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Donald Trump's False Narrative on Mexican Migration and Trade: A Geopolitical Economic Analysis

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Abstract:¹

Donald Trump's political rise utilized the narrative that (1) America ceased being great because of (2) illegal immigrants and (3) trade agreements that take U.S. jobs. Trump's popularity has been conflated by many observers with the actual existence of measurable negative impacts from trade and migration on the lives of Trump supporters, as well as evidence for the need for more restrictive immigration and trade policy responses. Some observers have also postulated a positive relationship between Trump's support among voters and "China Shock" trade exposure, while others have suggested that there is a positive relationship between support for Trump and the level of Mexican immigrants. However, an examination of the geographical concentration of support for Donald Trump in the presidential primaries indicates a *negative* correlation between the number of Trump supporters and the population size of Mexican immigrants, as well as a *negative correlation* between Trump support and import competition from Mexico or China. Areas with high concentration of Mexican immigrants and import exposure to Mexico and China are actually more likely to favor Hillary another Republican candidate or Hillary Clinton. In fact, only 2% of U.S. counties in the U.S. actually fit the Trump narrative of very high Trump support combined with very high levels of immigration or trade, while nearly 60% of counties are polarized as either high Trump/low Mexican or low Trump/high Mexican. These correlations hold at both the County and Commuting Zone levels, as well as after controlling for the share of Trump support among Republican voters and total voters in both contested and non-contested primary elections. While these results directly refute and invert the Trump narrative, they also confirm that Donald Trump enjoys high levels of support in particular regions which are struggling economically and contain high concentrations of White poverty, high unemployment rates and a low median income. The lessons from the false Trump narrative for future U.S. and Mexico policy makers, however, is that neither the causes nor the solutions for these lagging regional dynamics are related to U.S. migration policies, or to trade relationships with China and Mexico.

¹ A special thank you to Patrick Pastor and Marcelo Pleitez for their research and hard work.

1. Executive Summary

From the initial launch of his campaign in June 2015, Donald Trump adeptly created a simple yet dangerous media narrative that (1) America ceased being great because of (2) border raiding illegal immigrants ("murderers and rapists") and (3) trade agreements like NAFTA and TPP which produce trade deficits that take U.S. jobs. Real American working people are hurt because America's border is being overrun because of "Mexico sending their worst people" and "unfair" trade deals made by "our bad leaders." In his hands, this diagnosis leads to the magical solution that can "make America great again": build a Great Wall, deport millions, and impose huge tariffs. "We have no choice, or else we will cease to be a country."

The now historic collective failure by media and political leaders to immediately counter the manifest economic absurdity and blatant bigotry of his initial position allowed Trump to elaborate his nativist narrative throughout his political rise with specific calls for:

- 1. Deporting all undocumented immigrants and their US born children.
- 2. Making Mexico pay for the wall by seizing family remittances sent to Mexico.
- 3. Voiding NAFTA and other trade deals, while aggressively imposing new trade terms on China and other trading partners.

The power of this simply constructed yet fictitious cross-border narrative should not have been underestimated, especially given Trump's dangerously racist demonizing, which has no precedent in modern presidential campaigns. Seemingly designed to set off the Limbic brain which was credited with the successful Brexit Leave campaign,² Trump's narrative consists of an appeal to white ethnic identity politics and nostalgia, both of which are being fueled by the US's historical legacy of white supremacy, and the challenge to that supremacy presented by the current demographic transition to a non-white dominant, multiracial America. Trump's claim that "this is our last chance" remained a desperate attempt to ride the white backlash to the presidency and should have made clear the high stakes for American democracy in the 21st Century.

Analysts have been describing the "huge" negative economic consequences of implementing Trump's policy prescriptions since soon after he announced his candidacy, including the UCLA NAID Center's review of migration proposals in "<u>Six HUGE numbers which should Disqualify Donald Trump</u>",³ and the Peterson Institute for International Economics PIIE's more recent study of the potential impact of his trade policy.⁴

² Dennis Sandole. *Immigration issue may allow the limbic brain to prevail* (Financial Times, 2016)

³ Raul Hinojosa. *Six HUGE Numbers Which Should Automatically Disqualify Trump From Being President*. (UCLA NAID Center, 2016). The costs of Trump's immigration proposal include: 2.6 trillion GDP loss due to mass deportations and restrictive immigration; 5 trillion loss of ending birthright citizenship; and 1.6 trillion on walls and enforcement.

⁴ Gary Hufbauer, Tyler Moran, Marcus Noland, and Sherman Robinson. *Assessing Trade Agendas in the US Presidential Campaign*. (Peterson Institute for International Economics, 2016)

Trump's simplistic and increasingly divisive diatribes were normalized over the course of hundreds of Trump rallies and through their extensive coverage in the media. This has had the effect of saturating the press and social media in a post-data, post-truth era haze. Many news organization contributed to the normalization process by not questioning Trump's logic or the details of his policy proposals.

By and large media organizations and the pundit class continued to repeat Trump's anti-Mexican narrative, while conflating the rise of Trump's popularity with the existence of measurable negative impacts from trade and migration on the lives of Trump supporters. Such reporting implicitly justifies deplorable attitudes against immigrants and foreigners, as Hillary Clinton has described them, by suggesting that these attitudes are the product of legitimate material grievances. Some, like the Wall Street Journal (WSJ), have gone further. That paper explicitly validated Trump's narrative with weak correlations. Extrapolating on a well know research paper's⁵ narrow analysis of the "trade exposure" that has been caused by the impacts of Chinese imports on some economic sectors in some parts of the country, the WSJ attributed Trump's support in these parts of the country, and a wide array of the US economy's shortcomings generally, to trade with China. The WSJ's Bob Davis reports that "[i]n this year's Republican presidential primary races, Mr. Trump won 89 of the 100 counties most affected by competition from China, according to an analysis by The Wall Street Journal."⁶ Yet this analysis can be very misleading due to a limited sample size of voting counties as well as a reliance on large multicounty "commuting zones" and a "trade exposure" calculation based on national level imports from China, while excluding an analysis of exports or migration at the county level.

The need to provide solid data and critical analysis is now more important than ever, particularly with respect to an understanding of the real forces driving the Trump phenomenon. Weakly informed questioning by the media legitimizes Donald Trump's false claims about the real problems facing the economy has implicitly endorsed a dangerously wrong-headed set of solutions. It is thus critically important that Hillary Clinton and the rest of America have the tools to demonstrate the false assumptions and dangerous implications of Trump's narrative. We must not learn the wrong lesson from the 2016 election and be swayed by the assumed "political necessities" of implementing anti-immigrant and anti-trade policies in order to "address the legitimate concerns of Trump voters." Similarly, the rest of the world, and especially the Mexican government, should also not readily accept this narrative as a basis for renegotiating immigration and trade relations with the U.S.⁷

⁵ David Autor, David Dorn, and Gordon Hanson. *The China Shock: Learning from Labor Market Adjustment to Large Changes.* (2016)

⁶ Bob Davis, and Jon Hilsenrath. *How the China Shock, Deep and Swift, Spurred the Rise of Trump.* (The Wall Street Journal, 2016)

⁷ This appears to have been the motivation behind President's Pena Nieto's invitation to Donald Trump to Mexico

New Data, New Findings

The end of the primary season provided detailed voting results for most of the nation's 3,007 counties, and this data can be integrated with large scale databases containing socioeconomic data, Mexican immigration data, and data on two-way trade with Mexico and China. The resulting database allows us the ability to analyze a variety of statistical regressions on the relationship between: 1) voting patterns, 2) migration patterns, 3) exports as well as imports, and 4) patterns of economic wellbeing at the county and commuting zone level.

Our research shows that there are clearly many people in the US who are struggling financially, many of them in Trump voting counties, but that does not mean that trade and migration are to blame for those struggles. On the contrary, our research shows that <u>virtually no aspects of Trumps simple narrative to his voters has any factual basis, and that the data actually shows the opposite of Trump's narrative.</u> We found that Trump's primary voters are less likely to live in areas that have a significant number of non-citizen Mexican immigrants or in counties that are experiencing negative impacts from trade. In fact, we find that higher exposure to import competition in a county (ie. trade that could depress low-skill high-pay employment) actually predicts <u>less</u> support for Trump. We also found that a higher level of exports from a county actually predicts greater support for Trump.

Because we examined primary voting patterns, these findings provide a clearer picture of the factors motivating Trump voters than would a similar analysis focusing on the general election. Primary voting data allows us to delineate the forces that are motivating support for Trump specifically, rather than for the Republican Party generally. In addition to the detailed county level, we have also conduced our analysis at the level of more aggregate multi-county commuting zones (CZs). We found that virtually all the county level results reported below are closely reproduced at the CZ level.

