REGULAR ISSUE PAPER



Desert and redistribution: Justice as a remedy for, and cause of, economic inequality

Jacob S. Bower-Bir^{1,2}



²J. Irwin Miller Architecture Program, Indiana University Bloomington, Bloomington, IN, USA

Correspondence

Bloomington, IN, USA

Jacob S. Bower-Bir, Ostrom Workshop in Political Theory and Policy Analysis, Indiana University Bloomington, Bloomington, IN, USA. Email: jbowerbir@gmail.com

Abstract

Post-positivist scholars have shown that justice motivates personal behavior and policymaking, but they have not adequately explained how such normative concerns exert their influence. I argue that justice is the rewarding of desert, and desert is an emergent social institution. As a social institution, community members have built-in incentives to enforce and perpetuate communal understandings of desert though external sanctions and inculcation. As an evolutionary phenomenon, what constitutes upright, moral behavior will vary across communities and contexts, constraining individuals and policymakers as they address community issues. In an empirical test of my theory, I find that an individual's support for redistributive policies is driven by her (a) belief in desert's reward and (b) definition of economic deservingness. People tolerate grave inequalities if they think those inequalities are deserved. Indeed, if outcomes appear deserved, altering them constitutes an unjust act. Moreover, people who assign a significant role to personal responsibility in their definitions of economic desert oppose large-scale redistribution policies because government intervention makes it harder for people to (by their definition) deserve their economic station. In short, people must perceive inequality as undeserved to motivate a policy response, and the means of combating inequality must not undermine desert.

KEYWORDS

justice, progressive taxation, social institutions

THEORETICAL CONTRIBUTION

The idea of distribution is fundamental to human interactions, informal and formal, on scales intimate and grand. Social scientists and laypeople alike tend to use "distribution" in reference to allocations of material wealth and economic resources, which determine our physical comfort and safety, and also indirectly affect social and political power (e.g., Bartels, 2008). But we directly distribute power, too, entrusting certain of our fellows with this or that responsibility while naming others categorically ineligible to operate levers of authority. Treatments are similarly scarce and strategically distributed. We dole out ire or kudos to neighbors and colleagues, but no one can be angry or congratulatory all the time so we reserve those nuanced modes of interpersonal conduct for when they might reasonably affect how others act (e.g., McKean, 1992). In formal settings, too, sanctions and rewards are effective at influencing behavior, but are also expensive. City prosecutors, for example, must determine if prosecuting a crime is worth further burdening an understaffed legal system and an overcrowded penal system (Hill & Martin, 2019).

Because distributions are important in social science, so is justice. In its simplest construction, justice is getting what one *deserves* (Mill, 1957). The (mis)allocation of a resource, treatment, or responsibility to undeserving parties is, by definition, an injustice, and some injustices appear to have measurable social consequences. Researchers in organizational and social psychology, for example, have produced entire subfields¹ devoted to the study of justice, always with important findings, but often at the expense of linguistic and conceptual clarity (Greenberg, 2011; Jost & Kay, 2010). Policy theorists and researchers have also contributed mightily to the topic of justice, hewing markedly closer to the concept's core connection to deservingness. Social construct theory (e.g., Schneider & Ingram, 1993), the narrative policy framework (or "NPF"; e.g., Stone, 2002), and recent political science investigations (e.g., Cramer Walsh, 2012) have made a convincing case for the effect of normative, moral concerns—including desert, specifically—on everyday human behavior and broader societal functioning.

Although empirically rigorous and theoretically compelling, research in these veins does not clearly explain why moral concerns such as those related to justice might motivate human behavior in the first place, nor how they might influence policies meant to regulate that behavior. In this paper, I hope to provide these pioneering policy frameworks and findings with a solid theoretical footing. To do that, I first make explicit what is currently an implicit relationship with modern equity theory (e.g., Adams, 1963). Modern equity theory posits that a perceived injustice induces mental distress, which provokes action to rectify the injustice and thereby eliminate the distress. I then attempt to delineate, beyond a vague appeal to universal psychological mechanisms, where this internal turmoil originates and how the necessary sensitivity to justice is inculcated. I argue, in short, that desert is a social institution, with built-in incentives to conform and perpetuate.

Desert is emergent, fashioned over repeated interactions among humans trying to solve multiple-equilibria problems (i.e., problems with many possible, enduring solutions). Material wealth and child rearing responsibilities, for example, can be distributed in all sorts of ways that could constitute a stable equilibrium. Rather than rehash the issue anew at every meeting, the people involved eventually arrive at a regularity of distributional behavior, and they often codify this expected behavior in a moral vernacular—akin to, and perhaps backed by, a narrative—identifying who deserves what, and why. Violating your community's desert formula comes at a cost. Your fellow community members will be impelled—for their own good, they believe—to correct the mismatch of deserved object and deserving subject, and sanction anyone complicit in that mismatch. Over time, these sanctions take root in peoples' minds and they police themselves. In short, "[p]eople are not preoccupied with justice because they are moral, per se," (Bower-Bir, 2017, p. 4) but because they are rational, responding to the external and internal costs incurred by violating institutional boundaries.

I back this argument with an empirical demonstration. If desert is an emergent social institution, the criteria that make someone deserving will vary across communities and time, and will influence how community members rectify injustices (Binmore, 2011). Scholars in the post-positivist tradition have reinvigorated the qualitative, ethnographic core of the social sciences (Dodge et al., 2005). They are

therefore well positioned to identify and interrogate varying definitions of desert. This is not the case among all social scientists, many of whose theories concerning justice do not require investigators to explain what it means to the actors under study to deserve the good or treatment at stake. It is enough for their analyses to know whether and to what degree the actors perceive a situation as just (i.e., whether and to what degree actors believe deserved objects have been delivered to deserving subjects). I show that policy and political scholars also need to account for peoples' particular definitions of economic desert.

People will tolerate grave inequalities—inequalities that trouble them, even—if they think those inequalities are deserved. If undeserved, however, people may nonetheless oppose policies aimed at economic leveling when those policies conflict with their definitions of desert. Many Americans want to reduce economic inequality. Those same Americans will oppose government efforts to reduce inequality if they consider personal responsibility a key economic desert basis. For these people, progressive taxation and redistribution rectify an unjust situation, but through unjust means. Government intervention undermines economic desert. Not so if your economic desert bases do not include personal responsibility. These findings help resolve a major conundrum regarding American public support for economic redistribution policies. In resolving this puzzle, moreover, I illustrate the potentially destructive quality of justice. The variety of desert norms makes public calls to justice—absent a definition of desert—unintelligible, and often counter productive in the eyes of the caller.

Before turning to this empirical test in Sections 2–6, I flesh out my theoretical argument in the remainder of this section.

1.1 | Showing that justice matters: Social constructions and policy narratives

Following the discipline's "argumentative turn" (Fischer & Forester, 1993), policy theorists began grappling with the seemingly messy influence of language and deliberation on the policy process, from shaping citizens' and leaders' preferences all the way through implementation and assessment. No longer taking for granted an objective political reality to be cleanly modeled and measured, scholars in policy and related fields now recognize that some primary forces governing our world are socially constructed (e.g., Fischer, 2003; Roe, 1994; Stone, 2002). To navigate their physical and social environments, humans ascribe or assign meanings to events, objects, symbols, and behaviors. Meaning generation is of particular interest to social and policy scientists because pretty much any problem or task confronting a community is fundamentally ambiguous and open to many meanings. That is, it can be tackled in any of a number of ways by any constellation of actors depending on how people interpret and understand it. Once a particular interpretation of the problem or task takes hold, that community may be walking down a path radically different than if they had landed on an alternate interpretation, with a different set of winners and losers and a unique host of intended and unintended consequences (Zahariadis, 2007).

To make sense of, and choose between, the range of interpretations potentially applicable to a given problem or task, humans tell themselves and one another stories. Storytelling is fundamental to human thought and "a primary means by which individuals organize, process, and convey information" (Jones & McBeth, 2010, p. 330). Because public decisions yield winners and losers, various interests will hawk their preferred interpretation of the task at hand. ⁵ Scholars working within the narrative policy framework show how social elites and interest groups weaponize narratives, casting themselves as victims and others as villains (Stone, 2002). They transmit their easily digestible stories to political decision-makers (Jones & McBeth, 2010) and through the media to the wider citizenry (Blair & McCormack, 2016). ⁶

Widespread adoption of a particular narrative can have lasting social effects, as can continued competition between narratives. Research in social construct theory shows how policymakers and policies convey powerful, enduring messages about what target populations deserve from government, and what society should expect from those populations. These messages about who deserves what, and why, will reinforce or alter the political and material advantages of specific groups, often at the expense of others, all without exercising traditional levers of power (Ingram et al., 2007; Schneider & Ingram,

1993). Stories about who deserves what are not only relevant at grand societal scales. They influence interactions at intimate scales, too, as when street-level bureaucrats including police and teachers eschew standard operating procedures and adjust their delivery of social services based on personal assessments of citizen/client deservingness (Maynard-Moody & Musheno, 2003, 2012). Among the general citizenry, these stories drive public opinion to surprising places, as when those most injured by economic inequality defend it as fair and oppose government redistribution (Bower-Bir, 2014; Starmans et al., 2017). Narrative-informed public opinion filters back up the policy chain during elections when citizens vote for policymakers apparently at odds with their economic interests, relying instead on their perceptions of a candidate's delivery of benefits to deserving or undeserving populations (Cramer Walsh, 2012; McCall, 2013).

1.2 | Explaining why justice matters: Emergent social institutions

That normative issues like justice matter for policymaking is clear, but the question remains: Why do moral concerns motivate people to action? Social factions, interest groups, etc. bother perpetuating or undermining narratives about who deserves what because those narratives influence policymakers and public opinion, both of which shape public policy, to the advantage of some and disadvantage of others. There is a strategic incentive to control narratives pertaining to desert, but that does nothing to tell us why these normative stories ought to inspire political behavior, let alone behavior seemingly at odds with personal interests.

To answer this question, we must expand the scope of the benefits and costs that constitute our personal interests beyond pocketbooks and political power. Although not (to my knowledge) explicitly mentioned in the forgoing literature, the abovementioned theories and frameworks may be doing just that by tacitly building their insights atop modern equity theory (e.g., Adams, 1963, 1965), which gets decent traction among syllabuses in organizational studies, public management, and related policy courses (e.g., Schay, 1988; Thompson & Rainey, 2003). According to modern equity theorists, humans experience psychological distress when they perceive injustice—specifically inequity—which inspires them to correct the imbalance between (a) a person or group's contributions to an undertaking and (b) that person or group's subsequent payoffs (Walster et al., 1973). This psychological turmoil, which presents as disappointment, anger, or guilt, is a cost people want to avoid. Equitable outcomes, conversely, produce contentment. From this perspective, political battles over narratives and social constructions of deservingness are attempts to strategically inspire or suppress these emotional costs to the benefit of specific interests.

Making explicit this link is mutually beneficial. Modern equity theory provides post-positivst policy frameworks a mechanism by which the normative concerns at their core might spur a behavioral response. Reciprocally, post-positivist policy frameworks explain how competition among elites yields the variety of moral interpretations different people bring to the same interpersonal interactions and social distributions. The story, however, remains incomplete. Equity theory ignores all those occasions where people's conception of justice has nothing to do with balancing inputs and outputs, resting instead on need, equality, or some other basis (Jost & Kay, 2010). Questions remain even when equity is the defining principle. How, for example, are competing desert narratives sufficiently ingrained into people's minds so as to induce psychological duress? And what accounts for the myriad understandings of equity, fairness, and justice that operate in small communities over everyday distributions not worth concerted politicking (e.g., Elster, 1992; Westermarck, 1906; Young, 1995)? It may be that humans have a mental hair-trigger when it comes to injustice, and that the morals imparted by higher-stakes narratives spill over into the quotidian realm, but this is to ignore a commonsense, well-researched phenomenon that tidies the picture: social institutions.

Although "the new institutionalism" is by now old, what many researchers and laypeople continue to call "institutions" (e.g., the US Congress and art museums) are, in the jargon of institutional economics and political science, "organizations" (North, 1990; Polski & Ostrom, 2017). "Institutions" are

considerably more general. They are "the prescriptions that humans use to organize all forms of repetitive and structured interactions including those within families, neighborhoods, markets, firms, sports leagues, churches, private associations, and governments at all scales" (Ostrom, 2005). Institutions tell you what to do and when to do it. They tell others what to expect from you, and vice versa. In generating this regularity of social interaction, institutions free up our cognitive resources and reduce transaction costs.

Policy theory can be thought of as an especially visible, especially salient focus of institutional theory. Whereas policy scholars study how people use language-mediated meaning to wrangle ambiguity in formal public settings, institutional scholars study how shared meaning-making allows humans to associate and thereby confront the broader category of multiple-equilibria problems—problems with many possible, enduring solutions (Binmore, 1994; Ostrom & Ostrom, 2004). All communities face multiple multiple-equilibria problems, there being innumerable ways—and no inherently correct way—to divvy resources, responsibilities, and treatments. Solutions to these problems may be the result of strategic wrangling in formal bodies, scientific experimentation and dumb trial and error among everyday people, or any combination thereof. The most straightforward institutions—called "strategies"—direct people toward prudent behavior, solving, however elegantly, this or that interpersonal conundrum. You can follow them or not as you like. More complex institutions—called "norms" and "rules"—are trickier to shirk (Crawford & Ostrom, 1995). These institutions are *self-reinforcing*, with built-in incentives to conform and perpetuate (e.g., Grief, 2004; North & Weingast, 1989). It is this self-reinforcing quality that helps explain why moral concerns like justice motivate behavior and policy.

In short, people face costs for violating norms and rules. Alternatively, people may be rewarded for maintaining and expanding norms and rules. It works as follows. Once a good-enough solution 11 to a communal problem—say, maintaining enough fish in a shared lake, or determining who is going to manage a town's sewage—has been hit upon, community members have a direct incentive to keep the newfound institution running, lest the problem worsen or return. For their own good, community members will sanction/reward their peers who violate/uphold communal norms and rules. These communally administered sanctions and rewards are called "external delta parameters." They may be unspoken and entirely unnoticed by community outsiders (e.g., raised eyebrows or an averted gaze), heavy-handed and physically exacted (e.g., a monetary fine), and/or brought to bear in settings seemingly unrelated to the institution being undermined or buttressed (e.g., ostracism from a social celebration). Eventually, the threat/promise of external delta parameters around a specific action will ingrain itself in people's minds to the point that people preemptively punish/reward themselves for the discouraged/encouraged behavior. These "internal delta parameters" manifest as guilt or self-approbation. People, in deciding (consciously or unconsciously) whether to observe or violate norms and rules will factor into their decision both external and internal delta parameters (Crawford & Ostrom, 1995; Ostrom, 2005). Sufficient feedback from external and internal sanctions/rewards will perpetuate an institution over time, and may even expand the range of scenarios on which it bears. 12 Insufficient feedback from delta parameters, and the institution will shrink in applicability and may eventually die out (Grief, 2004).

