of Heidelberg Departme	nt of Economics
Discussion Paper Series	No. 576
rol and the Effects of elations on Bilateral Trade ina Davis, Andreas Fuchs, and Kristina Johnson	
	November 2014
	Departme Discussion Paper Series rol and the Effects of elations on Bilateral Trade ina Davis, Andreas Fuchs,

# State Control and the Effects of Foreign Relations on Bilateral Trade<sup>\*</sup>

Christina Davis, Andreas Fuchs, and Kristina Johnson

October 28, 2014

<sup>\*</sup>Christina Davis is Professor of Politics and International Affairs, Department of Politics and Woodrow Wilson School, Princeton University (cldavis@princeton.edu). Andreas Fuchs is Postdoctoral Research Associate, Alfred-Weber-Institute for Economics, Heidelberg University, Germany (mail@andreas-fuchs.net). Kristina Johnson is Government Services Specialist, Collins Center, University of Massachusetts Boston (kristina.johnson@umb.edu). We thank seminar participants at the Research Institute of International Trade and Industry in Tokyo (July 2014), the Annual Convention of the International Studies Association in Toronto (April 2014), the Department and Program of East Asian Studies at Princeton University (April 2014), the 19th Diplomatic Forum at the Center for International Studies at Seoul National University (July 2013), University of Tokyo (July 2013), Waseda University in Tokyo (July 2013), the International Political Economy Colloquium at University of Pittsburgh (January 2013), the Conference on the Politics of the Changing World Economy in Goa, India (January 2013) and the Annual Conference of the International Political Economy Society at University of Virginia in Charlottesville (November 2012) for many helpful comments on earlier drafts of this paper. We are grateful to Torben Behmer, Raymond Hicks, Maria T. Krupenkin, and Christopher Moyer for valuable research assistance.

#### Abstract

Do states use trade to reward and punish partners? WTO rules and the pressures of globalization restrict states' capacity to manipulate trade policies, but we argue that governments can link political goals with economic outcomes using less direct avenues of influence over firm behavior. Where governments intervene in markets, politicization of trade is likely to occur. In this paper, we examine one important form of government control: state ownership of firms. Taking China and India as examples, we use bilateral trade data by firm ownership type, as well as measures of bilateral political relations based on diplomatic events and UN voting to estimate the effect of political relations on import and export flows. Our results support the hypothesis that imports controlled by state-owned enterprises (SOEs) exhibit stronger responsiveness to political relations than imports controlled by private enterprises. A more nuanced picture emerges for exports; while India's exports through SOEs are more responsive to political tensions than its flows through private entities, the opposite is true for China. This research holds broader implications for how we should think about the relationship between political and economic relations going forward, especially as a number of countries with partially state-controlled economies gain strength in the global economy.

# **1** Introduction

Powerful states have a long tradition of economic statecraft. During the Cold War, trade patterns closely reflected political relations (e.g. Pollins, 1989; Gowa, 1994; Mansfield and Bronson, 1997; Keshk, Reuveny and Pollins, 2004; Berger et al., 2013). Governments today, however, have less leeway for using trade as carrot and stick in foreign policy. Global trade rules restrict the ability of governments to discriminate among trading partners, and transnational production further complicates efforts to link trade to foreign policy (Gowa and Mansfield, 2004; Brooks, 2007; Davis and Meunier, 2011; Carnegie, 2014). This paper revisits the question of whether trade follows the flag and highlights state ownership of firms as a key means for politicization of trade.

Widely reported incidents suggest that governments continue to manipulate trade in response to political disputes. In 2014, for example, the United States and the EU announced a range of economic penalties to punish Russian intervention in Ukraine, and Russia retaliated with its own boycotts of agricultural products from Europe. Politically-motivated trade disruptions, however, are not limited to formal declarations of economic sanctions about use of force. The methods of manipulation are often more subtle than the public economic sanctions or trade agreements that are a large focus in the literature on economic statecraft. In many cases, officials approach firms directly to request that they restrict trade or change suppliers rather than adopting formal policy changes. Consequently, trade manipulation depends critically on the government's ability to influence decision-making at the firm level. In 2012, Telam, Argentina's official news outlet, reported that ministry officials had asked some 20 companies to cease importing materials from the UK in response to diplomatic tensions over the Falkland (Malvinas) Islands.<sup>[1]</sup> China made waves in 2010 when it cut off exports of rare earths minerals to Japan supposedly

<sup>&</sup>lt;sup>1</sup> "Falklands dispute: Argentina 'urges UK import ban," BBC News, February 28, 2012. See <a href="http://www.bbc.com/news/world-latin-america-17200528">http://www.bbc.com/news/world-latin-america-17200528</a>

in response to a territorial dispute in the East China Sea and again when it halted fresh salmon imports from Norway after the Nobel Committee awarded its Peace Prize to Chinese human rights activist Liu Xiaobo.

We argue that government influence over firms makes trade flows more responsive to foreign relations. Through state ownership of firms, governments gain an important tool for the exercise of economic statecraft. These firms are more likely to align their behavior with state interests because of close dependence at the level of both firm personnel and finances. Where private firms must trade on the basis of commercial interests, state-owned firms also pursue government interests. As a result, we expect the effect of political relations on trade to be a function of state control. To test this proposition, we compare trade flows through state-owned enterprises (SOEs) with trade through private firms. A comparison of bilateral trade flows by firm ownership offers an identification strategy for testing our argument about state control.

We focus our analysis on two important cases: China and India. Both are global players with active foreign policy agendas whose economies rank among the largest in the world.<sup>2</sup> Most critically, China and India retain high levels of state ownership in some sectors of the economy alongside other sectors with little state involvement. In 2013, these two countries comprised the largest numbers of SOEs on the Forbes list of the world's 2000 largest public companies.<sup>3</sup> Production by SOEs is estimated to account for about a third of China's GDP and 6.45 percent of India's.<sup>4</sup> Our analysis of economic statecraft in emerging markets and our use of new trade data disaggregated by firm ownership make an original

<sup>&</sup>lt;sup>2</sup> At the time of writing, China is the world's second largest economy and India the tenth, as determined by GDP. Together, these countries accounted for 13.0 percent of world exports and 12.7 percent of world imports in 2012 (WTO, 2013).

<sup>&</sup>lt;sup>3</sup> SOEs comprise the majority of total firms on the list for both China (90 of 136 firms) and India (31 of 56 firms). Included in the SOE count for China are subsidiaries with SOE parents. See http://www.forbes.com/global2000/list/ and Naazneen Karmali, "India faces reality check in latest Global 2000," *Forbes Business*, April 27, 2013. Figure for China by authors' calculation.

<sup>&</sup>lt;sup>4</sup> The China estimate is for 2009 and the India estimate is for 2010/11. Simon Rabinovitch, "Private sector battles march of Chinese state," *Financial Times*, November 11, 2012. See also OECD (2009) and Government of India (2011, p. 14).

contribution to the literature.

Our argument challenges the view that market expectations alone shape economic decisions and highlights the ongoing role of the state in trade discrimination, even within an era of high interdependence. Theories of conflict and interdependence emphasize firms' anticipation of increased trade costs brought on by the outbreak of war (Pollins, 1989; Morrow, Siverson and Tabares, 1998; Morrow, 1999; Long, 2008). But it may be state intervention rather than market forecasts that shift trade away from partners in times of discord. Economic patriotism is apparent across a range of regulatory policies and has been shown to motivate selective liberalization as well as protection (Levy, 2006; Clift and Woll, 2012; Rickard and Kono, forthcoming). Berger et al. (2013) find that the positive impact of CIA interventions on US imports by a country is conditional on the government's share of the economy. This finding highlights the role of the state in politicizing trade, but it does not clearly define the channel through which governments generate this effect. Here we demonstrate how states manipulate trade as a tool of foreign policy through their influence over state-owned firms.

Whereas much of the literature on conflict and interdependence focuses on militarized disputes, we examine a broader range of variation in political relations including lower-level frictions, such as threats, complaints, and diplomatic spats. Issues that fall well short of war and even appear minor in isolation may have a larger cumulative effect on interstate relations. Political relations are measured by negative political events and voting alignment in the United Nations General Assembly (UNGA). We hypothesize that worsening political relations will prompt the state to pursue economic statecraft where it has the most leverage. Across these different measures of relations, we expect more negative political relations to correspond with lower trade, with the most pronounced effect in trade flows through SOEs. We examine the effects of political relations on imports and exports separately. In the mercantilist framework of most governments, limiting or seeking other sources of imports will be preferred to restricting exports.

Nevertheless, we recognize that there may be some circumstances under which states would focus on exports as a tool of statecraft. For example, Russia's manipulation of gas exports in 2006 and 2009 amidst long-standing disputes with Ukraine, China's above-mentioned restrictions on rare earth exports, and the West's blockade of certain technology exports for the Russian energy sector represent high-profile cases where dominant market position over strategic goods allowed the use of export restrictions as a tool of statecraft.

Our statistical analysis of annual bilateral trade by China and India since the early 1990s through 2012 demonstrates that negative bilateral events correspond with a reduction in imports and exports. In our comparison of the impact of political relations by state ownership of the trading firms, we find the relationship is significantly greater for imports by firms in the state-owned sector of the economy. The strength of the findings varies across the different measures of political relations, but is generally robust to alternative specifications. The results are more mixed for exports. While in India there is evidence of greater trade politicization in the state-controlled sector as hypothesized, in China it would appear that—if anything—the private sector experiences a larger trade response to negative political relations than the state-controlled sector.

Our research indicates that economic statecraft remains relevant in the current era of globalization. Trade patterns respond to political relations in areas where governments maintain the capacity to manipulate trade. Even as market-oriented policies and free-trade rules expand, important pockets of state control remain, particularly in many emerging economies, where state-owned firms assume a growing role in critical sectors and increasingly participate actively in the global trading system (Kowalski et al., 2013). Indeed, after the widespread privatizations of the 1980s and 1990s, the governments of a number of these countries—China, Brazil, Argentina, South Africa, and Russia among them—have reversed course and taken steps to expand the number and size of state-owned enterprises in key sectors

and develop corporate "champions."<sup>5</sup> Studies that focus on the OECD countries and aggregate trade flows neglect the wide variation among countries and sectors in the relationship between governments and firms. We specify an important pathway through which a government's role in the economy shapes economic flows.

The paper proceeds as follows: the second section presents a brief overview of the literature and introduces some motivating examples of cases in which China and India limited trade in response to political conflicts; the third section discusses the argument and hypothesis; the fourth section presents the data; the fifth section describes the empirical strategy and discusses the results; the final section concludes.

# **2** Economic Statecraft in Theory and Practice

Economic interdependence has long played a contested role in theories of international relations. As a component of state power, economic wealth is central to realist theories. Major powers seek to avoid trade with adversaries who could use the wealth generated by trade to purchase security advantages (Gowa, 1994). Interdependence introduces vulnerability as the outbreak of conflict reduces trade (Keshk, Reuveny and Pollins, 2004). Trade relations may be used as a means of control (Hirschman, [1945] 1980; Lake, 2009), and alliances have long corresponded with favorable economic agreements (Mansfield and Bronson, 1997; Long and Leeds, 2006). This supports the expectation that states will structure their economic relations on the basis of political relations and will manipulate such dependency as part of coercive strategies.

Liberal theories place more emphasis on the constraining dynamic of economic ties. States act on the

<sup>&</sup>lt;sup>5</sup> SOEs account for 80 percent of China's stock market, 62 percent of Russia's, and 38 percent of Brazil's, for example, and increasingly occupy the ranks of the world's largest firms. See "The Visible Hand," *The Economist*, January 21, 2012.

interests of social actors within the state, and the economic gains from interdependence may encourage cooperative relations under commercial liberalism (Polachek, 1980; Russett and Oneal, 2001; Li and Sacko, 2002; Gartzke, 2007; Lee and Mitchell, 2012). While most attention is paid to the claim that trade promotes peace, there is a prior assumption that a break in political relations would interfere with economic exchange. Trade follows the flag because firms expect a lower likelihood of disruptive conflict when trading with states that share good relations (Pollins, 1989; Long, 2008).

Thus from both perspectives, one would expect to observe a correlation between political and economic relations. Changes in the past two decades in the political and economic structure of international politics elicit the need to reassess these claims, however. The end of the Cold War reduced the expectation of realist theories for strong differentiation among partners (Gowa, 1989). Global production networks and high levels of intra-industry trade in the current era of globalization raise sunk costs in specialized production and trade relationships, which slows the response of economic actors to political shifts (Davis and Meunier, 2011). The expanding membership and strength of the WTO has restricted states' ability to link trade to external issues, thus reducing the scope for economic statecraft.<sup>6</sup> Are patterns of economic exchange swayed by politics in a global economy? What are the channels by which governments could induce trade patterns to follow foreign policy interests?

## 2.1 Examples of Punishment

China offers a test of these theories given its status both as a major power and a country deeply embedded in global trade. Significant attention has been paid to China's use of investment and aid policies to win influence (e.g. Dreher and Fuchs, forthcoming; Cheung et al., 2012; Li and Liang, 2012). Recent disputes suggest that the Chinese government is also willing and able to use its economic weight to punish states

<sup>&</sup>lt;sup>6</sup> See Keohane (1984, p. 92) for an explanation of issue linkages in international institutions generally and Gowa (2010) and Carnegie (2014) for more explanation of how the trade regime insures states against foreign policy linkages.

through trade. For example, Fuchs and Klann (2013) find that countries whose leadership receives the Dalai Lama suffer from a temporary reduction of exports to China. Hong et al. (2010) show evidence of a successful boycott of French automobiles in the wake of Sino-French tensions in the run-up to the 2008 Beijing Olympics. In this section, we present three cases that motivate our research. The first case highlights import barriers and the second focuses on export restrictions imposed by China. The third extends the analysis to India and looks at India-Pakistan relations as an example of trade affected by ongoing political tensions.

