Economic Bargaining in Asymmetric Alliances

Joshua Alley
Postdoctoral Research Associate
University of Virginia*
jkalley@virginia.edu

October 22, 2021

Abstract

Can military alliance leaders leverage their preponderant security role to extract economic concessions from junior partners? Some argue that powerful states can manipulate their security commitments to coerce economic changes. Others believe that large states value security ties too much to exert economic leverage. I argue that large states usually have limited alliance leverage, but junior alliance members will make temporary economic concessions to support committed allied leaders' tenure in office. After a patron state leader signals substantial alliance commitment, alliance proteges help them manipulate the economy during leadership competitions. I test these claims with analyses of major power trade with allied states. I find that prior leader signals of commitment increases the major power exports to allied states during election years. A subsequent examination of election-year exports from U.S. states shows that increased trade with allies concentrates in swing states, which supports claims that Finally, I find that these trade concessions are temporary, as allies do not adjust their tariff policies in response to changing leader commitment or electoral cycles. These results suggest that leaders can employ security commitment for temporary economic and political gain as allies aid political business cycles.

*Thanks to Brian Blankenship, Lauren Peritz and Erik Lin-Greenberg for helpful comments.

1 Introduction

In 2019, when Donald Trump argued that "It's not right to be taken advantage of on NATO and also then to be taken advantage of on trade, and that's what happens," he was not the first or last U.S. policymaker to highlight perceived problematic economic concessions to allies. Then Secretary of the Treasury John Connally claimed in a 1971 speech that the United States "had the right to expect more equitable trading arrangements" with its allies (quoted in Sayle (2019, pg 175)). More recently, some leading congressmen criticized the Biden administration's decision to waive sanctions on the Nord Stream 2 gas pipeline between Russia and Germany.[1]

These examples reflect a general question; can large alliance leaders like the United States leverage their preponderant security role for economic influence over junior allies? There are two schools of thought on economic bargaining in asymmetric alliances. One argues that because leading states prioritize geopolitical aims, they have limited economic leverage (Drezner, 2013; Wolford and Kim, 2017). Another perspective argues that alliance leaders have substantial economic influence Norrlof (2010); Brooks, Ikenberry and Wohlforth (2013) threatening to reduce security commitments encourages economic concessions (Oatley, 2015, pg. 122).

I argue that large alliance members' economic leverage depends on potential leadership changes and past efforts to reassure allies. When leaders establish a reputation for alliance commitment, they usually reduce their leverage over allied economic policies. A prior reputation for commitment increases leverage when leaders seek economic concessions to support their efforts to remain in office. Small allies will make economic concessions if they help a committed partner retain power without endangering their own tenure in office. Thus, leaders who have previously demonstrated commitment to an alliance are more likely to secure economic

[1] https://www.bbc.com/news/world-us-canada-57180674

concessions, but those concessions will be temporary and targeted, rather than structural. Near election years, allies will tolerate political manipulation of trade by committed leaders, especially in key electoral constituencies. At the same time, prior commitments and elections will have no impact of tariffs, as these structural concessions endanger allied leaders' domestic political survival. Senior allies thus have little economic leverage, unless potential leadership change encourages their partners to make economic concessions to bolster their long-run security.

I test the argument in three ways. First, I analyze major power trade with junior allied countries. I find that when major power leaders signal more support to allied states, trade with allied states increases around elections. A subsequent analysis of exports from U.S. states in election years suggests that allies concentrate their imports from the United States in electorally competitive states, which is consistent with strategic imports to impact electoral competition. The final analysis shows that unlike trade flows, prior leader commitment and elections have a negligible association with allied tariffs on U.S. goods.

The argument and findings address three salient issues in international relations theory and practice. First, they speak to debates about the connection between economic and security ties (Mastanduno, 2009; Poast, 2019). Scholars dispute whether economic linkages drive security ties (Biglaiser and DeRouen, 2007; Fordham, 2010; Kimball, 2010), security concerns encourage economic linkages (Gowa, 1995; Li, 2003; Long and Leeds, 2006; Gowa and Mansfield, 2004), or the relationship goes in both directions (Biglaiser and DeRouen, 2009; Kinne and Bunte, 2018). My findings suggest that the relationship depends on leadership cycles. Security concerns shape economic links in most years, but the relationship flips when states use economic policies to cement security relationships.

Expanded exports from alliance leaders to junior partners in election years also reflect political business cycles where elites manipulate economic policy to win reelection. Elected leaders often use fiscal (Rogoff, 1987) and monetary policy (Clark and Hallerberg, 2000) to generate economic growth around elections. There is also evidence that leaders use non-budget instru-

ments like social policy (Philips, 2020), social pacts with unions (Ahlquist, 2010), trade disputes (Conconi et al., 2017) and defense contracts (Derouen Jr and Heo, 2000) to bolster their electoral prospects. I find that allies expand trade and contribute to political business cycles when the incumbent leader supported their security interests.

Finally, this paper provides new insight into coercive demands by bridging economic and security bargaining. When and why coercion succeeds is a salient question (e.g (Sechser, 2010, 2018; Cebul, Dafoe and Monteiro, 2021)). Most studies of coercion examine either security threats (e.g. (Horowitz and Reiter, 2001; Sechser, 2011)) or economic sanctions (e.g. (Marinov, 2005; Allen, 2008; Escribà-Folch and Wright, 2010)). This study explores whether security ties provide economic leverage. In particular, it explores issue linkage as part of alliance management, building on previous work that considers alliance formation (Poast, 2012) and credibility (Davis, 2008; Poast, 2013).

The paper proceeds as follows. To start, I outline an argument explaining when and why alliance leaders might demand economic concessions from their partners, and when allies might offer economic assistance. I then test three predictions from the argument. First, I show that U.S. trade balances with allies increase in election years as prior leader signals of support increase. I then show that election year exports from the United States to its allies concentrates in swing states. Finally, I examine tariff levels and show that allies are unlikely to make structural concessions, even as commitment signals increase.

2 Argument

This argument addresses economic bargaining in asymmetric alliances. In alliances between large and small states, the large state protects its junior partner in exchange for foreign policy concessions (Morrow, 1991). By providing costly and credible military support commitments, the large state increases their foreign policy influence. Small alliance members garner

protection from external threats and the cost of foreign policy autonomy.

Military alliances are inseparable from economic cooperation. Conflict and economic integration are linked in general (see for example, (Gartzke and Li, 2003; Chen, 2021)). Many alliances also include explicit or implicit linkages to economic cooperation (Gowa and Mansfield, 2004; Long and Leeds, 2006; Davis, 2008; Poast, 2012). Alliances often contain a cooperative bundle of security and economic ties.

There are two competing perspectives on the balance of security and economic relations in asymmetric alliances. Although many asymmetric alliance reflect a hierarchical relationships, security and economic hierarchy are not equivalent (Lake, 2009). One argues that to prioritize international influence and geopolitical concerns, large state leaders tolerate economic protectionism (Drezner, 2013; Wolford and Kim, 2017). In this perspective, large state leaders prioritize security over economic influence, leaving little economic leverage. Another view claims that large alliance leaders have substantial economic influence (Norrlof, 2010) and threats to reduce commitment can coerce economic concessions from junior alliance partners (Oatley, 2015).

I argue that large alliance members usually lack economic leverage, especially when they invest in credible alliance commitments. When a committed leader might be replaced, allies will make economic concessions, however. The relationship between alliances and economic bargaining thus depends on leader investment in alliance commitment and leadership competition in the large alliance partner. Only leaders with an established reputation for cooperation with allies can leverage security commitments for economic concessions, and then when they or their coalition face removal from power. To uphold security benefits, allies will make temporary concessions to support a friendly leader without endangering their own security in office. This process thus highlights the role of leaders in intra-alliance bargaining.