Specifically, our research shows that:

- Trump's support is concentrated in counties (and CZs) that are less likely to have significant numbers of Mexican immigrants.
 - The less non-citizen Mexican immigrants live in a county, the more likely it is that primary voters in that county supported Trump by larger margins.
 - The more non-citizen Mexican immigrants live in a county, the more likely it is that primary voters in that county supported a Democratic candidate or a Republican other than Trump.
 - The more naturalized Mexican immigrants live in a county, the more likely it is that primary voters in that county supported a Democratic candidate or a Republican other than Trump.
 - The impact of immigration legalization (either via DACA/DAPA or Comprehensive Immigration Reform) is much higher in counties where voters were more likely to support a Democratic candidate or another Republican. and is more strongly positive the more immigrants are residing in a county.

- Counter to the dominant narrative, Trump supporters are less likely to live in counties (and CZs) that receive a significant level of imports from China and Mexico and is more likely to live in an area that sends a significant level of exports to China and Mexico.
 - The more import competition a county likely faces from China, the more likely it is that primary voters in that county supported a Democratic candidate or a Republican other than Trump.
 - The more exports a county likely sends to China, the more likely it is that primary voters in that county supported Trump over a Democratic candidate or different Republican candidate.
 - The more imports a county likely receives from Mexico, the more likely it is that primary voters in that county supported a Democratic candidate or a Republican other than Trump.
 - The more exports a county likely sends to Mexico, the more likely it is that primary voters in that county supported Trump over a Democratic candidate or different Republican candidate.
- Trump support is nonetheless concentrated in counties and (CZs) in which the economic conditions are worse than those of the country as a whole.
 - In counties in which primary voters were more likely to support Trump over a Democratic candidate or different Republican candidate, the average poverty rate is 15.19%. In 2015, the national poverty rate was 13.5%.
 - The unemployment rate in these Trump counties is 9%. As of August 2015, the national unemployment rate was 4.9%
 - Trump voters are in counties where the whites with low education are struggling economically and where large majorities of people living in poverty are White. Counties struggling economically with more non-white populations are not Trump voting counties.
- From a regional perspective, there is a sharp polarization between those areas (counties and CZs) expressing high support for Trump and areas that have a high concentration of Mexican immigrants and/or trade exposure.
 - Less than 2% of U.S. counties exhibited both very high support for Trump as well as a very high number of FB Mexicans or a very high exposure to Mexican imports (very high defined as the top 25% quadrant for each variable).
 - Among counties with very high concentrations of Mexican immigrants, only 17% also exhibited very high support for Trump.
 - Among counties and CZs with very high support for Trump, over 60% had low or very low concentrations of Mexican immigrants or trade exposure.
 - Among CZs, more than 80% are characterized as either high/low, low/high or low/low of Trump support compared to Mexican immigration or trade exposure.

Our research contradicts the core Trump narrative and opens the need to develop a counter-narrative. While many people in the US are struggling financially in Trump voting counties, trade and migration are to not to blame for those struggles. The difference between the two should not be understated. Trump's supporters may feel like trade and migration have damaged their economic prospects, but the empirical evidence says otherwise. In the wake of Trump's political ascension, the worst thing that America's policy makers could do is to treat Trump supporters' misdirected anger as a set of legitimate grievances in need of redress through anti-immigrant and anti-trade policies.

In that sense, our work reinforces and goes beyond recent research by Gallup's Jonathan Rothwell who similarly found that Trump voters had less contact with Mexican immigrants (and are less likely to be negatively affected by trade) than have voters who support either Democrats or other Republicans. Similarly, our work reinforces a Brookings report which found that "attitudes about immigrants are not significantly correlated with the perceived effect they are having on local communities, but they are highly correlated with the perceived effect they are having on American society."⁸ But unlike these two opinion based research articles, our analysis is based on actual recorded voting. Also the Rothwell report relies on the Author, et al. paper that looks at "import exposure" from China at the multi-county level commuting zones (CZs), while we look at exports and net trade with China and Mexico at both the county level and commuting zone level.

The relationships between Trump's electoral support and either migration or trade that we observed at the county level were extremely similar to those that we observed at the commuting zone level. We conducted our first round of analysis at the County level, and then conducted an additional round of analysis at the commuting zone level, in order to confirm that the trends we observed were not the product of the geographic level that we examined. As would be expected, there was some variation between the relationships we observed at the county level and those we observed at the commuting zone level, but these variations were slight. At both geographic levels, Trump supporters were more likely to live in places with fewer non-citizen foreign born Mexican, less import exposure, and greater levels of exports and net exports.⁹

This report is the first in a series that seeks to analyze and correct the United States' counterproductive approach to the intertwined issues of immigration, trade, and economic development. For decades the policies and political rhetoric surrounding these issues have respectively deepened and misrepresented the problem. These problems pre-date Donald Trump, but his campaign has pushed these issues away from a space in which a rational policy discussions are possible, and into a toxic fog of demagoguery. The arc of this series is as follows:

⁸ Elizabeth McElvein. *Border battle: new survey reveals Americans' views on immigration, cultural change.* (Brookings, 2016)

⁹ For more information on the results of our commuting zone analysis see section 4.3.

- 1. This first report seeks to strip away the false narratives that have blanked this election cycle's policy debate. We do this by showing that the most concentrated opposition to trade and migration comes from places that have benefited from trade and do not have a significant population of Mexican immigrants.
- 2. Having cleared the air of false narratives, the second report in the series will begin diagnosing the actual problems facing America's immigration and trade policy landscape, while also providing concrete policy recommendations supported by empirical evidence. The first issue we will address is out of control immigration enforcement spending and the negative impact this spending has had on the economy, the budget, as well as the lives of migrants and citizens alike.
- 3. The third report will examine the significant economic benefits of legalizing undocumented immigrants and show that the impacts from trade pale in comparison to the positive impacts of legalization.
- 4. The fourth report will address the other half of migration policy and highlight how remittances can be leveraged to address the root causes of migration. Rather than seizing remittances to build a border wall that would be neither cost effective nor an effective deterrent, harnessing remittances productive potential would encourage economic development in migrants' countries of origin. This would disincentive migration in a way that benefits the populations on both sides of the border.

2. <u>Data</u>

Most recent attempts to describe the forces that are driving support for Donald Trump have either lacked empirical support or focused too narrowly on a single factor. This report aspires to offer a data driven and multifaceted corrective. In addition, we believe the depth of our data analyses allow us to expand on Rothwell's Gallup research by providing data that offers stronger support for his hypothesis. Our revision of earlier arguments, and support for Rothwell's, is made possible by our focus on the intersection of 2016 Republican and Democratic primary data,¹⁰ trade data,¹¹ and demographic data.¹² These data sources, and their relationship, reveals the forces driving political choice both within the Republican party and without, while also highlighting how focusing on only one factor, and ignoring others, has compromised previous research efforts.

We conducted a series of Ordinary Least Squared (OLS) regressions in order to quantify the relationship between Trump support and both trade and migration. Election data variables are

¹⁰ CNN. *Elections 2016: Primaries + Caucuses.* (CNN, 2016)

¹¹ Calculations based on data from WISERTrade and the 2012 Economic Census, Survey of Business Owners (SBO). See citations for these databases in bibliography.

¹² Census' ACS 2010 5-year and 2014 5-year.

our dependent variables while trade and migration variables are our central explanatory factors.¹³

2.1 Election Data

We examined primary outcomes at the county level and these outcomes are described in our model as ElectOutcomes_{county}. We used three variables to describe these primary models:

- "Trump Winning," which is a dichotomous variable that indicates whether Trump received the most votes in a given county.
- Trump's share of Republican primary votes in a given county
- Trump's share of total votes in both the Democrat and Republican primaries.

We made the three ElectOutcomes_{county} variables our dependent variable because they are robust and direct measures of where Trump's support is the most prevalent. We used CNN's primary election data as the source for all three of these variables.¹⁴

In our regressions we also controlled for a number of political factors. Specifically, the number of candidates in a given primary, and, when using Trump's share of Republican primary votes as our dependent variable, whether or not a given county was won by Romney in 2012.

There are three major benefits to using primary data to measure the impact of our central explanatory variables on political outcomes. First, it highlights intra-part distinctions which would have been obfuscated by the use of either presidential or congressional general election data. Second, it allows for analyzing intra-party distinctions while also accounting for a geography's general political composition. That is, it allows for acknowledging the relative Republican support for Donald Trump in a county, while also accounting the fact that his support may be less relevant in an overwhelmingly democratic county.

