

# Interdependence, Networks, and Public Policy Support

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What arguments affect citizen support for policies? Most existing studies of preferences emphasize direct effects on personal welfare. Yet, for many regulatory policies—like financial regulations—recent theories highlight indirect policy externalities, such as interdependent foreign policies and/or global economic networks. We theorize that citizens will respond to arguments emphasizing the three distinct theoretical logics—direct, interdependent, and network. We further hypothesize that their beliefs about the international system and about out-group members might explain heterogeneity in citizen responses. An original survey experiment compares support for financial regulations when respondents receive different arguments about the policy's positive effects. Respondents most strongly supported regulations when provided with the network logic. Even among respondents least likely to support financial regulations (e.g., conservatives), the network argument systematically increased support. Interdependence arguments did not significantly increase support. We find some evidence of moderation by respondents' beliefs about the international system but little evidence of moderation by beliefs about out-group members. Overall, we find strong, consistent effects of network arguments and conclude that citizens respond to indirect arguments. Our results suggest that interdependent and networked perspectives toward the structure of the global economy represent a promising avenue to further understand public support for economic policies.

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How do citizens decide whether to support foreign economic policies? International political economy (IPE) scholarship often answers this question using well-known neoclassical economic models. These models theorize about types of individuals likely to benefit from a particular policy change, and researchers use this to predict whether specific individuals then support that policy (Frieden and Rogowski 1996; Lake 2009). This approach has been most often used to study preferences over trade.<sup>1</sup> For example, a factor endowments model predicts that owners of a scarce factor of production gain from high tariffs, so those owners should support protectionist trade policies. More recently, this literature has expanded beyond trade to address attitudes toward foreign aid, investment, and immigration.<sup>2</sup>

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<sup>1</sup>E.g., Scheve and Slaughter (2001b).

<sup>2</sup>E.g., Milner and Tingley (2011); Pandya (2010); Hainmueller and Hopkins (2015).

However, for a large class of policies—regulatory policies, among others—the labor market consequences (wages and employment) are less widespread and less emphasized compared to those predicted by the models underlying changes to trade or immigration policy. Regulatory policy decisions are increasingly analyzed with a growing body of literature that emphasizes the interdependent and networked causes and effects of national policies on welfare in a globalized economic environment.<sup>3</sup> Yet, to the best of our knowledge, scholarship has yet to link interdependent and network theoretical models with observed or potential citizen support for policies.<sup>4</sup>

We seek to bridge the emphases of international relations (IR) theoretical models with individual-level policy support. We examine whether and how citizens respond to different theoretical logics that make distinct assumptions about the international externalities of economic policies. We examine how citizens react to three distinct logics: *direct* effects of a country's policy upon the respondent's country (without emphasis on international externalities); *network* effects, where one country's position in the global economic network determines system-wide externalities; and *interdependent* effects, where one country's policy may lead to a change in another country's policy.

Specifically, we ask, can arguments that tap into interdependent and network logics affect citizens' policy support? Existing work implies that arguments based on labor market consequences should, and do, affect preferences. But, can indirect arguments—interdependence and network—resonate to a similar or potentially larger degree upon citizens' opinions? In a world where arguments about global interconnectedness are growing in public and academic discourse, we think it is likely that citizens are responsive to arguments about policy effects that extend beyond their own national borders. For financial regulations in particular, elite discourse within the United States emphasizes interdependence and network perspectives of policy effects. This creates the possibility that such arguments trickle down to influence citizens' opinions.

We additionally analyze how and why citizens might respond to these indirect—that is, interdependent and network—arguments. We expect that reactions reflect beliefs about the international system and valuations of the possible foreign benefits to regulations. Beliefs about the international system—the degree to which it is conflictual or cooperative—affect a citizen's expectation that cross-border policy spillovers will or will not occur. Citizens that value foreign benefits—those with low levels of ethnocentrism—are those most likely to care about international spillovers. Respondents may vary in their views of both dimensions, and we hypothesize that this explains why some citizens are more or less responsive to each logic.

We consider US respondents' attitudes toward financial regulatory stringency, an issue area where research emphasizing theoretical indirect policy effects has blossomed. As applied to financial regulations, network logics might expect that stricter US regulations will make the worldwide economic system more stable and less susceptible to financial contagion. Interdependence logics might expect that stricter US financial regulations will spur European Union (EU) nations to adopt similar policies. In contrast, the direct effects of financial regulations consist of increased stability of the national economy and decreased access to capital, but these costs and benefits aren't necessarily tied to an underlying economic model based on wages or sector of employment. Thus, financial regulations illustrate how regulatory policies do not easily fall into traditional neoclassical approaches when considering policy

<sup>3</sup>Oatley (2011); Hafner-Burton, Kahler, and Montgomery (2009); Farrell and Newman (2014, 2016); Chaudoin, Milner, and Pang (2015).

<sup>4</sup>We are interested in the degree to which international logics resonate with voters and measure shifts in citizens' public policy support. A large American politics literature analyzes the causal direction between politicians, policy, and public opinion. See Canes-Wrone (2015).

support; expanding tropes to include the international policy externalities better captures cross-jurisdictional policy interactions.

To empirically assess the degree to which citizens find each argument type persuasive, we fielded an online survey with an embedded experiment. Respondents were given a brief description of a debate over whether the United States should have stricter financial regulations. All respondents read an argument against regulation, that it would decrease access to loans. Respondents were then randomly assigned to treatment groups consisting of an argument in favor of financial regulations. Each proregulation argument emphasized either direct, interdependence, or network channels of regulatory effects. The direct treatment focused solely on how regulations directly affected the US economy. The interdependence treatment focused on how US regulations can spur foreign regulations, potentially benefiting both countries. The network argument focused on how US regulations can stabilize the global financial system, more broadly. As an outcome, we measured support for more strict regulations. We compared support levels to respondents who received no argument or a placebo argument. In addition to understanding the effects of these arguments, we also join a small and growing body of literature focused on understanding preferences over financial regulations.<sup>5</sup>

We also assess whether an individual's beliefs—about the international system (as primarily conflictual or cooperative) and about people different from themselves (seen as more or less different)—magnify or mute the effect of each treatment. [Kertzer and McGraw \(2012\)](#) refer to the former beliefs as “folk realism.” We hypothesize that respondents with weak beliefs in cooperation will be less likely to believe that regulatory change in one country spurs changes abroad, as in the interdependence treatment. Similarly, the argument emphasizes benefits for foreigners; thus, we hypothesize that citizens with views that accentuate foreignness, as measured by questions pertaining to the respondent's degree of ethnocentrism ([Kam and Kinder 2007](#); [Mansfield and Mutz 2009](#)), may also be less responsive to the interdependence treatment.

Overall, we find that respondents who received network and direct arguments were more likely to support more stringent financial regulatory policy. Network treatment respondents' support was consistently as strong as, and often stronger than, support among direct treatment respondents. This pattern persisted even for respondents least likely to support financial regulation, such as Republicans, ideological conservatives, and those with a general dislike for government regulation, writ large.

Interdependent arguments did not significantly increase support for regulations. Especially since these arguments often enter the rhetoric of public debate, this conclusion ran against our expectations. We also did not find strong support for hypotheses that respondents' beliefs about the international system or ethnocentrism moderated responses only to particular arguments. Those who believed in the cooperative nature of the international system were most responsive to the interdependence treatment, but they were also more responsive to the other treatments, such that we cannot say the result is specific *only* to interdependence. Against expectations, we found little evidence of ethnocentrism moderating the interdependence argument.

Our results suggest the value of broadening our views beyond the economic models that potentially underlie citizens' expressed policy preferences. Overall, the inquiry provides initial evidence that indirect models, network perspectives in particular, should be considered within the realm of public policy support. It might be fruitful to expand the tropes that citizens are thought to consider beyond his own national boundary. In many contexts, the relevant economic effects of a policy for an individual are driven by that individual's personal characteristics (e.g., her sector of employment) and subsequent decisions by foreign countries. This

<sup>5</sup>E.g., [Pagliari, Phillips, and Young \(2014\)](#).

paper bridges the literature on individual preferences toward foreign policies with changes in broader theorizing within international relations.

While this inquiry focuses upon financial regulation, many other domains share similar features where cross-border interdependent and network effects determine a large amount of the net effects of a policy change. For example, scholarship on the politics of climate change policies emphasizes both network and interdependence dynamics. Consistent with interdependence arguments, [Tingley and Tomz \(2013\)](#) assess the potential for policy leaders to induce others to follow suit or be taken advantage of in the realm of climate change. A large body of research assesses the effects of climate change on networked relationships between states in conflict or cooperation ([Nordås and Gleditsch 2007](#)). And, scholarship on trade has also seen a resurgence in emphasis on network dynamics ([Ward, Ahlquist, and Rozenas 2013](#)). In the context of security, policymakers emphasize the importance of spillover of counterterrorist practices like anti-money laundering rules ([Johannesen and Zucman 2014](#)).

The paper proceeds by first discussing theoretical expectations that tie together the preferences and IR theoretical literatures. We apply different IR models to the area of financial regulations and arrive at specific hypotheses. We then introduce the survey experiment and present results. We conclude by discussing broader implications.

### Expanding the Set of Underlying Sources of Policy Support

Can different logical arguments affect citizens' support of a public policy? Understanding different ways that citizens respond to policies is crucial for politicians who must marshal implicit or explicit support for policy actions. Politicians must justify policy actions to constituents and may justify the same policy for citizen consideration in multiple ways. We examine how arguments based on a policy's international feedback effects might affect support. Extant international relations research on theoretical causes and effects of policies emphasize three logics: direct, interdependence, and network. Existing research on individual policy support emphasizes the direct logic. However, our working hypothesis is that citizens will also respond to network and interdependence arguments.