There are four key actors in this argument. First, the large alliance member leader seeks geopolitical influence and a favorable balance of economic relations. Second, a leader in the

small alliance member seeks security from external threat and a favorable economic balance. Both leaders are office-seeking and depend on domestic supporters to stay in power. The third and fourth actors are are domestic actors in both states can gain or lose from changes in economic ties between the allied states.

Leaders require domestic support to win and continue in office, and can win support through the distributional consequences of international economic ties. If large state leaders change the economic bargain in an alliance to benefit domestic interests, they increase their odds of retaining power. Leadership competition through an election or some other leadership challenge increases the pressure on leaders to solidify their existing coalition or find new supports. Even as leaders face term limits, they will often seek to ensure that their coalition remains in power.

Boosting economic prosperity is one way leaders can increase their odds of retaining in office. These incentives lead to political business cycles, where leaders manipulate economic policy to increase economic growth and bolster their electoral prospects (Rogoff, 1987; Clark and Hallerberg, 2000). Leaders also use social policy changes near elections to bolster their electoral prospects (Ahlquist, 2010; Philips, 2020).

Given their economic ties, allies can help patron state leaders with political business cycles. By adjusting their economic policies, allies can help leaders with trade balance adjustments, investment and financial ties. This in turn shapes the prosperity of domestic interests, who might reward the leader.

When leaders want to adjust the balance of economic relations, alliance security guarantees are a plausible source of economic leverage. If the initial alliance contained an implicit or explicit economic arrangement, those bargains can be renegotiated during alliance maintenance. Threatening to reconsider their security commitments to smaller partners might increase large state leaders' economic influence. Leadership competition motivates using security threats for economic gains, as allied economic policies affect prosperity and leadership competition.

Credible threats to reduce security commitments in exchange for economic concessions depend on prior investment in the alliance, however. If a leader has not invested in the alliance, their allies have less security to preserve by helping them remain in office. And if there is no risk of leader turnover, allies need not account for the danger that changes in the ruling coalition will reduce their security from the alliance. Given leadership competition, economic demands contain an implicit threat that failing to concede might endanger security cooperation by empowering a less committed leader.

Security threats in economic bargaining can create a dilemma for small alliance members. Reduced alliance commitments endanger small state security, but economic concessions threaten a leader's hold on office by harming domestic interests. Small state leaders thus weigh the likely security benefits of conceding against the domestic political economy consequences.

The security benefits of conceding to a patron state leader depend on that leader's prior commitment to the alliance. In economic bargaining between allies, reputations for commitment adhere to leaders, who have substantial influence on foreign and economic policy (Renshon, Dafoe and Huth, 2018). Executive leaders have a crucial role in alliance politics, as they have a pivotal role in decisions to use force (e.g (Colgan, 2013; Colgan and Weeks, 2015)). Just as leadership changes can increase the risk of international crisis (Wolford, 2007), a leader's reputation for alliance cooperation shape how allies respond to their economic demands.

Leaders establish alliance commitment by tying their hands and sinking costs (Fearon, 1997). Statements of reassurance and commitment to an alliance are one salient way for leaders to establish a cooperative reputation (Blankenship, 2020). Leaders can also deploy troops, visit allied states, offer aid, and employ other sunk cost signals of support (McManus and Nieman, 2019). Both these efforts indicate that a leader is willing to honor their alliance commitments.

If leaders are committed to an alliance, establishing credibility early in their tenure is crucial. New leaders' alliance commitment is private information to allies and adversaries. Taking costly actions shows whether a leader is committed to the alliance in the same way that new leaders

establish a reputation for resolve in crisis bargaining (Wolford, 2007).

Small alliance member leaders will only make economic concessions if they believe that supporting the efforts of the large alliance leader to retain power offers sufficient security benefits. Economic concessions thus depend on the large state leader's cooperative reputation. If the large state leader has demonstrated strong commitment to the alliance before making economic demands, then adjusting economic relations to help them retain power is worthwhile. Small state leaders prefer a cooperative partner to an uncertain leadership change, given the high stakes of changes in alliance commitments. If a leader has not tied hands or sunk costs, then allies may be willing to gamble on the next leader being more invested. At a minimum, allied states have few incentives to aid a leader who has not invested in their security.

In addition to establishing that concessions will bolster protege security by helping a friendly leader remain in office, prior cooperation generates a necessary reputation for restraint. Committing to not renege and follow through on a threat regardless of cooperation is essential in coercive bargaining (Cebul, Dafoe and Monteiro, 2021). If a leader previously demonstrated commitment to the alliance, it reduces the perceived risk that they will demand further concessions, or reduce security commitment regardless. This decreases the likelihood of proteges rejecting economic demands to establish a reputation for resolve to ward off future challenges (Sechser, 2010, 2018).

Trade politics offer a clear illustration of this logic. Trade policy shapes domestic policies, as trade barriers have distributional consequences for domestic interests in large and small alliance members. Under incomplete trade openness, some domestic sectors in both states are protected from foreign trade competition by tariff or non-tariff barriers. Protected sectors have higher incomes than they would under free trade, while sectors with a comparative advantage in the other state lose out on gains from trade.

There are two domestic political motives for large state leaders to renegotiate the balance of trade and security relations in an alliance. First, leaders can increase the income of some

domestic sectors. Increased exports to junior members could benefit domestic interests, who would then back the incumbent. Trade expansion also increases domestic consumption and sometimes facilitates intra-industry trade. Second, reducing allied exports allows large state leaders to increase the income of protected sectors. Protected sectors would then be more likely to support the incumbent leader, as trade cleavages shape domestic political coalitions (Rogowski, 1987; Hiscox, 2001).

Trade balances also impact the balance of payments between countries. A negative trade balance creates a current account deficit, which is usually financed with international capital inflows, which further strengthens the currency. Increases in the value of the currency then make domestic manufacturing and exports less competitive. This increases domestic interests' concerns over trade with allies.

The challenge for patron leaders is that their allies face the same political considerations. Even when a leader creates a cooperative reputation and faces replacement, domestic concerns constrain allied economic concessions (Davis, 2008). Reducing protection for domestic industries or tolerating patron protectionism exposes a leader to domestic political pressure as their industries lose trade income. Taking down trade barriers is also hard to reverse, especially when states are part of international organizations. Structural changes increase the risk of a small state leader losing office, so small states will prefer temporary concessions to help cooperative leaders remain in office. Symbolic, temporary and targeted measures can help a large state incumbent without antagonizing domestic interests. Large states can therefore only leverage security preponderance security role at specific times and in limited ways.

In trade and other economic areas, I expect that prior commitment provides conditional and limited economic leverage. Some concern with leadership change is necessary for commitment to increase patron influence. Allies will also make temporary changes, rather than adjusting tariff schedules or making other structural shifts.

Prior commitment signals increase leaders' economic influence when they might be re-

placed, but reduce it otherwise. Investing in security for junior allies makes threats to renegotiate the balance of security and economic relations less credible. Moreover, when leaders can provide another commitment signal by showing their support and then tolerate the resulting economic protectionism by allies. Bearing the costs of allied economic actions is a costly signal of commitment to an alliance because it generates economic inefficiencies. It also changes the domestic politics of the protege in favorable ways for the patron (Lake, 2013).

Several recent interactions between the United States and its allies help illustrate my claims about economic bargaining in asymmetric alliances. First, the Biden administration's controversial decision to waive sanctions and allow completion of the Nord Stream 2 gas pipeline between Germany and Russia is likely part of the Biden administration's efforts to reassure European allies. In addition to allowing this concession to German economic concerns, Biden sought to wind down many of Trump's European trade disputes while talking up the U.S. commitment to NATO and the EU.[2]

The argument also explains why U.S. allies rarely conceded Donald Trump's trade demands. Trump's prior rhetorical attacks on NATO and other U.S. alliances gave allies few incentives help him win re-election. Economic concessions might have aided Trump's re-election campaign, just as Chinese tariffs on soy reduced Republican's vote share in the 2018 election (Chyzh and Urbatsch, 2021). Moreover, Trump sought fundamental trade policy alterations such as reduced barriers to U.S. agricultural products that might have endangered allied leaders' political survival (Hee Park and Jensen, 2007).