The final major benefit of primary data is the ability to cross reference the relationships revealed by the Republican primary data and the primary data from both parties combined. This was useful when analyzing the relationship between Trump support and demographic data. Unsurprisingly, we found that the more Mexican immigrants lived in a county, the smaller Trump's share of total primary voters in that county was likely to be. But when looking at just Republican primary data we found that the trend held, and this finding contradicts a major tenet of the narrative describing Trump's support.

There are a number of reasons that counties might be described as data deficient in our findings. For the election data, the explanations are all rooted in the unevenness of the presidential primary process. A number of states have a primary in one party and a caucus in

¹³ For more information on our regressions see Section 5: Methodology and Regressions

¹⁴ CNN. *Elections 2016: Primaries + Caucuses.* (CNN, 2016)

the other, while other states count votes at either the congressional district or precinct level. Still more states canceled either their primaries or their caucuses, and Washington State they have both. In order to have uniform data across all the states being analyzed, we used only data from those states in which both parties held either caucuses or primaries. The following are the specific state by state issues that resulted in the data being omitted:

- In Colorado¹⁵ and North Dakota¹⁶ the state GOP executive committee voted to cancel its presidential vote at its state caucus.
- Both parties in Washington state have both a caucus and a primary but only one of them counts towards the selection delegates. The state Republican party chose to select delegates based on the primary, while the state Democratic party chose to select delegates based on the caucus.¹⁷
- Votes are tallied in Kansas¹⁸ and Minnesota's¹⁹ primaries and caucuses by congressional districts rather than by counties
- Votes are tallied in New Hampshire²⁰ and Maine's²¹ primary and caucus (respectively) by voting precincts rather than by counties.

2.2 Trade Data

To quantify the relationship between support for Donald Trump and trade, we collected data on imports, exports and net exports by sector.²² This data was collected from the World Institute for Strategic Economic Research (WISER) Trade database.²³ This data was available for Exports at the state level and imports at the national level by sector. To distribute this trade data at the county level we created a ratio based on county sales by sector and then distributed the higher level data according to this ratio. This sector sales data came was collected from the US Census Bureau's 2012 Survey of Business Owners and Self-Employed (SBO).²⁴

Our analysis sought replicate core aspects of the Autor, Dorn and Hanson methodology for measuring regional trade exposures while also extending and, we believe, improving the specificity of this measurement by including imports and exports for China and Mexico for more detail levels i.e. counties versus their use of multi county commuting zones. Their analysis of based on "the share of each industry in region *i*'s total sales on the U.S. market summarize differences in industry specialization patterns across U.S. regions and thus capture variation in

¹⁵ John Frank. *Colorado Republicans cancel presidential vote at 2016 caucus*. (The Denver Post, 2015)

¹⁶ Emily Schultheis. *Why North Dakota GOP voters don't vote in the presidential nomination process.* (CBS News, 2016)

¹⁷ Seattle Pi. Why does Washington state hold both a caucus and a primary? (Seattle Pi, 2007)

¹⁸ Dave Helling. *Rules vary between parties as Kansas prepare to caucus for president*. (The Kansas City Star, 2016)

¹⁹ Lily Mihalik, Anthony Pesce, and Ben Welsh. *Results form the Minnesota caucuses*. (Los Angeles Times, 2016)

²⁰ The New York Times. *New Hampshire Primary Results*. (The New York Times, 2016)

²¹ The New York Times. *Maine Results*. (The New York Times, 2016)

²² For more information on the contours of our regression, and specifically what trade variables were controlled for and why, see Section 5: Methodology and Regressions.

²³ Full citation of WISER trade data

²⁴ Full Economic Census Citation

regional exposure to China's supply-driven export growth."²⁵ However, our analysis examines both exports and net exports---value of exports minus value of imports---in addition to imports allowed us to provide a more complete characterization of the relationship between trade Trump support. Earlier research and public discussion of this relationship has focused only on the relationship between import exposure and Trump support. However, imports are only one side of the trade picture. A county could be receiving significant imports, but if that county is also producing a significant amount of goods for export, it may be running a surplus in net exports.

Any counties that are described as data deficient in our findings are described as such because their sales in traded sectors are too low to be included in the Economic Census.

2.3 Migration and Demographic and Socioeconomic Data

To quantify for the relationship between Trump support and immigration we collected data on Mexican naturalized and Mexican non-citizen population counts by county from the US Census Bureau's 2010 5-year American Community Survey (ACS).²⁶ We did not include total naturalized foreign born and total non-citizen foreign born because we found a strong correlation between Mexican foreign born and total foreign born. We also chose to use Mexican foreign born (naturalized and non-citizen), rather than total foreign born (naturalized and non-citizen), because total foreign born includes immigrants from many different countries which may introduce too much noise into the analysis.

We also have attempted to describe what differentiates counties that support Donald Trump from those that don't. To do this we collected demographic and socioeconomic data from the Census' 2014 5-year ACS. We also controlled for these factors in our regressions. Specifically, we collected data on and controlled for total population, median household income, percentage of population with that has at least a high school diploma, poverty rate, unemployment rate, and the race/ethnic composition of a given county.

Any counties that are described as data deficient in our findings are described as such because the Mexican immigrant population---both naturalized and non-citizen---is too low to meet the ACS's minimum threshold for inclusion.

3. Characteristics of Trump Counties and Commutimg Zones

Donald Trump's success in the Republican primary and beyond may not be driven by trade and migration, but there are subpar economic conditions in the counties where his support is the greatest. Before determining the forces that are driving his support, it is important to first

²⁵ David Autor, David Dorn, and Gordon Hanson. *The China Shock: Learning from Labor Market Adjustment to Large Changes in Trade*. (2016)

²⁶ Full citation of ACS 5-year

establish where his support is most concentrated, and what the demographic and socioeconomic characteristics of those places are. In summary, Trump's support is concentrated in counties that are whiter than the nation as a whole, significantly less populated, slightly poorer and slightly less educated.

For our analysis of the characteristics of Trump counties we looked at three geographic categories: Counties won by Trump in the 2016 primary and by Romney in the 2012 general election (Trump counties), counties lost by Trump in the 2016 primaries; and all counties in the United States. We used counties won by both Romney and Trump because it allows us to account for Trump's success in late uncontested primaries on the west coast without having to ignore inland counties that Trump is likely to win in the general election. For our analysis of the counties Trump lost we did not make adjustments based on 2012 because Trump lost no counties in uncontested primaries, and because we think it is important to include the characteristics of dense coastal cities when comparing where his supporters are and are not concentrated. The end result is that we are comparing counties Trump is likely to win in 2016 with counties that supported moderate republicans in the primary and/or will support Trump's opponent in the general.





3.1 Demographic Characterisitics

Trump counties are much smaller on average than those he didn't win and those in the country as a whole:

- Trump counties had an average population of 68,449.
- Counties he lost in the 2016 primary had an average population of 128,604.
- This is higher than, but much closer to, the national average of 123,980.

Trump counties are also more white than both the counties he lost and the country as a whole. This trend holds even when adjusting for Trump counties' smaller population size:

- On average Trump counties have 55,620 white residents.
- They are 81.3% white, compared to the counties he lost which are 75.1% white, and the nation as a whole, which is 72.6% white.
- Trump counties have an average of only 9,400 hispanic residents. That makes these counties 13.7% hispanic, compared to the counties he lost which are 22.8% hispanic, and the nation as a whole which is 19.4% hispanic.
- Trump counties have an average of only 5,792 black residents. That makes these counties 8.5% black, compared to the counties he lost which are 13.7% black, and the nation as a whole which is 12.6% black

In addition to being more likely to be white, residents in Trump counties are also more likely to be native-born. This trend holds even when adjusting for Trump counties' smaller population size:

• There are only, on average, 5,854 foreign born residents in Trump counties.

- The foreign born make up only 8.7% percent of the population in Trump counties, but they make up, on average, 13.6% of the population in counties that Trump lost, and 14.6% of the population in an average US county.
- Trump counties have an average of only 2,548 naturalized foreign born residents. The naturalized foreign born make up only 3.7% percent of the population in Trump counties, but they make up, on average, 5.4% of the population in counties that Trump lost, and 6.7% of the population in an average US county.
- Trump counties have an average of only 3,406 non-citizen foreign born residents. The non-citizen foreign born make up only 5% percent of the population in Trump counties, but they make up, on average, 8.2% of the population in counties that Trump lost, and 7.9% of the population in an average US county.

