When the Rich get Richer: Class, Globalization and the Sociotropic Determinants of Populism

Kathleen E. Powers and [*] Brian C. Rathbun[†‡]

Abstract

ABSTRACT: Globalization is frequently linked to populism in advanced industrial societies, yet scholars have found little evidence for a direct connection between citizens' personal economic fortunes and populist beliefs. We draw on the sociotropic tradition to argue that beliefs about how the global economy differently affects groups in society link globalization to populism and its component elements — anti-elitism, people-centrism, and demand for popular sovereignty — on the distribution within society of gains and losses. Data from an original survey of U.S. residents supports our argument that beliefs about whether wealthy Americans have gained from globalization — the rich getting richer — correlate with populist attitudes. This pattern holds while adjusting for a broad range of pocketbook measures and the nativist attitudes associated with right-wing populism. Results from a pre-registered experiment further show that exposure to an article about globalization enriching Davos billionaires increases two of three populist beliefs, lending causal leverage to our empirical tests. Our results emphasize the class dynamics created by outside financial forces and not the country as a whole, suggesting that IR scholars gain important insights by accounting for globalization's uneven effects. Perceptions about globalization inform attitudes about politics in general, a layer deeper than foreign economic policy preferences.

Forthcoming in *International Studies Quarterly*

The growing demand for populism in advanced industrialized societies features a common culprit: Globalization. Some scholars argue that globalization's economic consequences generate populist discontent (Rodrik, 2018, 2021; Colantone and Stanig, 2018; Gest, 2016; Burgoon et al., 2019).[1] This perspective attributes populism to individual economic grievances: open economics depresses wages in certain industries, increases inequality, and marginalizes workers who struggle to compete in the global economy. Those who lose from globalization express their economic frustration through anti-establishment, populist beliefs. Up to now, however, this perspective has found surprisingly little individual-level evidence connecting globalization's pocketbook effects to populism (see, e.g., Kates and Tucker, 2019; Gidron and Mijs, 2019; Norris and Inglehart, 2019; Rhodes-Purdy, Navarre and Utych, 2021).

We argue that a connection plainly exists between globalization's material effects and populism at the individual level. Analysts have just been looking in the wrong place, overlooking an important material consequence that links the two: Globalization's rewards for the rich. Our argument relies on two related insights from research on public opinion and international political economy. First, we expect that populism arises from beliefs about globalization's collective, societal implications. This claim builds from research on trade attitudes, which finds that such "sociotropic" considerations — about how trade affects whole groups like the nation — play a more important role in protectionist views than individual, pocketbook costs (Mansfield and Mutz, 2009). Second, the sociotropic assessments that matter are *distributional*. Believing that globalization's gains accrue to the wealthiest societal strata evokes antagonism and resentment against the rich's economic success.[2] People resent

---

[1]See Berman (2021) for a review.
[2]See e.g., Flaherty and Rogowski (2021) on the link between globalization and top-heavy inequality.

that the rich are getting richer under globalization. They target their resentment at the political system, embracing populist beliefs. Earlier research concluded that perceptions about broad social groups' differential economic trends inform domestic political attitudes (e.g., Mutz and Mondak, 1997). But international political economy research applying similar concepts has yet to incorporate these insights.

Populist ideas venerate ordinary people, characterize elites as untrustworthy, and stress that politicians should directly implement the public's will (e.g., Hawkins et al., 2018; Wuttke, Schimpf and Schoen, 2020; Erisen et al., 2021). This confluence of beliefs emphasizes intergroup dynamics, pitting establishment elites against 'the people' (Mudde, 2007). When it comes to economics, material circumstances divide the masses from elites. Populism implicates class politics. Individual and household economic strife fail to capture the class resentment that characterizes populism (see also Burgoon et al., 2019), partly explaining why scholars to date have not identified robust evidence linking personal economics to populism.

We analyze data from an original U.S. survey and a pre-registered experiment, finding that populist beliefs stem from the perception that globalization boosts the rich. Our survey analyses show that believing that globalization benefits wealthy Americans correlates with two core populist principles — anti-elitism and popular sovereignty. Perceiving that globalization helps the rich get richer also increases the probability that someone adheres to all three populist beliefs. We find that these relationships remain robust after adjusting for important pocketbook measures and the nativist attitudes implicated in right-wing populism. Finally, we find evidence to suggest that populism may be more acute among people who perceive globalization as helping wealthy Americans while also harming the working and middle classes. These findings add new insights to research on the political consequences

2

from globalization's contributions to economic inequality (Flaherty and Rogowski, 2021). Collectively, the survey analyses support our argument that group-based resentment fuels populist beliefs.

A separate survey experiment adds causal support to our argument. Exposing U.S. respondents to an article about the economic gains reaped by globe-trotting businesspeople at the World Economic Forum in Davos increases support two populist beliefs: popular sovereignty and people-centrism. The treatment does not affect anti-elitism. We found strong anti-elitist sentiment in the control group, suggesting that ceiling effects may limit our ability to identify growing anti-elitism in the sample. We doubt that globalization is the only factor driving the populist wave in advanced industrial societies, but our observational and experimental findings imply that its perceived economic consequences for different social classes constitute an important part of the equation.

This article makes four important contributions. First, our findings suggest that subjective perceptions of systemic economic forces affect bedrock assumptions about the nature of politics, moving beyond the attitudes about foreign economic policy that have occupied many IPE scholars (Mansfield and Mutz, 2009; Mutz and Kim, 2017; Guisinger, 2017). In this case, we link globalization to populism, a profoundly important force in contemporary politics — one that may strain the liberal international order (Lake, Martin and Risse, 2021). In other words, sociotropic attitudes about international political economy matter for a broad range of political attitudes, not just foreign economic policy.

Second, we stress that distributional judgments – about which groups win from globalization — shape political attitudes. The resentment that fuels populism stems from the perception that economic globalization enables some groups to fare better than others in

society. Previous work shows that the sociotropic basis of e.g., trade support depends on an evaluation of how it affects the country as a whole. But Americans distinguish between country and class-level economic trends (Conover, 1985; Kinder, Adams and Gronke, 1989; Mutz and Mondak, 1997), setting the stage for populist grievance when they view the global economic system as favoring the rich.

Third, our findings add to international political economy research charting the "backlash" against economic globalization and its consequences (see Mansfield, Milner and Rudra, 2021 and Walter, 2021 for reviews). Extensive research examines whether the economic exposure from globalization influences voting behavior (Colantone and Stanig, 2018; Milner, 2021; Rommel and Walter, 2018), protectionism (Hainmueller and Hiscox, 2006), or support for redistribution (Walter, 2010), among other phenomena. Interestingly, Flaherty and Rogowski (2021) argue that top-heavy inequality influences whether economic exposure from globalization generates a backlash — modifying some prior conclusions about how trade shocks affect political attitudes. Our article complements this scholarship with an individual-level argument explaining how distributional consequences foster the populist beliefs that help fuel the backlash.

Fourth, our results suggest possible economic origins of populism. Some accounts take the absence of any consistent link between individual economic circumstances and populism as evidence that populism is solely a socio-cultural phenomenon. Such analyses focus almost exclusively on right-wing, nativist populism, understanding it as an ideological backlash to an increasingly cosmopolitan world. While almost certainly true, we argue that it is not the complete story. When we better understand the level on which economic globalization matters – sociotropic and distributional – economics reasserts itself as a potent explanation

4

for populist beliefs. Our account helps to make sense of populism writ large, not just right-wing nativism.

In the following pages, we first identify our particular "ideational" use of the term populism and the three core populist beliefs. We then discuss research on the mechanisms linking globalization and populism, explaining how perceptions about the distributional effects of global economic integration affect broader political attitudes. Finally, we present our survey and experiment, concluding that concerns about wealthy Americans profiting from globalization contribute to populism.

Conceptualizing Populist Beliefs

Our interest lies in the factors that drive *populist beliefs* in the mass public — the degree to which individuals adhere to a set of core ideas about the nature of politics. As has become commonplace, we conceive of populism as an "attitudinal syndrome" (Wuttke, Schimpf and Schoen, 2020, 358) or "outlook" (Hawkins and Kaltwasser, 2017) that "considers society to be ultimately separated into two homogeneous and antagonistic groups, 'the pure people' versus 'the corrupt elite,' and which argues that politics should be an expression of the volonté générale (general will) of the people" (Mudde, 2007, 23). This conceptualization treats populism as a belief system that entails venerating good, ordinary people while vilifying self-serving, immoral elites (Mudde, 2017, 28) — implying competition between societal strata (Canovan, 1999). Empirical public opinion researchers have increasingly converged on this "ideational approach" to conceptualizing and measuring populism (Akkerman, Mudde and Zaslove, 2014; Elchardus and Spruyt, 2016; Schulz et al., 2017; Hawkins et al., 2018;

Castanho Silva et al., 2018; Wuttke, Schimpf and Schoen, 2020; Erisen et al., 2021; Rhodes-Purdy, Navarre and Utych, 2021; Schäfer, 2021; Bayram and Thomson, 2022).

This conceptualization has two important characteristics. First, the ideational approach distinguishes populist attitudes from host ideologies like nativism on the right or socialism on the left (Rooduijn, 2019). Separating this populist core from partisan politics highlights populist ideas that span the ideological spectrum. A Bernie Sanders voter might concern herself with elites who run multinational corporations whereas a Trump voter targets "globalists" or minority ethnic groups. Each then embraces populist attitudes despite holding other competing political views. The ideational approach to populism complements—but also departs from—research that specifically seeks to explain the populist radical right (e.g., Norris and Inglehart, 2019; Kriesi et al., 2008). Discontent with the establishment exists on the left and right.

Second, *populist* attitudes imply that people adhere to each of several otherwise independent subcomponent beliefs. Scholars disagree about the precise labels for each subcomponent and how many are required to create populism, but broadly conclude that populism combines anti-elitism with ideas about how politics should engage the people (Wuttke, Schimpf and Schoen, 2020, 358). We focus on three core dimensions highlighted in previous work: 1) belief in the good will and competence of ordinary people (*people-centrism*), 2) distrust of elites (*anti-elitism*), and 3) the desire that government policy directly reflects the people's will (*popular sovereignty*).

Populism starts with the people, who comprise a "virtuous... silent majority" (Akkerman, Mudde and Zaslove, 2014, 4). Elchardus and Spruyt (2016, 114) describe the "elevated status of 'the people'" or "*people-centrism*" as one of three core populist traits. Populists also

contend that the elite "uses its power to its own advantage" (Elchardus and Spruyt, 2016, 114). These *anti-elitism* beliefs exhibit a strong moralistic streak, with populists viewing elites as disingenuous, self-serving, dishonest, and profit-seeking (Hawkins, 2009, 3). Finally, populists want their government to implement the preferences of ordinary individuals to circumvent the "backroom deals and shady compromises" prevalent among the elite (Canovan, 1999, 6).[3] This desire for *popular sovereignty* often manifests itself in support for direct democracy, but populists might also endorse a 'strongman' leader who pushes necessary reforms past entrenched elites. Core to populism is the assumption that policies must reflect the will of the people — with populists assuming (perhaps inaccurately) that a homogeneous "people" better represent their interests than the political class.

Each subcomponent belief contains an element of populism. Yet *people-centrism*, *anti-elitism*, and *popular sovereignty* remain conceptually and empirically distinct from each other and from the populist intersection that requires committing to each idea. These properties and populism's status as an amalgamated concept raise the possibility that populism and its subcomponent beliefs have distinct correlates (Erisen et al., 2021). Our empirical approach, in turn, matches the conceptual structure with separate measures for each subdimension alongside and indicator for the populist combination of all three.

Why do People Embrace Populist Beliefs?

How do perceptions about globalization's economic effects influence populist beliefs in the mass public? Researchers contend that globalization fuels populism at the macro-level —

---

[3]Other schemes include a Manichean outlook or perceptions about the homogeneity of the people as populist subdimensions, reflecting continuing conceptual refinement and debate among populism scholars. See, for example, Schulz et al. (2017); Castanho Silva et al. (2018).

"empirical evidence leaves no doubt" that shocks from globalization have contributed to rising populism (Rodrik, 2021, 162). Trade shocks and financial crises correspond with increased support for populist parties and platforms (e.g., Autor, Dorn and Hanson, 2013; Colantone and Stanig, 2018; Flaherty and Rogowski, 2021).[4]

Individual-level data, however, produces inconsistent evidence that lower incomes, job losses, or subjective assessments about personal economic strife increase anti-establishment attitudes (cf. Rodrik, 2018; Morgan, 2018; Gidron and Mijs, 2019; Gidron and Hall, 2020; Norris and Inglehart, 2019; Mutz, 2018; Gest, 2016; Carreras, Irepoglu Carreras and Bowler, 2019). Researchers find little to no link between economics and support for the populist radical right, for example (Kates and Tucker, 2019). A recent review concludes that "despite the plausibility that individual economic setbacks and/or insecurity would lead voters to support populists, the evidence linking individual economic grievances to populist voting is not particularly strong" (Berman, 2021, 34, though see Abou-Chadi and Kurer, 2021).

Many therefore doubt that economic grievances animate populist attitudes, instead positing that socio-cultural mechanisms link globalization to contemporary populism. Globalization speeds immigration and erodes "traditional" values within a society, increasing nativism and feelings of social marginalization. These trends foment grievances among people who resent new immigrants for upending the country's racial or ethnic hierarchy. Indeed, elevating cultural factors has produced essential insights into contemporary populism (Rhodes-Purdy, Navarre and Utych, 2021; Gidron and Hall, 2020; Carreras, Irepoglu Carreras and Bowler, 2019; Colantone and Stanig, 2018; Bonikowski, 2017; Curtice, 2016; Gest, 2016): Concerns about culture and status hierarchies bear some responsibility for rising public populism

---

[4]See Berman (2021, 3.3-3.5) for a recent review.

— especially right-wing populism — with these factors often nullifying economic variables (Mutz, 2018; Norris and Inglehart, 2019, though see Schäfer, 2021). Some, however, combine this emphasis on nativism with political economic trends, in which globalization generates economic dislocation. People in turn express their economic discontent through misdirected hostility towards immigrants and other outgroups (Franzese, 2019).

Existing research that advances or refutes economic arguments about the link from globalization to populism tends to seek evidence in individual pocket-books, however, thereby overlooking an important element: As Steenvoorden and Harteveld (2018, 29) summarize, "Citizens do not need to be personally disadvantaged... to be worried about the direction of society." Globalization has distinct economic implications for different societal strata (see, e.g., Goldstein and Gulotty, 2019; Rodrik, 2018; Flaherty and Rogowski, 2021), fueling perceptions about group-level trends that foment populist ideas (Engler and Weisstanner, 2021).