A third implication of the leadership competition argument is that allies will target their concessions for maximum influence on leadership competition. There is ample of evidence of such strategic behavior in other domains. Domestic leaders use targeted trade disputes (Conconi et al., 2017) and defense contracts (Derouen Jr and Heo, 2000) to bolster their electoral prospects in key constituencies. Small states have similar incentives to undertake focused eco-

[2] https://www.aljazeera.com/economy/2021/6/15/eu-and-us-call-truce-in-trump-era-trade-war

nomic efforts. Proteges could target their concessions in crucial electoral districts to bolster a cooperative democratic leader, for instance. In autocracies, policy changes could favor members of the leaders' winning coalition, whether by geography or sector.

A 2002 trade dispute between the United States and Europe shows that allied states understand how to maximize the electoral implications of their economic policies. After George W. Bush imposed tariffs on EU steel to bolster the Republican Party's electoral fortunes in 2002 and 2004, EU retaliatory tariffs focused on goods from swing states such as Florida oranges.[3] Faced with lost support in other areas, Bush backed down.[4]

Large states can therefore only leverage security preponderance at specific times and in limited ways. Protege states will tolerate political business cycle efforts when a leader has invested in their security. Those efforts will not extend to structural concessions that endanger small state domestic interests, however.

2.1 Implications

The argument generates several testable implications, especially for democratic alliance leaders. Elections provide clear markers of potential leadership change. This facilitates strategic anticipation on the part of allies and leaders, who can adjust their economic bargaining accordingly. The relatively open nature of electoral competition also facilitates allied influence from economic concessions.

The first hypothesis concerns when and how junior partners make economic concessions. Junior partners will adjust trade with allies when the leader facing replacement has demonstrated prior commitment to the alliance. Otherwise, junior alliance members may take a chance on elections empowering a more supportive leader. Past indicators of commitment include statements of reassurance (Blankenship, 2020), aid, troop deployments, defense coop-

[3] https://www.wsj.com/articles/SB101674938851653120.
[4] https://euobserver.com/foreign/13791

eration (Morrow, 1994; Alley, 2021) and trade concessions (Wolford and Kim, 2017).

> Economic Concession Hypothesis: During election years in a patron state, exports to junior allies will increase as prior commitment signals by the incumbent leader increase.

The second hypothesis predicts targeted concessions. If allies want to support a friendly leader, they may target their economic concessions to crucial regions of electoral contests. In the United States, swing states have a critical role in presidential elections, which encourages U.S. leaders to focus on them in economic policies (Kriner and Reeves, 2015; Conconi et al., 2017). One implication is that exports from swing states to U.S. allies will increase in the year of elections more than exports from other states.

> Swing States Hypothesis: During presidential election years, exports from states to U.S. allies will be increase as electoral competition in that state increases.

The third prediction is that junior allies are unlikely to change their tariff policies. Although helping a committed leader remain in office is valuable, the leaders of junior alliance members cannot endanger their own tenure by antagonizing domestic interests. Therefore, even if a large state leader has offered substantial commitment and faces electoral replacement, their reassurances will be unlikely to alter allied tariff schedules.

> Tariff Hypothesis: When the leader of a large alliance member might be replaced, tariffs by junior allies, even as prior commitment signals by that leader increase, tariff levels will undergo negligible changes.

2.2 Objections and Alternative Explanations

Before proceeding to how I test these hypotheses, I consider several potential objections and alternatives to the argument, including whether committed leaders can make credible

economic demands and the role of external threat. First, why do junior partners to concede economic demands to committed leaders? While limited concessions are less consequential than tariff changes, they still have costs. I expect that the costs of economic concessions support the security benefits of a committed allied leader. Conceding purchases greater security in expectation.

Another objection is that increased external threat might make junior alliance partners more receptive to economic demands from their patron. Conceding to ensure protection might be worthwhile, in short. Though this is plausible, it ignores the incentives of the large partner, who also has more to lose from weakening an alliance if the threat to junior partners is greater. Cold War dynamics illustrate this issue. Although the United States initially tolerated and even encouraged European and Japanese protectionism to ensure that allies could rebuild their economies and military capabilities, later efforts to negotiate more favorable trade terms led to substantial resistance from the U.S. security establishment who feared that U.S. economic nationalism would increase Soviet influence (Mastanduno, 1998). Threats place pressure on both alliance parties, albeit on different margins.

In the following, I describe how I test each of these hypotheses. In the first analysis, I establish that more committed U.S. presidents export more to the allies they supported in election years. The second analysis shows that increasing U.S. exports to allied states in election years are concentrated in swing states, which suggests allied concessions concentrate in key electoral constituencies.

3 Major Power Exports to Allies

To test the economic concession hypothesis, I analyze democratic major power exports to junior alliance partners. I expect that when an election could replace leaders who have made more prior signals of commitment to their alliance partners, the trade balance will be more

favorable to the patron state. In non-election years, signals of support will reduce economic leverage over allies. This implies a negative constituent term on the leader support variable, as this capture the impact of prior support outside elections, and a positive interaction between leader signals of support and time to the election.

The outcome of interest is annual annual changes in the natural log of exports, but I also model total trade, imports, and the trade balance. I estimate models of changes so I can include dyadic fixed effects, and because lagged trade flows have unit roots or near unit root coefficients.[5] This dyadic dataset includes the United States and its allies from 1950 to 2010.[6] I draw on exports and imports data from the IMF's direction of trade statistics database.

I measure leader commitment to each allied states using the latent measure of McManus and Nieman (2019), refit to allied states only without the alliance indicator. Using this measure means that I employ a dyadic dataset of democratic major powers and their non-major power allies. Because reputations adhere to leaders, I measure commitment as the change in support across the leader's tenure, relative to the prior leader. Increased support implies that a leader is more supportive, relative to their predecessor, and thus more valuable to allies than likely alternatives. I then employ elections data from the National Elections across Democracy and Autocracy (NELDA) dataset (Hyde and Marinov, 2012) to identify election year. Finally, I interact the moving average of protege support with a dummy indicator of election years.

In addition to the interaction of time to elections and leader support for allies, I include a series of control variables that may be correlated with alliances and exports. The lagged trade balance addresses temporal autocorrelation in trade ties. I also adjust for changes in the GDP of both states (Fouquin and Hugot, 2016), democracy (Marquez, 2016), the presence of a militarized interstate dispute (Gibler, Miller and Little, 2016) shared IGO membership (Pevehouse et al., 2020) and whether an incumbent leader is running.[7]

[5]Fixed effects in dynamic models often bias estimates (Nickell, 1981).
[6]The analysis stops in 2010 due to limits on the major power support measure.
[7]Some dyadic data from the *peacesciencer* R package (Miller, 2021).

Some trade flows are unusual. This creates heavy-tailed residuals, so I employ a robust regression estimator; M-estimation with Tukey's biweight function (Rainey and Baissa, 2020). Robust regression places less weight on unusual observations, making it more efficient than OLS for this particular outcome.

Dyadic data is also clustered, which can generate misleading regression estimates. I adjust for this in two ways. First, all models I report here include dyad fixed effects.[8] As a result, I estimate the association between leader support, elections and trade within patron-protege dyads. Fixed effects estimate within-country changes in exports as leader signals of support shift. Second, I adjust the standard errors for dyadic clustering using the sandwich estimator of (Aronow, Samii and Assenova, 2015).