Variables	Won by Trump in 2016 and Romney in 2012	Lost by Trump in 2016	All Counties Nationwide
Total County Population	68,449	128,604	123,980
Total Foreign Born	5,954	17,530	18,100
Naturalized Foreign Born	2,548	6,958	8,282
Non-Citizen Foreign Born	3,406	10,570	9,815
Mexican Foreign Born	6,981	8,148	10,970
Mexican Foreign Born Naturalized	1,460	1,691	2,526
Mexican Foreign Born Non-Citizen	5,522	6,458	8,441
Race/Ethnicity: Hispanics	9,400	29,264	24,103
Race/Ethnicity: White	55,620	96,530	90,050
Race/Ethnicity: Black	5,792	17,680	15,660
Race/Ethnicity: American Indian	613	927	991
Race/Ethnicity: Asian	2,079	4,669	6,777
Race/Ethnicity: Native Hawaiian	66	122	210

Mean Demographic Characteristics of Counties

3.2 Socioeconomic Characteristics

Trump counties are poorer on average than those he didn't win, and those in the country as a whole:

- The average Trump county has a median household income of \$44,020.
- The average county he lost has a median household income of \$48,846.
- The average US county has a median household income is \$46,845.

Whites are poorer in the average Trump counties than they are in the average county he lost, as well as in the average US county.

- Whites in the average Trump county have a median household income of \$45,953.
- Whites in the average county he lost have a median household income of \$51,179.
- Whites in the average US county have a median household income is \$49,495.

In the average Trump county, there are more whites who are unemployed than there are people of all other races and ethnicities combined. In these counties, there are also more whites who are in poverty than there are of all other races and ethnicities combined. That said, poverty rates and unemployment rates are higher for blacks and hispanics.

- In the average Trump county, there are 2,232 unemployed whites, and 7,566 whites are living in poverty.
- In the average Trump county, there are 506 unemployed hispanics, and 2,463 hispanics are living in poverty.
- In the average Trump county, there are 395 unemployed blacks, and 1,581 blacks are living in poverty.
- In the average Trump county, there are 80 unemployed asians, and 271 asians are living in poverty.

Variables	Won by Trump in 2016 and Romney in 2012	Lost by Trump in 2016	All Counties Nationwide
Poverty Rate (%)	17.4%	15.9%	16.8%
Unemployment Rate (%)	9.034	7.388	8.545
Received at Least A High school Diploma (%)	84.2%	84.6%	85%
Household Median Income (\$)	44,020	48,846	46,845
Household Mean Income (\$)	57,224	63,857	61,046
Number of Whites in Poverty	7,566	12,923	11,465
Number of Unemployed Whites	2,232	3,304	3,550
White Median Household Income (\$)	45,953	51,179	49,495
Number of Hispanics in Poverty	2,463	7,232	5,797
Number of Unemployed Hispanics	506	1,206	1,236
Hispanic Median Household Income (\$)	39,669	39,601	40,367
Number of Asians in Poverty	271	608.5	861.1
Number of Unemployed Asians	79.69	136.6	251.6
Asian Median Household Income (\$)	60,606	61,953	60,879
Number of Blacks in Poverty	1,581	4,634	4,090
Number of Unemployed Blacks	395	1,233	1,178

Mean Socioeconomic Characteristics of Counties

4. Forces Driving Trump Voting

In order to determine whether the forces that Donald Trump has identified as damaging the US economy---migration and trade---are driving his support, we analyzed the relationship between those forces and his support in the primaries. If his supporters were motivated by the economic impacts of trade and migration, one would expect to find more Mexican immigrants and more exposure to imports in the counties and CZs in which he enjoys greater levels of support. We found the opposite to be true.

All results in this section are based upon our full model in which we controlled for the economic characteristics of the county, the number of foreign born residents (total foreign born, non-naturalized foreign born, and Mexican foreign born), political factors (number of candidates in the primary, whether the county voted for Romney in 2012, and whether the primary was contested), and industrial characteristics (employment and salary by industry).²⁷

4.1 Migration

Trump's narrative blames Mexican migrants for many of the US's economic and social ills. If migrants were having such a negative impact on the US, it stands to reason that voters who live in the same counties as these migrants would be attracted to an anti-immigrant candidate. However, our research shows that Trump's support is negatively correlated with the presence of both citizen and non-citizen Mexican Foreign born.

This trend holds regardless of whether we examined Trump support in terms of his share of all primary voters or his share of votes in only the Republican primaries. The latter metric is useful because it shows that Trump is also more likely to be unpopular with active Republicans if they live in areas with significant numbers of Mexican migrants. It suggests that Republicans who know Mexican immigrants are less likely to approve of Donald Trump than those who do not.

It is important to note that the scatter plot figures depicted in this section have negative values along their X axes because those axes not describing the raw value of the variables but rather the values of variables after taking into account all the other variables that are controlled for in our full regression model.

²⁷ For more detail see methodology section



(From left to right: scatter plot at county level, scatter plot at CZ level.)

Our research shows a negative correlation between non-naturalized Mexican immigrants and support for Donald Trump in the primaries. In other words, the more non-citizen Mexican immigrants live in a county, the more likely it is that primary voters in that county supported a Democratic candidate or a Republican other than Trump. Interestingly, this effect become more pronounced as we move from the smaller county level to in the larger CZ aggregation. The CZs are, by definition, more populated since they each represent a cluster of counties, and are relatively more likely to include a large city.



(Top row: map and scatter plot at county level, bottom row: map and scatter plot at CZ level)

The correlation trend also holds when we examine the relationship between naturalized Mexican immigrants and Trump support at the county level. The more naturalized Mexican immigrants live in a county, the more likely it is that primary voters in that county supported a Democratic candidate or a Republican other than Trump. Interestingly, this relationship is reversed at the CZ level. Parsing why there is a slightly positive relationship for naturalized Mexican foreign born at the CZ level but not at the county level, nor for non-naturalized Mexican foreign born at either the county or CZ level, is a potential avenue for future research.



(From left to right: scatter plot at county level, scatter plot at CZ level.)



(Top row: map and scatter plot at county level, bottom row: map and scatter plot at CZ level)

The trend also holds when we examine the relationship between Trump's share of Republican primary votes and the number of both naturalized and non-naturalized Mexican immigrants in any given county. The more naturalized Mexican immigrants live in that county, the more likely it is that a Republican primary voter in that county supported a candidate other than Trump.



(Both scatter plots describe data at the county level)

4.2 Trade

Trump has argued that two of the US's major trading partners are taking advantage of weak Democratic leadership.²⁸ According to this line of thinking, unfettered imports from China and Mexico have hollowed out the US economy, destroyed good paying jobs that require little education, and reduced the American heartland to a post-industrial economic wasteland. Meanwhile, Trump claims that our current trade relations with China and Mexico have not only limited domestic consumption of US made goods, they have hamstrung the ability of US firms to produce goods for export.²⁹

If this were the case, one would assume that Trump's support would be concentrated in the counties that import the most and export the least. Again, our research shows that this is not the case, and in fact, the opposite is true.

The more imports a county receives the less likely it is that primary voters in that county supported Trump. On the other hand, the more goods a county produces for export to China and Mexico, the more likely it is that that county's primary voters supported Trump. The same is true for counties that have greater levels of net exports--- that is the value of goods produced for export minus the value of imports. These trends hold at the CZ level.

It is important to note that the scatter plot figures depicted in this section have negative values along their X axes because those axes not describing the raw value of the variables but rather the values of variables after taking into account all the other variables that are controlled for in our full regression model.



(From left to right: scatter plot at county level, scatter plot at CZ level.)

The greater the value of imports a county receives from China, the more likely it is that primary voters in that county supported a Democratic candidate or a Republican other than Trump.

²⁸ Donald Trump. *China Trade Reform.* (Trump Pence website, 2016)

²⁹ Ibid.

These findings disprove the core underlying assumption of Donald Trump's trade narrative. While many people supporting Trump live in counties that are struggling economically, Chinese import exposure is not the cause of those struggles. The continued legitimization of Trump's narrative undermines the possibility of identifying and addressing the true causes of these economic woes. This trend holds at CZ level.



(Top row: map and scatter plot at county level, bottom row: map and scatter plot at CZ level)

The greater the value of imports a CZ receives from Mexico, the more likely it is that primary voters in that CZ supported a Democratic candidate or a Republican other than Trump. These findings also disprove the core underlying assumption of Donald Trump's trade narrative. While many people supporting Trump live in CZs that are struggling economically, Mexican import exposure is not the cause of those struggles. The continued legitimization of Trump's narrative undermines the possibility of identifying and addressing the true causes of these economic woes.