As students of the narrative policy framework might expect, institutions are not all wrath and recompense. Humans contemplate, communicate, and inculcate institutional arrangements via language and stories. Indeed, the variety of institutional types, and the multiple academic descriptions of them, can be expressed in a common "institutional grammar," whose syntax yields "institutional statements" (Crawford & Ostrom, 1995). Policy scholars are starting to pay serious attention to the institutional grammar (Siddiki et al., Forthcoming) so I will not belabor its specifics here. For our purposes, the key component of the institutional grammar is the "deontic operator," which permits or prohibits certain actions and separates norms and rules from mere strategies.

Whether expressed in the formal institutional syntax or ordinary language, deontic operators come with a moral flavor. They specify, for example, whether an action "may," "must," or "must not" occur (Crawford & Ostrom, 1995). Such institutional statements are already laden with a normative urgency that can be exacerbated if expressed with explicitly normative operators such as "should" or "should not." Add to that the temporal and physical distance many community members have from the issue an

institution evolved to address. If you are not, as in our example social problems, directly aware of how your institutional adherence maintains a viable fish stock or keeps town sewage at healthy levels, then your understanding of that institution is divorced from its practical implications. For you, the institution is a matter of ritual and lore, but internal and external delta parameters continue to weigh on you. "What was at first a narrow, prudent aim has been replaced by a broad, moral imperative" (Maddamsetti & Bower-Bir, 2018, p. 11) rooted in what anthropologists and NPF scholars would recognize as myths, folk tales, and fables. Taken together, it is natural for norms and rules to take on a decidedly normative character (Sugden, 1989) while still motivating human conduct. "What economists study as individually prudent or socially advantageous behavior, everyday humans learn and perpetuate as 'good' behavior' (Bower-Bir, 2014, p. 3).

1.3 Desert as an institution, and justice as a double-edged sword

In the foregoing discussion I argued that social institutions—which emerge naturally from otherwise ungoverned human interaction to generate reliable, self-enforcing patterns of human association—explain why normative concepts studied by post-positivist policy scholars motivate human behavior. But can they specifically be tied to the distributional stories politicians, bureaucrats, and citizens tell themselves and one another about who deserves what resources, responsibilities, and treatments? Yes they can, because desert itself is a social institution (Binmore, 2010, 2011).

Recall that justice is getting what one deserves (Feldman, 1995; Mill, 1957; Rescher, 1966; Sidgwick, 1962). Desert, then, is the meriting of some resource, responsibility, or treatment (Feldman, 1995; Rescher, 1966). In moral philosophy, a meaningful statement regarding desert has at least three components: a deserving *subject*, a deserved *object*, and a desert *basis* (McLeod, 2013). A desert statement clarifies who deserves what, on what grounds. In some cases, it may also be prudent to specify the *source* from which the subject deserves the object (Kleinig, 1971). This formulation has the basic components of a narrative (Jones & McBeth, 2010): a protagonist (the subject), a villain (the source), a conflict (the object), and a lesson or moral (the basis). Crucially, desert statements can be translated into institutional statements via the institutional grammar (Bower-Bir, 2014, 2020a). For all the reasons discussed earlier, the traditionally metaphysical notion of justice (i.e., the rewarding of desert) can also be grounded in natural, evolutionary processes (Binmore, 2010, 2011).

Under the "natural" (i.e., evolutionary, institutional) interpretation, justice is simultaneously important and meaningless. It is important because the desire for justice—the desire to reward desert—seems to be a universal human trait insofar as desert is an emergent, self-enforcing social institution (Binmore, 2009, 2011; Bower-Bir, 2014, 2020a). For that same reason, definitions of desert are widely variable, changing across communities and time (Elster, 1992; Westermarck, 1906; Young, 1995), and with the object being distributed (e.g., Deutsch, 1975, 1985; Reis, 1984; Tornblom & Foa, 1983). A call for justice absent a specification of desert is unintelligible, except among people in your immediate community and in communities that, by whatever fluke, evolved the same definitions of desert that you leave unstated. Asking people to act justly is as likely to undermine your distributional goals as to aid them. To ensure you are on the same page as others, you must specify who deserves what, on what grounds. Otherwise, you and your supposed allies may be working toward vastly different ends, all in the name of justice.

Think of justice as harborage, a general notion of sheltered water, and we are out at sea. Everyone in the boat sets to rowing, but not necessarily toward the same harbor. Some sailors are headed toward naturally sheltered coasts while others cannot conceive of anything but man-made ports and jetties. Desert is the much needed orientation, the specification of which calm waters we seek. Once identified, we may find that some of us prefer to be in other boats, but perhaps better that than rowing against one another.

There exists a widespread misconception among laypeople and scholars alike that power in the service of justice will necessarily lead to more equal distributions of resources and influence. Quite the opposite, many peoples' conceptions of justice demand that resources and influence be selectively apportioned, identifying certain people as deserving more and others less. As with all social institutions,

a community's peculiar definition of desert is apt to reflect and perpetuate the power asymmetries at play therein. Consider public opinion towards economic inequality and government redistribution, a topic to which we will return in later sections. Rather than promote altruism and a narrowing between haves and have-nots, justice can lead people to defend and exacerbate economic inequalities. Despite his moral outrage at labor's exploitation, Marx was famously suspicious of justice as a motivating force, recognizing that "certain conceptions of justice would be used to provide ideological cover for the status quo" (Jost & Kay, 2010, p. 1127). Yet many researchers are surprised when subjects with the greatest sensitivity to matters of morality and justice are the least willing to share their earnings (Decety et al., 2015), or when the poorest are least likely to demand a greater portion of the economic pie (Bartels, 2008; Jost et al., 2003). These scholars tacitly equate just outcomes with equal (or at least pro-social) outcomes, which is by no means a given. Rather than appreciate the evolved, social nature of deservingness (and, consequently, of justice) they conclude that their subjects are hypocritical (Decety et al., 2015), stupid (Bartels, 2008), or deluded (Jost et al., 2003), being either unprincipled or ignorant of a more self-serving policy position.

These researchers are undoubtedly correct much of the time for much of the population, but there are clear occasions when, for some groups of people, a just outcome is an unequal outcome, and the cost to violating that social institution is viewed as dearer than supporting a distribution that might otherwise materially benefit them. ¹⁵ Accordingly, I do not mean to imply that these researchers and their preferred explanations of redistributive preferences are wrong; only that they are not the full story. These theories sit alongside one another, and alongside my theory, accounting for the others' gaps, such that, for example, respondents in the upper-right quadrant of Figure 4 may be hypocritical, self-hating, delusional, and/or ignorant, but they may also be expressing a rational response to their "moral" institutional pressures.

Natural justice is problematic for more than egalitarians and altruists. It has the potential to frustrate anyone with a preferred criteria on which to apportion a given resource for the simple reason that not everyone will agree with your preferred criteria. Aristotle (2002, p. 162) presented justice as a matter of equity—a matching of inputs and outputs, worth and reward—but with a caveat: "[E]verybody agrees that what is just in distributions must accord with some kind of merit, but everybody is not talking about the same kind of merit [...]." Citizens from different communities will have different, potentially conflicting conceptions of merit (which in our formulation is better styled as a "desert basis"). Indeed, the desert bases to which communities adhere may strike outsiders as perplexing or downright reprehensible (Bower-Bir, 2020b). Moreover, members of multiple communities (e.g., a religion, a race, and a profession) and overlapping or nested communities (e.g., a nuclear family in a town within an extended family across towns) might be internally torn over the proper bases along which to divvy some good.

Proliferating definitions of desert are difficult enough to track. Our terminology around justice should not be. That is why I am adamant about focusing on desert, and why it is remarkable that post-positivist policy scholars have highlighted "desert" in their work. Desert is a qualitatively investigable and empirically measurable concept, conversant with moral philosophy and social science, that resolves much of the trouble wrought by lax use of related words. For example, entire disciplines of social scientists use "fairness" and "justice" interchangeably (Greenberg, 2011), while neighboring disciplines and philosophers contend that fairness and related procedural matters are but a facet of justice (Feinberg, 1974). Similarly, equal and equitable distributions are often conflated with fairly derived distributions (e.g., Starmans et al., 2017), and certain legal traditions have consciously introduced not-quite-commonplace terms to sidestep ordinary-but-fraught moral language (Kutz, 2004). ¹⁸

With only three ingredients—a subject, an object, and a basis—desert clarifies the relationship between oft-confused moral concepts. First, it unifies the otherwise separate distributional principles that characterize outcomes. Equality, equity, and need can all be meaningfully, and more accurately, addressed in terms of desert, and doing so exposes the often illusory divisions between them (Wagstaff, 1994). Desert also links those distributional concerns with fairness's procedural concerns (Bower-Bir, 2014, chap. 2). Desert also links those distributional concerns with fairness's procedural concerns (Bower-Bir, 2014, chap. 2).

This clarity, together with the institutional theory outlined above and my empirical findings below, exposes justice as a double-edged sword when it comes to redistribution. Americans' redistributive policy preferences are deeply tied to their quest for justice—they want to reward desert—but they have conflicting assessments of who belongs where on the socioeconomic ladder, and divergent ideas of what qualifies you for a specific rung. As I will show, justice pulls Americans to support *and* oppose government intervention in economic inequality. If you disagree with your audience on who deserves what and why, then your calls for justice will inspire them to pursue distributions you consider unjust. They are rowing for a harbor, but not the one you had in mind. We must look deeper than justice, uncovering what different communities mean by "deserving" as it applies to wealth, economic station, and the responsibilities that come with each.

2 | EMPIRICAL PUZZLE: REDISTRIBUTION PREFERENCES

Americans overwhelmingly espouse egalitarian views in the abstract (Bartels, 2008; Norton & Ariely, 2011). This egalitarian fervor, however, is decidedly not manifest in Americans' estimation of redistributive policy. Even minimally progressive tax structures like those employed in federal income and local property taxes are routinely rated the "worst" and "least fair," whereas regressive sales and payroll taxes receive markedly more favorable reviews (Page & Shapiro, 1992, p. 165). Indeed, specific instances of tax policy blatantly favoring the wealthy receive sizeable support and almost no opposition from ordinary, egalitarian-minded Americans, even as those same Americans diagnose the policies in question as exploitative.

Consider the example afforded by President Bush's 2001 tax cuts. Poll after poll showed a clear majority of Americans expressing support for the measure. The cuts, however, were essentially a "massive government-engineered transfer of wealth from the lower and middle classes to the rich" (Bartels, 2008, p. 162). Did Americans see this policy for what it was? By and large, yes. Three-quarters of Americans acknowledged that the cuts would inordinately benefit the rich, two-thirds of Americans recognized that they would not personally enjoy any measurable benefits, and a majority of Americans conceded that low- and middle-income citizens would similarly see no gains (Bartels, 2008, pp. 172–173).

The alleged inconsistency extends to public opinion on the economy more broadly. Popular perception holds that the economic system is fundamentally just despite widespread awareness of inequality. So it has been for decades (Fong, 2001; Hochschild, 1981; Lane, 1959), and as Figure 1 shows, so it continues to be. While 67% of citizens believe that differences in income are "too large" and 59% of Americans recognize that there are "strong conflicts" between the rich and poor, 52% think the disparity is not something that needs to be "fixed."

Majorities simultaneously despair at economic inequality and refuse to address it. These odd patterns are more than an aggregate phenomenon. Attempts to ascertain the individual foundations of the

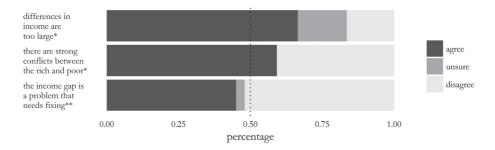


FIGURE 1 Incongruent public opinion? *Calculations based on 2010 General Social Survey data (*n* = 1512). **Calculations based November 28–December 1, 2011 Gallup poll data (*n* = 1012)

aforementioned pattern have been made by capable social scientists, and their micro-level results are as surprising as macrotrends. Economic and social have-nots are weirdly respectful of the tax burdens borne by their financial superiors and are quick to defend the existing economic arrangements that work to their disadvantage (Bartels, 2008, pp. 140–143; Jost et al., 2003).

We have a conundrum. Americans recognize and are troubled by market-driven inequalities, unhappy with the distribution of economic outcomes. Concurrently, they do not want to re-distribute wealth to correct disparities. What explains these apparent inconsistencies in public opinion? How can egalitarian Americans defend the integrity of a system with admittedly prejudiced aftermaths? Many capable thinkers and researchers have proposed explanations, among them: a flawed understanding of wealth distribution and tax incidence (Bartels, 2008; Slemrod, 2006), self-delusion (Jost et al., 2003; Lerner & Miller, 1978), an overriding concern for national economic growth (Page & Shapiro, 1992), optimism regarding personal financial wellbeing (Blakeley, 2011; Brooks, 2005), and general skepticism of government (Page & Jacobs, 2009). No one explanation accounts for the phenomenon overall, but each exposes an important reality. In this paper, I will add an additional explanation to this list.

I argue that people tolerate grave inequalities—knowing full well the social and personal costs of those inequalities—if they think those inequalities are deserved. Indeed if outcomes appear deserved, altering them would constitute an immoral act. Conversely, economic standing meted unjustly requires correction. My theory does not require people to be confused, greedy, or irrational (although they can be, and probably are to varying degrees), and it treats justice as a natural phenomenon open to empirical study, rather than a metaphysical one reserved for contemplation, or an apparition at which people reflexively grasp (although it can be those things, too). Support for redistribution is largely a moral issue, explained by an individual's (a) belief in and (b) definition of economic desert. As such, what may appear irrational policy preferences—opposition to redistributive measures inconsistent with ideology and/ or self-interest—may in actuality be reasonable when taking into consideration an individual's read on relevant moral norms, and the costs associated with their violation.

We know from previous research that an individual's assessment of economic justice—whether or not she believes people receive their economic due—influences her generosity when voluntarily redistributing personal earnings in an experimental setting (Bower-Bir, 2014, chap. 3). In this paper, I show that assessment of economic justice (i.e., belief that economic desert is accurately rewarded) also influences an individual's policy preferences for redistribution on a grander scale, and in the real world. If you believe wealth is going to people who deserve it, then its distribution requires no tampering, at least not on any moral grounds. Redistribution here would be "immoral," violating community norms. If, on the other hand, you believe there exists pervasive economic injustice and wealth is not going to whom it should, you will have cause to redistribute. Broad evaluations of economic justice matter, but more important is who gets (or does not get) what they deserve. Although redistributive efforts are supposedly meant to uplift the poor, I find that an individual's support for those efforts is primarily driven by their punitive effect on the rich. Whether or not you think poor and middle-class Americans get their economic due certainly influences your policy preference, but not nearly to the degree that your assessment of rich deservingness does.

I also show that an individual's specific *definition of economic desert* partly determines her redistributive policy preferences. Because it is emergent, what counts as deserved takes on a local flavor, varying with context and culture (e.g., Elster, 1992; Young, 1995). We know that Americans generally want people to be personally responsible for their economic situation, but some individuals value economic agency—the direct exercise of control over their economic wellbeing—more than others (Bower-Bir, 2020b). The more importance you place on personal responsibility in economic matters, the more you have an incentive to limit government intervention in economic activity so as to avoid dampening people's work ethic and reliance on government assistance.

