



# The Repercussions of Realignment: United States–China Interdependence and Exchange Rate Politics\*

ROBERT A. GALANTUCCI

*University of North Carolina – Chapel Hill*

Analysts generally believe that a weaker currency primarily benefits a country's manufacturing and primary goods sectors. However, many of these industries—and the elected officials who represent them—frequently oppose legislation designed to combat the dollar's overvaluation relative to the Chinese yuan. I argue that legislators hesitate to take aggressive action on the exchange rate issue because doing so could lead to a disruption of the broader United States–China economic relationship. The threat of an economic conflict emerges as a particularly important consideration in the context of currency bills, where proposed legislation is linked to trade policy and other areas of international economic regulation. A Bayesian statistical analysis of legislative behavior on two recent exchange rate bills in the US Congress provides overall support for my hypotheses. Legislators with ties to business interests that rely heavily on the Chinese economy were more likely to oppose the bills, while the strongest support came from legislators representing import-competing domestic producers. The results highlight the ways that economic interdependence shapes bilateral exchange rate politics in particular, and United States–China interactions more generally.

## Introduction

Few recent US foreign economic policy issues generate more attention than the role of currency movements on manufacturing sector competitiveness. As the Chinese economy developed into the second largest in the world and as the largest source of global exports, the relative value of the yuan took on increased importance in American policy debates. The 2008 recession also contributed to heightened concerns, as the United States dealt with the highest unemployment rates in decades and with decreased job growth in many manufacturing industries. Elected officials decried the competitive disadvantages confronting US producers; they argued that currency misalignments harmed American firms operating in domestic and foreign markets. In response to these concerns, Senator Sherrod Brown—along with a number of cosponsors—introduced the Currency Exchange Rate Oversight Reform Act. The bill, not the first of its kind, sought to punish countries for artificially holding down the value of their currencies. Although the proposal received substantial support, legislators representing states with high levels of manufacturing and agricultural production did not uniformly get behind the bill. What generated opposition to the legislation if dollar overvaluation presents a chief concern for these sectors?

I argue that political alignments on exchange rate legislation reflect the importance of economic interdependencies between the United States and China. Even if many sectors might benefit from a dollar that is weaker *vis-à-vis* the yuan and other major currencies, a battle on

currency policy could lead to a costly economic conflict. This constitutes a particularly important concern in the context of exchange rate bills, where proposed policies are tied to other areas of international economic policy (see, for example, Broz and Frieden 2006; Oatley 2010; Broz and Werfel 2014).

In some cases, the link between policy areas is explicit. Recent currency legislation, for instance, contemplates imposing punitive tariffs on countries deemed to be “currency manipulators.” Such policy measures could entail severe implications for a variety of US-based economic interests (Bown 2009:39; Seo 2010:1082–92; Xie 2006:738; Zeng 2012:20–21). First, many firms stand to face substantial costs from additional tariffs on Chinese goods. For example, these duties would harm US retailers who source goods from China. Second, China might respond with changes to its own trade and investment policy. This would have adverse consequences for industries that rely on China as an export market, a location for production or a source of capital. Indeed, many US exporters actively opposed the legislation. In short, even many US industries that might otherwise support the ostensible goals of realignment legislation—obtaining a relatively weaker dollar—find themselves opposing the proposed currency bills.

Economic interdependence between the United States and China also emerged as an important consideration for members of Congress. In fact, a number of legislators, including party leaders, explicitly raised concerns that the legislation could spark a broader “trade war.” In line with this discussion, I anticipate that legislators whose constituencies rely heavily on China as an economic partner are likely to oppose aggressive exchange rate legislation.

I test my hypotheses through a Bayesian statistical analysis of legislative behavior in the context of two recent pieces of high-profile currency legislation introduced in the US Congress. Using district- and state-level economic data, as well as data on financial contributions to legislators, I find support for my expectations.

Robert Galantucci is a PhD candidate in political science at the University of North Carolina – Chapel Hill. His research interests relate to international and comparative political economy, with a particular focus on the politics of international trade.

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Legislators who received contributions from US businesses that are economically dependent on China often withheld their support for the legislation. Constituency economic characteristics played an important role as well; legislators from districts that export extensively to the Chinese market proved less likely to support the bills. In contrast, legislators representing comparatively disadvantaged producers—many of which have a primarily competitive relationship with Chinese producers—often supported the legislation. These results prove robust to a host of controls for district-level manufacturing profiles and labor market characteristics, as well as legislator-level variables. In addition to the results of the quantitative analysis, the floor debate on these currency bills indicates that members of Congress appreciated the potential costs associated with triggering an economic conflict with a critical trade partner.

Recent research demonstrates that factors such as international competitiveness and capital intensity (Oatley 2010:6–9), reliance on foreign inputs and industry pass-through (Broz and Werfel 2014), and balance sheet criteria (Walter 2008) determine the extent to which firms are affected by currency movements. In addition to these considerations, this paper highlights another way in which economic interdependence can shape political behavior on the exchange rate: The potential for exchange rate conflicts to spill over into trade and investment policy constitutes a key concern for legislators determining their positions on currency legislation.

I cannot overstate the connection between trade and exchange rate policy. In many cases, these policies are substitutable; it makes little sense to consider them in isolation. Doing so has long been a weakness in the exchange rate literature. Indeed, scholars have only recently begun to take the substitutability of trade and exchange rate policy into account (see, for example, Broz and Werfel 2014; Jensen, Quinn, and Weymouth 2013; Steinberg and Shih 2012; Oatley 2010; see also Broz and Frieden 2006 for a review of the literature). It also bears noting that political alignments on currency-related legislation will not precisely adhere to the predictions of the standard models of exchange rate preferences—generally anticipating a tradables vs. nontradables divide; nor will political alignments necessarily resemble the coalitions predicted by standard models of trade policy preferences—comparatively disadvantaged vs. comparatively advantaged sectors.

Finally, these results highlight the implications of China's regional and systemic importance (Acharya 2014; Layne 2012; McNally 2012). China's rapid growth altered the structure of the international system, leading to a realignment of many countries' foreign policies (Flores-Macías and Kreps 2013). With respect to US foreign policy, research increasingly considers how the codependent relationship between the United States and China shapes policymaking (Bown 2009; Drezner 2009; McNally 2012; Seo 2010:1088–94; Xie 2006:738; Zeng 2012). Despite extensive "China bashing" in current American political rhetoric (Ramirez 2012), the findings here strongly suggest that elected officials recognize the potential consequences associated with disrupting the United States–China economic relationship. Explanations for political behavior that fail to account for international interdependencies may lead to an incomplete, or even inaccurate, picture of policymaking (Farrell and Newman 2014:353–355; Oatley 2011; Oatley, Winecoff, Pennock, and Danzman 2013:147–48).

This paper proceeds as follows. In the next section, I briefly discuss the literature on exchange rate preferences and consider Congressional involvement on the currency issue. In the following section, I generate several hypotheses concerning the likely sources of political opposition to, and support for, currency realignment legislation. Then, I present my research design and describe the data used to test my hypotheses. In the final two sections, I discuss the results and conclude by exploring the implications of these findings.

### Currency, Competitiveness, and Congress

Every government faces two critical considerations regarding its country's exchange rate: The first relates to the level of fixity for the exchange rate regime (that is, floating vs. fixed); the second concerns the relative strength of the currency. The United States implemented a floating rate regime beginning in 1971, but the latter consideration remains a subject of controversy. In recent years, the dollar's value relative to the yuan became particularly important due to China's emergence as a critical economic partner for the United States.

Any given choice on the level of a country's exchange rate is essentially a trade-off between competitiveness and purchasing power. A relatively depreciated currency encourages exports and expenditure switching from imports to domestic goods, thereby providing a boost to aggregate output (Broz and Frieden 2006:594). As such, the traded goods sector, including domestic producers who export abroad as well as producers who compete with imported products, generally benefits from a weaker dollar. In contrast, an appreciated currency increases the purchasing power of consumers and firms in nontraded goods sectors, such as the finance and construction industries. These initial observations generally lead us to expect that preferences on exchange rate legislation will break down along tradables/nontradable lines (Frieden 1991:444–50).<sup>1</sup>

This prediction tracks with much of the political rhetoric concerning the relative values of the dollar and the yuan. Out of concern for manufacturing sector competitiveness, legislators in the United States have placed currency realignment on the legislative agenda. The Bush and Obama Administrations' less confrontational approach coincided with this development. During both presidencies, the treasury routinely asserted that the yuan was undervalued, though it declined to label China a "currency manipulator" (a stance often portrayed as taking a soft line). Although China has taken some steps to allow a controlled appreciation of its currency, the yuan remains undervalued. Accordingly, in an attempt to address the issue, members of Congress sponsored exchange rate realignment legislation, often threatening to impose trade sanctions on Chinese goods in the absence of a sustained appreciation of the yuan.

In light of the general relationship between currency values and competitiveness, we might expect that Congressional support for realignment bills will come from legislators who represent manufacturing and primary goods sectors. In the cases analyzed here, we did see

<sup>1</sup> The extent to which manufacturers benefit from a depreciated currency is a function of several factors. Under some conditions, for example, heavy reliance on imported inputs, gains to competitiveness can be offset by decreased purchasing power (Broz and Werfel 2014; Broz and Frieden 2006:594).

vocal support from some senators and representatives with ties to these producers, including legislators from key manufacturing centers in Michigan, Pennsylvania, and Ohio. This support, however, was hardly uniform. In fact, many legislators representing traded goods producers adamantly opposed the proposed legislation. In the next section, I develop a series of hypotheses concerning the observed behavior on exchange rate policy.<sup>2</sup>

### Theory and Hypotheses

Concerns regarding the stability of the broader United States–China economic relationship heavily influence legislative behavior on currency policy. The economic ties between the United States and its key trade partner (and the vulnerabilities these ties create) lead many economic interest groups and legislators to oppose controversial currency legislation.

