Searching for Homo Economicus: Institutional Boundaries and Americans’ Construals of and Attitudes Toward Markets *

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Abstract
Economic sociologists agree that economic rationality is constructed and that morality and economic interests often intersect. Yet we know little about how Americans organize their economic beliefs or assess the morality of markets. We distinguish position taking (how people respond to opinion items) from construal (how respondents understand and structure their attitudes within a domain). Using data from the General Social Survey, we employ Relational Class Analysis to identify three subsets of respondents whose members construe economic markets in distinct ways. Few Americans embrace or reject a market understood in strict neoclassical terms. Most construe market exchange through a religious or political lens. Compared to the full sample, subsamples display markedly more structure in associations among responses, and between attitudes and sociodemographic predictors. Support for market solutions is associated with indicators of economic advantage in each subset, but religious and political identities predict pro-market views uniquely in particular subsets. Results illustrate the value of examining population heterogeneity in opinion data; identify and explain variations in how Americans’ understand markets; and illuminate the moral dimension in economic attitudes. Self-interest drives faith in markets, but only when people construe markets in ways consistent with their religious and political faiths.

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Introduction

Most economic sociologists agree that economic markets are described, perceived and enacted through profoundly moral frames and narratives; that markets are not just allocative instruments but are also moral products; and that normative conceptions of markets are various and conflicting (Fourcade and Healy 2007). Despite the seeming consensus among sociologists that *homo economicus*—the utility-maximizing creature presupposed in most neoclassical economic theories—is more of a theoretical convenience than an empirical reality, we know very little about popular understandings of, and public opinion about, markets.

In the analyses that follow we focus on Americans’ commitment to markets as a means of distributing a wide range of goods and services and their willingness to condemn or limit the use of markets on behalf of moral or social values. We ask, first, what can we infer from survey responses about the meanings that people attach to market exchange and the ways that they organize these meanings? Second, what kinds of people are most committed to the use of markets as solutions to social dilemmas and what kinds of people are most willing to regulate, limit, or even ban markets in the interests of noneconomic values?

Our analyses are informed by two fundamental assumptions. First, we distinguish between *construals* (the meaning structures that actors draw on to understand a domain of social life) and *position-taking* (the normative positions actors take, given the construals they adopt). To put it another way, we posit that individuals may endorse similar normative positions on particular issues even if their underlying understandings of a domain differ, and that, by the same token, they may reach different normative conclusions even if in interpretative agreement. For example, Occupy Wall Street protesters and bankers may share a construal, agreeing that self-interested profit seeking and social equality are incompatible, but disagree on the normative question of how one should make tradeoffs between them. An important methodological implication of this view, which this paper pursues, is that opinion data may be characterized by population heterogeneity, such that analyses of full samples may lead to misleading conclusions.

Second, we assume that individual construals often reflect interpenetration of institutional boundaries. Sociologists commonly conceptualize social institutions (e.g., the market or the family) as differentiated domains that embody distinct, and internally coherent, standards of value and forms of perception (Friedland and Alford 1991; Boltanski and Thévenot 2006; Thornton, Ocasio, and Lounsbury 2012). But individuals crosscut these institutional
boundaries: we all have families, we all operate in market society, and many of us attend religious services or participate in politics. We do not believe that individuals seamlessly switch between construals as they move from one institutional setting to another. Rather, drawing on approaches that imply a loose coupling between settings and construals (e.g. Stark 2009), we posit that criteria of interpretation and valuation often (but not always) permeate institutional boundaries, and, that much heterogeneity in construals of the market may be explained by variation in exposure and commitment to such institutions as religion and politics.

Consistent with these expectations, we anticipate that (1) Americans’ construals of the market vary as a function of their religious identities and their espoused political ideologies; (2) conditional on construal, those who benefit from the market most are most inclined to adopt normative positions in favor of market society; and (3) the effect on position-taking of political and religious identities will vary according to construal.

After presenting theory and expectations, we test our predictions on a sample of respondents to the 1996 General Social Survey Markets Module, a uniquely appropriate and underexploited resource for the study of attitudes toward markets.1 Our analyses proceed in four stages. First, we demonstrate that analyzing the full sample, assuming no population heterogeneity in construals, yields low levels of explained variance and seemingly inconsistent conclusions. Second, we apply Relational Class Analysis (Goldberg 2011), a statistical approach designed to identify subsets of survey respondents among whom specified responses display similar patterns of association, to identify three sets of respondents, each subscribing to a different construal of the market. These subsets appear to vary in the extent to which they conceive of the economy as sharply bounded from, or interpenetrating with, the domains of religion and politics. Third, we find that within each subset social privilege and education are associated with respondents’ support for the market irrespec-

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1 The vintage of the data does not, of course, affect the generalizability of our main conclusion that the field of attitudes toward the market is structured by distinctive construals and that population heterogeneity renders analyses of the full sample subject to misleading conclusions. Although we wish that more recent data were available, we are not overly concerned about this, however, for several reasons. First, the divisions that structure our results are as salient now as they were in 1996; and after almost twenty more years of stagnating middle-class wages and a major economic crisis in 2008, anti-market sentiment, if anything, is likely to be greater. Second, if the 1996 survey is replicated, our analysis will provide an important baseline for an analysis of change. Third, we would note that unlike descriptive public opinion research, sociological scholarship addresses fundamental theoretical issues in a range of historical settings. If the value of sociological research were contingent on the timeliness of empirical findings, most papers would have a very short shelf-life indeed.
tive of the construals they adopt, whereas the effects of religious and political identities vary across construals. Finally, we show that religious identities as well as political ideologies predict which construals individuals adopt.

As we discuss in the conclusion, our findings illuminate classical sociological views of markets as moral constructs by demonstrating the diversity of ways by which Americans understand markets. We show not only that economic rationality is socially constructed, but also delineate different versions of rationality and map their socio-cultural underpinnings. Distinguishing between construal and position-taking, we establish that few Americans either hew to or oppose an extreme neoclassical understanding of the appropriate role of markets in economic life. Most adapt their understanding of the market to their religious and political convictions, in effect constructing versions of the market they can support. Our findings have implications beyond understanding how markets are socially constructed. They also demonstrate that institutional boundaries are porous, and that different individuals, by virtue of their varied institutional commitments, are the vehicles through which these boundaries are traversed.

**Economic Rationalities and Normative Assessments of Markets**

Whereas economists often view rational, self-interested behavior as, if not natural, at least a convenient starting point for analysis of economic behavior in market societies, sociologists, anthropologists, and historians tend to emphasize the constructedness of economic self-interest and the cultural specificity of markets (Fourcade and Healy 2007; Gal 2001; Greif 1994; Guiso, Sapienza, and Zingales 2006; Zelizer 2005b; Stark 2009). Even modern economics’ founder, Adam Smith, though more famous for his reference to the human “propensity to truck and barter,” recognized that markets were historically specific, vulnerable to efforts by producers to subvert them and thus reliant on a morality rooted in human sympathy (Smith 1759 [2002], 1776 [1977]). Weber famously discerned both the roots of economic rationality in religious faith but also the decoupling of economic rationality from faith as the former became institutionalized. Polanyi (1944) contended that, although humans had traded for millennia, the notion of “market society”—a society in which self-sufficient economic markets carried the main burden of satisfying human needs and in which markets extended to labor and land as well as commodities—was a radical innovation of the 18th
century that required political intervention to restore the balance between economic theory and human welfare.

As a theoretical assumption, *homo economicus* has been frequently criticized. Herbert Simon (1955) posited that human rationality is “bounded”; behavioral economists and cognitive psychologists have explored how cognitive limitations and biases constrain calculative reasoning (Thaler and Sunstein 2008; Kahneman 2011). Economic sociologists take this critique one step further: They reject the notion that humans are intrinsically predisposed toward the self-interested rationality assumed by most economists, arguing that concepts of utility are themselves products of social circumstances (Etzioni 1990; Henrich, Boyd, Bowles, Camerer, Fehr, Gintis, and McElreath 2001).

Individual utility functions diverge from the economistic ideal in at least two respects. First, people vary in the extent to which they incorporate the welfare of others into their own utility functions and in the range of others (from one’s family of procreation through one’s community through humanity at large) whose welfare they incorporate (Sen 1977; DiMaggio 1994). Second, people vary in the extent to which they treat certain transactions as inappropriate for pure market exchange, either requiring social action to disguise their economic character or (as in the case of laws forbidding prostitution or organ sales) warranting complete prohibition (Zelizer 1994).

If calculative rationality is not a hard-wired human predisposition, then where does it originate? Roy (1954) argued that business managers’ behavior was governed by collective norms or “sentiments of rationality,” the influence of which often led to irrational outcomes. Neoinstitutional theory emphasizes normative processes that define certain behaviors as desirable and “rational,” pressuring actors to conform (Meyer, Boli, Thomas, and Ramirez 1997). Recent work on “performativity” has focused specifically on economics as an institutional force, arguing that due to economists’ social and scientific prestige and access to policy decision making, economic theories serve to create the empirical realities they claim merely to describe (Callon 2007; MacKenzie and Millo 2003; for evidence, see Marwell and Ames 1981; Frank, Gilovich, and Regan 1993).

Recognizing that economic rationality is socially constructed rather than innate leads one to two distinct conclusions. The first is that economic rationality may be constructed *in different ways*. The second is that people vary in the extent to which their economic opinions and behavior comport with stylized conceptions of economic rationality. Thus in the next section we expand on the rationale for studying *construals*—i.e., for identifying subsets of
respondents with varying constructions of economic rationality, inferred from distinctive patterns of associations among indicators of attitudes toward market exchange. The section after that develops predictions about the determinants of different market construals, as well as the kinds of respondents most likely to favor market solutions to policy dilemmas and to object to prohibitions on market exchange of intimate or sacred goods and services, however they construe the economic domain.

Construal: Variation in Understandings of the Market

The concept of “construal” may be unfamiliar to sociologists outside of the fields of social psychology (Tsoudis and Smith-Lovin 2001) and sociology of science (Lynch 1991; Douglas 1995). The construct became prominent among students of cross-cultural variation in self-construal (understanding of the self and its relations to other entities) (Riemer, Shavitt, Koo, and Markus 2014) and spread widely within social and cognitive psychology. Construals vary in level of abstraction: “Situational construals” fill in unknowns in a representation of a specific event; “high-level construals” are broader and more abstract representations that can extend to entire domains (Ledgerwood and Liberman 2015). In this paper, we are interested in high-level construals of economic markets, a novel application (but see Jessop 2015 on variation in construals of economic crisis).

