How Crises Shape Circles of Solidarity: Evidence from the COVID Pandemic in Italy

Jeremy Ferwerda, Dartmouth College

Gabriele Magni, Loyola Marymount University, CA

Liesbet Hooghe, UNC-Chapel Hill and EUI-Florence

Gary Marks, UNC-Chapel Hill and EUI-Florence

ABSTRACT

How has the COVID-19 pandemic affected boundaries of solidarity? Human-induced crises that impose asymmetric costs tend to sharpen pre-existing divides, but natural disasters often strengthen solidarity. The pandemic possesses properties of both kinds of crisis. In a panel survey conducted in Northern Italy, the initial epicenter of the pandemic, we asked respondents to complete conjoint tasks querying who was likely to violate health guidelines (wave 1) and who should be prioritized for vaccine distribution (wave 2). We find that while discrimination towards the rich is nearly universal, bias against other outgroups depends on ideology and personal experience with the crisis. Leftwing individuals display discrimination towards partisan outgroups, while those on the right display ethnic bias. However, this effect is conditional: those who suffered a significant income loss but no health effects display heightened discrimination, while respondents who experienced COVID-19 as a personal health crisis are less likely to penalize outgroups.

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When does a crisis foster solidarity and when does it sharpen discrimination against outgroups? How does one's personal experience of the crisis shape perceptions of who is to blame? And how are answers to these questions influenced by prior societal divides? In this paper, we seek to shed light on these questions by examining outgroup discrimination in the context of the COVID-19 pandemic in Northern Italy—the initial epicenter of the pandemic in Europe.

Existing research argues that crises can activate group identities and spur generalized hostility. We make two main contributions to this literature. First, building on the social psychology of affective polarization, we theorize that while crises prompt widespread outgroup discrimination, the target group will vary according to the ideological expression of pre-existing societal cleavages. Second, we argue that an increase in outgroup discrimination is conditional on the nature of the crisis. Extending previous work, we maintain that human-induced crises—e.g., an economic downturn—tend to sharpen outgroup discrimination, particularly when they impose asymmetric costs. However, crises viewed as beyond human control have the potential to increase solidarity. Using this framework, we explain that one's personal experience of the COVID-19 crisis—either as a health shock or an economic loss—shapes the propensity for outgroup discrimination.

To examine the boundaries of solidarity during a crisis, we conducted a two-wave panel survey in Northern Italy in 2020 and 2021. This region was among the earliest affected by the pandemic in the West, and the first to implement a full lockdown. As a result, the economic effects of the pandemic, and in particular the loss of tourism, hit Northern Italy particularly hard. These intertwined health and economic shocks occurred in an environment of high affective polarization, which places the ingroup/outgroup dynamics we examine in sharp relief. Moreover, as De Vries and co-authors report (2021), the government response to COVID in Italy set the

stage for measures adopted in other countries. While no country can be considered an island when studying the effect of a global crisis on outgroup discrimination, there is reason to believe that public opinion in Italy was less conditioned than its neighbors by events beyond its borders.

The first round of the survey was conducted in August 2020, before the development of vaccines, while the second was fielded in February 2021 on the heels of a brutal second wave when vaccines were still in short supply. Respondents were asked a series of questions in each wave about personal experience with the crisis and their attitudes towards outgroups. As our primary outcome, we embedded a conjoint survey experiment in the second round, which asked respondents to choose which types of individuals should have priority in accessing the vaccine. The conjoint design included several profiles which varied an individual's partisanship, place of birth, and economic status, alongside the same health characteristics officially prioritized by the Italian government.

We find that the COVID-19 crisis did not mitigate pre-existing societal divides. Although vaccines are lifesaving, respondents were willing to withhold them from outgroups. Lack of solidarity towards the rich is nearly universal, while other targets depend on an individual's ideology. Left-wing individuals reveal a strong animus against partisan opponents, while right-wing individuals have negative ethnic bias against immigrants. Additional analysis demonstrates this is primarily driven by the cultural rather than the economic dimension of the ideological cleavage.

An additional conjoint experiment embedded in the first wave of our panel enables us to assess the mechanisms driving outgroup discrimination. This experiment asked respondents which types of individuals were more likely to violate public health guidelines. The analysis reveals that outgroup discrimination among left-wing respondents may be driven by a

willingness to sanction those who were perceived not to take the crisis seriously. In contrast, discrimination against the rich and immigrants was less directly linked to perceived violations of public health measures, suggesting that bias along these lines reflects a generalized tendency to penalize outgroups during times of crisis.

Finally, and importantly, we find that the propensity to discriminate varies with one's personal experience with COVID-19. Individuals who suffered significant income loss during the pandemic display heightened outgroup discrimination, particularly towards immigrants and partisan outgroups. This is consistent with research suggesting that economic shocks activate scapegoating among at-risk citizens (Mewes & Mau, 2012; Gidron & Mijs, 2019). However, we also find that when respondents or their close relations contract COVID-19, they are *less* likely to subsequently discriminate against outgroups. Personal experience with illness may bring home the randomness of the crisis and weaken perceptions of outgroups' lack of deservingness (Oorschot, 2000; Haverland et al., 2022). Our findings thus suggest that an increase in outgroup discrimination is conditional on whether the effects of the crisis are attributed to particular individuals or perceived as beyond human control.

Our study builds on, and refines, research on how crises shape group dynamics. We corroborate the finding that pandemics intensify discrimination against immigrants (Esses and Hamilton 2021, Helbling et al. 2022) as well as partisan (Stoetzer et al., 2021) targets. However, we show that these effects are conditional on individuals' ideological orientation. Further, we add nuance to the argument that the nature of a crisis (human-induced or beyond human control) can shape solidarity and discrimination (Mewes & Mau, 2012; Haverland et al, 2022; Sambanis et al, 2022). We do so by showing that the same crisis can lead to opposite outcomes depending

on how individuals experience the crisis, either as a personal economic shock or as a health event.

Ingroup/Outgroup Thinking and the Political Articulation of Social Divides

Social identity theory holds that individuals display ingroup favoritism – i.e., they are more willing to help those with whom they share group identity (Tajfel & Turner, 1979; Brewer, 1999). Individuals also exhibit parochial altruism: they combine willingness to support members of the ingroup with refusal to help outgroups (Bowles & Gintis, 2013; Marks, 2012). These innate biases are exacerbated under conditions that impose stress on individuals. In this study, we examine the effects of a pandemic within an intensely polarized political environment. We discuss polarization and outgroup discrimination in this section, and the effect of the pandemic in the next.

Ingroups and outgroups are defined through the political articulation of social divides. In Western societies, two divides are overlaid. An economic divide pits those experiencing hardship due to shifts in the economy against those who are perceived to have excessive wealth and income. A cultural divide pits people who resent those who they regard as alien to their national culture, such as immigrants, against people who welcome multiculturalism and open societies (Bornschier et al., 2021; De Vries, 2018; Jackson & Jolly 2021; Norris & Inglehart, 2019). It is worth emphasizing that, while economic and cultural divides are conceptually distinct, they tend to intertwine in people's lives. Those who reject "others" of a different ethnicity, race, nationality, or sexual orientation often also feel economically disadvantaged in a global knowledge economy or perceive outgroups as 'cutting in line' (Hochschild, 2016; Hooghe & Marks, 2018; see also Gidron & Hall, 2017; Mutz, 2018).

These divides have motivated increasing partisan polarization—resentment toward political opponents—across Western societies (Iyengar & Westwood, 2015; Mason, 2018; Gidron, Adams & Horne, 2020; Reiljan, 2020; Bettarelli et al., 2022). Moreover, partisan animus may be sustained precisely because it can be leveraged to channel benefits to co-partisans in apolitical contexts, including hiring, economic transactions, and possibly health care (Gift & Gift, 2015; Michelitch, 2015; Lerman, Sadin & Trachtman, 2017; McConnell et al., 2018).

Pandemics and Outgroup Discrimination

Prior research argues that crises can spur generalized hostility against outgroups.[1] Pandemics, in particular, can push individuals to distance themselves from stigmatized "unhealthy" groups (Crawford, 1994). By generating feelings of vulnerability, the threat of infection promotes hostility toward outgroups (Faulkner et al., 2004; Navarrete & Fessler, 2006). Immigrants, often depicted as an outgroup, have historically been a target of blame during pandemics (Dionne & Turkmen, 2021; Adida, Dionne & Platas, 2018). COVID-19 was no different in this regard, as the crisis precipitated violence directed at immigrants and ethnic Chinese in many countries (Dionne & Turkmen, 2021).

A pandemic is also likely to channel outgroup discrimination along partisan lines. Political parties across Europe interpreted the crisis through the lens of their prior ideologies (Rovny et al., 2022). Moreover, dislike of the incumbent party appears to influence the perceived severity of the crisis and judgements concerning its management (Druckman et al., 2021; Lipsitz & Pop-Eleches, 2020; Gadarian et al., 2021; Gollwitzer et al., 2020; Rodriguez et al., 2020).

[1] These outgroups are usually domestic, but may be international following a terrorist attack, international incident, or declaration of war (Skitka, 2005; Godefroidt, 2022; see also Zagefka, 2021).

Who Penalizes Whom?

Although the majority of research to date has focused on population-level outgroups, we hypothesize that the targets of discrimination will vary across individuals. We develop two expectations. First, we expect the choice of targets to be mediated by pre-existing ideology. Second, we expect that an individual's personal experience with COVID-19, either in terms of loss of income or illness, will shape their willingness to discriminate against outgroups.

Ethnic/national outgroups

We anticipate that ethnic outgroups, and specifically immigrants, will face stronger discrimination from those who embrace an exclusive national identity. Attitudes toward immigrants tend to be more negative among citizens who hold ascriptive views (Sniderman et al., 2004; Ford, 2016), and willingness to help non-nationals is weaker among individuals who are non-cosmopolitan or socially conservative (Bechtel, Hainmueller & Margalit, 2014; Kleider & Stoeckel, 2019). Such latent hostility intensifies during crises. During the Ebola crisis in the US, for instance, Republicans – but not Democrats – displayed exclusionary attitudes toward immigrants (Adida, Dionne & Platas, 2018).

People with an exclusive national identity constitute a core constituency of right-wing or TAN[2] political parties, and they should be responsive to cues provided by party leaders who targeted immigrants during the COVID-19 pandemic. For example, in Italy, Salvini's Lega and Meloni's Brothers of Italy advocated closing borders to undocumented immigrants to halt the

[2] TAN refers to traditionalist, authoritarian, and nationalist values and GAL refers to green, alternative, libertarian values (Hooghe, Marks & Wilson, 2002).

spread of the virus.[3] Hence, for supporters of right-wing parties, we expect the crisis to activate latent bias against immigrant outgroups.

Partisan outgroups

We anticipate that partisan outgroups will face stronger discrimination among left-leaning individuals. While earlier studies argued that conservatives were more prejudiced against political opponents than liberals (see Sibley & Duckitt, 2008 for a meta-analysis), more recent work shows that liberals can display intense animus against opposing partisans on the ground that they transgress social norms against prejudice (Harteveld et al., 2021; Helbling & Jungkunz, 2020).

The COVID-19 pandemic may have intensified left-wing discrimination against partisan outgroups on the belief that such groups ignore or violate public health guidelines. Two studies conducted in the Netherlands, and in the United States, Brazil, Poland, Italy and Germany respectively find that individuals are less willing to provide intensive medical care and vaccination to right-wing individuals who do not comply with coronavirus containment measures (Stoetzer et al., 2021; Reeskens, Roosma & Wanders, 2021). In general, right-wing voters have been less willing to acknowledge the gravity of the pandemic, less likely to practice social distancing, and less likely to get vaccinated (Allcott et al., 2020; Clinton et al. 2021). This has been reinforced by partisan cues. Groups protesting COVID restrictions in European countries are predominantly right-wing, and more specifically, TAN.[4] In Italy, Lega and Brothers of Italy –

[3] "Migranti e Covid, l'ultima bufala della destra." Repubblica. October 5, 2020.

[4] "Germany coronavirus: Anger after attempt to storm parliament." BBC. August 30, 2020.

two TAN populist parties – have been most consistent in voicing opposition to lockdowns and vaccine mandates.[5] Since in most countries non-compliance has been concentrated among TAN voters, we anticipate that left-leaning voters will be most willing to express discrimination against partisan opponents, consistent with a sanctioning mechanism whereby compliant groups penalize non-compliant groups.

Economic outgroups

While ethnic and partisan discrimination is concentrated in specific societal groups, we expect discrimination against the rich to cut across partisan lines. In many countries, the rich are often perceived as an outgroup detached from the rest of the society with only 1-2% of American and European citizens identifying as upper class (Eurobarometer, 2016; Pew, 2012).[6] This may reflect sharply increased economic inequality and status differentiation in recent decades (Atkinson et al., 2011; Volscho & Kelly, 2012). In such a context, both Americans and Europeans are increasingly skeptical about upward mobility (McCall et al., 2017, Magni, 2021). Furthermore, in recent years the rich have been a target of political rhetoric. In Italy populist movements, including the Five Star Movement, Power to the People, the League, and the Brothers of Italy have depicted the rich as a selfish outgroup. There is reason to believe that COVID has further exacerbated this sentiment as reports of wealthy individuals violating rules have generated popular indignation, consistent with a sanctioning mechanism.

[5] "The impact of COVID-19 on the Italian far right: The rise of Brothers of Italy." Brookings. November 30, 2020.

