Ambassadorial Vacancies and U.S. Trade*

William F. Lincoln
Claremont McKenna College

July 17, 2025

Abstract

We analyze the economic effects of ambassadorial vacancies on U.S. trade and exchange rate volatility. Using a monthly database of 172 countries spanning five decades, we find significant effects of these openings. To establish casual effects, we exploit variation in vacancies arising from changes in U.S. presidential administrations in an instrumental variables framework. The impacts of these vacancies are concentrated in the months following a vacancy. The effects dissipate when the vacancies are filled. These findings are robust to a range of alternative specifications and placebo tests. Ambassadors play a crucial role in ensuring the smooth flow of international trade.

JEL Classification: F13, F14, F51, P16
Keywords: International trade, trade policy, ambassadors, diplomacy

*Robert Day School, Claremont McKenna College, 500 East Ninth Street, Claremont, CA 91711, wlincoln@cmc.edu. I would like to thank Faisal Ahmed and Cameron Shelton helpful comments and suggestions. I thank Annika Johnson, Samuel Johnson-Saeger, Molinaka Lim, and Luke Young for superb research assistance and GPT-4o for inspiration and editorial assistance. The current working draft should not be cited yet and only presents preliminary estimations that will eventually be complemented by firm-level analyses. Any errors are entirely my own.

1 Introduction

In a world with increasingly interconnected economies, the personnel behind economic diplomacy play a vital that has largely been unexplored. This study examines the economic implications of periods when a U.S. ambassadorial post is without a formally appointed ambassador. We find strong evidence that vacancies reduce U.S. exports and weaker evidence that they increase exchange rate volatility, which demonstrates the crucial role of lead personnel in economic diplomacy. The lack of an ambassador not only has foreign policy consequences but also affects the macroeconomic environment.

This paper contributes to three distinct areas of the literature. First, previous work has demonstrated that diplomatic infrastructure, including embassies, consulates, and trade promotion agencies, are associatesd with larger bilateral trade. However, it often overlooks the economic impact of what occurs when that infrastructure is not properly staffed. This study demonstrates that those vacancies can have economic consequences, not just foreign policy ones. Second, our results add to the literature on trade frictions and institutional quality by supporting the idea that ambassadors and diplomatic staff are key to overcoming barriers in information that would otherwise have an adverse impact on trade. Finally, our work contributes to our understanding of bureaucratic turnover. Our findings emphasize the importance of ensuring the continuity of government personnel.

To analyze the effects of U.S. ambassadorial vacancies, we construct a monthly panel spanning from 1963 to 2014 and 172 countries, utilizing new, hand-collected data on ambassadorial tenures. This is then merged with data on monthly bilateral trade and daily exchange rates. By collecting data at such a granular level, we can identify short-run economic effects that would not otherwise be possible. We then utilize an identification strategy that exploits the exogenous variation in ambassadorial openings from U.S. presidential transitions. This creates a predictable cycle in which old ambassadors are removed en masse, and their positions remain vacant for months while their replacements are found. These surges in vacancies are independent of local economic conditions, allowing us to identify the causal effects of ambassadorial absence on U.S. trade and exchange rate volatility.

We begin by attempting a replication of an unpublished working paper in the prior literature by Ahmed and Slaski (2022). The predictable nature of ambassador turnover mitigates concerns that vacancies result from endogenous responses to political or economic conditions in the U.S. or host country. We use a variety of placebo tests and robustness checks to validate the instrumental variables strategy. These findings remain robust to a wide variety of specifications, including country-by-year and month fixed effects, lag structures, and alternative measures of a vacancy. To better understand the causal effect of ambassadorial absences, we further utilize an event study framework around the dates of vacancies, although the results here are more mixed. Mechanisms such as trade facilitation, conflict mediation, and credibility signaling are all reliant on the presence of diplomats and ambassadors. In addition to a decrease in exports, during periods of ambassadorial vacancies, we also consider changes in the standard deviation of daily exchange rate movements, although the results here are also much more mixed.

These results suggest several policy implications. The first is that the U.S. export promotion policy should consider the maintenance of ambassador positions alongside trade agreements. Second, political gridlock or bureaucratic delays that slow down ambassadorial confirmations may have unintended economic consequences. Finally, rapid confirmation of ambassador-level positions and integrating diplomatic staffing with trade and development objectives may enhance the effectiveness of U.S. foreign commercial policy.

The remainder of the paper is structured as follows. Section 2 reviews the literature on diplomacy, trade, and institutions. Section 3 describes our data, including the construction of our ambassadorial vacancy panel, as well as data on bilateral trade and currency exchange volatility. Section 4 outlines the empirical strategy. Section 5 presents the results. Section 7 concludes.

2 Literature Review

In this section, we begin by reviewing the relevant literature that is relevant for understanding the effects of ambassadorial vacancies. We begin by considering what we know about international trade policy broadly and then move on to a discussion of the effects of economic diplomacy. We conclude by considering the underlying political economy of international affairs.

2.1 International Trade Policy

The impact of trade policy has been the subject of much scholarly work. Bown and Crowley (2016) surveyed trade and trade policy data to try to characterize the global trade policy landscape as of 2013-14. In their paper, they addressed five questions: 1. Do some countries have more liberalized trading regimes than others? 2. Which industries receive the most import protection? 3. How do trade policies change over time? 4. Do countries discriminate across trading partners when setting trade policy? 5. How liberalized is world trade? The authors argued that higher-income countries have more liberalized trading regimes than their middle-income counterparts, which are more liberalized still than lower-income countries. Across countries, food and agriculture and final goods received the most import protection, while commodities like minerals and fuel typically received less protection. Trade policies have liberalized over time, but cycles define trade policy: similar industries receive protectionism over time. Countries certainly discriminate when setting trade policy, both by imposing higher and lower levels of import protection. World trade was, relative to the past, seemingly liberalized. However, Bown and Crowley argue that academics usually overestimate the degree of trade liberalization because they do not account for behind-the-border trade barriers, which are becoming increasingly important.

Bagwell et al. (2020) looked past trade negotiations to articulate how this liberalization came to be. They used declassified GATT/WTO data on detailed US bilateral tariff cut offers and requests during the Torquay Round (1950-51) to determine a set of stylized facts about GATT/WTO negotiations and assess the role of the GATT in facilitating multilateral reciprocity in tariff negotiations. After assessing detailed timing of offers, modifications, and requests, Bagwell et al. argued that countries readily adjust the set of goods on which they offer tariff cuts (extensive) but do not modify their proposed rate of the cut (intensive). Largest supplying countries play dominant roles in negotiations, particularly for products in which they have substantial market share. Bagwell et al. used a natural experiment of the breakdown of US-UK bilaterals in the Torquay Round to show that both the US/UK and other countries counted on multilateral reciprocity (US/UK reductions in bilaterals would benefit other countries due to MFN requirements). They found no evidence that the US faced challenges from a major free rider problem in GATT/WTO rounds.

Other authors have conducted analyses of GATT/WTO tariff reduction negotiations to illustrate real-world policy debates. Ossa (2011) used a Krugman "new trade" model to demonstrate that neoclassical trade models focused on the principles of nondiscrimination and reciprocity and discussions of optimal tariffs a) do a poor job of approximating real-world trade policy debates and b) are hard to calibrate. Ossa interpreted the GATT/WTO principles of nondiscrimination and reciprocity as internalizing a production relocation externality. Tariffs function to provide the home country with a greater share of global manufacturing production, increasing manufacturing employment (which closely tracks actual trade policy debates). Ossa developed a theoretical model and then calibrated it using bilateral trade data from six major players in GATT/WTO rounds. His calibration results showed that predicted noncooperative tariffs are similar in magnitude to those observed in tariff wars after Smoot-Hawley, and that predicted welfare losses of moving to noncooperative tariffs are moderate, never exceeding 35% of predicted losses from moving to autarky.

2.2 Effects of Economic Diplomacy

Thinking about international trade, the literature then turns to the effects of economic diplomacy and its domestic political determinants. Van Bergeijk (2014) outlined the landscape of economic diplomacy with a particular focus on the role of geography. The author reviewed several studies that establish a clear and strong correlation between many instruments of economic diplomacy—such as embassies or trade missions—and important economic or political outcomes. Van Bergeijk simultaneously highlighted the need for further research that aims to better uncover potential causal (and bidirectional) relationships about the dynamics of these instruments. He emphasized arguments about "the death of distance" being misleading, noting that there is clear heterogeneity that needs to be studied further – both in terms of the economies for which distance is still a strong determinant of trade flows and in terms of which countries' tools of economic diplomacy are important.

For example, Moons and van Bergeijk (2017) conducted a stillmeta-analysis of 32 papers analyzing the effects of economic diplomacy instruments on outcomes of exports, imports, or foreign direct investment (FDI). They began by identifying t-statistics from the papers and then constructing dependent variables that classify the paper's methodologies, dependent and independent variables, and several other characteristics. In a meta-analytical regression, the authors found that it is generally supported that economic diplomacy has statistically significant and positive effects on the studied outcome variables, except for state visits and trade missions. State visits and trade missions, being the dependent variable of choice in a paper, tended to decrease the probability that it found statistically significant results on the dependent variable. Studies of only one country also had lower probabilities of finding statistically significant results. Moons and van Bergeijk also developed a logit model to test discrete significance levels in the papers they analyze. That model found that studies published before 2000 and studies that use FDI as the dependent variable are more likely to find strongly statistically significant and highly positive results. The authors argued that FDI appears comparatively understudied and should be a focus of further analysis.

The economic diplomacy literature then focuses on the roles of specific instruments of economic diplomacy: embassies and consulates, trade missions and state visits, and ambassadors.

2.2.1 Embassies/Consulates

Rose (2007) conducted a seminal analysis on whether the number of embassies and consulates an exporter has increases exports to that destination. He answered this question by selecting 22 important (wealthy, large, or otherwise relevant) exporters and collecting data on their diplomatic corps presence in import destinations from 2002-03. Rose then used the gravity model of international trade to estimate the effect of each additional embassy or consulate in promoting exports. He found, after conducting several robustness and reverse causality checks, that each additional consulate increases exports to that country by 6-10%. This effect is larger for the first embassy and shows marginal decreasing returns as the number of consulates increases. Rose's empirical tests included adding exporter and importer fixed effects, differentiating the impacts of different regional trade agreements in the gravity model, instrumenting for the importance and desirability of import destinations (e.g. oil reserves and travel destinations), and accounting for factors commonly considered important in gravity estimations (e.g. if country i and j share a common language, border, currency, etc.).

Malone (2013) explained the structure of modern diplomatic missions, distinguishing between embassies and consulates. The latter have a greater focus on trade promotion and other economic matters, although embassies are also involved in these domains. Malone also identified that export credit and trade insurance schemes are a key diplomatic tool that embassies use to promote economic interests. Most of this promotion involves attempting to revoke prior protectionist policies. Malone argued that post-Doha-round

WTO negotiations, cross-border investment flows have provided far more mutual benefit than trade flows (perhaps shaping an investment focus among modern diplomatic missions). Malone also furthered that trade promotion today is less about changing the groundwork (FTAs, PTAs, etc.) and more about specific deal facilitation. Malone, therefore, identified how critical the "human factor" – the actual ambassador manning the post – is in ensuring effective diplomatic representation.

Malone's work aligns with research by others that studies how bureaucratic efficiency and incentives affect a spectrum of outcomes. Ayal and Karras (1996) sought to establish an empirical relationship between bureaucratic efficiency and economic growth. Using data from 1960-1990 in 21 OECD countries, they argued that bureaucratic inefficiency is negatively related to economic growth, with the mechanism being that bureaucratic inefficiency disrupts investment. Their data supported this hypothesis. Bureaucratic inefficiency, measured as the share of government employment divided by the government consumption share of GDP, was associated with reductions in economic growth. It explained approximately 8% of the variation in investment, supporting their identification of that causal mechanism.