Extending construal theory to the study of social attitudes is a natural step: Construals are implicit understandings or explicit narratives that produce relations of implication, entailment, opposition and exclusion among beliefs in a particular domain. Construals are different from attitudes in two ways. First, they refer to patterns of association among attitudes, rather than to the attitudes themselves. Second, actors may share construals even when their attitudes differ, so long as they understand attitudes to be related in similar ways. Thus the notion of “construal” invites an intrinsically relational approach to attitudes and a distinction between representations and preferences.

In this section, we draw on three literatures to argue that it is necessary to identify heterogeneity in construals of the market before trying to explain the positions that people

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2We prefer the term “construal” which is often used by psychologists (Schwarz 2009; Markus and Kitayama 1991) to refer to understandings of entities (the self, others, social situations) with reference to which individuals act, over alternatives such as “ideology,” which implies a tighter, more elaborate and more discursively available network of beliefs, or “institutional logic,” which is a property of contexts or domains rather than of persons.
take on the market’s proper role and regulation. Reasons to expect such heterogeneity come from research in economic sociology, work on institutional logics, and public opinion research.

**Economic Sociology**

The expectation of heterogeneity rests on the notion that there is no natural affinity between particular ideas about markets, exchange behavior and economic policy. Such ideas go together only in so far as people understand and accept a constructed narrative that links them. Neoclassical thought is strongly institutionalized in much of the world, but there are also distinctive national variations, and many economists deviate from neoclassical orthodoxy (Fourcade 2006, 2009).³

Economic sociologists have viewed understandings of and attitudes toward markets as deeply suffused by underlying moral sentiments and cosmologies (Fourcade and Healy 2007; Almeling 2007; Anteby 2010). Markets are moralizing arenas because they involve the categorization, naturalization and assignment of value to different behaviors and people. As Weber noted in *Economy and Society* (1922 [1978]), markets invariably challenge distinctions between the sacred and the profane. Interpersonal intimacy, bodily products and the natural environment have all, under a variety of historical circumstances and in the eyes of different people, been seen as too sacred to debase through commodification (Healy 2006; Zelizer 2005b; Fourcade 2011). Market construals differ from one another in the boundaries they prescribe, and, by extension, the different visions of social order they embody.

Market construals vary historically. Although the rise of the market is neither inexorable (Zelizer 1988) nor uncontested (Turco 2012), the scope of goods subject to market exchange has expanded, encompassing land and labor (Polanyi 1944), prestige goods once monopolized by certain status groups (Weber 1922 [1978], 934-39), and various forms of risk (Zelizer 1983; Fligstein and Goldstein 2010). More recently, Fligstein (1993) charts fundamental shifts in economists and executives’ understandings of the relationship between markets and

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³Based on a survey of members of the American Economic Association, Klein and Stern (2007) conclude that not even one in ten economists supports free-market principles, defined as opposition to government regulation of both markets and private behavior—a definition of “free-market principles” that appears to restrict eligibility to economists who are both neoclassical and libertarian. Thus even economists divide over alternative construals of markets that entail different interpretations of the regulation of individual and corporate behavior that imposes negative externalities on third parties.
firms; and McCall (2013) documents over-time change in patterns of belief about economic inequality and policies to ameliorate it.

As market construals evolve over time, so they vary over space. Cross-national differences in the use of markets to distribute blood constitute a famous example (Titmuss 1971; Healy 2006). Similarly, laws regulating human organ sales (and their efficacy in curbing black markets) vary cross-nationally (Schepers-Hughes 2000). Fourcade (2009) demonstrates sharp differences in premises about economic life between economists in the U.S., U.K. and France. Similar differences exist in understandings of the proper role of management (Boltanski and Thévenot 2006), in connections among firms in a market (Granovetter 1995), and in interactions between firms and the state (Hamilton and Biggart 1988).

Even within one society, actors in different structural locations may understand markets in different ways. As Bourdieu notes, to engage in an economic transaction is not necessarily to perceive oneself as an actor in an abstract market. Such a perception requires that one has acquired the proper “dispositions and beliefs ... through early and protracted experience of [the market’s] regularities and necessities” (Bourdieu 2005, p. 8). “Below a certain threshold” of economic security and education, writes Bourdieu (2000, p. 27), “rational dispositions cannot be constituted.” If the economic habitus shapes practices, so it may affect beliefs about the appropriate domain of economic markets, proper behavior in economic exchange, and views of economic policies.

Institutional Logics

Classical sociology (Durkheim 1997 [1893]; Parsons 1966: 24-25) viewed institutional differentiation as an inexorable feature of human social evolution. We are concerned here not with institutional differentiation per se, but with conceptions of the market that institutions render plausible. The classical economic notion of the market as an institution through which the pursuit of self-interest enhances social welfare implied a radical decoupling of the economic from the religious and political domains. Theories of institutional logics (Bell 1976; Friedland and Alford 1991; Boltanski and Thévenot 2006; Thornton et al. 2012) posit that different institutional settings—the economy, the polity, religion, the family—entail contrasting standards of value and forms of perception. We draw especially on approaches like those of Friedland and Alford (1991) and Stark (2009) that call attention to struggles over the applicability of particular institutional logics to particular areas of social life. In so
doing, we view the relationship among institutional domains as an empirical question and
a potential source of conflict and social change.

How might institutional logics be aligned with individuals’ economic understandings of
and attitudes toward markets? Thornton et al. (2012, p. 2) define institutional logic as “the
socially constructed, historical patterns of cultural symbols and material practices, including
assumptions, values and beliefs, by which individuals and organizations provide meaning
to their daily activity, organize time and space and reproduce their lives and experiences.”
In other words, institutional logics are properties of institutions rather than individuals,
and, as such, are linked to particular settings.4 But individuals may segregate domains
of activity or, alternately, annex subordinate domains to those with which they are most
consistently engaged. Highly religious business leaders, for example, vary in the degree to
which they segregate sharply their executive roles from their religious faiths (Lindsay 2014).
And experimental work demonstrates that framing situations as more or less market-like
can elicit or inhibit selfish behavior (Fershtman, Gneezy, and List 2012).

The notion of institutional logic bears a family resemblance to Bourdieu’s notion of
the “economic habitus.” But whereas the latter refers to durable individual differences,
institutional logics are inscribed in situations in which particular institutional orders are
especially salient and strongly represented, with persons shifting perspectives as they move
from one to another (Mische and White 1998). Yet institutions also equip actors with
standardized cultural understandings, enabling them to act and speak appropriately (and to
do so sincerely) in different institutional settings (Swidler 2001). The two concepts, “habitus”
and “logics,” intersect in the recognition that prolonged exposure to an institutional setting
makes the relevant institutional logic (and representations, ideas, and symbols associated
with it) more salient and more chronically activated, causing it to generalize across domains.
Thus participation in market economies affects many psychological dispositions (Lane 1991);
middle-class children adjust more readily to schools than children from working-class families
(Bernstein 1975); and experimental studies find wealthy people better at utility maximizing
(in a narrowly economic sense) than people with less exposure to markets (Choi, Kariv,
Müller, and Silverman 2014). The inverse should also be true: those who are consistently
exposed and emotionally committed to institutional domains other than the market should

4To use Parsons’ (1959) classic example, public schools understand “the person” and organize behavior
in very different ways than do families, and the sooner children figure this out, the better off they are.
Similarly, one might expect many Christians or Muslims to have more expansive utility functions while at
church or mosque than when behind the desk at a corporate job.
be more prone to reconfiguring their understandings of the market accordingly.

**Public Opinion Research**

The recognition that different respondents organize opinion domains in distinctive ways, and that variation in constructions may be orthogonal to variation in attitudes, has important implications for analyzing data from opinion surveys. Two implicit assumptions, *response identity* and *item fungibility*, guide most research that uses survey-based attitude data. By *identity* we mean the assumption that a given response means the same thing to each respondent who chooses it. This assumption is implicit in the practice of using survey items to compare opinions of different population samples or subsamples. When items are combined into scales (e.g., to examine such constructs as tolerance or economic conservatism) item responses are further treated as *fungible* in the following sense: Respondents who respond affirmatively to, e.g., four items on an eight-item scale are believed to hold similar views (at the midpoint of the scale) even if the affirmative responses are to different items. These two assumptions—*identity of meaning* and *fungibility within scales*—characterize most attitude research.

But what if a survey item means different things to different respondents? Take, for example, responses to a hypothetical item tapping support for lenient or restrictive immigration policies. Moral evaluations of immigrants may drive the views of some respondents. The responses of others may reflect beliefs about economic effects of immigration. Because responses to this item are embedded in different networks of beliefs and representations for different respondents, neither a single scaling strategy nor one causal model will suffice (Ceobanu and Escandell 2010).

In a classic paper, Converse (1964) argued that responses to individual survey items are embedded in broader systems of meaning by which they are constrained. But Converse viewed such constraining structures as largely restricted to elites and people with lots of schooling. Indeed, educational attainment is typically associated with attitude constraint (i.e., with the extent to which beliefs are coherently and consistently organized) (Zaller 1992). But the fact that the responses of educated respondents exhibit more constraint than those of less educated respondents does not necessarily mean that the latter’s views are simply noisy versions of the former’s. As Meyer (1977) and Collins (1979) have noted, higher education is a powerful source of identity and socialization; thus one would expect it
to structure understandings of many social domains. “Less education,” by contrast, is neither a master identity nor a form of socialization: The responses of less educated respondents are likely to be structured by a range of other identities and socializing experiences, the opinion-constraining effects of which will be invisible if respondents are grouped on the basis of their level of schooling (see Kinder 2006, on “group-centrism”). Thus African-American respondents with less schooling than white respondents nonetheless exhibit more constraint in racial attitudes (Carmines and Stimson 1982), and religiosity generates higher levels of attitude constraint among Evangelical Christians (Jelen 1990).

In a study that, like this one, employs Relational Class Analysis, Baldassarri and Goldberg (2014) identified alternative coherent patterns in Americans’ views on a wide range of policy issues that were only partially structured by political attentiveness or education. Using different methods, Achterberg and Houtman (2009) reached similar conclusions for the Netherlands. In other words, evidence suggests that attitudes in a number of opinion domains are organized in different ways by different sets of respondents, with different identities serving as salient but nonexclusive axes of organization in different domains. We anticipate that this will be true of the domains we study here as well.

