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The Impact of Covid-19 on Trump's Electoral Demise: The Role of Economic and Democratic Accountability*

Anja Neundorf Sergi Pardos-Prado[†]
(University of Glasgow) (University of Glasgow)

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Abstract

Did the Covid-19 crisis have a significant effect on Trump's electoral demise? We present survey experimental evidence on two substantial effects of the pandemic. First, information on the unprecedented economic downturn significantly depressed Trump's popular support across all partisan groups, and especially among middle-low and low-income respondents. Second, being primed on the poor public health record of the Trump administration reduced its electoral prospects among citizens aged between 55 and 70 years old. We conclude that the 2020 election was a normal contest compatible with theories of economic voting and political competence. Our results suggest that democratic accountability can be a powerful determinant of the fate of populist leaders once in power.

Keywords: Covid-19; US election; Trump; voting; survey experiment.

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[†] Email: anja.neundorf@glasgow.ac.uk; sergi.pardos-prado@glasgow.ac.uk

1 Introduction

Has the Covid-19 crisis affected the outcome of the 2020 US Presidential election? Or did partisanship play a particularly strong role in a context of high polarization? Was Donald Trump exonerated from the management of the economic and political crisis by a populist electoral base, or did democratic accountability play a role explaining his ultimate defeat?

These questions are important for both American and comparative politics scholars. Firstly, the reasons behind the electoral fortunes and defeat of an atypical President in recent American history are a matter of interest in political science (Inglehart and Norris 2017; Sides et al. 2017; Federico and de Zavala 2018; Goetz et al. 2018; Hooghe and Dassonneville 2018; Morgan and Lee 2018; Mutz 2018; Schaffner et al. 2018; Setzler and Yanus 2018; Redlawsk et al. 2018; Reny et al. 2019; Knuckey and Hassan 2020). The significance of the Trump administration for the nature of American values and resilience of liberal democracy is highly debated and controversial. Moreover, Trump's double status as both a populist outsider and a presidential incumbent make this case particularly interesting. While populist entrepreneurs are expected to benefit from some forms of economic anxiety and disaffection with the political system (Hobolt and Tilley 2016; de Vries and Hobolt 2020), incumbent candidates are expected to be electorally punished in bad economic times (van der Brug et al. 2007; Duch and Stevenson 2008). Disentangling which of these dynamics was at play has important implications for the role of democratic accountability and the prospects of populist illiberal narratives in the US.

Secondly, this research question is also relevant for comparative scholars and beyond the specific interest on Trump's electoral fortunes. The impact of economic and political crises on political behavior outcomes like radical-right voting (Arzheimer 2009; Golde 2016; Hobolt and Tilley 2016; Arzheimer 2018; Gidron and Mijs 2019) or policy preferences (Margalit 2013) remains surprisingly controversial. The Covid-19 epidemic is a major and exogenous shock providing a unique opportunity to analyze how different aspects of a sudden crisis affect political attitudes and behavior (Acharya et al. 2020; Amat et al. 2020; Arceneaux et al. 2020; Bol et al. 2020).

To test the impact of the Covid-19 crisis on the 2020 US presidential election, we present the results of a survey experiment fielded during the campaign manipulating the salience of different aspects of the

crisis: the major economic downturn, a controversial political management of the pandemic (with the US having the highest death toll worldwide), and immigration-related anxieties around the Chinese origin of the virus spreading globally via open borders. We compare vote intentions and thermometer feelings between respondents exposed to each of those treatment conditions and a control group. Our research design has two main advantages. First, it allows us to assess the causal impact of specific aspects of the crisis, net of partisanship and other well-known perceptual screens filtering attribution of responsibility. Second, given the high levels of affective and ideological polarization in a bitterly divisive campaign (Gidron et al. 2020), our design is a potentially conservative test of the ability of economic and political retrospective evaluations to affect voting behavior.

Our analyses provide two main findings. First, the economic downturn is the only aspect of the crisis with an average, negative, and significant effect on Trump's re-election prospects. More interestingly, we find this effect to be pervasive across the population, and not conditional on partisanship. The group exposed to factual information on the economic crisis reduced vote intentions for Trump by 7-9 percentage points. Household income levels below \$50,000 were responsive to the economic downturn in a more statistically significant way, suggesting that egocentric calculations also played a role in Trump's electoral prospects.

Second, information on the political management of the crisis had strong negative effects on Trumps' prospects among voters between 55 and 70 years of age. In comparison to respondents of the same age in the control group, being exposed to information on the management of the health crisis depressed Trump support up to 25 percentage points, which is a remarkable magnitude for a demographic typically aligned with the Republican Party.

Our findings have several implications for the literature on crises and political behavior, and for the prospects of populism in the US. The main implication of our findings is that, despite the toxic and polarizing character of the campaign, the 2020 election was to a large extent a *normal* contest. It was fiercely fought along traditional partisan and demographic lines, and the incumbent was held to account by a turbulent economic and political context. Despite the overwhelming effect of partisanship, race, and religion in our data, Trump was still evaluated as a standard Presidential incumbent. He was punished by the economic crisis, and by older voters most at risk by the mismanagement of the pandemic.

Our findings imply a considerable degree of rationality in the 2020 outcome, and are in line with canonical theories of economic voting (Lewis-Beck and Stegmaier 2000; Tilley et al. 2018) and the politics of competence (Green and Jennings 2017, 2019). Our results also confirm that anti-immigrant attitudes are one of the strongest predictors of Trump support (Hooghe and Dassonneville 2018), as well as anti-tax policy preferences. Overall, our experiment suggests that populist candidates are not immune to democratic accountability once in power (van Spanje 2011), and that becoming insiders is one of their biggest electoral dangers.

2 Hypotheses

The global Covid-19 outbreak is an unprecedented crisis affecting various politically relevant areas. Firstly, it is a health crisis with unseen consequences in fatalities and pressures on national health systems, putting enormous expectation and strain on national governments. Secondly, the economic consequences of the pandemic far surpass the impact of the financial crisis in 2008, with national debt mounting, GDP plummeting, and unemployment rising. Thirdly, the crisis has led to an unparalleled impact on the openness of international borders, with governments shutting down specific travelling routes and many pointing at international flows of people as spreaders of the pandemic.

We develop several theoretical expectations concerning the impact of different aspects of the Covid-19 crisis on voting behaviour. More specifically, the next sub-sections consider the effects of the major economic debacle caused by the pandemic, the political management of the crisis, the global spread of the virus, and the role of partisanship filtering political events.

2.1 The role of the economic debacle

Socio-tropic theories of economic voting have profusely documented strong effects of macro-economic conditions on the electoral fortunes of incumbents (Lewis-Beck and Stegmaier 2000; Duch and Stevenson 2008; Vavreck 2009). The Covid-19 crisis has generated an unprecedented economic debacle. According to official US government data and by the time of the 2020 presidential campaign, GDP had decreased by 32.9% following the start of the coronavirus outbreak. This output drop is four times larger

than after the financial crisis in 2008. The unemployment rate had tripled in comparison to the previous year¹.

From a socio-tropic perspective, and assuming that Trump was perceived as a standard incumbent with responsibility over recent economic performance, the magnitude of the 2020 economic crisis should have significant, direct, and negative effects on Trump' prospects of re-election. This leads to our first hypothesis:

Hypothesis 1 (H1): Respondents exposed to information on the economic crisis triggered by the pandemic will evaluate Trump (Biden) more negatively (positively) than respondents in the control group.

While socio-tropic considerations have proved to be highly consequential in previous research, egocentric or pocketbook considerations can also be relevant when attribution of responsibility is clear (Tilley et al. 2018). This means that the economic downturn should especially affect vote intentions of those personally affected by it. Economic self-interest can be conceptualized from an income-maximizing (Kenworthy and Pontusson 2005) or an economic risk perspective (Rehm 2009). The former focuses on present income as the best indicator of hardship, and the latter considers prospective unemployment risk as a key determinant of preferences and political behavior. Our second hypothesis expects economic conditions to interact with the individual probability to feel the downturn. More specifically, we expect information on the economic conditions to harm Trump's prospects more among those at higher risk of becoming unemployed or with lower incomes:

Hypothesis 2 (H2): The negative effect of the economic crisis treatment vs. the control group on the evaluation of Trump will be larger among respondents at high risk of unemployment (H2a) and with low income (H2b) (conditional effects).

The study of an exogenous economic shock triggered by a global pandemic provides a unique opportunity to analyze the role of populist attitudes on Trump's electoral prospects. While Trump has been

 $[\]overline{\ \ }^1$ https://www.bea.gov/news/2020/gross-domestic-product-2nd-quarter-2020-advance-estimate-and-annual-up-

considered an atypical candidate capitalizing on populist and political disaffection (Rudolph 2019), he is also the presidential incumbent and leader of the Republican Party. The tension between his permanent outsiderness and his role as a canonical anti-tax Republican leader leads to two competing expectations.

On the one hand, macro-economic turbulence has been suggested as a trigger of populist radical right electoral success (Hobolt and Tilley 2016; de Vries and Hobolt 2020). The arguably exogenous shock of Covid-19 could exonerate Trump from any responsibility in the economic downturn, and even re-activate populist and anti-systemic attitudes ultimately benefiting him. On the other hand, the economic crisis could activate classical left-right distributional issues and bring preferences over tax and spending at the forefront of the election, at least in the short term (Margalit 2013). The major economic shock and consequent public debt could exacerbate anti-tax preferences among high and median-income voters, who tend to be redistribution-averse in majoritarian systems (Iversen and Soskice 2006). The populist vs. mainstream dichotomy leads to the next pair of hypotheses:

Hypothesis 3 (H3): Respondents exposed to information on the economic crisis will increase their populist attitudes in comparison to the control group, and those attitudes will subsequently increase positive (negative) evaluations of Trump (Biden) (mediation effect).