#### **Chinese Boycott of Norwegian Salmon**

The announcement on October 8, 2010 that the Norwegian Nobel Committee had awarded the Nobel Peace Prize to Chinese human rights activist Liu Xiaobo set off a controversy in Norway-China relations. The Chinese government immediately protested the decision with public statements charging that Liu was a criminal and warning that selecting him for the award could harm China-Norway ties.<sup>7</sup> With a former Norwegian prime minister on the committee, it was difficult for the Norwegian government to distance itself from the award. Three days later, the Chinese government canceled a scheduled meeting with the Norwegian fisheries minister after her arrival in China, which Norwegian officials attributed to "reaction to the Nobel Peace Prize."<sup>8</sup>

These would not be the only repercussions. A new set of veterinary controls imposed at ports in China on fresh salmon had immediate effects. The data in Figure 1 reveal the sharp drop in fresh salmon exports from Norway to China compared with those to the rest of the world after the announcement of the Peace Prize. The controls appeared to be Norway-specific; while Norwegian salmon was reported to

<sup>&</sup>lt;sup>7</sup> Zheng Xinyi, "Beijing blasts Nobel Peace Prize Meddling," *People's Daily Online*, October 9, 2010. http://english.peopledaily.com.cn/90001/90776/90882/7160366.html.

<sup>&</sup>lt;sup>8</sup> Sharon LaFraniere, "Chinese Cancel Meeting with Norwegian Minister," New York Times, October 11, 2010.

be left rotting in the ports, Scottish salmon encountered no obstacles.<sup>9</sup> Indeed, salmon exports from the UK enjoyed a brief surge beginning in January 2011, just as those from Norway plunged. Since then, Scottish salmon has generally kept apace with its Norwegian competitors, and Norway's exports did not return to 2010 levels until the middle of 2012. In the right-hand graph of Figure 1, the effect on total exports from Norway to China is less visible and—if anything—delayed. The delay might be a result of the freeze on diplomatic contact between governments.<sup>10</sup> Norway's total exports to China appear to have decreased slightly one year after the bestowal of the Peace Prize, while the country's exports to the rest of the world increased by 11 percent. Another consequence to bilateral relations was China's decision to halt plans to sign a free trade agreement with Norway.

The Chinese government is heavily involved in the fishing sector. State ownership in fishing is about 10 percent overall and 30 percent in distance-water fishing, the sub-sector most likely to compete with foreign suppliers. One SOE, China National Fisheries Corporation, and its subsidiaries account for about a third of total sector production in distance fishing. Furthermore, the government maintains stakes in fish processing and distribution, as well as retail sales, extending its leverage over the entire length of the production chain. While only 369 of the roughly 8,000 enterprises involved in fish processing are state-owned, these firms account for 18 percent of the industry's processing capacity and almost 30 percent of cold storage capacity, making the state a big player in distribution (Fan and Yu, 2004, p.18).<sup>11</sup> Among the top 100 food retailers in China, 45 percent are SOEs.<sup>12</sup> Thus from port to supermarket, a sizeable share of the stakeholders that would have been affected by the boycott were state-owned.

<sup>&</sup>lt;sup>9</sup> "Norway's salmon rot as China takes revenge for dissident's Nobel Prize," *The Independent*, October 6, 2011.

<sup>&</sup>lt;sup>10</sup> Diplomatic contact can be a tool to foster commerce (e.g. Rose, 2007). The empirical results in Nitsch (2007), for example, show that state visits cause an increase in bilateral trade.

<sup>&</sup>lt;sup>11</sup> Figures as of 2002.

<sup>&</sup>lt;sup>12</sup> Figure as of 2004. See China Chain Store and Franchise Association's "China Top 100 Chain Retailers, 2007" available at http://www.chinaretail.org/reports.asp.

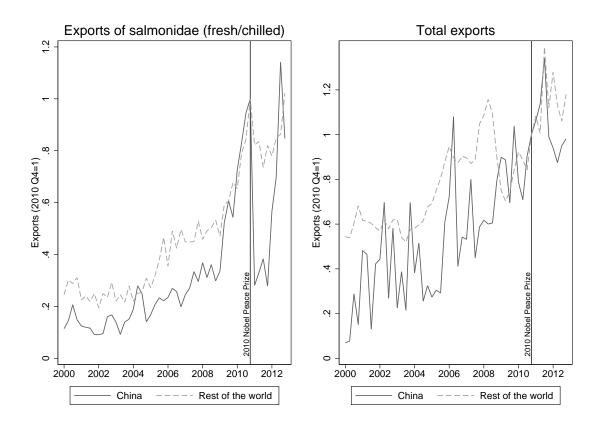


Figure 1: *Salmon Boycott*: Norwegian exports before and after the 2010 Nobel Peace Prize. Values are normalized to take a value of 1 in the last quarter of 2010 when the Nobel Peace Prize was conferred. Source: Eurostat, with authors' calculations

#### **Chinese Rare Earth Embargo on Japan**

During this same period, Japan experienced problems with China after the Japanese Coast Guard arrested the crew of a Chinese fishing boat on September 7, 2010, during a hostile encounter in the waters surrounding the disputed territory of the Senkaku/Diaoyu islands. Amidst anti-Japanese demonstrations in Beijing and a halt to cabinet-level exchanges, relations worsened as Japan extended its detention of the fishing boat captain. Evidence of targeted economic retaliation began to appear.<sup>13</sup> In an event study analysis of stock market returns, Fisman, Hamao and Wang (forthcoming) demonstrate that Japanese firms with more exposure to trade with China experienced an adverse impact. Furthermore, they find that at

<sup>&</sup>lt;sup>13</sup> "Chugoku kakuryo koryu wo teishi (China stops cabinet level exchanges)," Asahi Shimbun, September 21, 2010.

the time of the incident, Chinese sectors with high SOE intensity lowered their trade with Japanese firms more than sectors dominated by private firms.

Most significantly, Japan reported the stoppage of rare earth exports from China, which threatened to cut off a vital resource used as an input by Japanese companies for everything from engines for electric and hybrid autos to industrial batteries and flat screen LCD displays. Given that China supplied over ninety percent of the global supply of rare earth elements, the prospect of an embargo was quite serious. A survey of Japanese firms by the Ministry of Economy, Trade, and Industry found that those directly engaged in trading rare earths reported that barriers to exports from China had increased starting September 21 and included problems gaining export licenses and demands for translation of documents.<sup>14</sup>

Possibly fearful of a WTO violation, the Chinese government denied that there was any boycott against Japan specifically and widened the restrictions on exports, which it then justified as serving environmental concerns regarding the sustainable development of natural resources.<sup>15</sup> The release of the Chinese captain on September 25 removed the most direct source of tensions, and rare earth exports from China to Japan began to increase in November.<sup>16</sup> Tensions over the islands spiked again in August and September 2012 with widespread and violent demonstrations in China against Japan's decision to nationalize the islands. This time economic repercussions were immediate, and a range of Japanese firms experienced decreasing sales and unusual delays at customs ports.<sup>17</sup>

The Chinese government's tight control over the rare earths industry facilitated the informal export

<sup>&</sup>lt;sup>14</sup> "Chugoku ni okeru yushutsunyu jyoukyo ni kan suru chyosa kekka (Results of a survey regarding exports and imports from China)," October 5, 2010. Summary of survey provided to authors.

<sup>&</sup>lt;sup>15</sup> "China is said to widen its embargo of rare earth minerals to Western countries," New York Times, October 20, 2010.

<sup>&</sup>lt;sup>16</sup> While a short-term embargo can slip by WTO rules as a 'hit-and-run' by eliminating the policy before another country can file a complaint, in this case China continued to impose some restrictions, and Japan joined with the US and EU to file a WTO complaint against the export restrictions in March 2012.

<sup>17</sup> See report by the Japan External Trade Organization (JETRO) entitled "Chugoku Situation China)" available okeru tsukan jyokyo (The Customs in and ni no at http://www.jetro.go.jp/world/asia/cn/custom/.

embargo in 2010. Comprised of about 90 companies, the largest of which are centrally state-owned, the sector is highly concentrated and largely in state hands. Inner Mongolia Baotou Steel Rare-Earth Hi-Tech, a subsidiary of major SOE Batou Iron and Steel Group, dominates mining in the north. SOE China Minmetals controls the south. Other major players include SOE China Nonferrous Metal Mining (Group) Co., Ltd and Aluminum Corporation of China, Ltd (Chalco), a state-backed holding company. Since 2006 the government has controlled the total-amount exploitation of rare earths and has exercised management over rare earths production by mandatory planning since 2007. As of 2014, the government is working to consolidate the entire industry into three large state-run conglomerates through a process of mandated mergers and acquisitions.<sup>18</sup>

These examples highlight several dimensions that we focus on in this paper. First, China has shown it can use economic channels to punish states that displease the central government. Second, the mechanism is more subtle than publicly announced sanctions. Instead, a range of new standards, informal guidance, and customs procedures appear as culprit. Does the large role of the government in the economy facilitate China's behavior in these and other such cases?

#### The Case of Ongoing Tensions: India and Pakistan

The enduring rivalry between Pakistan and India offers an example where negative relations have suppressed trade over decades. Trade between the countries had almost completely halted during the 1960s and 1970s when the countries experienced two wars and imposed import restrictions, and have never fully recovered to the levels one would normally expect between neighboring countries. Naqvi and Schuler (2007) point out that bilateral trade is low in both absolute and relative terms; the sum of bilateral exports

<sup>&</sup>lt;sup>18</sup> According to a June 2012 government White Paper (State Council, 2012), the government launched its plan to "exercise planned regulation and control, restrictive exploitation, tightened access and comprehensive utilization for rare earths...." in 2008 under the National Plan for Mineral Resources (2008-2015), re-assuming the authority for "registering, examining and approving the prospecting and mining of specified minerals" in 2009.

constitutes a tiny 0.9 percent of the pair's total exports and is small when compared to other similar pairs of countries or against projections of trade potential.<sup>19</sup>

While the two countries agreed to confidence-building measures in the face of their rival nuclear tests in 1998, conflict in Kashmir worsened. In May 1999 India engaged in airstrikes in Kashmir's Kargil sector against militants who allegedly received support from Pakistan. Pressure from the major powers led to negotiations that defused the immediate crisis. The December 2001 suicide squad attacks on the Indian Parliament prompted both countries to mobilize troops and missiles such that they were reported to be on "war footing."<sup>20</sup> These negative events had an impact on trade. India's imports from Pakistan fell by more than half from 75.4 million in 2001 to 36.7 million in 2002, although exports remained steady, and imports returned to 68.7 million in 2003 (all values in constant 2005 US\$).

Unstable political relations have made firms reluctant to make risky investments even where there are not formal barriers (Naqvi and Schuler, 2007, p. 6). Both governments impose lengthy lists of sensitive goods restricted from bilateral trade, and Pakistan has long denied most favored nation status to India. The start of a strategic dialogue between the two countries in 2004 under pressure from the United States began a process of improving trade relations with a gradual reduction of barriers and possibility that Pakistan would grant India MFN status in 2014. While these are signs of possible improvement, the overall pattern shows two governments that have taken every step possible over the years to reduce the level of trade within the context of ongoing tensions.

<sup>&</sup>lt;sup>19</sup> In the same volume, Baroncelli (2007) uses a gravity model analysis of trade flows to estimate that in absence of conflict, India and Pakistan would benefit from an annual peace dividend of more than three billion dollars in additional trade.

<sup>&</sup>lt;sup>20</sup> Cecilia W. Dugger, "India and Pakistan Add to War Footing," New York Times, December 28, 2001.

# **3** State Control and Non-commercial Interests in Trade

From the examples above, we see evidence that governments intervene in trade for a range of events from seemingly minor issues to enduring rivalries that involve militarized conflict. Under what conditions do such political tensions impact bilateral trade? In this section we explain why state control of firms increases the ability of government to manipulate trade. Through firm ownership, the state can inject non-commercial considerations into business decisions.

The exercise of economic statecraft has distributional consequences both at home and abroad. The objective is to punish or reward another state for its policy position or attempt to influence its behavior. Denying key resources or market opportunities harms the target state, while preferential access offers benefits. Using economic policy to achieve foreign policy goals, however, can produce negative externalities for the domestic market. To the extent that the state encourages a move away from the market equilibrium, some firms will suffer costs. Indeed, the domestic costs of economic sanctions enhance their credibility as a signal of resolve.<sup>21</sup> Despite possible foreign policy gains, economic decisions dictated by geopolitical interests may not coincide with the best economic outcomes.

Several studies find that harm to economic actors at home limits the use of economic statecraft (Skalnes, 2000; Davis, 2008/9). During the Cold War, the sanctions regime in the West to restrict exports to Soviet bloc countries (CoCoM) faced ongoing resistance from firms eager to trade more freely. Even when retaliation occurs in the context of WTO-authorized enforcement against a violation by a trade partner, the decision to raise tariffs encounters opposition from home industries that would suffer from the actions.<sup>22</sup> As the United States and European governments debate sanctions against Russia for its

<sup>&</sup>lt;sup>21</sup> See Martin (1992), Hufbauer, Schott and Elliott (1990) and Drezner (2003) on sanctions literature. Gartzke, Li and Boehmer (2001) model the signaling value of economic harm as the mechanism behind the commercial peace.

