

The Relationship between Political Tensions, Trade, and Capital Flows in ASEAN Plus Three*

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July 4, 2016

Abstract

We estimate the effects of political tension on trade and capital flows in ASEAN Plus Three countries in the framework of a gravity model. We quantify political tension through text-parsing software reading daily Reuters' articles from 1990 to 2013, and exclude Brunei and Laos due to sparsity of news coverage. Regarding bilateral trade, we find that political conflict, measured by negative reports in Reuters articles, seems to only affect bilateral trade between countries that are not both members of the World Trade Organization (WTO). For these countries, a 1% rise in the tension score results in a .05% decline in trade. There is weaker evidence that improvement in bilateral relationship, measured by positive reports in Reuters articles, is associated with more trade. As for capital flows, while long-term capital flows, measured by foreign direct investment, appear to be unaffected by short-term tensions, both a non-democratic government and a history of war negatively affect FDI.

JEL classification codes: F1, F2, F4, F5

Key words: political tensions, trade, capital flows and ASEAN Plus Three.

*We are grateful for the comments and suggestions of Matthew Botsch, Rachel Connelly, Deborah DeGraff, John Fitzgerald, Ta Herrera, Stephen Meardon, Stephen Morris, Erik Nelson, Ke Pang, and Gonca Senel. All errors are ours.

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1 Introduction

The relationship between international politics and international trade is often complex with causality likely running both ways. As the episodes of large trade surpluses of Japan and China against the US have illustrated, significant trade imbalance can cause political frictions. In the other direction, the most overt way political conflict can impact trade flows is through government sanctions that limit trade with a rival. For example, the United States and the European Union used sanctions on Russia in response to the Russian annexation of Crimea and fermenting unrest in eastern Ukraine (AP, 2015). Although the efficiency of these sanctions, often used by large economies to coerce other countries into changing their behavior, is debatable, they are the clearest link between the bilateral political climate and trade flows (Lindsay, 1986).

Even though political conflict often does not reach the threshold that incurs sanctions or war, low-level tensions may impact trade through a number of channels. First, at the government level, states, in an effort to enhance their own relative power and security, may avoid trading with countries they deem as a potential threat. This may be particularly true in countries such as China and Vietnam where the government has more direct control of the economy and can thus use trade as a political tool. The bilateral climate also signals the likelihood of future sanctions or war that would damage profits. Second, at the firm-level companies may cut trade ties due to pressure from the general public, or the risk of sanctions or war. Periods of *détente* between the United States and Soviet Union during the Cold War brought increased trade. Likewise, West Germany's *Ostpolitik* strategy of warming political ties between West Germany and the Eastern Bloc was followed by more trade (Pollins, 1989). Similarly, lobby and interest groups, such as human rights pressure against South Africa's apartheid regime, may influence trade and investment. Finally, political tensions may also play out at the individual-level where consumers choose to avoid trade with another country because of personal dislike of their politics. American anger at France's lack of support for the invasion of Iraq in 2003 resulted in anti-French boycotts, notably in the high-salience industry of wine. This had noticeable effects on the volume of French wine sold, indicating political conflict can influence consumer choice and, by

extension, impact trade flows (Chavis and Leslie, 2009).

The empirical literature on low-level tensions has produced mixed results. Early work has found that warmer political signaling results in higher bilateral trade (Pollins, 1989). This result has especially held for countries where the government has a particularly powerful role in the economy (Davis, Fuchs, and Johnson, 2014). The government, acting to ensure its security, tries to achieve political goals through state-owned enterprises (SOEs), distorting the profit-maximizing behavior that encourages trade with all viable partners. However, recent work has found no correlation between heightened political tensions and decreased trade levels when looking at the trading partners of the United States and Japan, two countries with minimal government involvement in the economy (Davis and Meunier, 2011). This insignificant result also holds for FDI. Davis and Meunier (2011) argue this is due to the sunk costs associated with international trade such as establishing intra-firm relations and marketing in the partner country which increase the costs of shifting trade for political reasons. Recent work has specifically explored one of Asia's most prominent historical grievances, the 1937-1945 Japanese invasion of China. Che, Du, Lu, and Tao (2015) find regions of China with more casualties proportional to population trade less with Japan and receive less investment from Japan. The authors hypothesize that the war fostered lasting distrust and anger between the countries that still influences trade.

In this paper, we aim to estimate the relationship between tensions and trade and capital flows in East and Southeast Asia specifically. The connection between politics and economic relations is particularly important in East and Southeast Asia where growing trade and capital flows face serious challenges in the form of rising tensions that have yet to cause sanctions or war in recent decades. The data from the World Trade Organization (WTO) suggest that in 2013 Asia accounted for 34.4% of the world's merchandise exports and 34.4% of merchandise imports. This amounts to over \$12 trillion in total trade. Asia also contains the world's second and third largest economies in the People's Republic of China (PRC) and Japan, with market exchange rate-evaluated GDP's of \$9.5 trillion and \$4.9 trillion in 2013, respectively. The region is particularly bound by manufacturing trade

ties as China deepens its role as the hub (Economist, 2015a). The astounding growth of Asia has greatly shifted economic power to the East.

However, territorial disputes, large contested energy reserves, and the animosity from past conflicts like World War II have all contributed to rising defense spending and tensions in Asia, particularly in response to China's growing clout. While no major conflict has broken out in the region since the Sino-Vietnamese war of 1979, relations have been repeatedly strained, concerning politicians and business leaders.¹

Because a multitude of factors influence trade and capital flows, we estimate the determination of international trade and investment in a gravity model of trade augmented by political factors. Specifically, using a panel of 11 countries, the members of the regional multilateral institution The Association of Southeast Asian Nations Plus Three (ASEAN Plus Three), from 1990 to 2013, we estimate the effects of trading countries' economic output and distances such as joint membership in the WTO and politics on their bilateral trade and capital flows.

Regarding trade, we find that short-term political tensions in the region only affect trade flows if either trade participant is not a member of the WTO. This result is largely driven by non-democratic countries such as China which appear to be more susceptible to tensions than democratic countries in the region. This result is consistent with the conjecture that non-democratic government intervene more in international trade. Government actors in non-democratic states do not have to be as responsive to public opinion and thus may be using their influence to shift trade flows to punish political adversaries or reward friendly states (Davis et al., 2014). Furthermore, democratic countries' firms and consumers may more readily discriminate against non-democracies and vice versa in

¹The threat of war was highlighted, and perhaps exaggerated, by Japanese Prime Minister Abe Shinzo's comments in January 2014, when he described Sino-Japanese relations as similar to Anglo-German relations before the outbreak of World War I. At the time, England and Germany were each the other's largest trading partners, causing many experts, notably the English politician Norman Angell, to discount a war as highly unlikely. Now China and Japan have significant economic ties, but also maintain fierce distrust after Japan's aggression in World War II and high-profile territorial disputes. Furthermore, China's aggressive assertion of sovereignty in the South China Sea, including the decision to move an oil rig into disputed waters off of Vietnam's coast in May 2014 and the rapid construction of facilities on disputed islands, led to significant confrontation between China and the Philippines and Vietnam (Economist, 2015b). An important issue is thus what effect, if any, these tensions have on trade between the countries of East and Southeast Asia, notably China. If political tensions are decreasing trade, China's strong regional trade role in manufacturing may be undermined by its more bellicose stance.

import and export decisions in times of political conflict. While non-democracies are particularly prone to tensions affecting trade if they are not in the WTO, as membership in multilateral institutions like the WTO grows, trade will likely become further isolated from politics. When positivity in bilateral relationship is included in trade regressions, we find that improvement in bilateral relationship is associated with more trade in some cases.²

Our results about capital flows suggest that politics broadly affect foreign-direct investment (FDI) but in ways different from trade. Non-democracies are associated with a lower chance of reporting positive FDI, and a history of war significantly reduces the amount of FDI. However, unlike trade, short-term tensions have no effect on FDI. As in the case of trade regressions, we find that joint membership of the WTO boosts FDI.

Our paper makes several contributions to the literature on political tension and international economic transactions. First, to our knowledge, our paper is the first to systematically examine the relationship between politics and trade and capital flows in ASEAN Plus Three, an important multinational economic institution that incorporates important economies such as China and Japan. Because the rapid economic integration of these countries has been continually shadowed by deeply-rooted political tensions, it is important to quantify the economic effects of politics. Second, our study highlights the positive role of the WTO in mitigating the economic effects of political tensions. The results suggest international institutions may act as effective safeguard to international economic freedom. Third, existing evidence on international political tensions and capital flows is quite limited (Davis and Meunier, 2011; Che et al., 2015), thus our work contributes to knowledge in this particular area.

2 Theoretical Frameworks

Realist theories of international relations argue that politics drive international trade. In an anarchic international system with no strong supranational governing body it is the responsibility of states to ensure their own survival. This is the chief priority of the state.

²We cannot include the positivity variable in FDI regressions because it would lead to severe problems of multicollinearity.

As such, countries are concerned with relative power such as the distribution of gains from activities like trade and capital flows. If a country feels another state is becoming relatively stronger, it is in the interest of the threatened state to protect itself from potential rivals. Empirically, bilateral trade is higher amongst political alliances (Gowa and Mansfield, 1993). This likely reflects the impact of trade on national defense and implies countries do shift trade to maximize their security position. In this realist perspective trade follows the flag (Morgenthau, 1973).

There are a number of examples of states using trade to punish adversaries. China tightened quotas on its exports of rare earth metals, which are an important component of electronics manufacturing, in 2009. When the Japanese Coast Guard detained a Chinese fisherman who collided with Coast Guard vessels while fishing in Japanese-controlled waters in 2010 China responded by banning all rare earth metal exports to Japan (Fackler, 2013). The Chinese government later expanded this action by stopping exports to several Western countries, nominally for environmental protection reasons (Bradsher, 2010). While the exports to all affected countries eventually resumed, the incident illustrates a country's ability to use trade as leverage for political means.