3.1 Results

As prior support signals by a major power leader increases, exports to non-major power allies increase during election years. Figure 1 presents the coefficient estimates from models of changes in exports, imports, total trade and the trade balance. As expected, the interaction between mean leader support and the election year dummy is positive, which implies that leaders who have signaled more support to allies export more to that ally in election years. Moreover, the mean leader support signals constituent term is negative in all models, but not clearly so. The positive election constituent term is harder to interpret, because it reflects the impact of election timing when average leader support is zero and the latent support measure is never equal to zero.

The sign and confidence intervals of the interaction terms are inadequate evidence of a conditional relationship (Brambor, Clark and Golder, 2006), so I plot predicted changes in trade flows in Figure 2. This figure presents predicted changes in trade across the range of mean leader support with and without election years. Given the non-linear relationships from logged

[8]Results are robust to omitting the fixed effects and estimating dynamic models. See the appendix for details.

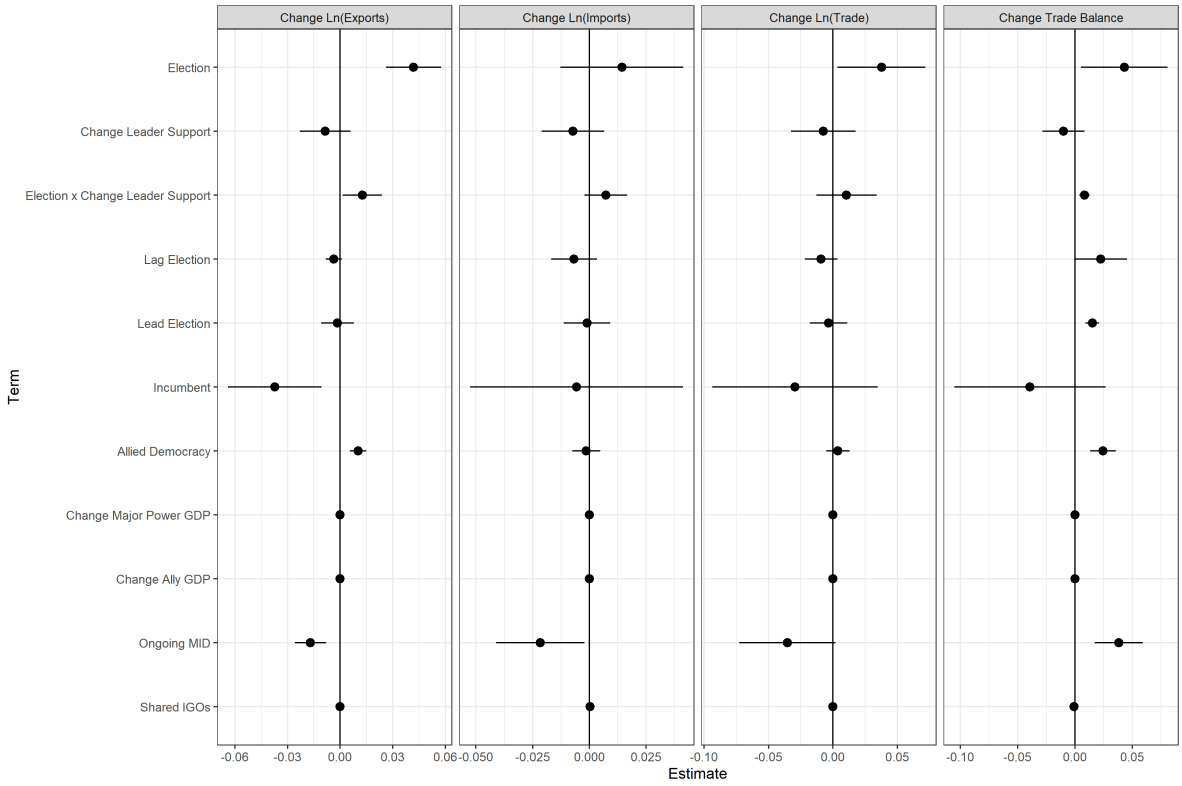

Figure 1. *Coefficient estimates from gravity models of exports from democratic major powers to non major power allies, 1950 to 2012. The first model addresses annual changes in the log of exports. The second models changes in the log of imports from the partner country. The third model regresses annual trade changes on the explanatory variables. The fourth model examines changes the overall balance of trade. All models include dyad fixed effects. 95% confidence intervals in parentheses.*

trade flows and a non-linear robust estimator, these predictions are more straightforward to interpret than marginal effects.[9]

The positive interaction between elections and leader support in the model of democratic major power exports reflects a slight increase in exports in election years and falling exports outside of elections. In non-election years, greater prior support from the incumbent leader reduces major power exports. The result is a clear difference between election and non-election years at the highest values of mean leader support.

Imports are less responsive to electoral cycles and leader support. A similar pattern might obtain, but predicted imports in election and non-election years at any level of leader support are largely indistinguishable. There is a potential difference in total trade, but given limited import fluctuations, this difference is less pronounced than changes in exports. Finally, inferences about electoral differences in trade balances across the range of leader support are uncertain.

Some of the other estimates in Figure 1 and Figure 2 suggest an electoral cycle in U.S. trade with allies. Incumbent leaders tend to lose out on exports, but democratic major power trade balances with allies also increases before an election. Furthermore, allied democracy is associated with greater exports from democratic major powers and more positive trade balances.

These results are consistent with the economic concessions hypothesis. When leaders have previously demonstrated commitment to their allies, they export more in election years than non-election years. In the next analysis, I show that in the United States, election year exports are concentrated in electorally competitive states.

4 Swing States and U.S. Exports to Allies in Election Years

Greater U.S. exports to allied states during election years are partially a result of increased exports from swing states. In election years, allied states import more goods than other states,

[9] I present marginal effects in the appendix.

