NBER WORKING PAPER SERIES

POPULISM, POLARIZATION AND GREEN INVESTMENT

Anders Anderson
David T. Robinson

Working Paper 32131
http://www.nber.org/papers/w32131

NATIONAL BUREAU OF ECONOMIC RESEARCH
1050 Massachusetts Avenue
Cambridge, MA 02138
February 2024, Revised May 2026

This manuscript supersedes a previous working paper titled “Political Polarization and Green Investment”. We thank Laura Starks, Elise Gourier, Pat Akey, Patrick Bolton and Vesa Pursiainen for helpful suggestions on the current draft. Earlier drafts benefitted from comments from seminar participants at the Stockholm School of Economics, University of Florida, Purdue University, Copenhagen Business School, Aarhus and Aalto University, the ZEW conference on Aging and Sustainable Finance the EFA 2024 conference in Bratislava, the HEC-HKUST Sustainability workshop, the EWFC and the Lapland Household Finance conference for comments. We are grateful to Eline Jacobs and Ajitha Duvvuri for excellent research assistance, the Swedish Premium Pension Agency for providing data and Vinnova, the Nasdaq Nordic Foundation and the Jan Wallander and Tom Hedelius Foundation for research funding. The views expressed herein are those of the authors and do not necessarily reflect the views of the National Bureau of Economic Research.

Populism, Polarization and Green Investment
Anders Anderson and David T. Robinson
NBER Working Paper No. 32131
February 2024, Revised May 2026
JEL No. G40, G51, G53, Q54

ABSTRACT

We use detailed, individual-level, panel data to relate growing political polarization to (i) changing beliefs about the pace of global warming and (ii) the propensity to make climate-friendly investment decisions. Individuals in our study were exogenously exposed to forest fires to varying degrees in the summer of 2018. While exposure increased the perceived pace of climate change on average, the response is attenuated in areas experiencing increases in right-wing populism, especially when local environmental media coverage was stronger. Changing beliefs also predict climate-friendly investment, but this is heavily mediated by the same political dynamics.

Anders Anderson
Stockholm School of Economics
Anders.Anderson@hhs.se

David T. Robinson
Duke University
Fuqua School of Business
and NBER
davidr@duke.edu

> In the East, it could be the coldest New Year's Eve on record. Perhaps we could use a little bit of that good old Global Warming that our Country, but not other countries, was going to pay TRILLIONS OF DOLLARS to protect against. Bundle up!
>
> President Donald J. Trump, 12/28/2017

1 Introduction

President Trump's message, posted on social media as a winter storm was engulfing the East Coast of the United States, illustrates several noteworthy features of right-wing populist discourse on the subject of global warming. The message implicitly questions climate science, portraying it as exaggerated. It also highlights perceived economic injustice created by international agreements, depicting global warming in anti-globalist terms with suggestions that global cooperation comes at the unfair expense of national interests and ordinary citizens. In addition, by conflating weather (freezing temperatures in late December) and climate (long-term trends in weather in a specific region), it illustrates a well-known tendency for extreme weather events to raise the salience of climate change.[1]

As this message illustrates, global warming has become an increasingly politically charged topic throughout much of Europe and North America, fueled by populist discourse on both the right and the left. In this paper, we use exogenous variation in exposure to localized, weather-related catastrophes to identify how local political polarization shapes not only climate change beliefs, but also the retirement savings decisions that stem from these beliefs.

Our empirical strategy is built around a record-setting heat wave in the summer of 2018 that triggered forest fires throughout Sweden, including areas close to major city centers and regions above the Arctic Circle. These fires occurred during the lead up to national elections later that fall, and they pushed the topic of climate change to the forefront of the political discussion. The fires occurred between two waves of a panel survey

[1]This has been shown in a wide range of settings. Recent settings include car purchases, Busse et al (2015); real estate prices, Bernstein, Gustafson, and Lewis (2019) and Baldauf et al (2020); stock prices, Choi, Gao, and Jiang (2020); portfolio holdings, Anderson and Robinson (2019); options pricing, Kruttli, Tran, and Watugala (2021); and analyst earnings forecasts, Addoum, Ng, and Ortiz-Bobea (2023). Borick and Rabe (2017) contains a review of earlier findings.

administered to a nationally representative sample of working-age Swedes, allowing us to measure within-individual changes in beliefs about the pace of global warming before and after the forest fires occurred. Our data allow us to relate these changes to a respondent's geographic proximity to a nearby forest fire, and in turn link these belief revisions to detailed administrative records from the Swedish pension system, which provides complete portfolio holdings and transaction histories for virtually the entire Swedish working-age population.

The paper makes two main contributions. First, we show that the average effect of wildfire exposure on climate beliefs — which we term the climate salience effect — masks substantial cross-sectional heterogeneity associated with the local political environment. While individuals living in fire-affected areas become more convinced on average that global temperatures will rise faster over the next twenty years, this effect is concentrated in areas with socio-demographic characteristics associated with higher social trust. In regions marked by characteristics associated with the rise of right-wing populism, the climate salience effect is largely absent. Contemporaneous shifts in support for populist parties predict the direction of belief revision directly: individuals in areas where right-wing populist parties gained vote share between the 2014 and 2018 elections tend to revise their climate-change beliefs downward, while those in areas with growing left-wing populist support revise upward. Local media coverage of climate change plays an important amplifying role in this process.

A natural explanation for this result is that areas experiencing increases in right-wing populism face more pressing local concerns—such as crime or unemployment—and are thus less attuned to more distant concerns such as climate change. To identify the mechanisms linking political attitudes to beliefs and trading behavior, we focus on prosocial financial orientations, which capture value-based preferences over financial trade-offs and have been shown to play a central role in explaining preferences for socially responsible investments (Riedl and Smeets (2017), Anderson and Robinson (2022)). We have two measures of pro-social attitudes: one narrowly connected to environmental views (preferring a clean environment to financial returns), and one that reflects broader patterns in left- versus right-wing discourse towards immigration and economic redistribution. These attitudes were measured in the first survey, before the forest fires, and therefore

cannot be attributed to weather shocks. The climate salience effect is stronger among respondents who display these prosocial attitudes.

Second, we show that the same political geography that governs belief updating also mediates the translation of beliefs into portfolio choices. On average, individuals who grow more concerned about climate change following the fires are more likely to hold fossil fuel exclusion funds in their retirement accounts, while there is no symmetric effect for those who become less concerned. These portfolio shifts arise through both active rebalancing decisions and passive fund reclassifications, and persist in the data several years after the belief shock occurred. Again, this average effect conceals substantial heterogeneity: the positive relationship between upward belief revision and green investment is concentrated in areas with low right-wing or high left-wing populist support and is absent elsewhere. In areas with strong right-wing populist support, individuals who revise their beliefs downward actively divest from fossil fuel exclusion funds. The effect of belief revisions on trading activity varies according to pro-social attitudes, and the effects are also more pronounced among respondents who regularly check their retirement balances. Importantly, the effect of belief revision on trading activity only appears in areas where respondents were exposed to fire shocks. Thus, the evidence shows that weather shocks amplify prior beliefs informed by politically aligned prosocial attitudes, which in turn affect rebalancing decisions among financially sophisticated respondents.

Taken together, the two parts of the paper illustrate how political polarization shapes not only the formation of beliefs about climate change, but also the real economic decisions that follow from them. The magnitudes of these decisions are economically meaningful. For example, among individuals in our sample who actively rebalance their portfolios, the average allocation to green funds is 22%. This jumps to around 27% for those who revise climate beliefs upward. But this average increase masks substantial heterogeneity. Among those affected by fire shocks, upward climate belief revisions move the average allocation from 22% to 35%, ten times larger than the effect associated with those living outside forest-fire areas.

Our paper connects to several distinct literatures. The first part of our analysis relates to a large body of experimental evidence documenting asymmetric updating, in which individuals overweight information that aligns with prior beliefs and underweight infor-

mation that contradicts them. Such selective interpretation contributes to the growing polarization of opinions observed in modern societies. Asymmetric updating is especially consequential in the context of climate change, where there is substantial scope for encountering politically charged and conflicting information. Sunnstein et al. (2017) show that respondents initially skeptical of anthropogenic climate change attach more weight to unexpected good news and dismiss unexpected bad news, while those already convinced of climate change do the reverse. Our analysis of within-individual changes in expectations in response to a common weather shock sheds new light on the dynamics of belief dispersion about climate change .

The second part of our paper connects to a broader literature on politics and investment decisions. Earlier work by Hong and Kostovetsky (2012) and Bauer, Ruof, and Smeets (2021) links partisanship and social preferences to portfolio holdings. Meeuwis et al. (2022) and Mian, Sufi, and Khoshkhou (2023) use unexpected changes in political leadership to exploit changes in economic expectations and decisions. Pan et al. (2023) link growing political dispersion at the county level to the securities holdings of wealthy individuals. Unlike these studies, our design allows us to measure individual-level climate belief changes as a function of the local political landscape and connect them directly to individual financial choices by exploiting within-individual survey variation rather than inferred partisanship. While it is widely recognized that political polarization leads to divergent opinions on climate-related issues, our study provides direct evidence linking changes in individual beliefs about global warming to individual financial behavior.

The balance of the paper proceeds as follows. Section 2 provides institutional background on political polarization in Sweden and its connection to weather events in the summer of 2018. This sets the backdrop for our empirical analysis. Section 3 describes our survey and connects it to pension data. In Section 4, we show how temperature revisions vary with characteristics and wildfire exposure. Section 5 relates these temperature revisions to rebalances and portfolio holdings. Section 6 concludes.

2 Politics, Polarization, and Climate Change in Sweden

2.1 Political Polarization in Sweden

Sweden is a constitutional monarchy that operates under a proportional representation system; historically, this has encouraged the formation of centrist coalition governments. While traditional parties such as the Social Democrats (center-left) and Moderate Party (center-right) have dominated governance for decades, the last two decades have seen increasing fragmentation, particularly with the emergence of populist movements on both sides of the political spectrum.[2] One key advantage of studying a setting with multiparty representation is that it allows us to more cleanly trace out the rise in populism by tracking the messaging and popularity of specific parties.

Mudde (2004) defines populism as: *an ideology that considers society to be ultimately separated into two homogeneous and antagonistic groups, 'the pure people' versus 'the corrupt elite', and which argues that politics should be an expression of the volonté générale (general will) of the people.* Funke, Schularick, and Trebesch (2023) further argues that left-wing populists exploit this people-vs-elites dynamic along primarily economic lines, while right-wing populists speak of this struggle more in cultural and social terms. Climate change is a central element of both right-wing and left-wing populist narratives. Left-wing populists point to environmental degradation as yet further evidence of how rich exploit the poor, while right-wing populists often portray climate policies as reflecting the priorities of international elites rather than local economic interests.

The most notable force in Sweden's recent political shift has been the rise of the Sweden Democrats (Sverigedemokraterna), which has gained electoral support across much of the country, with particularly strong growth in rural areas. While the party's early platform emphasized immigration and crime, it has increasingly adopted positions that are more skeptical of ambitious climate policies, often emphasizing their economic and distributional consequences of such policies for households.

On the opposite end of the political spectrum, the Left Party (Vänsterpartiet) and Green Party (Miljöpartiet) have advocated more ambitious climate policies. These parties typically frame climate change as linked to economic structures and emphasize policy

[2] In Appendix B we provide an overview of voting outcomes in Swedish parliamentary elections from 1960 until 2022.

tools such as regulation, corporate accountability, redistribution, and state intervention to address environmental challenges.

Insert Figure 1 here

To illustrate where these parties sit on the policy spectrum, we classify the eight main Swedish parties using a measure of populism—"people versus elite"—from the 2019 Chapel Hill Expert Survey, which provides rankings of party positions on ideology and policy issues (see Jolly et al. (2022)).

Figure 1 plots party positions along two dimensions: a populism axis (capturing "people versus elite" rhetoric) and, separately, ideological orientation—either along the traditional left–right policy spectrum or environmental sustainability. The vertical and horizontal lines indicate the vote-weighted averages in the 2018 election.

Three parties stand out as scoring highly on the populism dimension: the Sweden Democrats, the Left Party, and the Green Party. Importantly, while all three exhibit strong populist characteristics, they occupy opposite ends of the ideological spectrum—the Sweden Democrats on the right, and the Left and Green parties on the left. We obtain qualitatively similar classifications when using environmental sustainability instead of the general left–right policy dimension, indicating that our identification of populist parties is robust to the choice of ideological axis.

The rise of left- and right-wing populism in Sweden is part of a broader pattern across Europe in which extreme parties have taken more parliamentary seats. Figure B.2 in Appendix B presents a version of Figure 1 including parties from Germany, Spain, Italy and the UK that ranks high on the populism scale. Sweden Democrats ranks close to Lega Nord in Italy, AfD in Germany and Rassemblement National in France. The Swedish Green party compares to the Grünen in Germany, the EHB in Spain and Green Party of England, and the Swedish Left Party to EELV in France, and Podemos in Spain, for instance. In virtually all cases, sorting on populism scores creates a sharp divide between both environmental issues and left and right policies. If anything, the political and ideological divide we aim to measure in Sweden is less extreme than that in many other European countries.

To measure changing left- and right-wing populism, we use regional changes in voting outcomes between 2014 and 2018 for the three parties discussed above: Sweden

Democrats on the right, the Left and the Green Party on the left. This approach provides separate measures of political movement to the right or left, as well as a general shift away from the centrist parties across Sweden's 290 municipalities.

Insert Figure 2 here

Figure 2 presents a scatter plot that depicts the movement away from the center. In general, right-wing parties, and in particular the Sweden Democrats, gained ground across the board. This shift is visible along the horizontal axis of Figure 2. All municipalities recorded an increase in support for the Sweden Democrats. About one-quarter of municipalities also showed increased support for the left. These observations are represented above zero on the vertical axis of Figure 2. In our analysis that follows, we will utilize the interaction of these movements in order to capture a greater political divide (also known as "centrifugal movement") as opposed to general shifts to the right or left.

2.2 The Heat Wave and Forest Fires in 2018

The summer of 2018 brought a record-setting heat wave to Sweden, with temperatures running 3-5 degrees Centigrade above normal and Stockholm recording its highest average monthly temperature in 262 years of systematic measurement. The heat wave coincided with numerous forest fires in July and August that not only affected rural areas, but also many municipalities close to the main cities. This is especially noteworthy given that 15% of the land mass of Sweden sits above the Arctic circle.[3]

We make use of two complementary data sources to measure exposure to wildfires. Our primary source comes from the Swedish Civil Contingencies Agency (SCCA), which compiles reports from local emergency services. These data provide municipality-level aggregates for all natural fires, including those occurring outside forestry areas. The SCCA series is comprehensive in scope and consistently collected, but does not contain precise fire locations. Figure 3 presents a map of Sweden that indicates the municipalities.

Our second source is produced by the Swedish Forest Agency, which since 2018 maps areas destroyed by forest fires using satellite imagery and aerial photography. These data

[3]The Guardian reports about some of these events in July 18, 2018: "Wildfires rage in Artic Circle as Sweden calls for help", `https://www.theguardian.com/world/2018/jul/18/sweden-calls-for-help-as-arctic-circle-hit-by-wildfires`.

include only fires that occur on classified forest land and exclude burned areas less than 0.5 hectares. We also obtain approximate coordinates for our respondents. Statistics Sweden deliver location in coordinates using squares of 250 meters for urban dwellers and 1,000 meter squares for rural addresses. This is done to mask the identity of respondents.

The map data enable us to calculate proximity to wildfire perimeters and identify localized exposure, but by construction do not capture all fires, nor do they directly measure intensity. The overlap between the two sources is therefore incomplete.[4] Figure 3 plots fire areas in red and black circles indicating the location of respondents.

Insert Figure 3 here

We define wildfire intensity using the SCCA data as the area destroyed by fire divided by total municipal land area in 2018. Like many catastrophic variables, this measure is highly right-skewed: a small number of municipalities experienced very large fires, while most saw little or no damage. To reduce the influence of extreme values and facilitate interpretation, we take the logarithm of one plus the destroyed-area fraction, measured in basis points. This transformation yields a more tractable distribution but retains the underlying skewness that motivates the use of non-linear and threshold-based specifications in the empirical analysis.

Insert Figure 4 here

Figure 4 displays the distribution of the log fire-area measure together with a binscatter of the number of survey observations within each bin. The figure highlights the pronounced skewness of wildfire exposure across municipalities. Only 11 municipalities fall into the top 10 bins, containing just 54 survey responses. The combination of highly skewed wildfire exposure and limited survey representation in the most severely affected areas poses an empirical challenge addressed in Section 4.

2.3 Climate Change in the Public Debate

The year 2018 marked a turning point in Sweden, as in other countries, in which awareness of and concern about climate change moved to the top of the political agenda. To

[4]This is primarily due to definitional differences—but may also reflect variation in reporting practices. A detailed comparison provided by SCCA is available from the authors.

capture local variation in news sentiment, we construct a text-based measure of climate salience, defined as the share of news articles mentioning "global warming" relative to all published articles, following approaches used in the literature on media coverage of climate change (Boykoff et al. (2023)) and media attention more broadly (Gentzkow and Shapiro (2010)). More broadly, this relates to recent work showing that narratives and personal experiences jointly shape climate beliefs (e.g., Djourelova et al. (2024)).

We collect data from 113 local newspapers covering 276 of Sweden's 290 municipalities using the web tool provided by the Swedish Royal Library.[5] We search for articles mentioning the term "global warming" over the 17-month period between the two survey waves, which includes the wildfire shock.

Insert Figure 5 here

Figure 5 presents a time series plot the number of local news paper articles mentioning the key word "global warming" over time and shows how climate change quickly grew to become an important topic on the political agenda. The highlighted area shows that there is a spike in interest in climate news during the peak of the heat wave in the summer of 2018. The heat wave was followed by an intensified discussion about climate change which peaked in September.[6]

To construct a measure of local media attention, we compute the share of articles mentioning "global warming" relative to the total number of articles published in the same newspapers (reported as "Fraction GW" in Figure 5). In the 17 months preceding the heat wave, approximately 11% of articles contain this term. This share increases to 20% in the period following the heat wave, corresponding to a 96% increase in the relative frequency of coverage. A doubling of climate-related news is consistent with the data from the Climate Change Observatory (Boykoff et al (2023)). We include a comparison with this data in Appendix D and show that the time series correlation is 85%. In what follows, our measure for local news intensity is ΔNews, defined as the relative increase in average word count in local news mentioning "global warming" between the two surveys.

[5] A detailed description of this data is provided in Appendix D.

[6] Indeed, one of the most established political polls (Demoskop) finds that "Climate change" replaced "Immigration" as the most important topic for Swedish voters at this time.

2.4 *Polarization, Populism and the Role of Media at the Macro Level*

Before turning to individual-level survey data, we merge and analyze the data on populist voting outcomes, fire shocks and news reports on global warming at the municipality level. This allows us to better understand how regional voting outcomes varies in the geographical cross-section.

We add to this analysis open-source data from Statistics Sweden on unemployment, the proportion of foreign-born residents (used as a proxy for immigration), and population density—all measured in 2014.[7] These indicators are supplemented with data on social trust from a survey conducted by the Public Health Agency in the same year. The survey asked, "Do you generally trust others?" and reports the proportion of respondents answering "No" as an average across all 290 municipalities.[8] We also include the log fire-area variable defined in the previous section, which captures wildfire exposure during the summer of 2018, prior to the election that year.