Below, we first describe the general features of each logic and argue that each could be plausibly linked with public support for a policy. We describe how individual-level characteristics distinct from ideology and partisanship, such as either an individual's beliefs about the international system (sometimes called "folk realism"<sup>6</sup>) or ethnocentrism, could moderate responsiveness to arguments based on each logic. We then link each logic and moderator to the specific domain of financial regulations, providing examples of US policymakers making different arguments in congressional hearings. We then derive and test specific hypotheses.

#### *Theoretical Framework: The Three Logics and Moderators*

International relations (IR) theory uses at least three different analytical models—direct, interdependence and network—to explain how policy-makers select among alternative policy options and the effects of those alternatives. These three characterizations reflect existing analytical approaches, yet they are not meant to be exhaustive nor fully mutually exclusive categories. They are logics that are posited within IR theory, and we emphasize the distinct international feedback channels that each implies.

Existing analytical approaches differ in at least two ways: the degree to which they emphasize foreign externalities and the degree to which they emphasize reciprocal policy changes abroad. The first dimension describes whether a particular

<sup>6</sup>Kertzer and McGraw (2012).

Table 1. Differences across the three logics.

Logic	Policy action	Possible externality	Policy effect consideration
Direct	Nat'l policy change	None	Nat'l policy on national outcomes
Network	Nat'l policy change	Worldwide public good or bad	Nat'l policy on world outcomes
Interdependent	Nat'l policy change	Another country's policy change	Nat'l policy on another country's outcomes

analytical approach emphasizes only national level effects of a policy or whether it also emphasizes positive or negative effects abroad. The second dimension describes whether the approach emphasizes only national policy changes or whether it also emphasizes how a policy change in the home nation can induce reciprocal changes abroad. Table 1 summarizes relevant distinctions among the three perspectives examined in this paper.

The *direct* perspective emphasizes a direct link between a national policy change and the national interest. This includes, but is not limited to, sociotropic conceptions of national interest or a citizen's self-interest. For example, Mansfield and Mutz (2009) assess the relationship between citizens' beliefs about the effect of trade on the national economy and support for protectionism. Citizens who think that trade benefits the national economy are more supportive of free trade.

Within this paper's emphasis on externalities, the direct approach is characterized by what it does *not* emphasize. Direct approaches de-emphasize a policy's effects on the actions or welfare of others abroad. This is not to say that foreign actors are unimportant in this conception. Indeed, global markets' and foreign actors' responses (e.g., changed prices or patterns of production, immigration, or investment) are critical intermediate steps but are only important insofar as they increase or decrease a citizen's or nation's domestic welfare.

Research that links Open Economy Politics (OEP) models with citizen preferences most closely fits within the direct category. Within OEP approaches, public support for a policy is informed by how a national policy change—within an open economy—will affect a citizen's wages and wealth according to neoclassical economic theories (Lake 2009). For example, a low-skilled citizen in a relatively labor abundant country is expected to gain from trade liberalization. Generally, a citizen's position within the domestic economy determines whether he might gain or lose from more free trade versus protectionist policies (Scheve and Slaughter 2001a), restrictions on foreign direct investment (Pandya 2010), or tighter immigration rules (Hainmueller and Hiscox 2010). The body of research linking the OEP approach with preferences over trade policy is particularly mature. Existing research uses surveys and experiments to assess the effect of education (Hainmueller and Hiscox 2007) or knowledge of economic models (Rho and Tomz 2017) on support for free trade. Related work analyzes whether gains and losses from trade policy affect citizens' actual voting action and elected officials' voting records.<sup>7</sup> A common feature of this research is that its citizens envision a link between national policy and personal welfare or national interest that does not necessarily include the policy reactions of foreign nations or welfare gains abroad.

A *network* perspective asks how the international structure affects a government's—and its citizens'—national preferences within a top-down process. Hafner-Burton, Kahler, and Montgomery (2009, 560) define networks as “sets of relations that form structures, which in turn may constrain and enable agents.” In the short run, actors are constrained by, yet cannot affect, the network structure. Kahler (2009, 4, emphasis in original) most overtly states, “networks as structures ... influence the behavior of their members, and, through them, produce

<sup>7</sup>E.g., Margalit 2011; Milner and Tingley 2011; Guisinger 2017.

consequential network effects... network design is not intentional on the part of any actor or set of actors.” In contrast to the direct approach, the network approach emphasizes how national level decisions have effects that reverberate throughout an interconnected network, particularly for decisions made by nations that are more central to the network. This approach has most often emphasized how outcomes and decisions that affect welfare in one part of the network can be transmitted to nations in another part of the network. To the best of our knowledge, this analytical approach has not been linked with citizens’ preferences.

Finally, *interdependence* perspectives consider how decision-makers create policy changes that, in turn, affect other countries’ foreign policies (Farrell and Newman, 2014, 2016). National policy in one country begets policy in another; together, national policy in one country affects and changes the systemic environment that other countries face. Interdependencies refer to more than simply growing, bidirectional economic transactions across borders. Interdependence, here, refers to how policies in one country can spill over to another because of increasing rule-overlap, where multinational firms must navigate jurisdictions with varying rules, creating incentives for consistency. The increasingly interdependent nature of global economics also creates opportunities for subnational actors to have cross-border influences on policy. In contrast with the direct and network approaches, interdependence emphasizes the knock-on effects of policy changes in one country on subsequent policy changes in another country. Here too, to the best of our knowledge, this analytical approach has not been linked with citizens’ preferences.

### Moderators

We expect citizens to be heterogeneous in the degree to which they are affected by each argument; moderators are characteristics that magnify or mute each argument’s effect. Two moderators—folk realism and ethnocentrism—are theoretically tied to the arguments of interest and are independent of the single-dimension ideological and partisan division found within American politics scholarship (McCarty, Poole, and Rosenthal 2006; Barber and McCarty 2016).

Regarding the first, folk realism describes a person’s beliefs about the ability of states to cooperate and harmonize policies within an anarchic world (Kertzer and McGraw 2012). While folk realism differs from academic theories of realism, Kertzer and McGraw (2012) find significant heterogeneity in the degree to which laboratory subjects espouse beliefs that reflect traditional assumptions made by realist scholarship. This is consistent with the argument of Rathbun (2009) that individuals may vary in their trust levels and subsequent openness to international cooperation or belief in competition. Those with more folk realist beliefs tend to be pessimistic about cooperation and believe states must provide for their own security. Because interdependence arguments emphasize state reactions to each other, we expect folk realists will tend to be less persuaded by arguments emphasizing cooperative reactions, while non-folk realists, in contrast, will believe cooperative arguments.

Regarding the second, ethnocentrism describes the tendency to “divide the world into in-groups and out-groups,” ascribing positive characteristics to in-group members and negative traits to out-group members (Kam and Kinder 2007, 321). As applied to international relations, people who see greater contrasts between themselves and others (ethnocentrists) have been found to more strongly support the war on terror and oppose free trade.<sup>8</sup> A citizen’s degree of ethnocentrism may affect her utility regarding costs and benefits that accrue to foreign (rather than domestic) countries or actors as the result of national policy change. Since the survey’s interdependence argument emphasizes policy benefits that accrue to foreign countries, ethnocentrist respondents may be less inclined to support such a policy, while nonethnocentrists may more readily value policy benefits that accrue abroad.

<sup>8</sup>Mansfield and Mutz (2009). Also, Margalit (2012) analyzes the relationship between ethnocentrism and views toward globalization.

*Application to Financial Regulations: Academic and Practitioner Views*

Scholars studying financial regulations have increasingly called attention to network and interdependence approaches, making this an especially good context to link research on indirect models to public policy support. The 2007 financial crisis renewed interest in the politics of financial regulation, as regulatory failures were consistently identified by policymakers, economists, and political scientists as a cause of crisis. IPE scholars reflected on the stability of the system,<sup>9</sup> including postcrisis regulatory changes<sup>10</sup> and the state of the IPE literature to understand what happened.<sup>11</sup> To fully understand its causes and effects required scholars to move beyond direct approaches toward examining policy interdependencies and international outcomes.

Scholarly analyses of the crisis often call for more attention to the world financial network.<sup>12</sup> In an important conceptual shift, a network perspective of the international financial system argues that the financial regulatory strength of the most important, central nodes of a hierarchically structured financial system ensures stability of the system as a whole (Oatley et al. 2013). Further, Oatley et al. (2013) provide empirical evidence that the United States is the central node within a hierarchical banking system, with the implication that US financial stability will aid stability of the entire system. For a simple analogy, a shock like the US financial crisis is like dropping a stone (or boulder) into a pond. The ripples spread outward from the epicenter. Crisis in a less central node within the hierarchy may create instability for some countries but is less likely to trigger widespread crisis. Cohen (2009) focused on the changing nature of the financial system and called for a move beyond the assumption of a static and unchanging system. Answering this call, Drezner and McNamara (2013) put forth a life-cycle theory of global financial orders that evolve over time.

A separate body of scholarship emphasizes *interdependence* among national financial regulations, allowing room for self-interested actors to consciously affect and alter the structure as a whole. One strand of this literature includes international regulatory capture. Young (2013) shows how financial special interests affected the content of international bank capital regulations throughout the 2000s (and that this relationship was interrupted after 2008). Seabrooke and Tsingou (2014) and Tsingou (2015) show how financial special interests embed themselves within intellectual policy clubs to legitimize their preferences within international regulation best practices. Another strand shows how states may pool their institutional and market power to counter larger states to achieve international financial regulatory preferences (Posner 2009; Buthe and Mattli 2011). Overall, interdependence emphasizes the competitive and interconnected nature of financial regulations across countries that create the financial system.

