Do Chinese Imports Influence U.S. Elections?*

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Abstract

This paper examines the impact of U.S. imports from China on U.S. Congressional elections. We find that counties with greater increases in imports from China during the 2000s exhibit increases in the share of votes cast for Democrats as well as the likelihood that a Democrat takes a seat from a Republican. These relationships are not present in the 1990s, before the surge in U.S. imports from China occurred, and they are consistent with our finding that Democrats in office were more likely than Republicans to support legislation limiting import competition or offering economic assistance. (JEL Codes: F13; F16; D72) (Keywords: China; Voting; Elections; Import Competition; Normal Trade Relations; World Trade Organization)

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1 Introduction

International trade is often a contentious issue in U.S. elections. During the 2000s, the U.S. trade deficit with China emerged as a focus of particular attention given the concomitant decline in U.S. manufacturing employment, and recent research has documented a strong relationship between these trends. Autor et al. (2013), for example, find that 25 to 50 percent of the manufacturing job loss in the United States between 2000 and 2007 is due to rising Chinese imports, while Pierce and Schott (2015) show that this link can be attributed to an exogenous change in U.S. trade policy – the U.S. granting of permanent normal trade relations (PNTR) to China in 2000 – which eliminated the threat of substantial tariff increases.

This paper examines the relationship between voting in U.S. Congressional elections and heightened Chinese import competition, which may affect voters' preferences through several channels, including employment, wages and profits. In the first part of our analysis, we show that voters in U.S. counties exposed to greater import competition from China exhibit larger increases in the share of votes cast for Democrats as well as a greater likelihood of a switch in representation from Republican to Democrat. Intuitively, these increases are strongest for the 2004 election, which occurs after an unprecedented three-year, 15 percentage point decline in U.S. manufacturing employment. The second part of our analysis documents a rationale for these votes by showing that Democrats are, in fact, more likely to support policies that place restrictions on imports or that provide economic assistance that might mitigate the impact of import competition.

We assess counties' competition from China in terms of the growth of their imports from China. As U.S. import data are not available at the county level, we follow Autor et al. (2013) in approximating county-level import growth as the weighted sum of overall U.S. import growth across the industries in which the county is active, using counties' labor shares in those industries as weights. Given potential endogeneity of counties' Chinese import growth to other factors, our identification strategy makes use of two instrumental variables suggested by recent papers in the literature: the the growth in Chinese imports experienced by eight developed countries other than the United States (Autor et al. 2013) and counties' exposure to PNTR (Pierce and Schott 2015).

We focus on voting for the U.S. House of Representatives because House members serve two-year terms and are expected to maintain close personal contact with local constituents. As a result, they are more responsive to the demands of voters than elected officials with longer terms or a broader base of constituents, e.g., Senators, Governors or Presidents.[1] We examine voting by county rather than Congressional

[1]Karol (2012) finds that Senators and Presidents are more likely to support policies (like free trade) that are in the long-run interests of the country as a whole, even if they run counter to the short-run passions of voters. Conconi et al. (2014) show that Senators are more likely to support trade liberalization than Representatives, but that the result does not hold for Senators facing elections within the next two years.

district in order to examine changes *within* geographic areas over time. Such analysis is not possible at the district level because the borders of Congressional districts change substantially during the period we examine due to redistricting after the 2000 Census. The borders of counties, by contrast, are stable. An additional benefit of focusing on counties is that they are smaller than Congressional districts in terms of both area and population. As a result, they allow us to capture greater variation in both Chinese import competition and demographics.

Our baseline voting specification, which examines changes in Chinese imports and voting between 1996 and 2004, suggests that a one standard deviation increase in import growth from China is associated with a 1.4 percentage point increase in the share of votes won by Democrats, representing an approximately 4 percent increase in their average vote share in 2004. When we examine the probability of a change from Republican to Democrat representation of a county in Congress, our baseline specification implies that a one standard deviation increase in imports from China is associated with a 1.9 percentage point increase in the probability of switching, or roughly one-fifth of the unconditional probability of a Republican-to-Democrat switch between 1996 and 2004.

The second half of our analysis examines Representatives' Congressional votes during the 1990s and 2000s using a regression discontinuity identification strategy that compares the voting of Democrats and Republicans who win office by small margins. We find that Democrats are more likely to take positions that restrict trade and that seek to offer economic assistance that may benefit those affected by trade, providing a rationale for the change in voting documented in our earlier results. This tendency to support such legislation is stronger after the decline in U.S. manufacturing employment and increase in U.S. imports from China starting in 2001.

The results in this paper relate most closely to research conducted in the political science literature, but also complement the large literature in economics examining the impact of international trade on worker outcomes.[2] One closely related paper in the voting literature is Feigenbaum and Hall (2015), which examines the effect of Congressional-district-level economic shocks from Chinese imports – like those investigated in this paper – on the roll-call behavior of legislators and electoral outcomes. They find that legislators from districts experiencing larger increases in Chinese import competition become more protectionist in their voting on trade-related bills, and that incumbents are able to insulate themselves from electoral competition via this voting behavior. In the economics literature, Conconi et al. (2012) examine the impact of district-level trade competition on representatives' votes to grant U.S. Presidents Fast Track Authority *vis a vis* the negotiation of trade agreements, and Conconi et al.

[2]A substantial body of research, for example, documents a negative relationship between import competition and U.S. manufacturing employment, e.g., Freeman and Katz (1991), Revenga (1992), Sachs and Shatz (1994) and Bernard et al. (2006). More recently, a series of papers link Chinese imports to employment outcomes in the United States and other developed or developing countries, e.g., Autor et al. (2013), Bloom et al. (2015), Ebenstein et al. (2011), Groizard, Ranjan and Rodriguez-Lopez (2012), Mion and Zhu (2013) and Utar and Torres Ruiz (2013).

(2015) examine the role of skilled labor abundance in Representatives' votes on trade and immigtration bills. Blonigen and Figlio (1998) examine the role of direct foreign investment (DFI) on legislator's votes for bills related to trade protection, finding that DFI is actually associated with more protectionist voting.

This paper proceeds as follows. Section 2 provides an overview of the growth of U.S.-China trade. Sections 3 and 4describe our empirical strategy and data. Sections 5 and 6 present our empirical results.

2 China's Growth as a U.S. Trade Partner

In the past thirty-five years China jumped from being an insignificant contributor to world GDP to the second-largest economy and the largest trading state. In 2007 it became the United States' largest source of imports, accounting for 17 percent of all imports versus just 3 percent in 1990. As illustrated in Figure 1, U.S. imports from China accelerated after China's receipt of permanent Normal Trade Relations (PNTR) in 2000. U.S. exports to China also grew substantially over this period, but less rapidly, with the result that by 2007 the United States trade deficit with China reached $256.3 billion U.S. dollars, or 1.7 percent of GDP, up from 0.6 percent of GDP in 1997.

As illustrated in Figure 2, the United States' growing imports from China coincides with a sharp, 18 percent decline in aggregate U.S. manufacturing employment from 2001 to 2007, with more than 80 percent of the decline occurring between 2001 and 2004. Pierce and Schott (2015) show that declines were steeper in industries more exposed to PNTR. Here, following Autor et al. (2013), we document substantial variation in manufacturing employment growth rates across U.S. counties. Figure 3, for example, reports the distribution of two-year manufacturing employment growth rates for 1996 to 1998, 1998 to 2000, 2000 to 2002 and 2002 to 2004. As indicated in the figure, there is a pronounced leftward shift in these distributions over time, with a corresponding sharp increase in the mass of counties experiencing large (i.e., greater than 0.1) log-point declines. Figure 4 reports a similar trend for county-level unemployment rates.[3]

Recent research in international trade highlights a relationship between U.S. imports from China and manufacturing job loss. Autor et al. (2013) show that geographic areas in the United States that are more exposed to Chinese import competition experience greater declines in manufacturing employment, while Pierce and Schott's (2015) industry-level analysis ties the decline in manufacturing employment and surge in U.S. imports from China to the elimination of tariff rate uncertainty associated with PNTR. Adjustment costs for workers who switch industries or occupations as a result of these trends, and which might be influential in driving voting preferences, are highlighted in Artuc et al. (2010), Ebenstein et al. (2014), Autor et al. (2013) and Caliendo et al. (2015).

[3]A large literature beginning with Fair (1978) documents the importance of recent economic changes including the unemployment rate in voter preferences.

Growth in the U.S. trade deficit with China has motivated U.S. legislators at various levels of government to propose restricting Chinese imports. As discussed in Pierce and Schott (2015), Congress demonstrated substantial resistance to the granting of normal trade relations to China during the 1990s. Then, after the extension of PNTR and China's entry into the WTO in 2001, Senators Charles Schumer and Lindsey Graham repeatedly introduced legislation in the U.S. Senate to impose tariffs on U.S. imports from China based on allegations that China manipulates its exchange rate relative to the U.S. dollar (Lichtblau 2011). Calls for such action generally increase during elections. Indeed, in a move the New York Times referred to as "election year politics over a loss of American jobs" (Sanger and Chan 2010), the House of Representatives in 2010 granted President Obama expanded authority to impose tariffs on a wide range of Chinese goods. More recently, the 2012 presidential election featured candidates announcing their willingness to "stand up" to China in trade negotiations, label China a currency manipulator on their first day in office, and impose tariffs on goods they perceive as being traded unfairly.[4].

3 Empirical Strategy

We examine the relationship between U.S. counties' import growth from China and election outcomes using the following specification,

$$\Delta DemShare_c = \lambda + \beta ln\left(\Delta US\ Imports_c^{China}\right) + \mathbf{X_c^{0\prime}}\theta + \delta_s + \Delta\varepsilon_c, \tag{1}$$

where $\Delta DemShare_c$ represents the change in the share of votes won by Democrats in county c over some interval – with 1996 to 2004 as the baseline – and $ln\left(\Delta US\ Imports_c^{China}\right)$ captures the log change in county c's imports per worker from China over the same period. $\mathbf{X_c^0}$ is a matrix of county attributes in the initial period, summarized below. λ, $\Delta\varepsilon_c$ and δ_s represent the constant, the error term and state fixed effects, which capture time-invariant characteristics that are common to counties within a state. An important advantage of this approach is the ability to estimate the effects of increased Chinese import competition within counties, thereby controlling for time-invariant county attributes.

Identification of β requires that our measure of the change in counties' Chinese imports conditional on their initial characteristics $\mathbf{X_c^0}$ be uncorrelated with the error term. As there might exist unobservable factors that affect both Chinese imports and the share of votes received by Democrats across counties, such as implementation of policies favored by a particular political party, there is reason to doubt this identifying assumption. Moreover, counties that favor a particular political party could directly influence the level of imports from China, generating reverse causality.[5] To mitigate these concerns, we employ two instruments for $ln\left(\Delta US\ Imports_c^{China}\right)$, discussed in detail in the next section.

[4]See, for example, Brower and Lerer (2012).

[5]Indeed, as indicated in Section 5, Democrats are less likely to favor free trade.

4 Data

We make use of data from a variety of sources to measure the voting behavior of U.S. citizens and U.S. imports from China.

4.1 Election Results and Demographics

Data on county-level election outcomes beginning in 1996 are from *Dave Leip's Atlas of U.S. Presidential Elections*.[6] These data track the number of votes received by Democratic and Republican candidates for Congress in each county in each election year, as well as the number of registered voters.

