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JEL CLASSIFICATIONS: P16, F60, N40

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Populism is More than Hysteria: *A Selective Review of the 2016 U.S. Presidential Election**

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1 August 2020

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Abstract

Immigration and foreign efficiency have increased domestic labor market competition and displaced native workers. Populist rhetoric identifies immigrants, outsourcing, and trade deficits as the causes for voter's socioeconomic anxieties. This populist rationale gained political traction in the 2016 U.S. presidential election. The support from voters for a populist candidate, who would win the election, has a tendency to place a hysteria label upon these voters. Critics of populism have charged these voters with acting irrationally given the long-term, beneficial impacts of globalization for workers in the U.S. This study questions these charges by developing a spatially weighted regression to predict, at the county level, the proportion of populist votes in the 2016 U.S. general election. The results suggest that voters in support of the populist candidate viewed protectionism as a reasonable solution to their immediate economic needs and concerns. Such a conclusion lifts the hysteria label and replaces it with sympathetic views for populist voters in 2016.

*Special Thanks to the Political Economy Research Institute (PERI) at Middle Tennessee State University for the research opportunity, *semper gratus*. Also, without the political economic thought and editorial remarks from Dr. Michael Federici, Dr. Daniel J. Smith, Dr. Jennifer Pettit, and Bronwyn G. Graves this research would not be possible. And above all, thanks to the mentorship of Dr. E. Anthony Eff who was the *sin qua non* for the research and for the years of economic teaching. Thank you all, for being a part of my first paper.

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1: Introduction

Populism is spreading all over Europe and the Americas and is speculated to be a protest against the current political climate.¹ The new wave of Western right-wing populism dates back to the early 1970s. Both Denmark's Progress Party and People's Party, alongside the Progress Party in Norway, catalyzed the movement (Camus & Lebourg 2017). The resurgence of populism received little attention until the Brexit vote in June 2016, which was quickly followed by the U.S. presidential election.

In explaining the appeal of populist candidates in the 2016 election, voters pointed to the impact of globally interconnected markets on their economic security. For over a decade, income inequality has become more pronounced as the American median annual income has decreased alongside declining wages and rising unemployment (Spence *et al.* 2011, Semega *et al.* 2017). Americans have felt the impact of jobs being offshored to labor surplus nations as well as domestic labor market competition from immigrants. In addition to these economic changes that are known to be consequences of globalization's exponential growth, the War on Terror and the Great Recession of 2008 provided enough shock for working-class voters to demand change (Smith 2019). A populist political candidate consequently appealed to voters by promising to renegotiate trade deals, restrict immigration, and assist declining American industries.

In the 2016 election, the populist candidate offered protectionism as a remedy for voters' concerns about the negative economic impacts of globalization. These policies have received criticism because economists generally view free trade and interconnected markets as beneficial, even though shifting markets displace workers in the process. This *creative destruction* view of

¹Andre Tartar, "How the Populist Right Is Redrawing the Map of Europe," *Bloomberg*, December 11, 2017, <https://www.bloomberg.com/graphics/2017-europe-populist-right/>

workers by pro-globalists helps to explain voters' rational attraction to populism's empathetic attention to globalization's consequences.² The instant relief that protectionist policies promise is not as irrational as critics claim and should not be dismissed as a hysterical response to globalization. Lacking social safety nets, working-class voters rationally support policies that address their immediate economic situation, although they might also lack awareness that protectionist policies could lead to additional problems. As the 2016 general election illuminates, political and economic leaders must attend to workers' recognition that even if free trade sustains economic development in a global economy, it diminishes economic conditions for workers in developed countries (Stiglitz 2017). Policies that create a balance between protection and free trade could ease the economic pressure felt by this contingent of workers and thus reduce the appeal of populist policies that provide short-term benefits at the expense of workers' long-term interests.

2: Literature Review:

Aberration from traditional politics by rejecting them, defined the 2016 U.S. Presidential election. Arguably, a populist candidate won the most globally important political position. In order to understand the appeal of populist rhetoric to U.S. voters, populism should be clearly defined. Cas Mudde, a political scientist who focuses his research on political extremism, offers a modified definition of populism:

Populism is a thin-centered ideology that considered society to be ultimately separated into two homogeneous and antagonistic

² Creative Destruction, also known as Schumpeter's gale, was a concept developed by Joseph Schumpeter and refers to economic innovation killing off old economic processes which leaves those who were employed by the old processes displaced. See Schumpeter (1942) for more information.

camps, “the pure people” verses “the corrupted elite,” and which argues that politics should be an expression of the *volonté générale* (general will) of the people. (Mudde and Kaltwasser 2017)

Mudde’s ideational approach to defining populism uses ‘thin-centeredness’ to make the definition of populism malleable in a liberal democratic setting. A candidate does not have to follow an -ism nor a specific political platform to identify or be identified as a populist. Rather, ‘thin-centeredness’ enables populist leaders to occupy political positions in a wide array of governments. In the 2016 presidential election, ‘thin-centeredness’ enabled the winning candidate to appeal to morally and economically conservative voters while also framing his candidacy as a solution to class struggle between the U.S. public and governing elites.³ Trump’s inaugural address illustrates this conjoined battle against elitism in proclaiming, “We are transferring power from Washington, D.C. and giving it back to you, the people.”⁴

2.1: Two-Party System Populism

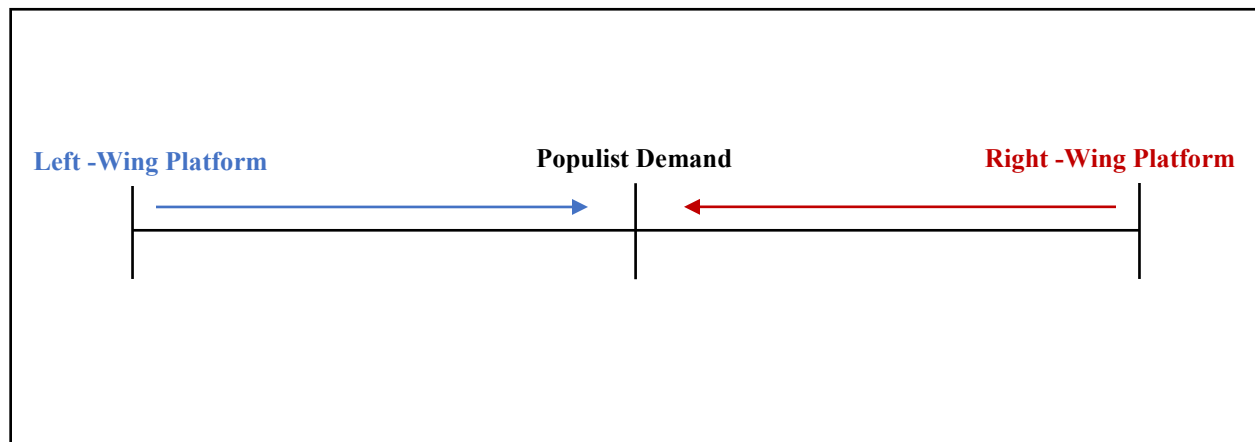
Trumpian populism distinguished itself from conventional U.S. presidential platforms. His strongly worded rhetoric and nostalgic political platform resonated with voters’ perception of a troubled nation in decline. The implication of such rhetoric can create a situation where a candidate who would normally be predicted to lose the election based on political competence, wins with the message they are using (Drew 2019). Mr. Trump’s irregular tactics and his unorthodox platform caused pundits to dismiss his prospects for winning the 2016 presidential

³ Donald J. Trump, “Let Me Ask America a Question,” *The Wall Street Journal*, April 14, 2016.

⁴ Aaron Blake. "Donald Trump’s full inauguration speech transcript, annotated," *The Washington Post*, January 1, 2017.

election (Enns *et al.* 2017, Kennedy *et al.* 2018, Panagopoulos *et al.* 2018, Wright & Wright 2018). Trump rejected the platitude speech typical of traditional politics and sought to connect with voters emotionally (Mohammadi & Javadi 2017, Demata 2017). Populist rhetoric was key to this strategy, and it enabled Trump not only to appeal to the Republican Party's more socially and economically conservative base but also to establish a new connection with working-class voters.

FIGURE 1. THE 2016 U.S. PRESIDENTIAL ELECTORATE'S DEMAND MIDPOINTS MODEL



NOTE: Model depicts how normative platforms shifted in 2016 towards the populist demand while preserving political leaning.