Politicians engaged with all three logics during the course of US legislative policymaking. To be sure, all three logics are not emphasized equally, with the greatest emphasis placed on direct arguments. However, the other two logics are present in some parts of political discourse around regulations. The 2010 US Dodd-Frank Act increased both the number and stringency of existing financial regulations. The following exchange between Republican Senator Bob Corker and US Treasury Under Secretary for International Affairs Lael Brainard discusses the implications of the act upon competitiveness and other countries' national regulations:<sup>13</sup>

<sup>9</sup>Helleiner, Pagliari, and Zimmermann (2010); Helleiner (2011); Drezner (2014).

<sup>10</sup>Moschella and Tsingou (2013); Helleiner (2014); Wilf (2016).

<sup>11</sup>Cohen (2009); Mosley and Singer (2009); Helleiner (2011); Katzenstein and Nelson (2013).

<sup>12</sup>Cohen (2009); Katzenstein and Nelson (2013).

<sup>13</sup>US Senate Hearing 111-720, "Continuing Oversight on International Cooperation to Modernize Financial Regulation," July 20, 2010.

**Bob Corker (Senator, TN-R):** If we ended up being out of synch [sic] with the rest of the world in areas that made us not competitive... . would you come back and talk with us about those so that we might make changes[?] ...

**Lael Brainard (Witness, US Treasury):** ... [O]ther countries are going to want to move in [the direction of Dodd-Frank] because it will improve the strength and ... resilience of our financial system ... [M]any of the countries participating in the G-20 have, in fact, been waiting to see the final outlines of U.S. financial reforms because they want to move in that direction and emulate the systems that we are putting in place.

**Bob Corker:** But the question is, if [other countries] do not emulate [the United States], will you come back and talk with us?

**Lael Brainard:** ... [Yes, though] in those areas where we must have international rules, we will absolutely pursue them and ensure that the U.S. standard, high standard, is the world standard.

The quote begins with Senator Corker emphasizing his concern that higher regulations will make US-headquartered finance less competitive than these firms' foreign competitors. This is an example of *direct effects*, where the international system is fixed in the short- to medium-term, and relative change in national policies leads to short-run competitive effects that some actors may want to pursue or avoid. Under Secretary Brainard responds, emphasizing that other countries will likely follow US reforms, an example of the indirect *interdependence* approach, emphasizing the sequencing and interconnectedness of countries' policy choices. And, Senator Corker replies with skepticism that other countries might indeed follow the United States.

Network theory dynamics permeated discussion about the desirability of more stringent financial regulations. Arguments for regulation recognized that the US crisis had spread outward because of increasingly intertwined financial markets. And arguments against regulation often recognized the potential for multinational firms to simply move elsewhere.

Consistent with variation in citizens' folk realism and ethnocentrism levels, politicians' beliefs about the likelihood of foreign cooperation and the degree to which foreign benefits are emphasized varied. Senator Corker's skepticism that other countries would emulate US policies implies he held a realist view of the world. We find additional examples of such concern from October 2011:<sup>14</sup>

**Mike Johanns (Senator, NE-R):** [An ongoing concern is how Dodd-Frank will] be harmonized internationally. US Deputy [Treasury] Secretary [Neal] Wolin said, "... We are working closely with our G-20 partners to make sure that we get a regime that works world-wide so we do not have new opportunities for arbitrage... . Soon after that ... Michel Barnier of the European Union said "..., "We don't support the same approach... . That is not what we are going to do."

So what assurance can you give me that the G-20 ... [is] trying to figure out how to [follow] ... the leadership of the United States? ... It is not very reassuring to me [when you talk about principles being adopted to harmonize legislation.] All that tells me is that we are having a lot of meetings.

Further, we find variation in the degree to which US politicians are interested in helping other countries—an example of variation in ethnocentrism—as illustrated below from March 2009:<sup>15</sup> **Carolyn McCarthy (House Representative, NY-D):** AIG ... was saved because it was a systemic risk to the American economy... . [Yet this week] we find out that a significant amount, billions and billions, tens of billions of dollars, went to foreign banks. I do not believe we should be bailing out foreign banks. I believe other governments should bail out their own banks.

<sup>14</sup>US Senate Hearing 112-350, "The G-20 and Global Economic and Financial Risks," October 20, 2011.

<sup>15</sup>US House Hearing 111-14, "Perspectives on Regulation of Systemic Risk in the Financial Services Industry," March 17, 2009.



I would like to ask the panelists, do you feel that that is a proper use of taxpayers' money, under the guidelines that it protects the systemic risk of the financial institutions of America? **Peter Wallison (Witness, American Enterprise Institute)**. Let me try to start on that, Congresswoman, and just say that if you were to bail out any U.S. bank of any size, you are going to be bailing out foreign banks, because banks are all interconnected.

Thus, politicians vary in their beliefs that there will exist international effects of national policy and in the degree to which they care about those international effects.

### *Three Logics and Moderators Applied to Financial Regulations*

Our goal is to apply each of the three theoretical logics to representative, individual-level arguments that engage with the substantive issue of financial regulatory stringency. We thus construct individual-level arguments that highlight theoretical distinctions among direct, network, and indirect approaches.

When we present the *direct* logic to survey respondents, we construct an argument that directly links a national change in financial regulations with an effect only on the national economy. We first emphasize that an increase in financial sector regulations will increase the stability of the US financial sector. We then tell respondents that a stable US financial sector will positively impact the real US economy and, then, finally, the stability of the United States as a whole. Thus, survey respondents that receive the direct treatment are primed to consider the effect of US regulations within an all-US context (US financial sector stability, US real economic stability, and US stability). While international externalities may arise from a change in US policy, such effects are not overtly mentioned.

For the *network* logic, we constructed an argument that links a national change with a change in the stability of the overall financial network, not just US stability. Empirically, [Oatley et al. \(2013\)](#) and [Winecoff \(2015\)](#) establish that the current financial system is hierarchical, with one major node, the United States, whose centrality has *increased* in the aftermath of crisis. Our network argument emphasizes exactly that, US financial regulations' effects on stability abroad. Respondents assigned to the network treatment first read how an increase in US regulatory stringency may directly increase the stability of the US financial sector and this, in turn, will increase stability of the international system as a whole. Here, there are additive benefits to an increase in US regulations—the US financial system is more stable (a direct effect) and the international system is also more stable (an indirect effect). Unlike the direct argument, this logic emphasizes an ultimate effect of regulations upon global stability, with US stability as an intermediate step.

Finally, we constructed an *interdependence*-based argument for financial regulations. Within the context of financial regulations, a US citizen might support an increase in US financial regulations if it creates incentives for other states to adopt similar policies. Within finance, this is most obvious when we think about how regulatory decisions by bodies within the European Union (e.g., the Bank of England, the European Central Bank) or within the United States (e.g., the Federal Reserve Board, the Securities and Exchange Commission) directly and indirectly affect the business environment for both domestic and foreign firms. In general, we expect all three arguments to increase respondents' support for financial regulations.

Each is a potentially persuasive argument that would increase a citizen's support for regulation. The first set of hypotheses test the simple question of whether each of these three arguments' logics will systematically affect citizen policy preferences:

H1a: Direct logic hypothesis: direct arguments will increase citizen support for regulatory stringency.

H1b: Interdependence logic hypothesis: interdependent arguments will increase citizen support for regulatory stringency.

H1c: Network logic hypothesis: network arguments will increase citizen support for regulatory stringency.

### Moderator hypotheses

Interdependence arguments rely on other countries cooperating with the United States by enacting similarly strict regulations. We expect that folk realist respondents might be skeptical of this logic and more apt to believe that, if the United States took the lead with stricter regulations, then other countries would take advantage of the United States by leaving their own regulations lax. In this way, the foreign country benefits from whatever additional stability the US regulations bring, while simultaneously making its own country more attractive for financial actors who dislike onerous regulation.<sup>16</sup> If the respondent does not believe that US regulations will spur foreign regulations—this skepticism is consistent with folk realist beliefs—then the interdependence argument likely does not increase his affinity toward regulation. Therefore, we expect that folk realists will be less responsive to interdependence arguments, and non-folk realists will be more responsive.

H2a: Folk realism decreases responsiveness to interdependence arguments.

The interdependence argument emphasizes how the benefits of regulation are eventually accrued by foreign countries, with implications for ethnocentrism as a moderator. Because the interdependence prompt emphasizes an increase in financial stability for other countries (without emphasizing a benefit for the respondent's home country). This is most valuable to nonethnocentrists and least valuable to ethnocentrists. We thus expect that ethnocentrist respondents may be less responsive to interdependence arguments.

H2b: Ethnocentrism decreases responsiveness to interdependence arguments.

### Experimental Design

We fielded an original survey experiment to assess two questions: (1) to what degree do citizens respond to arguments pertaining to the direct, interdependent, and network effects of regulations, and (2) what characteristics moderate these treatment effects? We randomly assigned respondents to either a treatment or control group. Each respondent in the treatment group received one argument—direct, interdependent, or network—in favor of increasing financial regulations. Respondents learn in each treatment that increasing US regulatory stringency increases stability—but through different logical channels. For question 1, we assess the effect of treatment on the outcome, which measures support for stricter financial regulations. We compare support for financial regulations when respondents are given one treatment to a null case, where they are given no positive explanation, and to a placebo explanation.

Our survey terminology—“more strict regulations”—is selected to circumvent citizen assessment of the efficacy of current regulations as adequate or inadequate. It most broadly captures the idea that regulatory stringency may be increased by imposing an additional number of regulations or more stringent regulations.<sup>17</sup>

<sup>16</sup>This describes the regulator's dilemma, e.g., Kapstein (1989).