First, exchange rate choices are inextricably intertwined with other areas of international economic policy, especially trade policy. Many pieces of currency legislation have provisions that directly affect trade. For example, recent currency bills in Congress contemplate imposing punitive tariffs against countries that are found to be manipulating the exchange rate. And, even when currency policy and trade regulation are not explicitly tied together, there is still a clear interplay between the policy areas, as a relative depreciation often has the same practical effect as increasing trade barriers on foreign goods (for a discussion of the intersection of trade and exchange rate politics, see Broz and Werfel 2014; Corden 1997:Chapter 15; Eichengreen and Irwin 2009; Frieden 1997; Jensen et al. 2013; Oatley 2010).<sup>3</sup> Accordingly, industries and legislators staking out a position on a proposed currency realignment bill must consider how the bill could impact their interests through both exchange rate and trade policy.<sup>4</sup>

Second, there is a high level of economic interdependence between the United States and its key trading partners, especially China, the presumptive target of much of the recent currency legislation. Given the vast interconnectedness between the two economies, the possibility of Chinese government economic retaliation looms in the background of any policy decision.<sup>5</sup> A US protectionist policy might very well be responded to in kind; this possibility serves as a key consideration for economic interest groups and legislators (Bown 2009:39; Seo 2010:1082–92; Xie 2006:738; Zeng 2012:20–21).<sup>6</sup> The potential for retaliation is made even more likely given the linkages between the exchange rate and other international economic policy areas. A foreign government could respond to aggressive

exchange rate legislation through any number of policy measures, perhaps most readily in the context of trade policy. This point is an important one, as the menu of options available to directly affect changes to another country's exchange rate/monetary policy is limited. In short, the interdependence of the US and Chinese economies—a mutual dependence that implicates many different policy areas—impacts actors' behavior on the exchange rate.

In the debate over recent currency legislation in the United States, a number of major economic interests raised concerns regarding the potential effects of these bills. Industry groups openly recognized that the proposed currency legislation might lead to economic protectionism on the part of the United States and/or its trade partners. Members of Congress echoed these apprehensions. Senators Rob Portman, Mark Kirk, Jim DeMint, Bob Corker, and others, all noted the costs associated with disruption to the United States–China economic relationship. They highlighted the importance of China as an export market, a supplier, a destination for US investment and a growing source of inward foreign direct investment. Even several legislators who ultimately decided to support the bill acknowledged these considerations. US policymakers were not alone. Economic ministers in China similarly warned that tit-for-tat retaliation could ignite a trade war.<sup>7</sup>

In line with such concerns, several US firms that export extensively to China criticized the legislation, as they would potentially face retaliatory tariffs. Although most discussions of United States–China trade emphasize the United States's role as a critical export destination, aside from Canada and Mexico, no country receives more exports from the United States than China. In the last decade, US-to-China trade has grown fivefold, a pace far faster than the US global export growth average (US-China Business Council 2012:2,5). Continued access to the Chinese market is an especially important concern for agricultural industries, including producers of wheat, livestock, and dairy goods, as well as certain high-end technology sectors, such as aerospace product manufacturers (Seo 2010:1078–92; Xie 2006:738). In fact, in these sectors, the United States often enjoys a trade surplus with China. Moreover, it would seem that these types of industries are ripe for potential Chinese retaliation, as Chinese trade policy has targeted them in the past (see Bown 2009:34; Zeng 2012:5,21).<sup>8</sup>

Beyond exporters, a host of US-based economic interests in nontraded goods sectors—including retailers, as well as real estate and financial interests—opposed the legislation. The imposition of tariffs on Chinese goods or US exports would substantially affect these groups. For

<sup>2</sup> This analysis focuses on legislative behavior. The bulk of the recent political economy literature on exchange rate policy examines preferences at the sector and firm levels (see, for example, Walter 2008; Oatley 2010; Steinberg and Shih 2012; Jensen et al. 2013; Broz and Werfel 2014). Broz (2010) is an exception that included a brief analysis of legislative voting while primarily considering behavior at the sectoral level.

<sup>3</sup> Recognizing the interaction between trade and exchange rate policy, several studies explore how the exchange rate influences industry demands for protection (Oatley 2010; Broz and Werfel 2014).

<sup>4</sup> See Davis (2004, 2008/2009) for a discussion of the implications of issue linkage.

<sup>5</sup> See Hirschman (1945:Ch. 2) and Keohane and Nye (1977) for a more general discussion of interdependence.

<sup>6</sup> See Frieden 1999:45–47 for a discussion of the ways in which strategic international interactions can influence political behavior on economic policy.

<sup>7</sup> The WTO might even authorize Chinese retaliation if the United States's currency legislation failed to comply with international obligations. Regardless of the WTO compliance of the parties' trade policies, immediately imposed trade restrictions would at the very least disrupt trade in the short term.

<sup>8</sup> Trying to determine the likelihood of Chinese retaliation in a particular sector is largely impossible, as its trade dispute strategy is something of a "blank slate" (Bown 2009:34). That said, we can identify certain areas where the Chinese government imposed (or considered imposing) tariffs in the past. For instance, the government has identified import surges of agricultural products from the United States as a concern (Bown 2009:34), specifically targeting poultry, beef, and meat-processing industries (Zeng 2012:21). Similarly, the possibility that technology goods might face retaliation is suggested by previous efforts to protect the semiconductor industry, as well as China's contemplation of protection on clean-energy-related products (Zeng 2012:5,25).



instance, US retailers who carry finished goods from China would see the price of their inventory increase drastically (Xie 2006:738). The same is true for sectors that rely on imported intermediate goods, such as the construction industry. Financial interests are likely to oppose a bilateral economic conflict for a host of reasons (Seo 2010:1082–83). Exports and capital flows from China ultimately facilitate consumption and cheap borrowing in the United States; additionally, the banking sector would benefit from stable relations that lead to financial sector liberalization in China. These considerations hardly constitute an exhaustive list.

One might also argue that nontraded goods sectors oppose the legislation because they generally benefit from a stronger currency. While such considerations might partially drive their opposition, this is only part of the story. First, the benefits these groups realize from an appreciated currency are fairly “indirect” (Frieden 1994:86). As such, their preferences on the exchange rate are frequently less intense than those of the traded goods sectors, and they are less likely to mobilize on the issue (Henning 1994:33). In fact, evidence suggests that their recent political mobilization on the currency issue had at least as much to do with concerns over the United States–China trade/investment relationship as their concerns regarding the relative value of the dollar. In a letter from the Business Roundtable to Congress, a number of organizations representing nontraded goods sectors, including Financial Services Roundtable, Retail Industry Leaders Association, and the National Retail Federation, stressed that tariff legislation would ultimately be costly to the US economy. The organization highlighted concerns regarding job creation, trade retaliation, and potential WTO incompatibility (Business Roundtable 2011). Similarly, the CEO of the Financial Services Forum’s op-ed highlighted the importance of China’s 1.3 billion person market for financial services and traded goods exports (Nichols 2011). In both instances, the statements explicitly argued that the yuan should in fact be permitted to rise against the dollar—indicating that maintaining the relative strength of the dollar was not a primary goal. Such statements also suggested that these sectors’ concerns regarding a trade/investment conflict between the United States and China are *at least* as important in driving their opposition to currency legislation as their concerns regarding the relative value of the dollar.

Taken together, exporters to China and a wide variety of interests outside of the traded goods sector all have incentives to oppose currency legislation. Whether the legislation resulted in American punitive tariffs against China or Chinese retaliatory tariffs against the United States, these firms could see an important relationship with a key economic partner disrupted. This discussion leads to Hypothesis 1:

**Hypothesis 1:** *Legislators who receive financial contributions from interests that rely on the Chinese economy are less likely to support currency realignment legislation.*

Hypothesis 1 focuses on legislators’ ties to industries through financial contributions. Constituency economic characteristics, however, also drive legislative behavior. Accordingly, legislators from states or districts that have a high level of exporters targeting the Chinese market will be more likely to oppose currency legislation. Several members of Congress specifically highlighted these considerations. In a floor speech in the Senate, for instance, Mark Kirk noted that exports to China from his state

totaled \$3.18 billion. He warned, “A trade war with China would put in jeopardy a number of jobs from my State of Illinois. . . I do not think we should put these jobs at risk with an unnecessary trade war” (Congressional Record [CR] Oct. 5, 2011; S6154).<sup>9</sup> Hypothesis 2 captures the relationship between export profile and legislative behavior:

**Hypothesis 2:** *Legislators from districts/states with high levels of exports destined for China are less likely to support currency realignment legislation.*

Although currently still in its nascent stages, China-to-US FDI is rapidly increasing. This inbound investment serves as another source of economic interconnectedness between the countries. Because these investments are often geographically concentrated, for some regional economies, they are significant. Locations that have clear potential for future Chinese FDI may be especially hesitant to see their investment relationships threatened. Indeed, Senator Rob Portman noted such considerations in his formal comments on proposed currency legislation. He pointed to the importance of Chinese capital as a source of employment in Ohio and observed that certain localities have proactively welcomed Chinese investors (Congressional Record [CR] Oct. 5, 2011; S6157).

