to China's own security and military initiatives, China also shares close political ties with Tajikistan, a founding member for the Shanghai Cooperation Organization. Since the end of China's boundary dispute with Tajikistan in 2011, this partnership has been important for Tajikistan's domestic political stability. While this strategic partnership is important for China, given Tajikistan's positioning in central Asia, it is even more important for Tajikistan, who relies greatly on China for economic support. The two military partners signed a swap in 2015. The end of this arrangement would be especially costly for Tajikistan. Security cooperation with China increases economic cooperation, thereby giving China greater leverage over its economic and political partners.

3.2.3 China Distant: US Ally and Non-Ally

Further away from China, Chinese military power is less present and less concerning for US allies and non-allies. Potential swap partners in these regions are less likely to feel concerned with security dynamics in the Western Pacific. Many states further from China are also looking to diversify their reserve portfolios and settlement currencies away from the US dollar. RMB swaps present these countries with such an opportunity. These countries will be more likely to diversify their monetary portfolio by joining China's currency initiatives unencumbered by the additive need for continued ties with the US. For them, given their relative geographic distance from US-China competition in China's neighborhoods, RMB swaps become more attractive as another source of accessing currency liquidity to meet their economic and financial needs. It also facilitates many states' growing wish for an alternative currency to diversify towards, and decreasing the burdens of dollar dependence.

Countries further away from China, especially further from its maritime borders, will also be less deterred by US alliances and its security presence. In fact, China may be altogether less likely to regard US security presence in these countries as a threat to its regional political and security aspirations. American security guarantees in regions such as Europe and Latin America may well be net positives for China, which has economic interests in these areas but little military presence there. Thus, in regions further away from China, the security alliances

and military presence provided by the United States provide public goods of stability and security, and China will therefore be more comfortable partnering with currencies in these regions.

3.2.4 The US

The US is also a pivotal actor in the geopolitics and geoeconomics of China's rise, and is closely watching as China expands in economic and financial reach across the globe. Signing a BSA with China signals a state's recognition of China's growing influence to the rest of the world. This signal may be especially costly to allies and close partners of the US, and explain, in part, why states don't sign on to these lines at higher rates.

In the later 2010s, the US has sought to impede another of China's global infrastructure projects, the Belt and Road Initiative (BRI). Some argue that the Biden administration views the program negatively, is wary of states' engagement with China's economic expansion, and is trying hard with its allies to propose alternatives to target the BRI (Zhao, 2021). Given that the RMB swap network is an inherently economic cooperation with China undertaken by political institutions (finance ministries or treasuries), we can infer that US administrations might view these arrangements similarly to other economic expansionary efforts. In fact, McDowell (2023) shows evidence from US Congressional testimonies that US policymakers view expansion of China's monetary initiatives as concerning. US Treasury officials are monitoring the increasing number of swaps that China has extends.¹⁷

In recent years, US ability to maintain its global monetary leadership has been questioned and China's position as the US's main competitor has been the source of much attention. In 2022, the Biden administration stated its intention to deepen its five regional treaty alliances, and relationships with "leading regional partners." Many of these states are themselves wary of being in China's economic grip, but may indeed turn toward China if US economic stewardship wavers (Choyleva, 2023). We suggest that the costly signal that cooperation with China sends to the US may deter states from signing BSAs with the PBoC. The deterrent effect would be higher for US allies.

¹⁷Our paper does not address how the US may respond to BSA partners over monetary cooperation with China, but rather argues that concerns of how the US perceives this engagement will factor into states' decisions to enter RMB swaps.

In sum, countries' willingness to commit to monetary instruments denominated in RMB vary greatly depending on both distance from China and geopolitical orientation. How states engage with China's monetary initiatives will depend on US support, as well as on the signal that this cooperation sends to the US. This was the logic behind leading Chinese international relations scholar Wang Jisi's 2012 article "Go West," which establishes the maintenance of stability in areas to the west of China as an area of common interest with the United States, as opposed to a more confrontational relationship in East Asia. In other words, China feels uncomfortable making financial commitments to American allies in its own neighborhood, where geopolitical tension is a fact of life, but actually benefits from American security guarantees in further-flung regions where China is less geopolitically involved.

4 Hypotheses

Geopolitical pursuits and disputes can influence a states' likelihood of receiving a swap. RMB swaps help advance China's geopolitical, economic and financial aims (Armijo and Katada, 2015; Subacchi, 2017; Prasad, 2016; McDowell, 2019b). We build on this line of inquiry to show how military and security factors also constrain China's economic statecraft.

We develop and test our arguments through an analysis of the economic and security determinants of the PBoC's swap network. China's BSAs have steadily expanded to countries in different regions from 2009 through 2020 (see Figure 1). With a few significant exceptions, China's earliest BSAs were concentrated in its neighborhood, and have since been regionally diversified. Past studies of China's bilateral swap agreements have taken note of this fact and have tended to attribute it to the centrality of trade facilitation to China's BSAs.

Taking together the varying political costs and interests of both China and its swap partners discussed above, we present our hypotheses on the security foundations of the RMB swap program. We show how security considerations influence international economic cooperation, and specifically, limit China's monetary expansion through the RMB swap network. We focus on membership in the United States' network of security alliances as the main indicator of whether or not states view China's military strength as a threat. Figure 2 shows US allies and non-US allies separately, with the countries that have signed swaps with

Figure 1: People’s Bank of China Bilateral Swap Agreements by Year of Initial Signature, 2009-2020



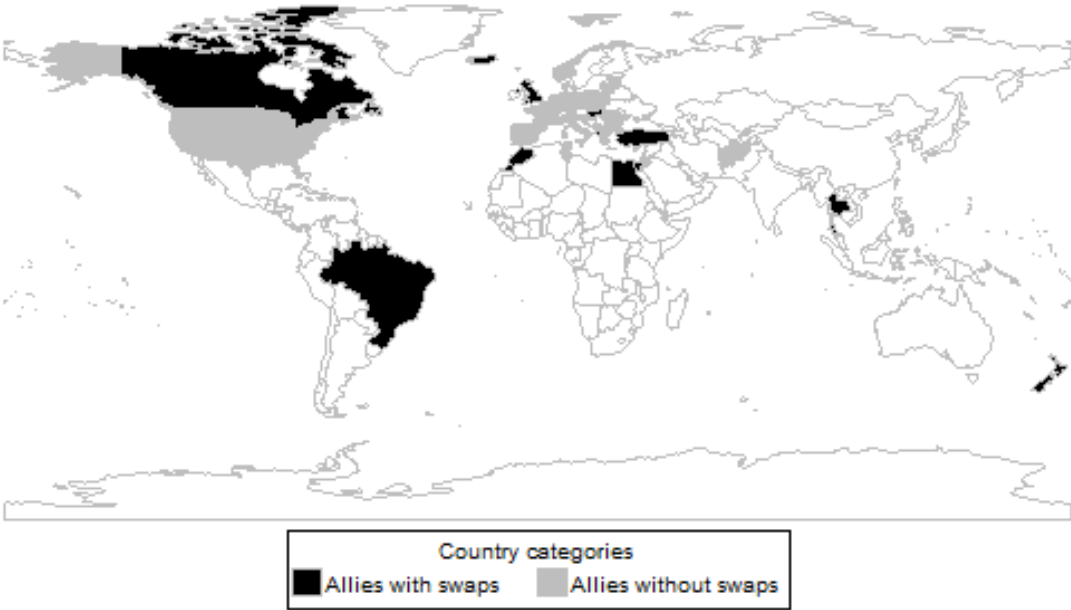
Note: Data from McDowell, [2023](#). Note that the ECB’s swap signed since 2013 is not reflected in this figure.