Trying to shed light on potential mechanisms based on the incentives faced by individual bureaucrats, Prendergast (2007) analyzed how the intrinsic motivations and biases of bureaucrats (street-level, such as nurses, firefighters, police officers, IRS agents) function. She developed a theoretical model to demonstrate these dynamics. First, Prendergast showed that bureaucrats should be biased in some sense – their preferences should differ from those of their principals, whose preferences are assumed to align with society's more broadly (e.g., to reduce crime or distribute welfare benefits in a certain way). The model demonstrated that two types of bureaucrats will be hired by principals – those biased highly in favor of the principal's views and those biased highly against them. Agents with middling preferences are largely filtered out of bureaucratic jobs. Prendergast also argued that the model is complicated by several factors, such as the fact that bureaucratic preferences may be latent – even the bureaucrat doesn't know them until she's in the job. All these dynamics, from necessary bureaucratic bias to unobservable preferences, are potential mechanisms that contribute to bureaucratic inefficiency, such as that described by Ayal and Karras.

2.2.2 Trade Missions

Many authors have also studied the effect of international trade missions or official state visits on international trade. These findings have often been weak or insignificant compared to other instruments of economic diplomacy, though some authors have found significance. For example, Nitsch (2007) sought to explain whether official state visits, often accompanied by business delegations, promoted exports. His dataset included approximately 55 years of data (1948-2003) on official visits by Germany, France, and the United States. Nitsch found that state visits are associated with exports that are 8-10% higher, ceteris paribus. He did note that in the more complex time series analysis, exports were already above predictions in the run-up to visits. However, Nitsch argued that this does not eliminate the positive effect of the trade visit and was in line with many trade visits being about long-term investment project handovers. Nitsch noted that there is relatively weak evidence for an impact of official visits on imports. Nitsch also conducted difference-in-difference robustness checks and generally supported his findings that state visits promote exports. For Nitsch, the checks showed that the effect of a state visit on exports is short-lived but strong.

On the other hand, Head and Ries (2010) investigated whether Canadian trade missions (in which government officials, businesses, and others travel to foreign countries to promote export and import linkages) increase trade. They analyzed trade creation associated with missions from 1993-2003 using a gravity model of international trade. Although they found that Canadian trade to countries to which Canada sent trade missions is higher than the gravity model would predict, they argued that trade before trade missions to those countries was also higher than the estimation would predict. Head and Ries therefore ran estimation

checks that suggest that endogeneity tainted the results of several of their estimations. This led to their inclusion of bilateral trade pair fixed effects to account for trade partner-specific dynamics. In their preferred estimation, the effect of a trade mission on trade was zero.

Some of the literature on international trade visits addresses more complex geopolitical dynamics. For example, Fuchs and Klann (2013) studied whether the Dalai Lama's (the Buddhist spiritual leader) visit to a country reduces that country's imports from China, by means of Chinese punishment, which is often threatened in state rhetoric due to the CCP considering control of Tibet an "internal affair." They conducted several gravity estimations on data of Chinese trading partners from 1991-2008. For the 2002-2008 period, Fuchs and Klann found a significant reduction (8.1% or 16.9%, depending on the estimation technique) in Chinese exports to countries that hosted the Dalai Lama, but only when the Dalai Lama was received by a high-level state official. The results dissipated after about 2 years and were most consistently found in machinery and transport exports. Fuchs and Klann addressed endogeneity concerns by instrumenting for whether the Dalai Lama was received by a state official with his travel patterns and the prevalence of Tibet Support Groups (TSGs) in the receiving country. Their results suggested that the Chinese government did use exports to punish political conduct related to state visits in receiving countries. There was only weak evidence for an effect of Dalai Lama visits on Chinese exports before 2002.

2.2.3 Ambassadors

A third segment of the economic diplomacy literature focuses on the role that ambassadors play in promoting certain economic outcomes. Several econometric studies have found support for the idea that ambassadors are critical to supporting US economic interests. First, the scholarship focusing on US ambassadors distinguishes between career ambassadors (who have worked their way up through the ranks of the foreign service) and political appointees. For career ambassadors, Malis (2021) investigated the effects of US ambassadorial turnover on two outcomes: the onset of militarized disputes and US exports to the host country. Malis argued that political appointee ambassadorial turnover is likely endogenous and thus chooses to instead leverage a natural experiment in career appointee turnover. Malis uses an ambassadorial appointment in year t-3 to instrument for ambassadorial turnover/vacancy in year t (because the US foreign service rotates career ambassadors on a 3-year schedule). In doing so, Malis finds that ambassadorial vacancies and turnover are associated with an increased onset of militarized disputes and decreased inflows of US exports to host countries. For both variables, IV estimates are of higher magnitude than the OLS estimates, which Malis argues may be due to either a net deflationary bias in the OLS estimates or that countries in which the 3-year rotation schedule is adhered to are precisely where US interests in diplomatic stability and export promotion rely on Chiefs of Mission (subgroup selection).

Although political appointee ambassadorial turnover is likely endogenous, there is still literature that helps illuminate how political appointment decisions are made. Hollbaugh (2015) studied the determinants of Presidential appointments of non-career ambassadors, who are often major donors or allied current and former politicians. Drawing on a dataset on the career backgrounds of ambassadors appointed from the 68th to the 112th Congress, Hollbaugh shows that on the supply side, non-career ambassadors are more likely to be appointed to "easy" postings, which have characteristics that make dyadic conflict with the US less likely – high rates of trade, foreign policy alignment, and democracy. On the demand side, Hollbaugh also finds that non-career ambassadors are also more likely to be appointed to countries with higher quality of life and overall attractiveness as a destination (measured through tourism and other compound measures).

Not distinguishing between types of ambassadors, Gertz (2018) continued to assess the effect of ambassadorial vacancies on US firms. He theorized that ambassadorial vacancies would increase the amount of investment arbitration cases filed because firms cannot turn to commercial diplomacy, whereby ambassadors

and embassy staff work with host governments to informally settle commercial disputes. Gertz's regression results support this view. Compared to a host country with an ambassador all year, a country with a 90% vacancy rate for the year sees double the number of investment arbitration cases filed by US firms. This finding was amplified in host countries with weak rule of law and institutions, where informal negotiations pursued by US ambassadors prove increasingly important due to the selective application of formal rules and regulations.

2.3 Political Economy

A final section of literature focuses on the political determinants of international economic dynamics beyond the scope of economic diplomacy. This literature considers whether political alignment on matters of international affairs, for example, contributes to increased international trade between countries. Dixon and Moon (1993) used a gravity model to test the effects of export destinations being democratic and of the percent of UN votes with which they agreed with the US. Their model included a democracy-UN agreement interaction term. They found that democracies and countries that frequently vote with the US on UN votes were correlated with higher US exports, with increasing returns to democracy for countries that infrequently voted with the US and increasing returns to vote alignment for non-democracies. While arguing that it illustrated important political determinants of US export behavior, the authors acknowledged the causal limitations of the model, establishing merely increased trade rather than increased trade with the US specifically.

Other studies have looked at how US influence promotes trade. For example, Berger et al. (2013) used a declassified dataset of CIA political interventions during the Cold War to investigate how political influence is used to promote US exports. They found that countries where the CIA intervened – where the US has high political influence – saw steep increases in imports from the US. They demonstrated that there is no corresponding increase in US imports from the country in which it intervened. To address potential endogeneity issues related to where the CIA decided to intervene, the authors included time lags and controls for the presence of US sanctions or conflicts in their specifications. The results hold. The authors found that the effect on US exports occurred only for US exports to autocracies, consistent with the hypothesis that the US was wielding political influence. The increase in imports from the US was nearly entirely from direct government purchasing. The authors also demonstrated that total trade volumes did not increase post-intervention; rather, the US share of imports into the intervened country increased. There was no corresponding increase in imports from ideologically aligned Western countries (measured either through NATO membership or UN General Assembly voting alignment), suggesting that the results come directly from US political influence rather than from new geopolitical alignments.

Several authors have also theorized about and studied the effect of trade in the international political arena, taking the causal relationship in the other direction. Gowa (1994) argued, drawing on trade data from 1905-1985, that trade between allies is more likely than trade between adversaries. She attributed this to trade between allies creating a positive externality (both states have more resources – gains from trade – that they can invest in their military, if necessary). On the other hand, trade between adversaries creates a security diseconomy, as both states gain but create competing incentives in an (often anarchic) international system. Gowa furthered that the likelihood of trade following the flag is increased when states have some sort of monopoly/monopsony power in international markets, and occurs more frequently in bipolar international systems than in multipolar ones.

Considering the effects of trade on interstate conflict, Martin et al. (2008) distinguished between bilateral and multilateral trade in a theoretical model with asymmetric information, where trade is not necessarily conflict-decreasing. Through their empirical specifications, they demonstrated that bilateral trade reduces the odds of conflict between that bilateral pair. However, bilateral trade increases the odds of conflict with

third states, because increased multilateral openness reduces trade interdependence on any single trading partner. Martin et al. further showed that warfare dynamics have been changing such that conflicts are more concentrated among geographically localized states. Martin et al.'s empirical strategy included several specifications. Some instrumented for trade openness, including via an index of economic remoteness and the Generalized System of Preferences (GSP), a scheme of tariffs granted to developing countries.

3 Data

We use a variety of data for our estimations. Our main data are hand-collected information on the terms of ambassadors from the United States to 172 countries. This spans 1963-2014 and is obtained from the Department of State website to the exact date.[1] We consider any personnel an "ambassador" who are listed as "Chiefs of Mission" as identified by the Office of the Historian, along with related titles including "Ambassador Extraordinary and Plenipotentiary", "Chargé d'Affairs", and "Principal Officer." In cases where full start and end date information is unavailable, often for Chargés d'Affaires, we impute this information in a manner designed to record vacancies only when we know with certainty that they occur. In cases of missing start (end) dates, we impute them based on the end (start) dates for previous (following) terms. When start (end) dates are reported to the month instead of the day, we impute them based on the end (start) dates for previous (following) terms if possible, and assume that they are the first (last) of the month otherwise. Comparing our dataset to a similar panel compiled by Arias and Smith (2018), we find our version to be more complete and accurate.

Using the start and end date information, we construct a country-month-level panel of ambassadorial vacancies for each country. We code a dummy variable for vacancies in two ways. The first identifies the months where an ambassadorial seat is vacant on any day of the month. The second identifies the months where the seat is vacant for the whole month. We drop months during embassy closures due to severed diplomatic relations or other conflicts, as reported by the Office of the Historian, as well as long gaps in the reporting of Chiefs of Mission to Cambodia and the Republic of the Congo.

We merge these vacancy data onto a country-month-level panel of United States import and export volumes from the International Monetary Fund (IMF) Direction of Trade database, inflation adjusted to 2015 US dollars using the Consumer Price Index from the US Bureau of Labor Statistics. We also focus on the within-month exchange rate variation for a selected 60 countries from 1994 to 2014, as measured using the IMF rate database.

In terms of baseline controls, we source annual real GDP per capita information from the World Bank, supplemented by the United Nations (UN) Statistics Division for countries excluded from World Bank estimates. We source annual data on agreement in the UN General Assembly from Bailey et al. (2017). We source monthly data on formal military alliances from the Correlates of War Formal Alliances dataset.