The Social Foundations of Construals and Position Taking

If indeed subsets of Americans understand the market in different ways, along what social axes might these construals diverge? And how might these axes of differentiation vary from the identities and experiences that lead respondents to exhibit more or less favorable attitudes towards markets independent of the construal they embrace? To be sure, construal and position taking are closely connected. But in this section we separate them analytically, discussing influences on construal first and then turning to factors likely to influence position taking. We expect construals to be most strongly influenced by religious faith and political commitments. We expect position-taking to be driven by the principle that those benefiting most from the market economy will most enthusiastically endorse it (with the impact of social and political identities contingent upon construal).

Construal

What factors may shape these different construals? We look to institutional identities that (a) entail orientations with implications at odds with those of the market and (b) exhibit
relatively high levels of ideological structure due to the prominence of specialists in the
codification and alignment of beliefs.

By these criteria, two dimensions of social identity should be especially salient.\footnote{Other institutions fail on one or both of the criteria. The institutional logic of kinship (Friedland and Alford 1991) diverges from economic values, but is not ideologically structured. The field of art has ideological specialists, but with less pressure toward consistency and therefore a less clear opposition to economic modes of valuation.} The first is religion. Previous studies have reported that Protestants, especially in congregations
influenced by the prosperity gospel, which associates religious faith and freedom with economic
individualism and laissez-faire economics, ordinarily support free-market capitalism
(Wuthnow 1988; Steensland and Schrank 2011). By contrast, more communitarian
traditions and less anti-statist faiths, such as Catholics, Jews, and some Mainline Protestants,
are often more critical of unbridled capitalism (Barker and Carman 2000). Even among
Evangelicals, support for free-market views is not unqualified. Religious leaders of many
denominations have vigorously repudiated market transactions that challenge traditional
visions of the sanctity of life, body and sexual purity (Davis and Robinson 1996; Greely and
Hout 2006). The combination of enthusiasm for laissez-faire capitalism with a willingness
to restrict the sphere of market transactions that threaten sacred boundaries leads us to
expect that religiously observant respondents, while differing on particular issues, will con-
strue economic rationality in distinctive ways. At the same time, even Evangelicals vary
in the extent to which they integrate their religious and professional beliefs and networks
(Lindsay 2014), so we anticipate not only that religious identities will shape construals but
also that the impact of faith on economic attitudes may vary depending on the degree of
cognitive segregation between domains.

Second, we expect political identity to shape the organization of economic attitudes.
While no mainstream U.S. political movement questions the centrality of markets to the
economic system, conservatives and liberals vary in their views of markets as liberating
or coercive, their definitions of justice, and the relative weight they place on the values
of liberty and equality. The most pronounced ideological difference on economic issues
relates to government’s role in regulating markets and implementing redistributive policies.
U.S. political conservatives historically have rejected government intervention and taxation
both on moral and practical grounds (Friedman 2002; Burns 2009). Nonetheless many
pro-market economists support government regulation to correct market failures and make
markets more efficient (Fourcade and Healy 2007; Weisbrod 1964). In particular, liberal
economists ordinarily support measures like truth-in-lending laws that address information asymmetries, as well as regulations to protect the environment (degradation of which is a negative externality of much economic activity) (Shipan and Lowry 2001). Thus we expect political identity to shape respondents’ economic construals, both by influencing the economic theories they bring to bear and by eliding boundaries between the political and economic domains. As with religion, we anticipate that political identities will influence construals directly and will also interact with construals to affect attitudes toward the market.

**Position Taking**

People who construe the market similarly may nonetheless evaluate markets vary differently. Some of this variation will derive from factors peculiar to each construal. More generally, however, we expect that variation will be predicted across every construal by access to market rewards.

Factors that enhance one’s ability to reap the market’s rewards will engender support for markets and trust in market institutions. Four such factors are especially prominent. The first is income, both an indicator of prior success (or inherited wealth) and a resource that increases access to market rewards (Nau 2013). Much research indicates that the wealthy tend to adopt beliefs that justify their privilege; for example, higher levels of economic inequality increase the tendency of the well-to-do to believe in meritocracy (Newman, Johnston, and Lown 2015). Thus we expect that higher incomes will be associated with more positive views of market exchange.

The second factor, race, affects access to jobs, wages, health, decent housing, and treatment by the criminal-justice system (Pager and Shepherd 2008). Although few studies report racial effects on the kinds of attitudes we consider here, previous research demonstrates that African-Americans, upon whom the cost of racial disadvantage falls most heavily, are more likely to attribute poverty to structural factors and less likely than whites (other things equal) to identify as middle class (Kleugel and Smith 1981). It follows that African-Americans will be less likely to view markets as impersonal, fair and benign and that they will therefore hold less favorable views of markets than members of other groups.

Gender also reduces access to market rewards (Ridgeway 2011). Historically, women were systematically denied access to benefits afforded by market exchange. The Victorian
ideology of “separate spheres” (Davies and Frink 2010) explicitly portrayed (middle-class) women as guardians of the home, viewed as a curated space protected from the values of the market. Even as barriers to women’s labor-market participation gradually fell in postwar Western societies, women remained disadvantaged both materially and symbolically within the labor market (Petersen and Saporta 2004; Brines 1994). Research suggests that, despite real transformations in women’s labor-market position and entrepreneurial activity (Fernandez 2013), gendered expectations about market behaviors resist change and femininity continues to be constructed as antithetical to the calculative rationality constitutive of *homo economicus* (Ridgeway 2011). Moreover, the commodification of the human body—from advertising to prostitution and surrogacy—disproportionately targets women. Women, in other words, are both disadvantaged by the market and culturally produced as incongruent with it. We therefore expect women to express less favorable attitudes toward markets than men.

A fourth factor is schooling, which is strongly associated with increased earnings and other measures of labor-market success (Hout 2012). Moreover, exposure to formal education socializes students into norms of rationality and individualism that underpin pro-market thought (Meyer et al. 1997; Meyer and Bromley 2013).

These expectations are consistent with results of empirical research. Sociological studies of popular orientations toward economic fairness and inequality report that Americans’ faith in their economic system is strengthened by formal schooling and economic success (Hochschild 1981; Kleugel and Smith 1981; McClosky and Zaller 1984; Osberg and Smeeding 2006). A study comparing professional economists to laypeople found that formal education, being male, and expecting income growth all increased the extent to which lay views aligned with those of professionals (Caplan 2001).

### Data and Analytic Strategy

Data are from the 1996 Markets Module of the General Social Survey, a biennial household sample survey fielded on a regular basis since the late 1960s by the University of Chicago’s National Opinion Research Center. The GSS consists of a set of core items asked regularly of all respondents, and changing modules devoted to particular areas of social life. The Markets Module included items on topics of interest to economic sociologists, including several tapping normative attitudes towards markets.
Measures of Economic Orientation

We focus on seven items that relate to normative views of economic exchange; these items are summarized in Table 1. We scale these items such that a higher value corresponds to a neoclassically economistic perspective. The first two items tap normative orientations toward profit making. The first probes respondents’ evaluations of profit maximizing, asking whether it is acceptable for a manufacturer to keep prices constant even when manufacturing costs have declined. The second examines whether respondents perceive profit making as inherently in tension with social welfare. Together they speak to a core principle of neoclassical thought, derived from Adam Smith’s famous dictum that the pursuit of self-interest is not only unobjectionable but can also contribute to the common good. We interpret favorable attitudes toward both items as manifestations of economistic views.

The following three items concern the appropriate role of markets for the allocation of intimate goods and services: the sale, respectively, of organs, surrogate motherhood and sex. In each case, we associate approval of the use of markets with an economistic viewpoint, and opposition with a less economistic way of viewing the world. Each of these three items deals with the appropriateness of trading an intimate good on the market, and all three forms of exchange have elicited strong objections on ethical grounds. There are nonetheless important differences among them. First, the three are regarded differently in the eyes of the law. Whereas organ trade and prostitution are illegal in the U.S. (the latter except in parts of Nevada), surrogacy is not. Cross-nationally, prostitution (as distinct from procuring or brothel proprietorship) is legal in much of the world (ProCon.org 2015), whereas sale of organs is illegal in almost every country but Iran, where it is highly regulated (Hippen 2008). Moreover, objections to these forms of trade stem from a sense of violation of the sacredness of different spheres: whereas with organ trade and surrogacy it is the sanctity of the human body that is arguably being debased, prostitution is held to contaminate the

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6The GSS Markets Module included ninety-four items. Fifty-seven of these items elicited information about actual economic transactions in which respondents had participated, and were thus irrelevant for our purposes. Twelve more items asked hypothetical questions about transactions, focusing on respondents’ orientations toward transactions within their social or family networks; two asked about participation in garage sales; three about work in a family business; and four about the division of economic labor and decision making within marriages. These, too, were not directly relevant. Of sixteen normative items, three items about inequality contained no nexus to markets; the implications of two items for attitudes toward the market were difficult to interpret; and four questions generated variables with more than two (non-ordered) categories, which Relational Class Analysis cannot use. The seven remaining items are the ones included in these analyses.
Table 1: Economic attitude variables

<table>
<thead>
<tr>
<th>Label</th>
<th>Economistic response</th>
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<tbody>
<tr>
<td><strong>Profit Making</strong></td>
<td></td>
</tr>
<tr>
<td>Profit</td>
<td>It is acceptable that a small table manufacturer continues to charge the same price even after production costs decrease by 10%.</td>
</tr>
<tr>
<td>Trickle-down</td>
<td>Allowing business to make good profits is the best way to improve everyone’s standard of living.</td>
</tr>
<tr>
<td><strong>Intimate Goods &amp; Services</strong></td>
<td></td>
</tr>
<tr>
<td>Organ</td>
<td>People with two healthy kidneys should be permitted to sell a kidney to a hospital or organ center to use for transplants.</td>
</tr>
<tr>
<td>Surrogacy</td>
<td>The practice of paid child surrogacy should be permitted under the law.</td>
</tr>
<tr>
<td>Prostitution</td>
<td>There is nothing wrong with exchanging money for sex.</td>
</tr>
<tr>
<td><strong>Regulation</strong></td>
<td></td>
</tr>
<tr>
<td>Environment</td>
<td>Environments supporting endangered species should not be protected when economic benefits can be gained.</td>
</tr>
<tr>
<td>Consumer</td>
<td>It is not the responsibility of government to require businesses to provide customers with the information they need to make informed choices.</td>
</tr>
</tbody>
</table>

purity of love and sexual relationships. Finally, whereas the organ trade is gender blind, women are especially vulnerable to harms resulting from surrogacy and prostitution.