Finally, I test but find only suggestive evidence for an *interactive relationship* between my two explanatory variables, whereby belief in desert's reward moderates the influence of desert's definition of redistributive preferences. My two explanatory variables appear to have an additive, rather than interactive, relationship.

3 | EXISTING EXPLANATIONS FOR REDISTRIBUTION PREFERENCES

Given the importance of large-scale redistribution to economic inequality and the delivery of basic services, social scientists have long sought to explain popular support for and opposition to it. The literature is vast, but Alesina and Giuliano (2011) succinctly organize the major theoretical strands, arguing that redistributive preferences depend on an individual's (a) current and anticipated consumption, (b) assessment of inequality's positive and negative externalities, (c) ideal levels of inequality, and (d) concern for fairness.

3.1 | Personal consumption, current and future

Early static models of redistributive preferences posit individuals with different productivities but who care only about their consumption and the income that enables it (Meltzer & Richard, 1981; Romer, 1975). Progressive redistribution will take money from the rich—who will oppose such measures—and give it to the poor—who will support such measures. More recent studies add dynamic elements to the model, whereby people consider future as well as current income when weighing policy options (Bénabou & Ok, 2001). Whether an individual thinks redistribution will limit her future earning potential or provide much needed income transfers depends on changes in the political environment, fluctuations in economic growth, movements in and optimism about personal social position, and tolerance for risk.

3.2 | Inequality, indirectly

Redistributive policies, in lessening or exacerbating economic inequality, also have an indirect effect on people's consumption. For example, if reducing inequality stands to reduce crime and therefore expenditures on security (Fajnzlber et al., 2002), then wealthy citizens may see some benefit in redistributive measures they would otherwise oppose. Working in the opposite direction, if inequality motivates laborers to expend more effort (Bell & Freeman, 2001), then the wealthy—as the beneficiaries of the resulting increase in productivity—have indirect cause to oppose redistribution.

3.3 | Inequality, directly

Closer to the focus of this article are models that build inequality directly into individual support for redistribution. In such utility functions, concern for social justice is relevant beyond its influence on an individual's consumption and takes on a fundamentally aesthetic quality. People have in mind "an ideal profile of inequality in a society" alongside their desire to safeguard or increase their personal consumption (Alesina & Giuliano, 2011, p. 111). An individual's preferred level of inequality is determined by a range of factors, from her political ideology and religious affiliation to the strength of her family ties and the homogeneity of her current polity.

3.4 | Fairness and effort

Still closer to notions of desert and economic justice are people's perceptions of fairness, although researchers use the term so cavalierly that it has come to mean different things in different disciplines. Lay persons and researchers alike tend to append "(un)fair" as a qualification to both outcomes and processes, but upon closer inspection the former is generally meant to mean outcomes that were achieved

through the latter. As such, fairness is most directly applicable to matters of procedure (Bower-Bir, 2014, chap. 2). Mercifully, economists generally appreciate this insight and tend to use the term to indicate the means by which an actor arrives at her economic station. That may mean playing by the defined rules of a game (Alesina & Angeletos, 2005b) and not taking advantage of other actors (Alesina & Giuliano, 2011). Most often, however, economists use the term to distinguish between luck and effort, where a fair route to riches requires effort and lessens the influence of stochastic factors.

Many philosophers argue (Pojman, 1997; Rawls, 1971), and many Americans agree, that a just economic system is one that affords its actors agency. With a few important exceptions, a person must be personally responsible for her economic lot to deserve it (Bower-Bir, 2020b). Rather than disentangle the notions of agency, personal responsibility, and desert, economic and public opinion researchers tend to draw a related albeit simpler distinction. Effort encompasses "all activities that require 'pain' or a utility cost for the individual" and luck "represents those factors that deliver income to individuals without any pain or loss of utility to obtain it" (Alesina & Giuliano, 2011, p. 127). This distinction has proven empirically useful. While various notions of fairness are shown to influence a person's tolerance for redistribution in isolation, the degree to which an individual believes the economic system rewards hard work over luck is the only one to maintain statistical significance when tested against competing notions and relevant control variables (Alesina & Angeletos, 2005a; Alesina & La Ferrara, 2005; Fong, 2001).

4 | PROPOSED EXPLANATIONS FOR REDISTRIBUTION PREFERENCES

If, as I argue at the outset, justice is a natural phenomenon centered about an emergent social institution we commonly call "desert," then social institutions pertaining to economic deservingness will influence people's willingness to redistribute economic resources. Essentially, my theory replaces and refines Alesina and Giuliano's (2011) third and fourth explanations, respectively. ²³ Whatever a person's preferred level of inequality (Section 3.3), it is trumped by the more basic question: Is the distribution we have just? It may be personally disadvantageous and socially deleterious, but it may be deserved and therefore just, at least according to the specific communal institutions that bear upon us. Calling for reapportionment of communally sanctioned distributions would invite reprobation and other costs from our peers.²⁴ Moreover, I refine the alternatingly vague and narrow concerns for "fairness" and "effort/ luck" (Section 3.4) with the more robust "definition of economic desert" as it pertains to personal responsibility. Understanding what, for an individual, makes a subject deserving of a particular economic resource is crucial to understanding what policies pertaining to the distribution of that resource the individual considers permissible. Someone who believes (by virtue of their institutional milieu) that deserving income requires personal agency in its acquisition will see third party redistribution of income as undermining economic desert and therefore justice. Such a person would experience institutional pressure to oppose, say, progressive taxation and government redistribution schemes.

In short: rather than an ideal profile of inequality or a simple effort-luck dichotomy, I argue that an individual's faith in and understanding of economic desert determine her stance on economic redistribution. Specifically, predicting a person's support for redistribution requires knowledge of (a) her confidence that economic desert is rewarded, (b) the importance of personal responsibility to her definition of economic desert, and potentially but not necessarily (c) the interaction between the two. I examine the rationale behind each in the remainder of this section.

4.1 | Faith that the prevailing economic system is just (i.e., rewards desert)

As a matter of government policy, redistribution involves a third party taking resources from one person or set of people and giving them to another person or set of people. Prior to such intervention, I want to know whether and to what degree an individual considers the existing distribution of resources

just. A just economic system, from the naturalist perspective, is one that delivers to people their economic due, and a just outcome is one that is deserved.

Regardless of how you define economic desert, if you think that people by-and-large get the economic resources they deserve, then you will be reluctant to tamper with economic outcomes, at least on moral grounds. You may not like the current distribution of resources for reasons of efficiency, ideology, or aesthetics, but redistributing those resources will not (in your mind) facilitate economic justice—it will not get deserved outcomes to deserving subjects. In fact, merit (for you) is being actively punished. Redistribution would take from people resources to which they are entitled and transfer those resources to people who, as near as you can tell, have no claim to them. In this case, economic outcomes following redistribution would no longer accurately reflect desert.

Now consider a person convinced that economic desert is not, in general, accurately rewarded. The prevailing system appears unjust. Redistribution would take from people resources they do not deserve and hopefully transfer those resources to more deserving citizens. I say "hopefully" because—while an individual who considers the current resource distribution unjust has no moral qualms appropriating undeserved resources—doling those resources to deserving persons requires a more developed worldview than supporters may have. It is cognitively easier to be against redistribution than for redistribution. Support for redistribution requires that (a) current resource holders not deserve those resources and (b) the ensuing policy will transfer those resources to people more deserving of them. The first condition may apply to any redistribution scheme, but the second will depend on the specific policy. Accordingly, as long as redistributive policy is apt to increase distributional justice (i.e., will not transfer resources to people less deserving than the present owners), individuals skeptical of prevailing economic justice will see moral cause to redistribute.

4.2 | Definition of economic desert

An individual may subscribe to any among countless definitions of economic desert, as Binmore (2011) suggests and Westermarck (1906) and Elster (1992) show, but there are some dimensions of desert that cut across definitions. For example, social psychologists tend to tacitly equate desert and personal responsibility (Greenberg, 2011; Jost & Kay, 2010), while moral philosophers point out that the connection is not only unnecessary, but that personal responsibility sometimes *undermines* the case for desert (Cupit, 1996; Feldman, 1996). Between these extremes, recent survey analysis finds that many people consider personal responsibility a key ingredient of economic desert, though to varying degrees and in a way that varies predictably with demographic and experiential variables (Bower-Bir, 2020b). Personal responsibility can be more or less important to an individual's definition of economic justice, and that variation will alter an individual's stance on redistribution.

All else equal, the more crucial personal responsibility is to your definition of deservingness, the less you support redistribution. If you, as many Americans do, associate economic deservingness with industry, diligence, and other qualities that seem within an individual's control, redistributive policies threaten to undermine the very values you want instilled in your fellow citizens by encouraging people to absolve themselves of personal responsibility over their financial well-being. Why work hard when a third party can appropriate your wealth in times of financial plenty and/or cover your needs should you be in financial distress? If a person works for and consequently deserves (in your view) her high income, taking a portion of that income is in itself a punitive act. It becomes outright unjust when that money is transferred to people who in your estimation worked for and deserve a lower income.

The thrust of this theory is akin to three other strands of literature, although I frame it specifically in the moral language of desert and so bring to bear the internal and external motivations for conformance (i.e., the "delta parameters") that come with that social institution. Compare this to psychologists and sociologists, who find that people who exhibit the so-called "Protestant Work Ethic" tend to oppose welfare policies out of fear such policies will inspire lethargy in themselves and others (Furnham, 1983). Political scientists find that people who subscribe to "social ideologies" promoting personal diligence

similarly exhibit skepticism toward welfare policies (Hansenfeld & Rafferty, 1989). And then there are the economists I mentioned earlier, who show that the relative importance an individual attaches to effort and luck partly determines her redistributive preferences, supposedly as a matter of redistribution's incentives for individual effort.

4.3 | Interaction between definition of economic desert and faith in economic justice

Finally, an individual's faith in the justness of the economy may moderate the marginal influence her definition of justice has on her redistributive preferences. As previously discussed, individuals who inpart define a just economic system as one in which people have control over their economic well-being will be inclined to oppose progressive taxation so that people retain their incentive to work hard and assume responsibility over their economic standing. But not all of these individuals will be equally convinced that economic outcomes accurately reflect desert as they define it. Apparent injustice may curb the marginal negative influence their definition of desert has on their redistributive preferences.

Consider an individual who wants but is skeptical of the control she and others wield over their economic fates. It is possible that her definition of desert and her assessment of desert's reward (i.e., justice) have the simple linear influences on her distribution preferences that I outline above, such that the two variables draw her in opposite directions: Her definition pushes her to oppose redistribution while her assessment pushes her to support redistribution. It is also possible that the two variables interact such that the marginal effect of her definition is contingent on her assessment. That is, she only brings her definition of desert to bear on policy when things appear unjust. First, hold her assessment at a low level, where she thinks the prevailing economic system unjust. Increasing the import she places on personal responsibility yields only a small marginal decrease in support for redistribution. Her assessment keeps the effect of her definition in check. Next, raise her assessment so that she thinks the prevailing economic system just, and then hold it constant again. Increasing the import she places on personal responsibility now yields a larger marginal decrease in support for redistribution. Her assessment is doing less to restrain the effect of her definition.

5 | TESTING THE PROPOSED EXPLANATIONS

I test my proposed explanations of redistribution preferences using novel survey data. I administered my survey to 1000 adult American respondents—who were compensated for their time—in early 2014 using an internet-based panel, which provides the best balance between survey cost and sample representativeness (Clifford & Jerit, 2014). Appendix A contains a detailed explanation of survey length, and respondent recruitment and compensation. Of the 1000 respondents surveyed, 992 completed the survey within a reasonable timeframe and their responses constitute the primary dataset used in the forth-coming empirical analyses. The demographic breakdown for the final 992 respondents is shown in Table A1 in Appendix A. Population totals are also shown to provide a sense of the survey's external validity.

The distribution of household income in my sample is remarkably close to the national distribution; fortuitous given the substantive focus of this paper. Males and Latinos are underrepresented. Republicans and people with a high school education or less are substantially underrepresented. Females, Whites, Asians, political independents, and Democrats are overrepresented. College graduates are substantially overrepresented. So that the standard errors in my subsequent analyses account for under- and over-recruitment from various sub-populations, I calculate sampling weights using a "raking" weight-calibration process. Hy final weights are based on five stratification dimensions: gender, education, race, household income, and political party identification. The marginal distributions of each dimension in the US population serve as "control totals," toward which sample margins converge over the stepwise process.

In the remainder of this section, I detail how I translate my proposed explanations of people's redistributive preferences into measurable variables and testable models, and I present hypotheses thereto pertaining.

5.1 Dependent variables: Support for redistribution policies

I use two variables to gauge respondent support for government-led economic redistribution, one broad in its scope, the other comparatively narrow. There are myriad government policies and programs designed to remedy the imbalanced distribution of all manner of resources. Income inequalities lie at the heart of many social and economic imbalances. An individual's access to education, free time, and political representation are all associated with income. How income is distributed in a population, therefore, has an important influence on economic and social disparities. My first dependent variable, then, deals with government response to income inequality, generally: "Do you think that the government should try to reduce income differences between the rich and poor? How strongly do you feel that way?" Responses are combined and coded on a seven-point scale, ranging from "strongly disagree" to "strongly agree." For ease of exposition, I will refer to values of this dependent variable as $Y_{gov_fix_gap}$.

As a matter of economic theory, income inequality is unambiguously reduced if people's incomes are taxed progressively (Lambert, 1993), but even the soundest theories are not guaranteed to survive a tortuous political process. That empirical research so uniformly reinforces the link between inequality reduction and progressive income taxation is evidence of "policy-makers and tax designers who are sensitive to redistributional issues" (Lambert, 1993, 362).²⁷ My second dependent variable, therefore, specifically addresses income tax schemes: "Generally speaking, do you think that rich citizens should pay a higher tax rate than citizens who earn an average wage? If so, how much higher?" Responses are combined and coded on a four-point scale ranging from "the same" to "much higher." For ease of exposition, I will refer to values of this dependent variable as $Y_{prog-tax}$.

5.2 | Control variables: Existing explanations

Alesina and Giuliano (2011) devise a base model on which to build and test various determinants of redistributive preference. Independent variables in this base model—which you can see in isolation as Model A in Appendix C, Table C1—account for the four dominant, existing explanations of redistributive preferences as outlined in Section 3, plus standard demographic controls. I use the independent variables from that base model as the independent control variables in my own analyses. See Alesina and Giuliano (2011) for a full account of how each variable relates to the various explanations of peoples' redistribution preferences.