China in a darker color (black). We use a measure of American security commitments that comprises of both formal alliances and “major non-NATO allies” (MNNAs), a Congressional designation which authorizes certain types of arms transfers and defense cooperation with or without a formal treaty (22 USC § 2321k, [1996](#)). We also use joint military exercises as an alternative measure of American and Chinese security commitments to test for the robustness of our findings ([Bernhardt, 2021](#)).

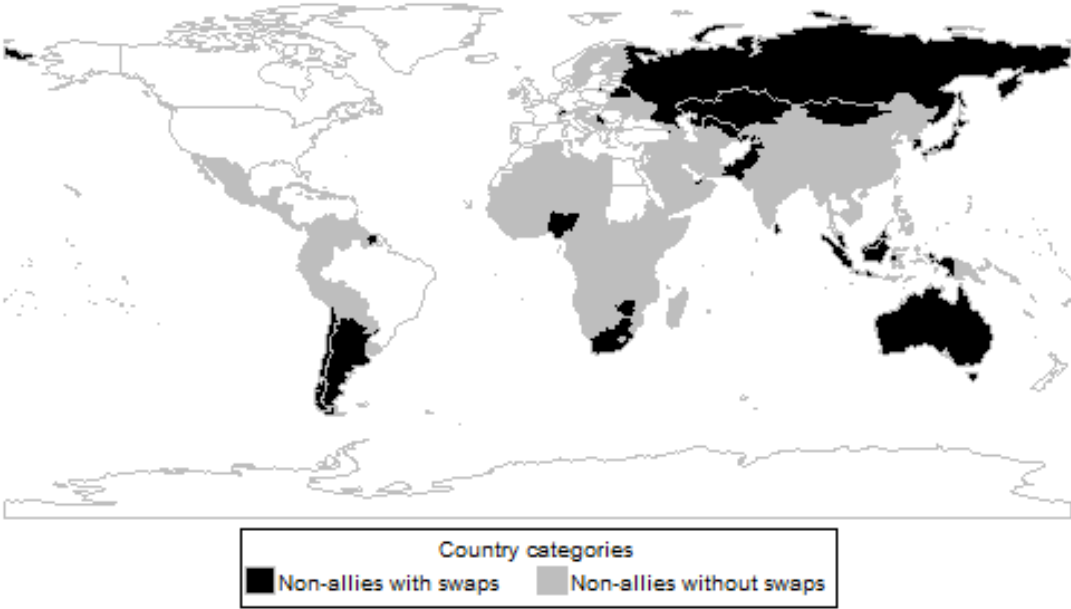
While US treaty allies are concentrated in the Western Hemisphere and Europe due to the post-World War II formal institutionalization of security commitments in these regions, the MNNAs are significantly tilted towards Middle Eastern countries and better represent United States military activity in the contemporary era ([Tertrais, 2004](#)). The graphic pattern largely conforms to our theoretical expectations. US allies that have signed swaps with China tend to be outside of China’s immediate sphere of geopolitical influence. For countries not allied with the US however, BSAs with China are more appealing in regions closer to China where China can project its military power. This leads to our first two hypotheses:

Figure 2: People’s Bank of China Bilateral Swap Agreements by US Ally Type

(a) US allies



(b) Countries not allied with the United States



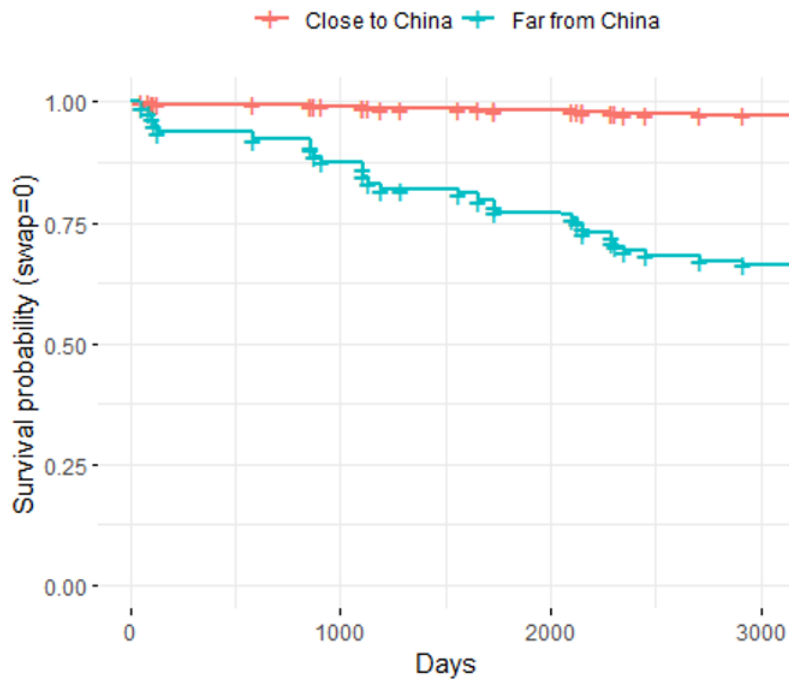
Note: Data from McDowell, 2023. The figures reflect US alliance relationships in 2020. Countries are considered “with swaps” if they signed a swap with China at any time by 2020. Note that the ECB’s swap since 2013 is not reflected in this figure.

H1: United States allies are less likely to sign bilateral swap agreements with China.

H1a: The deterrent effect of an alliance with the United States on bilateral swap agreements with China will decrease with distance from China.

Hypothesis 1a is focused primarily on the left-hand side column of Table 2 above. Figure 3 provides preliminary evidence for the hypothesis using a cox proportional hazard model. Measuring the duration of days that countries took to sign swaps since the first bilateral swap appeared in 2009, estimation results show that the survival time of US allies further away from China is shorter than US allies closer to China, namely that US allies further away from China have a higher “risk” of signing onto a swap earlier on.

Figure 3: Hazard plot of US Allies signing BSAs with China by Distance from China



Note: Data on date of swap signage from The People’s Bank of China (2021). The model includes the same control variables as Table 3. The red line is the survival curve for US allied countries that are at the 20th percentile distance from China in the data sample. The blue line is the survival curve for US allied countries that are at the 80th percentile distance from China in the data sample.

Our analysis also highlights the positive effect of security ties on economic cooperation.