[6] Similar results emerge in Italy, where we conducted our empirical analysis. A question in the second wave of our survey asked respondents where they would place themselves on a 10-step social status ladder, after explaining that some groups in society are at the bottom and others at the top. Of 1,274 respondents, 10 place themselves on the 10th step and 5 on the 9th step. Hence, less than 1.2% of respondents considered themselves as belonging to the top of society.

Direct Exposure to the Crisis

Crises can therefore accentuate group discrimination by reinforcing pre-existing social cleavages. An individual's prior beliefs and ideology will shape the identity of the groups who will become target of discrimination. Crises, however, vary with regard to their origin and the ways in which individuals experience them.

Crises that are human-induced and which impose disproportionate costs on particular groups—e.g., commodity crises, economic recessions, or refugee crises—tend to amplify outgroup discrimination (Gidron & Mijs, 2019; Sambanis et al., 2022). By contrast, exogenous shocks that hit individuals more randomly, such as natural disasters or health crises, are less clearcut. When an exogenous shock is perceived as a shared threat, this can reduce animosity against outgroups and induce solidarity across group divides (Flores et al, 2022: 2; Gaertner & Dovidio, 2000; Tierney, 2007). A disaster beyond human control may activate empathy with those affected irrespective of their social status (Haverland et al, 2022: 3, 5). Research on deservingness suggests that this may occur because individuals affected by the crisis may be seen as not responsible for their situation (Petersen, 2012). This appears strongest among those who experience the crisis first-hand and who correspondingly may develop a sense of shared fate with other victims of the crisis (van Oorschot, 2000, Haverland et al, 2022).

Hence, we expect the nature of the crisis to matter for outgroup discrimination. To the extent a pandemic is perceived as a health crisis endangering people across society, it can activate solidarity that binds people together irrespective of background or ideology. If the crisis is perceived as policy-induced, it is likely to amplify negative attitudes towards existing outgroups such as immigrant or ethnic minorities, the wealthy, or partisan opponents. The

COVID-19 crisis produced both responses in Northern Italy. Citizens working within the retail and tourism sectors faced steep declines in income, whereas other individuals faced serious illness or death in their personal networks.

We anticipate that those who experienced a loss of income due to COVID will display heightened ingroup-outgroup thinking. First, a sense of increased competition over scarce resources may lead individuals to narrow their circle of solidarity. This expectation is consistent with a literature that ties economic insecurity to welfare chauvinism (Mews & Mau, 2012; Van der Waal et al., 2013: Cavaillé and Ferwerda, 2018). More broadly, nationality often emerges as an important boundary for empathy (Van der Waal et al., 2010; Reeskens & Van Oorschot, 2012; Magni 2021). Second, because economic policy can be attributed to specific political actors, it is plausible that those who suffered income losses discriminate against partisan outgroups perceived to promote harmful policy. This will be intensified in a climate of affective polarization.

Our expectations are different for citizens who experienced the crisis primarily as a shock to personal or family health. These individuals are likely to view COVID chiefly as a health emergency rather than as a human-mediated economic disruption. Furthermore, personal experience with COVID may strengthen the perception that exposure is beyond individual control. Prior research suggests that a perception of a lack of control over one's situation (i.e., bad luck) is associated with greater solidarity towards potential beneficiaries of crisis management policies (Jensen & Petersen, 2017). In addition, the shared experience of COVID illness or death may generate a sense of common fate and identity which in turn nurtures feelings of empathy and deservingness with (prior) outgroup individuals (Haverland et al, 2022, Van

Oorschot, 2000, Harell et al., 2021). As a result, we expect that outgroup discrimination will be weaker among those with personal exposure to the health consequences of COVID-19.

Case Selection: Why Northern Italy?

We test our hypotheses in Northern Italy, which is an instructive case for three reasons. First, a focus on Italy and its northern regions allows analysis of the effect of the COVID crisis in advance of its effects in other Western countries. The country registered its first two cases of coronavirus on January 30, 2020, followed by an outbreak three weeks later. The first deaths from COVID were reported in Italy in early March 2020 and the incidence of fatality was considerably higher than any other European country until midway through April, and in fact the cumulative mortality rate remained greater than in all other European countries until the second half of May (Villani et al., 2020: Figure 2). Italy also became the first Western country to impose a strict lockdown, which closed schools, businesses, and almost all commercial activity. It also severely limited movement of people. Images with Italian flags and the slogan "Andrà tutto bene" went around the world, along with videos of residents singing the national anthem on their balconies and clapping for healthcare workers at sunset. While we cannot test this directly, it seems reasonable to believe that the political framing of the COVID crisis in Italy was at least partly, or perhaps even predominantly, homegrown.

Second, Italy is an ideal locus for studying how attitudes towards outgroups are mediated by individuals' contrasting personal experience with a crisis. Both the health effects and economic effects of COVID cut deep and wide in the social fabric of the country, particularly in the northern regions selected for our survey (see Appendix). Not only was the incidence of illness and mortality in these regions extremely high, these regions had also an unusually high

economic exposure to travel restrictions that shut down foreign and domestic tourism for much of 2020. In 2019, tourism accounted for 13.1 percent of Italy's GDP, or 236 billion Euros. Tourism revenue fell by 51% to 115.8 billion Euros in 2020. Moreover, in contrast to other states within the European Union, Italy has a relatively weak, means-tested, social safety net.[7] The health threats and the economic anxieties induced by COVID were severe, and they are visible within our sample. 35.6% of individuals reported they had personally experienced serious illness, or illness or death among their family or friends. And 33% of individuals reported that they had experienced a loss of income, while 9.2% reported losing their job.

Lastly, Italy is an example of a political system with high affective polarization. While most democracies saw rising levels of affective polarization prior to COVID, this increase was most extreme in Italy. Affective polarization increased from 1996-2008 to 2009-2019 in 16 of 22 European countries, with an average increase of .09 on a 0-1 scale. In Italy, the increase was .58, with the next highest Sweden (.48) (Bettarelli et al, 2022: Table 2). This places the chief query of our study—how affective polarization shapes the political reaction to the pandemic—in sharp relief.

Methods

We conducted a two-wave panel survey using Qualtrics Panels. The first wave was fielded in August 2020, at the height of the traditional tourist season, to evaluate respondents' reactions to the economic losses induced by COVID. Our sample was drawn from Northern Italy – the region

[7] OECD Social Indicators (2019).

most affected by the coronavirus – and was designed to be representative on age and gender. The final sample consists of 2,604 respondents.

The second wave was fielded in February 2021, a period in which vaccines had been announced but were not yet widely available. The second wave recontacted all respondents from the first wave, retaining 1,248 respondents. Appendix Table A1 assesses attrition between waves; we observe a mild loss of younger respondents (18-24), but attrition across other demographic categories remains small.

Each wave included a conjoint survey experiment. In the first wave, respondents were presented with four pairs of profiles that varied according to age, gender, place of birth, education, wealth, and partisanship. We then asked respondents to select the individual who would be most likely to violate public health guidelines (see Appendix for wording).

In the second wave, respondents evaluated five pairs of profiles, and were asked which person should be prioritized when distributing vaccines (see Appendix for wording). The conjoint attributes were modeled after those used in the first conjoint experiment, but several values were modified to match the current guidance for vaccine distribution used by the Italian government. In addition, a new attribute – occupation – was added to reflect these guidelines.

A unique aspect of this conjoint design, therefore, is that it includes all the health guidelines adopted by the Strategic Plan of the Italian Health Ministry to determine vaccine priority as well as multiple group identities not identified in the Plan.[8] In particular, given the Health Ministry decision to prioritize healthcare workers, individuals over 80, and individuals with comorbidities, we include conjoint dimensions for occupation, age, and health status.

[8]" Vaccinazione anti-SARS-COV-2/COVID-19 Plano Strategico." Gazzetta Ufficiale Della Repubblica Italiana. 12 December 2020. 1

Additionally, we include conjoint dimensions that capture economic, political and ethnic outgroup identities, such as economic status, partisanship, and place of birth.

This second conjoint experiment serves as our main outcome of interest. At the time, vaccines were scarce, and vaccine distribution was based upon widely publicized national guidelines. We assess the degree to which respondents prioritized attributes that are orthogonal to these guidelines when determining vaccine distribution, such as place of birth, education, wealth and partisanship. In this setup, deviations from public health guidelines indicate either self-interested motives – i.e., prioritizing the group to which one belongs – or punitive motives, in the form of withholding a scarce good from perceived outgroups.[9]

The first conjoint experiment then allows us to assess whether negative outgroup bias is driven by generalized discrimination or sanctioning. Including experimental measures in different waves is a key strength of our design. First, we can be certain about temporal priority when we test whether discrimination or sanctioning drive preferences over vaccine distribution, since we collected respondents' background characteristics and sanctioning outcomes several months before measuring vaccine preferences. Second, measuring discrimination and sanctioning in separate waves reduces potential social desirability bias.

[9] In Appendix C, we evaluate the possibility that varying trust in vaccines moderates the result of the conjoint task. Trust in vaccines in Italy was high at the point of survey fielding; in our sample only 20% of respondents indicated they were unlikely to take the vaccine. In Figure C3, we show that excluding these low-trust respondents from the sample does not influence the substantive results.

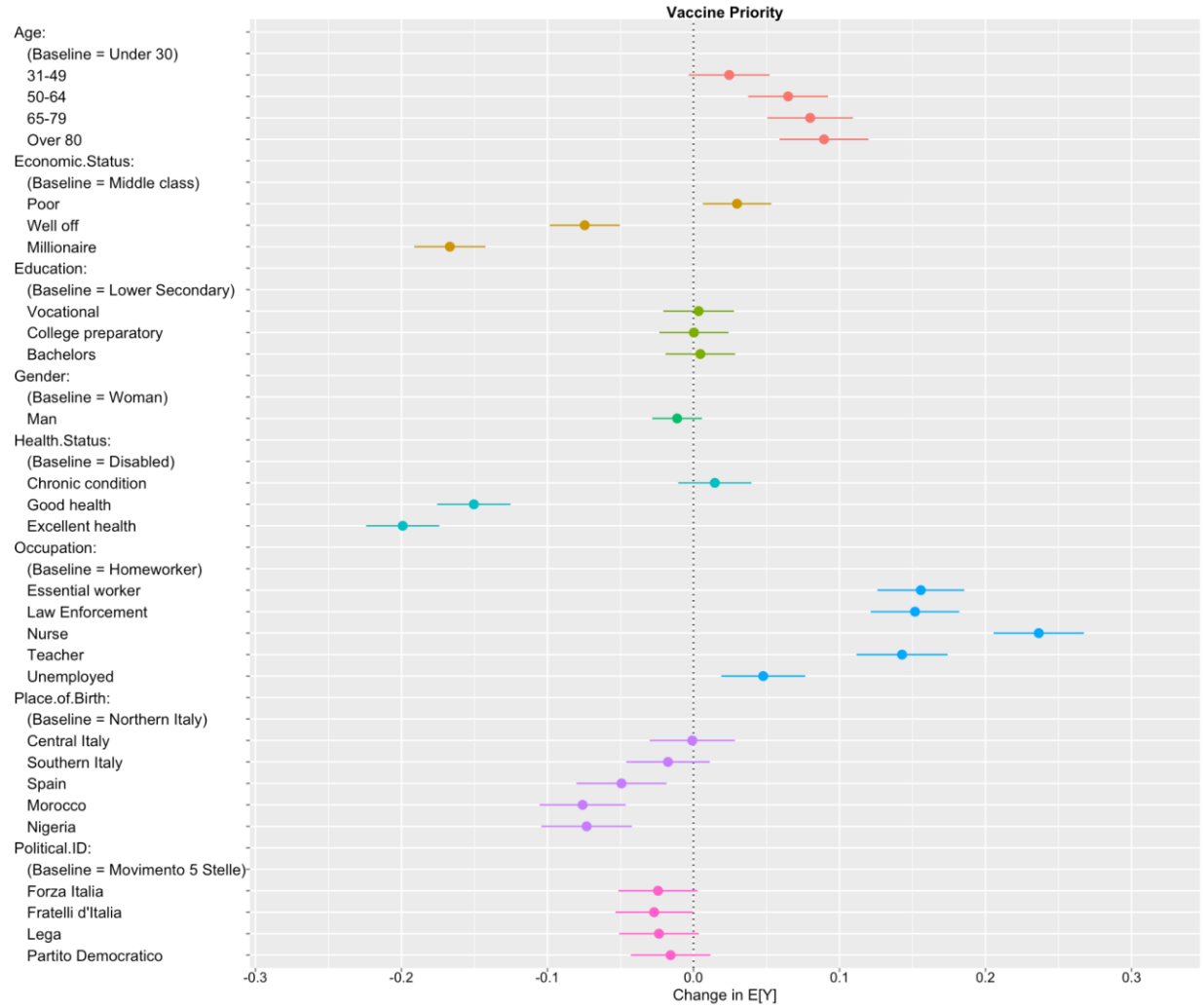
Results: Vaccine Prioritization

Figure 1 presents the average marginal component effects (AMCE) for the vaccine distribution conjoint. Consistent with the fact that the guidelines were widely publicized, respondents generally prioritized the categories selected by the Italian government to determine vaccine distribution. For instance, the elderly, those with poor health, and those working in frontline occupations were all more likely to be prioritized in vaccine distribution.

However, the results suggest that respondents also prioritized several characteristics that were orthogonal to national health guidelines. While we detect no significant discrimination on the basis of education or gender, respondents took each profile's wealth, place of birth, and partisanship into consideration when determining vaccine priority. For instance, individuals who were described as "well-off" were 7.5 percent less likely to be selected for prioritization than those who were middle class. Those who were described as millionaires were 16.7 percent less likely to be selected. Indeed, the emphasis placed on wealth is roughly on par with the consideration given to individuals' health status.

