

Selective Exposure, Media Trust and Party Identification

A thesis submitted by

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In partial fulfillment of the requirements for the degree of

Master of Science

In

Economics

Tufts University

May 2023

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Abstract

I study partisan selective exposure in the United States. Matching news audiences with similar demographics and political preferences, I find that an intensified party identification toward Democrats increases the likelihood of consuming CNN News by 5 percentage points, while the effect of intensified Republican identity on Fox News consumption is statistically insignificant. Partisan selective exposure increases with political news engagement and digital engagement. To understand the sources of partisan selective exposure, I analyze the correlation between divides in media trust and indicators of culture, institution, and economic development in a small sample of countries. Despite imprecisely estimated coefficients, the result suggests that media bias might be associated with societies' risk preferences. Finally, press freedom appears to reduce media bias.

Acknowledgement

I am extremely grateful to Professor Enrico Spolaore for his invaluable advice throughout the whole process of writing this thesis. His unwavering support kept me going during times of doubt.

I would like to thank Professor Marcelo Bianconi for his thoughtful feedback to improve my work.

I am also indebted to Professor Melissa McInerney for her guidance throughout my studies at Tufts.

A big thank you to my friends and classmates for the warmth and camaraderie I received in my journey. Finally, my deepest gratitude to my parents and my sister.

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CHAPTER I – OVERVIEW

As an individual, each of us lives with different identities. These identities define our sense of self, by who we are, how we feel, and how we think. Consciously or unconsciously, they shape our decision-making process in many ways. As rational individuals, we maximize our utility. For that purpose, we need to understand our preferences. Our preferences derive from our motivations, values, and the distance we maintain from the outside world. For instance, people of certain religions and ethnicities consume a prescribed set of identity goods and restrict themselves from the forbidden food (Atkin et al., 2021). During a time of political tension, national identity(-ies) could prompt consumers to choose domestic production (Nardotto and Sequeira, 2021). Customers are willing to pay a premium for products labeled “fair trade” if they endorse the associated moral values (Arnot et al., 2006). Countries are inclined to trade with whom they share cultural proximity (Felbermayr and Toubal, 2010). When making decisions, we seek information to reduce information asymmetry and make better choices. Nevertheless, our information processing is subject to bias and heuristics oriented from subjective and objective motives. Our self-verification bias implies that we seek advice, interpret information and restore memories in a way consistent with our beliefs; when people run out of cognitive resources, they use heuristics to process a persuasive message. These instincts are gaining relevance in the literature of economics, as we strive to explain unexpected political economy outcomes in reality.

This thesis describes the bias that we hold when choosing our political news sources. Today, news and social media are important sources of information. Which media outlets do we choose? How do we choose them based on our beliefs? Who is exposed to more partisan messages? What are the origins of our bias? How could we deal with our bias? In **Chapter II** and **Chapter III**, I study partisan selective exposure in the U.S. and media bias worldwide, respectively.

CHAPTER II – SELECTIVE EXPOSURE IN THE UNITED STATES

1 Introduction

The purpose of this chapter is to study selective exposure in the United States. The politics of the U.S. is characterized as a two-party system with close votership. In the 2016 presidential election, Republican candidate Donald Trump was elected over Democrat candidate Hillary Clinton with a lead in the electoral vote;^{1,2} in the 2020 presidential election, Democrat candidate Joseph Biden was elected over Republican candidate Donald Trump leading both the electoral and popular votes.³ The political parties are known to adopt a strategy called issue selection, to which they “specialize” or “own” a set of issues on which the public relates and views them as the most competent party to handle the issues (Petrocik, 1996; Riker, 1996). They attract different types of voters whose political priorities diverge. For instance, more registered voters viewed the Democratic Party as more competent to deal with climate change, abortion, health care, public health impact of COVID-19, and issues involving race and ethnicity, while the Republican Party was referred to terrorism and economy. Relatedly, Biden supporters revealed that health care, COVID-19 outbreak, inequality, and climate change were very important to their votes in the election, while Trump supporters prioritized the economy, violent crime, and immigration (Pew Research Center, 2020a). This survey result is consistent with a theory in political science

¹ Donald Trump received 306 electoral votes and 46.09% popular vote, while Hillary Clinton received 227 electoral votes and 48.18% popular vote (U.S. Federal Election Commission, 2017).

² When voters cast their votes for president, they elect members of the Electoral College who cast electoral votes for president. The Electoral Colleges in most states often follow a winner-take-all system that awards all votes to the candidate who wins the popular vote within the states, rather than proportionally assigning the electoral votes according to the states’ popular vote results. Therefore, it is possible for the popular vote results unaligned with the electoral results (Liberty of Congress, n.d.).

³ Joseph Biden received 306 electoral votes and 51.31% popular vote, while Donald Trump received 232 electoral votes and 46.85% popular vote (U.S. Federal Election Commission, 2022).

hypothesizing that voters endogenously choose their party identification by evaluating their positions on important issues relative to the parties' positions, and ultimately translate into votes (Jackson, 1975). To understand the parties' and candidates' stances on various issues, many Americans refer to media outlets as political and election news sources, especially around the election period. In the 2020 presidential election, three-quarters of Americans followed news about the candidates closely prior to the election (Pew Research Center, 2020b).

However, information from media outlets could differ in terms of coverage and the stances that they convey. For instance, CNN is typically considered more left-wing or Liberals than Fox News: during September 2020, CNN spent more time reporting COVID-19 as the failure of the former U.S. President Donald Trump, while Fox News sought to advertise Trump's efforts to control the pandemic (Broockman and Kalla, 2022). Meanwhile, the audience develops their own preference and habit for their news consumption, and therefore divergence in news diet persists and increases (Bertrand and Kamenica, 2018). In August 2020, 29 percent of the Republicans and Republican-leaning independents used only Fox News or talk radio as their major source of political news, while 32 percent of the Democrats and Democrat-leaning independents used only CNN, MSNBC, NPR, New York Times or Washington Post (Pew Research Center, 2020c). This selection of media outlets matching their political predispositions is commonly known as partisan selective exposure.

This selective exposure has significant implications. Firstly, it makes people partisan-segregated and over-exposed to like-minded opinions. Muise et al. (2022) find that one-fifth of the partisan-segregated television news audience maintain their partisan news diets after six months, and about 15 percent remain partisan-segregated after a year. The population of partisan-segregated TV news audiences grows despite the fall in the population of television news

audiences. Secondly, it shapes the audience's perception of public policies and therefore affects their effectiveness. For example, Simonov et al. (2022) find that an increase in Fox News viewership reduced the propensity to stay at home during the COVID-19 outbreak, while another survey reveals the persistent divide in public opinion on the effectiveness of the pandemic controls among Democrats and Republicans (Pew Research Center, 2020b). Lastly and unfortunately, selective exposure could sometimes lead to the spread of political misinformation. In their randomized experiment, Broockman and Kalla (2022) find that increased exposure to CNN News reduced the Fox News audience's perception of Biden's support for defunding the police. Thirty-seven percent of the U.S. audience reported that their main news sources had reported made-up information intended to mislead the public, while eighteen percent reported being the target of seemed made-up news or information, especially among the audience of Fox News and social media sites.⁴ Audience with the most partisan selective media diet perceived that made-up news was the most intended to hurt their affiliated party. Only 26 percent of the population were very confident in recognizing made-up news (Pew Research Center, 2020c; 2020d). The exploded volume of false information has consumed people's cognitive resources and ability to fact-check, aided the creation of like-minded social networks (in particular, the "echo chamber" in Sunstein (2001) and "filter bubble" in Pariser (2011)), and eventually eroded the public trust in media outlets. The U.S. population's trust in national news organizations has declined since 2016, leading to about 61 percent trusting these news sources (Pew Research Center, 2022).

This thesis empirically shows that partisan selective exposure increases with self-perceived party identity. Matching voters with similar demographics and political preferences, I find that shifting party identification from Democrat-leaning to Democrat increased the likelihood of CNN

⁴ Audiences of right-leaning media also reported higher confidence in recognizing made-up news.

news consumption by 5 percentage points before the election, but this effect is not statistically significant for Republicans. This selective exposure effect increased in magnitude after the election, with a lower statistical significance. The results also suggest that partisan selective exposure increases with political news and digital engagement, with certain demographics associated with higher partisan selective exposure across all specifications.

In the following, Section 2 provides a literature review on news media consumption and political polarization, Section 3 describes the data, Section 4 introduces the theoretical framework, Section 5 details the empirical models, Section 6 presents the results, Section 7 provides robustness check, and Section 8 concludes with a discussion.

2 Literature Review

2.1 Political Polarization

Many believe that the political ideology of Americans has become more diverged than ever. Using General Social Survey (1972-2018), Desmet and Wacziarg (2021) measure the political divide as the proportion of cultural heterogeneity originating from political party preference. They find that the heterogeneity enlarges in recent years, yet the divergence of political orientation has widened since the 2000s. They suggest a model in which social influence triggers the change of pre-existing cultural traits. The prediction of the model depends on the mode of social interaction – if information technologies such as social media foster within-group interactions over between-group interactions, they potentially create echo chambers and increase cultural divides among people who identify themselves with different party affiliations. Similarly, Bertrand and Kamenica (2018) measure cultural distance along cultural aspects such as media consumption. They use machine learning algorithms to predict individuals' media consumption based on their political

ideologies and define cultural distance as the accuracy of the prediction. They conclude that TV consumption habits have diverged the most between the Liberals and the Conservatives since the 1990s. The authors of both papers relate political polarization to the rise of selective exposure.

2.2 Partisan Selective Exposure

Empirical research finds that 17 percent of Americans are partisan-segregated by TV news diet (Muisse et al., 2022). While it is common for consumers to have their preferred media outlets, concerns about over-exposure to partisan messages emerge when there is media bias. Media bias could originate from both supply and demand sides. A strand of the literature develops models to explain the observed heterogeneity in media outlets. For example, Baron (2006) proposes a model in which journalists obtain private information through investigation and compete for career opportunities to be influential and prominent. They hence exploit the discretion granted by the news organizations to produce biased stories and affect the private decisions of individuals. This media bias persists and even intensifies in a competitive market. Yamaguchi (2022) suggests that profit maximization prompts media outlets to adopt an issue selection strategy and differentiate in news coverage even when they do not have ideological preferences. This results in the polarization of issue salience among the voters. Alonso and i Miquel (2022) features a model in which two special interest groups (SIGs) strike to influence public opinion through lobbying the media outlets. Once captured by a SIG, the media outlet publishes favorable issue coverage which the messages are not certifiable. The model predicts that the published messages in media outlets diverge despite being initially identical in quality and viewership. The audience is aware of the bias in information and discounts extreme information. The media outlets mix over a set of favorable messages such that the audience neutralizes the expected skepticism. Nevertheless, the overall informativeness of

media declines. An implication of this model is that viewers selectively choose news outlets based on their ideologies. All these models illustrate a sorting effect that mirrors Suen (2004), which will be described in detail in [Section 4](#). Individuals seek biased information according to pre-existing beliefs, and therefore, they might form self-serving beliefs in the short term. In his discussion on misperceptions, Nyhan (2020) notes that individuals have incentives to endorse ideologically coherent information, especially from a trusted source such as party candidates. As we should be concerned, information technology has reduced the cost of distributing misinformation, particularly among partisan-segregated groups.

2.3 Partisan Selective Exposure to Political Preference

Partisan selective exposure has significant implications in public economics and political economy as it shapes the audience's political views and perceptions of public policies. Mere exposure to partisan messages could impact voters. A seminal paper by Martin and Yurukoglu (2017) uses cable channel positions as an instrumental variable for Fox News viewership and estimates its impact on viewers' ideologies. They estimate that additional 2.5 minutes of induced Fox News consumption on average increased Republican vote shares by 0.3 points. Similarly, DellaVigna and Kaplan (2007) estimate that the introduction of Fox News in the 2000s raised Republican vote shares by 0.4 to 0.7 percent. Recent studies extend the research questions to the impacts on the audience's behaviors and attitudes. For example, Simonov et al. (2022) study the persuasive effects of Fox News on social distancing compliance, Djourelova (2023) analyzes how the audience's attitudes towards immigrants are affected by the use of slanted language by media outlets, and Levy (2021) explores the impacts of random online exposure to counter-attitudinal news on the participants' political opinions and affective polarization. Here I study the initial

formation of news media habits which are originated from political predispositions. Since political preference and partisan selective exposure are likely to reinforce each other, in other words, I study the reverse direction of this causality.

2.4 Political Preference to Partisan Selective Exposure

It is empirically challenging to show the causal effects of political preference on biased media consumption, or more broadly, information seeking. The identification of cause and effect would require an exogenous shift in political preferences or beliefs, which is rarely observed in reality. In an experimental setting, Broockman and Kalla (2022) incentivized a random group of Fox News audience to watch CNN News for four weeks' time. Their results suggest that the consumption of ideologically incongruent news media leads to the moderation of beliefs and the acquisition of more diverse information. However, in the long run, no change in news media habits is observed. This shows that the information-seeking process is not solely driven by objective interests. Consumers seek media slants that match their ideologies and party identities. Gentzkow and Shapiro (2010) document a strong demand for media slant by newspaper readers as they prefer like-minded news. While the ideological segregation in offline and online news consumption might not be as higher as expected in absolute terms, individuals are likely to interact with whom they share similar ideologies. For instance, face-to-face interactions with neighbors, co-workers, or family members exhibit the most ideological segregation (Gentzkow and Shapiro, 2011). Moreover, even if the overall media diet shows low selective exposure, a subset of the news audience might experience unusually high selective exposure. Dejean et al. (2022) find that despite the low selective exposure in the whole sample, television tends to over-expose the oldest French population to partisan content more than the other age groups. The inclusion of social media in the

diet increases partisan selective exposure, especially among the youngest generation. My results are consistent with their observations that selective exposure typically increases with digital engagement. While my focus is on partisan segregation in offline political news consumption, I also find that partisan segregation is associated with specific demographic characteristics.

3 Data

This analysis uses individual-level political preference and election news media consumption from Pew Research Center’s American Trend Panel (ATP). This is an online survey panel that consists of a nationally representative sample randomly selected across the U.S. The panel is composed of more than 10,000 adults and recruits new panelists annually to address attrition. While it is possible that only a subsample of the panelists is invited to complete some of the waves, wave-specific weights are assigned to each respondent to match population benchmarks. The topics of the questionnaire range from everyday lives such as family, workplace, and religion to specific current issues in politics, immigration, and news media. This analysis will focus on three specific waves of the survey – 3 months before the 2020 presidential election (August 2020), right after the election (November 2020), and 3 months after the election (March 2021).

3.1 Party Identity

The independent variables on party identity could be created based on two sets of questions. In the first set of questions,⁵ respondents were asked “In politics today, do you consider yourself a: (1) Republican; (2) Democrat; (3) Independent; (4) Something else” and subsequently “As of

⁵ In Waves 23, 29, 31, 48, 59, 71 and 84.

today do you lean more to...: (1) The Republican Party; (2) The Democratic Party” for those who answered (3) and (4) in the previous question. In the second set of questions,⁶ the respondents were asked “If the 2020 presidential election were being held today, would you vote for: (1) Donald Trump, the Republican; (2) Joe Biden, the Democrat; (3) Jo Jorgensen, the Libertarian Party candidate; (4) Howie Hawkins, the Green Party candidate; (5) Vote for none/Other From these responses” and subsequently “As of TODAY, do you: (1) Lean more toward Donald Trump; (2) Lean more toward Joe Biden; (3) Lean more toward Jo Jorgensen; (4) Lean more toward Howie Hawkins; (5) None/Other” for those who answered (5) in the previous question.

From these, I constructed a summary measure of self-perceived party identity as “Rep/Lean Rep” or “Dem/Lean Dem.” **In both sets of questions**, I identified Republicans as those who answered (1) to the first question and Republican-leaning as those who answered (1) to the second question; Democrats as those who answered (2) to the first question and Democrat-leaning as those who answered (2) to the second question. [Table 1](#) lists the waves and [Figure 1](#) illustrates the trend. It appears that the self-perceived party identities from Set 1 have been more stable than those identified from Set 2.

Here, I recognize the inconsistency between the two sets of questions. Firstly, self-perceived party identities are not equivalent to votes. For example, in the 2020 presidential election, most of Biden’s supporters cited “He is not Trump” as the main reason to support or lean toward the Democratic Party candidate (Pew Research Center, 2020a). Secondly, the conditions for prompting the second question are not the same. For the survey in November 2020, respondents who answered voting for the Libertarian Party candidate and the Green Party candidate were not prompted to answer the subsequent question, while in August 2020 and March 2021, these

⁶ In Waves 21, 22, 37, 38, 39, 65, 69, 75, and 78.

respondents would have been required to answer the second question. The set-up of the first set of questions is justified by the results from the second set of questions. In the election, voters strategically make their votes based on the likelihood of winning, so they essentially choose among the Democrat and Republican candidates;⁷ similarly in the first set of the questions, the Independents were asked to choose between the Democrat-leaning and Republican-leaning despite declaring indifference initially. Since only the first set of questions provides enough sample in the control group, I will focus on waves in August 2020 and March 2021, but results from November 2020 are reported for reference.

3.2 Political News Consumption

The dependent variables on political news consumption could be created based on two sets of questions. In the first set of questions,⁸ respondents were asked “Please indicate whether each of the following⁹ is a source of political and election news for you: (1) Major source; (2) Minor source; (3) Not a source.” In the second set of questions,¹⁰ the respondents were asked “Please click on all of the sources¹¹ that you got political news from in the past week. This includes any way that you can get the source. If you are unsure, please DO NOT click it.”

From these, I constructed separate binary variables of Fox News and CNN viewership as follows. In the first set of questions, I identified Fox News or CNN viewers as those who answered

⁷ In November 2020 survey, only around 2 percent of the respondents reported voting for the Libertarian Party candidate and the Green Party candidate (around 1 percent if weighted).

⁸ In Waves 73 and 79.

⁹ Fox News Cable Channel; CNN; MSNBC; ABC, CBS, or NBC national network TV; NPR; The New York Times; Washington Post; Talk radio, such as Sean Hannity or Rush Limbaugh.

¹⁰ In Waves 57 and 85.

¹¹ Fox News; MSNBC; CNN; PBS; The Wall Street Journal; USA Today; Politico; BuzzFeed; Newsweek; Business Insider (now a part of Insider); Vox; The Hill; Washington Examiner; Newsmax; ABC News; CBS News; NBC News; NPR; Mark Levin Show (radio); Sean Hannity Show (radio); Washington Post; The New York Times; HuffPost; Breitbart; New York Post; One America News Network.

(1) or (2) to the corresponding questions; in the second set of questions, I identified Fox News or CNN viewers as those who selected the corresponding news outlets in their responses. Another variable capturing the intensity of viewership was created for the first set of questions only.¹² [Table 1](#) lists the waves and [Figure 2](#) illustrates the change in viewership over time. Viewerships of both news channels follow a similar trend over the sample period. The table below illustrates the inconsistency at different times for the sample period.

	Aug 2020 (Pre-election)	Nov 2020 (Election)	Mar 2021 (Post-election)
Party Identity	Set 1	Set 2	Set 1
Political News Consumption	Set 1	Set 1	Set 2

I consider wave in August 2020 as the preferred specification as it could better reveal the preference of the audience. Firstly, it captures the discount effects of political news sources. Suppose a Democrat spends equal time watching multiple media outlets, it is possible that he/she would only refer to some of the news channels as major sources and the others as minor sources or even not a source. This would be especially relevant when measuring selective exposure. Secondly, the design of the second set of the questions might capture rather superficial exposure to media outlets.