(Scatter plot depicts regression analysis at CZ level)



(Top row: map and scatter plot at county level, bottom row: map and scatter plot at CZ level)

Surprisingly, Trump supporters are more likely to live in counties that are the relative beneficiaries of trade with China and Mexico. The greater the value of a county's exports to both China and Mexico, the more likely Trump supporters are to live there. The fact that Trump supporters are more likely to be the relative beneficiaries of trade is reinforced by the relationship between that support and net exports. Net exports are the value of exports minus the value of imports. Our findings show that the greater a county's net exports to China and Mexico the more likely it is that a primary voter will support Trump. This again contradicts a core tenet of the narrative surrounding Trump's trade policies. Trump is not being supported by a groundswell of white workers who have been marginalized by trade. Trump support may be driven by marginalized white workers, but if so, trade is not generally the cause of that marginalization.

The relationship between Trump support and both exports and net exports is similar when looking at either China or Mexico:



(From left to right: scatter plot at county level, scatter plot at CZ level.)

The scatter plots above show that the more exports a county or CZ sends to China, the more likely it is that primary voters in that county or CZ supported Trump over a Democratic candidate or a different Republican candidate.



The more exports a county or CZ sends to Mexico, the more likely it is that primary voters in that county or CZ supported Trump over a Democratic candidate or different Republican candidate.



(Top row: map and scatter plot at county level, bottom row: map and scatter plot at CZ level)

Again, our research revealed that the greater the level of net exports between any given county and China, and between any given county and Mexico, the more likely it is that primary voters supported Trump as opposed to a Democrat or another Republican. The great Irony of these results is that the more a county benefits from net exports to Mexico, the more inclined it is to support Trump whose trade policies would potentially hurt them the most.

The following figures illustrate this point:



(All four figures describe net trade at the county level)





(All four figures describe net trade at the CZ level)

4.3 Continuity at the Commuting Zone Level

In terms of geography, the bulk of our research was originally focused on the County level which allowed for a clearer depiction of the relationship between Trump support and either trade or migration. Because we examined primary voting patterns at the county level, these findings provide a clearer picture of the factors motivating Trump voters than would a similar analysis focusing on the general election. Primary voting data allows us to delineate the forces that are motivating support for Trump specifically, rather than for the Republican Party generally.

After we conducted our first round of analysis at the County level, we then conducted an additional round of analysis at the commuting zone level, in order to confirm that the trends we observed were not the product of the geographic level that we examined. We also conducted our analyses at the commuting zone level to allow our research to be more easily compared to a number of earlier studies that had examined the relationship between Trump's political support and either trade or migration at that geographic level.

The relationships between Trump's electoral support and either migration or trade that we observed at the county level were extremely similar to those that we observed at the commuting zone level. We found that almost all the county level results are closely reproduced at the CZ level.

As would be expected, there was some variation between the relationships we observed at the county level and those we observed at the commuting zone level, but these variations were slight. At both geographic levels, Trump supporters were more likely to live in places with fewer non-citizen foreign born Mexicans, less import exposure, and greater levels of exports and net exports. The general trend we observed at the county level held at the commuting zone level, but there were some variations. The most important of these are:

- The population size of non-citizen foreign born Mexicans still has a negative relationship with Trump support, and that relationship is stronger at the commuting zone level.
- The value of imports from China are still negatively related to Trump support. However, this relationship is less strong at the commuting zone level than it is at the county level.
- The value of exports to China are still positively related to Trump support. However, this relationship is less strong at the commuting zone level than it is at the county level.
- The value of exports to Mexico are still positively related to Trump support. However, this relationship is no longer statistically significant.

Comparing results from a regional perspective, there is a sharp polarization between those areas (counties and CZs) expressing high support for Trump, and those areas that have a high concentration of Mexican immigrants and/or trade exposure.

 In a 4x4 quadrant level analysis, less than 2% (1.56%) of U.S. counties exhibited both "very high" support for Trump as well as a very high number of non-naturalized foreign-born Mexicans or a very high exposure to Mexican imports ("very high" defined as the top 25% quadrant for each variable).



- For Commuting Zones, the comparable share is 3.60%
- In a 2x2 level analysis, nearly 60% (59.31%) of CZs are characterized as either high/low, low/high or low/low of Trump support compared to non-naturalized foreign-born Mexicans or trade exposure from Mexican imports.



• Among counties, the comparable number is 57.16%



 Of the counties that had "very high" levels of support for Trump, two-thirds had low or very low concentrations of non-naturalized foreign-born Mexicans (85.8%) or trade exposure from Mexican Imports (63.5%).



• Among CZs with "very high" support for Trump, two thirds had low or very low concentrations of non-naturalized foreign-born Mexicans (66.96%) or trade exposure from Mexican imports (65.76%).

 Among counties with "high" concentrations of Mexican immigrants, only 8.7% also exhibited "high" support for Trump. The comparable number among CZ is 18.62% in a 2x2 level analysis.



While the comparative regional level analysis between counties and CZs both show very similar refutations of the Trump narrative, both also display a sharp polarization between those areas (counties and CZs) that are expressing high support for Trump and those areas with high concentration of Mexican immigrants and/or trade exposure. The county analysis at the 4x4 level (very high, medium high, medium low and very low), however, allows us to specify that the Trump narrative is only applies to a very small number of counties within particular commuting zones. Future research should further analyze these counties and CZs in order to better specify why they, unlike the vast majority of counties and CZs, conform to the Trump narrative.

	Mex	ican Foreign Bo	rn Non Naturaliz	ed		
		High	Low	Total		
	High	226	1152	1378		
	Low	424	955	1379		
	Total	650	2107	2757		
	US China Imports					
Trump	High	364	1014	1378		
Voters	Low	521	858	1379		
	Total	885	1872	2757		
	US Mexico Imports					
	High	349	1029	1378		
	Low	536	843	1379		
	Total	885	1872	2757		

Counties

	Mexican Foreign Born Non Naturalized				
		High	Low	Total	
	High	8.20%	41.78%	49.98%	
	Low	15.38%	34.64%	50.02%	
	Total	23.58%	76.42%	100.00%	
		US China	Imports		
Trump	High	13.20%	36.78%	49.98%	
Voters	Low	18.90%	31.12%	50.02%	
	Total	32.10%	67.90%	100.00%	
	High	12.66%	37.32%	49.98%	
	Low	19.44%	30.58%	50.02%	
	Total	32.10%	67.90%	100.00%	