<sup>&</sup>lt;sup>22</sup> Andersen and Blanchet (2010, p. 237) describe how such petitions from business prevented the use of the carousel retaliation plan devised by Congress to increase the pain of retaliation against Europe in two well known disputes (hormones and bananas). Europe encountered similar difficulties when trying to draft a list for retaliation against the United States in the

actions in Ukraine in 2014, the harm to business interests looms as a major concern.<sup>23</sup>

State control over economic activities in a sector addresses this problem by lowering domestic opposition to letting foreign policy influence business decisions. Close integration with the state in terms of personnel, funding, and goals, hard-wires business actors to support state preferences. Market competition pushes for decisions on a commercial basis, but state intervention introduces additional decision criteria that call on economic actors to incorporate non-commercial goals.

Indeed, WTO rules reflect this tendency, admonishing that state-trading enterprises must make purchases "solely in accordance with commercial considerations."<sup>24</sup> While the manipulation of economic policies to serve political interests clearly challenges the non-discrimination rules of the WTO, the explicit statement highlights that state-controlled enterprises are most subject to interference and in need of monitoring. Yet precisely because of the close relationship between firm and state, there may be no paper trail of discriminatory policies that could be challenged in the WTO.

## 3.1 State Ownership and Trade

Governments have a number of tools at their disposal to influence the behavior of firms. They may selectively enforce regulations or tax collection, dictate access to financing from state-backed institutions, or support purchases through government procurement. In this paper, we focus on state ownership of firms as the most direct and observable form of control.

How does state ownership facilitate the politicization of trade? Most fundamentally, the purpose of state-owned enterprises is to advance the goals of the state. While SOEs can and increasingly do operate

steel safeguard dispute (Nordstrom, 2010, p. 268).

<sup>&</sup>lt;sup>23</sup> Alison Smale and Danny Hakim, "European Firms Seek to Minimize Russia Sanctions," *New York Times*, April 26, 2014.

<sup>&</sup>lt;sup>24</sup> Article XVII of the General Agreement, full text available at the WTO website: http://www.wto.org/english/docs\_e/legal\_e/gatt47\_e.pdf.

with commercial considerations, they serve primarily as conduits through which the government may intervene in the economy to serve particular social, economic, or political objectives deemed necessary for the national interest.<sup>25</sup> In China, for example, many SOEs are required to maintain burdensome employment levels and forced to manage resource-depleting social ventures, like schools and hospitals, under their corporate umbrellas to serve the government's goals of mitigating social unrest (Steinfeld, 2000). In India, the state-owned Food Corporation of India (FCI) was established in 1965 to ensure effective price supports for farmers, distribute food grains under the country's Public Distribution System, and maintain stocks to ensure national food security. The original purpose behind the formation of Hindustan Latex in 1969 (now HLL Lifecare), one of India's largest condom producers, was to promote the government's population control policies.<sup>26</sup> While state-owned companies also compete for revenues and market share, and while profits are sometimes used as a measure of firm performance, they are not solely focused on the pursuit of profits. Top managers at SOEs ultimately face evaluation not just by public shareholders or corporate trustees, but by political officials who assess them in large part on how successfully they have implemented government objectives. Given that fulfilling political imperatives is one of the primary raisons d'être of these firms, we should expect them to pose less resistance to political demands than private firms in general.

At the same time, the close relationship between the state leadership and state-owned firms lowers opposition to political maneuvering. In China, two central organizations—the Central Organization Department (COD), the head of which is a member of the Politburo, and the State-owned Assets Super-

<sup>&</sup>lt;sup>25</sup> For example, the Indian government describes the role of state-owned enterprises (known as "public sector undertakings" (PSUs)) on its official portal as the following: "PSUs provide leverage to the Government (their controlling shareholder) to intervene in the economy directly or indirectly to achieve the desired socio-economic objectives and maximize long-term goals." See http://www.india.gov.in/spotlight/spotlight\_archive.php?id=78; accessed August 20, 2012.

<sup>&</sup>lt;sup>26</sup> Today FCI continues its original missions, while HLL Lifecare is tasked with aiding the government's disease control efforts. "Stakes and Mistakes: India Is Privatising Companies for the Wrong Reasons," *The Economist*, November 12, 2009.

vision and Administration Commission (SASAC), with the approval of the COD—have the authority to appoint the leadership of the country's 117 remaining centrally-owned SOEs.<sup>27</sup> In India, the responsibility for managing SOEs falls with the relevant ministries, determined by industry, and the Department of Public Undertakings. The ministers responsible for these agencies report directly to parliament, and decisions over how SOEs should serve national economic policy fall to the legislature and executive, which allows the government to influence their direction and operation.<sup>28</sup> By consolidating the management of SOEs under central-government authority and directly appointing corporate leadership in some cases, the government exercises a great amount of control over the decisions and operations of state-owned firms.

When top managers of major SOEs are determined by political appointment, the lines between business and politics blur, and business leaders are incentivized to serve the demands of the state. The appointees themselves are often political insiders. A study by Pei (2006) shows that the three top leadership positions—CEO, Chairman and Party Secretary—in almost all centrally-managed Chinese SOEs are occupied by senior members of the Chinese Communist Party (CCP). In a number of cases, the CEO and Party Secretary are the same person. Business managers in state-owned enterprises thus often view their responsibilities as two-fold—to advance the interests of the firm and the state—and may suffer consequences for failing to do so. In one prominent example, Roger Agnelli, the former head of Brazilian state-owned mining giant Vale, was ousted by President Dilma Rousseff in 2012 for being too "independent-minded" and failing to follow the government's development agenda.<sup>29</sup> On the flip side, it has been observed at the meetings of the World Economic Forum in Davos that contrary to Western

<sup>&</sup>lt;sup>27</sup> In 2003, the government established the SASAC under which the monitoring and management of SOEs, previously separated across several ministries and agencies, was consolidated. The SASAC falls directly under the authority of the State Council of the National People's Congress, the country's chief administrative authority.

<sup>&</sup>lt;sup>28</sup> Within parliament the 22-member Committee on Public Undertakings is tasked with reviewing the reports of the relevant administrative bodies and is also responsible for monitoring and evaluating the management of SOEs more directly.

<sup>&</sup>lt;sup>29</sup> "The Visible Hand," *The Economist*, January 21, 2012.

delegations, "Chinese delegates from both [government and business] tend to have the same point of view, and even the same patriotic talking-points."<sup>30</sup>

In addition to influence through corporate governance, financial support provides leverage over SOEs. These firms do not, and in many cases could not, operate without the financial sponsorship of the state. Much scholarly and policy research has documented the inefficiencies of state-backed firms, especially relative to private firms (e.g. Alchian, 1965; Boardman and Vining, 1989, 1992; World Bank, 1995). In India, the government recently approved an expensive bailout plan for 46 centrally-owned SOEs it deems "sick" (severely underperforming), which account for about 20 percent of all centrally-owned SOEs.<sup>31</sup> Those state-owned firms able to achieve competitiveness owe much of their success to privileged access to capital and other regulatory benefits. SOEs enjoy a range of advantages over private firms, including favorable taxation, subsidies, and preferential financing (Capobianco and Christiansen, 2011; DeWenter and Malatesta, 2001). In China, over 75 percent of the country's capital, which is largely provided by state-owned banks, flows to SOEs.<sup>32</sup> For these firms, refusing to comply with political demands could mean a reduction in financial benefits.

The interactions between SOEs and policymakers represent mutual dependence. Just as the bureaucratic channels linking SOEs directly to the state enhance government oversight, they also provide avenues for managers to bargain for compensation when state policy adversely impacts firm profits or operations. Indeed, state-owned firms report higher levels of policy influence than private firms (Aisbett and McAusland, 2013).<sup>33</sup> Thus given their subsidized operations and ability to negotiate for compen-

<sup>&</sup>lt;sup>30</sup> "The Rise of State Capitalism," *The Economist*, January 21, 2012.

<sup>&</sup>lt;sup>31</sup> Purba Das, "Rs 40,650 cr for sick PSUs," *The Sunday Guardian*, August 19, 2012.

<sup>&</sup>lt;sup>32</sup> John Lee, "China's Corporate Leninism," *The American Standard*, May/June 2012.

<sup>&</sup>lt;sup>33</sup> Baccini and Malesky (2012) show that SOEs in Vietnam experienced the smallest tariff reductions and longest transition periods following WTO accession, which the authors attribute to SOE lobbying. It is important not to overstate this influence, which may be weakest when SOE preferences diverge from those of policymakers (Aisbett and McAusland, 2013). Moreover, autonomy over corporate decision-making can reinforce dependence on the state when easy access to credit allows for rapid

sation, SOEs are less sensitive than non-SOEs to distributional costs arising from the manipulation of economic policies. They have less need to object to state influence that injects non-commercial criteria for business. Instead, dependence on the state requires responsiveness to government requests.

We hypothesize that economic statecraft is contingent on government capacity to control economic actors. Completely free markets are unlikely to show any correlation between political relations and trade. In free-market economies, states must adopt explicit policies to constrain markets, such as imposing legal restrictions on trade to force compliance by private actors. In contrast, where the state maintains more control over firms, politicizing trade can be a quick and informal process. For the reasons outlined above, firms owned by the state are the most likely to be responsive to government preferences. Looking within China and India, we expect to observe a stronger correlation between political relations and trade in the state-owned sector of the economy compared to the private sector.

# 4 Measuring State Control and Political Relations

## 4.1 Trade by Enterprise Ownership Type

To analyze the effect of political relations on import and export flows as a function of state control over economic activity, we differentiate between the trading activities of the state-controlled and private sectors of the economy.

For our analysis of Chinese trade, we obtained data on trade by enterprise ownership type from the Customs Bureau through Customs Info, a government-owned company licensed to distribute official customs data.<sup>34</sup> The data include the annual value of bilateral imports and exports by ownership category.

<sup>&</sup>lt;sup>34</sup> http://www.customs-info.com/

In all, there are nine ownership categories covering government, private, and foreign enterprises, as well as various forms of hybrid ownership.<sup>35</sup> For our purposes, the relevant categories are private enterprises and SOEs. SOEs are defined as enterprises in which the government holds the majority equity share and include both centrally- and locally-owned enterprises. We are thus able to measure the value of trade in each year flowing to and from a partner country through state-owned firms versus private firms.

For India, we use Prowess firm-level data from the Centre for Monitoring the Indian Economy, an Indian think-tank, and trade data from UN Comtrade.<sup>36</sup> The Prowess database includes data on total assets, sector, and ownership type for 27,000 companies, which together comprise 75 percent of all corporate tax revenue. We define as SOEs those enterprises categorized as "Central Government," "State Government," or "Central and State Government" in Prowess.<sup>37</sup> Unfortunately, statistics on bilateral trade by firm ownership type are not available in Prowess. We therefore construct variables that proxy for trade through state-owned and private enterprises using the following procedure: we first calculate the share of assets held by SOEs in each sector; we then multiply the sector share by the volume of imports or exports for the sector (from Comtrade) for a particular bilateral trade relationship; finally, we sum the resulting values across sectors to get an estimate of the annual volume of imports and exports flowing through SOEs for the dyad. We repeat the procedure for each partner country. Private-enterprise trade is calculated by the same method.<sup>38</sup> Our procedure assumes that SOE shares in total assets are equivalent

<sup>&</sup>lt;sup>35</sup> The categories are as follows: state-owned enterprise, sino-foreign contractual joint venture, sino-foreign equity joint venture, foreign-owned enterprise, collective enterprise, private enterprise, privately or individually-owned business, enterprise with customs declaration authority but without permission to import or export, and "other." Importantly, just because an enterprise is categorized as "private" does not mean that the government is not a minority shareholder; local governments in particular often own shares of local firms.

<sup>&</sup>lt;sup>36</sup> Trade data are from UN Comtrade accessed by using the World Bank's World Integrated Trade Solution (WITS) software (http://wits.worldbank.org; accessed 28 October 2013.) The data are classified according to the third revision of the International Standard Industrial Classification of All Economic Activities (ISIC). For details on the Prowess database, see http://prowess.cmie.com/; accessed April/May 2012 and November 2013.

<sup>&</sup>lt;sup>37</sup> We also include in this category enterprises classified as "State and Private Sector" and "Joint Enterprises," a class of enterprises in which the state is typically the majority shareholder.

<sup>&</sup>lt;sup>38</sup> The following example illustrates how we construct our measure of trade by firm ownership type for India. Consider

to SOE shares in trade, which is unlikely to be true in reality. The potential for over- or under-estimating trade, however, will not affect our estimation results as long as there are not systematic differences across trade partners.

Figure 2 demonstrates the contribution of SOEs and private enterprises to Chinese and Indian imports and exports over the sample period. The share of China's trade comprised by SOEs has fallen over the last decade during the period of privatization, while the share of trade comprised by the private sector has risen correspondingly. The decline in SOE shares of trade has leveled off recently, and SOEs continue to comprise large shares of China's overall trade—about 30 percent of imports and 12 percent of exports. India presents a different pattern. Estimated trade shares remain generally even over time, especially since 2000, with SOE trade again comprising smaller shares of total imports and exports than private enterprises but still notable shares overall—about 40 percent of imports and 15 percent of exports.