As discussed above, security guarantees and partnerships have been found to support trade and international currency US among allies. We view membership in the network of US security partnerships as an indicator of whether or not states view China’s military strength as a threat. Figure 2 shows US allies and non-US allies separately, with the countries that have signed swaps with China in a darker color (black). Geopolitical ties and affinities among states, especially those more visibly opposed to the US-led order, will generate increased support for China’s emerging alternative. Given the absence of Chinese formal military allies, barring North Korea, we refer to states with bilateral or multilateral military exercises and security partnerships with China as “security partners.” We evaluate the impact of the geopolitics on the RMB swap network. As discussed above, despite China’s expansive efforts at securing economic and political ties across the globe, it faces an uphill battle of disembedding the US-led status quo. The limited reach of China’s security partnerships, and its engagement in territorial disputes with neighboring countries, vis-a-vis the extensive and established network of US security alliances, will inhibit the reach of its monetary arrangements. This leads to our next two hypotheses:

H2: States with military and security ties with China are more likely to sign bilateral swap agreements with China than other countries.

H2a: States engaged in a territorial dispute with China are less likely to sign bilateral swap agreements with China than other countries.

5 Data and Methods

Below, we describe our data and methods to evaluate our argument. Our dataset covers 195 countries from the onset of the financial crisis in 2007 to 2020.

5.1 Dependent Variables

We use a country-year panel dataset with China’s bilateral swap agreements as the primary dependent variable. Our dependent variable is China’s bilateral swap agreements. Data on

swap agreements is taken from McDowell (2023),¹⁸ and is based on the People’s Bank of China’s RMB Internationalization Reports as well as external media reports. In the final year within our sample, 2020, 23 countries have bilateral swap agreements with China. This includes developing countries such as Indonesia, Albania, and Qatar, as well as developed economies such as Australia, United Kingdom, and Switzerland. Table 1 shows China’s bilateral swap agreements and the initial signing dates as reflected in People’s Bank of China’s RMB Internationalization reports (The People’s Bank of China, 2021).

In our estimations, we omit country-years during which the country in question diplomatically recognizes Taiwan.^{19,20} We also omit non-sovereign dependencies from the sample.²¹ Because swap agreements are signed between central banks and not national governments per se, we weight eurozone country observations to combine them into a single unit as the European Central Bank.²² For variables such as the UN ideal point where countries have equal weight, we take the average among eurozone countries as the value for the ECB, and for variables such as capital account openness and government effectiveness, we take the GDP-weighted mean scores among eurozone countries.^{23,24} Weighting countries by GDP better replicates the incentives faced by policymakers, who are more likely to pay attention to governance in countries with larger shares of eurozone output. For variables such as trade with China and GDP, we take the aggregate sum of eurozone countries. We also subtract

¹⁸We thank Daniel McDowell for generously sharing these data with us.

¹⁹Beijing as a matter of policy does not sign official agreements with countries that maintain relations with the government in Taipei, and no BSAs have to date been signed between the People’s Bank of China and a central bank whose national government recognizes Taiwan.

²⁰Country-years in which countries switch recognition are included in the sample, since these years are often marked by a flurry of inducements and aid packages from both sides of the Taiwan Strait.

²¹Only one dependency, Hong Kong, has signed a bilateral swap agreement with China. As the primary conduit between onshore and offshore renminbi trading, Hong Kong is crucial to the renminbi’s international use, but is an atypical case in that it has limited autonomy from the Chinese government.

²²The European Central Bank (ECB) oversees the monetary policy of the nineteen states which use the euro. It is the second-largest currency bloc in the world, and the largest with which the People’s Bank of China has signed a bilateral swap agreement.

²³For each year in the sample, GDP-weighted mean scores were calculated according to the formula:

$$\sum_{i=1}^{n_t} \left(\frac{GDP_{it}}{\sum_{i=1}^{n_t} GDP_{it}} \times Variable_{it} \right)$$

²⁴Many European Union institutions are headquartered in Brussels, and we use data for Belgium to approximate distance to the eurozone. This provides a reasonable approximation of an economic center of gravity between the twin giants of France and Germany.

intra-eurozone trade from trade dependency measures for the ECB to better compare the Eurozone’s external trade dependency with that of nation-states.

5.2 Independent Variables

The primary independent variable of interest is countries’ alliance with the United States. We include both formal alliances and “major non-NATO allies” (MNNAs). “Major non-NATO US allies” is a congressional designation that is an important part of American security commitments in an era with few formal arrangements. In the contemporary era, formal treaty alliances are less common and are typically more informal arrangements such as those surrounding military exercises and arms transfers (Tertrais, 2004). Introduced in 1989 as a legal mechanism for the authorization of aid and arms transfers, MNNA has grown from designated to six countries to nineteen. Six of these countries—Argentina, Australia, Japan, Pakistan, the Philippines, and South Korea—already had alliance treaties with the United States, but the rest do not. Our US alliance variable is therefore a binary variable based on the Alliance Treaty Obligations and Provisions (ATOP) project’s dataset (Leeds et al., 2002) supplemented with “major non-NATO allies” (MNNAs). Country-years were coded as 1 if the country was allied with the United States for any part of the year in question.

We also include measures for security relationships with China in our analysis, including Shanghai Cooperation Organization (SCO) membership and territorial disputes with China. Following Liao and McDowell (2015), we include SCO membership as the closest approximation to a “Chinese alliance” variable. The SCO is a regional security initiative which includes China, Russia, India, Pakistan, and the former Soviet republics of Central Asia, with the exception of Turkmenistan. China has no firm security commitments to these states, but participates in counterterrorism and other defense cooperation with them. China has ongoing territorial disputes with Brunei, Bhutan, India, Japan, Malaysia, the Philippines, Taiwan, and Vietnam. These disputes are invariably between China and nearby countries and will influence these countries’ perceptions of their large neighbor’s military capabilities as well as their assessments of broader diplomatic relationships with China (Fravel, 2005), leading them to be less likely to sign a BSA with China. The territorial dispute variable is a binary based on Fravel (2005), with a modification made to reflect the 2011 formal end to China

and Tajikistan’s boundary dispute.²⁵

We include a set of control variables for political and economic relationships between China and other countries. Debt obligations to China and foreign aid from China might influence how dependent countries are on for additional financing from China in the form of swaps. Chinese debt and aid figures are notoriously intransparent and official disclosures are incomplete. We therefore rely on the most reliable estimates that have been produced by scholars of Chinese debt and aid. Horn, Reinhart, and Trebesch (2021) use data on Chinese loans and grants to estimate outstanding debt stocks owed to China. We use their measure of outstanding external debt to Chinese official creditors from direct loans in nominal USD. AidData’s Global Chinese Development Finance Dataset (Dreher et al., 2022) capture development projects financed by Chinese government institutions and state-owned entities. We use the total dollar amount for projects that have concessional terms as our measure of Chinese aid.²⁶ Both the debt and aid measures are available up to 2017.