Even if a potential economic dispute is most likely to take place in the context of policies relating to trade, the conflict could very well spill over into other areas, such as investment policy. This is particularly true in the case of the United States–China dispute, as the Chinese government plays a significant role in directing and funding investment projects. Hypothesis 3 concerns the relationship between inbound FDI and support for currency legislation:

**Hypothesis 3:** *Legislators whose constituencies receive high levels of FDI from China are less likely to support currency realignment legislation.*

Thus far, I have highlighted the ways in which mutual economic dependency can serve to create opposition to currency legislation. Of course, trade with China harms many comparatively disadvantaged sectors, and thus, they supported the legislation.

The steel industry serves as a prime example. The industry measures moderately below average on a scale of revealed comparative advantage for US manufacturing industries, and China’s enormous excess capacity in the industry exacerbates the disadvantage. The industry also has a history of actively pursuing trade protection through administrative agencies and export restraints (Broz and Werfel 2014:395–97, 413). A number of other comparatively disadvantaged manufacturing sectors, including portions of the auto industry and fabricated metals producers, supported the legislation. Firms in these industries stand to benefit from restrictive trade policies, as is provided for in the realignment legislation. Alternatively, if the legislation ultimately resulted in a relative appreciation of the yuan, this would also benefit many of these industries. This discussion leads to Hypotheses 4 and 5:

<sup>9</sup> A number of prominent studies have noted that exporting interests can create an important economic block of opposition to trade protection (Bailey, Goldstein, and Weingast 1997; Gilligan 1997; Milner 1988).

**Hypothesis 4:** *Legislators who receive financial contributions from comparatively disadvantaged sectors will support currency realignment legislation.*

**Hypothesis 5:** *Legislators from districts/states with a high proportion of comparatively disadvantaged industry will support currency realignment legislation.*

In summary, although a large number of firms in the United States suffer as a result of trade with China, substantial business interests greatly benefit from ongoing cooperation. These firms and industries are incentivized to mobilize in opposition to proposed currency legislation that could lead to conflict between the two countries, particularly as the dispute would implicate other areas of international economic relations, such as trade and investment policy. Legislative behavior on recent realignment legislation reflects these concerns.

### Research Design and Data

To test my expectation that economic interdependence influences behavior on currency legislation, I run a series of Bayesian logit/ordered logit models. I consider legislative behavior in the context of the Currency Reform for Fair Trade Act, H.R. 2378, 111th Congress ("CRFTA"), and the Currency Exchange Rate Oversight Reform Act, S. 1619, 112th Congress ("CERORA"). Both bills proposed permitting domestic industries in the United States to seek administrative trade remedies (that is, antidumping/countervailing duties) to offset the advantage conferred on foreign producers by virtue of having an undervalued currency.

The CRFTA received 159 cosponsors (113 Democrat; 46 Republican), and the CERORA received 22 (16 Democrat; 5 Republican; 1 Independent).<sup>10</sup> Both bills successfully drew attention to the currency issue. Although legislators introduced a number of currency realignment bills in recent years, these two bills made it out of committee and ultimately received roll call votes in their respective chambers. Because the bills made it far in the legislative process, they triggered a great deal of interest group mobilization.

The primary dependent variable in the analysis is each legislator's decision whether or not to sponsor/cosponsor the currency realignment legislation in question. The unit of analysis therefore is a legislator's (co)sponsorship opportunity, and the dependent variable is coded as 1 if the legislator (co)sponsored the legislation, 0 otherwise. Models 1–3 examine House behavior on the CRFTA, and Models 4–6 examine the Senate's behavior on the CERORA. In Models 3 and 6, I run the models with an ordered dependent variable which incorporates legislators' roll call voting behavior as well.<sup>11</sup>

I rely on (co)sponsorship as the initial dependent variable here because it provides a reliable indicator of legislators' support for the bills. Initial sponsors successfully sought out cosponsors on these high-profile pieces of legislation in an effort to improve the bills' prospects.

Accordingly, cosponsoring or choosing not to cosponsor these bills constituted an important decision for legislators. Although in some cases a decision not to cosponsor a bill may be a poor measure of a legislator's preferences on a proposed policy (see Alemán, Calvo, Jones, and Kaplan 2009:88), here, these bills were extremely controversial and heavily sponsored. Under these conditions, it is appropriate to treat non-cosponsorship as an informative signal.<sup>12</sup>

My independent variables of interest capture legislators' connections to economic interests that are invested in the currency legislation. These connections may arise from interest groups' financial contributions or from constituency economic profile. The first two variables test Hypotheses 1 and 4. ANTI-REALIGNMENT \$ is measured as the contributions received from business interests that are likely to oppose passage of the legislation, as a share of total contributions. Antirealignment interests include China-oriented exporters, such as many agricultural and technology producers. Such interests also include businesses that carry finished goods from China, financial firms, and the real estate sector. The imposition of tariffs on Chinese goods and any retaliatory protection that might be imposed on US products would harm these groups (Seo 2010:1082–92; Xie 2006:738; Zeng 2012:20–21).<sup>13</sup>

I measure PRO-REALIGNMENT \$ as the contributions each legislator received from interest groups likely to favor passage of currency legislation, as a share of total contribution receipts. This includes groups that typically fare poorly as a result of trade and investment competition with China, such as the steel and fabricated metals industries (see, for example, Broz and Werfel 2014:395–97, 413).

To construct the PRO-REALIGNMENT \$ and ANTI-REALIGNMENT \$ variables, I needed to identify the industries with a substantial stake in currency realignment legislation and then determine whether they had an identifiable (*ex ante*) position on the proposed policy. The pro/antirealignment interests identified in the preceding discussion are simply illustrative, and a more comprehensive treatment of key sectors' posture with respect to the currency legislation is contained in Appendix 1.

The next set of variables concerns state/district economic characteristics. CHINA EXPORTS captures the level of exports specifically destined for China that are produced in each legislator's district (Models 1–3) or state (Models 4–6). If many firms in a legislator's district export to China, and these firms account for a large portion of local economic activity, it is likely that the legislator would be reluctant to support any policy that might risk a trade war. The variable is measured as merchandise exports to China as a share of state/district economic activity.

The presence of substantial Chinese investment in the local economy (and the potential for more of such

<sup>12</sup> I provide additional discussion of the decision to rely on (co)sponsorship behavior in the "Results and Discussion" section, below.

<sup>13</sup> Although there are numerous ways that interest groups can influence legislators' behavior on foreign economic policy (see Fordham and McKeown 2003), scholars widely acknowledge the relationship between contributions and legislative behavior (see, for example, Baldwin and Magee 2000; Broz 2005; Broz 2011:358–365; Broz and Hawes 2006:380–391; Magee 2010:383–85, 389–94; Milner and Tingley 2011:52). Such contributions can directly encourage particular policy positions (Grossman and Helpman 1994) or can constitute a reward or subsidy for maintaining a position (Hall and Deardorff 2006).

<sup>10</sup> The table on pages 3–5 of Appendix S1 denotes each legislator's (co)sponsorship choice, as well as his/her state and party.

<sup>11</sup> The N for the analysis ranges from 100 (in the Senate) to 433 (House), accounting for vacant seats during the relevant period. The relatively small sample size in the Senate partially motivated my use of Bayesian methods here (see Gill 2007:64–65; Western and Jackman 1994:414; Long 1997:53–54, 60; Taylor, West, and Aiken 2006).

investment in the future) should also make legislators more likely to oppose currency legislation. CHINA FDI captures the importance of Chinese foreign direct investment in a given jurisdiction. The variable accounts for expenditures by Chinese-owned entities on US investments, including greenfield projects as well as acquisitions that grant investors at least 10% of a business's voting rights (Rhodium Group 2012). The variable is measured as Chinese FDI as a proportion of state GDP.

I include MFG EMPLOYMENT, a measure of manufacturing jobs as a share of total district employment. This variable captures any general relationship between manufacturing interests and support for currency legislation. I also include MFG INCOME as a proxy for the capital intensity of the manufacturing sector in a given state or district.

To account for vulnerability to trade-related job loss, I rely on IMPORT PENETRATION, a measure of the number of workers displaced due to foreign trade (Kondo 2012:44–46), and JOBS LOST TO CHINA, which is coded as the proportion of job loss resulting from trade with China during the 2001–2008 period (Scott 2010). I also include a measure of unionization rates in the private manufacturing sector (Hirsch and Macpherson 2003). These variables account for realized/potential job displacement due to competition with China and also roughly account for the predictions of the standard models of trade preferences (Hiscox 2001, 2002: Chapters 1, 11). I expect a positive relationship between these variables and a legislator's propensity to support currency legislation.

High levels of unemployment might similarly increase demand for measures intended to stimulate job growth or protect existing jobs (Cassing, McKeown, and Ochs 1986). For that reason, I also include a standard business cycle variable (UNEMPLOYMENT).

Democratic partisanship is often associated with greater support for trade protection. I therefore include DEMOCRAT, a dichotomous variable coded as 1 if the legislator is a Democrat (or caucuses with the Democrats) and 0 otherwise. To capture any relationship between a legislator's left-right ideology and his or her position on currency legislation, I also include IDEOLOGY. The variable is measured as each legislator's NOMINATE score (Poole and Rosenthal 1997). Table 1 contains descriptive statistics and data sources for each of the variables.