One challenge to making inferences about state ownership is the strategic nature of government decisions that determine state ownership; SOE intensity is not randomly allocated across sectors. Energy and resource sectors experience the highest levels of state ownership because of their importance to both economic growth and security. The decisions about ownership reflect state priorities toward the sector in general. This mitigates the endogeneity problem for our research question because we leverage the variation in political relations with specific trading partners that is largely independent of ownership decisions across different sectors of the economy.

exports from India to Poland. In the year 2000, India exported 806,345 US\$ worth of electrical machinery and apparatus to Poland (ISIC Rev.3, division 31). In this sector and year, SOEs held 15.7 percent and private enterprises held 67.3 percent of total assets.<sup>39</sup> Multiplying the trade values by the asset shares, we estimate that 126,450 US\$ worth of exports exited through SOEs and 542,983 US\$ through private enterprises. We repeat this procedure for all ISIC divisions covered in the trade data and sum across sectors to obtain values for SOE and private enterprise trade. According to the resulting estimates, SOE exports from India to Poland amounted to 8.6 million US\$, compared to 65.4 million US\$ through private enterprises. We repeat the procedure for each partner country/year. By using a high level of sector aggregation (ISIC Rev.3 2-digit), the measure accounts for the entire length of the intra-industry vertical production chain. Our analysis thus captures cases in which political disputes affect upstream trade in inputs.

<sup>&</sup>lt;sup>40</sup> SOE and private-sector shares do not necessarily sum to 100; the remaining shares are comprised by other types of enterprises, such as foreign, joint-venture, and collective.

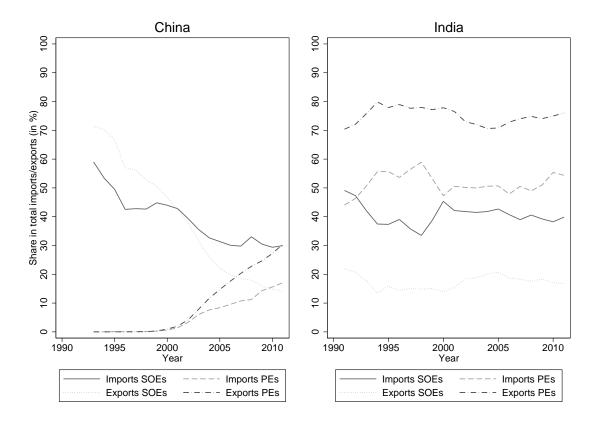


Figure 2: *Trade by Enterprise Ownership Type*: Imports and exports of SOEs and private enterprises as a share of total imports and exports (1991-2012; data for China begin in 1993).

## 4.2 Political Relations

While bilateral trade is objectively quantifiable, political relations between countries are difficult to measure. Our analysis relies on several variables that capture different aspects of relations. We include indicators common in the literature—negative political events and voting alignment in the United Nations General Assembly (UNGA)—for both China and India, as well as a unique "China-specific" measure.

Our first two measures quantify the tensions that occur between China, India, and their trading partners using political events data. More precisely, we use the Global Data on Events, Location and Tone (GDELT) events data from Leetaru and Schrodt (2013). The dataset, considered the most comprehensive of its kind, uses the TABARI coding system to classify daily reports of events from eleven global news outlets into categories based on the actors involved in the event (i.e. government, military, citizens, etc.).<sup>41</sup> Each event is weighted by the corresponding "Goldstein score," a value between -10 and 10 that captures the likelihood that the event will impact on the stability of the country, based on its *type*. For example, a use of military force would be weighted more heavily than an expulsion of another country's diplomats, but expelling diplomats would be weighted more heavily than a verbal condemnation of another country's actions.<sup>42</sup> We then sum the severity-weighted number of negative events to create a single annual observation and take the log to smooth the distribution. Our first indicator captures events involving a government (non-military) actor, while the second captures events involving a military actor to determine whether militarized disputes provoke a stronger reaction than diplomatic events.

Figure 3 plots the logged number of negative events that occurred after 1990 between China (first and third panel) and India (second and fourth panel) with three major partners – the United States (left), Japan (center) and Russia (right). Several events that have caused bilateral tensions with China are visible in the data. For example, the US bombing of the Chinese embassy in Belgrade and the Hainan Island incident, during which the Chinese government detained the crew of a US Navy Intelligence plane following a mid-air collision with a PRC Navy interception fighter jet, are reflected in the spikes in negative events in 1999 and 2001 respectively. Similarly, the Japanese government's 2010 detention of a Chinese fishing vessel and its captain near the disputed Diaoyu/Senkaku Islands mentioned in section 1.2 is reflected in the military events data.<sup>43</sup> Turning to India, the spikes in both government and military tensions with the US in 1998, for example, correspond to the events surrounding India's nuclear weapon tests in Pokhran.

Our third relations variable measures the degree of distance in foreign policy orientation between

<sup>&</sup>lt;sup>41</sup> TABARI (Textual Analysis by Augmented Replacement Instructions) is a system for the machine coding of event data based on pattern recognition. It has been found to be as accurate as human coders. See, for example, Best, Carpino and Crescenzi (2013).

<sup>&</sup>lt;sup>42</sup> For further explanation of the Goldstein scale, see Goldstein (1992).

<sup>&</sup>lt;sup>43</sup> While the Japanese government does not consider the Coast Guard boats that engaged in action in this case to be part of the military, it seems that GDELT codes such actions as military disputes. Note that the United States and some other countries do integrate their Coast Guard as part of military.

China or India and each partner country. Bailey, Strezhnev and Voeten (2013) use UNGA voting data to construct an annual measure of each country's ideal point along a single dimension that captures its position *vis-à-vis* a "US-led liberal order." The resulting scores are differenced to obtain dyadic measures of the distance between a pair of states in terms of their foreign policy preferences. The measure improves upon traditional UN voting alignment measures in at least two ways. First, it uses resolutions that were identical over time to "bridge observations," allowing researchers to separate out shifts in state preferences from changes in the UN agenda and make more meaningful comparisons of state preferences over time. Second, measuring the gap in preferences between pairs of states by the difference in their ideal points rather than by the difference in their voting records helps to eliminate noise and facilitate better comparisons of states' relative foreign policy orientations.

Figure 3 plots the ideal point distances between China (fifth panel) and India (sixth panel) and the US, Japan, and Russia. Interestingly, the patterns are similar for China and India for each partner country, but as the plots demonstrate, ideal-point distances vary across countries and over time. For example, while the distances between China and the US and China and Japan remained relatively stable from the mid-1990s through 2010, India bridged some of its distance with these countries between the mid-1990s and early 2000s. The plots also accurately reflect the closer alignment of both China and India with Russia after the end of the Cold War. By 2010, both countries were closer to Russia than to either the US or Japan.

For our China analysis, we employ an additional measure that captures the overall level of relations between China and twelve states from a Chinese perspective. <sup>44</sup> Developed by Chinese scholar Yan Xuetong and colleagues, this conflict-cooperation index is based on reports of bilateral political events

<sup>&</sup>lt;sup>44</sup> The twelve countries included in the data are Australia, France, Germany, India, Indonesia, Japan, Korea, Pakistan, Russia, US, UK, and Vietnam.

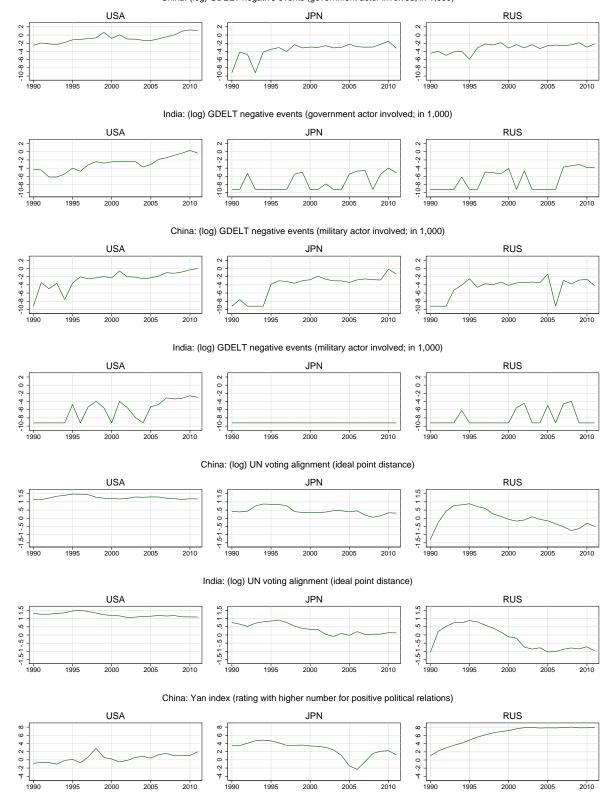
from Chinese newspapers (Yan, 2010).<sup>45</sup> Events—both positive and negative—are tallied on a monthly basis and weighted by severity in similar fashion to the Goldstein scores explained above. The resulting values are then summed to form positive and negative index scores, which are weighted by the overall level of relations from the previous month and summed again to obtain the change in relations from the previous month. The rationale behind this weighting scheme is that the effect of events should be conditional on the existing level of relations. For example, a verbal criticism probably affects the overall level of relations less between two countries already at war than between two countries with cooperative relations. The change from the previous month is added to the previous month's overall relations score to form the new overall relations score. The final relations score is bounded between -9 and 9. Figure 3 demonstrates that the Yan score captures Sino-Japanese tensions that arose from disputes over war history in the middle of the 2000s and shows deterioration in 2011 of the bilateral climate after the Senkaku/Diaoyu island dispute in late 2010. In line with the evolution of Sino-Russian voting alignment in the UNGA, the score on relations with Russia shows strongly improving relations with China after the end of the Cold War.

Table 1 compares the measures of political relations by ranking the states with the most negative relationships. According to the average score on Yan's scale, where higher values indicate better relations, of the twelve countries covered, China's relations are worst with the United States (0.4), a position which extends across each of the other three measures. <sup>46</sup> Taiwan occupies the second spot for China in terms of both negative government events and military events but fails to appear in UNGA voting or the Yan Index because it is not recognized as a sovereign country in either context. Japan, South Korea, and Russia feature prominently on both events lists for China, while Pakistan, the US, Sri Lanka and

<sup>&</sup>lt;sup>45</sup> We are grateful to Yan Xuetong for generously sharing an updated version of the dataset and to Qi Haixia for answering our questions about the data.

<sup>&</sup>lt;sup>46</sup> See Yan and Qi (2012) for a more complete discussion of the state of US-China relations.

China are among the countries that experienced the most negative events with India. Not surprisingly, the countries that experience the fewest events with either China or India are small, geographically distant countries that would be unlikely to have strong engagement with either country diplomatically or militarily. Thirty-nine countries were engaged in no government or miltary events with China over the sample period, and ninety-seven did not experience any events with India. Moving to UNGA voting, the patterns for China and India are quite similar; the same ten coutries comprise the list for both countries with slight differences in order. After the US, the countries with which both China and India are most distant are Israel (average score of 3.1 for China and 3.0 for India) and the UK (2.6 for China and 2.5 for India). On the flip side, China is most closely aligned with Pakistan (.20) and Nigeria (.22), while India is closest to East Timor (.19), Uganda (.19), and Ghana (.19).



China: (log) GDELT negative events (government actor involved; in 1,000)

Figure 3: Diplomatic Tensions: Measures of political relations (1990-2011).

China: Negative events (government)	China: Negative events (military)	China: UNGA voting (ideal point distance)	China: Yan Index
1 United States of America	1 United States of America	1 United States of America	1 United States of America
2 Taiwan (China)	2 Taiwan (China)	2 Israel	2 Indonesia
3 Papua New Guinea	3 Japan	3 United Kingdom	3 India
4 United Kingdom	4 South Korea	4 Palau	4 South Korea
5 Australia	5 Russia	5 Micronesia Fed States	5 Japan
6 South Korea	6 Philippines	6 France	6 Vietnam
7 Russia	7 Vietnam	7 Canada	7 United Kingdom
8 France	8 Pakistan	8 Marshall Islands	8 Australia
9 India	9 Myanmar	9 Belgium	9 France
10 Philippines	10 United Kingdom	10 Netherlands	10 Germany
India: Negative events (government)	India: Negative events (military)	India: UNGA voting (ideal point distance)	
1 Pakistan	1 Pakistan	1 United States of America	
2 United States of America	2 Sri Lanka	2 Israel	
3 China	3 United States of America	3 United Kingdom	
4 Venezuela	4 China	4 France	
5 Sri Lanka	5 Myanmar	5 Micronesia Fed States	
6 Afghanistan	6 American Samoa	6 Palau	
7 United Kingdom	7 Bangladesh	7 Canada	
8 Bangladesh	8 Russia	8 Marshall Islands	
9 Nepal	9 Israel	9 Belgium	
10 Saudi Arabia	10 United Arab Emirates	10 Netherlands	
Table 1: <i>Bad Relations</i> : List of courthat the Yan index covers only twelved	tries with the worst relations with a countries. With the two higher	Table 1: Bad Relations: List of countries with the worst relations with China and India by measure of political relations (1990-2012). Note that the Yan index covers only twelve countries. With the two highest average scores on Yan's scale. Russia and Pakistan are the eleventh	relations (1990-2012). Note and Pakistan are the eleventh

Table 1: Bad Relations: List of countries with the worst relations with China and India by measure of political relations (1990-2012). Note
that the Yan index covers only twelve countries. With the two highest average scores on Yan's scale, Russia and Pakistan are the eleventh
and twelfth countries, respectively. We do not observe UN voting alignment with Taiwan (China) because it is not a member of the United
Nations.