We control for political relationships using the United Nations ideal point data and regime type data. The United Nations ideal point data come from Bailey, Strezhnev, and Voeten (2017), who construct an index of political affinity to the liberal world order based on United Nations voting records. We use these data to construct an ideal point distance measure between the partner country and China. For regime type, we use the Polity score from The Center for Systemic Peace’s Polity IV Annual Time-Series that codes country regime types from hereditary monarchies to consolidated democracies.

We control for economic relationships using Chiang Mai Initiative membership, international trade data, and oil production. We include Chiang Mai Initiative (CMI) membership to account for the possibility that countries cooperating with China in the Chiang Mai Initiative are more likely to cooperate further through bilateral swaps. The Initiative establishes currency swaps among ASEAN countries, Japan, China, South Korea, and the Hong Kong Special Administrative Region following the Asian Financial Crisis. The measure

²⁵The years 2007-2010 are coded as 1 for Tajikistan, but the year 2011 itself is coded as 0, since the Tajikistani parliament’s January 2011 decision to ratify the agreement to end the border dispute presented an opportunity in that year for further diplomatic agreements in areas such as finance. See BBC News (2011).

²⁶According to AidData’s Global Chinese Development Finance Dataset, Version 2.0, concessionality is based on OECD’s grant element calculator and 25% grant element threshold.

is a time-variant dummy variable that records the years that respective states have active swap agreements with one another.²⁷ Using trade data from United Nations Conference on Trade and Development (2017), we measure China’s trade dependence on partner countries as the total trade volume between China and the country in a given year divided by China’s total trade with all countries in that year. We measure partner trade dependency on China based on the same formula: the partner country’s total trade with China in a given year divided by the partner country’s total trade in that year. Trade dependency data is logged to account for positive skew. To control for the role of energy security in China’s foreign economic policy, we also include data on oil production in thousands of barrels per day from the United States Energy Information Administration (2017). Oil production data is transformed according to the formula $\ln(Oil + 1)$ to account for positive skew without losing a large number of observations with a value of zero.

Two variables that account for alternative explanations of currency cooperation are capital account openness and government effectiveness. Data on the former comes from Chinn and Ito (2006), who construct a state-level measure of financial openness based on an index of various laws and regulations related to capital mobility. The latter is measured using the Worldwide Governance Indicator for government effectiveness (Kaufmann and Kraay, 2017). This was selected as a strong proxy for a state’s ability to manage the economy, prevent financial instability, and (where applicable) implement capital controls.

We include traditional gravity model variables of gross domestic product (GDP) and distance. GDP data come from the World Bank’s *World Development Indicators* and are logged to account for positive skew. Distance data come from CEPII’s 2017 *GeoDist* dataset. We use CEPII’s *distw* variable, which measures distance between most important cities/agglomerations in terms of population. This distance variable is also used to assess the hypothesized interactive effect between alliance with the United States and distance from China.

²⁷The ASEAN+3 (Japan, South Korea, China) entered into bilateral currency swap agreements under the Chiang Mai Agreement in 2000. The Chiang Mai Initiative Multilateralization established a multilateral agreement in 2010 with the addition of Hong Kong. China’s CMI swap with Japan expired in 2013 and was not renewed until 2018.

5.3 Research Design

We use logistic regressions to model swap agreements with China as binary outcomes. Given the number of countries that have not signed swaps with China, our models face issues of near-complete separation, especially with respect to relatively time-invariant variables such as US alliance and geographic location. To prevent over-fitting due to near-complete separation, we use Firth’s (1993) method of penalized maximum likelihood estimation. This method penalizes coefficients toward zero based on the risk of over-fitting due to near-complete separation and small sample size. Heinze and Schemper (2002) find it to be less biased than exact logistic regression in small samples. Leitgöb (2013) uses Monte Carlo simulations to demonstrate that in more extreme cases of near-perfect prediction and when working with smaller samples, Firth’s penalized maximum likelihood method is more effective in dealing with bias than King and Zeng’s 2001 more widely used rare events method.²⁸ We also lag variables that vary year-by-year to avoid post-treatment bias in our control variables.

Our data also contains significant trends over time. The People’s Bank of China’s BSAs are signed in three-year increments and could technically be allowed to lapse after three years, but this happens very infrequently, such as with Belarus’s agreement allowed to lapse in 2012, and Uzbekistan’s in 2014 (Lin, Zhan, and Cheung, 2016). Carter and Signorino (2010) find that the inclusion of a cubic time polynomial in a binary response model of panel data approximates a survival model. Because almost all PBoC BSAs to date have been extended indefinitely, our data has some properties similar to that of survival data. Following Carter and Signorino (2010), we add an integer variable for “time” coded as 1 for the first year in the sample set, and two more variables for the squared and cubed values.

²⁸King and Zeng’s rare events method as implemented in R’s Zelig package frequently either did not converge for our models or yielded coefficients in the tens of thousands. Results are available from the authors upon request.

6 Results and Discussion

Main results

Table 3 presents main results on our hypotheses. The coefficients shown in the table represent the change in the log-odds of signing a bilateral swap with China for a one-unit change in the predictor variable, while holding all other predictors constant. The results provide evidence for our theoretical expectations. Before an interactive term between alliance and distance is included, the association between alliance with the US and PBoC BSAs is actually positive (column 1), seemingly contradicting H1, that United States allies would be less likely to sign bilateral swap agreements with China. However, the inclusion of the alliance-distance interactive term in column (2) tells a different story. When this term is included, we find that alliance with the United States decreases the probability of signing a swap with China, but that US allies further away from China are more likely to sign BSAs with China. These results provide support for H1 and H1a.

Figure 4 visualizes the marginal effect of distance from China on the probability of US allied countries signing a swap with China as according to the model in column (2) of Table 3. The interaction effect becomes unambiguously positive at the 95% level of confidence at 4,700 kilometers. For reference, the US allied country in our dataset with distance from China closest to this value is Afghanistan, a Major Non-NATO Ally from 2012 to 2022.

For our two hypotheses on China's security relationships, we find evidence for H2a that states engaged in a territorial dispute with China are less likely to sign bilateral swap agreements with China. We do not find evidence for H2, and our results show that states with military and security partnerships with China, as measured by membership in the Shanghai Cooperation Organization, are no more likely to sign bilateral swap agreements with China than other countries. Converting the log-odds coefficient to probability and holding all other predictors constant in model (2) of table 3, having a territorial dispute with China decreases the probability of signing swaps with China by 7.6%.