Insert Table I here

Columns (1) through (4) of Table I presents predictive regressions where the dependent variable is the change in vote share from centrist parties toward either the far right or far left across Sweden's 290 municipalities while controlling for the 2014 outcome. A movement to the left reflects gains in vote share for the two left-wing populist parties identified earlier, while a movement to the right reflects increased support for the Sweden Democrats between the 2014 and 2018 elections. The independent variables—capturing key socio-economic conditions such as unemployment, immigration, and trust—allows us to examine how pre-existing regional characteristics predict subsequent shifts toward political extremes.

Municipalities with higher unemployment experienced substantial increases in support for left-wing populist parties and were significantly less likely to see gains in right-wing populist support. Consistent with the anti-immigration emphasis of right-wing populist rhetoric, municipalities with larger shares of foreign-born residents saw marked increases in right-wing populist support, whereas support for left-wing populists tended

[7] The urban definition captures fewer than ten percent of Sweden's most densely populated municipalities, which together account for nearly 40% of the population.

[8] Summary statistics of these variables are tabulated in Table B.1 in the appendix.

to rise in areas with lower proportions of foreign-born residents. A similar pattern emerges with respect to social trust: municipalities with lower levels of interpersonal trust were more inclined toward right-wing populism, while those with higher trust levels leaned toward left-wing populism. Urbanization also plays a role—left-wing populist support is concentrated in more densely populated municipalities, while right-wing populist gains are stronger in less urban, rural areas.

Columns (2) and (4) of Table I introduce wildfire exposure. Municipalities more severely affected by the 2018 wildfires experienced increases in support for both left- and right-wing populist parties. The coefficient estimates for the left and right specifications are 0.07 and 0.10. A one–standard deviation increase in log fire area—corresponding to roughly a fourfold increase in area burned—implies an increase in vote share of about 0.10 and 0.13 percentage points for the two parties.[9]

Columns (5) and (6) report OLS regressions in which the dependent variable is the change in local media coverage related to global warming. Climate-related reporting increases in municipalities with lower unemployment and higher shares of foreign-born residents. The statistically insignificant coefficient for population density indicates that the change in reporting is not confined to large cities. Column (6) of Table I introduces the wildfire exposure measure. A one–standard deviation increase in fire exposure is associated with approximately a 10% increase in climate-related media attention.

In sum, the coefficients on the socio-economic variables reflect the underlying polarity between left-wing and right-wing populist movements, as described in Funke, Schularick, and Trebesch (2023) and Mudde (2004). On the left, populism frames the conflict between ”the people” and ”the elite” primarily in economic terms—a narrative consistent with the observed leftward shift in areas with higher unemployment. On the right, populism tends to emphasize cultural and social divides, which is reflected in the strong positive associations with variables capturing low social trust and high levels of immigration. These patterns establish that the 2018 fires generated plausibly exogenous variation in the salience of climate change across Swedish municipalities, variation that is systematically related to the local political and media environment. This motivates our individual-level analysis.

[9]In untabulated results, we find that wildfire exposure is also associated with a higher likelihood of voters simultaneously shifting toward both left- and right-wing populist parties.

3 Survey Data

The core of our analysis connecting weather shocks to changing beliefs about global warming is built around two surveys that measure environmental attitudes for a nationally representative sample of working-age individuals in Sweden. Figure 6 presents the timeline of our study. The first survey was conducted in the spring of 2018, before a record-breaking heat wave caused a large number of forest fires throughout the country. National elections took place in the fall of the same year, and in the wake of the forest fires, climate policy became a central political topic. The same individuals were surveyed again in the fall of 2019, after these events, allowing us to measure within-respondent variation in climate beliefs and relate these changes to respondent demographics and characteristics of the communities in which they live.

Insert Figure 6 here

In this section we describe the survey in detail. We defer the discussion of the data surrounding the retirement savings decisions to Section 5.

3.1 Overview

Our empirical strategy can be described in three steps. First, in conjunction with Statistics Sweden (SCB), we administered two surveys, the first of which occurred in February and March of 2018.[10] The first survey, which is documented in detail in Anderson and Robinson (2022), targeted 20,000 randomly selected individuals aged 18 to 65 who were provided instructions by mail on how to complete the survey online. After two reminders, we received 4,230 completed responses corresponding to a 21% response rate. We then administrated a follow-up survey to the same respondents in August and September 2019. Around 60% of the original respondents participated in the second survey, resulting in a total of 2,561 complete responses.[11] Both surveys show high response rates by

[10]SCB is a government agency responsible for collecting and compiling nationwide statistics in Sweden, similar to the US Census Bureau. Details of the response statistics and the matching procedure is provided in Appendix A and Appendix E presents the survey questions.

[11]We provide a detailed analysis of attrition between the first and second survey waves in Appendix A. We show that respondents who remain in the sample are older, are less likely to be foreign born and have higher levels of education and income than the average population. We do not find any meaningful regional differences in responses, except for somewhat higher attrition in right-leaning districts. If anything, this pattern would bias against finding evidence of polarization.

international standards and are in line with other surveys solicited by the SCB.

Working with SCB also has the advantage that our sample demographics can be compared to the underlying population where we apply survey weights to make our analysis generalizable. Survey weights are constructed based on age and gender, which are two important determinants of retirement savings wealth.

In a second step, Statistics Sweden matches the survey responses to administrative data obtained from various sources, including the Swedish Tax Authority. This step allows us to combine the environmental views that we elicited in our surveys with a large set of demographic and wealth characteristics. We also know in which of the 290 municipalities the respondent lives in Sweden, which allows us to match on local voting outcomes and exposure to natural disasters.

Because we are specifically interested in understanding the link between environmental views and investment decisions, we add the complete transaction histories from the Swedish Pension Agency (SPA) in the third step. Since the SPA provides retirement savings accounts for the whole working Swedish population, we can obtain mutual fund choices for virtually every individual in our sample. The data include the timing and composition of any portfolio rebalancing as well as the year-end portfolio balances. From the SPA, we also obtain fund characteristics, which allows us to classify the funds the same way they are presented at the SPA website. Data on monthly fossil fuel exclusion are available from April 2019, but we hand-collect yearly data for all funds back to 2017 — before the survey.[12]

3.2 Survey Questions

Our first survey includes basic questions about financial literacy, green preferences and climate beliefs. The questions and responses to the environmental and financial literacy tests are analyzed in detail in Anderson and Robinson (2022). In the second survey, we repeat one question from the first survey. We ask:

- "Over the next 20 years, how likely do you find the following scenario?"

[12]The hand-collected historical data is obtained from the mutual fund companies annual reports, in which we classify exclusion based on a threshold of 5% restriction of fossil fuel investments.

– "The average temperature on earth will rise by more than one degree Centigrade"

Responses fall on a Likert-scale ranging from "Very unlikely" (-2) to "Very likely" (2). Rather than ask a more general question about the pace of global warming—which could easily be primed by generally available information on climate change—asking it this way forces respondents to form their own expectations. The 20-year time-frame was chosen so that individuals were being asked to look forward over their own lifetimes, rather than over longer future periods that they will not experience personally or recall from some media reports.

A one-degree Centigrade increase in global temperature within a 20-year horizon would imply a substantially faster rate of warming than has been observed historically. According to the Intergovernmental Panel on Climate Change (IPCC), global average temperatures have increased by approximately 1.1–1.2°C since pre-industrial times, with recent warming occurring at a rate of about 0.2°C per decade. While future warming may accelerate under certain scenarios, a one-degree increase over such a short horizon would require a pace well above current trends. Such an increase would also have significant implications for climate targets. In particular, an additional 1°C rise within two decades would make it considerably more difficult to meet the Paris Agreement goal of keeping global temperature increases well below 2°C by the end of the century.

There is no exact mapping between Likert-scale responses and probabilities, as terms such as "Likely" and "Very likely" may be interpreted differently across individuals. Our empirical strategy addresses this issue by exploiting the panel structure of the data: repeated responses from the same individuals allow us to difference out time-invariant heterogeneity in how respondents map verbal probabilities into subjective beliefs.

Insert Table II here

Table II presents a transition matrix of the responses across the two surveys and shows that while 1,264 people did not revise their expectations, 684 revised up and 613 revised down the probability of a sharp global temperature increase. In other words, there is substantial variability in individuals' perceptions of how a temperature increase will play out within the next two decades even if measured only between at time period of 17 months.

In our analysis that follows, we grade assessments from -2 ("Very unlikely") to 2 ("Very likely") to score forecasts and define changes across surveys as forecast revisions. We also use the off-diagonal elements of Table II to define dummies: "Revised up" for the upper diagonal elements and "Revised down" for the lower diagonal elements. We use dummies for the 2018 temperature assessments as controls in our analysis when analyzing how changes in expectations affect choices.

We present a full breakdown of respondent characteristics and survey measures in Appendix Table A.2. The sample composition reflects systematic differences relative to the population: younger, lower-income, and less-educated individuals are underrepresented. More than half of respondents report some post-secondary education, and 35

Our attrition analysis (Appendix Table A.3), which examines participation between Survey 1 and Survey 2, shows that attrition is primarily driven by age and education, with no statistically significant relationship with income. This suggests that the underrepresentation of lower-income individuals arises mainly from initial selection into the first survey wave rather than differential attrition across waves.

In the first survey, climate concerns are, on average, higher among women, younger individuals, lower-income respondents, and those residing in urban areas.[13]

To verify that differences in beliefs about global temperature increases are associated with broader climate awareness and concern, we asked respondents in the second survey (after the fire shock) to indicate their agreement with three climate-related statements:

- *Notice GW*: "I have already noticed the effects of climate change in Sweden" (58%)
- *Worry GW*: "I'm worried about climate change and what it means for myself and my family" (23%)
- *Government Action*: "The government should do more to fight climate change" (52%)

All responses fall on a five-point Likert scale from "Strongly Disagree" to "Strongly Agree", where the share reporting strong agreement is shown in parentheses.[14]

A majority of respondents report having noticed the effects of climate change where they live: 58% strongly agree and an additional 24% agree. In contrast, fewer respondents

[13]We define urban areas as municipalities with more than 50,000 inhabitants, encompassing 21 municipalities primarily located around Stockholm, Gothenburg, and Malm"o.

[14]Table E.1 in Appendix E provides a full tabulation of the survey question results.

express strong personal concern: 23% report being very worried about climate change. Slightly more than half of respondents strongly agree that the government should do more to fight climate change.

Appendix Table A.2 tabulates responses across demographic characteristics. Women, younger individuals, and lower-income respondents are more worried about climate change and more supportive of government action. There is also a marked difference in worry between urban and non-urban residents, whereas noticing climate change varies less along this dimension.

We complement these measures with three questions from the 2018 survey that capture aspects of general prosocial financial orientation, all measured prior to exposure to the fire shock (see Anderson and Robinson (2022)):

- *Attention*: "How often do you look over your retirement savings?" (53%)
- *Non-pecuniary orientation*: "A clean planet is more important to me than financial welfare" (66%)
- *Taxes-for-aid*: "I am willing to pay higher taxes to increase Sweden's aid to poor countries" (31%)

The first question captures attentiveness to pension savings and is informative for understanding how preferences translate into financial action. Responses range from "never" to "several times per year." We classify respondents as attentive retirement savers if they report reviewing their accounts at least once per year; 53% of respondents meet this criterion.

The latter two questions capture prosocial value orientations along two distinct dimensions with clear financial implications: environmental sustainability and global redistribution. As illustrated in Figure 1, these measures are conceptually related to broader ideological positions along the environmental and left–right political spectrum. Standard populist rhetoric on both the left and right would typically predict disagreement with these statements, as they imply support for collective and redistributive outcomes that involve personal financial trade-offs. The taxes-for-aid question introduces an additional cultural dimension and is less directly related to environmental sustainability. Both questions are measured on a five-point Likert scale from "Strongly disagree" to "Strongly

agree." We classify respondents as prosocially oriented if they express at least some level of agreement (fractions reported in parentheses).

Two-thirds of respondents agree that a clean planet is more important than financial welfare. In contrast, support for higher taxes to finance foreign aid is substantially weaker: 39% disagree to some extent, 31% agree, and only 9% strongly agree.

Support for redistribution varies markedly across characteristics. For example, 13% of women but only 9% of men strongly support increasing taxes to help poorer countries. Support is also stronger in urban areas, among younger respondents, those with lower income, and those with higher education (see Appendix A). Overall, the cross-tabulations reveal a positive association between environmental views and redistributive preferences, consistent with prior evidence linking such value orientations to voting behavior (Bauer, Ruof, and Smeets (2021) and Riedl and Smeets (2017)).

Taken together, the combination of changes in climate concern, pre-existing value orientations, and differential exposure to the weather shock allows us to study how belief updating interacts with underlying preferences and how these changes carry over into investment decisions.

3.3 Temperature Estimates and Climate Beliefs

To verify that our temperature-revision measure captures broader environmental attitudes, this section relates the measures discussed above to our key independent variable: changes in beliefs about global warming.

Table III presents the results from Probit regressions where the dependent variable takes the value of one for strongly agreeing to the three statements presented above (Notice GW, Worry GW and Government Action). Among the independent variables, we include separate dummy variables for up and down temperature revisions as well as individual characteristics as controls: gender, university education, age (in decades) and the log of income. We use two specifications for each questions: one in which we only include the individual characteristics and one that include the temperature revisions and dummy variables for each value of the initial temperature assessments (TA) made in the first survey. All reported coefficients denote marginal probabilities.

Columns (1) and (2) of Table III show that men and older respondents are less likely to

have noticed the effects of global warming in Sweden, while university-educated individuals are more likely to have noticed it. This demographic breakdown alone hints at the sociodemographic elements of left- and right-wing populism that we highlight below. The loadings on the characteristics explaining green views are consistent with what is found in previous work.[15] In column (2), upward and downward temperature expectation revisions correlate with reported noticing of global warming in the expected direction. In terms of magnitude, respondents who revise their expectations upward (downward) are approximately 20% more (less) likely to report strongly agreeing that they have noticed climate change in their local area.

Insert Table III here

We obtain similar patterns in columns (3) and (4) when we relate our measure to worrying about global warming. Following previous results, men and older people are less worried. Worry is strongly related to upward and downward revision in expected future temperature increases. There is a 14% higher probability to be more worried among those who revise up, but a 17% lower probability to worry for those who revise down. The results are similar, but weaker, for the question about whether the government should take action against climate change.

The main take-away from this analysis is that forecast revisions are meaningfully correlated with more general beliefs about climate change, over and above what is explained by characteristics.

3.4 Politics and Prosocial Financial Orientation

To explore the mechanisms linking populism to portfolio choice through belief formation, we examine how prosocial financial orientations relate to local political support. The first survey—conducted before the forest fires—includes three measures: financial engagement, non-pecuniary environmental preferences, and redistributive preferences. The latter helps distinguish between left- and right-wing populist orientations, as it spans both economic and cultural dimensions of political discourse.

[15] See Falk et al (2018) and Dechezleprêtre et al (2023)

We estimate OLS regressions in which responses to these questions serve as dependent variables. The specifications control for individual characteristics and include measures of changes in municipal vote shares for left- and right-wing populist parties.

Insert Table IV here

Table IV presents the results. Columns (1) and (2) show that men, older individuals, those with higher education, and higher income are more attentive to their pension savings. Column (2) adds the political variables. While attentiveness should not, in principle, depend on political leanings, we find that respondents living in right-leaning municipalities are significantly less attentive to their retirement accounts.

Columns (3) and (4) repeat the analysis for the question capturing non-pecuniary motives. Support for prioritizing environmental concerns over financial welfare is stronger among women, older respondents, those with lower income, and those with higher education. Column (4) shows that these views are substantially more prevalent in left-leaning municipalities.

Finally, columns (5) and (6) report the results for willingness to pay higher taxes to aid poor countries. Overall support for this proposition is considerably lower than for the environmental statement and is weaker among men and older respondents, but stronger among the university educated. Column (6) shows a pronounced political gradient: support is significantly higher in left-leaning municipalities and significantly lower in right-leaning ones.

Although foreign-born respondents are, on average, less attentive to their pension savings and more supportive of higher taxes for foreign aid, these differences are not statistically significant.[16]

Taken together, the results suggest that the taxes-for-aid question is the most politically polarized of the three prosocial measures, followed by the non-pecuniary environmental preference. Pension attentiveness is less directly political, yet still exhibits systematic differences across political environments, with lower financial attentiveness in right-leaning areas. This pattern is informative for understanding the mechanisms governing portfolio tilts explored in Section 5.

[16] In unreported results, we also include the forward-looking wildfire exposure measure used in the next section and find it to be insignificant. Prosocial preferences measured prior to the wildfire shock are therefore not correlated with subsequent exposure. We discuss the implications of this in more detail below.

4 Changing Beliefs About the Severity of Global Warming

4.1 Measuring Fire Exposure

In the analysis presented in Section 2.4, the unit of observation was a municipality, which allowed us to measure fire exposure in terms of the area of the municipality that was damaged. For the remainder of our analysis, the unit of observation shifts to the individual survey respondent, and our measure of fire exposure treats large wildfires as rare, discrete events, consistent with the rare–disaster and tail–risk literature in finance (e.g., Barro (2006)). This parallels a well-established finance literature that exploits extreme events such as hurricanes or other natural disasters as discrete, location-specific shocks.

In the remainder of the paper, we classify respondents as exposed to a fire shock if they reside in municipalities with more than 20 basis points of destroyed area. This threshold classifies approximately one-third of the sample as fire-treated, and corresponds to roughly the top one-fifth of the municipal fire intensity distribution. In Appendix C we present a battery of tests to assess the robustness of this threshold. These tests show that the estimated effects remain stable in size and statistical significance across a wide range of alternative thresholds.

An alternative way of measuring fire exposure is to focus on proximity to a fire. Using proximity-based definitions yields qualitatively similar results: effects are strongest for individuals living closer to wildfire events and remain statistically significant over distance ranges that generate treatment groups comparable in size to the baseline specification. Taken together, this suggests that our results do not rest on a particular operationalization of wildfire exposure, and that the municipality-level intensity measure provides a parsimonious and empirically robust treatment definition that aligns naturally with the geographic aggregation of our voting data.

4.2 Identification

Any attempt to study the effect of polarization must confront the endogeneity of politics, economic beliefs and financial decisions. Approaches to this challenge vary. Recent work by Meeuwis et al (2022) and Mian, Sufi, and Khoshkhou (2023) exploit the surprise nature of the 2016 US national election to separate Democrat and Republican voters. Pan et

al (2023) in turn uses the expansion of Sinclair Broadcasting Corporation, a right-wing media channel, to induce plausibly exogenous variation in the structure of local political information.

Our approach differs from prior approaches in that we rely on the randomness of an environmental catastrophe as an exogenous shock to the salience of climate change. We run regressions of the form

$$\text{Forecast Revision}_i = \alpha + \beta \text{Fire Shock}_\text{i} + \epsilon_i \tag{1}$$

and use $\hat{\beta}$ as the crux of our analysis.[17] We then examine how $\hat{\beta}$ varies systematically across both indirect and direct measures of local left-wing and right-wing populism, as well as measures of personal pro-social attitudes.

Importantly, we do not observe individual-level political preferences or voting behavior. Instead, we rely on historical socio-economic conditions prior to the election and municipality-level voter turnout for left- and right-wing populist parties to proxy for the local political climate. To the extent that individuals with anti-establishment views are less likely to participate in government surveys, our estimates may understate the true extent to which the salience effect varies with political attitudes rooted in distrust of traditional institutions.

Identification in our setting relies on the assumption that variation in forest fire damage is orthogonal to individuals' initial concerns about climate change. This assumption would be violated if, for instance, areas with lower baseline concern about climate change were also systematically more vulnerable to fire damage due to characteristics of the built environment.[18]

To examine this, Table V reports regressions in which pre- and post-fire climate beliefs are regressed on forest fire exposure and other controls.