## Results and Discussion

The results from my statistical models, contained in Tables 2–4, provide support for my hypotheses. Overall, the models indicate that United States–China interdependence drives legislators' positions on currency realignment legislation.

Prior to turning to my results, I note that the output from a Bayesian statistical model is different from a standard maximum likelihood ("MLE") regression. A Bayesian analysis yields a full distribution for a parameter, as opposed to a single fixed point. The "posterior mean" is the mean value of the parameter's distribution, which amounts to the analogue of a maximum likelihood coefficient. Testing the effect of a variable in a Bayesian analysis is also different than in the MLE context. Instead of relying on p-values, a variable's effect can be interpreted by observing the proportion of its posterior distribution that falls on either side of zero (Gill 2007:Chapter 2). The proportion of a variable's posterior distribution that falls above (below) zero corresponds to the probability that the variable's effect is positive (negative). These proportions yield

results similar to frequentist hypothesis testing: Having a posterior distribution with 95 (90) % of the distribution on either side of zero is roughly akin to the variable being statistically significant at the .05 (.10) level.<sup>14</sup>

I begin the discussion of results with Models 1–2, which examine House behavior on the CRFTA. Models 1 and 2 are logit models; as noted above, the dependent variable is coded as 1 if the legislator in question (co)sponsored the bill, 0 otherwise. In both specifications, I find strong support for Hypotheses 1, 2, 4, and 5. As the results were comparable in Models 1 and 2, I focus my discussion on Model 1 unless otherwise noted.

First, the posterior distributions for the ANTI-REALIGNMENT \$ and PRO-REALIGNMENT \$ variables have the anticipated relationships (negative and positive, respectively) with a legislator's decision to (co)sponsor the legislation. ANTI-REALIGNMENT \$'s posterior distribution is overwhelmingly negative, suggesting that legislators representing interests that rely on China as an economic partner are more likely to withhold support for the legislation. Representatives receiving funds from interests that directly compete with Chinese firms are more likely to support the bill. The distribution for PRO-REALIGNMENT \$ is decisively positive, with 98% of the distribution greater than zero.

Consistent with Hypothesis 2, legislators from districts with high levels of exports destined for China are less likely to cosponsor the legislation. This relationship is robust. Almost the entirety of CHINA EXPORTS's posterior distribution is less than zero, regardless of the model under consideration. In fact, the entirety of the distribution falls below zero when rounding to two decimal places. These results are consistent with my expectation that legislators representing industries with extensive export interests in China would oppose the legislation, as aggressive realignment efforts could ultimately lead to restricted access to the Chinese market.

It bears noting that export orientation can in many cases capture another characteristic of a district's manufacturing profile. In particular, export-oriented firms are often highly competitive and more resilient to exchange rate driven shocks to competitiveness (Oatley 2010:6–9). For this reason, legislators representing capital intensive industries may be less concerned with exchange rate alignments. Here, however, I include a host of variables that account for district-level sectoral composition (this includes an interaction between MFG WAGE LEVEL and MFG EMPLOYMENT). The fact that I control for these variables indicates that—even net of these characteristics—China-related export reliance still has a negative relationship with support for currency legislation. Stated differently, CHINA EXPORTS is not simply capturing capital intensity, but rather export dependence. This finding provides strong support for Hypothesis 2.

In line with Hypothesis 5, legislators from import-competing states supported currency realignment legislation, as indicated by the performance of IMPORT PENETRATION. At least 99% of the variable's distribution is greater than zero across models. JOBS LOST TO CHINA and MFG UNIONIZATION are also positively associated with support for the leg-

<sup>14</sup> Bayesian results are only directly comparable to maximum likelihood estimates with a sufficiently large sample size and the use of uninformative priors. The models presented here are run with uninformative priors, using MCMCpack in R (Martin, Quinn, and Park 2011). The results are consistent in alternate specifications that utilize a diffuse normal prior distribution. Diagnostic tests are performed with the coda package (Plummer, Best, Cowles, and Vines 2010).



TABLE 1. Descriptive Statistics and Data Sources

<i>Variable Name</i>	<i>Mean</i>	<i>SD</i>	<i>Min</i>	<i>Max</i>	<i>Source</i>
DEMOCRAT (House, "H")	.587	.493	0	1	<a href="http://clerk.house.gov/">http://clerk.house.gov/</a>
DEMOCRAT (Senate, "S")	.530	.502	0	1	<a href="http://www.senate.gov/">http://www.senate.gov/</a>
IDEOLOGY (H)	.064	.517	-.731	1.226	Poole and Rosenthal (1997)
IDEOLOGY (S)	.036	.454	-.643	1	<a href="http://voteview.com/dwnomin.htm">http://voteview.com/dwnomin.htm</a>
JOBS LOST TO CHINA	1.554	.425	.74	2.35	Scott (2012) [state level]
IMPORT PENETRATION	.669	.319	.06	1.37	Kondo (2012) [state level]
UNEMPLOYMENT (H)	.110	.030	.039	.275	<a href="http://factfinder2.census.gov/">http://factfinder2.census.gov/</a> (ACS)
UNEMPLOYMENT (S)	.093	.021	.03	.13	<a href="http://factfinder2.census.gov/">http://factfinder2.census.gov/</a> (ACS)
MFG INCOME (H)	41473.64	11396.94	16092	100068	<a href="http://factfinder2.census.gov/">http://factfinder2.census.gov/</a> (ACS)
MFG INCOME (S)	45057.14	6484.52	33825	60642	<a href="http://factfinder2.census.gov/">http://factfinder2.census.gov/</a> (ACS)
MFG EMPLOYMENT (H)	.104	.043	.025	.256	<a href="http://factfinder2.census.gov/">http://factfinder2.census.gov/</a> (ACS)
MFG EMPLOYMENT (S)	.102	.037	.030	.180	<a href="http://factfinder2.census.gov/">http://factfinder2.census.gov/</a> (ACS)
MFG UNIONIZATION	10.493	5.355	2.4	25	Hirsch and Macpherson (2003) [state level]
CHINA EXPORTS (H)	.012	.018	.000	.223	Dept. of Commerce; US-China Business Council (2012)
CHINA EXPORTS (S)	.006	.006	.000	.029	Dept. of Commerce; US-China Business Council (2012)
PRO-REALIGNMENT \$ (H)	.005	.008	-0.001	.096	maplight.org
PRO-REALIGNMENT \$ (S)	.003	.003	.000	.024	maplight.org
ANTI-REALIGNMENT \$ (H)	.009	.010	.000	.11	maplight.org
ANTI-REALIGNMENT \$ (S)	.025	.051	.003	.515	maplight.org
CHINA FDI	.000	.001	.000	.004	<a href="http://rhg.com/">http://rhg.com/</a> (Rhodium Group)

(Note. Several variables have been rescaled to facilitate interpretation in the statistical analysis).

TABLE 2. Legislative Behavior on the Currency Reform for Fair Trade Act (111th Congress)

	<i>Model 1</i>			<i>Model 2</i>			<i>Model 3</i>		
	<i>Post. Mean</i>	<i>95% Cred. Intervals</i>	<i>p (&gt;0)</i>	<i>Post. Mean</i>	<i>95% Cred. Intervals</i>	<i>p (&gt;0)</i>	<i>Post. Mean</i>	<i>95% Cred. Intervals</i>	<i>p (&gt;0)</i>
INTERCEPT	-3.27	-6.40, -0.19	0.02	-4.10	-7.20, -0.97	0.00	0.39	-0.97, 1.77	0.71
DEMOCRAT				0.81	0.21, 1.41	1.00			
IDEOLOGY	-1.04	-1.66, -0.44	0.00				-1.14	-1.43, -0.85	0.00
JOBS LOST TO CHINA	0.52	-0.30, 1.39	0.89	0.69	-0.14, 1.54	0.94	-0.09	-0.47, 0.28	0.32
IMPORT PENETRATION	1.05	0.26, 1.87	1.00	0.98	0.19, 1.78	0.99	0.61	0.21, 1.02	1.00
UNEMPLOYMENT	-4.33	-13.34, 4.71	0.19	-3.05	-11.88, 5.97	0.25	0.25	-4.10, 4.62	0.54
MFG INCOME	0.01	-0.57, 0.59	0.50	-0.01	-0.57, 0.56	0.49	-0.02	-0.28, 0.25	0.46
MFG EMPLOYMENT	1.90	-0.19, 4.02	0.97	1.71	-0.35, 3.82	0.95	0.98	-0.02, 1.99	0.97
MFG UNIONIZATION	0.04	-0.01, 0.09	0.93	0.05	0.00, 0.11	0.98	0.01	-0.01, 0.03	0.79
CHINA EXPORTS	-0.38	-0.69, -0.13	0.00	-0.37	-0.68, -0.12	0.00	-0.21	-0.32, -0.10	0.00
PRO-REALIGNMENT \$	0.39	0.01, 0.77	0.98	0.45	0.06, 0.82	0.99	0.23	0.06, 0.40	1.00
ANTI-REALIGNMENT \$	-0.46	-0.81, -0.14	0.00	-0.48	-0.84, -0.17	0.00	-0.16	-0.29, -0.04	0.00
MFG EMPL*MFG INC	-0.08	-0.56, 0.38	0.36	-0.07	-0.56, 0.40	0.39	-0.04	-0.27, 0.18	0.35
Gamma							1.70	1.50, 1.92	1.00
	N = 433			N = 433			N = 433		

(Note. Models 1–3 are Bayesian logit/ordered logit models with flat (uninformative) priors. The table contains the posterior means and 95% credible intervals for each parameter, as well as the proportion of the probability density on either side of zero, that is, the probability that the parameter's effect is positive or negative).

isolation, as anticipated, though the relationships are less robust for these variables. To provide a visual illustration of the performance of my key variables, posterior distribution plots are contained in Figure 1.