In terms of dyadic variables used to construct bi- and multilateral resistance terms for regressions based on the gravity model of trade, we source annual data on GDP, distance between countries, shared borders, common language, General Agreement on Tariffs and Trade (GATT)/World Trade Agreement (WTO) participation, and regional trade agreement participation from the Centre d'Études Prospectives et d'Informations Internationales (CEPII) Gravity dataset. We construct a dummy variable for common colonizers using the Becker (2019) Colonial Dates dataset. For bilateral resistance terms, we measure GATT/WTO participation and US free trade agreement participation at the monthly level using data from the WTO website.[2] In terms

[1] See Chiefs of Mission by country: `https://history.state.gov/departmenthistory/people/chiefsofmission/by-country`

[2] See GATT members list: `https://www.wto.org/english/thewto_e/gattmem_e.htm`, WTO members list: `https://www.wto.org/english/thewto_e/whatis_e/tif_e/org6_e.htm`, and regional trade agreements database: `https://rtais.wto.org/UI/PublicMaintainRTAHome.aspx`

of data on the United States political environment, we source Presidential party data from Brittanica[3] and on Senate and House of Representative party divisions from their respective websites [4]

4 Methods

4.1 Baseline Specification

In our first analyses, we exploit the panel structure of our data in a naive approach that identifies the average change in trade or exchange rate volatility during a vacancy. As in Ahmed and Slaski (2022), we follow Berger et al. (2013)'s extension of the gravity model of international trade. We estimate variants of the following specification with different outcomes, vacancy dummies, and fixed effects:

$$Y_{cym} = \beta_0 + \beta_1 Vacancy_{cym} + \rho\tau_{cym} - \rho\left(\Pi_y + P_{cy} - \phi_y\right) + \theta X_{cym} + \alpha_c + \lambda_y + \epsilon_{cym}$$

Y_{cmy} is the outcome variable: log total trade, log imports, log exports, or exchange rate volatility, between country c and the United States in year y and month m. Thus, in results related to trade, the coefficients represent log-point changes or elasticities. Our main coefficient of interest is β_1, which captures the relationship between an ambassadorial vacancy and our outcome of interest.

We also include in τ_{cmy} a full set of bilateral trade costs in line with the gravity model including log distance, a dummy for a shared border, a dummy for a common language, a dummy for a common colonizer, a dummy for FTA participation, a dummy for shared GATT/WTO participation, and a county of the number of RTAs the two countries participate in. Π_y, P_{cy}, and ϕ_y capture multilateral trade costs for the US, trade partner c, and for the world, respectively, as GDP-weighted averages of the same variables across country pairs. The coefficients on the bilateral and multilateral resistance terms are constrained to be opposite in sign and equal in magnitude based on the intuition that trade volumes should decrease with trade costs between two given countries and increase with trade costs between each country and the rest of the world.

We also include a set of time-varying controls that could plausibly affect trade, exchange rates, and the appointment of US ambassadors. The first is GDP per capita. We may expect higher trading volumes with higher certainty in the exchange rate with richer trading partners. The US may also be motivated to better maintain foreign relations with these more influential countries. The second is a measure of agreement in the UN General Assembly, which proxies foreign policy alignment. The third is a dummy indicating formal military alliances with the United States. These account for potentially increased trade, increased certainty, and improved foreign relations with "friend" nations.

Finally, α_c and λ_y represent vectors of country and year fixed effects used in our main specifications to control for both time-invariant factors (e.g., remoteness, natural resources wealth, culture) and common shocks affecting all controls (e.g., financial crises, technological growth). The country fixed effects absorb the time-invariant trade costs outlined above. We compare the results of these specifications to a more relaxed model, excluding country fixed effects, to analyze selection concerns, as well as stricter specifications that control for all country-specific traits that vary with time, sometimes absorbing additional trade costs. ϵ_{cmy} is an error term. We perform our analyses with heteroskedasticity-robust errors clustered at the country level.

The key underlying assumption of this model is that, conditional on controls, our explanatory variable of interest is uncorrelated with the error term. This assumption is challenged by endogeneity concerns,

[3]See presidents list: `https://www.britannica.com/topic/Presidents-of-the-United-States-1846696`

[4]See Senate webpage: `https://www.senate.gov/history/partydiv.htm` and House Office of the Historian: `https://history.house.gov/Institution/Party-Divisions/Party-Divisions/`

including that of endogenous selection. For example, we record heterogeneity in vacancy incidence across countries. Additional analyses aim to address these concerns and better identify a causal effect of ambassador vacancies on bilateral trade and exchange rate variation.

4.2 Instrumental Variable Approach

For the purposes of econometric identification we follow Ahmed and Slaski (2022). We use new presidential inaugurations as a source of exogenous variation in the frequency of ambassadorial absences. We consider the following two-stage least squares (2SLS) specification:

$$(1)\, Vacancy_{cym} = b_0 + b_1 Z_{my} + r\tau_{cym} - r\left(\Pi_y + P_{cy} - \phi_y\right) + tX_{cym} + a_c + l_y + e_{cym}$$

$$(2)\, Y_{cym} = \beta_0 + \beta_1 \widehat{Vacancy}_{cym} + \rho\tau_{cmy} - \rho\left(\Pi_y + P_{cy} - \phi_y\right) + \theta X_{cym} + \alpha_c + \lambda_y + \epsilon_{cym}$$

Again, Y_{cmy} is our outcome variable of interest. Here, we focus on exports, the component of trade for which we have the strongest evidence of a vacancy effect, and exchange rate volatility.

Z_{my}, our instrument, is a dummy that takes on a value of 1 in the first five months of a new presidency and a value of 0 otherwise. For example, it takes on a value of 1 from January to May 2008, the first five months of President Barack Obama's first term, but not from January to May 2012, the first five months of his second term. We expect new presidential inaugurations to generate greater churn in ambassadorial appointments due to the new foreign policy goals of each new president and the changes to the diplomatic corps that he may pursue to serve these goals. We use this instrument to predict the value of $Vacancy_{cym}$ with a linear probability model in stage (1), providing the instrumented regressor $\widehat{Vacancy}_{cym}$ included in stage (2).

τ_{cmy} and $(\Pi_y + P_{cy} - \phi_y)$ contain GATT/WTO and RTA participation, the other trade costs being accounted for by country fixed effects. X_{cmy} contains log GDP per capita, UN General Assembly agreement, and the US ally dummy. We add to this vector of controls a set of interactions between the instrument and three measures of policy alignment in year y and month m: a dummy indicating whether the President is Republican, a dummy indicating whether the Senate has a Republican majority, and a dummy indicating whether the House has a Republican majority. These serve to address potential violations of the exclusion restriction in which a change in the President's policy alignment could affect both our explanatory variable and outcomes of interest through a systematic shift in foreign policy goals, including by ushering in a change in the partisan alignment of the legislative branch.

We also include fixed effects by country and year. In stricter specifications, we include interactions between the instrument and our baseline controls, including the addition of country-year fixed effects. The country-year fixed effects absorb GDP per capita and UN General Assembly agreement. To account for the possibility of hysteresis, we estimate additional specifications including lagged values of the outcome variable up to 5 months prior. We compare the results of a specification including these lags in both stages to one including them only in the second stage to further analyze the possibility of endogenous selection.

For analyses of exchange rate volatility, we residualize the US ally dummy on the fixed effects across specifications and residualize the trade costs on the country-year fixed effects due to increased multicollinearity during the restricted time period. A weakness of this approach is a potential violation of the order condition. We use only one instrument to address only one endogenous regressor. Additional control variables, particularly agreement in the UN general assembly and the US ally dummy, could plausibly be endogenous to ambassadorial vacancies. We thus explore an additional identification strategy beyond those implemented in Ahmed and Slaski (2022).

4.3 Event Study Approach

We implement two event study approaches, avoiding reliance on exogenous instruments and instead examining endogenous selection concerns through analysis of pre-trends. First, we estimate variants of the following specification that examines trade volumes and exchange rate volatility before, during, and after a vacancy.

$$Y_{cmy} = \beta_0 + \sum_{t=-6, t\neq -1}^{10} \beta_1^k D_{cym}^k + \rho\tau_{cym} - \rho\left(\Pi_y + P_{cy} - \phi_y\right) + \theta X_{cym} + \alpha_c + \lambda_y + \epsilon_{cym}$$

Again, Y_{cym} is the outcome variable: log total trade, log imports, log exports, or exchange rate volatility, between country c and the United States in year y and month m. D_{cym}^k is a set of dummies indicating months before or after a vacancy. $D_{cym}^0 = 1$ during a vacancy. The excluded reference level is D_{cym}^{-1}, corresponding to the month preceding a vacancy. Thus, the β_1 coefficients indicate changes in the outcome variables relative to their pre-vacancy levels.

Second, we explore the possibility that the effect of a vacancy varies over its course, estimating variants of the following specification that examines trade volumes and exchange rate volatility before and during a vacancy.

$$Y_{cmy} = \beta_0 + \sum_{t=-6, t\neq -1}^{5} \beta_1^k D_{cym}^k + \rho\tau_{cym} - \rho\left(\Pi_y + P_{cy} - \phi_y\right) + \theta X_{cym} + \alpha_c + \lambda_y + \epsilon_{cym}$$

In this case, we consider the same outcome variables, but the event dummies differ. Negative values of k correspond to months preceding a vacancy, but positive values indicate the month of a vacancy. $D_{cym}^0 = 1$ during the first month of a vacancy, $D_{cym}^1 = 1$ during the second month, and so on. Again, the excluded reference level is D_{cym}^{-1}, corresponding to the month preceding a vacancy.

For both models, the trade costs and time-varying controls are the same as explained in the baseline specification. As in the baseline specification, we implement multiple combinations of fixed effects, comparing the main specification outlined above, with fixed effects by country and year, to stricter and looser alternatives.

Although endogenous selection may still be a concern, the event study approach gives us more insight into this possibility, as well as an understanding of how our outcome variables of interest develop after the initial occurrence of a vacancy. A shift to pre-vacancy levels after the appointment of a new ambassador or strengthening of the vacancy effect over its course could more plausibly suggest a causal relationship.

5 Results

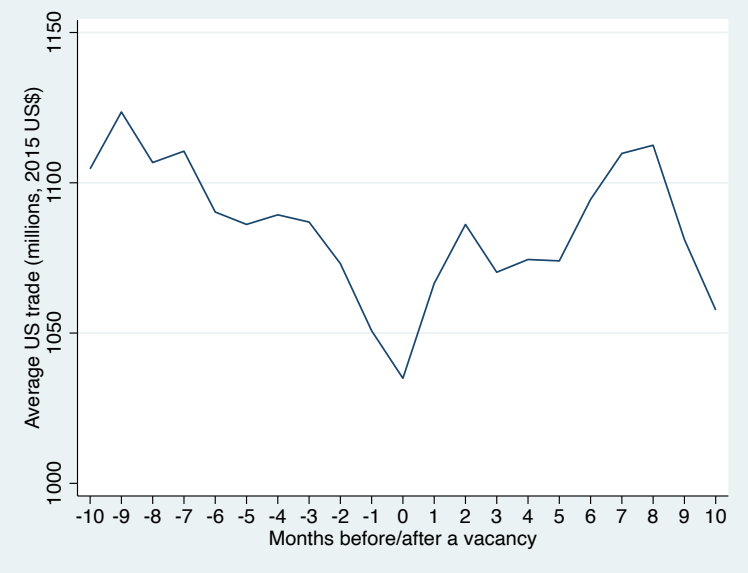
5.1 Descriptive Figures

We begin with descriptive figures that show the connections between ambassadorial vacancies and trade. Figure 1 plots the average monthly volume of US trade around an ambassadorial vacancy, illustrating a sharp decline during vacancy months. Figure 2 illustrates the incidence of an ambassadorial vacancy across territories diplomatically recognized by the United States.