Insert Table V here

[17]Throughout our analysis, unless otherwise noted, we report robust standard errors. We have also repeated our analysis clustering at the municipality level to account for any spatial dependence, and we have repeated our analysis with and without survey weights. These results are available from the authors.

[18]For example, individuals who are less concerned about climate change may be less likely to invest in resilience measures or may choose to locate in areas with higher wildfire risk (Baylis and Boomhower (forthcoming)). Forest fire damage would then be more severe precisely in areas where upward revision was more likely than downward revision. This would introduce endogeneity, as belief changes would be driven by pre-existing differences in vulnerability that correlate with climate attitudes.

The point estimates should be interpreted as conditional correlations between fire exposure and beliefs measured different points in time. Column (1) shows that the fire shock is unrelated to pre-fire beliefs about global warming. Column (2) adopts the same measure of climate concerns in 2019, but is observed after the occurrence of the 2018 forest fires. We find that people living in areas affected by the forest fires grew more convinced of the likelihood and severity of climate change in the next 20 years.

Column (3) estimates the main climate salience effect that is the primary object of interest in the analysis that follows. The point estimate does not have a convenient economic interpretation because it measures units of change on a Likert scale, but the comparisons to other variables are informative. Exposure to the fire shock is associated with a belief revision that is roughly half the difference in magnitude associated with gender, and about twice as large as the effects associated with age. Roughly speaking, exposure to the fire shock is equivalent to about twenty years of age difference in average belief revisions.

4.3 Demographic Variation and the Climate Salience Effect

Having established the *average* climate salience effect in Table V, we next examine how it varies with populism. Table VI reports split-sample regressions that estimate heterogeneous climate salience effects based on regional variation in populism and individual prosocial value orientations.

Insert Table VI here

In columns (1) through (8), we split the sample based on whether municipalities fall above or below the median in key socio-economic variables (all measured in 2014) that predict voting outcomes, as discussed in Section 2.4.

The climate salience effect is substantially stronger in rural areas, in areas with a below-median proportion of unemployment, foreign-born residents, and in regions with above-median trust in others. In these sub-samples, the estimated coefficients are up to twice as large as the baseline result in Table V. Notably, within low-immigration areas, foreign-born residents show a significantly negative coefficient, suggesting they are less responsive to the fire shock than native-born residents in those same communities. This pattern helps explain why the fire shock is insignificant in the high-immigration sample

overall: foreign-born individuals may draw on broader geographic reference frames or experiences from their countries of origin when interpreting local climate events, making them less likely to update their climate expectations based on a particular shock in Sweden. In contrast, native-born residents in low-immigration areas may have more locally anchored climate expectations that are more sensitive to domestic climate events.

The overall socio-demographic patterns in columns (1) through (8) could potentially be explained by a simple "competing priorities" mechanism: residents in high-immigration, low-trust, urban areas may face more pressing immediate concerns—such as economic pressures, integration challenges, or other socio-economic issues—that crowd out attention to climate change. Under this hypothesis, it is not that populism affects environmental directly through a party's political platform per se, but that the same social ills that give rise to surges in populism also lead individuals to de-prioritize longer-horizon social issues.

To explore this deeper, columns (9) through (12), split the sample by individual-level prosocial value orientations, not on regional characteristics. The magnitudes of the split-sample estimates of the climate salience effect speak against this pure attention-scarcity explanation being the only driver of our results. We find that individuals who prioritize non-pecuniary environmental values—preferring a clean planet over financial welfare—exhibit a statistically significant response to the fire shock, while those who do not hold these beliefs show no significant response. Similarly, individuals willing to pay higher taxes to aid poor countries respond significantly to the fire shock, while those unwilling show no response. If the lack of response in certain geographic areas were simply due to climate being crowded out by more immediate concerns, we would expect this crowding-out to affect all residents similarly, regardless of their personal prosocial orientation. Instead, the individual-level heterogeneity suggests that prosocial values mediate responsiveness to weather shocks: even individuals facing similar external pressures respond differently based on their underlying value orientations.

Importantly, the prosocial value orientation questions were asked before the fire shock occurred, meaning these individual characteristics represent pre-existing views rather than post-shock rationalizations. The timing of our measurement strengthens the interpretation that prosocial values causally impact the way in which individuals process and

respond to weather shocks.

The climate salience effect is strongest in high-trust, rural communities with lower immigration rates and among individuals with stronger pre-existing prosocial orientations. The geographic concentration of responsiveness in cohesive, high-trust communities, combined with the amplifying role of individual prosocial values measured prior to the shock, suggests that climate belief updating following salient events depends critically on both the social context in which information is processed and the social values frameworks through which individuals interpret that information.

4.4 Political Shifts, Media, and Forecast Revisions

The results so far indicate that the apparent climate salience effect associated with the wildfire shock weakens once we account for regional socio-demographic characteristics linked to political polarization. We next examine directly how forecast revisions relate to local shifts in support for left- and right-wing parties and to changes in media sentiment regarding climate change.

Column (1) of Table VII augments the baseline specification from Table V with measures of vote shifts toward the left and right. Districts with increasing right-wing support exhibit smaller upward revisions, whereas districts moving left show larger upward revisions. The negative interaction term implies that districts experiencing simultaneous growth in support for both political extremes display particularly muted upward revisions, consistent with polarization dampening belief updating.

Column (2) adds the wildfire shock. The coefficient on fire-shock exposure remains similar in magnitude to the baseline specification, but becomes statistically weaker once we control for local political shifts, indicating that the magnitude of the climate salience effect covaries with local political conditions.

Insert Table VII here

Columns (3)–(6) split the sample by whether local climate-related news sentiment increased above or remained below the median between the two surveys. Columns (3) and (4), which exclude political variables, show that the climate salience effect is five times larger, and only statistically significant, in areas with low increases in climate news

coverage. This indicates that the salience effect of the shock is strongest where media exposure is limited. Columns (5) and (6) help to explain why this is the case. They reintroduce political shifts and show that these strongly predict forecast revisions precisely in areas with increased climate news reporting, while they are insignificant where media coverage changed little. This indicates that the climate salience effect is effectively subsumed by a media salience effect, because belief revisions – in both directions – are much more extreme in high media coverage areas than in low media coverage areas. Upward revisions on the left are stronger than downward revisions on the right.

5 Investment Decisions and Global Warming Beliefs

In the previous sections we have established that wildfire exposure shifts climate beliefs in politically heterogeneous ways that are a function of both personal and regional-level measures. We now measure how these belief revisions carry through to long-term financial decisions, and how these actions are influenced by the same political geography that shapes climate beliefs.

We begin with a brief overview of the key institutional features of the Swedish pension system that are necessary for understanding our retirement savings data. Then we show how changing beliefs about global warming impact green investment choices within that system. Finally, we link the fire shock directly to portfolio reallocation through its impact on belief revision.

5.1 The Swedish Pension System

The Swedish Pension system currently operates two types of accounts for each individual contributing to the system.[19] One is a defined contribution account funded on a pay-as-you-go basis based on a contribution rate of 16% of labor income, analogous to Social Security in the United States. A second account, known as the Premium Pension Account (PPA) is based on an additional 2.5% of labor income. Our investment data come this segment of the pension system.

[19]The Swedish pension system underwent a dramatic transformation in the 1990s. A full account of this transition is beyond the scope of this paper; details are discussed at length in Palmer (1998).

The PPA operates in a manner similar to a 401(k) plan in the United States, except that it is part of the state pension. Participants can allocate this portion of their account to a maximum of five different funds from a list of approved funds. Investors who do not make a choice automatically fall into a default fund, which offers a low-fee, well-diversified, levered position on the global equity market. The default fund has minimal restrictions on its investment mandate, but it does exclude manufacturers of biological, nuclear and cluster weapons.[20] More importantly for our analysis, it does not apply fossil fuel exclusion restrictions.

The default fund is by far the most common allocation for first entrants in the system since the launch in 2000. As has been widely documented in the literature, default fund investors are generally less financially sophisticated, investors with lower income and financial literacy; inertia characterizes many individual's choices. At the end of 2021, the total assets under management (AUM) were just over SEK 2 Tn (USD 200 Bn) and covered six million people, a number which is close to the sum of our sample weights.

In 2004, the SPA introduced an ESG label to allow funds in the system to indicate whether they incorporated social (ethical) or environmental aspects in their investment processes. In 2019, the SPA launched more extensive online tools for investors to assess the environmental performance of funds. The online tool enables investors to screen and sort funds according to specific strategies, fees, fund types, and geography. The online tool also includes the Morningstar Climate Risk metric and 13 exclusion flags (so-called *negative selection* funds as in Hong and Kacperczyk (2009)), one of which is fossil fuel exclusion.

To study how belief changes relate to portfolio choice, we measure investment allocations in December 2021. This gives respondents sufficient time to rebalance after the surveys, because investor inertia and inattention work against us finding effects in short windows after the fire.

[20] As of December 2021, its fund manager maintains a list of 97 "blacklisted" firms that are individually screened and excluded from investment, most of them due to breach of UN principles of human rights.

5.2 Belief Revisions and Portfolio Allocations

The pension data contains the full history of portfolio allocation decisions for the respondents in our survey. Of the total 2,561 respondents in our sample, 2,521 owned a retirement account in 2021. The fraction of investors in the default fund in the sample is 43% at the end of 2021, similar to the population average of 40%. Investors outside the default fund made at least one active choice since they entered the premium pension system. Of the 1,436 people who were not in the default fund, 711 make a portfolio reallocation decision at some point during the three years between the first survey and the end of 2021.

Our analysis focuses on respondents who have opted out of the default fund, because it is impossible to determine whether someone is in the default fund because of their environmental preferences or because of their lack of attention.[21] We use the weighted portfolio average of fossil fuel exclusions along with Morningstar climate risk assessments as measures of investment tilts. We measure the portfolio tilt as of December 2021, which allows investors to rebalance their portfolios at any point from when they first participated in the survey to the end of the sample.

The total exclusion weight of a portfolio can change through either of two channels: investor rebalancing or managerial reclassification. That is, individuals can actively sell brown funds and reallocate the proceeds to green funds, or fund managers themselves can take investment decisions and administrative steps so that their fund is classified as a fossil fuel exclusion fund. We refer to the investor rebalancing channel as *active rebalancing* and the managerial reclassification channel as *passive relabeling*, even though in the latter case, we cannot know what the investor would have done in the absence of the reclassification.

We begin by analyzing the total exclusion weight, which includes both channels. First we use the Morningstar climate risk scale for mutual funds. The default fund and 33 other funds do not have data for the Morningstar Climate Risk measure. After removing 27 investors that were not in default but held funds with missing data, we arrive at a sample of 1,409 investor portfolios.

[21] There is no evidence that temperature forecast revisions or political variables explain the propensity to stay in the default fund, or to trade conditional on being out of the default fund. This analysis is available in Appendix F.

Insert Table VIII here

Table VIII presents the results from an OLS regression where the dependent variable in columns (1) through (5) is the inner product of the respondents' portfolio weights and the Morningstar climate risk ratings for each fund. Each regression includes controls for the fraction invested in each type of fund category (Stock, Bond, Mixed and Target funds), the portfolio-weighted prior-year return and standard deviation, fund fee, and the fund's exposure to local retail networks (consisting of the four main banks in Sweden). In addition, we introduce fixed effects for the initial individual temperature assessment (labeled "TA controls") in 2018, so that the temperature change measure indicates movements from the temperature assessments investors made before taking the second survey.

Column (1) shows that upward temperature revisions are strongly correlated with lower Morningstar climate risk exposures. The correlation is insignificant for downward revisions. Women and older investors hold portfolios with less climate risk, consistent with the baseline results on climate revisions also being more positive for these categories (see column (3) of Table V). Interpreting magnitudes, the average measured effects from upward revisions on climate risk scores are relatively modest: because the average overall portfolio climate risk is around 21, the magnitudes suggest a roughly 1.5% overall change in climate risk.

Columns (2) and (3) of Table VIII split the sample based on above- and below-median vote shares for populist left-wing parties in the 2018 election, while columns (4) and (5) use the corresponding split for right-wing populist parties. We find only limited differences in climate risk scores across these subsamples.

Columns (6) through (10) repeat the analysis on portfolio fossil fuel exclusion fund weights, which reflects a simpler choice architecture for the retirement saver. The average fossil fuel exclusion fund weight is 5 percentage points higher for those who revised up, a seven percent increase relative to the average total exclusion weight of 69.7%. Although generally consistent with the results from risk scores in column (1), sorting on left and right votes has stronger effects on portfolio allocations. In particular, upward revisions in areas of lower support for right-wing populism is significant, but not in areas of high support.

The stronger results for fossil-fuel exclusion labels rather than Morningstar risk scores

is consistent with the evidence reported in Anderson and Robinson (2022), who find stronger effects for green pension choices in settings where investors are more sophisticated or the information environment is simpler. This may be particularly relevant here, because the Morningstar Climate Risk measure was a relatively new measure when it was introduced in 2019, whereas fossil fuel exclusion funds have been around since at least 2004 with the introduction of the first sustainability label.

5.3 Active Portfolio Rebalancing

As discussed above, the total exclusion weights analyzed in Table VIII combine passive, manager-driven relabeling of funds with active rebalancing decisions made by survey respondents. Given the high degree of decision inertia and the high degree of inattention documented in Dahlquist and Martinez (2015), it is difficult to discern whether the results are the consequence of intentional investor decisions or the passive acceptance of manager-led reclassification. To address this, in this section we focus solely on active rebalancing decisions.

Table IX presents the results. The model specification is identical to that of Table VIII.

Insert Table IX here

Column (1) of Table IX shows the same asymmetry of up- and down revisions as found in Table VIII. The coefficients are of similar magnitude, but they imply a much stronger shift, because the average actively rebalanced green portfolio weight in sample is about 22%.

Columns (2) and (3) divide the sample based on whether the survey respondent lived in an area affected by the fire shock. The sample split indicates that the effect shown in column (1) is entirely driven by respondents who live in fire-affected areas. The point estimate is ten times larger than that estimated outside the fire shock regions, and moves the dependent variable from 25% to 38%. Belief revisions that occur among respondents outside these areas are unconnected to any subsequent portfolio rebalancing.

Columns (4) and (5) split the sample on low or high media coverage. In areas where media coverage of environmental issues is low, there is no connection between beliefs and rebalancing decisions. The result comes entirely from areas that experienced high

media coverage of environmental issues. Table VII above shows that high media coverage is associated with stronger upward and downward climate revision as a function of local political conditions, illustrating the importance of the media in exacerbating populist views. The fact that belief revisions affect portfolio allocation only in high media-saturation areas is consistent with the view that media coverage of the forest fires, on both the right and the left, is important for shaping beliefs and spurring individuals to act. The fact that the response is asymmetric partly reflects a general tendency for the pro-green portfolio rebalancing to be stronger in conjunction with the fact that splitting the sample on high/low media coverage conflates extreme coverage on the right and the left.

Columns (6) and (7) split the sample above and below the median for left-wing populist voter turnout. In areas with high voter support for left-wing populist parties, individuals who become more concerned about climate change are much more likely to invest in fossil-fuel exclusion funds. The effect is approximately 1/3rd of the mean of the dependent variable. In areas where left-wing populist support is low, individuals who grow less concerned about climate change actively divest from fossil-fuel exclusion funds. The mirror image of this result holds in Columns (8) and (9) when we split on right-wing populist support. These effects are large, approximately 50% of the mean value of the dependent variable.

Taken together these results suggest that individuals actively rebalanced their retirement portfolios in directions that were based on their political surroundings.[22] To explore the role that personal political attitudes play in this decision, we use the same measures of prosocial financial orientations as in Table IV. The results are reported in Table X.

Insert Table X here

Columns (1) and (2) split the sample on how often the respondent checks their retirement account. It shows that the rebalancing associated with upward revision is about twice as strong for attentive investors compared to the inattentive group, confirming the importance of this channel. Indeed, belief revision is only statistically significant for rebalancing among attentive respondents. In columns (3) and (4) we split the sample based on whether the respondent reported, prior to the forest fires, that they "preferred a clean

[22]These findings are in line with McCartney, Orellana-Li, and Zhang (2024), who also show that neighborhood effects influence financial decision-making.

planet over financial welfare." They confirm that the rebalancing effect is strongest for those who, before the fires took place, thought environment was more important than financial returns. Individuals who harbored these pro-social attitudes put their beliefs into action to a much greater degree than those who did not. Finally, in columns (5) and (6), we explore sample splits based on whether individuals are willing to "pay higher taxes to increase Sweden's aid to poor countries." We see similar results. This illustrates that these rebalancing results are not driven solely by environmental attitudes per se, but more broadly by left-leaning views which may include, but go beyond, environmental preferences.

5.4 Forest fire exposure, prosocial financial attitudes and rebalancing decisions

The final step of our analysis traces the rebalancing decisions we have documented above to the fire shocks. A standard approach would be to instrument belief revision with fire shock exposure, and relate the predicted belief revision to rebalancing decision. However, if we simply instrumented belief revision with exposure to the fire shock, we would be generating a local average treatment effect of fire on beliefs, which would miss the heterogeneity that is crucial to our analysis. Rather than instrumenting belief revision with exposure to the fire shock, we instead draw on Columns (2) and (3) of Table IX and interact the fire shock with belief revision and look at differences in belief revision in fire-affected and un-affected areas. This allows us to show that the heterogeneity results are much stronger in fire-affected areas, which in turn suggests that exposure to the fire drives portfolio rebalancing decision through the channels discussed in the paper.

Table XI presents our findings. In general, the results show that upward revisions in climate expectations translate into economically meaningful tilts toward fossil-fuel-exclusion funds, but only among respondents living in forest-fire affected areas.

Insert Table XI here

Columns (1) and (2) split the sample based on whether the respondent checks their pension balance regularly. For those who do (Column (2)) and who live in fire-affected areas, the point estimate implies that belief revision doubles the average active portfolio

weight from roughly 24% to 44%. The effects are negligible outside of fire-affected areas and among those who do not check their pension balances regularly. Individuals who check their pensions regularly are presumably more in tune with long-term investment decisions. Our results suggest that the connection between climate fears and investment activity is most salient for this group.

Columns (3) and (4) split the sample on pro-social environmental attitudes. Those with these views who live in fire-shocked areas make large, economically meaningful active rebalancing decisions. Similar to Column (2), the point estimate on the interaction term between fire shock and belief revision roughly doubles the mean active fossil fuel exclusion weight. We see similar results in the sample splits shown in Columns (5) and (6), where the splits are based on ex ante views of increasing taxes to aid foreign countries.

These results indicate that belief revisions affect portfolio choices only when accompanied by salient exposure, an information-rich environment, individual attention to financial decisions, and underlying non-pecuniary or prosocial financial preferences. Importantly, earlier results show that attention to pension savings is systematically lower in areas with stronger right-wing political support. This provides a link between the political environment and financial engagement: in regions where political shifts predict weaker climate belief revisions, they also predict lower attention to retirement savings, further dampening the transmission from beliefs to portfolio action.

6 Conclusion

This paper shows that political polarization shapes both how individuals form beliefs about climate change and how those beliefs translate into long-term financial decisions. We exploit a record-setting heat wave and the forest fires it triggered in Sweden in the summer of 2018 as an exogenous shock to the salience of climate change, using panel survey data to measure within-individual revision in climate beliefs before and after the shock and linking these revisions to administrative records from the Swedish pension system.

The average climate salience effect – the effect of wildfire exposure on climate beliefs – masks substantial heterogeneity driven by the local political environment. While ex-

posure to forest fires raises concern about the pace of global warming on average, this climate salience effect is concentrated in areas with socio-demographic characteristics associated with higher social trust, and is largely absent in areas associated with the rise of right-wing populism. Direct measures of political shifts reinforce this pattern: growing support for right-wing populist parties predicts downward revision in climate beliefs, while growing support for left-wing populist parties predicts upward revision. Local media coverage amplifies these dynamics. In areas with high local media coverage of environmental issues, political shifts to the right and left absorb the climate salience effect altogether.