A sixth item examines the sanctity of a non-human realm: the natural environment. Respondents are asked whether endangered species should be protected irrespective of economic gains. Here too we interpret the acceptance of the subordination of nature to the market as consistent with an economistic perspective. Because the question poses an opposition between endangered species and economic development, it specifically taps willingness to protect nature from the market.

The final item deals with another form of regulation, asking respondents if government should require businesses to provide consumers with information. As we note earlier, support for government regulation is not inherently antithetical to pro-market logic, and indeed is promoted from within the economics profession. Culturally and politically, however, neoclassical orthodoxy has been linked closely to opposition to most forms of government regulation. We therefore treat disagreement with government regulation as an expression of economism.
Variables

We model variability in economic orientations as a function of several sociodemographic variables (for a detailed description, see Appendix A). Religion is measured on two dimensions. We use Steensland et al’s (2000) classification to measure religious identity. A second dimension is religious devotion, irrespective of religious identity, measured as the frequency of attending religious services. Gender is straightforwardly measured using a dummy variable (where 1=female). Political orientation is measured using two standard scales of self-identification, one which corresponds to ideological identity (ranging from strong liberal to strong conservative), the other to partisan identity (ranging from strong Democrat to strong Republican).

Family income is self-reported (and log-transformed in the following analyses). We also use occupation and industry codes (based on Census Bureau’s respective two-digit classification systems) to distinguish between those in white-collar jobs (managers and professionals), and those in blue-collar, agricultural and non-skilled service jobs. We measure education as years of formal schooling.

Additional variables include age in years, which we anticipate may be related to views of the market due both to cohort and aging effects. We measure race with a dichotomous variable, where 1=African-American. We use region and community size (log transformed) to control for possible effects of regional subcultures and rural residence; and also include a dummy variable that identifies respondents born outside the United States, who experienced distinctive forms of socialization. Finally, we examine marital status and number of children, as previous literature indicates that both experiences can impact one’s economic attitudes (e.g. Dahl, Dezso, and Ross 2012).

Analytical Strategy

Our analytic strategy is quadrapartite. First, we proceed conventionally as if our sample were homogeneous with respect to market construals, assuming that items mean the same thing to all respondents and are fungible within scales. We construct a scale of views consistent with a conservative version of neoclassical economics and examine the predictors

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7Initial analyses suggest that using all seven categories suggested by Steensland et al. (2000) over-fits our models. We collapse Mainline, Non-Denominational and Black Protestants into one group (which serve as the reference category in the following models). We do the same for Jewish and Other religion.
of adherence to that scale and agreement with its component items. Predictive models perform poorly, suggesting a lack of structure in the data and in respondents’ economic beliefs.

Second, we examine heterogeneity in construals within the full sample. To do this, we employ Relational Class Analysis (Goldberg 2011), a relatively new approach to identifying sets of respondents who organize opinion domains in similar ways. We identify three subsets of respondents with distinctive patterns of association among attitude items and construct scales based on the specific form of pro-market attitudes found in each subset. We examine the properties of each subset and make inferences about the construals underlying observed patterns of association.

Third, we focus upon the socio-demographic correlates of position-taking, examining the predictors of espousing pro-market attitudes, conditional on construal. These models differ from one another and exhibit markedly superior predictive power compared to models assuming homogeneity within the entire sample. This is the case even though the sample was partitioned solely on the basis of responses to attitude items, without using any information about respondent sociodemographic attributes, religious beliefs, or political identities.

Finally, we look among people who endorse positive or negative views (respectively) of the market, and ask, among each group, what kinds of peoples adhere to what construals. Americans, we conclude, tend to craft versions of the market consistent with their religious faith and political values.

**Stage 1: Searching for Homo Economicus in the Full Sample**

We begin by constructing a stylized homo economicus—a pattern of responses consistent with the theoretical position and normative intuitions of neoclassical economics—and ask, first, whether such views hang together empirically; and, second, among what kinds of people support for the neoclassical view is strongest. (For items and rationales see Table 1, supra, and subsequent text.) To resemble homo economicus, it is not enough that a respondent hold a coherent neoclassical perspective on economic affairs. In addition, he or she must sharply decouple the domain of economic belief from values (e.g., sacredness or justice) associated with other domains.

Because the homo economicus index is based on responses to all seven constituent items,
we impute “don’t know” responses as midpoints on the variable scale. Respondents who refused to answer one or more items or who answered “don’t know” to three or more questions were removed from the sample (See Appendix A for details).

We recognize that economic theory, deftly employed, can justify deviation from what we describe as economistic positions: indeed we call attention to several instances in which this may be the case for the items used here. Moreover, we are aware that even among professional economists trained in the neoclassical creed, opinion on particular policy issues varies as a function both of interpretation of economic principles and of adherence to competing ethical principles. Nonetheless, we contend that economism exists both as an observable discourse and a set of practices (Jelveh, Kogut, and Naidu 2014) and, accordingly, view our stylized homo economicus as a cultural representation and not as an empirical description of either the beliefs of most professional economists or of inescapable implications of neoclassical economic theory.

As Figure 1 illustrates, the homo economicus scale appears to be normally distributed across the population, with only a handful of respondents exhibiting either strong support for or rejection of economistic views. Examining the correlations among the items that comprise the scale, however, belies the notion that this distribution is driven by individual differences in commitment to a coherent economistic worldview. The scale alpha is a mere 0.325. Of twenty-one correlations, fewer than half (eight) are significantly positive in the predicted direction, and one is unexpectedly negative (people who support the use of markets for surrogacy also support regulating markets on behalf of environmental protection). Even the significantly positive correlations are mostly weak, with only three exceeding 0.1.

Table 2 reports estimates of a multivariate model wherein the homo economicus scale is regressed on a set of sociodemographic variables. Of the variables that we earlier posited are related to access to market rewards only one, gender, is significant. Women, as expected, are less likely to endorse economistic views. Moreover, consistent with our intuitions, Evangelicals are less economistic than mainline Protestants, while Republicans are more likely to espouse economism. Additional analyses of individual items comprising the scale (available upon request) suggest that the items are not fungible (e.g., women object to prostitution,

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8 Each response is normalized on a scale with mean 0 and standard deviation 1, and the responses are averaged.

9 These three are correlations between opposition to consumer regulation and anti-environmentalism (0.375), between support for paid surrogacy and support for organ markets (0.188), and between opposition to consumer regulation and tolerance for prostitution (0.158).
Figure 1: Full sample statistics. On the left, the distribution of the Homo Economicus scale. On the right, correlations between the seven attitudinal variables comprising the scale. Significant correlations are represented by a plus/minus sign, indicating correlation direction. Shades correspond to correlation strength.

whereas African-Americans oppose surrogacy). Moreover neither education nor income nor occupation explains variance in the homo economicus scale. \(^{10}\) Contrary to the intuitions that those advantaged in the marketplace by wealth or schooling have greater faith in markets, or to the hypothesis that formal education inculcates the marketplace values of rationality and individualism, neither schooling nor economic success appear to be strongly related to an overall economic worldview. In fact, of the remaining variables only parenthood is significantly associated with an opposition to economism. The variance explained by this model is moderate (10.1%), and effects are modest. Being a woman, for example, decreases one’s propensity to support economistic views only by 0.15 of a standard deviation. Overall, these results provide only modest guidance in our search for the social coordinates of \textit{homo economicus}. The trail appears to lead toward childless, Republican men, but the varying and in some cases contradictory results for individual items suggest that that we have been pursuing a chimera.

Shall we conclude that \textit{homo economicus} exists only in economics textbooks and in the minds of social scientists who have read them? Not so fast. The weak effects reported above reflect not a lack of structure but rather \textit{structural heterogeneity} underlying Americans’ economic orientations. Only by identifying subsets of respondents who understand the market in different ways can we detect the underlying structure. This we do in the next

\(^{10}\) Analyses with more detailed occupational categories do not increase the variance explained.
Table 2: Multivariate model of the Homo Economicus scale

<table>
<thead>
<tr>
<th></th>
<th>Homo Economicus</th>
</tr>
</thead>
<tbody>
<tr>
<td>Education</td>
<td>0.002 (0.31)</td>
</tr>
<tr>
<td>log Income</td>
<td>0.020 (1.20)</td>
</tr>
<tr>
<td>White-Collar</td>
<td>0.052 (1.75)</td>
</tr>
<tr>
<td>Religious Attendance</td>
<td>-0.006 (-1.20)</td>
</tr>
<tr>
<td>Catholic</td>
<td>-0.063 (-1.79)</td>
</tr>
<tr>
<td>Evangelical</td>
<td>-0.110** (-3.08)</td>
</tr>
<tr>
<td>Non-Christian</td>
<td>-0.013 (-0.27)</td>
</tr>
<tr>
<td>Female</td>
<td>-0.150*** (-5.47)</td>
</tr>
<tr>
<td>Black</td>
<td>-0.045 (-0.97)</td>
</tr>
<tr>
<td>Age</td>
<td>-0.001 (-1.23)</td>
</tr>
<tr>
<td>Conservatism</td>
<td>-0.004 (-0.42)</td>
</tr>
<tr>
<td>Republican Partisanship</td>
<td>0.033*** (4.50)</td>
</tr>
<tr>
<td>Log Community Size</td>
<td>-0.003 (-0.40)</td>
</tr>
<tr>
<td>West</td>
<td>0.064 (1.71)</td>
</tr>
<tr>
<td>South</td>
<td>0.035 (1.03)</td>
</tr>
<tr>
<td>North East</td>
<td>0.014 (0.35)</td>
</tr>
<tr>
<td>Married</td>
<td>0.002 (0.06)</td>
</tr>
<tr>
<td>No. of Children</td>
<td>-0.020* (-2.32)</td>
</tr>
<tr>
<td>Immigrant</td>
<td>-0.088 (-1.72)</td>
</tr>
<tr>
<td>Constant</td>
<td>0.043 (0.24)</td>
</tr>
</tbody>
</table>

\[ t \text{ statistics in parentheses} \]

\* \( p < 0.05 \), \*\* \( p < 0.01 \), \*\*\* \( p < 0.001 \)

Stage 2: Construal (Part I) – Identifying Distinctive Understandings of the Market

We have seen that Americans, taken as a whole, do not construct the field of normative economic opinion along lines defined by neoclassical orthodoxy (or by opposition to such
orthodoxy). Rather than interpret these initial results as evidence of a lack of structure, we ask instead how Americans do construct this field of opinion, and to what extent subsets of respondents construct the field of affinities and oppositions among economic attitudes in different ways.