<sup>17</sup>The phrase “more strict regulation” plausibly isolates reactions to the given argument and avoids respondents' evaluation of existing levels of financial regulation (if the alternative phrasing was “stricter regulation”), and abstracts

### The Respondents

We recruited 1,293 survey respondents using Amazon's Mechanical Turk (MTurk) service in July 2015. MTurk is an online web-based platform where researchers post "tasks" and compensation levels for participants who may opt-in to complete the task. Our task was to complete a short survey. Respondents were compensated \$1.25 for the survey; 1,159 respondents completed the survey in a median time of sixteen minutes.<sup>18</sup> After accepting the task, participants were directed to an external survey site (Qualtrics) to answer the survey questions. Because MTurk is relatively inexpensive for survey research, its use has grown within international relations scholarship and beyond.<sup>19</sup> Since online survey respondents can sometimes take surveys very quickly or get distracted, we limited our sample to respondents who spent at least eight minutes (no less than half the median completion time) on the survey but who did not take greater than thirty-two minutes (double the median completion time). This corresponds to excluding the fastest 1.8% and the slowest 7.7% of survey takers and leaves a 1,049 respondent sample.<sup>20</sup>

The recruited respondents are a reasonable sample to test the theoretical relationships of interest. Subjects recruited on MTurk are more representative of the US population than convenience samples drawn from student populations, though less representative than subjects recruited via nationally representative internet-based samples or national probability samples (Berinsky et al. 2012). While our respondent pool was similar to national averages, it differed in some ways. For example, 54% of our sample was male, compared to 48% in the 2012 ANES survey. Our respondents tended to be younger than the national average (sample average 34.3 years old), and our sample contained more white respondents than the national average (sample average 77.4% white). We are not making claims about nationally representative treatment effects but also do not expect that the theoretical relationships we assess here would differ substantially in another sample.<sup>21</sup>

### Main Treatment

After a few demographic questions, all respondents read a short introduction, reproduced below, that described the 2007–8 financial crisis. Each respondent was told that there exists a debate over whether the United States should adopt "more strict" financial regulations.

*Since the Financial Crisis of 2007–2008, policymakers and citizens in the United States have debated how to regulate banks and other financial actors. Some have argued the firms should have more strict regulations, such as banning banks from engaging in especially risky activities.*

*This debate is very important. The United States holds the world's largest financial sector. Further, the United States is also at the center of the global financial network, with contracts between U.S. banks and banks from other countries totaling over 6 trillion USD. To put this in perspective, that is twice the amount as the next largest country in terms of banking transactions, the United Kingdom.*

Each respondent was then given the following argument against increased regulation: "When regulations are more strict, banks may make fewer loans, which can hurt the economy as a whole." Next, each respondent was randomly assigned to one of

away from ideological bends toward favoring more (liberal) or less (conservative) regulation (if the alternative phrasing was "more regulation").

<sup>18</sup>Mean completion time was 21.6 minutes, and completion times ranged from three (minimum) to 411 (maximum) minutes.

<sup>19</sup>For recent examples, see Chaudoin (2014); Tingley and Tomz (2013).

<sup>20</sup>The appendix shows the distribution of completion times. Dropping the fastest and slowest 10% of respondents does not substantively change results.

<sup>21</sup>The appendix examines treatment effects for subpopulations that are over- and under-represented in our sample.

five conditions—either one of three logical arguments in support of more stringent regulations (direct, interdependent, or network) or one of two control groups (null, placebo). Treatment wordings were carefully chosen; the primary difference between each treatment is the logic that underlies the proregulation argument. Each treatment has similar word counts, similar tone, and verbiage of similar force, meaning that no treatment contains significantly stronger or weaker wording than the others. The treatments differ from one another in the *location of policy externality* and *the location of the ultimate effect* of national regulatory change on financial stability, as indicated in Table 1.

We reproduce these treatments below and underline the important differences for emphasis.<sup>22</sup> Each of the proregulation treatments is prefaced with the statement “*Other people have argued that the United States should adopt more strict regulations.*”

- **Direct Treatment:** These people believe that more strict regulations will increase the stability of the United States financial sector, which increases the stability of the United States as a whole. This helps ensure that another financial crisis does not occur in the United States.
- **Interdependent Treatment:** These people believe that more strict regulations will increase the likelihood that foreign countries adopt similar regulation, which increases the stability of foreign countries’ financial sectors. This helps ensure that another financial crisis does not occur in those other countries.
- **Network Treatment:** These people believe that more strict regulations will increase the stability of the United States financial sector, which increases the stability of the global financial network as a whole. This helps ensure that another financial crisis does not spread across countries.

For the null treatment, respondents were not given any proregulation argument, and a placebo condition. For the placebo treatment, respondents receive a positively toned message but one without actual argumentative content. This allows us to assess the degree to which treatment effects are caused by the logical argument contained in the treatment, as opposed to just simply having proregulation words on the page.

- **Placebo:** Other people have argued that the United States should adopt more strict regulations. These people believe that more strict regulations will increase stability. This helps ensure that another financial crisis does not occur.

To increase respondents’ attentiveness to the survey, we promised an additional monetary reward if, at the end of the survey, they could answer factual questions about the survey they had just taken. These incentives can induce participants to pay greater attention to the survey and ensure that respondents are generally able to correctly recall features of their treatment assignment. The questions ask them to identify the pro- and antiregulation arguments that they were given. Our respondents performed well on these manipulation checks.<sup>23</sup>

<sup>22</sup>Respondents did not see any underlining or bold headers.

<sup>23</sup>84% correctly recalled the antiregulation argument. Among respondents receiving the direct, interdependent, or network treatments, 42% correctly recalled the treatments they received.

*Outcome Variable*

After treatment, respondents were asked, “Do you favor or oppose more strict regulation of the U.S. financial system?” Respondents chose among a seven-point Likert scale—“strongly favor,” “somewhat favor,” “weakly favor,” “neither favor nor oppose,” “weakly oppose,” “somewhat oppose,” or “strongly oppose.” Respondents choosing “neither favor nor oppose,” were asked a follow-up question of whether they “lean toward supporting or opposing” regulations. We coded a respondent as *supportive* if he chose “strongly favor” or “somewhat favor.” Results are similar using alternative classifications of support.

*Moderator Measurements*

We identified respondents’ realist beliefs using a subset of three questions proposed by Kertzer and McGraw (2012, 248) that most closely pertained to questions of international cooperation. Specifically, we used the items that asked, “What’s more important to you: Upholding international law or protecting American corporations?”; “In your opinion, countries are inherently cooperative or are inherently aggressive?”; and, “In your opinion, countries should be able to trust other states or should never trust other states?” We coded respondents as high or low on the folk realism dimension according to the number of times they chose the realist option. 363 respondents (35%) never chose the realist option, while 404 (39%), 213 (20%), and 60 (6%) chose the realist option one, two, or three times, respectively. In our sample, respondents at and above the median—those who chose the realist option one, two, or three times—were classified as folk realist.

To measure respondents’ levels of ethnocentrism, we followed existing literature and asked respondents a set of questions about different groups in society, such as racial groups (e.g., whites or Hispanics) and other groups (e.g., physicians or teachers). Respondents classified these groups along continua regarding certain traits, such as hardworking versus lazy. We calculated the standardized difference between how positively a respondent evaluated her in-group compared to how she evaluated out-group members. A larger difference indicates a higher degree of ethnocentrism. We classified a respondent as high (ethnocentrist) or low (nonethnocentrist) on the ethnocentrism scale if her score was in the upper or lower half of the sample distribution.

**Results**

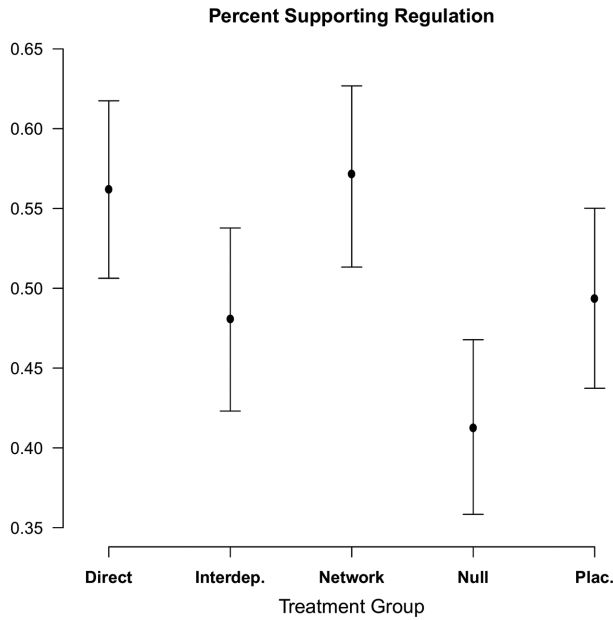
All three main treatments (direct, indirect, and network) raised support for regulation, on average. 41.1% of respondents in the null group (who did not receive any argument) supported more strict regulation, compared to 48.1% of respondents who received the interdependence argument and 57.1% of respondents who received the network argument.<sup>24</sup> The direct treatment also increased support to 56.2%. A simple difference-in-means test indicates that this difference is statistically significant for the network and direct treatments, though not for the interdependent treatment.<sup>25</sup> The placebo treatment also increased support to approximately 49.3%, which was very similar to the effect of the interdependent treatment.

Figure 1 shows Bayesian estimates of the level of support, with credibility intervals, for each treatment category.<sup>26</sup> Respondents who received the network and

<sup>24</sup>Table B.4 provides details.

<sup>25</sup>Table B.4 provides difference-in-means test showing that results are substantively consistent across two, alternative broader definitions of support. When using a moderate definition of support, respondents who received the interdependent treatment indicated higher average support than did null treatment respondents at the 10% level.