The first row of Table 1 reports the mean and standard deviation of the change in Democrat vote share between 1996 and 2004 across the roughly 3000 counties for which we observe the change in Democrat vote share. The first two columns report the mean and standard deviation for all counties, while the middle and right two columns focus on counties in the top and bottom quintiles of the change in imports from China (defined in the next section). As shown in the first row of the first panel, the share of votes going to Democratic candidates in congressional elections declined by an average of 6.04 percent between 1996 and 2004, from 44.44 (row 4) to 38.4 (not shown). Comparison of the next two panels, however, reveals that this decline is shallower (-4.84 percent) for counties in the top quintile in terms of increases in Chinese imports, but steeper (-7.60) for counties in the lowest quintile.

We match the voting data to county-level demographic data found to be important correlates of voting behavior in the political science and economics literature on voting.[7] These data are collected from a variety of sources: population and unemployment rates are from the U.S. Bureau of Labor Statistics; per capita income is from the U.S. Bureau of Economic Analysis; and breakdowns of the population by race, age, household income, education and veteran status are from the U.S. Census. Data on House members' age, gender, party affiliation and other characteristics are obtained from Wikipedia. Data on population, the unemployment rate and per capita income are available for all years; the remaining attributes are available for 2000 via the decennial Census.

County attributes are summarized in Table 1. Counties with changes in Chinese imports in the top quintile between 1996 and 2004 exhibit lower Democrat vote share as well as lower income and population in 1996, and a lower share of college graduates in 2000, than counties in the lowest quintile of Chinese import growth. As noted above, our empirical strategy examines changes in outcomes within counties across time and therefore controls for unobserved, time-invariant county characteristics.

[6] For details on data collection, see www.uselectionatlas.org.

[7] See, for example, Baldwin and Magee (2000), Gilbert and Oladi (2012), Kriner and Reeves (2012), Wright (2012) and Conconi et al. (2012).

4.2 Counties' Exposure to Chinese Imports

We construct a measure of county-level changes in U.S. imports from China using international trade data from the United Nations' Comtrade database and employment data from the U.S. Census Bureau's County Business Patterns (CBP) database.[8] As in Autor et al. (2013), we define the change in counties' Chinese import competition over time as the change in their Chinese imports per worker. As U.S. import data are unavailable at the county level, these changes are constructed using aggregate U.S. import data and county-level labor shares in two steps. First, we use the Comtrade database to compute the change in aggregate U.S. imports from China by four-digit Standard Industry Classification (SIC) industries from 1996 to 2004.[9] Second, using data on county employment by industry from the CBP database, we compute the change in county c's imports from China over the 1996 to 2004 interval as

$$ln\left(\Delta US\ Imports_c^{China}\right) = \ln\left[\sum_j \frac{L_{jc}^{1996}}{L_j^{1996}} \frac{\Delta US\ Imports_j^{China}}{L_c^{1996}} + 1\right], \tag{2}$$

where L_{jc}^{1996} is the initial employment of SIC industry j in county c, L_c^{1996} is the overall initial employment in county c, L_j^{1996} is the initial employment of industry j for the United States as a whole, and $ln\left(\Delta US\ Imports_j^{China}\right)$ is the change in U.S. imports from China in industry j between 1996 to 2004.[10] We add 1 to the term in brackets to retain observations where the measure of import competition is zero.[11]

As reported in the second row of Table 1, $ln\left(\Delta US\ Imports_c^{China}\right)$ varies widely across counties, averaging 1.70 but with a standard deviation of 0.84. The average change in imports for counties in the top quintile is 2.89, while for counties in the bottom quintile it is 0.53.

We use a similar procedure to compute the change in net imports from China, $ln\left(\Delta US\ Net\ Imports_c^{China}\right) = ln\left(\Delta US\ Imports_j^{China}\right) - ln\left(\Delta US\ Exports_j^{China}\right)$, which takes into account the potential benefits of regions' exports to China.

[8] We use import data from Comtrade rather than the U.S. census so that it is conformable to the import data from the eight other developed countries used to construct the instrument discussed in Section 4.3.

[9] We concord the six-digit Harmonized System categories at which trade is tracked in Comtrade to SIC industries using concordances provided by Pierce and Schott (2012)

[10] We concord the North American Industry Classification System categories over which employment is tracked in the CBP to SIC industries using concordances provided by the U.S. Census Bureau at https://www.census.gov/eos/www/naics/concordances/concordances.html. If one NAICS02 code is split into two or more NAICS97 codes, we split the employment of this NAICS02 code equally among the NAICS97 codes. We convert NAICS97 to SIC87 using the concordance provided by David Dorn, who uses the "bridge" file of the 1997 census to construct weights for NAICS97 codes to be split into two or more SIC87 codes. This procedure yields a dataset with consistent SIC87 industry codes across our sample period.

[11] There are approximately 70 counties without manufacturing employment in 1996.

4.3 Instruments for Counties' Changes in Chinese Imports

Both components of our measure of counties' imports from China – their employment structure and their change in U.S. imports from China – raise concerns about potential endogeneity. We mitigate the endogeneity of employment structure in the instruments constructed below by using the distribution of employment observed in 1990, approximately ten years before the surge in U.S. imports from China occurs, and by including counties' lag Democrat vote share as an additional covariate in our regressions. We alleviate concern over the endogeneity of counties' imports from China by employing two instruments for $ln\left(\Delta US\ Imports_c^{China}\right)$.

For the first instrument, we follow Autor et al. (2013) in substituting $\Delta US\ Imports_j^{China}$ with the growth in Chinese imports per worker experienced by eight other developed countries – Australia, Denmark, Finland, Germany, Japan, New Zealand, Spain, and Switzerland – which we refer to as the D8:

$$ln\left(\Delta D8\ Imports_{c,}^{China}\right) = \ln\left[\sum_j \frac{L_{jc}^{1990}}{L_j^{1990}} \frac{\Delta D8\ Imports_j^{China}}{L_c^{1990}} + 1\right]. \tag{3}$$

As noted above, we use employment shares from 1990 and, as with the construction of $ln\left(\Delta US\ Imports_c^{China}\right)$, we add 1 to the term in brackets to retain observations where the import measure is zero, and compute a similar measure for net imports, $ln\left(\Delta D8\ Imports_{c,}^{China}\right)$, using information about D8 countries' exports to China. To the extent that the surge in U.S. imports from China is due to supply factors – e.g., growth in Chinese firms' productivity – $ln\left(\Delta D8\ Imports_{c,}^{China}\right)$ is correlated with $ln\left(\Delta US\ Imports_j^{China}\right)$ but orthogonal to other potential drivers of U.S. voters' behavior. This instrument is less effective if the increase in U.S. imports from China are driven by demand shocks that are correlated across the United States and the D8. We address this concern by comparing two-stage-least-squares results based on this instrument with those of the second instrument, described below.[12]

Our second instrument takes advantage of an exogenous change in U.S. trade policy – the U.S. granting of PNTR to China in October 2000 – that increased U.S. firms' incentives to import from China differentially across industries. The U.S. tariff schedule has two sets of tariff rates. The first, known as NTR tariffs, are generally low and applied to goods imported from other members of the World Trade Organization (WTO). The second, known as non-NTR tariffs, were set by the Smoot-Hawley Tariff Act of 1930 and are often substantially higher than the corresponding NTR rates. Imports from non-market economies outside the WTO generally are subject to the higher non-NTR rates, but U.S. tariff law allows the President to grant such countries access to NTR rates on a year-by-year basis subject to annual approval by Congress.

U.S. Presidents granted China such a waiver every year starting in 1980, but Congressional votes over annual renewal became politically contentious and less certain of

[12]Feigenbaum and Hall (2015) also employ the instrument from Autor et al. (2013) to correct for potential endogeneity of U.S. imports from China.

passage following the Chinese government's crackdown on Tiananmen Square protests in 1989 and other flashpoints in U.S.-China relations during the 1990s such as China's transfer of missile technology to Pakistan in 1993 and the Taiwan Straits Missile Crisis in 1996. Uncertainty over China's access to NTR tariff rates ended with the U.S. granting of permanent normal trade relations (PNTR) status to China in October 2000, which took effect upon China's entry into the WTO in December 2001.

We follow Pierce and Schott (2015) in capturing the industry-level impact of PNTR as the rise in U.S. tariffs on Chinese goods that would have occurred in the event of a failed annual renewal of China's NTR status prior to PNTR,

$$NTR\,Gap_j = Non\,NTR\,Rate_j - NTR\,Rate_j. \tag{4}$$

We refer to this difference as the NTR gap, and compute it for each SIC industry j using *ad valorem equivalent* tariff rates provided by Feenstra et al (2002) for 1999, the year before passage of PNTR. As illustrated in Figure 5, NTR gaps vary widely across industries, with a mean and standard deviation of 33 and 15 percentage points, respectively. As noted in Pierce and Schott (2015), 89 percent of the variation in the NTR gap across industries is due to non-NTR rates, set 70 years prior to passage of PNTR. This feature of non-NTR rates effectively rules out reverse causality that would arise if *non-NTR rates* were set to protect industries with declining employment or surging imports. Furthermore, to the extent that *NTR rates* were set to protect industries with declining employment prior to PNTR, these *higher* NTR rates would result in *lower* NTR gaps, biasing our results away from finding an effect of PNTR.[13]

We compute U.S. counties' exposure to PNTR as the employment-share weighted average NTR gap across the sectors in which they are active[14],

$$ln(NTR\,Gap_c) = \ln\left[\sum_j \frac{L_{jc}^{1990}}{L_j^{1990}} \frac{NTR\,Gap_j}{L_c^{1990}} + 1\right], \tag{5}$$

where, as above, we use employment shares from 1990 and add 1 to the weighted sum to retain observations with zero exposure to PNTR. In our empirical estimations, we use $ln(NTR\ Gap_c)$ as both an instrument for $ln\left(\Delta US\ Imports_j^{China}\right)$ and as an independent regressor.

Figure 6 contains a scatterplot comparing $ln\left(\Delta D8\ Imports_{c,}^{China}\right)$ for the baseline period 1996 to 2004 to $ln\left(NTR\,Gap_c\right)$. The two series have a correlation of 0.56, and their correlations with respect to $ln\left(\Delta US\ Imports_c^{China}\right)$, defined over the same period, are 0.84 and 0.53, respectively.

[13]Using a difference-in-differences identification strategy, Pierce and Schott (2015) show that industries with larger NTR gaps experienced relatively greater import growth and steeper employment losses after passage of PNTR.

[14]Given the large share of employment accounted for by services and other non-tradeables, for which the NTR gap is zero, these averages are often quite small.

5 The Link Between Chinese Imports and U.S. Election Results

This section explores the link between the change in U.S. counties' imports from China and election outcomes.[15] Our baseline specification considers changes between 1996 to 2004. This interval has three attractive properties. First, as noted above in Figures 1 and 2, it captures the period of sharply rising Chinese imports and sharply falling U.S. manufacturing employment. Second, it straddles the U.S. granting of PNTR to China in 2000. Finally, it is anchored by years in which presidential elections occur, thereby controlling for factors, like voter turnout, that might vary between presidential and non-presidential election years. Additional specifications indicate the robustness of the results from our baseline specification across both longer and shorter time intervals, as well as intervals anchored by years in which presidential elections do not occur.