America's two-party system also facilitated Trump's populist victory in the 2016 election. Trump's popularity with Republicans, despite his deviation from the normative conservative platform, can be explained with Hotelling's Law. Just as any company has an incentive to maximize the number of consumers buying its product, political parties must expand their appeal to the largest possible number of voters. In consumer markets, companies adhere to consumer demand by getting as close to a competitor's product while preserving their own distinctive traits (Hotelling 1990). In electoral contests, political parties will similarly adjust their platforms to comply with a median demand, yet they must also preserve identifying ideologies and positions (Westley *et al.* 2004). Relative to the 2016 general election, Hotelling's Law is

illustrated by the similarities and differences between Donald Trump and Bernie Sanders as shown in Figure 1. Fulfilling voter demand, both candidates gained popularity with populist rhetoric that critiqued the economic situation impacting the opportunities and status of many working-class Americans.⁵ However, their vastly different positions on the partisan spectrum distinguished their proposed solutions to the issues they described in such similar terms (Jensen & Henrik 2017).

As the popularity of both Donald Trump and Bernie Sanders in the 2016 presidential election reveals, the rise of populism must be viewed as a backlash against the effects of globalization (Rodrik 2018). Both candidates invoked the specter of elitism to explain these effects while partisanship shaped how they respectively depicted the entrenched, predatory class of leaders that had so disadvantaged American workers. Adhering to a protectionist script, Trump gained electoral support by castigating foreign labor competition and immigration. Although these threats to American labor originated in interconnected global markets, Trump sidestepped the capitalist critique to maintain support from economic conservatives who vehemently opposed Sanders's calls for democratic socialist solutions to the decline of working-class fortunes. When Sanders lost the Democratic primary, Trump's populism retained supporters because he appeared to understand and represent their cries for help (Berman 2019).

2.2: The Irrational Populist Voter Argument

Populism is a necessary, radical revision to emancipate liberal democracies from stagnated, inefficient, and sometimes even corrupt governments as described by Ernesto Laclau and his life-time collaborator Chantal Mouffe (2014). Incited by an awareness of government's inability to

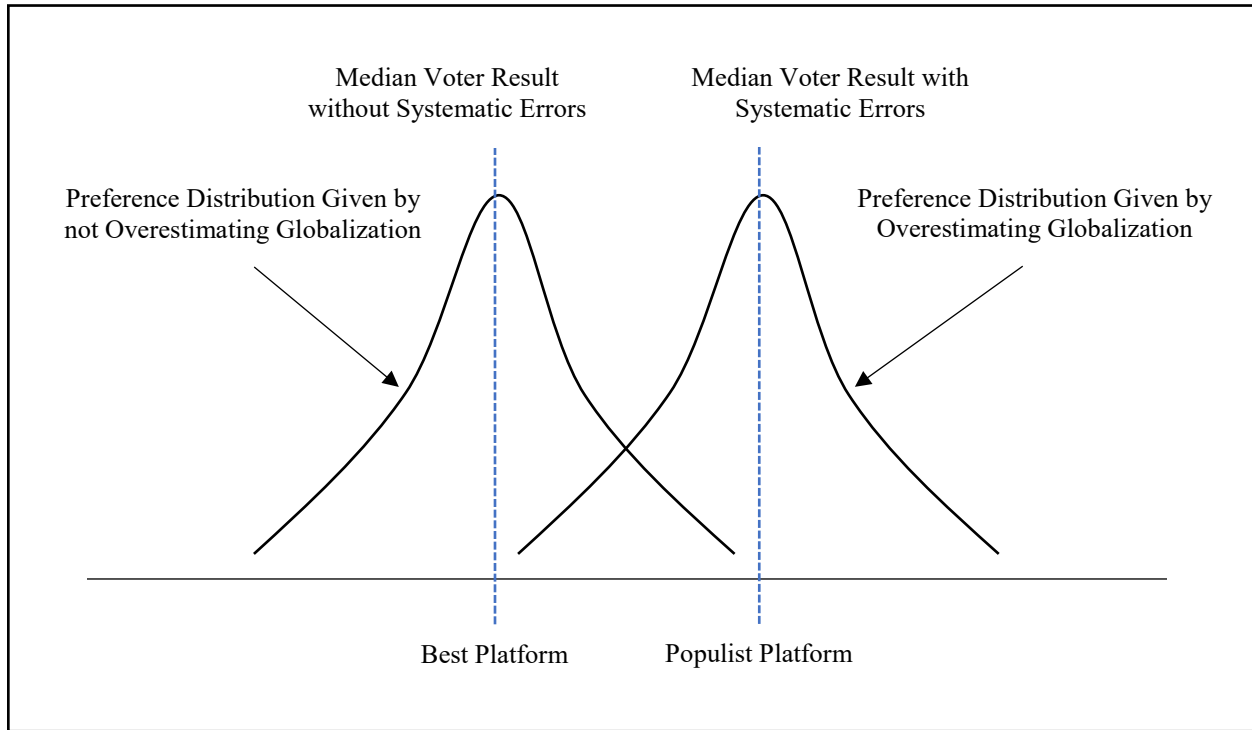
⁵ Talbot, Margaret. "The Populist Prophet," *The New Yorker* (12 October 2015): 64.

serve voters' needs and interests, populist movements represent the perspective of a politically informed choice by voters to alter government institutions and policies. Laclau's view of populism consequently frames voters as rational actors in a democratic system wherein populism is a logical strategy for achieving reform. To be an instrument for change, voter behavior must operate under the assumptions of choice theory in which aggregate voter behavior is generated by rational individual votes (Browning *et al.* 1999). The critique of choice theory in this context rests on its assumption that all voters are rational, which may not always be the case.

The influence of populist rhetoric in the 2016 election raises important questions about the rationality of American voters. Americans generally lack knowledge of basic political facts (Carpini & Keeter 1996, Somin 2016) and their limited understanding of a complex global economy calls into question voters' ability to recognize sound economic policies (Caplan 2011). The Miracle of Aggregation could provide assurance that random errors made by uninformed voters cancel each other out, ensuring that well-informed voters will select the most competent candidate. For example, if 99% of the electorate lacked information about the candidates or the issues making them irrational, these votes would be distributed randomly between two candidates. The remaining 1% of informed voters would consequently pick the best candidate. A candidate in such a scenario would need 51% of the 1% of rational voters to win an election (Caplan 2008). Optimal candidates could be elected with an ignorant majority electorate if the Miracle of Aggregation was not nullified by well-informed voters' systematic errors (Caplan 2009). A systematic error is when rational voters, who have the ability to elect an optimal candidate even with a majority of ignorant voters casting ballots, make errors which lead to the election of a sub-optimal politician. These types of biases explain why policies not beneficial to

the public, supported by the public, and then carried out by sub-optimal politicians who were voted in by the public occur constantly.

FIGURE 2. MEDIAN VOTER MODEL WITH AND WITHOUT SYSTEMATIC ERRORS



NOTE: Adapted from Caplin's *The Myth of the Rational Voter* (2011)

Empirical evidence from 1972 to 2004 showed systematically erroneous votes, by the handful of non-ignorant voters, in favor of Republican Party candidates (Richey 2013). Similarly, the 2016 Republican primaries also contained voting paradoxes such as systemic errors by the non-ignorant voters (Kurrild-Klitgaard 2018). These results imply that conservative candidates during those timeframes were possibly sub-optimal compared to their running political competition. Furthermore, Kurrild-Klitgaard's (2018) results recognized the possibility that a better candidate than the populist existed for the nomination of a Republican presidential

candidate in 2016. Thus, if the 2016 populist president was voted into office by an electorate making systematic errors, one can be skeptical regarding the rationality of the 2016 voter.

2.3: Rational Short-Run and Irrational Long-Run Voting

Another possibility for explaining populism's popularity among voters in the 2016 general election must be considered before taking the all-inclusive stance that voters lack complete rationality. Skeptical of voters' capacity to elect competent politicians, Joseph Schumpeter speculated that a failure to distinguish between immediate and long-term interests impacts the perceived rationality of electoral behavior:

Voters thereby prove themselves bad and indeed corrupt judges of such issues and often they even prove themselves bad judges of their own long-run interests, for it is only the short-run promise that tells politically and only short-run rationality that asserts itself effectively. (Schumpeter 1942)

Schumpeter's analysis helps to illuminate that contemporary populism derives its appeal from voters' backlash against the dislocating effects of globalization and their failure to consider its potential long-term benefits. Acknowledging the fact that voters are incapable of electing competent officials but constraining the ignorance to the long-run consequences of their decision, while preserving short-run rationality, makes a plausible populist narrative in 2016.