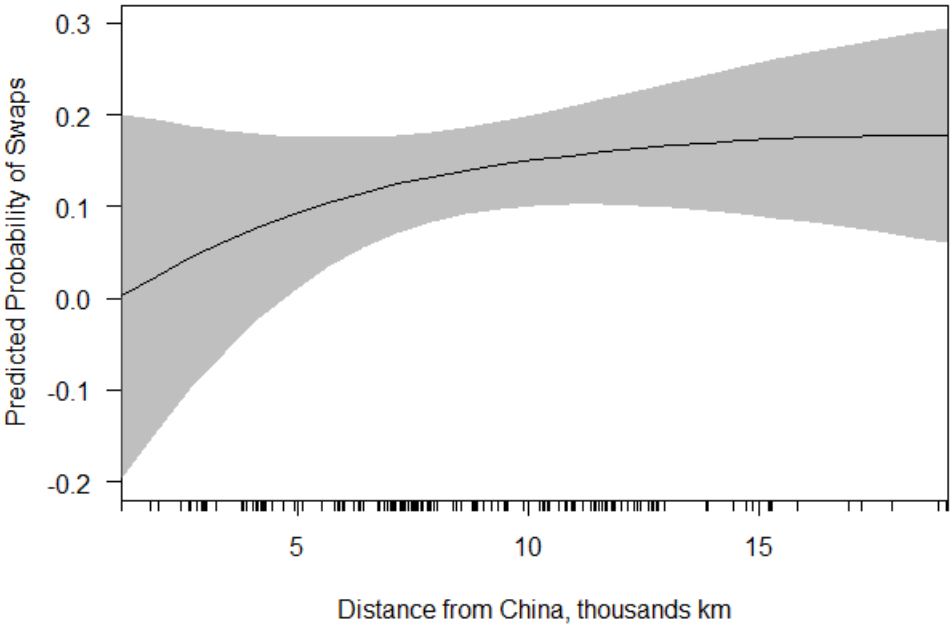
Table 3: Explanations of Chinese currency swaps (2007-2020)

	(1)	(2)
US ally	1.700*** (0.299)	-0.244 (0.839)
Territorial dispute with China (binary)	-2.502*** (0.454)	-2.495*** (0.449)
SCO membership	0.398 (0.405)	0.450 (0.405)
US ally \times Distance from China		0.225** (0.097)
External debt to China (log)	-0.010 (0.017)	-0.009 (0.017)
Concessional aid from China (log)	0.023 (0.016)	0.024 (0.016)
UN ideal point from China	-1.218*** (0.217)	-1.176*** (0.216)
Capital account openness	-0.336*** (0.096)	-0.390*** (0.099)
Government effectiveness	1.406*** (0.212)	1.408*** (0.211)
Trade dependence on China (log)	0.060 (6.475)	0.869 (6.438)
China's trade dependency (log)	3.713*** (1.224)	3.756*** (1.234)
Polity score	0.029 (0.020)	0.041** (0.020)
Oil production (log)	0.147*** (0.055)	0.148*** (0.056)
Chiang Mai membership	0.715* (0.380)	0.765** (0.378)
GDP (log)	0.285** (0.113)	0.257** (0.112)
Distance from China	-0.128*** (0.031)	-0.340*** (0.096)
Time (2007=1)	0.848 (0.654)	0.953 (0.657)
Time ²	-0.024 (0.088)	-0.037 (0.088)
Time ³	-0.001 (0.004)	-0.001 (0.004)
Constant	-13.722*** (3.050)	-11.540*** (3.116)
Observations	1,395	1,395
Log Likelihood	-352.779	-350.429
Akaike Inf. Crit.	743.558	740.857

Note:

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

Figure 4: Predicted probability of US allies signing Chinese currency swap given distance from China



Notes: Predicted probability of signing currency swaps with China for an average US ally, given its distance from China in terms of thousands of kilometers (km). The shaded area denotes the 95% confidence interval. The rug plot on the x-axis shows the distribution of data points.

Robustness

Given that US formal alliances remain relatively static in the time period that China actively sought partnerships in monetary cooperation, we use joint military exercises as an alternative measure of security relationships to test for the robustness of our findings. We use the Joint Military Exercises Data Set from Bernhardt (2021) that records up until 2016, a period in which 37 of the 41 bilateral renminbi swaps in our sample were signed. From 2007 to 2016, the US engaged in 610 military exercises with countries in our sample and China engaged in 89, thus providing substantial variation in the degree of cooperation that the US and China have with security partners.

Table 4 provides the estimation results using this alternative measure of security cooperation. The results remain highly consistent with the main estimation results shown in Table 3. Before an interactive term between US joint military exercises and distance from China is included (column (1)), countries with closer military relationships with the US seem to be more likely to sign bilateral swap agreements with China. With inclusion of the interaction term in column 2, such countries that are further away from China tend to be more likely to do so. Similar to table 3, countries that have territorial disputes with China are on average less likely to sign swap agreements with China, while we still do not find evidence that states with military partnerships with China, as measured by joint military exercises with China, are more likely to sign BSAs with China than other countries.

7 Conclusion

Historical precedent and existing theory would indicate that large, rising powers will seek security *and* economic expansion, such as pursuing the goal to internationalize their currencies. This paper shows that in their extensive policy efforts to achieve this goal, rising powers will face significant limits in meeting their aims. These limits are not only sourced in the domestic economic and political systems of rising powers, but in the broader international economic and security environment in which they operate. Specifically, the case of China's efforts through its monetary initiatives such as the RMB swap program, shows that limited military projection capabilities and high incidences of territorial disputes constrain

Table 4: Robustness: Explanations of Chinese currency swaps (2007-2016)

	(1)	(2)
Joint military exercises with US	0.519** (0.232)	-0.947* (0.557)
Territorial dispute with China	-1.992*** (0.476)	-1.773*** (0.478)
Joint military exercises with China	-0.237 (0.382)	-0.060 (0.383)
Joint military exercises with US \times Distance from China		0.184*** (0.065)
Concessional aid from China (log)	-0.001 (0.016)	0.003 (0.016)
External debt to China	-0.017 (0.015)	-0.025* (0.015)
Ideal point distance from China	-0.560*** (0.203)	-0.534*** (0.205)
Polity score	0.048** (0.020)	0.053** (0.021)
Chiang Mai membership	1.549*** (0.375)	1.056*** (0.409)
China's trade dependency (log)	-11.180 (7.679)	-7.492 (7.739)
Trade dependency on China (log)	4.182*** (1.483)	4.363*** (1.502)
Oil production (log)	0.015 (0.058)	0.028 (0.059)
GDP (log)	0.693*** (0.122)	0.626*** (0.122)
Distance from China	-0.133*** (0.033)	-0.261*** (0.058)
Time (2007=1)	1.195 (0.936)	1.175 (0.938)
Time ²	-0.088 (0.142)	-0.083 (0.143)
Time ³	0.002 (0.007)	0.002 (0.007)
Constant	-23.230*** (3.514)	-20.637*** (3.557)
Observations	1,227	1,227
Log Likelihood	-318.285	-313.908
Akaike Inf. Crit.	670.569	663.816

Note:

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

its capacity to engage in financial statecraft.

The financial crisis prompted critical reflection of America’s espoused practices and brought in “a new heterogeneity of thinking” in which states are more inclined to seek ways of managing international finance that diverge from past practices (Kirshner, 2014). The post-2008 financial environment in which our analysis is situated is indeed more heterogeneous and amenable to new players in global monetary affairs such as China. However, we argue that there are constraints on the capacity of up-and-coming contenders such as China to meaningfully challenge America’s global financial dominance. Taken together, this paper makes three key empirical and theoretical contributions to the literature.

