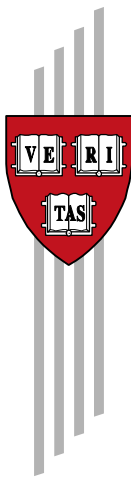


Social Mobility Explains Populism, Not Inequality or Culture

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Social Mobility Explains Populism, Not Inequality or Culture

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What explains contemporary populism, for example Brexit, Trump, the Gilets Jaunes, and Five-Star? Commonly-accepted answers are divided into two schools of thought, one economic and one cultural. The main explanation in the former camp is inequality of income and wealth; those in the latter are social media-induced ideological polarization, unprecedented levels of immigration, and older generations reacting against millennial values. This paper exploits geographic variation in the incidence of populism to apply cross-sectional regression analysis to these arguments, and concludes that they are unconvincing. Instead, the thus-largely overlooked factor of social mobility is found to correlate far more consistently with the incidence of populism. Four settings are analyzed: the 2016 US Presidential Election, the 2017 French Presidential Election, the 2019 European Parliament Elections, and the political stability of developed countries in 2017. The article contends that the decisiveness of social mobility as an explanation for populism is plausibly rooted in universal human conceptions of fairness.

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www.defeatingpopulism.com

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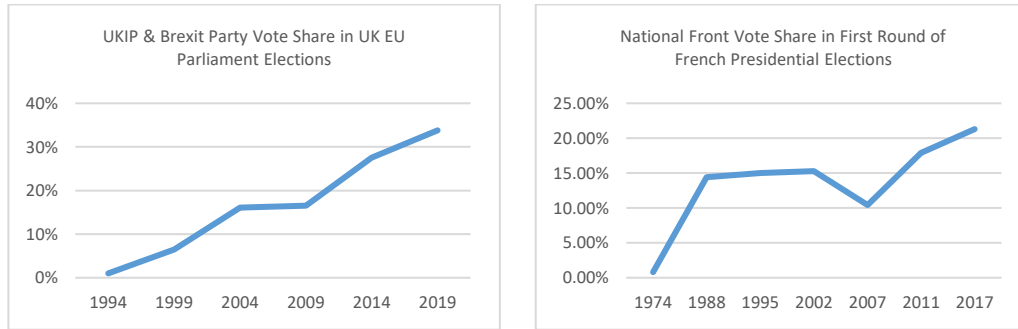
I. Introduction and Literature Review

The developed world is at a critical junction in the path of history. A wave of populist politics has taken hold in countries as diverse as the US, the UK, France, Italy, Spain, Greece, and the Czech Republic. A number of these nations have served as important beacons of freedom for the wider world, particularly since 1945. But now the realities of populist movements are threatening long-standing democratic institutions and practices. Less-developed countries that elected populists earlier on, like Turkey and Hungary, have rapidly descended into authoritarianism – a trajectory that is suggestive of the risk populism poses broadly. Understanding the roots of contemporary populism may therefore be vital to the survival of liberal democracy.

The what, where, and when of the populist wave are reasonably well understood. Many compelling characterizations of the qualities of populism exist, among them Müller (2016), who defines populism as “a way of perceiving the political world that sets a morally pure and fully unified [but ultimately fictional] people against elites who are deemed corrupt or in some other way morally inferior... In addition to being anti-elitist, populists are always anti-pluralist: populists claim that they, and only they, represent the people.” The geographic locus of concern over contemporary populism is in developed countries, which are experiencing political upheaval despite having deep democratic roots. While there is a common misconception that the timeline of the populist wave starts around 2016 with Trump and Brexit, authors such as Colantone and Stanig (2018) and Golder (2016) trace its rise to approximately the 1980s (see Figure 1).

Although it is reasonably well understood what populism is in addition to when and where the recent wave has occurred, there is much less comprehension of *why* it is happening. There is vigorous debate over this puzzle in both academic and popular circles.

Figure 1. Vote Shares for Populists in the UK and France.



To date explanations have been divided into two schools of thought, one economic, and the other cultural. In the first, authors like Pastor and Veronesi (2018) and Voorheis, McCarthy and Shor (2015) advance what is perhaps the most commonly accepted explanation: inequality of income and wealth. In the second there are three prominent approaches: a “cultural backlash” of older against younger generations as posited by Norris and Inglehart (2019); social media-induced ideological polarization (Sunstein 2018); and resentment over immigration (Kaufmann 2018).

Yet in many ways these explanations turn out to be dissatisfying. First, Rodrik (2019) notes that “conventional indicators of inequality are a poor predictor of economic and political discontent in democracies.” Starman, Sheskin and Bloom (2017), in addition, review the behavioral science literature to demonstrate that “there is no evidence that people are bothered by economic inequality itself.” Second, Becker, Fetzer, and Novy (2017) as well as Colantone and Stanig (2016) find only weak relationships between immigration and Brexit voting patterns. Third, Groshek and Koc-Michalska (2017) find that active social media use in the US decreased support for Republican populists in the 2016 election, and that passive or uncivil use of social media had an effect similar to that of watching

traditional television. Finally, Norris and Inglehart (2019) base their cultural backlash argument on an “attitudes on attitudes” analysis, which shows that people who are surveyed to have populist values vote for populists. While this analysis describes the symptom of populism in detail it does not shed light on the cause. As will be explored in the empirical part of this paper, these explanations neither match well with the broad geography of the populist wave.

There is a nascent but growing body of research which suggests that vulnerability to unfair economic outcomes is a more compelling root cause of the current wave of populism. What exactly is meant by economic fairness in this context? Most broadly, as put by Aristotle in *Nicomachean Ethics*, it means that “awards should be according to merit; for all men agree that what is just in distribution must be according to merit in some sense.” That is, economic outcomes should be meritocratic. John Rawls puts this perhaps more precisely in *A Theory of Justice* when he states that “those who are at the same level of talent and ability, and have the same willingness to use them, should have the same prospects of success regardless of their initial place in the social system.” Economic fairness here means that innate and self-cultivated individual merit should be rewarded, and neither losses nor inequitable opportunity should be imposed on the basis of uncontrollable characteristics. Thus the economic fairness hypothesis claims that the violation of these principles has generated the populist wave.