Understanding the emotional appeal of populism forces us to examine how voter rationality is both defined and measured. Donald Trump successfully focused voters' attention

on their short-term interests, even though the protectionist solutions he offered ultimately undermined the long-term benefits from globalization which might have been derived from the global economy's greater economic efficiency. Voters' preference for the populist platform might have conflicted with a more informed, macroeconomic understanding of the global economy's operation, but based on voters' immediate economic condition which could be fixed temporarily by protection, the support for Trump was not entirely irrational.

The negative economic impacts of globalization led American voters to support Donald Trump's protectionist 'America first' policies.⁶ While the expansion of interconnected markets has yielded gains for global citizens, globalization has meant a decline in real income for the large majority of Americans over the past decade (Haskel 2012). Rising unemployment and increasing income inequality has not only affected those working-class households directly involved but has also trickled down into surrounding communities (Berger 2017, Autor *et al.* 2013). This evidence of declining opportunity and mounting anxiety creates an argument for economists to be more sympathetic to globalization's losers (Rodrik 1998). Expressing concern for the economic and emotional costs of globalization is taboo for economists and intellectuals who focus on the long-term benefits of free trade and market competition. For example, wages have been shown to increase over time when domestic markets remain open to foreign trade (Wallerstein 2000, Rama 2003). Also, domestic benefits are found more frequently in countries with interconnected markets and lower trade barriers correlate with higher national welfare expenditures (Caliendo & Parro 2015, Rao 2011).

⁶ Jose Del Real. "Trump, Pivoting to the General Election, Hones 'American First' Foreign Policy Vision," *The Washington Post*, April 27, 2016. & Maggie Haberman and David E. Sanger. "Transcripts: Donald Trump Expounds on His Foreign Policy Views." *The New York Times*, March 26, 2016.

For economists who point out the net positive results of mobile labor markets, voters' attention to the hardships that attend globalization is often viewed as irrational. Take the populist attack on immigration, for example. The U.S. has experienced a large influx of immigration from the turn of the century due to loose immigration policies and an incentive for migrants to capitalize on high minimum wages and protective labor regulations for workers (Camarota 2010). The U.S. has accrued significant economic benefits from immigrant labor at the aggregate long-run level, as simulated models reveal that a reduction in restrictive barriers to immigration has supported 50% to 100% increases in GDP (Clemens 2011). Native wages are negatively affected in the short run from competing migrant labor, but as the country's capital adjusts wages begin to bolster. In an empirical investigation of the short and long-run effects of immigration on Switzerland between 2002 and 2008, Gerfin and Kaiser (2010) found that in the short run immigration will produce negative macroeconomic effects on the average wage which gradually declines producing long-run gains. These consequences of immigration are similar to the Mexican immigration to the U.S. (Borjas 2014). However, before a country's capital adjusts to an increase in immigrant workers, native workers can demand protection, which leads to right-winged opposition to immigrants (Powell 2016). Immigration in the short run, especially true in the manufacturing sector, creates competition between natives and immigrants for low-skilled jobs (Wanger 2010, Gould 2019). Naturally, an increase in the supply of those seeking low-skilled jobs decreases domestic wages for those jobs. Trump's anti-immigrant rhetoric, even with its national security stance rather than the protection of domestic job concern, is able to gain support from low-skilled Americans whose jobs are being lost and wages cut because of competing immigrant labor (Swank & Betz 2003, Hing 2017). Opposition to immigration can be viewed as reasonable given the relative lack of temporary economic relief packages for displaced

workers (Kletzer 2005). Rather than provide such support, populism's anti-immigrant rhetoric capitalizes on the frustration of low-skilled American workers. Critics of populism overlook the perspective of the low-skilled workers, who favor the populist candidate's anti-immigration rhetoric because of the secondary effect it has to protect their job. In other words, low-skilled domestic workers will prefer anti-immigration policies no matter the motive than no policies at all. An awareness that displaced workers make rational decisions from a different locus than what professional economists suggest emphasizes that providing temporary relief to workers who are affected by immigration while simultaneously facilitating the long-term positive impacts of globalization might defuse populism's appeal for working-class voters.

Along with protecting the nation which implicitly protects low-skilled American workers, the populist agenda in the 2016 general election encompassed an 'American First' position on international trade. Riding a wave of public support for protectionism into office, Trump has dealt with trade disparities by starting trade wars with traditional partners and punishing domestic companies for seeking cheaper sources of labor.⁷ Such policies appear democratic in their response to voters' populist demands for federal interventions that would protect jobs from foreign competition including offshoring (Margalit 2011).

The populist commitment to protectionist economic policies illuminates the discrepancy between popular and academic understandings of economic rationality. If populist voters were motivated in 2016 by the rational, short-term goals of preserving jobs and wages, Trump's apparent efforts to fulfill these economic demands has affirmed the wisdom of their electoral support. The domestic labor force is affected in both wages and employment - positively and negatively - from moving production overseas where labor is substantially more efficient

⁷ Tejada, Carlos, and Amie Tsang. "How Trump's Trade War Is Being Fought Around the World," *The New York Times*, May 31, 2019.

(Deardorff 2001, Kohler 2001). A total resistance to outsourcing jobs to labor surplus countries could eventually prevent domestic employment and wages from gaining from the benefit the international market has to offer (Arndt 1997, 1998). Erecting barriers to trade would also have a substantially negative, long-term impact on U.S. workers (Miller 2001). To avoid violating the rational gains from international policies, a focus on enabling the workforce to perform the final stages of assembly or more complex production processes where labor-surplus counties are inefficient.

Trump's solution for equalizing the balance of trade restores protectionist policies from the Reagan era. Ronald Reagan's former trade negotiator Robert Lighthizer currently works, for example, in the Trump Administration where he continues to implement his view that protectionist policies are a reliable solution for trade disparities between the U.S. and its partners (Irwin 2017). In analyzing the effects of these policies, the 1982 U.S. International Trade Commission concluded they had adverse impacts in achieving the goal of trade protection.⁸ Renegotiating trade relations could nevertheless be a very beneficial method for creating fairer trade and adapting more gradually to the movement of American jobs abroad. The perceived individual benefits of market adaptation and trade adjustment make it reasonable for working-class voters to support these protectionist initiatives. Such policies should be carefully considered and not undertaken as a political stunt.

3: Data

The data used in the study was publicly available and at the county level. Alaska, Hawaii and some Virginia counties were excluded from the study. Alaska and Hawaii counties were

⁸ United States International Trade Commission, *Operation of the Trade Agreements Program*, John W. Suomela, Martin F. Smith, Thomas F. Jennings. 34, Washington D.C., 1982

excluded from the study because of their unsuitableness for the spatial lag model. Some Virginia counties were excluded because some sources for the data confounded city and county data.

There were 3,045 U.S. counties remaining after these observations were taken out. Table 1 and 2 respectively provide the data sources and the descriptive statistics for the variables in the study.

TABLE 1. DATA SOURCES

Data Source	Table Title	Web Location
MIT Election Lab	<i>County Presidential Election Returns 2000 – 2016</i>	https://doi.org/10.7910/DVN/VOQCHQ
U.S. Census Bureau	<i>County-to-County Migration: Flows 2011-2015 AC, In-, Out-, Net, and Gross Migration</i>	https://www.census.gov/data/tables/2015/demo/geographic-mobility/county-to-county-migration-2011-2015.html
American Factfinder	<i>Total Population from the American Community Survey: 2015 5-year</i>	https://factfinder.census.gov/faces/nav/jsf/pages/index.xhtml
	<i>Latino Origin by Race: 5-year estimate</i>	
	<i>Limited English-Speaking Households and Hispanic 2015 5-year</i>	
	<i>Gini Coefficient by U.S. County in the year 2015</i>	
	<i>Employment Status: 5-year estimate</i>	
Bureau of Economic Analysis	<i>State Wage by Industry Data (2001 – 2015) (CAEMP25N: Total Full-Time and Part-Time Employment by NAICS Industry 1/)</i>	https://www.bea.gov/data/employment/employment-by-industry

NOTE: (1.) American Factfinder data was merged with the U.S. Census Bureau Data base. See the Census Bureau Database for the new location of data: data.census.gov (2.) All datasets pulled, excluding the those from the MIT Election Lab, where 2015 observations.