5.1 Democrat Vote Share Results

Table 2 summarizes the results of estimating equation (1) for the baseline 1996 to 2004 period via both ordinary least squares (OLS) and two-stage-least-squares (2SLS). Robust standard errors adjusted for clustering (Wooldridge 2010) at the state level are reported below each estimate and account for heteroskadasticity across counties within states.

The first column of the table presents OLS results, while the next three columns present 2SLS estimates using each of the instruments described in Section 4.3 individually and then together. As indicated in the first column of the table, OLS results indicate a positive but statistically insignificant relationship between the change in Democrat vote share and the change in imports from China. But as shown in the next three columns, once 2SLS is used to correct for potential endogeneity in the regressors, the coefficient estimate for the change in Chinese imports is both positive and statistically significant in all three specifications. In addition, first-stage results (not reported) indicate that the two instruments exhibit positive and statistically significant relationships with $ln\left(\Delta US\ Imports_c^{China}\right)$, and standard test statistics rule their being underidentified or weak.

The estimated coefficient for the specification using both instruments, 1.66, suggests that a one standard deviation change in log imports from China (0.84, row 2 of Table 1) is associated with a 1.4 (=1.66*0.84) percentage point increase in the share of votes earned by Democrats. This predicted change in Democrats' vote share represents a 3.6

[15] In contrast to voting districts, whose boundaries change substantially after each decennial census (discussed further below), county boundaries are stable. Indeed, there are only three changes in county boundaries over our sample period: South Boston, VA (county code 51780) joined Halifax County (51083) on July 1, 1995; Dade County, FL (12025) was renamed as Miami-Dade FL (12086) on November 13, 1997; and Skagway-Yakutat-Angoon, AK (2231) was changed to Skagway-Hoonah-Angoon Census Area, AK (2232) on September 22, 1992, and then to Hoonah-Angoon Census Area, AK on June 20, 2007.

percent increase relative to their average vote share in 2004 (38.4; row 1 plus row 4 in Table 1).[16]

The final column of Table 2 regresses the change in Democrats vote share directly on the $ln(NTR\ Gap_c)$. One attractive feature of this specification is that it allows for the possibility that a reduction in tariff rate uncertainty with respect to China may have affected counties' labor markets beyond the import channel. The estimated impact of PNTR is both positive and statistically significant. The point estimate of 0.63 implies that a one standard deviation increase in exposure to PNTR (0.68) is associated with a 0.52 percentage point increase in Democrats margin of victory, or a 1.35 percent increase relative to their average vote share in 2004.

In terms of county attributes, we find that counties with higher Democrat vote shares in 1996 experienced larger declines in that share over the next 8 years, consistent with reversion to the mean. By contrast, counties with higher levels of unemployment, larger populations and higher shares of population with bachelor degrees are all associated with increases in the Democrat vote share from 1996 to 2004.

Table 3 examines the relationship between voting and changes in imports from China across various time periods using the 2SLS specification that employs both instruments (column 3 of 2). The first three columns compare three intervals beginning in 1996 and ending in the subsequent three presidential election years, 2000, 2004 and 2008. The coefficient estimate for the change in Chinese imports over the period ending in 2000 (column 1) is statistically insignificant, which is unsurprising given that this period precedes the surge in Chinese imports and the decline in U.S. manufacturing employment that began around 2000. The coefficient estimate for the period ending in 2008 (column 3) is positive, as it was for the period from 1996-2004, but it is statistically insignificant, perhaps indicating that voter attention by 2008 was more focused on other issues such as the Great Recession.

The second three columns of Table 3 compare intervals using the same three end years but starting in 1998, a non-presidential election year. Here, the relationship between the change in the Democrat vote share and the change in Chinese imports is positive and statistically significant for both 1998 to 2004 and 1998 to 2008. The point estimate for the 1998 to 2004 specification, 2.55, implies that a one standard deviation increase in imports from China over that interval (0.78) is associated with a 1.98 (=2.55*0.78) percentage point increase in the Democrat vote share, representing a 5.16 percent increase relative to the average in 2004. The final three columns report results for 2000 to 2004 and 2000 to 2008. Results are similar to those for the analogous intervals beginning in 1998.

[16]By way of comparison, Wright (2012) finds that a one standard deviation change in the unemployment rate (2.5 percent) is associated with a 0.5 percentage point change in Democrats vote share. In our sample, across the 1998 to 2010 period, Democrats average margin of victory across counties is -18.87 percent, varying from -4.58 percent in 2008 to -20.78 percent in 2004).

5.2 Republican-to-Democrat Switching

Changes in the share of votes cast for Democrats may have additional economic significance if they lead to a change in the party composition of Congress. To explore such a link, this section uses a linear probability version of Equation 1 to examine the relationship between counties' Chinese imports and the likelihood of a change in the party representing the county.

Define $R\,to\,D_c = 1$ if the Democrat lost county c_in the beginning year of the period examined but won county c in the end year of the period examined, and zero otherwise. Likewise, define $D\,to\,R_c = 1$ if the Democrat won country c_in 1996 but lost county c in 2004, and zero otherwise. Over this interval 53 percent of counties remained Republican, 24 percent of counties remained Democrat, 8 percent switched from Republican to Democrat and the remaining 15 percent switched from Democrat to Republican.[17]

Results for 1996 to 2004 using the 2SLS specification that employs both instruments are reported in the first two columns of Table 4. As indicated in the table, we find a positive and statistically significant relationship between Republican to Democrat switching and the change in imports from China. By contrast, we find no relationship for Democrat to Republican switching. As above, first-stage results (not reported) indicate that the two instruments exhibit positive and statistically significant relationships with $ln\left(\Delta US\ Imports_c^{China}\right)$, and standard test statistics rule out their being underidentified or weak.

The point estimate for the former, 0.023, implies that a one standard deviation increase in Chinese imports is associated with a 1.9 percentage point increase in the probability of a switch from Republican to Democrat. This estimated impact is 22 percent of the unconditional probability of a Republican-to-Democrat switch noted above.

The remaining two columns of Table 4 report results for the 1998 to 2004 interval, which follow the same pattern as those for 1996 to 2004. The point estimate for $RtoD_c$ over this interval, 0.052, implies that a one standard deviation increase in imports from China is associated with a 4.1 percentage point increase in a switch from Republican to Democrat, or slightly under half of the unconditional probability of a Republican-to-Democrat switch noted above.[18]

While Congressional elections are based on district-level voting, our county-level analysis has the attractive feature of permitting estimation within counties over long time periods. This is particularly important in the current setting, as the sharp decline in manufacturing employment and surge in Chinese imports occurs around the time of the 2002 redistricting of House seats.

[17] The distribution is similar for the period from 1998 to 2004.

[18] While Feigenbaum and Hall (2015) also examine the effect of Chinese import shocks on election outcomes, they find no effect of Chinese import competition on election outcomes including the probability of a primary challenge, incumbent vote share or the probability of an incumbent winning their election.

5.3 IV Validity

We conduct two placebo tests designed to examine the validity of our instrumental variables strategy. The first regresses the the change in the Democrat vote share between 1992 and 2000 on the contemporaneous change in Chinese import competition, with results reported in Table 5. Because the period examined is prior to the manufacturing employment decline and the largest surge in imports from China, we do not expect a statistically significant relationship between imports and voting behavior. Indeed, as indicated in the table, the relationship is statistically insignificant at conventional levels across all specifications.

The second placebo test again regresses the change in Democrat vote share between 1992 and 2000 on the change in Chinese imports between 1996 and 2004, in order to test whether past changes in voting behavior led to subsequent changes in import competition. As shown in Table 6, the relationship is again statistically insignificant at conventional levels across all specifications.

6 Party Affiliation and Legislator Voting Behavior

The previous section establishes that voters in counties facing larger increases in Chinese imports are more likely to elect Democratic Representatives. One explanation for this result is that workers displaced by Chinese imports sought to elect officials that would either protect U.S. workers from international trade or soften the effect of this competition by promoting economic assistance. This section investigates whether Congressional Democrats in the U.S. House of Representatives during the 1990s and 2000s were more likely to vote for legislation along these lines. We use a regression discontinuity approach to examine whether Republicans' and Democrats' votes differ on trade-related and economic assistance-related bills. We begin by discussing the classification of bills as being either for or against free trade or economic assistance and then describe our identification strategy before presenting the results.

6.1 Classification of "Trade" and "Economic Assistance" Bills

House members' votes during the 103^{rd} to the 112^{th} Congresses (1993 to 2013) are obtained from the website www.govtrack.us. Data on the set of bills considered by the House during this period are from the Rohde/PIPC House Roll Call Database, maintained and generously provided by David Rohde of Duke University. We classify bills according to whether they are pro- versus anti-trade and pro- versus anti- economic assistance as follows.

6.1.1 Trade Bills

The Rohde/PIPC House Roll Call Database assigns each bill a code summarizing its content.[19] We follow Rohde in considering bills to be trade-related if they fall into the following categories: "Japanese trade" (540), "Federal trade commission" (542), "unfair trading practices" (543), "export controls" (544), "compensation to U.S. business and workers" (545), "Export-Import Bank" (546), "tariff negotiations" (547), "import quotas-tariffs" (548), and "miscellaneous" (549). We classify trade-related bills as pro- versus anti-free-trade based on the National Journal's rankings of the "economic liberalness" of the bills' sponsors.[20] A ranking of $r\epsilon(0, 100)$ indicates that the sponsor is more "liberal" in their voting than r percent of House members. Bills whose primary sponsor's ranking exceeds 50 are coded as anti-free-trade. The remaining bills are coded as pro-free-trade.

6.1.2 Economic Assistance Bills

We consider bills to be related to economic assistance if they fall into the following categories of the Rohde database: "jobs" (code 810 of the database), "welfare benefits/social services" (code 811), "job training" (code 816), "nutrition programs" (code 831), "family assistance" (code 832), "homeless" (code 835), "unemployment assistance" (code 962), and "minimum wage" (code 966). As above, we use the National Journal rankings of the bills' sponsors to classify bills as pro- versus anti- economic assistance according to whether the ranking is above or below 50.

6.2 Identification Strategy

We examine the relationship between House members' votes on trade and economic assistance bills and their party affiliation using the following OLS specification,

$$y_{dh} = \alpha + \beta Democrat_{dh} + \mathbf{X}'_{\mathbf{dh}}\theta + \delta_s + \delta_h + \varepsilon_{dh}, \tag{6}$$

where d and h denote congressional districts and the particular two-year Congress during which representatives serve between elections[21] The dependent variable y_{dh} represents the share of anti-trade or pro-economic assistance bills supported by a particular representative during a particular Congress. The dummy variable $Democrat_{dh}$ takes the value 1 if the representative is a Democrat and zero otherwise. $\mathbf{X_{dh}}$ represents a matrix of district-Congress attributes, including the demographics of the district used in the previous section and attributes of the particular representative holding office during Congress h. δ_s and δ_y represent state and Congress fixed effects. ε_{dh} is the error term.

[19] The complete list of codes can be found at http://sites.duke.edu/pipc/data/.

[20] Further detail on these rankings is available at http://www.nationaljournal.com/2013-vote-ratings/how-the-vote-ratings-are-calculated-20140206.

[21] For example, $h = 110$ represents the 110th Congress which met from January 3, 2007 to January 3, 2009.