3.3 Partisan Selective Exposure Index

Following Dejean et al. (2022), I measure partisan selective exposure as follows:

¹² This variable is coded as 1 if the respondent answered (1) Major Source to the question, 0.5 if answered (2) Minor Source; 0 if answered (3) Not a Source.

$\forall s = \{Democrat, Democrat - Lean, Republican - Lean, Republican\}$

$$I_i^{SE} = \left(\frac{\sum_{j=1}^J \left(\frac{N_{js_i}}{N_j} \right) \times w_{ij}}{\sum_{j=1}^J w_{ij}} \right) / \frac{N_s}{N}$$

Where news outlets are indexed as $j = \{1, \dots, J\}$, individuals as $i = \{1, \dots, N\}$. w_{ij} represents the consumption frequency of individual i on news outlet j and it can take three values: 1 if the respondent reported using a news outlet j as a major source; 0.5 if reported using it as a minor source; 0 if reported as not a source. N_{js_i} is the number of viewers for media outlet j sharing the same party identity s as individual i ; N_j is the number of viewers for media outlet j .

In the first bracket, the numerator first computes the share of users sharing the same partisan preference with individual i for news outlet j , weighted by the consumption frequency of individual i on news outlet j .¹³ The like-minded exposure is summed over the news outlet set to estimate the selective exposure to partisan opinions over all media outlets, and averaged by the total news media consumption of individual i in the denominator. Finally, N_s/N normalizes the index with regard to the initial distribution of partisan preference. An individual consuming more partisan content than N_s/N implies that the person consumes news outlets where the audience of type s is over-represented. Therefore, $I_i^{SE} > 1$ implies the individual consumes more like-minded opinions than an individual who makes random choices in political news diet.

To illustrate, consider an individual who identifies as Democrat and consumes CNN News as a major source and Fox News as a minor source. Suppose the audience of CNN News is composed of 70% Democrats, 10% Democrats-Lean, 10% Republican-Lean, and 10% Republicans; the audience of Fox News is composed of 10% Democrats and 90% Republicans;

¹³ Note that in the computation of selective exposure, only the proportion of the like-minded audience decides the exposure of like-minded opinion, while the composition of the remaining audience does not affect the value.

half of the population identifies themselves as Democrats. While the individual might consume more like-minded information, she or he is also potentially exposed to news with a different partisan preference. The table below summarizes three examples with different values of the selective exposure index.

	Individual 1	Individual 2	Individual 3
CNN News (70% Democrats, 10% Democrats-Lean, 10% Republican-Lean and 10% Republicans)	A major source	A minor source	A major source
Fox News (10% Democrats and 90% Republicans)	A major source	A major source	Not a source
Average selective exposure	0.4 ¹⁴	0.3 ¹⁵	0.7 ¹⁶
Normalized average selective exposure	0.8	0.6	1.4

An assumption is implicitly made here. That is, the news content of the media outlets reflects the audience’s partisan preferences. I would consider this as the equilibrium outcome as the media outlets and the audience endogenously decide what to produce and what to watch. This differentiation in media slant and sorting of viewership is consistent with model predictions and

¹⁴ = $(0.7 * 1 + 0.1 * 1)/(1 + 1)$
¹⁵ = $(0.7 * 0.5 + 0.1 * 1)/(0.5 + 1)$
¹⁶ = $(0.7 * 1)/(1)$

empirical evidence discussed in [Section 2](#).¹⁷ I also assume that the audience's perceptions of party identity and news consumption intensity do not differ significantly or systematically.

3.4 Other Variables

The control variables include demographic information on age, region, race/ethnicity, gender, education, citizen status, and income quartiles. [Table 1](#) lists the control variables. To study the heterogeneity of selective exposure, I consider two types of respondents' characteristics: political news engagement and digital engagement (Pew Research Center, 2020d). For the former, respondents are characterized as election news influencers, bystanders, or checked-out, based on election news attention and participation in the election and political news discussion.¹⁸ For the latter, respondents are characterized as digitally savvy, dabbler, or disengaged, based on the intensity of internet usage and confidence in the ability to use electronic devices.¹⁹

[Table 2](#) provides summary statistics for the full sample and by party identities. Additional variables measuring the political preference of the respondents are listed in [Table 3](#).²⁰

¹⁷ For example, see the discussion on Baron (2006), Yamaguchi (2022), and Alonso and i Miquel (2022) in Section 2. Gentzkow and Shapiro (2010) also provide empirical evidence that media companies respond strongly to consumers' preferences.

¹⁸ In the previous wave in November 2019, respondents were asked the questions "How closely do you follow political and election news? (1) Very closely; (2) Somewhat closely; (3) Not too closely; (4) Not at all closely" and "When you talk with friends and family about political and election news, do you tend to: (1) Listen to the conversation more than lead; (2) Lead the conversation more than listen; (3) Never talk with friends and family about politics." Respondents are classified as election news influencer if answered (1) or (2) to the first question AND answered (1) to the second question; as election news bystander if answered (1) or (2) to the first question OR answered (1) to the second question; as checked out of election news if NEITHER answered (1) or (2) to the first question NOR answered (1) to the second question.

¹⁹ In the previous wave in November 2019, respondents were asked the questions "About how often do you use the internet? (1) Almost constantly; (2) Several times a day; (3) About once a day; (4) Several times a week; (5) Less often" and "Overall, how confident do you feel using computers, smartphones, or other electronic devices to do the things you need to do online? (1) Very confident; (2) Somewhat confident; (3) Only a little confident; (4) Not at all confident." Respondents are classified as digitally savvy if answered (1) or (2) to the first question AND answered (1) to the second question; as digital dabblers if answered (1) or (2) to the first question OR answered (1) to the second question; as the digitally disengaged if NEITHER answered (1) or (2) to the first question NOR answered (1) to the second question.

²⁰ See [Section 5.4](#) about the design of propensity score matching for details.

4 Microeconomics Theory

The theoretical model from Suen (2004) is especially suited for the analysis in this thesis. Consider that there are two possible states of the world, $\{s_1, s_2\}$, and each voter has two possible actions to take, $\{a_1, a_2\}$. For simplicity, I refer these actions to be a vote for Democratic Party and Republican Party, respectively. Therefore, $v \in \{D, R\}$. The payoffs to voting for the two parties under the two states are displayed in the table below. With the assumption that $\alpha > \beta$ and $\delta > \gamma$, voters decide to vote for Democrats if s_1 is true, and vote for Republicans if s_2 is true.

State-contingent payoffs for different votes

State	Vote	
	D	R
s_1	α	β
s_2	γ	δ

Subjectively, the voter estimates the prior probability of living in states s_1 and s_2 as π and $1 - \pi$, respectively. Then, the condition for choosing D is $\pi\alpha + (1 - \pi)\gamma \geq \pi\beta + (1 - \pi)\delta$, which could be expressed as

$$r = \frac{\pi}{1 - \pi} \geq \frac{\delta - \gamma}{\alpha - \beta} = c$$

Here, r is the ratio of subjective probabilities, representing the voter's prior beliefs, or I refer to partisan bias; c is the cost of incorrectly choosing D relative to the cost of incorrectly choosing R ,

representing the voter's interests to seek factual information.²¹ A higher value of r indicates that the voter has higher tendency to choose D and therefore is more biased toward Democrats.

A voter observes a signal Y distributed on the support $[\underline{y}, \bar{y}]$. Under state s_1 , the differentiable density function and distribution function are f_1 and F_1 , respectively; under state s_2 , these are f_2 and F_2 , respectively. By assumption, the likelihood ratio $l(y) = f_1(y)/f_2(y)$ satisfies the strict monotone likelihood ratio property for any value of y , that is, $l'(y) > 0$.²² After observing the signal $Y = y$, the voter updates his belief according to Bayes' rule, and the ratio of posterior probabilities becomes $\pi f_1(y)/(1 - \pi)f_2(y) = rl(y)$. Therefore, the decision rule is to choose D if and only if

$$rl(y) \geq c$$

And the optimal threshold of evidence, $t^*(r, c)$, is reached when the above condition is held as equality, i.e.,

$$l(t^*) = c/r$$

As t^* is increasing in interest in seeking factual information and decreasing in partisan bias, a lower threshold of evidence in favor of choosing D is required for a voter biased towards D initially.

However, the voter relies on third parties to perceive the actual state of the world, which in this case, the news outlets. These news outlets are biased in the sense that, they have an ex-ante threshold $t \in (\underline{y}, \bar{y})$ such that they only report whether $Y \geq t$ or $Y < t$ to the audience. This threshold t is assumed to be known by the voter. A higher value of the signal Y is favorable news

²¹ Here I interpret these interests as the welfare in public policies. For example, Democratic Party might generally have a more lenient approach when determining public policies in social security, health care, and immigration, while Republican Party might have a more stringent approach. Under state s_1 , the voter receives a higher payoff from having a health care policy from Democratic Party; however, under state s_2 , the voter receives a higher payoff from having a policy from Republican Party.

²² With this assumption, a higher value of y is indicative of a relatively higher chance in state s_1 , and therefore it is in favor of choosing D .

for state s_1 so voter choose D if $Y \geq t$ is observed and choose R if $Y < t$ is observed.^{23,24} To the voter, the perceived payoff from choosing biased news below reached a maximum at $t = t^*$.

$$EU(t, \pi) = \pi\{[1 - F_1(t)]\alpha + F_1(t)\beta\} + (1 - \pi)\{[1 - F_2(t)]\gamma + F_2(t)\delta\}$$

Essentially, this implies that the optimal media outlet to consult shares the same interests and partisan bias with the voter.

PROPOSITION 1 (Optimal advisor): *The optimal media outlet to consult shares the same interests and partisan bias with the voter, that is, the threshold t satisfies*

$$l(t^*) = c/r$$

PROPOSITION 2 (Selective exposure): *The optimal advisor type is decreasing in partisan bias, r . That is, if a voter is biased toward choosing D ex-ante, he chooses a media outlet with a lower threshold of evidence to report in favor of D .*

PROPOSITION 3 (Rationality): *The optimal advisor type is increasing in interest to seek factual information, c . That is, comparing two voters with the same partisan bias toward D ex-ante, the one with a higher interest in making the correct vote chooses a media outlet with a higher threshold of evidence to report in favor of D .*

5 Empirical Models

5.1 Baseline Model

$$CNNnews_i = \beta_0 + \beta_1 Repub_i + \beta_2 Democ_i + X\beta + \varepsilon_i \quad (1)$$

²³ This is a realistic setting in today's politics. Suen (2004) refers this as information coarsening which the complete information is ultimately revealed only as a 'yes' or 'no' recommendation. For example, due to limited time and space in news reports, a cost-effective way of information transmission is instead adopted.

²⁴ While the current model has no assumption on the supply side of the market and how this threshold of evidence is determined, Chan and Suen (2008) show that media outlets become slightly biased to attract audience with extreme views.

$$FOXnews_i = \beta_0 + \beta_1Repub_i + \beta_2Democ_i + X\beta + \varepsilon_i \quad (2)$$

Here, I consider election news from two news media: CNN News and Fox News. Proposition 2 implies that voters are more likely to choose information from an ideologically coherent source, thus the expected signs of β_1 and β_2 in equation (1) are negative and positive, respectively; and in opposite directions in equation (2). The reference group refers to those who identified as Independents.

5.2 Heterogeneity by Political News Engagement

Suppose the individual i has different degrees of interest in political news. That is, $\theta_i \in [0,1]$, where 0 indicates no interest in political news, while 1 indicates the highest interest in political news. Here, I consider that the degree of political interest is revealed by one's political news engagement, irrespective of one's party identity – the higher this interest is, the higher degree that the individual is engaged in political news.

$$CNNnews_i = \beta_0 + \beta_1Repub_i * Influencer_i + \beta_2Repub_i * Bystander_i + \beta_3Democ_i * Influencer_i + \beta_4Democ_i * Bystander_i + \beta_5Repub_i + \beta_6Democ_i + \beta_7Influencer_i + \beta_8Bystander_i + X\beta + \varepsilon_i \quad (3)$$

$$FOXnews_i = \beta_0 + \beta_1Repub_i * Influencer_i + \beta_2Repub_i * Bystander_i + \beta_3Democ_i * Influencer_i + \beta_4Democ_i * Bystander_i + \beta_5Repub_i + \beta_6Democ_i + \beta_7Influencer_i + \beta_8Bystander_i + X\beta + \varepsilon_i \quad (4)$$

Here I consider three types of news audiences: Influencers, Bystanders, and Checked-out. Influencers are those who follow the political news closely or somewhat closely, and lead the discussion of election news; bystanders are those who either follow political and election news very or somewhat closely, or tend to lead conversations about political and election news; checked-

out are those who follow political and election news not too or not at all closely, and tends to listen to conversations or not have those conversations at all. They represent the scenarios where θ_i takes the value of 1, 0.5, and 0, respectively. In Equations (3) and (4), instead of a discrete variable, I create two dummy variables *Influencers* and *Bystanders*, and interact them with the party identities. Proposition 3 implies that voters with higher interest are more likely to choose information from an ideologically **incoherent** source, thus the expected signs of β_1 and β_2 in equation (3) are both positive and the expected signs of β_3 and β_4 in equation (4) are both positive.²⁵ The reference group are those who identified as Independents.

5.3 Heterogeneity by Digital Engagement

It is an empirical question whether digital engagement would cause users to select more partisan media outlets in their offline news consumption. On one side, a variety of information sources available on the Internet might prompt them to diversify offline news consumption. On the other side, users might become more selective by interacting with people of like-minded, referred to as the echo chamber effects. Suppose the individual i has different degrees of digital engagement. That is, $\rho_i \in [0,1]$, where 0 indicates digitally disengaged, while 1 indicates those who intensively use the internet.

$$CNNnews_i = \beta_0 + \beta_1 Repub_i * Savvy_i + \beta_2 Repub_i * Dabblers_i + \beta_3 Democ_i * Savvy_i + \beta_4 Democ_i * Dabblers_i + \beta_5 Repub_i + \beta_6 Democ_i + \beta_7 Savvy_i + \beta_8 Dabblers_i + X\beta + \varepsilon_i \quad (5)$$

$$FOXnews_i = \beta_0 + \beta_1 Repub_i * Savvy_i + \beta_2 Repub_i * Dabblers_i + \beta_3 Democ_i * Savvy_i + \beta_4 Democ_i * Dabblers_i + \beta_5 Repub_i + \beta_6 Democ_i + \beta_7 Savvy_i + \beta_8 Dabblers_i + X\beta + \varepsilon_i \quad (6)$$

²⁵ Notice that I do not make any expectation on the signs of β_3 and β_4 in equation (3) and β_1 and β_2 in equation (4). In general, β_7 and β_8 should be positive as news influencers and bystanders follow political news closely, but I do not expect this effect to be heterogeneous between the ideologically coherent group and the Independents.

Here I consider three types of digital engagement: digitally savvy, digital dabblers and digitally disengaged. Digitally savvy represents those who use the internet multiple times a day, and are very confident in their ability to use digital devices; digital dabblers describe those who use the internet multiple times a day, or are very confident; digitally disengaged are those who neither use the internet multiple times a day nor are very confident. They represent the scenarios where ρ_i takes the value of 1, 0.5, and 0, respectively. Similarly, in Equations (5) and (6), I create two dummy variables *Savvy* and *Dabbler* and interact them with the party identities.

5.4 Propensity Score Matching

Given the observational nature of the data, endogeneity would be a threat to the identification. This thesis attempts to alleviate the partial effects of selection bias by using propensity score matching. At the baseline, I estimate the likelihood of being a Democrat or Republican (Treatment) based on observables, i.e., demographics and political preferences, using probit regression. Then, I estimate the average treatment effect on the treated (ATT) using 1-to-many matching and radius matching between the Independents and Democrats/Republicans.²⁶ In this way, I study the effects of increased self-perceived party identity on the likelihood of consuming identity coherent information, or selective exposure.

$$Democ_i = f(metro, northwest, midwest, \dots, VOTEGEN) \text{ (probit)}$$

$$ATT = E[CNNnews_{1i} - CNNnews_{0i} | Democ_i = 1] \text{ (matching)}$$

$$Repub_i = f(metro, northwest, midwest, \dots, VOTEGEN) \text{ (probit)}$$

$$ATT = E[FOXnews_{1i} - FOXnews_{0i} | Repub_i = 1] \text{ (matching)}$$

²⁶ These matching algorithms are deployed because the sample sizes of the treatment group are always greater than the control group. In radius matching, a treated individual is not matched with a control if they are a “poor” match of each other.

Proposition 2 implies that the ATTs are expected to be positive for both CNN and Fox News. [Table 3](#) lists all the variables used in the matching.

Since the matching variables are available only before and after the election, no result is reported for November 2020. Furthermore, the survey asked similar but different sets of questions in August 2020 and March 2021, these matching variables are selected as my best efforts to maintain consistency. Nevertheless, it is reasonable to consider the estimates from the two periods still comparable. The underlying assumption under propensity score matching is that the matching variables are predictors of self-perceived party identity. In [Figure 4](#), I show the distributions of the propensity score estimated. The distributions of both periods appear to be similar despite using different matching variables. In [Figure 5](#), I reclassify the control group as the Independents. Two distinct peaks are observed in the distributions of the propensity score. This illustrates that the Democrat-leaning and Republican-leaning voters are dissimilar in political preferences but not so in demographics, which supports the claim that the matching variables are effective in predicting party identity.

6 Results

6.1 Baseline Model

[Table 4](#) reports the regression results of the baseline models (1) and (2). As expected, there exists strong and persistent selective exposure among Democrats and Republicans. On average, Democrats are 16-20 percentage points more likely to watch CNN News as compared to the Independents, while Republicans are 25-32 percentage points more likely to watch Fox News.

6.2 Heterogeneity

[Table 5](#) and [Table 6](#) report the results of heterogeneous selective exposure by political news engagement, i.e., models (3) and (4). [Table 5](#) shows that political news engagement increases consumption of both CNN News and Fox News, with larger estimated coefficients for CNN News. In [Table 6](#), this effect generally still holds for the Independents, except in November 2020.²⁷ Political news influencers are 13-23 percentage points more likely to watch CNN News, while bystanders are 10-17 percentage points more likely. Democrat news bystanders have a stronger tendency than Independent bystanders to watch the news channel, but not so or even a diminished effect for Democrat influencers. This suggests that political news influencers would watch CNN News anyway regardless of Independent or Democrats. Contradicting Proposition 3, Republican news influencers and bystanders are indeed less likely to watch CNN News, even after controlling for party identity. This offsets any increase in the tendency from political news engagement. Meanwhile, the effects of political news engagement on Fox News consumption are much smaller, with only a 5-10 percentage points increase in likelihood. Moreover, the effects are stronger among bystanders rather than influencers. Republican bystanders and influencers have a stronger tendency to watch the channel than Independent bystanders and influencers. Similar to results from CNN News, Democrat news influencers and bystanders are less likely to watch Fox News than the Independent influencers and bystanders, offsetting any increase in the tendency from political news engagement.

[Table 7](#) and [Table 8](#) report the results of heterogeneous selective exposure by digital engagement. [Table 7](#) shows that being a digital dabbler does not change the political news diet much from the digitally disengaged. For the digital savvy, they increase CNN News consumption

²⁷ Similar results are yielded even if I define political news engagement as how closely the respondents followed political news only.

and reduce Fox News consumption, as compared to the digitally disengaged. In [Table 8](#), these effects are disentangled by self-perceived party identity. For the Independent, the digitally savvy reduce Fox News consumption. The Democrat digital savvy and dabblers have a stronger tendency to watch CNN News, but only after the election. They are also the least likely to watch Fox News.