Voting proportions came from the MIT Election Lab in the Harvard Dataverse. Votes for the Republican party in 2016 and 2012 were normalized by total votes per county. The 2016 results provided the populist proportion which was used as the dependent variable. In predicting 2016 election results this study implemented observations from 2015 because using earlier values for independent variables avoid the problem of endogeneity. These earlier values also had

TABLE 2. DISCRIBTIVE STATISTICS

Variable	Description	Source	Mean	Median	St. Dev.	Min	Max	2Q	3Q
Populist	Populist Vote Proportion in 2016	*	0.635	0.665	0.155	0.041	0.946	0.548	0.750
Republican	Republican Vote Proportion in 2012	*	0.598	0.609	0.147	0.072	0.933	0.505	0.704
Gini	Gini Coefficient in 2015	‡	0.443	0.441	0.034	0.329	0.624	0.419	0.464
Unemployment	Unemployment Rate in 2015	‡	0.078	0.075	0.035	0.000	0.294	0.055	0.097
Construction	Proportion of Construction Employment in 2015	§	0.054	0.053	0.029	0.000	0.390	0.041	0.068
Farming	Proportion of Farming Employment in 2015	§	0.079	0.057	0.077	0.000	0.584	0.021	0.113
Manufacturing	Proportion of Manufacturing Employment in 2015	§	0.080	0.065	0.068	0.000	0.588	0.028	0.114
Mining	Proportion of Mining Employment in 2015	§	0.014	0.001	0.041	0.000	0.820	0.000	0.007
Trans. & Wear.	Proportion of Transportation/Warehousing Employment in 2015	§	0.022	0.020	0.025	0.000	0.405	0.000	0.034
South Immigration	Proportion of Immigration from Central & South America and Caribbean Islands	†	0.001	0.000	0.003	0.000	0.056	0.000	0.001
South Immigration ²			(1.05) ⁻⁵	(5.54) ⁻⁸	0.000	0.000	0.003	0.000	(1.18) ⁻⁶
Other Immigration	Proportion of Immigration not from Central & South America and Caribbean Islands	†	0.065	0.060	0.028	0.009	0.437	0.046	0.076
Other Immigration ²			0.005	0.004	0.006	(7.83) ⁻⁵	0.191	0.002	0.006
Hispanic	Proportion of the Population Who Identify Themselves as Hispanic or Latino	‡	0.089	0.037	0.136	0.000	0.987	0.019	0.090
Hispanic ²			0.026	0.001	0.089	0.000	0.974	0.000	0.008
Limited Spanish	Proportion of Households Who have Limited English and Primally Speak Spanish	‡	0.014	0.004	0.028	0.000	0.404	0.001	0.014
Limited Spanish ²			0.001	(1.93) ⁻⁵	0.006	0.000	0.163	(5.32) ⁻⁷	0.000

NOTE: Refer to Table 1 for sources, (*) MIT Election Lab, (†) U.S. Census Bureau, (‡) American Factfinder, (§) Bureau of Economic Analysis.

the advantage of complying with the suggestion that voters only look back one year for explaining their vote (Fair 1996).

Illegal immigration counts were not used in this study due to the difficulty of available county level records. However, legal immigration data was gathered from the United States Census Bureau. The migration counts for 2015 were used from the Census Bureau's database. The two variables created from this dataset was South Immigration and Other Immigration. South Immigration summed migration from Central America, South America and the Caribbean. The Other Immigration variables included migration from Africa, Asia, Europe, North American, and U.S. Islands. The data was split into two variables because of the discussion of Latin America migration in the 2016 U.S. presidential election. To generate inflow migration per capita, total population counts from American Factfinder was used to normalize migration.

The use of census counts enabled a measurement of Hispanic and Latino populations in the United States. The two measurements of Hispanic and Latino cultured peoples were households with limited English who spoke primarily Spanish and self-identifying Hispanics or Latinos. The dataset providing the raw counts of those two variables were normalized by the American Factfinder dataset which outlined total population as well.

The unemployment rate and the Gini index by county was exported from American Factfinder also. Employment by industry came from the Bureau of Economic Analysis. The total employment variable in the dataset was used to normalize the proportions of industry specific employment. The industries focused by this study were farming, construction, mining, manufacturing, and transportation/warehousing.

4: Model

Election regressions are vulnerable to spatial biases making a spatial weight an important aspect of the model (Kim *et al.* 2003, Lacombe *et al.* 2007, Jensen *et al.* 2011). This study’s spatial bias was corrected with a spatial lag variable. In order to generate a lag variable, the latitude and longitude coordinates for each county were recorded by using the “`coordinates`” function in R’s “`sp`” package.⁹ The latitude and longitude coordinates from each county represented the distance from every county to another county in kilometers with the use of the “`distm`” function in R’s package titled “`geosphere`”.¹⁰ Computing the distance from county to county is shown by the following spatial matrix:

$$\mathbf{W}_{ij} = \begin{bmatrix} 0 & d_{1,2} & \cdots & d_{1,n} \\ d_{2,1} & 0 & \cdots & d_{2,n} \\ \vdots & \vdots & \ddots & \vdots \\ d_{n,1} & d_{n,2} & \cdots & 0 \end{bmatrix}, \quad (1)$$

where d_{ij} is the distance between i and j counties. The diagonal of the matrix is zero because the distance between a county and itself is zero. The spatial matrix was transformed into a k -nearest neighbor weight matrix, resulting in a weight matrix which took only the 15 nearest counties for each county i ($k=15$) and negating the influence on county i from any further counties (Cliff & Ord 1970). Let $d_{i,j}$ be the distance from i to j counties be ranked from $k = 1, \dots, 15$ where

⁹ Edzer Pebesma and Roger Bivand, “Package ‘sp’,” The Comprehensive R Archive Network, 2012, <https://cran.r-project.org/web/packages/sp/sp.pdf>.

¹⁰ Robert J. Hijmans, Ed Williams, Chris Vennes, “Package ‘geosphere’,” The Comprehensive R Archive Network, 2019, <https://cran.r-project.org/web/packages/geosphere/geosphere.pdf>.

$d_{i,j(1)} \leq d_{i,j(2)} \leq \dots \leq d_{i,j(15)}$ and set $N_{15}(i)=\{j(1), j(2), \dots, j(15)\}$ so that the resulting weight matrix can be described as follows: ¹¹

$$\mathbf{W}_{ij} = \begin{cases} d_{i,j}, & j \in N_{15}(i) \\ 0 & , \text{ otherwise.} \end{cases} \quad (2)$$

Given the nature of Euclidean space \mathbb{R}^2 , the spatial matrix was then transformed into a proximity matrix by raising each cell to the inverse second power known as the 2nd norm distance (Graepel. al. 1999, Bertazzon & Elikan 2009, Caporin & Paruolo 2015).¹²

$$\mathbf{W}_{ij} = \begin{bmatrix} 0 & d_{1,2}^{-2} & \dots & d_{1,n}^{-2} \\ d_{2,1}^{-2} & 0 & \dots & d_{2,n}^{-2} \\ \vdots & \vdots & \ddots & \vdots \\ d_{n,1}^{-2} & d_{n,2}^{-2} & \dots & 0 \end{bmatrix} \quad (3)$$

The proximity matrix in this study was than row-standardized which gave a higher weight for observations closer to each other and a lower weight for further away observations (Kelejian & Prucha 2010), as shown by the following:

$$\mathbf{W}_{ij} = \begin{cases} \frac{d_{ij}^{-2}}{\sum_{j=1}^n d_{ij}^{-2}}, & \text{if } i \neq j, \\ 0, & \text{otherwise.} \end{cases} \quad (4)$$

¹¹ Smith, Tony E. "Spatial Weight Matrixes." University of Pennsylvania. Accessed July 3, 2020. Retrieved from: <https://www.seas.upenn.edu/>.

¹² Euclidean 2nd norm distance can also be thought of as Minkowski distance of p -norm, where $p = 2$.

The independent variable vector was multiplied by the weight matrix to generate a spatial lag,

$$Y = \alpha + \underbrace{y \cdot \mathbf{W}_{ij}}_{\text{Spatial Lag}} + \beta_0 \cdot x_0 + \dots + \beta_n \cdot x_n + u. \quad (5)$$

The spatial lag term is an endogenous predictor and was corrected with an instrumental variable by multiplying explanatory variables by the weight matrix (Betz *et al.* 2019). These have been known to be good instruments for correcting endogeneity in a spatial lag term.

$$\widehat{y \cdot \mathbf{W}_{ij}} = \mathbf{X} \cdot \mathbf{W}_{ij} + u, \quad (6)$$

where \mathbf{X} and u were respectively the matrix of explanatory variables and the error term. The corrected spatial lag term $\widehat{y \cdot \mathbf{W}_{ij}}$ was used in the model to adjust for spatial autocorrelation in the study's observations.