Globalization and the Sociotropic Economics of Populist Beliefs

We expect that globalization drives populist attitudes via class-based sociotropic perceptions — people's beliefs about how economic interdependence affects different economic classes. For citizens who believe that economic globalization makes rich Americans richer, populist ideas offer a "societal diagnosis" — corrupt establishment elites bear responsibility for advantaging wealthy groups.

Our argument leverages three important insights from work on sociotropic and behavioral economics. First, extensive research suggests that sociotropic perceptions complement or outperform egocentric economic concerns in explaining political attitudes and behavior

(Kinder and Kiewiet, 1981; Kiewiet and Rivers, 1984; Kinder, Adams and Gronke, 1989; Lewis-Beck, 1988; Mughan and Lacy, 2002). Sociotropic judgments depend on individual assessments of a policy's collective impact on one or more groups, in contrast to the individual household focus of egocentric assessments. In IPE, for example, scholars show that citizens prioritize their impressions of how trade affects the whole country moreso than their own paychecks (Hainmueller and Hiscox, 2006; Mansfield and Mutz, 2009). These patterns might reflect a commitment to compatriotism (Mutz and Kim, 2017) or a process in which citizens use group trends to glean and extrapolate information (Guisinger, 2017). But scholars agree that people use these broader economic trends to form political opinions.

Second, sociotropic judgments are not always made at the level of the national economy; people also consider the fates of "intermediate-level groups" (Mutz and Mondak, 1997, 285). Although IPE tends to center individual assessments about the country's economy as a whole, (Mansfield and Mutz, 2009; Mutz and Kim, 2017; though see Guisinger, 2017; Lü, Scheve and Slaughter, 2012), citizens recognize that what's good for the country may not benefit all Americans (Conover, 1985; Kinder, Adams and Gronke, 1989). For example, presidential votes correlate with concerns that some groups face relatively precipitous economic declines (Mutz and Mondak, 1997). Notably, these sociotropic perceptions do not redound to personal economic circumstances. So far, this insight from sociotropic accounts has not been integrated into IPE studies, though it complements recent debates about how rising inequality contributes to the globalization backlash (Flaherty and Rogowski, 2021).

Third, behavioral economics research shows that people have different *social preferences*: interests in how others behave in and benefit from social and economic exchange, even when it does not affect their personal outcomes. The most obvious is altruism, in which we derive

10

value when others prosper (Fehr and Fischbacher, 2002; Camerer, 2011). An altruistic, other-regarding social preference underlies most sociotropic arguments to date — people are happier when either the nation or another societal group does well (Schäfer, 2021, 1271).[5]

But caring about how others fare may not always mean that we want them to do better; there is more to social preferences than altruism (Rabin, 1998; Kertzer and Rathbun, 2015). People pay careful attention to how economic benefits are distributed. Indeed, we sometimes want groups to fare worse even when we do not benefit from their losses, perhaps because we think that they are doing too well. A sociotropic theory must account for these social preferences with a negative, resentful character. Although some research shows that Americans are content with economic disparities to the extent that elites merit their economic success (Jost, Banaji and Nosek, 2004; Scheve and Stasavage, 2017), rising inequality contributes to declining belief in the American dream (Wolak and Peterson, 2020) — additional fuel for a populist backlash.

Bridging these insights with research on globalization and populism suggests that class-based sociotropic economics provide a fruitful avenue for understanding how globalization contributes to populist beliefs in the mass public. Populist beliefs stress societal divisions between elites and ordinary people: Populism is a resentful outlook. Urbinati (1998, 111), for example, describes American populism as one "collective expression of resentment against the domestic enemies of 'the people.'" And as Gidron and Hall write, "Feeling that one is not

---

[5]We recognize that the original studies of the effects of sociotropic literature stress information over identity, in that the reason why national-level evaluations are more important than personal-level evaluations is because individuals cannot assess the effect of policy on their own pocketbooks. Even so, to judge policy based on how it affects broader groups presupposes an identification and concern with that group. There is also the possibility that individuals use societal-level information to make inferences about their personal circumstances, what Schäfer (2021) call "obfuscated egocentric preference." We consider that possibility in analyzing our results.

11

accorded much respect by society is likely to inspire resentment against elites, and populist appeals exploit this type of resentment with claims to speak for ordinary people who have been ignored by elites that are described as corrupt or incompetent" (Gidron and Hall, 2020, 1033). Moreover, they argue that grievance may reflect sociotropic judgments, a "dismay at the direction of society as a whole" (1030). If populists believe that self-serving elites fail to represent good, ordinary people, then a phenomenon they believe improves economic conditions for the wealthiest Americans — globalization — should drive populist attitudes.

In that respect, our argument has much in common with research that attributes populism to societal grievances and disparities between the haves and have-nots (Lipset, 1955). For example, Cramer (2016) describes palpable resentment among rural Wisconsinites who feel that some groups have not gotten their fair share — elites benefit while 'the people' suffer. Burgoon et al. (2019, 54-55) make a similar point in their research linking positional economic deprivation to voting for radical parties, noting that well-studied measures of "economic misfortune" only partly capture the resentment that qualitative researchers report from interviews and ethnographies. Indeed, interview subjects link populist resentment to social class and other forms of group consciousness (Gest, 2016), including people who target the corrupt government for failing rural Americans.

We expect that populism will be associated with beliefs that globalization has made the wealthy class better off.[6] This perception will produce antipathy to government elites, sympathy for the "common man" manifest in pro-people sentiments, and a desire that "the people" direct policy. Our argument takes the often maintained — but empirically unob-

---

[6]Our argument only requires that many citizens *perceive* globalization as the culprit driving wealthy advancement over other social classes, despite the multiple factors that influence domestic inequality. Indeed, research shows that mass publics overwhelmingly attribute job losses to trade, not automation (Guisinger, 2017; Mutz, 2021), despite the latter's clear importance.

served — supposition that economic losers of globalization indict the political system for favoring elites and transfers it to the sociotropic level. Populism might indeed partly reflect discontent with how globalization favors the rich, directed at the political class, but this sentiment is not confined to those personally affected.

We might also expect that the connection between perceptions about the rising rich and populism will be particularly pronounced for those who feel the working and middle classes are simultaneously experiencing economic decline. If the rising tide lifts all boats, then resentment and its populist consequences should be mitigated. A substantial literature shows that the mass public is keenly sensitive to relative differences and particularly concerned about falling behind (but not as much with getting ahead) (Lü, Scheve and Slaughter, 2012; Brutger and Rathbun, 2021; Powers et al., 2022).

Sociotropic Class Perceptions Correlate with Populist Beliefs

We first analyze data from an original survey to establish whether class-based sociotropic globalization perceptions correlate with populism. These observational data provide an important look at evidence for the key relationships implicated by our argument and motivate the experiment that constitutes the second part of our research design.

The 2017 survey recruited 1,462 U.S. adult respondents using Survey Sampling International (SSI) with quotas for race, income, age, region, and gender. We oversampled white males in the South and Midwest to increase the precision of our estimates for the subgroup most often implicated in the rise of American populism, per both sociocultural and pocketbook economic arguments. Analyses employ entropy balancing to generate post-stratification

weights based on gender, age, education, race, and region (Hainmueller, 2012).

Measuring populist beliefs

We examine the relationship between sociotropic globalization perceptions and four dependent variables: anti-elitism, popular sovereignty, people-centrism, and the populist combination of these three subcomponents. These outcomes correspond directly to the ideational conceptualization of populism reviewed above. Populism draws together distrust of elites, the belief in the good will of ordinary people, and a desire to implement the people's will. We create separate scales for the 3 subcomponents because they are conceptually distinct – nothing precludes someone from endorsing popular sovereignty while also trusting elites. *Populism* implies a commitment to all three subcomponent beliefs (Wuttke, Schimpf and Schoen, 2020; Erisen et al., 2021), and we therefore measure it as the confluence of these three commitments. However, it is both empirically and normatively interesting if globalization beliefs affect any of these three components.

We created additive 2-item scales for the three discrete populist beliefs; Table 1 lists each item. These 6 items are drawn from a list of 9 populist statements on the survey.[7] Participants reported their agreement on 6-point scales. Each statement on the survey has been used extensively to measure populist beliefs in previous research and lacks left-right ideological content. Yet two challenges preclude us from using previous research to pre-specify items for the subcomponent scales. First, scholars disagree about which statements tap each populist belief such that the same survey item might correspond to distinct

---

[7]As a robustness check, we also estimate models that regress each individual populist statement on the independent variables and panel of controls. Results discussed in the Appendix §2.4 and available in replication materials.

subcomponents depending on the analysis.[8] Second, comparative studies reveal substantial cross-national heterogeneity regarding which survey items provide informative populism measures (Van Hauwaert, Schimpf and Azevedo, 2018). Scales developed and validated in European countries — where populism research has proliferated — may prove less useful in the U.S. context (and vice versa).

We therefore used our theoretically grounded concepts to match individual statements on this populist battery to the three subcomponent beliefs, and provide empirical validation via a series of factor analyses.[9] The resulting continuous scales for anti-elitism, popular sovereignty, and people-centrism each range from 2 (strongly disagree with both items) to 12 (strongly agree with both items), which we rescale to 0 to 1 for analysis.

The two *Anti-elitism* items ask whether participants agree that people running the government are dishonest, and whether governments just favor "bigwigs." These statements capture the disdain for politicians and a system that works for "big interests" central to anti-elitism attitudes (Castanho Silva et al., 2018, 2020; Rhodes-Purdy, Navarre and Utych, 2021). The *popular sovereignty* items probe beliefs about whether governments and politicians should follow the will of the people, with "the people" responsible for important decisions. These items capture the core populist notion that politicians often fail to represent their constituents, and that "politics should be an expression of the *volonté générale* (general will)" of the homogeneous "people" (Mudde, 2007, 23). Finally, two questions about placing trust in ordinary people form a distinct *people-centrism* factor. Although some scholars combine people-centrism and popular sovereignty into a single populist belief (Erisen

---

[8]For example, cf. Schulz et al. (2017) and Castanho Silva et al. (2018), which use versions of "politicians need to follow the will of the people" to measure popular sovereignty and people-centrism, respectively.

[9]See Appendix §1 for discussion. On measuring populist beliefs, see e.g., Akkerman, Mudde and Zaslove (2014); Castanho Silva et al. (2018, 2020) and Wuttke, Schimpf and Schoen (2020).

et al., 2021), we find that the people-centrism and popular sovereignty dimensions are only weakly correlated, consistent with our conceptualization (factor correlation= 0.03). This scale taps respondents' desire that 'ordinary' people serve in government, highlighting the relative virtue and trustworthiness of these non-elite Americans — casting ordinary people as pure and good but without the demands for direct democracy that characterize popular sovereignty.

Table 1: Measuring Three Dimensions of Populism

Anti-elitism	Quite a few of the people running our government are not as honest as the voters have a right to expect. (*dishonest government*) Regardless of the party in power, all governments just favor the bigwigs. (*bigwigs*)
Popular Sovereignty	Politicians need to follow the will of the people. (*popular will*) The people, and not politicians, should make our most important policy decisions. (*people make decisions*)
People-centrism	Ordinary people can't be trusted to make the right choices about our nation's interests (*reverse coded*). (*trust ordinary people*) I would rather be represented by a specialized politician than a regular citizen (*reverse coded*). (*citizen representative*)

We next use these continuous subcomponent scales to create a non-compensatory, dichotomous *populism* variable (Wuttke, Schimpf and Schoen, 2020). Populism represents the *confluence* of anti-elitism, people-centrism, and popular sovereignty beliefs: "all of its subcomponents must be present simultaneously to tap populism" (Erisen et al., 2021, 4). Each belief represents a separate posture conceptually, and they weakly correlate empirically. Aggregating subcomponents by adding scores from the 6 survey items allows high scores on one dimension to compensate for low scores on another, and risks conflating populism with a single belief. For example, an anti-elitist who lacks trust in ordinary people may score high

on an additive populism scale despite rejecting a key populist belief.

We therefore create a dichotomous measure for populism, treating the three subcomponents as jointly necessary (Hawkins et al., 2018). A *populist* must endorse each subcomponent (see also Castanho Silva et al., 2018). Participants who score above the median on each subcomponent indicate strong populist beliefs and receive a 1 for *populism*, and 0 otherwise.[10] This procedure classified 13.2% of our sample as "populists."[11] Notably, this populism variable is a relative measure (Wuttke, Schimpf and Schoen, 2020, 371) — it identifies which participants endorse anti-elitism, people-centrism, and popular sovereignty to a greater degree than average participants in the sample. The dichotomous measure fits the populism conceptualization we advance here, and which is common in contemporary research on populist attitudes: populism is "an attitudinal syndrome that is more than the sum... of its subdimensions" (Wuttke, Schimpf and Schoen, 2020, 356). The thresholding approach can appropriately "account for the necessary conditions of populist attitudes" (ibid., 370) by only classifying people who agree with each subcomponent belief as populists.

We present results for each separate subcomponent belief alongside populism (Erisen et al., 2021); these continuous measures retain full information and allow us to examine both

---

[10]We made an informed coding decision prior to analysis: We chose a relative threshold to capture the strongest populists and combat general agreement bias that complicates setting an absolute threshold, applying one rule to each subcomponent. Like any cutpoint-based variable coding, the precise threshold remains somewhat arbitrary. For example, Wuttke, Schimpf and Schoen (2020) set their preferred threshold to the 75th percentile. The appendix presents estimates from several alternative specifications. Estimates on key independent variables lose precision for the least (*at or above* the median) and most restrictive coding rules (above the 75th percentile), but general patterns remain consistent. We use this dichotomous measure due to its conceptual advantages, but find similar results with scales that retain more information from the original responses — including a multiplicative measure for populism, a trichotomous variable that separates non-populists from people holding some populist beliefs, and a non-compensatory additive scale. See Appendix §2.3.

[11]Accounting for population weights. This proportion is remarkably similar to what Wuttke, Schimpf and Schoen (2020) find in the 2016 ANES using a 75th percentile relative threshold, though they use a different conceptual scheme that treats Manichean outlook as the third dimension of populism (see http://populism.alexander-wuttke.de).

the subcomponents and populism separately rather than assert that we have developed the measure for populism. Appendix §2.3 presents results using several alternative specifications for populism, including alternate dichotomous thresholds, a trichotomous variant, and continuous additive and multiplicative scales. Each approach tells a similar story.