The other variables perform largely as expected. IDEOLOGY is negative, with the majority of its distribution less than zero. This suggests that more conservative legislators are less likely to support the bill. Similarly, Democratic partisanship has an overall positive association with support for the bill. Because of very high collinearity, both variables could not be included in the model simultaneously. The results, however, are consistent regardless of which variable is included (compare Models 1 and 2).

In another model, PRO-REALIGNMENT \$ and ANTI-REALIGNMENT \$ are disaggregated, and the analysis is run with

more fine-grained sectoral contributions data (see Table 4–Model 7). The results are consistent with those reported here: Receipt of contributions from the agricultural sector (exporters to China), financial/real estate interests, and the retail sector are negatively associated with support for realignment. Contributions from import-competing manufacturing industries, including interests within the steel and fabricated metal industries, are positively associated with support. These findings reinforce my conclusions with respect to the heterogeneity of industry positions on exchange rate legislation—including preference diversity within the traded goods sector.

The findings with respect to the financial, real estate, and retail sectors might be interpreted as consistent with existing explanations for sectoral exchange rate preferences (see, for example, Frieden 1991:444–50).

TABLE 3. Legislative Behavior on the Currency Exchange Rate Oversight Reform Act (112th Congress)

	Model 4			Model 5			Model 6		
	Post. Mean	95% Cred. Intervals	$p(>0)$	Post. Mean	95% Cred. Intervals	$p(>0)$	Post. Mean	95% Cred. Intervals	$p(>0)$
INTERCEPT	-6.31	-25.45, 10.39	0.24	-7.59	-25.86, 10.01	0.20	1.10	-5.68, 7.84	0.63
IDEOLOGY	-4.41	-7.29, -2.04	0.00				-2.53	-3.36, -1.73	0.00
DEMOCRAT				3.08	1.25, 5.13	1.00			
IMPORT PENETRATION	4.84	1.74, 8.51	1.00	4.85	1.91, 8.19	1.00	1.11	0.09, 2.13	0.98
JOBS LOST TO CHINA	1.69	-1.16, 4.67	0.89	1.94	-0.73, 4.65	0.92	0.83	-0.17, 1.86	0.95
UNEMPLOYMENT	-0.69	-4.48, 3.25	0.37	-0.88	-4.68, 3.13	0.33	0.26	-1.06, 1.57	0.65
MFG INCOME	-0.23	-4.03, 3.67	0.45	-0.29	-4.04, 3.35	0.44	-0.55	-2.03, 0.91	0.23
MFG EMPLOYMENT	-0.16	-1.91, 1.69	0.42	-0.35	-2.01, 1.35	0.35	-0.06	-0.73, 0.61	0.43
MFG UNIONIZATION	0.16	0.01, 0.32	0.98	0.17	0.02, 0.32	0.99	0.04	-0.02, 0.10	0.90
CHINA EXPORTS	-1.58	-3.09, -0.41	0.00	-1.57	-2.99, -0.39	0.00	-0.44	-0.88, 0.00	0.02
PRO-REALIGNMENT \$	2.07	-0.48, 4.89	0.95	2.01	-0.58, 4.67	0.94	0.39	-0.42, 1.19	0.83
ANTI-REALIGNMENT \$	-0.52	-1.22, -0.04	0.01	-0.53	-1.26, -0.04	0.01	-0.02	-0.06, 0.03	0.24
INBOUND FDI	-0.56	-11.92, 8.14	0.49	-1.27	-11.32, 7.58	0.41	-0.52	-4.12, 3.03	0.39
MFG EMPL*MFG INC	0.02	-0.38, 0.40	0.55	0.06	-0.31, 0.43	0.60	0.00	-0.15, 0.15	0.52
Gamma							1.70	1.29, 2.10	1.00
	N = 100			N = 100			N = 100		

(Note. Models 4–6 are Bayesian logit/ordered logit models with flat (uninformative) priors. The table contains the posterior means and 95% credible intervals for each parameter, as well as the proportion of the probability density on either side of zero, that is, the probability that the parameter's effect is positive or negative).

TABLE 4. Legislative Behavior on the CRFTA/CERORA—Contributions Disaggregated

	Model 7			Model 8		
	Post. Mean	95% Cred. Intervals	$p(>0)$	Post. Mean	95% Cred. Intervals	$p(>0)$
INTERCEPT	-4.04	-7.06, -0.91	0.00	-8.32	-28.44, 9.91	0.20
DEMOCRAT	1.08	0.54, 1.63	1.00	3.63	1.47, 6.44	1.00
IMPORT PENETRATION	1.26	0.55, 2.03	1.00	5.10	1.96, 8.79	1.00
JOBS LOST TO CHINA	0.74	-0.15, 1.61	0.95	2.18	-0.80, 5.14	0.93
UNEMPLOYMENT	-2.90	-11.62, 6.11	0.26	-1.09	-4.92, 3.12	0.28
MFG INCOME	-0.05	-0.62, 0.52	0.43	-0.46	-4.26, 3.44	0.41
MFG EMPLOYMENT	1.42	-0.60, 3.50	0.91	-0.35	-2.14, 1.48	0.34
MFG EMPL*MFG INC	-0.03	-0.49, 0.45	0.45	0.06	-0.33, 0.45	0.63
MFG UNIONIZATION	0.07	0.02, 0.12	1.00	0.16	0.00, 0.32	0.98
CHINA EXPORTS	-0.41	-0.71, -0.15	0.00	-1.62	-3.31, -0.32	0.01
AGRICULTURE SECT. \$	-0.40	-0.80, -0.04	0.01	-0.60	-2.40, 0.97	0.26
FINANCE/BUSINESS \$	-1.16	-1.97, -0.40	0.00	-0.63	-1.68, 0.00	0.03
STEEL/METAL SECT. \$	0.97	0.24, 1.70	0.99	1.91	-0.76, 4.84	0.91
RETAIL SECTOR \$	-1.56	-3.12, -0.13	0.01	3.23	-2.69, 9.32	0.87
CHINA FDI				0.55	9.01, 9.15	0.56
	N = 433			N = 100		

(Note. Models 7 and 8 are specified in accord with Models 1 and 4, with the interest group contribution variables divided into subgroupings).

That is, rather than through their trade/investment dependence on China, these groups might oppose currency realignment legislation as a function of their preferences for a stronger currency. As Henning (1994:33) explains with respect to retail and real estate sectors, however, the exchange rate is “far more salient for producers of tradeable goods... and thus a more important item on their political agenda,” whereas “[t]he nontradeable sector is rarely mobilized politically on external monetary issues.” Additionally, the banking sector often does not have a unified preference on the exchange rate, as “bank preferences in general are highly variable, highly situationally dependent, and typically not held with high intensity” (Henning 1994:26). Nontraded goods sectors *did* mobilize against the bills

under consideration here, and their statements on the issue suggest that they were motivated in large part by considerations beyond the relative value of the dollar. In any case, it is worth highlighting that the explanation offered for these sectors’ behavior—their commitment to maintaining stability in the United States–China bilateral economic relationship—constitutes a complement to, rather than a substitute for, existing explanations for political behavior on the exchange rate.

I experiment with several additional specifications of the House models. I run an alternate model where I allow the intercept to vary by state to account for any geographic variation that is not captured by the model specified (Gelman and Hill 2006: Chapter 11–14; Clark



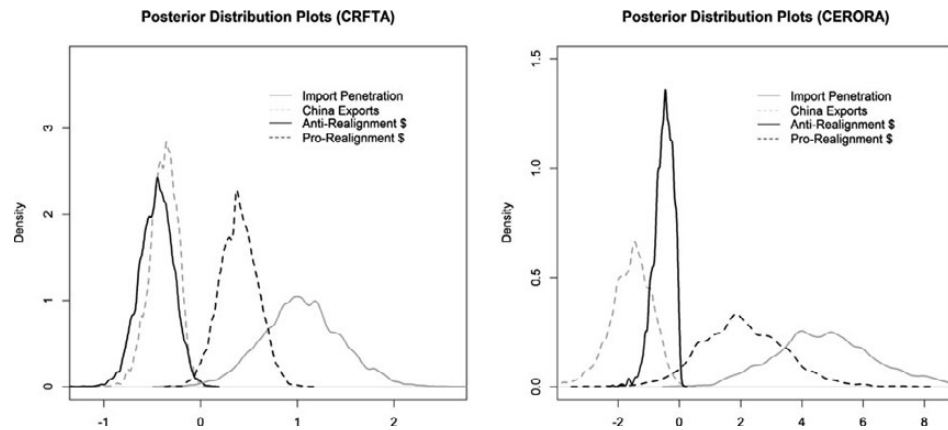


FIG 1. Posterior Distributions – Key Independent Variables

and Linzer 2012). The results are contained in the online-only supplementary files and are consistent with those reported here.