Hypothesis 4 (H4): Respondents exposed to information on the economic crisis will increase their anti-tax and spending preferences in comparison to the control group, and those preferences will subsequently increase positive (negative) evaluations of Trump (Biden) (H4a); this effect will be larger among high-income respondents (H4b) (mediation effect).

2.2 The political management of the pandemic

The Covid-19 crisis is of course not only an economic catastrophe, but a major public health issue. The role of governments at imposing social and mobility restrictions to halt the spread of the virus has become a salient and divisive issue in many democracies. The management of the crisis by the Trump

administration, the use of masks, and the infection of the President himself became highly politicized events during the campaign.

Perceptions of governmental competence have become a crucial determinant of the fortunes of mainstream politicians in advanced liberal democracies (Green and Jennings 2017, 2019). Assuming that
high public health standards are a valence and universally valued issue, the capacity of governments to
control the epidemic is reasonable determinant of their chances to remain in office. More specifically,
we expect that priming on the highest death toll worldwide and the controversies over the governmental
management of the pandemic should depress Trump's electoral prospects on average. We also expect a
conditional effect with age, since older respondents are a particularly vulnerable group² more at risk of
suffering serious health consequences from contracting Covid-19.

Hypothesis 5 (H5): Respondents exposed to information on the high death toll of the virus and the controversies over the government's management of the pandemic will evaluate Trump (Biden) more negatively (positively) than respondents in the control group (H5a); and this effect will be larger among older respondents (H5b) (conditional effect).

Our expectations on older voters speak to a burgeoning literature on age and Covid-19 (Canning et al. 2020; Daoust 2020; von Siemens 2021). Since age appeared to be the most important determinant of hospitalization and the chances to survive the virus, social scientists have turned their attention to the differences in attitudes and compliance with preventive measures between the young and old. One of the most interesting and emerging findings is that the relationship between age and Covid-19 measures is not linear (Daoust 2020), which we will take into account in our analyses.

2.3 Out-group hostility

Earlier studies on Trump's 2016 electoral victory point out that anti-immigrant attitudes clearly outperformed economic factors and other electoral determinants (Hooghe and Dassonneville 2018; Reny et al.

https://www.imperial.ac.uk/mrc-global-infectious-disease-analysis/covid-19/covid-19-scientific-resources/(04/21/2021)

2019). This finding speaks to the overwhelming evidence in favor of cultural and status-related concerns as the strongest drivers of radical right electorates (Mudde 2007; Mutz 2018; Norris and Inglehart 2019). Trump kept his populist and anti-immigrant narrative alive throughout his term in office. As a consequence, one would expect anti-immigrant attitudes to still benefit the clear owner of the issue in the 2020 election.

The Covid-19 crisis might have exacerbated the salience of anti-immigration and anti-globalization attitudes driving electoral choices. This would resonate with attempts by the Republican campaign to frame the crisis as the 'Chinese virus'³, and by beliefs that open borders contributed to the global spread of the disease (Yucesahin and Sirkeci 2020). There is evidence that anti-Asian attitudes were associated with Covid-19 attitudes and behaviors in the early stages of the pandemic, when conservative elites racialized the outbreak (Reny and Barreto 2020).

Out-group hostility may thus be a relevant theoretical channel explaining the electoral impact of the Covid-19 crisis. Priming respondents on the Chinese origin of the virus and the role of international travelling and migration routes could interact with prior levels of out-group hostility, and ultimately boost vote intentions for Trump. Even if the Coronavirus crisis is unable to change anti-immigrant attitudes entrenched in stable cultural values and beliefs (Kustov et al. 2019), immigration concerns associated with the pandemic (i.e. priming respondents on the risk of open borders and the Chinese origin of the virus) could still increase Trump's electoral prospects among electorates with anti-immigrant policy preferences. This leads to our next hypothesis:

Hypothesis 6 (H6): Respondents exposed to immigration concerns associated with the pandemic will evaluate Trump (Biden) more positively (negatively) than respondents in the control group (H6a); and this effect will be larger among respondents with anti-immigrant policy preferences (H6b) (conditional effect).

 3 https://www.nytimes.com/2020/04/18/us/politics/trump-china-virus.html (11/23/2020)

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2.4 Partisanship

Finally, it is well known that partisanship is a strong driver of American voting behavior and political attitudes, and that affective and ideological polarization are a crucial wedge between Democrats and Republicans (Gidron et al. 2020). Partisanship has also become a surprisingly strong driver of attitudes towards the pandemic, including the use of masks and the compliance with social distancing measures (Grossman et al. 2020). Partisanship is traditionally regarded as a stable perceptual screen filtering elements that may be associated with the Covid-19 crisis, like economic downturns and governmental competence (Evans and Andersen 2006). We would thus expect the mechanisms summarized in our previous hypotheses to be more visible among weak partisans or independents, than among strong partisans:

Hypothesis 7 (H7): The expected effect of economic conditions (H1), the political management of the pandemic (H5a), and immigration anxieties (H6a) will be stronger for weak partisans and independents than for strong partisans of either party (conditional effects).

3 Research design

To test our hypotheses, we use a survey experiment priming respondents on different aspects of the Covid-19 crisis. Survey experiments prime latent attitudinal and behavioral traits and are a powerful tool for causal inference (Krupnikov and Findley 2018). This approach is particularly valuable when studying attitudes that are likely to be confounded by underlying partisan and ideological considerations.

The scope of our findings is inevitably limited by the conditions created by the experiment and the context in which they were received. We aim, however, at a reasonable level of external validity by embedding our experiment in a representative sample of the US population, during the campaign leading to the election that we are studying, and at a time in which the economy and Covid-19 were highly salient issues in the public⁴.

We registered the data collection and data analysis of this study at the OSF on October 15, 2020,

 $^{^4}$ https://www.pewresearch.org/politics/2020/08/13/important-issues-in-the-2020-election/(04/16/2021).

before any data collection commenced.⁵

Data collection: Participants were recruited from an online access panel administered by the company Deltapoll and their partners. No direct financial incentives were given. However, respondents got some virtual tokens, which they can ultimately exchange for some money or vouchers. The survey included 1,200 individuals representative of the US population.⁶

Our analysis is well powered according to standard calculations. As it is conventional to do, we assume 95% level of statistical significance and 80% statistical power. We then calculate the standardized difference that we expect to find between our control and each of our treatment groups: difference between the means / standard deviation of our outcome in the population (Jones et al. 2003). We assume a 0.1 (10%) difference in the means of our outcomes between our treatment and control group, and take the standard deviation of thermometer feelings towards Trump from the 2016 pre-electoral survey of the American National Election Study (0.33). We look at one-tailed hypotheses given the strong theoretical background suggesting specific signs of competence and economic perceptions on incumbents. Given these assumptions we need 176 individuals per treatment group for a well-powered analysis, which adds up to 704 as the total necessary sample size for average treatment effects.

We also estimated the necessary power to calculate heterogenous treatment effects across partisan groups (Democrats, Independents, and Republicans). On the basis of the 2016 American National Election Study, the difference in thermometer feelings for Trump between Republicans and Independents is 0.25, which is a conservative assumption since the difference between Republicans and Democrats is much larger. The standard deviation of feelings towards Trump for both Democrats and Republicans is 0.25. Given these values and the well-known strong effects of partisanship on voting behavior, a well-powered conditional analysis across 4 treatments and 3 partisan groups would require a total sample size of 204.

Appendix 1 tabulates key demographic characteristics of our sample, and shows a remarkably high

The Pre-Analysis Plan is available here: https://osf.io/vdh8x/?view_only=af8a132b534f4fba81d828fc3d98af62

⁶ 73 cases were dropped from the data, as they were not born in the US and we could not confirm whether they had citizenship and were hence allowed to vote in the election.

correspondence with a high-quality sample from the American National Election Study.⁷ Data collection took place between October 21-29, 2020, about one week before the election, which was held on November 3, 2020.

3.1 Experimental design

After consenting to participating in our study, respondents were first asked a few pre-treatment variables: gender, age, education, partisanship, and state of residence. Then, they were randomly assigned to the control group or one of our three treatment groups. Outcome variables were directly asked after the exposure to the treatments, followed by some mediating and moderating variables needed to test some of our hypotheses above. The survey finished with some additional demographic questions on income, domicile, ethnicity and religiosity.⁸

Randomization: We randomly assigned three treatment conditions and one control group to our sample, relying on simple block-randomization, whereby respondents were first allocated to one of three groups: Democrats, Independents, and Republicans. The random assignment of our treatment conditions took place within each group. Each experimental condition makes up 25% of the sample.

As we show in Appendix 2, the randomization of our treatment was largely successful, based on key demographics: gender, age, education, partisanship, income, urban/rural residence, ethnicity, and religiosity. Estimating a multi-nominal logistic regression of treatment allocation (reference category: control group), we find only slight significant differences in terms of religion (especially for the governmental management treatment) and ethnicity (for China virus treatment). In order to deal with these small imbalances between the treatment groups and the control group, observed demographic characteristics

⁷ Our sample has slightly under-sampled respondents with a degree and over-sampled people living in urban places. Our statistical models will control for these variables.