6.3 Selective Exposure Index

[Figure 3](#) illustrates the distribution of the selective exposure index between different party identities.²⁸ For Democrats, the distribution is mixed when compared with Democrat-Lean: the majority of the Democrats has a less partisan-selective news diet than Democrat-leaning, but a non-trivial proportion falling on the right tail. For Republicans, the distribution is more spread than Republican-Lean, but a higher proportion falls on the right tail. The weighted average of the partisan selective exposure index is 1.184.²⁹ [Table 9](#) reports regression results with the partisan selective exposure index.³⁰ In general, selective exposure increases with self-perceived party identity. Democrats and Republicans are exposed to 14-17 percentage points more partisan messages than the Democrat-leaning and Republican-leaning. News influencers and bystanders are more selective than political news checked-out individuals, by 16 and 9 percentage points, respectively. Digital engagement only marginally increases selective exposure, by 2-3 percentage points. It appears that white men aged 65 or above with some degree of college education are the most partisan selective in political news consumption. Middle- and high-income classes are also more partisan-selective than the low-income class.

²⁸ The partisan composition of the audience for each media outlet is listed in [Table A1.1](#).

²⁹ The weighted average is 1.224 for Democrats, 1.143 for Democrat-leaning, 1.001 for Republican-leaning, and 1.283 for Republicans.

³⁰ The regression result with the effects of political news and digital engagement disentangled by party identity is reported in Column (1) of [Table A2.1](#).

6.4 Propensity Score Matching

[Figure 4](#) illustrates the distribution of propensity score predicted using estimated coefficients from the probit regression. Although it appears that the distributions between Democrats/Republicans and the Independents overlap the greatest using demographic variables only in prediction, the inclusion of political preferences would give a more realistic distribution of propensity score. Moreover, the pseudo R-squared in [Table 10](#) increases non-trivially after including political preferences as predictors. The distributions in the estimated propensity score overlap well so I did not trim any sample. [Table 10](#) reports the propensity score matching estimators. Before the election, an intensified party identification toward Democrats increased the likelihood of consuming CNN News by 5 percentage points, statistically significant at a 1% level. Increased party identification towards Republicans had no statistically significant effect on Fox News consumption. In three months after the election, the estimated coefficients increase for both Democrats and Republicans, but their statistical significance declines.

7 Alternative Specifications

7.1 Democrats, Independents, and Republicans

A potential threat to the validity of propensity score matching could be the insufficient size of the control groups. Across all waves, the sample sizes of control groups, Democrat-leaning and Republican-leaning, are smaller than the treatment groups, Democrats and Republicans. Here I reclassify the control groups collectively as “the Independents” in an attempt to increase the size of the control group. The success of this strategy relies on how alike the two control groups are – if the Independents are truly indifferent between the two parties, the reclassification should yield similar propensity score distributions and estimators; otherwise, the reclassification would bias the

estimators upward due to increased average distance in party identity. [Figure 5](#) shows the distributions of the estimated propensity score after the reclassification. While the distributions using demographic variables do not change much, two peaks are noticeable in the distributions using demographics and political preference variables. This illustrates that despite identifying as the Independent, the sample of Lean-Democrat and Lean-Republican are distinctly different in terms of political preference. This generally supports the inclusion of political preference variables to enhance the matching process as they are predictive of self-perceived party identity. [Table 11](#) reports the propensity score matching estimates. The estimated selective exposure increases considerably, as the absolute distance in party identity increases. However, the specification in [Section 6](#) is preferred as the treatment and control groups are more alike to each other.

[Figure 6](#) displays the distribution of the partisan selective exposure index after the reclassification. Notice that the distributions for Democrats and Republicans are not affected as the composition of the other audience has no effect on their selective exposure indices. For the Independents, the partisan selective exposure index is now concentrated around 1.³¹ The moderation of party identity increases the proportion of viewers sharing the Independent identity and “neutralizes” any insignificant partisan messages produced by media outlets.

Column (2) of [Table 12](#) reports the regression result with the revised partisan selective exposure index.³² While the estimated coefficients for the party identities slightly increase, the effects of political news engagement and digital engagement decline. This tells that the Democrat-leaning and Republican-leaning are different in these aspects.

³¹ The weighted average of the partisan selective exposure index is 1.139. The weighted average is 1.224 for Democrats, 0.964 for Independents, and 1.283 for Republicans. The partisan composition of the audience for each media outlet is listed in [Table A1.2](#).

³² The regression result with the effects of political news and digital engagement disentangled by party identity is reported in Column (2) of [Table A2.1](#).

7.2 Selective Exposure Index Without Intensity

Recall that the intensity measure of political news consumption is available in the wave before the election but not in the wave after the election. To allow comparison of estimates across the two waves, I revise the definition of partisan selective exposure index as follows:

$$I_i^{SE} = \left(\frac{\sum_{j=1}^J \left(\frac{N_{js_i}}{N_j} \right) \times C_{ij}}{\sum_{j=1}^J C_{ij}} \right) / \frac{N_s}{N}$$

Where the news outlets are indexed as $j = \{1, \dots, J\}$, individuals are indexed as $i = \{1, \dots, N\}$. C_{ij} represents the consumption of individual i on news outlet j and it can take two values: 1 if the respondent reported using a news outlet j as a major or a minor source; 0 if reported as not a source.

The revised index captures the extensive margin of political news consumption but not the intensive margin. The validity of the estimates from this revised index depends on whether mere exposure to partisan news could affect decisions.

[Figure 7](#) illustrates the distributions of the revised selective exposure index.^{33,34} The Republicans are less partisan-selective in their political news diet as compared to the original distribution. This implies that despite that some Republicans consume an extensive set of election news sources, they disproportionately refer to news sources consumed by like-minded individuals as their major sources. Similarly, the distribution of the Democrats becomes more left-skewed. This implies that they also refer to news sources consumed by individuals holding different party identities as their major sources. Columns (3) and (4) of [Table 12](#) report the regression result with

³³ In August 2020, the weighted average of the partisan selective exposure index is 1.174. The weighted average is 1.221 for Democrats, 1.139 for Democrat-leaning, 0.990 for Republican-leaning, and 1.260 for Republicans. In March 2021, the weighted average of the partisan selective exposure index is 1.182. The weighted average is 1.223 for Democrats, 1.154 for Democrat-leaning, 1.009 for Republican-leaning, and 1.277 for Republicans.

³⁴ In August 2020, the partisan composition of the audience for each media outlet is the same as in [Table A1.1](#). In March 2021, the partisan composition of the audience for each media outlet is listed in [Table A1.3](#).

the revised partisan selective exposure index. Comparing columns (1) and (3), the results are similar but the effects of party identity, political news, and digital engagement decline. Comparing columns (3) and (4), the effects of digital engagement on the news consumption bundle rise after the election. It could be that the digitally engaged voters become more partisan-segregated after the election, or they refer to diverse election news sources only before the election.

8 Conclusion and Discussion

In summary, I find that an intensified party identification toward Democrats increased the likelihood of consuming CNN News by 5 percentage points, while the effect of intensified Republican identity on Fox News consumption is statistically insignificant. Partisan selective exposure increases with political news engagement and digital engagement. My results are consistent with Gentzkow and Shapiro (2011) and Dejean et al. (2022), which find that social media could intensify partisan selective exposure. However, the estimated coefficients are less comparable across different time periods due to inconsistency in survey questions. While political preferences are predictive of self-perceived party identity, the justification of the estimated ATT coefficients is weakened by the relatively small sample size of the control groups.³⁵ My results suffer from the reverse causality issue, which is also a challenge in many empirical studies.

To proceed with the current analysis, more detailed individual-level data on political news consumption and preferences with location identifiers would be needed. One might also consider

³⁵ To ensure confidentiality, certain responses from a small number of respondents with a high risk of identification were randomly swapped with those of lower-risk cases with similar characteristics in the provided dataset. While it is unsure which variables were swapped initially, I consider it less of a concern even if some of the party identifications were swapped for two reasons. Firstly, it is more likely that responses from interviewees with extreme views were replaced, and therefore this would bias the estimated coefficients toward zero. Secondly, the estimated propensity scores based on demographics and political preferences would have correctly predicted their party identities.

exploiting exogenous shocks in political preferences or party identification, which might originate from location-based public policies or local political events. Future research on the effects of partisan selective exposure on belief formation would also be important. The extension of the model to other household consumption could unveil unexpected market outcomes that we observe (for example, Bursztyn et al. (2022) study the effects of party identity on enrollment and market outcomes in the Affordable Care Act insurance marketplaces).

While some people who fear the widespread misinformation deem the removal of seemingly untruthful political speech or “fake news” from the public domain necessary, such responses might only risk undermining free speech in society. As noted by Nyhan (2020, p.232), “In reality, false information, misperceptions, and conspiracy theories are general features of human society.” If the origin of selective exposure is from our pre-existing bias, any solutions increasing the cost of information are unlikely to yield fruitful results. Instead of targeting the information itself, making us aware of the imperfection in our information processing could be more promising. Understanding the bias that we have is key to dealing with our bias.

CHAPTER III – SELECTIVE EXPOSURE WORLDWIDE

1 Introduction

The purpose of this chapter is to study selective exposure and media trust worldwide. This analysis is motivated by the following questions:

- Are selective exposure and media bias associated with specific traits or culture?
- Could better institutions help to eliminate media bias in society?
- How is media bias related to economic development?

This analysis focuses on the divergence of public opinion towards media between governing party supporters and non-supporters. Globally, a higher proportion of governing party supporters follow national news than governing party non-supporters. They also reveal more favorable views of their news media and greater tolerance towards biased political news (Pew Research Center, 2018). Here, I define media bias as the divergence in public opinion between the governing party supporters and non-supporters. I find that it is consistently associated with certain dimensions of culture. At the end of this chapter, I will provide my speculations based on the results and propose potential areas for future research.

2 Data

This analysis uses individual-level political preference and media habit survey data from Pew Research Center's Global Attitudes & Trends Survey Spring 2017. This survey covers 38

nations^{36,37} and roughly 1,000 respondents aged 18 or above from each sample nation. The fieldwork dates lie between mid-February to mid-April 2017. Each respondent was assigned a weight based on demographic characteristics and probability of selection. I used self-perceived proximity to the governing party, news habits, and attitudes toward media for this analysis. These were supplemented by indicators of culture, institution, and development. [Table 13](#) lists the variables and their definitions.

[Figure 8](#) provides the foundation for my analysis. Government supporters follow national news more closely than non-government supporters in most countries. Government supporters also reveal greater trust in their news media, including the reporting on political and government news. Regional patterns of media trust emerge, especially for confidence in political and government news. This suggests that social norms of media bias converge in neighboring countries, possibly originating from similarities in culture, institution, and economic development.

[Figure 9](#) to [Figure 13](#) illustrate media bias by ideology and the dimensions of culture (Hofstede et al., 2010).³⁸ No noticeable pattern is observed except for uncertainty avoidance. It seems that countries with a higher degree of risk aversion show greater confidence in all aspects of media trust. [Figure 14](#) illustrates the difference in tolerance toward biased political news. Unfortunately, government supporters generally convey greater tolerance towards biased political

³⁶ The sample countries include: Argentina, Australia, Brazil, Canada, Chile, Colombia, France, Germany, Ghana, Greece, Hungary, India, Indonesia, Israel, Italy, Japan, Jordan, Kenya, Lebanon, Mexico, Netherlands, Nigeria, Peru, Philippines, Poland, Russia, Senegal, South Africa, South Korea, Spain, Sweden, Tanzania, Tunisia, Turkey, United Kingdom, United States, Venezuela, Vietnam

³⁷ Certain countries are not included in this analysis due to insufficient respondents identifying as government supporters.

³⁸ Ideology is defined as the ideology of the governing party. A country is classified as individualistic if the index value is above the median value of all countries listed in Hofstede et al. (2010), as collectivistic otherwise. Similarly, a country is classified as high in uncertainty avoidance, long-term orientation, and power distance if the index value is above the median value of all countries, as low otherwise.

news. Individuals from individualistic, socially hieratical, and risk-averse societies are less tolerant of biased political news.

To measure bias within a country, I define bias as the absolute difference in percentage population between government supporters and non-government supporters for the above variables. This captures the two types of bias – government supporters over-trusting the news media, or non-government supporters under-trusting the news media.

3 Empirical Model

To obtain the correlational relationship between the indicators and media bias, I regress the bias variables separately with all the indicators each time. The coefficients would be imprecisely estimated due to the small sample size and multicollinearity.

$$y_i = \beta_0 + X\beta + \varepsilon_i \quad (7)$$

Where y_i is the media bias measure in country i , X is a vector of the indicator variables. I expect statistical selection bias to exist because of two main reasons. Firstly, the sample countries are only a subset of countries, and I would expect these countries to be selected due to a certain level of development. Secondly, the number of respondents in each country is independent of the population size, so there would be an over-representation issue in countries with relatively small population sizes.

4 Results and Discussion

[Table 14](#) reports the signs and statistical significance of the above estimation. Focusing on columns (3) to (6), media bias consistently increases with voice and accountability, political

stability and absence of violence or terrorism, government effectiveness, control of corruption, and economic production. It decreases with regulatory quality, press freedom, and telecommunication. People from individualistic and socially hierarchal cultures possess less media bias, and risk aversion increases media bias. I have two naïve interpretations of the results. Pessimistically, economic growth and political stability could be at the cost of press freedom and controlled media. In their remark, Reporters Without Borders (n.d.) write:

Singapore boasts of being a model of economic development but it is an example of what not to be in regard to freedom of the press, which is almost non-existent.

Nevertheless, divides in public opinion towards media could also be indicative of press freedom. For instance, in the U.S., the divergence in trust towards media represents a model for press freedom and free speech – to the extent that conflicting messages confuse the audience when perceiving the truth. Still, press freedom appears to reduce media bias worldwide.

While culture and bias have been recurring themes in psychology studies, economic and political outcomes are often less studied subjects. One could expect that traits and values would eventually lead to social norms that could not be purely explained by economic indicators. For example, Azariadis and Ioannides (2023) study the role of culture in the joint evolution of corruption and economic growth. They predict distinctive growth paths of economies as determined by culture and initial social norms. For societies that begin with collectivist cultures and corruption-tolerant norms, institutional quality and growth are driven mainly by culture and social norms, which eventually lead to the erosion of property rights. Similarly, my result shows that political polarization could be related to certain dimensions of culture, in particular, risk aversion. Baron (2006) provides an illustration of how risk-averse individuals could be more tolerant of bias. I suggest further research on the relationship between societal risk preference, economic growth, and political polarization.

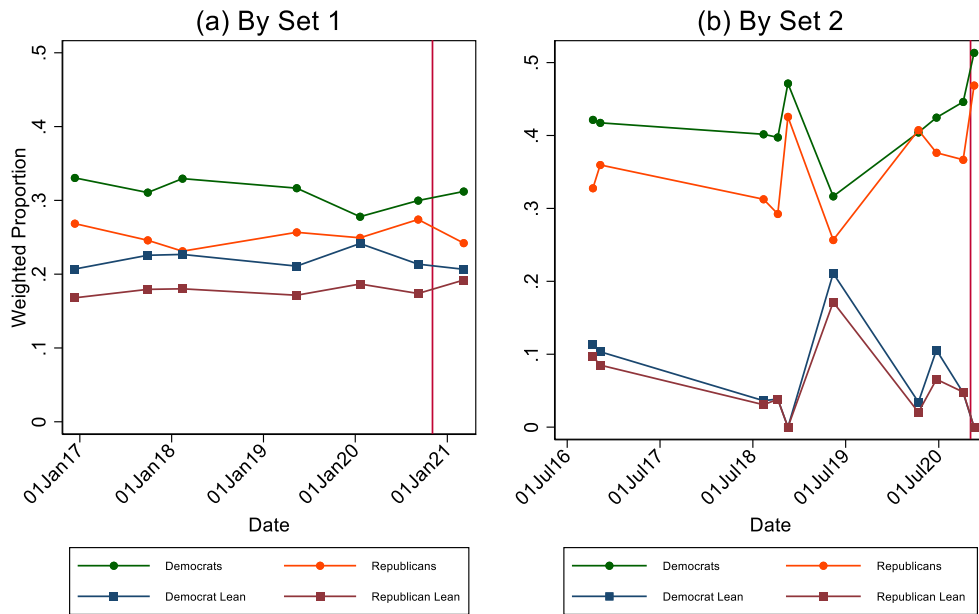
Tables and Figures

Table 1. Definition of Variables

Variable	Definition
<i>Democ</i>	=1 if identified as a Democrat in Waves 23, 29, 31, 48, 59, 71 and 84; OR =1 if voted for Democrat candidate during presidential/ congressional election in Waves 21, 22, 37, 38, 39, 65, 69, 75, and 78
<i>Repub</i>	=1 if identified as a Republican in Waves 23, 29, 31, 48, 59, 71 and 84; OR =1 if voted for Republican candidate during presidential/ congressional election in Waves 21, 22, 37, 38, 39, 65, 69, 75, and 78
<i>CNNnews</i>	=1 if reported CNN as a major or minor source of political news in Waves 73 and 79; OR =1 if reported CNN as one of the sources of political news in Waves 57 and 85
<i>FOXnews</i>	=1 if reported Fox News as a major or minor source of political news in Waves 73 and 79; OR =1 if reported Fox News as one of the sources of political news in Waves 57 and 85
<i>Influencer</i> <i>Bystander</i>	=1 if reported follow the political news closely or somewhat closely AND lead the discussion of election news =1 if reported either follow political and election news very or somewhat closely OR tend to lead conversations about political and election news
<i>Savvy</i> <i>Dabbler</i>	=1 if reported use the internet multiple times a day AND are very confident in their ability to use digital devices =1 if reported use the internet multiple times a day OR are very confident in their ability to use digital devices
<i>METRO</i>	=1 if reported in metropolitan area
<i>NORTHWEST</i>	=1 if census region is Northwest
<i>MIDWEST</i>	=1 if census region is Midwest
<i>SOUTH</i>	=1 if census region is South
<i>MALE</i>	=1 if reported man as gender
<i>COLGRAD</i>	=1 if reported highest level of school as Bachelor's degree or above
<i>SOMECOL</i>	=1 if reported highest level of school as some college credit or above, but less than Bachelor's degree
<i>WHITE</i>	=1 if reported race or origin as White
<i>BLACK</i>	=1 if reported race or origin as Black or African-American
<i>ASIAN</i>	=1 if reported race or origin as Asian or Asian-American
<i>CITIZEN</i>	=1 if reported as a citizen of the United States
<i>UPPERINC</i>	=1 if reported family income (adjusted for differences in purchasing power by geographic region and for household size) is greater than the double of the median family income in the panel
<i>MIDDLEINC</i>	=1 if adjusted family income is two-thirds to double of the median family income in the panel