In addition to demonstrating discrimination against wealthy individuals, respondents considered place of birth and ideology. Individuals born in Spain, Nigeria, and Morocco were 4.9, 7.6, and 7.3 percent, respectively, less likely to be selected than someone born in Northern Italy. In addition, profiles with right-wing partisanship – Forza Italia, Fratelli d'Italia, and Lega – were penalized by approximately 2.5 percent in the pooled sample, relative to the Five Star Movement, with effects significant at the 90% level.

Figure 1: Vaccine Prioritization



Note: Point estimates represent average marginal component effects, with 95% confidence intervals; N=1248 respondents. The estimates are calculated on the basis of a conjoint task in which respondents select which of two individuals with given characteristics should receive priority in obtaining the vaccine. See Appendix for exact wording. Each respondent evaluates four pairs of profiles.

Results: Health Guideline Violations

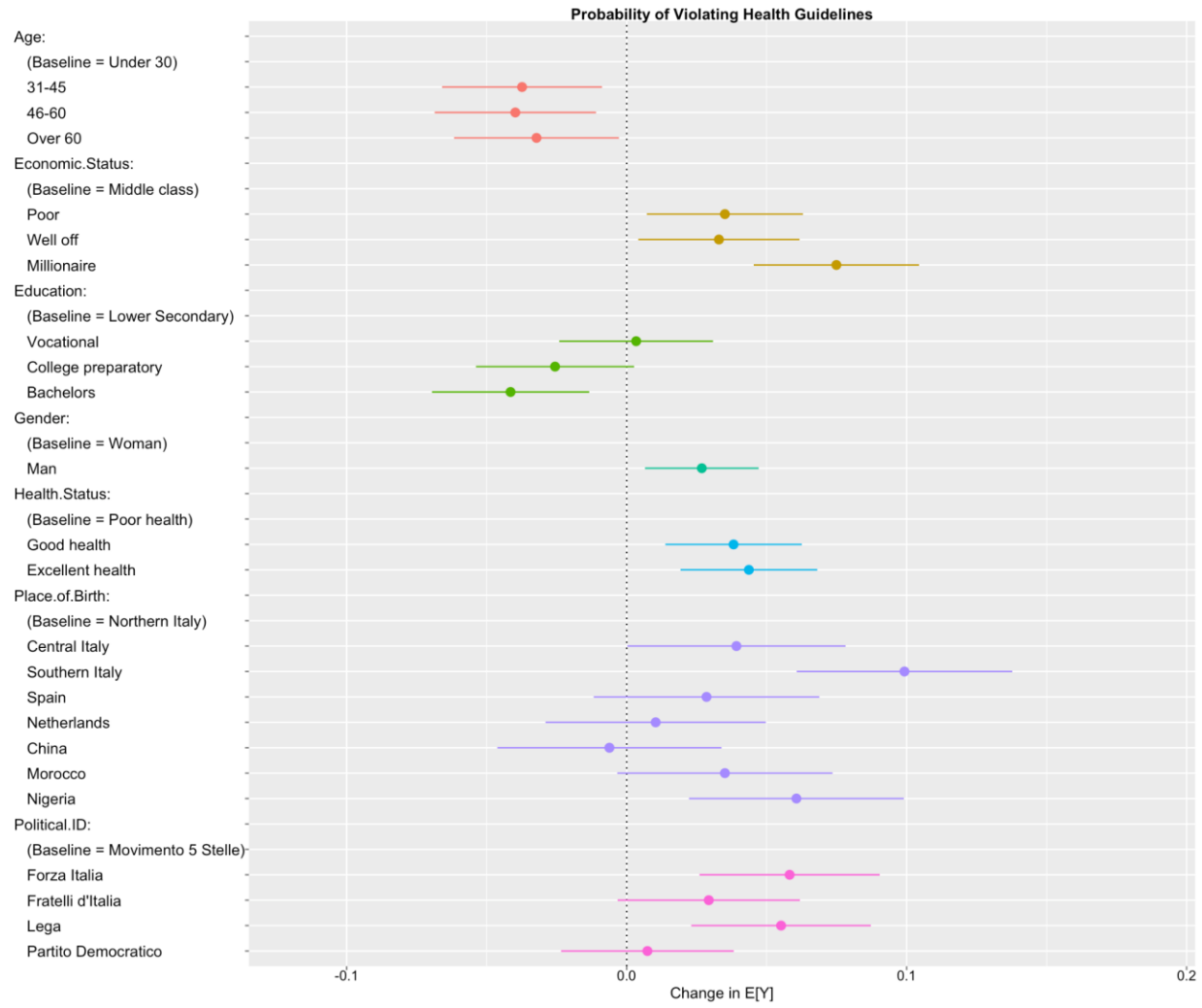
To evaluate whether this negative outgroup bias is driven by discrimination or sanctioning, we examine responses to the conjoint on health guideline violations, which was fielded five months prior to the vaccine conjoint. If respondents identified certain groups as likely violators of health guidelines, subsequent deprioritization in vaccine distribution may be consistent with a

sanctioning mechanism, in which the vaccine is withheld from groups that were deemed to not be taking the crisis seriously. Conversely, if a group is penalized in the vaccine prioritization conjoint but is not identified as a likely violator in the guidelines conjoint, this pattern is more plausibly the result of outgroup discrimination.

To maximize comparability, we limit the sample for the health guidelines conjoint to include only those respondents who were retained in the second wave. Figure 2 displays the average marginal component effects. The clearest evidence for the sanctioning mechanism is visible with respect to partisan bias. Right-wing profiles are consistently identified as likely violators in the health guideline conjoint, while supporters of the Five Star Movement and Democratic Party are identified as likely compliers. This is consistent with the relative prioritization observed within the vaccine distribution conjoint (Figure 1).

However, results for other categories are largely inconsistent with a sanctioning mechanism. Men and those with lower education are identified as likely violators of health guidelines but are not penalized by the same respondents during vaccine distribution. With respect to wealth, although respondents identified millionaires as potential violators, they ranked poor and well-off profiles the same. Overall, this pattern is inconsistent with the vaccine distribution conjoint, in which well-off individuals were penalized and the poor were favored. Finally, with respect to place of birth, Southern Italians were ranked as the most likely to violate health guidelines, ahead of Moroccans. If sanctioning were the main mechanism driving vaccine prioritization, we would expect Southern Italians to face the largest penalties in the vaccine conjoint, rather than the observed bias against Moroccans.

Figure 2: Health Guideline Violations



Note: Point estimates represent average marginal component effects, with 95% confidence intervals. The sample includes all individuals within the second wave (N=1248 respondents). The estimates are calculated on the basis of a conjoint task in which respondents select which of two individuals with given characteristics is more likely to violate health guidelines. See Appendix for exact wording. Each respondent evaluates four pairs of profiles.

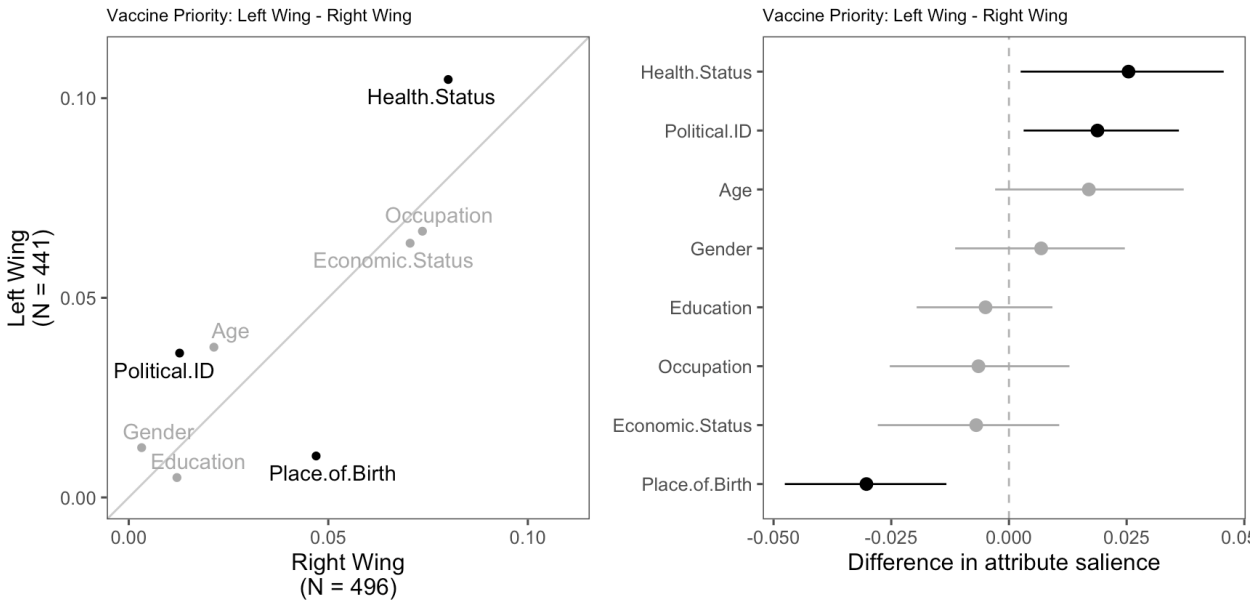
Targeting: The Role of Ideology

We next examine how the targets of outgroup discrimination differ across categories of respondents. To do so, we adopt the attribute salience approach developed by Clayton, Ferwerda, and Horiuchi (2021). Given that there are two profiles presented in each conjoint task, the probability of selecting a profile with a given characteristic is 50% if the selection was purely

random. To measure the overall salience of each attribute category (e.g., economic status, place of birth), we calculate the absolute value of the difference between the observed probability and 50% for each discrete level (e.g. Northern Italian, Southern Italian, Moroccan, etc.) within a particular attribute category, and then estimate the average difference by category. Finally, we compare the observed attribute salience between categories of respondents, with bootstrapped standard errors. This approach reveals the attributes that served as key selection criteria (either positively or negatively) across different groups of respondents.

We first assess how vaccine prioritization varies as a function of respondents' ideology. To classify respondents as left or right wing, we draw on a question which queried respondents' ideological position in wave 1, using a standard 11-point Likert scale. Figure 3 plots the difference in attribute salience between self-reported left and right-wing respondents. A deviation from the 45-degree line in the left-hand plot indicates how much the salience attached to each attribute varies by ideology, while the right-hand plot displays 95% confidence intervals for the differences between the two sub-groups. Statistically significant differences between the two groups are highlighted in black, while other differences appear in gray.

Figure 3: Relative Salience of Attributes in Vaccine Prioritization, by Ideology



Left-hand panel: Deviations from the 45-degree line measure the degree to which individuals in either group use the attribute to discriminate between profiles. Attributes above the 45-degree line are used more by left-wing respondents to distinguish between profiles, whereas attributes below the 45-degree line are used more by right-wing respondents. *Right-hand panel:* 95% confidence intervals for the difference in selection criteria between left- and right-wing respondents. See Appendix Figure A1 for marginal means.

The results demonstrate that, relative to right-wing respondents, left-wing respondents place greater weight on individuals' health status when determining vaccine allocation. In addition, left-wing respondents were significantly more likely to consider a profile's partisanship when determining vaccine priority. Appendix Figure A1, which plots the marginal means for each group of respondents, shows that left-wing respondents consistently favored profiles that were associated with the Five Star Movement (an ideologically ambiguous populist party) and the Democratic Party, the strongest center-left party. In contrast, left-wing respondents deprioritized profiles associated with Lega and Fratelli d'Italia (two right-wing populist parties) and Forza Italia (a mainstream conservative party). In Appendix Figure A2, we find that discrimination on the basis of partisanship is particularly prominent among individuals who indicate their intention to vote for the Democratic Party in the next election. In contrast, right-wing respondents placed

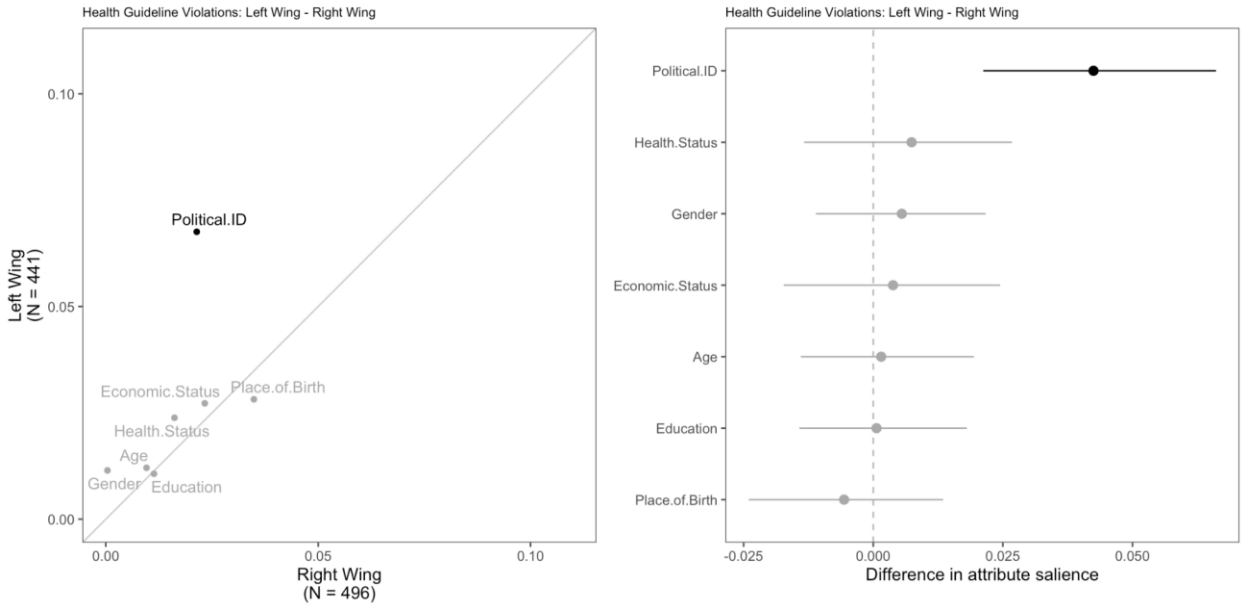
less weight on partisanship, assigning only a mild penalty to Democratic Party supporters relative to all other parties. Hence consistent with our priors, partisan negative bias appears concentrated among left-wing respondents.