There is strong evidence that fairness in this sense is a critical concern to human economic life. Starmans et al. (2017) review the behavioral science literature on inequality to demonstrate that “there is no evidence that people are bothered by economic inequality itself. Rather, they are bothered by something that is often confounded with inequality: economic unfairness.” They consider, among other results, two well-known findings: that of the dictator game, where people will often reject arbitrarily-chosen reward distributions that are highly unequal; and that of Norton and Ariely (2011), where people indicate that their ideal societal income

distribution is decidedly unequal. While the former result would suggest at first glance that people are averse to inequality, the latter indicates otherwise. Starmans et al. (2017) reconcile the two findings through the lens of fairness, pointing out that in the dictator game nobody has done anything to earn a higher reward than anyone else. Thus in that particular circumstance unequal rewards are unfair, but the generalizable principle is that people are averse to unfairness. Indeed, the authors show that in numerous experiments people consistently want to accord higher rewards to those who have exerted more effort – as that is the fair, albeit potentially unequal, outcome. Children and even infants also exhibit this value. When people consider society broadly, as in Norton and Ariely (2011), they correspondingly tend to idealize an unequal income distribution. The most plausible explanation is that a degree of inequality is seen to be the fair result of differences in effort and talent.

How important is this value? Aversion to economic unfairness appears to be so foundational to the human condition that it is even found in our biological relatives. Brosnan and De Waal (2003) study reactions to reward systems among capuchin monkeys, showing that “monkeys refused to participate if they witnessed a [peer] obtain a more attractive reward for equal effort, an effect amplified if the partner received such a reward without any effort at all.”

Specific lines of research in the economic school of thought concerning populism suggest that economic unfairness is one of its key root causes. To begin, the literature on the Global Financial Crisis (GFC) and the China Shock hints at this conclusion. While these events in of themselves cannot plausibly explain the entirety of the populist wave, the research on these topics demonstrates specific instances of unfair economic outcomes leading to populism and suggests these links are part of a broader trend.

Tooze (2018) substantiates the relationship between the GFC and the rise of populism in detail. Funke, Schularick, and Trebesch (2016) shed light on why such

links exists. They show that on average, financial crises have resulted in 30% more support for far-right parties among developed countries from 1870 – 2014; but critically, that non-financial macroeconomic disasters which create losses of the same magnitudes have no such effect. The authors suggest that this may be because financial crises are seen as the “inexcusable” result of a self-serving financial elite that puts its own interests above those of broader society. That is, it is not just the size of the economic loss that matters in the political realm – it is the fairness of the loss. But of course the GFC occurred in 2008, whereas populism had already been on the rise for roughly two decades at that time. The unfair economic outcomes resultant from the GFC must therefore be one component of some larger phenomenon.

Similarly, Autor et al. (2016) show that trade shocks from China resulted in increased local political polarization in the US, while Colantone and Stanig (2018) repeat the exercise for the UK in the context of Brexit. To explore the causal link between trade shocks and populism, Rodrik (2018) asks “why trade gets picked on so much by populists both on the right and the left. After all, imports are only one source of churn in labor markets, and typically not even the most important source.” His answer is that “it’s one thing to lose your job to someone who competes under the same rules as you do. It’s a different thing when you lose your job to someone who takes advantage of lax labor, environmental, tax, or safety standards in other countries... What arouses popular opposition... is perceived unfairness.” Once more, it is not just the size of the economic loss that matters, but whether the loss was fair.

As with the GFC, the China Shock literature provides critical insight but suggests these outcomes must be part of a larger puzzle. After all, many countries which have not been disrupted by populism trade heavily with China. Acemoglu et al. (2016) find that 9.7% of US manufacturing job losses from 1999 – 2011 were attributable to import competition with China, while Balsvik, Jensen, and Salvanes

(2014) show that approximately 10% of Norwegian manufacturing job losses 1996 – 2007 were caused by the China shock; and Murray (2017) finds the proportion from 2001 – 2011 in Canada was 20.7%. Yet there is no Norwegian nor Canadian Trump.

The best explanation for this pattern is that the shock itself does not matter so much as how resistant a place is to unfair outcomes resultant from the shock. Whereas Acemoglu et al. (2016) find no statistically significant evidence of job recovery following the China Shock in the US, Murray (2017) finds that 60% of jobs lost in Canada due to the China shock were recovered in the non-tradeable sector. Eriksson et al. (2019) further investigate why the China Shock in particular had such a strong impact within the US as opposed to earlier trade shocks spanning the previous century. They find that the key factor was the economic environment of the place that was shocked – specifically, that places characterized by industrial decline, low education, and high wages have been the most vulnerable. This suggests that there are critical policy inputs which determine the likelihood of unfair economic outcomes, and consequently populism. Indeed, *The Economist*, which reviewed Eriksson et al. (2019), commented that “it may be tempting to conclude that America has paid too high a price for China’s entry into the global trading system... A more helpful conclusion is that politicians should take more care to equip workers labouring far from the innovation frontier to adapt to shocks in their industries – from import competition or anywhere else.”

Other lines of research explore economic unfairness more explicitly. Troublingly, there is evidence that economic outcomes have become more unfair in the developed world over the past few decades. Hufe, Kanbur, and Piechl (2018) decompose the growth of US income inequality into an “unfair” component explained by uncontrollable demographic variables – including gender, ethnicity, parental income, and parental occupation – and a “fair” remainder. They show that the growth of US inequality was largely “fair” before the 1990s, but “unfair”

thereafter. That is, from the 1990s onwards uncontrollable characteristics became more decisive determinants of economic outcomes.