China also used trade to penalize Norway, whose Nobel committee awarded prominent Chinese dissident Liu Xiaobo the Nobel Peace Prize in 2010. In retaliation China canceled a number of bilateral talks and selectively blocked some Norwegian imports, notably salmon, supposedly for health reasons (Baker, 2014). However, other countries' salmon was unaffected. Politics have also affected trade through less centralized channels. In 2008 pro-Tibetan protestors harassed the Chinese torch bearer in France, bringing widespread anger amongst Chinese. A grass-roots boycott of French stores in China soon followed, despite Chinese government officials attempts to quell some of the anger (Jacobs, 2008).

In opposition to realism, liberalism stresses the primacy of trade and international discourse in influencing foreign relations. This framework argues that countries are more concerned with absolute gains. The increasingly connected world becomes more secure as economic and cultural ties bring states together and decrease the threat of war. Thus

countries do not have to place their survival as the dominant objective nor do they fear relative power changes (Doyle, 1986). Commercial liberalism particularly argues that the benefits of international trade and capital flows will lead to greater peace as countries increase economic ties, thus calming bellicose international politics (Moravcsik, 2001). For instance, Lan and Li (2015) finds that economic openness reduces nationalism. Realism and liberalism represent ideal types, the relationship between international politics and trade is often more complex and causality between the two may run either way or both ways.

Similar to trade, the economic literature has recognized that quality of government in the host country (Busse and Hefeker, 2007) and bilateral political relationship (Desbordes and Vicard, 2009) affect FDI. Politics, both domestic and international, are important determinants of FDI. Foreign firms demand a premium for the uncertainty associated with instability in the country they invest in and thus will invest less (Busse and Hefeker, 2007). External political conflict and instability also play a role in FDI as they decrease growth and thus the profitability of a FDI opportunity. Desbordes and Vicard (2009) find that political conflict reduces FDI and hypothesize this is in part because tensions raise the risk of government expropriation as a way to punish the rival state. In addition, political tensions can affect FDI via trade. Vertical trade, defined as trade in intermediate products, has become a significant part of international trade (Feenstra, 1998; Hummels, Ishii, and Yi, 2001; Yi, 2003). Much of the vertical trade occurs through the network of subsidiaries within multinational enterprises (MNEs) (Lanz and Miroudot, 2011) that are set up through FDI. Hence, if political tensions restrict trade between two countries, MNEs would have less incentive to invest across the border.

Causality for politics and FDI, as for politics and trade, theoretically could run both ways. Gartzke, Li, and Boehmer (2001) found both increased trade and capital flows reduce the incidence of war, potentially because these economic relations allow credible signaling between countries. Strong threats from trading states will elicit a market response whose magnitude is based on the probability of going through with the action. This increases bargaining information amongst the disputing countries and limits misun-

derstandings in intentions that can lead to further conflict.

Countering the effects of politics, international institutions such as the WTO and investment treaties have helped to insulate international economic transactions from politics (Desbordes and Vicard, 2009). The WTO is one of the largest multilateral institutions that work to reduce trade barriers. Membership in the WTO may decrease the influence of tension on trade as its liberalization rules limit mercantilist practices like discriminatory tariffs. While the WTO has no enforcement mechanism on its rulings and the tariff limits and general practices member-states agree to, countries with discriminatory trade practices are open to similar retaliation of their exports through new tariffs. Thus most countries, knowing the ensuing trade war would hurt their interests, comply with the WTO and avoid mercantilist practices, fostering growing trade amongst all WTO members (Bello, 1996).

This reprisal mechanism of the WTO appears to work in practice. After China introduced a quota, and temporarily a ban, on rare earth metal exports, several governments, including the United States and Japan, submitted a formal WTO complaint against China. The WTO ruled in favor of the complainants and China scrapped all rare earth metal export quotas. Specifically, the WTO forbids trade discrimination for political reasons other than Article XXI's exception for national security (Lindsay, 2003). While interpretation of Article XXI is debatable, it generally forbids discriminatory trade practices to advance foreign policy goals. This limits WTO member states' ability to pressure each other for political purposes through trade. The institution itself may also increase understanding between countries as another avenue of communication. Trade representatives at the WTO may develop personal rapport that change underlying feelings towards other countries at a high government level. Thus the government may be less likely to condone boycotts or other trade practices designed to hurt a political rival.

This paper focuses on the effects of recent political tensions on bilateral trade and capital flows in East and Southeast Asia, an area which has been previously unexplored in specific detail. In particular, we examine trade flows between Cambodia, China, Indonesia, Japan, Malaysia, Myanmar, Philippines, Republic of Korea (South Korea), Singapore,

Thailand, and Vietnam from 1990 to 2013. These countries, with the exception of China, Japan, and Republic of Korea, are members of the ASEAN.³ ASEAN Plus Three began in December 1997 at the height of the Asian Financial Crisis as ASEAN decided that cooperation with the largest Asian economies, China, Japan, and the Republic of Korea was important for containing and preventing crises in the region⁴. Since then ASEAN Plus Three has worked on a number of issues, from creating emergency loans in banking crises to resolving territorial disputes, with varying degrees of success. Many theories argue that multilateral institutions like ASEAN Plus Three will lead to greater security in the region as collective trust through experience and communication channels grow. However, ASEAN Plus Three is distinct from the European multilateral institutions in that ASEAN Plus Three was designed to primarily increase economic ties, not security ties (Goldstein and Mansfield, 2012). Thus ASEAN Plus Three's effect on regional security is more contentious.

Overall, we hypothesize countries in ASEAN Plus Three follow a mixture of realism and liberalism, thus we expect increased political tensions to have negative effects on bilateral trade and FDI. However, if two countries are in the WTO, we expect political tensions to have a reduced impact on the level of trade and capital flows between them.

3 International Trade

3.1 Empirical Model for Trade

Similar to previous work in this area (Pollins, 1989; Davis and Meunier, 2011; Davis et al., 2014), we use a gravity model augmented with political tensions as a “distance” variable. The dependent variable is log bilateral trade volume ($\ln(\textit{trade})$). To measure the size of a pair of countries, i and j , the log of trade flows are determined by the log of the geometric mean of their GDP ($\ln(\textit{GDP})$), the log of the geometric mean of their population ($\ln(\textit{Population})$). The key variables of interests are political tensions

³Two ASEAN member countries, Brunei and Laos, are omitted from the sample because the lack of reliable data on political tensions.

⁴ASEAN was originally formed in 1967 to combat the threat of communism and encourage economic development in the region. Originally consisting of Indonesia, Malaysia, the Philippines, Singapore, and Thailand, the group expanded primarily in the 1990s. With the end of the Cold War ASEAN began prioritizing economic development and increased trade in lieu of fighting communism.

(*Tension*), common membership in the General Agreement on Tariffs and Trade (GATT) or WTO (*WTO*), and their interaction ($WTO \times Tension$). In subsequent discussion, we will use the term pre-WTO era to refer to the time before a country joins the GATT or WTO. Control variables include the real exchange rate volatility (*RER Volatility*), a time trend (*Time*) and a variable (*Trade Disputes*), which represents the number of GATT or WTO trade complaints filed by country i or j against the other country for that quarter.⁵ We include dyad fixed effects ϕ_{ij} and allow the error term ϵ_{ijt} to be clustered at country level. Note the dyad fixed effects would absorb the effects of time constant factors such as the history of war between a pair of countries.⁶ Hence, our baseline model for quarterly bilateral trade is

$$\begin{aligned} \ln(\text{trade}_{ijt}) = & \beta_0 + \beta_1 \cdot (Tension_{ijt}) + \beta_2 \cdot (WTO_{ijt} \cdot Tension_{ijt}) + \beta_3 \cdot (WTO_{ijt}) \\ & + \beta_4 \cdot \ln(GDP_{ijt}) + \beta_5 \cdot \ln(Population_{ijt}) + \beta_6 \cdot (Trade\ Disputes_{ijt}) \\ & + \beta_7 \cdot (RER\ Volatility_{ijt}) + \beta_8 \cdot (Time) + \phi_{ij} + \epsilon_{ijt}. \end{aligned} \quad (1)$$

Because we include the number of trade disputes as a control for short-term tensions due to economic relations and history of war through the dyad fixed effects, the coefficient on *Tension* should mainly reflect the effect of short-term political conflict. In some regressions, we also include interactions of political tension with indicators for countries of note, such as non-democracies, large economies, and China.

Following the method used by Davis and Meunier (2011), We determine a political tension score by using the Virtual Research Associates' (VRA) Virtual Reader program which reads daily Reuters articles, determines the participant countries and assigns a positive or negative score towards the dyad depending on the event's severity following the conflict-cooperation coding of Joshua Goldstein (Goldstein, 1992). For example, breaking

⁵We do not control for real exchange rate because our focus is on the total bilateral flow. When an appreciation of a country's currency against a partner reduces the former's export, the depreciation of the partner country's currency should increase the import of the former. The net effect on total bilateral trade volume can be small.

⁶Che et al. (2015) show that the Sino-Japanese war had a negative impact on trade and FDI between the two countries. In our trade regressions, we are unable to include the war variable because it is important to include dyad fixed effects. When we exclude dyad fixed effects to include war in the regression, tension is estimated to have positive and significant effects on trade. Presumably, the omission of dyad fixed effects may lead to inconsistent estimates.

off diplomatic relations would incur a score of -7 while issuing a formal complaint or protest would result in a score of -2.4. This method of quantifying event data is robust and accurate (King and Lowe, 2003).