	Mexican Foreign Born Non Naturalized					
		Very High	Medium High	Medium Low	Very Low	Total
	Very High	43	54	53	539	689
	Medium High	63	66	90	470	689
	Medium Low	89	111	105	385	690
	Very Low	130	94	77	388	689
	Total	325	325	325	1782	2757
			US China	Imports		
	Very High	48	95	109	437	689
Tourse Materia	Medium High	93	128	128	340	689
Trump voters	Medium Low	134	115	111	330	690
	Very Low	167	105	94	323	689
	Total	442	443	442	1430	2757
			US Mexic	o Imports		
	Very High	52	88	106	443	689
	Medium High	88	121	131	349	689
	Medium Low	138	121	116	315	690
	Very Low	164	113	90	322	689
	Total	442	443	443	1429	2757
		M	exican Foreign Bo	orn Non Naturaliz	ed	
		M Verv High	exican Foreign Bo Medium High	orn Non Naturaliz Medium Low	ed Verv Low	Total
	Very High	M Very High 1.56%	exican Foreign Bo Medium High 1.96%	rn Non Naturaliz Medium Low 1.92%	ed Very Low 19.55%	Total 24.99%
	Very High Medium High	M Very High 1.56% 2.29%	exican Foreign Bo Medium High 1.96% 2.39%	Medium Low 1.92% 3.26%	ed Very Low 19.55% 17.05%	Total 24.99% 24.99%
	Very High Medium High Medium Low	M Very High 1.56% 2.29% 3.23%	exican Foreign Bo Medium High 1.96% 2.39% 4.03%	Medium Low 1.92% 3.26% 3.81%	ed Very Low 19.55% 17.05% 13.96%	Total 24.99% 24.99% 25.03%
	Very High Medium High Medium Low Very Low	M Very High 1.56% 2.29% 3.23% 4.72%	exican Foreign Bo Medium High 1.96% 2.39% 4.03% 3.41%	Medium Low 1.92% 3.26% 3.81% 2.79%	ed Very Low 19.55% 17.05% 13.96% 14.07%	Total 24.99% 24.99% 25.03% 24.99%
	Very High Medium High Medium Low Very Low Total	M Very High 1.56% 2.29% 3.23% 4.72% 11.79%	exican Foreign Bo Medium High 1.96% 2.39% 4.03% 3.41% 11.79%	Medium Low 1.92% 3.26% 3.81% 2.79% 11.79%	ed Very Low 19.55% 17.05% 13.96% 14.07% 64.64%	Total 24.99% 24.99% 25.03% 24.99% 100.00%
	Very High Medium High Medium Low Very Low Total	M. Very High 1.56% 2.29% 3.23% 4.72% 11.79%	exican Foreign Bc Medium High 1.96% 2.39% 4.03% 3.41% 11.79% US China	Medium Low 1.92% 3.26% 3.81% 2.79% 11.79% Imports	ed Very Low 19.55% 17.05% 13.96% 14.07% 64.64%	Total 24.99% 24.99% 25.03% 24.99% 100.00%
	Very High Medium High Medium Low Very Low Total Very High	M. Very High 1.56% 2.29% 3.23% 4.72% 11.79%	exican Foreign Bc Medium High 1.96% 2.39% 4.03% 3.41% 11.79% US China 3.45%	Medium Low 1.92% 3.26% 3.81% 2.79% 11.79% Imports 3.95%	ed Very Low 19.55% 17.05% 13.96% 14.07% 64.64% 15.85%	Total 24.99% 24.99% 25.03% 24.99% 100.00% 24.99%
Turner Vielans	Very High Medium High Medium Low Very Low Total Very High Medium High	M Very High 1.56% 2.29% 3.23% 4.72% 1.79% 1.74% 3.37%	exican Foreign B co Medium High 1.96% 2.39% 4.03% 3.41% 11.79% US China 3.45% 4.64%	rn Non Naturaliz Medium Low 1.92% 3.26% 3.81% 2.79% 11.79% Imports 3.95% 4.64%	ed Very Low 19.55% 17.05% 13.96% 14.07% 64.64% 15.85% 12.33%	Total 24.99% 24.99% 25.03% 24.99% 100.00% 24.99% 24.99%
Trump Voters	Very High Medium High Medium Low Very Low Total Very High Medium High Medium Low	M Very High 1.56% 2.29% 3.23% 4.72% 11.79% 1.74% 3.37% 4.86%	exican Foreign Bo Medium High 1.96% 2.39% 4.03% 3.41% 11.79% US China 3.45% 4.64% 4.17%	rn Non Naturaliz Medium Low 1.92% 3.26% 3.81% 2.79% 11.79% Imports 3.95% 4.64% 4.03%	ed Very Low 19.55% 17.05% 13.96% 14.07% 64.64% 15.85% 12.33% 11.97%	Total 24.99% 24.99% 25.03% 24.99% 100.00% 24.99% 24.99% 25.03%
Trump Voters	Very High Medium High Medium Low Very Low Total Very High Medium High Medium Low Very Low	M Very High 1.56% 2.29% 3.23% 4.72% 11.79% 1.74% 3.37% 4.86% 6.06%	exican Foreign BG Medium High 1.96% 2.39% 4.03% 3.41% 11.79% US China 3.45% 4.64% 4.17% 3.81%	rn Non Naturaliz Medium Low 1.92% 3.26% 3.81% 2.79% 11.79% imports 3.95% 4.64% 4.03% 3.41%	ed Very Low 19.55% 17.05% 13.96% 14.07% 64.64% 15.85% 12.33% 11.97% 11.72%	Total 24.99% 24.99% 25.03% 24.99% 100.00% 24.99% 24.99% 24.99% 25.03% 24.99%
Trump Voters	Very High Medium High Medium Low Very Low Total Very High Medium Low Very Low Yery Low Total	M Very High 1.56% 2.29% 3.23% 4.72% 11.79% 1.74% 3.37% 4.86% 6.06% 16.03%	exican Foreign Bd Medium High 1.96% 2.39% 4.03% 3.41% US China 3.45% 4.64% 4.17% 3.81% 16.07%	rn Non Naturaliz Medium Low 1.92% 3.26% 3.81% 2.79% 11.79% 11.79% 11.79% 1.79% 4.64% 4.03% 3.41% 16.03%	ed Very Low 19.55% 17.05% 13.96% 14.07% 64.64% 15.85% 12.33% 11.72% 51.87%	Total 24.99% 24.99% 25.03% 24.99% 100.00% 24.99% 24.99% 25.03% 24.99% 100.00%
Trump Voters	Very High Medium High Medium Low Very Low Total Very High Medium High Medium Low Very Low Total	M Very High 1.56% 2.29% 3.23% 4.72% 11.79% 1.74% 3.37% 4.86% 6.06% 16.03%	exican Foreign BG Medium High 1.96% 2.39% 4.03% 3.41% 11.79% US China 3.45% 4.64% 4.17% 3.81% 16.07% US Mexic	rn Non Naturaliz Medium Low 1.92% 3.26% 3.81% 2.79% 11.79% 11.79% 1.179% 1.179% 3.95% 4.64% 4.03% 3.41% 16.03% o Imports	ed Very Low 19.55% 17.05% 13.96% 14.07% 64.64% 15.85% 12.33% 11.97% 11.72% 51.87%	Total 24.99% 24.99% 25.03% 24.99% 100.00% 24.99% 24.99% 25.03% 24.99% 100.00%
Trump Voters	Very High Medium High Medium Low Very Cow Total Very High Medium Low Very Low Total Very High	M Very High 1.56% 2.29% 3.23% 4.72% 11.79% 1.74% 3.37% 4.86% 6.06% 16.03% 1.89%	exican Foreign BG Medium High 1.96% 2.39% 4.03% 3.41% 11.79% US China 3.45% 4.64% 4.17% 3.81% 16.07% US Mexic 3.19%	rn Non Naturaliz Medium Low 1.92% 3.26% 3.81% 2.79% 111.79% Imports 3.95% 4.64% 4.03% 3.41% 16.03% 0 Imports 3.84%	ed Very Low 19.55% 17.05% 13.96% 14.07% 64.64% 15.85% 12.33% 11.97% 11.72% 51.87%	Total 24.99% 24.99% 25.03% 24.99% 100.00% 24.99% 25.03% 24.99% 100.00%
Trump Voters	Very High Medium High Medium Low Very Low Total Very High Medium Low Very Low Total Very High Medium High	M Very High 1.56% 2.29% 3.23% 4.72% 1.74% 3.37% 4.86% 6.06% 16.03% 1.89% 3.19%	Exican Foreign Bd Medium High 1.96% 2.39% 4.03% 3.41% US China 3.45% 4.64% 4.17% 3.81% 16.07% US Mexic 3.19% 4.39%	rn Non Naturaliz Medium Low 1.92% 3.26% 3.81% 2.79% 11.79% 11.79% 11.79% 1.79% 4.64% 4.03% 3.41% 16.03% 0 Imports 3.84% 4.75%	ed Very Low 19,55% 17,05% 13,96% 14,07% 64,64% 15,85% 12,33% 11,97% 11,72% 51,87% 16,07% 12,66%	Total 24.99% 24.99% 25.03% 24.99% 24.99% 24.99% 25.03% 25.03% 24.99% 100.00%
Trump Voters	Very High Medium High Medium Low Very Low Total Very High Medium High Medium Low Very High Medium High Medium High Medium Low	M Very High 1.56% 2.29% 3.23% 4.72% 11.79% 1.74% 3.37% 4.86% 6.06% 16.03% 1.89% 3.19% 5.01%	exican Foreign Bd Medium High 1.96% 2.39% 4.03% 3.41% US China 3.45% 4.64% 4.17% 3.81% 16.07% US Mexic 3.19% 4.39%	rn Non Naturaliz Medium Low 1.92% 3.26% 3.81% 2.79% 11.79% 11.79% 1.79% 4.64% 4.03% 3.41% 16.03% o Imports 3.84% 4.75% 4.21%	ed Very Low 19.55% 17.05% 13.96% 14.07% 64.64% 15.85% 12.33% 11.97% 11.72% 51.87%	Total 24.99% 24.99% 25.03% 24.99% 100.00% 24.99% 25.03% 100.00% 24.99% 25.03%
Trump Voters	Very High Medium High Medium Low Very Low Total Very High Medium Low Very Low Total Very High Medium High Medium High Medium Low Very Low	M Very High 1.56% 2.29% 3.23% 4.72% 11.79% 1.74% 3.37% 4.86% 6.06% 16.03% 1.89% 3.19% 5.01% 5.95%	exican Foreign BG Medium High 1.96% 2.39% 4.03% 3.41% 11.79% US China 3.45% 4.64% 4.17% 3.81% 16.07% US Mexic 3.19% 4.39% 4.39% 4.10%	rn Non Naturaliz Medium Low 1.92% 3.26% 3.81% 2.79% 11,79% 11,79% 4.64% 4.03% 3.41% 16.03% o Imports 3.84% 4.75% 4.21% 3.26%	ed Very Low 19.55% 17.05% 13.96% 14.07% 64.64% 15.85% 12.33% 11.97% 11.72% 51.87% 10.07% 12.66% 11.43% 11.68%	Total 24.99% 24.99% 25.03% 24.99% 24.99% 24.99% 25.03% 24.99% 24.99% 24.99% 24.99% 24.99%