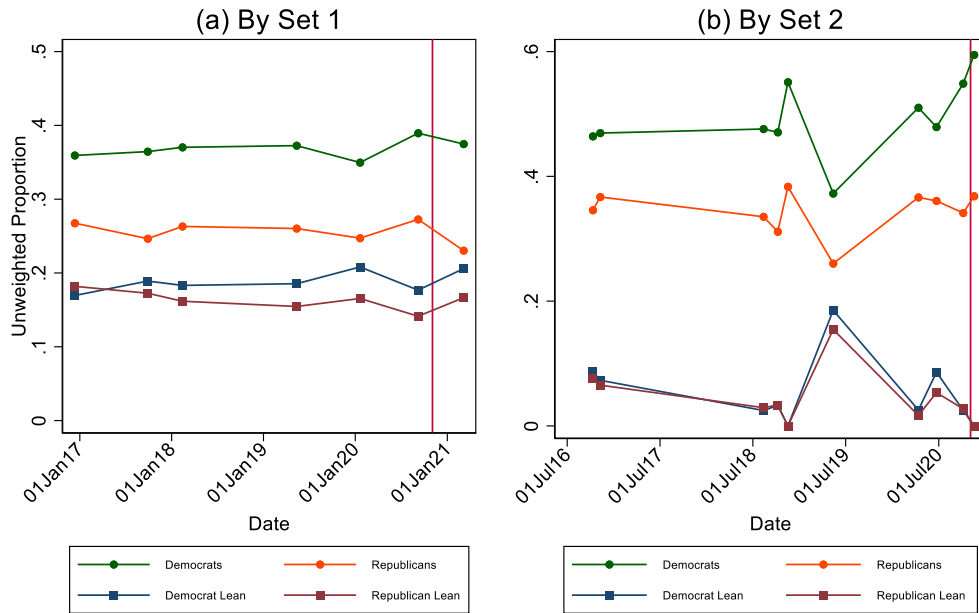
Figure 1. Trend of Party Identity Over Time

Trend of Party Identity Over Time (Weighted)



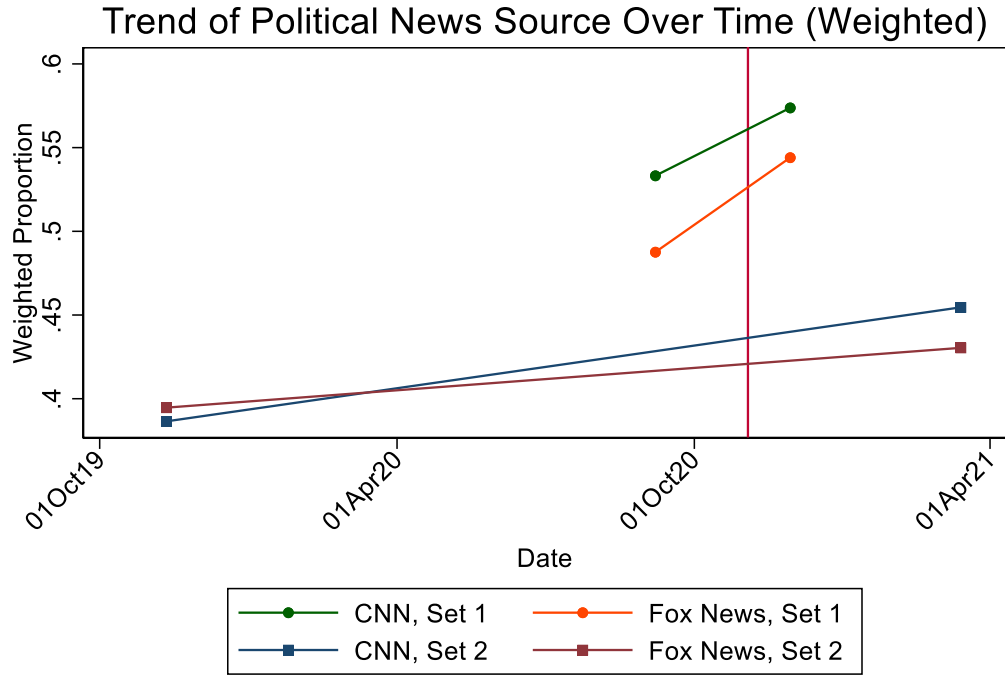
The red line indicates 2020 U.S. Presidential Election

Trend of Party Identity Over Time (Unweighted)

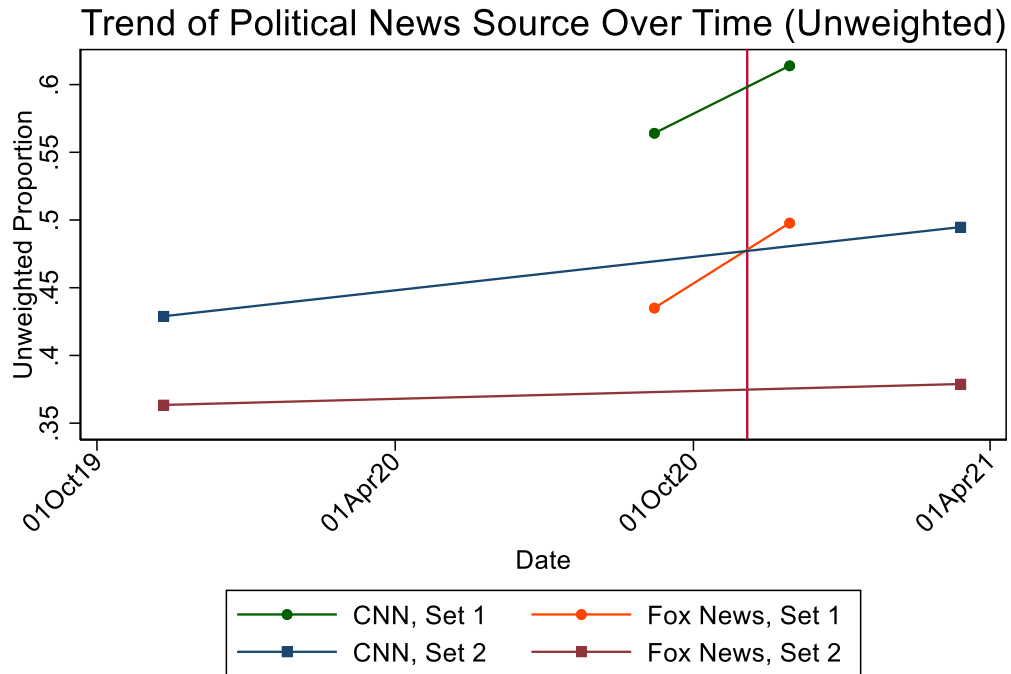


The red line indicates 2020 U.S. Presidential Election

Figure 2. Trend of Political News Source Over Time



The red line indicates 2020 U.S. Presidential Election



The red line indicates 2020 U.S. Presidential Election

Table 2. Summary Statistics (Weighted)

VARIABLES	Aug 2020					Nov 2020	Mar 2021
	(1) Full sample	(2) Democrat	(3) Democrat Lean	(4) Republican	(5) Republican Lean	(6) Full sample	(7) Full sample
<i>METRO</i>	0.87 (0.34)	0.9 (0.29)	0.9 (0.3)	0.82 (0.39)	0.84 (0.37)	0.87 (0.34)	0.87 (0.34)
<i>NORTHWEST</i>	0.17 (0.38)	0.19 (0.4)	0.19 (0.39)	0.15 (0.36)	0.17 (0.37)	0.17 (0.38)	0.18 (0.38)
<i>MIDWEST</i>	0.21 (0.41)	0.18 (0.38)	0.21 (0.41)	0.24 (0.43)	0.21 (0.41)	0.21 (0.41)	0.21 (0.41)
<i>SOUTH</i>	0.38 (0.49)	0.37 (0.48)	0.37 (0.48)	0.41 (0.49)	0.37 (0.48)	0.38 (0.49)	0.38 (0.49)
<i>WEST</i>	0.24 (0.43)	0.26 (0.44)	0.23 (0.42)	0.2 (0.4)	0.25 (0.43)	0.24 (0.43)	0.24 (0.43)
<i>MALE</i>	0.47 (0.5)	0.41 (0.49)	0.47 (0.5)	0.48 (0.5)	0.55 (0.5)	0.47 (0.5)	0.47 (0.5)
<i>COLGRAD</i>	0.33 (0.47)	0.38 (0.49)	0.37 (0.48)	0.29 (0.45)	0.28 (0.45)	0.33 (0.47)	0.33 (0.47)
<i>SOMECOL</i>	0.32 (0.46)	0.28 (0.45)	0.34 (0.47)	0.32 (0.47)	0.36 (0.48)	0.32 (0.46)	0.31 (0.46)
<i>HS</i>	0.36 (0.48)	0.34 (0.47)	0.29 (0.45)	0.39 (0.49)	0.36 (0.48)	0.36 (0.48)	0.36 (0.48)
<i>WHITE</i>	0.64 (0.48)	0.49 (0.5)	0.55 (0.5)	0.86 (0.35)	0.7 (0.46)	0.64 (0.48)	0.63 (0.48)
<i>BLACK</i>	0.12 (0.32)	0.25 (0.43)	0.13 (0.34)	0.01 (0.12)	0.03 (0.17)	0.12 (0.32)	0.12 (0.32)
<i>ASIAN</i>	0.05 (0.22)	0.06 (0.23)	0.08 (0.26)	0.03 (0.17)	0.04 (0.2)	0.05 (0.22)	0.05 (0.22)
<i>HISPANIC</i>	0.15 (0.36)	0.18 (0.39)	0.19 (0.39)	0.07 (0.26)	0.16 (0.37)	0.15 (0.36)	0.16 (0.37)
<i>CITIZEN</i>	0.93 (0.25)	0.94 (0.23)	0.9 (0.3)	0.96 (0.19)	0.92 (0.27)	0.93 (0.25)	0.92 (0.27)

<i>UPPERINC</i>	0.2 (0.4)	0.21 (0.41)	0.19 (0.39)	0.22 (0.41)	0.19 (0.39)	0.2 (0.4)	0.19 (0.39)
<i>MIDDLEINC</i>	0.46 (0.5)	0.42 (0.49)	0.43 (0.5)	0.53 (0.5)	0.49 (0.5)	0.46 (0.5)	0.45 (0.5)
<i>LOWERINC</i>	0.29 (0.46)	0.34 (0.47)	0.35 (0.48)	0.19 (0.39)	0.28 (0.45)	0.29 (0.46)	0.31 (0.46)
<i>IDEOLOGY</i>	0.04 (1.06)	-0.65 (0.87)	-0.43 (0.87)	0.92 (0.75)	0.44 (0.82)	0.04 (1.06)	0.06 (1.05)
<i>INFLUENCER</i>	0.19 (0.39)	0.22 (0.42)	0.19 (0.39)	0.19 (0.39)	0.15 (0.35)	0.19 (0.39)	0.19 (0.39)
<i>BYSTANDER</i>	0.43 (0.5)	0.47 (0.5)	0.41 (0.49)	0.47 (0.5)	0.4 (0.49)	0.44 (0.5)	0.43 (0.5)
<i>DIG_SAVVY</i>	0.54 (0.5)	0.53 (0.5)	0.61 (0.49)	0.49 (0.5)	0.56 (0.5)	0.53 (0.5)	0.54 (0.5)
<i>DIG_DABBLER</i>	0.31 (0.46)	0.3 (0.46)	0.25 (0.44)	0.36 (0.48)	0.31 (0.46)	0.31 (0.46)	0.31 (0.46)
N	9,220	3,591	1,630	2,514	1,304	12,648	12,045

Table 3. Variables Used in Propensity Score Matching

Pre-election	Collected In	Post-election	Collected In
<i>CNNnews, FOXnews</i>	Aug 2020	<i>CNNnews, FOXnews</i>	Mar 2021
<i>Democ, LNDemoc, Repub, LNRepub</i>	Aug 2020	<i>Democ, LNDemoc, Repub, LNRepub</i>	Mar 2021
<i>METRO, NORTHWEST, MIDWEST, SOUTH, MALE, COLGRAD, SOMECOL, WHITE, BLACK,, ASIAN, CITIZEN, UPPERINC, and MIDDLEINC</i>	Aug 2020	<i>METRO, NORTHWEST, MIDWEST, SOUTH, MALE, COLGRAD, SOMECOL, WHITE, BLACK, ASIAN, CITIZEN, UPPERINC, and MIDDLEINC</i>	Aug 2020
<i>SATIS</i> - All in all, are you satisfied or dissatisfied with the way things are going in this country today? (1) Satisfied (2) Dissatisfied (3) No answer	Aug 2020	<i>SATIS</i> - All in all, are you satisfied or dissatisfied with the way things are going in this country today? (1) Satisfied (2) Dissatisfied (3) No answer	Mar 2021
<i>POLIDT</i> - Do you approve or disapprove of the way Donald Trump is handling his job as president? (1) Approve (2) Disapprove	Aug 2020	<i>POLIJB</i> - Do you approve or disapprove of the way Joe Biden is handling his job as president? (1) Approve (2) Disapprove	Apr 2021
<i>USCONF_FUT</i> - How much confidence do you have in the future of the United States? (1) Quite a lot	Aug 2020	<i>USCONF_FUT</i> - How much confidence do you have in the future of the United States? (1) Quite a lot	Apr 2021

<p>(2) Some (3) Very little (4) None at all</p>		<p>(2) Some (3) Very little (4) None at all</p>	
<p><i>GOVFEEL</i> - Some people say they are basically content with the federal government, others say they are frustrated, and others say they are angry. Which of these best describes how you feel?</p> <p>(1) Basically content (2) Frustrated (3) Angry</p>	<p>Aug 2020</p>	<p><i>GOVFEEL</i> - Some people say they are basically content with the federal government, others say they are frustrated, and others say they are angry. Which of these best describes how you feel?</p> <p>(4) Basically content (5) Frustrated Angry</p>	<p>Apr 2021</p>
<p><i>TRUSTFEDGOV</i> - How much of the time do you think you can trust the government in Washington to do what is right?</p> <p>(1) Just about always (2) Most of the time (3) Only some of the time (4) Never</p>	<p>Aug 2020</p>	<p><i>TRUSTFEDGOV</i> - How much of the time do you think you can trust the government in Washington to do what is right?</p> <p>(1) Just about always (2) Most of the time (3) Only some of the time (4) Never</p>	<p>Apr 2021</p>
<p><i>PRZCMPGN</i> - How much thought, if any, have you given to candidates who are running for president in 2020?</p> <p>(1) A lot</p>	<p>Aug 2020</p>	<p><i>GOVT_ROLE</i> - Which statement comes closer to your own views, even if neither is exactly right?</p> <p>(1) Government should do more to solve</p>	<p>Apr 2021</p>

<p>(2) Some (3) Not much (4) None at all</p>		<p>problems (2) Government is doing too many things better left to businesses and individuals</p>	
<p><i>MATTERS</i> - Thinking about how you feel about the 2020 presidential election, where would you place yourself on the following scale?</p> <p>(1) Really matters who wins (2) (3) (4) Doesn't really matter who wins</p>	<p>Aug 2020</p>	<p><i>NATPROBS</i> - How much of a problem do you think each of the following are in the country today?</p> <p>b. The coronavirus outbreak e. Racism g. Illegal immigration l. Sexism m. Economic inequality</p> <p>(1) A very big problem (2) A moderately big problem (3) A small problem (4) Not a problem at all</p>	<p>Apr 2021</p>

Table 4. Regression Results – Baseline Model

VARIABLES	(1)	(2)	(3)	(4)	(5)	(6)
	Aug 2020	<i>CNNnews</i> Nov 2020	Mar 2021	Aug 2020	<i>FOXnews</i> Nov 2020	Mar 2021
<i>Democrat</i>	0.2007*** (0.0118)	0.3731*** (0.0219)	0.1664*** (0.0103)	-0.1466*** (0.0119)	-0.0970*** (0.0229)	-0.1519*** (0.0102)
<i>Republican</i>	-0.2168*** (0.0121)	-0.0573*** (0.0220)	-0.1840*** (0.0110)	0.3195*** (0.0122)	0.3188*** (0.0230)	0.2576*** (0.0110)
Controls	Y	Y	Y	Y	Y	Y
Weighted	Y	Y	Y	Y	Y	Y
Observations	9,094	10,189	12,045	9,094	10,189	12,045
R-squared	0.1662	0.2335	0.1183	0.1573	0.1729	0.1199

Standard errors in parentheses: *** p<0.01, ** p<0.05, * p<0.1. Control variables include *AGE*, *METRO*, *NORTHWEST*, *MIDWEST*, *SOUTH*, *MALE*, *COLGRAD*, *SOMECOL*, *WHITE*, *BLACK*, *ASIAN*, *CITIZEN*, *UPPERINC*, and *MIDDLEINC*.

Table 5. Regression Results – Heterogeneity by Political News Engagement

VARIABLES	(1)	(2)	(3)	(4)	(5)	(6)
	Aug 2020	<i>CNNnews</i> Nov 2020	Mar 2021	Aug 2020	<i>FOXnews</i> Nov 2020	Mar 2021
<i>Democrat</i>	0.1839*** (0.0118)	0.3821*** (0.0243)	0.1601*** (0.0113)	-0.2154*** (0.0111)	-0.1607*** (0.0267)	-0.2001*** (0.0104)
<i>Republican</i>	-0.2277*** (0.0121)	-0.0765*** (0.0245)	-0.2174*** (0.0121)	0.3495*** (0.0121)	0.3040*** (0.0271)	0.3129*** (0.0118)
<i>Influencer</i>	0.1191*** (0.0141)	0.0562*** (0.0134)	0.1259*** (0.0137)	0.0530*** (0.0136)	0.0484*** (0.0145)	0.0475*** (0.0132)
<i>Bystander</i>	0.1313*** (0.0110)	0.0475*** (0.0110)	0.0965*** (0.0108)	0.0727*** (0.0114)	0.0651*** (0.0123)	0.0562*** (0.0110)
Controls	Y	Y	Y	Y	Y	Y
Weighted	Y	Y	Y	Y	Y	Y
Observations	8,989	8,600	9,721	8,989	8,600	9,721
R-squared	0.1803	0.2661	0.1435	0.2333	0.2062	0.1860

Standard errors in parentheses: *** p<0.01, ** p<0.05, * p<0.1. Control variables include *AGE*, *METRO*, *NORTHWEST*, *MIDWEST*, *SOUTH*, *MALE*, *COLGRAD*, *SOMECOL*, *WHITE*, *BLACK*, *ASIAN*, *CITIZEN*, *UPPERINC*, and *MIDDLEINC*.

Table 6. Regression Results – Heterogeneity by Political News Engagement and Party Identity

VARIABLES	(1)	(2)	(3)	(4)	(5)	(6)
	Aug 2020	<i>CNNnews</i> Nov 2020	Mar 2021	Aug 2020	<i>FOXnews</i> Nov 2020	Mar 2021
<i>Democrat</i>	0.1802*** (0.0194)	0.3065*** (0.0371)	0.1238*** (0.0185)	-0.0550*** (0.0213)	-0.1167*** (0.0425)	-0.0688*** (0.0204)
<i>Republican</i>	-0.0852*** (0.0192)	-0.0433 (0.0371)	-0.1600*** (0.0194)	0.2264*** (0.0220)	0.1789*** (0.0429)	0.2082*** (0.0217)
<i>Influencer</i>	0.2317*** (0.0216)	-0.0127 (0.0672)	0.1358*** (0.0212)	0.0453** (0.0224)	-0.2003*** (0.0761)	0.0447** (0.0205)
<i>Democrat</i> × <i>Influencer</i>	-0.0542* (0.0322)	0.1510** (0.0694)	0.0458 (0.0309)	-0.1827*** (0.0307)	0.1537** (0.0782)	-0.1441*** (0.0290)
<i>Republican</i> × <i>Influencer</i>	-0.3379*** (0.0334)	-0.0135 (0.0698)	-0.0932*** (0.0336)	0.2497*** (0.0336)	0.3950*** (0.0793)	0.2063*** (0.0331)
<i>Bystander</i>	0.1762*** (0.0162)	0.0272 (0.0507)	0.1023*** (0.0158)	0.1086*** (0.0180)	0.0832 (0.0557)	0.0849*** (0.0165)
<i>Democrat</i> × <i>Bystander</i>	0.0101 (0.0257)	0.0927* (0.0529)	0.0536** (0.0248)	-0.2145*** (0.0260)	-0.1098* (0.0580)	-0.1791*** (0.0247)
<i>Republican</i> × <i>Bystander</i>	-0.1780*** (0.0259)	-0.0522 (0.0531)	-0.0859*** (0.0263)	0.1244*** (0.0274)	0.0985* (0.0587)	0.1156*** (0.0270)
Controls	Y	Y	Y	Y	Y	Y
Weighted	Y	Y	Y	Y	Y	Y
Observations	8,989	8,600	9,721	8,989	8,600	9,721
R-squared	0.1913	0.2707	0.1459	0.2508	0.2153	0.1980

Standard errors in parentheses: *** p<0.01, ** p<0.05, * p<0.1. Control variables include *AGE*, *METRO*, *NORTHWEST*, *MIDWEST*, *SOUTH*, *MALE*, *COLGRAD*, *SOMECOL*, *WHITE*, *BLACK*, *ASIAN*, *CITIZEN*, *UPPERINC*, and *MIDDLEINC*.