In ASEAN Plus Three, Japan’s expansionist past is one of the causes of political tensions. Visits by prominent Japanese politicians to the Yasukuni Shrine, which honors some war criminals, has repeatedly strained relations between Japan and its neighbors, particularly China and Republic of Korea (Fackler, 2013). In Figure 1 and 2, spikes in measured quarterly tension between Japan and China and tension between Japan and South Korea follow high-profile events closely, suggesting that the VRA data seems to accurately reflect the bilateral political sentiment. We summarize the time-averaged bilateral tension between the countries as a matrix in Table 1 and plot the annual average tension for the region against time as a whole in Figure 3. We plot the average of each country’s tension score vs. the other countries in Figure 4, and each country’s tension vs. China in Figure 5. It is obvious that there exists significant variation in tension score across countries and over time.

We omit Brunei and Laos, two members of ASEAN Plus Three, from our dataset because of their very low tension scores compared to other countries in the region. The average quarterly tension score for dyads involving Brunei and Laos is 0.04 and 0.01, respectively, while the averages for all other countries are over 1, as can be seen in Table 2. The extremely low level of tension scores for Brunei and Laos may have several explanations. First, because of the relatively minor economic size of these countries (see Table 2) they may play a smaller role in international disputes. Thus there is less heterogeneity in tension for both countries. Secondly, the Reuters articles VRA depends on to quantify tension may systematically underreport the tension from these countries because they do not garner the same media attention as larger states such as China or Japan, whose disputes are much more high-profile.⁷ Even other small countries like Cambodia are likely more accurately represented because they have a higher profile around the world, in part because of the infamous Khmer Rouge regime. Both factors lead us to believe the data

⁷The salesperson from VRA explicitly warned that the tension scores for Brunei and Laos are likely unreliable due to the lack of news coverage.

coverage for Brunei and Laos is relatively poor.

To construct the *Tension* variable, we sum the absolute value of all negative events in a dyad for each quarter and then take the log of this value. To account for the time period in which political events affect importers and exporters we lag the sum of the tension scores in the previous 4 quarters in regression.

As our discussion in the section of theoretical framework highlights, the causation between tension and trade can run in both directions. Using lag tensions helps reduce the two-way causality issue because the lagged approach makes it more likely that tensions are affecting trade and not the other way around. If the tension variable was not lagged there could arguably be an impact from trade levels on tension in the same quarter. For example, heightened trade may cause political frictions that increase the tension score. In addition, the inclusion of the number of trade disputes as a control variable helps to account for tension caused by trade practices such as discriminatory tariffs. Therefore, it is plausible that the coefficient on the tension variable mainly captures the causal effect of short-term tension on trade.

We obtain the GDP and population data from the IMF's Economic Outlook database and information about WTO membership and trade dispute from the WTO website. Real exchange rate volatility, defined as standard error of monthly changes in real exchange rate in a given year, is provided by Pang and Tang (2014). Table 2 shows the GDP, GDP per capita, and average growth rates of GDP and GDP per capita of each country as well as average and median tension levels for each country's dyads. China and Japan have notably larger economies and significantly higher level of tensions as well.

Given our definition of the tension variable, a negative β_1 supports the hypothesis that tensions reduce trade. Meanwhile, if joint membership of the WTO mitigates the negative effects of tensions on trade, as hypothesized, then β_2 is positive. Joint membership in the GATT or WTO itself should increase trade since the institution limits tariffs and other trade barriers. We expect the GDP variable to have a positive coefficient as well as richer countries trade more. Population will likely have a negative coefficient as more populous countries have larger domestic markets and thus trade more internally.

Real exchange volatility will likely decrease trade as the uncertainty created by increased volatility will deter some importers and exporters.

3.2 Trade Regression Results

We present the estimated baseline trade model (equation 1) in Table 3 column (1). Consistent with our hypothesis, the coefficient on *Tension* is negative and statistically significant at a 5% level. The tension coefficient of -0.05 implies that increasing tension by 1% in the previous year decreases trade by 0.05% in the next quarter if both countries are not members of the WTO. Because the average magnitude of change in tension is 33% in our sample, our estimated effect is also economically significant. The coefficient on $WTO \times Tension$ is positive and significant, which matches our hypothesis that the WTO mitigates the negative effects of tension. To find the effect of political tension on trade when both countries are members of the WTO, we sum the coefficients on *Tension* and $WTO \times Tension$ (β_1 and β_2) and compute the standard error. This combined result is insignificant and implies that if both trading countries are members of the WTO, political tensions have no discernible impact on bilateral trade levels. We report the combined effect in the row of *WTO-Era Tension* in the lower panel in Table 3. We will use the lower panel to summarize the effects of tension for different types of countries in the pre-WTO era and WTO era.

The other variable signs generally match our hypothesis. Population has a negative coefficient, though insignificant. GDP and joint WTO membership have a positive coefficient and are highly statistically significant. Real exchange rate volatility is positive, counter to our expectations, though the correlation is statistically insignificant. Economic disputes have a negative coefficient but the result is also insignificant.

Because the countries in our dataset lie along a spectrum from authoritarian to liberal democracies, we explore if regime type is affecting the influence of politics on trade. We create a dummy for non-democracies that takes a value of 1 if the trade involves China, Myanmar, Singapore, Cambodia, and Vietnam in any year, or if the trade involves Indonesia before 1999 or Malaysia before 2008. These countries all received a score of 5

or less out of 10 in Democracy from the Polity IV project in these years. We interact this non-democratic dummy with the tension variable and with the WTO dummy to create three interaction terms to be added to the regression: $Non\text{-}Democracy \times Tension$, $Non\text{-}Democracy \times WTO$, $Non\text{-}Democracy \times WTO \times Tension$. Note that the non-democracy indicator is absorbed into the fixed effects because it is time-invariant in our sample.

The results with non-democracy interaction terms are shown in Table 3, column (2). Because our dataset does not contain any observations of democratic countries that are not members of the GATT or the WTO, we cannot estimate the effect of tension for democratic countries in pre GATT/WTO era. Instead, the only pre-WTO effect of political conflict is associated with non-democratic countries, measured by the coefficient on $Non\text{-}Democracy \times Tension$.⁸ This coefficient, repeated in the row of *Pre-WTO Non-Democracy Tension* in the lower panel, is highly statistically significant and the estimate of -.05 implies that increasing tensions by 1% reduces trade by .05% when at least one country in a pair of trading countries is non-democratic. The effect of tension for democratic countries, all of whom are in the WTO, is the coefficient on $WTO \times Tension$. This coefficient, repeated in the row of *WTO-Era Democracy Tension* in the lower panel, is statistically insignificant. Finally, to compute the effect of tension on trade with non-democracies after joint WTO ascension, we sum the coefficients on $WTO \times Tension$, $Non\text{-}Democracy \times Tension$, and $Non\text{-}Democracy \times WTO \times Tension$ and report the result in the *WTO-Era Non-Democracy Tensions* row in the lower panel of Table 3. WTO-era tension is insignificant for non-democracies, just as we found for democracies. This suggests that the WTO limits politics' power over trade in non-democracies.

There are reasons why non-democracies may be fundamentally different than democracies in trade and politics. First, it is easier for non-democracies to enact protectionist policies or discriminatory trade practices that favor the interests of the government or a powerful minority over regular consumers because they do not have to respond to the will of citizens as much as a democracy, while electoral accountability encourages democracies to adopt liberal trade policy to minimize deadweight loss (Rosendorff, 2005). Furthermore,

⁸It is now clear that in the baseline trade model in column (1), the effects of tensions in pre-WTO era are driven by non-democracies only.

the nature of political conflict can differ by the regime type. Democracies historically do not go to war with each other, thus the risks of tensions escalating into sanctions or war are higher for conflict with a non-democratic country. Consumers and firms may more readily shift trade in times of conflict because of an inherent dislike of the non-democratic regime. Previous work has found that countries with similar government types trade more (Dixon and Moon, 1993). These analogous regimes may also be less prone to tension since they share similar political values that translate to less conflict over product regulations and restrictions. Finally, with less freedom of speech, nondemocratic governments can play a more active role in asserting nationalist feelings in times of conflict that can affect consumer preferences. Unfortunately, we cannot definitively say non-democracies are functionally different than democracies before WTO-admission because of the afore-mentioned lack of democracies in their pre-WTO era in our dataset. However, we can surmise there is likely some penalty for non-democracies in terms of politics and trade.

As shown in Table 2, large economies are also associated with the largest amount of tension. Meanwhile, they are also major trading nations. Thus we explore if trade with large countries is inherently more prone to politics. We deem China, Japan, and Republic of Korea to be the large economies in East Asia. Similar to our examination of non-democracies, we create interactions with a dummy representing trade with these large countries. However, we do not include the triple interaction of *Large Economy* \times *WTO* \times *Tension* for two reasons. First, conditional on including *Tension* and fixed effects, the triple interaction only captures the effect of China joining the WTO, which has few observations. Second, technically, the inclusion of this interaction term causes multicollinearity on our tension variables, raising variation inflation factor statistics for these variables above 10. The results are shown in Table 3 column (3). Judged by the coefficient on *Large Economy* \times *Tension*, when trade involves a large economy, tension has no additional effect on trade. Coefficients on other tension variables are similar to the baseline model in column (1).

Of the non-democracies and large economies examined before, China, as a rising superpower, is associated with the highest levels of average tension for this period, as

shown in Table 1. This high tension score is corroborated by polling data in 2014 by the Pew Research Center that found a majority of Asians were concerned with the threat of war, with the percentage highest in countries with disputes with China. A staggering 93% of polled Filipinos voiced concern, while the number in Vietnam and Japan was 84% and 85% respectively (Economist, 2014). The Chinese government also has relatively deep involvement in the economy. To determine if trade reacts differently to tensions with China than tensions with other non-democracies we first add to the model in column (2) in Table 3 a China dummy and its interactions with *Tension* and *WTO*. However, judged by the variation inflation factor statistics, this approach suffers from the multicollinearity problem because of the large number of interactions involving *Tension*. As such we split the sample into two subsamples, the first containing pre-WTO dyads, the second containing dyads where both countries are in the WTO. This allows us limit multicollinearity by dropping the WTO-interactions. From the regression results, unreported here to preserve space, we find that there was no difference between China and other non-democracies.