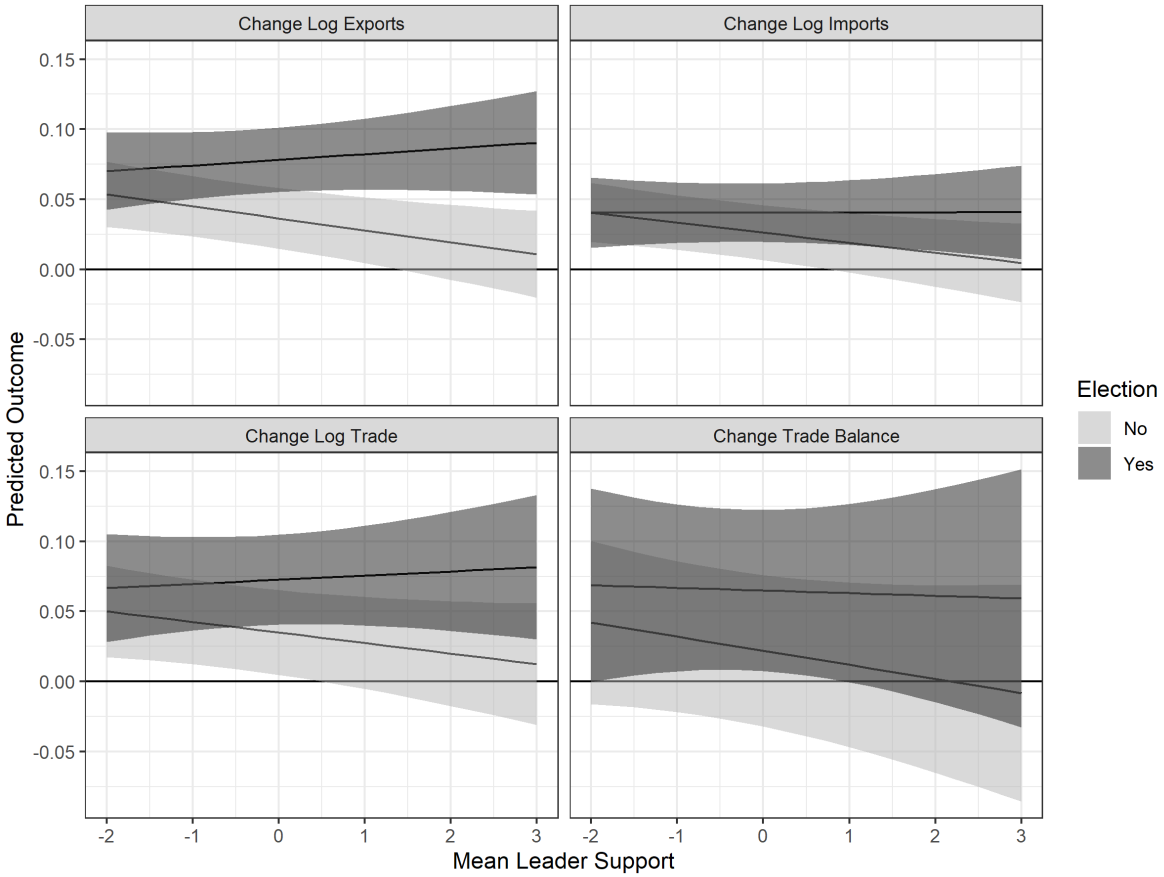

Figure 2. *Predicted changes in trade between the democratic major powers and junior allied states given elections and signals of support by the incumbent leader, 1950 to 2010. Points lines mark the predictions and error bars summarize the 95% confidence interval.*

and these imports are concentrated in important electoral states. The result holds across two measures of electoral importance— prior electoral competitiveness and pivot proximity (Wright, 2009).

To examine state trade, I fit a gravity model of trade to a dyadic dataset of logged exports from U.S. states to foreign countries during election years. This analysis employs exports data from the St. Louis Federal Reserve and runs from 2002 to 2020. The key independent variables are a dummy indicator of whether the destination country has a defense pact with the United States and two distinct measures of electoral competition. Because I expect that allies will be more likely to import from electorally competitive areas to maximize the impact of their economic concessions, allied imports from swing states should be higher than imports from other states in election years. The first electoral competition measure is the difference in the two-party vote share in the last presidential election. Smaller differences in the vote share imply greater competition. The second measure captures a state's pivot proximity in the election results. The pivot state is the state that, after ranking states by the vote share of the winner, gives them 270 electoral votes (Wright, 2009). Keeping the same ordering, states are then close or far from the pivot. Pivot proximity thus encompasses vote share and electoral college considerations. Low pivot proximity scores implies a state was closer to providing the winning margin and was thus more important, while high proximity distance implies a state was unlikely to put the winning candidate over the top.[10]

Because smaller pivot proximity and vote differences imply greater competition, I expect that the interaction of U.S. alliance and these variables will be negative. The U.S. alliance constituent term should be positive, as alliances support trade regardless of how pivotal a state may be (Gowa and Mansfield, 2004; Fordham, 2010). I have no strong expectations about the electoral competition constituent term.

[10]To maximize the number of elections in this analysis, I do not examine the conditioning effect of prior leader support, as the latent support measure only runs through 2010.

These models adjust for likely correlates of alliances, electoral competition and trade. First, standard gravity model controls include the logged population and GDP of each state and corresponding country destination. I also adjust for the reelection years of George W. Bush, Barack Obama and Donald Trump with separate dummy indcators, as well as the exchange rate and government spending as a share of GDP in the destination state. A lagged dependent variable adjusts for temporal autocorrelation in dyadic exports. To account for dyadic clustering, especially the diffusion of key electoral competition in a state across trading dyads with multiple partners, I employ a cluster-robust sandwich estimator for the standard errors (Aronow, Samii and Assenova, 2015).

4.1 Results

As expected, allied states import more from U.S. states than other countries during election years. Crucial states in the electoral college export more to allies that other states. This is consistent with claims that allies make electorally strategic economic concessions.

Figure 3 presents the coefficient estimates from the two primary regression models. The constituent term for the alliance variable is positive, which indicates that when vote difference is zero, or a state was pivotal in the Electoral College, allied states import more than other states. Among non-allied states, electoral salience does not have a clear association with exports. The negative interactions between alliances and electoral competition measures indicate that decreasing electoral salience reduces the association between an alliance and exports.

The control variables in the model are also generally sensible. Increasing GDP in the state of origin and international destination both increase exports. Trump's reelection in 2020 is associated with far lower exports than other elections due to the Covid-19 pandemic.

To show the interactions, Figure 4 presents the estimated marginal effect of an alliance on exports across the range of electoral competition. As prior election vote differences or proximity to the electoral pivot increase and electoral competition falls, allied states still import

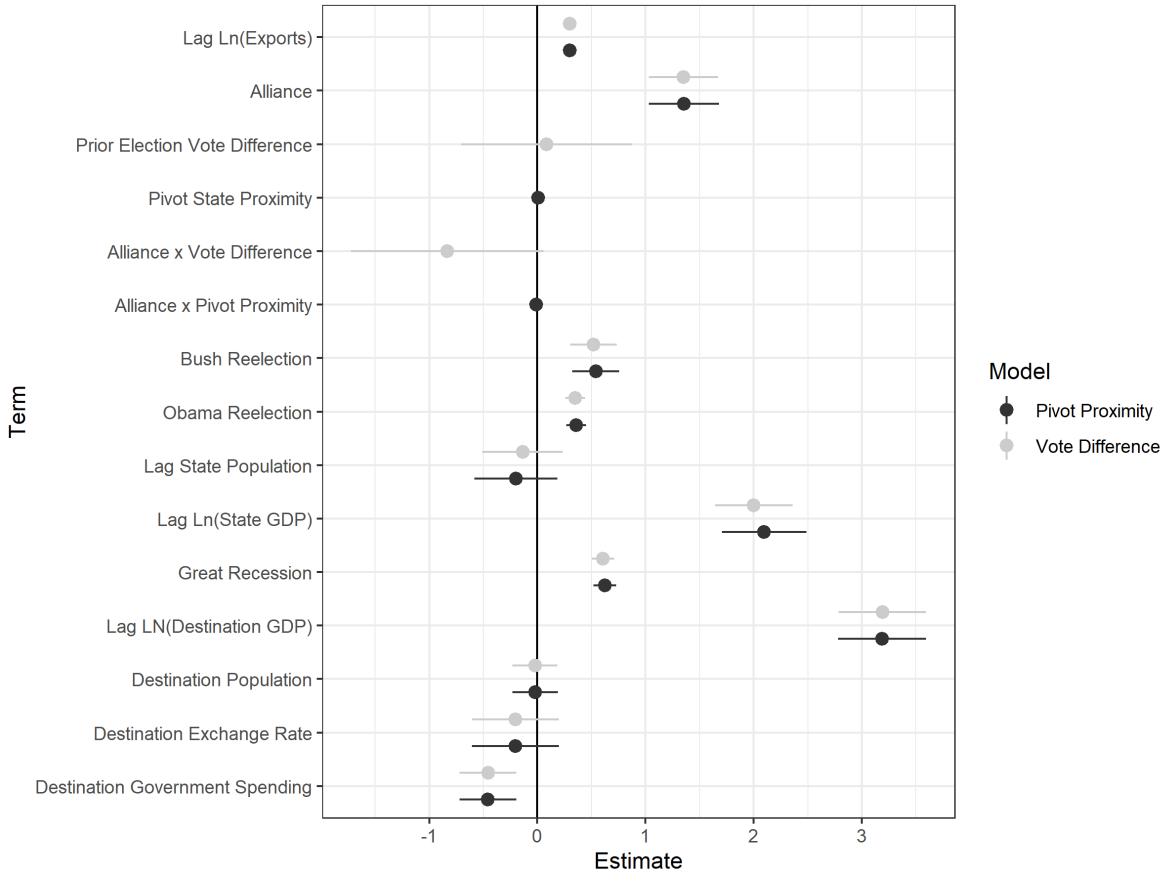

Figure 3. *Coefficient estimates from a gravity model of exports from U.S. states to foreign countries, 2002 to 2020. Points mark the coefficient estimates and error bars summarize 95% confidence intervals.*

more than other states, but they import less, relative to more competitive states. This implies that allies have a slight preference for swing state exports during election years.