In this specification, identification of β requires that representatives' party affiliation be uncorrelated with the error term. As there may be several reasons why this assumption is violated, we follow Lee (2008) in identifying the causal effect of party affiliation on voting behavior using a regression discontinuity (RD) approach.[22] Specifically, we make use of the simple principle that the probability of a Democrat winning a congressional election disproportionately increases at the point where she receives a larger share of votes than the Republican competitor.

Formally, define the assignment variable $Margin_{dh} \equiv VoteShare_{dh}^{Democratic} - VoteShares_{dht}^{Republican}$ as the difference in voting share between the Democratic and Republican candidates in the congressional district d for election to Congress h. As illustrated in Figure 7, the probability of a Democratic candidate winning an election conditional on the margin of victory has a discontinuity at the cutoff 0. That is, this probability is substantially near 1 for values of m just above zero compared with values of m just below zero.[23] Hahn et al. (2001) show that when $E[\varepsilon_{dh}|Margin_{dh} = m]$ is continuous in m at the cutoff 0, β in equation (6) can be identified as

$$\hat{\beta}_{RD} = \frac{\lim_{m\downarrow 0} E[y_{dh}|Margin_{dh} = m] - \lim_{m\uparrow 0} E[y_{dh}|Margin_{dh} = m]}{\lim_{m\downarrow 0} E[Democrat|Margin_{dh} = m] - \lim_{m\uparrow 0} E[Democrat_{dh}|Margin_{dh} = m]}. \tag{7}$$

Lee and Lemieux (2010) show that $\hat{\beta}_{RD}$ is essentially an instrumental variable estimator. Specifically, the first stage of the instrumental variable estimation is

$$Democrat_{dh} = \gamma I\{Margin_{dh} \geq 0\} + g(Margin_{dh}) + \mu_{dh},$$

while the second stage is

$$y_{dh} = \alpha + \beta Democrat_{dh} + f(Margin_{dh}) + \varepsilon_{dh},$$

where $I\{.\}$ is an indicator function that takes a value of 1 if the argument in brackets is true and 0 if it is false, and where $g(.)$ and $f(.)$ are flexible functions of the assignment variable that control for the direct effect of the strength of the Democratic versus Republican parties on the outcome variable y_{dh}. Lee and Lemieux (2010) suggest both nonparametric and parametric approaches to estimate $\hat{\beta}_{RD}$. We pursue both.

The nonparametric approach is a "local linear" estimation that uses observations within a window of width w on both sides of the cutoff point and assumes that $g(.)$ and $f(.)$ are linear with potentially different slopes on the two sides of the cutoff point. We implement this approach using the procedure developed by Imbens and Kalyanaraman (2014) to calculate the optimal bandwidth w^*, and estimate analytical standard errors using the procedure developed in Porter (2003). In robustness checks, we examine

[22] Lee (2004) uses RD to investigate the effect of party affiliation on legislators' right-vs-left voting scores.

[23] Note that there are cases in which a third party won the election even though the Democratic candidate received more (less) votes than the Republican part. As a result, $\Pr[Democratic_{d,t} = 1|Margin_{d,t} = m] \neq 1$ when $m > 0$.

whether our estimates are sensitive to different bandwidths, e.g., halving and doubling w^*.

Parametric estimation, by contrast, uses all of the observations over the domain of the assignment variable and assumes high-order polynomial functions of $g(.)$ and $f(.)$. We implement this approach using third-order polynomial functions with potentially different coefficients on the two sides of the cutoff point. Following Lee and Card (2008), we calculate standard errors clustered at the assignment variable level. We also experiment with different polynomial orders, e.g., second- and fourth-order, to examine the sensitivity of our estimates to choice of control function forms. Use of different polynomial orders does not qualitatively affect our results.

As discussed in Lee (2008), the identifying assumption of our RD estimation – that $E\left[\varepsilon_{dh}|Margin_{dh} = m\right]$ is continuous in m at the cutoff 0 – means that the election outcome at the cutoff point is determined by random factors, i.e., no party or candidate can fully manipulate the election.[24] To provide quantitative support of this assumption, we perform two checks suggested by Lee and Lemieux (2010). First, if there were full manipulation at the cutoff point 0, the distribution of district characteristics on the two sides of the cutoff point would be different, and a mixture of district-level discontinuous densities would imply that the aggregate distribution of assignment variable is discontinuous at the cutoff point. We check the density distribution of the assignment variable using the method developed by McCrary (2008). As shown in Figure A.1 of the appendix, we do not find any discontinuity in the density distribution of the assignment variable at the cutoff point 0, and hence fail to reject the hypothesis that our identifying assumption is satisfied.

The second check directly examines pre-determined characteristics between congressional districts in the neighborhood of the cutoff point. If there were full manipulation at the cutoff, districts on the margin would not be balanced and these pre-determined district characteristics would show discontinuities in their distribution at the cutoff point. Figures A.2 to A.10, reported in the appendix reveal that none of the distributions of district attributes used in our analysis exhibit discontinuities at the cutoff 0, indicating that our hypothesis of a valid RD setting cannot be rejected.

[24] Using RD to investigate the incumbent advantage, Lee (2008) argues:

> "It is plausible that the exact vote count in large elections, while influenced by political actors in a non-random way, is also partially determined by chance beyond any actor's control. Even on the day of an election, there is inherent uncertainty about the precise and final vote count. In light of this uncertainty, the local independence result predicts that the districts where a party's candidate just barely won an election—and hence barely became the incumbent—are likely to be comparable in all other ways to districts where the party's candidate just barely lost the election."

6.3 Baseline Results

We start with a visual presentation of the relationship between Democrats' margin of victory, $Margin_{dh}$, and the districts' subsequent votes for trade and economic assistance bills, y_{dh}, across the 103^{rd} (January 1993 through January 1995) to the 112^{th} (January 2011 to January 2013) Congresses. Figures 8 and 9 show that the share of districts' pro-trade votes drops discontinuously at the cutoff point $Margin_{dh} = 0$, while their share of pro-economic assistance votes rises discontinuously at this cutoff. Given that the chance of winning the election jumps discontinuously at the same point (see Figure 7), these outcomes reveal that Democratic representatives are more likely to take anti-trade positions and pro-economic assistance positions than their Republican colleagues.

Formal estimation results for the effect of party affiliation on districts' voting for pro-trade and pro-economic assistance bills, $\hat{\beta}^{RD}$, are reported in Tables 7 and 8. The first column of each table reports results using OLS, while columns 2 and 3 report results for the non-parametric and parametric RD estimations, respectively. As noted in the tables, estimates are negative and statistically significant in all three columns for pro-trade bills, and positive and statistically significant in all three columns for pro-economic assistance bills, consistent with Figures 8 and 9.[25]

In terms of economic significance, the 2SLS coefficient estimates reported in the third column of each table indicate that a Democrat is approximately 16 and 27 percent more likely to support anti-trade and pro-assistance bills than a Republican. These results therefore provide a rationale for the voting results reported in Section 5. Moreover, we find that Representatives' votes after after 2000 indicate even sharper differences between parties: 2SLS coefficient estimates restricted to Congresses after 2000 (not reported) indicate that Democrats are approximately 34 and 43 percent more likely to support anti-trade and pro-economic assistance legislation.[26]

7 Conclusion

This paper provides evidence that increased competition from China influenced U.S. Congressional elections, with the strongest effect occurring around the time of the steep decline in manufacturing employment in the early 2000s. The first half of our analysis finds that U.S. counties with larger increases in U.S. imports from China experience larger increases in the share of votes cast for Democratic candidates. These results are robust to varying techniques for controlling for the potential endogeneity of increased Chinese import competition, as well as alternative measures of that competition.

[25] Results in Tables 7 and 8 are robust to variation in the bandwidth of our nonparametric estimation as well as alternative polynomial expansions. See appendix for further discussion.

[26] 2SLS coefficient and standard error estimates for the post-2000 Congresses are -0.336 (0.034) and 0.425 (0.043), respectively. For the pre-2000 Congresses they are -0.032 (0.026) and 0.195 (0.031), respectively.

The second half of our analysis finds that Democrats are more likely to support policies that limit import competition and that provide economic assistance that may benefit workers adversely affected by trade competition, providing an explanation for the voting behavior documented in the first part of our paper.

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	All Counties		Counties in Bottom 20% Growth in Imports from China		Counties in Top 20% Growth in Imports from China	
County Attribute	Mean	SD	Mean	SD	Mean	SD
1996-04 Change in Democrat Share	-6.04	17.55	-7.60	16.81	-4.84	17.68
1996-04 ln(Change in Imports/Worker from China)	1.70	0.84	0.53	0.33	2.89	0.48
1999 ln(NTR Gap)	1.89	0.68	1.34	0.81	2.14	0.61
1996 Democrat Share	44.44	17.89	42.12	20.33	44.47	17.47
1996 Per Capita Income	19.65	4.43	18.39	4.03	20.19	5.15
2000 Median Household Income	35.29	8.75	31.86	6.68	36.21	9.94
1996 Unemployment Rate	5.93	3.11	5.89	3.55	5.84	2.91
1996 Population	0.09	0.28	0.02	0.02	0.13	0.36
2000 Percent Bachelor	7.43	3.56	6.82	2.98	8.04	4.20
2000 Percent Veteran	13.92	2.81	14.15	3.04	13.64	2.68
2000 Percent 18-25	9.08	3.46	7.81	2.65	9.47	3.72
2000 Percent 65+	15.20	3.97	16.11	4.12	14.83	3.84
2000 Percent Black	8.25	14.16	6.22	13.25	8.03	13.84

Notes: First two rows display change in county democrat vote share and exposure to China between 1996 and 2004. Data in rows four, five and seven are for 1996. Remaining rows are for 2000. Final five rows represent shares of the overall population. First column displays the mean and standard deviation across all 2989 counties for which we observe the change in the Democrat vote share. Middle and right columns display the mean and standard deviation for the counties in the top and bottom quintiles of the change in exposure to China. Incomes are in thousands of dollars. Population is in millions. Remaing varilables are in percent.