Looking for different economic construals therefore requires an analytical approach that finds subsets of respondents who exhibit distinctive patterns of association among their opinions, without necessarily holding the same opinions. In effect, we are seeking groups of respondents who, while disagreeing on substance, agree on the terms of debate. To that end, we use Relational Class Analysis (RCA) (Goldberg 2011).

RCA employs a network approach by generating a proximity matrix between respondents wherein each cell value represents the extent to which the row and column respondents exhibit similar patterns of difference between pairs of item responses. RCA then partitions the network into subsets (Newman 2006), each of which corresponds to a distinctive construction of the opinion domain. Applied to our data, each such subset embodies a different construal of the market economy.

RCA is particularly appropriate for our purposes for several reasons. First, it compares respondents on the basis of the relationships among their attitudes, rather than on the basis of the attitudes themselves. Because people might understand the meaning of the market in similar ways yet hold opposing normative views, it is imperative that we measure how opinions relate to one another, rather than examining them independently. RCA does this by first taking the standardized difference between each pair of attitudes for each respondent and then, for each pair of respondents, producing a distance measure based on aggregating the differences between them on the inter-item differences.

Second, unlike confirmatory factor analysis, RCA is inductive, freeing the analyst from dependence on received expectations about the ways in which beliefs cohere into patterns or about the sociodemographic attributes that divide the population into different “thought communities” (Zerubavel 1997). Third, also unlike factor analysis, RCA identifies distinctive subgroups of people, rather than variables. Within each subgroup, variables relate to one another in different ways.

11 Although less than four years old, RCA has already been used to study musical taste (Goldberg 2011), corporate public relations strategies (Miranda and Kim 2012), political attitudes in the U.S. (Baldassarri and Goldberg 2014), European Union (Fazekas 2012), and China (Wu 2014), and asset managers’ views of investment strategy and risk (Rook 2014).
A useful way to understand the analytical purchase that RCA affords is to compare it to other latent variable models. Some such models reduce item dimensionality: Factor analysis reduces a set of variables onto a smaller set of factors. Other such models reduce respondent dimensionality by placing respondents in different groups. Latent class models divide sets of observations into subgroups such that variables are uncorrelated within each subgroup. RCA, by contrast, simultaneously reduces inter-item and inter-respondent variability. Like latent class analysis (LCA), it divides a population into subgroups, and like factor analysis, each subgroup is identified by a reduction of the set of variables onto a smaller number of factors. Note, however, that because the input to RCA is a distance matrix based on the difference of differences matrix, RCA solutions cannot be recovered by LCA or vice versa.\footnote{For a fuller explanation of the difference between Relational Class Analysis and Latent Class Analysis, including a comparison of results from parallel analyses, see Goldberg 2011, Appendix C (online at \url{http://www.jstor.org/stable/full/10.1086/657976#apc}).}

RCA is distinctive in enabling us to identify sets of actors who understand a domain in similar ways without necessarily agreeing on the normative implications of such an understanding. People may construe the market similarly, but still take opposing normative positions on such matters as profit-seeking, paid surrogacy, or trickle-down economics. For example, in her 2007 book *The Shock Doctrine*, author/activist Naomi Klein vehemently repudiates Milton Friedman and the Chicago School of economics. Although Friedman and Klein have starkly opposing views of the morality of free-market capitalism, they share a construal of markets as arenas of unfettered exchange motivated by self-interest. Whereas Friedman (Friedman and Friedman 1980) sees unregulated markets as liberating, Klein interprets them as inherently destructive.

We used RCA to divide the sample into subsets (relational classes) of respondents.\footnote{We use the term “class” in talking about these respondent subsets in the same sense as users of Latent Class Analysis: as a categories of persons identified as sharing a particular pattern of responses to survey items, with no intended analogy to “social class” in either the Marxian or Weberian sense. We do not assume that persons in a relational class share a common identity. Although in particular instances (where construals of a domain are structured by such institutions as political parties or faith communities) such self-awareness is possible, we suspect such cases are rare. In particular, our use of the phrase “relational class analysis” is unrelated to that of Wright (1997), who employs it to contrast his approach to “gradational class analysis.”} We then conducted principal component analyses (details available upon request) separately for each class, identifying a single dominant factor (by the eigenvalue criterion) in each case. This dominant component represented the underlying axis of attitudinal variability for each set of respondents. Based on these results, we created a scale for each class by...
summing the seven items (each standardized to a mean of 0 and a standard deviation of 1 and weighted by factor loadings). As we shall demonstrate, each such scale measures respondents’ commitment to the economic marketplace as represented by the dominant construal of economic rationality for that respondent class.

Using RCA, we find that economic opinion is structured by three different construals of the market and of economic rationality. We employed a new method to validate the solution, using Monte Carlo simulation and the gap statistic to evaluate goodness of fit (see Appendix B for details). The three classes comprise, respectively, 20.5%, 39.1% and 40.5% of the sample. Figure 2 illustrates the correlations between economic attitudes in these three groups. As is clearly visible, these correlations are, on average, substantially stronger and more statistically significant than they are in the sample as a whole (with the median absolute value correlations of 0.324, 0.128, and 0.213, respectively, as opposed to 0.066 for the full sample). Moreover, the structure of associations between economic attitudes in each class is unique.

Figure 2: Attitude correlations in each of the groups produced by RCA. Significant correlations are represented by a plus/minus sign, indicating correlation direction. Shades correspond to correlation strength.

In the first group, five core variables are correlated with one another, with organ trading only associated with one of these and trickle-down correlated with none. Those who express economistic opinions on any one of the five core attitudes (acceptance of profiteering;14

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14We use the term “profiteering” (shortening it to “profit” in figures) because we need a mnemonic shorthand to refer to this item. But we do so without the negative connotations usually associated with this term. Indeed, we were surprised that so many respondents objected to what might be considered conventional practice under weak price competition.
acceptance of paid surrogacy and prostitution; and opposition to consumer or environmental regulation) tend to exhibit economistic views on the others, and those who express anti-market views tend to do so consistently across all core attitudes. We refer to this class, which is structured most similarly to the stylized *homo economicus* scale employed to analyze the full sample, as the *economistic* group.\(^{15}\)

The two other groups depart from the axial principles we identified with *homo economicus*. The second class’s construal revolves around the one hand, views of commodifying bodily goods (organs and childbearing), and, on the other, attitudes toward consumer regulation, environmental regulation and profiteering. Those in this class who espouse economistic views on the latter would place bodily goods outside the purview of the market, whereas those willing to use markets to exchange such goods tend also to support regulation and object to profiteering.\(^{16}\) Following Zelizer’s (2005a) characterization of the view that sacred spaces are founded on social solidarity and sentiment and therefore stand to be corrupted by market exchange, we refer to this construal as *hostile worlds*. We anticipate that, for this set of respondents the religious domain penetrates the economic and constrains the full expression of economistic values.

The attitudes of the third and largest class of respondents appear to be structured by an opposition between pro-market orientations and restrictive approaches to consumer and environment regulation. Members of this group who support the commodification of bodily goods and accept profiteering also believe that government should enhance consumer regulation, protect the environment, and, to a lesser extent, ban prostitution. They appear to embrace a secular *progressive* construal, so that while supporting the rational pursuit of self-interest and denying the sanctity of human goods, they also hold that men and women in market economies must be protected from exploitation and market failures and they have faith in government’s capacity to provide such protection. These respondents, it appears, have learned the lessons of Speenhamland (Polanyi 1944), that markets cannot stand alone

\(^{15}\)Note that our class labels refer to the structure of opinion at the pro-market end of the scale specific to each class, even though the class itself includes people strongly supportive of and strongly opposed to markets as so construed. Although this terminology is potentially confusing (as it identifies the class as a whole with only one end of the opinion spectrum), economy of expression recommends it over the alternative (e.g., referring to the economistic class as the “economism vs. anti-economism class”).

\(^{16}\)Attitudes toward prostitution in this group appear anomalous in that they are not correlated with views of organ sales or paid surrogacy, and those who condone prostitution tend to condone profiteering and oppose consumer regulation. It appears that these respondents’ objection to trading organs and reproductive capabilities is related not to their sensitivity toward exploitation of women per se, but rather to an underlying assumption about the sanctity of the body (but not of sexual relations).
but instead require political intervention to tame their negative externalities. On the other end of this continuum are those who appear distrustful of government, indifferent to the environment and largely hostile to market institutions.

Separate principal component analyses of the seven items for each class produced scales reflecting the configuration of pro- and anti-market sentiment given the dominant market construal in each class. Figure 3 illustrates the distribution of respondents in each class on its scale (blue bars), while showing as well the distribution for members of the other two classes (white bars). We see that each scale is very strongly bimodal for members of its respective class, but follows a bell curve distribution amongst respondents in other groups. This tells us that RCA has worked as intended, identifying classes of respondents among who opinion is polarized along a unique dimension that is captured by its corresponding scale.

Figure 3: Distributions of scales produced for each class based on principal component analyses. Blue bars correspond to the distribution in the respective RCA group, and white bars to the distribution in the remainder of the sample.

The class whose views are defined by the economism scale is most evenly split between advocates and detractors of the market (as members construe it). Note that respondents who rank high on that scale hew closely to our stylized model of neoclassical homines economici. If we define homo economicus as someone in this class with a scale value above zero, we can report that fewer than one in ten (9.5 percent) of Americans (in 1996) fit that definition. By contrast, looking at those below the mean, 11 percent were antagonistic to the market on nearly every dimension.

For those in the class whose views are defined by the hostile-worlds scale, the pro-market wing supports a market from which sharp boundaries exclude traffic in bodily goods,
with 14.3 percent embracing this pro-market but morally conservative position. At the opposite end of this scale, 24.7 percent of respondents are social liberals, restrained in their enthusiasm for the market but libertarian in their opposition to moral regulation.