5.3 | Independent variables: Faith that the prevailing economic system is just (i.e., rewards desert)

I use three measures to determine how confident a respondent is that economic desert (as they define it) is rewarded. The first variable, *agency*, builds on the philosophical and empirical correlation between personal responsibility and desert, and on and the findings from economists who differentiate between effort and luck. It measures the level of control respondent's believe people exercise over their economic fates. Respondents are asked, "Which of the following statements comes closest to your general point of view: Whether or not a person gets ahead economically in this country is (a) mostly up to them or (b) mostly up to circumstances beyond their control? How strongly do you support that point of view?" Responses are combined and coded on a seven-point scale. The higher the value, the more control the

respondent believes people have over their economic fates. For ease of exposition, especially when discussing interaction effects, I will refer to values of this independent variable as Z_{agenc} . This variable is essentially a subset of my other variables in measuring faith that desert is rewarded. While agency is a critical component of economic justice for most people, its absence or presence does not account for the totality of economic justice. Accordingly, I expect the explanatory power of this variable to be the weakest of my three.

My second variable, *justice*, is the broadest measure of a respondent's faith in the reward of economic desert. Respondents are asked, "Generally speaking, do you believe that in the American economic system people get what they deserve? How strongly do you feel that way?" Responses are combined and coded on a seven-point scale. The higher the value, the more control the respondent believes people have over their economic fates. For ease of exposition, I will refer to values of this independent variable as $Z_{instice}$.

My third variable is, in truth, three variables—*rich_deserve*, *average_deserve*, *poor_deserve*—that measure whether a respondent thinks different segments of the American population get their economic due. Respondents think rich, average, and poor Americans are not equally deserving of their economic lots. Together, these three measures indicate a respondent's overall assessment of the justness of the American economic system, much like the justice variable. But by separating a respondent's assessment of economic justice as it pertains to rich, poor, and average Americans will allow us to determine if policy preferences are driven by concern for justice as it exists for certain groups more than others.

For $rich_deserve$, respondents are asked, "Generally, do you think that rich Americans deserve their wealth? How confident are you in your assessment? How deserving/undeserving are they?" For $average_deserve$, respondents are asked, "Do you think that average Americans generally get what they deserve, economically? How confident are you in your assessment? How deserving/undeserving are they of their economic standing?" And for $poor_deserve$, respondents are asked, "Generally, do you think that poor Americans deserve their poverty? How confident are you in your assessment? How deserving/undeserving are they?" The first of the three questions for each variable determines the sign of the final value and the two follow-up questions serve as weights, such that each of the deserve variables is coded on a thirteen-point scale with higher values meaning a respondent rates the group as more deserving. See Table B1 in Appendix B for a full review of the possible values of these variables. ²⁹ For ease of exposition, I will refer to values of these independent variables as $Z_{rich_deserve}$, $Z_{average_deserve}$, and $Z_{poor_deserve}$.

Figure 2 shows the distribution of values for these three variables among survey respondents. A sizable majority of respondents say that poor Americans do not deserve their poverty, implying that they ought to be among the nation's higher economic echelons. A slight majority of respondents rate the rich as undeserving of their wealth. About as many respondents think that rich Americans ought to be rich as think that rich Americans ought to be among the middling and poor of our nation. A majority of respondents rate average Americans as deserving of their middle status. For those who disagree, I cannot say whether they think average Americans ought to move up or down the socio-economic ladder; I can only say that they do not think average Americans belong where there are, which is an injustice all the same.

I test my theory using separate models for each of the aforementioned independent variables (or collections of variables, as in the case of the *deserve* measures) on both dependent variables. I expect that the five independent variables will be statistically significant and negative in sign. The different measures allow multiple tests of my theory, and might reveal otherwise hidden aspects of the relationship I propose between belief in justice and redistributive preferences.

5.4 | Independent variables: Definition of economic desert

If agency is a critical ingredient of economic desert, then people's preferred desert bases should be qualities over which we have control, or at least qualities over which we think we have control.

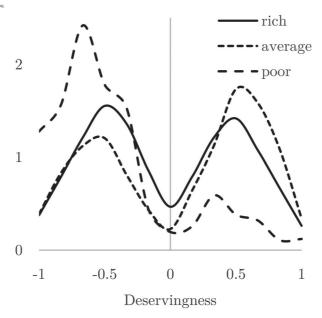


FIGURE 2 Density plot of rich_deserve, average_deserve, and poor_deserve variables

Survey respondents saw 15 factors, each of which might have some bearing on an individual's economic standing (e.g., health, intelligence, creativity, years of education, social connections, family's wealth, etc.; see Figure B1 in Appendix B for a full list). They answered two questions about each factor: "How much control do you think people have over this factor?" and "How important should this factor be in determining whether people get ahead or fall behind economically?" Responses to the first question are coded on a seven-point scale and responses to the second question are coded on a five-point scale.

The *definition* variable is a respondent's correlation coefficient for her responses to these two questions across the 15 factors. Values approaching 1 indicate that a respondent values agency and personal responsibility—those economic factors over which she thinks we have control are also the economic factors she thinks should influence people's economic standing. Values approaching —1 indicate the respondent's ideal desert criteria are factors that are *beyond* our control. Figure 3 shows the distribution of this variable among survey respondents. Americans consistently, but not exclusively, incorporate agency into their definitions of economic desert. For ease of exposition, I will refer to values of this independent variable as X. I test my theory using both dependent variables, and expect the *definition* variable will be statistically significant and negative in sign.

5.5 | Independent variables: Interaction between definition of economic desert and faith in economic justice

In the final piece of my theory, I posit that a respondent's faith in economic justice (Z) will moderate the influence her definition of economic justice (X) has on her redistributive preferences (Y). Specifically, I hypothesize that an individual's support for redistribution will decline the more importance she places on personal responsibility, and the marginal negative influence thereof will increase as existing economic circumstances appear more just. Put differently: The marginal effect of X on Y will be negative for all values of Z. This effect will be weakest when Z is at its lowest and will increase in magnitude as Z increases. Interested readers should see Appendix D1 for an expanded discussion of my test for an interaction effect.

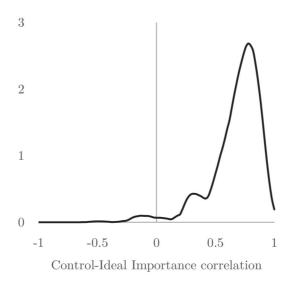


FIGURE 3 Density plot of definition variable

6 | RESULTS

Following Alesina and Giuliano (2011), I show ordinary least squares (OLS) results for simplicity of interpretation with robust standard errors, and I control for state fixed effects.³¹ I obtained statistically and substantively similar results using ordered logit models. To further aid interpretation of regression results, I standardized all variables save *age* and *age*² to a [0, 1] scale.

I present key findings in Table 1. You can compare each model therein with the corresponding interaction models in Table D1, which I have placed in Appendix D. For a holistic understanding of these findings, as well as intriguing albeit tangential findings, I recommend you also peruse Tables C1 and C2 in Appendix C.

6.1 | Findings: Existing explanations

For the most part, my findings for these controls are expected, as you can see in all results tables. Ideology is always a substantively and statistically significant predictor of redistributive preferences. The positive signs on the *ideology* coefficients indicate that the more liberal a respondent, the most supportive she is of government efforts to reduce the income gap and the more supportive she is of progressively taxing income. Household income is a similarly important predictor of redistributive efforts. As *income* increases, $Y_{gov_fix_gap}$ and Y_{prog_tax} reliably decrease. The rich are not keen to part with their wealth.

Other control variables appear to influence one or another dependent variable. Race tends to have a small but statistically significant effect on $Y_{gov_fix_gap}$, such that racial minorities are slightly more supportive of government redistributive efforts than are whites. Age is not a consistently significant determinant, but age and its square are occasionally predictive of $Y_{gov_fix_gap}$, and the positive coefficient on age^2 indicates a concave curve. Support for government policy addressing the income gap grows as a respondent ages, and with an increasing marginal effect. Support for progressive taxation, on the other hand, is bolstered by a respondent's education. More schooling leads to a greater Y_{prog_fax} .

A respondent's gender, marital status, and employment do not have much influence on either dependent variable. This conclusion aligns with previous research save Alesina and Giuliano (2011), who find that women are reliably more generous than men in their redistributive preferences, although the substantive magnitude of this generosity is minimal.

TABLE 1 Support for government action to reduce the income gap $(Y_{gov_{plix},go})$ and for progressive taxation $(Y_{prog_{-lax}})$ based on definition of economic justice (X) and on perceived economic justice (Z)

		Y _{gov_fix_gap}			Y_{prog_tax}	
Variable	Model 1	Model 2	Model 3	Model 1	Model 2	Model 3
Definition	-0.382*** (0.148)	-0.498*** (0.126)	0.518*** (0.131)	0.139 (0.140)	0.067 (0.128)	0.044 (0.127)
Agency	-0.215*** (0.051)			-0.133*** (0.053)		
Justice		-0.403*** (0.048)			-0.258**** (0.056)	
Rich deserve			-0.366*** (1.056)			-0.308*** (0.080)
Avg. deserve			-0.126*** (0.047)			-0.050 (0.055)
Poor deserve			-0.277*** (0.067)			-0.132* (0.071)
Ideology	0.502*** (0.052)	0.393*** (0.051)	0.310**** (0.050)	0.565*** (0.048)	0.494*** (0.054)	0.432*** (0.056)
Age	0.011 (0.007)	0.010 (0.007)	0.004 (0.006)	0.008 (0.007)	0.008 (0.007)	0.006 (0.006)
Age ²	0.000* (0.000)	0.000 (0.000)	0.000 (0.000)	0.000 (0.000)	0.000 (0.000)	0.000 (0.000)
Female	0.025 (0.028)	0.005 (0.026)	0.031 (0.023)	-0.013 (0.027)	-0.026 (0.026)	-0.009 (0.026)
Nonwhite	0.048 (0.032)	0.052* (0.029)	0.050* (0.028)	0.012 (0.012)	0.015 (0.032)	0.022 (0.030)
Married	0.007 (0.032)	-0.008 (0.028)	-0.013 (0.027)	0.044 (0.036)	0.035 (0.034)	0.028 (0.034)
Unemployed	-0.019 (0.046)	-0.015 (0.039)	-0.029 (0.038)	-0.066 (0.056)	-0.064 (0.056)	-0.074 (0.057)
Education	0.020 (0.058)	0.001 (0.054)	0.067 (0.050)	0.104* (0.055)	0.092* (0.056)	0.121** (0.056)
Income	-0.196*** (0.058)	-0.129** (0.053)	-0.122** (0.052)	-0.102 (0.062)	-0.059 (0.058)	-0.051 (0.062)
Constant	0.660*** (0.195)	0.851*** (0.182)	1.147*** (0.170)	0.032 (0.179)	0.155 (0.175)	0.345*** (0.168)
N	963	963	963	963	963	963
R^2	0.4914	0.5462	0.5897	0.4157	0.4406	0.4673
Adj-R ²	0.4582	0.5165	0.5619	0.3776	0.4041	0.4312

Note: All regressions control for state fixed effects. Robust standard errors given in parentheses. All variables save age and age^2 are standardized [0, 1].

Table C2 displays my models with controls that Alesina and Giuliano (2011) do not include, but which have some explanatory power over $Y_{gov_fix_gap}$ and/or Y_{prog_tax} . The effects of our key X and Z variables remain more or less unaffected by the inclusion of these additional controls. While not substantively altering the analysis to follow, these new controls are interesting in and of themselves. First, the more generous you ascertain Americans to be in their charitable giving (charity), the less you support progressive taxation. The effect is substantively large and uniformly significant. Second, if you believe that the government generally does more to help than hurt people trying to climb the economic ladder (gov help) you are more likely to support government action to reduce the income gap and progressive taxation. This effect is sizable and consistently significant, especially for $Y_{gov_fix_gap}$. Finally,

^{*} Significant at 10%; ** Significant at 5%; *** Significant at 1%

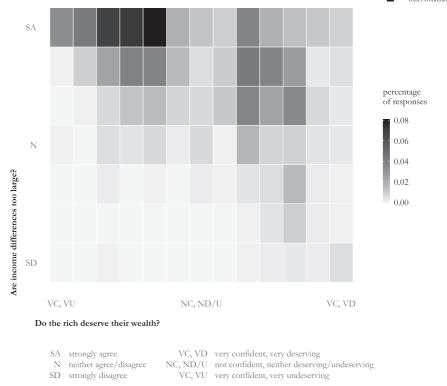


FIGURE 4 Deserved inequality

a respondent's optimism regarding her future standard of living (good life) has no discernible effect on either dependent variable.

6.2 | Findings: Faith that the prevailing economic system is just (i.e., rewards desert)

An individual's perception of economic justice is a major determinant of her support for government redistribution efforts. This finding is robust to different measures of our Z and Y variables, as you can see in Table 1 (and all other results tables in Appendices C and D), where different models within each table present different measures of our explanatory variable of interest, which is faith that the American economic system delivers to people their economic due.

Model 1 uses *agency* as a measure of the apparent prevalence of economic justice. The more control people seem to exercise over their economic station—the more responsible people are for their economic fates—the more just the American economic system appears, and the less tolerant respondents are of government altering outcomes. Z_{agency} has a negative and statistically significant influence on both $Y_{gov_fix_gap}$ and Y_{prog_tax} , although the magnitude of its effect on $Y_{gov_fix_gap}$ is nearly twice as that of its effect on Y_{prog_tax} , and in neither model does Z_{agency} approach the substantive significance of *ideology*. But personal responsibility is only one aspect of the larger concept of economic desert. Although agency may be a necessary condition for some people's understanding of deservingness, it may not be a sufficient condition. And for some people, agency may have little or no bearing on desert's reward. My remaining measures of Z will make up for this deficit.

Model 2 uses *justice* as a measure of respondent assessment of economic justice. Whereas *agency* tells us the degree to which a critical component of desert appears present to a respondent, my theory is based on perceptions of injustice *whatever* the beholder's definition of economic desert. As predicted $Z_{justice}$ has a negative and statistically significant influence on both $Y_{gov_fix_gap}$ and Y_{prog_tax} . Its influence on $Y_{gov_fix_gap}$ is nearly as strong as *ideology*'s. $Z_{justice}$ is notably less powerful in determining Y_{prog_tax} , although its effect is still prominent and more than twice that of Z_{agency} from Model 1. The more confident you are that people get their economic due, the more government tampering threatens to undo an already just (or just-ish) resource allocation. Conversely, the more skeptical you are of desert's reward, the more appealing government's promise to correct economic injustice.

Whereas agency provides a decidedly narrow look at respondent justice evaluations, the justice variable may, in its comparatively broad focus, obscure valuable nuance. With my deserve variables in Model 3 we can see if the apparent treatment of different economic sub-populations influences respondent support for redistribution efforts. As predicted $Z_{ricb_deserve}$, $Z_{average_deserve}$, and $Z_{poor_deserve}$ have a negative and statistically significant influence on $Y_{gov_fix_gap}$. Interestingly, only $Z_{ricb_deserve}$ has a negative and statistically significant influence on Y_{prog_tax} .