Table 1: Summary Statistics

	1996-04	1996-04	1996-04	1996-04	1996-04	1996-04
	ΔDVS	ΔDVS	ΔDVS	ΔDVS	ΔDVS	ΔDVS
ln(ΔChina Imports per Worker)	-0.18	1.67 **	1.51 *	1.66 **		
	0.43	0.78	0.90	0.73		
ln(NTR Gap)					0.61 *	
					0.36	
ln(ΔChina Net Imports per Worker)						1.27 **
						0.58
DVS (%)	-0.21 ***	-0.21 ***	-0.21 ***	-0.21 ***	-0.21 ***	-0.21 ***
	0.06	0.06	0.06	0.06	0.06	0.06
Unemployment (%)	0.70 ***	0.66 ***	0.67 ***	0.66 ***	0.69 ***	0.67 ***
	0.18	0.17	0.18	0.17	0.18	0.18
Population	3.29 **	2.85 *	2.89 *	2.86 *	3.21 **	2.92 *
	1.63	1.51	1.55	1.51	1.58	1.52
Bachelors (%)	0.66 ***	0.64 ***	0.64 ***	0.64 ***	0.67 ***	0.64 ***
	0.19	0.18	0.18	0.18	0.19	0.18
Veteran (%)	0.14	0.13	0.13	0.13	0.13	0.14
	0.20	0.20	0.20	0.20	0.20	0.20
Per Capita Income	0.10	0.09	0.09	0.09	0.09	0.09
	0.12	0.12	0.12	0.12	0.12	0.11
Median HH Income	-0.17	-0.20	-0.20 *	-0.20 *	-0.18	-0.19
	0.12	0.12	0.12	0.12	0.12	0.12
Age 18-25 (%)	0.13	0.05	0.06	0.05	0.10	0.06
	0.10	0.09	0.09	0.09	0.10	0.09
Age 65+ (%)	-0.23	-0.26	-0.26	-0.26	-0.24	-0.26
	0.20	0.20	0.20	0.20	0.20	0.20
Black (%)	0.20 *	0.21 *	0.21 *	0.21 *	0.20 *	0.21 *
	0.11	0.11	0.11	0.11	0.11	0.11
Observations	2,995	2,995	2,995	2,995	2,995	2,995
R2	0.32	0.31	0.31	0.31	0.32	0.31
Underidentification	.	28.61	19.80	29.64	.	27.70
Weak Identification	.	567.59	218.00	0.00	276.36	158.95
Estimation	OLS	2SLS	2SLS	2SLS	OLS	2SLS
Instrument(s)	.	D8	PNTR	D8,PNTR	.	D8,PNTR
Fixed Effects	State	State	State	State	State	State
Clustering	State	State	State	State	State	State

Notes: Tables report results of OLS or two-stage-least-squares (2SLS) county-level regressions of the change in the democrat vote share (DVS) across noted inteval on the change in Chinese imports per worker and initial values of country attibutes. Instruments are the change in imports per worker among D8 countries or counties' exposure to PNTR (see text). Robust standard errors adjusted for clustering at the state level are reported below coefficients. Centered-R2 are reported for 2SLS regressions. Underidentification and weak identification tests represent the Wald version of the Kleibergen-Paap (2006) rk statistic. *, ** and *** signify statistical significance at the 10, 5 and 1 percent level.

Table 2: County-Level Voting and Imports from China

	1996-00	1996-04	1996-08	1998-00	1998-04	1998-08	2000-04	2000-08
	ΔDVS	ΔDVS	ΔDVS	ΔDVS	ΔDVS	ΔDVS	ΔDVS	ΔDVS
ln(ΔChina Imports per Worker)	-1.08	1.66 **	0.88	-0.10	2.55 ***	2.09 **	2.62 ***	1.99 *
	1.34	0.73	0.72	1.42	1.04	1.05	1.07	1.17
DVS (%)	-0.11	-0.21 ***	-0.36 ***	-0.36 ***	-0.47 ***	-0.57 ***	-0.43 ***	-0.54 ***
	0.10	0.06	0.07	0.05	0.05	0.05	0.06	0.06
Unemployment (%)	0.37 *	0.66 ***	0.86 ***	0.76 ***	1.12 ***	1.17 ***	1.92 ***	1.48 ***
	0.22	0.17	0.23	0.23	0.25	0.27	0.53	0.59
Population	2.64 *	2.86 *	2.54 *	2.62 ***	3.24 **	2.80 **	1.96	2.06 *
	1.35	1.51	1.39	1.10	1.45	1.29	1.26	1.23
Bachelors (%)	0.47 **	0.64 ***	0.57 **	0.30	0.56 **	0.51	0.22	0.40
	0.21	0.18	0.28	0.23	0.26	0.38	0.25	0.34
Veteran (%)	0.06	0.13	0.03	0.20	0.28	0.13	0.08	0.00
	0.22	0.20	0.28	0.17	0.24	0.35	0.26	0.37
Per Capita Income	-0.19	0.09	0.05	-0.13	0.15	0.06	0.22 **	0.11
	0.17	0.12	0.13	0.21	0.14	0.16	0.11	0.09
Median HH Income	-0.01	-0.20 *	-0.18	0.13	-0.14	-0.14	-0.12	-0.24
	0.14	0.12	0.16	0.14	0.14	0.19	0.20	0.21
Age 18-25 (%)	-0.03	0.05	0.16 *	0.21 *	0.23 **	0.28 **	0.24 **	0.20
	0.14	0.09	0.09	0.12	0.10	0.12	0.12	0.14
Age 65+ (%)	-0.15	-0.26	-0.25	0.04	-0.23	-0.21	-0.14	-0.26
	0.20	0.20	0.22	0.18	0.20	0.23	0.28	0.29
Black (%)	0.19 ***	0.21 *	0.26 *	0.20 ***	0.20 *	0.22 *	0.20 *	0.20
	0.07	0.11	0.14	0.06	0.10	0.12	0.12	0.15
Observations	3,021	2,995	2,992	2,949	2,935	2,952	2,997	2,983
R2	27.64	29.64	29.01	26.16	27.93	28.61	27.81	26.99
Underidentification	136.68	276.36	426.16	125.79	239.92	184.49	189.31	228.79
Weak Identification	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Estimation	2SLS	2SLS	2SLS	2SLS	2SLS	2SLS	2SLS	2SLS
Instrument(s)	D8,PNTR	D8,PNTR	D8,PNTR	D8,PNTR	D8,PNTR	D8,PNTR	D8,PNTR	D8,PNTR
Fixed Effects	State	State	State	State	State	State	State	State
Clustering	State	State	State	State	State	State	State	State

Notes: Tables report results of county-level regressions of the change in the democrat vote share (DVS) across noted inteval on the change in exposure to China and initial values of country attibutes (see text). Robust standard errors adjusted for clustering at the state level are reported below coefficients. Centered-R2 are reported for 2SLS regressions. Underidentification and weak identification tests represent the Wald version of the Kleibergen-Paap (2006) rk statistic. *, ** and *** signify statistical significance at the 10, 5 and 1 percent level.

Table 3: Voting Results: Alternate Time Periods

	1996-04	1996-04	1998-04	1998-04
	R to D	D to R	R to D	R to D
ln(ΔChina Imports per Worker)	0.0230 *	-0.0043	0.0523 ***	-0.0077
	0.0140	0.0105	0.0215	0.0177
DVS (%)	-0.0011 ***	0.0065 ***	-0.0006 **	0.0048 ***
	0.0005	0.0012	0.0003	0.0011
Unemployment (%)	0.0018	-0.0026	0.0033	-0.0098 ***
	0.0027	0.0034	0.0039	0.0032
Population	0.0230	-0.0603 **	0.0186	-0.0505 **
	0.0336	0.0266	0.0283	0.0237
Bachelors (%)	0.0044	-0.0092 ***	0.0015	-0.0057
	0.0059	0.0036	0.0053	0.0048
Veteran (%)	-0.0002	-0.0001	-0.0005	0.0032
	0.0024	0.0045	0.0017	0.0042
Per Capita Income	0.0034	-0.0025	0.0018	-0.0061 ***
	0.0022	0.0029	0.0024	0.0026
Median HH Income	-0.0025	0.0047	-0.0009	0.0058 **
	0.0021	0.0029	0.0020	0.0027
Age 18-25 (%)	0.0003	0.0015	0.0024	0.0036
	0.0018	0.0030	0.0018	0.0029
Age 65+ (%)	-0.0023	0.0048 *	-0.0011	0.0071 *
	0.0023	0.0027	0.0025	0.0037
Black (%)	0.0009	0.0001	0.0014	-0.0005
	0.0008	0.0014	0.0012	0.0010
Observations	2,995	2,995	2,935	2,935
R2	0.13	0.23	0.16	0.22
Underidentification	29.64	29.64	27.93	27.93
Weak Identification	276.36	276.36	239.92	239.92
Estimation	2SLS	2SLS	2SLS	2SLS
Instrument(s)	D8,PNTR	D8,PNTR	D8,PNTR	D8,PNTR
Fixed Effects	State	State	State	State
Clustering	State	State	State	State

Notes: Tables report results of county-level regressions of an indicator variable for a switch from Republican to Democrat representation or vice versa across noted inteval on the change in exposure to China and initial values of country attibutes (see text). Robust standard errors adjusted for clustering at the state level are reported below coefficients. Centered-R2 are reported for 2SLS regressions. Underidentification and weak identification tests represent the Wald version of the Kleibergen-Paap (2006) rk statistic. *, ** and *** signify statistical significance at the 10, 5 and 1 percent level.*, ** and *** signify statistical significance at the 10, 5 and 1 percent level.

Table 4: Switch from Republican to Democrat

	1992-00	1992-00	1992-00	1992-00	1992-00	1992-00
	ΔDVS	ΔDVS	ΔDVS	ΔDVS	ΔDVS	ΔDVS
ln(ΔChina Imports per Worker)	0.04	-0.33	-0.74	-0.38		
	0.55	0.94	1.10	0.90		
ln(NTR Gap)					-0.32	
					0.48	
ln(ΔChina Net Imports per Worker)						-0.29
						0.89
DVS (%)	-0.43 ***	-0.43 ***	-0.43 ***	-0.43 ***	-0.43 ***	-0.43 ***
	0.07	0.07	0.07	0.07	0.07	0.07
Unemployment (%)	0.87 ***	0.87 ***	0.87 ***	0.87 ***	0.87 ***	0.87 ***
	0.18	0.18	0.17	0.18	0.18	0.17
Population	4.02 ***	4.10 ***	4.20 ***	4.12 ***	4.06 ***	4.10 ***
	1.72	1.73	1.71	1.72	1.68	1.72
Bachelors (%)	0.38 ***	0.38 ***	0.39 ***	0.38 ***	0.38 ***	0.38 ***
	0.14	0.14	0.14	0.14	0.14	0.14
Veteran (%)	0.16	0.17	0.17	0.17	0.16	0.17
	0.19	0.19	0.18	0.19	0.19	0.19
Per Capita Income	-0.12	-0.12	-0.12	-0.12	-0.12	-0.12
	0.36	0.36	0.36	0.36	0.36	0.36
Median HH Income	-0.03	-0.03	-0.02	-0.03	-0.03	-0.03
	0.17	0.17	0.17	0.17	0.17	0.16
Age 18-25 (%)	0.23 **	0.24 **	0.26 **	0.24 **	0.24 **	0.24 **
	0.12	0.12	0.12	0.12	0.11	0.11
Age 65+ (%)	-0.10	-0.09	-0.08	-0.09	-0.09	-0.09
	0.18	0.18	0.19	0.18	0.18	0.18
Black (%)	0.41 ***	0.41 ***	0.41 ***	0.41 ***	0.41 ***	0.41 ***
	0.07	0.07	0.07	0.07	0.07	0.07
Observations	3,036	3,036	3,036	3,036	3,036	0
R2	0.44	0.44	0.44	0.44	0.44	0.44
Underidentification	.	26.13	20.76	26.64	.	26.67
Weak Identification	.	281.37	319.12	195.62	.	142.79
Estimation	OLS	2SLS	2SLS	2SLS	OLS	2SLS
Instrument(s)	.	D8	PNTR	D8,PNTR	.	D8,PNTR
Fixed Effects	State	State	State	State	State	State
Clustering	State	State	State	State	State	State

Notes: Tables report results of county-level regressions of the change in the democrat vote share (DVS) across noted inteval on the change in exposure to China and initial values of country attibutes (see text). Robust standard errors adjusted for clustering at the state level are reported below coefficients. Centered-R2 are reported for 2SLS regressions. Underidentification and weak identification tests represent the Wald version of the Kleibergen-Paap (2006) rk statistic. *, ** and *** signify statistical significance at the 10, 5 and 1 percent level.*, ** and *** signify statistical significance at the 10, 5 and 1 percent level.