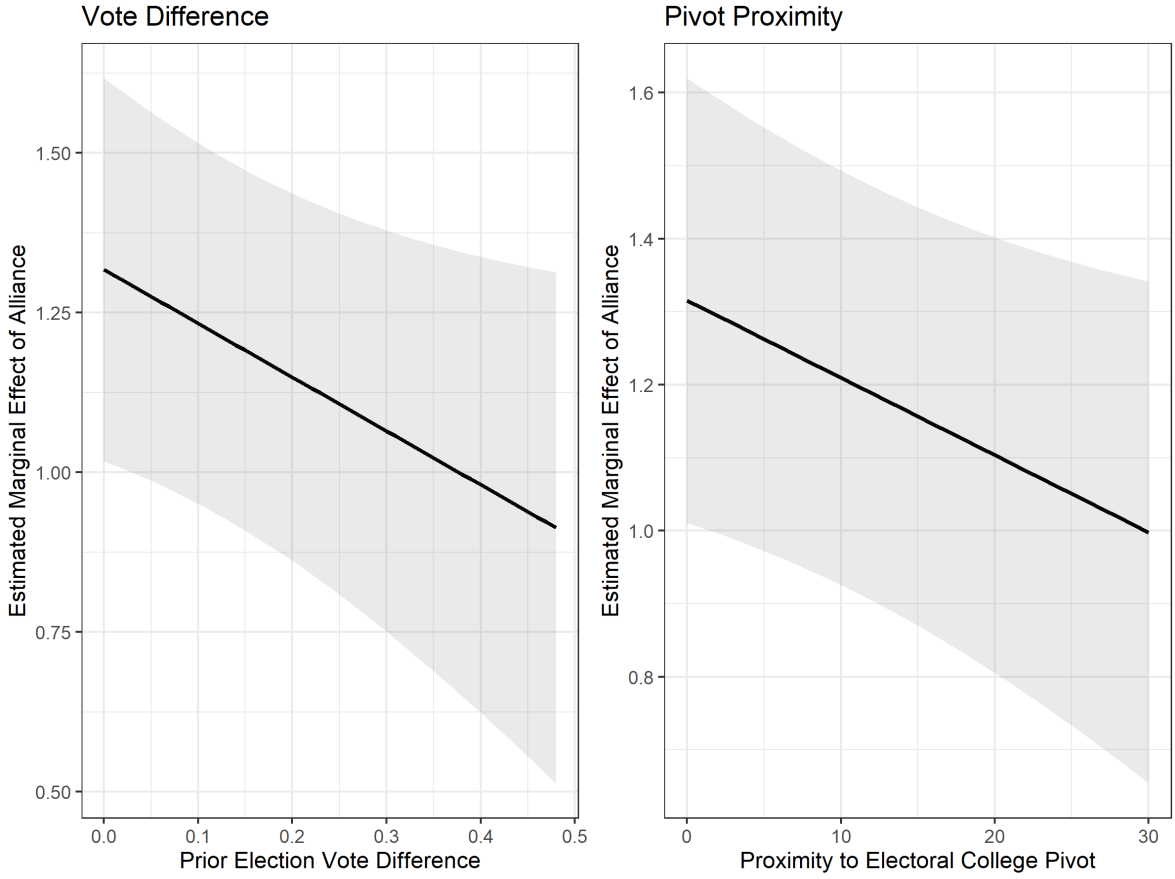

Figure 4. *Estimated marginal effect of an alliance on exports from U.S. states to foreign countries across two measures of electoral competitiveness, 2002 to 2020. Smaller vote difference or pivot proximity implies greater electoral competition.*

This suggests that allied economic concessions in election years are targeted. U.S. allies concentrate their imports in states that are electorally crucial. While this analysis does not show whether the export patterns are demand driven, where allies seek exports from competitive states, or supply driven as allies take on more goods from swing states where politicians want to bolster prosperity to win elections, allies help move trade flows for electoral advantage. As I show in the appendix, these interactions, as well as the conditional relationship between prior leader support and trade around elections, are robust to alternative specifications and functional

forms (Hainmueller, Mummolo and Xu, 2019).

5 Allied Tariffs

The final analysis scrutinizes the claim that allies will be less likely to make structural trade concessions. I test this claim by modeling allied tariffs on U.S. goods with the same approach for testing the impact of prior leader support and elections. I find little evidence that increasing leader support reduces average allied tariffs or maximum tariff rates, even as proximity to elections increases. when tariffs are weighted by import volume.

These models use tariff data from United Nations Conference on Trade and Development (UNCTAD)'s Trade Analysis and information systems (TRAINS) database. The tariff data starts in 1988 and limited temporal coverage in some control variables stops the sample in 2010.[11] I analyze two outcome measures; average tariffs weighted by import volume and logged maximum tariffs. As in the analyses of exports and imports, I employ robust m-estimation with Tukey's biweight function due to heavy-tailed residuals.

I use weighted average and maximum tariff rates to measure structural changes in allied trade policy because these measures capture crucial areas of domestic political competition. Goods with greater U.S. exports are more salient to domestic industries. Maximum tariff rates likely reflect areas of particular political concern.

Table 1 presents the estimates from robust regression models of weighted average allied tariffs and maximum tariff rates. There is less evidence that prior leader support reduces allied tariffs. The average leader support constituent term is positive for weighted tariffs, but it is of small magnitude and uncertain direction. Greater prior leader support has an unclear association with maximum allied tariffs even in election years as well. As is the case in other models, the years to election constituent term does not have a direct interpretation. Both interaction

[11] I include the European Union in the analysis because the EU is a key U.S. trade partner. I use with the average of presidential support in each year as the key independent variable.

terms are positive, though close to zero in magnitude.

Figure 5 presents how election proximity modifies the impact of leader support on allied tariff rates. In election years, greater leader support has small and uncertain association with weighted average allied tariffs. There is no evidence that electoral timing modifies this relationship. Allies may tolerate temporary trade changes, but there is little evidence that they make structural trade changes.