<sup>26</sup>Estimates were constructed using noninformative Jeffrey’s priors for the Beta distribution. See Appendix A.



**Figure 1.** Respondent support across treatments, Bayesian point estimates and 95 percent credibility intervals.

direct treatments indicated greater levels of support compared to the null group. Respondents receiving the interdependent argument increased support for regulations on average, but support levels are similar to support for the null and placebo respondents. Thus, the interdependent treatment respondents had weaker positive effects. Results are consistent across different codings of the dependent variable, with network and direct treatments having the largest and most significant effects on support for regulation.

Table 2 shows results of estimating logit regressions of the outcome on treatment assignment and a variety of other respondent characteristics. The first column includes the set of four treatment indicators, with the null treatment withheld as the base category, while the second column adds a set of respondent characteristic control variables found to be important in other analyses. In both models, we find that those in the direct and network treatments are statistically more supportive of financial regulations. In Model (1), without additional control variables, those in the placebo group were also statistically more likely to support regulations. Model (2) includes controls that we might expect to affect support for regulation. We find that more highly educated respondents and those with high scores on the political knowledge questions are more likely to support regulations. Those with incomes greater than \$50,000 per year (44% of the sample) are less likely to support regulations. We did not find significant differences based on whether the respondent was Caucasian, male, or employed.

Across Models (3), (4), and (5), direct and network treatment respondents continue to be associated with statistically higher levels of support for regulation, and we add additional controls for characteristics theoretically expected to affect respondents' levels of support for regulation. Model (3) includes a measure of general affinity for regulations. It asks for a respondent's opinion regarding the current state of regulations and codes whether respondents indicate there exists "too much" (1), "about right" (2), or "too little" (3) regulation of business. It is straightforward to expect that respondents who believe there is too much regulation will

**Table 2.** Logistic regression results, effect of treatment on support for regulation.

	Baseline (1)	Additional controls (2)	Regulatory Preferences (3)	Party (4)	Ideology (5)	Moderators (6)
<b>Treatment Assignment Indicators</b>						
Direct Treatment	0.608*** (0.197)	0.593*** (0.201)	0.670*** (0.221)	0.658*** (0.211)	0.686*** (0.215)	0.793*** (0.234)
Interdependence Treatment	0.282 (0.196)	0.265 (0.201)	0.249 (0.219)	0.301 (0.211)	0.251 (0.213)	0.330 (0.231)
Network Treatment	0.647*** (0.197)	0.631*** (0.201)	0.780*** (0.222)	0.716*** (0.211)	0.795*** (0.215)	0.826*** (0.234)
Placebo Treatment	0.330* (0.197)	0.300 (0.202)	0.266 (0.220)	0.305 (0.212)	0.264 (0.214)	0.245 (0.237)
<b>Additional Controls</b>						
Education Level		0.098* (0.051)	0.061 (0.056)	0.086 (0.054)	0.051 (0.055)	0.013 (0.059)
Caucasian Indicator		0.204 (0.153)	0.188 (0.167)	0.389** (0.161)	0.259 (0.163)	0.189 (0.214)
Female Indicator		0.006 (0.129)	-0.075 (0.141)	-0.018 (0.135)	-0.066 (0.138)	-0.112 (0.152)
Employed Indicator		-0.115 (0.145)	-0.072 (0.159)	-0.112 (0.153)	-0.085 (0.155)	-0.094 (0.171)
Income > \$50,000 Indicator		-0.256* (0.133)	-0.158 (0.146)	-0.179 (0.139)	-0.181 (0.141)	-0.204 (0.155)
Political Knowledge Level		0.297*** (0.057)	0.292*** (0.061)	0.344*** (0.060)	0.313*** (0.060)	0.354*** (0.067)
<b>Regulatory Preference</b>						
Demand for More Regulations			1.184*** (0.097)			
Democrat Indicator				1.412*** (0.152)		
Liberal Ideology Scale					0.461*** (0.045)	0.434*** (0.050)
<b>Moderators</b>						
Folk Realism Level						-0.232*** (0.089)
Ethnocentrism Level						-0.108 (0.097)
Constant	-0.359*** (0.139)	-1.791*** (0.346)	-4.269*** (0.436)	-3.108*** (0.396)	-3.905*** (0.428)	-3.622*** (0.509)
N	1,049	1,045	1,044	1,044	1,044	900

Notes: \*\*\* Significant at the 1 percent level.

\*\* Significant at the 5 percent level.

\* Significant at the 10 percent level.

be less likely to support financial regulations. Indeed, this indicator is positive and statistically significant. Among additional control variables, all except political knowledge lost statistical significance. Model (4) replaces regulatory preference with an indicator of self-identification as a Democratic party member, and Model (5) includes respondents' self-identification along a traditional seven-point ideology score, ranging from "Extremely conservative" (1) to "Extremely liberal" (7). As expected, Democrats and those who identify as more liberal were associated with statistically higher levels of support for regulation.

The final column includes the possibility that the moderators analyzed below—folk realism and ethnocentrism—have a direct effect on a respondent's support for regulation. We enter discrete measures of folk realism (0, 1, 2, 3) and continuous

measure of ethnocentrism, and—even controlling for ideology—find that higher levels of folk realism are associated with less support for regulations. Higher levels of ethnocentrism are negatively associated with support for regulations, but the estimates are not statistically significant. Direct and network treatment respondents remain statistically likely to support financial regulations at higher rates than the null.

Across these methods of analysis, the main result is that respondents who received network and direct arguments consistently indicated greater support for financial regulations. The estimated coefficients for the network treatment are approximately 20% larger than those for the direct treatment. The interdependence argument has a positive, though statistically insignificant, effect on support for regulation.

### *Robustness*

For subsets of respondents for which we hold theoretical expectations about respondents' predispositions to like or dislike regulations, we consider how different treatments affected policy support. Figure 2 subsets respondents who are predisposed to dislike regulations (left panels) and to like regulations (right panels). Across all three subsets of respondents we identify as predisposed to like regulations (right panels), network arguments consistently increase support for regulations. Among self-identified liberals (bottom-right graph), those who received the direct argument also increased support as compared to the null; among other specifications, those who receive the direct argument increase support on average, but it is not substantially different from the null. Interdependence arguments increase this subset's proclivity to support financial regulations on average, but the posterior distributions are similar. In sum, even among those predisposed to support regulations, we see variation across treatment groups, with consistent evidence that network arguments most persuaded respondents.

Among those predisposed to dislike regulations, we see fascinating patterns. The placebo argument actually *lowered support for regulations*, on average, as compared to the null. This might indicate backlash among these respondents. Interestingly, network arguments increased support on average as compared to the null and increased support more substantially as compared to the placebo argument. This is more evidence that network arguments—across the board and for different subsets of the population—seem to resonate consistently and most strongly. Those who received the network argument have, on average, higher support for regulations than do those who received the direct argument, which indicates that the systemic effect of regulations resonates with respondents (above and beyond direct effects to the United States). We find little evidence that interdependence arguments affect respondent support.

### *Moderation Results*

Do respondent characteristics, such as level of ethnocentrism or folk realism, explain variation in treatment effects? We examine this question especially for interdependence arguments, where we held theoretical expectations but for which we found little evidence of an aggregate treatment effect.

Figure 3 shows direct tests of these hypotheses for interdependence. We expected that folk realists would not be as persuaded by interdependence arguments that relied upon countries acting cooperatively; in contrast, we expected non-folk realists to believe that countries may act cooperatively and to increase policy support when provided the interdependence argument. Consistent with these expectations, estimated treatment effects (compared to the null) are indeed weaker for folk realists (top left) than for non-folk realists (top right). Among non-folk realists, those who