First, we show that while previous assessments of China’s economic expansion justifiably places emphasis on economic facilitators of cooperation, external security constraints were not given their fair due. These constraints can manifest from the preferences and capabilities of China, its economic partners, and states located in its immediate neighborhood. How states choose to engage with China’s economic expansion is influenced by their ties with the US, and their reliance on US security guarantees. This is especially important in the context of growing US-China rivalry and ongoing territorial disputes to the east and south of China. Our study addresses this gap in the literature and emphasizes the intertwined relationship of military capacity with currency power.

Secondly, our findings contribute to the emerging and growing literature on hedging strategies and how secondary states choose to respond to the threat of great power conflict, given their geographic location and existing military ties. Specifically, this literature is focused on perceptions and concerns of threat of conflict in the region and with the US. While our model cannot directly capture how economic cooperation with China will change in the event of a real dispute, our analysis and qualitative insights highlight how hedging strategies may play out in the actual event of conflict escalation.

Third, we also show that security partnerships with China can serve as a key tool for creating greater demand for RMB-denominated instruments. Moreover, security concerns, namely, territorial disputes with China have a hindering effect of engagement with China’s monetary initiatives through the RMB swap program. This has important implications for China’s increasing military expansion and goals of monetary expansion. While our study

focuses on China's swap program, our paper raises questions for further research on the role of security consideration in China's other economic and monetary initiatives. Moreover, our findings suggest, counterintuitively, that the growth of China's military power and ability to back its economic interest seem to constrain its choice of BSA partners in regions closer to China given existing US military alliances, and emerging conflict from China's territorial pursuits in its immediate neighbourhood.

In summary, we show how, in addition to conventional economic arguments of international cooperation, the international political environment, and existing security order can serve to preserve the balance of monetary power and limit the rising powers' practice of financial statecraft. Our study has implications for understanding great power transitions and monetary dimensions thereof.

References

- [1] 22 USC § 2321k. *Designation of major non-NATO allies*. 1996. URL: [http://uscode.house.gov/view.xhtml?req=\(title:22%20section:2321k%20edition:prelim\)#executivedocument-note](http://uscode.house.gov/view.xhtml?req=(title:22%20section:2321k%20edition:prelim)#executivedocument-note) (visited on 08/20/2018).
- [2] Joshua Aizenman. “Internationalization of the RMB, Capital Market Openness and Financial Reforms in China”. In: *Pacific Economic Review* 20.3 (2015), pp. 444–460.
- [3] Joshua Aizenman and Gurnain Kaur Pasricha. “Selective swap arrangements and the global financial crisis: Analysis and interpretation”. In: *International Review of Economics & Finance* 19.3 (2010), pp. 353–365.
- [4] Leslie Elliott Armijo and Saori N. Katada. “Theorizing the Financial Statecraft of Emerging Powers”. In: *New Political Economy* 20.1 (Feb. 2015), pp. 42–62. ISSN: 13563467.
- [5] Michael A. Bailey, Anton Strezhnev, and Erik Voeten. “Estimating Dynamic State Preferences from United Nations Voting Data”. In: *Journal of Conflict Resolution* 61.2 (Feb. 2017), pp. 430–456. ISSN: 0022-0027, 1552-8766. DOI: [10.1177/0022002715595700](https://doi.org/10.1177/0022002715595700). URL: <http://journals.sagepub.com/doi/10.1177/0022002715595700> (visited on 08/20/2018).
- [6] BBC News. “Tajikistan cedes land to China”. In: (Jan. 13, 2011).
- [7] Jordan Bernhardt. *Joint Military Exercises Dataset*. 2021. DOI: [10.7910/DVN/HXQFHU](https://doi.org/10.7910/DVN/HXQFHU).
- [8] J. Lawrence Broz. “The Politics of Rescuing the World’s Financial System: The Federal Reserve as a Global Lender of Last Resort”. In: *The Korean Journal of International Studies* 13.2 (Aug. 2015), pp. 323–351. ISSN: 2012-2234.
- [9] J. Lawrence Broz, Zhiwen Zhang, and Gaoyang Wang. “Explaining Foreign Interest in China’s Global Leadership”. In: *International Organization* (2019). DOI: [10.2139/ssrn.3138278](https://doi.org/10.2139/ssrn.3138278).

- [10] Chris Brummer. “The Renminbi and Systemic Risk”. In: *Journal of International Economic Law* 20.3 (Sept. 1, 2017), pp. 447–507. ISSN: 1369-3034, 1464-3758. DOI: [10.1093/jiel/jgx026](https://doi.org/10.1093/jiel/jgx026). URL: <http://academic.oup.com/jiel/article/20/3/447/4553496/The-Renminbi-and-Systemic-Risk> (visited on 06/28/2018).
- [11] David B. Carter and Curtis S. Signorino. “Back to the Future: Modeling Time Dependence in Binary Data”. In: *Political Analysis* 18.3 (2010), pp. 271–92.
- [12] CEPII. *GeoDist*. Paris, 2017. URL: http://www.cepii.fr/cepii/en/bdd_modele/presentation.asp?id=6.
- [13] Menzie D. Chinn and Hiro Ito. “What Matters for Financial Development? Capital Controls, Institutions, and Interactions”. In: *Journal of Development Economics* 81.1 (2006), pp. 163–192.
- [14] Ja Ian Chong. “Other Countries Are Small Countries, and That’s Just a Fact: Singapore’s Efforts to Navigate US–China Strategic Rivalry”. In: *China-US Competition: Impact on Small and Middle Powers’ Strategic Choices*. Ed. by Simona A. Grano and David Wei Feng Huang. Cham: Springer International Publishing, 2023, pp. 307–338. DOI: [10.1007/978-3-031-15389-1_12](https://doi.org/10.1007/978-3-031-15389-1_12).
- [15] Diana Choyleva. *China’s Neighbors Are Eyeing Up Yuan as Banking Worries Spread*. Apr. 2023. (Visited on 10/11/2023).
- [16] Thomas Christensen. *The China Challenge: Shaping the Choices of a Rising Power*. New York: W. W. Norton, 2015.
- [17] Benjamin J. Cohen. *Currency Power: Understanding Monetary Rivalry*. Princeton University Press, 2015.
- [18] Bernard D Cole. *The Great Wall at Sea: China’s Navy in the Twenty-first Century*. 2nd ed. OCLC: 821183703. Annapolis: Naval Institute Press, 2012. ISBN: 978-1-61251-163-4. (Visited on 05/13/2018).
- [19] Axel Dreher et al. *Banking on Beijing*. Cambridge University Press, Apr. 2022. DOI: [10.1017/9781108564496](https://doi.org/10.1017/9781108564496).