These politically mediated belief revisions have measurable consequences for the allocation of retirement wealth. Among individuals who regularly check their pension account balances, upward revisions in climate concerns are associated with greater holdings of fossil fuel exclusion funds. This relationship is absent in areas with strong right-wing populist support; in those areas, individuals who grow less concerned about climate change actively divest from fossil fuel exclusion funds. While the aggregate increase in fossil fuel exclusion exposure reflects both active rebalancing and passive fund reclassification, the cross-sectional effects of belief revisions on portfolio allocations are driven exclusively by active rebalancing.

Taken together, these findings illustrate how political polarization mediates climate-related beliefs and investment decisions. A weather event that raises the average salience of climate change produces politically heterogeneous responses, with individuals in right-leaning areas withdrawing from climate-friendly assets at the same time as individuals in left-leaning areas move toward them. The net effect on aggregate capital allocation may therefore be smaller than the average salience effect would suggest, and potentially smaller than what policymakers who rely on average treatment effects might anticipate.

Our findings point to several directions for future research. A key challenge is disentangling the role of populist political shifts from the underlying social and economic characteristics that are correlated with support for populist parties. While our empirical design controls for observable characteristics and exploits within-municipality variation over time, further work could use cross-country variation in the environmental positioning of populist parties to more sharply isolate the role of political rhetoric. The Swedish

setting, where political disagreement over environmental issues is relatively moderate compared to other countries, suggests that our estimates may provide a conservative benchmark for the degree of climate polarization that can arise in other contexts.

These findings have important policy implications concerning the political economy of retirement system design. In our data, respondents living in areas that gained right-wing populist support tend to be less financially engaged. In general, their retirement savings allocations do not reflect their surveyed beliefs as much as more attentive individuals living in left-shifting areas. Given that this retirement system is fed through mandatory contributions, these differences have the potential to create a negative feedback loop, whereby politically disaffected individuals grow increasingly disaffected as they perceive the social institutions that are responsible for their retirement security to be increasingly less reflective of the values they hold.

More broadly, as climate change becomes an increasingly salient political issue, understanding how political polarization shapes the household financial response to environmental shocks is of direct relevance both to researchers and policymakers. Our results suggest that efforts to align investment products with majority climate preferences — for example through fund reclassifications or mandatory disclosure — are of limited value if they do not also take account of the dispersion in preferences. The fact that investment decisions reflect not only the first moment but also the second moment of aggregate social values is a matter of great importance for policy makers concerned with the role of incorporating social values into investment decisions.

Declaration of generative AI and AI-assisted technologies in the manuscript preparation process.

Statement: During the preparation of this work the author(s) used ChatGPT, Claude and Refine in order to check for inconsistencies, typoes, and grammatical errors. After using this tool/service, the author(s) reviewed and edited the content as needed and take(s) full responsibility for the content of the published article.

References

Addoum, Jawad M., David T. Ng, and Ariel Ortiz-Bobea, 2023, Temperature shocks and industry earnings news, *Journal of Financial Economics* 145, 1–45.

Anderson, Anders, and David T. Robinson, 2019, Climate fears and the demand for green investment, Swedish House of Finance working paper No. 19-14.

——— , 2022, Financial literacy in the age of green investment, *Review of Finance* 26, 1551–1584.

Baldauf, Markus, Lorenzo Garlappi, Constantine Yannelis, and José Scheinkman, 2020, Does climate change affect real estate prices? Only if you believe in it, *Review of Financial Studies* 33, 1256–1295.

Barro, Robert J., 2006, Rare disasters and asset markets in the twentieth century, *The Quarterly Journal of Economics* 121, 823–866.

Bauer, Rob, Tobias Ruof, and Paul Smeets, 2021, Get real! Individuals prefer more sustainable investments, *Review of Financial Studies* 34, 3976–4043.

Baylis, Patrick, and Judson Boomhower, forthcoming, Mandated versus voluntary adaptation to natural disasters: The case of US wildfires, *Journal of Political Economy*.

Bernstein, A., M. T. Gustafson, and R. Lewis, 2019, Disaster on the horizon: The price effect of sea level rise, *Journal of Financial Economics* 134, 253–272.

Borick, Christopher P., and Barry G. Rabe, 2017, Personal experience, extreme weather events, and perceptions of climate change, Oxford University Press.

Boykoff, M., A. Benham, M. Daly, R. Fernández-Reyes, L. McAllister, M. McNatt, A. Nacu-Schmidt, D. Oonk, J. Osborne-Gowey, O. Pearman, A.H. Simonsen, and A. Ytterstad, 2023, European newspaper coverage of climate change or global warming, 2004-2023. media and climate change observatory data sets, Cooperative Institute for Research in Environmental Sciences, University of Colorado.

Busse, Meghan R., Devin Pope, Jaren Pope, and Jorge Silva-Risso, 2015, The psychological effect of weather on car purchases, *Quarterly Journal of Economics* 130, 371–414.

Choi, Darwin, Zhenyu Gao, and Wenxi Jiang, 2020, Attention to Global Warming, *The Review of Financial Studies* 33, 1112–1145.

Dahlquist, Magnus, and José Martinez, 2015, Investor inattention: A hidden cost of choice in pension plans?, *European Financial Management* 21, 1–19.

Dechezleprêtre, Antoine, Adrien Fabre, Tobias Kruse, Bluebery Planterose, Ana Sanchez Chico, and Stefanie Stantcheva, 2025, Fighting climate change: International attitudes toward climate policies, *American Economic Review* 115, 1258–1300.

Djourelova, Milena, Ruben Durante, Elliot Motte, and Eleonora Pattacchini, 2024, Experience, narratives, and climate change beliefs, CEPR Discussion Paper No. 18738.

Falk, Armin, Anke Becker, Thomas Dohmen, Benjamin Enke, David Huffman, and Uwe Sunde, 2018, Global evidence on economic preferences, *The Quarterly Journal of Economics* 133, 1645–1692.

Funke, Manuel, Moritz Schularick, and Christoph Trebesch, 2023, Populist leaders and the economy, *American Economic Review* 12, 3249–3288.

Hong, Harrison, and Marcin Kacperczyk, 2009, The price of sin: The effects of social norms on markets, *Journal of Financial Economics* 93, 15–36.

Hong, Harrison, and Leonard Kostovetsky, 2012, Red and blue investing: Values and finance, *Journal of Financial Economics* 103, 1–19.

Jolly, Seth, Ryan Bakker, Liesbet Hooghe, Gary Marks, Jonathan Polk, Jan Rovny, Marco Steenbergen, and Milada Anna Vachudova, 2022, Chapel Hill Expert Survey trend file, 1999–2019, *Electoral Studies* 75, 102420.

Jylhä, Kirsti, Jens Rydgren, and Pontus Stripling, 2018, Sverigedemokraternas väljare. Vilka är de, var kommer de ifrån och vart är de på väg?, Institutet för Framtidsstudier, Working Paper 2018/12.

Kruttli, Mathias S., Brigitte Roth Tran, and Sumudu W. Watugala, 2021, Pricing poseidon: Extreme weather uncertainty and firm return dynamics, Finance and Economics Discussion Series 2019-054. Washington: Board of Governors of the Federal Reserve System.

McCartney, W. Ben, John Orellana-Li, and Calvin Zhang, 2024, Political polarization affects households' financial decisions: Evidence from home sales, *The Journal of Finance* 79, 795–841.

Meeuwis, Maarten, Jonathan A. Parker, Antoinette Schoar, and Duncan Simester, 2022, Belief disagreement and portfolio choice, *Journal of Finance* 77, 3191–3247.

Mian, Atif, Amir Sufi, and Nasim Khoshkhou, 2023, Partisan bias, economic expectations, and household spending, *The Review of Economics and Statistics* 105, 493–510.

Mudde, Cas, 2004, The populist zeitgeist, *Government and Opposition* 39, 541–563.

Palmer, Edward, 1998, The Swedish pension reform model: Framework and issues, Stockholm: National Social Insurance Board.

Pan, Yihui, Elena S. Pikulina, Stephan Siegel, and Tracy Yue Wang, 2023, Political divide and the composition of households' equity portfolios, Working Paper, SSRN, http://dx.doi.org/10.2139/ssrn.4381330.

Riedl, Arno, and Paul Smeets, 2017, Why do investors hold socially responsible mutual funds?, *Journal of Finance* 72, 2505–2550.

Sunstein, Cass R., Sebastian Bobadilla-Suarez, Stephanie C. Lazzaro, and Tali Sharot, 2017, How people update beliefs about climate change: Good news and bad news, *Cornell Law Review* 102, 1431–1443.

Figure 1: Populism, Politics and Climate Change

This figure presents a graphical analysis of how Sweden's main eight parties in parliament position themselves with respect to policy and a measure of populism. Populism is measured by position on "people versus elected representatives". Figure 1A plots the importance of environmental sustainability against populism and Figure 1B plots overall ideological stance in the left and right dimension against populism. Vertical and horizontal lines indicate voted weighted average outcomes for the 2018 national election. Party acronyms: SD (Sweden Democrats); GP (Green Party); LP (Left Party); C (Center); L (Liberals); S (Social Democrats); CD (Christian Democrats); M (Moderate Party). Data obtained from the 2019 Chapel Hill Expert Survey.

Figure 1A: Environment

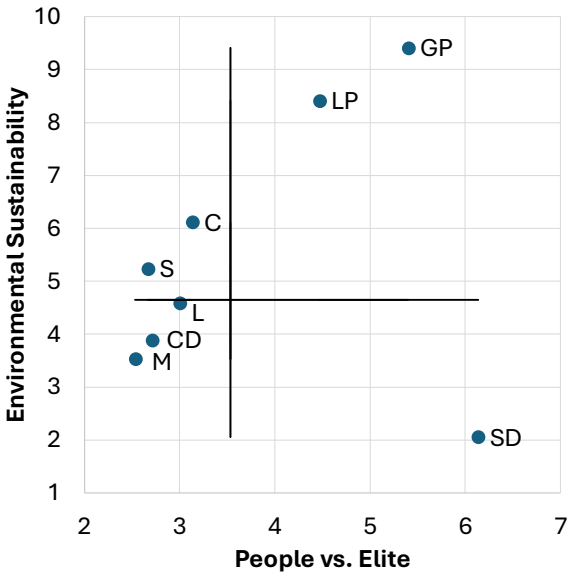


Figure 1B: Left/Right

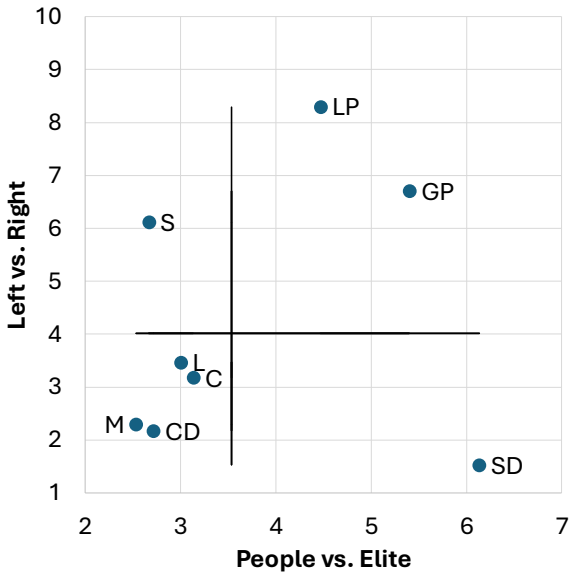


Figure 2: Changes in Right vs. Left Voting Outcomes between 2014 and 2018

This figure presents a scatter plot of the changes in voting outcomes for populist Left (Green Party and Left Party) versus populist Right (Sweden Democrats) between elections in 2018 compared to 2014 across the 290 regional municipalities in Sweden. 71 municipalities moved both to the right and left during this period, and so diverged from the political center. The cross-sectional average across municipalities of Moved right is 5.6% and Moved left is -0.5%. The voting data is obtained from the Swedish Electoral Authority.

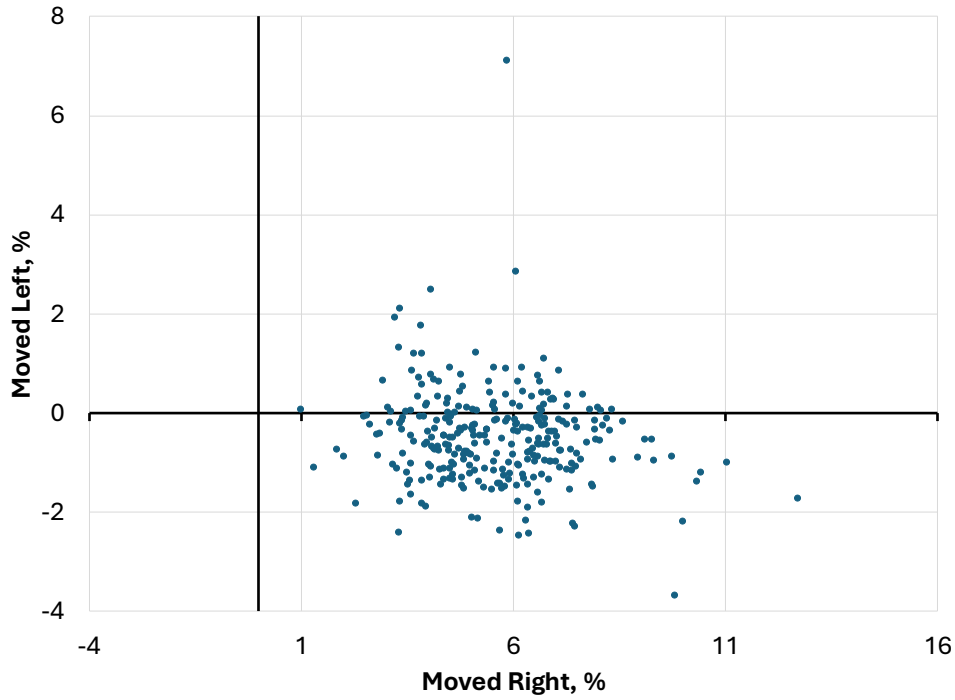


Figure 3: Forest Fires and Survey Responses

This figure plots survey responses (black dots) and forest fires (red area) across Sweden's 290 municipalities (black lines). Survey responses from left to right are sized by rings of 7, 10 and 15 kilometer radius. Overlaps occur where the black dots intersects red areas, affecting 10%, 21% and 37% of the sample across the three specifications.

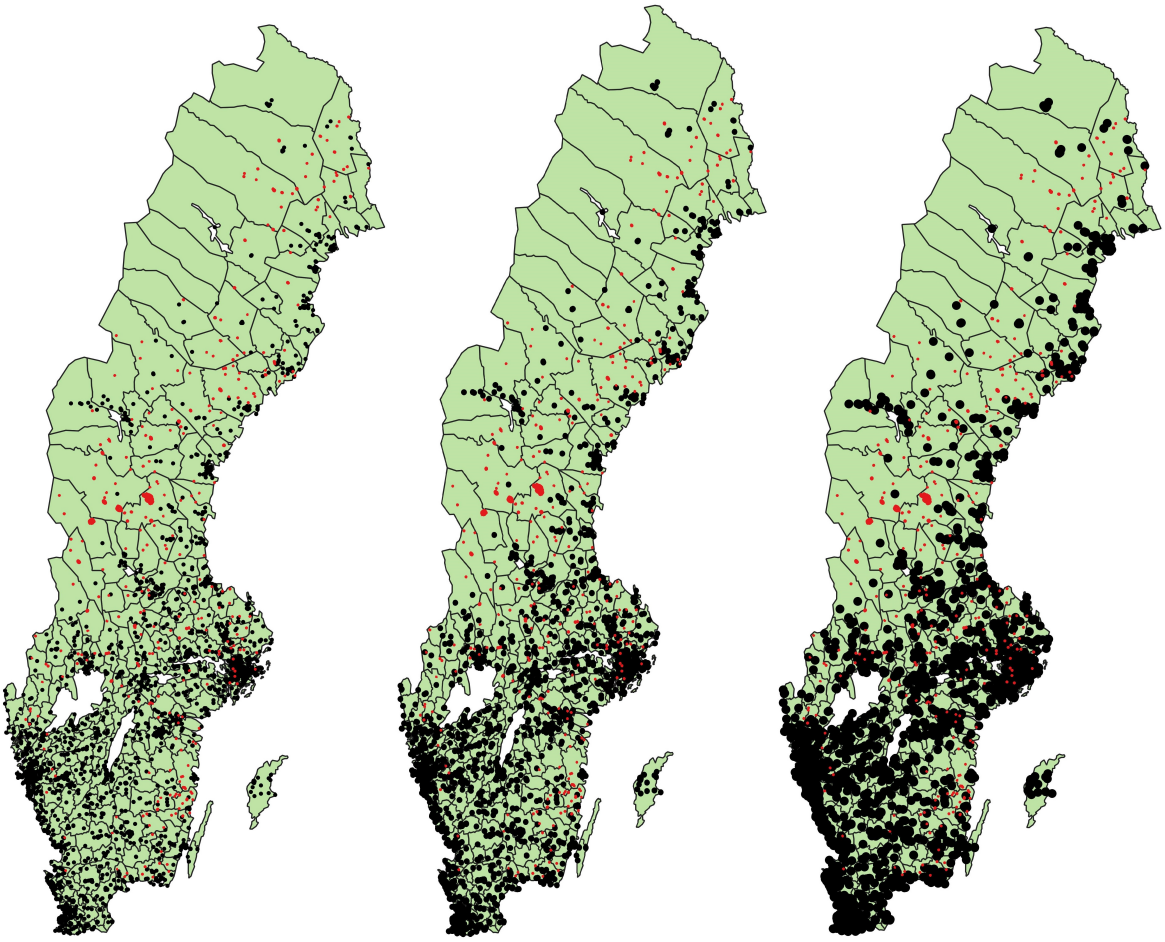


Figure 4: The Distribution of Fires and Survey Responses

This figure presents a bin scatter-plot of the number of survey responses and a histogram of fire area in log basis points for each of the 290 municipalities in Sweden. The horizontal axis breaks the distribution of the log of fire exposure area within the municipality into thirty bins. Grey bars represent the number of municipalities that fall into each bin. The black dots represent the average number of survey observations per municipality in that bin. Fire area data is obtained by the Swedish Civil Contingencies Agency (SCCA). There are 2,521 observations in the survey sample.

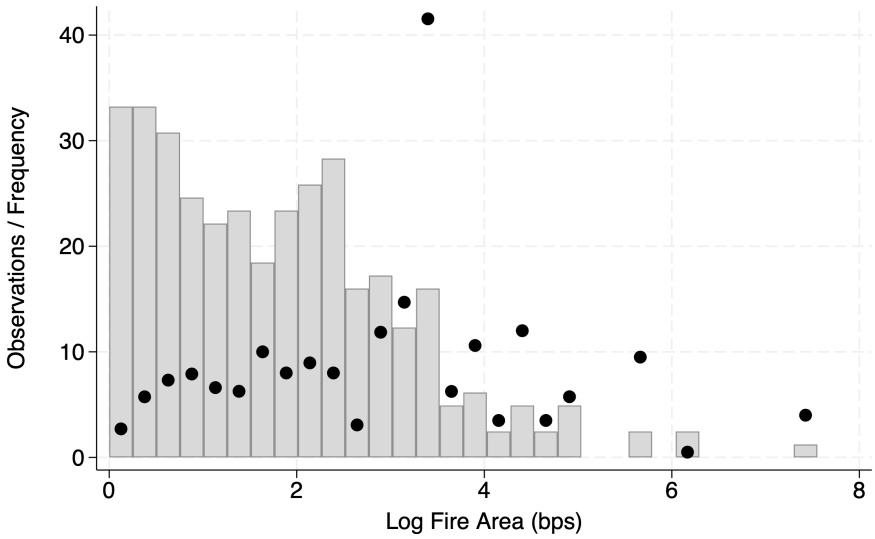


Figure 5: Media Coverage of Global Warming

This figure plots the monthly time series of article counts around a window before and between the two surveys in April 2018 through August 2019 (highlighted by grey area). The bars show the number of articles mentioning "global warming" in local news media collected for regional newspapers. The solid line shows the share of articles mentioning global warming compared to all published news articles. Local news data was obtained from the Swedish Royal Library.