⁸ The ethical considerations of this study have been anonymously peer-reviewed and officially approved (on Oct 9, 2020) at [removed for anonymity] following standard ethical review procedures.

⁹ The assignment to partisan groups was done on the basis of a pre-treatment partisanship variable: (1) Strong Democrat, (2) Not very strong Democrat, (3) Independent closer to the Democratic party, (4) Independent, (5) Independent closer to the Republican party, (6) Not very strong Republican, (7) Strong Republican. For the purposes of block randomization, Democrats correspond to categories 1-2, Independents to categories 3-5 (plus don't knows), and Republicans correspond to categories 6-7.

are included in the regression models, presented below as control variables.

3.2 Variables

3.2.1 Experimental treatments

Our main independent variable is the random assignment to the control group or one of our three treatment groups. This variable has four values: 1) "control group"; 2) "economic treatment"; 3) "government management treatment"; and 4) "China virus treatment". The control group was not exposed to any vignette or mentioning of Covid-19. All treatment conditions report factual statistics from official sources or academic studies, and the sources were provided in the vignettes. The wording of the vignettes for each treatment is the following:

ECONOMIC TREATMENT - T1: "According to official data from the US government, the economy has declined dramatically over the last few months. GDP decreased by 32.9% following the start of the coronavirus outbreak, which is four times higher than after the financial crisis in 2008.¹⁰ The unemployment rate has tripled in comparison to last year.¹¹"

GOVERNMENT MANAGEMENT TREATMENT - T2: "According to data from John Hopkins University, the death toll in the US due to the coronavirus outbreak is the highest in the world, well surpassing 200,000 deaths.¹² The federal government has been under intense scrutiny recently, accused of being slow to coordinate a national response and sending unclear messages.¹³"

CHINESE VIRUS TREATMENT - T3: "Recent academic studies have linked the spread of coronavirus to migration and specific travelling routes originating in Central China and spreading across the

¹⁰ Sources: https://www.bea.gov/news/2020/gross-domestic-product-2nd-quarter-2020-advance-estimate-and-ahttps://www.thebalance.com/2008-gdp-growth-updates-by-quarter-3305542

¹¹ Source: https://www.bls.gov/news.release/pdf/empsit.pdf

¹² Source: https://coronavirus.jhu.edu/map.html

¹³ Source: https://www.pewresearch.org/global/2020/08/27/most-approve-of-national-response-to-covid-19-i

world.¹⁴ Based on Census Bureau data, immigration to the United States has tripled since 1970, reaching unprecedented levels. According to recent estimates, the U.S. foreign-born population has reached a record 44.8 million.¹⁵"

Immediately after each treatment, respondents assigned to that particular vignette were asked about a related opinion on subjective unemployment risk, political performance, or immigration policy respectively. Those questions were part of the treatment. Everyone else was still asked the same questions, but after the outcome variables.

3.2.2 Outcome variables

To test the impact of our treatments on the electoral fortunes of the main presidential candidates – incumbent President Donald J. Trump and Democratic challenger Joseph R. Biden, Jr. – we use two questions. Firstly, we investigate **vote intention for Trump over Biden**, setting those that would not vote (5.4%), vote for another candidate (2.4%) or did not know who to vote for (5.4%) to missing. ¹⁶ Based on our sample, 47.6% stated that they would vote for Trump, which is within 1% to the official election results, confirming the high quality of our sample. ¹⁷ In Appendix 3 (M5) we further replicate our main models using Trump vote versus all other options, including not voting and don't know answers.

The second set of outcomes focuses on **thermometer feelings towards the two candidates**, ranging from 0 to 100. Figure 2 plots the distribution of the two variables and illustrates the extreme polarization of the American public in the lead up to the 2020 election. 35% of respondents give Trump a zero on the feeling thermometer, while 21% give him 100. Biden exhibits a similar extreme, bi-modal distribution, with 24% giving him a zero and 20% giving him a 100. As one would expect, the two variables are

¹⁴ Source: Sirkeci, I., & Yucesahin, M. M. (2020). Coronavirus and Migration: Analysis of Human Mobility and the Spread of Covid-19. Migration Letters, 17(2), 379-398.

¹⁵ Source: https://www.pewresearch.org/fact-tank/2020/08/20/key-findings-about-u-s-immigrants/

¹⁶ Absentee voting was particularly high in this election and it is likely that some of our respondents had already voted when completing the survey. While the use of thermometer feelings as dependent variables should not be affected by this, the vote intention variable might. However, we believe that this makes it more difficult for economic and political retrospective evaluations to affect voting behavior, in the sense that a few respondents might have already made up their minds when answering our survey.

¹⁷ Trump received 46.86% of the votes according to the final election count, https://www.fec.gov/resources/cms-content/documents/2020presgeresults.pdf

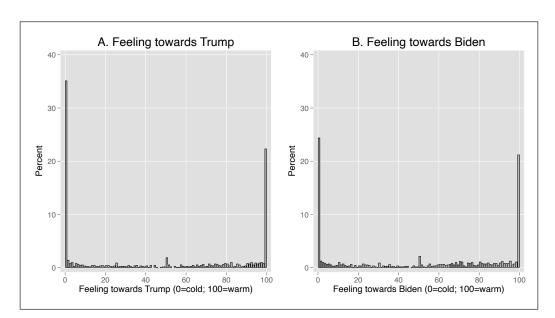


Figure 1: Descriptive distribution of feeling thermometer for Trump (A) and Biden (B)

highly, negatively correlated (R = -0.75) and strongly reflect partial partial we see this context as a difficult case study to prove contextual economic and political effects on vote intentions.

3.2.3 Mediating and moderating variables

Based on our pre-registered hypotheses and analytical strategy, we expect varying moderating and mediating variables to impact the effect of Covid-19 on the electoral success of the two presidential candidates. Following H2 we expect **subjective unemployment risk** and income to condition the impact of the pandemic. To measure the former, we use a four-categorical scale that asked respondents "how likely do you think it is, if at all, that during the next 12 months you will be unemployed and looking for work for at least four consecutive weeks?", ranging from 1 "very likely" to 4 "not at all likely". Respondents who do not seek work are coded as missing.

To measure **income**, respondents were asked to state their combined, pre-tax annual household income, ranging from less than \$15,000 (1) to \$250,000 and above (24). We use income as a linear

¹⁸ Average score among Republicans: Trump=84; Biden=18. Average score among Democrats: Trump=13; Biden=84. Average score among Independents: Trump=41; Biden=48.

variable, and in Appendix 5.2 replicate the results using a binary variable (below sample median (below \$50,000) = 0; above sample median (\$50,000+) = 1). While income is an important measure of personal economic circumstances, it inevitably misses other important aspects like property of assets (Nadeau et al. 2010; Stubager et al. 2013; Nadeau et al. 2019) and class or occupation (Evans and Tilley 2017).

H3 and H4 look at potential mediators of the economic treatment. Firstly, we measure **populist at-titudes** (H3) asking respondents whether they disagree (1) or agree (5) with the following statement: "The people, and not politicians, should make our most important policy decisions". This is a verified item often used to measure populist sentiments (Akkerman et al. 2014). Secondly, we measure **anti-tax and spending preferences** using the following question: "Imagine that the federal government had to choose between increasing taxes and spending more on unemployment benefits (1), or decreasing taxes and spending less on unemployment benefits (5), which should they do?".

H5b further expects that the impact of the government management treatment to be strongest among older voters. To test this hypothesis, we model age as a linear as well as non-linear effect. Appendix 5.4 further replicates the analysis using a binary age variable (below 55 years old = 0; 55 years or older = 1).

Next, we look at the conditioning effect of **immigration preferences** (H6b), asking respondents "How restrictive, if at all, do you think immigration policy in the United States should be?". Responses range from not at all restrictive (1) to extremely restrictive (5). Lastly, to test H7 we condition the effects of our three treatments by **partisanship**, using the same three categories also used for block randomization. For this we collapsed the standard 7-point partisanship into Democrats (1+2), Independents (3-5, don't know) and Republican (6+7).

It is important to note that two of our moderators (i.e. subjective economic risk and immigration policy preferences) are post-treatment, as we also wanted to check whether they mediated rather than moderated our treatments of interest. Appendix 8 shows clearly insignificant effects of our treatments on all our endogenous mediators and moderators. This already indicates that our different Covid-19 primes are not mediated by unemployment risk, spending preferences, populism, and immigration policy preferences. This also means that none of our moderators were affected by the treatments.

3.2.4 Additional control variables

As outlined in our pre-registration plan, our models below control for key demographic variables. This will help to account for small but significant imbalances in our treatment groups (see Appendix 2) and to compare the effect size of our treatments with well established (pre-treatment) drivers of vote choice. We include the following control variables:

- **Gender**: Female (51.3%) versus male (48.7%).
- **Education**: Degree (35.6%), high school (58.0%), less than high school (6.4%). ¹⁹
- **Domicile**: Urban (25.1%), Suburban (41.2%), City or sizable town (10.3%), Rural (23.4%).
- Ethnicity: White (73.4%), Black (12.4%), Hispanic (9.2%), Other (5.0%).²⁰
- **Religion**: Identify with religion + frequent attend (31.9%), Identify with religion + not frequent attend (35.8%), do not identify with religion (32.3%).
- Age: To compare the effect size across all variables, age was recoded to range from 0 to 1.²¹

4 Research design

To test our hypotheses, we use a survey experiment priming respondents on different aspects of the Covid-19 crisis. Survey experiments prime latent attitudinal and behavioral traits and are a powerful tool for causal inference (Krupnikov and Findley 2018). This approach is particularly valuable when studying attitudes that are likely to be confounded by underlying partisan and ideological considerations.