- [20] Barry Eichengreen. *Exorbitant Privilege: The Rise and Fall of the Dollar and the Future of the International Monetary System*. Oxford University Press, 2011.
- [21] Barry Eichengreen, Arnaud Mehl, and Livia Chitu. “Mars or Mercury? The Geopolitics of International Currency Choice*”. In: *Economic Policy* 34.98 (Apr. 2019), pp. 315–363. ISSN: 0266-4658. DOI: [10.1093/epolic/eiz005](https://doi.org/10.1093/epolic/eiz005).
- [22] Robert Farley. “Does the US Navy have 10 or 19 Aircraft Carriers?” In: *The Diplomat* (Apr. 17, 2014). URL: <https://thediplomat.com/2014/04/does-the-us-navy-have-10-or-19-aircraft-carriers/>.
- [23] David Firth. “Bias reduction of maximum likelihood estimates”. In: *Biometrika* 80.1 (1993), pp. 27–38.
- [24] M. Taylor Fravel. “Regime Insecurity and International Cooperation: Explaining China’s Compromises in Territorial Disputes”. In: *International Security* 30.2 (2005), pp. 46–83.
- [25] Kevin P. Gallagher. *China to the Rescue? China’s Liquidity Finance Should Be Welcomed but Not Gambled With*. <https://chinaglobalsouth.com/analysis/china-to-the-rescue-chinas-liquidity-finance-should-be-welcomed-but-not-gambled-with/>. Oct. 2022. (Visited on 08/17/2023).
- [26] Alicia García-Herrero and Le Xia. *China’s RMB bilateral swap agreements: What explains the choice of countries?* BOFIT Discussion Papers 12/ 2013. Helsinki: Bank of Finland Institute for Economies in Transition, 2013.
- [27] Douglas M. Gibling. *International military alliances, 1648-2008*. Washington: CQ Press, 2009.
- [28] Lyle Goldstein. “The US–China Naval Balance in the Asia-Pacific: An Overview”. In: *The China Quarterly* 232 (Dec. 2017), pp. 904–931. ISSN: 0305-7410, 1468-2648. DOI: [10.1017/S030574101700131X](https://doi.org/10.1017/S030574101700131X). URL: https://www.cambridge.org/core/product/identifier/S030574101700131X/type/journal_article (visited on 08/20/2018).

- [29] Joanne Gowa. *Allies, Adversaries, and International Trade*. Princeton University Press, 1994. ISBN: 978-0-691-04471-2. DOI: [10.2307/j.ctv173f0s6](https://doi.org/10.2307/j.ctv173f0s6). JSTOR: [j.ctv173f0s6](https://www.jstor.org/stable/j.ctv173f0s6). (Visited on 07/20/2023).
- [30] Joanne Gowa and Edward D. Mansfield. “Power Politics and International Trade”. In: *The American Political Science Review* 87.2 (1993), pp. 408–420. ISSN: 00030554, 15375943. DOI: [10.2307/2939050](https://doi.org/10.2307/2939050). JSTOR: [2939050](https://www.jstor.org/stable/2939050). (Visited on 07/20/2023).
- [31] Georg Heinze and Michael Schemper. “A solution to the problem of separation in logistic regression”. In: *Statistics in Medicine* 21.16 (Aug. 30, 2002), pp. 2409–2419. ISSN: 0277-6715, 1097-0258. DOI: [10.1002/sim.1047](https://doi.org/10.1002/sim.1047). URL: <http://doi.wiley.com/10.1002/sim.1047> (visited on 08/20/2018).
- [32] Eric Helleiner. “Political Determinants of International Currencies: What Future for the US Dollar?” In: *Review of International Political Economy* 15.3 (Aug. 2008), pp. 354–378. ISSN: 09692290.
- [33] Eric Helleiner and Jonathan Kirshner. *The Great Wall of Money : Power and Politics in China’s International Monetary Relations*. Cornell University Press, 2014.
- [34] Sebastian Horn, Bradley C Parks, et al. “China as an International Lender of Last Resort”. In: *AidData Working Paper* 124 (2023).
- [35] Sebastian Horn, Carmen M. Reinhart, and Christoph Trebesch. “China’s overseas lending”. In: *Journal of International Economics* 133 (Nov. 2021), p. 103539. DOI: [10.1016/j.jinteco.2021.103539](https://doi.org/10.1016/j.jinteco.2021.103539).
- [36] David Martin Jones and Nicole Jenne. “Hedging and grand strategy in Southeast Asian foreign policy”. In: *International Relations of the Asia-Pacific* 22.2 (Feb. 2021), pp. 205–235. DOI: [10.1093/irap/lcab003](https://doi.org/10.1093/irap/lcab003).
- [37] Isaac B. Kardon. “China’s Global Maritime Access: Alternatives to Overseas Military Bases in the Twenty-First Century”. In: *SECURITY STUDIES* (Oct. 2022). ISSN: 09636412. DOI: [10.1080/09636412.2022.2137429](https://doi.org/10.1080/09636412.2022.2137429).

- [38] Niniek Karmini. *ASEAN Vows to Conclude Pact with China on Disputed Territory*. <https://apnews.com/article/politics-indonesia-government-association-of-southeast-asian-nations-min-aung-hlaing-china-07ff4443471fae04c2d093608d4eeb70>. Feb. 2023. (Visited on 06/28/2023).
- [39] Daniel Kaufmann and Aart Kraay. *Worldwide Governance Indicators*. Washington: World Bank, 2017.
- [40] Tanveer Ahamed Khan. “Limited Hard Balancing: Explaining India’s Counter Response to Chinese Encirclement”. In: *Journal of Indo-Pacific Affairs* 6.3 (2023), pp. 92–108.
- [41] Gary King and Langche Zeng. “Logistic Regression in Rare Events Data”. In: *Political Analysis* 9.2 (2001), pp. 137–163. ISSN: 1047-1987, 1476-4989. DOI: [10.1093/oxfordjournals.pan.a004868](https://doi.org/10.1093/oxfordjournals.pan.a004868). URL: https://www.cambridge.org/core/product/identifier/S1047198700003740/type/journal_article (visited on 08/20/2018).
- [42] Jonathan Kirshner. *Currency and Coercion: The Political Economy of International Monetary Power*. Princeton: Princeton University Press, 1995.
- [43] Jonathan Kirshner. “Regional Hegemony and an Emerging RMB Zone”. In: *The Great Wall of Money: Power and Politics in China’s International Monetary Relations*. Ithaca: Cornell University Press, 2014.
- [44] Brett Leeds et al. “Alliance Treaty Obligations and Provisions, 1815-1944”. In: *International Interactions* 28.3 (July 2002), pp. 237–260. DOI: [10.1080/03050620213653](https://doi.org/10.1080/03050620213653).
- [45] Heinz Leitgöb. “The Problem of Modeling Rare Events in ML-based Logistic Regression: Assessing Potential Remedies via MC Simulations”. Conference of the European Survey Research Association. Ljubljana, 2013.
- [46] Steven Liao and Daniel McDowell. “No Reservations: International Order and Demand for the Renminbi as a Reserve Currency”. In: *International Studies Quarterly* 60 (2016), pp. 272–93.