Commuting Zones

	Mexi	co Foreign Bo	rn Non Natur	alized
		High	Low	Total
	High	119	179	298
	Low	200	141	341
	Total	319	320	639
		US China	Imports	
Trump	High	136	184	320
Voters	Low	182	137	319
	Total	318	321	639
		US Mexic	o Imports	
	High	130	189	319
	Low	188	132	320
	Total	318	321	639
	Mexi	<u>co Foreign Bo</u>	rn Non Natur	alized
	Mexi	<u>co Foreign Bo</u> High	rn Non Natur Low	alized Total
	Mexi High	co Foreign Bo High 18.62%	rn Non Natur Low 28.01%	alized Total 46.64%
	Mexi High Low	co Foreign Bo High 18.62% 31.30%	rn Non Natur Low 28.01% 22.07%	alized Total 46.64% 53.36%
	High Low Total	co Foreign Bo High 18.62% 31.30% 49.92%	rn Non Natur Low 28.01% 22.07% 50.08%	alized Total 46.64% 53.36% 100.00%
	High Low Total	co Foreign Bo High 18.62% 31.30% 49.92% US China	rn Non Natur Low 28.01% 22.07% 50.08% Imports	alized Total 46.64% 53.36% 100.00%
Trump	Mexi High Low Total High	co Foreign Bo High 18.62% 31.30% 49.92% US China 21.28%	rn Non Natur Low 28.01% 22.07% 50.08% Imports 28.79%	alized Total 46.64% 53.36% 100.00% 50.08%
Trump Voters	High Low Total High Low	co Foreign Bo High 18.62% 31.30% 49.92% US China 21.28% 28.48%	rn Non Natura Low 28.01% 22.07% 50.08% ilmports 28.79% 21.44%	alized Total 46.64% 53.36% 100.00% 50.08% 49.92%
Trump Voters	High Low Total High Low Total	co Foreign Bo High 18.62% 31.30% 49.92% US China 21.28% 28.48% 49.77%	rn Non Natur Low 28.01% 22.07% 50.08% 1mports 28.79% 21.44% 50.23%	Total 46.64% 53.36% 100.00% 50.08% 49.92% 100.00%
Trump Voters	Mexi High Low Total High Low Total	co Foreign Bo High 18.62% 31.30% 49.92% US China 21.28% 28.48% 49.77% US Mexic	rn Non Natur Low 28.01% 22.07% 50.08% http://www.solution. 28.79% 21.44% 50.23% o Imports	alize d Total 46.64% 53.36% 100.00% 50.08% 49.92% 100.00%
Trump Voters	Mexi High Low Total High Low Total High	co Foreign Bo High 18.62% 31.30% 49.92% US China 21.28% 28.48% 49.77% US Mexic 20.34%	rn Non Natur Low 28.01% 22.07% 22.07% 50.08% http://www.second/se	alize d Total 46.64% 53.36% 100.00% 50.08% 49.92% 100.00%
Trump Voters	High Low Total High Low Total High Low	co Foreign Bo High 18.62% 31.30% 49.92% US China 21.28% 28.48% 49.77% US Mexic 20.34% 29.42%	rn Non Natur Low 28.01% 22.07% 50.08% 1mports 28.79% 21.44% 50.23% 50.23% 0 imports 29.58% 20.66%	Alize d Total 46.64% 53.36% 100.00% 50.08% 49.92% 100.00% 49.92% 50.08%

			Mexico Foreign Bo	rn Non Naturalized		
		Very High	Medium-High	Medium-Low	Very Low	Total
	Very High	23	30	36	71	160
	Medium-High	29	38	56	37	160
	Medium-Low	57	55	27	21	160
	Very Low	50	37	40	32	159
	Total	159	160	159	161	639
			US China	Imports		
	Very High	18	35	47	59	159
	Medium-High	34	48	47	31	160
ump voters	Medium-Low	59	38	31	32	160
	Very Low	48	38	35	39	160
	Total	159	159	160	161	639
			US Mexic	o Imports		
	Very High	18	36	44	61	159
	Medium-High	33	43	48	36	160
	Medium-Low	60	37	36	27	160
	Very Low	48	43	32	37	160
	Total	159	159	160	161	639

	Mexican Foreign Born Non Naturalized					
		Very High	Medium-High	Medium-Low	Very Low	Total
	Very High	3.60%	4.69%	5.63%	11.11%	25.04%
	Medium-High	4.54%	5.95%	8.76%	5.79%	25.04%
	Medium-Low	8.92%	8.61%	4.23%	3.29%	25.04%
	Very Low	7.82%	5.79%	6.26%	5.01%	24.88%
	Total	24.88%	25.04%	24.88%	25.20%	100.00%
			US China	Imports		
	Very High	2.82%	5.48%	7.36%	9.23%	24.88%
Trump Mators	Medium-High	5.32%	7.51%	7.36%	4.85%	25.04%
rrump voters	Medium-Low	9.23%	5.95%	4.85%	5.01%	25.04%
	Very Low	7.51%	5.95%	5.48%	6.10%	25.04%
	Total	24.88%	24.88%	25.04%	25.20%	100.00%
			US Mexic	o Imports		
	Very High	2.82%	5.63%	6.89%	9.55%	24.88%
	Medium-High	5.16%	6.73%	7.51%	5.63%	25.04%
	Medium-Low	9.39%	5.79%	5.63%	4.23%	25.04%
	Very Low	7.51%	6.73%	5.01%	5.79%	25.04%
	Total	24.88%	24.88%	25.04%	25.20%	100.00%







Trump Vote Shares vs US-China Net Trade (in Millions)









5. Methodology and Data Regressions

5.1 Econometric Methodology

In order to determine the relationship between both international trade and migration and support for Donald Trump in the 2016 republican primaries, we applied the following Ordinary Least Squared (OLS) regressions:

```
ElectOutcomes<sub>county</sub> = US_MX_Export<sub>county,sector</sub> + US_CN_Export<sub>county,sector</sub>
+US_MX_Import<sub>county,sector</sub> + US_CN_Import<sub>county,sector</sub>
+MxForeignBornNat<sub>county</sub> + MxForeignBornNonNat<sub>county</sub>
+PoliFactors<sub>county</sub> + SocEconFactors<sub>county</sub> + SalesSectors<sub>county</sub>
+AveTradeGrowth<sub>county</sub> + Uncontested<sub>county</sub> + ε<sub>county</sub>
```

ElectOutcomes_{county} includes: "Trump Winning," which is a dichotomous variable that indicates whether Trump received the most votes in a given county; Trump's share of Republican primary votes in a given county; and Trump's share of total votes in both primaries.

 $US_MX_Export_{county}$ refers to the value of U.S. exports to Mexico by sector, $US_CN_Export_{county}$ refers to the value of U.S. exports to China by sector, $US_MX_Import_{county}$ refers to value of U.S. imports from Mexico by sector, and finally $US_CN_Import_{county}$ refers to the value of U.S. imports from China by sector.

MxForeignBornNat_{county} refers to the number of naturalized Mexican foreign born in an observed county, while MxForeignBornNonNat_{county} refers to the number of non-citizen Mexican foreign born in an observed county.

PoliFactors_{county} refers to the political characteristics of an observed county, while SocEconFactors_{county} refers to the socioeconomic characteristics of an observed county. Specifically, political characteristics includes the number of candidates on the primary ballot for a given party in an observed county, and a dichotomous variable that indicates whether the county is a "Republican oriented" county. This variable is defined as positive if Mitt Romney won a given county in the 2012 general election. Socioeconomic characteristics include total population number, median household income, percentage of the population that has at least a high school diploma, poverty rate, unemployment rate, and race/ethnic composition (i.e. number of White, Black, Asian, and so on) in a specific county.

SalesSectors_{county} include the annual employment rate and annual pay rate in a specific sector and in a specific county. AveTradeGrowth_{county} includes the annual average export and import growth for trade between the US and Mexico and between the US and China.

Finally, Uncontested_{county} is a dichotomous variable that will equal to 1 if the given county is in a state which had an uncontested primary in 2016.

We made the three ElectOutcomes_{county} variables our dependent variable because they are robust and direct measures of where Trump's support is the most prevalent. We examined both Trump's share of total primary votes and his share of Republican primary votes because these two metrics allow us to draw important distinctions. For example, the former allows us to measure the forces that our influencing the general electorate, while the latter allows us the measure different forces influence the republican electorate. This is especially relevant to our analysis of the relationship between Trump support and the size of the Mexican migrant population.