Some authors explicitly address the relationship between economic unfairness and populism. Deaton (2017) argues that “inequality is not the same thing as unfairness; and, to my mind, it is the latter that has incited so much political turmoil in the rich world today. Some of the processes that generate inequality are widely seen as fair. But others are deeply and obviously unfair, and have become a legitimate source of anger and disaffection.” Guriev (2017), in addition, explores the empirical relationship between economic unfairness and political dissatisfaction. He shows that low support for capitalism and democracy in post-Soviet states is far better explained by unequal opportunity than outcomes. In a similar manner to Hufe, Kanbur, and Piechl (2018), income inequality is decomposed into a component explainable by uncontrollable circumstances of birth, and a remainder; the former is an indicator of unequal opportunity. While unequal opportunity has a significant negative relationship with support for capitalism and democracy, once it is controlled for income inequality actually has a slight positive coefficient. Guriev (2018) emphasizes that this is unsurprising given that the previous Soviet economies imposed “unfair equality,” and that the fairness of economic outcomes rather than aggregate inequality is what most plausibly influences populism.

Thus the extant literature suggests that aversion to economic unfairness is foundational to the human condition; economic outcomes are becoming more unfair in the developed world; there are explicit links between unfair economic outcomes and political discontent; and critically that it is not only particular shocks which matter, but underlying vulnerability to unfair outcomes resultant from those shocks. To provide further evidence on the matter it may be useful to consider a more general measure of unfair economic outcomes that is not tied to any particular event. This paper therefore offers social mobility as a general barometer of unfair

economic outcomes, and considers its relationship with measures of populism in several settings.

Specifically, social mobility here refers to what is known in the literature as intergenerational income elasticity. This takes a particular geography, like a municipality, province, or country, and uses tax return data to examine the correlation between an individual's income and the income of their parents when they were the same age. In places with high social mobility an individual's economic outcomes are not dependent on how wealthy their parents were. This situation can be considered fair, as economic outcomes are more strongly decided by individual merit. Conversely, in places with low social mobility an individual's economic success strongly depends on how wealthy their parents were. This situation clearly violates economic fairness. Intuitively, one can imagine that in places with low social mobility it is very difficult to get ahead without coming from a well-off family. At the same time, people who succeed do not earn their outcomes on their own merits but based on the success of their parents. Many people feel as though society is predisposed to keep them in place, and that the rules are unfairly rigged against them. Thus the siren song of populism, which blames elites and foreigners for tipping the playing field, becomes deeply attractive.

It is important to note that social mobility is a slow-moving variable. Hertz (2007) and Lee and Solon (2009) show that US social mobility did not change substantially over 1977 – 2000, while Chetty et al. (2014) demonstrate the same pattern extending to the 2010s. The OECD (2018) finds that social mobility for people born to low-education parents after 1975 has generally been stagnant among its member countries. But, as discussed, populism has been mounting since roughly the 1980s in key countries, and Hufe, Kanbur, and Piechl (2018) demonstrate that uncontrollable characteristics have become more critical determinants of economic outcomes over this time period in the US, at least. Thus the timeline of social

mobility and the economic unfairness it captures is wholly compatible with the rise of populism.

One possible objection to relating social mobility to populism is that social mobility and income inequality are so closely related that the former variable cannot provide any additional insight. The Great Gatsby Curve, as seen in Corak (2013), for example shows that social mobility and income inequality are correlated across countries. They are of course causally related to one another in some sense; Bénabou (2017) describes the chief mechanisms by which income inequality lowers social mobility. But social mobility is also a function of a wide variety of other factors pertaining to how fair a society is, and the claim that it is indistinguishable from income inequality is not borne out empirically. Chetty and Hendren (2016) show that income inequality is just one of several important factors that influence social mobility in local US labor markets, while Connolly, Corak, and Haeck (2019) show that in both American and Canadian local labor markets the two variables are positively correlated but with substantial residuals. Chetty et al. (2014) even demonstrate that the rise in American income inequality in recent decades has not been linked to changes in social mobility.

One might also object that social mobility is unlikely to influence political stability because high social mobility means both upwards and downwards mobility, and while people adore the former they surely detest the latter. What that perspective fails to recognize is that people do not only care about the magnitudes of their economic gains and losses; as emphasized, they also care about the fairness of how those gains and losses occur. When someone is unable to get ahead and live life on their own terms – say because their family background prevents them from accessing good education or healthcare – that is an obvious source of anger. But if someone is downwardly mobile in a highly socially mobile society where outcomes are earned – say because they didn't study hard enough in school – that is their

responsibility. It seems far less plausible that this latter situation would generate mass discontent, as there is no obvious third party to blame.

Having introduced the rationale for linking the economic unfairness of low social mobility to populism, let us proceed to the empirical component of this paper. Cross-sectional regression analysis is used to determine how social mobility correlates with the geography of populism versus several factors that are not plausibly directly related to economic fairness: income and wealth inequality, immigration, social media use, and the presence of older generations who may undergo a “cultural backlash”. While panel regression would of course be preferable, time series data for social mobility is largely unavailable; nevertheless sufficient cross-sectional data is available to display repeated and compelling correlations.

Two national and two international settings are examined, using data where available to variously address the aforesaid theories explaining populism. In all cases social mobility, income inequality, and immigration are addressed. Due to data availability social media is only examined at the international level. Separate election events are not examined together due to the inherent incompatibility of different national political frameworks.

Four contexts are examined: first, US counties in the 2016 Presidential election, where populism is measured as the vote swing towards Trump relative to 2012 levels of Republican support. This context is advantageous because it can be leveraged for a large number of datapoints. Second, France in the second round of its 2017 Presidential election is investigated, where populism is measured as the vote share for Le Pen. The data here is more limited, but the results are still suggestive. Third, the 2019 European Parliament elections are analyzed, where populism is measured in terms of the vote share for parties classified as populist or far-right. This setting is useful because it is one of the only valid examples of internationally-comparable election results. Fourth, developed countries across the

world are examined; although election results are not comparable across these countries, populist political turmoil is proxied for with the World Bank’s political stability index in addition to protests per 100,000 people. The case that the unfairness of low social mobility is a key explanation for populism is made by repeatedly demonstrating the same pattern at subnational and international levels. Robustness checks additionally show the results are not sensitive to arbitrary choices like the use of particular datasets or definitions.