The story is a subtle one, but in-line with my theory. Group-specific desert assessments vary in the magnitude of their effects on redistributive preferences. When explaining $Y_{gov_fix_gap}$, the coefficient on $Z_{ricb_deserve}$ is greater than the coefficient on $Z_{poor_deserve}$, which is greater than the coefficient on $Z_{average_deserve}$. When explaining Y_{prog_tax} , $Z_{ricb_deserve}$ is more important than $Z_{poor_deserve}$, which may matter but whose influence is statistically questionable, while $Z_{average_deserve}$ has no bearing whatsoever. In all tests of the three deserve variables, redistributive preferences are foremost effected by perceptions of economic justice as it applies to the rich, the effects of which are stronger than or nearly as strong as that exerted by ideology. Whether or not the poor appear to deserve their poverty has the next largest, and still sizable, effect. The just compensation of average Americans is still less important in determining $Y_{gov_fix_gap}$, and has potentially no role in determining Y_{prog_fax} .

Not only do respondents recognize that the economic system may be more or less just in its treatment of specific groups operating within it, they weigh the treatment of specific groups more than others when formulating their redistributive preferences. This has important policy ramifications, which I discuss in the article's conclusion.

6.3 | Findings: Definition of economic desert

In Table 1 and those in the appendix, definition of desert (X) always has a negative and statistically significant influence on $Y_{gov_fix_gap}$ but it has no discernible effect on Y_{prog_tax} . While a respondent's definition of desert does not appear to influence her attitude toward progressive taxation, respondents for whom agency is an important component of desert are less supportive of other government efforts to reduce the income gap. The more central personal responsibility is to an individual's definition of desert, the more government intervention seems to undermine incentives to work for and earn your own payoff. For these respondents, government intervention makes it harder for people to deserve their economic station.

6.4 | Findings: Interaction between definition of economic desert and faith in economic justice

I find meager and inconsistent statistical support for my proposed interaction. In the interest of space, I have moved the discussion of interaction results and related tables and figures to Appendix D.2. While I cannot with confidence speak to the validity of my proposed interaction, this does nothing to undermine my previous findings, which appear robust even when testing for an interaction effect, as you can see in Table D1.

7 | CONCLUSIONS

American majorities simultaneously despair at economic inequality and refuse to address it. Scholars have puzzled at and argued over this apparently contradictory worldview—the bizarre American combinations of egalitarian values and worsening class division, of glaring economic disparities and a weak welfare state. How can the self-proclaimed "land of opportunity" so routinely leave so many behind? My answer is simple. People's policy preferences are not driven by the shape of an economic distribution, but by the apparent justness of (a) the causes that formed it and (b) the available means of reshaping it. People are reluctant to reallocate a seemingly just (i.e., deserved) distribution. When they do see fit to reallocate, they will avoid reallocation methods that—while correcting the injustice at hand—threaten future injustice (i.e., undermine desert).

Regarding the first point: Many Americans cannot shake the belief that people get what they deserve. Even when they are alarmed at economic inequality, people may think it just, as in Figure 4 where nearly 35% of respondents simultaneously believe that income differences are too large and that the rich deserve their wealth. These people want a flatter economic distribution but not at the expense of justice. Logically, then, an individual's assessment of economic justice explains much of her attitude towards government-sponsored redistribution and progressive taxation. Individuals who believe that people receive their economic due see income disparities as just, the product of morally sound processes and institutions. However unattractive and whatever its implications for economic and democratic functioning, these individuals have no moral grounds on which to alter inequalities, which appear justly derived. Conversely, individuals who believe there exists pervasive economic injustice see virtue in government-sponsored redistribution, hoping to allocate deserved resources to deserving people.

My regressions show that perceptions of the wealthy are especially important in this moral calculation. Individuals confident that the rich deserve their wealth are apt to see redistribution and progressive taxation as unjust, perhaps even punitive. Individuals who consider the rich *un*-deserving of their wealth, however, are driven to redistribute and progressively tax. These individuals cannot be certain that the resources taken from the rich will go to more deserving citizens. Still, these respondents may prefer that excess resources be held by the deserving poor (i.e., those who deserve to be poor) rather than the undeserving rich (i.e., those who do not deserve their wealth). This would constitute an injustice, but perhaps one of a lesser magnitude than the status quo.

Deservingness assessments of all economic classes will work together or at odds. For example, the moral drive to redistribute will be strongest for individuals who think that neither the rich nor poor deserve their economic standings. The rich have no moral claim to their wealth so taking a portion of it does not diminish economic justice, and the poor possess fewer resources than they deserve so giving them more increases economic justice. Moral obligations become muddier when desert assessments of different classes work at odds. For example, you may believe that the poor are undeserving of their poverty and so should be given additional resources. But if you simultaneously believe that the rich deserve their wealth, there is no good source from which to redistribute. Your Robin Hoodian inclinations have been tempered. And then there is the problem with desert assessments of people in the middle range of the economic distribution. It is unclear whether labeling them undeserving of their unexceptional-yet-adequate position means they ought to have more or fewer economic resources.

Regarding the second point: Many Americans' economic desert bases prohibit obvious avenues to combat inequality. The more important personal responsibility is to your definition of economic desert, the less you support government-led redistribution. Presumably, this is a result of your not wanting to give citizens an incentive to rely on a third party for their economic wellbeing, as doing so would make them less responsible for, and thereby undeserving of, that wellbeing. Interestingly, this effect holds for state remedies to inequality, generally, but does not appear to influence tax preferences, specifically. Moreover, the effect of your definition on redistributive and tax preferences is not moderated by your assessment of justice. The two work together in a linear-additive model, with only meager evidence of interaction.

In summary, it is not enough to know about and be alarmed by inequality. Inequality must be perceived as undeserved to motivate a behavioral and policy response, and those responses will be shaped

by our specific definitions of desert. Looking back at Figure 2, nearly half of survey respondents believe the rich deserve their wealth, and sizable portions believe that average and poor Americans are similarly deserving of their economic lots. These individuals will fight redistributive efforts. So will citizens who ascribe a critical place to personal responsibility in their definitions of economic desert, which according to Figure 3 is almost all of them, though to varying degrees. ³³ Both groups will oppose redistribution policies because they undo or undermine economic justice.

Justice, therefore, is as much an excuse for resource and power asymmetries as it is motivation to combat them. It is not enough to demand justice. As America enters a new gilded age, we are confronted with a more basic question: What does it mean to *deserve* wealth and poverty? Appreciating how different people answer that question is critical to understanding the origins of myriad social policies and ills.

Doing so will also force clarity among researchers, who are grappling with nuanced but often caricatured and confused concepts like "altruism," "equality," "fairness," and "justice," to name a few. Contrast, for example, my approach to justice as a social institution with that of Just World theorists who have little reason to investigate what, exactly, economic desert means to actual people because the thrust of their program is that people, whatever their definition of desert, will "cling defensively to the illusion that the world is a just place" (Jost et al., 2003, p. 58). So it will be for many people, but self-deception of this sort is one of many possible relations people have with justice. By treating justice as a social rather than strictly psychological phenomenon, we admit that people may have definite ideas of merit (i.e., desert bases), and that they are rationally acting on those ideas as a matter of institutional prodding. From there we can do a better job determining whether and where their reasoning vis-à-vis distributional policy is flawed, or if they engage in reasoning at all.

In my empirical test, I used a relatively narrow, agency-focused definition of economic desert, with important results. I hope this emboldens fellow researchers to uncover yet richer definitions of desert through narrative and ethnographic study. Interpretive, post-positivist policy scholars are dispositionally disposed and methodologically well-equipped to do just that, uncovering the meanings citizen and policymakers attach to "deserve" (Dodge et al., 2005). Doing so in concert with empiricist policy scholars will be a boon to democratic governance. That many people—even the most economically vulnerable—believe economic outcomes are merited does seem the product of delusion and/or stupidity, especially as the distribution of economic and political resources becomes so very, undeniably imbalanced. Rather than summarily label as "delusional" or "irrational" the many Americans who find their political, moral, and financial values in conflict, better to find the degree to which this conflict is aided by inaccurate information, untenable assumptions, and social pressures (aka, "delta parameters"). We need to dig deeper to see whether and at what point the delusion or irrationality occurs, and how it interacts with the costs and benefits stemming from self-enforcing "moral" norms and rules.

ACKNOWLEDGEMENTS

I am indebted to Lin Ostrom for her mentorship when I started this research project as a doctoral student, and to Andrea Louis Campbell for her counsel on how to go about turning this research project into an academic article. A hearty thanks to Kris-Stella Trump, who is no doubt skeptical of my theory and has thereby proven a valuable and enjoyable colleague. Zach Wendling convinced me the ideas at the heart of this paper were worth sharing. Gwen Arnold and Nathan Bower-Bir were instrumental in making those ideas legible. I also appreciate the guidance and helpful feedback from three anonymous reviewers and this journal's editorial staff.

ORCID

Jacob S. Bower-Bir https://orcid.org/0000-0002-4825-9850

ENDNOTES

- And sub-subfields. There is active research into "interpersonal," "informational," "restorative," and "procedural" justices, to name a few. See Greenberg (2011) for an overview.
- 2. The term in moral philosophy is "desert," but many readers prefer "deservingness." I use both throughout this paper.

- 3. See Alesina and Giuliano (2011), McCall (2013), and Jost et al. (2003), for examples from economics, political science and sociology, and psychology, respectively.
- 4. For example, global pandemics can be framed as issues of public health, national security, and trade and commerce. If a nation's legislative body primarily understands an outbreak as an economic issue, they will direct government resources towards propping up businesses and keeping families financially afloat during the immediate crisis. A public health or national security interpretation, conversely, may lead to forward-looking investment in viral research and monitoring, but with very different beneficiaries. The public health framing would yield a windfall for an international community of scientists, whereas a security interpretation would enrich internal defense agencies and contractors.
- 5. By "public decisions," I mean any decision confronting a group. Stories are as central to formulating and communicating why I should not have to do the dishes tonight as they are to arguing that healthcare workers should be first in line for vaccinations during a viral outbreak.
- 6. Although overtly political actors are frequently deliberate in crafting and disseminating narratives, humans generally may be constrained by biases and subconscious motives when formulating stories meant to aid personal and communal understanding of an issue.
- 7. At least, public opinion helps shapes public policy in American state and national legislatures (e.g., Erikson et al., 1993), a finding that has come into question with rising economic, and consequently political, inequality (Bartels, 2008; Gilens & Page, 2014), but one that continues to hold, more or less (Bashir, 2015; Enns, 2015).
- For example, an employee who receives too small a bonus check after a lucrative deal deserves more money, and a criminal who gets too harsh a sentence for a petty crime deserves reduced punishment.
- Although I use the term "post-positivist" to refer to a broad class of research programs including the narrative policy framework and social construct theory, scholars in these areas make important empirical observations using rigorous qualitative and quantitative methodologies (Dodge et al., 2005; Jones & McBeth, 2010).
- 10. Officials in auspicious deliberative bodies are perfectly capable of grasping for answers, just as humans in humbler settings are capable of strategic cunning.
- 11. "Good enough" meaning the new arrangement is an equilibrium. It may not be the most efficient or even-handed arrangement, but moving to an equilibrium superior on whatever metric is, for the time, unlikely.
- Perpetuated institutions are said to be "self-enforcing" or "weakly self-reinforcing". Expanding institutions are said to be "self-reinforcing" (Grief, 2004). Note that such institutions may be, or may become, maladaptive (Maddamsetti & Bower-Bir, 2018).
- 13. Even philosophers who debate this straightforward definition acknowledge the patent the link between justice and desert (e.g., Feinberg, 1963; Lucas, 1980; Sher, 1987; Slote, 1973).
- 14. Note that a deserved object need not be a physical good. It may be a responsibility or treatment. Moreover, none of the three desert ingredients are necessarily singular. For ease of exposition I will assume a singular subject, object, and basis, though any could be made plural as the situation requires, in which case there would be "subjects," "objects," and "bases."
- 15. Alternatively, the benefits from upholding their community's institutions surrounding the distribution in question may outweigh the benefits they expect from a distribution that would materially benefit them.
- 16. For example, American farmers "rightly" divvy farmsteads among uninterested kin rather than committed colleagues (Rogers & Salamon, 1983), and certain conservative Christians "appropriately" distribute household roles according to sex (Sherkat, 2000). Though baffling to me and other outsiders, kinship and sex are desert bases for these groups when it comes to the specified objects being distributed. Their members will sanction other members for not rewarding these bases as their norms and rules require. For some readers, this may smack of moral relativism. See Binmore (2009, pp. 12–13) and Bower-Bir (2020b, p. 9) for a rebuttal.
- 17. The issue is undoubtedly complicated by Rawls (1958), who distinguishes between the two concepts on the first page of his seminal article, but titles said article "Justice as Fairness."
- 18. For example, a punishment can be "warranted," which legal theorists intend to mean the same thing as "deserved" in ordinary language, but they avoid the latter term due to its peculiar use in certain philosophical circles. See Kutz (2004) and Bower-Bir (2020b) for an extended discussion.
- 19. For example, you can frame universal suffrage as a matter of equality—one person deserves one vote—but it just as ably illustrates the equity principle. The desert bases for a vote are adulthood and citizenship. From an equity approach, the inputs must correspond to the outputs, so two people who are equal in their adulthood and citizenship will have the same voting power. Both adulthood and citizenship are (or are often treated as) binary categories so an equitable distribution among adult nationals is also an equal distribution among adult nationals. Similarly, you can distribute 2000 calories of food to all adult human males every day as a matter of equality and equity—their equal statuses as adults, humans, and males makes them deserving of equal treatment—or as a matter of need, 2000 calories being about what an adult human male needs to maintain weight. See Bower-Bir (2014, chap. 2) and Bower-Bir (2020a) for further discussion and examples.
- 20. Failing to meet a desert basis negates your deservingness. Failing to follow proper procedures in assessing whether you meet the basis calls into question your deservingness. For example, the system for promoting employees at your job does not take into consideration that Steve is drinking buddies with one of the managers on the promotion committee (i.e., there is no

- "bias suppression" (Leventhal, 1980)). Scholars from different fields will argue over whether the promotion process and/or promotion decision are unfair or unjust, while others will think there is no debate because they are all the same thing. We can all agree, however, that when it comes to a promotion, Steve is a suspect deserving subject.
- 21. For example, Norton and Ariely (2011, p. 9) find "a surprising level of consensus" on the issue, whereby "[a]ll demographic groups—even those not usually associated with wealth redistribution such as Republicans and the wealthy—desired a more equal distribution of wealth than the status quo."
- 22. An individual's financial aspirations and her hopes for society at large may pull her in opposite directions when it comes to backing this or that redistributive policy. Rather than strain their allegiance to either personal consumption or ideology, however, many people will amend their beliefs (i.e., lie to or delude themselves) about the likely effects of a policy.
- 23. Note that these are not Alesina and Giuliano's (2011) explanations, per se, but their distillation of explanations proposed and tested in the broader literature.
- 24. As always with social institutions, this scenario can be framed in the reverse: Defending communally sanctioned distributions would invite approbation and other benefits from our peers.
- 25. It is a bystander's innocence—her lack of personal responsibility—that may make her deserving of compensation for some suffering
- Alternatively known as "iterative proportional fitting" and "sample-balancing." Specifically, I use STATA 12's survwgt rake command.
- Indeed, this empirical finding has been replicated in countries throughout the world, including, for example, OECD states (Sawyer & Wasserman, 1976), the United Kingdom (Morris & Preston, 1986), Australia (Kakwani, 1986), and India (Gupta & Aggarwal, 1982).
- 28. When answering this question, respondents were able to choose their answers from a seven-point scale that included regressive tax schemes wherein rich citizens are taxed at rates less than those facing average citizens. Fifteen of the 992 respondents favored a regressive tax scheme, but in the final analysis their responses were included with respondents who favored a flat tax rate and the range of the scale was truncated.
- 29. It is possible to conduct the forthcoming analysis using the dichotomous responses alone, or with any combination of the weights. All weighted versions highly correlate with one another (mean r = 0.953, minimum r = 0.874) and did not produce statistically differentiable regression results so I used the full thirteen-point scale shown in Table B1.
- 30. For the sake of clarity, this second question was rephrased for respondents thusly: "How important would each factor be to economic standing in your ideal society?"
- 31. Alesina and Giuliano control for regional fixed effects, but never specify how they define regions.
- 32. I obtain similar results using a variable that measures whether respondents believe government agencies are generally efficient or inefficient in completion of their duties.
- 33. See Bower-Bir (2020b) for more on the flexible relationship between desert and personal responsibility.
- 34. You can determine the most common levels of importance placed in agency in the rug plot along the horizontal axis and in the histogram plotted in relation to the right side vertical axis in Figure D2(a-d).