# **5** Empirical Analysis

## 5.1 Empirical Strategy

To test our hypothesis, we build on the gravity model of trade, the "workhorse" of the empirical trade literature (e.g. Tinbergen, 1962; Anderson and van Wincoop, 2003). According to this model, trade flows are expected to increase with both the exporter's supply and the importer's demand of goods and to decrease with trade costs. While supply and demand are usually proxied by exporter and importer GDP, respectively, geographic distance is commonly used as a proxy for trade costs, and additional variables, such as common language, measure friction. We model bilateral trade flows controlled by state-owned enterprises (SOEs) and those controlled by private enterprises using seemingly unrelated estimations.<sup>47</sup>

Specifically, we estimate the following system of equations:

$$trade_{SOE, ij} = \beta_0 + \beta_1 relations_{ijt} + \beta_2 GDP_{ijt} + \beta_3 X_{ijt} + \nu_j + \tau_t + \varepsilon_{ijt}$$
(1)

$$trade_{private,ij} = \tilde{\beta}_0 + \tilde{\beta}_1 relations_{ijt} + \tilde{\beta}_2 GDP_{ijt} + \tilde{\beta}_3 X_{ijt} + \tilde{\nu}_j + \tilde{\tau}_t + \tilde{\varepsilon}_{ijt}$$
(2)

where  $trade_{SOE}$  represents (logged) import or export flows between country *i* (China or India) and its trading partner *j* that are under the control of SOEs,  $trade_{private}$  represents the corresponding (logged) import or export flows between country *i* (China or India) and its trading partner *j* through private enterprises, *relations* represents each of our four measures of political relations, *GDP* denotes the product of exporter and importer GDP in constant 2005 US\$, *X* represents a vector of control variables,  $\nu$ represents a set of partner-country dummies,  $\tau$  represents a set of year dummies, and  $\varepsilon$  is the error

<sup>&</sup>lt;sup>47</sup> We use the STATA command "suest" to combine estimation results.

term.<sup>48</sup> Standard errors are clustered on partner country. We run each system of equations separately for import and export flows to allow political relations to impact on imports and exports differently. To test our hypothesis, we include each measure of *relations* separately. All measures are logged with the exception of the Yan index.

Note that our specification is identical to an estimation of OLS equation-by-equation since both equations use the same set of regressors. Seemingly unrelated estimations enable us to test hypotheses involving parameters in both equations. Specifically, we test whether the coefficients on our political relations variables differ between SOE and private-enterprise trade. We expect to find that political relations play a larger role in trade controlled by SOEs than in trade controlled by private enterprises. For our first three measures of relations—negative government events, negative military events, and UNGA ideal point distance—where larger values correspond with more negative relations, our formal expectation is  $\beta_1 < \tilde{\beta}_1$ . For the Yan measure, where larger values correspond with more positive relations, we expect  $\beta_1 > \tilde{\beta}_1$ .

We include *GDP* from the standard gravity model. Data are from World Development Indicators (WDI). Because we employ partner-country fixed effects, however, we leave out of our model geographic distance and other time-invariant determinants of bilateral trade flows.<sup>49</sup> Within our set of control variables *X*, we first include market potential, which we proxy as the (logged) product of exporter and importer population size, with data from WDI. We also include two control variables for political institutions at the domestic and international level. Because trade relations have been found to depend on regime type (see, for example, Mansfield, Milner and Rosendorff, 2000; Aidt and Gassebner, 2010), we

<sup>&</sup>lt;sup>48</sup> All trade values are converted to constant 2005 US\$ using US consumer price indices obtained from the World Bank's World Development Indicators database available at http://data.worldbank.org/indicator; accessed 22 October 2013.

<sup>&</sup>lt;sup>49</sup> The interested reader will find regression results without partner-country fixed effects below in the subsection on robustness checks.

control for differences in the trade policies of democratic versus authoritarian regimes with the polity2 variable from the Polity IV Project (Marshall, Gurr and Jaggers, 2013). Polity is a 21-point index, where the largest value refers to a fully institutionalized democracy. Next we add a dummy variable that captures participation in the WTO; the variable takes a value of 1 if both countries are members of the WTO for the majority of a given year; data are from the WTO website.

Finally, to mitigate endogeneity concerns, we lag all covariates by one year. Our analysis for China starts in 1993, the first year for which Customs Info provides data by ownership type, and the analysis for India begins in 1991 when the country entered its period of economic liberalization. All estimations extend through 2012. Table 5 in the appendix lists all variables, their definitions, and their sources. Descriptive statistics are found in Table 6.

## 5.2 Results

#### 5.2.1 Trade with China

Table 2 presents our results for imports to China. Each column shows the results for one of our four measures of political relations. While the upper half of the table displays the results for SOE trade, the lower half shows the corresponding results for private-enterprise trade.

Beginning with column 1, the coefficient for the index of negative government events between China and its trade partner has the expected negative sign and is statistically significant at the one-percent level in the SOE equation, while there is no significant effect on private-enterprise trade. A Wald test (shown in last row of Table 2) shows that the observed differences in the coefficients are statistically significant at the one-percent level. The results of this first equation support our hypothesis that the effect of bilateral relations on trade is stronger in the state-controlled sector of the economy. Moreover, the effects are large; a one-percent increase in our government events index decreases SOE imports by

	(1)	(2)	(3)	(4)
	Imports Negative events (government)	<b>Imports</b> Negative events (military)	<b>Imports</b> UNGA voting (ideal point distance)	<b>Imports</b> Yan index
SOE trade	(government)	(minui y)	(ideal point distance)	
Political relations	-0.1206***	-0.1543***	-0.4289***	0.0585**
	(0.0402)	(0.0361)	(0.1094)	(0.0290)
(log) GDP	1.6039*	1.6236*	1.2110	0.5319
	(0.8382)	(0.8453)	(0.8751)	(0.5566)
(log) Population	4.9985**	4.8963**	4.6166**	3.2498**
	(2.0463)	(2.0415)	(1.9522)	(1.5526)
Both in WTO	0.7498	0.7771	0.7056	-0.3265**
	(0.5944)	(0.5930)	(0.6212)	(0.1500)
Polity	0.0310	0.0324	0.0498	-0.0030
	(0.0543)	(0.0543)	(0.0553)	(0.0236)
Private enterprise trade				
Political relations	0.0583	-0.1265	-0.1098	0.1150
	(0.0578)	(0.0946)	(0.1351)	(0.2058)
(log) GDP	2.0813**	2.0514**	2.3472**	-0.3436
	(1.0246)	(1.0264)	(1.1215)	(2.9933)
(log) Population	3.5546**	3.5434**	3.2008*	45.2565***
	(1.7649)	(1.7482)	(1.7163)	(5.7960)
Both in WTO	0.8177	0.8022	1.2351	-3.1196***
	(1.1213)	(1.1192)	(1.1510)	(0.7269)
Polity	-0.0528	-0.0561	-0.0619	-0.3100***
	(0.0570)	(0.0569)	(0.0576)	(0.0746)
Number of observations	2984	2984	2954	240
Wald test (p-value)	0.005	0.757	0.033	0.778

Table 2: *Imports to China (1993-2012)*: Results of a gravity model estimating the (logged) import value between China and its trading partners with partner-country and year fixed effects. Standard errors are clustered on partner country. Regressions for SOE and private-sector trade are run as seemingly unrelated estimations. \*\*\* significant at 1%; \*\* significant at 5%; \* significant at 10%.

0.12 percent. To give a substantive example of this result, the decline in China's relations with Japan in 2010, resulting from Japan's retention of a Chinese fishing vessel near the Diaoyu/Senkaku Islands, among other tensions, and registered as an increase in negative events by 218 percent, corresponds to a 26.5 percent drop in SOE imports from Japan between 2010 and 2011, all else equal.

In column 2, we see that negative military events produce similar negative and significant effects on SOE imports. A one-percent increase in military events decreases SOE imports by 0.15 percent respectively. Moving to private-enterprise imports, we again find that the coefficient on negative events is less negative than for SOE trade and fails to reach significance at conventional levels. However, unlike with government events, the results of the corresponding Wald test do not show a significant difference between SOEs and private enterprises. Turning to our measure of political relations based on UN voting (column 3), we again find that the effect on import flows is limited to SOEs and that the difference between state and private enterprises is statistically significant at conventional levels, as shown by the Wald test. A one-percent increase in the ideal point distance between China and a given trade partner reduces SOE imports by 0.43 percent. With respect to the Yan index (column 4), we also find only a statistically significant effect of political relations on imports through SOEs, but the corresponding Wald test does not suggest a significant difference between state-owned and private enterprises. While the index is comprehensive in its treatment of political relations across multiple dimensions, it has the drawback that it covers only twelve countries. Taken together, we find statistically significant effects of political tensions only on SOE imports. Overall, our findings support the hypothesis that the effect of diplomatic tensions on imports is more pronounced in the state-owned sector of the economy.

Turning the results for our control variables in models with large samples (columns 1-3), a partner's population size is positive and significant at the five-percent level in all equations, except for UN voting for private enterprises, where it is significant at the ten-percent level. Partner-country GDP is a robust predictor of trade through private enterprises. Our measures of political and trade institutions, polity and WTO membership, do not achieve statistical significance at conventional levels in any of the models. The control variables have different effects in column 4, which may simply reflect the limited sample of twelve partner countries. While population is still highly significant for both SOE and private enterprise imports, GDP fails to reach significance in either group. At the same time, WTO membership has a negative coefficient for both SOE and private imports, significant at the five- and one-percent level respectively, and the coefficient on polity is negative and highly significant for private enterprises.<sup>50</sup>

<sup>&</sup>lt;sup>50</sup> These results from a fixed-effects regression should not be interpreted as evidence that WTO membership and democracy harm overall trade with China. The results from simple OLS regressions in Table 7 suggest instead that joint WTO

Next we examine China's exports. Table 3 presents our results for each of our four measures of political relations. Beginning with column 1, we do not see a significant effect of government events on either SOE or private-enterprise exports. Splitting out just military events, however, does produce a negative and highly significant effect on both SOE and private exports (column 2). It seems that the bar is higher for exports than imports in terms of the severity of events that would be expected provoke a trade response, likely because cutting exports hurts the exporting country as well as the partner country. Interestingly, the effect is larger for private enterprises, as confirmed by the Wald test. A possible explanation is that the Chinese government maintains leverage over private enterprises as well as SOEs. The private sector in China is very much intertwined with the government. In this regard, several studies have analyzed the role of affiliation with the China Communist Party for private business activities (e.g. Li et al., 2008; Lu, 2011). Returning to our salmon case from section 2 as an example, two of the strongest sources of state influence in the fishing sector are found in the subsidies the government provides to private fishing enterprises, without which most would not survive, and its integration of the entire fishing fleet into a large maritime militia upon which it calls to shore up maritime security.<sup>51</sup> Even private fishermen are thus routinely mobilized in the service of political goals. Policy distance also has a negative effect on both SOE and private-enterprise exports, significant at the ten-percent and five-percent levels respectively. Again contrary to our hypothesis, the coefficient on private-enterprises is larger than the coefficient on SOEs, and the difference is statistically significant as confirmed by the Wald test. Overall, the results for China do not support the hypothesis that political relations have a larger effect on state-controlled trade for exports, while they strongly support our hypothesis for imports.

membership increases, not decreases, Chinese imports and show negative effects of democratic institutions only for SOE trade.

<sup>&</sup>lt;sup>51</sup> See Lyle Goldstein, "China's fishing fleet sets challenge to US," Asia Times, August 7, 2009.

	(1) Exports	(2) Exports	(3) Exports	(4) Exports
	Negative events (government)	Negative events (military)	UNGA voting (ideal point distance)	Yan index
SOE trade				
Political relations	-0.0107	-0.0351***	-0.0436*	0.0515**
	(0.0072)	(0.0108)	(0.0241)	(0.0239)
(log) GDP	1.0142***	1.0137***	1.0608***	2.0270***
	(0.2186)	(0.2167)	(0.2323)	(0.3544)
(log) Population	0.1851	0.1696	0.0768	0.6252
	(0.4332)	(0.4295)	(0.4256)	(1.1190)
Both in WTO	-0.3820**	-0.3798**	-0.3398*	0.1111
	(0.1801)	(0.1794)	(0.1843)	(0.1458)
Polity	0.0113	0.0111	0.0108	0.0066
	(0.0108)	(0.0107)	(0.0108)	(0.0051)
Private enterprise trade				
Political relations	-0.0381	-0.1849**	-0.2448**	0.4183
	(0.0504)	(0.0817)	(0.1140)	(0.3845)
(log) GDP	2.1312***	2.1236***	2.7202***	3.9574
_	(0.7683)	(0.7665)	(0.7381)	(5.6769)
(log) Population	1.2363	1.1631	0.6735	4.3790
	(2.0194)	(1.9901)	(1.9231)	(7.5724)
Both in WTO	-2.4331***	-2.4260***	-2.3629***	-4.0361*
	(0.4900)	(0.4911)	(0.4846)	(2.4357)
Polity	0.0969*	0.0956*	0.1010**	-0.0368
	(0.0535)	(0.0526)	(0.0506)	(0.0307)
Number of observations	2984	2984	2954	240
Wald test (p-value)	0.578	0.053	0.061	0.332

Table 3: *Exports from China (1993-2012)*: Results of a gravity model estimating the (logged) export value between China and its trading partners with partner-country and year fixed effects. Standard errors are clustered on partner country. Regressions for SOE and private-sector trade are run as seemingly unrelated estimations. \*\*\* significant at 1%; \*\* significant at 5%; \* significant at 10%.