The rest of this paper is organized as follows. Section II details the statistical framework and data sources used. Section III presents empirical results and robustness checks, and Section IV discusses those results. Section V concludes.

II. Empirical Specifications and Data Description

A. 2016 US Presidential Election

A cross-sectional OLS regression framework is used:

$$(1) \quad Trump_i = \beta_0 + \beta_1 Mobility_i + \beta_2 Inequality_i + \beta_3 Immigrants_i + \beta_4 Age_i + \gamma W_i + \varepsilon_i$$

Where i subscripts each US county, $Trump_i$ measures the change in the Republican Presidential vote share from 2012 to 2016, $Mobility_i$ is a measure of intergenerational income mobility, $Inequality_i$ is the Gini coefficient for income inequality, $Immigrants_i$ is the proportion of immigrants in the population, Age_i is the proportion of people aged at least 65 in the population, W_i is a vector of controls, and ε_i is the error term. The controls consist of the percent Republican

Presidential vote share in the previous election, the percentage of the county that is ethnically white, the percentage of the county that is religious, and the population density of the county.

Notice that several demographic controls are employed, but economic controls are not included. This is because economic controls like income per person or educational attainment almost certainly cross over the causal pathway from income inequality and/or intergenerational mobility to support from Trump, especially when viewed at as small a unit as a county (i.e. the bad control problem). That is not to say such variables were necessarily unimportant factors in Trump's election; but simply that their inclusion here would obscure the main research question. Demographic variables, conversely, less plausibly cross over this causal path and, given how wrapped up in identity Trump's campaign was, are likely important to control for.

The change in the Republican Presidential vote share from 2012 to 2016 is used to analyze Trump's election because votes in his favor were undoubtedly influenced by baseline support levels for the Republican Party. By looking at this change we can better identify factors associated with support for Trump specifically. In the main specification the percentage change in the vote share from 2012 to 2016 is examined. For example, if a hypothetical county voted 10% Republican in 2012 and 15% Republican in 2016 this would be treated as a 50% change. In robustness checks the absolute change in levels is used, where the same county's outcome would be treated as a 5% change.

Two main measures of intergenerational income mobility are taken from Chetty (2014). One, which is used in the main specification, is the rank-rank slope, which conceptually corresponds to the correlation between parent and child income. The other, which is used in robustness checks, is absolute mobility, which corresponds to the chance that a child whose parents were in the 25th percentile on their generation's income distribution will come to be in the 75th percentile of their own

generation's income distribution. See Chetty (2014) for further technical details behind these measures. Only 2769 of all 3242 American counties are covered by Chetty (2014), somewhat restricting the scope of analysis. However, those counties with missing data tend to be those with the least inhabitants.

Voting data is drawn from the MIT Election and Data Science Lab. Controls for the percentage of the county that is white and population density are from Chetty (2016), while religiosity is drawn from a Kaggle dataset.

B. 2017 French Presidential Election

A cross-sectional OLS regression framework is used:

$$(2) \text{ Le Pen}_i = \beta_0 + \beta_1 \text{Mobility}_i + \beta_2 \text{Inequality}_i + \beta_3 \text{Immigrants}_i + \gamma W_i + \varepsilon_i$$

Where i subscripts each French department, Le Pen_i measures the percent vote share for Le Pen in the second round of the 2017 Presidential election, Mobility_i is intergenerational income elasticity, Inequality_i is the Gini coefficient for income inequality, Immigrants_i is the percentage of births with at least one immigrant parent in 2015, W_i is a vector of controls, and ε_i is the error term. Unfortunately detailed subnational demographic statistics for France are generally not collected, but controls are included for each department's population density.

Whereas the US specification uses the change in Republican vote share from 2012 to 2016 as the outcome variable, here the specification for France simply uses the 2017 vote share for Le Pen. This is because Le Pen was not an insurgent within her own party, and thus it does not make sense to focus on the change in the vote

share for the *Front National*. The French voting data comes from the French Ministère de l'Intérieur.

The intergenerational income elasticity data covers the largest 41 French departments, and is drawn from Kenedi (2017), a master's thesis in economics from the Paris Institute of Political Studies (*Sciences Po*)¹. Due to the incomplete coverage the results for this section must be interpreted with caution; nevertheless they seem indicative.

Data on each department's income inequality, population density, and percentage of immigrant births are from INSEE.

C. 2019 European Parliament Elections

A cross-sectional OLS regression framework is used:

$$(2) \text{ Populist}_i = \beta_0 + \beta_1 \text{Mobility}_i + \beta_2 \text{Inequality}_i + \beta_3 \text{Social Media}_i + \beta_4 \text{Immigrants}_i + \beta_5 \text{Age}_i + \gamma W_i + \varepsilon_i$$

Where i subscripts each European Union country, Populist_i measures the percent vote share received by populist or far-right parties in the 2019 European Parliament election, Mobility_i is intergenerational income elasticity, Inequality_i is the Gini coefficient for income inequality, Social Media_i is the proportion of population who actively use social media, Immigrants_i is the share of immigrants in the population, Age_i is the proportion of the population at least 65 years old, W_i is a vector of controls, and ε_i is the error term. For controls log GDP per capita, log population, and the GDP per capita growth rate are used.

¹ Recognized as the best master's thesis in that graduating class.

PopuList, a frequently-updated and academically-reviewed list of extremist European parties, is used to identify populist and far-right parties. In addition to those parties identified as populist or far right by PopuList, the UK's Brexit Party and Spain's Vox are also treated as populist. In the main specification both populist and far-right parties are considered, and in a robustness check only populist parties are considered. Data for the Gini coefficient of income inequality is taken from the OECD for the latest year and, for non-OECD countries, the World Economic Forum's 2018 Inclusive Development Index. Intergenerational income elasticity data is taken from the World Bank's Global Database on Intergenerational Mobility for the most recent year available. In robustness checks alternative sources are used: the Gini coefficient is replaced where possible with the most recent data from the Luxembourg Income Study; wealth inequality as reported by the World Economic Forum is considered instead of income inequality; and intergenerational income elasticity is replaced where possible with results from Corak (2016).