The scope of our findings is inevitably limited by the conditions created by the experiment and the context in which they were received. We aim, however, at a reasonable level of external validity by

¹⁹ The detailed list of highest degrees: Degree = Doctorate degree (3.3%), Masters degree (10.7%), Completed some graduate, but no degree (2.6%), College Degree (such as B.A., B.S.) (13.4%), Associate Degree (5.18%). High School = Completed some college, but no degree (9.4%), Other post high school vocational train (1.58%), High school graduate (46.4%). Less than high school = Completed some high school (5.1%), Middle School or less (1.2%).

²⁰ We pre-registered that we would further divide respondents into Asian and Middle Eastern. However, there were not enough respondents from these groups. We therefore merged these with the Other category.

²¹ Age ranges from 18 to 99 with the average respondents being 48.5 years old.

embedding our experiment in a representative sample of the US population, during the campaign leading to the election that we are studying, and at a time in which the economy and Covid-19 were highly salient issues in the public²².

We registered the data collection and data analysis of this study at the OSF on October 15, 2020, before any data collection commenced.²³

Data collection: Participants were recruited from an online access panel administered by the company Deltapoll and their partners. No direct financial incentives were given. However, respondents got some virtual tokens, which they can ultimately exchange for some money or vouchers. The survey included 1,200 individuals representative of the US population.²⁴

Our analysis is well powered according to standard calculations. As it is conventional to do, we assume 95% level of statistical significance and 80% statistical power. We then calculate the standardized difference that we expect to find between our control and each of our treatment groups: difference between the means / standard deviation of our outcome in the population (Jones et al. 2003). We assume a 0.1 (10%) difference in the means of our outcomes between our treatment and control group, and take the standard deviation of thermometer feelings towards Trump from the 2016 pre-electoral survey of the American National Election Study (0.33). We look at one-tailed hypotheses given the strong theoretical background suggesting specific signs of competence and economic perceptions on incumbents. Given these assumptions we need 176 individuals per treatment group for a well-powered analysis, which adds up to 704 as the total necessary sample size for average treatment effects.

We also estimated the necessary power to calculate heterogenous treatment effects across partisan groups (Democrats, Independents, and Republicans). On the basis of the 2016 American National Election Study, the difference in thermometer feelings for Trump between Republicans and Independents is 0.25, which is a conservative assumption since the difference between Republicans and Democrats is

²² https://www.pewresearch.org/politics/2020/08/13/important-issues-in-the-2020-election/(04/16/2021).

The Pre-Analysis Plan is available here: https://osf.io/vdh8x/?view_only=af8a132b534f4fba81d828fc3d98af62

²⁴ 73 cases were dropped from the data, as they were not born in the US and we could not confirm whether they had citizenship and were hence allowed to vote in the election.

much larger. The standard deviation of feelings towards Trump for both Democrats and Republicans is 0.25. Given these values and the well-known strong effects of partisanship on voting behavior, a well-powered conditional analysis across 4 treatments and 3 partisan groups would require a total sample size of 204.

Appendix 1 tabulates key demographic characteristics of our sample, and shows a remarkably high correspondence with a high-quality sample from the American National Election Study.²⁵ Data collection took place between October 21-29, 2020, about one week before the election, which was held on November 3, 2020.

4.1 Experimental design

After consenting to participating in our study, respondents were first asked a few pre-treatment variables: gender, age, education, partisanship, and state of residence. Then, they were randomly assigned to the control group or one of our three treatment groups. Outcome variables were directly asked after the exposure to the treatments, followed by some mediating and moderating variables needed to test some of our hypotheses above. The survey finished with some additional demographic questions on income, domicile, ethnicity and religiosity.²⁶

Randomization: We randomly assigned three treatment conditions and one control group to our sample, relying on simple block-randomization, whereby respondents were first allocated to one of three groups: Democrats, Independents, and Republicans.²⁷ The random assignment of our treatment conditions took place within each group. Each experimental condition makes up 25% of the sample.

As we show in Appendix 2, the randomization of our treatment was largely successful, based on

²⁵ Our sample has slightly under-sampled respondents with a degree and over-sampled people living in urban places. Our statistical models will control for these variables.

²⁶ The ethical considerations of this study have been anonymously peer-reviewed and officially approved (on Oct 9, 2020) at [removed for anonymity] following standard ethical review procedures.

²⁷ The assignment to partisan groups was done on the basis of a pre-treatment partisanship variable: (1) Strong Democrat, (2) Not very strong Democrat, (3) Independent closer to the Democratic party, (4) Independent, (5) Independent closer to the Republican party, (6) Not very strong Republican, (7) Strong Republican. For the purposes of block randomization, Democrats correspond to categories 1-2, Independents to categories 3-5 (plus don't knows), and Republicans correspond to categories 6-7.

key demographics: gender, age, education, partisanship, income, urban/rural residence, ethnicity, and religiosity. Estimating a multi-nominal logistic regression of treatment allocation (reference category: control group), we find only slight significant differences in terms of religion (especially for the governmental management treatment) and ethnicity (for China virus treatment). In order to deal with these small imbalances between the treatment groups and the control group, observed demographic characteristics are included in the regression models, presented below as control variables.

4.2 Variables

4.2.1 Experimental treatments

Our main independent variable is the random assignment to the control group or one of our three treatment groups. This variable has four values: 1) "control group"; 2) "economic treatment"; 3) "government management treatment"; and 4) "China virus treatment". The control group was not exposed to any vignette or mentioning of Covid-19. All treatment conditions report factual statistics from official sources or academic studies, and the sources were provided in the vignettes. The wording of the vignettes for each treatment is the following:

ECONOMIC TREATMENT - T1: "According to official data from the US government, the economy has declined dramatically over the last few months. GDP decreased by 32.9% following the start of the coronavirus outbreak, which is four times higher than after the financial crisis in 2008.²⁸ The unemployment rate has tripled in comparison to last year.²⁹"

GOVERNMENT MANAGEMENT TREATMENT - T2: "According to data from John Hopkins University, the death toll in the US due to the coronavirus outbreak is the highest in the world, well surpassing 200,000 deaths.³⁰ The federal government has been under intense scrutiny recently, accused

 $^{^{28} \,} Sources: \, https://www.bea.gov/news/2020/gross-domestic-product-2nd-quarter-2020-advance-estimate-and-ahttps://www.thebalance.com/2008-gdp-growth-updates-by-quarter-3305542$

²⁹ Source: https://www.bls.gov/news.release/pdf/empsit.pdf

³⁰ Source: https://coronavirus.jhu.edu/map.html

of being slow to coordinate a national response and sending unclear messages.³¹"

CHINESE VIRUS TREATMENT - T3: "Recent academic studies have linked the spread of coronavirus to migration and specific travelling routes originating in Central China and spreading across the world.³² Based on Census Bureau data, immigration to the United States has tripled since 1970, reaching unprecedented levels. According to recent estimates, the U.S. foreign-born population has reached a record 44.8 million.³³"

Immediately after each treatment, respondents assigned to that particular vignette were asked about a related opinion on subjective unemployment risk, political performance, or immigration policy respectively. Those questions were part of the treatment. Everyone else was still asked the same questions, but after the outcome variables.

4.2.2 Outcome variables

To test the impact of our treatments on the electoral fortunes of the main presidential candidates – incumbent President Donald J. Trump and Democratic challenger Joseph R. Biden, Jr. – we use two questions. Firstly, we investigate **vote intention for Trump over Biden**, setting those that would not vote (5.4%), vote for another candidate (2.4%) or did not know who to vote for (5.4%) to missing.³⁴ Based on our sample, 47.6% stated that they would vote for Trump, which is within 1% to the official election results, confirming the high quality of our sample.³⁵ In Appendix 3 (M5) we further replicate our main models using Trump vote versus all other options, including not voting and don't know answers.

³¹ Source: https://www.pewresearch.org/global/2020/08/27/most-approve-of-national-response-to-covid-19-i

³² Source: Sirkeci, I., & Yucesahin, M. M. (2020). Coronavirus and Migration: Analysis of Human Mobility and the Spread of Covid-19. Migration Letters, 17(2), 379-398.

³³ Source: https://www.pewresearch.org/fact-tank/2020/08/20/key-findings-about-u-s-immigrants/

³⁴ Absentee voting was particularly high in this election and it is likely that some of our respondents had already voted when completing the survey. While the use of thermometer feelings as dependent variables should not be affected by this, the vote intention variable might. However, we believe that this makes it more difficult for economic and political retrospective evaluations to affect voting behavior, in the sense that a few respondents might have already made up their minds when answering our survey.

³⁵ Trump received 46.86% of the votes according to the final election count, https://www.fec.gov/resources/cms-content/documents/2020presgeresults.pdf

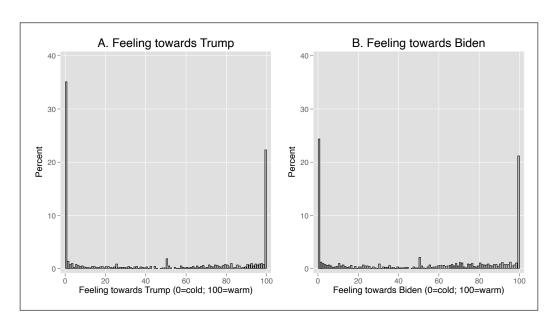


Figure 2: Descriptive distribution of feeling thermometer for Trump (A) and Biden (B)

The second set of outcomes focuses on **thermometer feelings towards the two candidates**, ranging from 0 to 100. Figure 2 plots the distribution of the two variables and illustrates the extreme polarization of the American public in the lead up to the 2020 election. 35% of respondents give Trump a zero on the feeling thermometer, while 21% give him 100. Biden exhibits a similar extreme, bi-modal distribution, with 24% giving him a zero and 20% giving him a 100. As one would expect, the two variables are highly, negatively correlated (R = -0.75) and strongly reflect partisanship.³⁶ We see this context as a difficult case study to prove contextual economic and political effects on vote intentions.