Finally, the class whose views are captured by the progressive scale skews strongly pro-market, with 29.3 percent taking the view, shared by many mainstream economists, that markets work well but require regulation of negative externalities. By contrast their rather nihilistic counterparts constitute just 11 percent of the sample as a whole.\footnote{We have argued that the scale associated with each class represents a different construal of market society, but that the positive and negative poles of each scale represent, respectively, different flavors of pro- and anti-market normative views. If so, within each class, the native scale should be correlated positively with respondents’ overall opinion of the American economic system. The GSS asked respondents their view of the “American economic system,” requiring a choice among four responses ranging from “needs to be replaced” (the most negative) to “the best possible” (the most positive). We did not include the item in our initial analyses because it seemed like an ambiguous test of attitudes toward the market. (A liberal might have downgraded the U.S. system for too much inequality, whereas a conservative might have objected to too much regulation.) But we believe the item suffices to provide external validation of our interpretation of the scales. Indeed, high positions on each class’s scale are related to more favorable views of the economic system, with standard deviation differences boosting the odds ratio of a one-point increase in the scale (based on an ordered logistic regression) by between 24 percent (for the hostile worlders) to 42 percent (for progressives).}

To summarize: Whereas, in the full sample, relations among items were weak, once we used RCA to partition the sample into three classes of respondents, each with its own construal of the market, much more structure was evident. Within each class of respondents, the first principal component defines a scale that measures the extent of pro-market sentiment. But each scale captures a different kind of pro-market orientation: in the economistic group, this orientation is consonant with a neoclassical version of *homo economicus*; in the hostile-worlds group, it exempts the human body as belonging to a sacred sphere to be defended from economic pollution; and in the progressive view, markets appear as delicate projects requiring regulatory remedies for predictable market failures.

Stage 3: Position Taking – Social Coordinates of Normative Views on the Market

What are the social bases of pro-market orientations in the three classes? We begin by replicating the straightforward analysis reported in Table 2. Rather than modeling the homo-economicus scale in the sample as a whole, however, we model the three pro-market
scales (which we earlier induced using RCA) in their respective classes (see Appendix C, Table C-1). Given the bimodality of these three scales, we use OLS simply to compare model fit and variance explained, which rises from 10.1 percent for the full sample (Table 2) to between 12.4 and 25.2 percent of the variance in the subclass scales, using the same socio-demographic predictors. We separately modeled pro-market attitudes over the sample as a whole, where the dependent variable is the respondent’s location on the pro-market scale native to the class into which she or he was assigned and each independent variable interacted with RCA class dummies (with the Economism class omitted), to account for variability in the relationship between independent variables and scales across the different construals. The amount of variance explained by this model (available upon request) was 24.6, and the adjusted-$R^2$ is 20.5 (more than twice the adjusted-$R^2$ of 8.6 in the full-sample model assuming population homogeneity). In other words, the subclasses of respondents revealed by RCA exhibit considerably more structured attitudes than does the sample as a whole.

Given the bimodality in our pro/anti-market attitude scales, it is more appropriate to divide each class into subsets who espouse pro- and anti-market positions respectively and to use multinominal logistic analyses to estimate the effects of sociodemographic attributes on assignment into each of these six subclasses (positive or negative for each scale). We divide scales into “pro” and “anti” factions at their midpoint, and weight observations by respondents’ magnitude of market support or opposition (measured as the absolute distance of a respondent on her respective class scale from its midpoint), in order to account for variability in commitment or opposition to the market within each construal. As is customary with multinominal logistic regression, we report exponentiated coefficients, which are interpretable as risk ratios of assignment to one subclass relative to another subclass. We compare pro- to anti-market subclasses within each construal to identify predictors of positive orientation toward the market.

We hypothesized earlier that faith in markets is a product of access to market rewards and socialization. Figure 4 plots the risk ratios of being assigned to the pro-market subclass within each construal as opposed to its anti-market oppositional subclass. Variables included in the model are the same as those listed on Table 2, but only effects of theoretically important variables are noted on Figure 4. Consistent with expectations, we find that greater access to market rewards and higher levels of formal education (which entails socialization into dominant economic attitudes) independently predict pro-market orientations, largely
irrespective of one’s construal. For example, with full controls, income is significantly related to pro-market views for all three construal classes; and education is a significant predictor of pro-market attitudes for the economicist and progressive classes. Conversely, women are significantly less likely than men to express pro-market attitudes within the economicist and hostile-worlds construals; and African Americans are less likely to endorse pro-market views in all but the hostile-worlds class. Two of the parameters that fail to operate as hypothesized reflect the particular religious inflection of the hostile-worlds market construal, which may resonate less with the highly educated and more with African-Americans, who are overrepresented in conservative faith traditions. In the third case, gender effects on pro-market views in the progressive class are not quite statistically significant, but women in that class are significantly more inclined than men to express anti-market views (with p=0.014, one-tailed).

Despite these consistencies, certain variables shape attitudes only for respondents who construe the markets in particular ways; and, indeed, these construal-specific relationships account for the greater explanatory power of these models relative to the full-sample model. Religious views are critical in some but not all construals. For example, church attendance strongly predicts pro-market views in the hostile-worlds class (where the strict exclusion of bodily goods from market exchange renders the market palatable to persons of faith), but not in the other classes. Similarly Catholics and Evangelicals are more hostile to markets than others (after controlling for political partisanship and ideology, as well as demographic factors), except in the hostile-worlds class, where this negative effect disappears.

Political and ideological perspectives play a particularly striking role. (As always, note that we show effects controlling for religious faith, income, and other sociodemographic factors.) Consistent with research demonstrating that conservative moral views drove conservative self-definition by the 1990s (Hout 1999), conservatism was associated with pro-market views in the hostile-worlds class, but with anti-market views for the other construals. By contrast, identification as a partisan Republican predicted pro-market opinions in every class except hostile worlds.

Figure 5 enables us to illustrate the construal-specific effects of religious behavior and political identities. It illustrates graphically the relationships between church attendance,
Figure 4: Risk ratios and 95% confidence intervals of being assigned to one of the three pro-market subclasses (color coded shapes), relative to assignment into their respective anti-market subclasses, as a function of a one unit increase in sociodemographic variables (y-axis). Light lines with empty shapes represent ratios that are insignificantly different from 1. The x-axis is logarithmically scaled.
conservatism, and Republican partisanship (respectively) and espousal of one of the three pro-market construals. The figure shows marginal effects associated with increments in the values of each of these predictors on the probability of assignment into each of the pro-market subclasses, estimated using multinomial logistic models with the full set of independent variables. (Main effects are plotted with thick lines; confidence intervals are indicated with thin lines and shaded only when effects are statistically significant.) Religious attendance has a very positive effect on pro-market views for the hostile-worlds construal, nearly doubling the probability of espousing pro-market views for this set of respondents. By contrast, it has no effect on pro-market attitudes in other construals. Political identities matter as well, with conservatives more likely to adopt pro-market hostile-worlds views, and liberals inclined toward pro-market progressive views. Republican partisanship produces strongly significant marginal increases in economism, but not in other types of pro-market ideology. These patterns reinforce our interpretation that the hostile-worlds and progressive construals reflect porous boundaries between the economic domain and the domains of religious and politics, respectively.

Taken together, these results tell a consistent story: As others have noted, people who benefit from access to the market, are more likely to express faith in markets as a social tool. But there is more to it than this, for this only occurs after people adopt construals of the market consistent with their religious and political identities and principles. Those who benefit from markets have more faith in markets; but their religious and political faith shapes their understandings of the markets they support. We examine this tendency more closely in the next and final section of our analyses.

Stage 4: Construal, (Part II) – What Kinds of People Gravitate to Which Pro-Market (and Anti-Market) Views?

Privilege and socialization explain who is more likely to support the market. But among those who endorse, or reject the market, what explains adoption of different construals? We implemented an additional series of multinomial logistic regressions to predict assignment into subclass among respondents expressing pro- and anti-market views, respectively, again controlling for the full set of respondent attributes. Results are reported in Figure 6 below,
Figure 5: Marginal effects of Religious Attendance, Political Ideology and Political Partisanship on the probability of assignment into the three pro-market subclasses, as estimated by a multinomial logistic model. Thick lines correspond to main effects (and are color coded and styled by subclass), and thin lines outline 95% confidence intervals. Intervals are shaded when the effect is statistically significant.
with exponentiated coefficients interpreted once again as relative risk ratios. The left panel compares the pro-market subclasses to one another, and the right panel the anti-market subclasses. Whereas in the previous section we asked about the effects of sociodemographic attributes and religious and political identities on pro-market attitudes within construal sets, in this section we compare all respondents who expressed pro-market views and look at the effects of attributes and identities on which of the pro-market construals they expressed (doing the same with all respondents who expressed anti-market opinions).

Note that each comparison to the right of the left hand variable represents the effect of that variable on the probability of the first as opposed to the second construal in the particular pair. For example, the first line in the “across pro-market” panel, to the right of “religiosity” indicates that church attendance significantly reduces the probability that a pro-market respondent will be assigned to the economism as opposed to the hostile-worlds construal. Put another way, if one is pro-market, the more one attends church, the more likely one is to construe markets as excluding traffic in bodily goods (a conclusion reinforced by the third line to the right of religiosity, which demonstrates that church-going pro-market respondents also prefer the hostile-worlds to the progressive construal). In fact, the odds ratio of a pro-market respondent being assigned to the hostile worlds class increases by 52 and 62 percent, respectively, with a one-day increase in weekly religious service attendance, compared to the economistic and progressive pro-market subclasses. To complete the example, the middle line to the right of religiosity, with its empty square, demonstrates that church attendance has no effect on the relative risk of a pro-market respondent adopting the economistic as opposed to the progressive construal.

Note that, consistent with our theoretically motivated expectations, religious and political ideologies are central to the different ways by which many pro-market respondents construe the market’s boundaries. The likelihood of espousing a pro-market respondent being assigned to the hostile worlds view (i.e., considering intimate goods and services outside the scope of the market) increases not only with church attendance, but also with Catholicism and political conservatism. Similarly, among pro-market respondents, Evangelicals are less likely to adopt the economistic construal, and those not in the Christian faith are less likely to be assigned to progressivism.

\(^{19}\) We illustrate only a subset of the variables included in the model. Additional variables are: white collar, age, marital status, number of children, regional dummies and immigrant status. Overall, this model explains a 49.8 percent of the variance, estimated using the Cragg-Uhler \(R^2\).
Figure 6: Risk ratios and 95% confidence intervals of being assigned to one subclass, relative to another, as a function of a one unit increase in sociodemographic variables (y-axis). Color codes and shapes correspond to different subclass pairs. Left panel compares pro-market subclasses to one another, right panel compares anti-market subclasses to one another. Light lines with empty shapes represent ratios that are insignificantly different from 1. The x-axis is logarithmically scaled.
Notably (and consistent with our contention that people do not support markets abstractly, but construct markets that their religious and political views permit them to support), access to market rewards and education play a far less pronounced role in distinguishing between these three pro-market orientations than they do in differentiating pro-market from anti-market respondents. Education leads pro-market respondents to gravitate towards the progressive construal (economics courses often include material on market failures and regulatory responses), and pro-market men are more likely to endorse economistic than progressive construals (consistent with the dominant cultural construction of masculinity as eschewing sentiment on behalf of utilitarian rationality). Otherwise, education, gender, income and race have no significant effects. What explains differences in pro-market construals, in other words, is not so much one’s access to market rewards or socialization, but one’s religious and political orientations.