GDP per capita (PPP) at 2010 USD, GDP per capita growth, population, and age data from 2017 are taken from the World Bank's World Development Indicators. The percentage of the population accounted for by immigrants is produced by dividing the country's international migrant stock, also taken from the World Development Indicators, by population. Social media penetration data is from Hootsuite, for either 2016 or 2017 depending on data availability for each country.

D. International Political Stability

A cross-sectional OLS regression framework is used:

$$(3) \text{ Stability}_i = \beta_0 + \beta_1 \text{Mobility}_i + \beta_2 \text{Inequality}_i + \beta_3 \text{Social Media}_i + \beta_4 \text{Immigrants}_i + \beta_5 \text{Age}_i + \gamma W_i + \varepsilon_i$$

Where i subscripts the country in question, $Stability_i$ is an indicator of political stability, $Mobility_i$ is intergenerational income elasticity, $Inequality_i$ is the Gini coefficient for income inequality, $Social Media_i$ is the proportion of population who actively use social media, $Immigrants_i$ is the share of immigrants in the population, Age_i is the proportion of the population at least 65 years old, W_i is a vector of controls, and ε_i is the error term. The controls are comprised of log GDP per capita, the GDP per capita growth rate, and log population.

In the main specification the analysis is restricted to countries with GDP per capita levels above \$25,000, as the research question pertains to developed countries. In a robustness check this threshold is increased to \$35,000.

Political stability data in the main specification is given by the 2017 Political Stability variable from the World Bank's World Governance Indicators. The supplied definition of this variable is "perceptions of the likelihood that the government will be destabilized or overthrown by unconstitutional or violent means, including politically-motivated violence or terrorism." It is a composite of risk indicators for numerous factors, including: social unrest; protests and riots; ethnic tensions; international tensions; government stability; orderly transfers; violent demonstrations; violent activities; terrorism; and armed conflict. Critically, this index captures both violent and nonviolent elements of political instability. For example, in 2017 it rates the Democratic Republic of the Congo as far more unstable than South Africa, presumably due to the risk of armed conflict. At the same time, it rates the United States as noticeably less politically stable than Canada in 2017, presumably due to perceptions that the Trump government was more likely to be destabilized than the Trudeau government through either violent or nonviolent means. This measure thus seems to appropriately capture a general sense of political instability. In a robustness check protest events per 100,000 people from 2015 –

2018 with data drawn from The Mass Mobilization Project are alternatively used as the outcome variable.

Data for the Gini coefficient, intergenerational income elasticity, immigrants, age, social media penetration, population, GDP per capita, and the GDP per capita growth rate are from the same sources described in part C.

III. Results

A. 2016 US Presidential Election

Roughly 2% of counties are dropped as outliers which proved to have large residuals in the main specification. The results for the main specification are reported in Table 1. Intergenerational income mobility is statistically significant and has the expected sign; that is, a higher correlation between parent and child income – worse social mobility – is positively associated with a larger swing towards Trump. Income inequality, the proportion of immigrants in the population, and the proportion of seniors in the population are all statistically insignificant.

Three robustness checks examining the 2016 election are used (Table 2). In (1) relative mobility is replaced with absolute mobility; in (2) the outcome variable is replaced with the absolute change in the vote share; and in (3) both of these alterations are made. In all cases intergenerational income mobility retains significance and the appropriate sign. Note that the negative sign on absolute mobility is expected because it measures the chance of upward mobility: a higher value means better social mobility, which we expect to be negatively associated with a swing towards Trump. While specification (2) has a marginally significant coefficient on income inequality and a significant coefficient on the proportion of immigrants, those results are not robust to alternative specifications.

TABLE 1—MAIN RESULT FOR 2016 US ELECTION

Relative	0.693***
Mobility	(0.063)
Gini	0.020
	(0.061)
Percent	0.169
Immigrant	(0.106)
Percent Senior	-0.099
	(0.113)
2012 Republican	-1.092***
Support	(0.035)
Percent White	0.617***
	(0.036)
Percent	0.171***
Religious	(0.022)
Population	-0.054***
Density	(0.004)
Constant	0.134***
	(0.049)
Observations	2617
R ²	0.483

Notes: Regression coefficients reported. White-corrected standard errors reported in parentheses.

*** Significant at the 1 percent level; ** significant at the 5 percent level; * significant at the 10 percent level.

In Table 3 results examining the 2012 election are reported, which run the same specifications as in Tables 1 and 2. A remarkably different pattern presents itself. The coefficient for social mobility is up to 50% smaller, and the alternative hypotheses become significant (notably not always with the expected sign). This is a different story than what transpired in the 2016 election: Trump as a candidate appears to have attracted votes from counties with low social mobility in a way that Romney did not.

TABLE 2—ROBUSTNESS CHECKS FOR 2016 US ELECTION

	(1) Outcome Variable: Percent Change	(2) Outcome Variable: Absolute Change	(3) Outcome Variable: Absolute Change
Relative		0.397***	
Mobility	-	(0.036)	-
Absolute	-0.833***		-0.466***
Mobility	(0.112)		(0.064)
Gini	-0.022	0.063*	0.040
	(0.065)	(0.033)	(0.035)
Percent	0.016	0.160***	0.067
Immigrant	(0.111)	(0.058)	(0.061)
Percent Senior	-0.120	-0.059	-0.071
	(0.117)	(0.064)	(0.067)
2012 Republican	-1.081***	-0.6083***	-0.601***
Support	(0.036)	(0.018)	(0.018)
Percent White	0.617***	0.375***	0.373***
	(0.040)	(0.021)	(0.023)
Percent	0.264***	0.092***	0.144***
Religious	(0.026)	(0.013)	(0.016)
Population	-0.054***	-0.033***	-0.033***
Density	(0.004)	(0.002)	(0.002)
Constant	0.699***	0.025	0.344***
	(0.066)	(0.027)	(0.036)
Observations	2617	2617	2617
R ²	0.468	0.483	0.467

Notes: Regression coefficients reported. White-corrected standard errors reported in parentheses.