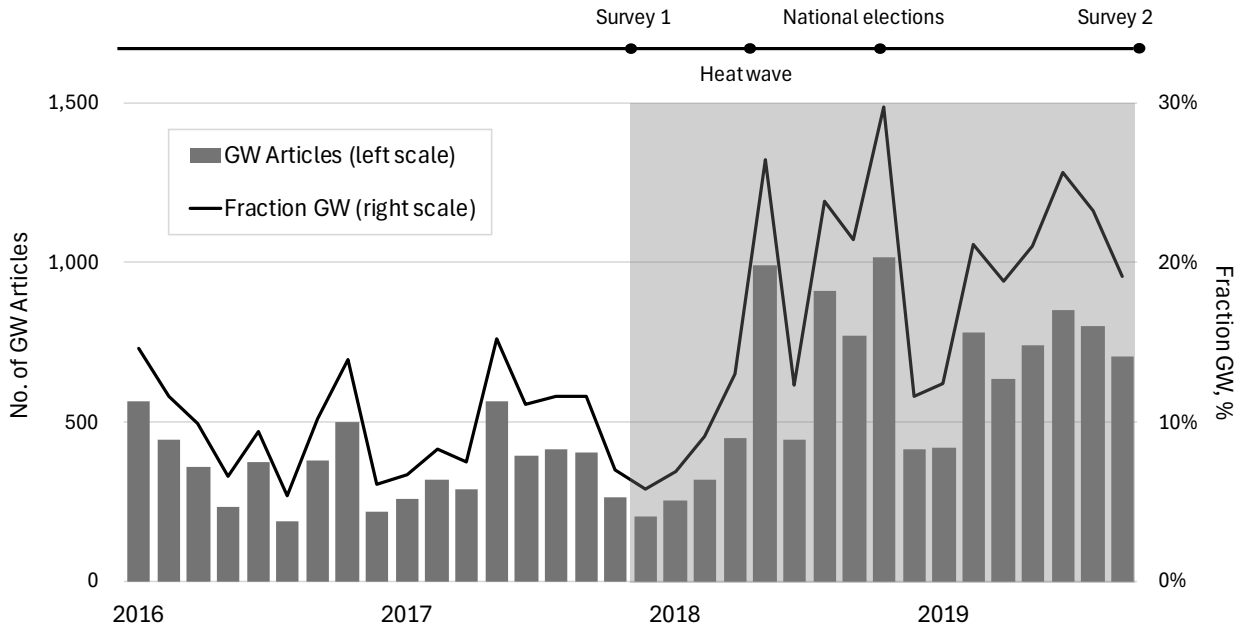


Figure 6: Timeline of Events

This figure presents the timing of key events in this study. The first survey was distributed in February 2018. The summer that followed included a record heatwave that triggered series of forest fires and media reporting about global warming. National elections were held in September of 2018. The second survey was distributed in August 2019. The retirement portfolio data in this study ends in December 2021.

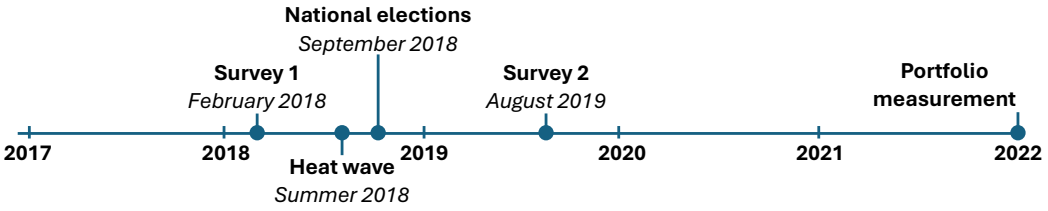


Table I: Forest Fires and Municipal Election Outcomes

This table reports the results of OLS predictive regressions in which the dependent variables "Moved left" and "Moved right" in columns (1)–(4) measure changes in municipal vote shares for left-wing populist parties (the Green Party and the Left Party) and the right-wing populist party (the Sweden Democrats), respectively, between the 2014 and 2018 elections. The dependent variable ΔNews in columns (5)–(6) measures the change in the fraction of local news content mentioning "global warming" between the two survey waves. Independent variables measured in 2014 include the unemployment rate, the proportion of foreign-born residents, the proportion reporting low trust in others, and population density. Election controls denote 2014 vote shares for left- and right-wing populist parties. Specifications in columns (2), (4), and (6) additionally include the log of fire area. A constant is estimated but omitted from the table. The sample consists of 290 Swedish municipalities, of which 276 are included in the news specifications. Robust standard errors are reported in parentheses. One, two, and three asterisks denote statistical significance at the 10%, 5%, and 1% levels, respectively.

	Election outcomes 2014-2018				**Media attention**	
	Moved right		Moved left		ΔNews	
VARIABLES	(1)	(2)	(3)	(4)	(5)	(6)
Log Fire Area		0.099*		0.073**		0.050***
		(0.053)		(0.033)		(0.010)
Unemployment	-0.199***	-0.202***	0.096***	0.095***	-0.023**	-0.026***
	(0.041)	(0.040)	(0.031)	(0.030)	(0.009)	(0.009)
Foreign born	0.077***	0.077***	-0.044***	-0.045***	0.016***	0.016***
	(0.026)	(0.027)	(0.013)	(0.013)	(0.005)	(0.005)
Low trust in others	0.067**	0.059*	-0.036*	-0.038**	0.013	0.009
	(0.032)	(0.032)	(0.019)	(0.018)	(0.008)	(0.008)
Population density	-0.666***	-0.702***	0.438***	0.401***	0.050	0.030
	(0.146)	(0.150)	(0.131)	(0.127)	(0.032)	(0.032)
Election controls	Yes	Yes	Yes	Yes	Yes	Yes
Observations	290	290	290	290	276	276
R-squared	0.266	0.275	0.097	0.115	0.173	0.230

Table II: Changing Beliefs About Future Temperature Increases

This table reports the distribution of responses to the survey question: "Within the next twenty years, how likely is a global temperature increase of more than one degree Centigrade?" Response options include "Highly unlikely," "Unlikely," "Neutral," "Likely," and "Highly likely." The responses are drawn from two survey waves administered to the same individuals: the first in spring 2018 and the second in fall 2019. The sample consists of 2,561 respondents, of whom 613 revised their assessments downward, 684 revised upward, and 1,264 reported no change between the two surveys.

	Temp Forecast 2019					
Temp Forecast 2018	Highly Unlikely	Unlikely	Neither/ nor	Likely	Highly Likely	Total
Highly Unlikely	13	6	7	19	15	60
Unlikely	7	20	22	50	22	121
Neither/nor	9	33	102	131	53	328
Likely	23	45	142	496	359	1,065
Highly Likely	16	23	51	264	633	987
Total	68	127	324	960	1,082	2,561

Table III: Temperature Revisions and Climate Concerns

This table reports marginal probabilities from Probit regressions in which the dependent variable is an indicator equal to one if the respondent reports "Strongly agree" to the following statements measuring environmental concerns: "I have already noticed the effects of climate change in Sweden" ("Notice GW" in columns (1)–(2)); "I'm worried about climate change" ("Worry GW" in columns (3)–(4)); and "The government should do more to fight climate change" ("Government action" in columns (5)–(6)). These questions were asked in the second survey wave conducted in 2019. The dummy variables "Revised up" and "Revised down" are constructed from changes in the reported likelihood of a more than one-degree Centigrade increase in global temperature within 20 years between the 2018 and 2019 surveys. Characteristic controls include log disposable income, age (in decades), and indicator variables for gender, higher education, and birthplace. Temperature assessment (TA) controls are indicator variables for each response category to the corresponding question in the 2018 survey. Regressions are weighted using sample weights. Robust standard errors are reported in parentheses. One, two, and three asterisks denote statistical significance at the 10%, 5%, and 1% levels, respectively.

	Notice GW		Worry GW		Government Action	
VARIABLES	(1)	(2)	(3)	(4)	(5)	(6)
Revised up		0.225***		0.138***		0.206***
		(0.027)		(0.031)		(0.030)
Revised down		-0.196***		-0.173***		-0.215***
		(0.028)		(0.019)		(0.028)
Men	-0.128***	-0.094***	-0.127***	-0.098***	-0.203***	-0.175***
	(0.021)	(0.022)	(0.019)	(0.019)	(0.021)	(0.022)
Age	-0.027***	-0.013	-0.038***	-0.029***	-0.038***	-0.026***
	(0.008)	(0.008)	(0.007)	(0.007)	(0.008)	(0.008)
Log income	-0.003	-0.004	0.000	0.001	-0.009	-0.010
	(0.010)	(0.010)	(0.008)	(0.009)	(0.010)	(0.011)
University	0.074***	0.073***	0.080***	0.081***	0.074***	0.072***
	(0.022)	(0.023)	(0.019)	(0.019)	(0.022)	(0.023)
Foreign born	0.020	0.033	0.022	0.033	-0.047	-0.044
	(0.035)	(0.035)	(0.032)	(0.033)	(0.037)	(0.038)
Observations	2,561	2,561	2,561	2,561	2,561	2,561
TA controls	No	Yes	No	Yes	No	Yes
Pseudo R2	0.023	0.103	0.041	0.116	0.044	0.110

Table IV: Prosocial Financial Orientations and Political Shifts

This table reports the results of OLS regressions in which the dependent variables are ordinal responses to the following questions: "How often do you review your pension?" ("Attentive" in columns (1)–(2)); "I prefer a clean planet over financial welfare" ("Non-pecuniary" in columns (3)–(4)); and "I am willing to pay higher taxes to increase Sweden's aid to poor countries" ("Tax-for-aid" in columns (5)–(6)). "Moved left" and "Moved right" measure changes in municipal vote shares between the 2014 and 2018 elections, and "Moved right × left" denotes their interaction. Characteristic controls include log disposable income, age (in decades), and indicator variables for gender, higher education, and birthplace. Regressions are weighted using sample weights, and a constant is estimated but omitted from the table. Robust standard errors are reported in parentheses. One, two, and three asterisks denote statistical significance at the 10%, 5%, and 1% levels, respectively.

	Attentive		Non-pecuniary		Tax-for-aid	
VARIABLES	(1)	(2)	(3)	(4)	(5)	(6)
Moved right		-0.058***		-0.028		-0.049**
		(0.020)		(0.019)		(0.023)
Moved left		-0.058		0.158**		0.183**
		(0.069)		(0.068)		(0.084)
Moved right × left		0.001		-0.023		-0.021
		(0.016)		(0.016)		(0.020)
Men	0.267***	0.272***	-0.222***	-0.225***	-0.286***	-0.288***
	(0.048)	(0.048)	(0.043)	(0.043)	(0.057)	(0.056)
Age	0.227***	0.230***	0.035**	0.040**	-0.074***	-0.065***
	(0.017)	(0.017)	(0.017)	(0.017)	(0.021)	(0.021)
Log income	0.075***	0.078***	-0.065***	-0.062***	-0.005	-0.000
	(0.025)	(0.025)	(0.014)	(0.014)	(0.027)	(0.027)
University	0.227***	0.218***	0.204***	0.173***	0.334***	0.283***
	(0.048)	(0.049)	(0.044)	(0.044)	(0.057)	(0.058)
Foreign born	-0.114	-0.104	0.007	-0.010	0.116	0.092
	(0.082)	(0.082)	(0.068)	(0.067)	(0.095)	(0.095)
Observations	2,561	2,561	2,561	2,561	2,561	2,561
R-squared	0.110	0.116	0.035	0.044	0.040	0.054

Table V: Temperature Forecasts and Fire Shocks

This table reports the results of OLS regressions in which the dependent variables are based on responses to the survey question: "Within the next twenty years, how likely is a global temperature increase of more than one degree Centigrade?" The dependent variables labeled "Forecast levels" in columns (1) and (2) are indicator variables equal to one if the respondent answers "Very likely" in the 2018 and 2019 surveys, respectively, and zero otherwise. In column (3), the dependent variable is "Forecast revisions," defined as the change in responses between the 2018 and 2019 surveys, as reported in Table II, coded from -2 ("Very unlikely") to $+2$ ("Very likely"). The independent variable "Fire shock" is a dummy equal to one for areas most severely affected by the 2018 forest fires and zero otherwise. Characteristic controls include log disposable income, age (in decades), and indicator variables for gender, higher education, and birthplace. The sample consists of 2,561 respondents. Regressions are weighted using sample weights, and a constant is estimated but omitted from the table. Robust standard errors are reported in parentheses. One, two, and three asterisks denote statistical significance at the 10%, 5%, and 1% levels, respectively.

	Forecast levels		**Forecast revisions**
	Survey		
	2018	2019	All
	(1)	(2)	(3)
Fire shock	0.005	0.048**	0.109**
	(0.023)	(0.023)	(0.052)
Men	-0.023	-0.124***	-0.216***
	(0.022)	(0.022)	(0.048)
Age	-0.051***	-0.033***	0.044**
	(0.008)	(0.008)	(0.018)
Log income	-0.019*	-0.006	0.025
	(0.010)	(0.009)	(0.026)
University	0.034	0.015	-0.069
	(0.022)	(0.022)	(0.049)
Foreign born	-0.003	-0.023	-0.028
	(0.035)	(0.035)	(0.084)
Observations	2,561	2,561	2,561
R-squared	0.026	0.028	0.015
F-stat	9.34	10.33	5.14

Table VI: Forecast Revisions, Fire Shocks, and Social Differences

This table reports the results of OLS regressions in which the dependent variable, "Forecast revisions," is the change in responses to the survey question: "Within the next twenty years, how likely is a global temperature increase of more than one degree Centigrade?" between the 2018 and 2019 surveys. Columns (1)–(8) split the sample by above- or below-median unemployment, foreign born, trust in others and urban-dwellers, measured in 2014 (see Table I). Columns (9)–(12) split the sample by prosocial financial orientation (see Table IV). The independent variable "Fire shock" is a dummy equal to one for areas most severely affected by the 2018 forest fires and zero otherwise. Characteristic controls include log disposable income, age (in decades), and indicator variables for gender, higher education, and birthplace. The sample consists of 2,561 respondents. Regressions are weighted using sample weights, and a constant is estimated but omitted from the table. Robust standard errors are reported in parentheses. One, two, and three asterisks denote statistical significance at the 10%, 5%, and 1% levels, respectively.

	Unemployment		Foreign born		Trust		Urban-dwelling		Non-pecuniary		Tax-for-aid	
	Low	High	Low	High	Low	High	Low	High	Low	High	Low	High
VARIABLES	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
Fire shock	0.148**	0.032	0.221**	0.038	-0.040	0.229***	0.192**	0.033	0.022	0.137**	-0.033	0.172***
	(0.071)	(0.075)	(0.087)	(0.065)	(0.078)	(0.069)	(0.090)	(0.073)	(0.092)	(0.063)	(0.089)	(0.063)
Men	-0.148**	-0.299***	-0.174**	-0.234***	-0.292***	-0.144**	-0.219***	-0.193***	-0.305***	-0.162***	-0.222***	-0.181***
	(0.068)	(0.069)	(0.070)	(0.066)	(0.071)	(0.066)	(0.064)	(0.075)	(0.084)	(0.059)	(0.080)	(0.061)
Age	0.037	0.053**	0.043*	0.040*	0.021	0.068***	0.036	0.057**	0.036	0.049**	0.049*	0.044**
	(0.026)	(0.024)	(0.026)	(0.023)	(0.025)	(0.025)	(0.024)	(0.026)	(0.030)	(0.022)	(0.029)	(0.022)
Log income	0.003	0.050	0.068*	-0.008	0.045	0.003	0.046	-0.001	0.100	0.019	0.083*	-0.004
	(0.032)	(0.038)	(0.037)	(0.029)	(0.037)	(0.035)	(0.033)	(0.036)	(0.070)	(0.028)	(0.047)	(0.026)
University	-0.026	-0.131*	0.045	-0.173***	-0.137*	-0.015	-0.061	-0.086	-0.031	-0.095	-0.076	-0.087
	(0.070)	(0.068)	(0.070)	(0.067)	(0.070)	(0.067)	(0.064)	(0.077)	(0.082)	(0.059)	(0.079)	(0.061)
Foreign born	0.029	-0.087	-0.374***	0.140	-0.002	-0.047	-0.259**	0.139	-0.112	0.007	0.132	-0.123
	(0.122)	(0.113)	(0.138)	(0.101)	(0.110)	(0.123)	(0.124)	(0.113)	(0.150)	(0.101)	(0.140)	(0.104)
Observations	1,368	1,193	1,210	1,351	1,167	1,394	1,487	1,074	866	1,695	977	1,584
R-squared	0.010	0.031	0.030	0.020	0.024	0.020	0.024	0.015	0.024	0.014	0.021	0.016

Table VII: Forecast Revisions, Fire Shocks, and Media Coverage

This table reports the results of OLS regressions in which the dependent variable, "Forecast revisions," is the change in responses to the survey question: "Within the next twenty years, how likely is a global temperature increase of more than one degree Centigrade?" between the 2018 and 2019 surveys. Columns (1)–(2) use the full sample. Columns (3)–(6) split the sample by above- or below-median changes in local news reporting. The independent variable "Fire shock" is a dummy equal to one for areas most severely affected by the 2018 forest fires and zero otherwise. "Moved left" and "Moved right" measure changes in municipal vote shares between the 2014 and 2018 elections, and "Moved right × left" denotes their interaction. The regressions include the same characteristic controls as in Table VI. The full sample consists of 2,561 respondents, while the news sample includes 2,512 respondents across 276 of the 290 municipalities. Regressions are weighted using sample weights, and a constant is estimated but omitted from the table. Robust standard errors are reported in parentheses. One, two, and three asterisks denote statistical significance at the 10%, 5%, and 1% levels, respectively.

	Forecast revisions					
			ΔNews			
	All		High	Low	High	Low
VARIABLES	(1)	(2)	(3)	(4)	(5)	(6)
Fire shock		0.100*	0.052	0.254***	-0.002	0.256***
		(0.061)	(0.070)	(0.090)	(0.094)	(0.093)
Moved right	-0.045**	-0.041**			-0.090***	-0.034
	(0.020)	(0.021)			(0.035)	(0.028)
Moved left	0.136*	0.094			0.282**	0.162
	(0.072)	(0.075)			(0.142)	(0.115)
Right × left	-0.033*	-0.027			-0.079**	-0.032
	(0.017)	(0.017)			(0.036)	(0.023)
Characteristics	Yes	Yes	Yes	Yes	Yes	Yes
Observations	2,561	2,561	1,262	1,250	1,262	1,250
R-squared	0.016	0.017	0.013	0.028	0.019	0.030

Table VIII: Temperature Revisions, Climate Risk Exposure, and Fossil Fuel Exclusion Fund Holdings

This table reports the results of cross-sectional OLS regressions in which the dependent variable is either the portfolio-weighted Morningstar Climate Risk Score (columns (1)–(5)) or the portfolio weight in fossil fuel exclusion funds (columns (6)–(10)) in respondents' pension holdings at the end of 2021. The dummy variables "Revised up" and "Revised down" are constructed from changes in the reported likelihood of a more than one-degree Centigrade increase in global temperature within 20 years between the 2018 and 2019 surveys. Columns (1) and (6) use the full sample. Columns (2), (3), (7), and (8) split the sample by above- or below-median vote shares for populist left-wing parties in the 2018 election; columns (4), (5), (9), and (10) apply the same split for right-wing vote shares. Characteristic controls include log disposable income, age (in decades), and indicator variables for gender, higher education, and birthplace. TA controls denote dummies for temperature assessments reported in 2018. Fund controls include portfolio weights by fund category, exposure to retail distribution networks, one-year past returns, portfolio-weighted standard deviation, and fees. Regressions are weighted using sample weights, and a constant is estimated but omitted from the table. The full active sample consists of 1,436 investors, and 1,409 observations are available in the MS Risk score specifications. Robust standard errors are reported in parentheses. One, two, and three asterisks denote statistical significance at the 10%, 5%, and 1% levels, respectively.