Trade and immigration are generally the central explanatory factors that we wish to explore. To measure impacts of trade on our dependent variables, we have focused on trade with China and Mexico. These two countries were selected because they are two of the US's largest trading partners, and because they have both been specifically targeted by Donald Trump's

trade rhetoric. We measured exports and imports between the US and Mexico and between the US and China.

In order to measure the collective impacts of both exports and imports on a given county, we also conducted the following regression which uses net trade, instead of separately using either exports or imports, as the explanatory trade variable:

ElectOutcomes_{county} = US_MX_NetTrade_{county,sector} +US_CN_NetTrade_{county,sector} +MxForeignBornNat_{county} + MxForeignBornNonNat_{county} +PoliFactors_{county} + SocEconFactors_{county} + SalesSectors_{county} +AveTradeGrowth_{county} + Uncontested_{county} + ε_{county}

Besides of using net trade, we also use Total import and Total export as explanatory variables for trade. We did this because there are significant differences between the volume of imports and exports from Mexico and the volume of imports and exports from China. The regression model is shown as follow:

$$\begin{split} \text{ElectOutcomes}_{\text{county}} &= \text{Total}_{\text{Export}_{\text{county},\text{sector}}} + \text{Total}_{\text{Import}_{\text{county},\text{sector}}} \\ &+ Mx\text{ForeignBornNat}_{\text{county}} + Mx\text{ForeignBornNonNat}_{\text{county}} \\ &+ \text{PoliFactors}_{\text{county}} + \text{SocEconFactors}_{\text{county}} + \text{SalesSectors}_{\text{county}} \\ &+ Ave\text{TradeGrowth}_{\text{county}} + \text{Uncontested}_{\text{county}} + \varepsilon_{\text{county}} \end{split}$$

Regarding the explanatory variables for immigration, we controlled for both Mexican naturalized foreign born and non-citizen Mexican foreign born. We did not include total naturalized foreign born and total non-citizen foreign born because we found a strong correlation between Mexican foreign born and total foreign born. We also chose to use Mexican foreign born (naturalized and non-citizen), rather than total foreign born (naturalized and non-citizen), because total foreign born includes immigrants from many different countries which may introduce too much noise into the analysis.

We controlled for political and economic factors because of their potential impact on electoral outcomes. It is clear that both the number of electoral candidates and, when using the share of Republican primary votes as the dependent variable, whether or not a county is "Republican oriented," can have an outsized impact on an electoral outcome. Socioeconomic factors may not have direct impact on voting patterns, but they will have a direct impact on voters, which will indirectly affect electoral outcomes. Thus, controlling for these factors is critical.

Sales sectors are controlled for because they may reflect the channel in which trade affects electoral outcomes. That is, different trade sectors will affect the sales of different sectors in different ways. Average growth in trade is controlled due to the temporal limitations of our analysis. Our analysis used cross sectional data instead of a panel data. Therefore, controlling for average growth is crucial because it takes into account the dynamic of trade over time.

Finally, controlling for uncontested primaries is of obvious importance, given that a candidate in a late uncontested primary will have near unanimous support, while that same candidate in that same state would have had much lower levels of support had they been competing against a full slate of candidates earlier in the primary season.

	Full Model at County Level	
	Trump's Share of Votes in D and R Primaries	Trump's Share of Votes in R Primaries
dummy_uncontested	20.81530***	25.01678***
-	(0.36003)	(0.30233)
net_trade_us_cn		
net_trade_us_mx		
nofcandidates	-0.13425	-2.97907***
	(0.08346)	(0.07408)
republican_oriented	10.88495***	-1.44234***
	(0.34020)	(0.29639)
mx_fb_nat	0.00328	0.00342
	(0.02306)	(0.01922)
mx_fb_non_nat	-0.03300***	-0.04601***
	(0.00920)	(0.00770)
ave_growth_us_mx_export	-0.00219***	-0.00044
	(0.00036)	(0.00030)
ave_growth_us_cn_export	0.00017**	0.00080***
	(0.0008)	(0.00006)
o.ave_growth_mx_cn_import	-	-
ave_growth_us_cn_import	1.42428***	1.91470***
	(0.15694)	(0.13234)
county_tot_pop	0.00000*	0.00002***
	(0.00000)	(0.00000)
county_hh_median	-0.00049***	-0.00032***
	(0.00002)	(0.00002)
county_higher_hs	-41.39497***	-26.15968***
	(2.83353)	(2.37644)
county_poverty_rate	-103.61370***	-78.00082***

5.2 Regressions at County Level

	(4.73863)	(3.97566)
county_unemployment_rate	61.49366***	151.36502***
	(5.53475)	(4.59380)
annualaverageemployment	-0.00000	0.00001***
	(0.00000)	(0.00000)
annualaveragepay	-0.00002***	0.00002***
	(0.00001)	(0.00001)
white	-0.00189	-0.01515***
	(0.00283)	(0.00231)
black	-0.00095	-0.02193***
	(0.00320)	(0.00262)
ame_indian	0.01618	-0.04540***
	(0.01252)	(0.01032)
asian	-0.02060***	-0.00789**
	(0.00492)	(0.00401)
native_hawaiian	0.02315	-0.14914***
	(0.02279)	(0.01853)
county_us_cn_export	0.01021***	0.00309***
	(0.00053)	(0.00043)
county_us_cn_import	-0.00069**	-0.00127***
	(0.00028)	(0.00024)
county_us_mx_export	0.00012	-0.00005
	(0.00011)	(0.00009)
county_us_mx_import	-0.00166***	0.00103***
	(0.00043)	(0.00038)
Constant	65.60082***	63.92579***
	(3.66528)	(3.08713)
Observations	9,339	8,836
R-squared	0.45455	0.70324

Standard errors in parentheses

*** p<0.01, ** p<0.05, * p<0.1

5.3 Regressions at Commuting Zone (CZ) Level

Full Model at Commuting Zone Level	
Trump's Share of Votes in D and R	Trump's Share of Votes in R
Primaries	Primaries

dummy_uncontested	20.81530*** (0.36003)	25.01678*** (0.30233)
net_trade_us_cn		
net_trade_us_mx		
nofcandidates	-0.13425	-2.97907***
	(0.08346)	(0.07408)
republican_oriented	10.88495***	-1.44234***
	(0.34020)	(0.29639)
mx_fb_nat	0.00328	0.00342
	(0.02306)	(0.01922)
mx_fb_non_nat	-0.03300***	-0.04601***
	(0.00920)	(0.00770)
ave_growth_us_mx_export	-0.00219***	-0.00044
	(0.00036)	(0.00030)
ave_growth_us_cn_export	0.00017**	0.00080***
	(0.0008)	(0.00006)
o.ave_growth_mx_cn_import	-	-
ave_growth_us_cn_import	1.42428***	1.91470***
	(0.15694)	(0.13234)
cz_tot_pop	0.00000*	0.00002***
	(0.00000)	(0.00000)
cz_hh_median	-0.00049***	-0.00032***
	(0.00002)	(0.00002)
cz_higher_hs	-41.39497***	-26.15968***
	(2.83353)	(2.37644)
cz_poverty_rate	-103.61370***	-78.00082***
	(4.73863)	(3.97566)
cz_unemployment_rate	61.49366***	151.36502***
	(5.53475)	(4.59380)
annualaverageemployment	-0.00000	0.00001***
	(0.00000)	(0.0000)
annualaveragepay	-0.00002***	0.00002***
	(0.00001)	(0.00001)
white	-0.00189	-0.01515***
	(0.00283)	(0.00231)
black	-0.00095	-0.02193***
	(0.00320)	(0.00262)

ame_indian	0.01618	-0.04540***
	(0.01252)	(0.01032)
asian	-0.02060***	-0.00789**
	(0.00492)	(0.00401)
native_hawaiian	0.02315	-0.14914***
	(0.02279)	(0.01853)
cz_us_cn_export	0.01021***	0.00309***
	(0.00053)	(0.00043)
cz_us_cn_import	-0.00069**	-0.00127***
	(0.00028)	(0.00024)
cz_us_mx_export	0.00012	-0.00005
	(0.00011)	(0.0009)
cz_us_mx_import	-0.00166***	0.00103***
	(0.00043)	(0.00038)
Constant	65.60082***	63.92579***
	(3.66528)	(3.08713)
Observations	9,339	8,836
R-squared	0.45455	0.70324

Standard errors in parentheses

*** p<0.01, ** p<0.05, * p<0.1

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