Differences between the three anti-market subclasses (right panel) are more subtle. Among those embracing anti-market perspectives, anti-hostile-worlders, who generally oppose unfettered markets except when applied to intimate goods, are the least church-attending, the least likely to be non-Christian, and the least likely to be African-American. Anti-progressives, by contrast, are the least educated among the market critics. It is not surprising that those with the weakest exposure to formal education espouse an anti-market disposition that is suspicious both of the market and of the institutions tasked with regulating it.\(^{20}\)

Discussion and Conclusions

These results are important both methodologically and substantively. Methodologically, they indicate the importance of incorporating heterogeneity into our models of attitude formation. If predictors had similar effects in all three RCA classes, failing to detect heterogeneity would reduce the variance researchers could explain, but would not lead to misidentification of sociodemographic and other factors associated with economic attitudes. Because, as we have shown, sociodemographic, religious, and ideological measures are associated with

\(^{20}\)Moreover, in additional analyses we find that those espousing an anti-progressive disposition are most likely to argue that the American economic system “needs to be replaced”, and least likely to consider it “the best possible”; compared to members of all other subclasses. These respondents appear to be most alienated from market society.
attitudes in different ways in the three RCA classes (even though the subsample was partitioned entirely on the basis of responses to attitude measures, using no information on respondent attributes), analysis of the full sample not only underestimated the degree to which economic attitudes are socially patterned but also led to misleading inferences about particular relationships.

Heterogeneity would be less of a problem, as well, if one could partition samples based on one or two key attributes. For example, if variation in construals were linked tightly to gender, we could simply conduct separate analyses for men and women and compare the results. But this is distinctly not the case. Respondents with high and low scores on each of the attitude scales are found in every class. Moreover, the three classes have similar distributions on most of the key variables: one-way analysis of variance revealed no significant difference in means for education, gender, frequency of religious attendance, or political ideology among the three subsets of respondents identified by RCA. Yet adoption of each construal is predicted by a unique combination of factors, with no single variable sufficiently dominant to serve as a basis for dividing the sample. In sum, then, we draw three methodological lessons:

1. Heterogeneity in construals of the market economy—in patterns of association among attitude measures—is sufficiently great that analysis of the full sample was incapable of detecting structure in the relationship between individual attributes and economic views, thus producing misleading conclusions.

2. *Pace* Converse (1964), heterogeneity, in this domain at least, does not lie in a dichotomy between rational educated respondents with coherent belief systems and less educated or attentive respondents with disorganized attitudes. Indeed, heterogeneity in patterns of response cannot be reduced to differences among identifiable subgroups, but appears to be produced by complex interactions among identities and life experiences.

3. Given that heterogeneity is a problem, and one that cannot be addressed just by dividing the sample into demographic subgroups, identifying patterns in the data requires the use of a method like Relational Class Analysis that inductively partitions the sample on the basis of observed similarities in pairwise relations among item responses.
In so doing, one shifts the thrust of attitude research from the study of opinions to the study of schemas: networks of mutually implicated attitudes that, taken together, frame and provide narrative consistency to a domain of social life. We do not, of course, believe that the seven items available to us exhaust the most important elements of persons' construals of market society; nor, even if they did, would we be willing to equate aggregate associations with individual-level cognitive structures. Nonetheless, the approach employed in this paper nudges us a bit closer to the goal of using survey responses to make inferences about common patterns in the organization of social knowledge domains, social meta-schema if you will, as these are reflected in survey respondents' choices.

Substantively, this paper contributes to the literature on the constructedness of markets in several ways. First, it confirms empirically that Americans differed not only in their economic beliefs, but also in how those beliefs were organized. The conventional opposition of free-market to anti-free-market economic attitudes proved of limited value in understanding the field of popular economic opinion in the United States. Different subsets of respondents shared different ways of organizing information about the market, so that for each subset, the content of pro-market ideology differed.

Second, our analyses describe these alternative constructions, as they are reflected in responses to attitude items, with greater specificity than has been possible heretofore. We began this paper by asking if *homo economicus* exists, or if this selfishly rational creature is more of a fable than a reality. Our findings suggest that roughly 10 percent of the American population subscribed to a folk version of a Hayekian worldview that sees markets as efficient and morally neutral (if not superior) allocative mechanisms. This small minority consisted largely of high-income, mainline Protestant, Republican men. A roughly equal number (women, people with lower incomes, social conservatives and Democrats) appear to accept the Hayekian construal of what a market economy is, but disagree on its virtues, opposing the market as implacably as their counterparts support it.

Third, our results go beyond previous studies that show the effect of religious faith or political attitudes on particular economic attitudes by examining a broader set of attitudes and, more important, demonstrating that religion and ideology work, first, by affecting construals and, second and only then, by influencing attitudes. The finding that in many cases the effects of faith and politics are contingent upon construal is a distinctive contribution of this paper.

Fourth, although we have emphasized variation in pro-market views, our research also
reveals considerable discontent with or hostility toward markets. Indeed, almost as many respondents were represented in the anti-market as in the pro-market poles of their respective construals. Large minorities of respondents expressed opposition to even a basic precept of the market economy (that producers in competitive markets are not obliged to pass savings in factor costs to consumers). The fact that such strong countercurrents lay just beneath the surface of a political culture dominated by allegiance to “free markets,” suggests that many Americans are available for recruitment into populist or other anti-market social movements.\textsuperscript{21}

Finally, and in some ways most interesting, even the majority of respondents who endorsed the pro-market poles of their respective construals for the most part reject pure economism. To be sure, those who benefited most from markets (the wealthy and well educated) tended to support them and those with less access to their rewards (women and African-Americans) endorsed more negative views. But most supporters of the market modify neoclassical dogma engage in some form of ideological laundering. Some would restrict markets when they impinge on the sacred, simply excluding exchange in goods and services like organs or maternal surrogacy that entail sale (or rental) of human bodies. For many religiously observant Americans this restriction may be what it takes to render economic conservatism and social conservatism compatible.

Others demand what Polanyi (1944) called the “double movement” of society—the use of market institutions to produce wealth and spur innovation, but use of government to protect society from the destructive forces that markets unleash. These respondents would shave off the market’s rough edges, endorsing some consumer and environmental regulation and opposing prostitution. This construal accomplishes for liberals what the second construal effects for social conservatives: It renders the market palatable, defining a version of pro-market sentiments consistent with liberal values.

Thus our research indicates that, while access to market rewards predicted one’s degree of support for the market, the construal of the market that one supports was shaped more strongly by political ideology and religious faith. Although faith in the market is most evident in those sectors of society that the market serves most faithfully, the relationship is neither simple nor automatic. Instead it appears that before Americans adopt economic

\textsuperscript{21}Our 1996 data are consistent with more recent evidence on attitudes toward inequality (McCall 2013) that indicate that Americans, while suspicious of government intervention, remain critical of aspects of the economic system.
attitudes congruent with their material interests, they must first construct a market construal consistent with their political values and religious faith. In this way, the institutional logics of religion and politics penetrate those of economic self-interest, producing a diversity of understandings of the market and its effects.

References


Polanyi, Karl. 1944. he great transformation: The political and economic origins of our time. Boston, MA: Beacon Press.


Appendix A: Item Wordings and Descriptive Statistics

Items comprising the homo-economicus scale:

*Profit.* Consider the following situation: A small factory produces tables and sells all that it can make at $200 each. Because of changes in the price of materials, the cost of making each table has recently decreased by $20. The factory does not lower its price for the tables. Is this acceptable or unfair?
1 Acceptable
2 Unfair
8 Don’t know

*Trickle Down.* Allowing business to make good profits is the best way to improve everyone’s standard of living.
1 Strongly agree
2 Agree
3 Neither
4 Disagree
5 Strongly disagree
8 Can’t choose

*Organ.* A body organ that is much in need and that people may contribute are kidneys. Most people can live with only one kidney, though their chances of survival are better if they have two. Do you believe that people with two healthy kidneys should be permitted to sell a kidney to a hospital or organ center to use for transplants?
1 Definitely not
2 Probably not
3 Perhaps
4 Probably
5 Definitely

*Surrogacy.* Recently, some married couples who are unable to have children have paid women, called "surrogate mothers," to bear a child for them. When the child is born, the
couple becomes its adoptive parents and the surrogate mother receives a fee. Do you think that this practice should be permitted or forbidden under the law?
1 Forbid it
2 Permit it
8 Don’t know

Prostitution. How much do you agree or disagree with the following statements:
There is nothing inherently wrong with prostitution, so long as the health risks can be minimized. If consenting adults agree to exchange money for sex, that is their business
1 Agree strongly
2 Agree somewhat
3 Disagree somewhat
4 Disagree strongly
8 Don’t know

Environment. How much do you agree or disagree with the following statements:
Natural environments that support scarce or endangered species should be left alone, no matter how great the economic benefits to your community from developing them commercially might be.
1 Agree strongly
2 Agree somewhat
3 Disagree somewhat
4 Disagree strongly
8 Don’t know

Consumer. How much do you agree or disagree with the following statements:
It is the responsibility of government to require businesses to provide consumers with the information they need to make informed choices.
1 Agree strongly
2 Agree somewhat
3 Disagree somewhat
4 Disagree strongly
8 Don’t know
For the purpose of the RCA analysis, we transformed “don’t know” responses (where applicable) into mid-scale responses. Respondents who provided 3 or more “don’t know” responses, or at least one missing response, were excluded from the analysis.