Table 7. Regression Results – Heterogeneity by Digital Engagement and Party Identity

VARIABLES	(1)	(2)	(3)	(4)	(5)	(6)
	Aug 2020	<i>CNNnews</i> Nov 2020	Mar 2021	Aug 2020	<i>FOXnews</i> Nov 2020	Mar 2021
<i>Democrat</i>	0.2037*** (0.0118)	0.3980*** (0.0243)	0.1773*** (0.0113)	-0.2071*** (0.0110)	-0.1510*** (0.0266)	-0.1940*** (0.0104)
<i>Republican</i>	-0.2155*** (0.0122)	-0.0620** (0.0245)	-0.2082*** (0.0122)	0.3509*** (0.0120)	0.3074*** (0.0271)	0.3119*** (0.0118)
<i>Digital Savvy</i>	0.0230 (0.0146)	0.0561*** (0.0145)	0.0455*** (0.0143)	-0.0735*** (0.0160)	-0.0255 (0.0171)	-0.0707*** (0.0155)
<i>Digital Dabbler</i>	-0.0016 (0.0154)	0.0183 (0.0150)	0.0337** (0.0150)	-0.0231 (0.0167)	0.0064 (0.0178)	-0.0255 (0.0162)
Controls	Y	Y	Y	Y	Y	Y
Weighted	Y	Y	Y	Y	Y	Y
Observations	8,989	8,600	9,721	8,989	8,600	9,721
R-squared	0.1668	0.2659	0.1344	0.2329	0.2045	0.1865

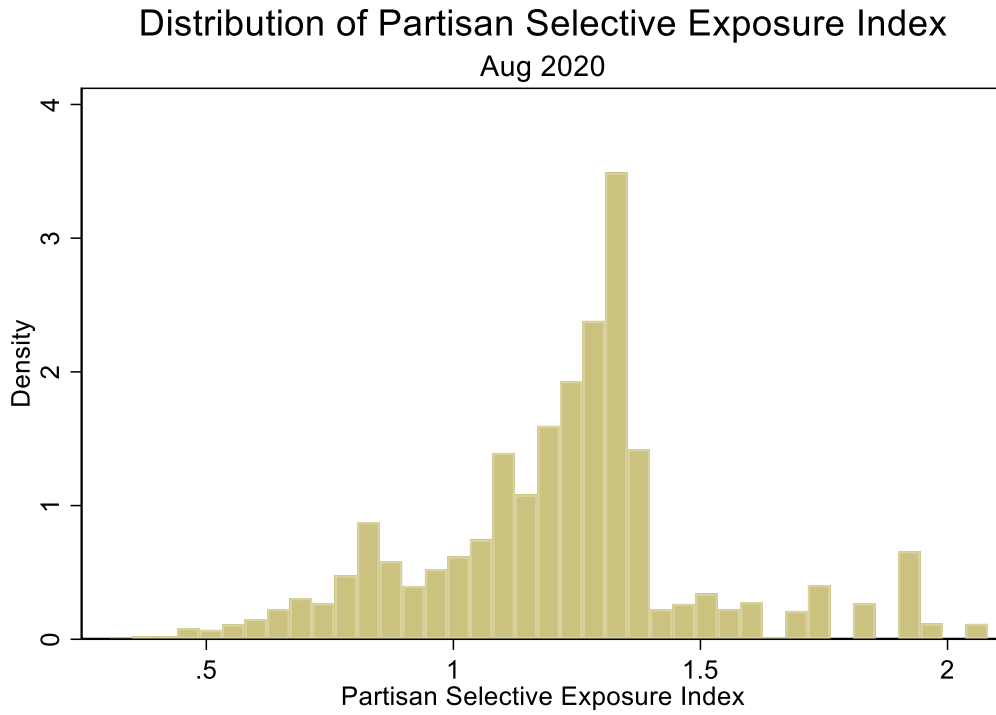
Standard errors in parentheses: *** p<0.01, ** p<0.05, * p<0.1. Control variables include *AGE*, *METRO*, *NORTHWEST*, *MIDWEST*, *SOUTH*, *MALE*, *COLGRAD*, *SOMECOL*, *WHITE*, *BLACK*, *ASIAN*, *CITIZEN*, *UPPERINC*, and *MIDDLEINC*.

Table 8. Regression Results – Heterogeneity by Digital Engagement and Party Identity

VARIABLES	(1)	(2)	(3)	(4)	(5)	(6)
	Aug 2020	<i>CNNnews</i> Nov 2020	Mar 2021	Aug 2020	<i>FOXnews</i> Nov 2020	Mar 2021
<i>Democrat</i>	0.1742*** (0.0295)	0.2805*** (0.0750)	0.0798*** (0.0283)	-0.1713*** (0.0348)	-0.1669* (0.0901)	-0.1676*** (0.0330)
<i>Republican</i>	-0.2004*** (0.0308)	-0.1654** (0.0751)	-0.2547*** (0.0307)	0.3207*** (0.0357)	0.2247** (0.0905)	0.2740*** (0.0349)
<i>Digital Savvy</i>	0.0105 (0.0222)	-0.0817 (0.0778)	-0.0013 (0.0215)	-0.0804*** (0.0270)	-0.0983 (0.0927)	-0.0842*** (0.0244)
<i>Democrat</i> × <i>Digital Savvy</i>	0.0372 (0.0332)	0.1382* (0.0802)	0.1017*** (0.0318)	-0.0207 (0.0374)	0.0439 (0.0954)	-0.0039 (0.0354)
<i>Republican</i> × <i>Digital Savvy</i>	0.0072 (0.0346)	0.1545* (0.0804)	0.0521 (0.0349)	0.0446 (0.0389)	0.1110 (0.0960)	0.0521 (0.0381)
<i>Digital Dabbler</i>	0.0072 (0.0243)	-0.0219 (0.0917)	-0.0272 (0.0231)	0.0011 (0.0288)	0.0379 (0.1047)	-0.0036 (0.0259)
<i>Democrat</i> × <i>Digital Dabbler</i>	0.0286 (0.0361)	0.0778 (0.0941)	0.1401*** (0.0347)	-0.0785** (0.0400)	-0.0724 (0.1074)	-0.0817** (0.0378)
<i>Republican</i> × <i>Digital Dabbler</i>	-0.0570 (0.0369)	0.0086 (0.0941)	0.0605* (0.0366)	0.0126 (0.0413)	0.0154 (0.1080)	0.0234 (0.0403)
Controls	Y	Y	Y	Y	Y	Y
Weighted	Y	Y	Y	Y	Y	Y
Observations	8,989	8,600	9,721	8,989	8,600	9,721
R-squared	0.1676	0.2677	0.1359	0.2337	0.2053	0.1878

Standard errors in parentheses: *** p<0.01, ** p<0.05, * p<0.1. Control variables include *AGE*, *METRO*, *NORTHWEST*, *MIDWEST*, *SOUTH*, *MALE*, *COLGRAD*, *SOMECOL*, *WHITE*, *BLACK*, *ASIAN*, *CITIZEN*, *UPPERINC*, and *MIDDLEINC*.

Figure 3. Distribution of Partisan Selective Exposure Index



Distribution of Partisan Selective Exposure Index by Party Identity
Aug 2020

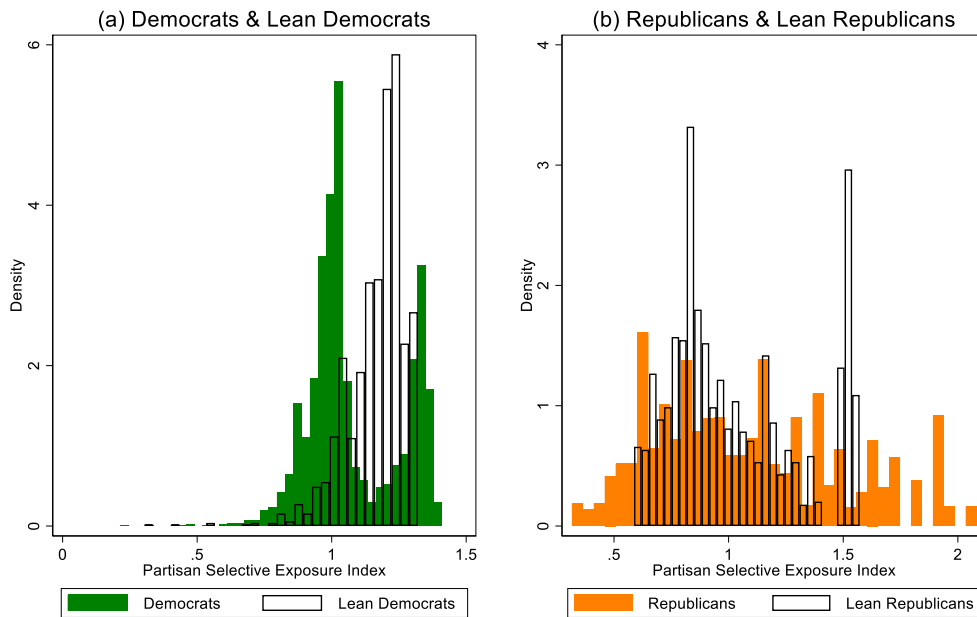


Table 9. Regression Results – Partisan Selective Exposure Index

VARIABLES	(1)	(2)	(3)	(4)	(5)
	<i>Partisan Exposure Index</i>				
<i>Democrat</i>	0.1442*** (0.0073)	0.1553*** (0.0075)	0.1423*** (0.0074)	0.1550*** (0.0075)	0.1421*** (0.0074)
<i>Republican</i>	0.2030*** (0.0076)	0.1766*** (0.0078)	0.1774*** (0.0077)	0.1804*** (0.0079)	0.1767*** (0.0077)
<i>Influencer</i>			0.1618*** (0.0088)		0.1606*** (0.0089)
<i>Bystander</i>			0.0984*** (0.0071)		0.0968*** (0.0071)
<i>Digitally Savvy</i>				0.0394*** (0.0099)	0.0206** (0.0097)
<i>Digitally Dabbler</i>				0.0411*** (0.0098)	0.0294*** (0.0096)
<i>METRO</i>		0.0057 (0.0092)	0.0097 (0.0091)	0.0057 (0.0093)	0.0083 (0.0091)
<i>NORTHWEST</i>		-0.0115 (0.0096)	-0.0105 (0.0094)	-0.0066 (0.0096)	-0.0108 (0.0094)
<i>MIDWEST</i>		0.0008 (0.0093)	0.0046 (0.0091)	0.0022 (0.0093)	0.0053 (0.0091)
<i>SOUTH</i>		0.0090 (0.0082)	0.0077 (0.0081)	0.0083 (0.0082)	0.0081 (0.0081)
<i>MALE</i>		0.0600*** (0.0062)	0.0386*** (0.0062)	0.0598*** (0.0062)	0.0383*** (0.0062)
<i>COLGRAD</i>		0.0297*** (0.0082)	0.0098 (0.0082)	0.0214** (0.0085)	0.0070 (0.0083)
<i>SOMECOL</i>		0.0437*** (0.0077)	0.0267*** (0.0076)	0.0344*** (0.0079)	0.0241*** (0.0078)
<i>WHITE</i>		0.0562*** (0.0089)	0.0462*** (0.0088)	0.0509*** (0.0089)	0.0454*** (0.0088)
<i>BLACK</i>		-0.0167 (0.0121)	-0.0182 (0.0120)	-0.0167 (0.0122)	-0.0163 (0.0120)
<i>ASIAN</i>		0.0101 (0.0153)	0.0216 (0.0150)	0.0094 (0.0153)	0.0238 (0.0150)
<i>CITIZEN</i>		0.0132 (0.0134)	0.0141 (0.0133)	0.0171 (0.0136)	0.0150 (0.0133)
<i>UPPERINC</i>		0.0369*** (0.0097)	0.0204** (0.0095)	0.0302*** (0.0097)	0.0193** (0.0096)
<i>MIDDLEINC</i>		0.0350*** (0.0073)	0.0247*** (0.0072)	0.0295*** (0.0074)	0.0235*** (0.0073)
<i>AGE18_29</i>		-0.0601*** (0.0103)	-0.0322*** (0.0103)	-0.0644*** (0.0109)	-0.0362*** (0.0109)
<i>AGE30_49</i>		-0.1069*** (0.0085)	-0.0873*** (0.0084)	-0.1179*** (0.0089)	-0.0908*** (0.0089)

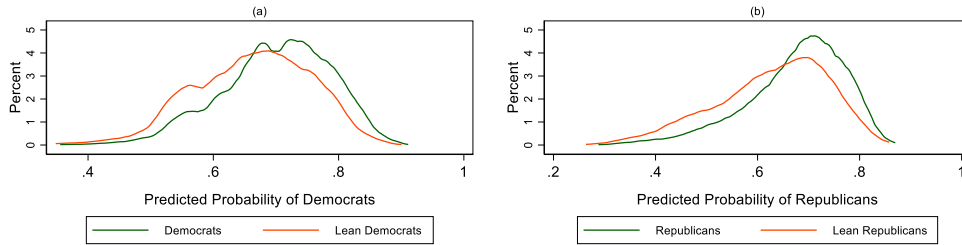
<i>AGE50_64</i>		-0.0568***	-0.0417***	-0.0590***	-0.0434***
		(0.0088)	(0.0086)	(0.0089)	(0.0087)
Constant	1.0799***	0.9676***	0.9597***	0.9962***	0.9461***
	(0.0049)	(0.0214)	(0.0192)	(0.0198)	(0.0197)
Weighted	Y	Y	Y	Y	Y
Observations	8,680	8,570	8,471	8,471	8,471
R-squared	0.0836	0.1351	0.1718	0.1381	0.1727

Figure 4. Distribution of Propensity Score

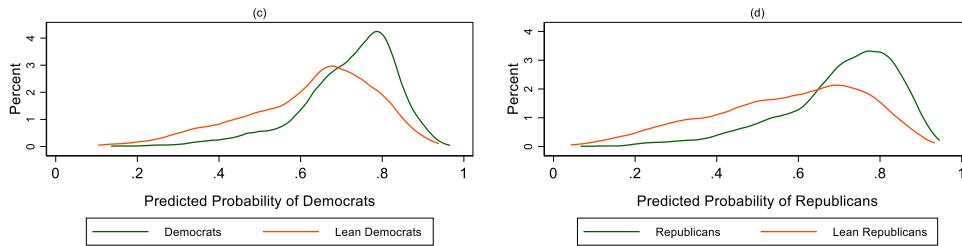
Distribution of Propensity Score

Aug 2020

Demographics



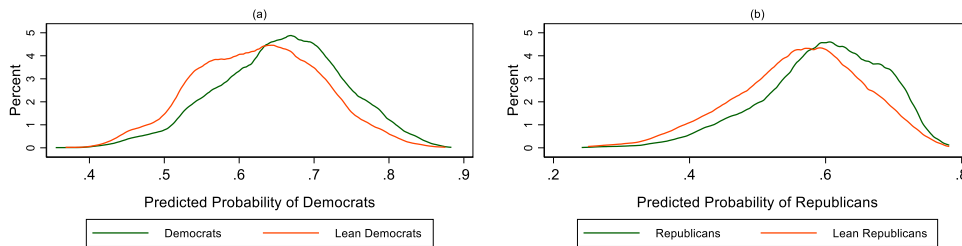
Demographics and Political Preference



Distribution of Propensity Score

Mar 2021

Demographics



Demographics and Political Preference

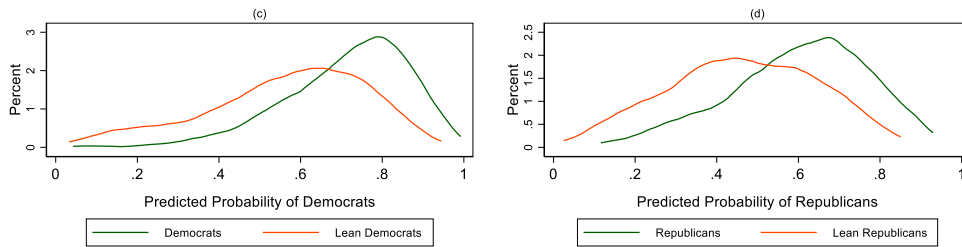
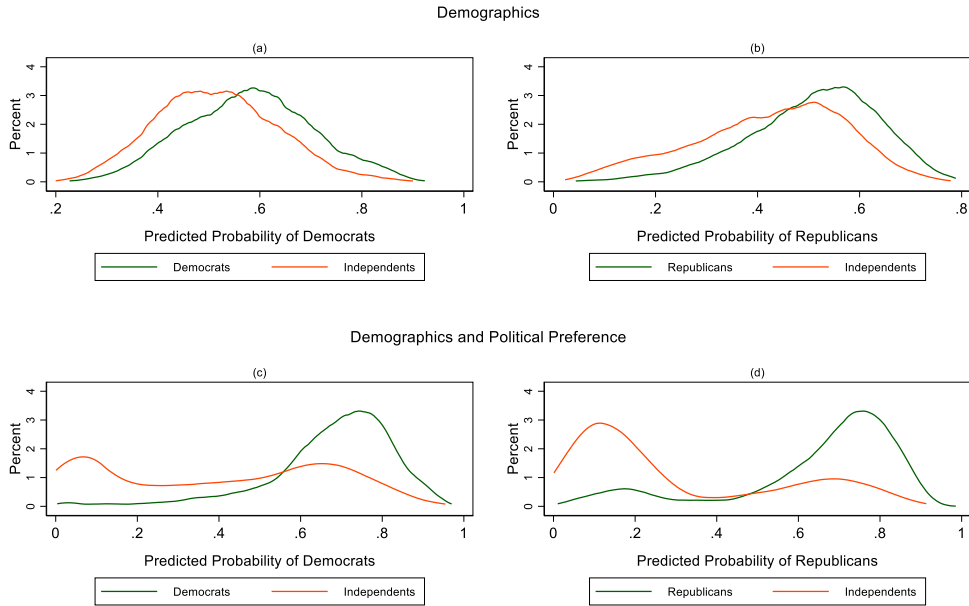


Table 10. ATT Estimates from Propensity Score Matching

Matching variables		Aug 2020		Mar 2021	
		Democrat	Republican	Democrat	Republican
Demographics only	Pseudo R-squared	0.0307	0.0369	0.0243	0.0259
	Radius matching	.0731*** (.0163)	.1092*** (.0191)	.0776*** (.0140)	.0984*** (.0163)
	One-to-many matching	.0701*** (.0153)	.1047*** (.0176)	.0754*** (.0133)	.0997*** (.0155)
Demographics and political preference	Pseudo R-squared	0.0736	0.1035	0.1230	0.1092
	Radius matching	.0534*** (.0181)	.0254 (.0201)	.0726* (.0375)	.0749* (.0453)
	One-to-many matching	.0540*** (.0173)	.0284 (.0199)	.0901** (.0415)	.0683 (.0577)