In addition to exploring (co)sponsorship behavior, I include a set of models to account for roll call voting on the CRFTA. Model 3 is an ordered logit model with a dependent variable coded as 0 if the legislator did not support the bill; 1 if he or she voted yea on the bill; and 2 if he or she (co)sponsored the bill and voted in favor of the legislation. The key variables—CHINA EXPORTS, PRO-REALIGNMENT \$, ANTI-REALIGNMENT \$, and IMPORT PENETRATION—all perform as they did in the initial (co)sponsorship models.

To examine the substantive importance of my findings, I calculate predicted probabilities to assess how varying the observed value on the variables of interest changes the probability of cosponsorship. These probabilities are based on Model 1.<sup>15</sup> A one-standard deviation increase in ANTI-REALIGNMENT \$ leads to an 8% decrease in the probability of cosponsorship. An increase of the same magnitude to CHINA EXPORTS decreases the predicted probability of supporting CRFTA by approximately 12%. A similar increase to PRO-REALIGNMENT \$ yields a 7% increase in the probability of a cosponsorship. Finally, an increase of the same magnitude to IMPORT PENETRATION leads to an 8% increase in the probability of cosponsorship. The statistical relationships identified here, then, are both robust and substantively meaningful in terms of actual legislative behavior.

Next, I turn to Models 4 and 5, where I assess senators' behavior in the context of the CERORA. The results are similar to those reported above, with some important exceptions. PRO-REALIGNMENT \$ is again positive, and 94–95% of its distribution is greater than zero. ANTI-REALIGNMENT \$ is overwhelmingly negative, and only 1% of its distribution is greater than zero. Also consistent with the previous models, IMPORT PENETRATION has a clear positive relationship with support for the legislation.

As above, CHINA EXPORTS has a negative relationship with support for the realignment legislation, with the entirety of the variable's distribution falling below zero (with rounding). It is also worth noting that an alternate variable measuring total state exports (to all markets, not just China) does not return a robust negative relationship. This point is an important one, as the key driver of behavior was dependence on China, not simply the constituency's overall export orientation. Taken

together, the performance of the key independent variables provides evidence consistent with Hypotheses 1, 2, 4, and 5.

The posterior distribution of CHINA FDI is fairly centered around zero, with 51 to 59% of the distribution falling below zero. As such, the model does not indicate that there is a statistical relationship between inbound FDI and a legislator's position on the currency legislation, contrary to Hypothesis 3.<sup>16</sup> This result may reflect the still-growing role of Chinese FDI in the US economy.

I note that in several robustness checks, the results in the CERORA models are somewhat less consistent when compared to the models in the House. In Model 8 (Table 4), for instance, contributions from steel/metals and business/finance have the anticipated relationship with support for the currency legislation (positive and negative, respectively). Other sectoral contributions do not have a strong statistical relationship with the outcome of interest, however. This result may be a function of the relationship between narrow sectoral interests and legislative behavior being less pronounced in the Senate, where legislators are generally representing a broader set of economic interests.<sup>17</sup>

Model 6 (ordered logit) considers both cosponsorship and roll call voting behavior on the CERORA. Some of the variables that explain cosponsorship decisions in Models 4 and 5 perform in a similar manner here. For example, CHINA EXPORTS and IMPORT PENETRATION have the anticipated relationships with the dependent variable. Others, namely PRO-REALIGNMENT \$ and ANTI-REALIGNMENT \$, do not. This result is not necessarily surprising. By the time the CERORA made it to the voting stage, a number of factors indicated that a House version of the bill was not going to have the support of leadership. In fact, key figures, including David Camp (chairman of the House Ways and Means Committee) and Speaker John Boehner, indicated that a currency-related bill was not a priority (Lesniewski and Weyl 2011). As a result, the fate of the CERORA was largely a foregone conclusion, potentially rendering the vote more about "China bashing" than legislators' genuine concern with the actual economic implications of the bill. Vote choice on such a bill, then, is largely a function of legisla-

<sup>16</sup> CHINA FDI is compiled at the state level, and this variable is only included in the Senate models.

<sup>17</sup> Additionally, in Model 10, I run Model 4 as a hierarchical model. Although the results (contained in the online-only supplemental files) are largely consistent with those reported here, the CHINA EXPORTS variable has a less decisive relationship with the outcome of interest.

<sup>15</sup> These predicted probabilities are calculated using the posterior mean value as a point estimate.

tive position taking, rather than a genuine effort to impact policy (see, for example, Seo 2010:1092; Trubowitz 1998:210). Under these conditions, it is inappropriate to read too much into the model of voting behavior on this bill. Indeed, this concern partially motivates my focus on (co)sponsorship behavior here.

Extensive diagnostics suggest that the models perform well. With respect to mixing, trace plots and running mean plots show no signs of trending. Geweke model diagnostics and Gelman-Rubin statistics are similarly favorable. Based on the results of these four tools, there is little reason to be concerned about nonconvergence. The results from these tests are contained in the online supplemental materials.

In sum, then, the models provide support for my hypotheses. I find consistent support for Hypotheses 1, 2, 4, and 5 in the context of legislative behavior related to the CRFTA in the House. My findings are largely consistent, with a number of important qualifications, in the context of the CERORA in the Senate.

### Conclusion

Bilateral economic relationships can lead to dependencies that shape political behavior on the exchange rate. Given the various linkages between exchange rate policy and other areas of international economic policy, the United States's economic relationship with key trade partners creates many potential sources of vulnerability. The ongoing conflict over the relative value of the dollar and the yuan epitomizes this dynamic. US industries that compete with Chinese producers often support aggressive efforts to seek currency realignment. Economic interdependencies, however, also lead many industries to oppose realignment legislation. Legislators who represent business interests that rely on China for trade and investment opportunities are likely to withhold support for the legislation. Through an analysis of Congressional behavior on two major pieces of currency legislation, my statistical analysis provides evidence consistent with my central hypotheses.

Existing explanations for political behavior in the areas of exchange rate and trade policy fail to fully capture actors' positions on currency legislation. The standard model of exchange rate preferences generally predicts that traded goods sectors prefer a weaker currency, while non-traded goods sectors prefer a stronger currency. The standard model of trade preferences suggests that comparatively advantaged industries will oppose currency bills as protectionist, and uncompetitive industries will support the legislation. Although some of the observed political mobilizations surrounding the currency bills proved consistent with these expectations, many did not. The US agricultural sector serves as a useful example. As a non-capital intensive traded goods sector, we might expect that this industry would number among the most ardent supporters of pursuing a weaker dollar or, failing that, imposing punitive tariffs against trade partners. Many agricultural interests, however, came out in strong opposition to the proposed legislation. The industry's reliance on China as a huge and growing export market—a market that economic conflict could potentially restrict—shaped the sector's political calculus on exchange rate legislation.

Recent work on the nuances of exchange rate preferences demonstrates that firm/industry-level factors determine the sensitivity of businesses to exchange rate fluctuations (see, for example, Broz and Werfel 2014; Jensen et al. 2013; Oatley 2010:6–9; Walter 2008). This

research identifies additional sources of heterogeneity with respect to exchange rate preferences across, and even within, industries. The findings here highlight several ways in which issue linkage and bilateral economic dependence drive political behavior with respect to exchange rates.

These results raise several considerations for future research. First, whether analyzing behavior at the firm, industry, legislator, or country level, research should fully acknowledge intersections between policy areas. Theoretical development and empirical analyses alike must recognize that political behavior in any issue area rarely takes place in an isolated arena. In international economic policy, for instance, the intersection between trade and exchange rate policy cannot be overstated.

Second, analysts increasingly recognize that international forces heavily drive actors' preferences and strategies. Political economy research that neglects to fully account for the interdependence of the global economic environment may fail to accurately explain and anticipate political behavior (Oatley 2011; Farrell and Newman 2014:343–49); it may very well lead to short-sighted or sub-optimal policy guidance. This is as true for studies of financial flows and labor market regulation as it is for exchange rate policy. Research must adequately consider the ways that retaliation, diffusion, contagion, and other international influences can impact political behavior (see, for example, Greenhill, Mosley, and Prakash 2009; Manger and Peinhardt 2013; Oatley et al. 2013).

The ongoing controversy surrounding currency legislation in the United States illustrates the importance of recognizing the overlap between policy areas, as well as the pivotal role of mutual economic dependence. While currency conflicts are typically cast as an effort to fight on behalf of domestic producers against beggar-thy-neighbor economic policies abroad, this framing presents only part of the story. In the recent US experience, even industries that frequently prefer a weaker currency (and those that often have weak preferences on the exchange rate) vigorously opposed realignment efforts; these industries would suffer from economic protectionism on the part of the United States or its key economic partners. Despite the heated rhetoric suggesting that the United States should take a hard line against China, many policymakers in the United States and in China recognize the risks entailed by such an approach. This includes legislators representing economic interests that are particularly vulnerable to the consequences of a trade war, as well as officials representing broader constituencies. After the introduction and subsequent vote on the CERORA, President Obama suggested that such legislation could lead to Chinese retaliation. Similarly, Speaker John Boehner called the bill “pretty dangerous,” warning that such legislation “could start a trade war” (Reuters 2011). United States–China interdependencies constrain behavior on exchange rate legislation, and these constraints are recognized at the highest levels of policymaking.