- [47] Steven Liao and Daniel McDowell. “Redback Rising: China’s Bilateral Swap Agreements and Currency Internationalization”. In: *International Studies Quarterly* 59.3 (2015), pp. 401–22.
- [48] Darren J. Lim and Zack Cooper. “Reassessing Hedging: The Logic of Alignment in East Asia”. In: *Security studies* 24.4 (2015), pp. 696–727. ISSN: 0963-6412. DOI: [10.1080/09636412.2015.1103130](https://doi.org/10.1080/09636412.2015.1103130).
- [49] Zhitao Lin, Wenjie Zhan, and Yin-Wong Cheung. “China’s Bilateral Currency Swap Lines”. In: *China & World Economy* 24.6 (2016), pp. 19–42.
- [50] Steven E Lobell, Neal G Jesse, and Kristen P Williams. “Why Do Secondary States Choose to Support, Follow or Challenge?” In: *International Politics* 52.2 (Feb. 2015), pp. 146–162. ISSN: 1384-5748, 1740-3898. DOI: [10.1057/ip.2014.50](https://doi.org/10.1057/ip.2014.50). (Visited on 08/18/2023).
- [51] Daniel McDowell. *Bucking the Buck: US Financial Sanctions and the International Backlash Against the Dollar*. Oxford: Oxford University Press, 2023.
- [52] Daniel McDowell. “Emergent International Liquidity Agreements: Central Bank Cooperation after the Global Financial Crisis”. In: *Journal of International Relations and Development* 22.2 (June 2019), pp. 441–467. ISSN: 1581-1980. DOI: [10.1057/s41268-017-0106-0](https://doi.org/10.1057/s41268-017-0106-0).
- [53] Daniel McDowell. “The (Ineffective) Financial Statecraft of China’s Bilateral Swap Agreements”. In: *Development and Change* 50.1 (Jan. 2019), pp. 122–143. ISSN: 0012155X.
- [54] Daniel McDowell. “The US as ‘Sovereign International Last-Resort Lender’: The Fed’s Currency Swap Programme during the Great Panic of 2007–09”. In: *New Political Economy* 17.2 (Apr. 2012), pp. 157–178. ISSN: 1356-3467. DOI: [10.1080/13563467.2010.542235](https://doi.org/10.1080/13563467.2010.542235).
- [55] Christopher A. McNally and Julian Gruin. “A novel pathway to power? Contestation and adaptation in China’s internationalization of the RMB”. In: *Review of International Political Economy* 24.4 (July 4, 2017), pp. 599–628. ISSN: 0969-2290, 1466-4526. DOI:

- [10.1080/09692290.2017.1319400](https://doi.org/10.1080/09692290.2017.1319400). URL: <https://www.tandfonline.com/doi/full/10.1080/09692290.2017.1319400> (visited on 06/12/2018).
- [56] Carla Norrlof. “The Security Foundations of Dollar Primacy”. In: *International Studies Perspectives* (2020). Ed. by Carla Norrlof et al., pp. 126–132.
- [57] T.J. Pempel. “Asia’s Lesser Powers Confront US–China Threat to the Regional Order”. In: *Issues and Studies / Issues & Studies* 56:2 (June 2020), pp. 5–25. ISSN: 1013-2511.
- [58] Eswar Prasad. *Gaining Currency: The Rise of the Renminbi*. Oxford: Oxford University Press, 2016.
- [59] Sudha Ramachandran. “India and China Engage in War of Words Over Sri Lanka”. In: (Sept. 2022). (Visited on 08/18/2023).
- [60] Aditi Sahasrabuddhe. “Drawing the Line: The Politics of Federal Currency Swaps in the Global Financial Crisis”. In: *Review of International Political Economy* 26.3 (May 2019), pp. 461–489. ISSN: 0969-2290. DOI: [10.1080/09692290.2019.1572639](https://doi.org/10.1080/09692290.2019.1572639).
- [61] Zachary Selden. “Balancing Against or Balancing With? The Spectrum of Alignment and the Endurance of American Hegemony”. In: *Security studies* 22.2 (2013), pp. 330–364. ISSN: 0963-6412. DOI: [10.1080/09636412.2013.786918](https://doi.org/10.1080/09636412.2013.786918).
- [62] David Shambaugh. *China Goes Global: The Partial Power*. Oxford: Oxford University Press, 2013.
- [63] David Shambaugh. “U.S.-China Rivalry in Southeast Asia: Power Shift or Competitive Coexistence?” In: *International Security* 42.4 (2018), pp. 85–127.
- [64] Susan Strange. *Sterling and British Policy*. Oxford: Oxford University Press, 1971.
- [65] Paola Subacchi. *The People’s Money: How China Is Building a Global Currency*. Columbia University Press, 2017.
- [66] SWIFT. *RMB Tracker*. May 2023. La Hulpe, Belgium: SWIFT, 2023.
- [67] Bruno Tertrais. “The Changing Nature of Military Alliances”. In: *Washington Quarterly* 27.2 (2004), pp. 135–150.

- [68] The People’s Bank of China. *2021 RMB Internationalization Report*. Tech. rep. Beijing: The People’s Bank of China, 2021, p. 81.
- [69] United Nations Conference on Trade and Development. *UNCTADStat*. Geneva, 2017. URL: <http://unctadstat.unctad.org/>.
- [70] United States Department of Defense. *Base Structure Report - Fiscal Year 2017*. Washington, 2017.
- [71] United States Energy Information Administration. *International*. 2017. URL: <https://www.eia.gov/beta/international/>.
- [72] United States Navy. *U.S. Navy Ships*. 2018. URL: http://www.navy.mil/navydata/our_ships.asp (visited on 08/20/2018).
- [73] Stephen Walt. *The Origins of Alliances*. Ithaca: Cornell University Press, 1987.
- [74] 王缉思 [Wang Jisi]. “‘西进’: 中国地缘战略的再平衡[‘Go West’: China’s Geostrategic Rebalance]”. In: *国际战略研究简报[International and Strategic Studies Report]* 73 (2012).
- [75] Thomas Wilkins. “Middle Power Hedging in the Era of Security/Economic Disconnect: Australia, Japan, and the ‘Special Strategic Partnership’.” In: *International Relations of the Asia-Pacific* 23.1 (Jan. 2023), pp. 93–127. ISSN: 1470482X.
- [76] Mike Yeo. *How a New Vietnam-Indonesia Deal Will Affect South China Sea Disputes*. <https://www.defensenews.com/smr/defending-the-pacific/2023/02/13/how-a-new-vietnam-indonesia-deal-will-affect-south-china-sea-disputes/>. Feb. 2023. (Visited on 06/28/2023).
- [77] Minghao Zhao. “The Belt and Road Initiative and China–US Strategic Competition”. In: *China International Strategy Review* 3.2 (Dec. 2021), pp. 248–260. ISSN: 2524-5635. DOI: [10.1007/s42533-021-00087-7](https://doi.org/10.1007/s42533-021-00087-7).
- [78] Yizheng Zou. “China and Indonesia’s Responses to Maritime Disputes in the South China Sea: Forming a Tacit Understanding on Security”. In: *Marine Policy* 149 (Mar. 2023), p. 105502. ISSN: 0308-597X. DOI: [10.1016/j.marpol.2023.105502](https://doi.org/10.1016/j.marpol.2023.105502).