4.2.3 Mediating and moderating variables

Based on our pre-registered hypotheses and analytical strategy, we expect varying moderating and mediating variables to impact the effect of Covid-19 on the electoral success of the two presidential candidates. Following H2 we expect **subjective unemployment risk** and income to condition the impact of the pandemic. To measure the former, we use a four-categorical scale that asked respondents "how likely do you

Average score among Republicans: Trump=84; Biden=18. Average score among Democrats: Trump=13; Biden=84. Average score among Independents: Trump=41; Biden=48.

think it is, if at all, that during the next 12 months you will be unemployed and looking for work for at least four consecutive weeks?", ranging from 1 "very likely" to 4 "not at all likely". Respondents who do not seek work are coded as missing.

To measure **income**, respondents were asked to state their combined, pre-tax annual household income, ranging from less than \$15,000 (1) to \$250,000 and above (24). We use income as a linear variable, and in Appendix 5.2 replicate the results using a binary variable (below sample median (below \$50,000 = 0; above sample median (\$50,000 + 0 = 1). While income is an important measure of personal economic circumstances, it inevitably misses other important aspects like property of assets (Nadeau et al. 2010; Stubager et al. 2013; Nadeau et al. 2019) and class or occupation (Evans and Tilley 2017).

H3 and H4 look at potential mediators of the economic treatment. Firstly, we measure **populist at-titudes** (H3) asking respondents whether they disagree (1) or agree (5) with the following statement: "The people, and not politicians, should make our most important policy decisions". This is a verified item often used to measure populist sentiments (Akkerman et al. 2014). Secondly, we measure **anti-tax and spending preferences** using the following question: "Imagine that the federal government had to choose between increasing taxes and spending more on unemployment benefits (1), or decreasing taxes and spending less on unemployment benefits (5), which should they do?".

H5b further expects that the impact of the government management treatment to be strongest among older voters. To test this hypothesis, we model age as a linear as well as non-linear effect. Appendix 5.4 further replicates the analysis using a binary age variable (below 55 years old = 0; 55 years or older = 1).

Next, we look at the conditioning effect of **immigration preferences** (H6b), asking respondents "How restrictive, if at all, do you think immigration policy in the United States should be?". Responses range from not at all restrictive (1) to extremely restrictive (5). Lastly, to test H7 we condition the effects of our three treatments by **partisanship**, using the same three categories also used for block randomization. For this we collapsed the standard 7-point partisanship into Democrats (1+2), Independents (3-5, don't know) and Republican (6+7).

It is important to note that two of our moderators (i.e. subjective economic risk and immigration policy preferences) are post-treatment, as we also wanted to check whether they mediated rather than moderated our treatments of interest. Appendix 8 shows clearly insignificant effects of our treatments on all our

endogenous mediators and moderators. This already indicates that our different Covid-19 primes are not mediated by unemployment risk, spending preferences, populism, and immigration policy preferences. This also means that none of our moderators were affected by the treatments.

4.2.4 Additional control variables

As outlined in our pre-registration plan, our models below control for key demographic variables. This will help to account for small but significant imbalances in our treatment groups (see Appendix 2) and to compare the effect size of our treatments with well established (pre-treatment) drivers of vote choice. We include the following control variables:

- **Gender**: Female (51.3%) versus male (48.7%).
- Education: Degree (35.6%), high school (58.0%), less than high school (6.4%).³⁷
- **Domicile**: Urban (25.1%), Suburban (41.2%), City or sizable town (10.3%), Rural (23.4%).
- Ethnicity: White (73.4%), Black (12.4%), Hispanic (9.2%), Other (5.0%).³⁸
- **Religion**: Identify with religion + frequent attend (31.9%), Identify with religion + not frequent attend (35.8%), do not identify with religion (32.3%).
- Age: To compare the effect size across all variables, age was recoded to range from 0 to 1.³⁹

³⁷ The detailed list of highest degrees: Degree = Doctorate degree (3.3%), Masters degree (10.7%), Completed some graduate, but no degree (2.6%), College Degree (such as B.A., B.S.) (13.4%), Associate Degree (5.18%). High School = Completed some college, but no degree (9.4%), Other post high school vocational train (1.58%), High school graduate (46.4%). Less than high school = Completed some high school (5.1%), Middle School or less (1.2%).

³⁸ We pre-registered that we would further divide respondents into Asian and Middle Eastern. However, there were not enough respondents from these groups. We therefore merged these with the Other category.

³⁹ Age ranges from 18 to 99 with the average respondents being 48.5 years old.

5 Results

To test our hypotheses we use OLS regression analysis with the following dependent variables: vote intention in the 2020 Presidential election as well as thermometer feelings concerning Trump and Biden.⁴⁰ Our main independent variables are our experimental conditions, which are specified as a set of dummy variables with the control group as the reference category. In this section, we first test the average impact of our treatments on our outcome variables, before exploring further the conditional and mediating effects outlined in our hypotheses.

5.1 Main effects

Table 1 reports the regression coefficients and standard errors predicting our three outcomes. Those coefficients test the effects of our three Covid-19 priming treatments compared to the control group. In these models we control for key demographics, which are exogenous to the treatment and which have been shown to be important for US voting behavior. Models M1.1, M2.1, and M3.1 only include ethnicity and religiosity, which remain imbalanced between our treatment and control groups.

The results confirm hypothesis 1, which stated that the economic crisis triggered by the pandemic will harm Trump's electoral prospects and help his opponent. Table 1 confirms that the expected vote intention is about 7 to 9 percentage points lower for the treated group compared to the control group. This effect is significant at the 5% level when including the full list of control variables (M1.2) and significant at the 10% level when using a reduced number of controls (M1.1)⁴¹. The results are also robust to the use of clustered standard errors by state (see Appendix 3, Model 6). In terms of thermostatic feelings, being primed on the economic impact of Covid-19 reduces positive feelings towards Trump by between

⁴⁰ In Appendix 3, Models 4 and 5, we further present the results, predicting vote intention using logistic regression instead of a linear model. The results are unchanged.

⁴¹ In a randomized setup, an improvement in the significance of a treatment effect after including pre-treatment covariates is due to an increase in the precision of the estimate (Imbens and Rubin 2015). This is especially the case in the absence of multicollinearity or clear suppression effects, since our treatments are uncorrelated with these additional covariates (see Appendix 2). The increase of the precision of an estimate is particularly likely when there is within-treatment variability. This is consistent with our Figure 2, and with previous research showing heterogeneous effects of economic perceptions (Duch et al. 2000; Evans and Andersen 2006; Duch and Stevenson 2010; Fraile and Pardos-Prado 2014).

Table 1: Regression coefficients: Main treatment effects

	M1.1	M1.2	M2.1	M2.2	M3.1	M3.2
Outcome	Vote:		Thermometer feeling			
	Trump vs Biden		Trump		Biden	
Treatment (ref: Control)						
Economy	-0.072*	-0.087**	-5.875*	-6.652*	3.643	5.971*
	[0.043]	[0.043]	[3.510]	[3.541]	[3.359]	[3.376]
Gov. Managment	-0.040	-0.044	-4.110	-3.082	4.462	5.236
	[0.043]	[0.043]	[3.509]	[3.538]	[3.364]	[3.382]
Chinese virus	-0.064	-0.060	-3.713	-2.871	5.564*	6.235*
	[0.043]	[0.043]	[3.504]	[3.540]	[3.356]	[3.378]
Religion	$\sqrt{}$	$\sqrt{}$		$\sqrt{}$		$\sqrt{}$
Ethnicity			\ \ \		\ \ \ \	
Additional pre-treatment controls					·	
Constant	0.684***	0.700***	64.830***	65.204***	40.222***	40.406***
	[0.041]	[0.065]	[3.318]	[5.311]	[3.172]	[5.064]
Observations	986	966	1,102	1,068	1,096	1,066
R-squared	0.105	0.130	0.096	0.122	0.086	0.113

Significance levels: *** $p \le 0.01$, ** $p \le 0.05$, * $p \le 0.1$. Source: Deltapoll online survey. Note: The table reports coefficients and standard errors. The results are based on linear regressions predicting the three outcome variables: A) Vote intention for Trump (1) over Biden (0); B) Thermostatic feelings towards Trump (0-100); C) Thermostatic feelings towards Biden (0-100). The coefficients capture the impact of the three treatments in comparison to the control group. Ethnicity and religiosity are included in all models as controls due to small imbalances between the treatment groups. In models M1.2, M2.2, and M3.2 we additionally control for gender, age, education and domicile. The full list of coefficients is reported in Appendix 3.

6 and 7 percentage points. This effect is however only significant at the 10% level. Figures 7.1 and 7.2 in the Appendix express the magnitudes of the main findings in this section in terms of predicted vote shares for treated and control groups.