Table 5: IV Validity: Prior Change in Vote on Prior Change in Chinese Imports

	1992-00	1992-00	1992-00	1992-00	1992-00	1992-00
	ΔDVS	ΔDVS	ΔDVS	ΔDVS	ΔDVS	ΔDVS
ln(ΔChina Imports per Worker 1996-2004)	-0.24	-0.42	-0.79	-0.51		
	0.47	1.21	1.16	1.08		
ln(NTR Gap)					-0.32	
					0.48	
ln(ΔChina Net Imports per Worker 1996-2004)						-0.29
						0.89
DVS (%)	-0.43 ***	-0.43 ***	-0.43 ***	-0.43 ***	-0.43 ***	-0.43 ***
	0.07	0.07	0.07	0.07	0.07	0.07
Unemployment (%)	0.87 ***	0.87 ***	0.87 ***	0.87 ***	0.87 ***	0.87 ***
	0.18	0.18	0.17	0.18	0.18	0.17
Population	4.10 ***	4.14 **	4.24 ***	4.17 ***	4.06 ***	4.10 ***
	1.72	1.78	1.74	1.77	1.68	1.72
Bachelors (%)	0.38 ***	0.39 ***	0.39 ***	0.39 ***	0.38 ***	0.38 ***
	0.14	0.13	0.13	0.13	0.14	0.14
Veteran (%)	0.16	0.16	0.16	0.16	0.16	0.17
	0.19	0.18	0.18	0.18	0.19	0.19
Per Capita Income	-0.12	-0.12	-0.12	-0.12	-0.12	-0.12
	0.37	0.36	0.36	0.36	0.36	0.36
Median HH Income	-0.03	-0.03	-0.02	-0.02	-0.03	-0.03
	0.16	0.17	0.17	0.17	0.17	0.16
Age 18-25 (%)	0.24 **	0.24 **	0.26 **	0.25 **	0.24 **	0.24 **
	0.11	0.12	0.12	0.12	0.11	0.11
Age 65+ (%)	-0.09	-0.09	-0.08	-0.09	-0.09	-0.09
	0.18	0.19	0.19	0.19	0.18	0.18
Black (%)	0.41 ***	0.41 ***	0.41 ***	0.41 ***	0.41 ***	0.41 ***
	0.07	0.07	0.07	0.07	0.07	0.07
Observations	3,036	3,036	3,036	3,036	3,036	0
R2	0.44	0.44	0.44	0.44	0.44	0.44
Underidentification	.	26.35	20.04	27.02	.	26.67
Weak Identification	.	300.18	250.51	190.76	.	142.79
Estimation	OLS	2SLS	2SLS	2SLS	OLS	2SLS
Instrument(s)	.	D8	PNTR	D8,PNTR	.	D8,PNTR
Fixed Effects	State	State	State	State	State	State
Clustering	State	State	State	State	State	State

Notes: Tables report results of county-level regressions of the change in the democrat vote share (DVS) across noted inteval on the change in exposure to China and initial values of country attibutes (see text). Robust standard errors adjusted for clustering at the state level are reported below coefficients. Centered-R2 are reported for 2SLS regressions. Underidentification and weak identification tests represent the Wald version of the Kleibergen-Paap (2006) rk statistic. *, ** and *** signify statistical significance at the 10, 5 and 1 percent level.*, ** and *** signify statistical significance at the 10, 5 and 1 percent level.

Table 6: IV Validity: Prior Change in Vote on Subsequent Change in Chinese Imports

	OLS	Non-parametric	Parametric
Democrat	-0.176***	-0.173***	-0.156***
	0.007	-0.033	0.022
Observations	4,199	4,199	4,199
R2	0.59	.	0.59
Covariates	Yes	No	Yes
Fixed effects	State, Congress	.	State, Congress
Control Function	.	.	Cubic

Notes: Table summarizes the results of district-level OLS, regression discontinuity (RD) and 2SLS estimations of the effect of party affiliation on House members' votes on trade bills. Covariates include the district-Congress level demographic attributes as well as Congressman-Congress attributes (see text for list). Coefficient estimates for these attributes are suppressed. Centered R2 is reported for 2SLS. Robust standard errors reported below coefficients. *, ** and *** signify statistical significance at the 10, 5 and 1 percent level.

Table 7: Effect of Democrat Affiliation on Districts' Voting for Pro-Trade Bills

	OLS	Non-parametric	Parametric
Democrat	0.419***	0.287***	0.274***
	0.009	0.026	0.027
Observations	4,197	4,197	4,197
R2	0.55	.	0.54
Covariates	Yes	No	Yes
Fixed effects	State, Congress	.	State, Congress
Control Function	.	.	Cubic

Notes: Table summarizes the results of district-level OLS, regression discontinuity (RD) and 2SLS estimations of the effect of party affiliation on House members' votes on economic assistance bills. Covariates include the district-Congress level demographic attributes as well as Congressman-Congress attributes (see text for list). Coefficient estimates for these attributes are suppressed. Centered R2 is reported for 2SLS. Robust standard errors reported below coefficients. *, ** and *** signify statistical significance at the 10, 5 and 1 percent level.

Table 8: Effect of Democrat Affiliation on Districts' Voting for Pro-Economic Assistance Bills

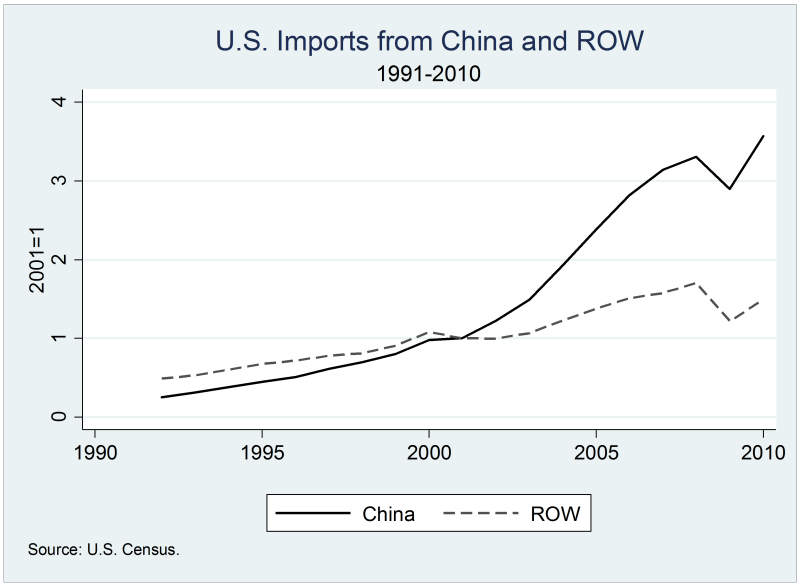


Figure 1: U.S. Imports from China and ROW

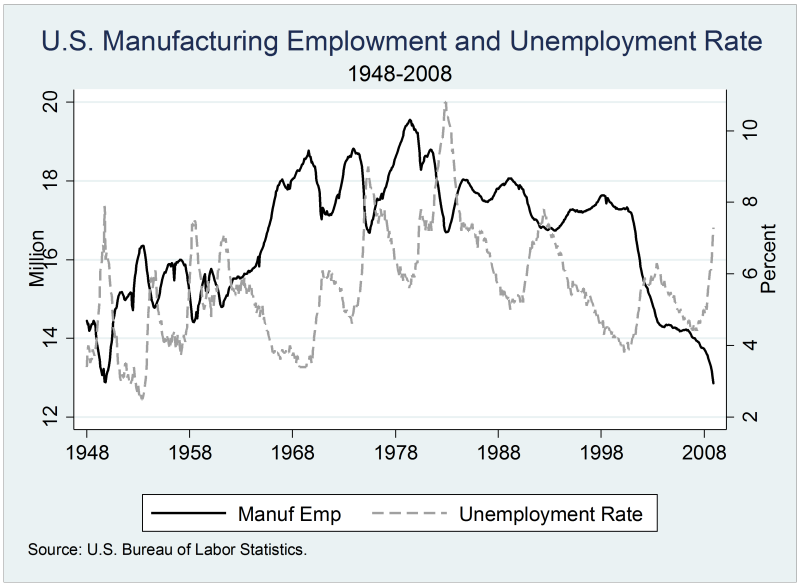
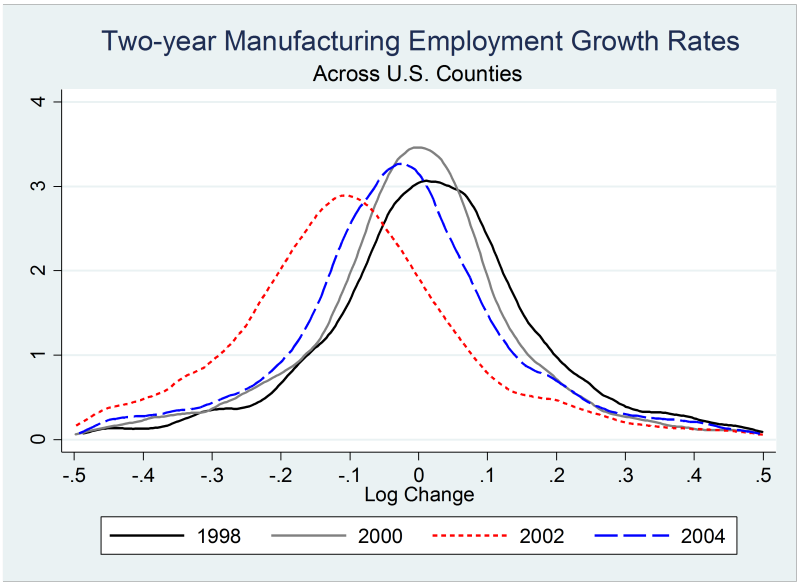
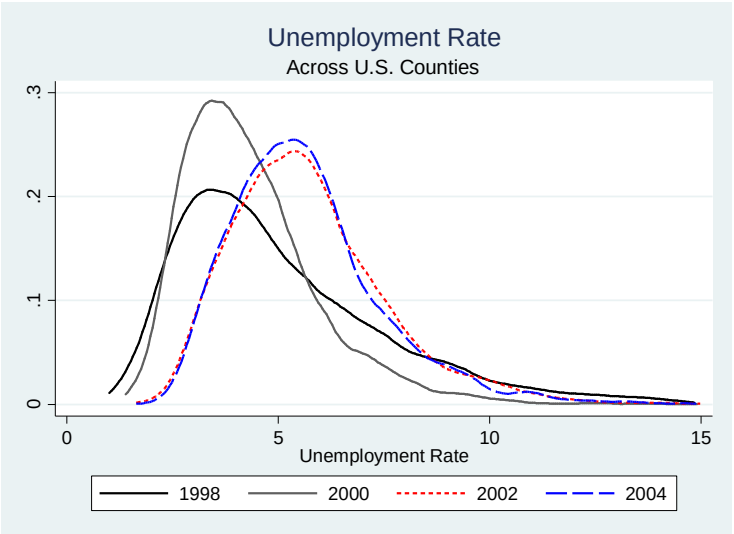


Figure 2: Post-War U.S. Manufacturing Employment



Notes: Figure displays the distribution of two-year manufacturing employment growth rates across U.S. counties. Distributions are censored at -50 percent and 50 percent to increase readability.