An electorate is bounded by 0% and 100% in all possible votes allocated to a candidate. The advantage of the logit transformation is that it generates a dependent variable constraint to values from zero to one (Hosmer *et al.* 2000). The spatial lag and logistic adjustments produced the following regression:

EQUATION 7. THE INTIAL UNRETICTED REGRESSION

$$\begin{aligned}
 \ln\left(\frac{\text{Populist Vote}}{1-\text{Populsit Vote}}\right) = & \alpha + \beta_0 \cdot \text{Spatial Lag} + \beta_1 \cdot \text{Republican} + \beta_2 \cdot \text{Gini} \\
 & + \beta_3 \cdot \text{Unemployment.} + \beta_4 \cdot \text{Construction.} + \beta_5 \cdot \text{Farming} + \beta_6 \cdot \text{Manufacturing} \\
 & + \beta_7 \cdot \text{Mining} + \beta_8 \cdot \text{Trans. \& Wear.} + \beta_9 \cdot \text{South Immigration} + \beta_{10} \cdot \text{South Immigration}^2 \\
 & + \beta_{11} \cdot \text{Other Immigration} + \beta_{12} \cdot \text{Other Immigration}^2 + \beta_{13} \cdot \text{Hispanic} \\
 & + \beta_{14} \cdot \text{Hispanic}^2 + \beta_{15} \cdot \text{Limited Spanish} + \beta_{16} \cdot \text{Limited Spanish}^2 + \text{error.}
 \end{aligned}$$

4.1: Ex-Ante Explanation of the Model

The lagged Republican vote (Republican) was included in the model as a control for unobserved socioeconomic variables that influence a voter's preferred political party. The Gini index and the unemployment rate were included to assess how the most basic economic factors influenced voters. If populism is viewed as a vehicle for restoring economic balance and prosperity, higher levels of both the Gini index and the unemployment rate should lead to more votes cast for the populist candidate which could be viewed as casting a rational vote. This conclusion assumes that voters responded favorably to populist promises to ameliorate American economic hardships from globalization.

There are five variables measuring the proportional county level employment in low-skilled jobs such as manufacturing, mining, farming, construction, and transportation/warehousing. These low-skilled jobs are particularly affected by offshoring, competition from immigrant labor, and trade deals restricting American goods from entering foreign markets. The populist candidate vowed to protect these industries with trade agreements

and immigration policies. Given this campaign promise, higher proportions of these jobs should positively correlate with the populist vote. Voters' economic understanding of complex economic policies could be weak and the proposed populist policies hurtful in the long run; however, the desire for an immediate solution to declining security and status was not irrational or unreasonable.

Immigration from countries both south of the U.S. border and elsewhere should be perceived by voters as a reason for job competition and wage suppression. Hence, immigration should correlate positively with the populist vote. The polynomial specification of the immigration variables should capture the effects of an increasing number of immigrants accumulating in a community over time: these immigrant conscious communities' fears of job competition and wage suppression from immigration diminishes with more immigrants. Similar to immigration, counties with a larger proportion of self-identifying Hispanic and Latino populations and limited English but predominantly Spanish speaking households were predicted to positively correlate with higher rates of populist support with a diminishing effect as well and hence why the polynomial was included in the model for these two variables. These classifications of Hispanic and Latino groups were predicted to positively correlate with the populist vote until some threshold where the communities had higher voting power to oppose the populist who they may have perceived to hold negative opinions about their culture.

5: Results:

Estimation was conducted in R. Equation 7 constituted the study's unrestricted regression. First, a Lagrange multiplier test for spatial dependence was conducted on the unrestricted model which rejected the null hypotheses which states that no spatial autocorrelation existed (p -value <

(2.2)⁻¹⁶) which indicated the necessity for a spatial lag variable in the model (Anselin 1988).¹³ A Breusch-Pagan test (p -value = (4.6)⁻¹²) provided confirmation that heteroskedasticity did exist in the unrestricted model (Breusch & Pagan 1979).¹⁴ To correct for the inconsistent variance, the study boot-strapped the estimated coefficients (Efron 1992).¹⁵ Construction, Transportation/Warehousing, and the quadratic form of Limited Spanish (Limited Spanish²) were not significant at the 0.1 confidence level. Based on F-test, which failed to reject the null hypothesis (p -value = 0.45) stating that the insignificant variables in the unrestricted model did not add explanation power to the model, these variables were dropped from the model.¹⁶

Therefore, the restricted model consisted of the variables in Equation 7 minus those which did not provide any explanation power to the regression (*i.e.* Construction, Transportation/Warehousing, and Limited Spanish²). Similar to the unrestricted model, the restricted model was tested for heteroskedasticity with a Breusch-Pagan test as well as for spatial dependence with a Lagrange multiplier test. Both tests rejected the null hypothesis (respective p -value = (8.5)⁻¹² and < (2.2)⁻¹⁶). These results indicated that bootstrapping the restricted model's coefficients and a spatial lag variable was needed. The regression results of both the unrestricted and restricted model are outlined in Table 3. The populist vote, displayed geographically on a U.S. map, is presented in Figure 3.¹⁷

¹³ The Lagrange Multiplier was conducted with the R function "lm.LMtest" in R's "spdep" package, see the R documentation for more details: Bivand, Roger *et al.*, "The spdep package 'spdep'," Comprehensive R Archive Network, 2020, <https://cran.r-project.org/web/packages/spdep/spdep.pdf>.

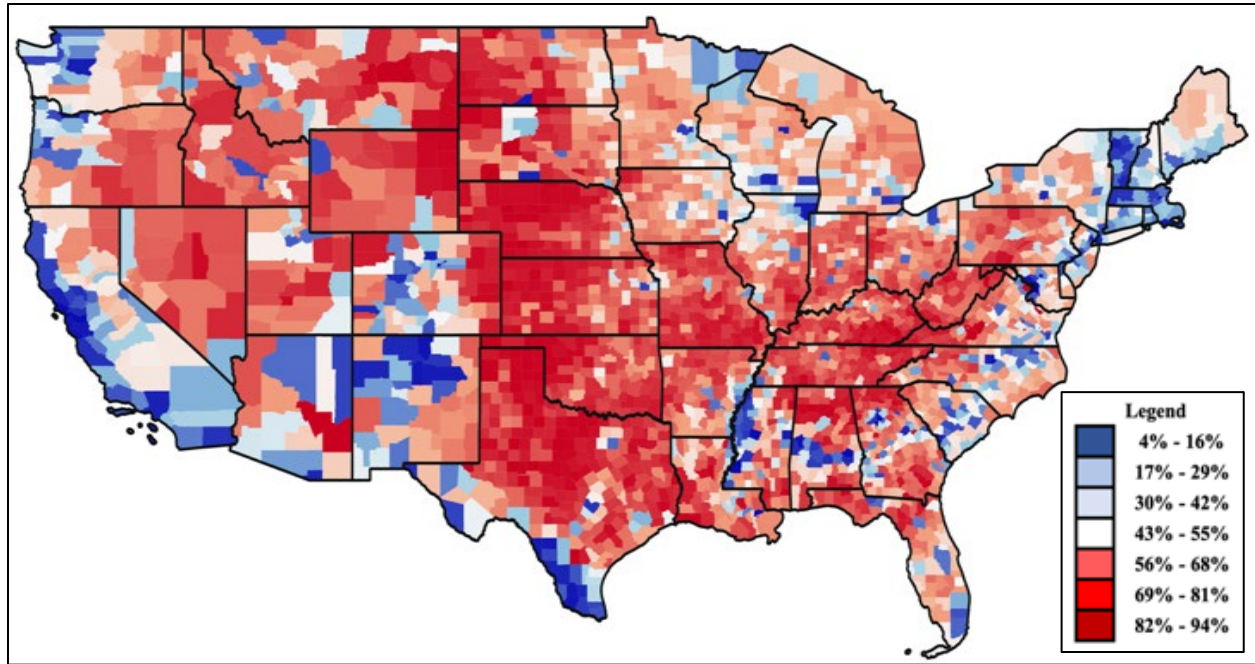
¹⁴ Breusch-Pagan test was conducted with the R function "ncvTest" in R's "car" package, see the R documentation for more details: John Fox *et al.*, "Package 'car'," Comprehensive R Archive Network, 2012, <https://cran.r-project.org/web/packages/spdep/spdep.pdf>.