We then estimate the effect of ambassadorial vacancies on US bilateral trade using the baseline specification described in Section 4.1. The results are presented in Table 1.

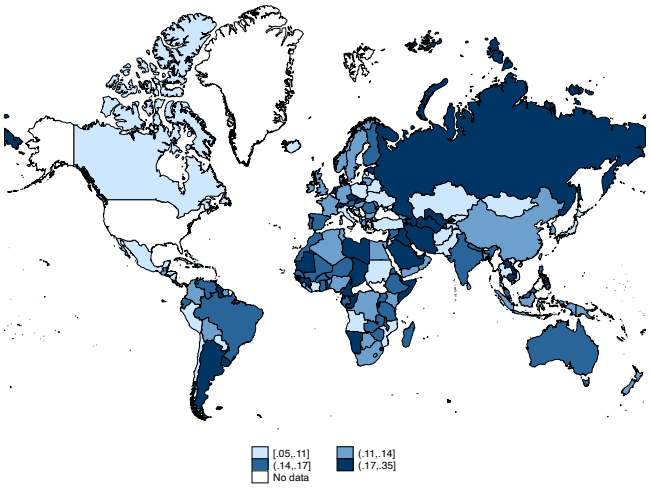
As explained in section 4.2, we implement an instrumental variable approach following Ahmed and Slaski (2022) to address potential endogeneity concerns. Figure 3a shows the monthly average number of

Figure 1: *Average monthly volume of US trade around an ambassadorial vacancy*



Notes: This 5% contraction in trade is not statistically significant at conventional levels with $p = 0.12$. It is possible for t to take on both positive and negative values for a single observation. We assign t based on the closest vacancy to avoid double-counting. For example, if a given observation is 4 months after one vacancy and 5 months before another, $t = 4$. If an observation is equidistant from two vacancies, t takes on the positive value.

Figure 2: *Incidence of an ambassadorial vacancy across territories diplomatically recognized by the United States*



Notes: We use different breaks from the original study due to differences in the distribution of vacancy incidences. The breaks included here are quartiles rounded to the nearest hundredth. Using the breaks from the original study the majority of countries fall into the bottom bin. The trend of higher vacancy incidence in Africa and Asia compared with European countries seems slightly less pronounced than in the original study.

ambassadorial vacancies over time and Figure 3b displays the probability of vacancy by month during the first (inaugural) year of new President.

Table 2 presents our 2SLS estimates using the inaugural year as an instrument for vacancy.

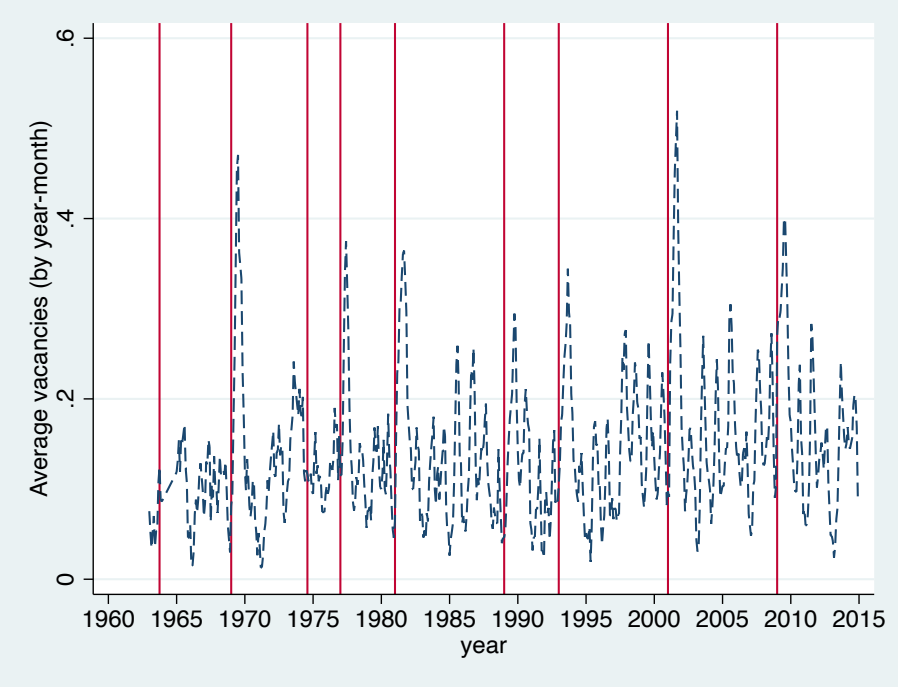
Table 1: *The effect of ambassador vacancies on US bilateral trade*

	Log US total trade		Log US imports	Log US exports		
	(1)	(2)	(3)	(4)	(5)	(6)
Ambassadorial vacancy	-0.0998***	-0.000132	-0.0147	0.0133	0.0213**	0.00809
	(0.0382)	(0.0125)	(0.0257)	(0.0120)	(0.00878)	(0.0121)
Controls						
Log per capita income	0.814***	1.096***	1.373***	0.878***		0.879***
	(0.106)	(0.0958)	(0.130)	(0.112)		(0.112)
UNGA voting similarity	-0.660	0.228	0.284	0.0780		0.0796
	(0.719)	(0.218)	(0.309)	(0.202)		(0.203)
Trade cost/B&B MR controls						
Log distance	0.266					
	(0.258)					
Border	3.757***					
	(0.626)					
Common colonizer	-0.928**					
	(0.430)					
Common language	-0.0841					
	(0.432)					
US FTA participant	1.681***	0.393***	0.739***	0.391***		0.389***
	(0.252)	(0.124)	(0.229)	(0.107)		(0.107)
GATT/WTO participant	0.798***	0.136	0.219	0.116		0.116
indicator	(0.221)	(0.0847)	(0.133)	(0.0897)		(0.0896)
Number of regional trade	0.00518	-0.00165	0.00787**	-0.00421**		-0.00425**
agreements	(0.00690)	(0.00211)	(0.00306)	(0.00206)		(0.00206)
Constant	-4.643*	-4.643***	-8.168***	-3.679***	3.692***	-3.682***
	(2.507)	(0.791)	(1.072)	(0.901)	(0.00126)	(0.901)
Country fixed effects	No	Yes	Yes	Yes		
Year fixed effects	Yes	Yes	Yes	Yes		Yes
Country FE x Year FE					Yes	
Country FE x Month FE						Yes
R^2	0.407	0.931	0.879	0.923	0.962	0.925
Observations	70,880	70,880	72,118	75,205	75,154	75,205
Countries	172	172	172	172	172	172

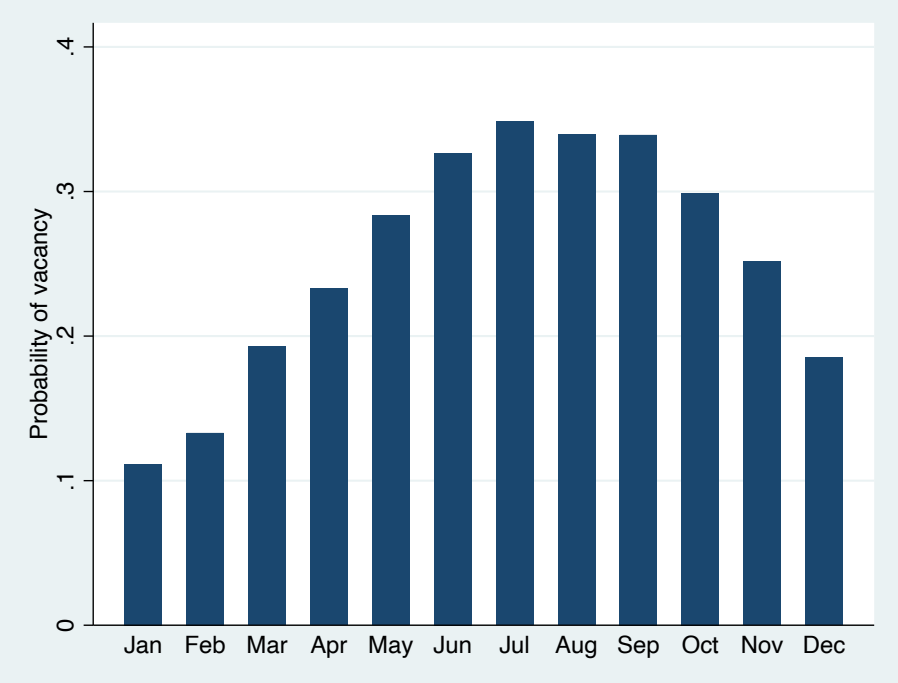
Notes: Standard errors are robust and clustered by country. The original study indicates that US FTA particpant and GATT/WTO participant indicator are included in Column 5. This was not possible because the regression includes country x year fixed effects. The original study finds that the coefficient on ambassadorial vacancy is negative and statistically significant in all columns but 3. Here, it is negative and statistically significant in Column 1, but positive and statistically significant in Column 5. These regressions also differ notably from the original study in the effect of most additional controls.

Figure 3: *Ambassadorial vacancies across time*

(a) *Monthly average*



(b) *During the first (inaugural) year of new President*



Notes: In Figure 3a, vertical lines correspond to the months of new presidential inaugurations. We see a different trend from the original study in that the incidence of vacancies spikes some months after a new presidential inauguration instead of immediately. In Figure 3b, it is unclear whether the original study includes "traditional" inaugural years for a new president, where he is inaugurated in January, or all inaugural years. This time period includes President Johnson's inauguration in November 1963 and President Ford's inauguration in August 1974, both of which are indicated with red lines in Figure 3a in the original study. Here, we include only "traditional" inaugural years for new presidents. Again, we see a trend of vacancies increasing some months after a new presidential inauguration instead of spiking in January and gradually decreasing afterwards.

Table 2: *2SLS estimates for the effect of ambassadorial vacancies on US exports*

	Log US exports			
	(1)	(2)	(3)	(4)
	Panel A: 2SLS			
		Controls x Instrument		
Ambassadorial vacancy	0.351	0.580**	1.424	0.190*
	(0.396)	(0.243)	(0.869)	(0.113)
Lagged exports				
Log US exports in $t-1$,				0.280***
				(0.0100)
Log US exports in $t-2$,				0.163***
				(0.00807)
Log US exports in $t-3$,				0.130***
				(0.00764)
Log US exports in $t-4$,				0.104***
				(0.00722)
Log US exports in $t-5$,				0.117***
				(0.00597)
	Panel B: First stage			
	Vacancy			
New President, 5 months	-0.0452**	-0.454***	-0.143*	-0.472***
	(0.0181)	(0.0836)	(0.0774)	(0.0883)
F-statistic	6.247	29.45	3.429	28.57
	Controls in both panels			
Baseline controls	Yes	Yes	No	Yes
Controls x Instrument	No	Yes	Yes	Yes
Politics x Instrument	Yes	Yes	Yes	Yes
Country fixed effects	Yes	Yes	No	Yes
Year fixed effects	Yes	Yes	No	Yes
Country FE x Year FE	No	No	Yes	No
Observations	75,205	75,205	75,154	71,156
Countries	172	172	172	172

Notes: Standard errors are robust and clustered by country. The original study states that "Politics includes: indicator variables (0=Democrat, 1=Republican) for the President's party, majority party in the US House of Representatives and majority party in the US Senate." The original study states that "Baseline controls include: Log GDP per capita of the partner country c, an indicator variable for US ally, UN General Assembly voting "similarity" score with the United States, membership in GATT/WTO, membership in a regional or bilateral trade agreement with the United States." Note that the description of the RTA variable is different than in the first set of regressions, so here, we use the indicator instead of the count variable.