Our results suggest that like other non-democracies, the WTO seems to be an important factor in decoupling trade and politics of China after China joined the WTO in 2001. As discussed before, this may be because the WTO limits unfair trade practices that could be used to target political adversaries such as tariffs on goods from rival countries. WTO ascension was particularly important for China because it increased transparency in China's subsidies and tariff practices (Cross, 2004). This should lead to more trust amongst trading partners and encourage the development of long-term trade links since there is a reduced fear of discriminatory trade practices in times of political conflict. The reduction in information asymmetries caused by China's ascension to the WTO may have helped China solidify its place as the center of manufacturing trade in the region. These established international supply chains are likely less susceptible to politics because they are costly to change. As a result trade is not quickly shifted back between countries because of political spats. Thus WTO admittance ultimately likely further divides the realm of politics and economics for China as proponents of multilateral institutions argue.

4 Capital Flows

4.1 Empirical Model for Capital Flows

While trade represents a large component of the economic interaction between ASEAN Plus Three countries, short and long-term capital flows are also important in the region. We observe these flows in terms of FDI which is an ownership stake of more than 10% in a foreign company and FPI, which includes foreign bonds and equities. Unfortunately, due to a scarcity of data on FPI our emphasis is on FDI.

Bilateral FDI plays a very important role in ASEAN Plus Three members' economies. Many states in the region, particularly Japan, are linked by ownership of firms in other countries. We use the United Nations Conference on Trade and Development's (UNCTAD) database for bilateral FDI data. The bilateral aggregate FDI flows for 2001 to 2012, the entirety of the UNCTAD sample period, are shown in Table 4.

FDI is quite different from trade in that 60% of dyad-year observations report zero bilateral FDI. To account for this important feature of the data, we estimate the determination of FDI in a hurdle model that assumes a two-step decision-making process. First, firms decide whether or not to invest in another country. Then, conditional on positive investment (clearing the "hurdle"), they determine how much to invest. As discussed in Wooldridge (2001), the classic Tobit model is restrictive in assuming that the same stochastic process decides both whether we observe positive FDI and the amount of FDI. To allow for more flexibility in the econometric modeling, we first estimate a Probit model which indicates how tension and other variables affect the probability of any investment. In the second step, for observations with positive FDI values, we regress on the log of bilateral FDI on the independent variables.

We use a set of right-hand-side variables that are similar to the trade models. However, because the large number of observations with zero bilateral FDI limits the variation in the FDI variable, we make two changes to the specification in the trade models. First, we omit the $WTO \times Tension$ interaction to reduce multicollinearity issues. Second, we include fixed effects for sender countries and fixed effects for recipient countries, instead of dyad fixed effects to lessen the total number of dummies in the model. Because of

the second change, we are also able to include several time-invariant variables such as a variable accounting for a history of war.⁹ In addition, we construct *Tension* differently by incorporating tension from the last three years because firms likely use a longer time-horizon for direct investment than for trade and are thus more sensitive to political events further in the past.

Therefore, our baseline model for annual bilateral FDI is given by

$$\begin{aligned} Prob(FDI_{ijt} > 0) = & \Phi(\gamma_0 + \gamma_1 \cdot (Tension_{ijt}) + \gamma_2 \cdot (WTO_{ijt}) + \gamma_3 \cdot (War_{ij}) + \gamma_4 \cdot \ln(GDP_{ijt}) \\ & + \gamma_5 \cdot \ln(Population_{ijt}) + \gamma_6 \cdot (Trade\ Disputes_{ijt}) + \gamma_7 \cdot (RER\ Volatility_{ijt}) \\ & + \gamma_8 \cdot (Time) + \phi_i + \phi_j + \mu_{ijt}), \end{aligned} \quad (2)$$

where Φ is the density function for a normal distribution, and

$$\begin{aligned} \ln(FDI_{ijt}) = & \theta_0 + \theta_1 \cdot (Tension_{ijt}) + \theta_2 \cdot (WTO_{ijt}) + \theta_3 \cdot (War_{ij}) + \theta_4 \cdot \ln(GDP_{ijt}) \\ & + \theta_5 \cdot \ln(Population_{ijt}) + \theta_6 \cdot (Trade\ Disputes_{ijt}) + \theta_7 \cdot (RER\ Volatility_{ijt}) \\ & + \gamma_8 \cdot (Time) + \phi_i + \phi_j + \nu_{ijt}. \end{aligned} \quad (3)$$

Similar to the trade regressions, in further regressions we add an indicator for non-democracies and its interaction with *Tension*. We do the same for large economies too. Because the Probit model in the first-stage is nonlinear, the maximum likelihood estimator with fixed effects is inconsistent. As such we use the Hahn-Newey delete-one jackknife method to reduce the bias (Hahn and Newey, 2004). This method takes advantage that the first order bias of these estimators is linear in $1/T$ where T is the number of time periods in the sample. As a result, decreasing the sample size will increase the bias. The delete-one jackknife procedure then uses the difference between estimate from the full sample of T periods and the estimate from a subsample with $T - 1$ periods to estimate the bias. The average of estimated bias arising from all possible $N-1$ subsets is then used to correct for the underlying bias in estimates generated by the fixed effect Probit model.

⁹Our *War* variable represents the number of year the dyad countries were at war since 1900. We use 1900 as the starting year as this represents the first regional conflict in the 20th century, Japan's participation in the Eight-Nation alliance that put down China's Boxer Rebellion.

4.2 Regression Results for Capital Flows

We estimate three sets of regressions for FDI. Columns (1) and (2) of Table 5 present results from estimating the baseline equations (2) and (3). We then add the non-democracy indicator and its interaction with tension in columns (3) and (4). The indicator for large economy and its interaction with tension are introduced in columns (5) and (6). The odd-numbered columns correspond to the first stage of FDI model, the Probit model for positive FDI, and the even-numbered ones are the second stage regressions for positive FDI flows.

From all six columns, it is obvious that *Tension*, a measure of short-term tension, does not affect whether a country pair reports a positive FDI flow, nor the magnitude of positive flows. However, the number of year two countries were at war with each other in the last century (*War*) consistently affect the flow of FDI, as indicated by the even-numbered columns. The coefficient on *War* in column (2), -.09, implies an extra year of war history is associated with a 9% decrease in bilateral FDI. From columns (3) and (5), we can see that non-democracy has a negative and large marginal effect on the chance of positive FDI, while a large economy is more likely to report positive bilateral FDI with other countries.

Joint-WTO membership is positive and highly significant in the second-stage regressions while geographic distance is negative and significant. Real exchange rate volatility is positive and highly significant in the Probit models. The positive sign may be because firms decide to invest abroad in part to reduce exchange rate risk. Total trade disputes has a negative and significant effect in the second-stage model for FDI flows. This may be because the formal complaints in the WTO could trigger discriminatory response tariffs that make trade more expensive.

There are several potential explanations for short-term tensions insignificant relationship with FDI flows. First, FDI is inherently a long-term position. Thus investing firms likely have a longer time-horizon than firms dealing solely in trade. As a result ephemeral political spates, or conflict that firms believe to be ephemeral, may be disregarded in FDI decisions as inconsequential. Long-term tensions on the other hand may

signal a more credible risk to government expropriation or discrimination in the future. FDI is also unique in that consumers may not be aware of the foreign ownership, particularly if the new subsidiary does not change the name and brand of the acquired firm. This limits the negative impact of boycotts and similar consumer actions against a hostile countrys firms. Long-term tensions may be more important than short-term tensions in this consumer aspect of FDI since countries that are historically hostile to each other are more likely to hold boycotts against each others products and firms. Thus investing firms may be chiefly concerned with this underlying propensity to boycott or shift buying habits as opposed to short-term fluctuations. Overall, the results suggest that political tensions do affect FDI. This effect is reflected in the negative impact of non-democratic governments and history of war, while short-term political tensions do not affect FDI.

In an unreported regression, we add the interaction between China and tension to regressions in Table 5 column (4) to see if tension with China has additional effect on FDI.¹⁰ The coefficients are generally similar to those in the non-democracy model in column (4), although the significance levels for both models are reduced. The tension variable and its interactions with the non-democracy indicator and the China indicator are all insignificant. Thus there is no evidence that China is different from other non-democracies in terms of FDI.

5 Robustness Checks

In this section, we summarize results from robustness checks regarding exclusion of China from the sample, the inclusion of positive political events, alternative definitions of tension and non-democracies, a random effects estimator, and Taiwan, Brunei and Laos.

As indicated by Tables 1 and 2, on average China has a much higher level of political tension in bilateral relationships with other countries. It is natural to check whether our results are driven by China. Hence, we exclude all dyads with China from both trade and FDI regressions and report the results in Table 6 and 7, respectively. Comparing Table 6 to Table 3, we can see that the effects of tension on trade remain negative in non-

¹⁰Because China has FDI flows with all other partners in our dataset for all years, we cannot estimate the effect of China on the chance of reporting positive FDI in a Probit model similar to column (3).

democracies and small economies in the pre-WTO era. The difference is that for large economies, the effect of tension changes from negative to insignificant in the pre-WTO era, and from insignificant to positive in the WTO era. Overall, when we exclude China from the sample, the effects of tension on trade are similar except for trade associated with large economies. From Table 5 and Table 7, we can see the effect of short-term tension on FDI remain insignificant. The only notable difference is that the coefficient on non-democracy changes from -0.87 to -0.69, and loses statistical significance. To summarize, while the exclusion of China weakens our results somewhat, the key findings remain.