Independent variables

Our main independent variables tap perceptions about how globalization has affected different social classes in the U.S. The survey asked participants whether they think that "globalization – the increased trade between countries in goods, services, and investments – has had a negative effect, no effect, or a positive effect on each of the following groups?" We adopted this question from research on international economic attitudes (e.g., Woodward, Skrbis and Bean, 2008; Powers, Reifler and Scotto, 2021), but included three social class targets: wealthy Americans, middle class Americans, and working class Americans. We code each item 0 for "negative effect", 0.5 for "no effect", and 1 for "positive effect."

Our primary analyses include separate variables for each class. If populism reflects wealthy class resentment per our argument, we should observe a positive correlation between perceptions about how globalization affects wealthy Americans and populist beliefs. If populism stems partly from concerns about lower classes faring worse, we will observe a negative correlation between perceptions about working/middle class Americans and populist beliefs. Finally, we create a combined variable to capture whether the perception that the rich are benefiting from globalization while other classes fall behind strengthens populism — a measure we return to below.

We include several important control variables. First, all models include participant

18

beliefs about whether globalization has had a positive or negative effect on 1) the country and 2) their family to address the possibility that narrower egocentric concerns or broader national trends relate to class-based sociotropic beliefs and populism.

Second, a panel of economic controls captures the various ways that individuals might experience personal economic distress. We created an economic insecurity index from employment status, whether participants delayed healthcare due to cost concerns in the past year, whether they receive government benefits, and the likelihood of making housing payments on time in the next year. We capture subjective economic perceptions using self-reported financial comfort. Finally, three items control for participant concerns about general economic trends — retrospective evaluations about whether the country, community, or household economy have been doing better in the last 12 months.

Third, we control for sociocultural factors. We measure nativism with a 4-item additive index, and include a measure gauging concerns about losing a job due to foreign competition or outsourcing. The latter captures a combination of economic considerations and nativism. All models include party identification and indicators for income, gender, university education, age, and race.

Populism and Sociotropic Resentment

Figure 1 presents estimates from six models that regress the three populist subcomponents on beliefs about globalization's distributive effects. In each panel, triangles depict estimates from a model with the globalization variables and demographic controls, whereas circles depict estimates from models that also include the full sets of additional economic and

19

sociocultural explanatory variables.[12] Dependent variables in Panels a-c are continuous additive scales based on responses to the constituent items in Table 1. All models incorporate population weights, and variables are rescaled to range from 0 to 1.

Figure 1: Sociotropic globalization perceptions and populist beliefs
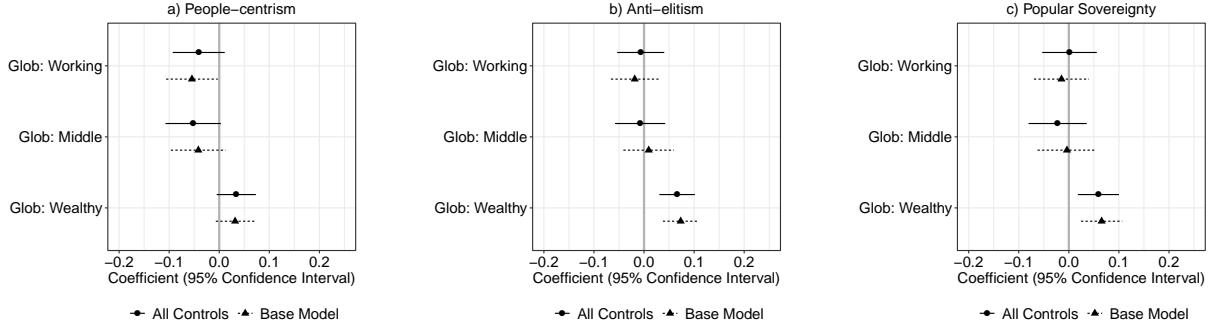
Note: Panels a-c depict OLS coefficients and 95% confidence intervals.

The results reveal three interesting findings. First, the perception that globalization has been a boon for wealthy Americans most consistently correlates with populist subcomponent beliefs. Believing that globalization has a positive effect on wealthy Americans increases support for *popular sovereignty* (panel c) by 6.6 percentage points and *anti-elitism* by 7.3 percentage points (panel b; both $p < 0.01$). The notion that wealthy Americans reap rewards in the liberal global economy correlates with demands to strengthen direct democracy and create a government that does more than favor special interests. We also observe a correlation between perceptions about wealthy Americans and *people-centrism* (panel a). Notably, however, the positive coefficient estimate is only significant at the upper bounds of what scholars consider statistically significant (with controls $b = 0.034$, $p = 0.09$).[13]

Our second takeaway is that perceptions about the rich also predict the populist conflu-

---

[12]See the Appendix §2.1 for regression results, including models without survey weights and those that separately account for the economic and sociocultural panels.

[13]Analyses discussed in Appendix §2.4 suggest that our findings are not merely an artifact of concerns about racial groups: the significant effects of class perceptions are robust to controlling for beliefs about globalization's effect on minority group and white Americans.

ence of all three subcomponents. The *populist* dependent variable is a dichotomous indicator coded 1 for respondents who endorse all three subcomponents and 0 otherwise. We therefore estimate a logistic regression and present the average marginal effect (AME) for each independent variable in Figure 2. AMEs indicate the substantive effect of a one-unit change in the independent variable on the probability that someone endorses all three populist beliefs, averaged across observations.

Believing that globalization makes the rich better off increases the probability of being a populist by 8 percentage points (with all controls). By contrast, believing that globalization has positive ramifications for working or middle class Americans decreases the probability of endorsing populism by 6.9 and 7.9 (both $p < 0.1$) percentage points, respectively, although the higher p-values suggest additional uncertainty. The two variables, however, are jointly significant ($F = 5.54$, $p < 0.01$).[14] Importantly for those skeptical of this holistic, non-compensatory populism measure, we emphasize the strong support for our sociotropic account in the separate subcomponent analyses. Moreover, we find similar patterns across several populism specifications in Appendix §2.3 — including different cutpoints and continuous multiplicative and additive scales — suggesting support for our argument across measurement possibilities.

Third, we observe inconsistent evidence for correlations between populist beliefs and perceptions about how globalization affects middle and working class Americans. Perceptions that globalization hurts working and middle class Americans correlate with people-centrism (panel a). People who believe that globalization has helped working class Americans are

---

[14]In the Appendix §2.2, we show that the combined working/middle class perceptions scale significantly correlates with populism ($AME = -0.148$, $p < 0.01$).

Figure 2: Globalization's distributional effects and populism
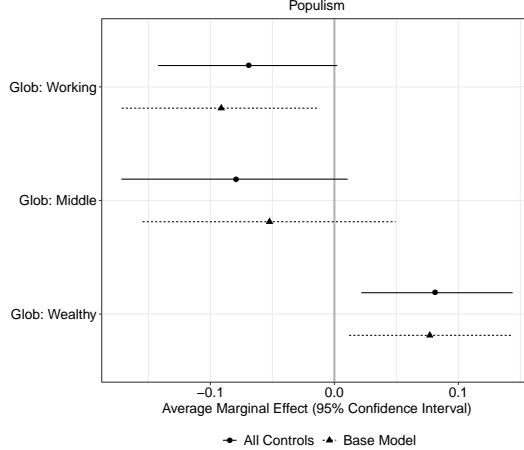
Note: Points depict average marginal effects from logistic regression model and 95% confidence intervals.

less likely to demand that trustworthy citizens join the government ($b = -0.05$, $p < 0.05$), though the 95% confidence interval contains 0 with all controls ($p = 0.12$). Beliefs about how globalization affects the middle class follow a similar pattern ($b = -0.04$, $p = 0.14$; $b = -0.05$, $p = 0.07$ with controls), and the two variables are jointly significant ($F = 5.4$ with all controls, $p < 0.01$). The positive correlation (0.73) between perceptions about the working and middle classes likely contributes to the varying statistical significance across specifications. Indeed, combining perceptions about working and middle classes into a single additive scale shows a robust negative coefficient on people-centrism (See the Appendix §2.2; $b = -0.1$, $b = -0.09$ with all controls; both $p < 0.01$). By contrast, neither anti-elitism nor popular sovereignty correlate with participant assessments about globalization's effects on lower socioeconomic rungs of American society in any specification — confirming the null relationships in panels b and c.

Our argument anticipates that these concerns about middle/working class decline primarily lead to populism by exacerbating resentment about the rich getting richer. If con-

cerns about uneven class gains from globalization contribute to populism, we should observe stronger populist beliefs among people who believe that the wealthy class is gaining more than middle and working class Americans. We capture this dynamic by subtracting perceptions about how globalization affects working and middle class Americans from perceptions of its effect on the wealthy classes. The resulting measure ranges from -2 to 1. Participants who believe that globalization helps wealthy Americans but negatively affects *both* the working and middle classes receive a positive 1 on this scale; a score of negative 2 captures people who believe that middle and working class Americans are getting ahead while globalization harms the wealthy.

Table 2 shows a positive correlation between this class inequity variable and populism (all $p < 0.05$). The perception that globalization unfairly boosts the wealthy class corresponds to 3-4 percentage point increases on people-centrism, popular sovereignty, and anti-elitism (Models 1-3). It also significantly increases the odds that someone is classified a populist on the dichotomous scale (Model 4).These findings provide additional support for our argument that populist beliefs reflect wealthy class resentment.

Supplementary analyses suggest that the observed relationships between class perceptions and populist beliefs remain remarkably consistent across important subgroups.[15] Although our dependent variables lack partisan content, we might wonder whether the populist backlash to globalization's perceived inequities is the domain of Democrats. We find no evidence for differences between Republicans and Democrats, though Independents are less likely to connect their beliefs about wealthy class prosperity to popular sovereignty than their partisan counterparts. We also consider whether individuals' self-identified social class or eco-

---

[15]Results discussed in Appendix §2.4 and available in replication materials.

Table 2: Populism and perception that globalization has uneven benefits that favor the wealthy

	People-Centrism	Popular Sovereignty	Anti-Elitism	Populism
	(1)	(2)	(3)	(4)
Glob: Wealthy Minus	0.04**	0.03*	0.03*	0.74**
Working & Middle	(0.01)	(0.01)	(0.01)	(0.18)
Constant	0.73**	0.96**	0.85**	−0.68
	(0.05)	(0.05)	(0.04)	(0.65)
All Controls	✓	✓	✓	✓
N	1,249	1,260	1,244	1,248
R^2	0.09	0.12	0.13	

[†]$p < .1$; [*]$p < .05$; [**]$p < .01$
Note: OLS (Models 1-3) and logit (Model 4) coefficients, standard errors in parentheses.

nomic insecurity moderate the relationship between sociotropic perceptions and populism. Evidence for an interaction could imply that the sociotropic variables partly capture self-interest and not social preferences, as suggested by an "obfuscated egocentrism" argument. If this is the case, respondents use information about what they know — the effect of globalization on broader societal groupings — to judge something they do not know — its effect on themselves. Results reveal little indication the link between beliefs about globalization's sociotropic consequences and populism stems from self-interest measured by class membership, though the relationship between perceptions that globalization helps the wealthy and popular sovereignty is strongest among the most economically insecure.

Experiment: 'Davos Billionaires' and Populist Beliefs

The survey results support our argument that the link from globalization to populism flows partly through views about how globalization affects broad social classes. The results reveal

a consistent correlation between participant perceptions that globalization helps wealthy Americans and populist beliefs, alongside some evidence that concerns about middle and working class decline correlate with people-centrism. Importantly, we find stronger populism among people who view globalization as benefiting the wealthy while harming the relatively poor. We build on this observational evidence with a pre-registered experiment designed to evaluate whether a stark illustration of wealthy Americans benefiting from economic globalization causes populist beliefs.[16]

The experiment supplements our observational analysis in several important ways. First, it addresses the possibility that reverse causation wholly explains our observational findings. A motivated reasoning perspective might lead us to expect that respondents with a preexisting anti-elitist and pro-people axe to grind are more likely to perceive the wealthy as doing better and the other classes as falling behind, for example. The experiment allows us to adjudicate whether we can draw a causal arrow from reading an article about wealthy Americans prospering from globalization to populist beliefs. Second, an experimental test is a particularly high bar to cross if we expect that populist beliefs reflect long-term ideas about globalization's distributive effects. When people regularly receive a message in the real world, it can create a "pre-treatment" effect whereby their views on the issue are sufficiently settled to render a single additional exposure ineffective at shifting attitudes (Druckman and Leeper, 2012). Observing significant movement on what are often regarded as hardened attitudes — via a single exposure to a realistic article — would be quite noteworthy.

---

[16]Registration available at: https://osf.io/65gmp. We note one deviation from our pre-analysis plan: We did not include a measure for political interest on the final survey instrument, and therefore could not include it in models with pre-treatment covariates.

Experimental expectations

Our theory proposes that globalization's rewards for the rich increase populism. Our observational analyses provide robust support for the claim that the belief that globalization benefits wealthy Americans correlates with two of three populist subcomponent beliefs: anti-elitism and popular sovereignty. If class-based globalization perceptions cause these populist beliefs, exposing people to an article about U.S. billionaires benefiting from globalization at the World Economic Forum (WEF) should increase scores on both outcome variables.[17]

The observational data suggest competing possibilities regarding whether a treatment targeted at wealthy class globalization gains will increase scores on people-centrism or the dichtomous populism measure that captures the confluence of anti-elitism, popular sovereignty, and people centrism. We found that people-centrism correlated with perceptions about middle and working class decline and class inequity, not wealthy class gains on their own.

The observational data suggest competing possibilities regarding whether a treatment targeted at wealthy class globalization gains will increase scores on people-centrism and therefore the dichotomous populism measure that captures the confluence of anti-elitism, popular sovereignty, and people centrism. The preceding analyses found that people-centrism correlates with perceptions about middle and working class decline and class inequity, not wealthy class gains on their own. Our pre-analysis plan therefore lists research questions, rather than single directional hypotheses, asking whether the article treatment affects people-centrism or the three-pronged populism measure that partly depends on people-centrism.[18]

---

[17]See pre-registered H1 and H2.

[18]See RQ1. See RQ1. On one hand, if people-centrism does not stem from beliefs about wealthy class gains, an article describing billionaires at the WEF will have no effect on people-centrism beliefs. On the other hand, it is possible that a) people view globalization's class effects as interrelated — such that an article about the wealthy implicitly affects beliefs about other classes, and in turn, people-centrism; or

Experiment Design

We fielded this between-subjects experiment to 1,492 U.S. participants recruited via Prolific in March 2022.[19] We included a census-based quota for having completed a 4-year degree or higher to ensure that the sample reflects people with a range of educational attainment, and randomly assigned treatments within these education blocks. Each block also balanced on sex.