The original study's notes state that Controls x Instrument are included in Columns 2 and 3, but the table shows that they are included in Column 4 as well. We include them in Column 4. The original study states that baseline controls are included in all columns. It is not possible to include them in Column 3 due to the inclusion of country x year fixed effects. The original study is not completely clear, but seems to indicate that in Column 4, lagged exports are only included in the second stage. We include them in both stages because I do not think Stata does allows exogenous regressors to be included only in the second stage and because, based on my reading, this can introduce bias.

In the original study, the instrument is positively correlated with the vacancy indicator and has $F > 60$ in all columns. Here, it is negatively correlated with the vacancy indicator and is weak in Columns 1 and 3. In the original study, the coefficient on ambassadorial vacancy is negative and statistically significant in the second stage for all columns. Here, it is positive and statistically significant in Columns 2 and 4.

5.2 Attempted Match Results

This version of the results uses the raw Arias and Smith data with data added/edited for:

1. countries missing from the original dataset,
2. countries with vacancy incidence higher than 0.5 using the original dataset,
3. countries dropped during merges due to insufficient observations using the original dataset, and
4. terms with end dates incorrectly listed as December 31, 2014, when they are actually earlier.

This version of the results uses the raw Arias and Smith data with edits and additions for countries missing from the original dataset, countries with vacancy incidence higher than 0.5 using the original dataset, countries dropped during merges due to insufficient observations using the original dataset, and terms with end dates incorrectly listed as December 31, 2014, when they are actually earlier. It uses the original assumptions about missing and monthly ambassador start and end dates from Arias and Smith. It uses monthly frequency data on GATT/WTO membership and US FTA/RTA participation for bilateral resistance terms. It also uses monthly frequency data on US alliances. See summary statistics below. The illogical values for ambassador age come from mistakes in the Arias and Smith data.

	Obs	Mean	Std. Dev	Min	Max
US total trade	68171	1167.1	4207	0.000079	60488
US exports	72407	438.9	1589	0.000058	26783
US imports	69336	689.9	2669	0.0000010	45067
Log US total trade	68171	4.74	2.29	-9.45	11.0
Log US exports	72407	3.68	2.38	-9.76	10.2
Log US imports	69336	3.76	2.70	-13.8	10.7
Ambassadorial vacancy	73572	0.16	0.37	0	1
Country characteristics					
Log distance	73572	8.92	0.53	6.28	9.69
Border	73572	0.016	0.12	0	1
Common colonizer	73572	0.36	0.48	0	1
Common language	73572	0.32	0.46	0	1
Log per capita income	73572	8.29	1.41	5.12	11.7
UNGA voting similarity	73572	0.36	0.24	0	1
US ally	73572	0.38	0.48	0	1
Ambassador characteristics					
Female	73572	0.15	0.36	0	1
Ambassador age	72108	53.7	7.46	-2	146
Political appointee	73287	0.30	0.46	0	1
Years of experience	73572	2.76	2.36	0.077	21.6

Table 3: *The effect of ambassador vacancies on US bilateral trade*

	Log US total trade		Log US imports	Log US exports		
	(1)	(2)	(3)	(4)	(5)	(6)
Ambassadorial vacancy	-0.0725	0.000485	-0.00130	-0.0166	0.0185**	-0.0228
	(0.0519)	(0.0138)	(0.0212)	(0.0303)	(0.00888)	(0.0310)
Controls						
Log per capita income	0.804***	1.118***	1.395***	0.951***		0.951***
	(0.109)	(0.0947)	(0.134)	(0.114)		(0.114)
UNGA voting similarity	-0.443	0.213	0.271	0.0309		0.0322
	(0.748)	(0.213)	(0.309)	(0.196)		(0.197)
Trade cost/B&B MR controls						
Log distance	0.296					
	(0.263)					
Border	3.732***					
	(0.628)					
Common colonizer	-0.926**					
	(0.441)					
Common language	-0.0747					
	(0.452)					
US FTA participant	1.682***	0.393***	0.760***	0.359***	0.0369	0.357***
	(0.265)	(0.145)	(0.269)	(0.126)	(0.0390)	(0.126)
GATT/WTO participant	0.604**	0.134*	0.225*	0.102	0.0598	0.0987
indicator	(0.234)	(0.0783)	(0.119)	(0.0845)	(0.0400)	(0.0845)
Number of regional trade	0.00409	-0.00185	0.00772**	-0.00455**		-0.00460**
agreements	(0.00724)	(0.00211)	(0.00316)	(0.00207)		(0.00207)
Constant	-4.719*	-4.810***	-8.333***	-4.236***	3.640***	-4.239***
	(2.551)	(0.785)	(1.102)	(0.927)	(0.0284)	(0.927)
Country fixed effects	No	Yes	Yes	Yes		
Year fixed effects	Yes	Yes	Yes	Yes		Yes
Country FE x Year FE					Yes	
Country FE x Month FE						Yes
R^2	0.391	0.932	0.882	0.923	0.962	0.925
Observations	68,171	68,171	69,336	72,407	72,371	72,407
Countries	172	172	172	172	172	172

Notes: Standard errors are robust and clustered by country. The original study finds that the coefficient on ambassadorial vacancy is negative and statistically significant in all columns but 3. Here it is positive and statistically significant in Column 5. These regressions also differ notably from the original study in the effect of most additional controls.

Table 4: *2SLS estimates for the effect of ambassadorial vacancies on US exports*

	Log US exports				
	(1)	(2)	(3)	(4)	(5)
			Panel A: 2SLS		
			Controls x Instrument		
Ambassadorial vacancy	0.349	0.705**	2.103	0.284**	0.280**
	(0.333)	(0.278)	(1.774)	(0.141)	(0.123)
Lagged exports					
Log US exports in $t-1$				0.283***	0.282***
				(0.0111)	(0.0107)
Log US exports in $t-2$				0.164***	0.163***
				(0.00887)	(0.00848)
Log US exports in $t-3$				0.129***	0.128***
				(0.00743)	(0.00716)
Log US exports in $t-4$				0.107***	0.105***
				(0.00799)	(0.00764)
Log US exports in $t-5$				0.121***	0.118***
				(0.00680)	(0.00614)
			Panel B: First stage		
			Vacancy		
New President, 5 months	-0.0559***	-0.411***	-0.103	-0.408***	-0.414***
	(0.0186)	(0.0857)	(0.0843)	(0.0921)	(0.0852)
F-statistic	9.085	22.98	1.487	19.59	13.45
			Controls in both panels		
Baseline controls	Yes	Yes	Yes	Yes	Yes
Controls x Instrument	No	Yes	Yes	Yes	Yes
Politics x Instrument	Yes	Yes	Yes	Yes	Yes
Country fixed effects	Yes	Yes	No	Yes	Yes
Year fixed effects	Yes	Yes	No	Yes	Yes
Country FE x Year FE	No	No	Yes	No	No
Lagged Exports	No	No	No	Yes	No
Observations	72,407	72,407	72,371	68,546	68,546
Countries	172	172	172	172	172

Notes: Standard errors are robust and clustered by country. The original study states that "Politics includes: indicator variables (0=Democrat, 1=Republican) for the President's party, majority party in the US House of Representatives and majority party in the US Senate." It also states that "Baseline controls include: Log GDP per capita of the partner country c, an indicator variable for US ally, UN General Assembly voting "similarity" score with the United States, membership in GATT/WTO, membership in a regional or bilateral trade agreement with the United States." Note that the description of the RTA variable is different than in the first set of regressions, so here, we use the indicator instead of the count variable.

The original study's notes state that Controls x Instrument are included in Columns 2 and 3, but the table shows that they are included in Column 4 as well. We include them in Column 4. The original study states that baseline controls are included in all columns. It is not possible to include log GDP per capita and UNGA voting similarity in Column 3 due to the inclusion of country x year fixed effects. The original study is not completely clear, but seems to indicate that in Column 4, lagged exports are only included in the second stage. We include them in both stages because I do not think Stata does allows exogenous regressors to be included only in the second stage and because, based on my reading, this can introduce bias. In column five, we estimate each stage separately to exclude them from the first stage.

In the original study, the instrument is positively correlated with the vacancy indicator and has $F > 60$ in all columns. Here, it is negatively correlated with the vacancy indicator and is weak in Columns 1 and 3. In the original study, the coefficient on ambassadorial vacancy is negative and statistically significant in the second stage for all columns. Here, it is positive and statistically significant in Columns 2, 4, and 5.

5.3 Hand-Collected Data Results

This version of the results uses the complete hand-collected data on ambassadorial appointments. We impute missing start (end) dates based on the end (start) dates for previous (following) terms. We impute monthly start (end) dates based on the end (start) dates of previous (following) terms if possible, and assume that they are the first (last) of the month otherwise.

It uses monthly frequency data on GATT/WTO membership and US FTA/RTA participation for bilateral resistance terms. It also uses monthly frequency data on US alliances.

See summary statistics below.

	Obs	Mean	Std. Dev	Min	Max
US total trade	70846	1200.2	4403	0.000079	60488
US exports	75120	455.1	1711	0.000058	28254
US imports	72053	706.3	27401	0.0000010	45067
Log US total trade	70846	4.75	2.30	-9.45	11.0
Log US exports	75120	3.70	2.39	-9.76	10.2
Log US imports	72053	3.77	2.72	-13.8	10.7
Ambassadorial vacancy	76327	0.14	0.35	0	1
Country characteristics					
Log distance	76327	8.92	0.54	6.28	9.69
Border	76327	0.016	0.13	0	1
Common colonizer	76327	0.36	0.48	0	1
Common language	76327	0.32	0.46	0	1
Log per capita income	76327	8.30	1.41	5.12	11.7
UNGA voting similarity	76327	0.36	0.24	0	1
US ally	76327	0.37	0.48	0	1
Ambassador characteristics					
Female	76327	0.14	0.35	0	1
Ambassador age	75928	53.8	6.71	32	83
Years of experience	76327	2.68	2.26	0.079	21.6
Political appointee	76327	0.29	0.45	0	1

Table 5: *The effect of ambassador vacancies on US bilateral trade*

	Log US total trade		Log US imports	Log US exports		
	(1)	(2)	(3)	(4)	(5)	(6)
Ambassadorial vacancy	-0.0753**	0.0126	0.0121	0.0246**	0.0215**	0.0194*
	(0.0370)	(0.0109)	(0.0180)	(0.0107)	(0.00885)	(0.0109)
Controls						
Log per capita income	0.814***	1.096***	1.371***	0.882***		0.883***
	(0.107)	(0.0957)	(0.131)	(0.111)		(0.111)
UNGA voting similarity	-0.573	0.233	0.293	0.0841		0.0855
	(0.740)	(0.217)	(0.309)	(0.203)		(0.203)
Trade cost/B&B MR controls						
Log distance	0.281					
	(0.261)					
Border	3.758***					
	(0.639)					
Common colonizer	-0.957**					
	(0.437)					
Common language	-0.0450					
	(0.448)					
US FTA participant	1.673***	0.398***	0.755***	0.389***	0.0463	0.387***
	(0.253)	(0.124)	(0.231)	(0.109)	(0.0360)	(0.110)
GATT/WTO participant	0.639***	0.139*	0.239**	0.0879	0.0499	0.0847
indicator	(0.231)	(0.0791)	(0.119)	(0.0861)	(0.0384)	(0.0861)
Number of regional trade	0.00485	-0.00166	0.00793***	-0.00431**		-0.00436**
agreements	(0.00689)	(0.00209)	(0.00304)	(0.00206)		(0.00206)
Constant	-4.657*	-4.643***	-8.171***	-3.683***	3.658***	-3.687***
	(2.527)	(0.791)	(1.073)	(0.900)	(0.0274)	(0.900)
Country fixed effects	No	Yes	Yes	Yes		
Year fixed effects	Yes	Yes	Yes	Yes		Yes
Country FE x Year FE					Yes	
Country FE x Month FE						Yes
R^2	0.400	0.932	0.881	0.923	0.962	0.926
Observations	70,846	70,846	72,053	75,120	75,074	75,120
Countries	172	172	172	172	172	172

Notes: Standard errors are robust and clustered by country. The original study finds that the coefficient on ambassadorial vacancy is negative and statistically significant in all columns but 3. Here it is negative and statistically significant in Column 1, but positive and statistically significant in Columns 4 and 5. These regressions also differ notably from the original study in the effect of most additional controls.