Figure 5. Distribution of Propensity Score – Alternative Specification with the Independents As Control Group

Distribution of Propensity Score (With Independents)
Aug 2020



Distribution of Propensity Score (With Independents)
Mar 2021

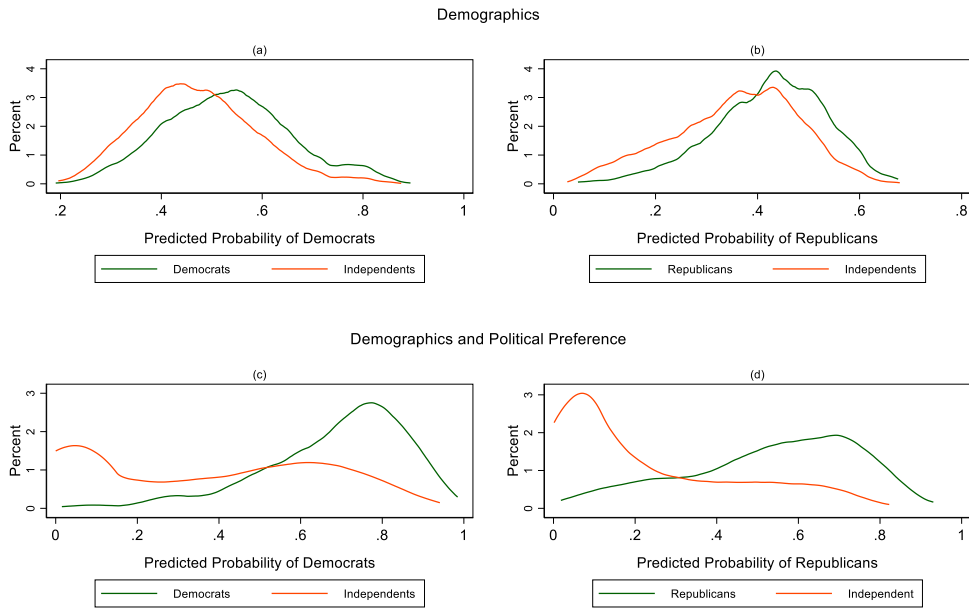


Table 11. ATT Estimates from Propensity Score Matching – Alternative Specification with the Independents As Control Group

Matching variables		Aug 2020		Mar 2021	
		Democrat	Republican	Democrat	Republican
Demographics only	Pseudo R-squared	0.0486	0.0662	0.0464	0.0514
	Radius matching	.1991*** (.0137)	.3203*** (.0155)	.1734*** (.0120)	.2785*** (.0134)
	One-to-many matching	.2103*** (.0127)	.3254*** (.0142)	.1863*** (.0113)	.2831*** (.0129)
Demographics and political preference	Pseudo R-squared	0.2243	0.2830	0.2749	0.2703
	Radius matching	.0699*** (.0171)	.0508*** (.0186)	.0299 (.0343)	.1027** (.0420)
	One-to-many matching	.1169*** (.0193)	.1462*** (.0213)	.1356*** (.0323)	.0667 (.0484)

Figure 6. Distribution of Partisan Selective Exposure Index – Alternative Specification with the Independents As Control Group

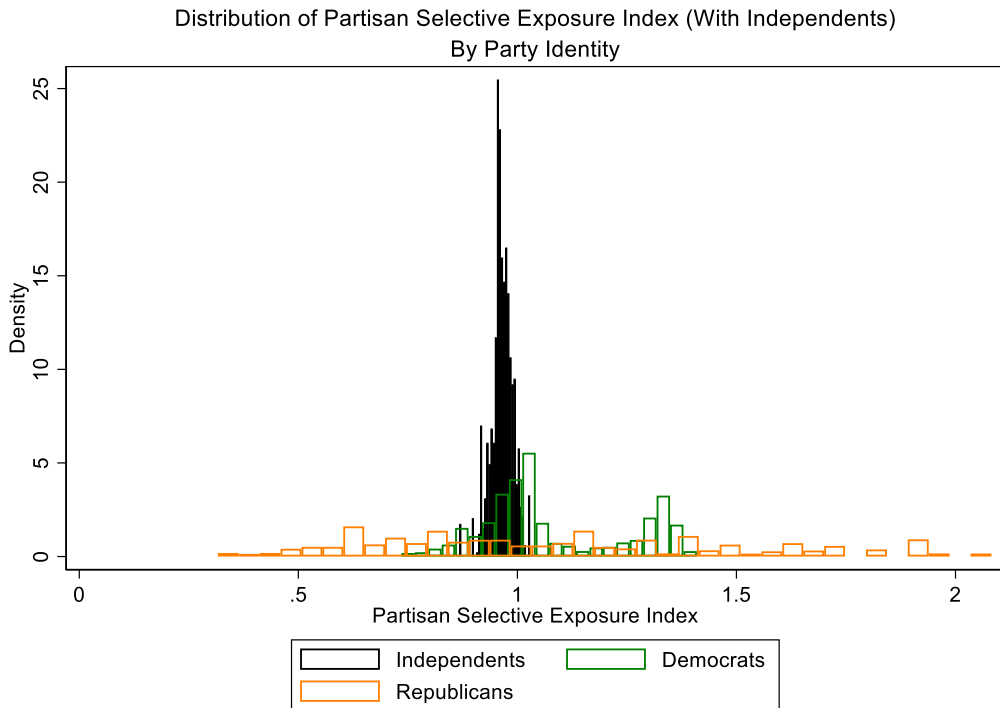
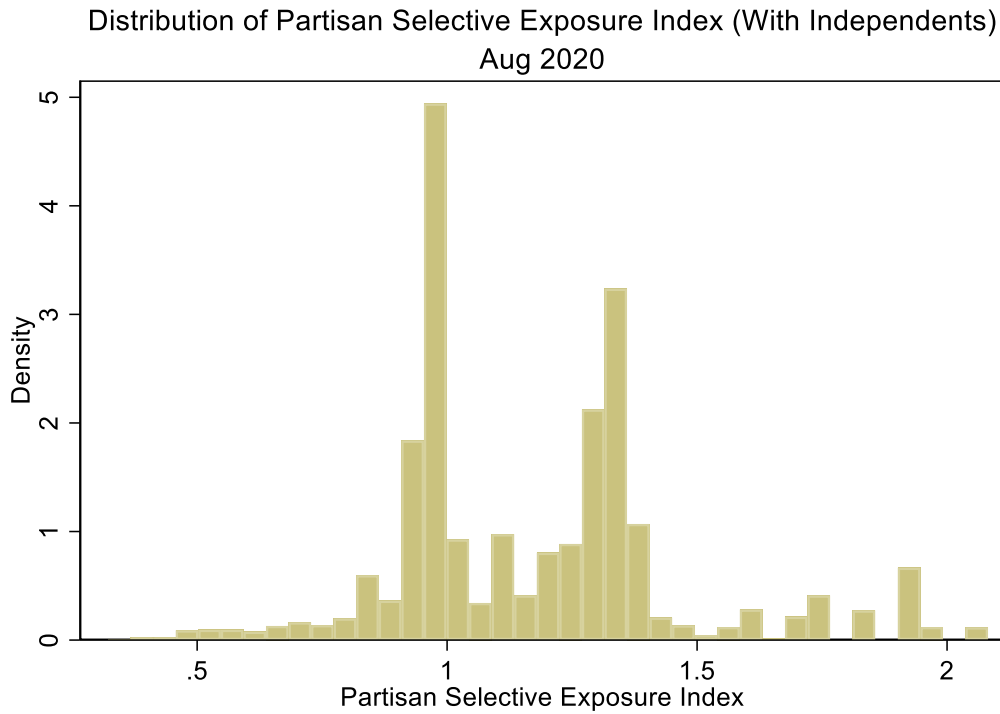


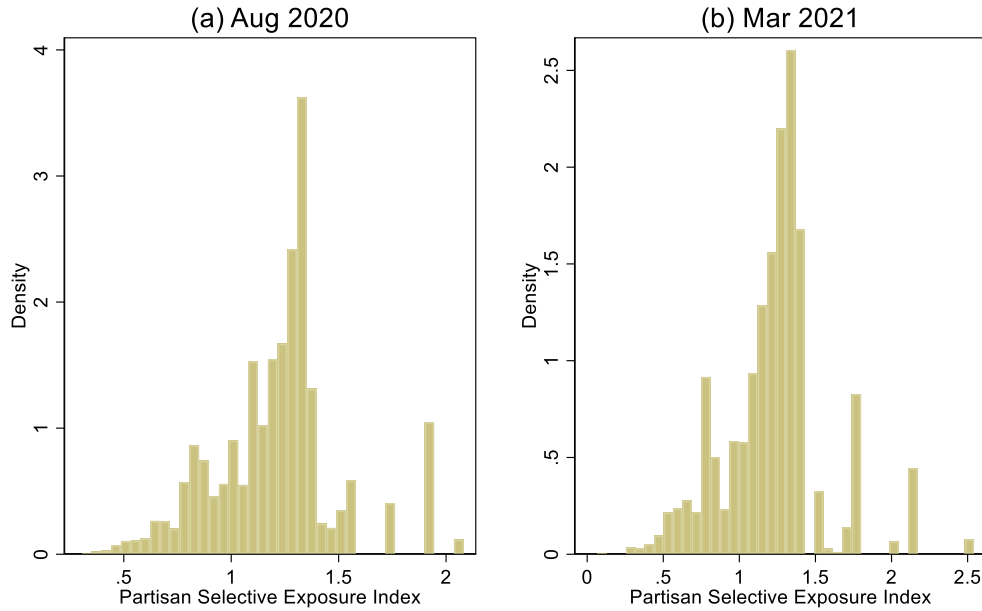
Table 12. Regression Results – Partisan Selective Exposure Index (Alternative Specifications)

	(1) Baseline – Aug 2020	(2) With Independent – Aug 2020	(3) Without Intensity – Aug 2020	(4) Without Intensity – Mar 2021
VARIABLES	<i>Partisan Exposure Index</i>			
<i>Democrat</i>	0.2514*** (0.0084)	0.2638*** (0.0067)	0.1477*** (0.0074)	0.1204*** (0.0086)
<i>Republican</i>	0.2649*** (0.0087)	0.2986*** (0.0069)	0.1623*** (0.0077)	0.1730*** (0.0094)
<i>Influencer</i>	0.1810*** (0.0100)	0.1168*** (0.0080)	0.1537*** (0.0089)	0.1549*** (0.0106)
<i>Bystander</i>	0.1080*** (0.0081)	0.0614*** (0.0064)	0.0920*** (0.0071)	0.0838*** (0.0086)
<i>Digitally Savvy</i>	0.0236** (0.0110)	0.0115 (0.0087)	0.0137 (0.0098)	0.0378*** (0.0115)
<i>Digitally Dabbler</i>	0.0318*** (0.0109)	0.0159* (0.0087)	0.0221** (0.0097)	0.0386*** (0.0114)
<i>METRO</i>	0.0093 (0.0103)	0.0062 (0.0082)	0.0072 (0.0091)	-0.0011 (0.0108)
<i>NORTHWEST</i>	-0.0103 (0.0107)	-0.0229*** (0.0085)	-0.0136 (0.0094)	-0.0192* (0.0113)
<i>MIDWEST</i>	0.0069 (0.0103)	-0.0004 (0.0082)	0.0068 (0.0092)	-0.0340*** (0.0108)
<i>SOUTH</i>	0.0086 (0.0091)	-0.0076 (0.0072)	0.0065 (0.0081)	-0.0195** (0.0096)
<i>MALE</i>	0.0424*** (0.0070)	0.0268*** (0.0056)	0.0384*** (0.0062)	0.0025 (0.0074)
<i>COLGRAD</i>	0.0095 (0.0094)	-0.0209*** (0.0075)	0.0053 (0.0084)	-0.0168* (0.0099)
<i>SOMECOL</i>	0.0275*** (0.0088)	0.0015 (0.0070)	0.0244*** (0.0078)	-0.0114 (0.0093)
<i>WHITE</i>	0.0498*** (0.0099)	0.0221*** (0.0079)	0.0419*** (0.0088)	0.0773*** (0.0109)
<i>BLACK</i>	-0.0142 (0.0136)	-0.0434*** (0.0108)	-0.0184 (0.0120)	0.0052 (0.0143)
<i>ASIAN</i>	0.0277 (0.0170)	0.0011 (0.0135)	0.0204 (0.0151)	0.0359* (0.0184)
<i>CITIZEN</i>	0.0135 (0.0151)	0.0135 (0.0120)	0.0195 (0.0133)	0.0182 (0.0158)
<i>UPPERINC</i>	0.0233** (0.0108)	0.0327*** (0.0086)	0.0212** (0.0096)	0.0408*** (0.0115)
<i>MIDDLEINC</i>	0.0253*** (0.0082)	0.0228*** (0.0065)	0.0269*** (0.0073)	0.0364*** (0.0088)

<i>AGE18_29</i>	-0.0393*** (0.0123)	-0.0425*** (0.0098)	-0.0294*** (0.0109)	-0.0944*** (0.0129)
<i>AGE30_49</i>	-0.1006*** (0.0101)	-0.0695*** (0.0080)	-0.0794*** (0.0089)	-0.0901*** (0.0106)
<i>AGE50_64</i>	-0.0503*** (0.0099)	-0.0436*** (0.0079)	-0.0383*** (0.0088)	-0.0416*** (0.0101)
Constant	0.8905*** (0.0223)	0.9059*** (0.0177)	0.9402*** (0.0197)	0.9945*** (0.0239)
Weighted	Y	Y	Y	Y
Observations	8,471	8,471	8,471	8,748
R-squared	0.2253	0.2922	0.1577	0.1283

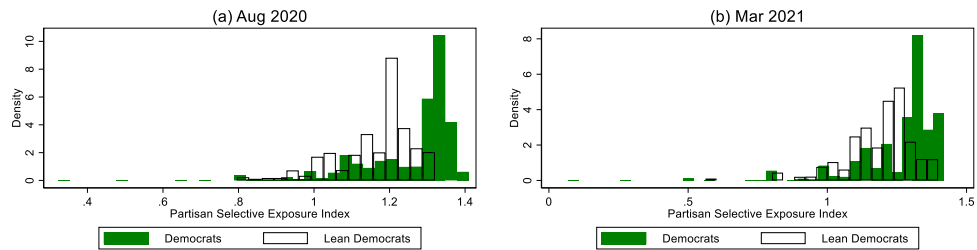
Figure 7. Distribution of Partisan Selective Exposure Index (Alternative Specification Without Intensity)

Distribution of Partisan Selective Exposure Index (Without Intensity)



Distribution of Partisan Selective Exposure Index (Without Intensity)

Democrats and Lean Democrats



Republicans and Lean Republicans

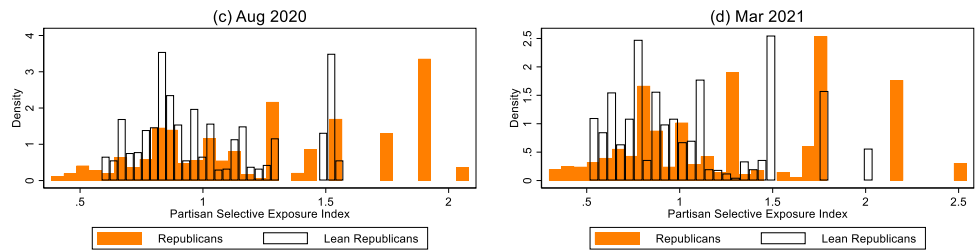


Table 13. Definitions of Variables

Variables	Definitions	Sources
<i>FOLLOW_LOCAL</i> <i>FOLLOW_NATIONAL</i>	=1 if reported following news about the city or town very closely or somewhat closely =1 if reported following news about the country very closely or somewhat closely	Global Attitudes & Trends Spring 2017, Pew Research Center
<i>MEDIA_ACCU</i> <i>MEDIA_COV</i> <i>MEDIA_POL</i> <i>MEDIA_GOV</i>	=1 if reported news organizations in the country are doing very well or somewhat well in (a) Reporting news accurately (b) Reporting on the most important news events (c) Reporting the different positions on political issues fairly (d) Reporting news about government leaders and officials	
<i>BIAS_TOL</i>	=1 if reported “It is sometimes acceptable for a news organization to favor one political party over others when reporting the news” comes closest to his/her view, as compared to “It is never acceptable ...”	
<i>SUPPORT_GOVPARTY</i>	=1 if reported having a very favorable or somewhat favorable opinion of the governing party ³⁹	
<i>VOICE_ACCOUNT</i>	Voice and Accountability: Captures perceptions of the extent to which a country's citizens are able to participate in selecting their government, as well as freedom of expression, freedom of association, and a free media	
<i>POLSTAB_ABSVIO</i>	Political Stability and Absence of Violence/Terrorism: Measures perceptions of the likelihood of political instability and/or politically motivated violence, including terrorism	Worldwide Governance Indicators 2016, The World Bank
<i>GOV_EFF</i>	Government Effectiveness: Captures perceptions of the quality of public services, the quality of the civil service and the degree of its independence from political pressures, the quality of policy formulation and implementation, and the credibility of the government's commitment to such policies	
<i>REG_QUA</i>	Regulatory Quality: Captures perceptions of the ability of the government to formulate and implement sound policies and regulations that permit and promote private sector development	
<i>ROLAW</i>	Rule of Law: Captures perceptions of the extent to which agents have confidence in and abide by the rules of society, and in particular the quality of contract enforcement,	

³⁹ The list of governing party(-ies) in each country is included in [Table A3](#).

	property rights, the police, and the courts, as well as the likelihood of crime and violence	
<i>CORRU_CONTR</i>	Control of Corruption: Captures perceptions of the extent to which public power is exercised for private gain, including both petty and grand forms of corruption, as well as "capture" of the state by elites and private interests	
<i>IDEOLOGY</i>	Chief executive's party's orientation with respect to economic policy. Right: for parties that are defined as conservative, Christian democratic, or right-wing. Left: for parties that are defined as communist, socialist, social democratic, or left-wing. Center: for parties that are defined as centrist or when party position can best be described as centrist. Not described as centrist if competing factions "average out" to a centrist position 0: for all those cases which do not fit into the above-mentioned category or no information. NA: for those cases which there is no executive.	Database of Political Institutions 2017, Inter-American Development Bank
<i>PRESS_FREE</i>	Press Freedom Index: Compares the level of "press freedom" enjoyed by journalists and media in a country and territory, defined by Reporters Without Borders (RWB) as "the ability of journalists as individuals and collectives to select, produce, and disseminate news in the public interest independent of political, economic, legal, and social interference and in the absence of threats to their physical and mental safety"	World Press Freedom Index 2016, Reporters Without Borders
<i>BROADBAND</i>	Fixed broadband subscriptions (per 100 people)	World Development Indicators 2016, The World Bank
<i>TELECOM</i>	Fixed telephone subscriptions (per 100 people)	
<i>LN_GDP</i>	Natural log of GDP (constant 2015 US\$)	
<i>GINI</i>	Gini Index	
<i>P_INTERNET</i>	Individuals using the Internet (% of population)	
<i>P_TRADE</i>	% Trade in GDP	
<i>PDI</i>	Power Distance Index: The extent to which the less powerful members of organizations and institutions (like the family) accept and expect that power is distributed unequally	Hofstede et al. (2010)
<i>IDV</i>	Individualism vs. Collectivism: Degree to which people in a society are integrated into groups	