Figure 3: Distribution of Log Change in Manufacturing Employment Across Counties



Notes: Figure displays the distribution of county unemployment rates at two-year intervals from 1998 to 2004. Distributions are censored at 15 percent to increase readability.

Figure 4: Distribution of Unemployment Rate Across Counties

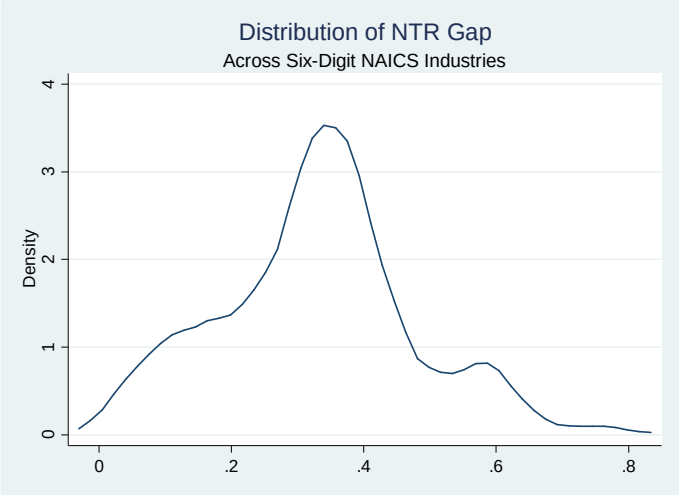


Figure 5: Distribution of NTR Gap Across Industries

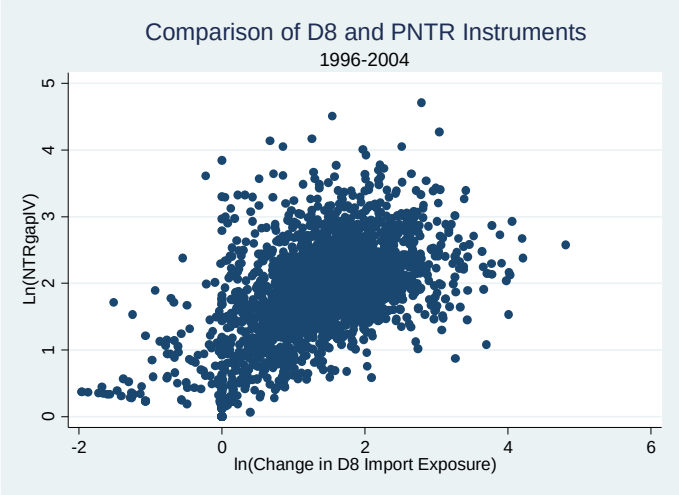
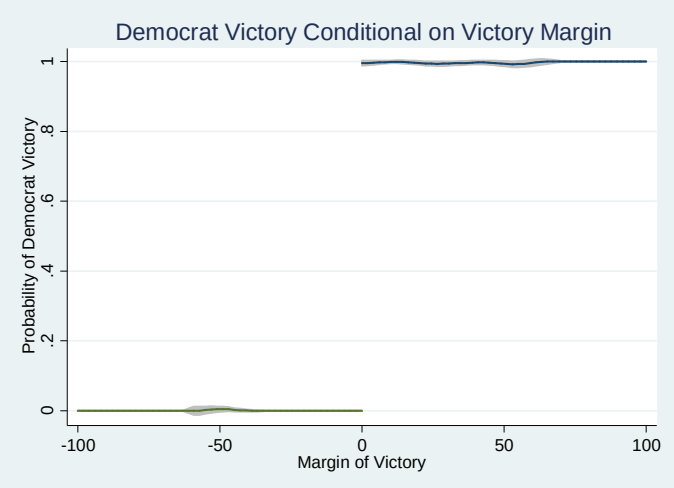
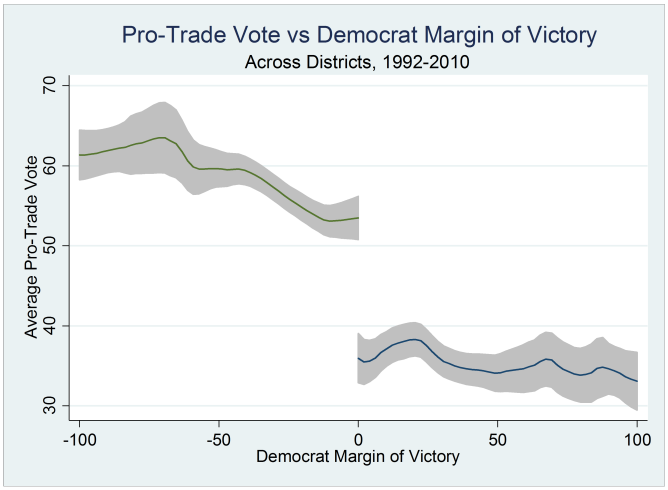


Figure 6: Comparison of $ln\left(\Delta D8\ Imports_{c,}^{China}\right)$ and $ln\left(NTR\ Gap_c\right)$



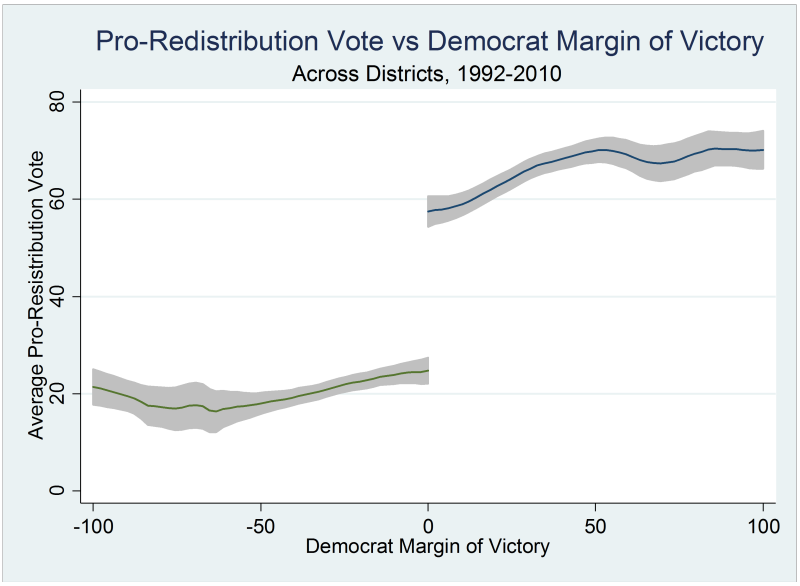
Notes: Figure displays the probability of Democrat victory conditional on the Democrat margin of victory. Shading represents the 95 percent confidence interval. A positive margin of victory does not perfectly predict Democrat victory because of the presence of third parties.

Figure 7: Regression Discontinuity Intuition



Notes: Figure displays the discontinuity of pro-trade votes across districts versus Democrats margin of victory. The horizontal axis represents Democrats' margin of victory over Republicans. The vertical axis denotes share of votes that the congressman takes pro-trade position. Triangular kernel is used for local linear regressions.

Figure 8: Democrats Votes On Trade Bills



Notes: Figure displays the discontinuity of pro-economic assistance votes across districts versus Democrats margin of victory. The horizontal axis represents Democrats' margin of victory over Republicans. The vertical axis denotes share of votes that the congressman takes a pro-redistribution position. Triangular kernel is used for local linear regressions.

Figure 9: Democrats Votes On Economic Assistance Bills

Appendix

This appendix contains additional empirical results referenced in the main text.

A Legislator Voting Behavior

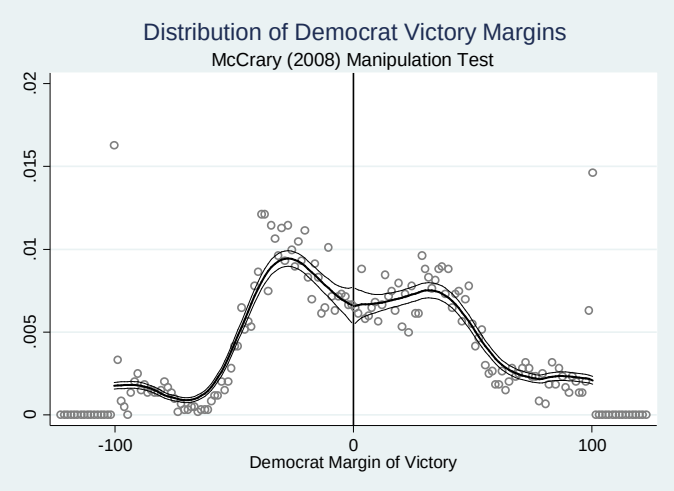
Figure A.1 displays the McCrary (2008) test of whether there is a discontinuity in the density of Democrats' winning margin over Republicans. The estimate of the discontinuity is 0.021 with a standard error of 0.119. Figures A.2 to A.10 examine the distributions of all of the district-level attributes included in the legislative voting regressions in Section 6. As discussed there, none of these distributions exhibit discontinuities at the cutoff 0.

Appendix Tables and Figures

	Pro-Trade Bills		Pro-Assistance Bills	
	Half Optimal Bandwidth	Twice Optimal Bandwidth	Half Optimal Bandwidth	Twice Optimal Bandwidth
Democratic Party	-0.138***	-0.143***	0.311***	0.348***
	0.047	0.023	0.038	0.020
Observations	4,329	4,329	4,327	4,327
Control Function				
Cubic	Yes	Yes	Yes	Yes
Cubic*Democratic Party	Yes	Yes	Yes	Yes

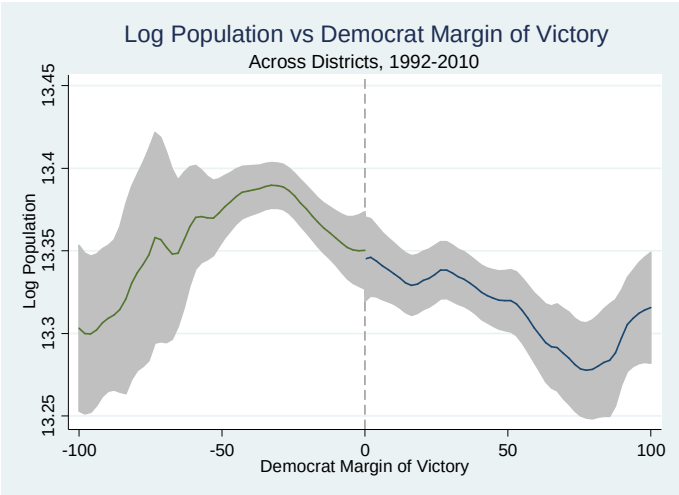
Notes: Table summarizes the results of district-level OLS and regression discontinuity (RD) estimations of the effect of party affiliation on House members' pro-trade and pro-assistance votes. . Robust standard errors are reported below each coefficient. *, ** and *** signify statistical significance at the 10, 5 and 1 percent level.