Table 6: *2SLS estimates for the effect of ambassadorial vacancies on US exports*

	Log US exports				
	(1)	(2)	(3)	(4)	(5)
			Panel A: 2SLS		
			Controls x Instrument		
Ambassadorial vacancy	0.351	0.531**	1.386*	0.205*	0.204*
	(0.386)	(0.219)	(0.769)	(0.113)	(0.111)
Lagged exports					
Log US exports in $t-1$				0.280***	0.281***
				(0.0101)	(0.00994)
Log US exports in $t-2$				0.163***	0.164***
				(0.00811)	(0.00806)
Log US exports in $t-3$				0.130***	0.130***
				(0.00766)	(0.00768)
Log US exports in $t-4$				0.104***	0.104***
				(0.00720)	(0.00716)
Log US exports in $t-5$				0.118***	0.117***
				(0.00598)	(0.00589)
			Panel B: First stage		
			Vacancy		
New President, 5 months	-0.0463**	-0.472***	-0.156**	-0.473***	-0.476***
	(0.0180)	(0.0825)	(0.0763)	(0.0875)	(0.0822)
F-statistic	6.632	32.64	4.178	29.24	10.61
			Controls in both panels		
Observations	75,120	75,120	75,074	71,146	71,146
Baseline controls	Yes	Yes	Yes	Yes	Yes
Controls x Instrument	No	Yes	Yes	Yes	Yes
Politics x Instrument	Yes	Yes	Yes	Yes	Yes
Country fixed effects	Yes	Yes	No	Yes	Yes
Year fixed effects	Yes	Yes	No	Yes	Yes
Country FE x Year FE	No	No	Yes	No	No
Lagged Exports	No	No	No	Yes	No
R-squared	0.077	0.042	-0.573	0.438	0.955
Countries	172	172	172	172	172

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

Notes: Standard errors are robust and clustered by country. The original study states that "Politics includes: indicator variables (0=Democrat, 1=Republican) for the President's party, majority party in the US House of Representatives and majority party in the US Senate." The original study states that "Baseline controls include: Log GDP per capita of the partner country c, an indicator variable for US ally, UN General Assembly voting "similarity" score with the United States, membership in GATT/WTO, membership in a regional or bilateral trade agreement with the United States." Note that the description of the RTA variable is different than in the first set of regressions, so here, we use the indicator instead of the count variable.

The original study's notes state that Controls x Instrument are included in Columns 2 and 3, but the table shows that they are included in Column 4 as well. We include them in Column 4. The original study states that baseline controls are included in all columns. It is not possible to include log GDP per capita and UNGA voting similarity in Column 3 due to the inclusion of country x year fixed effects. The original study is not completely clear, but seems to indicate that in Column 4, lagged exports are only included in the second stage. We include them in both stages because I do not think Stata does allows exogenous regressors to be included only in the second stage and because, based on my reading, this can introduce bias. In column five, we estimate each stage separately to exclude them from the first stage.

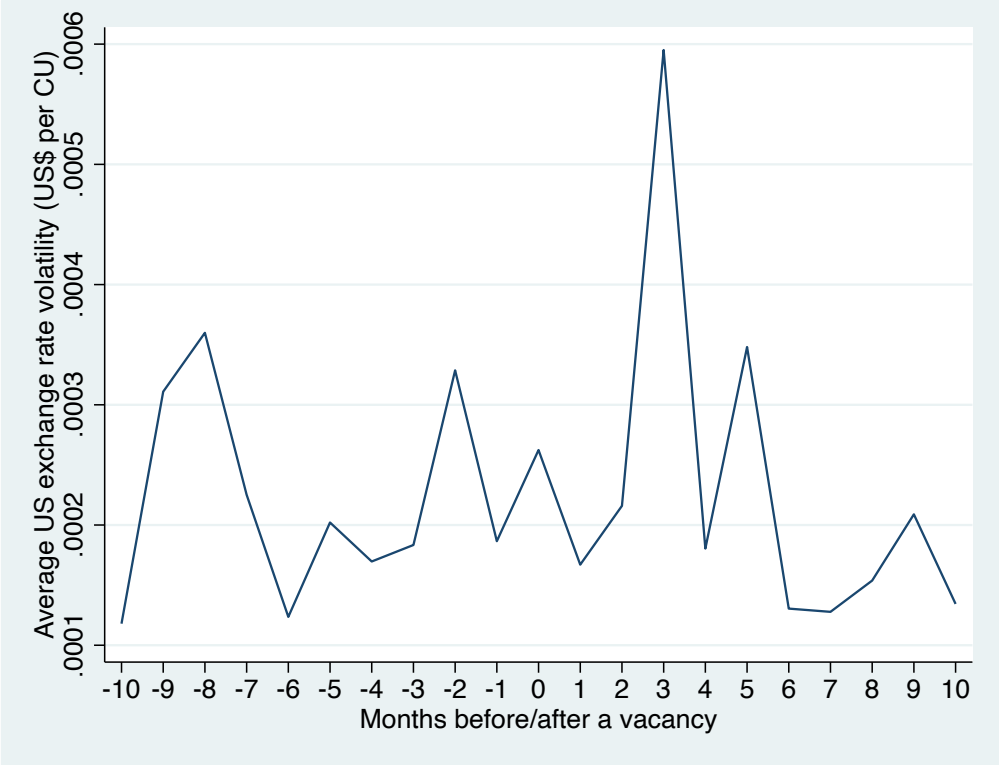
In the original study, the instrument is positively correlated with the vacancy indicator and has $F > 60$ in all columns. Here, it is negatively correlated with the vacancy indicator and is weak in Columns 1 and 3. In the original study, the coefficient on ambassadorial vacancy is negative and statistically significant in the second stage for all columns. Here, it is positive and statistically significant in Columns 2-5.

5.4 Exchange Rates

We analyze the effect of ambassadorial vacancies on exchange rate volatility along with trade outcomes. This version of the results uses the complete hand-collected data on ambassadorial appointments. We impute missing start (end) dates based on the end (start) dates for previous (following) terms. We impute monthly start (end) dates based on the end (start) dates for previous (following) terms if possible, and assume that they are the first (last) of the month otherwise. It uses monthly frequency data on GATT/WTO membership and US FTA/RTA participation for bilateral resistance terms. It also uses monthly frequency data on US alliances. It uses IMF data on exchange rates for a selected 60 countries from 1994 to 2014.

Figure 10 displays the average monthly volatility in US exchange rates prior to and following the start of a vacancy. Table 7 shows how ambassadorial vacancies affect US exchange rate volatility, and in Table 8, we present 2SLS estimates using presidential inaugurations as an instrument for vacancy.

Figure 4: *Average US Exchange Rate Volatility Around an Ambassadorial Vacancy*



Notes: This 18% increase in exchange rate volatility is not statistically significant at conventional levels with $p = 0.38$. It is possible for t to take on both positive and negative values for a single observation. We assign t based on the closest vacancy to avoid double-counting. For example, if a given observation is 4 months after one vacancy and 5 months before another, $t = 4$. If an observation is equidistant from two vacancies, t takes on the positive value.

Table 7: *The effect of ambassador vacancies on US total trade*

	(1)	(2)
	Log US Total Trade	
Ambassadorial vacancy	-0.0753**	0.0126
	(0.0370)	(0.0109)
Controls		
Log per capita income	0.814***	1.096***
	(0.107)	(0.0957)
UNGA voting similarity	-0.573	0.233
	(0.740)	(0.217)
Trade cost/B&B MR controls		
Log distance	0.281	
	(0.261)	
Border	3.758***	
	(0.639)	
Common colonizer	-0.957**	
	(0.437)	
Common language	-0.0450	
	(0.448)	
US FTA participant	1.673***	0.398***
	(0.253)	(0.124)
GATT/WTO participant	0.639***	0.139*
indicator	(0.231)	(0.0791)
Number of regional trade	0.00485	-0.00166
agreements	(0.00689)	(0.00209)
Constant	-4.657*	-4.643***
	(2.527)	(0.791)
Country fixed effects	No	Yes
Year fixed effects	Yes	Yes
R^2	0.400	0.932
Observations	70,846	70,846
Countries	172	172

Notes: Standard errors are robust and clustered by country.

Table 8: *The effect of ambassador vacancies on US imports and exports*

	(1)	(2)	(3)	(4)
	Log US Imports	Log US Exports		
Ambassadorial vacancy	0.0121	0.0246**	0.0215**	0.0194*
	(0.0180)	(0.0107)	(0.00885)	(0.0109)
Controls				
Log per capita income	1.371***	0.882***		0.883***
	(0.131)	(0.111)		(0.111)
UNGA voting similarity	0.293	0.0841		0.0855
	(0.309)	(0.203)		(0.203)
US FTA participant	0.755***	0.389***	0.0463	0.387***
	(0.231)	(0.109)	(0.0360)	(0.110)
GATT/WTO participant	0.239**	0.0879	0.0499	0.0847
indicator	(0.119)	(0.0861)	(0.0384)	(0.0861)
Number of regional trade	0.00793***	-0.00431**		-0.00436**
agreements	(0.00304)	(0.00206)		(0.00206)
Constant	-8.171***	-3.683***	3.658***	-3.687***
	(1.073)	(0.900)	(0.0274)	(0.900)
Country fixed effects	Yes	Yes		
Year fixed effects	Yes	Yes		Yes
Country FE x Year FE			Yes	
Country FE x Month FE				Yes
R^2	0.881	0.923	0.962	0.926
Observations	72,053	75,120	75,074	75,120
Countries	172	172	172	172

Notes: Standard errors are robust and clustered by country.

Table 9: *2SLS estimates for the effect of ambassadorial vacancies on US Exchange Rate Volatility*

	Log US exports				
	(1)	(2)	(3)	(4)	(5)
	Panel A: 2SLS				
			Controls x Instrument		
Ambassadorial vacancy	0.351	0.531**	1.386*	0.205*	0.204*
	(0.386)	(0.219)	(0.769)	(0.113)	(0.111)
Lagged exports					
Log US exports in $t-1$				0.280***	0.281***
				(0.0101)	(0.00994)
Log US exports in $t-2$				0.163***	0.164***
				(0.00811)	(0.00806)
Log US exports in $t-3$				0.130***	0.130***
				(0.00766)	(0.00768)
Log US exports in $t-4$				0.104***	0.104***
				(0.00720)	(0.00716)
Log US exports in $t-5$				0.118***	0.117***
				(0.00598)	(0.00589)
	Panel B: First stage				
			Vacancy		
New President, 5 months	-0.0463**	-0.472***	-0.156**	-0.473***	-0.476***
	(0.0180)	(0.0825)	(0.0763)	(0.0875)	(0.0822)
F-statistic	6.632	32.64	4.178	29.24	10.61
	Controls in both panels				
Observations	75,120	75,120	75,074	71,146	71,146
Baseline controls	Yes	Yes	Yes	Yes	Yes
Controls x Instrument	No	Yes	Yes	Yes	Yes
Politics x Instrument	Yes	Yes	Yes	Yes	Yes
Country fixed effects	Yes	Yes	No	Yes	Yes
Year fixed effects	Yes	Yes	No	Yes	Yes
Country FE x Year FE	No	No	Yes	No	No
Lagged Exports	No	No	No	Yes	No
R-squared	0.077	0.042	-0.573	0.438	0.955
Countries	172	172	172	172	172

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

Notes: Standard errors are robust and clustered by country. The original study states that "Politics includes: indicator variables (0=Democrat, 1=Republican) for the President's party, majority party in the US House of Representatives and majority party in the US Senate." The original study states that "Baseline controls include: Log GDP per capita of the partner country c, an indicator variable for US ally, UN General Assembly voting "similarity" score with the United States, membership in GATT/WTO, membership in a regional or bilateral trade agreement with the United States." Note that the description of the RTA variable is different than in the first set of regressions, so here, we use the indicator instead of the count variable.