Participants first completed a pre-treatment questionnaire with questions about demographics, party identification, and views about the World Economic Forum. Next, half the sample proceeded to view an article excerpt with a large, bold headline titled "Davos Billionaires Keep Getting Richer" via random assignment:

Davos Billionaires Keep Getting Richer

Every year, wealthy Americans gather with the world's richest people in Davos, Switzerland for a four-day summit called the World Economic Forum. The forum—titled Globalization 4.0—is expected to host 3,000 people. And the American elites descending on Davos are richer than ever.

An invitation to the meeting is supposed to be considered an exclusive honor. But for corporate executives, the cost of being a Davos Man, or, yes, a Davos Woman, even for just a couple of days, does not come cheap – tickets and membership fees cost about $71,000. All those costs, of course, do not include the travel-related costs of getting from the U.S. to Switzerland.

So why do they do it? Davos grants attendees the ability to efficiently conduct global business. In the increasingly globalized economy, senior executives from America's largest companies take advantage of their physical proximity to meet in person with partners and clients and would-be clients from around the world – meetings that can end up being vastly more valuable than the price of admission.

---

b) other factors confounded the observational results, masking the relationship between perceptions about wealthy class gains and people-centrism. Pre-registering the research question allows us to clearly pre-specify that we will analyze treatment effects on people-centrism while acknowledging that the survey data implies competing possibilities. This setup facilitates an empirical test for competing hypotheses of a null treatment effect versus a positive treatment effect on people-centrism and the composite populism measure.

[19]1,539 participants provided informed consent; the effective sample excludes participants identified as bots and those failing a pre-treatment attention check. See Appendix §3.

> It seems to pay off. Prominent Americans who have attended have seen their fortunes soar in the past decade, doubling or sometimes even quintupling their wealth as globalization has continued to increase.

Control group participants proceeded directly to the populism questions. We opt for a 'pure control' rather than assign control group participants to a placebo article. Placebo articles carry both Type I and Type II error risks, depending on whether the article also affects populist beliefs – and in what direction – via some other mechanism primed by the placebo (Porter and Velez, 2022). Moreover, the pure control setup allows us to evaluate whether the treatment increases populism relative to the key quantity of interest, participants' pre-intervention populist beliefs.

The treatment article describes the World Economic Forum, emphasizing the high cost for attending alongside the economic benefits that it confers wealthy Americans in the globalized economy. The article introduces 4 key elements implicated by our theory: 1) The WEF provides a venue for conducting business in the globalized economy; 2) only the very wealthy attend the WEF; 3) the WEF facilitates networking in the globalized economy; 4) attending the WEF further increases billionaires' wealth. For example, the final sentence summarizes: "It seems to pay off. Prominent Americans who have attended have seen their fortunes soar in the past decade, doubling or sometimes even quintupling their wealth as globalization has continued to increase." In short, the treatment conveys that globalization enriches the wealthy. After reading, participants identified true statements about the article to reinforce core themes about globalization and how the WEF helps wealthy Americans, strengthening the treatment (Thal, 2020).[20]

The article is designed to convey information about the link between globalization and

---

[20]See the Appendix §3.1.

benefits for wealthy Americans while closely matching what citizens might view perusing web searches about the annual Davos meeting. We therefore drew language and structure from real articles, which we spliced together and edited for coherence and conciseness. These articles appeared in business-sympathetic outlets – *Bloomberg News* and *Business Insider* – selected in part to avoid inserting populist sentiment directly into the text(Metcalf and Kennedy, 2019; Blodget, 2011).Of course, compiling multiple sources into a single article prompt introduces challenges. For example, some paragraphs may contain more difficult-to-read text and mask the key information for respondents with lower reading comprehension skills. The reinforcing question mitigates this concern by using straightforward prose to reiterate important elements from the article. Indeed most treatment group respondents – 70% – selected all three reinforcing statements. Moreover, 84% correctly selected *"American billionaires gather at the World Economic Forum in Davos to promote their businesses and wealth."* – an essential and complex claim.[21]

We measured populist beliefs using the same six items that comprised the dependent variables in our observational analysis. We create continuous two-item additive scales for anti-elitism, popular sovereignty, and people-centrism. We also create a dichotomous populism variable coded 1 if participants score above the median on each subcomponent scale, and 0 otherwise. Next, we include a set of questions about whether participants think that globalization has a positive or negative effect on different social classes, the country, or their family. These questions allow us to explore mechanisms while also providing a subjective manipulation check — if the treatment successfully targets beliefs about how globalization

---

[21]We thank a reviewer for bringing this consideration to our attention. Additional analyses show that education does not correlate with correct responses to the reinforcing question, suggesting that participants with higher and lower education levels gleaned similar information from the treatment.

affects the wealthy, we should observe a positive treatment effect on beliefs that globalization has a positive effect for wealthy Americans.

Davos treatment increases people-centrism, popular sovereignty, and populism

Figure 3 displays average treatment effects for three populist subcomponent scales alongside the dichotomous populism variable.[22] The results support our core argument — that seeing globalization benefit the wealthy drives populist beliefs. The Davos treatment increased popular sovereignty scores by 3.5 percentage points ($p < 0.01$). We also observed a statistically and substantively significant 4.7 percentage point increase on people-centrism ($p < 0.01$). Wealthy class gains at the WEF clearly increased this populist belief, suggesting an important relationship that the observational data did not fully capture.

Figure 3: Article treatment effects on populist beliefs
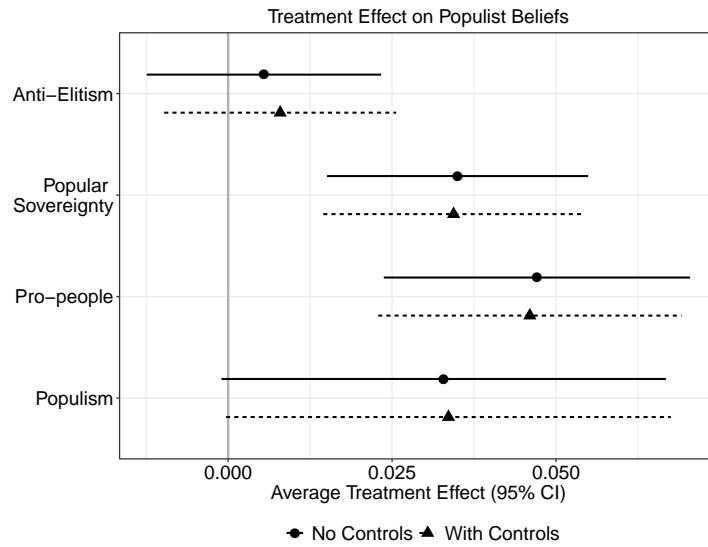
Note: Points depict average treatment effects with 95% confidence intervals from separate OLS models.

The experiment induced meaningful differences two central components of populism through a simple article about billionaires growing their wealth. Notably, the article ex-

---

[22]See the Appendix §3.4 for regression results.

cludes any mention of the ideas about governance, "ordinary people" or politicians that comprise popular sovereignty and people-centrism. Just telling respondents about a small set of very rich individuals getting richer suffices to make them feel more strongly about giving political power to the people and entrusting ordinary individuals with more power.

To our surprise, the Davos treatment did not increase anti-elitism. Our anti-elitism measure may have been susceptible to ceiling effects that limit variation — the median anti-elitism score is 0.9 on the 0 to 1 scale, higher than the 0.7 median in the 2017 survey. And 52.15% of participants scored on the top two points of the scale, compared to only 62 total participants (4.2%) whose views fell below the scale midpoint. This distribution on anti-elitism suggests strongly held anti-elite views. There is limited room for movement on these strongly held views following a one-shot treatment confirming that the system favors elites.

Finally, we find some evidence that the treatment increases scores on the composite populism measure that classifies people as populist if they hold relatively strong agreement with each subcomponent belief. The effect narrowly exceeds standard thresholds for statistical significance ($b = 0.033, p = 0.058$), perhaps a product of the strict pre-registered cutoff: Following our "above median" coding rule, participants must have scored the maximum on anti-elitism to be coded populist. We relaxed this cutoff in an exploratory analysis, coding people as populist if they score above the median on people-centrism and popular sovereignty, but at or above the median ($>= 0.9$) on anti-elitism. The analysis suggests a strong and significant treatment effect on this alternate populism specification ($b = 0.06, p < 0.01$).

The pattern of main effects supports our argument that a short article about how the WEF affords access and benefits to the wealthiest class of Americans drives populist beliefs. We observe meaningful effects despite concerns about globalization's existing salience. Yet

the high baseline anti-elitism scores also corroborate our suspicion that pretreatment effects may have mitigated the impact of a one-shot article exposure: The COVID-19 pandemic and its uneven economic impacts[23] comprised a context that may have limited movement on such a strong opinion (Druckman and Leeper, 2012).

We next tested whether pre-treatment views about Davos moderate the treatment effect. We hypothesized that the treatment effect would be strongest among people who view the WEF favorably. Results presented in the Apppendix §3.4 provide no evidence that pre-treatment Davos views moderate the treatment effects (all $p > 0.4$). On the one hand, the absence of differences suggest that pre-treatment Davos antipathy did not suppress the article's main effects on populist beliefs. On the other hand, a large majority of the sample (61.93%) reported having no opinion about Davos or having not heard of it, limiting the inferences we can draw about the small subset with strong pro-Davos views.

Finally, we completed a set of exploratory analyses to test for evidence of heterogeneity by education, partisanship, and social class. Consistent with the survey results, we find little evidence that an article about how globalization helps wealthy Americans has a distinct effect on populist beliefs for participants with different education levels, social classes, or partisan affiliations. One notable exception is that the article treatment has a stronger effect on the composite populism measure for Democrats compared to Republicans, but we do not observe this difference for the separate populist subcomponent scales.[24]

Why does an article about Davos billionaires drive populist beliefs? Our theory implies that the treatment should affect populism by altering participants' perceptions about

---

[23]See e.g., Orla McCaffrey and Shane Shifflett, 2021. "During Covid-10, Most Americans Got Ahead—Especially the Rich, *The Wall Street Journal*, 21 June.

[24]See Appendix §3.4 for education results; other analyses available in replication materials.

globalization's effects on social classes — especially the rich. We included the battery of globalization questions post-treatment, and results in Table 3 show that the treatment increased perceptions that globalization benefits the wealthy ($b = 0.04$, $p < 0.001$), confirming that the treatment affected the target construct.

Interestingly, we also find evidence that the treatment has polarizing effects on the other target groups unmentioned in the article: Reading that globalization helps Davos elites decreased participant assessments that globalization has a positive effect on working ($b = -0.06$) or middle class ($b = -0.10$) Americans, the country ($b = -0.06$), and their family ($b = -0.07$; all $p < 0.05$). This pattern suggests that people implicitly connect wealthy advancement with costs for lower socioeconomic classes, consistent with the notion that elite resentment goes hand-in-hand with concerns about other economic perceptions to drive populism in the public. This is consistent with our theoretical framework stressing social preferences. The gains of another are not considered in isolation from those of others. In this case, we find interrelated causal beliefs. The more one beliefs that globalization enriches already wealthy Americans, the more one beliefs that globalization hurts everyone else.

Table 3: Article Effects on Views about Globalization's Effects

	Positive Wealthy		Positive Middle		Positive Working		Positive Country		Positive Family	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
Article	0.040**	0.039**	−0.101**	−0.098**	−0.059*	−0.057*	−0.055*	−0.055*	−0.074**	−0.073**
	(0.013)	(0.013)	(0.022)	(0.022)	(0.023)	(0.023)	(0.023)	(0.023)	(0.020)	(0.019)
Controls		✓		✓		✓		✓		✓
Constant	0.886**	0.865**	0.599**	0.493**	0.439**	0.355**	0.658**	0.607**	0.603**	0.628**
	(0.009)	(0.037)	(0.016)	(0.063)	(0.016)	(0.067)	(0.016)	(0.066)	(0.014)	(0.056)
N	1,484	1,483	1,484	1,483	1,484	1,483	1,484	1,483	1,484	1,483
R^2	0.007	0.040	0.014	0.060	0.004	0.031	0.004	0.055	0.009	0.095

†p < .1; *p < .05; **p < .01
Note: OLS coefficients, standard errors in parentheses.

Our experiment provides clear and compelling evidence that exposure to an article about billionaires benefiting from globalization at that the World Economic forum increases populist beliefs. This approach has important advantages: the treatment bears similarity to real-world articles, uses strong descriptions to reduce the potential for Type II errors, and conveys the perceived link between globalization and wealthy class advancement using plain language. However, this experimental design precludes us from determining what precise information participants took from the article, and whether any single treatment element implicates populism. Perhaps learning about the costs of the WEF alone, or any mention of billionaires gaining could increase populist beliefs. The exploratory mechanisms analyses show that the treatment did affect the key independent variable from our observational analyses — perceptions about globalization's effects on wealthy Americans; an important manipulation check — but it also shifted beliefs about how globalization affects other groups. These considerations suggest clear paths for future research that 'unbundles' the treatment and explores which combination of elements has the largest effect on populist beliefs.

Conclusion

This article introduces new evidence that globalization drives populism via sociotropic perceptions: People who think that the the global economy makes the rich richer are more likely to reject the establishment politics believed to fuel their rise. This relationship reflects populism's resentful character (Cramer, 2016). If people think that globalization serves self-dealing elites, forsaking standard politics offers a route to reduce their influence. Our findings also hint that distributional concerns partly underlie this relationship. In the survey,

jointly perceiving that globalization provides a bounty for the richest Americans and negatively effects lower classes correlates with populism. In the experiment, reading about Davos billionaires altered views about how global integration affects society writ large, weakening beliefs that globalization is good for any groups besides the wealthy.

Our argument and findings have important implications for research on populism and IPE research on political attitudes. First, our sociotropic argument complements work on the economic foundations of the populist anti-globalization backlash (Rodrik, 2021; Flaherty and Rogowski, 2021), while offering an important rejoinder to research concluding that that economics play a limited role driving populist beliefs (Mutz, 2018; Norris and Inglehart, 2019). We provide a individual-level explanation that maps onto macro-level trends but replaces pocketbook effects as the primary source of economic grievance (see also e.g., Colantone and Stanig, 2018). Second, our sociotropic account emphasizes meso-level groups in society. Although our work links these class dynamics to populism, renewed attention to intra-national differences could inform IPE research on trade attitudes, where household and aggregate national welfare tend to dominate scholarship (Mansfield and Mutz, 2009, though see e.g., Guisinger, 2017).