### Appendix A: Data & Coding for Interest Group Contribution Variables

The data on legislators' contribution receipts are compiled by MapLight and originally sourced from OpenSecrets.org. MapLight catalogs contributions to legislators and identifies the interest groups/sectors that are the source of the contributions.

With respect to the two bills covered here—the CRFTA and CERORA—MapLight identifies over 40 groups as

TABLE 5. Interest Groups' Preferences on Realignment Legislation

<i>Interest Group</i>	<i>Posture</i>	<i>Explanation</i>
Agricultural services and related industries	Oppose	Trade surplus with China <sup>†</sup>
Aircraft mfg.	Oppose	Trade surplus with China
Labor unions (in import-competing sectors)	Support	Comparative disadvantage
Chamber of Commerce	Oppose	Pro-market; see discussion in text
Communications and electronics	Mixed	Heavy investment in China; import competing
Computer mfg. and services	Mixed	Heavy investment in China; import competing
Fabricated metal products	Support	Comparative disadvantage
Finance, insurance, and real estate	Oppose	Nontraded; bilateral stability; see discussion in text
Financial services and consulting	Oppose	Nontraded; bilateral stability; see discussion in text
Fishing	Oppose	Trade surplus with China <sup>†</sup>
Livestock	Oppose	Trade surplus with China <sup>†</sup>
Meat processing and products	Oppose	Trade surplus with China <sup>†</sup>
Milk and dairy producers	Oppose	Trade surplus with China <sup>†</sup>
Poultry and eggs	Oppose	Trade surplus with China <sup>†</sup>
Business associations	Oppose	Pro-market; see discussion in text
Retail trade	Oppose	Inventory from China; see discussion in text
Securities, commodities, and investment	Oppose	Pro-market; bilateral stability; see discussion in text
Steel	Support	Comparative disadvantage
Telecommunications	Mixed	Heavy investment in China; import competing
Wheat, corn, soybeans, and cash grain	Oppose	Trade surplus with China <sup>†</sup>
Wine	Oppose	Trade surplus with China

(Note. <sup>†</sup>Trade surplus in NAICS Cat. 11, Agriculture, Forestry, Fishing and Hunting).

having taken positions on the legislation.<sup>18</sup> I restrict the list to groups with an identifiable *ex ante* preference for or against currency legislation. This selection is based on several criteria. First, sectors that enjoy a substantial bilateral trade surplus with China, such as agriculture and certain high-tech industries, are more likely to oppose any measures that might disrupt access to a key export market (Seo 2010:1078–92; Xie 2006:738; Zeng 2012:5, 21). Second, financial, real estate, and retail interests should oppose the legislation (Seo 2010:1082–83). This opposition may be driven in part by their preference for a stronger currency; however, they generally have a relatively weak preference on the level of the exchange rate (Hennig 1994:33). I argue that their behavior on the exchange rate is also substantially driven by their desire to maintain a strong bilateral economic relationship (see main text). Third, sectors that invest heavily in China are likely to oppose such legislation for two reasons: (i) These firms frequently invest in China intending to export finished products back to the United States, subjecting them to US-imposed trade barriers; (ii) these firms could also see their investments disrupted by other retaliatory changes to Chinese domestic investment policy (see Bown 2009:34). Fourth, for reasons similar to those discussed above, “pro-market” organizations (for example, the Chamber of Commerce) would oppose the legislation. Fifth, sectors that compete with Chinese producers *and are not highly integrated with China’s market* are more likely to support currency legislation to help boost their competitiveness. These sectors benefit from a relatively weaker dollar or US-imposed trade protection; the steel and manufactured metals industries are good examples,

as they have actively sought policy measures to improve competitiveness (Broz and Werfel 2014:395–97, 413).

In Table 5, I list the interest groups that are invested in the legislation (as determined by MapLight) and then identify their posture with respect to the policy proposal. In addition to considering the criteria discussed above, I also consult press releases and various other documents from key interest groups and industry associations to ascertain their position on the legislation. Many of the antire-alignment interests, for instance, signed a letter to Congress opposing the legislation (see, for example, Business Roundtable 2011). Others were members of the “Fair Currency Coalition,” another group of industries that has been active on the currency issue. Such evidence is used to confirm my coding of interest groups’ positions.

For some groups, determining their anticipated posture on the legislation is relatively uncontroversial. For other sectors, however, a number of cross-cutting factors are simultaneously at work. For instance, the computer industry has a trade deficit with China, but also invests heavily in the country. A similar pattern is present in the apparel industry; domestic manufacturers are often strongly import competing, but many US-based firms contract for production processes to be carried out in China, and retail firms often carry Chinese products. For many of these “mixed” interest industries, we can see different groups within the same sector taking opposing positions on the legislation. Accordingly, contributions from these groups are excluded from the models presented. In several robustness checks, however, I experiment with alternate codings for PRO-REALIGNMENT \$ and ANTI-REALIGNMENT \$ where I include contributions from these sectors. These modifications do not substantially alter the results presented.

## References

- ACHARYA, AMITAV. (2014) Power Shift or Paradigm Shift? China’s Rise and Asia’s Emerging Security Order. *International Studies Quarterly* 58 (1): 158–173.

<sup>18</sup> For the Senate, the data include contributions during the period from January 1, 2006 to September 22, 2011 (the date of introduction of the bill). For the House, the period runs from January 1, 2006 to May 13, 2009. The date ranges are select so as to cover a full election cycle for all legislators. For select legislators, a slightly different period is relied upon to avoid including any anomalous spike in contributions, e.g., resulting from a presidential election campaign.