Turning to the other two primes of the Covid-19 crisis, we find no significant effects for the governmental management of the crisis nor the possible connection of the pandemic to immigration. If anything, both treatments seem to harm Trump, despite our expectation that framing the crisis as a "Chinese virus" might help him (H6). The insignificant average effect of our political management treatment is consistent with Acharya et al. (2020)'s conclusion that global public health issues have limited domestic electoral effects. This also confirms that Covid-related performance is very much filtered by partisan lenses (Grossman et al. 2020).

Appendix 3 also report the results of our control variables, which are all coded 0 to 1 to make com-

parisons possible. The results confirm usual patterns. For example, Trump receives support from whites, lower educated, rural respondents who are religious. These findings are hardly surprising. However, it is worth noting that in terms of effect size the impact of the economy is similar to comparing rural and urban voters, while the difference between black and white voters is about four times larger than the economic impact of Covid-19.

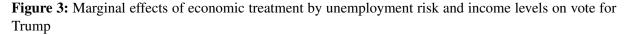
In Appendix 4 we further present models that add partisanship, immigration and tax-spending preferences as additional controls to the models presented in Table 1. Our findings are robust to the inclusion of these endogenous variables. It is interesting to note that neither voting for/against Trump nor his thermostatic appeal are driven by the indicator we used to measure populist sentiments.

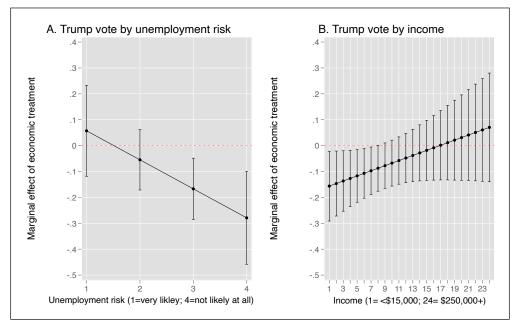
5.2 Covid-19 and the economy

In a next step, we further investigate whether the economic effect is conditional on respondents' own hardship, which we measure using subjective unemployment risk as well as income levels. Figure 3 plots the marginal effects of the economic treatment by these two conditional factors. Based on H2 we expect the economic implications of Covid-19 to hit harder those most at economic risk. This is partially confirmed when looking at income. As Figure 3.B confirms, the negative impact of the economic treatment on voting for Trump over Biden is only significant for low-income respondents (below \$50,000 annual, pre-tax household income). However, the confidence intervals of the estimation overlap across all values of the moderating variable. This does not allow us to confirm that the strength of our economic treatment differs across income groups.

Turning to the impact of subjective unemployment risk, the results presented in Figure 3.A are somewhat surprising. Based on our findings, the impact of the economic crisis is particularly strong among those not at risk of loosing their jobs. When focusing on respondents at the lowest level of unemployment risk that got primed on the economic crisis, their likelihood to vote for Trump is 28 percentage points lower than the control group. This is a strong effect, comparable to the partisanship effect (Independents vs. Republicans, see Appendix 4). Based on H2 we expected the opposite. The finding might be explained by a potential ceiling effect. Those most at risk of loosing their job in the current crisis do

⁴² Figures produced using the *plottig* package for Stata (Bischof 2017)





Note: The results are based on linear regressions predicting vote intention for Trump (1) over Biden (0), interacting the economic treatment with subjective unemployment risk and income. The model controls for: age, gender, education, domicile, ethnicity and religiosity. Appendix 5.1 further plots these interaction effects for the thermometer feelings towards Trump and Biden.

not need to be reminded of the economic impact of Covid-19, as they are experiencing it directly. On the other hand, among those not at risk themselves, the priming of the economic crisis has the expected impact due to the increased salience of the topic.

H3 and H4 are tested with mediation analysis (Imai et al. 2011). The economic treatment is supposed to increase populist attitudes (H3) and anti-spending and tax preferences (H4), and each of those mediators is in turn supposed to increase (decrease) vote intention and warm feelings for Trump (Biden). Tables 2 and 3 report the Average Causal Mediation Effect (ACME) of our economic treatment (vs. the control group) via populism and tax-spending preferences respectively, and compares it to the Average Direct Effect (ADE) and the Total Effect (direct and mediated) of the economic treatment. Tables A6.1-A6.3 in the Appendix report the effect of our treatment on the relevant mediators, and the effect of the mediators on our outcome.⁴³

⁴³ Table 6.5 reports the effect of populism and tax-spending preferences on the outcomes, without adjusting by the economic treatment.

Table 2 shows insignificant ACME's of the economic treatment via populist attitudes, and therefore rejects H3. By contrast, the ADE of the economy significantly reduces vote intention and thermometer feelings for Trump, and increases thermometer feelings for Biden. The significant total effects of the economy are only equivalent to its direct effects, suggesting that populism had no role at mediating the effects of the Covid-19 pandemic. Moreover, Tables A6.1 and A6.2 in the Appendix show that being exposed to the economic treatment did not significantly increase populist attitudes in our experimental setup, and that populist attitudes were not significantly related to voting for Trump. However, in order to measure populism, we only relied on a single item capturing agreement with the idea that the people, and not politicians, should make the most important policy decisions. While this particular item has proved to have the strongest loading in underlying populist attitudinal scales in public opinion (Akkerman et al. 2014: 1333), more efforts should be made to better measure and test the multifaceted concept of populism on the fate of Trump as an incumbent candidate.

Table 2: Economic effects mediated by populism

	Trump vote	Trump feeling	Biden feeling
Average Causal Mediation Effect	0.000	0.008	-0.017
Average Direct Effect	-0.069*	-6.885*	5.848*
Total Effect	-0.069*	-6.877*	5.832
N	482	482	482

Significance levels: *** $p \le 0.01$, ** $p \le 0.05$, * $p \le 0.1$. Source: Deltapoll online survey. Note: The table reports causal mediation effects using the 'mediation' package in R (Imai et al. 2011). Significance tests obtained via nonparametric bootstrapping after 1,000 simulations.

Table 3 rejects H4a, as the indirect effects of our economic treatment via tax and spending preferences are far from reaching statistical significance when predicting our three outcomes. Table A6.4 in the Appendix also rejects H4b, which looks at the same effects among high-income respondents only. This result does not mean that economic preferences did not matter, however. Table A6.3 in the Appendix shows very strong effects of economic policy preferences on vote intentions in the expected direction: anti-tax and spending positions are positively (negatively) correlated with supporting Trump (Biden). However, as shown in Table A6.1 in the Appendix, the economic crisis had no significant impact on those preferences. In sum, our mediation analyses confirm the important role of economic preferences in the 2020 US Presidential election, even if their effect was independent from the Covid-19 crisis.

Table 3: Economic effects mediated by tax and spending preferences

	Trump vote	Trump feeling	Biden feeling
Average Causal Mediation Effect	0.003	0.270	-0.284
Average Direct Effect	-0.072*	-7.148**	6.116*
Total Effect	-0.069	-6.877*	5.832
N	482	482	482

Significance levels: *** $p \le 0.01$, ** $p \le 0.05$, * $p \le 0.1$. Source: Deltapoll online survey. Note: The table reports causal mediation effects using the 'mediation' package in R (Imai et al. 2011). Significance tests obtained via nonparametric bootstrapping after 1,000 simulations.

5.3 Crisis management and the elderly

In a next step, we further investigate the impact of the governmental management prime. As shown in Table 1, we do not find a significant effect of this treatment across all respondents (H5a). However, based on H5b we further expect the handling of the crisis to mainly impact older voters, who are most at risk of experiencing severe health consequences from Covid-19. The results of an interaction between our government management treatment and age are presented in Figure 4, illustrating the marginal effects of the treatment on Trump versus Biden vote intention. We model age in two different ways. Figure 4.A models age as a linear effect, while Figure 4.B allows for a more flexible non-linear function, including quadratic and cubic specifications of age.

The results presented in Figure 4 strongly confirm our hypothesis that older voters are particularly receptive to the management of the crisis. No matter how we model the age effects, respondents above 55 exposed to the performance treatment exhibit significantly less support for Trump compared to the control group. The same pattern is also visible when looking at feeling thermometers or using a binary age specification distinguishing below and above 55. The additional results are presented in Appendix 5.3 and 5.4. Our results also indicate a significant curvilinear pattern, in line with recent research analyzing the relationship between age and compliance with Covid-19 preventive measures (Daoust 2020). In our experiment, the group between 55-70 years old was the most significantly responsive to the political performance treatment, especially in comparison to the group between 25-35 years old.

This subsection is revealing a substantial impact of the pandemic on an important group of voters that helped Trump win the election in 2016. The exit polls conducted every presidential election by

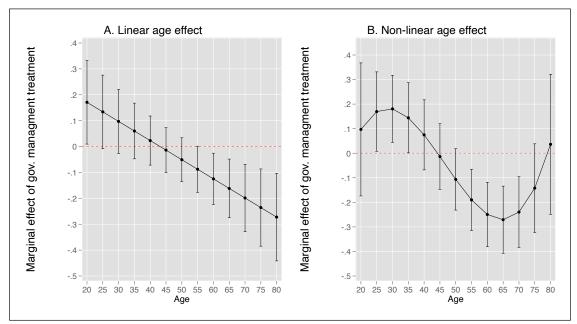


Figure 4: Marginal effects of government management treatment by age on vote for Trump

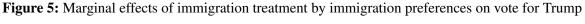
Note: The results are based on linear regressions predicting vote intention for Trump (1) over Biden (0). The model controls for: gender, education, domicile, ethnicity and religiosity. Appendix 4.2 further plots these interaction effects for the thermometer feelings towards Trump and Biden.