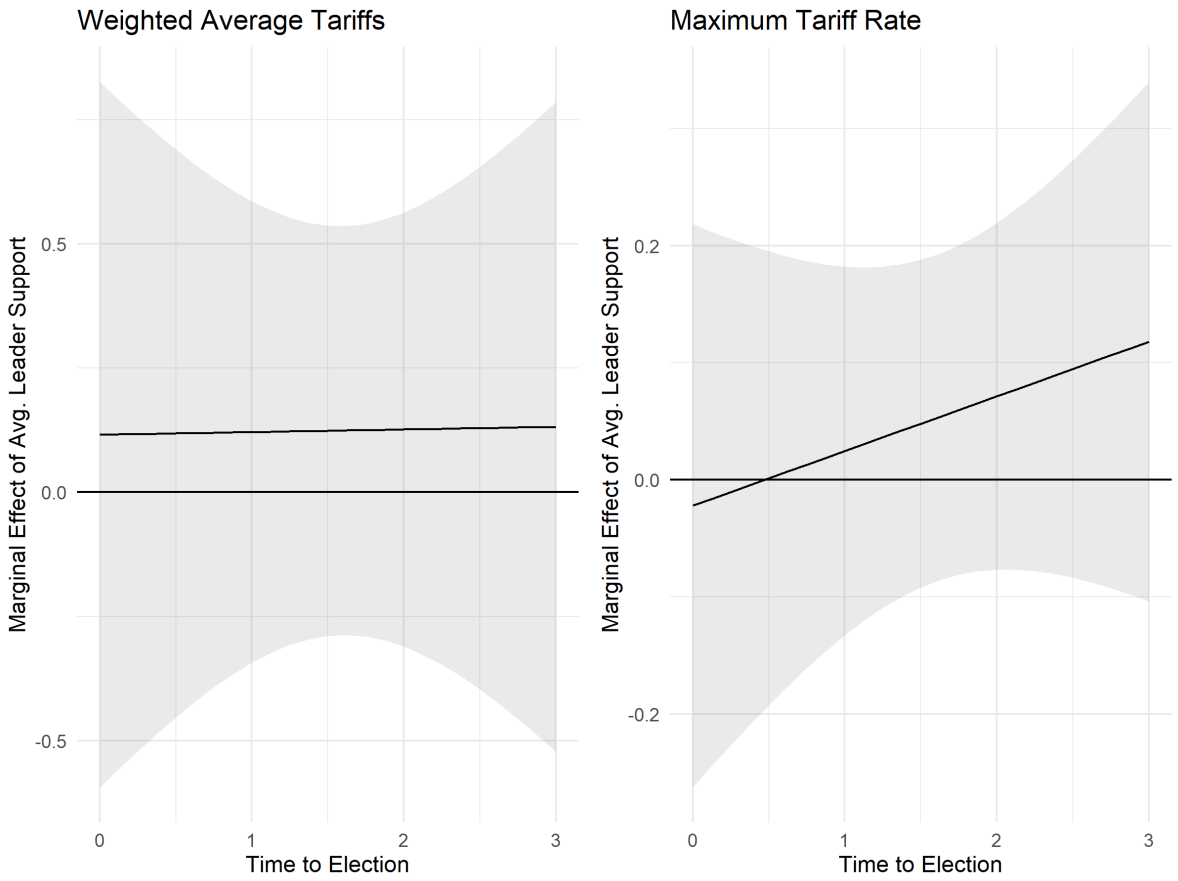

Figure 5. *Estimated marginal effect of of a two standard deviation increase in average signals of support by the incumbent leader on allied tariffs on U.S. exports, 1988 to 2010. The first model addresses each ally's annual average tariff on U.S. exports, weighted by import volume. The second model examines the log maximum tariff rate.*

Maximum tariffs also show little response to commitment signals, and this relationship is unlikely to fluctuate with U.S. electoral cycles. Therefore, the balance of evidence suggests

	Allied Tariffs	Maximum Tariffs
Change Leader Support	0.116	-0.022
	(-0.593, 0.825)	(-0.263, 0.218)
Years to Election	-0.133	-0.024
	(-0.375, 0.108)	(-0.106, 0.058)
Years to Election x Change Leader Support	0.005	0.047
	(-0.357, 0.367)	(-0.076, 0.169)
Incumbent	0.561	-0.109
	(-0.278, 1.399)	(-0.393, 0.175)
Allied Democracy	-1.507	0.911
	(-2.080, -0.934)	(0.717, 1.105)
Change US GDP	0.000	0.000
	(0.000, 0.000)	(0.000, 0.000)
Change Ally GDP	0.000	0.000
	(0.000, 0.000)	(0.000, 0.000)
Pop. Weighted Distance	0.000	0.000
	(0.000, 0.000)	(0.000, 0.000)
Contiguous	-0.885	0.369
	(-2.337, 0.568)	(-0.123, 0.862)
Common Language	3.147	-0.615
	(2.502, 3.791)	(-0.833, -0.396)
Former Colony	-1.716	0.517
	(-2.728, -0.704)	(0.174, 0.860)
Ongoing MID	-1.307	1.898
	(-3.342, 0.729)	(1.208, 2.588)
Shared IGOs	-0.130	0.017
	(-0.160, -0.100)	(0.007, 0.027)
Lag Ally Latency	3.516	0.348
	(2.596, 4.435)	(0.036, 0.659)
Lag Rivalry	0.702	-0.302
	(0.242, 1.163)	(-0.458, -0.146)
Prior Adversary Signal	-0.928	0.154
	(-1.315, -0.540)	(0.022, 0.285)
N	812	812

Table 1. *Coefficient estimates from models of allied tariffs on US exports, 1988 to 2010. The first model addresses each ally's annual average tariff on U.S. exports, weighted by import volume. The second model addresses the log maximum tariff rate. 95% confidence intervals in parentheses.*

that allied states do not reduce their tariffs to help supportive leaders win election. Allied trade concessions are temporary, rather than structural. Commitment signaling is more likely to increase allied trade barriers. Reduced commitment might lower allied tariffs, albeit at the cost of allied trade support in election years.

6 Discussion and Conclusion

All three results are consistent with temporary and targeted economic concessions for leaders who offer allies temporary economic concessions. In the appendix, I check these findings in several ways. First, I check for non-linear relationships and adequate support in the interactions (Hainmueller, Mummolo and Xu, 2019). I also present inferences from Bayesian models that adjust for dyadic clustering through varying intercepts. Finally, I show that the relationship holds outside the United States, as trade balances between major powers and their junior allies respond in similar ways to the United States.

Alliance patrons have limited economic leverage, unless allies make economic concessions to help them remain in office. Outside of election years, reassuring allies increases trade deficits. But when leaders offer more support, their trade balance with allies improves around election years.

References

Ahlquist, John S. 2010. "Policy by contract: Electoral cycles, parties and social pacts, 1974–2000." *The Journal of Politics* 72(2):572–587.

Allen, Susan Hannah. 2008. "The Domestic Political Costs of Economic Sanctions." *Journal of Conflict Resolution* 52(6):916–944.

Alley, Joshua. 2021. "Alliance Participation, Treaty Depth and Military Spending." *International Studies Quarterly* pp. 1–15. Online Access.

Aronow, Peter M, Cyrus Samii and Valentina A Assenova. 2015. "Cluster–Robust Variance Estimation for Dyadic Data." *Political Analysis* 23(4):564–577.

Biglaiser, Glen and Karl DeRouen. 2007. "Following the Flag: Troop Deployment and U.S. Foreign Direct Investment." *International Studies Quarterly* 51(1):835–854.

Biglaiser, Glen and Karl DeRouen. 2009. "The Interdependence of U.S. Troop Deployments and Trade in the Developing World." *Foreign Policy Analysis* 5(3):247–263.

Blankenship, Brian. 2020. "Promises under Pressure: Statements of Reassurance in US Alliances." *International Studies Quarterly* 64:1017–1030.

Brambor, Thomas, William Roberts Clark and Matt Golder. 2006. "Understanding interaction models: Improving empirical analyses." *Political Analysis* 14(1):63–82.

Brooks, Stephen G, G John Ikenberry and William C Wohlforth. 2013. "Don't come home, America: the case against retrenchment." *International Security* 37(3):7–51.

Cebul, Matthew D, Allan Dafoe and Nuno P Monteiro. 2021. "Coercion and the Credibility of Assurances." *The Journal of Politics* 83(3):000–000.

Chen, Frederick R. 2021. "Extended Dependence: Trade, Alliances, and Peace." *The Journal of Politics* 83(11):246–259.

Chyzh, Olga V and Robert Urbatsch. 2021. "Bean Counters: The Effect of Soy Tariffs on Change in Republican Vote Share Between the 2016 and 2018 Elections." *The Journal of Politics* 83(1):415–419.

Clark, William Roberts and Mark Hallerberg. 2000. "Mobile Capital, Domestic Institutions, and Electorally Induced Monetary and Fiscal Policy." *American Political Science Review* 94(2):323–346.

Colgan, Jeff D. 2013. "Domestic Revolutionary Leaders and International Conflict." *World Politics* 65(4):656–690.

Colgan, Jeffrey D. and Jessica L.P. Weeks. 2015. "Revolution, Personalist Dictatorships, and International Conflict." *International Organization* 69(4):163–194.

Conconi, Paola, David R DeRemer, Georg Kirchsteiger, Lorenzo Trimarchi and Maurizio Zanardi. 2017. "Suspiciously timed trade disputes." *Journal of International Economics* 105:57–76.