REFERENCES

Adams, J. Stacy. 1963. "Towards an Understanding of Inequality." Journal of Abnormal and Social Psychology 67: 422-36.

Adams, J. Stacy. 1965. "Inequity in Social Exchange." In Advances in Experimental Social Psychology, edited by Leonard Berkowitz, Vol. 2, 267–99. Orlando, FL: Academic Press.

Alesina, Alberto, and George-Marios Angeletos. 2005a. "Fairness and Redistribution: US vs Europe." *American Economic Review* 95: 913–35.

Alesina, Alberto, and George-Marios Angeletos. 2005b. "Redistribution, Corruption and Fairness." Journal of Monetary Economics 52: 1227–47.

Alesina, Alberto, and Eliana La Ferrara. 2005. "Preferences for Redistribution in the Land of Opportunities." *Journal of Public Economics* 89: 879–931.

Alesina, Alberto, and Paola Giuliano. 2011. "Preferences for Redistribution." In *Hanbook of Social Economics*, edited by Jess Benhabib, Alberto Bisin, and Matthew O. Jackson, Vol. 1A, 93–132. Amsterdam: North Holland.

Aristotle. 2002. Nicomachean Ethics (Christopher Rowe, Trans.). New York, NY: Oxford University Press.

Bartels, Larry M. 2008. Unequal Democracy: The Political Economy of the New Gilded Age. Princeton, NJ: Princeton University Press.

Bashir, Omar S. 2015. "Testing Inferences About American Politics: A Review of the 'Oligarchy' Result." Research and Politics 2: 1–7.

Bell, Linda A., and Richard B. Freeman. 2001. "The Incentive for Working Hard: Explaining Hours Worked Differences in the US and Germany." *Labour Economics* 8 (2): 181–202.

Bénabou, Roland, and Efe Ok. 2001. "Social Mobility and the Demand for Redistribution: The POUM Hypothesis." The Quarterly Journal of Economics 116 (2): 447–87.

Berry, William D., Matt Golder, and Daniel Milton. 2012. "Improving Tests of Theories Positing Interaction." The Journal of Politics 74: 653–71.



Binmore, Ken. 1994. Game Theory and the Social Contract, Volume I: Playing Fair. Cambridge, MA: The MIT Press.

Binmore, Ken. 2009. Fairness as a Natural Phenomenon [Working Paper]. Centre for Economic Learning and Social Evolution, University College London.

Binmore, Ken. 2010. "Game Theory and Institutions." Journal of Comparative Economics 38 (3): 245-52.

Binmore, Ken. 2011. Natural Justice. Oxford: Oxford University Press.

Blair, Benjamin D., and Larkin McCormack. 2016. "Applying the Narrative Policy Framework to the Issues Surrounding Hydraulic Fracturing Within the News Media: A Research Note." Research and Politics 3 (1): 1–3.

Blakeley, Kiri. 2011, August. Americans Don't Resent Super-Rich Because They Think They are Super-Rich. Forbes. https://www.forbes.com/sites/kiriblakeley/2011/08/16/americans-dont-resent-super-rich-because-they-thinkthey-are-super-rich/?sh=5e25f135522c

Bower-Bir, Jacob S. 2014. What We Deserve: The Moral Origins of Economic Inequality and Our Policy Responses to It (PhD dissertation). Bloomington, IN: Indiana University.

Bower-Bir, Jacob S. 2017. "Redistribution Preferences and Low Socio-Economic Status." In *Encyclopedia of Evolutionary Psychological Science*, edited by Todd K. Shackelford and Viviana A. Weekes-Shackelford, 1–5. New York, NY: Springer. https://doi.org/10.1007/978-3-319-16999-6_1702-1

Bower-Bir, Jacob S. 2020a. Desert as a Parsimonious, Emergent Social Institution [Working Paper]. Ostrom Workshop in Political Theory and Policy Analysis.

Bower-Bir, Jacob S. 2020b. "Earning Our Place, More or Less: Responsibility's Exible Relationship with Desert in Socioeconomic Standing." *Economia Politica* 38: 131–170. https://doi.org/10.1007/s40888-020-00201-9

Brambor, Thomas, William Roberts Clark, and Matt Golder. 2006. "Understanding Interaction Models: Improving Empirical Analyses." *Policy Analysis* 14: 63–82.

Brooks, David. 2005. "The Sticky Ladder." The New York Times, A19.

Clifford, Scott, and Jennifer Jerit. 2014. "Is There a Cost to Convenience? An Experimental Comparison of Data Quality in Laboratory and Online Studies." *Journal of Experimental Political Science* 1 (2): 120–31.

Cramer Walsh, Katherine. 2012. "Putting Inequality in its Place: Rural Consciousness and the Power of Perspective." *American Political Science Review* 106 (3): 517–32.

Crawford, Sue E. S., and Elinor Ostrom. 1995. "A Grammar of Institutions." American Political Science Review 89 (3): 582–600.

Cupit, Geoffrey. 1996. "Desert and Responsibility." Canadian Journal of Philosophy 26 (1): 83-99.

Decety, Jean, Jason M. Cowell, Kang Lee, Randa Mahasneh, Susan Malcolm-Smith, Bilge Selcuk, and Xinyue Zhou. 2015. "The Negative Association Between Religiousness and Children's Altruism Across the World." *Current Biology* 25 (1): 1–5.

Deutsch, Morton. 1975. "Equity, Equality, and Need: What Determines Which Value Will Be Used as the Basis of Distributive Justice?" *Journal of Social Issues* 31 (3): 137–49.

Deutsch, Morton. 1985. Distributive Justice: A Social-Psychological Perspective. New Haven, CT: Yale University Press.

Dodge, Jennifer, Sonia M. Ospina, and Erica Gabrielle Foldy. 2005. "Integrating Rigor and Relevance in Public Administration Scholarship: The Contribution of Narrative Inquiry." *Public Administration Review* 65 (3): 286–300.

Elster, Jon. 1992. Local Justice: How Institutions Allocate Scarce Goods and Necessary Burdens. New York, NY: Russell Sage Foundation. Enns, Peter K. 2015. "Relative Policy Support and Coincidental Representation." Perspectives on Politics 13 (4): 1053–64.

Erikson, Robert S., Gerald C. Wright, and John P. McIver. 1993. Statehouse Democracy: Public Opinion and Policy in the American States. Cambridge: Cambridge University Press.

Fajnzylber, Pablo, Daniel Lederman, and Norman Loayza. 2002. "Inequality and Violent Crime." Journal of Law & Economics 45: 1–40.

Feinberg, Joel. 1963. "Justice and Personal Desert." In Nomos VI: Justice, edited by Carl J. Friedrich, and John W. Chapman, 69–97. New York, NY: Atherton Press.

Feinberg, Joel. 1974. "Noncomparative Justice." Philosophical Review 83: 297-338.

Feldman, Fred. 1995. "Justice, Desert, and the Repugnant Conclusion." Utilitas 7: 189–206.

Feldman, Fred. 1996. "Responsibility as a Condition for Desert." Mind 105 (417): 165-8.

Fischer, Frank. 2003. Reframing Public Policy: Discursive Politics and Deliberative Practices. New York, NY: Oxford University Press.

Fischer, Frank, and John Forester. 1993. "Editors' Introduction." In *The Argumentative Turn in Policy Analysis and Planning*, edited by Frank Fischer and John Forester, 1–17. Durham, NC: Duke University Press.

Fong, Christina. M. 2001. "Social Preferences, Self-Interest, and the Demand for Redistribution." *Journal of Public Economics* 82 (2): 225–46.

Furnham, Adrian. 1983. "The Protestant Work Ethic, Human Values and Attitudes Towards Taxation." *Journal of Economic Psychology* 3: 113–28.

Gilens, Martin, and Benjamin I. Page. 2014. "Testing Theories of American Politics: Elites, Interest Groups, and Average Citizens." *Perspectives in Politics* 12 (3): 564–81.

Greenberg, Jerald. 2011. Organizational Justice: The Dynamics of Fairness in the Workplace. In APA Handbook of Industrial and Organizational Psychology, Volume 3: Maintaining, Expanding, and Contracting the Organization, edited by Zedeck, Sheldon, 271–327. Washington, DC: American Psychological Association.

Grief, Avner. 2004. Self-Enforcing Institutions: Comparative and Historical Institutional Analysis [Working Paper]. European School on New Institutional Economics.

- Gupta, Arindam, and Pawan K. Aggarwal. 1982. The Impact of the Personal Income Tax. New Delhi: National Institute of Public Finance and Policy.
- Hasenfeld, Yeheskel, and Jane A. Rafferty. 1989. "The Determinants of Public Attitudes Toward the Welfare State." Social Forces 67 (4): 1027–48.
- Hill, Crystal, and Ryan Martin. 2019. Marion County Will No Longer Prosecute Simple Marijuana Possession, Officials Say. The Indianapolis Star.
- Hochschild, Jennifer L. 1981. What's Fair? American Beliefs About Distributive Justice. Cambridge, MA: Harvard University Press.
- Ingram, Helen, Anne L. Schneider, and Peter deLeon. 2007. "Social Construction and Policy Design." In *Theories of the Policy Process*. 2nd ed. edited by Paul Sabatier, 93–126. Boulder, CO: Westview Press.
- Jones, Michael D., and Mark K. McBeth. 2010. "Narrative Policy Framework: Clear Enough to Be Wrong?" The Policy Studies Journal 38 (2): 329–53.
- Jost, John T., Sally Blount, Jeffrey Pfeffer, and György Hunyady. 2003. "Fair Market Ideology: Its Cognitive- Motivational Underpinnings." Research in Organizational Behavior 25: 53–91.
- Jost, John T., and Aaron C. Kay. 2010. "Social Justice: History, Theory, and Research." In *Handbook of Social Psychology*, edited by Susan T. Fiske, Daniel Todd Gilbert, and Gardner Lindzey, 1122–65. New York: John Wiley & Sons Inc.
- Kakwani, Nanak. 1986. Analyzing Redistribution Policies: A Study Using Australian Data. Cambridge: Cambridge University Press.
- Kam, Cindy D., and Robert J. Franzese. 2007. Modeling and Interpreting Interactive Hypotheses in Regression Analysis. Ann Arbor, MI: University of Michigan Press.
- Kleinig, John. 1971. "The Concept of Desert." American Philosophical Quarterly 8 (1): 71–8.
- Kutz, Christopher. 2004. "Responsibility." In Oxford Handbook of Jurisprudence and Philosophy of Law, edited by Jules L. Coleman, Kenneth Einar Himma, and Scott J. Shapiro, 549–87. New York, NY: Oxford University Press.
- Lambert, Peter J. 1993. "Inequality Reduction Through the Income Tax." Economica 60: 357-65.
- Lane, Robert E. 1959. "The Fear of Equality." American Political Science Review 53 (1): 35-51.
- Lerner, Melvin J., and Dale T. Miller. 1978. "Just World Research and the Attribution Process: Looking Back Ahead." *Psychological Bulletin* 85: 1030–51.
- Leventhal, Gerald S. 1980. "What Should Be Done with Equity Theory?" In *Social Exchange: Advances in Theory and Research*, edited by Kenneth J. Gergen, Martin S. Greenberg, and Richard H. Willis, 27–55. New York: Springer US.
- Lucas, John Randolph 1980. On Justice. Oxford: Clarendon Press.
- Maddamsetti, Rohan, and Jacob S. Bower-Bir. 2018. Parallels and Promising Directions in the Study of Genetic, Cultural, and Moral Evolution [Working Paper]. arXiv:1810.00501.
- Maynard-Moody, Steven, and Michael Musheno. 2003. Cops, Teachers, Counselors: Stories from the Front Lines of Public Service. Ann Arbor, MI: University of Michigan Press.
- Maynard-Moody, Steven, and Michael Musheno. 2012. "Social Equities and Inequities in Practice: Street-Level Workers as Agents and Pragmatists." Public Administration Review 72 (1): 16–23.
- McCall, Leslie. 2013. The Undeserving Rich: American Beliefs About Inequality, Opportunity, and Redistribution. New York, NY: Cambridge University Press.
- McKean, Margaret A. 1992. "Management of Traditional Common Lands (Iriaichi) in Japan." In *Making the Commons Work: Theory, Practice, and Policy*, edited by Daniel W. Bromley, and David Feeny, 63–98. San Francisco, CA: ICS.
- McLeod, Olsaretti. 2013. "Desert." In *The Stanford Encyclopedia of Philosophy*, edited by Edward N. Zalta. The Metaphysics Research Lab, Center for the Study of Language and Information, Stanford University.
- Meltzer, Allan H., and Scott F. Richard. 1981. "A Rational Theory of the Size of Government." *Journal of Political Economy* 89 (5): 914–27. Mill, John Stuart. 1957. *Utilitarianism*. Indianapolis, IN: Liberal Arts Press.
- Morris, Nick, and Ian Preston. 1986. "Inequality, Poverty, and the Redistribution of Income." Bulletin of Economic Research 38 (4): 277–344.
- North, Douglass C. 1990. Institutions, Institutional Change and Economic Performance. Cambridge: Cambridge University Press.
- North, Douglass C., and Barry R. Weingast. 1989. "Constitutions and Commitment: The Evolution of Institutions Governing Public Choice in Seventeenth-Century England." *The Journal of Economic History* 49 (4): 803–32.
- Norton, Michael I., and Dan Ariely. 2011. "Building a Better America—One Wealth Quintile at a Time." Perspectives on Psychological Science 6 (1): 9–12.
- Ostrom, Elinor. 2005. Explaining Institutional Diversity. Princeton, NJ: Princeton University Press.
- Ostrom, Elinor, and Vincent Ostrom. 2004. "The Quest for Meaning in Public Choice." American Journal of Economics and Sociology 63 (1): 105-47.
- Page, Benjamin I., and Lawrence R. Jacobs. 2009. Class War? What Americans Really Think About Economic Inequality. Chicago, IL: University of Chicago Press.
- Page, Benjamin I., and Robert Y. Shapiro. 1992. The Rational Public: Fifty Years of Trends in Americans' Policy Preferences. Chicago, IL: University of Chicago Press.
- Pew Research Center. 2012. Partisan Polarization Surges in Bush, Obama Years (Tec Rep.). Washington, DC: Pew Research Center for the People and the Press. http://www.people-press.org/2012/06/04/section-9-trends-in-party-affiliation/
- Pojman, Louis. 1997. "Equality and Desert." Philosophy 72 (282): 549-70.