The original study's notes state that Controls x Instrument are included in Columns 2 and 3, but the table shows that they are included in Column 4 as well. We include them in Column 4. The original study states that baseline controls are included in all columns. It is not possible to include log GDP per capita and UNGA voting similarity in Column 3 due to the inclusion of country x year fixed effects. In this smaller time sample, the interactions of political variables with the instrument are perfectly collinear, so all the specifications including Politics x Instrument only include the presidential party indicator interacted with the instrument. The original study is not completely clear, but seems to indicate that in Column 4, lagged exports are only included in the second stage. We include them in both stages because I do not think Stata does allows exogenous regressors to be included only in the second stage and because, based on my reading, this can introduce bias. In column five, we estimate each stage separately to exclude them from the first stage.

In each specification, we "partial out the controls that are too collinear with the fixed effects, causing the variance-covariance matrix not to be full-rank. In columns 1, 2, 4, and 5, we partial out the US ally indicator. In column 3, we additionally partial out the GATT/WTO indicator and the RTA indicator.

In the original study, the instrument is positively correlated with the vacancy indicator and has $F > 60$ in all columns. Here, it is negatively correlated with the vacancy indicator in all columns except 1 and is weak in all columns except 5.

The effect of ambassadorial vacancies on exchange rate volatility is not significant in any specification.

5.5 Event Studies Results

We use an event study approach to evaluate the effects of ambassadorial vacancies on both US trade and exchange rate volatility. The results are presented in the tables below. This version of the results uses the complete hand-collected data on ambassadorial appointments. We impute missing start (end) dates based on the end (start) dates for previous (following) terms. We impute monthly start (end) dates based on the end (start) dates for previous (following) terms if possible, and assume that they are the first (last) of the month otherwise. It uses monthly frequency data on GATT/WTO membership and US FTA/RTA participation for bilateral resistance terms. It also uses monthly frequency data on US alliances. It uses IMF data on exchange rates for a selected 60 countries from 1994 to 2014. All regressions use the same controls used in the original study's baseline specifications: log GDP per capita, UN agreement score, and gravity controls (log distance, border, common colonizer, FTA participation, GATT/WTO participation, and number of RTAs), constrained to have coefficients of equal magnitudes and opposite signs on the bi- and multilateral resistance terms. Log distance, border, common colonizer, and common language are dropped in the specifications with country fixed effects. Log GDP per capita, UN agreement, and number of RTAs is dropped in the specification with country $\times$ year fixed effects.

We run two separate event studies for both trade volumes and event studies. The first compares the pre-vacancy period to the vacancy period as a whole and to the post-vacancy period. In this specification, t = 0 indicates the vacancy, negative values of t indicate pre-vacancy months, and positive values of t indicate post-vacancy months. The second compares the pre-vacancy period to each of the first six months of the vacancy period. This window is chosen because the mean vacancy length is 5.7. In this specification, t=0 indicates the first month of the vacancy, negative values of t indicate pre-vacancy months, and positive values of t indicate additional vacancy months. In both, the month directly preceding a vacancy, t = -1, is excluded as the baseline period.

The results in Table 9 are fairly inconsistent, but column 5 shows evidence of an increase in exports between t = -4 and t = -1 and between t = -1 and the post-vacancy period. This trend disappears when including country fixed effects and year fixed effects, or country fixed effects and country $\times$ month fixed effects instead of country $\times$ year fixed effects. Columns 4 and 6 instead show a slight increase in exports during the vacancy. This is inconsistent with the decrease in total trade during vacancies and the subsequent increase above pre-vacancy levels. This trend disappears when adding country fixed effects, which suggests selection issues. There is no evidence of a relationship between ambassador vacancies and US import volumes.

Table 10: *Event study on US trade during and after an ambassador vacancy*

	Log US total trade		Log US imports	Log US exports		
	(1)	(2)	(3)	(4)	(5)	(6)
Months before/after a vacancy						
-4	0.0179	-0.00901	-0.0264	-0.0138	-0.0327**	-0.00852
	(0.0193)	(0.0135)	(0.0226)	(0.0154)	(0.0155)	(0.0159)
-3	0.0116	0.00157	-0.0218	-0.000734	-0.0175	0.00838
	(0.0151)	(0.0130)	(0.0190)	(0.0157)	(0.0155)	(0.0161)
-2	-0.0204	-0.00404	-0.00761	-0.00419	-0.0105	-0.000509
	(0.0186)	(0.0124)	(0.0162)	(0.0146)	(0.0144)	(0.0148)
0	-0.0576*	0.0155	-0.00181	0.0250*	0.0220	0.0254*
	(0.0338)	(0.0130)	(0.0223)	(0.0138)	(0.0133)	(0.0132)
1	0.0241	-0.0102	-0.0153	0.000523	0.0195	-0.00750
	(0.0212)	(0.0140)	(0.0232)	(0.0147)	(0.0143)	(0.0150)
2	0.0465**	-0.00728	-0.00561	0.0113	0.0391**	0.0174
	(0.0204)	(0.0150)	(0.0226)	(0.0148)	(0.0157)	(0.0156)
3	0.0349	-0.0146	-0.00212	-0.0142	0.0242	-0.00650
	(0.0227)	(0.0138)	(0.0209)	(0.0169)	(0.0182)	(0.0176)
4	0.0691**	0.00475	0.00542	-0.000923	0.0553***	0.0145
	(0.0274)	(0.0165)	(0.0218)	(0.0153)	(0.0175)	(0.0163)
5	0.0676**	0.00940	0.00253	-0.00128	0.0696***	0.0165
	(0.0260)	(0.0157)	(0.0235)	(0.0162)	(0.0180)	(0.0166)
6	0.0270	-0.000746	0.0180	-0.00214	0.0797***	0.00697
	(0.0256)	(0.0163)	(0.0260)	(0.0178)	(0.0212)	(0.0183)
7	0.0467*	0.0124	0.00886	0.0235	0.114***	0.0255
	(0.0268)	(0.0157)	(0.0257)	(0.0168)	(0.0192)	(0.0172)
8	0.0595*	0.0304*	0.0240	0.0375**	0.129***	0.0436**
	(0.0318)	(0.0183)	(0.0271)	(0.0172)	(0.0223)	(0.0171)
9	0.0325	0.0231	0.0320	0.0114	0.114***	0.0114
	(0.0271)	(0.0165)	(0.0264)	(0.0178)	(0.0233)	(0.0182)
10	0.0527*	0.0322*	0.0298	0.00793	0.111***	0.0106
	(0.0288)	(0.0164)	(0.0267)	(0.0197)	(0.0254)	(0.0182)
Constant	-4.739*	248.9***	225.2	239.7***	3.613***	239.9***
	(2.501)	(90.50)	(151.1)	(90.33)	(0.0505)	(90.09)
Country fixed effects		Yes	Yes	Yes		
Year fixed effects	Yes	Yes	Yes	Yes		Yes
Country FE x Year FE					Yes	
Country FE x Month FE						Yes
R-squared	0.394	0.934	0.885	0.927	0.964	0.931
Observations	33,296	33,296	33,881	35,297	35,132	35,279
Countries	172	172	172	172	172	171

Notes: Standard errors are robust and clustered by country.

The results in Table 10 are also inconsistent, but again show some evidence of an increase in exports

during ambassadorial vacancies, which drives an increase in total trade. Columns 6 through 8 vary in the timing of this increase, but there is some evidence that the effect of a vacancy becomes stronger over its first six months.

Table 11: *Event study on US total trade over the first six months of an ambassador vacancy*

	Log US total trade	
	(1)	(2)
Months before/during a vacancy		
-4	0.0115	-0.0103
	(0.0203)	(0.0138)
-3	0.00529	0.000377
	(0.0151)	(0.0132)
-2	-0.0228	-0.00502
	(0.0181)	(0.0122)
0	0.0468***	0.0176
	(0.0173)	(0.0136)
1	0.0320	0.0217
	(0.0242)	(0.0148)
2	0.0522	0.0186
	(0.0339)	(0.0181)
3	0.0206	0.00264
	(0.0439)	(0.0172)
4	0.00244	0.00232
	(0.0472)	(0.0189)
5	-0.0112	0.0241
	(0.0571)	(0.0236)
Constant	-4.798**	247.6***
	(2.429)	(93.13)
Country fixed effects		Yes
Year fixed effects	Yes	Yes
Country FE x Year FE		
Country FE x Month FE		
R-squared	0.408	0.935
Observations	14,248	14,248
Countries	172	172

Notes: Standard errors are robust and clustered by country.

Table 12: *Event study on US imports and exports over the first six months of an ambassador vacancy*

	Log US imports			Log US exports		
	(1)	(2)	(3)	(4)	(5)	(6)
Months before/during a vacancy						
-4	-0.0314	-0.0340	-0.0216	-0.0119	-0.0420***	-0.000187
	(0.0232)	(0.0220)	(0.0236)	(0.0155)	(0.0154)	(0.0180)
-3	-0.0270	-0.0255	-0.0141	0.00118	-0.0218	0.00697
	(0.0190)	(0.0176)	(0.0214)	(0.0158)	(0.0158)	(0.0183)
-2	-0.00947	-0.0119	0.00325	-0.00361	-0.0123	0.00562
	(0.0161)	(0.0156)	(0.0181)	(0.0147)	(0.0145)	(0.0159)
0	-0.00768	0.00947	-0.0130	0.0198	0.0266*	0.0257
	(0.0240)	(0.0244)	(0.0234)	(0.0140)	(0.0150)	(0.0165)
1	0.00852	0.0222	0.00127	0.00971	0.0248	0.0135
	(0.0265)	(0.0250)	(0.0252)	(0.0164)	(0.0172)	(0.0169)
2	0.00180	0.0210	-0.00311	0.0140	0.0271	0.0116
	(0.0285)	(0.0269)	(0.0279)	(0.0194)	(0.0188)	(0.0189)
3	-0.0290	-0.0101	-0.0463	0.0256	0.0409**	0.0337*
	(0.0305)	(0.0260)	(0.0328)	(0.0196)	(0.0180)	(0.0195)
4	-0.0224	0.0176	-0.0301	0.0240	0.0443**	0.00570
	(0.0327)	(0.0255)	(0.0363)	(0.0217)	(0.0203)	(0.0226)
5	-0.00199	0.0495	-0.00939	0.0440*	0.0392*	0.0609**
	(0.0370)	(0.0319)	(0.0421)	(0.0249)	(0.0229)	(0.0282)
Constant	169.3	3.747***	170.0	266.6***	3.678***	258.6***
	(149.2)	(0.0748)	(148.6)	(98.20)	(0.0756)	(96.68)
Country fixed effects	Yes			Yes		
Year fixed effects	Yes		Yes	Yes		Yes
Country FE x Year FE		Yes			Yes	
Country FE x Month FE			Yes			Yes
R-squared	0.887	0.963	0.899	0.928	0.967	0.935
Observations	14,496	14,200	14,412	15,096	14,817	15,037
Countries	172	172	170	172	172	170

Notes: Standard errors are robust and clustered by country.