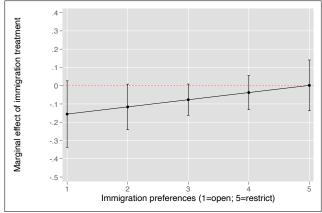
Edison Research for the National Election Pool suggest that the micro-mechanisms found here might have shaped to some extent the actual outcome of the election. In 2016 Trump won by 8-9% over Clinton among voters above 45 years old. In 2020, the electoral advantage of Trump in that age group shrank to 1% among the 45-64 year-old and 5% among voters above 64. Based on our findings, we conclude that this key age group in part abandoned Trump as a response to how his government managed the pandemic.

5.4 Is this an immigration crisis?

In the lead up to the election, President Trump often referred to Covid-19 as the "China virus", stoking anti-immigrant sentiments, which were an important driver of his electoral success in 2016. As we saw above in Table 1, we did not find a direct effect of priming respondents on the potential connection

⁴⁴ Results can be accessed here: https://www.nytimes.com/interactive/2016/11/08/us/politics/election-exit-polls.html.





Note: The results are based on linear regressions predicting vote intention for Trump (1) over Biden (0). The model controls for: gender, education, domicile, ethnicity and religiosity. Appendix 5.5 further plots these interaction effects for the thermometer feelings towards Trump and Biden.

between the pandemic and immigration (H6a). However, we theorized that the impact of this prime could be conditional on a respondent's anti-immigrant policy preferences (H6b).

In Figure 5 we plot the marginal effects of the "China virus" prime by immigration preferences. The figure overall confirms that the treatment had no significant effect on support for Trump, no matter the level of anti-immigration policy preferences. We therefore conclude that attempts to link Covid-19 to anti-immigration anxieties were not effective. One possible limitation of this conclusion is that the primes on immigration and the Chinese origin of the virus contained in the same vignette might be sending mixed messages. However, there is no clear theoretical argument or empirical strategy to discern whether this was indeed the case. It is nevertheless important to note that according to the findings presented in Appendix 4, anti-immigration preferences are one of the strongest drivers of support for Trump, independently of Covid-19.

5.5 Seeing the Coronavirus outbreak through partisan lenses

Lastly, we investigate whether the impact of the pandemic is conditional on partisanship. Based on H7, we expect the priming effect of the different aspects of Covid-19 to be stronger for weak partisans and independents. To test this hypothesis, we condition the impact of our three treatments on partisanship,

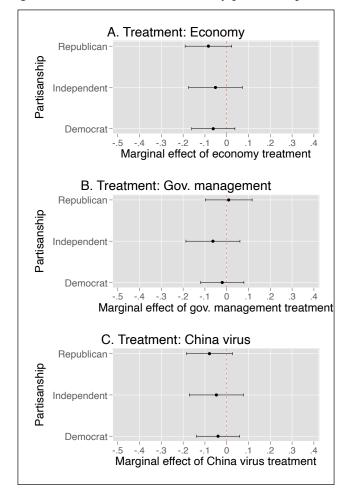


Figure 6: Marginal effects of Covid treatments by partisanship on vote for Trump

Note: The results are based on linear regressions predicting vote intention for Trump (1) over Biden (0). The model controls for: gender, education, domicile, ethnicity and religiosity. Appendix 5.6 further plots these interaction effects for the thermometer feelings towards Trump and Biden.

distinguishing between 1) Democrats, 2) Republicans and 3) weak partisans and independents. The results are presented in Figure 6, which plots the marginal effect of each treatment by partisan group on vote intention for Trump over Biden.

Based on the test of H7, we find no differential impact of our treatments by partisanship. The impact of the crisis - whether economic, governmental management or immigration - is not conditionally affecting vote intention for Trump for different partisans. We only find two significant, conditional effects for feelings towards Biden (see Appendix 5.6). As expected in H7, the government management treatment has a positive impact only among independents, increasing positive feelings towards Biden. Interestingly,

the priming of the crisis as a "China virus" impacted Republicans positively towards Biden. This is a surprising finding indicating that, if anything, attempts of the sitting President to divert responsibility for the Covid-19 crisis helped the electoral prospects of the Democratic challenger.

In sum, this section has revealed three main findings. Firstly, Covid-19 affected the electoral support for Trump negatively, mainly due to the economic downturn. Secondly, this effect is conditioned by personal economic situations. The economic effect is significant at low levels of income, and particularly pronounced among those least at risk of loosing their jobs. We interpreted the latter finding as a ceiling effect, whereby respondents feeling likely to become unemployed already had the economic downturn in mind. Thirdly, the mismanagement of the crisis has a strong negative impact among older voters.

6 Conclusion

The victory of Donald Trump in the 2016 Presidential election and the significant support that he received in 2020 raise questions on the role of democratic accountability, authoritarianism, and illiberal populism in contemporary US politics.

When looking at endogenous predictors, our results show that partisanship and anti-immigration policy preferences are among the strongest drivers for Trump's support. This is consistent with the thesis that out-group hostility and authoritarianism (understood as some form of social conservatism) are core components of Trump's social base (Inglehart and Norris 2017; Sides et al. 2017; Hooghe and Dassonneville 2018; Mutz 2018; Reny et al. 2019). At the same time, however, Trump also fitted the portrait of a canonical Republican candidate in 2020. His electoral support strongly benefited from anti-tax policy preferences (with identical magnitudes to the effect of immigration preferences), race divides, and religiosity.

The strong effects of the Covid-19 pandemic also point towards the conclusion that Trump was assessed as a standard incumbent and not as a perennial political outsider with no responsibility over the economic and political turmoil experienced by the US at the time of the election. Our survey experiment revealed exogenous effects of the economic downturn beyond partisanship and other confounders, reducing vote intentions by 7-9 percentage points among those exposed to economic information. The political

management of the health dimension of the crisis did not have significant average effects, suggesting that Covid-related performance is filtered by partisanship and individual circumstances (Acharya et al. 2020; Grossman et al. 2020). However, public health performance massively decreased vote intentions among voters above 55 years old, and marginally increased warm feelings towards Biden among independents. Attempts to frame the crisis as a 'Chinese virus' had no electoral effects, and if anything, attempts to elude responsibility in this way marginally backfired precisely among Republican identifiers.

Despite the unusually toxic and polarized campaign environment, the results above point towards a high degree of rationality and even *normality* behind the 2020 outcome. The effects of the crisis are perfectly consistent with predictions based on standard economic voting and valence models of voting behavior (Duch and Stevenson 2008; Green and Jennings 2017), and cross-cut partisan divides. Not only democratic accountability seemed to play a strong role by punishing an incumbent in bad times, but the effect of populist attitudes on Trump's support proved to be negligible in the context of our experiment. This result is in line with recent research questioning the importance of populist attitudes when explaining the electoral success of nativist candidates (Art 2020). However, future research should devote more efforts to better measure and test the role of populism in Trump's 2020 electoral base than our experiment allowed.

In terms of the external validity of our results, a survey experiment is inevitably circumscribed by the choice of specific primes, and by the context in which they were received. It is also true that our experiment is embedded in a high-quality sample representative of the US population, and fielded during the electoral campaign. While our analyses do not attempt to forecast the vote percentages that candidates got from different subgroups in real life, they do show exogenous causal effects of different aspects of the Covid-19 crisis on vote intentions. Those effects were observed at a time when the pandemic and elections were salient issues in the public debate, and when potentially many voters were making up their minds. It is therefore reasonable to conclude that the Covid-19 pandemic played a significant role in Trump's electoral demise.

The 2020 US Presidential election will probably be perceived by many as a singular event. However, our findings could potentially inform future research on the fate of populist incumbents at a time of crisis beyond the US, like in Brazil or Eastern Europe. Our study implies that political outsiders can face

a particularly high governing cost once in power (van Spanje 2011). While the electoral prospects of anti-immigrant candidates in the US and other countries is very strong, it is unclear that populist illiberal leaders will be able to systematically elude democratic accountability in the future.