It is plausible that positive events in the bilateral relationship between states improve trade. Because the VRA data also includes values of positive events between countries, we construct an analogous positivity measure which is equal to the number of positive event scores in the past year plus 1. Table 8 presents the results of trade regression augmented with the positivity variable and associated interaction terms. To help interpret the results, we summarize the overall effects of tension and positivity for various types of countries in Table 9. Comparing these results to Table 3, we can see that the effects of tension are very similar. There is also some evidence that positivity is associated with more trade, usually in the WTO-era. The results suggest that in the WTO-era, while WTO limits the impact of tension, improvements in bilateral political relationships boost trade. We also combine negativity and positivity into a single measure with various weightings in unreported regressions. In these sensitivities the political sentiment was irrelevant.

We do not report FDI regressions with positivity variables included as this leads to severe multicollinearity, judged by the Variance Inflation Factor. Multicollinearity is an issue in the FDI regressions but not in the trade regressions because the sample size is much smaller in the linear regressions for FDI. First, FDI data are available at annual frequency, compared to the quarterly frequency in the trade data. Second, in the linear regressions for FDI amount, we further reduce the sample size by using only observations with positive FDI. When we do run FDI regressions with positivity variables we find they do not have positive effects in the probit regression for FDI (the first stage of the hurdle model for FDI), and in the linear regressions for FDI amount (the second stage of the

hurdle model). However, again these results are likely unreliable.

In this paper we present findings where political tension from the past year, and past three years in the case of FDI, is accounted for. Similar work has used tension from the previous quarter (Davis and Meunier, 2011). We believe that political tensions may influence trade for more than one following quarter but this is very subjective. As such, we run the same trade regressions with a political tension from the previous quarter, the previous two quarters, and the previous three quarters. These three variations give all the same signs and similar coefficients though the significance level is generally reduced slightly. Similarly, in the FDI regressions, the coefficients remain generally the same when we vary the number of lagged tension periods in constructing the tension variable.

We also exclusively use fixed effects for our findings as tests indicated random effects would be a biased estimator. However, in unreported regressions we do use random effects to examine effects of time invariant gravity model variables, such as shared language, geographic contiguity, and geographic distance that are suppressed in fixed effects models. In these regressions distance has a negative coefficient and common language and contiguity have a positive coefficient, all of which are statistically significant. When we control for tension caused by a history of war in the trade regressions by including the variable *War* in random effects models, it is insignificant in all models.

There does not exist a unique way of classifying countries as democracies and non-democracies. When we restrict the non-democracy classification to only the least democratic countries such as China, Vietnam, and Myanmar, the coefficients in the FDI or trade models are not affected.

The dataset used for the presented results does not include Taiwan as it is not a member of ASEAN Plus Three. As such the channels through which politics influence trade are likely not directly comparable. Regardless, when Taiwan is included in the dataset the results also hold, with slight changes in the significance level. As discussed earlier Brunei and Laos were also omitted from this dataset because of the limited news coverage. We should caution that their inclusion does change the results substantially. The signs on *Tension* and $WTO \times Tension$ switch in some cases and significance in general is

lost. We believe these results are less credible because of the much lower tension associated with each of these countries. For example, Brunei had only 23 instances of bilateral tension out of more than 1500 quarterly bilateral dyads. With such little variation in measured tension, it is possible that regressions fail to pick up the relationship between tension and trade and capital flows.

6 Discussion and Conclusion

East and Southeast Asia contains some of the world's largest and most rapidly growing economies. However, political tensions have remained significant in the region. Beside high-profile tensions between China and Japan, and between Korea and Japan that are driven by past wars and occupation, tensions and sharp divisions certainly exist between other countries in East and Southeast Asia, such as Thailand-Cambodian anger over border disputes. To the best of our knowledge, somewhat surprisingly, there exists no systematic empirical study of the interaction between political tension and international economic activities specific to this region. Our paper aims to fill this void by studying effects of tension on trade and capital flows between ASEAN members and three large economies, China, Japan, and Korea that form the regional economic institution ASEAN Plus Three.

Using a modified gravity model this paper finds that the impact of short-term political tension does impact bilateral trade if either trading nation is not in the GATT or the WTO. Trade with non-democracies, like China, is responsible for the negative effect of tension on trade, but this effect is effectively eliminated by WTO-ascension. This implies that the rising political tensions and level of bellicose language in Asia may not necessarily systematically impede trade in the region. In particular, while China may follow a peaceful rise in its role as a superpower, the fear of a more aggressive China that threatens the status quo in East and Southeast Asia does not appear to be influencing trade with China after 2001. Meanwhile, the size of the trading economies does not appear to influence how conflict correlates with trade either. Specifically, tension with the three largest economies in the region (China, Japan, and Korea), also the three associated with the most political tension, causes no further detriment to trade compared to the effect of tension with smaller

economies. When we include a measure for positivity in bilateral relationship in the trade regressions, we find evidence that positivity is associated with more trade if two countries are both members of GATT or the WTO.

Politics affect long-term capital flows differently. When we estimate FDI as a two-stage decision process, i.e. a binary decision of investing or not, and a subsequent decision on the amount of investment, we find that non-democracies are less likely to report positive FDI and a history of war reduces the amount of FDI. Joint WTO membership has a positive effect on FDI flows, similar to its effect on trade flows. Meanwhile, short-term political tension has no effect on FDI in both stages of decision.

Thus, in some limited cases, trade was somewhat beholden to short-term tension in ASEAN Plus Three in recent years, while capital flows have remained unaffected. Over time tensions appear to have become less important to trade in the region as WTO-membership grew, lessening fears of future trade wars over diplomatic spates. This matches a more liberal view of international relations. Our results suggest that as the Asian economies continue to grow, the deepening economic links will remain mostly unaffected by short-term disputes, ultimately benefiting all countries. Multilateral trade agreements and institutions, such as the WTO, can, and have, played an important role in promoting trade and capital flows by reining in the impact of politics. However, we caution that our findings do not extend to extreme political conflicts or wars that we do not observe in our sample.

Our results generally lie between Pollins (1989) and Davis and Meunier (2011) who reached a more realist and liberal conclusion respectively. This difference relative to the former may be attributed to our updated dataset which accounts for the increasing international ties and an expanding role of GATT/WTO. Following a liberalism paradigm, these trends may have moderated the more realist trade behavior in Pollins (1989). Supporting a liberalism framework, recent empirical work finds that economic openness reduces nationalism. Lessened nationalism may then translate to a lower propensity for boycotts and discriminatory trade and capital flow policies through which politics generally influences economic ties Lan and Li (2015).

Meanwhile, compared to Davis and Meunier (2011), countries in our sample are more heterogeneous in regime types and the level of economic development. Specifically, Davis and Meunier (2011) focus the trading partners of the United States and Japan. These are large, rich economies with relatively little government intervention in markets. As such, the historical animosity and regime type that feature prominently in our sample play a minor role in theirs. This may explain why the empirical findings in Davis and Meunier (2011) lead a more liberal conclusion. In fact, when controlling for the level of government intervention and general foreign policy alignment. Davis et al. (2014) also finds that political tension does affect economic relationships.

Our finding that the WTO mitigates the effect of tension on trade may be particularly important in reconciling Pollins (1989) and Davis and Meunier (2011). Pollins (1989) used an earlier time period (1960-1975) as opposed to Davis and Meunier (2011) (1990-2004). As such, the earlier data contains years where GATT membership was much lower. This reduced GATT role would likely lead to a more realist conclusion than Davis and Meunier (2011). Ultimately, our findings are an amalgamation of the previous work of Pollins (1989), Davis and Meunier (2011), and Davis et al. (2014) which likely reflects both increasing economic ties in our dataset and our inclusion of additional factors such as regime type.

This paper extends previous work on tension and trade in several ways. First, where previous papers have observed data up until 2004, by using data up to 2013 we provide an important update on effects of tension in an era of increasing globalization and high-profile political tensions. Due to increased globalization any effect of tension on trade may be more noticeable, or globalization may be curbing the impact of politics on trade. Our sample of ASEAN Plus Three is both economically significant to the world economy and broader compared to previous work. Second, we highlight the potential role of multinational institutions, such as the WTO, in promoting trade and capital flows, and limiting the effects of politics on these economic relations. Lastly, our paper extensively examines politics' correlation with FDI. Although our results may be specific to ASEAN Plus Three, because the prominence of political conflicts and economic globalization in

our world, there exist ample opportunities to study the interaction of these two forces in the world economy in general.