*** Significant at the 1 percent level; ** significant at the 5 percent level; * significant at the 10 percent level.

TABLE 3—2012 US ELECTION

	(1)	(2)	(3)	(4)
	Outcome: Percent	Outcome: Percent	Outcome: Absolute	Outcome: Absolute
	Change	Change	Change	Change
Relative	0.375***		0.197***	
Mobility	(0.065)	-	(0.037)	-
Absolute		-0.6923***		-0.383***
Mobility		(0.117)		(0.064)
Gini	0.288***	0.229***	0.175***	0.142***
	(0.057)	(0.059)	(0.032)	(0.033)
Percent	0.491***	0.524***	0.305***	0.332***
Immigrant	(0.109)	(0.109)	(0.060)	(0.059)
Percent Senior	-0.669***	-0.703***	-0.393***	-0.413***
	(0.112)	(0.113)	(0.063)	(0.063)
2008 Republican	-0.985***	-0.983***	-0.535***	-0.534***
Support	(0.035)	(0.026)	(0.019)	(0.019)
Percent White	0.599***	0.634***	0.323***	0.359***
	(0.035)	(0.038)	(0.020)	(0.022)
Percent	0.196***	0.274***	0.105***	0.148***
Religious	(0.023)	(0.026)	(0.013)	(0.015)
Population	-0.049***	-0.053***	-0.029***	-0.031***
Density	(0.003)	(0.004)	(0.002)	(0.002)
Constant	0.095*	0.494***	0.046	0.263***
	(0.051)	(0.067)	(0.029)	(0.037)
Observations	2624	2624	2624	2624
R ²	0.374	0.375	0.365	0.367

Notes: Regression coefficients reported. White-corrected standard errors reported in parentheses.

*** Significant at the 1 percent level; ** significant at the 5 percent level; * significant at the 10 percent level.

B. 2017 French Presidential Election

The departments of Paris, Hauts-de-Seine, Seine-Saint-Denis, and Val-de-Marne are dropped as high-leverage outliers. Their exclusion, however, does not substantially alter results. The results for the main specification are presented in Table 4. Given the incomplete coverage of intergenerational mobility data for French departments this result must be interpreted with some caution. Nevertheless,

we see the same pattern as in the US: there is a positive significant relationship between intergenerational income elasticity – that is, low social mobility – and the vote share for Le Pen, whereas inequality and immigration are insignificant.

TABLE 4—MAIN RESULT FOR 2017 FRENCH ELECTION

IGE	0.311** (0.122)
Gini	1.663 (1.037)
Immigrant Births	-0.060 (0.205)
Population Density	-0.047 (0.029)
Constant	0.055 (0.288)
Observations	35
R ²	0.319

Notes: Regression coefficients reported. White-corrected standard errors reported in parentheses.

*** Significant at the 1 percent level; ** significant at the 5 percent level; * significant at the 10 percent level.

C. 2019 European Parliament Elections

Latvia is dropped as a high-leverage outlier for these regressions. The main analysis thus considers 20 out of 28 European Union countries for which data is available: Austria, Belgium, Croatia, the Czech Republic, Denmark, Finland, France, Germany, Greece, Ireland, Italy, Luxembourg, Netherlands, Portugal, Slovakia, Slovenia, Spain, Sweden, and the United Kingdom. The main result is shown below in Table 5. Worse intergenerational mobility is statistically significantly associated with a higher vote share for populists and the far right. Income inequality is not statistically significant, and while social media penetration and immigration are significant their signs are negative.

TABLE 5—MAIN EU RESULT

IGE	0.798*** (0.301)
Gini	0.263 (1.162)
Social Media	-0.554* (0.283)
Immigrants	-1.355*** (0.506)
Age	1.145 (2.105)
Log Population	-0.023 (0.032)
Log GDP per Capita	0.235 (0.162)
GDP per Capita Growth	-0.037* (0.022)
Constant	-1.912 (2.024)
Observations	20
R ²	0.728

Notes: Regression coefficients reported. White-corrected standard errors reported in parentheses.

*** Significant at the 1 percent level; ** significant at the 5 percent level; * significant at the 10 percent level.

Robustness checks are presented in Table 6, where (1) only considers countries with GDP per capita levels of at least \$30,000 and (2) through (5) use alternative data sources and definitions. In all cases social mobility retains its sign and significance. Inequality, age, and social media are never significant and immigration levels are significant but not in the expected direction. Social mobility thus remains by far the best explanation of populism.

TABLE 6—ROBUSTNESS CHECKS FOR EU RESULTS

	(1) Wealthy Countries Only	(2) Populists Only, No Far Right	(3) Wealth Inequality	(4) Corak Mobility Data	(5) LIS Gini Data
IGE	0.879*** (0.323)	0.763*** (0.289)	0.866*** (0.290)	0.806** (0.348)	0.806*** (0.278)
Gini	0.415 (1.417)	0.240 (1.166)	0.213 (0.514)	0.291 (1.199)	0.633 (1.158)
Social Media	-0.285 (0.294)	-0.456 (0.305)	-0.575 (0.365)	-0.435 (0.333)	-0.540 (0.264)
Immigrants	-1.097** (0.495)	-1.144** (0.557)	-1.238*** (0.350)	-1.246** (0.589)	-1.487*** (0.454)
Age	2.272 (1.939)	2.164 (2.054)	0.901 (2.648)	0.854 (2.273)	1.147 (2.006)
Log Population	-0.027 (0.032)	-0.016 (0.033)	-0.023 (0.022)	-0.025 (0.035)	-0.028 (0.030)
Log GDP per Capita	0.200 (0.242)	0.283* (0.150)	0.179 (0.241)	0.192 (0.170)	0.260 (0.160)
GDP per Capita Growth	-0.013 (0.016)	-0.026 (0.021)	-0.037* (0.021)	-0.036 (0.023)	-0.038** (0.017)
Constant	-1.999 (2.799)	-2.834 (1.875)	-1.370 (2.880)	-1.487 (2.107)	-2.196 (1.958)
Observations	16	20	19	20	20
R ²	0.833	0.683	0.731	0.707	0.738

Notes: Regression coefficients reported. White-corrected standard errors reported in parentheses.