27

Polski, Margaret M., and Elinor Ostrom. 2017. "An Institutional Framework for Policy Analysis and Design." In *Elinor Ostrom and the Bloomington School of Political Economy: Volume 3, a Framework for Policy Analysis*, edited by Daniel H. Cole, and Michael D. McGinnis, 13–47. New York, NY: Lexington Books.

Rawls, John. 1958. "Justice as Fairness." The Philosophical Review 67 (2): 164.

Rawls, John. 1971. A Theory of Justice. Cambridge, MA: Harvard University Press.

Reis, Harry T. 1984. "The Multidimensionality of Justice." In *The Sense of Injustice*, edited by Robert Folger, 25–61. New York: Springer US.

Rescher, Nicholas. 1966. Distributive Justice. Indianapolis, IN: Bobbs-Merrill.

Roe, Emery. 1994. Narrative Policy Analysis: Theory and Practice. Durham, NC: Duke University Press.

Rogers, Susan carol, and Sonya Salamon. 1983. "Inheritance and Social Organization Among Family Farmers." *American Ethnologist* 10 (3): 529–50.

Romer, Thomas. 1975. "Individual Welfare, Majority Voting, and the Properties of a Linear Income Tax." *Journal of Public Economics* 4 (2): 163–85.

Sawyer, Malcolm C., and Mark Wasserman. 1976. Income Distribution in OECD Countries. Paris: Organisation for Economic Cooperation and Development.

Schay, Brigitte W. 1988. "Effects of Performance-Contingent Pay on Employee Attitudes." Public Personnel Management 17 (2): 237-50.

Schneider, Anne, and Helen Ingram. 1993. "Social Construction of Target Populations: Implications for Politics and Policy." American Political Science Review 87: 334–47.

Sher, George. 1987. Desert. Princeton, NJ: Princeton University Press.

Sherkat, Darren E. 2000. "That They Be Keepers of the Home': The Effect of Conservate Religion on Early and Late Transitions into Housewifery." Review of Religious Research 41 (3): 344–58.

Siddiki, Saba, Tanya Heikkila, Christopher M. Weible, Raul Pacheco-Vega, David Carter, Cali Curley, Aaron Deslatte, and Abby Bennett. Forthcoming. "Institutional Analysis with the Institutional Grammar." *Policy Studies Journal*. https://doi.org/10.1111/psj.12361

Sidgwick, Henry. 1962. The Methods of Ethics. London: Macmillan & Co.

Slemrod, Joel. 2006. "The Role of Misconceptions in Support for a Regressive Tax Reform." National Tax Journal 59: 57-75.

Slote, Michael. 1973. "Desert, Consent, and Justice." Philosophy and Public Affairs 2: 323-47.

Starmans, Christina, Mark Sheskin, and Paul Bloom. 2017. "Why People Prefer Unequal Societies." Nature Human Behavior 1: 1–7.

Stone, Deborah. 2002. Policy Paradox: The Art of Political Decision Making. 2nd ed. New York, NY: W. W. Norton.

Sugden, Robert. 1989. "Spontaneous Order." Journal of Economic Perspectives 3 (4): 85-97.

Thompson, James R., and Hal Griffin Rainey. 2003. Modernizing Human Resource Management in the Federal Government: The IRS Model. Arlington, VA: IBM Endowment for the Business of Government.

Tornblom, Kjell Y., and Uriel G. Foa. 1983. "Choice of a Distribution Principle: Crosscultural Evidence on the Effects of Resources." *Acta Sociologica* 26 (2): 161–73.

Wagstaff, Graham. 1994. "Equity, Equality, and Need: Three Principles of Justice or One?" Current Psychology: Research and Reviews 13: 138–52.

Walster, Elaine, Ellen Berscheid, and G. William Walster. 1973. "New Directions in Equity Research." Journal of Personality and Social Psychology 25 (2): 151–76.

Westermarck, Edward. 1906. The Origin and Development of Moral Ideas (Vol. I and II). London: MacMillan.

Young, H. Peyton. 1995. Equity in Theory and Practice. Princeton, NJ: Princeton University Press.

Zahariadis, Nikolaos. 2007. "The Multiple Streams Framework: Structures, Limitations, Prospects." In *Theories of the Policy Process*, edited by Paul Sabatier, 65–92. Boulder, CO: Westview Press.

AUTHOR BIOGRAPHY

Jacob Bower-Bir is a graduate student at Indiana University's J. Irwin Miller Architecture Program and an affiliated faculty member at Indiana University's Ostrom Workshop in Political Theory and Policy Analysis. At least, he was when he submitted this article. Could be different now.

How to cite this article: Bower-Bir, J.S. (2021) Desert and redistribution: Justice as a remedy for, and cause of, economic inequality. *Policy Studies Journal*, 00, 1–38. https://doi.org/10.1111/psj.12439

APPENDIX A

DEMOGRAPHIC BREAKDOWN OF SURVEY SAMPLE

In early 2014, I hired Internet panel provider SocialSci to administer a survey of my design to 1000 adult American respondents. SocialSci uses a three-stage randomization procedure to ensure a representative sample of the target population (in this case, adult Americans). Survey managers randomly invite panel members to participate in an upcoming survey or experiment. A set of profiling questions is randomly

TABLE A1 Demographic breakdown of survey sample

	Sample	Sample	US pop	Sample%
	N	0/0	0/0	− US pop%
Gender				
Female	586	0.59	0.51	0.08
Male	406	0.41	0.49	- 0.08
	992	1.00	1.00	0.00
Race				
White	701	0.71	0.64	0.07
Black	93	0.09	0.12	- 0.03
Latino	52	0.05	0.16	- 0.11
Asian	111	0.11	0.05	0.06
Other	35	0.04	0.03	0.01
	992	1.00	1.00	0.00
Education				
High school or less	118	0.12	0.43	- 0.31
Associate's or some college	330	0.33	0.29	0.04
Bachelor's degree	351	0.35	0.17	0.18
Graduate degree	193	0.19	0.11	0.08
	992	1.00	1.00	0.00
Household income				
< \$25 k	192	0.19	0.25	- 0.06
\$25 k-\$49 k	247	0.25	0.25	0.00
\$50 k-\$74 k	210	0.21	0.18	0.03
\$75 k – \$99 k	141	0.14	0.12	0.02
\$100 k-\$149 k	137	0.14	0.12	0.02
\$150 k+	65	0.07	0.08	- 0.01
	992	1.00	1.00	0.00
Political party				
Republican	68	0.07	0.24	- 0.17
Lean Republican	79	0.08	0.16	- 0.08
Independent	264	0.27	0.12	0.15
Lean Democrat	284	0.29	0.16	0.13
Democrat	297	0.30	0.32	- 0.02
	992	1.00	1.00	0.00

Note: US partisanship estimates from the Pew Research Center for the People and the Press (2012). All other US estimates from the Census Bureau's 2012 projections. Sample data collected early 2014.

selected for them to answer and, upon completion, panel members are matched with a random selection of surveys and experiments for which they are likely to qualify. SocialSci provides large, diverse, carefully managed, and externally audited panels in several countries from which survey and experiment samples are drawn. These pools are specifically intended for academic research, and their vetting system tracks participant responses over time and across studies, removing from the pool participants whose demographics inexplicably fluctuate.

SocialSci remunerates enrollment in a panel and participation in surveys so as to attract even hard-to-reach groups within the population (e.g., seniors, low-income earners, ethnic minorities, etc.). As for any survey, there may be some latent variable common to people willing to volunteer for survey participation that makes them different from the broader population. For completing my survey, which took around 18 min on average, respondents were awarded 50 "points" (about \$0.83). SocialSci participants can accumulate and then redeem points for Amazon gift cards, or they can donate their earnings to scientific organizations such as the Public Library of Science.

APPENDIX B

ADDITIONAL INFORMATION ON MEASUREMENTS

Table B1 shows all the possible values and interpretations of $Z_{rich_deserve}$, $Z_{average_deserve}$, and $Z_{poor_deserve}$. This measure incorporates the direction, magnitude, and certainty of a respondent's deservingness evaluations of members of the specified groups (i.e., rich, average, and poor Americans). A 1 means the respondent is "very confident" that members of the specified group are generally "very deserving" of their economic position. A -1 means the respondent is "very confident" that members of the specified group are generally "very undeserving" of their economic position. Intermediate, scores, however, could mean different things. For example, a $Z_{rich_deserve}$ score of 0.5 may mean that a respondent is "very confident" the rich are "deserving" of their wealth, or it could mean that the respondent is "somewhat confident" that the rich are "very deserving" of their wealth.

The horizontal axes in Figure B1 show the degree of control survey respondents think people have over the specified factor, and the vertical axes show the ideal importance of that factor to economic standing. The correlation coefficient *r* between the two variables is shown above the graph for each of the 15 factors. These responses are a part of a larger analysis in this paper, but are interesting in themselves. See Bower-Bir (2020b) for a substantive discussion.

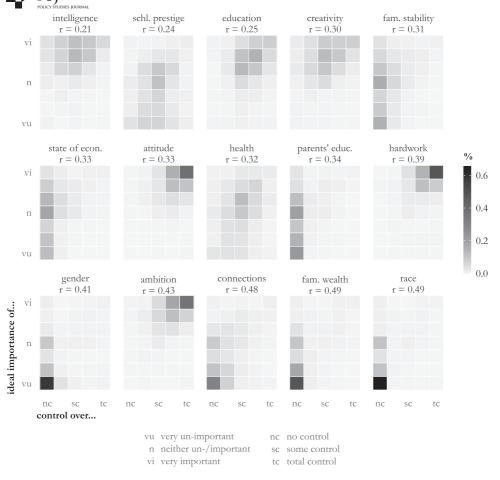


FIGURE B1 Heat maps of perceived control over economic factors versus their ideal importance to economic standing

TABLE B1 Deservingness values and their meanings

				NU						ND			
				VC						VC_			
			SU VC	SU C	NU C				ND C	SD C	SD VC		
		U	U	U	SU	NU	ND	ND	SD	D	D	D	
		VC	С	SC	SC	SC	NC	SC	SC	SC	С	VC	
Magnitude	VU	VU	VU	VU	U	su	NU	$^{\mathrm{SD}}$	D	VD	VD	VD	VD
Confidence	VC	С	SC	NC	NC	NC	NC	NC	NC	NC	SC	С	VC
Value	-1.000	-0.833	-0.667	-0.500	-0.333	-0.167	0.000	0.167	0.333	0.500	0.667	0.833	1.000
	VD/U	Very De	Very Deserving/Undeserving Very Confident								VC		
	D/U	Deservir	ng/Undese	erving						Co	nfident	$^{\rm C}$	
	SD/U	Somewh	at Deserv	ing/Unde	eserving				Somev	vhat Co	nfident	SC	
	ND/U	Not espe	ecially De	serving/U	Indeservir	ıg				Not Co	nfident	NC	

APPENDIX C

BASE MODELS AND MODELS WITH ADDITIONAL CONTROL VARIABLES

TABLE C1 Support for government action to reduce the income gap $(Y_{gov_{-j}ix,gop_{j}})$ and for progressive taxation $(Y_{porg_{-inc}})$ based on definition of economic justice (X) and on perceived economic justice (Z)

	6-3				*						РО
	Model E				-0.336^{***} (0.078)	-0.050 (0.054)	-0.116^* (0.070)	0.415***	0.008	0.000)	-0.003 (0.026)
	Model D			-0.285^{***} (0.053)				0.470*** (0.052)	0.009	0.000)	-0.022 (0.026)
Y_{prog_tax}	Model C		-0.129^{**} (0.052)					0.550***	0.011 (0.007)	0.000°* (0.000)	-0.001 (0.028)
	Model B	0.085						0.608***	0.008	0.000)	0.002 (0.027)
	Model A							0.589***	0.010 (0.007)	0.000*	0.013
	Model E				-0.338^{***} (0.055)	-0.137^{***} (0.049)	-0.223^{***} (0.073)	0.345*** (0.053)	0.007	0.000* (0.000)	0.009
	Model D			-0.375^{***} (0.048)				0.415^{***} (0.052)	0.012^{***} (0.007)	0.000 (0.000)	-0.012 (0.026)
$Y_{gov_fix_gap}$	Model C		-0.221^{***} (0.050)					0.506^{***} (0.054)	0.014**	0.000**	0.009 (0.028)
	Model B	-0.469*** (0.143)						0.572***	0.010 (0.007)	0.000° (0.000)	0.048^* (0.029)
	Model A							0.572^{***} (0.053)	0.013^{**} (0.006)	0.000***	0.034 (0.029)
	Variable	Definition	Agency	Justice	Rich deserve	Avg. deserve	Poor deserve	Ideology	Age	Age^2	Female

(Continued) TABLE C1

			$Y_{gov_fix_gap}$					Y_{prog_tax}		
Variable	Model A	Model B	Model C	Model D	Model E	Model A	Model B	Model C	Model D	Model E
Nonwhite	0.053	0.035	0.065** (0.032)	0.069**	0.061**	0.008	0.004 (0.032)	0.015 (0.032)	0.020 (0.031)	0.024 (0.029)
Married	-0.014 (0.032)	-0.012 (0.032)	0.007	-0.006 (0.029)	-0.011 (0.028)	0.008 (0.036)	0.320 (0.036)	0.020 (0.036)	0.014 (0.033)	0.007
Unemployed	0.020 (0.049)	0.003 (0.047)	0.004 (0.049)	0.006 (0.043)	-0.005 (0.039)	-0.089 (0.055)	-0.052 (0.057)	-0.098^* (0.055)	-0.100^* (0.053)	-0.106^{**} (0.053)
Education	-0.002 (0.062)	0.026 (0.060)	-0.009 (0.059)	-0.023 (0.56)	0.026 (0.053)	0.104* (0.057)	0.108^* (0.057)	0.100* (0.056)	0.088 (0.55)	0.110^{**} (0.056)
Income	-0.209^{***} (0.060)	-0.221^{***} (0.061)	-0.176^{***} (0.058)	-0.118^{**} (0.054)	-0.122^{**} (0.053)	-0.176^{***} (0.061)	-0.117^* (0.062)	-0.156^{***} (0.060)	-0.106^* (0.056)	-0.108^* (0.058)
Constant	0.135 (0.124)	0.584*** (0.191)	0.295*** (0.130)	0.376*** (0.125)	0.640***	0.065 (0.128)	-0.016 (0.176)	0.158 (0.129)	0.247^* (0.135)	0.416^{***} (0.127)
N	992	963	992	992	992	992	963	992	992	992
\mathbb{R}^2	0.4468	0.4687	0.4719	0.5186	0.5576	0.3926	0.4063	0.4017	0.4365	0.4645
Adj-R ²	0.4131	0.4346	0.4391	0.4887	0.5291	0.3556	0.3682	0.3645	0.4015	0.4300

Nowe. All regressions control for state fixed effects. Robust standard errors given in parentheses. All variables save egg and egg² are standardized [0, 1].