References

- Acharya, Arnab, John Gerring, and Aaron Reeves. 2020. "Is health politically irrelevant? Experimental evidence during a global pandemic." *BMJ Global Health* 5:e004222.
- Akkerman, Agnes, Cas Mudde, and Andrej Zaslove. 2014. "How Populist Are the People? Measuring Populist Attitudes in Voters." *Comparative Political Studies* 47(9):1324–1353.
- Amat, Francesc, Andreu Arenas, Albert Falcó-Gimeno, and Jordi Muñoz. 2020. "Pandemics meet democracy. Experimental evidence from the COVID-19 crisis in Spain." *SocArchiv papers*.
- Arceneaux, Kevin, Bert N. Bakker, Sara Hobolt, and Catherine E. DeVries. 2020. "Is COVID-19 a Threat to Liberal Democracy?" *PsyArXiv*.
- Art, David. 2020. "The Myth of Global Populism." Perspectives on Politics.
- Arzheimer, Kai. 2009. "Contextual Factors and the Extreme Right Vote in Western Europe, 1980-2002." American Journal of Political Science 53(2):259–275.
- Arzheimer, Kai. 2018. *The Oxford Handbook of the Radical Right*, chap. Explaining Electoral Support for the Radical Right. Oxford University Press.
- Bischof, Daniel. 2017. "New graphic schemes for Stata: plotplain and plottig." *The Stata Journal* 17(3):748–759.
- Bol, Damien, Marco Giani, Andre Blais, and Peter Loewen. 2020. "The effect of COVID-19 lockdowns on political support: Some good news for democracy?" *European Journal of Political Research*.
- van der Brug, Wouter, Cees van der Eijk, and Mark Franklin. 2007. *The economy and the vote: Economic conditions and elections in fifteen countries*. Cambridge University Press.
- Canning, D., M. Karra, R. Dayalu, M. Guo, and D.E. Bloom. 2020. "The association between age, COVID-19 symptoms, and social distancing behavior in the United States." *medRxiv*.
- Daoust, J.F. 2020. "Elderly people and responses to COVID-19 in 27 Countries." *Plos One* 15(7):e0235590.
- Duch, Raymond M. and Randolph T. Stevenson. 2008. *The Economic Vote: How Political and Economic Institutions Condition Election Results*. Cambridge University Press.
- Duch, R.M., H.D. Palmer, and C.J Anderson. 2000. "Heterogeneity in Perceptions of National Economic

- Conditions." *American Journal of Political Science* 44:635–652.
- Duch, R.M. and R. Stevenson. 2010. "Context and Economic Expectations: When Do Voters Get it Right?" *British Journal of Political Science* 41:1–31.
- Evans, Geoffrey and Robert Andersen. 2006. "The Political Conditioning of Economic Perceptions." *The Journal of Politics* 68(1):194–207.
- Evans, Geoffrey and James Tilley. 2017. *The New Politics of Class: The Political Exclusion of the British Working Class*. Oxford University Press.
- Federico, Christopher M. and Agnieszka Golec de Zavala. 2018. "Collective Narcissism and the 2016 US Presidential Vote." *Public Opinion Quarterly* 82(1):110–121.
- Fraile, Marta and Sergi Pardos-Prado. 2014. "The Correspondence between the Objective and the Subjective Economies: the Role of Personal Economic Circumstances." *Political Studies* 62(4):895–912.
- Gidron, Noam, James Adams, and Will Horne. 2020. *American Affective Polarization in Comparative Perspective*. Cambridge University Press.
- Gidron, Noam and Jonathan J B Mijs. 2019. "Do Changes in Material Circumstances Drive Support for Populist Radical Parties? Panel Data Evidence from the Netherlands during the Great Recession, 2007–2015." *European Sociological Review* 35(5):637–650.
- Goetz, Stephan J., Meri Davlasheridze, Yicheol Han, and David A. Fleming-Munoz. 2018. "Explaining the 2016 Vote for President Trump across U.S. Counties." *Applied Economic Perspectives and Policy*.
- Golde, Matt. 2016. "Far Right Parties in Europe." Annual Review of Political Science.
- Green, Jane and Will Jennings. 2017. *The Politics of Competence. Parties, Public Opinion and Voters*. Cambridge University Press.
- Green, Jane and Will Jennings. 2019. "Party reputations and policy priorities: how issue ownership shapes executive and legislative agendas." *British Journal of Political Science* 49(2):443–466.
- Grossman, Guy, Soojong Kim, Jonah M. Rexer, and Harsha Thirumurthy. 2020. "Political partisanship influences behavioral responses to governors' recommendations for COVID-19 prevention in the United States." *Proceedings of the National Academy of Sciences* 117(39):24144–24153.
- Hobolt, Sara B. and James Tilley. 2016. "Fleeing the centre: the rise of challenger parties in the aftermath

- of the euro crisis." West European Politics 39(5):971–991.
- Hooghe, Marc and Ruth Dassonneville. 2018. "Explaining the Trump Vote: The Effect of Racist Resentment and Anti-Immigrant Sentiments." *PS: Political Science and Politics* 51(3):528–534.
- Imai, Kosuke, Luke Keele, Dustin Tingley, and Teppei Yamamoto. 2011. "Unpacking the Black Box of Causality: Learning About Causal Mechanisms from Experimental and Observational Studies."

 American Political Science Review 105(4):765–89.
- Imbens, Guido and Donald Rubin. 2015. *Causal Inference for Statistics, Social, and Biomedical Sciences*. Cambridge University Press.
- Inglehart, Ronald and Pippa Norris. 2017. "Trump and the Populist Authoritarian Parties: The Silent Revolution in Reverse." *Perspectives on Politics* 15(2):443–454.
- Iversen, Torben and David Soskice. 2006. "Electoral Institutions and the Politics of Coalitions: Why Some Democracies Redistribute More than Others." *American Political Science Review* 100(2):165–181.
- Jones, S.R., S. Carley, and M. Harrison. 2003. "An introduction to power and sample size estimation." *Emergency Medicine Journal* 20(5):453–458.
- Kenworthy, Lane and Jonas Pontusson. 2005. "Rising Inequality and the Politics of Redistribution in Affluent Countries." *Perspectives on Politics* 3(3):449–471.
- Knuckey, Jonathan and Komysha Hassan. 2020. "Authoritarianism and support for Trump in the 2016 presidential election." *The Social Science Journal*.
- Krupnikov, Yanna and Blake Findley. 2018. *The Oxford Handbook of Polling and Survey Methods*, chap. Survey Experiments: Managing the Methodological Costs and Benefits. Oxford University Press.
- Kustov, Alexander, Dillon Laaker, and Cassidy Reller. 2019. "The Stability of Immigration Attitudes: Evidence and Implications." *The Journal of Politics*.
- Lewis-Beck, Michael S. and Mary Stegmaier. 2000. "Economic Determinants of Electoral Outcomes." Annual Review of Political Science 3:183–219.
- Margalit, Yotam. 2013. "Explaining Social Policy Preferences: Evidence from the Great Recession." American Political Science Review 107(1):80–103.

- Morgan, Stephen L. and Jiwon Lee. 2018. "Trump Voters and the White Working Class." *Sociological Science* 5:234–245.
- Mudde, Cas. 2007. Populist Radical Right Parties in Europe. Cambridge: Cambridge University Press.
- Mutz, Diana C. 2018. "Status threat, not economic hardship, explains the 2016 presidential vote." *Proceedings of the National Academy of Sciences of the United States of America* 115(19):E4330–E4339.
- Nadeau, Richard, Vincent Arel-Bundock, and Jean-Francois Daoust. 2019. "Satisfaction with Democracy and the American Dream." *The Journal of Politics* 81(3):1080–1084.
- Nadeau, Richard, Martial Foucault, and Michael S. Lewis-beck. 2010. "Patrimonial Economic Voting: Legislative Elections in France." *West European Politics* 33(6):1261–1277.
- Norris, Pippa and Ronald Inglehart. 2019. Cultural Backlash. Cambridge University Press.
- Redlawsk, David P., Ira J. Roseman, Kyle Mattes, and Steven Katz. 2018. "Donald Trump, Contempt, and the 2016 GOP Iowa Caucuses." *Journal of Elections, Public Opinion and Parties* 28(2):173–89.
- Rehm, Philipp. 2009. "Risks and Redistribution. An Individual-Level Analysis." *Comparative Political Studies* 42(7):855–881.
- Reny, Tyler T. and Matt A. Barreto. 2020. "Xenophobia in the time of pandemic: othering, anti-Asian attitudes, and COVID-19." *Politics, Groups, and Identities*.
- Reny, Tyler T., Loren Collingwood, and Ali A. Valenzuela. 2019. "Vote Switching in the 2016 Election: How Racial and Immigration Attitudes, Not Economics, Explain Shifts in White Voting." *Public Opinion Quarterly* 83(1):91–113.
- Rudolph, Thomas. 2019. "Populist anger, Donald Trump, and the 2016 election." *Journal of Elections, Public Opinion and Parties*.
- Schaffner, Brian F., Matthew Macwilliams, and Tatishe Nteta. 2018. "Understanding White Polarization in the 2016 Vote for President: The Sobering Role of Racism and Sexism." *Political Science Quarterly* 133(1):9–34.
- Setzler, Mark and Alixandra B. Yanus. 2018. "Why Did Women Vote for Donald Trump?" *PS: Political Science and Politics* 51(3):523–527.
- Sides, John, Michael Tesler, and Lynn Vavreck. 2017. "The 2016 U.S. Election: How Trump Lost and

- Won." Journal of Democracy 28(2):34-44.
- von Siemens, Ferdinand. 2021. "Motivated Beliefs and the Elderly's Compliance with COVID-19 Measures." *SAFE Working Paper* 299.
 - URL https://ssrn.com/abstract=3770589
- van Spanje, Joost. 2011. "Keeping the rascals in: Anti-political-establishment parties and their cost of governing in established democracies." *European Journal of Political Research* 50(5):609–635.
- Stubager, Rune, Michael Lewis-Beck, and Richard Nadeau. 2013. "Reaching for profit in the welfare state: Patrimonial economic voting in Denmark." *Electoral Studies* 32(3):438–444.
- Tilley, James, Anja Neundorf, and Sara B. Hobolt. 2018. "When the pound in people's pocket matters: how changes to personal financial circumstances affect party choice." *The Journal of Politics* 80(2):555–569.
- Vavreck, Lynn. 2009. *The Message Matters: The Economy and Presidential Campaigns*. Princetopn University Press.
- de Vries, Catherine E. and Sara B. Hobolt. 2020. *Political Entrepreneurs: The Rise of Challenger Parties in Europe*. Princeton University Press.
- Yucesahin, M. Murat and Ibrahim Sirkeci. 2020. "Coronavirus and Migration: Analysis of Human Mobility and the Spread of COVID-19." *Migration Letters* 17(2):379–398.