In contrast, right-wing respondents are significantly more likely to discriminate based on place of birth when evaluating claims. As seen in Appendix Figure A1, right-wing respondents favored Northern and Central Italians over all other categories, with penalties particularly pronounced for citizens born in culturally distant regions such as Nigeria or Morocco. Right-wing respondents also displayed mild bias against Southern Italians relative to Northern/Central Italians, suggesting a rather narrow conception of in-group identity.

To evaluate whether the observed negative bias is driven by sanctioning or outgroup discrimination, we replicate the attribute salience approach using the health guidelines conjoint. The results, displayed in Figure 4, suggest that partisan penalties assessed by left-wing individuals are likely driven by a sanctioning mechanism. In contrast, right-wing respondents were not more likely to identify ascriptive outgroups as violators of health guidelines prior to the availability of vaccines, suggesting that this negative bias represents a sharpening of an existing divide rooted in exclusive national identity.[10]

[10] In Appendix C, we test whether divergent responses across partisan groups are driven by differential exposure to the health consequences of the crisis. We find no statistically significant difference in serious COVID health exposure as a function of partisanship.

Figure 4: Relative Salience of Attributes in Guideline Violations, by Ideology



Left-hand panel: Attributes above the 45-degree line are used more by left-wing respondents to distinguish between profiles, whereas attributes below the 45-degree line are used more by right-wing respondents. *Right-hand panel:* 95% confidence intervals for the difference in selection criteria between left- and right-wing respondents. See Appendix Figure A3 for marginal means.

Additional analysis reveals that this pattern seems to reflect divergent GAL and TAN worldviews. We employ principal components factor analysis to a battery of items from wave 1 tapping attitudes related to gender roles, gay marriage, immigration, trade, European integration, income redistribution, and inequality to produce a cultural GAL-TAN factor and an economic Left-Right factor (see Appendix B for details). In Appendix Figure B2, we show that GAL-oriented individuals who value greater inclusion of people from diverse backgrounds are significantly more likely to prioritize older people and people of poor health for vaccine distribution, while TAN-leaning individuals who value a traditionalist worldview are more likely to prioritize Northern and Central Italians. These effects are markedly stronger than those across the economic divide. Figure B1 in the Appendix confirms that sanctioning is asymmetrical: GAL-oriented individuals engage in sanctioning against partisan outgroups, while TAN-oriented

individuals tend to express generalized hostility against immigrant outgroups. The pandemic has thus sharpened a pre-existing cultural divide in Italian society.

Targeting: Experience with COVID

Finally, we measure how attitudes towards outgroups vary as a function of whether respondents experienced COVID primarily as an economic or a health shock. There are two empirical challenges associated with this approach. First, the likelihood of experiencing a health or economic shock varies as a function of other socio-demographic variables. For instance, individuals who were seriously ill are likely to be older or skeptical of public health guidelines, whereas those who experienced an economic shock may be more likely to work in the retail sector. An observed relationship between a type of shock and attitudes towards outgroups may thus be driven by these underlying characteristics rather than the experience itself. Second, and relatedly, economic and health crises may themselves covary. Individuals experiencing an adverse health event in their family may give up work responsibilities to engage in caregiving, while personal illness can directly reduce earning capacity.

To account for these issues, we leverage the panel structure of our data and examine repeated outcome measures rather than subsetting the conjoint results. This allows us to evaluate how attitudes towards outgroups changed as a function of health or economic shocks experienced between waves. This difference-in-differences approach holds socio-demographic characteristics of respondent's constant, and controls for intertwined economic and health shocks within a regression framework.[11]

[11] In Appendix Figure A4, we show similar results when examining how respondents who suffered an income shock, but no health shock, completed the conjoint task, relative to other respondents. The sample size is insufficient to subset the conjoint to examine those who experienced a health shock but no economic shock.

To measure exposure to the health consequences of the crisis, we asked respondents whether they contracted COVID themselves or have friends or family who became seriously ill or died from COVID between survey waves.[12] To assess individuals' exposure to the economic consequences of crisis, we asked whether they experienced a significant decrease in income between waves.[13]

We estimate the effect of these shocks on two dependent variables. First, we assess affective polarization. In each survey wave, respondents first indicated their party preference and then rated major parties on an 11-point feeling thermometer. Following other studies in the European context (Gidron et al. 2022), we use the average rating of out-parties as a measure of affective polarization.[14] Second, we measure discrimination towards ethnic outgroups by assessing respondents' welfare chauvinism. In each wave, respondents were asked whether expanded unemployment benefits should be extended to (a) Italian citizens, or (b) immigrants, using a 5-point Likert scale. We use the difference between the two measures as an indicator of welfare chauvinism in a particular wave.

We regress the indicators for economic and health shocks on each dependent variable, differenced across survey waves. Although this approach holds time-invariant characteristics constant, in a separate specification we include covariates to adjust for potential imbalance in exposure across sociodemographic groups.

[12] We code individuals who tested positive without symptoms as unexposed to health consequences (see Appendix C for a breakdown). However, the results are robust to including these individuals.

[13] To measure changes in income, individuals were asked "How has your income changed since last September?" (the month after the first wave was fielded). Those responding "I earn much less" were coded as experiencing an income shock. Proportions are shown in Appendix Table A2.

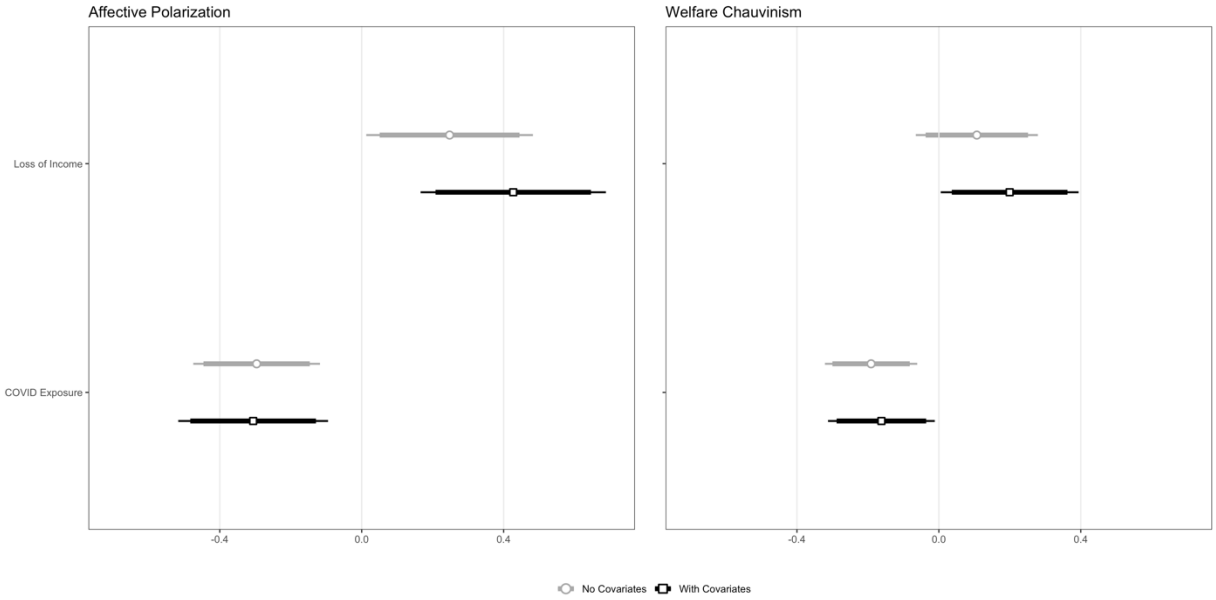
[14] The results are robust to using an alternative measure of affective polarization that compares the average thermometer score of all out-parties to the respondent's own party across waves.

Figure 5 displays the results. We find that individuals who experienced an income shock (top row) were less likely to display solidarity towards partisan and ethnic outgroups. The saturated model suggests that income loss increased affective polarization by 0.43 points (plus or minus 0.26) on the 11-point scale. Similarly, income loss was associated with elevated discrimination against ethnic outgroups: we find an increase in welfare chauvinism of 0.20 points (plus or minus 0.09) on the 5-point scale.

In contrast, we find that exposure to the health aspect of the crisis improved attitudes towards outgroups (bottom row). Following a health shock, affective polarization decreased by 0.31 points (plus or minus 0.20) and welfare chauvinism decreased by 0.16 points (plus or minus 0.14).[15] Together, this evidence suggests that while exposure to the economic aspects of the crisis sharpened prior divides, exposure to the health aspects of the crisis reduced ingroup/outgroup thinking.

[15] In further subgroup analysis, we find that these ameliorating effects are of greater magnitude among individuals with a TAN orientation.

Figure 5: Attitudes Towards Outgroups, by Exposure to the Crisis



90% confidence intervals (thick lines), 95% confidence intervals (thin lines). Covariates include age, gender, education, prior employment, sector, citizenship status, pre-survey exposure to covid, region, and ideological score. All coefficients shown in Appendix Table A3.

CONCLUSION

COVID-19 has intensified social divisions and outgroup discrimination. Our results from Northern Italy, the initial hotspot of the pandemic in the West, reveal how the crisis reinforced group boundaries. We find that citizens are willing to penalize traditional outgroups with punitive measures such as withholding life-saving vaccines in a deadly pandemic. Some categories of residents, such as the wealthy, face nearly universal hostility. Other targets of hostility, however, vary depending on citizens' ideology and personal experience with the coronavirus.

Ideology is decisive in predicting whether political or ethnic groups are the main targets. The left mostly exhibits bias along partisan lines, while the right discriminates against

immigrants. These reactions seem to be driven by different mechanisms: those on the left appear motivated to sanction norm violators while those on the right ascriptively penalize ethnic outgroups. Hence, the overall effect of COVID-19 was to tighten pre-existing circles of solidarity in a country already riven by affective polarization.

However, we also show how divergent personal experience with the crisis differentially shapes solidarity and discrimination. Individuals who suffered income loss due to the pandemic display heightened outgroup discrimination. By contrast, individuals who experienced the pandemic as a personal health shock deprioritize group boundaries. They are the only group among those examined in this study who seem willing to expand their circle of solidarity.

By showing how the crisis has generated heterogeneous effects with regard to outgroup discrimination, our findings advance work on the impact of crises on group dynamics. Consistent with prior work, we find that human-induced crises, such as economic ones, intensify scapegoating of outgroups, whereas crises deemed beyond human control may escape blame attribution and instead induce solidarity in shared fate. However, while prior work has analyzed economic crises and natural disasters separately, we show that a crisis can be experienced in different ways, and that this produces contrasting effects for solidarity and discrimination. To understand the political effects of the crisis and the shifting boundaries of solidarity, therefore, one should consider both a person's priors and experience of the crisis.

REFERENCES

Adida, C.L., Dionne, K.Y. & Platas, M.R. (2018). Ebola, elections, and immigration: how politicizing an epidemic can shape public attitudes. Politics, Groups, and Identities.

Allcott, H., Boxell, L., Conway, J., Gentzkow, M., Thaler, M. & Yang, D., (2020). Polarization and public health: Partisan differences in social distancing during the coronavirus pandemic. Journal of Public Economics, 191, p.104254.

Atkinson, A. B., Piketty, T., & Saez, E. (2011). Top Incomes in the Long Run of History. Journal of Economic Literature 49: 3–71.

Bechtel, M.M., Hainmueller, J. & Margalit, Y. (2014). Preferences for international redistribution: The divide over the Eurozone bailouts. American Journal of Political Science, 58(4), 835-856.

Bettarelli, L., Reiljan, A., van Haute, E. (2022). A regional perspective to the study of affective polarization. European Journal of Political Research. First view Aug 18, 2022 -- https://doi.org/10.1111/1475-6765.12548.

Bornschier, S., Häusermann, S., Zollinger, D., & Colombo, C. (2021). How "us" and "them" relates to voting behavior—Social structure, social identities, and electoral choice. Comparative Political Studies, 54(12): 2087-2122.

Bowles, S. & Gintis, H. (2013). A cooperative species: Human reciprocity and its evolution. Princeton University Press.

Brewer, M.B. (1999). The psychology of prejudice: Ingroup love or outgroup hate? Journal of social issues, 55, 429-444.

Cavaillé, C., & Ferwerda, J. (2018). How Distributional Conflict over In-Kind Benefits Generates Support for Anti-Immigrant Parties. Working Paper.

Clayton, K., Ferwerda, J., & Horiuchi, Y. (2021). Exposure to immigration and admission preferences: Evidence from France. Political Behavior, 43 (1), 175-200.

Clinton, J., Cohen, J., Lapinski, J. & Trussler, M. (2021). Partisan pandemic: How partisanship and public health concerns affect individuals' social mobility during COVID-19. Science advances, 7(2), p. eabd7204.