The results in Tables 11 and 12 generally show no significant effects of ambassador vacancies on exchange rate volatility. There is some evidence of decreased volatility four months before the beginning of a vacancy compared to the month before.

Table 13: *Event study on US Exchange Rate Volatility During and After an Ambassador Vacancy*

	US exchange rate volatility			
	(1)	(2)	(3)	(4)
Months before/after				
A vacancy				
-4	-2.23e-05	7.70e-07	-4.92e-05**	3.80e-05
	(2.57e-05)	(3.49e-05)	(1.92e-05)	(6.01e-05)
-3	-9.13e-06	9.70e-06	-2.05e-05	1.98e-05
	(5.16e-05)	(4.34e-05)	(5.76e-05)	(4.92e-05)
-2	0.000134	0.000137	0.000134	9.89e-05
	(0.000150)	(0.000149)	(0.000153)	(0.000119)
0	9.29e-05	0.000104	0.000165	0.000104
	(0.000113)	(0.000138)	(0.000186)	(0.000141)
1	2.77e-06	4.44e-05	6.03e-05	3.67e-05
	(5.22e-05)	(8.54e-05)	(7.69e-05)	(8.18e-05)
2	4.99e-05	0.000102	0.000123	0.000183
	(0.000127)	(0.000171)	(0.000161)	(0.000252)
3	0.000444	0.000499	0.000561	0.000572
	(0.000369)	(0.000411)	(0.000434)	(0.000492)
4	3.01e-05	0.000101	0.000147	7.40e-05
	(9.87e-05)	(0.000154)	(0.000167)	(0.000121)
5	0.000211	0.000271	0.000317	0.000291
	(0.000261)	(0.000310)	(0.000321)	(0.000369)
6	-1.47e-05	5.74e-05	0.000101	0.000120
	(4.99e-05)	(0.000101)	(0.000110)	(0.000151)
7	-1.53e-05	5.42e-05	0.000122	9.75e-05
	(4.53e-05)	(9.17e-05)	(0.000125)	(0.000120)
8	1.43e-05	7.67e-05	0.000149	0.000113
	(7.93e-05)	(0.000123)	(0.000160)	(0.000140)
9	7.28e-05	0.000136	0.000213	8.33e-05
	(0.000133)	(0.000180)	(0.000212)	(0.000141)
10	-3.64e-06	6.21e-05	0.000132	4.61e-05
	(6.85e-05)	(0.000115)	(0.000141)	(0.000114)
Constant	-0.00114	-0.967	6.15e-05	-1.038
	(0.00138)	(0.864)	(0.000173)	(0.931)
Country fixed effects		Yes		
Year fixed effects	Yes	Yes		Yes
Country FE x Year FE			Yes	
Country FE x Month FE				Yes
R^2	0.021	0.144	0.239	0.211
Observations	5,760	5,760	5,733	5,753
Countries	60	60	60	60

Notes: Standard errors are robust and clustered by country.

Table 14: *Event study on US Exchange Rate Volatility Over the First Six Months of an Ambassador Vacancy*

	US exchange rate volatility			
	(1)	(2)	(3)	(4)
Months before/during				
A vacancy				
-4	-1.91e-05	-4.09e-05*	-4.38e-05**	-8.65e-05*
	(3.06e-05)	(2.22e-05)	(1.87e-05)	(4.44e-05)
-3	-1.37e-05	-1.49e-05	-1.81e-05	4.20e-05
	(5.83e-05)	(5.92e-05)	(5.69e-05)	(6.68e-05)
-2	0.000128	0.000124	0.000135	4.47e-05
	(0.000145)	(0.000140)	(0.000154)	(8.67e-05)
0	1.13e-05	8.95e-06	-4.36e-07	-0.000187
	(3.95e-05)	(3.36e-05)	(1.57e-05)	(0.000166)
1	0.000754	0.000785	0.000771	0.000983
	(0.000805)	(0.000828)	(0.000801)	(0.00105)
2	1.46e-05	4.64e-05	-2.20e-05	0.000220
	(5.12e-05)	(5.02e-05)	(7.52e-05)	(0.000210)
3	2.63e-05	6.50e-05	2.51e-05	0.000184
	(8.14e-05)	(0.000105)	(5.37e-05)	(0.000238)
4	-1.09e-05	-1.44e-05	-0.000106	0.000150
	(5.14e-05)	(4.54e-05)	(7.10e-05)	(0.000214)
5	7.46e-05	0.000101	0.000194	0.000231
	(0.000114)	(0.000138)	(0.000208)	(0.000265)
Constant	-0.00149	-0.976	0.000306***	-0.884
	(0.00162)	(0.796)	(4.27e-05)	(0.795)
Country fixed effects		Yes		
Year fixed effects	Yes	Yes		Yes
Country FE x Year FE			Yes	
Country FE x Month FE				Yes
R^2	0.021	0.102	0.182	0.263
Observations	2,412	2,412	2,363	2,323
Countries	60	60	60	57

Notes: Standard errors are robust and clustered by country.

6 Conclusion

This paper expands the literature on economic diplomacy by highlighting the economics consequences of ambassadorial vacancies, a previously understudied area of international diplomacy. By utilizing a hand-collected panel of U.S. ambassadorial tenures across 172 countries over five decades, we find evidence of effects on U.S. international trade. Our identification strategy utilizes the predictable removal of ambassadors during U.S. presidential transitions to plausibly isolate exogenous variation in diplomatic presence. Placebo tests and robustness checks confirm the robustness of our results. The novelty of this analysis lies in the concentration on the absence of diplomatic presence rather than the impact of additional presence through the establishment of additional embassies or consulates. The focus on interruption rather than expansion demonstrates how policymakers can reduce economic consequences without any substantial changes in foreign policy. Another area in which this paper contributes to the literature is the use of high-frequency macroeconomic indicators, which enable the analysis to capture short-term effects that might otherwise be missed using annual or less granular data.

Our findings suggest the importance of ambassadorial continuity in shaping international economic outcomes. The benefits of rapid confirmation underscore the limitations of formal treaties or trade agreements that lack the personal channels for economic statecraft. The results suggest that the presence of an ambassador can better facilitate trade by reducing informational and contracting frictions. Therefore, delays in ambassadorial appointments result in substantial economic costs, despite oftentimes being viewed as a routine bureaucratic matter.

In work going forward, we intend to explore whether we find stronger effects in countries with a weaker rule of law or for more complex exports. During a vacancy, exports could fall the most in countries with weak governance, high transaction costs, and low U.S. strategic interest. In more developed countries with extensive commercial ties to the U.S., the effects could be less pronounced. These results would address the idea that filling ambassadorial vacancies is more crucial in environments where personal diplomacy is the most important. We also intend to further investigate whether there are similar effects for consular or lower-level diplomatic gaps, reinforcing the special economic role of ambassadors. We Will also exclude countries undergoing political turmoil, civil conflict, or major economic reforms to confirm the results are not confounded by concurrent shocks.

The findings on the absence of ambassadors open the door to many areas of future research. First, there are the transitory effects of political staffing in other areas, like defense, development, and financial regulation. Second, while this paper focuses on U.S. ambassadorial vacancies, a similar analysis can be conducted to determine if these findings can be generalized to other major powers, such as China or the European Union, despite their differing foreign policy approaches. Third, further investigation into firm-level mechanisms driving the results. For instance, whether the probability of contract enforcement, dispute resolution, or investor sentiment drives certain behaviors that help us better understand economic diplomacy. Finally, it would be of interest to understasnd whether the absence of an ambassador affects outcomes beyond trade such as foreign aid allocation, security cooperation, or immigration flows.

7 References

1. Ayal, Eliezer B., and Georgios Karras. 1996. "Bureaucracy, Investment, and Growth." *Economics Letters* 51 (2): 233–239.

2. Bagwell, Kyle, Robert W. Staiger, and Ali Yurukoglu. 2020. "Multilateral Trade Bargaining: A First Look at the GATT Bargaining Records." *American Economic Journal: Applied Economics* 12 (3): 72–105.

3. Berger, Daniel, William Easterly, Nathan Nunn, and Shanker Satyanath. 2013. "Commercial Imperialism? Political Influence and Trade During the Cold War." *American Economic Review* 103 (2): 863–896.

4. Bjorkman, Martina, and Jakob Svensson. 2009. "Power to the People: Evidence from a Randomized Field Experiment of Community-Based Monitoring in Uganda." *Quarterly Journal of Economics* 124 (2): 797–827.

5. Bown, Chad P., and Meredith A. Crowley. 2016. "The Empirical Landscape of Trade Policy." In *Handbook of Commercial Policy*, edited by Kyle Bagwell and Robert W. Staiger, 4–89. Oxford: North-Holland.

6. Dixon, William J., and Bruce E. Moon. 1993. "Political Similarity and American Foreign Trade Patterns." *Political Research Quarterly* 46 (1): 5–25.

7. Fuchs, Andreas, and Nils-Hendrik Klann. 2013. "Paying a Visit: The Dalai Lama Effect on International Trade." *Journal of International Economics* 91 (1): 164–177.

8. Gertz, Geoffrey. 2018. "Commercial Diplomacy and Political Risk." *International Studies Quarterly* 62 (1): 94–107.

9. Goldsmith-Pinkham, Paul, Isaac Sorkin, and Henry Swift. 2020. "Bartik Instruments: What, When, Why, and How." *American Economic Review* 110 (8): 2586–2624.

10. Gowa, Joanne. 1994. *Allies, Adversaries, and International Trade*. Princeton, NJ: Princeton University Press.

11. Head, Keith, and John Ries. 2010. "Do Trade Missions Increase Trade?" *Canadian Journal of Economics* 43 (3): 754–775.

12. Hollibaugh, Gary. 2015. "The Political Determinants of Ambassadorial Appointments." *Presidential Studies Quarterly* 45 (3): 445–466.

13. Kerry, John. 2014. *Logjam in the Senate: Hampering America's Role in the World*. Washington, DC: U.S. Department of State.

14. Khemani, Stuti. 2007. "Does Delegation of Fiscal Policy to an Independent Agency Make a Difference? Evidence from Intergovernmental Transfers in India." *Journal of Development Economics* 82 (2): 464–484.

15. Malis, Matt. 2021. "Conflict, Cooperation, and Delegated Diplomacy." *International Organization*. Forthcoming.

16. Malone, David. 2013. "The Modern Diplomatic Mission." In *Oxford Handbook of Modern Diplomacy*, edited by Andrew Cooper, Jorge Heine, and Ramesh Thakur, 121–141. Oxford: Oxford University Press.

17. Martin, Philippe, Thierry Mayer, and Mathias Thoenig. 2008. "Make Trade Not War." *Review of Economic Studies* 75 (3): 865–900.

18. Moons, Selwyn J. V., and Peter A. G. van Bergeijk. 2017. "Does Economic Diplomacy Work? A Meta-Analysis." *World Economy* 40 (2): 336–368.

19. Nitsch, Volker. 2007. "State Visits and International Trade." *World Economy* 30 (12): 41–66.

20. Ossa, Ralph. 2011. "A 'New Trade' Theory of GATT/WTO Negotiations." *Journal of Political Economy* 119 (1): 122–152.

21. Prendergast, Canice. 2007. "The Motivation and Bias of Bureaucrats." *American Economic Review* 97 (1): 180–196.

22. Rose, Andrew K. 2007. "The Foreign Service and Foreign Trade: Embassies as Export Promotion." NBER Working Paper 11111. Cambridge, MA: National Bureau of Economic Research.

23. van Bergeijk, Peter A. G. 2014. *Economic Diplomacy and the Geography of International Trade*. London: Edward Elgar.