Table A.1: Alternate Bandwidths



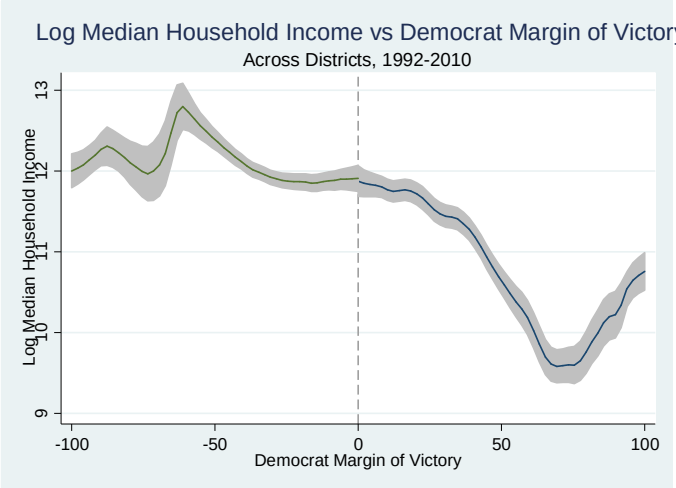
Notes: Figure displays the McCrary (2008) test of whether there is a discontinuity in the density of Democrats' winning margin over Republicans. This test rejects manipulation because the discontinuity estimate (i.e., the gap between counties in the treatment versus control group around the margin of zero) is -0.003 with a standard error of 0.125.

Figure A.1: RD Identifying Assumption Density Test



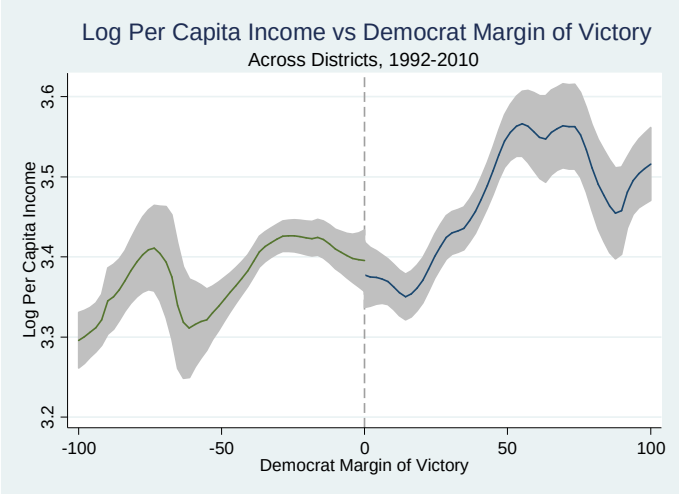
Notes: Unit of analysis is at district-year level. The horizontal axis represents Democrats' margin of victory over Republicans. The vertical axis denotes log of population. Triangular kernel is used for local linear regressions.

Figure A.2: RD Identifying Assumption: Population



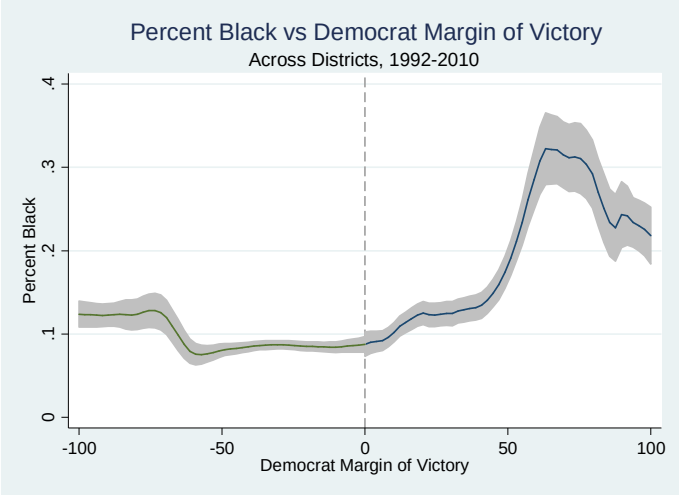
Notes: Unit of analysis is at district-year level. The horizontal axis represents Democrats' margin of victory over Republicans. The vertical axis denotes log of median household income. Triangular kernel is used for local linear regressions.

Figure A.3: RD Identifying Assumption: Household Income



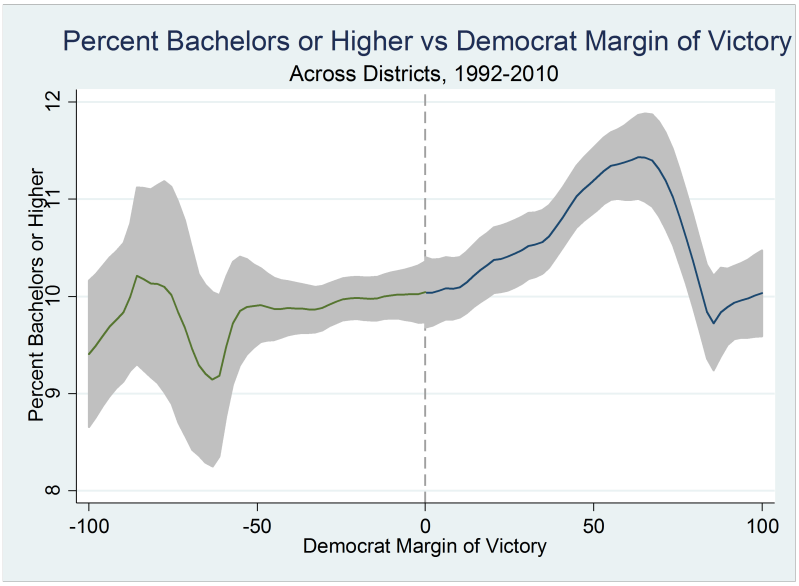
Notes: Unit of analysis is at district-year level. The horizontal axis represents Democrats' margin of victory over Republicans. The vertical axis denotes log of income per capita. Triangular kernel is used for local linear regressions.

Figure A.4: RD Identifying Assumption: Per Capita Income



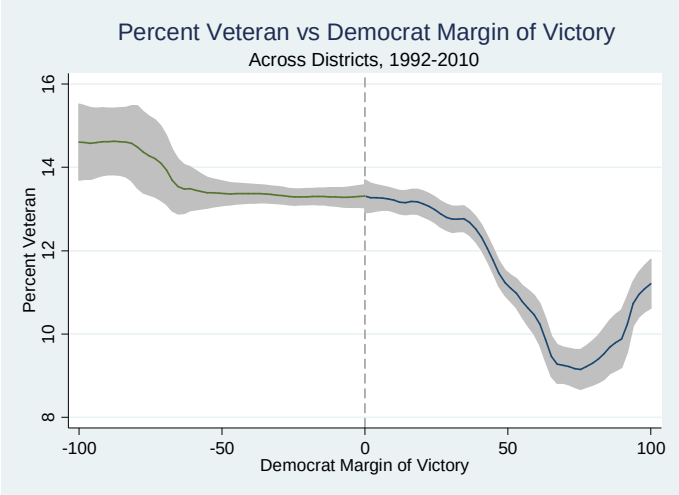
Notes: Unit of analysis is at district-year level. The horizontal axis represents Democrats' margin of victory over Republicans. The vertical axis denotes black population share. Triangular kernel is used for local linear regressions.

Figure A.5: RD Identifying Assumption: Black Population Share



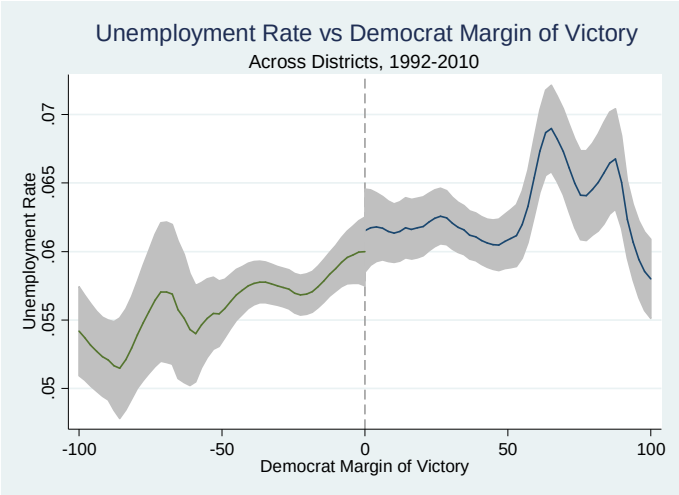
Notes: Unit of analysis is at district-year level. The horizontal axis represents Democrats' margin of victory over Republicans. The vertical axis denotes share of people with bachelor degree or above. Triangular kernel is used for local linear regressions.

Figure A.6: RD Identifying Assumption: College or Above Share



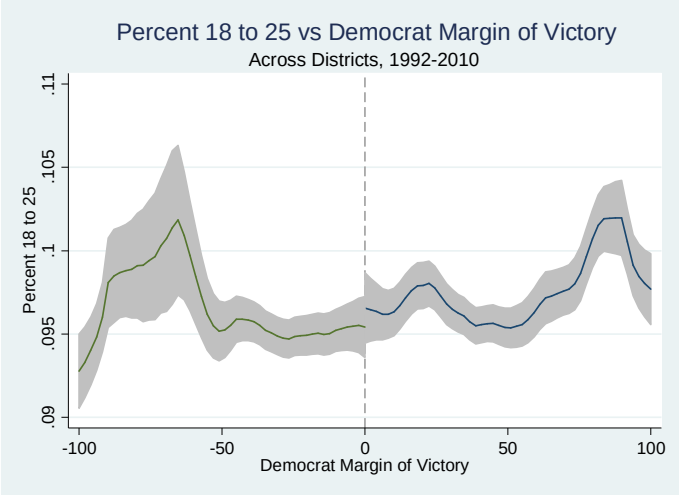
Notes: Unit of analysis is at district-year level. The horizontal axis represents Democrats' margin of victory over Republicans. The vertical axis denotes share of veteran. Triangular kernel is used for local linear regressions.

Figure A.7: RD Identifying Assumption: Veteran Share



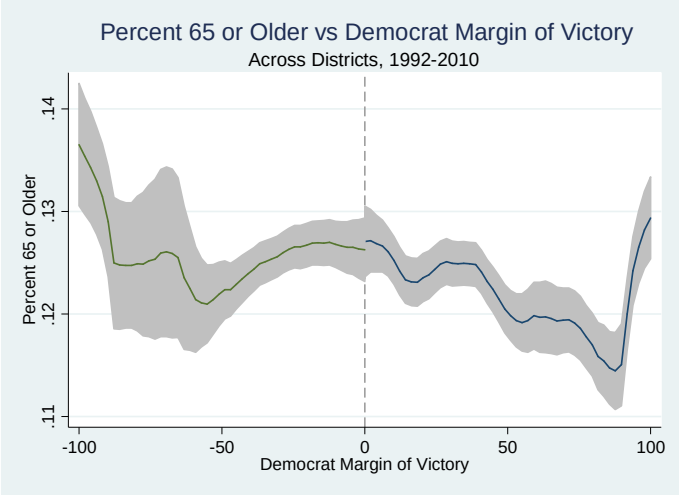
Notes: Unit of analysis is at district-year level. The horizontal axis represents Democrats' margin of victory over Republicans. The vertical axis denotes unemployment rate. Triangular kernel is used for local linear regressions.

Figure A.8: RD Identifying Assumption: Unemployment Rate



Notes: Unit of analysis is at district-year level. The horizontal axis represents Democrats' margin of victory over Republicans. The vertical axis denotes share of people aged 18-25. Triangular kernel is used for local linear regressions.

Figure A.9: RD Identifying Assumption: 18 to 25 Share



Notes: Unit of analysis is at district-year level. The horizontal axis represents Democrats' margin of victory over RepublicansThe vertical axis denotes share of people aged 65 or Over. Triangular kernel is used for local linear regressions.

Figure A.10: RD Identifying Assumption: Over 65 Share