This article also suggests three directions for future research. First, both globalization and class economics might be especially salient in the U.S. A leader in creating and sustaining an international system based on the tents of economic openness, the U.S. government has largely embraced globalization to grow the national economy. They also rank 5th among 38 OECD countries in economic inequality.[25] These contextual factors may shape both how

---

[25]Ranking by GINI coefficient among OECD countries per the latest data available. See https://data.oecd.org/inequality/income-inequality.htm, accessed 10 May 2023.

citizens view globalization — whether it triggers ideas about elite resentment in the first place — and how they respond to new information, perhaps prompting people to lean into to establishment parties amenable to redistribution in some countries. Cross-national studies could answer these questions, though researchers embarking on cross-national comparisons must attend to the challenges associated with measuring populism in different settings (Van Hauwaert, Schimpf and Azevedo, 2018).

Second, future research should carefully test the mechanisms that drive the effect of negative sociotropic perceptions. For instance, we find some evidence that populism is especially acute among people who conclude that that political access in the globalized economy unfairly benefits wealthy elites — contributing to a "widening gap between the rulers and the ruled" (Spruyt, Keppens and Van Droogenbroeck, 2016, 337). If fairness considerations mediate the relationship between elite resentment and populism, we might observe a weaker effect among meritocrats who see wealthy Americans as having earned their advantages (Ballard-Rosa, Goldstein and Rudra, 2023), or when presenting information about how globalization lowers prices for middle and working-class consumers.

Third, we examine populism as confluence of several sub-component beliefs that lack explicit partisan content. And indeed, the relationship between sociotropic class perceptions and populism appears largely independent of party identification.[26] Future research should examine how elite resentment combines with other host ideologies to separate left- and right-wing populists (Burgoon et al., 2019). Believing that globalization makes the rich richer drives anti-establishment views that might prompt nativists toward the populist radical and non-nativists to the left, for example. Exploring these possibilities would contribute

---

[26]See discussion in Appendix §2.4.

to important populism research on how economic and cultural grievances interact (Rhodes-Purdy, Navarre and Utych, 2021; Gidron and Hall, 2020; Carreras, Irepoglu Carreras and Bowler, 2019; Bonikowski, 2017; Curtice, 2016; Gest, 2016).

References

Abou-Chadi, Tarik and Thomas Kurer. 2021. "Economic Risk Within the Household and Voting for the Radical Right." *World Politics* 73(3):482–511.

Akkerman, Agnes, Cas Mudde and Andrej Zaslove. 2014. "How Populist Are the People? Measuring Populist Attitudes in Voters." *Comparative Political Studies* 47(9):1324–1353.

Autor, David H, David Dorn and Gordon H Hanson. 2013. "The China Syndrome: Local Labor Market Effects of Import Competition in the United States." *American Economic Review* 103(6):2121–68.

Ballard-Rosa, Cameron, Judith Goldstein and Nita Rudra. 2023. "Trade as Villain: The Fading American Dream and Declining Support for Globalization." *Journal of Politics* .

Bayram, A Burcu and Catarina P Thomson. 2022. "Ignoring the Messenger? Limits of Populist Rhetoric on Public Support for Foreign Development Aid." *International Studies Quarterly* 66(1):sqab041.

Berman, Sheri. 2021. "The Causes of Populism in the West." *Annual Review of Political Science* 24(3).

Blodget, Henry. 2011. "THE TRUTH ABOUT DAVOS: Here's Why People Happily Pay $71,000+ to Come–And Why They'll Keep Paying More Every Year." *Business Insider* .
  URL: *https://www.businessinsider.com/costs-of-davos-2011-1*

Bonikowski, Bart. 2017. "Ethno-Nationalist Populism and the Mobilization of Collective Resentment." *The British Journal of Sociology* 68:S181–S213.

Brutger, Ryan and Brian Rathbun. 2021. "Fair Share? Equality and Equity in American Attitudes Toward Trade." *International Organization* 75(3):880–900.

Burgoon, Brian, Sam van Noort, Matthijs Rooduijn and Geoffrey Underhill. 2019. "Positional Deprivation and Support for Radical Right and Radical Left Parties." *Economic Policy* 34(97):49–93.

Camerer, Colin F. 2011. *Behavioral Game Theory: Experiments in Strategic Interaction.* Princeton university press.

Canovan, Margaret. 1999. "Trust the People! Populism and the Two Faces of Democracy." *Political Studies* 47(1):2–16.

Carreras, Miguel, Yasemin Irepoglu Carreras and Shaun Bowler. 2019. "Long-Term Economic Distress, Cultural Backlash, and Support for Brexit." *Comparative Political Studies* 52(9):1396–1424.

Castanho Silva, Bruno, Ioannis Andreadis, Eva Anduiza, Nebojša Blanuša, Yazmin Morlet Corti, Gisela Delfino, Guillem Rico, Saskia P Ruth-Lovell, Bram Spruyt, Marco Steenbergen et al. 2018. Public Opinion Surveys: A New Scale. In *The Ideational Approach to Populism.* Routledge pp. 150–77.

Castanho Silva, Bruno, Sebastian Jungkunz, Marc Helbling and Levente Littvay. 2020. "An Empirical Comparison of Seven Populist Attitudes Scales." *Political Research Quarterly* 73(2):409–424.

Colantone, Italo and Piero Stanig. 2018. "Global Competition and Brexit." *American Political Science Review* 112(2):201–218.

Conover, Pamela Johnston. 1985. "The Impact of Group Economic Interests on Political Evaluations." *American Politics Quarterly* 13(2):139–166.

Cramer, Katherine J. 2016. *The Politics of Resentment: Rural Consciousness in Wisconsin and the Rise of Scott Walker.* University of Chicago Press.

Curtice, John. 2016. "A Question of Culture or Economics? Public Attitudes to the European Union in Britain." *The Political Quarterly* 87(2):209–218.

Druckman, James N and Thomas J Leeper. 2012. "Learning More from Political Communication Experiments: Pretreatment and Its Effects." *American Journal of Political Science* 56(4):875–896.

Elchardus, Mark and Bram Spruyt. 2016. "Populism, Persistent Republicanism and Declinism: An Empirical Analysis of Populism as a Thin Ideology." *Government and Opposition* 51(01):111–133.

Engler, Sarah and David Weisstanner. 2021. "The Threat of Social Decline: Income Inequality and Radical Right Support." *Journal of European Public Policy* 28(2):153–173.

Erisen, Cengiz, Mattia Guidi, Sergio Martini, Selin Toprakkiran, Pierangelo Isernia and Levente Littvay. 2021. "Psychological Correlates of Populist Attitudes." *Political Psychology* 42:149–71.

Fehr, Ernst and Urs Fischbacher. 2002. "Why Social Preferences Matter–the Impact of Non-selfish Motives on Competition, Cooperation and Incentives." *The Economic Journal* 112(478):C1–C33.

Flaherty, Thomas M and Ronald Rogowski. 2021. "Rising Inequality as a Threat to the Liberal International Order." *International Organization* 75(2):495–523.

Franzese, Robert J. 2019. "The Comparative and International Political Economy of Anti-globalization Populism." *Oxford Research Encyclopedia of Politics* .

Gest, Justin. 2016. *The New Minority: White Working Class Politics in an Age of Immigration and Inequality*. Oxford University Press.

Gidron, Noam and Jonathan JB Mijs. 2019. "Do Changes in Material Circumstances Drive

Support for Populist Radical Parties? Panel Data Evidence from the Netherlands during the Great Recession, 2007–2015." *European Sociological Review* 35(5):637–650.

Gidron, Noam and Peter A Hall. 2020. "Populism as a Problem of Social Integration." *Comparative Political Studies* 53(7):1027–1059.

Goldstein, Judith and Robert Gulotty. 2019. "The Globalisation Crisis: Populism and the Rise of an Anti-Trade Coalition." *European Review of International Studies* 6(3):57–83.

Guisinger, Alexandra. 2017. *American Opinion on Trade: Preferences without Politics.* Oxford: Oxford University Press.

Hainmueller, Jens. 2012. "Entropy Balancing for Causal Effects: A Multivariate Reweighting Method to Produce Balanced Samples in Observational Studies." *Political Analysis* 20(1):25–46.

Hainmueller, Jens and Michael J Hiscox. 2006. "Learning to Love Globalization: Education and Individual Attitudes toward International Trade." *International Organization* 60(2):469–498.

Hawkins, Kirk A. 2009. "Is Chávez Populist? Measuring Populist Discourse in Comparative Perspective." *Comparative Political Studies* 42(8):1040–1067.

Hawkins, Kirk A and Cristóbal Rovira Kaltwasser. 2017. "The Ideational Approach to Populism." *Latin American Research Review* 52(4):513–528.

Hawkins, Kirk A, Ryan E Carlin, Levente Littvay and Cristóbal Rovira Kaltwasser. 2018. *The Ideational Approach to Populism: Concept, Theory, and Analysis.* London: Routledge.

Jost, John T, Mahzarin R Banaji and Brian A Nosek. 2004. "A Decade of System Justification Theory: Accumulated Evidence of Conscious and Unconscious Bolstering of the Status Quo." *Political psychology* 25(6):881–919.

Kates, Sean and Joshua A Tucker. 2019. "We Never Change, Do We? Economic Anxiety and Far-Right Identification in a Postcrisis Europe." *Social Science Quarterly* 100(2):494–523.

Kertzer, Joshua D and Brian C Rathbun. 2015. "Fair Is Fair: Social Preferences and Reciprocity in International Politics." *World Politics* 67(4):613–655.

Kiewiet, D Roderick and Douglas Rivers. 1984. "A Retrospective on Retrospective Voting." *Political Behavior* 6(4):369–393.

Kinder, Donald R and D Roderick Kiewiet. 1981. "Sociotropic Politics: The American Case." *British Journal of Political Science* 11(2):129–161.

Kinder, Donald R., Gordon S. Adams and Paul W. Gronke. 1989. "Economics and Politics in the 1984 American Presidential Election." *American Journal of Political Science* 33(2):491.

Kriesi, Hanspeter, Edgar Grande, Romain Lachat, Martin Dolezal, Simon Bornschier, Timotheos Frey et al. 2008. *West European Politics in the Age of Globalization.* Cambridge University Press.

Lake, David A, Lisa L Martin and Thomas Risse. 2021. "Challenges to the Liberal Order: Reflections on International Organization." *International Organization* 75(2):225–257.

Lewis-Beck, Michael S. 1988. "Economics and the American Voter: Past, Present, Future." *Political Behavior* 10(1):5–21.

Lipset, Seymour Martin. 1955. "The Radical Right: A Problem for American Democracy." *The British journal of sociology* 6(2):176–209.

Lü, Xiaobo, Kenneth Scheve and Matthew J Slaughter. 2012. "Inequity Aversion and the International Distribution of Trade Protection." *American Journal of Political Science* 56(3):638–654.

Mansfield, Edward D and Diana C Mutz. 2009. "Support for free trade: Self-interest,

sociotropic politics, and out-group anxiety." *International Organization* 63(3):425–457.

Mansfield, Edward D, Helen V Milner and Nita Rudra. 2021. "The Globalization Backlash: Exploring New Perspectives." *Comparative Political Studies* 54(13):2267–2285.

Metcalf, Tom and Simon Kennedy. 2019. "Davos Billionaires Keep Getting Richer: The World's Elite Have Prospered since the Financial Crash." *Bloomberg News* .

URL: *https://www.bloomberg.com/news/articles/2019-01-20/dimon-schwarzman-and-other-davos-a-listers-add-175-billion-in-10-years*

Milner, Helen V. 2021. "Voting for populism in Europe: Globalization, technological change, and the extreme right." *Comparative Political Studies* 54(13):2286–2320.

Morgan, Stephen L. 2018. "Status Threat, Material Interests, and the 2016 Presidential Vote." *Socius* 4:1–7.

Mudde, Cas. 2007. *Populist Radical Right Parties in Europe*. Cambridge University Press.

Mudde, Cas. 2017. Populism: An Ideational Approach. In *The Oxford Handbook of Populism*, ed. Cristóbal Rovira Kaltwasser, Paul A Taggart, Paulina Ochoa Espejo and Pierre Ostiguy. Oxford: Oxford University Press pp. 27–47.

Mughan, Anthony and Dean Lacy. 2002. "Economic performance, job insecurity and electoral choice." *British Journal of Political Science* 32(3):513–533.

Mutz, Diana C. 2018. "Status Threat, Not Economic Hardship, Explains the 2016 Presidential Vote." *Proceedings of the National Academy of Sciences* pp. 1–10.

Mutz, Diana C. 2021. "(Mis) Attributing the Causes of American Job Loss: The Consequences of Getting It Wrong." *Public Opinion Quarterly* 85(1):101–122.

Mutz, Diana C and Eunji Kim. 2017. "The Impact of In-Group Favoritism on Trade Preferences." *International Organization* 71(4):827–850.

Mutz, Diana C. and Jeffery J. Mondak. 1997. "Dimensions of Sociotropic Behavior: Group-Based Judgements of Fairness and Well-Being." *American Journal of Political Science* 41(1):284.

Norris, Pippa and Ronald Inglehart. 2019. *Cultural Backlash: Trump, Brexit, and Authoritarian Populism.* Cambridge University Press.

Porter, Ethan and Yamil R. Velez. 2022. "Placebo Selection in Survey Experiments: An Agnostic Approach." *Political Analysis* 30(4):481–494.

Powers, Kathleen E, Jason Reifler and Thomas J Scotto. 2021. "Going Nativist: How Nativism and Economic Ideology Interact to Shape Beliefs about Global Trade*." *Foreign Policy Analysis* 17(3).

Powers, Kathleen E, Joshua D Kertzer, Deborah J Brooks and Stephen G Brooks. 2022. "What's Fair in International Politics? Equity, Equality, and Foreign Policy Attitudes." *Journal of Conflict Resolution* 66:217–245.

Rabin, Matthew. 1998. "PSychology and Economics." *Journal of Economic Literature* 36(1):11–46.

Rhodes-Purdy, Matthew, Rachel Navarre and Stephen K. Utych. 2021. "Populist Psychology: Economics, Culture, and Emotions." *Journal of Politics* 83:1559–1571.

Rodrik, Dani. 2018. "Populism and the Economics of Globalization." *Journal of International Business Policy* 1(1):12–33.

Rodrik, Dani. 2021. "Why Does Globalization Fuel Populism? Economics, Culture, and the Rise of Right-Wing Populism." *Annual Review of Economics* 13(1):133–170.

Rommel, Tobias and Stefanie Walter. 2018. "The Electoral Consequences of Offshoring: How the Globalization of Production Shapes Party Preferences." *Comparative Political Studies*

51(5):621–658.

Rooduijn, Matthijs. 2019. "State of the Field: How to Study Populism and Adjacent Topics? A Plea for Both More and Less Focus." *European Journal of Political Research* 58(1):362–372.