^{*} Significant at 10%; ** Significant at 5%; *** Significant at 1%.

(Continues)

TABLE C2 Support for government action to reduce the income gap $(X_{gor_{-j}fic_{-}gop_{-}})$ and for progressive taxation $(X_{poo_{-j}ac_{-}})$ based on definition of economic justice (X) and on perceived economic justice (Z), with additional control variables shown in bold typeface

			Y gov_fix_gap					Y_{png_tax}		
Variable	Model A	Model B	Model C	Model D	Model E	Model A	Model B	Model C	Model D	Model E
Definition		-0.466***	-0.384*** (0.141)	-0.445*** (0.117)	-0.482***		0.082	0.127	0.094 (0.129)	0.063
Agency			-0.202^{***} (0.052)					-0.111^{**} (0.052)		
Justice				-0.420^{***} (0.050)					-0.249^{***} (0.058)	
Rich deserve					-0.370^{***} (0.059)					-0.289*** (0.076)
Avg. deserve					-0.132^{***} (0.047)					-0.055 (0.055)
Poor deserve					-0.284^{***} (0.062)					-0.138^{**} (0.068)
Good life	-0.053^* (0.032)	-0.018 (0.032)	-0.003 (0.031)		0.016 (0.028)	-0.069* (0.040)	-0.057 (0.040)	-0.049 (0.040)		-0.031 (0.037)
Gov. help	0.159*** (0.051)	0.114^{**} (0.052)	0.107** (0.053)	0.167*** (0.048)	0.154*** (0.050)	0.101^* (0.054)	0.085 (0.053)	0.081	0.117^{**} (0.053)	0.109** (0.052)
Charity	-0.133 (0.085)	-0.185^{**} (0.085)	-0.151^* (0.084)	-0.052 (0.072)	-0.068 (0.083)	-0.183^{**} (0.080)	-0.234^{***} (0.080)	-0.215^{***} (0.080)	-0.155^{**} (0.076)	-0.153^{**} (0.076)
Ideology	0.524*** (0.053)	0.537***	0.477*** (0.055)	0.346^{***} (0.051)	0.270*** (0.049)	0.548*** (0.048)	0.572*** (0.047)	0.539^{***} (0.050)	0.459*** (0.057)	0.402*** (0.056)
Age	0.013^{**} (0.006)	0.012^* (0.007)	0.013* (0.007)	0.011 (0.007)	0.006)	0.011 (0.007)	0.009	0.010 (0.007)	0.009 (0.007)	0.007

TABLE C2 (Continued)



			Y gov_fix_gap					Y_{png_tax}		
Variable	Model A	Model B	Model C	Model D	Model E	Model A	Model B	Model C	Model D	Model E
Age ²	0.000**	0.000**	0.000**	0.000 (0.000)	0.000	0.000*	0.000)	0.000°* (0.000)	0.000)	0.000)
Female	0.024 (0.028)	0.042 (0.028)	0.022 (0.028)	0.000 (0.026)	0.029 (0.023)	0.002 (0.029)	-0.010 (0.028)	-0.021 (0.028)	-0.034 (0.027)	-0.016 (0.026)
Nonwhite	0.059^* (0.032)	0.042 (0.032)	0.052^* (0.031)	0.055^* (0.028)	0.051^* (0.027)	0.019 (0.030)	0.016 (0.031)	0.021 (0.031)	0.023 (0.031)	0.027 (0.030)
Married	-0.020 (0.030)	-0.027 (0.030)	-0.009 (0.031)	-0.018 (0.026)	-0.026 (0.026)	0.003 (0.034)	0.023 (0.034)	0.032 (0.034)	0.028 (0.032)	0.019 (0.033)
Unemployed	-0.008	-0.020 (0.048)	-0.035 (0.048)	-0.027 (0.041)	-0.039 (0.039)	-0.117^{**} (0.056)	-0.084 (0.059)	-0.092 (0.059)	-0.088 (0.058)	-0.095 (0.058)
Education	-0.017 (0.060)	0.008 (0.059)	0.004	-0.018 (0.052)	0.051 (0.049)	0.090 (0.056)	0.091 (0.056)	0.089	0.076 (0.056)	0.107* (0.057)
Income	-0.199*** (0.054)	-0.206^{***} (0.056)	-0.190*** (0.055)	-0.142^{***} (0.051)	0.136*** (0.049)	-0.151^{**} (0.065)	-0.082 (0.064)	-0.073 (0.064)	-0.044 (0.061)	0.039
Constant	0.204 (0.132)	0.606***	0.655*** (0.195)	0.804*** (0.176)	1.093***	0.173 (0.143)	0.077 (0.181)	0.104 (0.182)	0.194 (0.176)	0.368**
N	992	963	963	992	963	963	963	963	963	963
RR^2	0.4629	0.4809	0.5006	0.5594	0.6020	0.4071	0.4233	0.4297	0.4531	0.4778
$aAdj-R^2$	0.4284	0.4457	0.4662	0.5291	0.5736	0.3689	0.3842	0.3904	0.4154	0.4406

Note: All regressions control for state fixed effects. Robust standard errors given in parentheses.

All variables save age and age^2 are standardized [0, 1].

^{*} Significant at 10%; ** Significant at 5%; *** Significant at 1% .



APPENDIX D

EXTENDED EXPLANATION OF THE PROPOSED INTERACTION

D.1 | Extended explanation: Interaction variables and test

This section of Appendix D picks up from Section 5.5 in the main body of the paper.

Because interaction terms are always symmetrical (Brambor et al., 2006; Kam & Franzese, 2007), arguing that Z moderates X implies that X, too, has some conditional influence on Z. Although my theory does not speak directly to that relationship, neither is it silent on the matter. I can measure the relationship and make certain the results do nothing to undermine my theory (Berry et al., 2012). For example, I have no reason to expect justice assessments will, as a result of their interaction with desert definitions, suddenly have a positive influence on redistributive preferences. Moreover, increasing personal responsibility's importance will only embolden an individual in her opposition to redistribution if she thinks economic desert is rewarded. Hence, I expect that the marginal effect of Z on Y will be negative for all values of X. This effect will be weakest when X is at its lowest and will increase in magnitude as X increases.

I will present results for the three different measures of Z and the two different versions of Y. It is difficult and sometimes impossible to evaluate conditional hypotheses with the figures typically reported in results tables (Brambor et al., 2006). Consequently, I will evaluate the statistically significant interaction results graphically.

D.2 | Extended explanation: Interaction findings

This section of Appendix D picks up from Section 6.4 in the main body of the paper.

Figures D1(a) and D1(b), which are derived from Models 1 and 2 from the left half of Table D1, offer the strongest support for an $X \mid Z$ interaction effect. The marginal effect on redistributive preferences of increasing agency's importance is negative for all but the lowest values of and Z_{agency} and $Z_{justice}$, when it is statistically indistinguishable from zero. And the effect of X on $Y_{gov_fix_gap}$ strengthens in magnitude as Z_{agency} and $Z_{justice}$ increase. All of this indicates that an individual's assessment of prevailing economic justice tempers the marginal influence her definition of justice has on government redistribution efforts. Note, however, that definition, agency, and justice have the wrong sign in these models, although those first two variables do not achieve statistical significance so the sign may not especially matter.

Regardless, the interaction is not supported by Model 3 from the left half of Table D1, wherein definition, rich_deserve, and the interaction term between the two all achieve statistical significance, but the first two variables have the wrong sign, as confirmed by Figure D1(c). In that figure, you can see that the definition of justice has a positive marginal effect on support for government redistribution at the lowest values of $Z_{rich_deserve}$, and this contingent, marginal effect just manages statistical significance. The interaction is further undone when looking at the right side of Table D1. None of the relevant explanatory variables achieve statistical significance in estimating Y_{prog_tax} in Models 2 and 3. In Model 1, definition, agency, and the interaction term between the two all achieve statistical significance, but the first two variables again have the wrong sign, as confirmed by Figure D1(d). As in Figure D1(c), Figure D1(d) shows X exhibiting a positive marginal influence on Y_{prog_tax} , this time at low levels of Z_{agency} . At no value of Z should X have a positive marginal effect, regardless of the specific measure of Z or Y. I have no theoretical cause to expect an individual's definition of justice as here measured to have a positive marginal influence on redistributive preferences.

TABLE D1 Interacting definition of economic justice (X) and perceived economic justice (Z) to explain support for government reducing inequality $(Y_{gov_fix_gap})$ and progressive taxes (Y_{prog_tax})

		Y _{gov_fix_gap}			Y_{prog_tax}	
Variable	Model 1	Model 2	Model 3	Model 1	Model 2	Model 3
Definition	0.852 (0.530)	0.214 (0.184)	0.546** (0.226)	0.903*** (0.241)	0.103 (0.185)	0.244 (0.403)
Agency	2.194*** (0.654)			2.145**** (0.581)		
Def. \times Agency	-2.654*** (0.716)			-2.509*** (0.641)		
Justice		2.200**** (0.675)			-0.124 (0.550)	
Def . × Justice		-2.861*** (0.731)			-0.148 (0.608)	
Rich deserve			2.514** (1.031)			0.833 (0.867)
Def. \times Rich			-3.148*** (1.123)			-0.653 (0.843)
Avg. deserve			0.055 (0.966)			-0.922 (0.821)
Def. \times Avg.			-0.194 (1.049)			-1.300 (0.958)
Poor deserve			0.189 (0.865)			0.662 (0.926)
$Def. \times Poor$			-0.544 (0.929)			0.860 (0.900)
Ideology	0.470*** (0.051)	0.376*** (0.050)	0.280*** (0.049)	0.535**** (0.046)	0.493*** (0.054)	0.432*** (0.056)
Age	0.010 (0.007)	0.011 (0.007)	0.004 (0.006)	0.007 (0.007)	0.008 (0.007)	0.005 (0.006)
Age ²	0.000 (0.000)	0.000 (0.000)	0.000 (0.000)	0.000 (0.000)	0.000 (0.000)	0.000 (0.000)
Female	0.022 (0.027)	-0.009 (0.025)	0.024 (0.022)	-0.016 (0.027)	-0.027 (0.026)	-0.009 (0.026)
Nonwhite	0.051* (0.031)	0.048* (0.027)	0.042 (0.026)	0.015 (0.030)	0.015 (0.032)	0.019 (0.030)
Married	0.013 (0.036)	-0.024 (0.027)	-0.019 (0.026)	0.050 (0.035)	0.034 (0.034)	0.027 (0.034)
Unemployed	-0.008 (0.044)	-0.018 (0.037)	-0.013 (0.035)	-0.056 (0.054)	-0.064 (0.056)	-0.070 (0.056)
Education	0.024 (0.057)	0.009 (0.051)	0.075 (0.048)	0.109** (0.054)	0.092* (0.056)	0.125** (0.057)
Income	-0.197*** (0.057)	-0.113*** (0.051)	-0.107** (0.049)	-0.103 (0.062)	-0.058 (0.058)	-0.047 (0.062)
Constant	-0.388 (0.505)	0.258 (0.217)	0.289 (0.232)	-0.557** (0.232)	0.125 (0.209)	0.156 (0.385)
N	963	963	963	963	963	963
R^2	0.5076	0.5659	0.6101	0.4313	0.4407	0.4700
Adj-R ²	0.4748	0.5370	0.5824	0.3935	0.4035	0.4322

Note: All regressions control for state fixed effects. Robust standard errors given in parentheses. All variables save age and age^2 are standardized [0, 1].

^{*} Significant at 10%; ** Significant at 5%; *** Significant at 1%.

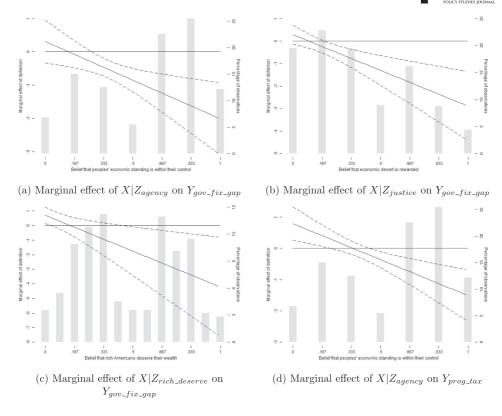


FIGURE D1 Marginal effect of desert's definition (i.e., importance of agency) on (a–c) support for government action to reduce economic inequality and (d) progressive taxation, contingent on belief that (a,d) peoples' economic standing is within their control, (b) economic desert is rewarded, and (c) rich Americans deserve their wealth

Most detrimental to the interaction piece of my theory are Figures D2(a–d), which all work against the symmetrical $Z \mid X$ interaction. In all four graphs—which are the respective counterparts to Figures D1(a–d) and show the moderating effect of desert's definition on justice assessments—the marginal effect of Z on Y is positive when X is at its lowest level. Were I to restrict the horizontal axis to only the most common definitions of desert as it relates to personal responsibility, this positive marginal effect would not be so apparent, which lends some credence to my interaction hypothesis. ³⁴ Nevertheless, I have no theoretical cause to expect an individual's assessment of existing economic justice to ever have a positive marginal influence on redistributive preferences.

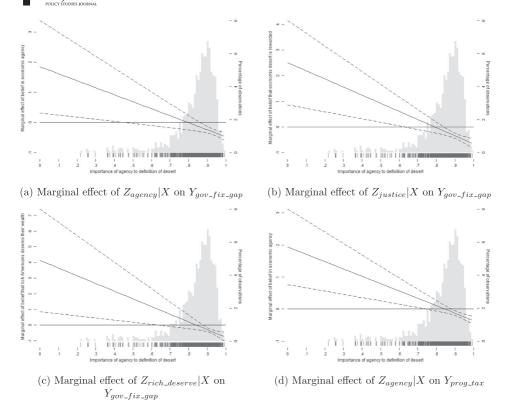


FIGURE D2 Marginal effect of belief that (a, d) peoples' economic standing is within their control, (b) economic desert is rewarded, and (c) rich Americans deserve their wealth on support for (a–c) government action to reduce economic inequality and (d) progressive taxation, contingent on desert's definition (i.e., importance of agency)