Crawford, R., (1994). The boundaries of the self and the unhealthy other: Reflections on health, culture and AIDS. Social science & medicine, 38(10), 1347-1365.

De Vries, C. E. (2018). The cosmopolitan-parochial divide: What the 2017 Dutch election result tells us about political change in the Netherlands and beyond. Journal of European Public Policy, 25(11): 1541-1565.

Devries, C.E., Bakker, B.N, Hobolt, S.B., Arceneaux, K. (2021). Crisis signaling: How Italy's coronavirus lockdown affected incumbent support in other European countries. Political Science Research and Methods, 9: 451-467.

Dionne, K.Y. & Turkmen, F.F. (2020). The politics of pandemic othering: putting COVID-19 in global and historical context. International Organization, 74(S1),. E213-E230.

Druckman, J. N, Klar, S. Krupnikov, Y., Levendusky, M. & Ryan, J.B. (2021). Affective polarization, local contexts and public opinion in America. Nature Human Behaviour, 5: 28-38.

Esses, V. M., & Hamilton, L. K. (2021). Xenophobia and anti-immigrant attitudes in the time of COVID-19. Group Processes & Intergroup Relations, 24(2), 253-259.

Faulkner, J., Schaller, M., Park, J.H. & Duncan, L.A., (2004). Evolved disease-avoidance mechanisms and contemporary xenophobic attitudes. Group Processes & Intergroup Relations, 7(4), 333-353.

Flores, A., Cole J.C., Dickert, S., Eom, K, Jiga-Boy, G.M, Kogut, T., Loria, R, Mayorga, M., Pedersen, E.J, Pereira, B, Rubaltelli, E., Sherman, D.K, Slovic, P., Västfjäll, D., Van Boven, L. (2022). Politicians polarize and experts depolarize public support for COVID-19 management policies across countries. PNAS, 119(3): 1-7.

Ford, R. (2016). Who should we help? An experimental test of discrimination in the British welfare state. Political Studies, 64(3): 630-650.

Gadarian, S.K., Wallace Goodman, S. & Pepinsky. T.B. (2021). Partisanship, health behavior, and policy attitudes in the early stages of the COVID-19 Pandemic. PLoS ONE, 16(4): e0249596.

Gaertner, SL, Dovidio, JF. (2000). Reducing Intergroup Bias: The Common Ingroup Identity Model. Ann Arbor: Sheridan Books.

Gidron, N. & Hall, P. (2017). The politics of social status: Economic and cultural roots of the populist right. British Journal of Sociology, 68(1): S57-84.

Gidron, N., Adams, J, & Horne, W. (2022). Who dislikes whom? Affective polarization between pairs of parties in western democracies. Comparative Political Studies.

Gidron, N., & Mijs, JJB. (2019). Do changes in material circumstances drive support for populist radical parties? Panel data evidence from The Netherlands during the Great Recession, 2007–2015. European Sociological Review, 35(5): 637-650.

Gift, K. and Gift, T. (2015). Does politics influence hiring? Evidence from a randomized experiment. Political Behavior, 37(3): 653-675.

Godefroidt, A. (2022). How Terrorism Does (and Does Not) Affect Citizens' Political Attitudes: A Meta-Analysis. American Journal of Political Science.

Gollwitzer, A., Martel, C., Brady, W.J., Parnamets, P., Freedman, I.G, Knowles, E.D., van Bavel, J.J. (2020). Partisan differences in physical distancing are linked to health outcomes during the COCID-19 pandemic. Nature Human Behaviour, 4: 1186-1197.

Harell, A., Banting, K., Kymlicka, W., & Wallace, R. (2021). Shared membership beyond national identity: Deservingness and solidarity in diverse societies. Political Studies, 0032321721996939.

Harteveld, E., Mendoza, P. & Rooduijn, M. (2021). Affective polarization and the populist radical right: Creating the hating? Government and Opposition, First View, 1 – 25, DOI: https://doi.org/10.1017/gov.2021.31.

Haverland, M., van der Veer, R., Onderco, M. (2022). Is this crisis different? Attitudes towards EU fiscal transfers in the wake of the COVID-19 pandemic. European Union Politics. First view: July 11, 2022. https://doi.org/10.1177/14651165221112988

Helbling, M., Maxwell, R., Munzert, S., & Traunmüller, R. (2022). The importance of citizenship for deserving Covid-19 treatment. Humanities and Social Sciences Communications, 9(1), 1-8.

Helbling, M. & Jungkunz, S. (2020). Social divides in the age of globalization. West European Politics, 43(6): 1187-1210.

Hochschild, A.R. (2016). Strangers in their own land: Anger and mourning on the American right. The New Press.

Hooghe, L. & Marks, G. (2018). Cleavage theory and Europe's crises: Lipset, Rokkan and the transnational cleavage. Journal of European Public Policy, 25 (1): 109-135.

Hooghe, L, Marks, G. & Wilson, C.J. (2002). Does left/right structure party positions on European integration? Comparative Political Studies, 35(8): 965-989.

Iyengar, S. & Westwood, S.J. (2015). Fear and loathing across party lines: new evidence on group polarization. American Journal of Political Science, 59(3): 690-707.

Jackson, D. & Jolly, S. (2021). A new divide? Assessing the transnational-nationalist dimension among political parties and the public across the EU. European Union Politics, 22(2):316-339.

Jensen, C. & Bang Petersen, M. (2017). The deservingness heuristic and the politics of health care. American Journal of Political Science, 61(1): 68-83.

Kleider, H., & Stoeckel, F. (2019). The politics of international redistribution: Explaining public support for fiscal transfers in the EU. European Journal of Political Research, 58(1): 4-29.

Lerman, A.E., Sadin, M.L. & Trachtman, S. (2017). Policy uptake as political behavior: evidence from the Affordable Care Act. The American Political Science Review, 111(4):.755-770.

Lipsitz, K., & Pop-Eleches, G. (2020). The partisan divide in social distancing." Available at SSRN 3595695 (2020).

Magni, G. (2021). Economic inequality, immigrants and selective solidarity: From perceived lack of opportunity to in-group favoritism. British Journal of Political Science, 51(4): 1357-1380.

Marks, G. (2012). Europe and its empires: From Rome to the European Union. Journal of Common Market Studies, 50(1), 1–20.

Mason, L. (2018). Uncivil agreement: How politics became our identity. University of Chicago Press.

McCall, L. (2013). The undeserving rich: American beliefs about inequality, opportunity, and redistribution. Cambridge University Press.

McCall, L., Burk, D., Laperrière, M. & Richeson, J.A. (2017). Exposure to rising inequality shapes Americans' opportunity beliefs and policy support. Proceedings of the National Academy of Sciences, 114(36): 9593-98.

McConnell, C., Margalit, Y., Malhotra, N. & Levendusky, M. (2018). The economic consequences of partisanship in a polarized era. American Journal of Political Science, 62(1):.5-18.

McKee, M., Gugushvili, A., Koltai, J., Stuckler, D. (2021). Are populist leaders creating the conditions for the spread of COVID-19? International Journal of Health Policy and Management, 10(8): 511-515.

Mewes, J., & Mau, S. (2012). Unraveling working-class welfare chauvinism. In J. Mewes & S. Mau (Eds.) Contested welfare states: Welfare attitudes in Europe and beyond, (119-157). Stanford University Press.

Michelitch, K. (2015). Does electoral competition exacerbate interethnic or interpartisan economic discrimination? Evidence from a field experiment in market price bargaining. American Political Science Review, 109(1): 43-61.

Mutz, D. C. (2018). Status threat, not economic hardship, explains the 2016 presidential vote. Proceedings of the National Academy of Sciences, 115(19): E4330-39.

Navarrete, C.D. & Fessler, D.M. (2006). Disease avoidance and ethnocentrism: The effects of disease vulnerability and disgust sensitivity on intergroup attitudes. Evolution and Human Behavior, 27(4): 270-282.

Petersen, M.B., 2012. Social welfare as small-scale help: evolutionary psychology and the deservingness heuristic. American Journal of Political Science, 56(1), pp.1-16.

Norris, P. & Inglehart, R. (2019). Cultural backlash: Trump, Brexit, and authoritarian populism. Cambridge University Press.

Piston, S. (2018). Class attitudes in America: Sympathy for the poor, resentment of the rich, and political implications. Cambridge University Press.

Reiljan, A. (2020). Fear and loathing across party lines'(also) in Europe: Affective polarisation in European party systems. European Journal of Political Research, 59(2): 376-396.

Rovny, J., Bakker, R., Hooghe, L., Jolly, S., Marks, G., Polk, J., Steenbergen, M., Vachudova, M.A. (2022). Contesting Covid: The ideological bases and consequences of partisan responses to the COVID-19 pandemic. European Journal of Political Research. First view: Jan 31, 2022. https://doi.org/10.1111/1475-6765.12510.

Sambanis, N, Nikolova, E, Schultz, A. (2022). The effects of economic austerity on pro-sociality: Evidence from Greece. European Union Politics. First view, Aug 29, 2022. DOI: 10.1177/14651165221120527

Sibley, C.G. & Duckitt, J. (2008). Personality and prejudice: A meta-analysis and theoretical review. Personality and Social Psychology Review, 12(3): 248-279.

Sniderman, P.M., Hagendoorn, L. & Prior, M. (2004). Predisposing factors and situational triggers: Exclusionary reactions to immigrant minorities. American Political Science Review, 98(1): 35-49.

Stoetzer, L., Munzert, S., Lowe, W., Çalı, B., Gohdes, A., Helbling, M., Maxwell, R. & Traunmueller, R. (2021). Affective partisan polarization and moral dilemmas during the COVID-19 pandemic. Working paper.

Tajfel, H. & Turner, J.C. 1979. An integrative theory of intergroup conflict. In W. G. Austin & S. Worchel (Eds.) The social psychology of intergroup relations, (33-47). Brooks/Cole.

Tierney, KJ. (2007). From the margins to the mainstream? Disaster research at the crossroads. Annual Review of Sociology 33(1): 503–525.

Reeskens, T. & Van Oorschot, W. (2012). Disentangling the 'new liberal dilemma': On the relation between general welfare redistribution preferences and welfare chauvinism. International Journal of Comparative Sociology, 53(2): 120-39.

Reeskens, T., Roosma, F. & Wanders, E. (2021). The perceived deservingness of COVID-19 healthcare in the Netherlands: A conjoint experiment on priority access to intensive care and vaccination. BMC public health, 21(1), 1-8.

Rodriguez, C., Gadarian, S., Wallace Goodman, S. & Pepinsky, T. (2020). Morbid Polarization: Exposure to COVID-19 and partisan disagreement about pandemic response. PsyArXiv. Available at: https://doi.org/10.31234/osf.io/wvyr7

Skitka, L.J., 2005. Patriotism or nationalism? Understanding post-September 11, 2001, flag-display behavior 1. Journal of Applied Social Psychology, 35(10), pp.1995-2011.

Van der Waal, J., Achterberg, P., Houtman, D., De Koster, W. &d Manevska, K. (2010). Some are more equal than others: Economic egalitarianism and welfare chauvinism in the Netherlands. Journal of European Social Policy, 20(4): 350-63.

Van der Waal, J., De Koster, W. & Van Oorschot, W. (2013). Three worlds of welfare chauvinism? How welfare regimes affect support for distributing welfare to immigrants in Europe. *Journal of Comparative Policy Analysis: Research and Practice*, 15(2): 164-181.

Van Oorschot, W. (2000). Who should get what, and why? On deservingness criteria and the conditionality of solidarity among the public. *Policy and Politics*, 28(1): 33-48.

Villani, L., McKee, M., Cascini, F., Ricciardi, W., Boccia, S. (2020). Comparison of death rates for COVID-19 across Europe during the first wave of the COVID-19 pandemic. *Frontiers in Public Health*, 8 (Dec, 620416): 1-5. *https://doi.org/10.3389/fpubh.2020.620416*

Volscho, T.W. & Kelly, N.J. (2012). The rise of the super-rich: Power resources, taxes, financial markets, and the dynamics of the top 1 percent, 1949 to 2008. *American Sociological Review*, 77(5): 679-699.

Zagefka, H. (2021). Intergroup helping during the coronavirus crisis: Effects of group identification, ingroup blame and third-party outgroup blame. *Journal of Community & Applied Social Psychology*, 31(1), 83-93.

APPENDIX

Conjoint Wording

Wave 1 (Health Guidelines):

> Imagine that you are hired by the National Health Service and tasked with developing an information campaign to encourage Italian residents to wear masks and maintain social distancing. Consider the two hypothetical individuals below. In your opinion, which of the two individuals would be more likely to violate public health guidelines?

Wave 2 (Vaccine Prioritization):

> Currently, there are not enough vaccines for every one and it is not possible to distribute them to the entire population. Consider the two individuals below. If you were in charge of deciding how to distribute vaccines, which of the following Italian citizens would have priority in your opinion?

Table A1: Sample Characteristics and Attrition

	Wave 1 Mean	Wave 2 Mean	t-statistic
Age: 18-24	0.119	0.047	-6.712
Age: 25-34	0.146	0.123	-1.754
Age: 35-44	0.167	0.190	1.546
Age: 45-54	0.169	0.228	3.753
Age: 55-64	0.278	0.266	-0.687
Age: 65+	0.122	0.147	1.864
Education: Secondary	0.203	0.188	-0.985
Education: Vocational	0.295	0.276	-1.092
Education: Preparatory	0.202	0.210	0.496
Education: College	0.105	0.101	-0.315
Education: Advanced	0.195	0.226	1.907
Female	0.548	0.508	-2.001

Respondents were drawn from Qualtrics Panels, from the following regions of Northern Italy: Emilia-Romagna, Liguria, Lombardy, Marche, Piedmont, Tuscany, Umbria, Veneto.