	MS Risk score weight					**Fossil fuel exclusion weight**				
		Left votes		Right votes			Left votes		Right votes	
	All	Low	High	Low	High	All	Low	High	Low	High
VARIABLES	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
Revised up	-0.289***	-0.311**	-0.289**	-0.287**	-0.297**	0.051**	0.048	0.047*	0.057**	0.020
	(0.092)	(0.132)	(0.116)	(0.113)	(0.138)	(0.020)	(0.034)	(0.024)	(0.023)	(0.038)
Revised down	0.125	-0.055	0.178	0.189*	-0.108	-0.004	-0.035	0.007	-0.003	-0.003
	(0.095)	(0.148)	(0.119)	(0.113)	(0.173)	(0.018)	(0.033)	(0.022)	(0.022)	(0.033)
Men	0.184***	0.099	0.230***	0.215***	0.086	-0.037**	-0.092***	-0.011	-0.038**	-0.031
	(0.064)	(0.103)	(0.081)	(0.076)	(0.111)	(0.015)	(0.027)	(0.018)	(0.017)	(0.029)
Age	-0.167***	-0.180***	-0.160***	-0.160***	-0.181***	0.018**	-0.000	0.029***	0.023***	-0.009
	(0.033)	(0.053)	(0.042)	(0.039)	(0.066)	(0.007)	(0.013)	(0.009)	(0.009)	(0.014)
Log income	-0.039	-0.007	-0.039	-0.037	0.001	0.003	0.032	-0.004	0.000	0.011
	(0.048)	(0.108)	(0.050)	(0.050)	(0.124)	(0.008)	(0.026)	(0.008)	(0.009)	(0.028)
University	0.057	0.124	0.012	0.026	0.162	-0.006	-0.031	0.010	0.004	-0.047*
	(0.071)	(0.111)	(0.088)	(0.086)	(0.114)	(0.015)	(0.027)	(0.018)	(0.018)	(0.028)
Foreign born	0.149	-0.213	0.242	0.202	-0.072	-0.022	-0.046	-0.014	-0.017	-0.024
	(0.151)	(0.200)	(0.180)	(0.178)	(0.214)	(0.026)	(0.045)	(0.030)	(0.030)	(0.046)
Fund controls	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
TA controls	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Observations	1,409	429	980	1,058	351	1,436	438	998	1,080	356
Mean dep. var.	20.86	20.77	20.90	20.88	20.81	0.697	0.733	0.682	0.684	0.740
R-squared	0.476	0.565	0.456	0.454	0.576	0.491	0.475	0.514	0.501	0.518

Table IX: Temperature Revisions and Active Investments in Fossil Fuel Exclusion Funds

This table reports the results of OLS regressions in which the dependent variable is the active portfolio weight in fossil fuel exclusion funds in respondents' pension holdings at the end of 2021. The dummy variables "Revised up" and "Revised down" are constructed from changes in the reported likelihood of a more than one-degree Centigrade increase in global temperature within 20 years between the 2018 and 2019 surveys. Column (1) uses the full sample. Columns (2)–(3) split the sample by low- and high-fire-affected areas; columns (4)–(5) split the sample by above- or below-median changes in local news reporting. Columns (6)–(7) split the sample by above- or below-median vote shares for populist left-wing parties in the 2018 election; columns (8)–(9) do so for right-wing vote shares. Characteristics include log disposable income, age (in decades), and indicator variables for gender, higher education, and birthplace. TA controls denote dummies for temperature assessments reported in 2018. Fund controls include portfolio weights by fund category, exposure to retail distribution networks, one-year past returns, portfolio-weighted standard deviation, and fees. Regressions are weighted using sample weights, and a constant is estimated but omitted from the table. Robust standard errors are reported in parentheses. One, two, and three asterisks denote statistical significance at the 10%, 5%, and 1% levels, respectively.

	Active fossil fuel exclusion weight								
		Fire shock		Δ News		Left votes		Right votes	
	All	No	Yes	Low	High	Low	High	Low	High
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Revised up	0.052*	0.012	0.134***	0.037	0.083**	0.016	0.077**	0.052*	0.070
	(0.027)	(0.031)	(0.052)	(0.038)	(0.040)	(0.050)	(0.031)	(0.031)	(0.056)
Revised down	-0.001	-0.025	0.053	0.008	0.003	-0.105***	0.035	0.031	-0.091**
	(0.022)	(0.026)	(0.041)	(0.032)	(0.031)	(0.036)	(0.027)	(0.027)	(0.038)
Men	0.029	0.031	0.041	0.041	0.010	0.002	0.047**	0.038*	0.024
	(0.019)	(0.023)	(0.037)	(0.027)	(0.028)	(0.034)	(0.023)	(0.023)	(0.037)
Age	-0.000	0.001	-0.011	0.008	-0.004	0.003	-0.000	0.003	-0.004
	(0.011)	(0.013)	(0.020)	(0.016)	(0.016)	(0.020)	(0.013)	(0.013)	(0.021)
Log income	0.013	0.015	0.004	0.023*	-0.007	0.028	0.007	0.009	0.039
	(0.011)	(0.011)	(0.026)	(0.014)	(0.020)	(0.035)	(0.012)	(0.012)	(0.036)
University	0.088***	0.087***	0.078**	0.072***	0.111***	0.009	0.118***	0.117***	-0.013
	(0.019)	(0.022)	(0.038)	(0.028)	(0.027)	(0.035)	(0.022)	(0.022)	(0.037)
Foreign born	-0.031	-0.079**	0.006	-0.054	-0.029	-0.120*	-0.019	-0.031	-0.038
	(0.032)	(0.039)	(0.052)	(0.046)	(0.043)	(0.071)	(0.036)	(0.037)	(0.061)
Fund controls	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
TA controls	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Observations	1,436	988	448	717	692	438	998	1,080	356
Mean dep. var.	0.222	0.207	0.254	0.212	0.234	0.213	0.226	0.230	0.198
R-squared	0.076	0.074	0.121	0.083	0.094	0.104	0.117	0.097	0.117

Table X: Active Fossil Fuel Exclusions and Prosocial Financial Orientations

This table reports the results of OLS regressions in which the dependent variable is the active portfolio weight in fossil fuel exclusion funds in respondents' pension holdings at the end of 2021. The dummy variables "Revised up" and "Revised down" are constructed from changes in the reported likelihood of a more than one-degree Centigrade increase in global temperature within 20 years between the 2018 and 2019 surveys. Columns (1)–(6) split the sample based on responses to the following three questions: "How often do you review your pension?" (columns 1–2); "I prefer a clean planet over financial welfare" (columns 3–4); and "I am willing to pay higher taxes to increase Sweden's aid to poor countries" (columns 5–6). Characteristics include the regression control variables used in Table IX. TA controls denote dummies for temperature assessments reported in 2018. Fund controls include portfolio weights by fund category, exposure to retail distribution networks, one-year past returns, portfolio-weighted standard deviation, and fees. Regressions are weighted using sample weights, and a constant is estimated but omitted from the table. Robust standard errors are reported in parentheses. One, two, and three asterisks denote statistical significance at the 10%, 5%, and 1% levels, respectively.

	Active fossil fuel exclusion weight					
	Attentive		Non-pecuniary		Tax-for-aid	
	Low	High	Low	High	Low	High
	(1)	(2)	(3)	(4)	(5)	(6)
Revised up	0.030	0.074**	0.022	0.076**	-0.016	0.087**
	(0.044)	(0.035)	(0.046)	(0.034)	(0.039)	(0.037)
Revised down	0.002	-0.003	-0.027	0.012	-0.019	0.019
	(0.038)	(0.027)	(0.038)	(0.027)	(0.033)	(0.030)
Characteristics	Yes	Yes	Yes	Yes	Yes	Yes
Fund controls	Yes	Yes	Yes	Yes	Yes	Yes
TA controls	Yes	Yes	Yes	Yes	Yes	Yes
Observations	557	879	491	945	578	858
Mean dep. var.	0.214	0.228	0.231	0.218	0.200	0.238
R-squared	0.087	0.117	0.058	0.109	0.069	0.107

Table XI: Active Fossil Fuel Exclusions, Fire Exposure, and Rebalancing Motivations

This table reports the results of OLS regressions in which the dependent variable is the active portfolio weight in fossil fuel exclusion funds in respondents' pension holdings at the end of 2021. The dummy variables "Revised up" and "Revised down" are constructed from changes in the reported likelihood of a more than one-degree Centigrade increase in global temperature within 20 years between the 2018 and 2019 surveys and are interacted with the fire shock dummy. Columns (1)–(6) split the sample based on responses to the following three questions: "How often do you review your pension?" (columns 1–2); "I prefer a clean planet over financial welfare" (columns 3–4); and "I am willing to pay higher taxes to increase Sweden's aid to poor countries" (columns 5–6). Characteristics include the regression control variables used in Table IX. TA controls denote dummies for temperature assessments reported in 2018. Fund controls include portfolio weights by fund category, exposure to retail distribution networks, one-year past returns, portfolio-weighted standard deviation, and fees. The full sample consists of 1,436 investors. Regressions are weighted using sample weights, and a constant is estimated but omitted from the table. Robust standard errors are reported in parentheses. One, two, and three asterisks denote statistical significance at the 10%, 5%, and 1% levels, respectively.

	Active fossil fuel exclusion weight					
	Attentive		Non-pecuniary		Tax-for-aid	
	Low	High	Low	High	Low	High
	(1)	(2)	(3)	(4)	(5)	(6)
Revised up × fire shock	0.037	0.203***	0.031	0.197***	0.107	0.151**
	(0.079)	(0.065)	(0.092)	(0.060)	(0.076)	(0.064)
Revised down × fire shock	0.078	0.079	0.092	0.049	0.118*	0.036
	(0.083)	(0.057)	(0.089)	(0.058)	(0.071)	(0.068)
Revised up	0.017	0.012	0.013	0.015	-0.047	0.041
	(0.050)	(0.038)	(0.051)	(0.038)	(0.043)	(0.041)
Revised down	-0.022	-0.028	-0.057	-0.003	-0.057	0.010
	(0.043)	(0.032)	(0.045)	(0.032)	(0.039)	(0.035)
Fire shock	0.006	-0.041	-0.018	-0.026	-0.062	0.004
	(0.051)	(0.032)	(0.054)	(0.032)	(0.044)	(0.035)
Characteristics	Yes	Yes	Yes	Yes	Yes	Yes
Fund controls	Yes	Yes	Yes	Yes	Yes	Yes
Observations	557	879	491	945	578	858
Mean dep. var.	0.214	0.228	0.231	0.218	0.200	0.238
R-squared	0.091	0.132	0.060	0.125	0.076	0.120

A Sampling Procedure and Summary Statistics

This appendix presents the data collection and matching procedure in detail. In early 2018, Statistics Sweden (SCB) mailed out 19,977 invitations to a random sample of Swedes aged 18-65. The invitation contained information about the survey and how to log on to the response website at SCB, what registry data that was going to be used and matched to the survey responses if the respondent agreed to participate, and contact details to SCB and one of the authors in case of questions. On behalf of the authors, SCB also collected and matched pension data to the survey which was supplied by the Swedish Pension Agency (SPA). All identities are scrambled and the analysis was conducted through the mainframe computer situated at the SCB from which the authors only can retrieve and keep aggregated results.

The procedure followed all standards applied by SCB and the project has been approved by Statistics Sweden's Ethical Review Committee. SCB calibrated the sample to an underlying population of 6,097,316 Swedes in the ages 18-65 as of the end of 2017 using gender and age (details of the exact survey weight methodology and mailer is available upon request).

Panels A and B of Table A.1 present details of the sampling procedure. Panel C of Table A.1 summarizes the matching of survey responses with retirement accounts. From the total sample of 2,561 respondents 2,521 also owned retirement accounts at the SPA at the end of 2021. Fund holdings is matched to monthly fund characteristics obtained from the SPA website that excludes the default fund. Exclusion fund exposure is obtained for the retirement sample from their selection of 499 available mutual funds and the default fund at the end of 2021 and is calculated as a portfolio weight. There were 1,436 investors with an active portfolio choice as of 2021. The default fund and 33 other funds have missing data for the Morningstar Climate Risk measure. 1,112 investors (1,085 in default and 27 investors in open funds) were invested in missing funds and so are dropped from the regression leaving 1,409 observations. The distribution of Morningstar Climate Risk scores is presented in Appendix F (Figure F.2).

1.1 Summary Statistics

Table A.2 presents summary statistics for the key variables in the study, organized by respondent characteristics. The first two columns report the sample shares alongside the corresponding population shares. Responses are tabulated separately by gender, age, income, and education level.

"Urban" denotes an indicator variable equal to one for municipalities with a population density above 1,000 inhabitants per square kilometer and a total population exceeding 50,000, and zero otherwise. "Foreign born" denotes an indicator variable equal to one for respondents whose recorded place of birth is outside Sweden, and zero otherwise.

Table A.3 presents regression results across responses to Survey 1 and 2. The dependent variable takes the value of one if the respondent participated in Survey 2. Columns (1) and (2) shows the results using the same variables as in Table I in the main text, and shows that participation across surveys is independent of regional variation for the fire shock, unemployment, proportion foreign born, low trust and population density. Column (2) includes the political variables and shows that individuals from areas with higher right-wing support are slightly less likely to participate in the second survey. Columns

(3) and (4) include individual characteristics and shows that respondents to the second survey are more likely to be male, older, university-educated and less likely to be foreign born.

Table A.1: Sample Selection

This table display details of the sample construction across the two surveys conducted in the spring of 2018 and fall of 2019. In 2018, 19,977 randomly selected individuals in the ages 18-65 were invited to take the first survey, of which 4,257 responded. In the fall of 2019, the 4,244 people who remained in the Statistics Sweden (SCB) registry where contacted again to take a second survey. Panel A displays details about the survey invitations, responses and deletions due to missing data. Panel B displays details of the overall responses and final sample in the 2019 survey across three survey waves from first invite to second reminder. Panel C shows the number of observations remaining when matching the survey data to pension holdings from which we only have sustainability data for the privately managed funds, excluding the stock and bond default fund. Panel D of Table A.1 presents the survey weights obtained by Statistics Sweden which are computed using the age and gender profile of survey respondents compared to the underlying sample presented in Table A.2.

Panel A:	**Survey invitations**			
Note	Responses	% of Total	Removed	Remark
Survey 1 invitations	19,977	100.0	0	Survey 1 open February 7, 2018
Survey 1 total responses	4,257	21.3	15,720	Survey 1 closed April 5, 2018
Survey 1 final responses	4,230	21.2	27	Missing location data
Survey 2 invitations	4,244	100.0	13	Survey 2 open August 22, 2019
Survey 2 total responses	2,596	61.2	1,648	Survey 2 closed October 8, 2019
Deletion 1	2,582	60.8	14	Missing SCB registry data
Deletion 2	2,561	58.1	21	Missing Survey 1 responses

Panel B:	**2019 responses**			
Note	Responses	% of Total	Sample	Date
First invitation (Wave 1)	1,347	31.7	1,334	August 22, 2019
Reminder 1 (Wave 2)	775	18.3	766	September 5, 2019
Reminder 2 (Wave 3)	474	11.2	461	September 19, 2019
Responses	2,596	61.2	2,561	Survey 2 closed October 8, 2019
Deletions	0	0.0	35	From Panel A
No response	1,582	37.3	1,582	
Returned mail	18	0.0	18	
Declined	46	1.1	46	
Blank	2	0.0	2	

Panel C:	**SPA Fund Matching**			
Note	Responses	SPA	Choice	Rebalanced
Full sample	2,561	2,521	1,436	711

Panel D:	**Survey weights**			
Strata	Weight	Freq.	% of Total	Population
1	1207.513	451	17.61	544,588
2	1337.449	454	17.73	607,702
3	1996.194	325	12.69	648,763
4	2126.129	325	12.69	690,992
5	2710.985	204	7.97	553,041
6	2840.921	252	9.84	715,912
7	3926.926	194	7.58	761,824
8	4056.861	156	6.09	632,870
9	4646.952	102	3.98	473,989
10	4776.887	98	3.83	468,135

Table A.2: Sample Characteristics, Temperature Change and Green Beliefs

This table presents sample means for the temperature assessments among the 2,561 respondents who took the survey in 2018 and 2019 across demographics. The first two columns report the sample fractions and population averages. The first two rows report the overall actual and survey weighted means. The columns labeled "Temperature change" report responses to question "Within the next twenty years, how likely is a global temperature increase by more than one Centigrade". See Table II for tabulation of responses. The columns labeled "Forecast" report the scored Likert scale responses from -2 ("Very unlikely") to 2 ("Very likely") for the 2018 and 2019 surveys. The remaining columns report the fractions of climate concerns. There are 2,561 respondents in the sample.

			Temp. Change		**Survey questions**			
	Sample	Pop.	Forecast		Notice	Worry	Gov't	Tax-
	prop.	prop.	2018	2019	GW	GW	more	for-aid
Overall	1.00	1.00	1.09	1.12	0.58	0.23	0.52	0.31
Pop. Wtd.	.	.	1.15	1.14	0.59	0.25	0.54	0.33
Gender								
Men	0.50	0.51	1.09	0.98	0.53	0.19	0.43	0.29
Women	0.50	0.49	1.20	1.30	0.66	0.32	0.64	0.37
Age								
18-24	0.08	0.15	1.27	1.26	0.62	0.30	0.60	0.44
25-34	0.15	0.23	1.36	1.22	0.66	0.31	0.59	0.36
35-44	0.17	0.21	1.07	1.10	0.59	0.27	0.55	0.34
45-54	0.25	0.22	1.06	1.05	0.56	0.19	0.50	0.29
55-65	0.35	0.19	0.98	1.08	0.55	0.19	0.46	0.25
Income								
0-111	0.11	0.25	1.27	1.22	0.61	0.28	0.57	0.37
111-287	0.37	0.25	1.16	1.16	0.62	0.27	0.55	0.32
287-399	0.32	0.25	1.13	1.14	0.57	0.23	0.54	0.35
399+	0.20	0.25	1.04	1.01	0.56	0.23	0.47	0.28
Education								
Some school	0.09	0.17	1.21	1.15	0.54	0.24	0.52	0.36
High school	0.35	0.44	1.09	1.12	0.55	0.19	0.48	0.22
University	0.56	0.39	1.16	1.15	0.63	0.29	0.57	0.38
Urban								
Yes	0.42	0.39	1.18	1.20	0.63	0.32	0.61	0.40
No	0.58	0.61	1.13	1.09	0.56	0.20	0.48	0.27
Foreign born								
Yes	0.11	0.19	1.15	1.12	0.63	0.28	0.52	0.39
No	0.89	0.81	1.15	1.14	0.59	0.25	0.54	0.32

Table A.3: Sample Selection: Survey 1 & 2

This table presents regressions where the dependent variable is a dummy taking the value of one if the respondent appear in the second survey, and zero otherwise. There are 4,230 responses to Survey 1 and 2,561 respondents to Survey 2. Independent variables in column (1) correspond to the regional variables in Table I. Column 2 includes voting outcomes. Columns (3) and (4) includes individual characteristics. The intercept is included in the regression but excluded from the presentation. Robust standard errors in parentheses, and one, two and three asterisks denote significance at the 10, 5, and 1% level, respectively.