Additional variables:

Education: highest year of schooling, ranging from 1 to 20
Income: self-reported total family income, log transformed
White collar: occupation is classified as either managerial, health professional & engineers, teachers and social scientists, technical, sales, and administrative support, by the census bureau’s two-digit classification
Gender: male=0, female=1
Black: Non-African American=0, African American = 1
Religiosity: frequency of religious service attendance, per week
Religious denomination: Catholic, Evangelical, Mainline Protestant (including Black Protestants and non-denominational Christians), Non-Christian
Political Ideology: self identification on a 7-point scale ranging from strong liberal to strong conservative
Party: partisan self-identification on a 7-point scale ranging from strong Democrat to strong Republican
Community size: population of place of residence, log transformed
Region: West, South, Northeast, Midwest
Age: in years
Married: is respondent currently married
Childs: number of children, ranging from 0 to 8 or more.
Immigrant: respondent born outside the U.S.
Table A-1: Summary Statistics

<table>
<thead>
<tr>
<th></th>
<th>Mean</th>
<th>Std. Dev.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Education</td>
<td>13.33542</td>
<td>2.947183</td>
</tr>
<tr>
<td>Log Income</td>
<td>10.27784</td>
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<td>White Collar</td>
<td>.5602787</td>
<td>.4965262</td>
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<tr>
<td>Gender</td>
<td>1.552632</td>
<td>.4973945</td>
</tr>
<tr>
<td>Black</td>
<td>.1391967</td>
<td>.3462716</td>
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<tr>
<td>Religious Attendance</td>
<td>3.694326</td>
<td>2.640415</td>
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<tr>
<td>Catholic</td>
<td>.2389197</td>
<td>.4265713</td>
</tr>
<tr>
<td>Evangelical</td>
<td>.2527701</td>
<td>.4347508</td>
</tr>
<tr>
<td>Non-Christian</td>
<td>.0914127</td>
<td>.288295</td>
</tr>
<tr>
<td>Conservatism</td>
<td>4.225901</td>
<td>1.352369</td>
</tr>
<tr>
<td>Republican Partisanship</td>
<td>2.847398</td>
<td>1.971629</td>
</tr>
<tr>
<td>Log Community Size</td>
<td>3.532967</td>
<td>2.141256</td>
</tr>
<tr>
<td>West</td>
<td>.2160665</td>
<td>.4117027</td>
</tr>
<tr>
<td>South</td>
<td>.3531856</td>
<td>.4781253</td>
</tr>
<tr>
<td>North East</td>
<td>.1932133</td>
<td>.3949556</td>
</tr>
<tr>
<td>Age</td>
<td>44.74636</td>
<td>17.05602</td>
</tr>
<tr>
<td>Married</td>
<td>.4903047</td>
<td>.5000792</td>
</tr>
<tr>
<td>Children</td>
<td>1.841922</td>
<td>1.743703</td>
</tr>
<tr>
<td>Immigrant</td>
<td>.0768698</td>
<td>.266477</td>
</tr>
</tbody>
</table>
Appendix B: RCA procedure and statistical significance

RCA measures schematic similarity between respondents using a metric called relationality. Relationality measures the extent to which two respondents' responses follow the same pattern. It does so by calculating the relative difference between all pairs of responses provided by each respondent, and then averaging the difference in differences across the two respondents. Like the Pearson correlation coefficient, relationality is bounded by -1 and +1. Pairs of respondents with high absolute relationality (namely, with values close to 1 or -1) are said to be schematically similar.

The overall schematic similarity between respondents can be represented as a weighted network. RCA calculates relationality between all pairs of respondents to generate such a network, and removes edges with insignificant relationality. A spectral network-partitioning algorithm (Newman 2006) is used to partition the network into groups of schematically similar respondents. The algorithm partitions the network by maximizing a property known as modularity (see Girvan and Newman [2004] for details). The algorithm follows an iterative procedure whereby classes are recursively partitioned until modularity cannot be maximized further.

The RCA procedure followed this sequence, and initially partitioned the dataset into five different classes. Because the modularity maximization procedure only stops when modularity cannot be maximized any further, it may include steps that only contribute marginally to modularity, and therefore do not produce a meaningful partition. Indeed, the last two steps of the partitioning algorithm only contributed modestly to overall modularity, increasing it by 9.5% and 1.5%, respectively. Our subjective examination of these two classes suggested that they are not substantively distinguishable. We therefore decided to reverse these last two steps and stop the procedure with a tri-partite partition.

In order to validate our decision we produced a set of Monte-Carlo simulations to generate random null distributions of data. We used those to calculate:

1. The expected modularity at random. If the modularity produced by our tri-partite partition is significantly greater than that expected at random, we could determine that the RCA classes we have produced indeed represent a meaningful partition.

2. Using a method known as the gap statistic (Tibshirani, Walther, and Hastie 2001, see below), we estimate the optimal number of classes.
The Monte-Carlo simulations generate a set of randomly drawn datasets that are identical in size to the original dataset, and which are used to obtain a reference null distribution (in expectation, these dataset should not naturally partition into classes). We generated these datasets by permuting the rows of the original dataset such that each observation retained the same distribution of attitudes, but these attitudes were randomly assigned to variables. In other words, each “respondent” in our simulated datasets is equally opinionated as the original respondent, but these opinions are applied to random items. Because we constrain the simulated datasets to adhere to observed distributional properties, the statistical estimates we obtain are highly conservative.

We generated 1,000 simulated datasets, and applied the RCA procedure to partition each into classes of schematically similar respondents. On average, RCA identified 7.32 classes, ranging from 5 to 10. The mean modularity for these simulated partitions was 0.2960, with a standard deviation of 0.0083. At 0.4168, the observed modularity is significantly greater than the null distribution at \( p = 0 \) (a one-sample t-test statistic of -462.82). In other words, the observed data present a significantly greater level of clustering than would be expected at random, even while constraining the data to adhere to respondents’ opinion distributions.

Next, we use the gap statistic to estimate the goodness of fit of our three-class partition. The gap statistic computes partition compactness, \( W_k \), for a partition into \( k \) classes, which equals the normalized sum of distances between observations in each class. Formally:

\[
W_k = \sum_{r=1}^{k} \frac{1}{2n_r} D_r
\]

where \( k \) is the number of classes, \( n_r \) is the size of class \( r \), and \( D_r \) is the sum of pairwise distances between observations in \( r \). We use one minus relationality as the distance between two observations. The gap statistic method compares the observed compactness to that obtained from the null reference distribution:

\[
Gap_n(k) = E_n^* \{ \log W_k \} - \log W_k
\]

where \( E_n^* \) denotes expectation under a sample size \( n \). The optimal number of classes is the smallest \( k \) that satisfies:

\[
Gap_n(k) \geq Gap_n(k + 1) - s_{k+1}
\]
where $s_{k+1}$ is the simulation standard error (see Tibshirani et al. [2001] for more details). As illustrated in Figure B-1, this condition is satisfied only for $k = 3$.

![Figure B-1: Gap statistic for number of clusters produced by RCA](image)

In other words, our subjective impression that a partition into three classes best fits the data is confirmed by the gap statistic.
Appendix C: Multivariate Analyses of Relational Class Scales

Table C-1: Multivariate models of pro-market scales in their respective classes

<table>
<thead>
<tr>
<th></th>
<th>Homo Economicus</th>
<th>Hostile Worlds</th>
<th>Progressive</th>
</tr>
</thead>
<tbody>
<tr>
<td>Education</td>
<td>0.159 (1.79)</td>
<td>-0.000 (-0.00)</td>
<td>0.183*** (4.24)</td>
</tr>
<tr>
<td>Log Income</td>
<td>0.206 (0.83)</td>
<td>0.355** (2.84)</td>
<td>0.432*** (3.48)</td>
</tr>
<tr>
<td>White-Collar</td>
<td>0.696 (1.46)</td>
<td>0.191 (0.85)</td>
<td>-0.394 (-1.75)</td>
</tr>
<tr>
<td>Church Attendance</td>
<td>-0.051 (-0.61)</td>
<td>0.111** (2.68)</td>
<td>-0.043 (-1.07)</td>
</tr>
<tr>
<td>Catholic</td>
<td>-1.146 (-1.84)</td>
<td>-0.209 (-0.81)</td>
<td>-0.585* (-2.25)</td>
</tr>
<tr>
<td>Evangelical</td>
<td>-1.487* (-2.43)</td>
<td>-0.188 (-0.70)</td>
<td>-0.206 (-0.80)</td>
</tr>
<tr>
<td>Non-Christian</td>
<td>-0.541 (-0.78)</td>
<td>0.250 (0.61)</td>
<td>-0.626 (-1.65)</td>
</tr>
<tr>
<td>Gender</td>
<td>-1.343** (-3.04)</td>
<td>-0.505* (-2.42)</td>
<td>-0.026 (-0.13)</td>
</tr>
<tr>
<td>Black</td>
<td>-1.145 (-1.54)</td>
<td>-0.101 (-0.29)</td>
<td>-1.303*** (-3.62)</td>
</tr>
<tr>
<td>Age</td>
<td>-0.016 (-1.20)</td>
<td>0.014* (2.08)</td>
<td>-0.021** (-3.01)</td>
</tr>
<tr>
<td>Conservatism</td>
<td>-0.149 (-0.89)</td>
<td>0.099 (1.28)</td>
<td>-0.217** (-2.73)</td>
</tr>
<tr>
<td>Republican</td>
<td>0.282* (2.35)</td>
<td>0.023 (0.43)</td>
<td>0.092 (1.67)</td>
</tr>
<tr>
<td>Log Community Size</td>
<td>0.175 (0.69)</td>
<td>-0.219 (-1.82)</td>
<td>0.006 (0.05)</td>
</tr>
<tr>
<td>West</td>
<td>1.151 (1.89)</td>
<td>0.664* (2.38)</td>
<td>-0.129 (-0.47)</td>
</tr>
<tr>
<td>South</td>
<td>0.783 (1.46)</td>
<td>-0.010 (-0.04)</td>
<td>-0.208 (-0.82)</td>
</tr>
<tr>
<td>North East</td>
<td>0.940 (1.47)</td>
<td>-0.115 (-0.37)</td>
<td>-0.087 (-0.30)</td>
</tr>
<tr>
<td>Married</td>
<td>-0.442 (-0.94)</td>
<td>-0.143 (-0.64)</td>
<td>-0.055 (-0.25)</td>
</tr>
<tr>
<td>Children</td>
<td>0.041 (0.31)</td>
<td>-0.043 (-0.67)</td>
<td>-0.176* (-2.54)</td>
</tr>
<tr>
<td>Immigrant</td>
<td>-0.941 (-1.27)</td>
<td>-0.153 (-0.40)</td>
<td>-0.577 (-1.39)</td>
</tr>
<tr>
<td>Constant</td>
<td>-1.712 (-0.58)</td>
<td>-4.356** (-3.12)</td>
<td>-3.401* (-2.52)</td>
</tr>
</tbody>
</table>

\[ N = 228 \quad 447 \quad 458 \]

\[ R^2 = 0.236 \quad 0.124 \quad 0.252 \]

\( t \) statistics in parentheses

* \( p < 0.05 \), ** \( p < 0.01 \), *** \( p < 0.001 \)