Figure A1: Marginal Means for Vaccine Prioritization, by Ideology

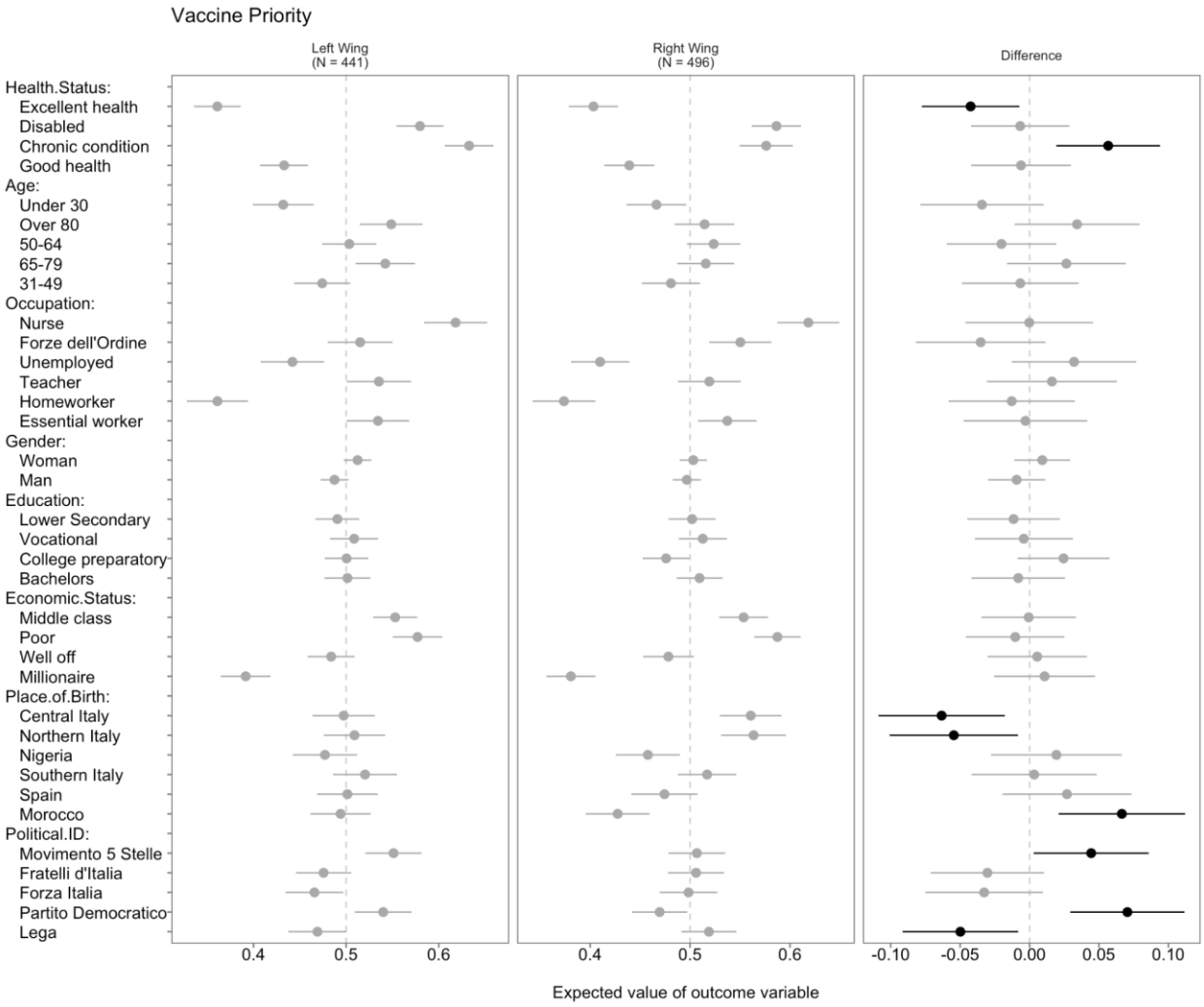


Figure A2: Marginal Means for Vaccine Prioritization, by PD Vote Intention

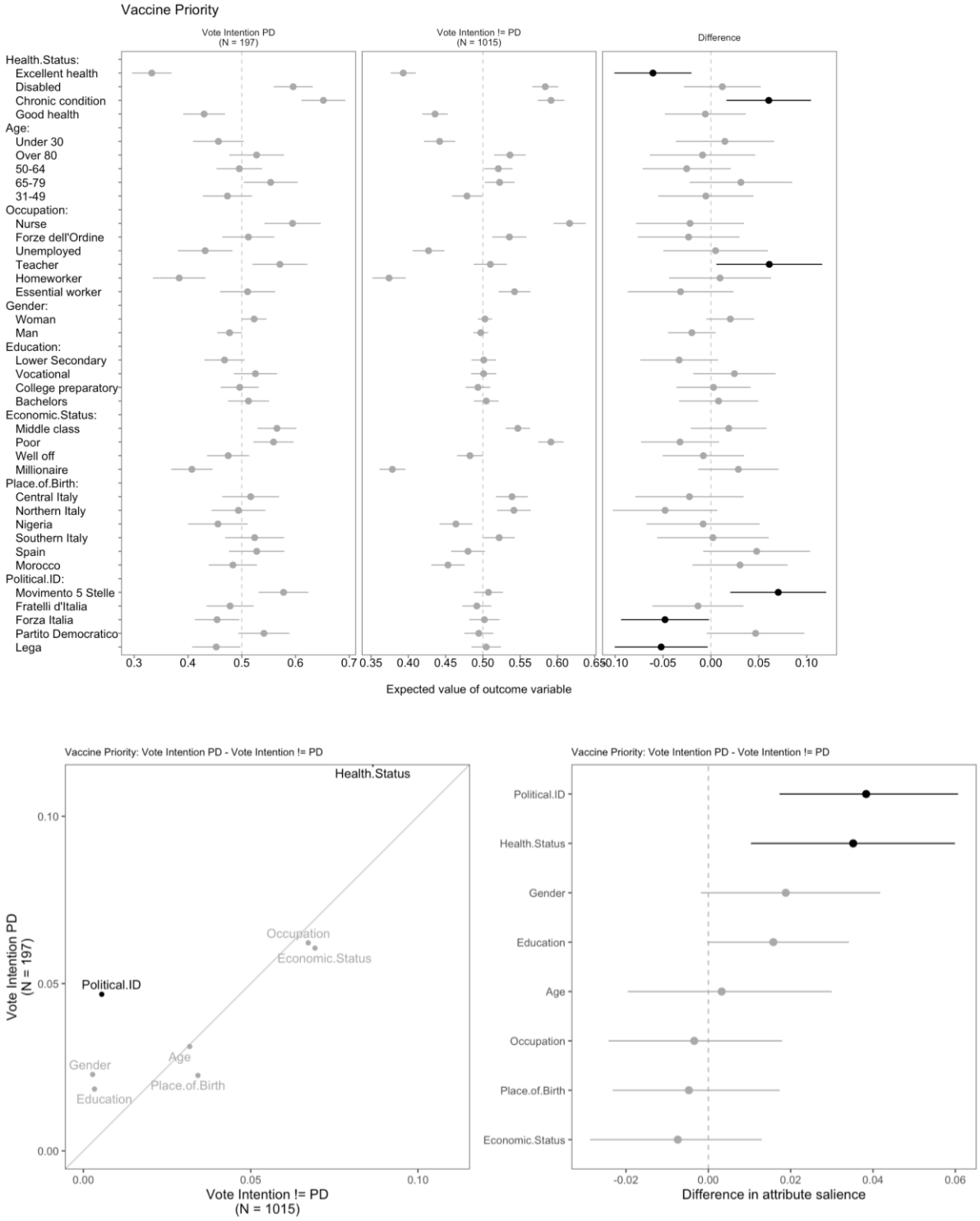


Figure A3: Marginal Means for Health Guideline Violations, by Ideology

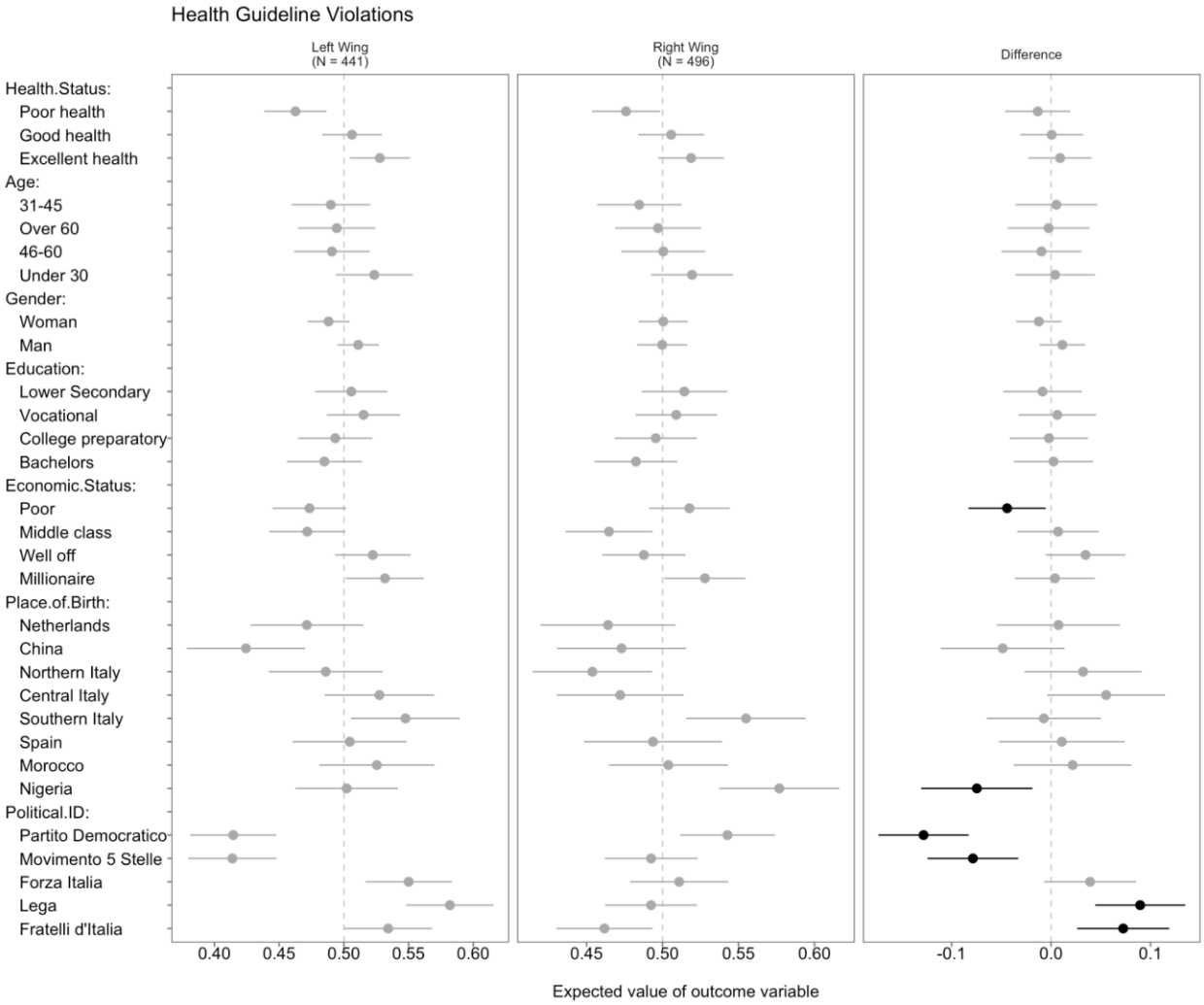


Table A2: Proportion of Respondents Experiencing Shocks Between Waves

		Exposure to COVID	
		N	**Y**
Significant Loss of Income	**N**	0.539	0.291
	Y	0.104	0.065

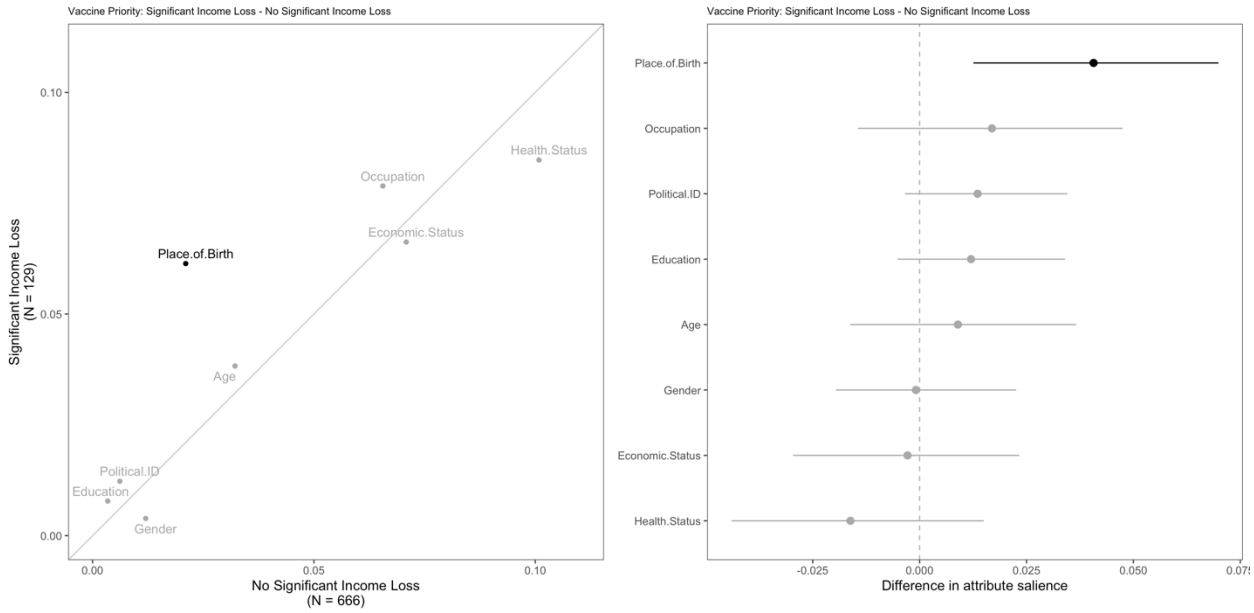
Exposure to COVID includes all individuals who reported personally getting ill or knowing friends/relatives who got seriously ill or died (see Appendix C for breakdown). Individuals who reported testing positive without symptoms are excluded. A significant loss of income refers to respondents who answered that they "earn much less" since the previous wave.