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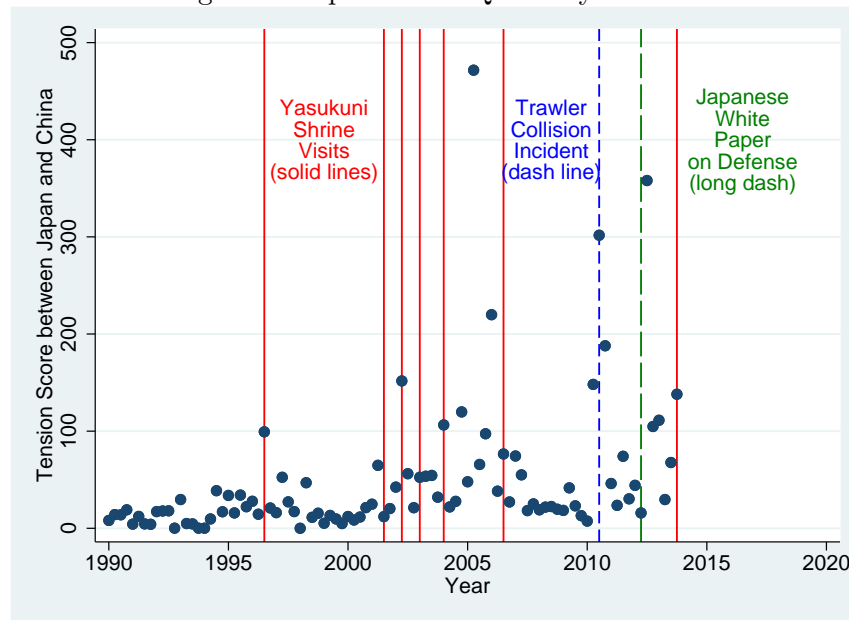
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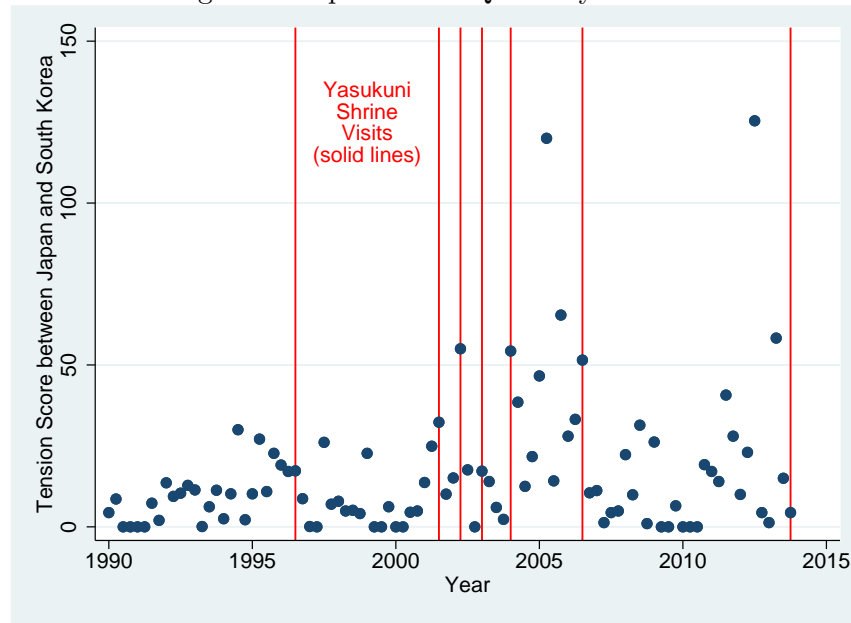
Figure 1: Japan-China Quarterly Tension



Notes: [1] “Yasukuni Shrines” represent visits to the shrine by the Japanese Prime Minister at the time. [2] “Trawler Collision Incident” refers the collision between a Chinese fishing boat and a Japanese Coast Guard vessel in disputed waters. The Japanese government detained the Chinese fishermen causing a diplomatic spat. [3] “Japanese White Paper on Defense” refers to the 2013 publication which calls for an increasingly assertive Japanese Self-Defense Forces in response to political tensions primarily with China. Chinese officials responded angrily, claiming the paper was nationalist and excessively hawkish.

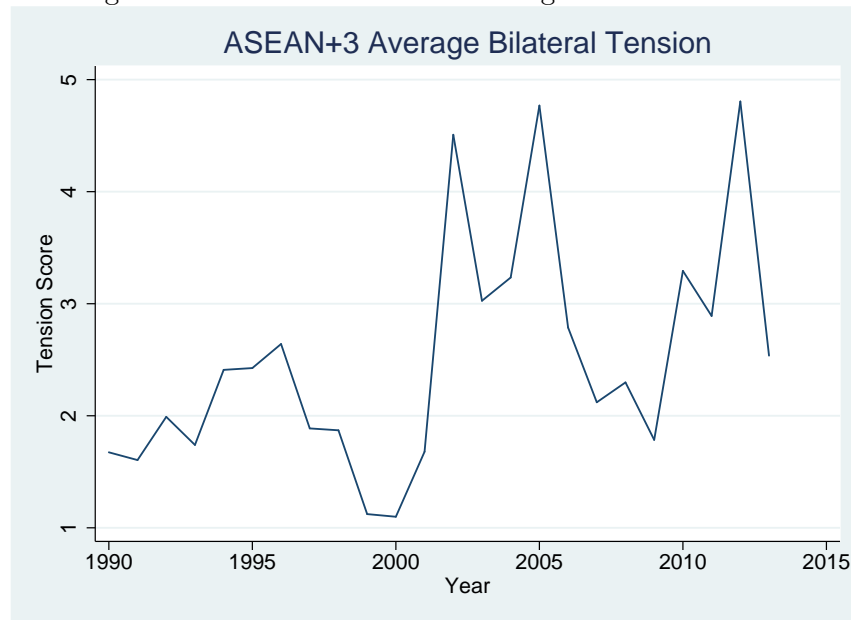
Source: VRA and authors’ tabulation.

Figure 2: Japan-Korea Quarterly Tension



Notes: [1] “Yasukuni Shrines” represent visits to the shrine by the Japanese Prime Minister at the time. [2] The South Korean President Park criticized Japan’s post-war actions, arguing that the country was not appropriately remorseful for its actions during World War II.
 Source: VRA and authors’ tabulation.

Figure 3: ASEAN Plus Three Average Bilateral Tension



Source: VRA and authors’ tabulation.

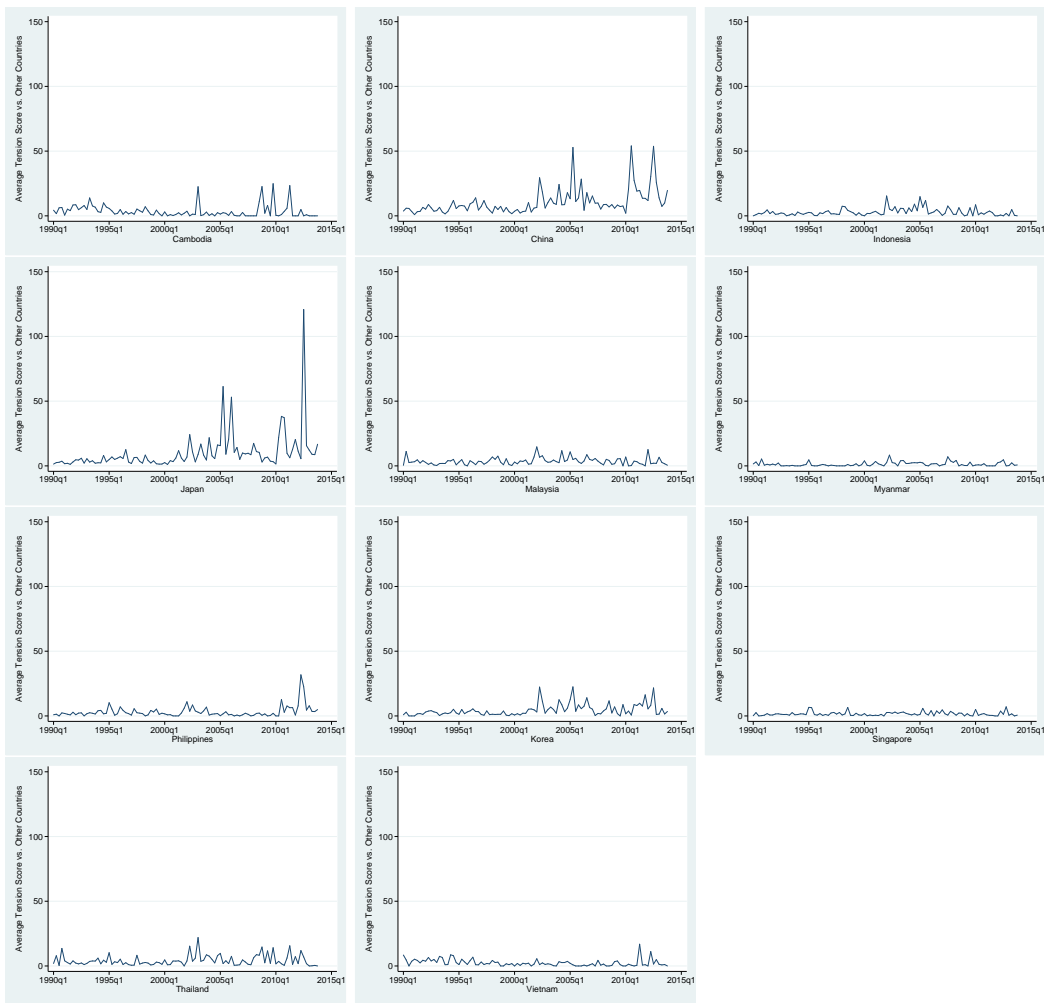


Figure 4: Average Tension Score vs. Other Countries in the Sample
 Source: VRA and authors' tabulation.