Davis, Christina L. 2008. "Linkage Diplomacy: Economic and Security Bargaining in the Anglo-Japanese Alliance,1902-23." *International Security* 33(3):143–179.

Derouen Jr, Karl and Uk Heo. 2000. "Defense Contracting and Domnestic Politics." *Political Research Quarterly* 53(4):753–769.

Drezner, Daniel W. 2013. "Military Primacy Doesn't Pay (Nearly As Much As You Think)." *International Security* 38(1):52–79.

Escribà-Folch, Abel and Joseph Wright. 2010. "Dealing with tyranny: International sanctions and the survival of authoritarian rulers." *International Studies Quarterly* 54(2):335–359.

Fearon, James D. 1997. "Signaling Foreign Policy Interests: Tying Hands versus Sinking Costs." *Journal of Conflict Resolution* 41(1):68–90.

Fordham, Benjamin O. 2010. "Trade and asymmetric alliances." *Journal of Peace Research* 47(6):685–696.

Fouquin, Michel and Jules Hugot. 2016. Two Centuries of Bilateral Trade and Gravity data: 1827-2014. techreport CEPII.

Gartzke, Eric and Quan Li. 2003. "War, Peace and the Invisible Hand: Positive Political Externalities of Economic Globalization." *International Studies Quarterly* 47(1):561–586.

Gibler, Douglas M, Steven V Miller and Erin K Little. 2016. "An Analysis of the Militarized Interstate Dispute (MID) Dataset, 1816–2001." *International Studies Quarterly* 60(4):719–730.

Gowa, Joanne. 1995. *Allies, Adversaries, and International Trade*. Princeton University Press.

Gowa, Joanne and Edward D. Mansfield. 2004. "Alliances, Imperfect Markets, and Major-Power Trade." *International Organization* 58(4):775–805.

Hainmueller, Jens, Jonathan Mummolo and Yiqing Xu. 2019. "How Much Should We Trust Estimates from Multiplicative Interaction Models?: Simple Tools to Improve Empirical Practice." *Political Analysis* 27(2):163–192.

Hee Park, Jong and Nathan Jensen. 2007. "Electoral Competition and Agricultural Support in OECD Countries." *American Journal of Political Science* 51(2):314–329.

Hiscox, Michael J. 2001. "Class versus Industry Cleavages: Inter-Industry Factor Mobility and the Politics of Trade." *International Organization* 55(1):1–46.

Horowitz, Michael and Dan Reiter. 2001. "When Does Aerial Bombing Work? Quantitative Empirical Tests, 1917-1999." *Journal of Conflict Resolution* 45(2):147–173.

Hyde, Susan D and Nikolay Marinov. 2012. "Which Elections Can Be Lost?" *Political Analysis* 20(2):191–210.

Kimball, Anessa L. 2010. "Political Survival, Policy Distribution, and Alliance Formation." *Journal of Peace Research* 47(4):407–419.

Kinne, Brandon J and Jonas Bunte. 2018. "Guns or Money? Defense Cooperation and Bilateral Lending as Coevolving Networks." *British Journal of Political Science* 50(3):1067–1088.

Kriner, Douglas L and Andrew Reeves. 2015. "Presidential Particularism and Divide-the-Dollar Politics." *American Political Science Review* 109(1):155–171.

Lake, David A. 2009. *Hierarchy in International Relations*. Ithaca: Cornell University Press.

Lake, David A. 2013. "Legitimating Power: The Domestic Politics of U.S. International Hierarchy." *International Security* 38(2):74–111.

Li, Quan. 2003. "The effect of security alliances on exchange-rate regime choices." *International Interactions* 29(2):159–193.

Long, Andrew G and Brett Ashley Leeds. 2006. "Trading for Security: Military Alliances and Economic Agreements." *Journal of Peace Research* 43(4):433–451.

Marinov, Nikolay. 2005. "Do Economic Sanctions Destabilize Country Leaders?" *American Journal of Political Science* 49(3):564–576.

Marquez, Xavier. 2016. "A Quick Method for Extending the Unified Democracy Scores." Available at SSRN: http://ssrn.com/abstract=2753830.
URL: *http://dx.doi.org/10.2139/ssrn.2753830*

Mastanduno, Michael. 1998. "Economics and Security in Statecraft and Scholarship." *International Organization* 52(4):825–854.

Mastanduno, Michael. 2009. "System maker and privilege taker." *World Politics* 61(01):121–154.

McManus, Roseanne W and Mark David Nieman. 2019. "Identifying the level of major power support signaled for protégés: A latent measure approach." *Journal of Peace Research* 56(3):364–378.

Miller, Steven V. 2021. *peacesciencer: A User's Guide for Quantitative Peace Science in R*.

Morrow, James D. 1991. "Alliances and Asymmetry: An Alternative to the Capability Aggregation Model of Alliances." *American Journal of Political Science* 35(4):904–933.

Morrow, James D. 1994. "Alliances, Credibility, and Peacetime Costs." *Journal of Conflict Resolution* 38(2):270–297.

Nickell, Stephen. 1981. "Biases in Dynamic Models with Fixed Effects." *Econometrica* 49(6):1417–1426.

Norrlof, Carla. 2010. *America's Global Advantage: US Hegemony and International Cooperation*. Cambridge University Press.

Oatley, Thomas. 2015. *A Political Economy of American Hegemony*. New York: Cambridge University Press.

Pevehouse, Jon C.W., Timothy Nordstrom, Roseanne W. McManus and Anne Spencer Jamison. 2020. "Tracking Organizations in the World: The Correlates of War IGO Version 3.0 datasets." *Journal of Peace Research* 57(3):492–503.

Philips, Andrew Q. 2020. "Just in time: Political policy cycles of land reform." *Politics* 40(2):207–226.

Poast, Paul. 2012. "Does Issue Linkage Work? Evidence from European Alliance Negotiations, 1860 to 1945." *International Organization* 66(1):277–310.

Poast, Paul. 2013. "Can Issue Linkage Improve Treaty Credibility? Buffer State Alliances as a "Hard Case"." *Journal of Conflict Resolution* 57(5):739–764.

Poast, Paul. 2019. "Beyond the "Sinew of War": The Political Economy of Security as a Subfield." *Annual Review of Political Science* 22:223–239.

Rainey, Carlisle and Daniel K. Baissa. 2020. "When BLUE Is Not Best: Non-Normal Errors and the Linear Model." *Political Science Research & Methods* 8(1):136–148.

Renshon, Jonathan, Allan Dafoe and Paul Huth. 2018. "Leader Influence and Reputation Formation in World Politics." *American Journal of Political Science* 62(2):325–339.

Rogoff, Kenneth S. 1987. "Equilibrium political budget cycles.". NBER Working Paper No. 2428.

Rogowski, Ronald. 1987. "Political cleavages and changing exposure to trade." *American Political Science Review* 81(04):1121–1137.

Sayle, Timothy Andrews. 2019. *Enduring Alliance: A History of NATO and the Postwar Global Order*. Ithaca NY: Cornell University Press.

Sechser, Todd S. 2010. "Goliath's Curse: Coercive Threats and Asymmetric Power." *International Organization* 64(4):627–660.

Sechser, Todd S. 2011. "Militarized Compellent Threats, 1918–2001." *Conflict Management and Peace Science* 28(4):377–401.

Sechser, Todd S. 2018. "Reputations and Signaling in Coercive Bargaining." *Journal of Conflict Resolution* 62(2):318–345.

Wolford, Scott. 2007. "The Turnover Trap: New Leaders, Reputation, and International Conflict." *American Journal of Political Science* 51(4):772–788.

Wolford, Scott and Moonhawk Kim. 2017. "Alliances and the High Politics of International Trade." *Political Science Research and Methods* 5(4):587–611.

Wright, John R. 2009. "Pivotal states in the Electoral College, 1880 to 2004." *Public Choice* 139(1-2):21–37.