Table A3: Coefficients for Figure 5

	Affective Polarization		Welfare Chauvinism	
	1	2	3	4
Intercept	−0.071	0.027	−0.007	−0.278
	(0.057)	(0.538)	(0.041)	(0.377)
Income Shock	0.248	0.427	0.107	0.199
	(0.120)	(0.133)	(0.088)	(0.099)
Health Shock	−0.296	−0.306	−0.191	−0.162
	(0.091)	(0.107)	(0.066)	(0.077)
Female		−0.067		−0.060
		(0.098)		(0.072)
Age 18-24		0.077		0.118
		(0.360)		(0.219)
Age 25-34		0.292		0.196
		(0.349)		(0.209)
Age 35-44		0.019		0.161
		(0.345)		(0.203)
Age 45-54		0.127		0.295
		(0.349)		(0.204)
Age 55-64		−0.087		0.287
		(0.365)		(0.221)
Age 65+		0.110		0.034
		(0.494)		(0.329)
Education - Post Secondary		0.125		0.040
		(0.130)		(0.098)
Education - Advanced		0.088		0.288
		(0.322)		(0.270)
Left-Right Ideology		−0.159		0.010
		(0.147)		(0.108)
Non-citizen		−0.025		−0.056
		(0.149)		(0.111)
COVID prior to W1		−0.349		−0.164
		(1.120)		(0.515)
Employed in 2019		−0.086		0.068
		(0.118)		(0.089)
Sector - Manufacturing		−0.144		−0.026
		(0.110)		(0.079)
Sector - Utilities		0.309		0.190
		(0.326)		(0.277)
Sector - Construction		−0.244		0.315
		(0.425)		(0.334)
Sector - Retail		0.342		0.117
		(0.368)		(0.318)
Sector - Finance		0.371		0.214
		(0.335)		(0.283)
Sector - Real Estate		0.124		0.125
		(0.357)		(0.297)
Sector - Hospitality		0.959		0.450
		(0.515)		(0.388)
Sector - Transport		0.344		0.335
		(0.370)		(0.303)
Sector - IT		0.427		0.345
		(0.366)		(0.310)
Sector - Education		0.436		0.137
		(0.370)		(0.302)
Sector - Health		0.435		0.381
		(0.345)		(0.287)
Sector - Public Admin		0.550		0.188
		(0.343)		(0.286)
Sector - Other		0.319		0.315
		(0.338)		(0.283)
Num. obs.	617	583	967	903
Region FE	Y	Y	Y	Y

Reference Variables: Sector:Agriculture, Age:18-24, Education: Secondary or Professional. Individuals who do not identify as a supporter of a major party are omitted from models 1 and 2. Models exclude respondents who failed an attention check.

Figure A4: Relative Salience of Attributes in Vaccine Prioritization, by Income Loss



Income loss corresponds to Figure 5 in text, and refers to a reported loss in income between survey waves. The figure omits individuals who reported significant health exposure to COVID between waves.

B: Decomposing the GAL-TAN and Economic Left-Right Dimension

For the GAL-TAN dimension, we include the following questions:

- Immigrants take jobs away from people who were born in Italy
- Immigrants are a threat to Italian culture and religious traditions
- It is important for Italy to remain open to international trade.
- Some say European unification should go further. Others say it has already gone too far. What best describes your position?
- Do you approve or disapprove of gay marriage?
- A man's job is to earn money; a woman's job is to look after the home and family.
- For some crimes, the death penalty is the most appropriate sentence

For the economic left-right dimension, we include the following questions:

- Differences in wealth between the rich and the poor make me extremely angry
- Italian society is deeply unfair
- Some people feel that government should make much greater efforts to make people's incomes more equal. Other people feel that government should be much less concerned about how equal people's incomes are. Where would you place yourself on this scale?
- Government should redistribute income from the better off to those who are less well off

We then extract two factors using PCA analysis:

	Comp1	Comp2
Comp1	-0.89472	0.44303
Comp2	0.44662	0.89651

Using these factors, we then split respondents according to terciles on each dimension. We then compare the first and third terciles.

Figure B1: Attribute Salience for Vaccine Prioritization, by GAL-TAN and Economic Left-Right

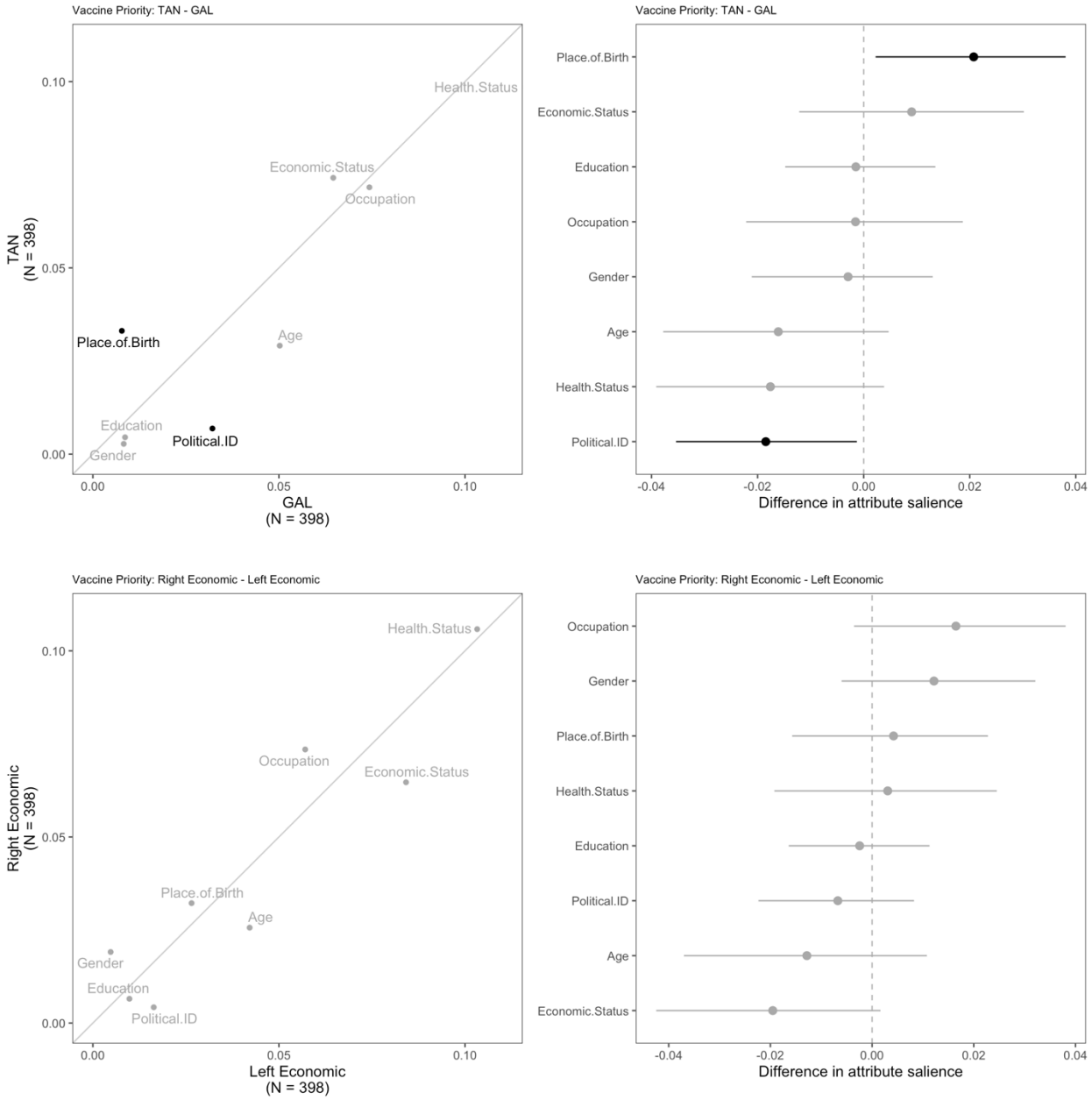


Figure B2: Marginal Means for Vaccine Prioritization, by GAL-TAN

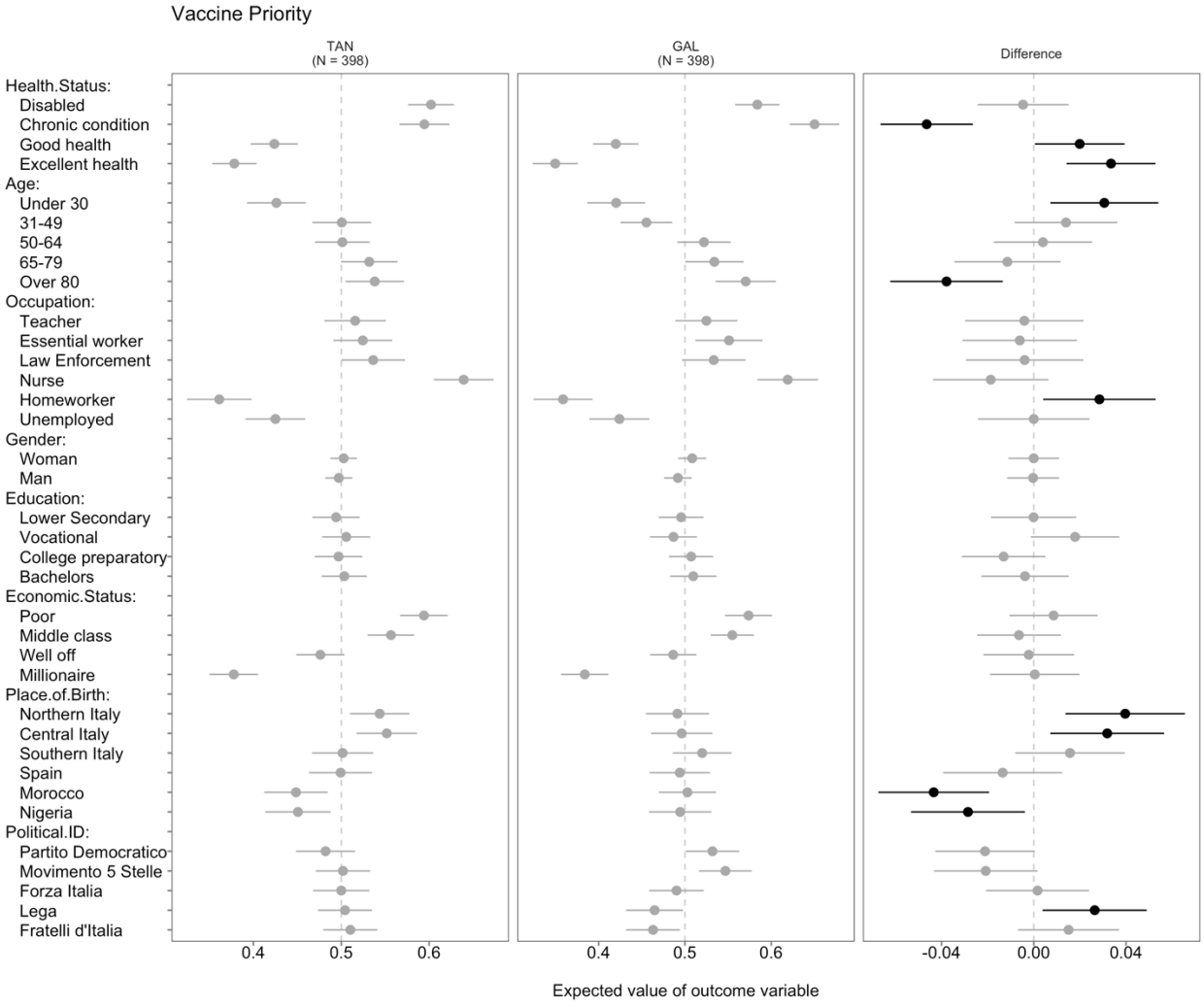
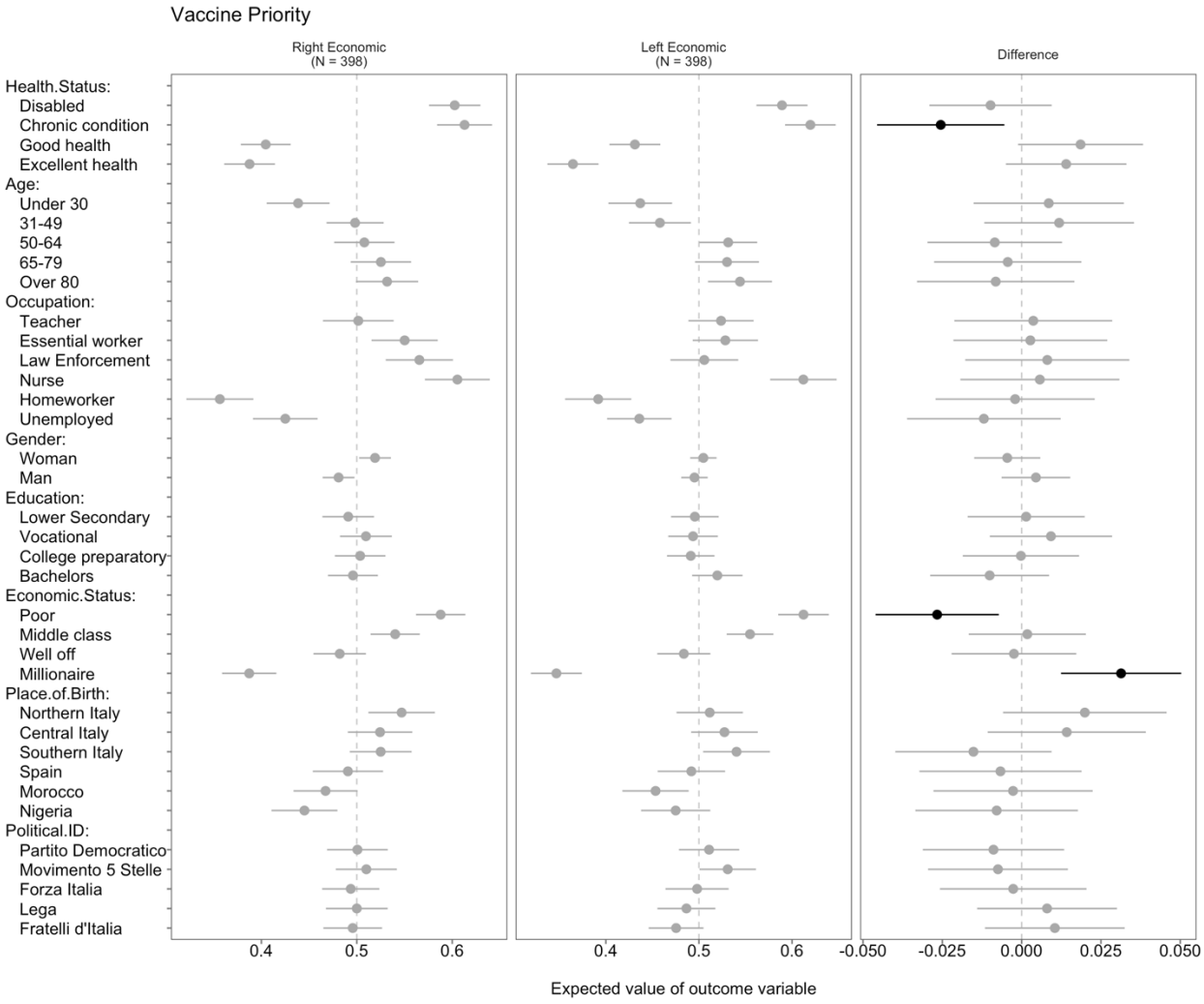