Scheve, Kenneth and David Stasavage. 2017. "Wealth Inequality and Democracy." *Annual Review of Political Science* 20:451–468.

Schulz, Anne, Philipp Müller, Christian Schemer, Dominique Stefanie Wirz, Martin Wettstein and Werner Wirth. 2017. "Measuring Populist Attitudes on Three Dimensions." *International Journal of Public Opinion Research* 30(2):316–26.

Schäfer, Armin. 2021. "Cultural Backlash? How (Not) to Explain the Rise of Authoritarian Populism." *British Journal of Political Science* p. 1–17.

Spruyt, Bram, Gil Keppens and Filip Van Droogenbroeck. 2016. "Who Supports Populism and What Attracts People to It?" *Political Research Quarterly* 69(2):335–346.

Steenvoorden, Eefje and Eelco Harteveld. 2018. "The Appeal of Nostalgia: The Influence of Societal Pessimism on Support for Populist Radical Right Parties." *West European Politics* 41(1):28–52.

Thal, Adam. 2020. "The Desire for Social Status and Economic Conservatism among Affluent Americans." *American Political Science Review* 114(2):426–442.

Urbinati, Nadia. 1998. "Democracy and Populism." *Constellations* 5(1):110–124.

Van Hauwaert, Steven M, Christian H Schimpf and Flavio Azevedo. 2018. Public Opinion Surveys: Evaluating Existing Measures. In *The Ideational Approach to Populism.* Routledge pp. 128–49.

Walter, Stefanie. 2010. "Globalization and the Welfare State: Testing the Microfoundations

of the Compensation Hypothesis." *International Studies Quarterly* 54(2):403–426.

Walter, Stefanie. 2021. "The Backlash against Globalization." *Annual Review of Political Science* 24:421–442.

Wolak, Jennifer and David AM Peterson. 2020. "The Dynamic American Dream." *American Journal of Political Science* 64(4):968–981.

Woodward, Ian, Zlatko Skrbis and Clive Bean. 2008. "Attitudes Towards Globalization and Cosmopolitanism: Cultural Diversity, Personal Consumption and the National Economy." *The British Journal of Sociology* 59(2):207–226.

Wuttke, Alexander, Christian Schimpf and Harald Schoen. 2020. "When the Whole Is Greater than the Sum of Its Parts: On the Conceptualization and Measurement of Populist Attitudes and Other Multidimensional Constructs." *American Political Science Review* 114(2):356–74.

Online Appendix
When the Rich get Richer: Class, Globalization and the Sociotropic Determinants of Populism

Kathleen E. Powers and Brian C. Rathbun

Contents

1 Survey Measurement

We combined theoretical guidance with a "model selection perspective" that considers trade-offs between interpretation, simplicity, and model fit to determine which items comprise the most appropriate components for the 2-item populism subcomponent scales (Preacher et al., 2013). This approach is appropriate for our purposes, considering substantial disagreement about which items tap separate populist beliefs (Castanho Silva et al., 2018; Van Hauwaert, Schimpf and Azevedo, 2018). As Schulz et al. (2017, 421) summarize, many existing populist batteries "appear to have poor psychometric properties, or fail at capturing the proposed construct." We therefore approached scale construction guided by theory and the data rather than directly adopt an existing scale that may not be appropriate for our setting. The survey instrument included 9 potential populism indicators, and we conducted a set of iterative exploratory factor analyses to determine appropriate scale components for our analyses.

Table 1: Measuring populist beliefs

	Populism Single factor	Popular sovereignty Factor 1	Anti-elitism Factor 2	People-centrism Factor 3	Factor 4
Will of people	0.71				
People should make policy	0.68				
Citizen should represent					
Special groups have influence	0.65				
Ordinary people are good	0.44				
Can trust ordinary people					
Politicians don't keep promises					
People in government dishonest	0.61				
Government favors bigwigs	0.50				
		$TLI = 0.55$		$RMSEA = 0.15\ (0.15, 0.16)$	
Will of people		0.82			
People should make policy		0.76			
Citizen should represent			0.69		
Special groups have influence		0.25		0.35	0.20
Ordinary people are good					0.88
Can trust ordinary people			0.61	-0.12	0.19
Politicians don't keep promises		-0.13	0.49	0.23	-0.19
People in government dishonest				0.78	
Government favors bigwigs				0.53	
		$TLI = 0.97$		$RMSEA = 0.04\ (0.02, 0.06)$	
Will of people		0.78			
People should make policy		0.79			
Citizen should represent				0.75	
Special groups have influence		0.32	0.36		
Can trust ordinary people				0.52	
Politicians don't keep promises		-0.18	0.18	0.50	
People in government dishonest			0.81		
Government favors bigwigs			0.53		
		$TLI = 0.99$		$RMSEA = 0.03\ (0.00, 0.05)$	

Note: Table reports results of principal axis factor analyses with oblimin rotation. Cell entries indicate the rotated factor loadings, values below $|0.1|$ suppressed for presentation. N=1462.

First, we conducted an exploratory factor analysis to assess whether all 9 items load on a single factor. Fit statistics illustrate that this model provides a poor fit, with a TLI far below the conventional 0.95 cutoff and RMSEA well above 0.05 ($TLI = 0.55$, $RMSEA = 0.15\ [0.15, 0.16]$). Consistent with our conceptualization of populism as the confluence of three dimensions – and with a large body of recent empirical research rejecting unidimensional populism scales (e.g., Schulz et al., 2017; Wuttke, Schimpf and Schoen, 2020) – the single-factor model's poor fit suggests that we consider populism's subcomponents separately.

We therefore conducted a parallel analysis and examined the scree plot for all 9 items. The results suggested that a 4-factor solution was appropriate for the data, and we present the results from that factor analysis in the top panel of Table 1. The model fits the data well ($TLI = 0.97$, $RMSEA = 0.04\ [0.02, 0.06]$),

but the pattern matrix shows that the fourth factor contains a single strongly loading item — "Ordinary people are of good and honest character" — and correlates with the first "popular sovereignty" factor (0.54).

Researchers caution against retaining factors comprised of a single component, and so for the second step we repeated the analysis procedure after omitting the *ordinary people* item. The parallel analysis suggests a 3 factor solution and the resulting model, presented in the bottom panel of Table 1, fits the data well ($TLI = 0.99$, $RMSEA = 0.02$ [0, 0.05]). The three factors in this model represent theoretically coherent populist subdimensions with popular sovereignty, anti-elitism, and people-centrism appearing as distinct latent constructs. Importantly, each factor contains at least two strongly loading items. We find some cross-loading: concerns about special groups' political influence weakly correlates with both the popular will and anti-elitism factors — perhaps due to the double-barreled nature of the statement that both demonizes special interest groups and calls for political decisions to reflect the public's interest.[1]

The measurement model clearly identified two items for the popular sovereignty factor — *will of the people* and *people should make policy* — and anti-elitism — *people in government dishonest* and *government favors bigwigs*. Three items correlated with people-centrism — *citizens should represent, can trust ordinary people*, and *politicians don't keep promises*. Because the *politicians don't keep promises* item also loaded weakly on both anti-elitism and popular sovereignty and conceptually bears a closer resemblance to concerns about political efficacy than populism, we excluded it from our people-centrism scale. Our conclusions remain largely the same when we create a 3-item scale that includes this item or when we replace the *can trust ordinary people* with *politicians don't keep promises* on the scale (results available in replication materials).

2 Correlates of Populist Beliefs

The following sections present results from the main analyses and discuss robustness checks and alternative specifications. Tables suppress some control variables due to journal space restrictions for appendices.

2.1 Main Analyses: Regression tables

Tables 2, 3, 4, and 5 present results from models that regress our dependent variables on beliefs about globalization's effects on different strata of American society. We include separate results tables for each dependent variable, with *people-centrism* in Table 2, *popular sovereignty* in Table 3, *anti-elitism* in Table 4, and *populism* in Table 5.

We present 8 models for each dependent variable. Models 1 and 2 in each table include the main independent variables alongside demographic and party controls. We then include these variables alongside economic (Models 3 and 4) and sociocultural (Models 5 and 6) controls. Models 7 and 8 incorporate the full complement of control variables. Results in the manuscript incorporate survey weights adjusted for census data on age, race, region, and educational attainment (Models 1, 3, 4, and 7). We present unweighted estimates in Models 2, 4, 6, and 8.

---

[1] "Special groups have too much influence over political decisions, which should represent the public's interests."

Table 2: Correlates of People-centrism Beliefs

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Glob: Family	0.01	−0.004	0.002	0.002	0.002	−0.01	0.001	−0.004
	(0.03)	(0.03)	(0.03)	(0.03)	(0.03)	(0.03)	(0.03)	(0.03)
Glob: Working Class	−0.05*	−0.05*	−0.05†	−0.05†	−0.05†	−0.04	−0.04	−0.03
	(0.03)	(0.03)	(0.03)	(0.03)	(0.03)	(0.03)	(0.03)	(0.03)
Glob: Middle Class	−0.04	−0.05	−0.04	−0.05†	−0.05	−0.05†	−0.05†	−0.06†
	(0.03)	(0.03)	(0.03)	(0.03)	(0.03)	(0.03)	(0.03)	(0.03)
Glob: Wealthy Class	0.03	0.05*	0.04†	0.05*	0.03	0.04*	0.03†	0.04*
	(0.02)	(0.02)	(0.02)	(0.02)	(0.02)	(0.02)	(0.02)	(0.02)
Glob: Country	−0.04†	−0.04†	−0.04†	−0.04†	−0.05*	−0.05*	−0.04*	−0.05*
	(0.02)	(0.02)	(0.02)	(0.02)	(0.02)	(0.02)	(0.02)	(0.02)
Economic Strife index			−0.004	−0.08*			0.03	−0.04
			(0.03)	(0.03)			(0.03)	(0.03)
Difficult on Income			0.06*	0.01			0.05*	0.001
			(0.03)	(0.03)			(0.03)	(0.03)
Country Econ Retro			0.04	0.03			0.03	0.02
			(0.03)	(0.03)			(0.03)	(0.03)
Personal Econ Retro			−0.10**	−0.10**			−0.09*	−0.09*
			(0.04)	(0.04)			(0.04)	(0.04)
Community Econ Retro			0.01	−0.03			0.002	−0.04
			(0.04)	(0.04)			(0.04)	(0.04)
Nativism					−0.08*	−0.08*	−0.07*	−0.08*
					(0.03)	(0.03)	(0.04)	(0.04)
Outsourcing Concerns					−0.07**	−0.08**	−0.07**	−0.07**
					(0.02)	(0.02)	(0.02)	(0.02)
Democrat	−0.02	−0.02	−0.02	−0.03	−0.04*	−0.04**	−0.04*	−0.05**
	(0.02)	(0.02)	(0.02)	(0.02)	(0.02)	(0.02)	(0.02)	(0.02)
Independent	0.003	0.01	−0.01	−0.01	−0.01	−0.004	−0.02	−0.02
	(0.02)	(0.02)	(0.02)	(0.02)	(0.02)	(0.02)	(0.02)	(0.02)
Demographics	✓	✓	✓	✓	✓	✓	✓	✓
Constant	0.70**	0.72**	0.68**	0.77**	0.76**	0.78**	0.74**	0.83**
	(0.03)	(0.03)	(0.04)	(0.05)	(0.04)	(0.04)	(0.05)	(0.05)
Survey Weights	✓		✓		✓		✓	
N	1,275	1,275	1,249	1,249	1,272	1,272	1,249	1,249
R^2	0.07	0.09	0.08	0.10	0.08	0.11	0.09	0.11

†p < .1; *p < .05; **p < .01

Note: OLS coefficients, standard errors in parentheses. Higher values on primary independent variables indicate belief that globalization had a positive effect on the group. All variables range from 0 to 1.

Table 3: Correlates of Popular Sovereignty Beliefs

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Glob: Family	−0.02	−0.03	−0.01	−0.03	−0.02	−0.03	−0.01	−0.03
	(0.03)	(0.03)	(0.03)	(0.03)	(0.03)	(0.03)	(0.03)	(0.03)
Glob: Working Class	−0.01	0.01	0.002	0.01	−0.02	0.01	0.001	0.02
	(0.03)	(0.03)	(0.03)	(0.03)	(0.03)	(0.03)	(0.03)	(0.03)
Glob: Middle Class	−0.004	−0.02	−0.02	−0.03	−0.002	−0.02	−0.02	−0.03
	(0.03)	(0.03)	(0.03)	(0.03)	(0.03)	(0.03)	(0.03)	(0.03)
Glob: Wealthy Class	0.07**	0.07**	0.06**	0.07**	0.06**	0.06**	0.06**	0.06**
	(0.02)	(0.02)	(0.02)	(0.02)	(0.02)	(0.02)	(0.02)	(0.02)
Glob: Country	0.02	0.02	0.02	0.02	0.01	0.01	0.01	0.01
	(0.02)	(0.02)	(0.02)	(0.02)	(0.02)	(0.02)	(0.02)	(0.02)
Economic Strife index			−0.08*	−0.02			−0.08*	−0.02
			(0.03)	(0.03)			(0.04)	(0.04)
Difficult on Income			−0.02	0.003			−0.02	−0.001
			(0.03)	(0.03)			(0.03)	(0.03)
Country Econ Retro			−0.04	−0.05			−0.04	−0.04
			(0.04)	(0.04)			(0.04)	(0.04)
Personal Econ Retro			0.01	0.03			0.02	0.03
			(0.04)	(0.04)			(0.04)	(0.04)
Community Econ Retro			−0.08†	−0.04			−0.10*	−0.05
			(0.04)	(0.04)			(0.04)	(0.04)
Nativism					−0.13**	−0.11**	−0.12**	−0.11**
					(0.04)	(0.04)	(0.04)	(0.04)
Outsourcing Concerns					0.04†	0.02	0.04*	0.02
					(0.02)	(0.02)	(0.02)	(0.02)
Democrat	0.02	0.02	0.02	0.01	0.004	0.002	0.003	−0.001
	(0.02)	(0.02)	(0.02)	(0.02)	(0.02)	(0.02)	(0.02)	(0.02)
Independent	0.03	−0.01	0.01	−0.01	0.01	−0.02	0.002	−0.02
	(0.02)	(0.02)	(0.02)	(0.02)	(0.02)	(0.02)	(0.02)	(0.02)
Demographics	✓	✓	✓	✓	✓	✓	✓	✓
Constant	0.79**	0.76**	0.89**	0.80**	0.84**	0.81**	0.94**	0.85**
	(0.04)	(0.04)	(0.05)	(0.05)	(0.04)	(0.04)	(0.05)	(0.05)
Survey Weights	✓		✓		✓		✓	
N	1,286	1,286	1,260	1,260	1,283	1,283	1,260	1,260
R^2	0.12	0.08	0.11	0.07	0.13	0.08	0.12	0.08

$^\dagger p < .1$; $^* p < .05$; $^{**} p < .01$

Note: OLS coefficients, standard errors in parentheses. Higher values on primary independent variables indicate belief that globalization had a positive effect on the group. All variables range from 0 to 1.