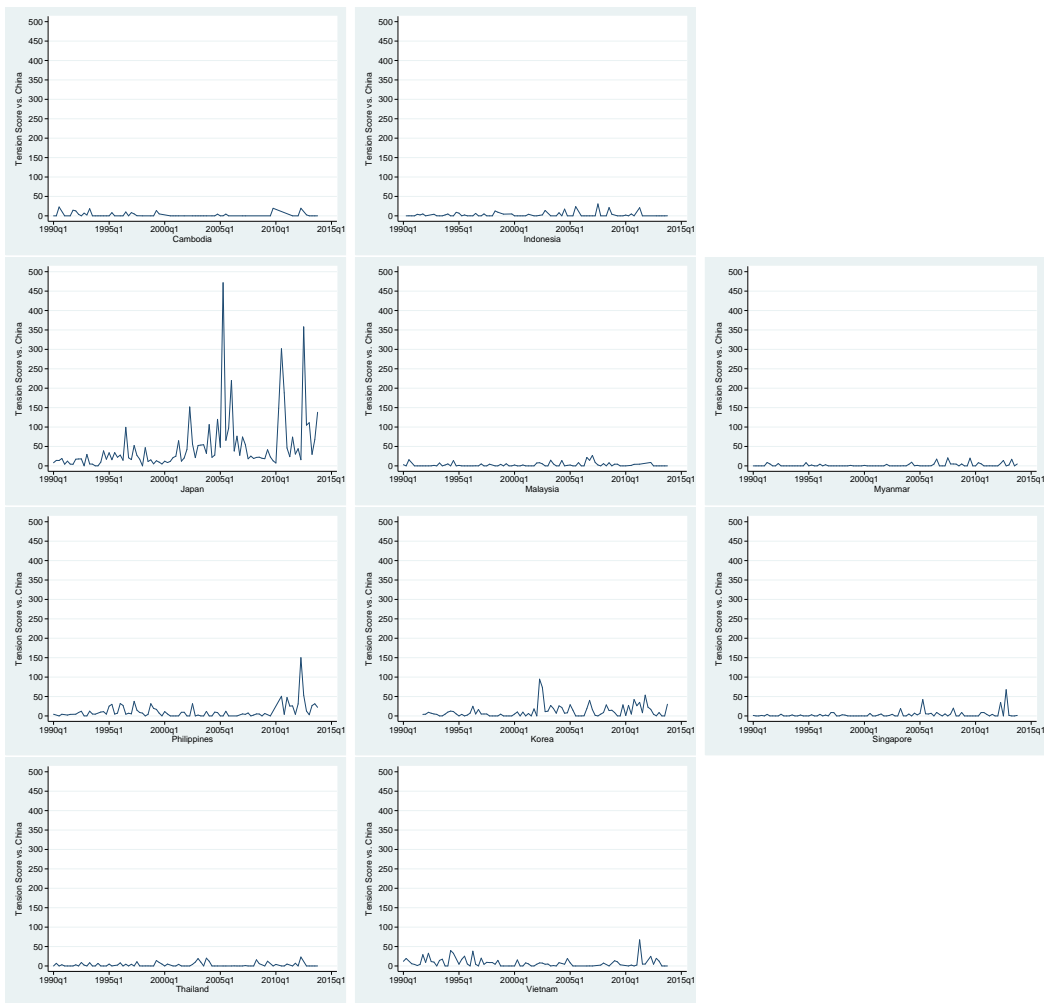


Figure 5: Tension Score vs. China

Source: VRA and authors' tabulation.

Table 1: Bilateral Average Quarterly Tension

	Cambodia	China	Indonesia	Japan	Malaysia	Myanmar	Philippines	Korea	Singapore	Thailand
China	2.0									
Indonesia	0.8	2.7								
Japan	0.9	49.2	2.6							
Malaysia	0.3	2.7	6.9	1.7						
Myanmar	0.2	2.1	.4	1.8	1.5					
Philippines	0.3	10.7	2.2	1.7	3.4	0.5				
Korea	0.2	11.2	0.5	16.2	0.4	0.2	0.4			
Singapore	0.2	3.6	3.5	0.8	4.9	0.3	1.1	0.2		
Thailand	9.4	2.8	2.3	3.1	3.2	8.5	0.5	0.7	2.1	
Vietnam	4.0	7.5	0.6	0.5	0.9	.004	1.0	0.5	0.3	0.8

Source: VRA and authors' tabulation.

Table 2: Summary Statistics

Country	2013 GDP (in US Billions)	Avg. Growth Rate 1990-2013	Trade/GDP Ratio 2013	Tension Mean
Cambodia	15	7.5	110	1.7
Mainland China	9,240	10.2	50	7.9
Indonesia	868	4.8	49	1.9
Japan	4,900	0.9	31 (2012 data)	6.5
Malaysia	312	5.7	154	2.2
Myanmar	52 (2011 data)	7.6*	-	1.3
Philippines	272	4.1	60	1.9
Rep. of Korea	1,300	5.1	103	2.7
Singapore	298	1.1	263	1.4
Thailand	387	4.2	144	2.7
Vietnam	171	7.0	157	1.5

Note: * indicates that Myanmar's average growth rate is based on data from 1990-2004.

Source: VRA, World Bank, and authors' tabulation.

Table 3: Dependent Variable: $\ln(Trade_{ijt})$

	Model 1	Model 2	Model 3
	(1)	(2)	(3)
Tension	-0.05 (0.02)**		-0.04 (0.02)**
WTO \times Tension	0.05 (0.02)**	0.01 (0.01)	0.03 (0.02)**
Non-Democracy \times Tension		-0.05 (0.02)***	
Non-Democracy \times Tension \times WTO		0.03 (0.02)	
Large Economy \times Tension			0.01 (0.01)
WTO	0.34 (0.07)***	0.43 (0.1)***	0.28 (0.09)***
Non-Democracy \times WTO		-0.08 (0.1)	
Trade Disputes	-0.02 (0.03)	-0.02 (0.03)	-0.03 (0.03)
$\ln(\text{GDP})$	1.76 (0.3)***	1.81 (0.31)***	1.70 (0.31)***
$\ln(\text{Population})$	-0.84 (0.82)	-0.88 (0.82)	-0.60 (0.88)
RER Volatility	0.0000391 (0.0000331)	0.0000396 (0.0000327)	0.0000435 (0.0000323)
Time	0.03 (0.02)**	0.03 (0.01)*	0.03 (0.02)*
Dyad Fixed Effects	Yes	Yes	Yes
Pre-WTO-Era Tension	-0.05 (0.02)**		
WTO-Era Tension	0.001 (0.01)		
Pre-WTO Non-Democracy Tension		-0.05 (0.02)***	
WTO-Era Non-Democracy Tension		-0.002 (0.01)	
WTO-Era Democracy Tension		0.01 (0.01)	
Pre-WTO Large Economy Tension			-0.03 (0.02)*
WTO-Era Large Economy Tension			0.003 (0.01)
Pre-WTO-Era Small Country Tension			-0.04 (0.02)**
WTO-Era Small Country Tension			-0.009 (0.01)
Obs.	8723	8723	8723
Overall R^2	0.74	0.75	0.71

Notes: [1] The symbols “*”, “**”, and “***” indicate statistical significance at the 10%, 5% and 1% levels, respectively. [2] The lower panel of coefficients are the effects of tension in different types of countries in two eras. They are linear combinations of the appropriate coefficients reported in the upper panel.

Source: authors' calculation.

Table 4: Bilateral Aggregate FDI and Total FDI Stock (in millions of dollars)

	Cambodia	China	Indonesia	Japan	Malaysia	Myanmar	Philippines	Korea	Singapore	Thailand	Total FDI
Cambodia											5,103
China	1,334										205,029
Indonesia	4	3,812									74,442
Japan	130	60,019	23,683								191,765
Malaysia	696	3,620	2,512	12,614							60,344
Myanmar	0	14,296	2	77	436						17,856
Philippines	1	1,720	23	3,321	75	0					16,007
Korea	912	44,370	3,069	21,065	3,234	2,833	108				86,441
Singapore	250	54,616	37,113	26,074	16,262	9,380	2,237	6,700			193,150
Thailand	404	3,160	646	32,420	2,963	8,299	317	1,414	17,331		80,900
Vietnam	804	573	49	4,111	387	367	12	1,415	2,396	213	34,955

Source: UNCTAD, VRA, and authors' tabulation. Data from

Table 5: Dependent Variables: FDI Indicator and $\ln(FDI_{ijt})$

	Baseline 1	Baseline 2	Non-Dem 1	Non-Dem 2	Large 1	Large 2
	(1)	(2)	(3)	(4)	(5)	(6)
Tension	-0.02 (0.06)	0.1 (0.12)	-0.11 (0.12)	0.03 (0.1)	0.03 (0.07)	0.17 (0.15)
Non-democracy × Tension			0.14 (0.13)	0.09 (0.18)		
Non-democracy			-0.87 (0.4)**	-0.06 (0.65)		
Large Economy × Tension					-0.14 (0.11)	-0.14 (0.17)
Large Economy					1.41 (0.62)**	0.11 (0.94)
War	0.01 (0.02)	-0.09 (0.03)***	0.01 (0.02)	-0.08 (0.03)**	0.04 (0.03)	-0.08 (0.02)***
WTO	0.3 (0.2)	0.21 (0.4)***	0.21 (0.2)	1.10 (0.39)***	0.17 (0.2)	1.09 (0.38)***
Trade Disputes	0.89 (0.99)	-0.75 (0.28)***	0.91 (1.01)	-0.81 (0.31)***	0.99 (0.95)	-0.73 (0.29)**
ln(GDP)	-3.85 (0.9)***	-0.83 (1.76)	-3.85 (0.92)***	-0.91 (1.86)	-3.80 (0.91)***	-0.68 (1.77)
ln(Population)	-5.89 (2.92)**	2.99 (3.51)	-6.04 (2.94)**	3.02 (3.60)	-5.13 (3.04)*	2.98 (3.74)
Contiguous	0.34 (0.24)	-0.18 (0.39)	0.36 (0.24)	-0.20 (0.37)	-0.02 (0.28)	-0.30 (0.44)
ln(Distance)	-0.06 (0.16)	-0.88 (0.34)**	-0.005 (0.17)	-0.85 (0.35)**	-0.31 (0.21)*	-0.87 (0.48)*
Common official language	-0.41 (0.28)	0.07 (0.68)	-0.48 (0.28)*	0.11 (0.69)	-0.48 (0.28)*	0.1 (0.67)
RER Volatility	0.32 (0.0003)***	-0.0001 (0.0003)	0.35 (0.0003)***	-0.0001 (0.0002)	0.33 (0.0003)***	-0.0001 (0.0003)
Time	0.46 (0.07)***	0.16 (0.05)***	0.46 (0.07)***	0.17 (0.06)***	0.45 (0.07)***	0.15 (0.05)***
Recipient Country Fixed Effects	Yes	Yes	Yes	Yes	Yes	Yes
Sender Country Fixed Effects	Yes	Yes	Yes	Yes	Yes	Yes
Non-Democracy Tension			0.02 (0.7)	0.12 (0.15)		
Large Economy Tension					0.11 (0.09)	0.03 (0.12)
Obs.	995	478	995	478	995	478
Overall R^2		0.67		0.67		0.67

Notes: [1] The symbols “*”, “**”, and “***” indicate statistical significance at the 10%, 5% and 1% levels, respectively. [2] The lower panel of coefficients are the effects of tension in different types of countries in two eras. They are linear combinations of the appropriate coefficients reported in the upper panel. [3] Odd-numbered columns report Probit estimation of probability of observing positive bilateral FDI flows. The coefficients are corrected for bias using the jackknife procedure of (Hahn and Newey, 2004). Even-numbered columns are linear regressions of positive FDI flows.