*** Significant at the 1 percent level; ** significant at the 5 percent level; * significant at the 10 percent level.

D. International Political Stability

This international analysis covers Australia, Austria, Belgium, Canada, Cyprus, the Czech Republic, Denmark, Finland, France, Germany, Ireland, Italy, Japan, South Korea, Latvia, Luxembourg, Malaysia, the Netherlands, New Zealand, Portugal, Singapore, Slovakia, Slovenia, Spain, Sweden, the United Kingdom, and the United States. The main result, where the outcome variable is the World Bank's political stability index, is shown in Table 7. Social mobility is highly significant

and has the expected sign; lower mobility is associated with worse political stability. Alternative explanations are not significant.

TABLE 7—MAIN INTERNATIONAL RESULT

IGE	-1.034** (0.456)
Gini	1.744 (2.940)
Percent Immigrant	0.681 (1.360)
Percent Senior	2.167 (2.409)
Social Media Penetration	0.015 (0.668)
Log GDP per Capita	0.127 (0.329)
GDP per Capita Growth	0.005 (0.042)
Log Population	-0.169** (0.067)
Constant	1.558 (3.567)
Observations	28
R ²	0.606

Notes: Regression coefficients reported. White-corrected standard errors reported in parentheses.

*** Significant at the 1 percent level; ** significant at the 5 percent level; * significant at the 10 percent level.

Robustness checks are reported in Table 8. In (1) Intergenerational Income Elasticity data is replaced with that of Corak (2016) where possible, and in (2) the Gini coefficient data is replaced with that from the Luxembourg Income Study. In both cases mobility is significant with the expected sign, while competing explanations are not significant. (3) uses wealth inequality instead of income inequality, and displays the same pattern. In specification (4) the alternative outcome variable of protests per 100,00 people is used. Low social mobility is significantly related to protests, while there is no relationship with alternative

explanations. Finally, (4) only examines countries with GDP per capita levels of at least \$35,000. Low social mobility is significantly related to worse stability, while other explanations are insignificant.

TABLE 8—ROBUSTNESS CHECKS FOR INTERNATIONAL RESULTS

	(1) Corak IGE Data	(2) LIS Gini Data	(3) Wealth Inequality	(4) Outcome: Protests per 100,000 People	(5) No Countries Below \$35,000 per Capita
IGE	-1.001* (0.514)	-0.922** (0.317)	-0.956** (0.441)	0.431* (0.258)	-2.376*** (0.765)
Gini	1.666 (2.864)	0.886 (2.986)	-0.532 (1.081)	0.696 (1.179)	8.090 (3.509)
Percent Immigrant	0.951 (1.315)	0.955 (1.415)	1.303 (1.009)	-1.375 (1.095)	0.020 (1.524)
Percent Senior	2.380 (2.397)	2.276 (2.717)	1.926 (1.975)	-0.534 (0.891)	3.422 (3.067)
Social Media Penetration	-0.082 (0.659)	0.180 (0.613)	0.435 (0.663)	-0.591 (0.520)	0.242 (0.810)
Log GDP per Capita	0.146 (0.327)	0.120 (0.373)	0.108 (0.375)	0.857** (0.374)	0.209 (0.361)
GDP per Capita Growth	0.008 (0.048)	0.012 (0.045)	0.025 (0.033)	0.067 (0.056)	-0.027 (0.050)
Log Population	-0.168*** (0.065)	-0.150** (0.068)	-0.115** (0.052)	-0.054 (0.048)	-0.186** (0.084)
Constant	1.340 (3.564)	1.388 (4.238)	1.434 (3.954)	-8.002** (4.013)	-0.792 (4.610)
Observations	28	28	27	24	21
R ²	0.597	0.597	0.597	0.637	0.773

Notes: Regression coefficients reported. White-corrected standard errors reported in parentheses.

*** Significant at the 1 percent level; ** significant at the 5 percent level; * significant at the 10 percent level.

IV. Discussion

The above results show a consistent narrative of populism taking root in places with low social mobility. In each case low social mobility is consistently and significantly correlated with populism, but the alternative hypotheses unrelated to economic fairness are not. Collectively, this suggests that the economic unfairness of low social mobility may be a critical factor behind contemporary developed-world populism.

The results for the American elections demonstrate that vote swings towards Trump in 2016 were strongly related to social mobility and unrelated to alternative factors. The fact that this was not the case for Romney –the “Massachusetts moderate” – just four years earlier reinforces the contention that this was because Trump ran as a populist and not because he ran as a Republican. The same underlying problems may have been there in 2012, but it took Trump’s anti-establishment politics to convert them to electoral success.

While the analysis concerning France must be interpreted with caution given the limited availability of data, the consistency of its findings with those in the American context are encouraging. The regressions for the European Union likewise demonstrate the primacy of social mobility. Interestingly, they additionally suggest that societies with high levels of immigration may be less susceptible to populism.

The international analysis again reinforces the importance of social mobility as an explanation for contemporary political turmoil in developed countries. While it may be technically feasible to extend this analysis by examining the vote share received by populist parties in different countries and different elections, as done by Pastor and Veronesi (2018), that approach is problematic because the outcome variable does not always properly correspond to true populist sentiment. Many people voted for Trump because he was a Republican, for instance, and hence in

the US it is most appropriate to examine the change in the Republican vote share from 2012 to 2016. Yet in the case of Le Pen the same transformation is not appropriate. Even if one could use the same transformation in both cases, the vagaries of French versus American politics mean that the same vote share may not be meaningfully comparable across the two countries. Unless looking at election events in the same settings with the same rules, more general indicators of political instability, such as those used in this paper, are arguably likelier to paint an accurate picture.