	In sample			
	Regional		Individual	
VARIABLES	(1)	(2)	(3)	(4)
Fire shock	0.006	0.011		0.005
	(0.020)	(0.021)		(0.020)
Moved right		-0.015**		-0.015**
		(0.008)		(0.007)
Moved left		0.038		0.033
		(0.032)		(0.031)
Moved right × left		-0.010		-0.008
		(0.006)		(0.006)
Unemployment	-0.001	-0.001		-0.001
	(0.003)	(0.004)		(0.004)
Foreign born	-0.000	-0.001		0.000
	(0.002)	(0.002)		(0.002)
Low trust	-0.024	-0.019		-0.018
	(0.018)	(0.019)		(0.018)
Population density	-0.004	-0.009		-0.011
	(0.007)	(0.010)		(0.009)
Men			0.032**	0.032**
			(0.015)	(0.015)
Age			0.067***	0.068***
			(0.005)	(0.005)
Log income			0.005	0.005
			(0.006)	(0.006)
University			0.090***	0.087***
			(0.015)	(0.015)
Foreign born			-0.117***	-0.114***
			(0.023)	(0.023)
Observations	4,230	4,230	4,230	4,230
R-squared	0.001	0.002	0.051	0.053

B Voting Outcomes

This appendix describes voting outcomes for parliamentary elections in Sweden. Voting outcome data is retrieved from the Swedish Electoral Authority. The Swedish parliamentary system is a constitutional monarchy with a parliamentary democracy. Sweden's proportional representation allows multiple parties to gain seats based on the share of the vote. This system promotes a multi-party landscape and coalition governments, but has over the last decades converged to a group of eight parties which take turns in forming governments to the center-right or center-left.

The Swedish Democrats (SD) are a right-wing party in Sweden that has historically been excluded from government leadership positions for extended periods, unlike for example the right-leaning Moderate Party, which has a longer history of leading or participating in governments.

Sweden Democrats (SD) is a party that has grown in popularity over recent years in the wake of increased distrust in the political system as in many other European countries.[23] SD was formed in the 1980's with close ties to the nationalistic movement mainly focusing on immigration, but has since formulated their own political agenda around other topics that opposes mainstream policies, such as EU membership, gay rights and climate control. SD votes are higher in rural areas with lower education, greater income disparity and higher immigration. The anti-immigration and climate sceptic policies makes the party less attractive to women. Men make up around 70% of SD voters (Jylhä, Rydgren, and Stripling (2018)).

Both the Green Party and the Left Party are and have been on the left side of the political spectrum in Swedish politics. These parties have typically acted as support parties for Social Democratic-led governments rather than leading governments themselves.

The Left Party is a self-proclaimed socialist, feminist and green party that has its historical roots in the Communist Party, on the very left of the political scale. The party was originally founded in opposition to the Social Democrats. While the party has never been part of coalitions, it has sporadically supported left-of-center coalitions led by the Social Democrats.

The Green Party was formed in 1981 with an agenda focused on environmental sustainability, climate change, and renewable energy. They advocate for strong environmental regulations and social justice, often aligning with the Social Democrats on progressive social issues. According to Novus, women make up around 60% of their voting base, the support is stronger among those with higher education and among city dwellers. The Green Party first entered Parliament in 1988 with less than 6% of votes and their support have since then fluctuated between around 4% to 7% in later years.

The 2014 elections resulted in a minority Center-Left government led by the Social Democrats and the Green Party. The years that followed saw an increased dispersion the political landscape, pulling voters away from the traditional center parties. The 2018 election outcome left the parliament deeply divided, with less support for the political middle and increased support for both the left right side of politics. Even if the Sweden Democrats gained strong support, neither block wanted to officially include them in a coalition. After months of negotiations and failed attempts, a compromise was reached in January 2019. This arrangement became known as the January Agreement, a deal

[23] See Pew Research Center, https://pewrsr.ch/3CDu5Pp.

where the Center and Liberal parties agreed to support a Social Democrat-led government while pushing for reforms typically associated with the center-right, such as labor market reforms.
Figure B.1 plots the voting outcomes for Swedish parliamentary elections between 1960 and 2022.
Figure B.2 graphically compares the positioning of selected European parties in Germany, France, the UK, Spain, and Italy—at both ends of the political spectrum—along policy and populism dimensions, using the same definitions as in the main paper, relative to Sweden.

Table B.1 reports summary statistics for shifts in voting outcomes between the 2014 and 2018 elections. Right-wing votes are defined as the combined vote shares of the Sweden Democrats, while left-wing votes sum the Left Party and the Green Party. Voting movements are computed as the difference between 2018 and 2014 outcomes.

Figure B.1: Historical Voting Outcomes
This figure presents the voting shares across the eight largest political parties over time for parliamentary elections in Sweden between 1960 and 2022. Data is retrieved from the Swedish Electoral Authority.

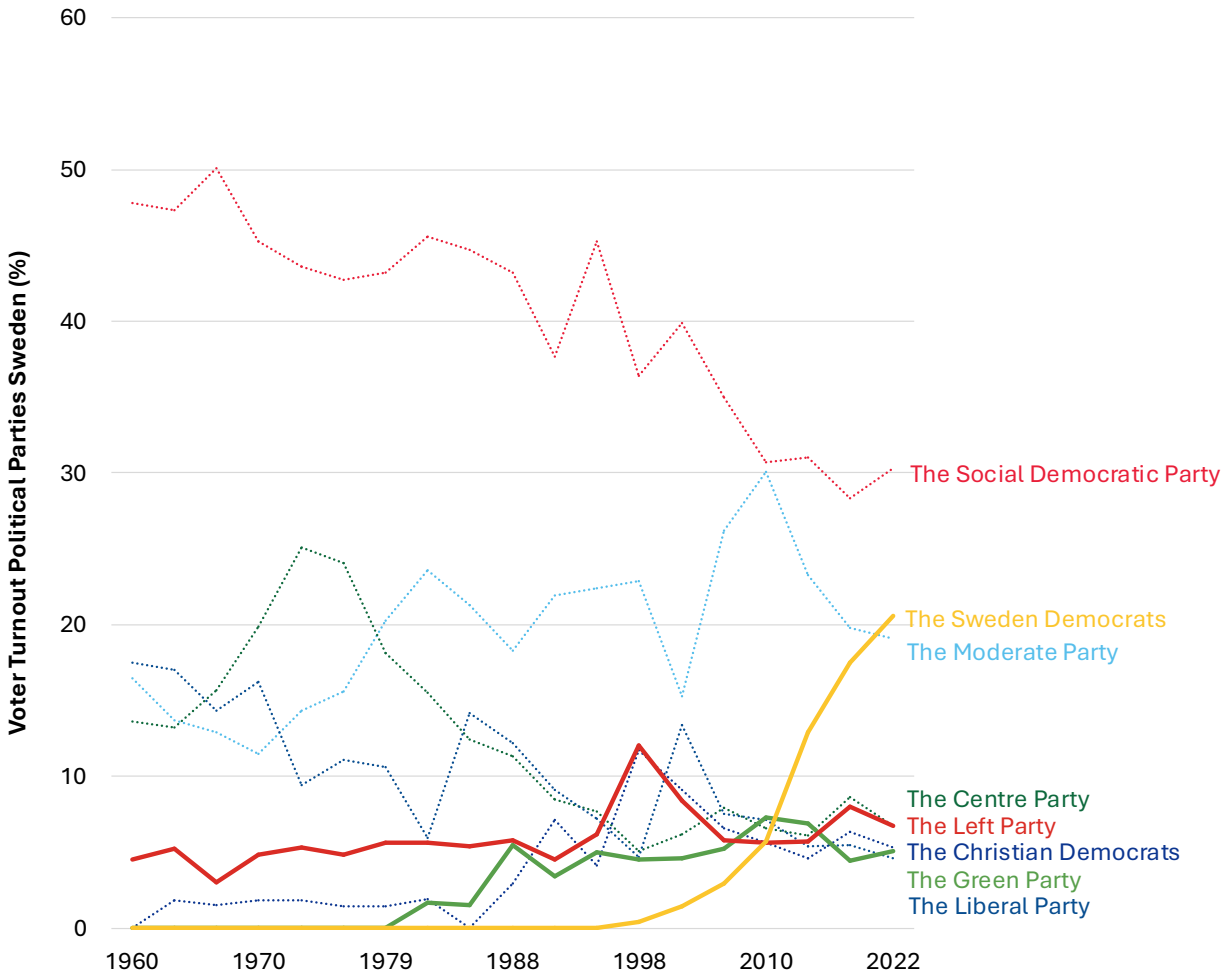


Figure B.2: European Parties: Populism and Policy Positions

This figure presents a graphical analysis of how Europe's main political parties at the ends of the spectrum position themselves regarding policy and populism. Populism is measured by their stance on "the people" versus elected representatives. Figure B.2A plots the importance of environmental sustainability against populism, while Figure B.2B plots ideological positioning on the left-right spectrum against populism. Data sourced from the 2019 Chapel Hill Expert Survey. Party abbreviations for Germany are AfD (Alternative für Deutschland), GRÜNEN (Bündnis 90/Die Grünen), for France are EELV (Europe Écologie Les Verts), RN (Rassemblement National), for Spain are EHB (Eusko Alkartasuna), POD (Podemos) , for Italy are LN (Lega Nord), M5S (Movimento 5 Stelle), for United Kingdom are GREEN (Green Party of England and Wales), SNP (Scottish National Party), UKIP (UK Independence Party) , and for Sweden are SD (Sverigedemokraterna), GP (Miljöpartiet), LP (Vänsterpartiet).

Figure B.2A: Environment

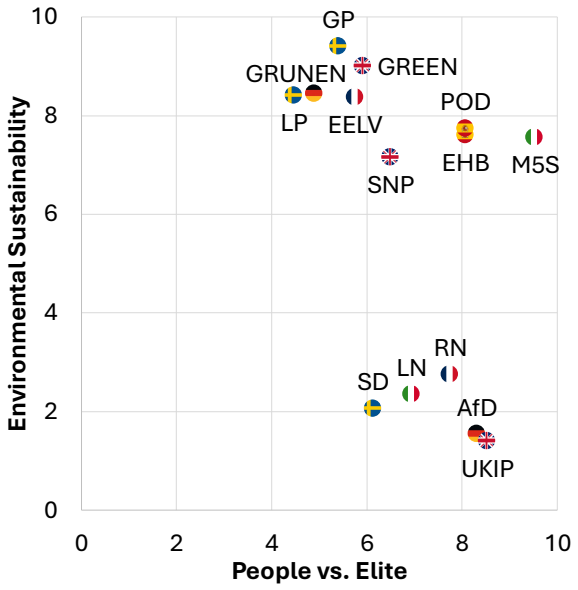


Figure B.2B: Left/Right

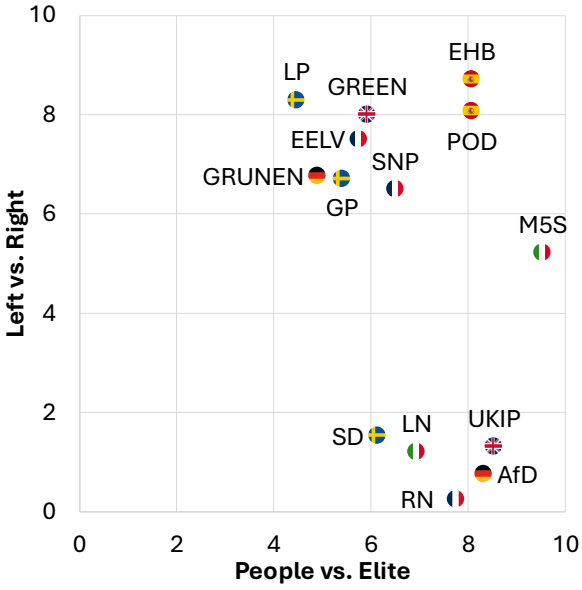


Table B.1: Regional Data

This table presents summary statistics for the regressions in Table I. "Moved left/right" represent the change in voter turnout for two parties on the political left (Green party and Left party) and right (the Sweden Democrats) between the elections in 2018 and 2014. Fire is a dummy variable taking the value of one for the top decile of municipalities affected by forest fires in 2018; zero otherwise. Other variables include unemployment rate, the share of foreign born, low trust in others and population density (in thousands per square kilometer). The sample covers all 290 municipalities in Sweden. The voting data is obtained from the Swedish Electoral Authority, fires from the Swedish Civil Contingencies Agency and demographics from Statistics Sweden.Low trust is obtained from the national health survey in 2019 solicited by the Swedish Public Health Agency from the fraction responding "No" to the question "Do you generally think that you can trust most people?".

Variable	**Mean**	**Std. Dev.**	**Min**	**Max**
Moved left	-0.48	0.96	-3.68	7.13
Moved right	5.59	1.75	0.99	12.70
Fire	0.17	0.37	0.00	1.00
Unemployment	7.63	2.61	2.30	15.20
Foreign born	12.69	5.77	4.33	40.16
Low trust in others	27.46	4.12	16.53	40.90
Population density	0.15	0.52	0.01	5.07

C Forest Fires

This appendix describes the fire data and draws on two sources. First, we use official data on the area destroyed by forest fires obtained from the Swedish Civil Contingencies Agency. Second, we use geographic location data on forest fires from the Swedish Forestry Agency, which we combine with respondents' coordinates to measure proximity to fire events.

Section C.1 provides details on the distribution of fire shocks across municipalities. Section C.2 presents robustness analyses using alternative definitions of the fire shock. Section C.3 examines the relationship between fire shocks, demographic characteristics, and political shifts.

Sweden is comparable in size to the state of California, spanning approximately 1,572 kilometers from north to south. About 15% of its territory lies north of the Arctic Circle. The country is divided into 21 counties and 290 municipalities.

C.1 Fire Area

Figure C.1 shows the distribution of fire destroyed area across 290 municipalities. Figure C.1A presents the frequency distribution in 2018 and Figure C.1B shows the fraction of municipalities affected by wild fires of the magnitude of at least 0.02% over time, and that 2018 stands out as an extreme year.

Fire areas in 2018 are unpredictable in regressions using fire data data from 2014 to 2017 as independent variables. These regressions are available from the authors.

Figure C.1: Forest Fires in Sweden during 2018

This figure illustrates the severity of forest fires across Swedish municipalities in 2018 and over time. Severity is defined as the share of municipal land area destroyed by fire. Figure C.1A shows that approximately 20% of municipalities experienced burned areas exceeding 0.2% in 2018. Figure C.1B demonstrates that 2018 was exceptional, marking a record number of municipalities adversely affected by forest fires. Sweden consists of 290 municipalities. The data are obtained from the Swedish Civil Contingencies Agency.

Figure C.1A: Distribution of 2018 fires

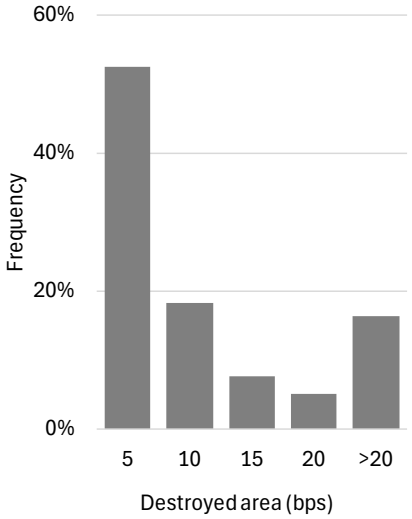
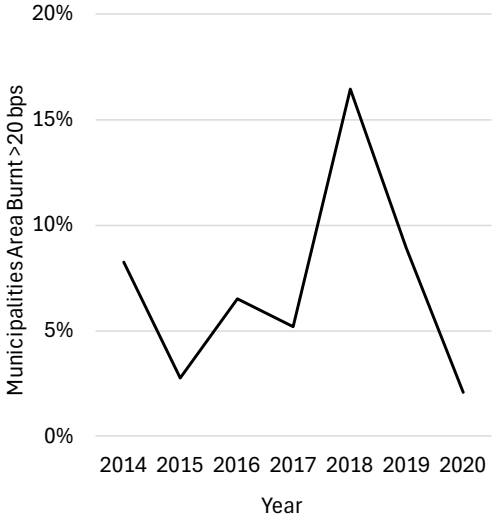


Figure C.1B: Fires over time



C.2 Fire Shock: Proximity versus Intensity

Figure C.2A presents results from varying the threshold for area destroyed, which is set to 20 basis points in the main specification. At the lowest threshold, approximately 86% of respondents are classified as exposed to some wildfire activity, whereas only about 2% are classified as exposed when the threshold is increased to 90 basis points of area destroyed. The key finding is that the estimated fire shock coefficient remains stable in magnitude and statistically significant across a broad range of moderate threshold values. When the definition becomes overly restrictive—above roughly 30 basis points—statistical power declines due to the limited number of observations in heavily affected, predominantly rural municipalities.

Figure C.2: Fire Shock: Alternative Definitions

This figure plots the estimated fire shock coefficient (solid line) from the OLS specification in column (3) of Table V under alternative definitions of exposure. Figure C.2A shows the coefficient as the threshold for area destroyed is varied. Figure C.2B shows the coefficient when exposure is defined by proximity to wildfires (in kilometers). Dotted lines indicate 95% confidence intervals computed using robust standard errors. Grey bars (right axis) report the fraction of the sample classified as treated under each definition. The vertical dotted lines in both panels mark the points at which estimates are reported in 10-unit intervals.

Figure C.2A: Fire intensity

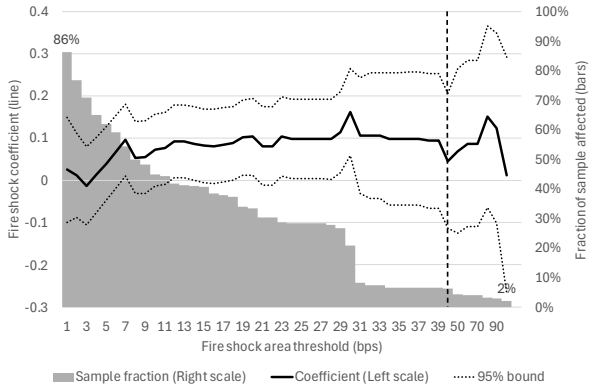


Figure C.2B: Fire proximity

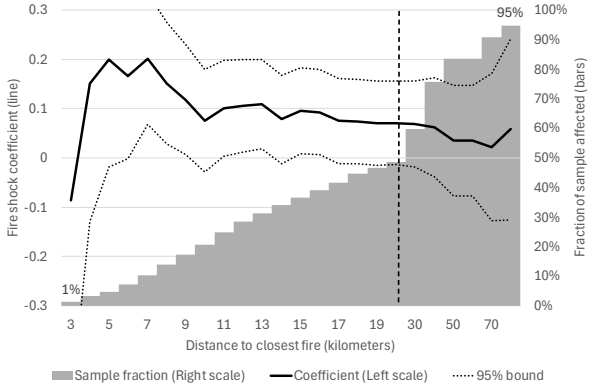


Figure C.2B presents a parallel analysis in which the fire shock is defined based on geographic proximity to mapped wildfire locations. Only about 1% of respondents reside within 3 kilometers of a wildfire. As the distance threshold increases, the estimated coefficient becomes statistically significant and remains so over the range of 5 to 15 kilometers. This interval corresponds to roughly 30% of the sample and is therefore comparable in size to the treatment group under the baseline area-destroyed definition. The vertical dotted line in Figure C.2B marks the region in which the regression is estimated using 10-kilometer distance bins spanning 30 to 90 kilometers. Overall, approximately 95% of respondents lived within 90 kilometers of a mapped wildfire in 2018.