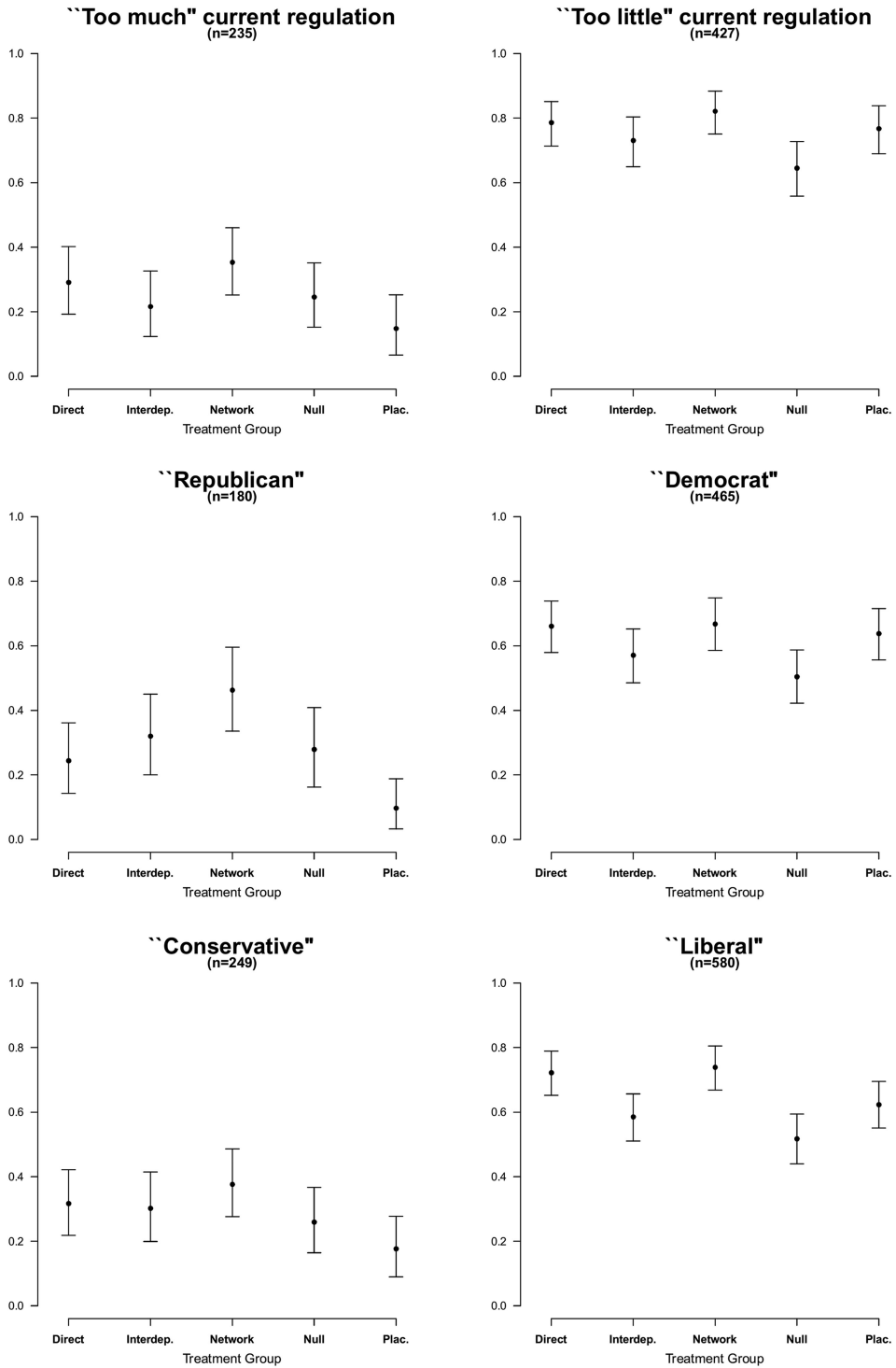
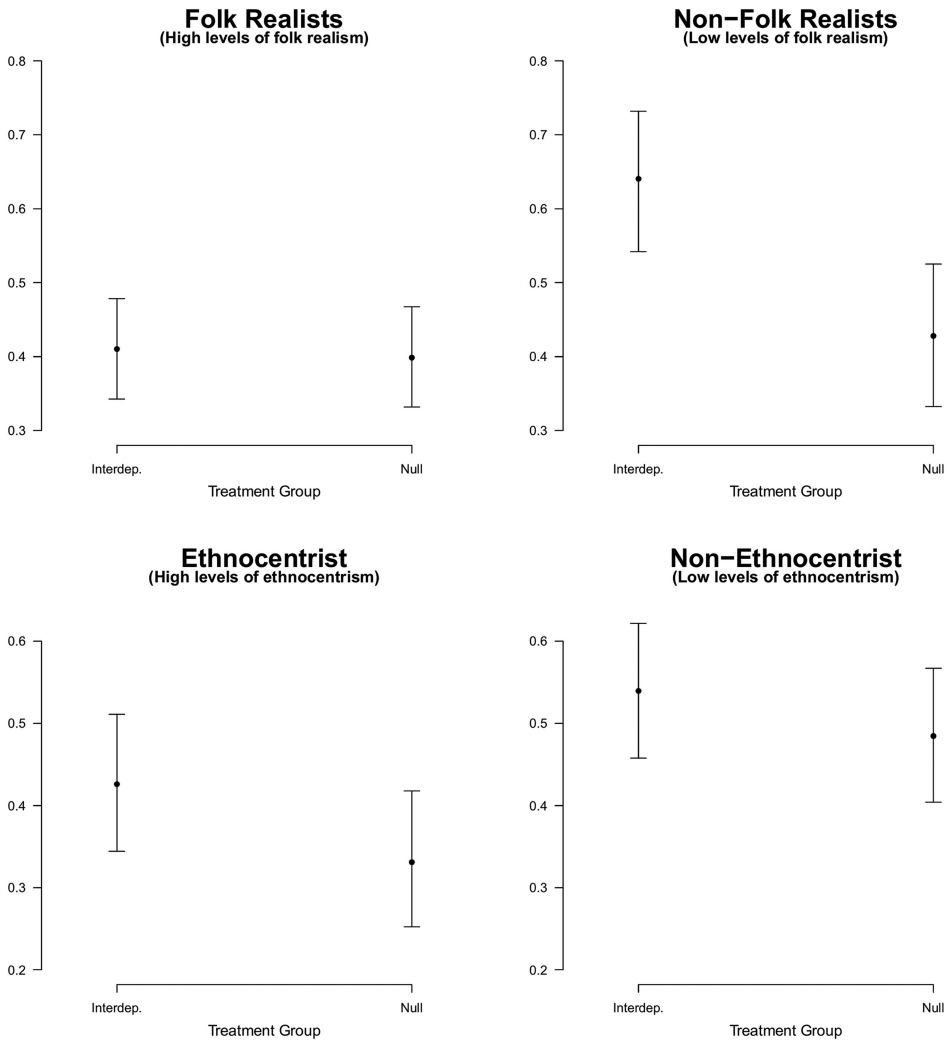


Figure 2. Percent respondent support for financial regulations, across treatments, by regulatory preference (top), party ID (middle), and ideology (bottom).



**Figure 3.** Support for financial regulations, folk realism and ethnocentrism moderation results for interdependence treatment.

received the interdependent argument expressed support for financial regulations at higher rates than did non-folk realists in the null treatment who received no argument for regulations. Among folk realists, there is not a substantial difference in support among respondents in the interdependence and null treatment groups.

Results for ethnocentrism, however, were less consistent with expectations. We expected ethnocentrists—those who make stark contrasts between themselves and members of a different group—to be less persuaded by the interdependence argument, which emphasizes the benefit of financial stability abroad; in contrast, we expected nonethnocentrists to value financial stability in countries abroad and to respond positively to the interdependence argument. The bottom graphs of Figure 3 reveal that ethnocentrist respondents were less likely to support regulations than nonethnocentrists (compare 33% ethnocentrist support under the null treatment versus 49% nonethnocentrist support under null), but we do not find the expected moderation effects. That is, the bottom left graph of Figure 3 shows that

ethnocentrists did seem to positively respond to the interdependence argument; ethnocentrist respondents were more likely to support the policy when given the interdependence treatment (42% support) than when given no argument (33% support under the null) in support. Among nonethnocentrists, there was little positive effect of the interdependence policy argument as compared to receiving no argument (54% support under interdependence treatment versus 49% under the null). Thus, interdependence arguments surprisingly raised policy support among ethnocentrists; nonethnocentrists as a group are more likely to support the policy; and the content of the interdependence argument did not substantially increase support. Thus, the ethnocentrist moderator findings were not consistent with our expectations but highlight interesting patterns that may be probed in future work.

To put results in perspective, Appendix Figure B.4 shows results for all treatment effects. We find that folk realism moderates *each* treatment as compared to the null such that we cannot say that the effect is specific to the interdependence treatment.

Overall, folk realism results were more consistent with our theoretical expectations, suggesting that heterogeneity in how respondents' world views of international relations do indeed affect how they process outside arguments about foreign policies. Ethnocentrism results were less consistent, however. There are several possible reasons for these inconsistent results. The first is that the effective sample size decreases as we divide respondents by the types and by treatments. Since approximately two hundred respondents received each treatment, dividing them into categories decreases the amount of data used to generate each estimate. A second possibility concerns the ethnocentrism measurement specifically. We used the battery of questions from Mansfield and Mutz (2009). Those questions measured ethnocentrism vis-à-vis other domestic groups of peoples, for example, asking a white respondent questions about black people. Our argument for why ethnocentrism might moderate treatment effects, however, pertained to how respondents viewed foreign groups of people, for example, how an American respondent felt about Norwegians. While we expected those two respondent characteristics to be correlated, a more theory-specific measurement of ethnocentrism might yield different results.

### Conclusion

We highlight distinct theoretical perspectives about how national policies interact with the international system and provides a first test of the degree to which citizens react to each perspective's logic as applied to increasing stringency of US financial regulations. To the best of our knowledge, this is the first paper to examine whether interdependent and network arguments resonate with citizens regarding policy preferences. In contrast to extant literature that provides abundant evidence that direct arguments can influence citizen preferences in certain issue areas, existing research gives few expectations about whether and how interdependent and network arguments might resonate with citizens. We thus conceptually distinguish among these perspectives and test them.

Within an original survey experiment, we find that network arguments resonate most consistently and strongly across respondents, followed by direct arguments. We find little support that our interdependent argument led respondents to systematically increase support for regulations. Overall, we conclude that respondents do react to international externalities. We find less support for our moderation hypotheses, though folk realism—despite being not highly correlated with partisanship and ideology—has a strong moderation effect across all treatments.

Additional work can and should probe the nature of these effects. For example, an open question concerns *why* the network treatment was so strong. Perhaps the prompt triggered respondents to think about a bigger magnitude of effect for regulations, since they affect the global network instead of one or two countries. It is also

possible that the network treatment framed the situation in such a way as to place the United States in a more central position, which appealed to respondents. Either of these might have been a more persuasive frame for the value of regulations than alternative treatments.<sup>27</sup> While we analyzed folk realist beliefs, others could use financial regulations, and the treatments we analyzed, as an appealing laboratory for further exploration of psychological insights into individual preferences over economic foreign policy and the mental models individuals use—or can use when exposed to them—in evaluating policies.<sup>28</sup> Or perhaps opinions over financial regulations are a function of the country's overall political mood regarding globalization (Owen and Quinn 2016). Another open question concerns the weakness of the interdependence treatment. Perhaps this treatment had less effect because it did not provide a fully fleshed out chain of interdependence logic, which links US regulations to regulations abroad, which then circle back to have consequences on the US economy. In order to design a valid comparison across treatments—the focus of the inquiry—this experiment acknowledges only one part of interdependence.