Table 4: Correlates of Anti-elitism Beliefs

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Glob: Family	−0.06*	−0.05†	−0.04	−0.04	−0.06*	−0.05†	−0.04	−0.04
	(0.02)	(0.02)	(0.02)	(0.03)	(0.02)	(0.02)	(0.02)	(0.03)
Glob: Working Class	−0.02	−0.01	−0.004	−0.01	−0.02	−0.01	−0.01	−0.01
	(0.02)	(0.02)	(0.02)	(0.02)	(0.02)	(0.02)	(0.02)	(0.02)
Glob: Middle Class	0.01	−0.02	−0.01	−0.02	0.01	−0.02	−0.01	−0.02
	(0.03)	(0.03)	(0.03)	(0.03)	(0.03)	(0.03)	(0.03)	(0.03)
Glob: Wealthy Class	0.07**	0.09**	0.07**	0.08**	0.07**	0.08**	0.07**	0.08**
	(0.02)	(0.02)	(0.02)	(0.02)	(0.02)	(0.02)	(0.02)	(0.02)
Glob: Country	0.02	0.01	0.02	0.01	0.02	0.01	0.01	0.005
	(0.02)	(0.02)	(0.02)	(0.02)	(0.02)	(0.02)	(0.02)	(0.02)
Economic Strife index			−0.05	0.04			−0.06†	0.03
			(0.03)	(0.03)			(0.03)	(0.03)
Difficult on Income			−0.11**	−0.06**			−0.11**	−0.06**
			(0.02)	(0.02)			(0.02)	(0.02)
Country Econ Retro			0.01	−0.02			0.02	−0.01
			(0.03)	(0.03)			(0.03)	(0.03)
Personal Econ Retro			0.001	0.03			0.01	0.03
			(0.03)	(0.03)			(0.03)	(0.03)
Community Econ Retro			−0.09*	−0.03			−0.10**	−0.04
			(0.04)	(0.04)			(0.04)	(0.04)
Nativism					−0.07*	−0.07*	−0.08*	−0.08*
					(0.03)	(0.03)	(0.03)	(0.03)
Outsourcing Concerns					0.05**	0.06**	0.05*	0.05**
					(0.02)	(0.02)	(0.02)	(0.02)
Democrat	0.06**	0.06**	0.06**	0.06**	0.05**	0.05**	0.05**	0.05**
	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)	(0.02)	(0.01)
Independent	0.08**	0.07**	0.07**	0.07**	0.08**	0.07**	0.07**	0.06**
	(0.02)	(0.02)	(0.02)	(0.02)	(0.02)	(0.02)	(0.02)	(0.02)
Demographics	✓	✓	✓	✓	✓	✓	✓	✓
Constant	0.65**	0.64**	0.79**	0.69**	0.67**	0.66**	0.82**	0.72**
	(0.03)	(0.03)	(0.04)	(0.04)	(0.04)	(0.03)	(0.04)	(0.04)
Survey Weights	✓		✓		✓		✓	
N	1,270	1,270	1,244	1,244	1,267	1,267	1,244	1,244
R²	0.10	0.08	0.12	0.09	0.10	0.09	0.13	0.10

†p < .1; *p < .05; *p < .01
 Note: OLS coefficients, standard errors in parentheses. Higher values on primary independent variables indicate belief
 that globalization had a positive effect on the group. All variables range from 0 to 1.

Table 5: Correlates of Populism (composite scale; logit coefficients)

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Glob: Family	−0.02	−0.25	0.27	−0.02	−0.04	−0.31	0.23	−0.16
	(0.43)	(0.36)	(0.43)	(0.04)	(0.43)	(0.37)	(0.44)	(0.38)
Glob: Working Class	−0.87*	−0.68†	−0.67†	−0.06	−0.89*	−0.65†	−0.67†	−0.59†
	(0.38)	(0.35)	(0.34)	(0.04)	(0.39)	(0.35)	(0.36)	(0.35)
Glob: Middle Class	−0.50	−0.62†	−0.81†	−0.09*	−0.42	−0.59	−0.77†	−0.66†
	(0.50)	(0.37)	(0.44)	(0.04)	(0.51)	(0.37)	(0.45)	(0.38)
Glob: Wealthy Class	0.73*	0.92**	0.88**	0.11**	0.62†	0.79**	0.79**	0.83**
	(0.33)	(0.27)	(0.30)	(0.03)	(0.32)	(0.27)	(0.30)	(0.28)
Glob: Country	0.02	−0.06	0.02	−0.01	−0.08	−0.16	−0.09	−0.19
	(0.29)	(0.26)	(0.30)	(0.03)	(0.30)	(0.27)	(0.31)	(0.27)
Economic Strife index			−0.57	−0.05			−0.60	−0.57
			(0.48)	(0.05)			(0.51)	(0.49)
Difficult on Income			−0.31	−0.03			−0.39	−0.39
			(0.40)	(0.04)			(0.40)	(0.36)
Country Econ Retro			−0.32	−0.05			−0.27	−0.32
			(0.47)	(0.05)			(0.47)	(0.44)
Personal Econ Retro			−0.05	−0.02			0.08	−0.07
			(0.54)	(0.05)			(0.55)	(0.49)
Community Econ Retro			−0.21	0.02			−0.38	−0.14
			(0.57)	(0.06)			(0.58)	(0.55)
Nativism					−1.58**	−1.75**	−1.48**	−1.72**
					(0.56)	(0.48)	(0.57)	(0.48)
Outsourcing Concerns					0.31	0.12	0.17	0.09
					(0.32)	(0.26)	(0.32)	(0.28)
Democrat	0.65**	0.53**	0.64**	0.05*	0.41†	0.24	0.42†	0.21
	(0.22)	(0.20)	(0.22)	(0.02)	(0.22)	(0.22)	(0.23)	(0.22)
Independent	0.80**	0.47*	0.65*	0.04	0.66*	0.35	0.55*	0.29
	(0.26)	(0.24)	(0.27)	(0.03)	(0.26)	(0.24)	(0.27)	(0.25)
Demographics	✓	✓	✓	✓	✓	✓	✓	✓
Constant	−1.99**	−1.91**	−1.49*	0.22**	−1.27*	−1.07*	−0.71	−0.40
	(0.49)	(0.46)	(0.65)	(0.07)	(0.53)	(0.51)	(0.69)	(0.66)
Survey Weights	✓		✓		✓		✓	
N	1,274	1,274	1,248	1,248	1,271	1,271	1,248	1,248
AIC		979.58		867.13		967.58		964.58

†p < .1; *p < .05; **p < .01
Note: Logit coefficients, standard errors in parentheses. Higher values on primary independent variables indicate belief that globalization had a positive effect on the group. All variables range from 0 to 1.

2.2 Combined Working/Middle Class Perceptions

Table 6 presents results from 8 models that regress each populist belief and the composite measure on the independent variables. These models use a combined measure for beliefs about globalization's effects on working and middle class Americans. We adopt this combined measure to address concerns about multicollinearity, which could bias coefficient estimates and contribute to inconsistency across model specifications. We include these analyses to evaluate the robustness of our conclusion that concerns about these lower socioeconomic class correlate with people-centrism and populism, but not popular sovereignty nor anti-elitism considered separately.

The combined variable ranges from 0 (globalization has a negative effect on *both* working and middle class Americans) to 1 (globalization has a positive effect on *both* working and middle class Americans). The results provide stable evidence for the trends suggested by our primary analyses. This combined variable negatively correlates with both people-centrism and populism but remains unrelated to popular sovereignty and anti-elitism. We use this combined variable across additional robustness checks and tests for heterogeneity to reduce concerns that multicollinearity affects our findings or conclusions.

Moreover, we observe the same positive and significant relationship between beliefs about the wealthy class and popular sovereignty, anti-elitism, and populism per conclusions in the manuscript. These models support our conclusion that populists especially concern themselves with globalization's winners.

Table 6: Combining working and middle class perceptions shows a consistent link to people-centrism and populism

	People-Centrism		Popular Sovereignty		Anti-Elitism		Populism	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Glob: Family	0.01	0.001	−0.02	−0.01	−0.06*	−0.04	−0.02	0.23
	(0.03)	(0.03)	(0.03)	(0.03)	(0.02)	(0.02)	(0.43)	(0.43)
Glob: Working/Middle Class	−0.10**	−0.09**	−0.02	−0.02	−0.01	−0.01	−1.38**	−1.43**
	(0.03)	(0.03)	(0.03)	(0.03)	(0.03)	(0.03)	(0.43)	(0.43)
Glob: Wealthy Class	0.03†	0.03†	0.07**	0.06**	0.08**	0.07**	0.76*	0.78*
	(0.02)	(0.02)	(0.02)	(0.02)	(0.02)	(0.02)	(0.31)	(0.30)
Glob: Country	−0.04†	−0.04*	0.02	0.01	0.02	0.01	0.02	−0.09
	(0.02)	(0.02)	(0.02)	(0.02)	(0.02)	(0.02)	(0.29)	(0.31)
Demographics	✓	✓	✓	✓	✓	✓	✓	✓
Other Controls		✓		✓		✓		✓
Constant	0.70**	0.73**	0.79**	0.94**	0.65**	0.82**	−1.98**	−0.72
	(0.03)	(0.05)	(0.04)	(0.05)	(0.03)	(0.04)	(0.49)	(0.69)
N	1,275	1,249	1,286	1,260	1,270	1,244	1,274	1,248
R^2	0.07	0.09	0.12	0.12	0.10	0.13		

†p < .1; *p < .05; **p < .01
Note: OLS (Models 1-6) or logit (Models 7-8) coefficients, standard errors in parentheses. Higher values on primary independent variables indicate belief that globalization had a positive effect on the group or groups. All variables range from 0 to 1.

2.3 Consistent results with different populism operationalizations

Figure 1 presents results from models that use a variety of alternative specifications for the composite populism variable. Panel **a** displays average marginal effect estimates from logistic models that adopt different thresholds for the dichotomous populism measure: *at or above* the median on each subcomponent (squares), *at or above* the 75th percentile on each subcomponent (triangles), and *above* the 75th percentile (circles), alongside the esitmates from our main model for comparison (vertical lines). The least restrictive threshold (squares) classifies 24.5% of the sample as populists, whereas requiring populists to score above the 75th percentile on each subcomponent limits the proportion of populists to 3.5%.

The next two panels adopt slightly different approaches that retain more information from the scales. Panel **b** separates the populism measure into three categories, allowing us to distinguish between people who score relatively low on all populist subcomponents (at or below the median value for each subcomponent) from populists (above the median on each subcomponent) and those who hold some populist beliefs (above

the median value on 1-2 subcomponents). The plot displays average marginal effects from a multinomial logit model, and shows the effect of a one-unit change for each independent variable on the probability that a participant is a populist (triangles) or non-populist/elitist (circles), relative to holding some populist beliefs as the baseline category.

Finally, panel **c** depicts OLS coefficients from two models that use continuous scales for populism. The first regresses a multiplicative measure of populism on the independent variables, whereby we multiply scores from each subscale to create the populism scale (Castanho Silva et al., 2018; Erisen et al., 2021) (triangles). The second uses an additive scale (circles). Although this scale poses conceptual challenges by taking a compensatory approach, we find similar results.

The results suggest that our findings are reasonably robust to alternative thresholds and specifications for this outcome variable. Point estimates suggest that people who believe that globalization helps wealthy Americans are more likely to be populists, though the estimates lose some precision with the most and least restrictive thresholds, with 95% confidence intervals that contain 0. Interestingly, the results from panel **b** suggest that sociotropic beliefs about globalization's effects on wealthy Americans distinguish non-populist elitists from people who hold relatively high scores on 1-2 populist beliefs. By contrast, ideas about globalization's implications for lower social classes have no effect on the probability that someone adheres to 1-2 populist beliefs relative to no populist beliefs.

Figure 1: Alternative specifications for composite populism measure
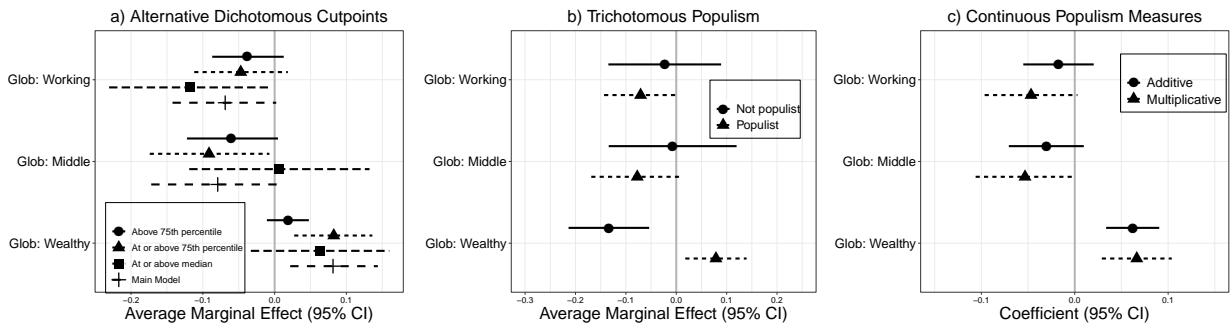
Note: Panel **a** depicts average marginal effect estimates from logistic regression models that use different cutpoints to measure a dichotomous populism variable. Panel **b** depicts average marginal effect estimates from a multinomial logit model with a trichotomous populism measure (baseline: above the median on 1-2 populist beliefs). Panel **c** depicts OLS coefficients. All models include the full panel of demographic, economic, and sociocultural controls and incorporate population weights.

2.4 Survey: Additional analyses

We completed several supplemental analyses and robustness tests. Journal space limitations do not permit us to fully report these analyses but we describe them here and include each in replication materials.

First, we find that our results are robust to controlling for perceptions about how globalization affects different racial groups. We add two control variables for participant beliefs about whether globalization has had a positive effect on 1) white or 2) minority Americans. Our conclusions about the relationship between sociotropic class perceptions and populist beliefs remain robust after accounting for these important variables.