Of course, this analysis consists of multiple regression and not causal inference. It can only demonstrate a persistent correlation between low social mobility and populism, and a good natural experiment seems unlikely to be found. But the robustness of the pattern these regressions display to wildly different contexts, data sources, and definitions is not insubstantial. In principle a correlation can fail to imply causation because there is reverse or bidirectional causality, there is measurement error in the data, the relationship is a spurious coincidence, or there is omitted variable bias. It is implausible that recent electoral results could have caused long-standing differences on social mobility, and the consistency of the results suggest that measurement error and coincidence were not at play. The concern of omitted variable bias cannot ever be fully addressed with regression alone, but social mobility outperforms the prominent alternative hypotheses; and its robustness across contexts suggests that if there is a substantial omitted variable, it is probably one that also applies internationally. To be sure this analysis shows a correlation, but it is arguably a correlation that is robust and compelling.

As explained, the most plausible explanation for the connection between social mobility and populism is fairness. Starmans, Sheskin and Bloom (2017) not only demonstrate that people are not averse to inequality at the micro level, but that they are “bothered by something that is often confounded with inequality: economic unfairness.” By “economic unfairness” they mean that humanity shares a profound

belief that economic outcomes should be determined by talent and effort. Rawls captures this sense of fairness in *A Theory of Justice* when he proposes that “those who are at the same level of talent and ability, and have the same willingness to use them, should have the same prospects of success regardless of their initial place in the social system.” Social mobility is one measure of the degree to which this holds true in a particular society.

Humanity has been deeply concerned with fairness in the economy for eons. Aristotle stakes out a similar claim to Rawls more than two millennia earlier in *Nicomachean Ethics* when he writes that “awards should be according to merit; for all men agree that what is just in distribution must be according to merit in some sense.” There are good reasons to believe that this conception of fairness is so universal that it has been with us from far earlier times – since before we were even human. Brosnan and De Waal (2003) demonstrate that capuchin monkeys, a relative we diverged from millions of years ago, become furious when relative rewards do not correspond to relative effort. It is unsurprising that violating a value as essential to the human condition as fairness would produce populist political upheaval.

These findings have profound implications for policy and the field of economics as a whole. In the former domain they suggest that aggressive redistribution, social media regulation, and immigration controls are unlikely to defuse populism, and in fact may make it worse. Far more attention to the foundations of fairness and their impact on social mobility is warranted. Depending on the country this may plausibly necessitate greater investment in public goods like education and health, or labor market reforms to ensure ample access to well-paying jobs. Pioneering work like Chetty and Hendren (2016), which investigates the determinants of social mobility across different US geographies, provides some guidance and lays the ground for future research.

These results suggest that Milton Friedman's (1953) exhortation for economists to eschew normative issues is ultimately wrong-headed. The way the field of economics has focused on explaining the magnitudes and distributions of gains and losses is an incomplete picture of economic life, and arguably is helping to create the conditions for populism in high-income democracies. By divorcing the study of economics from normative concerns it has missed the fact that people don't simply care about economic outcomes; they deeply care about the fairness of how outcomes are achieved. The early students of economics – more rightly thought of as political economists, such as Adam Smith in his *A Theory of Moral Sentiments* – put normative questions at the center of their thinking. If the state of liberal democracy critically depends on the fairness of the society that hosts the economy, perhaps modern economists should return to their roots. That is, economics ought to have a moral purpose.

V. Conclusion

This paper has investigated several competing hypotheses that aim to explain contemporary developed-world populism. The conventional explanations of income inequality, generational cultural backlash, social media, and immigration were found not to correlate with geographic variation in support for populism. In contrast, low social mobility – a situation where each person's economic success strongly depends on how successful their parents were – consistently correlates with the geography of populism in four different contexts.

First, it was shown that swings in support towards Trump in the 2016 US Presidential election among US counties were significantly related to low social mobility, but not to inequality, the presence of immigrants, or the presence of older generations. The same analysis was repeated for Romney in the 2012 US

Presidential election; effect sizes on social mobility were up to 50% smaller and alternative explanations became significant, indicating that Trump in particular – not just the Republican Party – engendered particular support from populations that suffer from low social mobility.

Second, it was shown that vote shares for Marine Le Pen in the second round of the 2017 French Presidential election among the 41 largest departments were significantly related to poor social mobility, but not income inequality or the presence of immigrants. The data restrictions in the French context mean that this result must be interpreted with caution, but it is nevertheless notable that it displays the same pattern as in the US.

Third, it was shown that vote shares for populist and far-right parties in the 2019 European Parliament elections were significantly related to social mobility but not the alternative hypotheses. This setting is especially advantageous as it yields one of the few instances of vote shares that are convincingly comparable on an international level.

Fourth, it was shown that an index of political stability and protests per 100,000 people among developed countries in recent years were significantly related to poor social mobility, but not alternative explanations. Where possible, alternative definitions and data sources showed that the above findings are robust.

The connection between social mobility and populism can be viewed through the lens of fairness. There is a wealth of micro-level behavioral evidence showing that human adults, infants, and even monkeys favor an economic system where rewards are decided by merit. Philosophers from Aristotle to Rawls have offered arguments along these lines, and social mobility is one measure of the degree to which this holds true in a particular society. It is not hard to imagine how long-standing unfairness in the economy could explain the way populism has built up over several decades in high-income democracies. Normative concerns have had a long history

in economics from the writings of Adam Smith to modern authors like Amartya Sen, and this article highlights their importance in the field.

These results suggest that aggressive redistribution, social media regulation, and immigration crackdowns will not halt populism because the descriptions behind these prescriptions do not have real explanatory power. Instead, policymakers ought to focus on the foundations of fairness and social mobility.

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