This inquiry is consciously abstract and hypothetical to provide a base for further examination of citizen preferences within international frameworks. Existing work heavily emphasizes direct effect stories, yet this paper establishes that alternative international frameworks can matter, too. Part of our goal with this analysis is to suggest that scholars of opinion on foreign economic policies can expand their theoretical toolkits to incorporate the network and interdependence-type arguments that are already emphasized in models of the causes and effects of policies. These logics especially matter for regulatory issue areas—which might include environment and human rights—where direct effects offer the most tentative expectations. This paper examined financial regulations as a starting point because the dominance of the United States as a center for capital offers special strength for evaluating network logics. However, other regulatory areas, environment and workers' rights, among others, are increasingly important, as evidenced by being included in international trade and investment agreements (Hafner-Burton 2005; Duer, Baccini, and Elsig 2014).

One may ask why we should examine citizen preferences over regulatory policy when that policy is technically complex and of low electoral salience. On both dimensions, we emphasize that elites and politicians maintain the ability to frame issues such that complex issues may be simplified for public consumption and unexpected events provide grassroots opportunities to mobilize citizens for causes. For example, to “break up the banks” was a key part of Bernie Sanders' Democratic campaign platform in the 2016 presidential primary race. Providing financial “regulatory relief” was a motivation of the Financial CHOICE Act of 2017 that rolled back certain Dodd-Frank provisions and passed the US House in June 2017 with 233 yeas (all Republicans).<sup>29</sup> In short, technical complexity may become simplified, and past salience does not predict future salience.

Substantively, we examined politician statements toward the policy of interest at the committee-stage of US national law-making. It was interesting to find many examples of overt politician concern with interdependent argument dynamics and little discussion of network effects from the perspective of assuming that US national policy would automatically and unilaterally lead to international outcomes. Instead, politicians were concerned with the degree of international cooperation (in an issue area where states hold few international legal obligations) and did not consider unilateralism. In sum, in committee statements, politicians often made interdependent arguments and few network arguments. Shifting to the experimental results, it is interesting to note that network logics resonate with citizens more

<sup>27</sup>Chong and Druckman (2007).

<sup>28</sup>Kertzer and Tingley (2018); Sylvan and Voss (1998).

<sup>29</sup>HR 10, Final vote results for Roll call 299 included 186 yeas (185 Democrats and 1 Republican) and 11 not voting (8 Democrats and 3 Republicans).

systematically and universally than does interdependent logics. Though the experimental prompts were designed to be abstract and to not test support for a specific substantive policy, it is interesting to note this disconnect. Future research might seek to more closely tie theoretical and observed arguments to a specific policy of interest. Further, one could consider how international institutional commitments might moderate this high interdependent concern regarding whether or not countries might follow or compete with another country's policy lead.

Overall, we conclude that citizens do understand and will respond to some indirect logics, like those based on network arguments. Through a test of these arguments, we are closer to understanding citizens' perspectives vis-à-vis their country, other countries, and the world as a whole.

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### Appendix A: Bayesian estimates details

The figures show Bayesian estimates of the posterior distribution of the proportion of respondents supporting regulation. Let  $\theta_t$  be the proportion of respondents supporting regulation under treatment regime  $t \in \{null, direct, indirect, network, placebo\}$ . Let  $n_t$  be the number of respondents receiving treatment  $t$  and  $a_t$  be the number of respondents in regime  $t$  approving. For a prior distribution for  $\theta_t$ , we used the noninformative Jeffrey's prior  $\theta_t^0 \sim \beta(0.5, 0.5)$ . The conjugate posterior distribution for  $\theta_t$  is  $\theta_t^p \sim \beta(a_t + 0.5, n_t - a_t + 0.5)$ . The mean and 95% credibility intervals are from 5,000 draws from the posterior distributions.

### Appendix B: Additional Figures and Table

#### Moderator Distributions

**Table B.1.** Descriptive statistics and across treatments: tables show the distribution of high and low values of folk realism and ethnocentrism across treatments.

	Treatment group					
	Pooled	Direct	Interdep.	Network	Null	Placebo
Non-folk realist {0} (below median)	34.9%	38.3%	32.5%	32.2%	32.2%	39.3%
Folk realist {1, 2, 3} (at and above)	65.1%	61.7%	67.5%	67.8%	67.8%	60.7%
Ethnocentrist (above median)	49.1%	52.4%	51.4%	48.4%	46.6%	46.5%
Nonethnocentrist (below median)	50.9%	47.6%	48.6%	51.6%	53.4%	53.5%

*Respondent Sample and Support Distributions***Table B.2.** Descriptive statistics—dependent variable sample distribution: respondents were randomly assigned to one of five treatment groups.

	Pooled	Treatment group				
		Direct	Interdep.	Network	Null	Placebo
All respondents	1255	252	248	251	253	251
In-sample respondents	1049	210	208	210	214	207
% support	50.3%	56.2%	48.1%	57.1%	41.1%	49.3%
% support, moderate defn	68.1%	73.8%	68.3%	71.9%	60.3%	66.2%
% support, broad defn	74.5%	78.1%	72.6%	78.1%	66.8%	76.3%

*Correlation Matrix (for Select Variables from Table 2)***Table B.3.** Correlation matrix for select variables in Table 2: among 899 respondents with values for all variables, correlations are presented above.

	Prefers regulations	Dem. partisan	Liberal ideology	Folk realism	Ethnocentrism
Demand for regulations	1.00				
Democratic Partisan	0.51	1.00			
Liberal ideology	0.53	0.72	1.00		
Folk realism measure	-0.27	-0.27	-0.29	1.00	
Ethnocentrism measure	-0.23	-0.22	-0.30	0.25	1.00

*Difference-in-Means Tests: Baseline, Moderate, and Broad Definitions of Support***Table B.4** Support for regulation by treatment group: This table shows the DV distribution and simple difference-in-means test against the null treatment.

Treatment group	N	Proportion support	Difference	SE	t-stat	p value
DV: Support (baseline definition) ("strongly favor" or "somewhat favor")						
Null	214	0.411				
Direct	210	0.562	0.151	0.048	3.13	0.002
Interdependence	208	0.481	0.048	0.035	1.44	0.151
Network	210	0.571	0.160	0.048	3.33	0.001
Placebo	207	0.493	0.082	0.048	1.68	0.093
DV: Support—moderate definition ("strongly favor," "somewhat favor," or "weakly favor")						
Null	214	0.603				
Direct	210	0.738	0.135	0.045	2.99	0.003
Interdependence	208	0.683	0.047	0.032	1.71	0.087
Network	210	0.719	0.116	0.046	2.54	0.011
Placebo	207	0.662	0.059	0.047	1.26	0.210
DV: Support—broad definition ("strongly favor," "somewhat favor," "weakly favor," or "lean toward favoring")						
Null	213	0.671				
Direct	210	0.781	0.110	0.043	2.54	0.011
Interdependence	207	0.729	0.045	0.031	1.30	0.194
Network	210	0.781	0.110	0.043	2.54	0.011



Table B.4 (Continued)

Treatment group	N	Proportion support	Difference	SE	t-stat	p value
Placebo	207	0.763	0.092	0.044	2.10	0.036

The top part of the table shows the narrow definition of support and the bottom shows the broad definition of support, with medium in between. The last four columns show results from a simple difference-in-means test, comparing support after a particular treatment with support after the null treatment. The standard deviation, t stat, and *p* values for differences in approval rates use the normal approximation of the Bernoulli data. The number of respondents in each group is much larger than traditional minimum values for use of the normal approximation. *P*-values less than 0.10 indicate that respondents that received that treatment indicated support for increased financial regulations at rates that are statistically distinguishable from those respondents that received no argument (the null). Across all definitions of support, respondents who heard the network and direct arguments were statistically more supportive of increased regulations as compared to the respondents in the null treatment who received no argument. Respondents who received the interdependence argument were statistically more likely to support regulations compared to the null in the moderate definitions of support, and respondents who received the placebo argument were statistically more likely to support regulations in the baseline and broad definitions of support.

### MTurk Sample versus Nationally Representative Sample

**Table B.5.** Logit regressions: treatment interactions with female, young, white, and college educated.

Our MTurk sample is different from a nationally representative sample. Above, we interact the treatment indicators with variables for which our sample differed from national averages: gender, age, race, and education. Table B.6 below displays predicted probabilities of supporting regulation for each type of person, for each treatment to display substantive effect estimates.