### 5.2.2 Trade with India

Columns 1-3 of Table 4 present our results for Indian imports. We find a negative relationship between events and imports for both SOE and private-enterprise trade with respect to both government events (column 1) and military events (column 2). The coefficients on both SOE and private-enterprise imports are statistically significant at the one-percent level in both models, but the Wald tests show a statistically larger effect on SOEs only for military events. Moreover, the coefficients are large. A one-percent increase in negative government events produces a 0.41 percent decrease in imports for SOEs, while the comparable effect for negative military events is 0.54 percent. Turning to ideal point distance, we again observe a negative effect of political relations, but the effect is significant only for SOEs at the five-percent level. The Wald test shows that the difference in the coefficients is statistically significant at the five-percent level. On the whole, the findings support our hypothesis.

Turning to the control variables, the effect of GDP is large, postive, and significant at least at the five-percent level in all models for both SOEs and private enterprises. The effect of population is also positive in all models but only achieves significance for SOEs and only at the ten-percent level. The coefficients on WTO and polity are positive across all models for both SOEs and private enterprises but never achieves statistical significance at conventional levels.<sup>52</sup>

<sup>&</sup>lt;sup>52</sup> These results from a fixed-effects regression do not necessarily suggest that WTO membership and democratic institutions do not play a role for trade with India. As can be seen from the simple OLS results presented in Table 9, Indian private companies import more from WTO members.

	(1)	(2)	(3)	(4)	(5)	(9)
	Imports	Imports	Imports	Exports	Exports	Exports
Neg	Negative events	Negative events	UNGA voting	Negative events	Negative events	UNGA voting
(gr	(government)	(military)	(ideal point distance)	(government)	(military)	(ideal point distance)
SOE trade						
Political relations -0	-0.4095***	$-0.5415^{***}$	-0.2688**	$-0.1212^{***}$	-0.1436***	-0.0162
-	(0.0646)	-0.0862	-0.1254	(0.0173)	(0.0308)	(0.0244)
(log) GDP 2	2.8222**	3.0765***	$2.8626^{**}$	$0.8876^{***}$	$0.9600^{***}$	1.0322 * * *
-	(1.1195)	-1.1235	-1.3211	(0.2170)	(0.2186)	(0.2615)
(log) Population	$4.6476^{*}$	4.4744*	4.3606	-0.1464	-0.1967	-0.2765
	(2.6808)	-2.718	-2.7061	(0.4729)	(0.4816)	(0.489)
Both in WTO	0.3564	0.4843	0.5611	0.0382	0.0747	0.0452
_	(0.5815)	-0.5865	-0.5801	(0.1126)	(0.1175)	(0.1161)
Polity	0.0262	0.0257	0.0254	-0.0077	-0.0075	-0.0036
	(0.0750)	-0.0765	-0.0784	(0.0121)	(0.0126)	(0.013)
Private enterprise trade						
Political relations -0	-0.3941***	-0.4687***	-0.1637	-0.1173***	$-0.1113^{***}$	-0.0033
-	(0.0558)	-0.0869	-0.1253	(0.0172)	(0.0314)	(0.0225)
(log) GDP 2	$2.8920^{**}$	$3.1277^{***}$	2.8025 **	$0.9586^{***}$	$1.0239^{***}$	$1.0809^{***}$
_	(1.1688)	-1.1668	-1.3472	(0.2268)	(0.2284)	(0.274)
(log) Population	2.4879	2.3242	2.2127	-0.1903	-0.2375	-0.3042
	(2.2166)	-2.2624	-2.2556	(0.4720)	(0.4867)	(0.4898)
Both in WTO	0.5748	0.6938	0.8436	-0.0089	0.0244	-0.0032
	(0.5729)	-0.5756	-0.558	(0.1106)	(0.1155)	(0.1169)
Polity	0.0207	0.0213	0.0355	-0.0003	0.0005	0.0033
	(0.0722)	-0.0736	-0.0758	(0.0122)	(0.0129)	(0.013)
Number of observations	3160	3160	3125	3160	3160	3125
Wald test (p-value)	0.619	0.014	0.039	0.627	0.047	0.338

Lastly, we analyze the role of political relations for Indian exports in columns 4-6. In general, we find support for the hypothesis that negative political events harm exports; the coefficients on both measures of events are negative for both SOEs and private enterprises and statistically significant at the one-percent level (columns 4 and 5). The Wald test indicates a significantly larger trade response to military tensions in the state-owned sector. This effect does not extend to ideal point distance, however (column 6). The coefficient on ideal point distance is negative, as expected, but never achieves significance for either SOEs or private enterprises. Overall, the coefficients on political relations for exports are much smaller than for imports. In sum, political relations affect India's trading patterns; the effect is more pronounced for SOEs than for private enterprises and stronger for imports.

### 5.2.3 Tests for Robustness

Several additional tests demonstrate the robustness of our results to alternative sample specification. The results demonstrating the impact of our relations variables on imports are generally robust to the removal of any particular year. For imports analysis there are two exceptions: our findings for impact of UN ideal point distance on Chinese imports are sensitive to the removal of 1995 (the Wald test does not show a significant difference between SOE versus private enterprises at conventional levels of significance); similarly, the impact of ideal point distance on Indian imports falls below conventional levels of significance if we remove 1994 or 1999 (p-values: 0.11 and 0.13). In all other cases, the qualitative results for imports remain unchanged. While the findings for Indian exports are robust to the removal of any particular year, the export analysis for China is more sensitive—three years appear to be important for the surprising finding for China that private sector exports declined more in response to military events than SOE exports—the removal of 1994, 1995, or 2012, erases the significance of the difference between state-owned and private enterprises in the effect of military events on Chinese exports.

Next, we tested whether our findings are driven by single countries. Removing the US, Japan, and Pakistan—countries with which China and/or India experience a large number of political events—as trade partners does not qualitatively change the results on Chinese and Indian imports, nor does removing any other single trade partner. Again, the export findings appear to be a bit weaker.<sup>53</sup> Full regression results are available upon request.

Finally, we also run standard gravity models without partner-country fixed effects to see whether our results hold when we analyze both the within and between variations rather than the within variation only. In these specifications, we can add (logged) bilateral distance defined as the great-circle distance between the 25 major cities of each country, weighted by the share of each city in the country's overall population. We also include a dummy for contiguity and a variable that takes a value of 1 if at least nine percent of the population of both countries share a common language, as both common border and common language are expected to facilitate trade. Being landlocked, on the other hand, should increase trade costs and reduce bilateral trade; we thus include a dummy that takes a value of 1 if the trade partner has no access to the sea. All four variables are obtained from the GeoDist dataset of the Centre d'Etudes Prospectives et d'Informations Internationales (Mayer and Zignago, 2011). Finally, to address the argument that structural patterns of trade follow alliance blocs (Gowa, 1994), we add a dummy variable that takes a value of 1 if a trading partner is an ally of the United States in a particular year. Given that India does not have any formal alliances of its own, and China has few, the measure of US alignment offers a better indicator of states that might generate security externalities and therefore reductions in trade.<sup>54</sup>

<sup>&</sup>lt;sup>53</sup> The Wald tests loses statistical significance for military events twice in the Indian case (Cape Verde and Qatar, both p-values, 0.16) and once in the Chinese case (Australia, 0.11). The same holds once for UNGA voting and Chinese exports (Indonesia, 0.11). No qualitative changes in all other cases.

<sup>&</sup>lt;sup>54</sup> Data are obtained from the Alliance Treaty Obligations and Provisions (ATOP) project (Leeds et al., 2002). Because these data end in 2003, we carry forward the 2003 value to the end of our dataset under the assumption that a country's alliance portfolio does not vary much over time.

Table 7, Table 8, and Table 9 show the results of the regressions excluding partner-country fixed effects. Overall, the results are similar to the ones obtained using the stricter fixed-effects specifications. In most models, we find the effect of bilateral tensions on Chinese or Indian imports to be significantly more negative in the state-controlled sector of the economy compared to the private sector. Consistent with our previous findings, Chinese exports appear again to be the outlier with our findings hinting in the opposite direction.

## 6 Conclusion

Does globalization render economic statecraft obsolete? Our research suggests that the answer is no. Governments still aspire to use economic tools to influence international politics. Deregulation of markets, transnational production, and international trade rules have simply narrowed their capacity for action. We trace politicization of trade directly to the role of government in the economy. The literature on interdependence, which aggregates the incentives of private actors and state intervention, has been unable to explain how the linkage between trade and foreign policy arises. In contrast, we identify state control as the mechanism to explain why trade patterns correlate with political relations and bring original data to test the relationship.

Where governments maintain control over trade flows, trade continues to follow the flag. We argue that this is most likely to occur when the government holds an ownership stake in firms that allows influence over their operations. We show that negative events with a trade partner reduce imports by China and India respectively, and that the magnitude of the change is greatest in the state-controlled sector of the economy. More general indicators of political "closeness" between states, as measured by their UNGA voting patterns, show a similar pattern. The results for exports are much weaker and we were only able to confirm our findings for India. By showing that the relationship between foreign policy and trade is conditional on state control, our study points to a new area for attention in the debate about economic interdependence and cooperation.

The paper also addresses the political economy of state ownership. It is not surprising that state control over economic actors would shift their behavior. Yet the literature has paid insufficient attention to how state interests shape trade patterns as a function of state control. Even as market-based economic policies are the norm, many states continue to exercise control over selected sectors. With China's emergence as the world's second largest economy, state influence over economic actors becomes an even more important avenue of inquiry. Importantly, however, our findings also extend to India, suggesting that the phenomenon is not "China-specific" nor driven by regime type. Our research highlights one important dimension of this influence for international relations research: since state-owned firms make decisions based on political rather than commercial interests, states can manipulate trade in pursuit of foreign policy goals.

Future research should address the effectiveness of these strategies. From both theoretical and policy perspectives, it is important to know whether states modify their behavior to avoid negative effects on trade flows. At the same time, such strategic anticipation has been a central problem in research about interdependence and cooperation. Scholars have been unable to draw strong inferences about the causal effect between political relations and trade at the aggregate level because we do not have any exogenous identification of variation in political relations. We circumvent this problem by comparing trade across sectors within the same country. Outside of our proposed mechanism, improved relations would have a similar effect across sectors. In addition, since China and India have only emerged in the past decade as economic powers with markets large enough to sway other countries, there is less concern about entrenched patterns of endogenous sanctioning and cooperation. Over time, partners who trade heavily

in the sectors with large shares of state ownership may experience trade punishment sufficiently often that they will begin to modify their behavior. Going forward, China and India offer an opportunity to study the evolution of economic statecraft and diplomatic cooperation.

## References

- Aidt, Toke S. and Martin Gassebner. 2010. "Do Autocratic States Trade Less?" World Bank Economic Review 24(1):38–76.
- Aisbett, Emma and Carol McAusland. 2013. "Firm Characteristics and Influence on Government Rule-Making: Theory and Evidence." *European Journal of Political Economy* 29(C):214–235.
- Alchian, Armen. 1965. "Some Economics of Property Rights." Politico 30(4):816-829.
- Andersen, Scott and Justine Blanchet. 2010. The Law, Economics and Politics of Retaliation in WTO Dispute Settlement. Cambridge: Cambridge University Press chapter U.S. Experience in Suspending WTO Obligations, pp. 235–245.
- Anderson, James E. and Eric van Wincoop. 2003. "Gravity with Gravitas: A Solution to the Border Puzzle." *American Economic Review* 93(1):170–192.
- Baccini, Leonardo, Impullitti Giammario and Edmund J. Malesky. 2012. "Trade Liberalization and State-Owned Enterprises: Evidence from Vietnam's Accession to the WTO." Paper presented at the Annual Meeting of the International Political Economy Society, University of Virginia.

Bailey, Michael, Anton Strezhnev and Eric Voeten. 2013. "Estimating Dynamic State Preferences from United Nations Voting Data.". URL: http://ssrn.com/abstract=2330913

- Baroncelli, Eugenia. 2007. *The Challenges and Potential of Pakistan-India Trade*. The World Bank chapter The 'Peace Dividend,' SAFTA, and PakistanIndia Trade, pp. 59–68.
- Berger, Daniel, William Easterly, Nathan Nunn and Shanker Satyanath. 2013. "Commercial Imperialism? Political Influence and Trade During the Cold War." *American Economic Review* 103(2):863– 896.
- Best, Rebecca H., Christine Carpino and Mark J.C. Crescenzi. 2013. "An Analysis of the TABARI Coding System." *Conflict Management and Peace Science* 30(4):335–348.
- Boardman, Anthony E. and Aidan R. Vining. 1989. "Ownership and Performance in Competitive Environments: A Comparison of the Performance of Private, Mixed, and State-Owned Enterprises." *Journal of Law and Economics* 32(1):1–33.
- Boardman, Anthony E. and Aidan R. Vining. 1992. "Ownership vs. Competition: Efficiency in Public Enterprise." *Public Choice* 73(2):205–239.
- Brooks, Stephen G. 2007. Producing Security: Multinational Corporations, Globalization, and the Changing Calculus of Conflict. Princeton, NJ: Princeton University Press.
- Capobianco, Antonio and Hans Christiansen. 2011. Competitive Neutrality and State-Owned Enterprises: Challenges and Policy Options. OECD Corporate Governance Working P]apers, No. 1, volume = , url=http://dx.doi.org/10.1787/5kg9xfgjdhg6-en, address=Paris, Organisation for Economic Co-operation and Development.