Source: authors' calculation.

Table 6: Dependent Variable: $\ln(Trade_{ijt})$, China Excluded

	Model 1	Model 2	Model 3
	(1)	(2)	(3)
Tension	-0.04 (0.02)*		-0.05 (0.02)**
WTO × Tension	0.05 (0.03)*	0.01 (0.01)	0.05 (0.03)*
Non-Democracy × Tension		-0.05 (0.02)*	
Non-Democracy × WTO × Tension		0.03 (0.03)	
Large Economy × Tension			0.03 (0.01)**
WTO	0.37 (0.07)***	0.47 (0.11)***	0.33 (0.09)***
Non-Democracy × WTO		-0.09 (0.1)	
WTO Disputes	0.06 (0.04)*	0.07 (0.04)*	0.06 (0.04)
log(GDP)	1.33 (0.37)***	1.39 (0.39)***	1.35 (0.36)***
log(Population)	-0.52 (0.92)	-0.55 (0.92)	-0.37 (0.94)
R.Ex Volatility	0.0000589 (0.0000333)*	0.0000596 (0.0000328)*	0.0000606 (0.0000337)*
Time Trend	0.04 (0.02)***	0.04 (0.02)**	0.04 (0.02)**
Dyad Fixed Effects	Yes	Yes	Yes
Pre-WTO-Era Tension	-0.04 (0.02)*		
WTO-Era Tension	0.004 (0.01)		
Pre-WTO Non-Democracy Tension		-0.05 (0.02)*	
WTO-Era Non-Democracy Tension		0.00005 (0.01)	
Pre-WTO Democracy Tension		NA	
WTO-Era Democracy Tension		-0.03 (0.03)	
Pre-WTO Large Economy Tension			-0.02 (0.03)
WTO-Era Large Economy Tension			0.02 (0.01)**
Pre-WTO-Era Small Economy Tension			-0.05 (0.02)**
WTO-Era Small Economy Tension			-0.01 (0.01)
Obs.	7038	7038	7038
Overall R^2	0.66	0.67	0.62

Notes: [1] The symbols “*”, “**”, and “***” indicate statistical significance at the 10%, 5% and 1% levels, respectively. [2] The lower panel of coefficients are the effects of tension in different types of countries in two eras. They are linear combinations of the appropriate coefficients reported in the upper panel.

Source: authors’ calculation.

Table 7: Dependent Variables: FDI Indicator and $\ln(FDI_{ijt})$, China Excluded

	Baseline 1	Baseline 2	Non-Dem 1	Non-Dem 2	Large 1	Large 2
	(1)	(2)	(3)	(4)	(5)	(6)
Tension	-0.01 (0.06)	0.07 (0.13)	-0.08 (0.12)	-0.02 (0.06)	0.01 (0.07)	0.14 (0.15)
Non-Democracy \times Tension			0.10 (0.13)	0.1 (0.18)		
Non-Democracy			-0.69 (0.42)	0.05 (0.58)		
Large Economy \times Tension					-0.12 (0.13)	-0.18 (0.21)
Large Economy					9.66 (2.88)***	3.92 (7.82)
War	-0.02 (0.03)	-0.09 (0.07)	-0.01 (0.03)	-0.07 (0.07)	0.26 (0.09)***	0.03 (0.25)
ln(population)	-2.20 (3.33)	0.56 (3.89)	-2.77 (3.33)	0.75 (3.79)	-2.71 (3.44)	0.54 (3.51)
joint WTO membership	-0.15 (0.23)	1.39 (0.53)***	-0.02 (0.23)	1.34 (0.48)***	-0.14 (0.24)	1.28 (0.43)***
contiguous	0.11 (0.34)	-0.18 (0.48)	0.23 (0.35)	-0.28 (0.49)	-0.44 (0.38)	-0.54 (0.6)
log(distance)	-0.49 (0.25)**	-0.93 (0.74)	-0.31 (0.27)	-0.90 (0.71)	-0.62 (0.26)**	-0.98 (0.72)
log(GDP)	-5.11 (1.14)***	-0.005 (1.01)	-5.77 (1.16)***	-0.19 (0.89)	-5.85 (1.17)***	0.06 (1.07)
common official language	-1.02 (0.45)**	-0.27 (1.54)	-0.91 (0.46)**	-0.16 (1.41)	-0.90 (0.46)	-0.13 (1.61)
real exchange rate volatility	0.28 (0.0003)***	-0.0003 (0.0002)	0.30 (0.0003)***	-0.0003 (0.0002)	0.28 (0.0003)***	-0.0003 (0.0002)
total trade disputes	0.17 (1.85)	-0.10 (0.67)	0.04 (1.89)	0.05 (0.55)	0.73 (1.77)	0.06 (0.59)
time	0.50 (0.08)***	0.16 (0.03)***	0.50 (0.08)***	0.17 (0.02)***	0.51 (0.08)***	0.16 (0.02)***
Recipient Country Fixed Effects	Yes	Yes	Yes	Yes	Yes	Yes
Sender Country Fixed Effects	Yes	Yes	Yes	Yes	Yes	Yes
Democracy Tension			-0.08 (0.12)	-0.02 (0.06)		
Non-Democracy Tension			0.02 (0.07)	0.08 (0.16)		
Large-Economy Tension					-0.10 (0.11)	0.14 (0.15)
Small-Economy Tension					0.02 (0.07)	-0.04 (0.13)
Obs.	805	372	805	372	805	372
R^2		0.63		0.64		0.64

Notes: [1] The symbols “*”, “**”, and “***” indicate statistical significance at the 10%, 5% and 1% levels, respectively. [2] The lower panel of coefficients are the effects of tension in different types of countries in two eras. They are linear combinations of the appropriate coefficients reported in the upper panel. [3] Odd-numbered columns report Probit estimation of probability of observing positive bilateral FDI flows. The coefficients are corrected for bias using the jackknife procedure of (Hahn and Newey, 2004). Even-numbered columns are linear regressions of positive FDI flows.

Source: authors’ calculation.

Table 8: Dependent Variable: $\ln(\text{Trade}_{ijt})$, Positivity Included

	Model 4	Model 5	Model 6
	(1)	(2)	(3)
Tension	-0.04 (0.02)**		-0.05 (0.02)**
Positivity	0.02 (0.02)		0.03 (0.02)*
WTO \times Tension	0.04 (0.02)*	0.02 (0.01)	0.03 (0.02)*
WTO \times Positivity	0.02 (0.03)	-0.01 (0.03)	-0.0009 (0.02)
Non-Democracy \times Tension		-0.04 (0.02)**	
Non-Democracy \times Positivity		0.02 (0.02)	
Non-Democracy \times Tension \times WTO		0.009 (0.02)	
Non-Democracy \times Positivity \times WTO		0.04 (0.04)	
Large Economy \times Tension			0.01 (0.01)
Large Economy \times Positivity			0.002 (0.02)
WTO	0.32 (0.08)***	0.56 (0.17)***	0.3 (0.09)***
Non-Democracy \times WTO		-0.24 (0.17)	
WTO Disputes	-0.03 (0.03)	-0.02 (0.03)	-0.03 (0.03)
log(GDP)	1.70 (0.32)***	1.76 (0.33)***	1.65 (0.33)***
log(Population)	-0.68 (0.86)	-0.59 (0.84)	-0.49 (0.89)
R.Ex Volatility	0.0000345 (0.0000334)	0.000034 (0.0000331)	0.0000386 (0.0000326)
Time Trend	0.03 (0.02)**	0.03 (0.01)*	0.03 (0.02)**
Dyad Fixed Effects	Yes	Yes	Yes
Obs.	8723	8723	8723
Overall R^2	0.74	0.73	0.70

Notes: [1] The symbols “*”, “**”, and “***” indicate statistical significance at the 10%, 5% and 1% levels, respectively.

Source: authors' calculation.

Table 9: Effect of Tension and Positivity on $\ln(Trade_{ijt})$ by Country Types and Eras

	Model 4	Model 5	Model 6
	(1)	(2)	(3)
Pre-WTO-Era Tension	-0.04 (0.02)**		
WTO-Era Tension	-0.01 (0.01)		
Pre-WTO-Era Positivity	0.02 (0.02)		
WTO-Era Positivity	0.03 (0.01)**		
Pre-WTO-Era Non-Democracy Tension		-0.04 (0.02)**	
WTO-Era Non-Democracy Tension		-0.02 (0.01)*	
Pre-WTO-Era Democracy Tension		NA	
WTO-Era Democracy Tension		0.02 (0.01)	
Pre-WTO-Era Non-Democracy Positivity		0.02 (0.02)	
WTO-Era Non-Democracy Positivity		0.05 (0.01)***	
Pre-WTO-Era Democracy Positivity		NA	
WTO-Era Democracy Positivity		0.01 (0.03)	
Pre-WTO-Era Large-Economy Tension			-0.04 (0.02)**
WTO-Era Large-Economy Tension			-0.002 (0.01)
Pre-WTO-Era Small-Economy Tension			-0.05 (0.02)**
WTO-Era Small-Economy Tension			-0.02 (0.01)
Pre-WTO-Era Large-Economy Positivity			0.03 (0.02)*
WTO-Era Large-Economy Positivity			0.03 (0.02)
Pre-WTO-Era Small-Economy Positivity			0.03 (0.02)
WTO-Era Small-Economy Positivity			0.03 (0.01)*

Notes: The coefficients are the effects of tension and positivity in different types of countries in two eras. They are linear combinations of the appropriate coefficients reported in Table 8.
Source: authors' calculation.