Figure B3: Marginal Means for Vaccine Prioritization, by Economic Left-Right



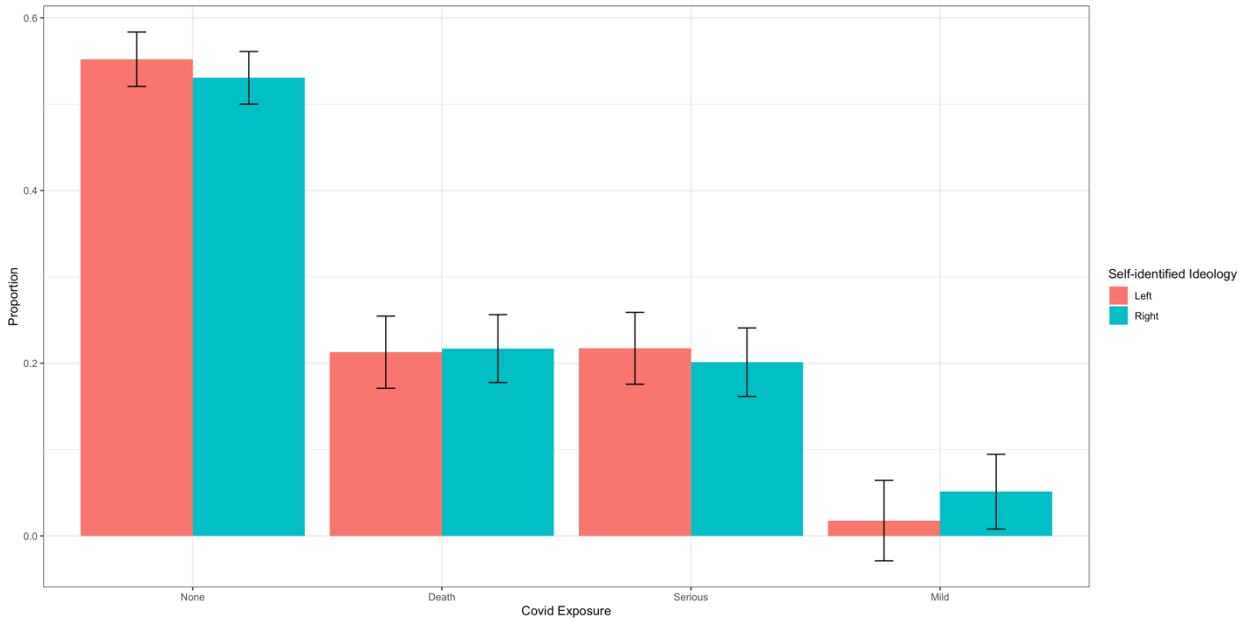
C: Exposure to COVID and Views Towards Vaccines

In Wave 2, the survey instrument asked respondents to indicate their personal experience with COVID. Respondents could select the following levels of exposure:

1. I tested positive for the coronavirus
2. I became sick with the coronavirus, with mild symptoms
3. I became seriously ill with the coronavirus
4. I became seriously ill with the coronavirus and still suffer the effects
5. A family member of mine became seriously ill with the coronavirus
6. A friend or neighbor of mine has become seriously ill with the coronavirus
7. A family member of mine died of the coronavirus
8. A friend or neighbor of mine died of the coronavirus
9. More than one family member, friend or neighbor died of the coronavirus
10. None of the above statements

We categorize items 1 and 2 as 'Mild', items 3 through 6 as 'Serious', items 7 through 9 as 'Death', and item 10 as 'None'. The figure below displays the distribution across respondents. We find that while self-identified right-wing respondents had slightly higher mild exposure, the difference is not statistically significant.

Figure C1: COVID Health Exposure, by Ideology



Error bars represent 95% confidence intervals.

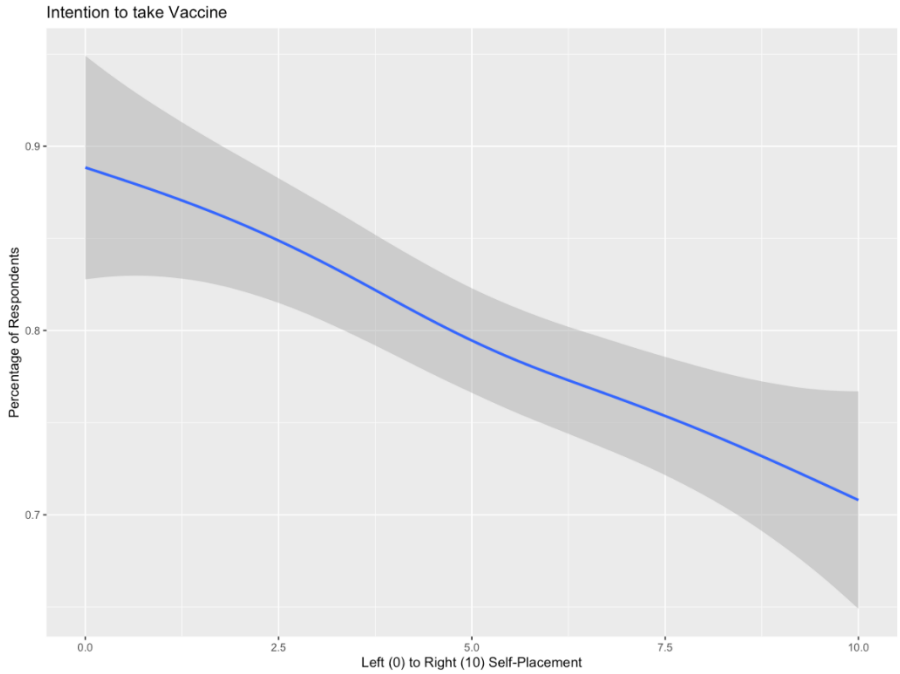
Wave 2 further asked respondents to provide their intentions regarding a vaccine. Table C1, below, displays the proportion of respondents agreeing with each statement, while Figure C2 plots responses as a function of left-right orientation. Although intention to take the vaccine is

correlated with ideology, the baseline rate of anticipated vaccine uptake among the respondents with the most right-wing views remains above 70%.

Table C1: Vaccine Intentions, Wave 2

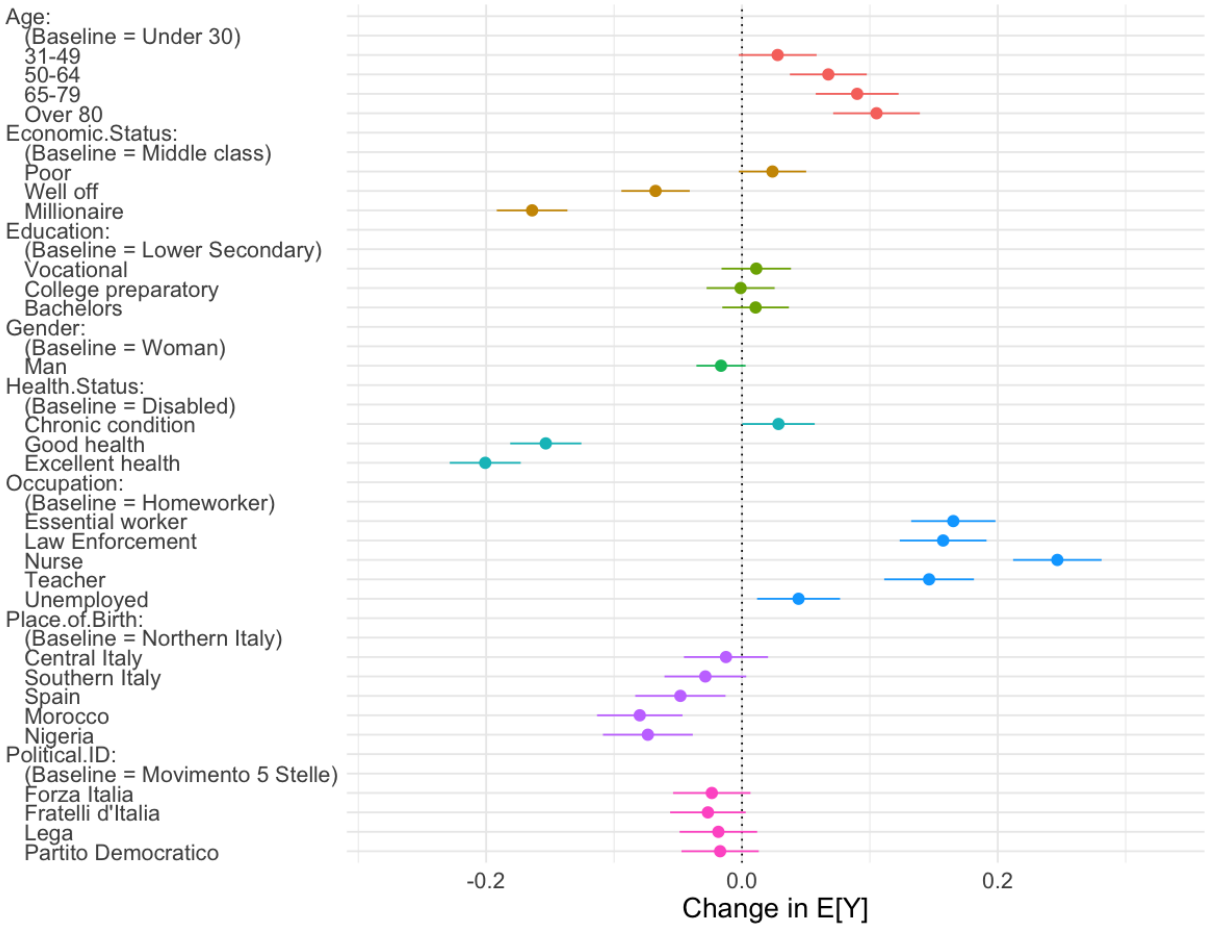
	Proportion
Already have taken the vaccine	.035
Would definitely take the vaccine	.501
Would likely take the vaccine	.206
Undecided	.054
Would likely not take the vaccine	.064
Would definitely not take the vaccine	.140

Figure C2: Vaccine Intentions, by Ideology



Loess fit, with 95% confidence interval. A positive intention is coded as a response that did not indicate the respondent "would likely not" or "would definitely not" take the vaccine.

Figure C3: Vaccine Prioritization, among Respondents not Opposed to Vaccine



Note: Parallels Figure 1 in the main text. Subset to respondents who indicated they were not opposed to taking the vaccine, N=960 respondents.