<i>MAS</i>	Motivation – Aspiration: A preference in society for achievement, heroism, assertiveness, and material rewards for success	
<i>UAI</i>	Uncertainty avoidance: A society's tolerance for ambiguity	
<i>LTO</i>	Long-term orientation vs. short-term orientation: The connection of the past with the current and future actions/challenges	
<i>IND</i>	Indulgences vs. Restraining: The degree of freedom that societal norms give to citizens in fulfilling their human desires	

Figure 8. Media Bias by Region

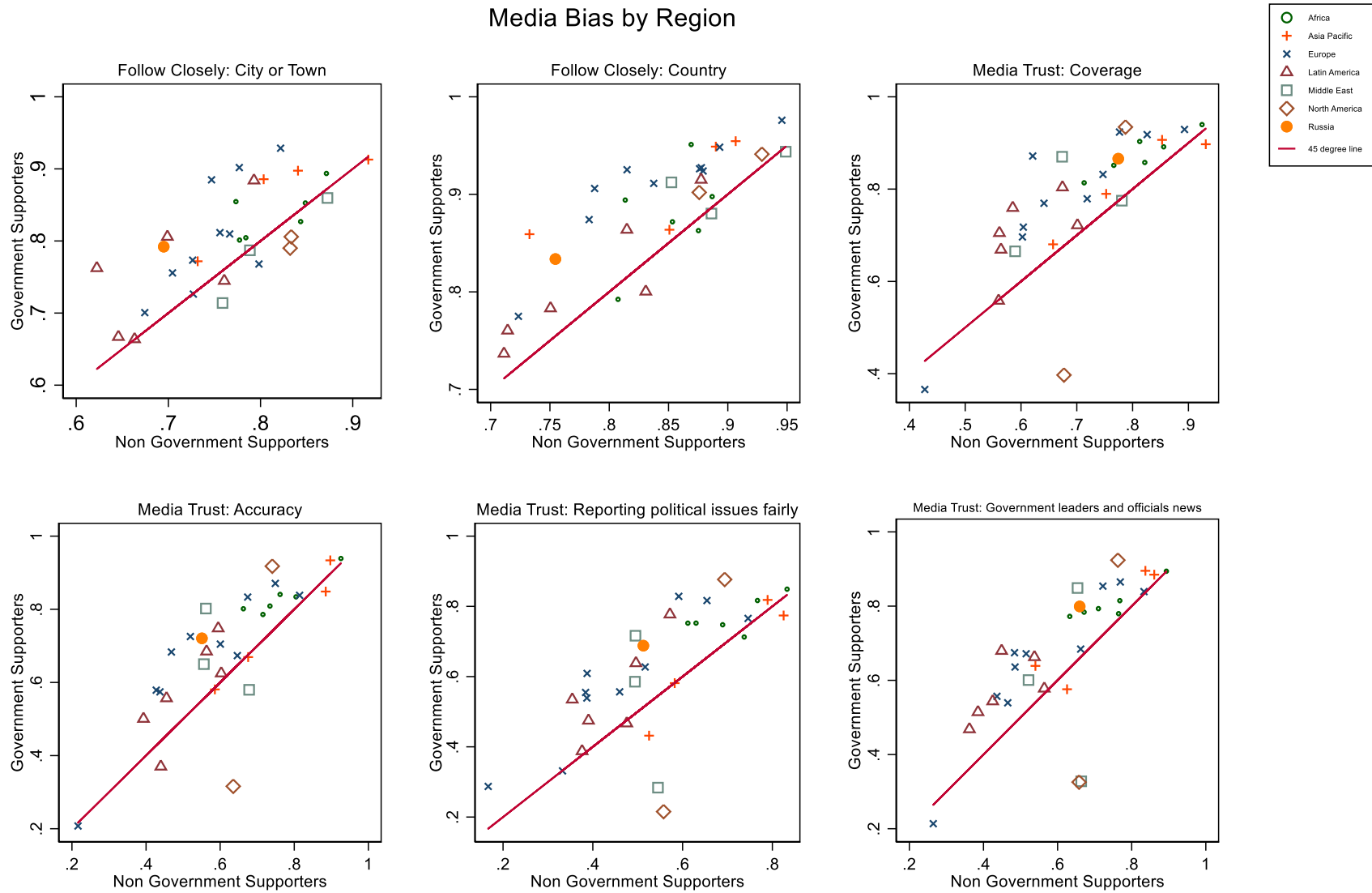


Figure 9. Media Bas by Ideology

Media Bias by Governing Party Ideology

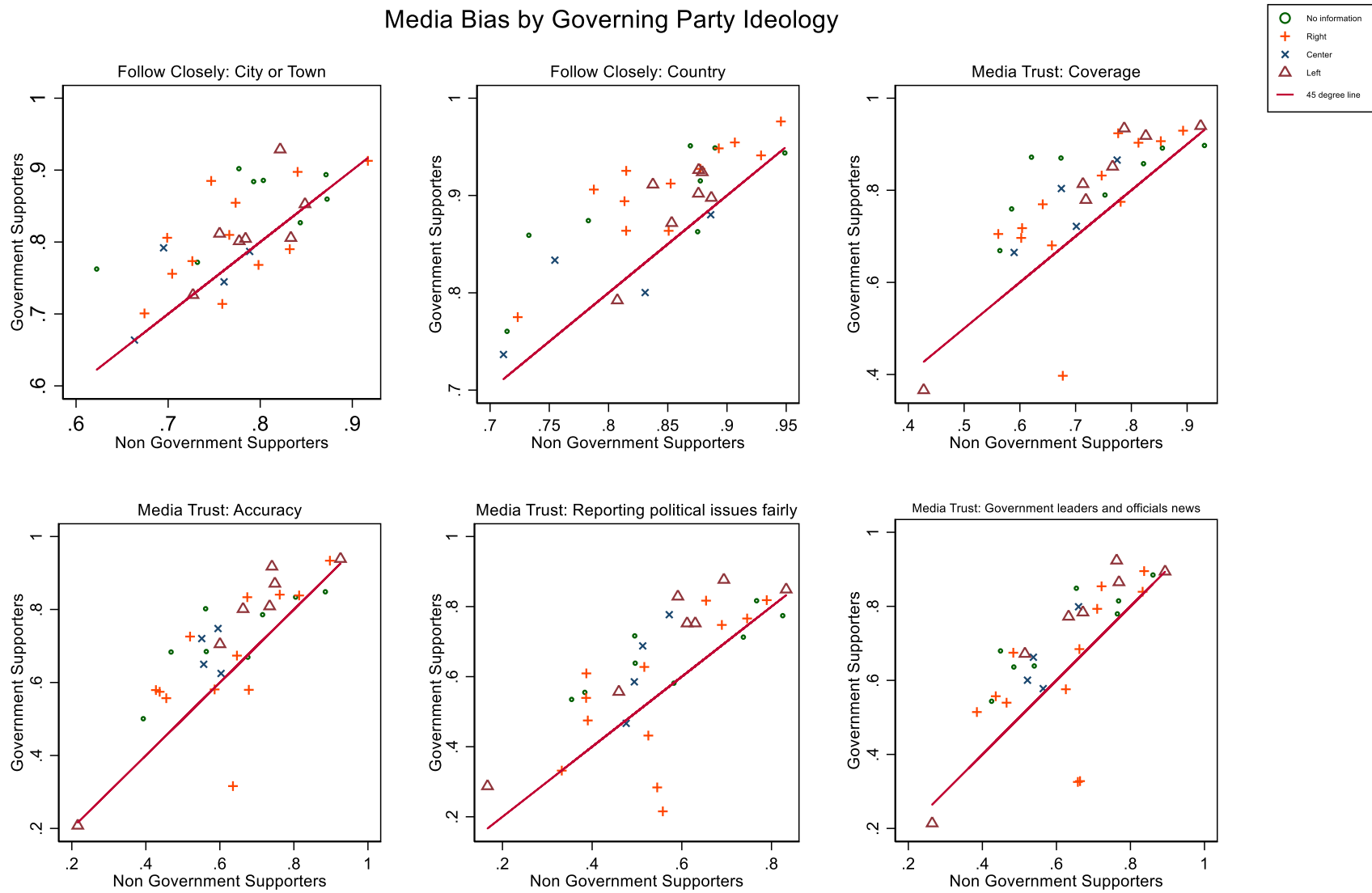


Figure 10. Media Bias by Individualism

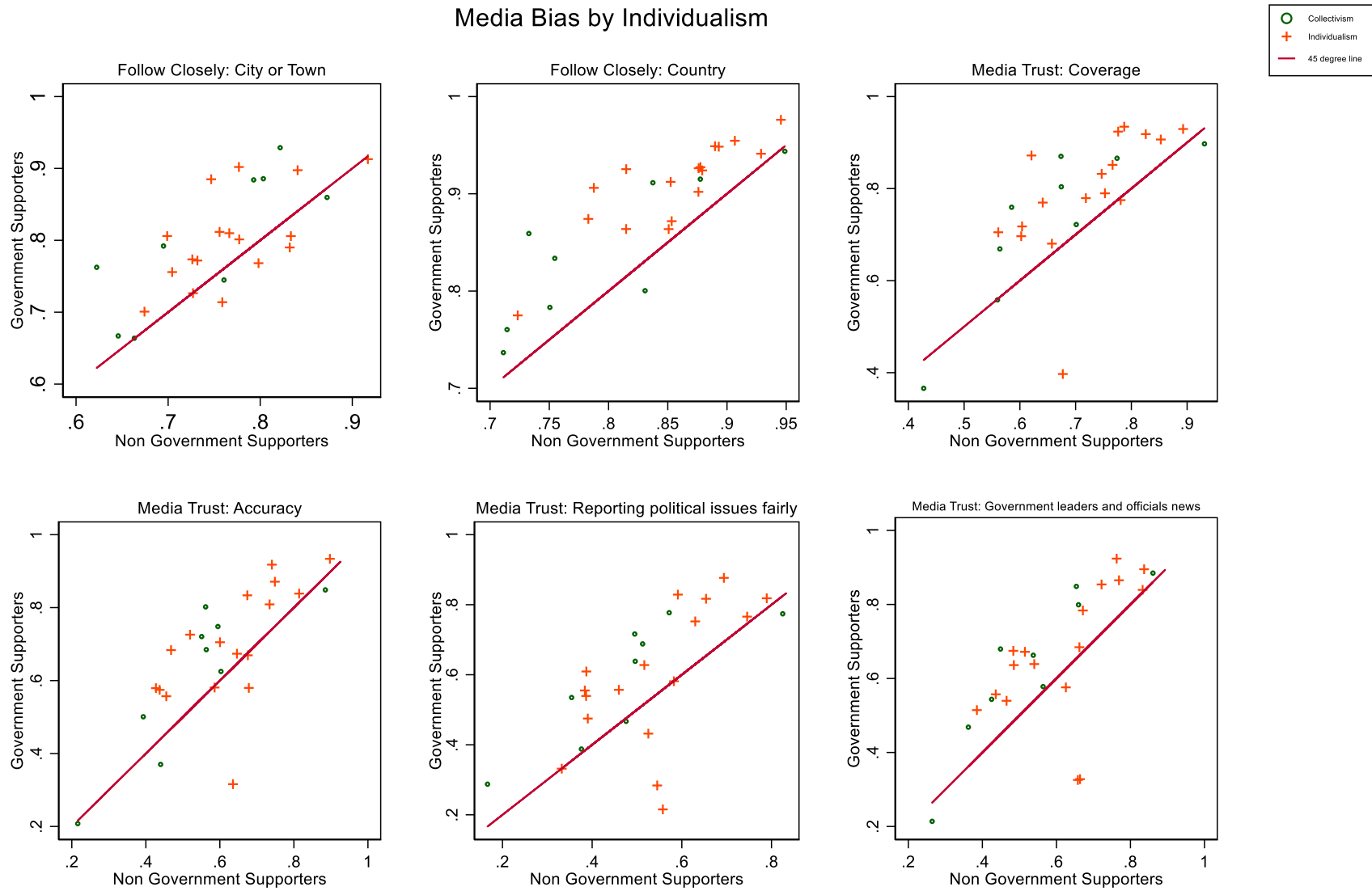


Figure 11. Media Bias by Uncertainty Avoidance

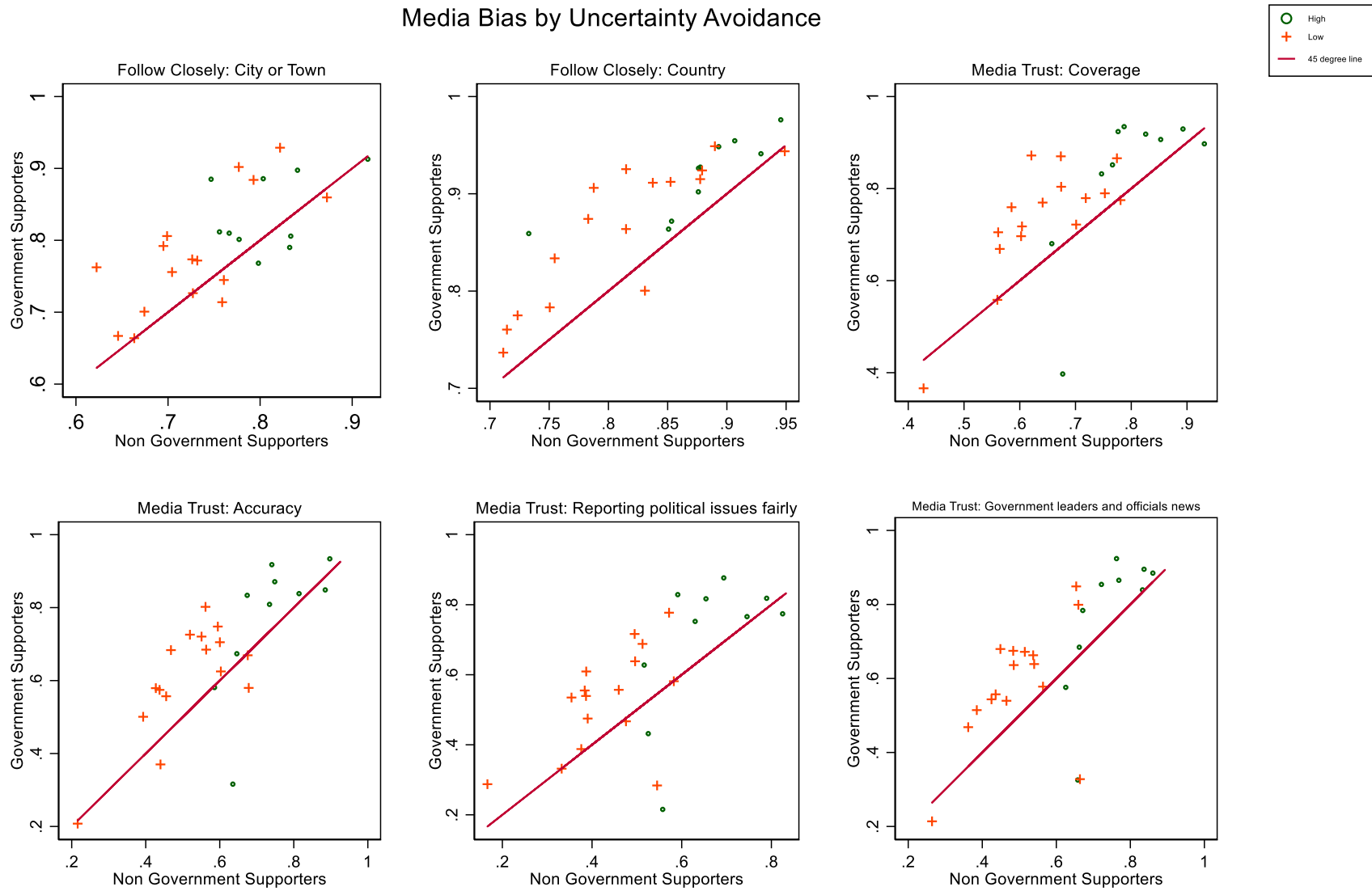


Figure 12. Media Bias by Long-term Orientation

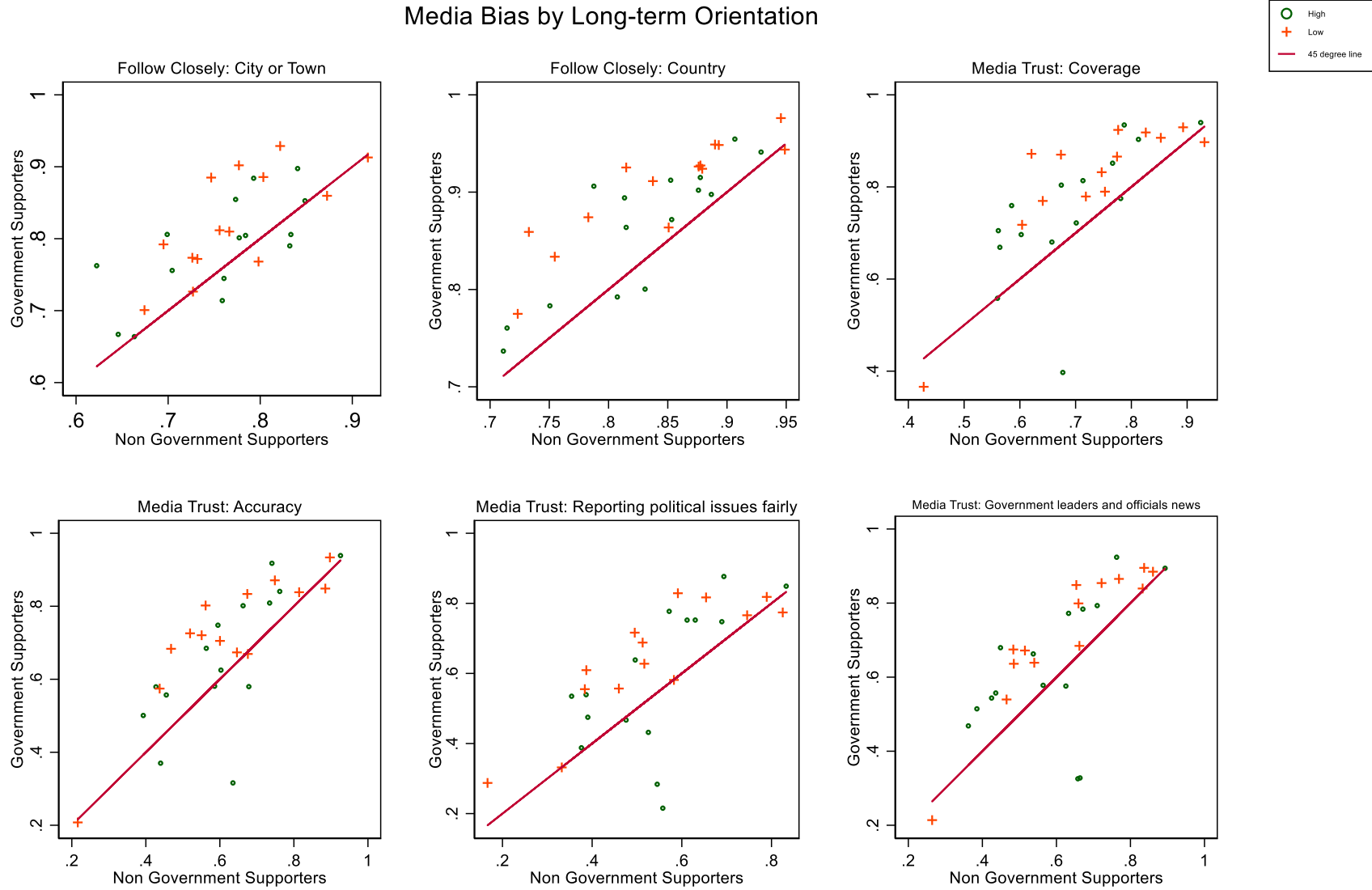


Figure 13. Media Bias by Power Distance

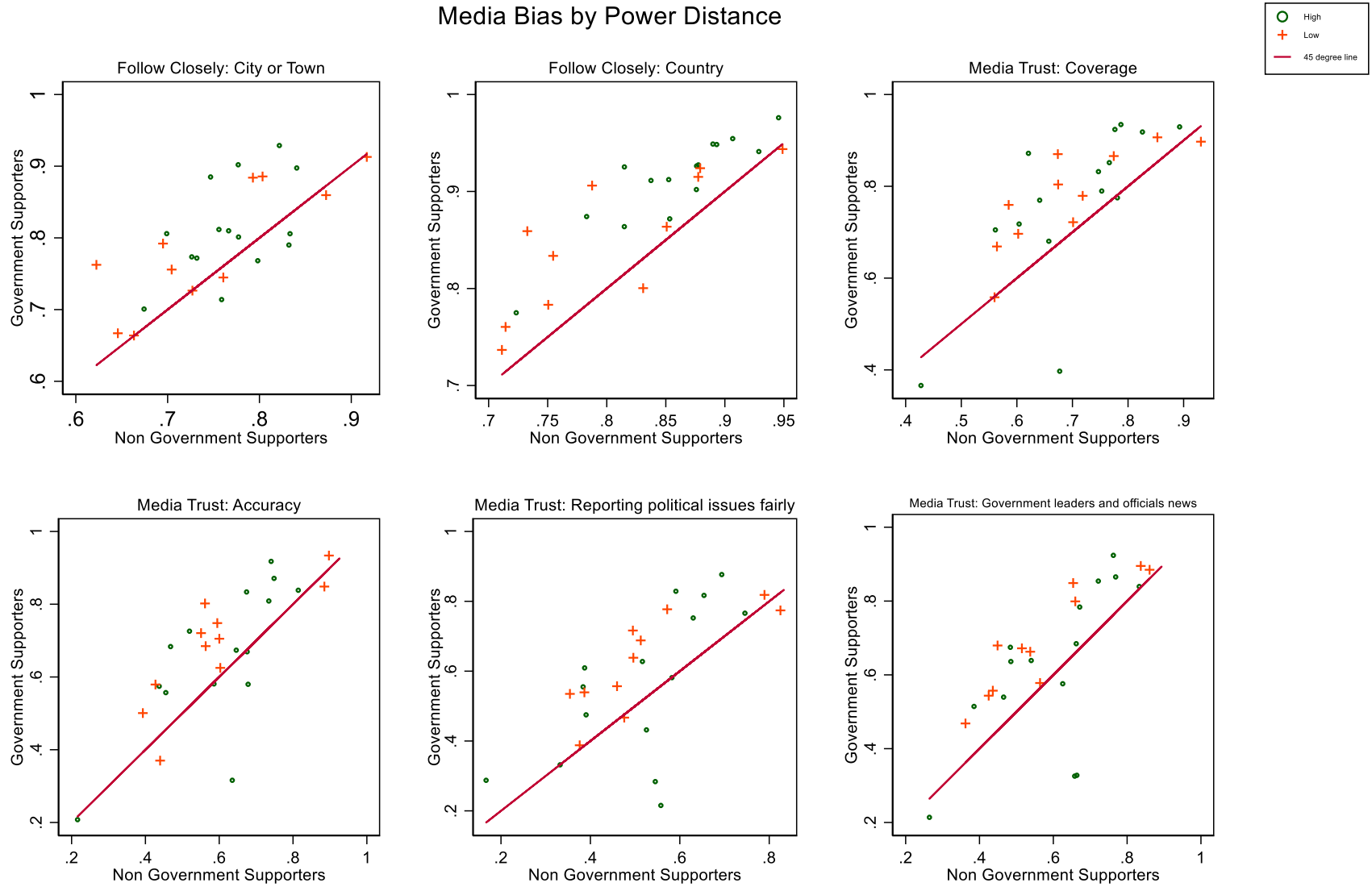


Figure 14. Tolerance on Biased Political News

Tolerance on Political Party Bias

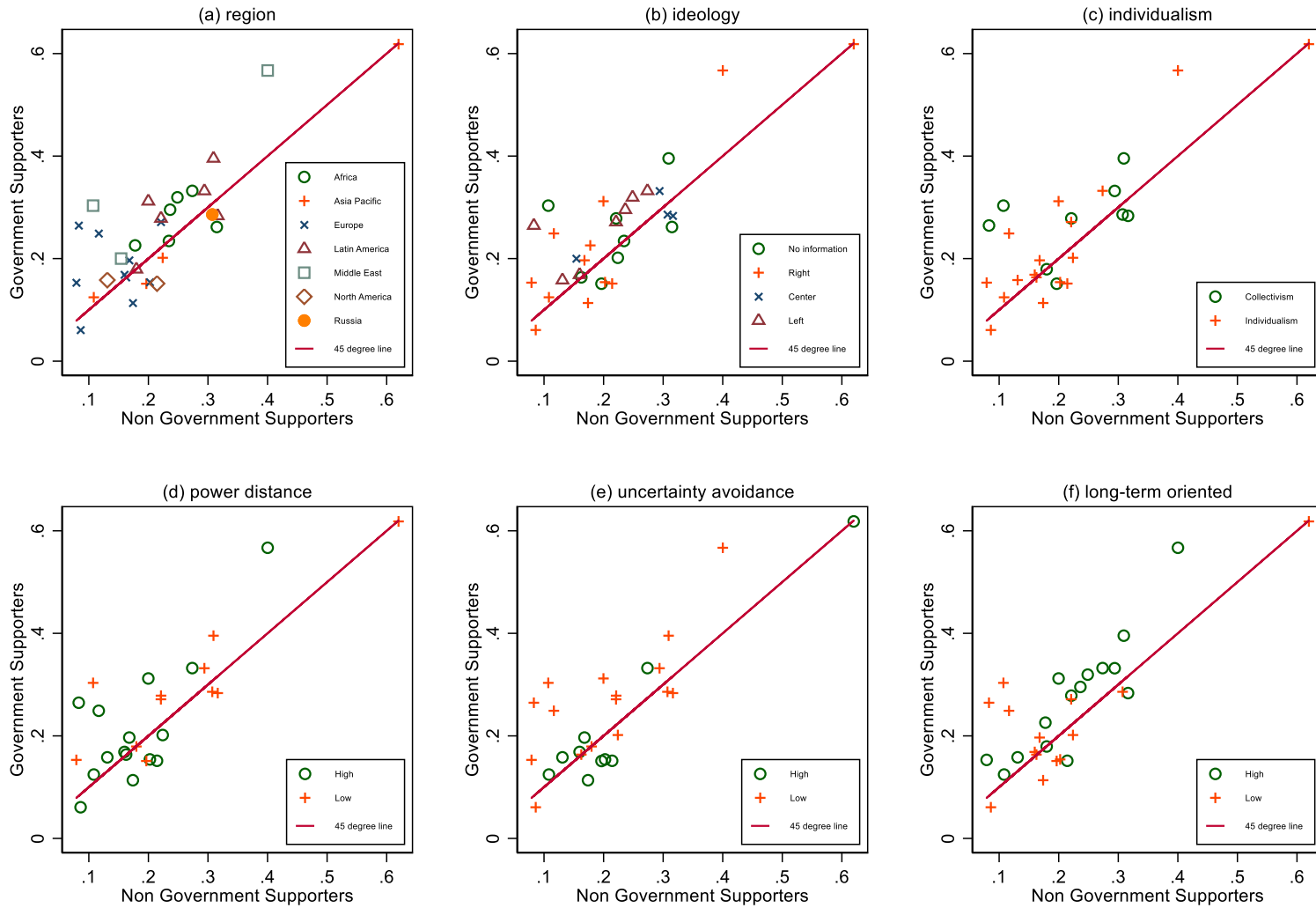


Table 14. Regression Results with Media Bias

VARIABLES	(1) Follow closely		(3)	(4)	(5)	(6)	(7)
	Local news	National news	Coverage	Accuracy	Media Trust Reporting political issues fairly	Government leaders and officials	Tolerance on political party bias
Voice and Accountability	-	+	+	+	+	+	-
Political Stability & Abs. of Violence/Terrorism	[-]	+	+	+	+	+	+
Government Effectiveness	(+)	-	+	+	+	+	-
Regulatory Quality	+	+	-	-	-	-	+
Rule of Law	+	-	-	+	+	-	-
Control of Corruption	[-]	-	+	+	+	+	+
Press Freedom Index	[+]	-	-	-	-	-	-
Fixed Broad Band	[+]	-	+	+	+	+	-
Fixed telecom	[-]	+	-	-	-	-	+
Ln(GDP)	(-)	+	+	+	+	+	+
Gini Index	(-)	-	+	+	-	+	+
Percent Internet	+	+	+	+	+	+	-
% Trade in GDP	[-]	+	+	+	-	+	+
Power Distance	(+)	+	-	-	-	-	-
Individualism	[-]	-	-	-	-	-	-
Motivation - Aspiration	[+]	-	-	-	+	-	-
Uncertainty Avoidance	+	-	+	+	+	+	-
Long Term Orientation	[+]	-	-	+	+	-	-
Indulgences vs. Restraining	(+)	-	-	-	+	-	-
Observations	21	21	21	21	21	21	21
R-squared	0.9996	0.9130	0.9743	0.9465	0.9124	0.9743	0.9714

Statistical significance: { } : p<0.01, [] : p<0.05, () : p<0.1.

Appendices

Table A1.1 Partisan Composition Of Offline News Outlets – Baseline Model

Media Outlet	Democrats	Lean-Democrat	Lean-Republican	Republican
Fox News Cable Channel	19.12%	10.05%	21.29%	47.94%
CNN	53.80%	22.05%	8.79%	13.52%
MSNBC	56.01%	20.74%	8.47%	13.31%
ABC, CBS, or NBC national TV	44.23%	18.83%	12.19%	22.87%
NPR	52.36%	23.54%	9.87%	13.10%
The New York Times	55.38%	23.81%	8.62%	10.63%
Washington Post	55.07%	23.24%	9.21%	11.27%
Talk radio	12.78%	5.48%	22.67%	57.91%
% in sample	39.73%	18.03%	14.43%	27.81%

Table A1.2 Partisan Composition Of Offline News Outlets – Alternative Specification with the Independents As Control Group

Media Outlet	Democrats	Independents	Republican
Fox News Cable Channel	19.12%	31.34%	47.94%
CNN	53.80%	30.84%	13.52%
MSNBC	56.01%	29.21%	13.31%
ABC, CBS, or NBC national TV	44.23%	31.01%	22.87%
NPR	52.36%	33.41%	13.10%
The New York Times	55.38%	32.43%	10.63%
Washington Post	55.07%	32.45%	11.27%
Talk radio	12.78%	28.15%	57.91%
% in sample	39.73%	32.46%	27.81%

Table A1.3 Partisan Composition Of Offline News Outlets – Alternative Specification without Intensity (March 2021)

Media Outlet	Democrats	Lean-Democrat	Lean-Republican	Republican
Fox News Cable Channel	18.56%	12.60%	25.42%	41.70%
CNN	51.02%	25.44%	10.81%	11.07%
MSNBC	54.40%	25.23%	8.78%	10.06%
ABC, CBS, or NBC national TV	43.27%	22.82%	12.91%	19.09%
NPR	53.40%	29.44%	8.84%	6.99%
The New York Times	54.16%	27.95%	9.02%	7.86%
Washington Post	52.44%	27.36%	9.73%	9.35%
Talk radio	2.64%	1.79%	34.72%	59.91%
% in sample	38.34%	21.06%	17.04%	23.56%

Table A2.1 Regression Results – Partisan Selective Exposure Index

VARIABLES	(1) Baseline Model – Aug 2020	(2) With Independents – Aug 2020	(3) Without Intensity – Aug 2020	(4) Without Intensity – Mar 2021
	<i>Partisan Exposure Index</i>			
<i>Democrat</i>	0.1359*** (0.0199)	0.1613*** (0.0176)	0.1393*** (0.0200)	0.0556** (0.0234)
<i>Republican</i>	0.1484*** (0.0207)	0.1811*** (0.0183)	0.1419*** (0.0208)	0.1750*** (0.0252)
<i>Influencer</i>	0.0950*** (0.0138)	-0.0247** (0.0122)	0.0922*** (0.0138)	0.1100*** (0.0168)
<i>Democrat</i> × <i>Influencer</i>	-0.0317 (0.0199)	0.0974*** (0.0176)	-0.0300 (0.0200)	-0.0488** (0.0233)
<i>Republican</i> × <i>Influencer</i>	0.2631*** (0.0208)	0.3882*** (0.0184)	0.2455*** (0.0209)	0.2365*** (0.0258)
<i>Bystander</i>	0.0685*** (0.0107)	-0.0233** (0.0095)	0.0701*** (0.0107)	0.0536*** (0.0128)
<i>Democrat</i> × <i>Bystander</i>	-0.0205 (0.0160)	0.0799*** (0.0142)	-0.0242 (0.0161)	-0.0031 (0.0188)