	(1)	(2)	(3)	(4)
Direct	0.254 (0.262)	0.495* (0.272)	1.219*** (0.452)	0.18** (0.321)
Interdep.	0.053 (0.265)	-0.003 (0.278)	0.680 (0.438)	0.583* (0.313)
Network	0.418 (0.266)	0.394 (0.272)	1.145*** (0.440)	1.218*** (0.329)
Placebo	0.046 (0.274)	0.161 (0.284)	0.708* (0.427)	0.600* (0.317)
Female	-0.558** (0.282)			
Direct*female	0.796** (0.400)			
Interdep.*female	0.502 (0.397)			
Network*female	0.502 (0.398)			
Plac.*Female	0.598 (0.397)			
Age low		0.576** (0.281)		

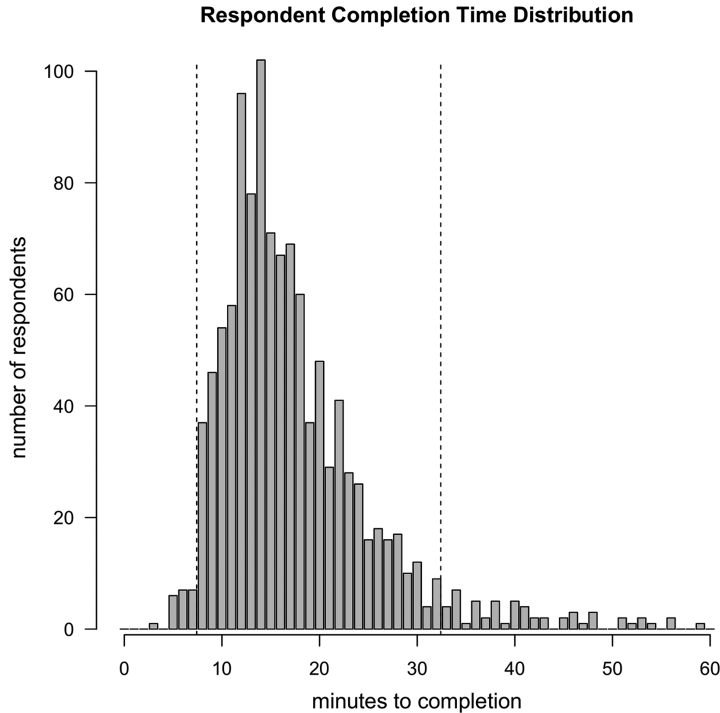
**Table B.5.** (Continued)

	(1)	(2)	(3)	(4)
Direct* age low		0.199 (0.397)		
Interdep.* age low		0.579 (0.395)		
Network* age low		0.490 (0.397)		
Placebo* age low		0.367 (0.396)		
White			0.716** (0.362)	
Direct*white			-0.765 (0.503)	
Interdep.*white			-0.490 (0.491)	
Network*white			-0.621 (0.492)	
Placebo*white			-0.454 (0.482)	
Educ. BA				0.539* (0.291)
Direct*educ. BA				-0.171 (0.408)
Interdep. *educ. BA				-0.480 (0.404)
Network*educ. BA				-0.912** (0.412)
Placebo*educ. BA				-0.429 (0.405)
Constant	-0.105 (0.188)	-0.076 (0.194)	-0.932*** (0.327)	-0.693*** (0.231)
N	1,048	1,048	1,049	1,049
Log likelihood	-716.687	-715.855	-717.082	-716.280
Akaike inf. crit.	1,453.375	1,451.711	1,454.165	1,452.560

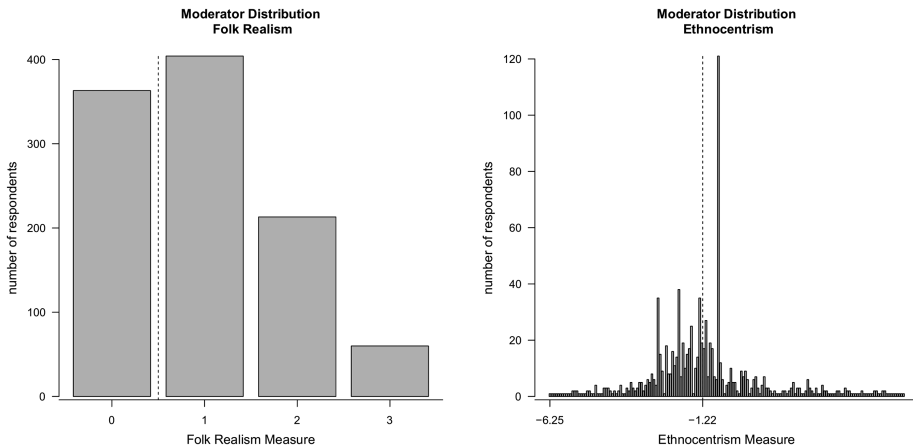
Notes: \*\*\*Significant at the 1 percent level; \*\*Significant at the 5 percent level; \*Significant at the 10 percent level.

**Table B.6.** Predicted probabilities of supporting regulation from interaction term models. In general, the substantive effects of the treatments are similar in the baseline models as they are for various underrepresented subpopulations. For females, older respondents, nonwhites, and respondents without a BA, the network and direct treatment effects were the two strongest. For some subpopulations, the direct treatment effects were stronger in the underrepresented group than in the baseline results, as is the case for females, older respondents, and nonwhites. The network treatment effects were slightly weaker for females, older respondents and nonwhites, compared to the baseline estimates, though the treatment effect was also stronger for respondents without BAs.

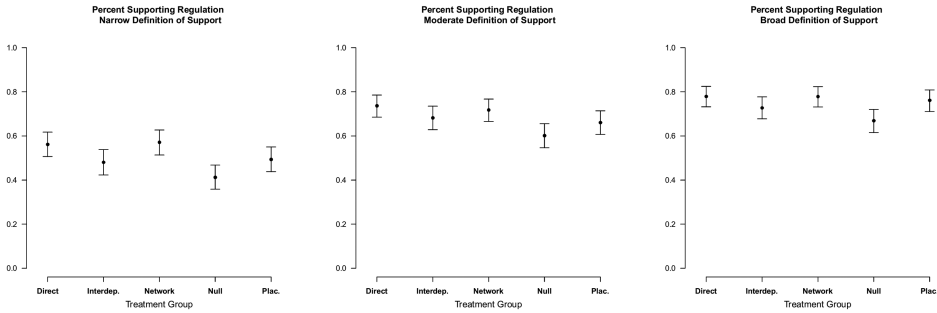
	Baseline	Fem.	Non-fem.	Age low	Age high	White	Non-white	Yes BA	No BA
Direct	0.562	0.596	0.537	0.511	0.603	0.560	0.571	0.597	0.506
Interdependence	0.481	0.473	0.487	0.481	0.480	0.494	0.438	0.487	0.473
Network	0.571	0.564	0.578	0.558	0.579	0.577	0.553	0.538	0.628
Placebo	0.493	0.495	0.485	0.469	0.521	0.510	0.444	0.504	0.477



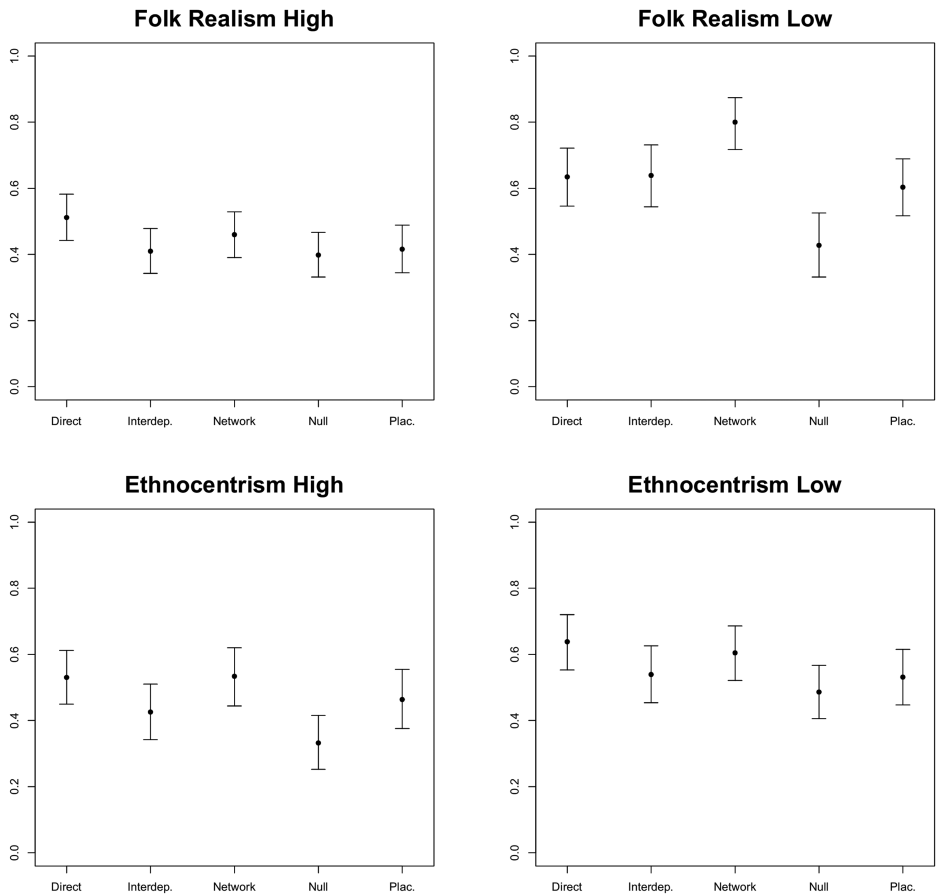
**Figure B.1.** Respondent response time distribution: The graph displays the distribution of response times for 1126 respondents who completed the survey within 60 minutes. Another 33 respondents completed the survey in between 61 and 411 minutes and—for clarity—are not displayed above. Dotted lines at 8 minutes (half the median survey completion time) and 32 minutes (double the median completion time) delineate the portion of respondents included in the analysis sample.



**Figure B.2.** Moderator sample distribution: The distribution of each moderator value is graphed above. 1,040 respondents answered questions to receive a folk realism value, and 913 respondents answered questions to receive an ethnocentrism value. Those values to the left and right, respectively, of each dotted line are samples of the low and high values of folk realism and ethnocentrism. The spike in ethnocentrism values reflects a number of respondents who selected neutral values on this series of questions.



**Figure B.3.** Treatment effects for different definitions of support: This figure shows point estimates with beta-estimated, 95 percent confidence intervals. Treatment effects are relatively similar across three narrow (left, “strongly favor” or “somewhat favor”), moderate (middle, narrow definition plus “weakly favor”), and broad (right, moderate definition plus “leans toward favoring”) definitions of support.



**Figure B.4.** Folk realism and ethnocentrism moderators, high/low: For subsets of high and low values of folk realism and ethnocentrism, this figure shows levels of support across all treatments with beta-estimated, 95 percent confidence intervals.

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