- ALEMÁN, EDUARDO, ERNESTO CALVO, MARK P. JONES, AND NOAH KAPLAN. (2009) Comparing Cosponsorship and Roll-Call Ideal Points. *Legislative Studies Quarterly* 34 (1): 87–116.
- BAILEY, MICHAEL A., JUDITH GOLDSTEIN, AND BARRY R. WEINGAST. (1997) The Institutional Roots of American Trade Policy. *World Politics* 49 (3): 309–338.
- BALDWIN, R., AND C. MAGEE. (2000) Is Trade Policy for Sale? Congressional Voting on Recent Trade Bills. *Public Choice* 105: 79–101.
- BOWN, CHAD. (2009) U.S.-China Trade Conflicts and the Future of the WTO. *Fletcher Forum of World Affairs* 33: 27–48.
- BROZ, J. LAWRENCE. (2005) Congressional Politics of International Financial Rescues. *American Journal of Political Science* 49 (3): 479–496.
- BROZ, J. LAWRENCE. (2010) *Exchange Rates and Protectionism. Paper prepared for the fifth annual meeting of the International Political Economy Society, November 12-13, 2010.* Cambridge, MA: Weatherhead Center for International Affairs, Harvard University.
- BROZ, J. LAWRENCE. (2011) The United States Congress and IMF Financing, 1944-2009. *The Review of International Organizations* 6 (3–4): 341–368.
- BROZ, J. LAWRENCE, AND JEFFRY FRIEDEN. (2006) The Political Economy of Exchange Rates. In *The Oxford Handbook of Political Economy*, edited by Barry R. Weingast and Donald Wittman. New York: Oxford University Press.
- BROZ, J. LAWRENCE, AND MICHAEL BREWSTER HAWES. (2006) Congressional Politics of Financing the International Monetary Fund. *International Organization* 60 (1): 367–399.
- BROZ, J. LAWRENCE, AND SETH H. WERFEL. (2014) Exchange Rates and Industry Demands for Trade Protection. *International Organization* 68 (2): 393–416.
- BUSINESS ROUNDTABLE. (2011) Business Groups Letter Opposing Currency Legislation. Letter to Sen. Harry Reid and Sen. Mitch McConnell. <http://businessroundtable.org/resources/business-groups-letter-opposing-china-currency-legislation> (Accessed October 25, 2014).
- CASSING, JAMES, TIMOTHY J. McKEOWN, AND JACK OCHS. (1986) The Political Economy of the Tariff Cycle. *The American Political Science Review* 80 (3): 843–862.
- CLARK, TOM S., AND LINZER DREW A. (2012) Should I Use Fixed or Random Effects?. [http://polmeth.wustl.edu/media/Paper/Clark\\_LinzerREFEMar2012.pdf](http://polmeth.wustl.edu/media/Paper/Clark_LinzerREFEMar2012.pdf) (Accessed November 12, 2014).
- CONGRESSIONAL RECORD. (2011) 112th Cong., 1st sess. Vol. 157, Number 148.
- CORDEN, WARNER MAX. (1997) *Trade Policy and Economic Welfare*, 2nd edn. Oxford, UK: Clarendon Press.
- DAVIS, CHRISTINA L. (2004) International Institutions and Issue Linkage: Building Support for Agricultural Trade Liberalization. *American Political Science Review* 98 (1): 153–169.
- DAVIS, CHRISTINA L. (2008/09) Linkage Diplomacy: Economic and Security Bargaining in the Anglo-Japanese Alliance, 1902-23. *International Security* 33 (3): 143–179.
- DREZNER, DANIEL. (2009) Bad Debts: Assessing China's Financial Influence in Great Power Politics. *International Security* 34 (2): 7–45.
- EICHENGREEN, BARRY J., AND DOUGLAS A. IRWIN. (2009) The Slide to Protectionism in the Great Depression: Who Succumbed and Why? NBER Working Paper No. w15142.
- FARRELL, HENRY, AND ABRAHAM NEWMAN. (2014) Domestic Institutions Beyond the Nation State: Charting the New Interdependence Approach. *World Politics* 66 (2): 331–363.
- FLORES-MACÍAS, GUSTAVO, AND SARAH KREPS. (2013) The Foreign Policy Consequences of China's Economic Rise: A Study of China's Commercial Relations With Africa and Latin America, 1992-2006. *Journal of Politics* 75 (2): 357–371.
- FORDHAM, BENJAMIN O., AND TIMOTHY J. McKEOWN. (2003) Selection and Influence: Interest Groups and Congressional Voting on Trade Policy. *International Organization* 57 (3): 519–549.
- FRIEDEN, JEFFRY A. (1991) Invested Interests: The Politics of National Economic Policy in a World of Global Finance. *International Organization* 45: 425–451.
- FRIEDEN, JEFFRY A. (1994) Exchange Rate Politics: Contemporary Lessons From American History. *Review of International Political Economy* 1 (1): 81–103.
- FRIEDEN, JEFFRY A. (1997) Monetary Populism in Nineteenth-Century America: An Open Economy Interpretation. *Journal of Economic History* 57: 367–395.
- FRIEDEN, JEFFRY A. (1999) Actors and Preferences in International Relations. In *Strategic Choice and International Relations*, edited by David Lake and Robert Powell. Princeton, NJ: Princeton University Press.
- GELMAN, ANDREW, AND JENNIFER HILL. (2006) *Data Analysis Using Regression and Multilevel/Hierarchical Models*. New York, NY: Cambridge University Press.
- GILL, JEFF. (2007) *Bayesian Methods: A Social and Behavioral Sciences Approach*. Boca Raton, FL: Chapman and Hall/CRC.
- GILLIGAN, MICHAEL. (1997) *Empowering Exporters: Reciprocity, Delegation, and Collective Action in American Trade Policy*. Ann Arbor: University of Michigan Press.
- GREENHILL, B., L. MOSLEY, AND A. PRAKASH. (2009) Trade-Based Diffusion of Labor Rights: A Panel Study, 1986–2002. *American Political Science Review* 103 (4): 669–690.
- GROSSMAN, GENE, AND ELHANAN HELPMAN. (1994) Protection for Sale. *American Economic Review* 84: 833–50.
- HALL, RICHARD L., AND ALAN V. DEARDORFF. (2006) Lobbying as a Legislative Subsidy. *American Political Science Review* 100(1): 69–84.
- HENNING, C. RANDALL. (1994) *Currencies and Politics in the United States, Germany, and Japan*. Washington, DC: Institute for International Economics.
- HIRSCH, BARRY T., AND DAVID A. MACPHERSON. (2003) Union Membership and Coverage Database From the Current Population Survey: Note. *Industrial and Labor Relations Review* 56 (2): 349–354.
- HIRSCHMAN, ALBERT O. (1945) *National Power and the Structure of Foreign Trade*. Berkeley: University of California Press.
- HISCOX, MICHAEL J. (2001) Class Versus Industry Cleavages: Inter-Industry Factor Mobility and the Politics of Trade. *International Organization* 55 (1): 1–46.
- HISCOX, MICHAEL J. (2002) *International Trade and Political Conflict*. Princeton: Princeton University Press.
- JENSEN, J. BRADFORD, DENNIS P. QUINN, AND STEPHEN WEYMOUTH. (2013) Global Supply Chains, Currency Undervaluation, and Firm Protectionist Demands. NBER Working Paper 19239.
- KEOHANE, ROBERT, AND JOSEPH NYE. (1977) *Power and Interdependence: World Politics in Transition*. Boston: Little, Brown and Co.
- KONDO, ILLENIN O. (2012) Trade Reforms, Foreign Competition, and Labor Market Adjustments in the U.S. University of Minnesota and Federal Reserve Bank of Minneapolis. <http://www.federalreserve.gov/pubs/ifdp/2013/1095/ifdp1095.pdf> (Accessed October 25, 2014).
- LAYNE, CHRISTOPHER. (2012) This Time It's Real: The End of Unipolarity and the Pax Americana. *International Studies Quarterly* 56 (1): 203–213.
- LESNIEWSKI, NIELS, AND BEN WEYL. (2011) CQ Weekly – Weekly Report, Trade, Oct. 17 – pg. 2169, “Senate Backs Bill That Would Allow Sanctions for Undervalued Currencies.”
- LONG, J. S. (1997) *Regression Models for Categorical and Limited Dependent Variables*. Thousand Oaks, CA: SAGE Publications Inc.
- MAGEE, C. (2010) Would NAFTA Have Been Approved by the House of Representatives Under President Bush? Presidents, Parties, and Trade Policy. *Review of International Economics* 18 (2): 382–395.
- MANGER, MARK S., AND CLINT PEINHARDT. (2013) Learning and Diffusion in International Investment Agreements. Annual Meeting of the American Political Science Association, Chicago, August 29–September 1.
- MARTIN, A. D., K. M. QUINN, AND J. H. PARK. (2011) MCMCpack: Markov Chain Monte Carlo in R. *Journal of Statistical Software* 42 (9): 1–21.
- MCNALLY, CHRISTOPHER. (2012) Sino-Capitalism: China's Reemergence and the International Political Economy. *World Politics* 64 (4): 741–776.
- MILNER, HELEN V. (1988) *Resisting Protectionism: Global Industries and the Politics of International Trade*. Princeton: Princeton University Press.
- MILNER, HELEN V., AND DUSTIN H. TINGLEY. (2011) Who Supports Global Economic Engagement? The Sources of Preferences in American Foreign Economic Policy. *International Organization* 65 (1): 37–68.



- NICHOLS, ROB. (2011) Op-Ed: Currency Legislation is Wrong Approach to Address Trade Imbalance With China. *Financial Services Forum*, Nov. 17. <http://financialservicesforum.org/2011/11/op-ed-currency-legislation-is-wrong-approach-to-address-trade-imbalance-with-china/> (Accessed October 25, 2014).
- OATLEY, THOMAS. (2010) Real Exchange Rates and Trade Protectionism. *Business and Politics* 12 (2): 1–17.
- OATLEY, THOMAS. (2011) The Reductionist Gamble: Open Economy Politics in the Global Economy. *International Organization* 65 (2): 311–341.
- OATLEY, THOMAS, W. KINDRED WINECOFF, ANDREW PENNOCK, AND SARAH BAUERLE DANZMAN. (2013) The Political Economy of Global Finance: A Network Model. *Perspectives on Politics* 11 (1): 133–153.
- PLUMMER, MARTYN, NICKY BEST, KATE COWLES, AND KAREN VINES. (2010) *Coda: Output Analysis and Diagnostics for MCMC*. R Package, Version 180.16-1.
- POOLE, KEITH T., AND HOWARD ROSENTHAL. (1997) *Congress: A Political-Economic History of Roll Call Voting*. New York, NY: Oxford University Press.
- RAMIREZ, CARLOS D. (2012) The Effect of ‘China Bashing’ on Sino-American Relations. *Journal of Chinese Political Science* 17 (3): 291–311.
- REUTERS. (2011) Obama Hits China on Trade; Cautious on Currency Bill (October 7, 2011), <http://www.reuters.com/article/2011/10/07/us-usa-china-idUSN1E7950FF20111007> (Accessed October 25, 2014).
- RHODIUM GROUP. (2012) China Investment Monitor Database. <http://rhg.com/interactive/china-investment-monitor> (Accessed October 25, 2014).
- SCOTT, ROBERT E. (2010) Unfair China Trade Costs Local Jobs. EPI Briefing Paper No. 260. March 23, 2010.
- SEO, JUNGKUN. (2010) Vote Switching on Foreign Policy in the U.S. House of Representatives. *American Politics Research* 38 (6): 1072–1101.
- STEINBERG, DAVID, AND VICTOR SHIH. (2012) Interest Group Influence in Authoritarian States: The Political Determinants of Chinese Exchange Rate Policy. *Comparative Political Studies* 45 (11): 1405–1434.
- TAYLOR, AARON. B., STEPHEN G. WEST, AND LEONA S. AIKEN. (2006) Loss of Power in Logistic, Ordinal Logistic, and Probit Regression When an Outcome Variable is Coarsely Categorized. *Educational and Psychological Measurement* 66: 228–239.
- TRUBOWITZ, PETER. (1998) *Defining the National Interest: Conflict and Change in American Foreign Policy*. Chicago: University of Chicago Press.
- US-CHINA BUSINESS COUNCIL. (2012) *US Exports to China by State 2000-11*. Washington, DC: US-China Business Council.
- WALTER, STEFANIE. (2008) A New Approach for Determining Exchange-Rate Level Preferences. *International Organization* 62 (3): 405–438.
- WESTERN, BRUCE, AND SIMON JACKMAN. (1994) Bayesian Inference for Comparative Research. *American Political Science Review* 88 (2): 412–423.
- XIE, TAO. (2006) Congressional Roll Call Voting on China Trade Policy. *American Politics Research* 34 (6): 732–758.
- ZENG, KA. (2012) High Stakes: U.S.-China Trade Disputes Under the World Trade Organization. *International Relations of the Asia-Pacific* 13 (1): 1–31.

### Supporting Information

Additional Supporting Information may be found in the online version of this article:

**Appendix S1.** Diagnostics, Robustness Checks and Supplementary Information.