¹⁵ Bootstrapping was conducted with the R function "boot" in R's "boot" package, see the R documentation for more details: Brian Ripley, "Package 'boot'," Comprehensive R Archive Network, 2010, <https://cran.r-project.org/web/packages/boot/boot.pdf>.

¹⁶ The linear hypothesis test was conducted using the R function "linearHypothesis."

¹⁷ QGIS was used to construct U.S. geographic maps for the study. See the QGIS project for more information: <https://qgis.org/en/site/>

FIGURE 3. ACTUAL POPULIST VOTE BY COUNTY IN THE 2016 PRESIDENTIAL ELECTIONS



Considering the dependent variables logistic specification, interpreting the coefficients of the restricted regression model is not intuitive.

$$\ln\left(\frac{P}{1-P}\right) = \alpha + \beta_0 \cdot x_0 + \dots + \beta_{17} \cdot x_{17}. \quad (8)$$

Therefore, the natural logarithm odds was transformed into the odds of voting populist by exponentiating both sides of the natural logarithm odds. Exponentiating cancels out the natural logarithm on the left side and rises the right side of the equation to Euler's number.

$$\frac{P}{1-P} = e^{\alpha + \beta_0 \cdot x_0 + \dots + \beta_{15} \cdot x_{15}}. \quad (9)$$

TABLE 3. REGRESSION RESULTS OF THE UNRESTRICTED AND RESTRICTED MODEL

Variable	Unrestricted Model					Restricted Model					r^2 -Decomp.
	Estimate	St. Err.	t-value	p-value	VIF	Estimate	St. Err.	t-Value	p-value	VIF	
(Intercept)	-1.590	0.077	-20.643	$< (2.2)^{-16}$	-	-1.581	0.069	-22.833	$< (2.2)^{-16}$	-	-
Spatial Lag	0.048	0.014	3.545	$(4.00)^{-4}$	2.910	0.050	0.014	3.677	$(2.00)^{-4}$	2.840	0.234
Republican	4.137	0.058	71.638	$< (2.2)^{-16}$	3.060	4.131	0.057	72.226	$< (2.2)^{-16}$	2.920	0.499
Gini	-0.770	0.150	-5.127	$< (2.2)^{-16}$	1.240	-0.782	0.135	-5.810	$< (2.2)^{-16}$	1.220	0.020
Unemployment	0.791	0.140	5.650	$< (2.2)^{-16}$	1.260	0.800	0.142	5.632	$< (2.2)^{-16}$	1.260	0.020
South Immigration	-14.280	4.269	-3.345	$(8.00)^{-4}$	4.840	-14.462	3.931	-3.679	$(2.00)^{-4}$	4.830	0.006
South Immigration ²	324.968	157.199	2.067	0.039	4.170	330.115	118.651	2.782	0.005	4.150	0.002
Farming	1.398	0.076	18.479	$< (2.2)^{-16}$	1.590	1.391	0.067	20.827	$< (2.2)^{-16}$	1.430	0.084
Construction	-0.070	0.144	-0.489	0.625	1.170	-	-	-	-	-	-
Trans. & Wear.	0.195	0.153	1.273	0.203	1.050	-	-	-	-	-	-
Hispanic	-1.092	0.107	-10.241	$< (2.2)^{-16}$	17.890	-1.168	0.076	-15.379	$< (2.2)^{-16}$	8.720	0.011
Hispanic ²	1.374	0.135	10.203	$< (2.2)^{-16}$	12.680	1.453	0.123	11.791	$< (2.2)^{-16}$	8.210	0.010
Other	-2.077	0.457	-4.542	$< (2.2)^{-16}$	5.010	-2.087	0.476	-4.387	$< (2.2)^{-16}$	5.000	0.002
Other ²	6.258	2.726	2.296	0.022	4.810	6.326	2.956	2.140	0.032	4.800	$(7.00)^{-4}$
Mining	0.714	0.123	5.834	$< (2.2)^{-16}$	1.220	0.723	0.130	5.565	$< (2.2)^{-16}$	1.220	0.021
Manufacturing	0.578	0.063	9.182	$< (2.2)^{-16}$	1.260	0.574	0.060	9.589	$< (2.2)^{-16}$	1.240	0.003
Limited Spanish	-1.417	0.503	-2.818	0.005	15.100	-1.020	0.241	-4.228	$< (2.2)^{-16}$	5.190	0.007
Limited Spanish ²	1.547	1.466	1.055	0.291	7.480	-	-	-	-	-	-

The odds of voting populist was than manipulated algebraically to derive the proportion of voting populist which would be used to interrupt the regression results.

$$P = \frac{e^{\alpha + \beta_0 \cdot x_0 + \dots + \beta_{15} \cdot x_{15}}}{1 + e^{\alpha + \beta_0 \cdot x_0 + \dots + \beta_{15} \cdot x_{15}}} \quad (10)$$

A logistic regression is non-linear, and to avoid the inaccuracy of describing an independent variable's influence on the dependent variable as a constant-linear change, the first derivative of the proportion of voting populist (Equation 10) was taken. The first derivative has the advantage of describing the logistic nature (or non-linear) independent variable's influence on the dependent variable (Crocker & Algina 1986, Doran 2005).

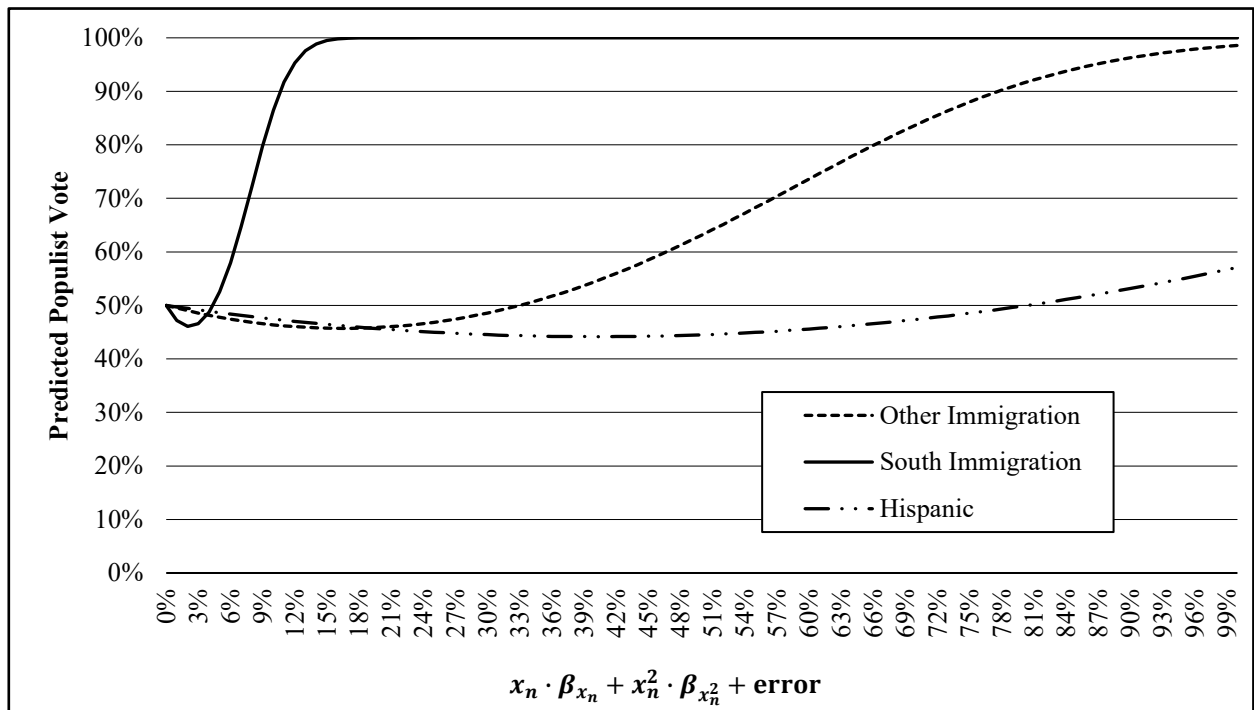
$$\frac{\partial P}{\partial x_n} = \left\{ \left[\frac{\beta_n \cdot e^{\beta_n \cdot x_n}}{1 + e^{\beta_n \cdot x_n}} \right] - \left[\frac{\beta_n \cdot e^{2 \cdot (\beta_n \cdot x_n)}}{(1 + e^{\beta_n \cdot x_n})^2} \right] \right\} \quad (11)$$

The second quartile, third quartile, and median value of the restricted model's independent variables were inputted into Equation 11 which produced the instantaneous rate of change of the independent variable's value, with respect to the value inputted, on the dependent variable. The instantaneous rate of change explained a one-percent increase from an independent variable's second quartile, third quartile, or median value's influence on the predicted populist vote. These marginal effects were outlined in Table 4.