<i>Republican</i> × <i>Bystander</i>	0.1240*** (0.0164)	0.2202*** (0.0145)	0.1052*** (0.0165)	0.1252*** (0.0204)
<i>Digitally Savvy</i>	0.0424*** (0.0147)	0.0198 (0.0130)	0.0342** (0.0148)	0.0417** (0.0170)
<i>Democrat</i> × <i>Digital Savvy</i>	0.0480** (0.0204)	0.0734*** (0.0181)	0.0496** (0.0205)	0.1153*** (0.0237)
<i>Republican</i> × <i>Digital Savvy</i>	-0.1301*** (0.0213)	-0.1081*** (0.0189)	-0.1277*** (0.0215)	-0.1802*** (0.0261)
<i>Digitally Dabbler</i>	0.0395** (0.0156)	0.0029 (0.0138)	0.0266* (0.0157)	0.0278 (0.0180)
<i>Democrat</i> × <i>Digital Dabbler</i>	0.0084 (0.0221)	0.0469** (0.0195)	0.0159 (0.0222)	0.0613** (0.0256)
<i>Republican</i> × <i>Digital Dabbler</i>	-0.0514** (0.0227)	-0.0161 (0.0201)	-0.0413* (0.0229)	-0.0617** (0.0275)
<i>METRO</i>	0.0090 (0.0089)	0.0057 (0.0079)	0.0083 (0.0090)	0.0056 (0.0107)
<i>NORTHWEST</i>	-0.0076 (0.0093)	-0.0210** (0.0082)	-0.0103 (0.0093)	-0.0193* (0.0111)
<i>MIDWEST</i>	0.0059 (0.0090)	-0.0016 (0.0079)	0.0076 (0.0090)	-0.0332*** (0.0107)
<i>SOUTH</i>	0.0104 (0.0079)	-0.0093 (0.0070)	0.0090 (0.0080)	-0.0180* (0.0095)
<i>MALE</i>	0.0338*** (0.0061)	0.0243*** (0.0054)	0.0341*** (0.0061)	-0.0020 (0.0073)
<i>COLGRAD</i>	0.0094	-0.0181**	0.0074	-0.0114

	(0.0082)	(0.0073)	(0.0083)	(0.0097)
<i>SOMECOL</i>	0.0257***	0.0040	0.0261***	-0.0059
	(0.0076)	(0.0068)	(0.0077)	(0.0092)
<i>WHITE</i>	0.0499***	0.0281***	0.0458***	0.0796***
	(0.0087)	(0.0077)	(0.0087)	(0.0108)
<i>BLACK</i>	-0.0113	-0.0340***	-0.0136	0.0105
	(0.0118)	(0.0105)	(0.0119)	(0.0141)
<i>ASIAN</i>	0.0231	0.0034	0.0193	0.0315*
	(0.0148)	(0.0131)	(0.0149)	(0.0181)
<i>CITIZEN</i>	0.0125	0.0113	0.0167	0.0151
	(0.0131)	(0.0116)	(0.0132)	(0.0155)
<i>UPPERINC</i>	0.0238**	0.0355***	0.0253***	0.0413***
	(0.0094)	(0.0083)	(0.0095)	(0.0114)
<i>MIDDLEINC</i>	0.0276***	0.0267***	0.0305***	0.0388***
	(0.0072)	(0.0063)	(0.0072)	(0.0086)
<i>AGE18_29</i>	-0.0336***	-0.0362***	-0.0278***	-0.0954***
	(0.0107)	(0.0095)	(0.0108)	(0.0127)
<i>AGE30_49</i>	-0.0861***	-0.0642***	-0.0751***	-0.0865***
	(0.0088)	(0.0078)	(0.0088)	(0.0104)
<i>AGE50_64</i>	-0.0397***	-0.0381***	-0.0348***	-0.0375***
	(0.0086)	(0.0076)	(0.0086)	(0.0100)
Constant	0.9468***	0.9575***	0.9403***	1.0068***
	(0.0216)	(0.0191)	(0.0217)	(0.0263)
Weighted	Y	Y	Y	Y
Observations	8,680	8,471	8,471	8,748
R-squared	0.2020	0.3404	0.1845	0.1559

Appendix A3. Political Categorization

Countries	Governing political party(ies)
Argentina	Cambiemos coalition: Republican Proposal, Radical Civic Union, Civic Coalition
Australia	Liberal Party, Liberal-National Party, Country-Liberal Party, National Party
Brazil	PMDB, PSDB, DEM, PP, PR, PRB, PSD, PTB, PSC, PROS
Canada	Liberal Party
Chile	New Majority coalition: Socialist Party, Christian Democratic Party, Party for Democracy, Communist Party, Social Democrat Radical Party, Citizen Left
Colombia	Social Party of National Unity, Radical Change, Liberal Party, Citizen Option
France	Socialist Party
Germany	CDU, CSU, SPD
Ghana	New Patriotic Party
Greece	SYRIZA, Independent Greeks
Hungary	Fidesz, Christian Democratic People's Party
India	National Democratic Alliance: BJP, Shiv Sena, Lok Janshakti, Telegu Desham, Shiromani Akali Dal
Indonesia	PDI-P, PPP, Golkar, PKB, People's Conscience Party, National Democratic Party (Nasdem), PAN
Israel	Likud, Yisrael Beiteinu, Jewish Home, Kulanu, United Torah Judaism, Shas
Italy	Democratic Party, Civic Choice, New Center-Right (now known as Popular Alternative)
Japan	Liberal Democratic Party, Komeito
Kenya	Jubilee Party
Mexico	Institutional Revolutionary Party (PRI), Ecologist Green Party (PVEM)
Netherlands	People's Party for Freedom and Democracy, Labour Party
Nigeria	All Progressives Congress
Poland	Law and Justice (PiS)
Russia	United Russia
Senegal	United in Hope Coalition: Alliance for the Republic
South Africa	African National Congress
Spain	People's Party, Citizens
Sweden	Social Democratic Party, Green Party
Tanzania	Party of the Revolution
Tunisia	Nidaa Tounes, Ennahda Movement, Free Patriotic Union, Afek Tounes
Turkey	Justice and Development Party
UK	Conservative Party
United States	Republican Party
Venezuela	United Socialist Party (PSUV)*

* During fieldwork, the Venezuelan Supreme Court suspended the National Assembly. Those who identified with any party in the Great Patriotic Pole before this happened were coded as supporters of the governing party.

Afterwards, only those who identified with the PSUV were classified as supporters of the governing party.

Note: Lebanon, South Korea, Jordan, Vietnam, Peru and the Philippines were excluded from this analysis due to insufficient respondents identifying as governing party supporters.

Data Source: Pew Research Center (2018)

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