Second, we evaluate whether party identification or self-interest moderate the relationship between sociotropic globalization beliefs and populism. Modeling the interaction between party and the independent variables shows that Independents are less likely to connect their support for popular sovereignty to beliefs about wealthy class prosperity compared to Republicans. We next estimate models that interact social class (poor/working, middle, upper middle/wealthy) with beliefs about globalization's effect on wealthy Americans and the combined working/middle class indicator. The results reveal little indication that social class moderates the relationship between beliefs about globalization's sociotropic effects and populist beliefs. Collectively, these analyses suggest that we cannot conclude that the relationship between beliefs about globalization's distributive effects on social classes and populism depends on party identification nor class self-interest.

Third, analyses in the manuscript consider whether populist beliefs reflect public perceptions that wealthy Americans are getting richer while lower classes either receive no benefits or economic harm from global integration. A series of supplemental subgroup analyses estimate the coefficient on beliefs about the wealthy class among 1) people who believe that globalization helps the working or middle classes (and harms neither), and 2) those who think that globalization has harmed the working or middle classes (and helped neither). Similar to our conclusions in the manuscript, we find some evidence for a stronger relationship between beliefs about the wealthy class and anti-elitism among those who think that lower classes fare worse.

Fourth, we estimate our models by using each individual item on the populism questionnaire as a separate dependent variable, forgoing the subcomponent scales. The results are largely consistent with our primary analyses, with beliefs about globalization's benefits for the wealthy class correlating with both anti-elitism items and popular sovereignty items ($p = 0.13$ on *people make decisions*), but also one of two people-centrism item (*trust ordinary people*) and concerns about special groups' influence (which cross-loads on popular sovereignty and anti-elitism in the factor analyses).

3 Experiment

We recruited respondents via Prolific Academic. We blocked on university education to ensure that our sample reflects the range of educational attainment in the U.S. population, and balanced on sex. 1,539 American respondents completed the informed consent process. Per our pre-registered criteria, our analyses omit 1) 20 observations flagged as bots or fraudulent respondents by Qualtrics; 2) 26 of the remaining respondents who failed either of two pre-treatment attention checks; and 3) 1 respondent flagged as located in Canada (the experiment required U.S. participants). These adjustments produce a sample of 1,492 participants for analysis, 11 of whom completed between 58 and 85% of the survey. We retain these partial responses where possible. Table 7 displays the demographic characteristics.

Table 7: Experiment Sample Characteristics

	Sample
Female	0.505
Male	0.495
18-34	0.546
35-44	0.197
45-54	0.121
55 and older	0.136
College/university or Higher	0.353
Non-Hispanic White	0.711

3.1 Reinforcing question and survey measures

A reinforcing question followed the article treatment:

> Which of the following statements is true based on the article that you just read? (You may select more than one answer) [*American billionaires gather at the World Economic Forum in Davos to promote their businesses and wealth.*, *Tickets and membership fees for the World Economic Forum cost about $71,000.*, *The next Davos meeting is called Globalization 4.0.*, *None of the above.*]

All three statements constitute correct responses to the reinforcing question, and 70% of participants selected all three correct statements and did not select "none of the above." A further 23% selected two statements.

Table 8 displays question wording for post-treatment measures. Participants reported whether they agree or disagree (on 6-point scales) with six statements measuring populist beliefs; the six statements appeared in random order. Questions tapping beliefs about globalization's effects on different groups in American society followed on the next page, with target groups presented in random order.

Table 8: Experiment measures

Variable	Measurement
Popular Sovereignty	"Politicians need to follow the will of the people." / "The people, and not politicians, should make our most important policy decisions."
People-centrism	"I would rather be represented by a specialized politician than a regular citizen." (*reverse coded*) / "Ordinary people can't be trusted to make the right choices about our nation's interests." (*reverse coded*)
Anti-elitism	"Quite a few of the people running our government are not as honest as the voters have a right to expect." / "Regardless of the party in power, all governments just favor the bigwigs."
Glob: Wealthy	"Do you think economic globalization – the increased trade between countries in goods, services, and investments – has had a negative effect, no effect, or a positive effect on each of the following groups?... Wealthy Americans" (negative effect, no effect, positive effect)
Glob: Middle	"... Middle Class Americans" (negative effect, no effect, positive effect)
Glob: Working	"... Working Class Americans" (negative effect, no effect, positive effect)
Glob: Country	"... The country as a whole" (negative effect, no effect, positive effect)
Glob: Family	"... You and your immediate family" (negative effect, no effect, positive effect)

3.2 Manipulation Checks

Participants completed two factual manipulation checks post-treatment. These factual manipulation checks identify whether participants read and received the treatment article, allowing us to identify basic attention levels (Kane and Barabas, 2019, 248). The first asked participants to select the correct headline from the article they read, and the second asked how many people are expected to attend the next WEF per the article. Both questions instructed participants to select "I did not read an article about the World Economic Forum" if they did not receive an article. In the treatment group, 77.96% of the sample selected the correct headline and 75.65% identified the correct number of participants. Control group participants had especially high rates of correct responses on their slightly simpler task, with 95.17% and 94.64% correctly noting that they had not read an article. These high rates of correct responses suggest largely attentive participants. We discuss the subjective manipulation check in the context of mechanisms in section 4.6 below, and in the main manuscript.

3.3 Main Effects

Table 9 displays results from eight OLS models estimating the effect of the Davos article treatment on the three populist beliefs and composite populism variable. Models 2, 4, 6, and 8 include a set of pre-treatment controls. The models do not control for political interest as specified in the pre-registration. We included political interest in the pre-registered panel of controls in error (based on an older survey draft) — this survey instrument did not include any items that measure interest in politics and we therefore could not include it as a pretreatment covariate.

Table 9: Davos Article Increases Populist Beliefs about Popular Sovereignty and People-centrism

	Anti-Elitism		People-Centrism		Popular Sovereignty		Populism	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Article	0.005	0.008	0.035**	0.034**	0.047**	0.046**	0.033†	0.034†
	(0.009)	(0.009)	(0.010)	(0.010)	(0.012)	(0.012)	(0.017)	(0.017)
Male		−0.010		−0.033**		−0.024*		−0.012
		(0.009)		(0.010)		(0.012)		(0.018)
Age: 18-34		0.014		0.016		−0.024		−0.020
		(0.014)		(0.016)		(0.018)		(0.027)
Age: 35-44		0.014		0.006		0.001		−0.024
		(0.016)		(0.018)		(0.021)		(0.031)
Age: 45-54		−0.013		−0.017		−0.033		−0.026
		(0.018)		(0.020)		(0.023)		(0.034)
White		0.002		0.031**		0.031*		0.024
		(0.011)		(0.012)		(0.014)		(0.020)
University		−0.007		−0.027*		−0.012		−0.032†
		(0.010)		(0.011)		(0.013)		(0.019)
West		0.011		0.004		−0.014		−0.005
		(0.014)		(0.016)		(0.018)		(0.027)
South		−0.0002		−0.011		−0.026		−0.032
		(0.013)		(0.014)		(0.017)		(0.025)
Northeast		0.008		−0.013		−0.028		0.0001
		(0.014)		(0.016)		(0.018)		(0.027)
Democrat		0.026*		0.007		−0.064**		0.007
		(0.011)		(0.013)		(0.015)		(0.022)
Independent		0.067**		0.002		−0.001		0.071*
		(0.016)		(0.018)		(0.021)		(0.031)
Income 1		−0.016		−0.011		−0.023		−0.001
		(0.015)		(0.017)		(0.020)		(0.029)
Income 2		−0.005		−0.010		0.030		0.033
		(0.016)		(0.018)		(0.021)		(0.031)
Income 3		0.017		0.012		0.021		0.061*
		(0.014)		(0.015)		(0.018)		(0.026)
Poor		0.117**		0.007		0.051		0.093*
		(0.024)		(0.027)		(0.031)		(0.046)
Working Class		0.070**		0.038†		0.046†		0.062†
		(0.018)		(0.020)		(0.024)		(0.035)
Middle Class		0.038*		0.012		0.041*		0.036
		(0.016)		(0.018)		(0.021)		(0.030)
Constant	0.818**	0.734**	0.759**	0.738**	0.591**	0.623**	0.111**	0.064
	(0.006)	(0.026)	(0.007)	(0.029)	(0.008)	(0.034)	(0.012)	(0.050)
N	1,486	1,485	1,485	1,484	1,485	1,484	1,485	1,484
R^2	0.0002	0.045	0.008	0.036	0.010	0.053	0.002	0.025

†$p < .1$; *$p < .05$; **$p < .01$

Note: OLS coefficients, standard errors in parentheses. Article is a dummy indicator for exposure to the article treatment. Continuous dependent variables in Models 1-6 range from 0 to 1; Populism is a dichotomous variable coded 1 for populists and 0 for non-populists.

3.4 Heterogeneous effects

Table 10 displays results from eight OLS models that estimate whether the treatment has a stronger effect among people with favorable views about the World Economic Forum (pre-registered H3). Contrary to our expectations, we find no evidence that favorable views toward the WEF moderate the main effect. Plotting the treatment effect across the range of the moderator and estimating the effect in separate bins suggest substantial uncertainty at high and low values on the Davos favorability scale (Hainmueller, Mummolo and Xu, 2019).[2] Indeed, 61.93% of participants selected either the scale midpoint, "no opinion" or "I have not heard of the World Economic Forum;" only 17.63% of the sample reported somewhat or very favorable views. We recommend that future research manipulate Davos favorability directly or adopt a more fine-grained measure for pretreatment beliefs about globalization to further evaluate evidence about heterogeneity.

Table 10: Davos Favorability does not Moderate Article Effect

	Anti-Elitism		People-Centrism		Popular Sovereignty		Populism	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Article	0.0001	−0.0003	0.019	0.013	0.058†	0.048	0.038	0.029
	(0.025)	(0.025)	(0.029)	(0.029)	(0.033)	(0.033)	(0.048)	(0.049)
Davos Favor	0.161**	0.161**	0.075*	0.084*	0.291**	0.264**	0.263**	0.251**
	(0.034)	(0.034)	(0.038)	(0.038)	(0.044)	(0.044)	(0.064)	(0.065)
Article x Favorable	0.010	0.015	0.031	0.043	−0.024	−0.005	−0.011	0.008
	(0.047)	(0.047)	(0.053)	(0.053)	(0.061)	(0.061)	(0.090)	(0.090)
Pre-treatment covariates		✓		✓		✓		✓
Constant	0.738**	0.645**	0.721**	0.690**	0.446**	0.478**	−0.021	−0.075
	(0.018)	(0.031)	(0.020)	(0.035)	(0.023)	(0.040)	(0.034)	(0.060)
N	1,486	1,485	1,485	1,484	1,485	1,484	1,485	1,484
R^2	0.032	0.076	0.016	0.046	0.063	0.096	0.024	0.045

†p < .1; *p < .05; **p < .01
Note: OLS coefficients, standard errors in parentheses. Article is a dummy indicator for exposure to the article treatment. Davos favorability and continuous dependent variables in Models 1-6 range from 0 to 1; Populism is a dichotomous variable coded 1 for populists and 0 for non-populists.

Next, Table 11 estimates an interaction between the article treatment and an indicator for university education (RQ2). The results show no evidence that education moderates the effect of reading about globalization's benefits for wealthy Americans on populist beliefs.

Table 11: University Education does not Moderate Article Effect

	Anti-Elitism		Popular Sovereignty		People-Centrism		Populism	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Article	−0.001	0.001	0.039**	0.037**	0.057**	0.055**	0.023	0.024
	(0.011)	(0.011)	(0.013)	(0.013)	(0.015)	(0.015)	(0.021)	(0.021)
University	−0.029*	−0.016	−0.025†	−0.023	−0.008	0.002	−0.062*	−0.045†
	(0.013)	(0.014)	(0.015)	(0.015)	(0.018)	(0.018)	(0.025)	(0.026)
Article x University	0.016	0.019	−0.012	−0.009	−0.028	−0.027	0.026	0.027
	(0.019)	(0.019)	(0.021)	(0.021)	(0.025)	(0.025)	(0.036)	(0.036)
Pre-treatment covariates		✓		✓		✓		✓
Constant	0.829**	0.738**	0.767**	0.736**	0.594**	0.618**	0.133**	0.069
	(0.008)	(0.026)	(0.009)	(0.030)	(0.010)	(0.035)	(0.015)	(0.051)
N	1,486	1,485	1,485	1,484	1,485	1,484	1,485	1,484
R^2	0.004	0.046	0.014	0.036	0.013	0.054	0.008	0.026

†p < .1; *p < .05; **p < .01
Note: OLS coefficients, standard errors in parentheses. Article is a dummy indicator for exposure to the article treatment. Davos favorability and continuous dependent variables in Models 1-6 range from 0 to 1; Populism is a dichotomous variable coded 1 for populists and 0 for non-populists.

---

[2]Available in the replication materials.

References

Castanho Silva, Bruno, Ioannis Andreadis, Eva Anduiza, Nebojša Blanuša, Yazmin Morlet Corti, Gisela Delfino, Guillem Rico, Saskia P Ruth-Lovell, Bram Spruyt, Marco Steenbergen et al. 2018. Public Opinion Surveys: A New Scale. In *The Ideational Approach to Populism*. Routledge pp. 150–77.

Erisen, Cengiz, Mattia Guidi, Sergio Martini, Selin Toprakkiran, Pierangelo Isernia and Levente Littvay. 2021. "Psychological Correlates of Populist Attitudes." *Political Psychology* 42:149–71.

Hainmueller, Jens, Jonathan Mummolo and Yiqing Xu. 2019. "How Much Should We Trust Estimates from Multiplicative Interaction Models? Simple Tools to Improve Empirical Practice." *Political Analysis* 27(2):163–92.

Kane, John V and Jason Barabas. 2019. "No Harm in Checking: Using Factual Manipulation Checks to Assess Attentiveness in Experiments." *American Journal of Political Science* 63(1):234–49.

Preacher, Kristopher J, Guangjian Zhang, Cheongtag Kim and Gerhard Mels. 2013. "Choosing the Optimal Number of Factors in Exploratory Factor Analysis: A Model Selection Perspective." *Multivariate Behavioral Research* 48(1):28–56.

Schulz, Anne, Philipp Müller, Christian Schemer, Dominique Stefanie Wirz, Martin Wettstein and Werner Wirth. 2017. "Measuring Populist Attitudes on Three Dimensions." *International Journal of Public Opinion Research* 30(2):316–26.

Van Hauwaert, Steven M, Christian H Schimpf and Flavio Azevedo. 2018. Public Opinion Surveys: Evaluating Existing Measures. In *The Ideational Approach to Populism*. Routledge pp. 128–49.

Wuttke, Alexander, Christian Schimpf and Harald Schoen. 2020. "When the Whole Is Greater than the Sum of Its Parts: On the Conceptualization and Measurement of Populist Attitudes and Other Multidimensional Constructs." *American Political Science Review* 114(2):356–74.