For the variables South Immigration, Other Immigration, and Hispanic which had quadric extensions in the restricted model, if interpreted separately would not provide an accurate picture of their influence on the dependent variable. These variables should be interpreted as a linear

combination (i.e. $x_n \cdot \beta_{x_n} + x_n^2 \cdot \beta_{x_n^2}$, where x_n^2 is the quadratic form of x_n) due to the *U-shaped* relationship with the dependent variable (Kuznets 1955, Selden & Song 1994, Grossman & Krueger 1995).¹⁸ The *U-shape* is best described by Figure 3 which plots the variables in their polynomial form against the predicted populist vote.

FIGURE 3. GRAPHICAL REPRESENTATION OF POLYNOMIAL VARIABLES



The *U-shape*, along with the logistic form of the regression, of the independent variables which explain the populist vote in linear combinations are non-linear by nature. Therefore, in order to quantify the influence these independent variables had on the dependent variable, the first derivative was used to find the marginal effect the second quartile, third quartile, and median value. In other words, those descriptive variables mentioned above were inputted into the

¹⁸ Kuznets (1955), Selden & Song (1994), Grossman & Krueger (1995) are examples of economic quadric relationships that are explained by quadric functions.

first derivative of the polynomial variables to explain a one-percent change in those values on the predicted populist vote. These results were also recorded in Table 4.

As shown in Figure 3 and defined by the critical point, the influence of the variables South Immigration, Other Immigration, and Hispanic on the predicted populist vote changes direction from negative to positive. In order to find the independent variables' value at which the direction of the variable's influence changed, Rolle's theorem was implemented to find at what independent value the first derivative was equal to zero (e Silva & Teixeira 1998, Khovanskii & Yakovenko 1996).¹⁹

$$\frac{\partial P}{\partial x} \cdot \left(\frac{e^{(x_n \beta_{x_n} + x_n^2 \beta_{x_n^2})}}{1 + e^{(x_n \beta_{x_n} + x_n^2 \beta_{x_n^2})}} \right) \equiv 0 \Rightarrow \exists y \in \hat{P} \forall \frac{\partial P}{\partial x} \Big|_{x=y} = 0, \quad (12)$$

where y is the critical point. The critical points for the variables South Immigration, Other Immigration, and Hispanic were included in Table 4. These critical points describe at what value the independent values go from negative to positive.

The marginal effect of the variables South Immigration, Other Immigration, and Hispanic before the slope changed direction from native to positive was outlined by the second quartile, third quartile, and median value of the variable inputted into the first derivative function of those polynomial variables. These descriptive statistics do not describe the marginal effect after their relationship to the dependent variable changed from negative to positive. Therefore, to capture the marginally effect after the critical value (*i.e.* the independent value's marginal effect for their

¹⁹ Rolle's Theorem states that for some value x the first derivative or the slope of the tangent line to a function is zero is known as the critical point (c^*). Let $a < c^* < b$, according to Rolle's Theorem, $f(c^*)$ is either $f(a) > f(c^*) < f(b)$ or $f(a) < f(c^*) > f(b)$. See e Silva & Teixeira (1998) and Khovanskii & Yakovenko (1996) for more information about Rolle's Theorem.

TABLE 4. MARGINAL EFFECT OF THE RESTRICTED MODEL

Variable	2Q		Median		3Q		Critical Point		Inflection Point	
	Value	M.E.	Value	M.E.	Value	M.E.	Value	M.E.	Value	M.E.
Republican	0.505	1.024	0.609	0.925	0.704	0.774	-	-	-	-
Gini	0.419	-0.194	0.441	-0.175	0.464	-0.147	-	-	-	-
Unemployment	0.055	0.198	0.075	0.179	0.097	0.150	-	-	-	-
Farming	0.021	0.345	0.057	0.312	0.113	0.261	-	-	-	-
Manufacturing	0.028	0.142	0.065	0.129	0.114	0.108	-	-	-	-
Mining	0.000	0.179	0.001	0.162	0.007	0.136	-	-	-	-
S. Immigration										
S. Immigration ²	0.000	-0.983	0.000	-0.983	0.001	-0.924	0.017	0	0.111	4.353
Other										
Other ²	0.046	-0.376	0.060	-0.331	0.076	-0.280	0.165	0	0.587	1.072
Hispanic										
Hispanic ²	0.019	-0.278	0.037	-0.265	0.090	-0.265	0.402	0	0.717*	0.228*
Limited Spanish	0.001	-0.253	0.004	-0.229	0.014	-0.191	-	-	-	-

*The linear combination of the Hispanic variable did not have an Inflection Point on the interval [0,1], so the midpoint of the interval [Critical Value, 1] was used instead to describe the function after the change in direction.

NOTE:

(1.) **M.E.** noted the marginal effect or $\partial P / \partial x$.

(2.) The **Critical Value** is where the function changes direction and the rate of change is zero or $\partial P / \partial x = 0$.

(3.) The **Inflection Point** is where the function changes concavity or $\partial^2 P / \partial x^2 = 0$.

positive relationship with the dependent variable), the equation was solved for the inflection point.

Similar to finding the critical point, finding the inflection point was completed by setting the second derivative of the regression to zero and solving for the independent variable value. The inflection point notes where the concavity of the function changes (Goshu & Koya 2013).

$$\frac{\partial^2 P}{\partial x^2} \cdot \left(\frac{e^{(x_n \beta_{x_n} + x_n^2 \beta_{x_n^2})}}{1 + e^{(x_n \beta_{x_n} + x_n^2 \beta_{x_n^2})}} \right) \equiv 0 \Rightarrow \exists z \in \hat{P} \quad \forall \frac{\partial^2 P}{\partial x^2} \Big|_{x=z} = 0, \quad (13)$$

where z is the inflection point. The inflection point has the advantage of describing the marginal effect of the independent variable on the predicted populist vote after the direction of the relationship changes from negative to positive due to the change in concavity making an interesting value similar to those descriptive values inserted into the first derivative (i.e. second quartile, third quartile, and median value). These results, both the inflection point and the marginal effect of the inflection point were displayed in Table 4.

5.1: Ex-Post Explanation of Model

Unsurprisingly the Republican vote from 2012 proved to be a successful control variable for the right-winged populist vote in 2016. The control variable was the reason such a high r-square existed for the regression model. The 2012 Republican vote explained 49.9% of the regression's explanatory power as shown in the r-squared decomposition in Table 3. Results from the regression revealed that the populist captured a lower proportion of right-wing votes than the Republican candidate in the 2012 presidential election. A one percent increase in the median

county vote proportion for the Republican in 2012 predicted a 0.925% increase for the populist in 2016.

The occupational variables Farming, Manufacturing, and Mining predicted a positive relationship with the populist vote. The model predicted that one percent increase in the median county's proportion of occupation in farming, manufacturing, and mining lead to an increase the populist vote proportion by a respective 0.312%, 0.129%, and 0.128%. These occupations classified as a part of the American blue-collar working class had a reason to support a populist who vowed to protect them and their economic interests, even if the long-run effects from such proposed policies would have later damaging effects. Farming, manufacturing, and mining are affected by trade deals, and manufacturing workers are doubly affected by competing migrant labor. These voters who live in counties with high levels of these occupations supported the populist due to his stance with 'America First Policies.' These blue-collar occupations have taken negative hits in 21st century's global economy and their job and wage security looked at by policy makers as an inevitable loss in the globalization processes. The study's regression results proved to support the theory that those communities which rely heavily on blue-collar jobs being affected by globalization would prefer a populist candidate who vowed to help.