- Carnegie, Allison. 2014. "States Held Hostage: Political Hold-Up Problems and the Effects of International Institutions." *American Political Science Review* 108:54–70.
- Cheung, Yin-Wong, Jakob de Haan, XingWang Qian and Shu Yu. 2012. China's Investments in Africa. In *The Evolving Role of China in the Global Economy*, ed. Yin-Wong Cheung and Jakob de Haan. Cambridge: MIT Press pp. 71–80. 2010 CESifo Venice Summer Institute Conference Volume.
- Clift, Ben and Cornelia Woll. 2012. "Economic Patriotism: Reinventing State Control Over Open Markets." *Journal of European Public Policy* 19(3):307–323.
- Davis, Christina L. 2008/9. "Linkage Diplomacy: Economic and Security Bargaining in the Anglo-Japanese Alliance, 1902-23." *International Security* 33(3):143–179.
- Davis, Christina and Sophie Meunier. 2011. "Business as Usual? Economic Responses to Political Tensions." *American Journal of Political Science* 55(3):628–646.
- DeWenter, Kathryn L. and Paul H. Malatesta. 2001. "State-Owned and Privately-Owned Firms: An Empirical Analysis of Profitability, Leverage, and Labor Intensity." *American Economic Review* 91(1):320–334.
- Dreher, Axel and Andreas Fuchs. forthcoming. "Rogue Aid? An Empirical Analysis of China's Aid Allocation." *Canadian Journal of Economics*.
- Drezner, Daniel. 2003. "The Hidden Hand of Economic Coercion." *International Organization* 57(3):643–659.
- Fan, Xubing and Rui Yu. 2004. Fishing Industry in China. FAO/GLOBEFISH Research Programme.
  FAO.
  URL: http://www.globefish.org/upl/Publications/GRP%2076%20China%20FINAL%20PRINTING.pdf
- Fisman, Raymond, Yasushi Hamao and Yongxiang Wang. forthcoming. "Nationalism and Economic
- Fuchs, Andreas and Nils-Hendrik Klann. 2013. "Paying a Visit: The Dalai Lama Effect on International Trade." *Journal of International Economics* 91(1):164–177.
- Gartzke, Erik. 2007. "The Capitalist Peace." American Journal of Political Science 51(1):166–191.

Exchange: Evidence from Shocks to Sino-Japanese Relations." Review of Financial Studies .

- Gartzke, Erik, Quan Li and Charles Boehmer. 2001. "Investing in the Peace: Economic Interdependence and International Conflict." *International Organization* 55(2):391–438.
- Goldstein, Joshua S. 1992. "A Conflict-Cooperation Scale for WEIS Events Data." *Journal of Conflict Resolution* 36(2):369–385.
- Government of India. 2011. Public Enterprises Survey 2010-2011: Overview on the Performance of Central Public Sector Enterprises. New Delhi: Ministry of Heavy Industries and Public Enterprises and Department of Public Enterprises.
- Gowa, Joanne. 1989. "Bipolarity, Multipolarity, and Free Trade." *American Political Science Review* 83(4):1245–1256.

- Gowa, Joanne. 1994. *Allies, Adversaries, and International Trade*. Princeton, NJ: Princeton University Press.
- Gowa, Joanne. 2010. "Alliances, Market Power, and Postwar Trade: Explaining the GATT/WTO." *World Trade Review* 9(3):487–504.
- Gowa, Joanne and Edward Mansfield. 2004. "Alliances, Imperfect Markets, and Major-Power Trade." *International Organization* 58(4):775–805.
- Hirschman, Albert O. [1945] 1980. *National Power and the Structure of Foreign Trade*. Berkeley, CA: University of California Press.
- Hong, Canhui, Wei-Min Hu Hu, James E. Prieger and Dongming Zhu. 2010. "French Automobiles and the Chinese Boycotts of 2008: Politics Really Does Affect Commerce." *B.E. Journal of Economic Analysis & Policy* 11(1):1–36.
- Hufbauer, Gary Clyde, Jeffrey J. Schott and Kimberly Ann Elliott. 1990. *Economic Sanctions Reconsidered: History and Current Policy*. Washington, DC: Institute for International Economics.
- Keohane, Robert. 1984. *After Hegemony: Cooperation and Discord in the World Political Economy*. Princeton, NJ: Princeton University Press.
- Keshk, Omar, Rafael Reuveny and Brian Pollins. 2004. "Trade Still Follows the Flag: The Primacy of Politics in a Simultaneous Model of Interdependence and Armed Conflict." *Journal of Politics* 66(4):1155–1179.
- Kowalski, Przemyslaw, Max Büge, Monika Sztajerowska and Matias Egeland. 2013. State-Owned Enterprises: Trade Effects and Policy Implications. OECD Trade Policy Papers No. 147 Organisation for Economic Co-operation and Development Paris: .
- Lake, David. 2009. Hierarchy in International Relations. Ithaca, NY: Cornell University Press.
- Lee, Hoon and Sara Mitchell. 2012. "Foreign Direct Investment and Territorial Disputes." *Journal of Conflict Resolution* 56(4):675–703.
- Leeds, Brett, Jeffrey Ritter, Sara Mitchell and Andrew Long. 2002. "Alliance Treaty Obligations and Provisions, 1815-1944." *International Interactions* 28(3):237–260.
- Leetaru, Kalev and Philip Schrodt. 2013. "GDELT: Global Data on Events, Language, and Tone, 1979-2012.". International Studies Association Annual Conference, April 2013. San Diego, CA. URL: http://data.gdeltproject.org/documentation/ISA.2013.GDELT.pdf
- Levy, J.D. 2006. *The State After Statism: New State Activities in the Age of Liberalization*. Cambridge, MA: Harvard University Press.
- Li, Hongbin, Lingsheng Meng, Qian Wang and Li-An Zhou. 2008. "Political Connections, Financing and Firm Performance: Evidence from Chinese Private Firms." *Journal of Development Economics* 87(2):283–299.
- Li, Quan and David Sacko. 2002. "The (Ir)Relevance of Militarized Interstate Disputes for International Trade." *International Studies Quarterly* 46(1):11–43.

- Li, Quan and Guoyang Liang. 2012. "Political Relations and Chinese Outbound Direct Investment: Evidence from Firm- and Dyad-Level Tests." Paper presented at the Annual Meeting of the International Political Economy Society, University of Virginia.
- Long, Andrew. 2008. "Bilateral Trade in the Shadow of Armed Conflict." *International Studies Quarterly* 52(1):81–101.
- Long, Andrew and Brett Ashley Leeds. 2006. "Trading for Security: Military Alliances and Economic Agreements." *Journal of Peace Research* 43(4):433–451.
- Lu, Yi. 2011. "Political Connections and Trade Expansion." Economics of Transition 19(2):231–254.
- Mansfield, Edward, Helen Milner and Peter Rosendorff. 2000. "Free to Trade: Democracies, Autocracies, and International Trade." *American Political Science Review* 94(2):305–321.
- Mansfield, Edward and Rachel Bronson. 1997. "Alliances, Preferential Trading Arrangements, and International Trade." *American Political Science Review* 91(1):94–107.
- Marshall, Monty G., Ted Robert Gurr and Keith Jaggers. 2013. Polity IV Project: Political Regime Characteristics and Transitions, 1800-2012. Technical report Center for Systemic Peace Vienna, VA: .
- Martin, Lisa. 1992. *Coercive Cooperation: Explaining Multilateral Economic Sanctions*. Princeton, NJ: Princeton University Press.
- Mayer, Thierry and Soledad Zignago. 2011. Notes on CEPII's Distances Measures: the GeoDist Database. MPRA Paper 26469, University Library of Munich, Germany.
- Morrow, James. 1999. "How Could Trade Affect Conflict?" Journal of Peace Research 36(4):267–293.
- Morrow, James D., Randolph M. Siverson and Tressa E. Tabares. 1998. "The Political Determinants of International Trade: The Major Powers, 1907-90." *American Political Science Review* 92(3):649–661.
- Naqvi, Zareen Fatima and Philip Schuler. 2007. The Challenges and Potential of Pakistan-India Trade. Technical report The World Bank.
- Nitsch, Volker. 2007. "State Visits and International Trade." World Economy 30(12):1797–1816.
- Nordstrom, Hakan. 2010. *The Law, Economics and Politics of Retaliation in WTO Dispute Settlement*. Cambridge: Cambridge University Press chapter The Politics of Selecting Trade Retaliation in EC, pp. 267–276.
- OECD. 2009. "State-Owned Enterprises in China: Reviewing the Evidence.". URL: http://www.oecd.org/daf/ca/corporategovernanceofstate-ownedenterprises/42095493.pdf
- Pei, Minxin. 2006. China's Trapped Transition. Cambridge, MA: Harvard University Press.
- Polachek, Solomon W. 1980. "Conflict and Trade." Journal of Conflict Resolution 24(1):55-78.
- Pollins, Brian. 1989. "Does Trade Still Follow the Flag?" *American Political Science Review* 83(2):465–480.

- Rickard, Stephanie and Daniel Kono. forthcoming. "Buying National: Democracy, Public Procurement and International Trade." *International Interactions*.
- Rose, Andrew. 2007. "The Foreign Service and Foreign Trade: Embassies as Export Promotion." *World Economy* 30(1):22–39.
- Russett, Bruce and John Oneal. 2001. Triangulating Peace: Democracy, Interdependence, and International Organizations. New York, NY: Norton.
- Skalnes, Lars. 2000. Politics, Markets, and Grand Strategy: Foreign Economic Policies as Strategic Instruments. Ann Arbor, MI: University of Michigan Press.
- State Council. 2012. Situation and Policies of China's Rare Earth Industry. Government White Paper Information Office of the State Council Beijing: .
- Steinfeld, Edward S. 2000. *Forging Reform in China: The Fate of State Industry*. New York, NY: Cambridge University Press.
- Su, Zhong-qin. 2013. "Political Connections and Corporate Overinvestment: Evidence from China." International Journal of Accounting and Information Management 21(4):285–296.
- Tinbergen, Jan. 1962. *Shaping the World Economy; Suggestions for an International Economic Policy*. New York, NY: Twentieth Century Fund.
- World Bank. 1995. Bureaucrats in Business. London: Oxford University Press.
- WTO. 2013. "International Trade Statistics 2013.". Accessed March 23, 2014. URL: http://www.wto.org/english/res\_e/statis\_e/its2013\_e/its2013\_e. pdf
- Yan, Xuetong and Haixia Qi. 2012. "Football Game Rather than Boxing Match: China-US Intensifying Rivalry Does not Amount to Cold War." *The Chinese Journal of International Politics* 5:105–127.
- Yan, Xuetong et al. 2010. Zhong wai guan xi jian lan, 1950-2005 : Zhongguo yu da guo guan xi ding liang heng lian. Beijing: Gao deng jiao yu chu ban she. (China's Foreign Relations by the Numbers 1950-2005: Quantitative Measures of China's Relations with the Major Powers).

# A Appendix

Variable	Description	Source
Trade data		
(log) Imports (SOE)	(log) Imports under control of state-owned enterprises (in constant 2005 US\$)	Own construction (see text)
(log) Imports (private)	(log) Imports under control of private enterprises (in constant 2005 US\$)	Own construction (see text)
(log) Exports (SOE)	(log) Exports under control of state-owned enterprises (in constant 2005 US\$)	Own construction (see text)
(log) Exports (private)	(log) Exports under control of private enterprises (in constant 2005 US\$)	Own construction (see text)
Variables of interest		
(log) Negative events (government)	(log) Sum of the negative events weighted by Goldstein scores (government actors, in thousands), lag	GDELT (Leetaru and Schrodt, 20)
(log) Negative events (military)	(log) Sum of the negative events weighted by Goldstein scores (military actors, in thousands), lag	GDELT (Leetaru and Schrodt, 20)
(log) UNGA voting (ideal point distance)	(log) Distance between a pair of states' foreign policy preferences based on UNGA voting, lag	Bailey, Strezhnev and Voeten (20)
Yan index	Diplomatic relations score (+9: best relations, -9: worst relations), lag	Yan (2010)
Control variables		
(log) GDP	(log product) GDP (constant 2005 US\$), lag	WDI 2013 (data.worldbank.
(log) Population	(log product) Population size, lag	WDI 2012 (data.worldbank.
Both in WTO	1 if both countries are WTO members in most of the year, lag	WTO (www.wto.org)
Polity	Revised Combined Polity Score (+10 (strongly democratic) to -10 (strongly autocratic), lag	Marshall, Gurr and Jaggers (2013)
(log) Distance	(log) Distance (between major cities, population-weighted, in km)	CEPII (Mayer and Zignago, 2011]
Neighbor	1 if both countries share a common border	CEPII (Mayer and Zignago, 2011]
Common language	1 if both countries share a language $(>9\%$ of the population)	CEPII (Mayer and Zignago, 2011]
Landlocked	1 if partner country is landlocked	CEPII (Mayer and Zignago, 2011]
US ally	1 if the partner country and the United States share an alliance, lag	ATOP(atop.rice.edu)
Table 5: Variables and Sources: The	Table 5: Variables and Sources: The table lists all variables employed in the empirical analysis, their definitions and sources. Before taking	Before taking

logarithms, we add 0.1 events to our measures of negative event counts and 0.01 US\$ to all trade values.