The negative relationship between the Gini index and the populist vote required an explanation further than the initially predicted positive relationship. For a 0.01 increase from the counties' median Gini Index, a decrease in the populist vote by 0.1752% was predicted. Communities with higher income inequality often support politicians who campaign for redistribution policies (Panizza 2002, Kenworthy & McCall 2008). The higher the income inequality the more skewed the median voter becomes in supporting for redistribution tax policies and welfare programs. Therefore, the negative relationship between the Gini coefficient

and the populist vote could have represented the median voter instead of being an indicator for voters who saw globalization as the reason for income inequality. This concept could explain why communities with a higher Gini coefficient predicted a lower populist vote proportion. Voters in communities with high income inequality might have seen welfare and tax policies as the solution to the communal income inequality rather than the protectionist policies proposed by the 2016 populist candidate.

In contrast to the Gini index, increases in the unemployment rate predicted higher proportions of the populist vote. To be exact, the model predicted that the median county which had an unemployment rate of 7.5%, explained a one percent increase from a median a 0.179% increase in the predicted populist vote. The populist being a right-wing candidate allowed the unemployment rate to create a narrative for voter rationality. Usually, left-wing candidates have election advantages in regions with higher unemployment rates (Wright 2012).²⁰ Voters in the 2016 election sought the nomination of a populist as a better solution to fix unemployment than traditional political norms. The unemployment rate in this study emphasizes the voters' rationale that a populist candidate could fix economic disparities caused by fallacies in the interconnected markets.

The *ex-ante* prediction of immigration was that the quadratic nature of the variables South and Other Immigration would have downward concavity, but the regression results predicted a concave up relationship with the predicted populist vote. The predicted populist vote was explained by a threshold of tolerable immigration which only adds strength to the populist voter's rational argument. Those results would concur with the idea that lower amounts of immigration are both manageable and non-threatening to local jobs and wages. However, as

²⁰ Wright's (2012) research counters assumptions stating that incumbents bear the weight of unemployment rates in elections.

immigration passes a threshold, the demand for a populist increased. The threshold from migrants from counties South and not South of the U.S. border were respectively 1.6% and 16.4% which were defined by the critical points or when the slope of the polynomial immigration variables equals zero.

These thresholds fit well into the populist narrative in the U.S. 2016 election. The majority of low-skilled immigrant workers entering the American work force are those from Latin American counties such as Mexico (Enchautegui 1998, Lozano-Ascencio and Gandini 2012). Hence, blue collar Americans affected by low-skilled immigration, which have the incentive along with the capabilities to migrate to the U.S. due to globalization, would be inclined to vote for a populist when immigration of low-skilled workers from such counties reaches a threshold. According to the regression results, when immigration from counties South of the U.S. border exceed 1.6% of the population, the voters in 2016 saw this as a damaging amount of immigration. The voters according to this study's results were not opposed to all immigration South of the border but were willing to accept immigration under the threshold. In terms of voter rationality, the threshold scenario creates a stronger argument for voter rationality in terms of protection from low-skilled migrants. Immigration from other countries not included in the South of the U.S. border classification was apparently more tolerated in 2016 than from South of the U.S. border (Hanson *et al.* 2005).

The variables measuring the proportion of Latinos and Hispanics in counties behaved similarly to the variables describing immigration with an upward concavity quadratic. The regression results indicated that support for the populist decreases for self-identifying Hispanics and Latinos until the county proportion reaches 40.17%. After this threshold the votes allocated to the populist increases at a slower rate than both immigration variables (see Table 4 for the

marginal effect after the critical point). Considering that foreign-born Hispanics were targeted by the populist's rhetoric, the change in counties options, expressed by the results of a significant polynomial relationship, from supporting a populist for president, could indicate that Hispanic voters in the U.S. were divided on the issue. Surveys indicate that in 2016 native-born and foreign-born Latinos are not united on political goals, insofar as some Hispanics favor deportation of illegal immigrants (Lopez *et al.* 2010). Research has also shown that Republican Hispanics are more likely to vote in elections than their Democratic counterparts and communities with higher levels on Hispanic or Latino have a significantly lower voter turnout than communities with lower Hispanic or Latinos (Fraga 2016, Lopez 2010, Lopez & Gonzalez-Barrera 2012). Hispanic or Latino voters seem to be more active in politics when they are minorities within a community not a majority. This suggest that communities with high levels of Hispanic or Latinos did not have proportionality equal representation at the ballot booth between the pro- and anti-populists. This would comply with the study's regression results. As fewer Hispanics or Latinos were present in a community they are more likely to vote and vote against the populist. As the proportion of Hispanics or Latinos in a community increased, those against the populist are less likely to vote than those who support the populist.

The variable measuring the proportion of limited English with predominantly Spanish speaking households and its negative relationship with the populist vote, for a one-percent change in the median Limited English variable there was a 0.229% decrease in the populist vote, was associated with these household's connection to immigration. Households with limited English in general are those who have newly immigrated to the county (Greenberg *et al.* 2001). Therefore, those households with Hispanic Cultures with limited English are more sympathetic

to immigrants. The populist in 2016 did not carry a sympathetic option about immigrations and thus would discourage these voters from supporting him in the presidential election.

6: Discussion and Limitations

The study showed that by implementing a logistic transformation for regressions that seek out to predict elections, ensures results that accurately portray a vote allocation bounded by 0% and 100%. Specifications such as a spatial weight and logistic transformations should be considered by future researchers who construct models which predicted election results.

This study was able to use socioeconomic observations from the 2016 U.S. presidential election and identify factors which predicted populist vote. The European political theater has been exposed to right-wing populist movements for roughly 40 years more than the U.S. Therefore, Western European states would have more data to analyze the motives of citizens to vote in favor of populist governments and leaders. Research on the cultural distinctiveness of populism is required to generate a more accurate view of the movements and this study provides such an insight to U.S. populism. This study does not take a stance on populism, but rather seeks to understand what motivates the voter towards populism. As the results from the study's model indicate, the effects of globalization expressed by trade and immigration stresses blue-collar job security motivates such voter. These results are similar to those right-wing populist movements in Western Europe but are culturally unique to the U.S populist movement in 2016. The cultural uniqueness reveals itself with immigration from Latin American countries and jobs being exported to labor-surplus counties.

The study's results reveal socioeconomic areas which future policy makers or political activists can take into account if they are to run against and/or avoid future populist movements.

This study also opens the door to discussions about the communal level variables which can generate 21st century American populism with hindsight from the 2016 elections. Voters were not responding to what they think is happening within the economy, but as the results from the study show, were responding to what was present in their communities (*i.e.* counties). If voters cast ballots for the populist because of real socioeconomic issues that were prevalent within their communities, it suggests that the U.S. populist movement in the 2016 presidential elections was something more than a hysteria.

6.1: The Illegal Immigration Limitation

A limitation of the study was the lack of illegal immigration observations. Considering the populist's rhetoric against illegal immigration, the results from such observations would have added another scope to voter's rationality. Future research could reconstruct the study with the added observation is such immigration data is available. A result of county-level illegal immigration rates could clarify if voters were rational in their appeal for a populist's anti-illegal immigration rhetoric.

6.2: The U-Shaped Limitation

With regards to the study's conclusions on the variables which had a *U-shaped* relationship with the predicted populist vote, these quadratic relationships could be explored future by future research. The criticism of such *U-shaped* relationships is that there are not enough observations after the relationship changes directions or what is known as the breaking point. Future research could implement the suggestions of Simonsohn (2016) or Lind and Mehlum (2010) by testing the

statistical significates of the break and thus the explanation relatability of the *U-shaped* relationship.

7: Conclusion

This study endeavors to challenge the claim that hysteria motivated working-class support for the populist candidate in the 2016 presidential election. This socioeconomic group has undeniably suffered from economic pressure created by the effects of globalization. The regression results reveal a rational environmental voting response that justified voter demand for a populist candidate in 2016. Firstly, the analysis indicates that voters are more likely to assess their rational interests according to their immediate economic prospects. When faced with job insecurity and declining wages, they receive little assurance from economists and policymakers who focus on the macroeconomic, long-run perspective in the global economy. Their support for a populist candidate who promised to protect the working American through immigration restrictions and trade regulations thus appeared a more reasonable and actionable solution than untested, inchoate strategies for supporting workers' adaptation to long-term economic trends. As this study reveals, however, the variables do illuminate how the various effects of globalization on different working-class communities provide an economic rationale for supporting a protectionist political agenda. Populism and the protectionism it offers would be unnecessary if policy makers would respond more effectively and convincingly to the immediate needs of displaced workers while also sustaining the productivity and efficiency of economic globalization.

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