Variable	Obs.	Mean	Std.Dev.	Min.	Max.
Trade data					
(log) Imports (SOE)	8899	11.56	8.06	-4.61	24.39
(log) Imports (private)	8899	9.30	10.01	-4.61	24.14
(log) Exports (SOE)	8899	15.32	5.03	-4.61	24.17
(log) Exports (private)	8899	13.34	7.99	-4.61	25.14
Variables of interest					
(log) GDELT negative events (government)	8185	-8.20	2.07	-9.21	1.26
(log) GDELT negative events (military)	8185	-8.91	1.21	-9.21	-0.00
(log) UNGA voting (ideal point distance)	7595	-0.71	1.29	-10.29	1.51
Yan index	228	3.90	2.32	-2.32	8.10
Control variables					
(log) GDP	7542	51.02	2.54	43.17	59.28
(log) Population	8189	36.06	2.24	29.69	41.94
Both in WTO	9397	0.41	0.49	0.00	1.00
Polity	6494	13.05	6.67	0.00	20.00
(log) Distance	8866	8.94	0.57	7.02	9.86
Neighbor	9016	0.05	0.22	0.00	1.00
Common language	9016	0.20	0.40	0.00	1.00
Landlocked	9038	0.17	0.37	0.00	1.00
US ally	9397	0.36	0.48	0.00	1.00

Table 6: *Descriptive Statistics*: The table presents the number of observations (Obs.), the average value (Mean), the standard deviation (Std.Dev.), the minimum (Min.) and maximum (Max.) of all variables employed in the empirical analysis for the entire dataset (1991-2012).

	(1) Imports	(2) Imports	(3) Imports	(4) Imports
	Negative events	Negative events	UNGA voting	Yan index
	(government)	(military)	(ideal point distance)	
SOE trade				
Political relations	-0.0501	-0.2237**	-0.2291*	0.1199*
	(0.0785)	(0.1026)	(0.1367)	(0.0651)
(log) Distance	-0.8303*	-0.9192*	-0.8204*	-0.8292***
	(0.5046)	(0.5019)	(0.4924)	(0.1888)
(log) GDP	1.8275***	1.8354***	1.8822***	0.9084***
	(0.1724)	(0.1649)	(0.1713)	(0.2128)
(log) Population	0.1245	0.1546	0.0631	-0.5868*
	(0.2519)	(0.2551)	(0.2629)	(0.3352)
Neighbor	1.3821	1.5368	1.1572	-0.0929
	(1.2745)	(1.2803)	(1.2593)	(0.8002)
Common language	1.7320***	1.5814***	1.4604***	
	(0.5168)	(0.5039)	(0.5101)	
Landlocked	-0.5170	-0.5866	-0.3520	
	(0.6169)	(0.6120)	(0.6081)	
Both in WTO	1.8255*	1.8417*	1.7448	-1.0175***
	(1.0554)	(1.0544)	(1.0727)	(0.3654)
Polity	-0.1368***	-0.1344***	-0.1289**	0.0223
	(0.0516)	(0.0509)	(0.0533)	(0.0300)
US ally	0.0814	0.0579	0.1532	-1.4456***
	(0.6257)	(0.6138)	(0.6157)	(0.4891)
Private enterprise trade				
Political relations	0.2149***	0.0769	0.0070	0.2781
	(0.0647)	(0.0953)	(0.1516)	(0.3842)
(log) Distance	-1.5736***	-1.7440***	-1.8479***	-1.7026***
	(0.4266)	(0.4520)	(0.4444)	(0.3249)
(log) GDP	1.6405***	1.7062***	1.6997***	2.1795***
	(0.1516)	(0.1540)	(0.1564)	(0.7338)
(log) Population	-0.0570	-0.0122	0.0450	-0.1007
	(0.2155)	(0.2197)	(0.2228)	(0.6479)
Neighbor	1.0247	1.1291	1.0761	-1.7238
	(1.0837)	(1.0956)	(1.1020)	(1.9107)
Common language	4.9713***	5.1109***	4.9812***	
	(0.6027)	(0.5999)	(0.5903)	
Landlocked	-0.6144	-0.6291	-0.7144	
	(0.4703)	(0.4763)	(0.4728)	
Both in WTO	1.7282*	1.6928*	1.7994*	-1.9522
	(1.0140)	(1.0224)	(1.0217)	(1.3930)
Polity	-0.0021	0.0054	-0.0012	-0.1920
	(0.0424)	(0.0424)	(0.0428)	(0.1553)
US ally	0.3428	0.2659	0.1924	-1.0260
	(0.5278)	(0.5376)	(0.5191)	(1.2572)
Number of observations	2978	2978	2948	240
Wald test (p-value)	0.000	0.000	0.074	0.674

Table 7: *Pooled Analysis of Imports to China (1993-2012)*: Results of a gravity model estimating the (logged) import value between China and its trading partners with year dummies only (excluding partner FE). Regressions for SOE and private-sector trade are run as seemingly unrelated estimations. \*\*\* significant at 1%; \*\* significant at 5%; \* significant at 10%.

	(1) Exports Negative events	(2) Exports Negative events	(3) Exports UNGA voting	(4) Exports Yan index
	(government)	(military)	(ideal point distance)	
SOE trade		•	· •	
Political relations	0.0539***	0.0198	-0.0996**	0.1246***
	(0.0208)	(0.0269)	(0.0436)	(0.0418)
(log) Distance	-0.3166*	-0.3590**	-0.3943**	-0.7642***
	(0.1662)	(0.1697)	(0.1553)	(0.0970)
(log) GDP	0.6418***	0.6582***	0.6957***	0.8450***
	(0.0725)	(0.0707)	(0.0698)	(0.1083)
(log) Population	0.2528***	0.2639***	0.2413***	-0.3723***
	(0.0726)	(0.0738)	(0.0760)	(0.1109)
Neighbor	0.6728	0.6985	0.6681	0.1554
	(0.4409)	(0.4490)	(0.4451)	(0.1779)
Common language	1.5811***	1.6164***	1.4916***	
	(0.4854)	(0.5004)	(0.5384)	
Landlocked	-0.9407***	-0.9441***	-0.9017***	
	(0.1936)	(0.1960)	(0.1937)	
Both in WTO	-0.0895	-0.0984	-0.1342	0.2230
	(0.2628)	(0.2670)	(0.2735)	(0.1661)
Polity	-0.0022	-0.0004	0.0040	-0.0228
	(0.0133)	(0.0133)	(0.0134)	(0.0194)
US ally	-0.0978	-0.1169	-0.1070	-1.2454***
	(0.2246)	(0.2263)	(0.1987)	(0.2730)
Private enterprise trade				
Political relations	0.0228	-0.1026	-0.3365***	0.5021*
	(0.0522)	(0.0728)	(0.0991)	(0.2655)
(log) Distance	-0.4417	-0.5290*	-0.5453*	-0.8329**
	(0.3125)	(0.3188)	(0.2932)	(0.3971)
(log) GDP	1.1975***	1.2170***	1.2653***	0.8667
	(0.1043)	(0.0997)	(0.1086)	(0.5419)
(log) Population	0.1043	0.1309	0.0675	-0.2403
	(0.1359)	(0.1393)	(0.1429)	(0.5299)
Neighbor	0.6461	0.7534	0.3938	-3.3999**
	(0.7818)	(0.7833)	(0.7938)	(1.3533)
Common language	2.9082***	2.8595***	2.6230***	
<b>T</b> 11 1 1	(0.5234)	(0.5562)	(0.6705)	
Landlocked	-1.9789***	-2.0198***	-1.7391***	
	(0.3408)	(0.3446)	(0.3286)	2.0421
Both in WTO	-0.7013*	-0.7008*	-0.7921**	-2.0421
D-1!/	(0.3910)	(0.3913)	(0.3897)	(1.3865)
Polity	0.0508*	0.0538**	0.0611**	-0.0570
LTC _11_	(0.0265)	(0.0263)	(0.0263)	(0.0562)
US ally	-0.5053	-0.5358	-0.3018	-1.8760
Number of the second	(0.3470)	(0.3489) 2978	(0.3389)	(1.5187)
Number of observations	2978	2978	2948	240

Table 8: *Pooled Analysis of Exports from China (1993-2012)*: Results of a gravity model estimating the (logged) import value between China and its trading partners with year dummies only (excluding partner FE). Regressions for SOE and private-sector trade are run as seemingly unrelated estimations. \*\*\* significant at 1%; \*\* significant at 5%; \* significant at 10%.

	Imports Negative events	1mports Negative events	Imports UNGA voting	<b>Exports</b> Neoative events	<b>Exports</b> Negative events	Exports UNGA voting
		<b>)</b>	)	CHICLO OF THEORY I	1108mi 10 010110	0
	(government)	(military)	(ideal point distance)	(government)	(military)	(ideal point distance)
SOE trade						
Political relations	-0.3132***	-0.7335***	$-0.3721^{***}$	-0.0366	-0.1528*	-0.1378***
	(0.0861)	(0.1520)	(0.1301)	(0.0355)	(0.0870)	(0.0485)
(log) Distance	-2.1165***	-2.1404***	-2.1162***	-1.0501 ***	-1.0626***	$-1.0856^{***}$
	(0.4205)	(0.4078)	(0.4148)	(0.1849)	(0.1852)	(0.1816)
(log) GDP	$1.9725^{***}$	$1.9270^{***}$	$2.0196^{***}$	$0.6676^{***}$	$0.6636^{***}$	$0.7035^{***}$
	(0.1552)	(0.1468)	(0.1577)	(0.0732)	(0.0706)	(0.0671)
(log) Population	-0.1243	-0.1142	-0.2687	$0.2355^{***}$	$0.2414^{***}$	$0.2002^{**}$
1	(0.2033)	(0.1965)	(0.2086)	(0.0901)	(0.0894)	(0.0903)
Neighbor	1.2089	1.5390	0.0471	0.3115	0.4571	0.0782
)	(1.8020)	(1.7346)	(1.8159)	(0.6896)	(0.6585)	(0.7073)
Common language	0.4213	0.3905	0.1207	0.8023 * * *	$0.8087^{***}$	$0.7421^{***}$
) )	(0.5887)	(0.5700)	(0.5564)	(0.2078)	(0.2063)	(0.1956)
Landlocked	-1.1030*	-1.1271*	-1.0544	-0.8071 ***	-0.8201 * * *	-0.8055***
	(0.6556)	(0.6453)	(0.6420)	(0.2229)	(0.2196)	(0.2092)
Both in WTO	0.7056	0.8268	0.8003	$0.7552^{***}$	$0.7763^{***}$	$0.7613^{***}$
	(0.6296)	(0.6154)	(0.6088)	(0.2233)	(0.2188)	(0.2205)
Polity	-0.0203	-0.0211	-0.0169	-0.0072	-0.0071	-0.0037
	(0.0401)	(0.0392)	(0.0406)	(0.0166)	(0.0166)	(0.0163)
US ally	-1.1348**	-1.0341*	-0.9902*	-0.5703**	-0.5597**	-0.5621**
•	(0.5747)	(0.5483)	(0.5701)	(0.2588)	(0.2482)	(0.2432)
Private enterprise trade						
Political relations	-0.2714***	-0.5999***	-0.2635*	-0.0251	-0.1204*	-0.1121**
	(0.0799)	(0.1492)	(0.1372)	(0.0316)	(0.0706)	(0.0470)
(log) Distance	-1.9639***	-1.9795***	-1.9521***	$-1.0710^{***}$	$-1.0818^{***}$	$-1.1013^{***}$
	(0.4376)	(0.4285)	(0.4238)	(0.1819)	(0.1821)	(0.1792)
(log) GDP	$1.5939^{***}$	$1.5537^{***}$	$1.6063^{***}$	$0.6832^{***}$	$0.6807^{***}$	$0.7124^{***}$
	(0.1571)	(0.1495)	(0.1656)	(0.0708)	(0.0686)	(0.0673)
(log) Population	0.0323	0.0386	-0.0716	$0.1688^{**}$	$0.1739^{**}$	0.1405
	(0.2154)	(0.2101)	(0.2192)	(0.0858)	(0.0852)	(0.0860)
Neighbor	1.5971	1.8261	0.6319	0.0292	0.1538	-0.1495
	(1.7713)	(1.7310)	(1.7723)	(0.6716)	(0.6467)	(0.6812)
Common language	0.4914	0.4594	0.2465	$0.7243^{***}$	$0.7310^{***}$	$0.6749^{***}$
	(0.6036)	(0.5865)	(0.5822)	(0.1960)	(0.1953)	(0.1856)
Landlocked	$-1.3943^{**}$	-1.4098**	-1.3659**	$-0.8716^{***}$	-0.8829***	-0.8761***
	(0.6814)	(0.6739)	(0.6672)	(0.2164)	(0.2144)	(0.2072)
Both in WTO	$1.2431^{*}$	$1.3445^{**}$	$1.3456^{**}$	$0.7259^{***}$	$0.7420^{***}$	$0.7305^{***}$
	(0.6437)	(0.6336)	(0.6304)	(0.2228)	(0.2202)	(0.2226)
Polity	0.0157	0.0149	0.0169	-0.0021	-0.0020	0.0009
	(0.0442)	(0.0437)	(0.0447)	(0.0165)	(0.0164)	(0.0163)
US ally	-1.1173*	-1.0294*	-0.9920	-0.4541*	-0.4472*	-0.4562*
	(0.6071)	(0.5920)	(0.6109)	(0.2505)	(0.2436)	(0.2360)
Number of observations	3160	3160	3125	3160	3160	3125
Wald test (n-value)	0.126	0.000	0.022	0.258	0.136	090.0

run as seemingly unrelated estimations. \*\*\* significant at 1%; \*\* significant at 5%; \* significant at 10%.