Taken together, these results indicate that our fire shock measure is robust to alternative specifications—both with respect to the choice of threshold and to whether exposure is defined by wildfire intensity at the municipality level or by geographic proximity to fire events.

We next examine how these two exposure measures compare when included jointly in the regression framework.

Table C.1 reports regressions that include both the fire shock dummy and alternative proximity-based exposure measures, using the same specification as column (3) of Ta-

ble V. All regressions are estimated without survey weights and include the full set of respondent-level controls.

Column (1) uses the logarithm of burned area (in basis points) as the explanatory variable. The estimated coefficient is positive but statistically insignificant, reflecting the pronounced right skewness of the distribution and the limited number of observations in the upper tail, as illustrated in Figure 4.

Column (2) includes only the fire shock dummy for comparison. Columns (3) through (8) instead include indicators for individuals residing within 7, 10, or 15 kilometers of a wildfire. These thresholds correspond to 10%, 21%, and 37% of the sample, respectively. Columns (4), (6), and (8) include both the fire shock dummy and the proximity-based measure simultaneously.

The results suggest that treatment effects are larger for individuals residing closer to wildfire locations. However, once the fire shock dummy is included, the estimated proximity effects are attenuated. For the widest distance threshold (15 kilometers), the correlation between the two exposure measures is 42%, rendering the fire shock dummy only marginally statistically significant.

Table C.1: Forecast Revisions, Fire Intensity and Proximity

This table presents an analysis of various definitions of the fire shock proxy by using OLS regressions where the dependent variable "Forecast revisions" is the change to the response to the survey question: "Within the next twenty years, how likely is a global temperature increase by more than one Centigrade" between the 2019 and 2018 survey. Column (1) uses the log fire area (in basis points as a treatment proxy and column (2) uses the fire shock dummy used throughout the analysis taking the value of one for fire areas above 20 basis points across municipalities. Columns (3) through (8) includes a dummy taking the value of one for respondents living within the distance of 7, 10 or 15 kilometers of any fire recorded in the map data obtained by the Swedish Forest Agency; zero otherwise. Columns (4), (6) and (8) includes both the fire shock dummy and the distance measure. All regressions include the same controls as in Table V in the main text. The row labeled Correlation reports the correlation between the distance and fire shock dummy. The row labeled Treated reports the fraction of sample within the defined range. Robust standard errors reported in parentheses and one, two and three asterisks denote significance at the 10, 5, and 1% level, respectively.

	Forecast Revisions							
			Distance to fire					
			7 km		10 km		15 km	
VARIABLES	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Log fire area	0.018							
	(0.014)							
Fire shock		0.109**		0.097**		0.098**		0.085*
		(0.046)		(0.046)		(0.047)		(0.049)
Distance			0.206***	0.191***	0.078	0.050	0.096**	0.068
			(0.068)	(0.068)	(0.053)	(0.054)	(0.045)	(0.048)
Observations	2,561	2,561	2,561	2,561	2,561	2,561	2,561	2,561
R-squared	0.014	0.015	0.016	0.018	0.014	0.016	0.015	0.016
Correlation	-	-	0.17	0.17	0.34	0.34	0.42	0.42
Treated	All	All	10%	10%	21%	21%	37%	37%

C.3 Forecast Revision Responses Across Characteristics

Table C.2 analyzes how forecast revisions depend on exposure to the fire shock and changes in political support across subsamples defined by income, education, age, and gender.

We find that shifts in populist political support are statistically significant primarily among respondents with lower income, higher education, and younger age. Men living in municipalities with increasing right-wing support are more likely to revise their forecasts downward. Conversely, women residing in municipalities with increasing left-wing support are more likely to revise their forecasts upward.

The fire shock itself is statistically significant only among respondents with lower levels of education (below university studies).

Table C.2: Forecast Revisions, Fire Shocks, and Characteristics

This table reports the results of OLS regressions in which the dependent variable, "Forecast revisions," is the change in responses to the survey question: "Within the next twenty years, how likely is a global temperature increase of more than one degree Centigrade?" between the 2018 and 2019 surveys. Columns (1)–(8) split the sample by above- or below-median income, education, age, and by gender. The independent variable "Fire shock" is a dummy equal to one for areas most severely affected by the 2018 forest fires and zero otherwise. "Moved left" and "Moved right" measure changes in municipal vote shares between the 2014 and 2018 elections, and "Moved right × left" denotes their interaction. The regressions include the same characteristic controls as in Table VI in the main text. The sample consists of 2,561 respondents. Regressions are weighted using sample weights, and the constant is estimated but omitted from the table. Robust standard errors are reported in parentheses. One, two, and three asterisks denote statistical significance at the 10%, 5%, and 1% levels, respectively.

	Forecast revisions							
	Income		Education		Age		Gender	
	Low	High	Low	High	Old	Young	Men	Women
VARIABLES	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Fire shock	0.102	0.120	0.264***	-0.002	0.107	0.102	0.086	0.117
	(0.085)	(0.084)	(0.093)	(0.080)	(0.079)	(0.082)	(0.082)	(0.089)
Moved right	-0.046*	-0.030	-0.032	-0.050*	-0.026	-0.048	-0.068**	-0.012
	(0.028)	(0.031)	(0.030)	(0.030)	(0.024)	(0.030)	(0.030)	(0.028)
Moved left	0.176*	-0.028	-0.054	0.192*	-0.091	0.191**	0.020	0.202*
	(0.097)	(0.116)	(0.112)	(0.104)	(0.098)	(0.096)	(0.105)	(0.105)
Moved right × left	-0.040*	-0.007	-0.001	-0.046*	0.022	-0.054**	-0.021	-0.042*
	(0.022)	(0.027)	(0.025)	(0.025)	(0.023)	(0.023)	(0.025)	(0.023)
Characteristics	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Observations	1,239	1,322	1,123	1,438	1,331	1,230	1,285	1,276
R-squared	0.019	0.021	0.012	0.014	0.016	0.019	0.011	0.019

D News Data

Local news data was retrieved manually from the online database at the Swedish Royal Library (Kungliga biblioteket, see https://tidningar.kb.se). We downloaded data for 113 local newspapers for two equally long (17 months) time periods: the period before the first survey was submitted, and the time period between the first and second survey. The before period runs from November 1, 2016 to March 31, 2018. The between period is from April 1, 2018 to August 31, 2019. The search term used is "global warming" (in Swedish "global uppvärmning") which in turn was benchmarked by the total number of articles in the newspaper. There are 290 municipalities in Sweden for which we were able to match at least one local newspaper to 276.

We define the fraction of newspaper articles mentioning global warming (denoted FGW) by dividing the two collected variables summed over municipalities. The variable ΔNews in the main text is defined as the relative difference in the fractions of newspaper articles mentioning global warming between and before the surveys:

$$\Delta\text{News}_i = \frac{\text{FGW Between}_\text{i} - \text{FGW Before}_\text{i}}{\text{FGW Before}_\text{i}},$$

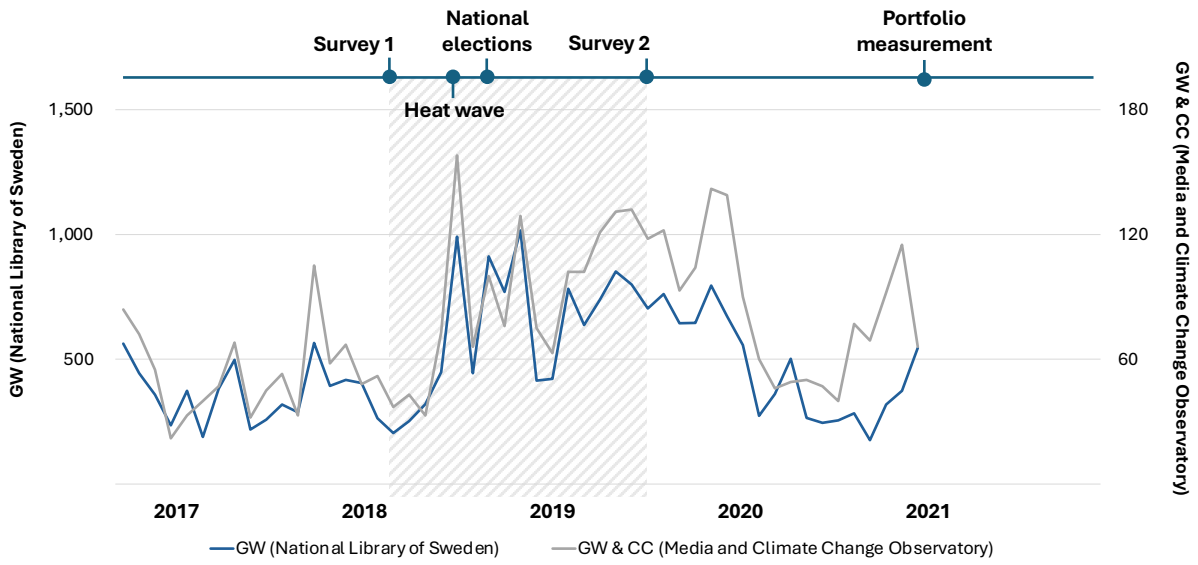
where i denotes municipality. Table D.1 tabulates the summary statistics of the data.

Table D.1: Summary Statistics for Newspaper Saliency
This table presents the data collected for local newspapers mentioning the keyword "global warming" for two 17-month time periods before and between the two surveys in 2018 and 2019. The data covers 113 local newspapers across 276 (of 290) municipalities (Muni's).

Panel A:		**Number of Articles Across Municipalities**		
Variable	Muni's	Mean	Std. dev.	Remark
GW Before	276	113.68	87.02	"Global warming" mentioned
GW Between	276	202.17	132.09	"Global warming" mentioned
All Before	276	965.52	493.25	All articles
All Between	276	942.11	481.66	All articles
Panel B:		**Fraction of Articles Across Municipalities**		
Variable	Muni's	Mean	Std. dev.	Remark
FGW Before	276	0.11	0.04	Fraction mentioning GW
FGW Between	276	0.20	0.06	Fraction mentioning GW
ΔNews	276	0.96	0.37	Difference in fraction mentioning GW

Figure D.1: Local versus National News

This figure plots the monthly time series of article counts from two data sources: the Swedish Royal Library and the Media and Climate Change Observatory (MCCO, see `https://scholar.colorado.edu/concern/datasets/2n49t3497`). The dark blue line shows the number of articles mentioning "global warming" in all news papers available at the Swedish Royal Library used in this paper. The light grey line shows the number of articles mentioning "global warming" or "climate change" in the MCCO data base covering the three main national newspapers.



E Survey instrument

This appendix presents and tabulates the responses to the four questions used for soliciting environmental beliefs.

Table E.1: Environmental Beliefs and Financial Attentiveness

This table reports the responses to six statements regarding climate change and financial behavior asked in the survey. Questions 1 through 3 were asked in the second survey in 2019 and questions 4 through 6 in the first 2018 survey. Boldface indicates how responses have been coded to dummies (taking the value of one; zero otherwise). The statements have been translated from Swedish into English.

1. *Notice GW*: "I have already noticed the effects of climate change in Sweden"
   (a) Strongly disagree (109, 4.3%)
   (b) Disagree (63, 2.5%)
   (c) Don't Agree nor Disagree (301, 11.8%)
   (d) Agree (604, 23.6%)
   (e) **Strongly Agree (1,481, 57.9%)**

2. *Worry GW*: "I'm worried about climate change and what it means for myself and my family"
   (a) Stongly disagree (20, 0.8%)
   (b) Disagree (129, 5.1%)
   (c) Don't agree nor disagree (641, 25.1%)
   (d) Agree (1,154, 45.7%)
   (e) **Strongly Agree (595, 23.3%)**

3. *Gov't Action*: "The government should do more to fight climate change"
   (a) Strongly disagree (77, 3.0%)
   (b) Disagree (83, 3.3%)
   (c) Don't agree nor disagree (375, 14.8%)
   (d) Agree (687, 27.0%)
   (e) **Strongly Agree (1,319, 51.9%)**

4. *Attentive*: "How often do you look over your retirement savings?"
   (a) **Several times per year (471, 18.5%)**
   (b) **Once a year (877, 34.4%)**
   (c) When I start or stop a plan (405, 15.9%)
   (d) Never (614, 24.1%)
   (e) Don't know (185, 7.2%)

5. *Non-pecuniary*: "A clean planet is more important for me than financial welfare"
   (a) Strongly disagree (60, 2.4%)
   (b) Disagree (118, 4.6%)
   (c) Don't agree nor disagree (683, 25.7%)
   (d) **Agree (1,033, 40.4%)**
   (e) **Strongly Agree (662, 25.9%)**

6. *Tax-for-aid*: "I am willing to pay higher taxes to increase Sweden's aid to poor countries"
   (a) Strongly disagree (517, 20.4%)
   (b) Disagree (460, 18.0%)
   (c) **Don't agree nor disagree (782, 30.8%)**
   (d) **Agree (552, 21.7%)**
   (e) **Strongly Agree (230, 9.0%)**

F Pension Data

This appendix provides details on rebalancing behavior in retirement accounts at the Swedish Pension Authority (SPA). By definition, default investors have never made an active fund choice. These "non-choosers" are allocated to the government-run default fund, AP7.

Table F.1 reports results from OLS regressions explaining (i) default status and (ii) the propensity to trade, conditional on not being in the default fund. As explanatory variables, we include the score from a five-question Big-5 financial literacy test and the self-reported propensity to monitor retirement savings (see Anderson and Robinson (2022) for details). Descriptively, default investors tend to be younger, reflecting the fact that more recent entry cohorts—who are younger on average—are significantly more likely to remain in the default fund. However, once we control for cohort fixed effects (year of entry), the relationship reverses. Within a given cohort, older individuals are more likely to remain in the default fund, as indicated by the positive coefficient on Age in Table F.1.

Columns (4) through (6) in Table F.1 report results of active rebalancing among people outside of the default fund. Rebalancing is more common among men, and those with higher levels of education and financial literacy. There is no statistically significant relationship between rebalancing and being foreign-born. When splitting the sample by attentiveness, the relationship between financial literacy and rebalancing becomes stronger among attentive respondents. For other characteristics, the differences are more modest: the effect of gender remains similar across groups, while the effect of higher education is somewhat weaker among attentive respondents.

Figure F.1 displays a screenshot of the online fund-selection interface on the SPA website, introduced in 2019.

Figure F.2 shows the frequency distribution of Morningstar Climate Risk Scores across active funds in the pension system at the end of 2021. The figure demonstrates that the value-weighted climate risk score in our sample closely matches the value-weighted score of total pension investments. It also shows that the simple average climate risk score across the fund menu is higher than the score implied by actual investment allocations.

Table F.1: Default Choice and Active Rebalancing

This table reports the results of OLS regressions in which the dependent variables measure engagement in the Swedish Premium Pension System. In columns (1)–(3), the dependent variable is an indicator equal to one if the respondent was invested in the default fund at the end of 2021 and zero otherwise. The sample consists of 2,521 individuals registered in the system at that time. Columns (4)–(6) use the subsample of 1,436 investors who were not invested in the default fund in 2021. In these columns, the dependent variable is an indicator equal to one for the 711 investors who rebalanced their portfolio at any point between the first survey wave and the end of 2021. Columns (5) and (6) further split the sample by attentiveness to pension savings, distinguishing respondents who report reviewing their retirement savings at least once per year (labeled "Yes"). The dummy variables "Revised up" and "Revised down" are constructed from changes in the reported likelihood of a more than one-degree Centigrade increase in global temperature within 20 years between the 2018 and 2019 surveys. "Moved left" and "Moved right" measure changes in municipal vote shares for left- and right-wing populist parties between the 2014 and 2018 elections, and "Left × Right" denotes their interaction. Financial literacy is measured as the score (ranging from 0 to 5) on a modified "Big Five" test administered in the first survey. Characteristic controls include log disposable income, age (in decades), and indicator variables for gender, higher education and birthplace. Additional controls include dummies for year of entry into the pension system ("Cohort FE") and indicator variables for each response category to the temperature expectations question in the 2018 survey ("TA controls"). Regressions are weighted using sample weights, and the constant is estimated but omitted from the table. Robust standard errors are reported in parentheses. One, two, and three asterisks denote statistical significance at the 10%, 5%, and 1% levels, respectively.

	In default fund			**Rebalanced**		
		Attentive			Attentive	
		No	Yes		No	Yes
VARIABLES	(1)	(2)	(3)	(4)	(5)	(6)
Fin. Lit.	-0.020**	-0.012	-0.027**	0.042***	0.029	0.047***
	(0.008)	(0.011)	(0.014)	(0.013)	(0.020)	(0.018)
Revised up	-0.001	-0.016	0.011	-0.039	-0.105*	0.014
	(0.025)	(0.033)	(0.036)	(0.038)	(0.062)	(0.049)
Revised down	0.006	-0.032	0.047	0.006	-0.007	0.017
	(0.023)	(0.031)	(0.034)	(0.034)	(0.054)	(0.045)
Moved left	0.048	0.048	0.031	0.061	0.078	0.034
	(0.029)	(0.039)	(0.044)	(0.044)	(0.071)	(0.057)
Moved right	0.001	-0.006	0.010	-0.008	0.003	-0.011
	(0.008)	(0.011)	(0.012)	(0.012)	(0.020)	(0.016)
Moved left × right	-0.005	-0.006	-0.002	-0.016	-0.014	-0.011
	(0.007)	(0.009)	(0.010)	(0.010)	(0.017)	(0.013)
Men	-0.006	-0.025	0.037	0.090***	0.083*	0.087**
	(0.019)	(0.026)	(0.028)	(0.029)	(0.046)	(0.038)
Age	0.067***	0.067***	0.073***	0.005	-0.009	0.014
	(0.013)	(0.020)	(0.018)	(0.021)	(0.035)	(0.026)
Log income	-0.013*	-0.000	-0.031**	0.011	0.007	0.001
	(0.007)	(0.009)	(0.014)	(0.016)	(0.021)	(0.032)
University	0.011	0.030	0.002	0.120***	0.171***	0.082**
	(0.020)	(0.029)	(0.028)	(0.030)	(0.049)	(0.039)
Foreign born	-0.022	-0.033	0.022	0.027	0.017	0.031
	(0.030)	(0.041)	(0.044)	(0.052)	(0.091)	(0.066)
TA controls	Yes	Yes	Yes	Yes	Yes	Yes
Cohort FE	Yes	Yes	Yes	No	No	No
Observations	2,521	1,182	1,339	1,436	557	879
R-squared	0.285	0.317	0.213	0.093	0.138	0.083

Figure F.1: SPA Fund Choice Interface

This figure shows a screen print of the SPA web tool for searching, filtering and ranking funds based on Fund type (e.g. industry, geographic area), Fund category (e.g. stocks, bonds, mixed, target), Fund company, Risk level (from very low to very high) and Exclusions. The tool allows for choosing actively managed or index funds as well as sustainable funds and funds with the Morningstar low carbon indicator. Funds can be sorted by category, fee, Morningstar climate risk, financial risk and past returns. Website http://pensionsmyndigheten.se/mina-tjänster/fondtorg/sok accessed on January 25, 2023.

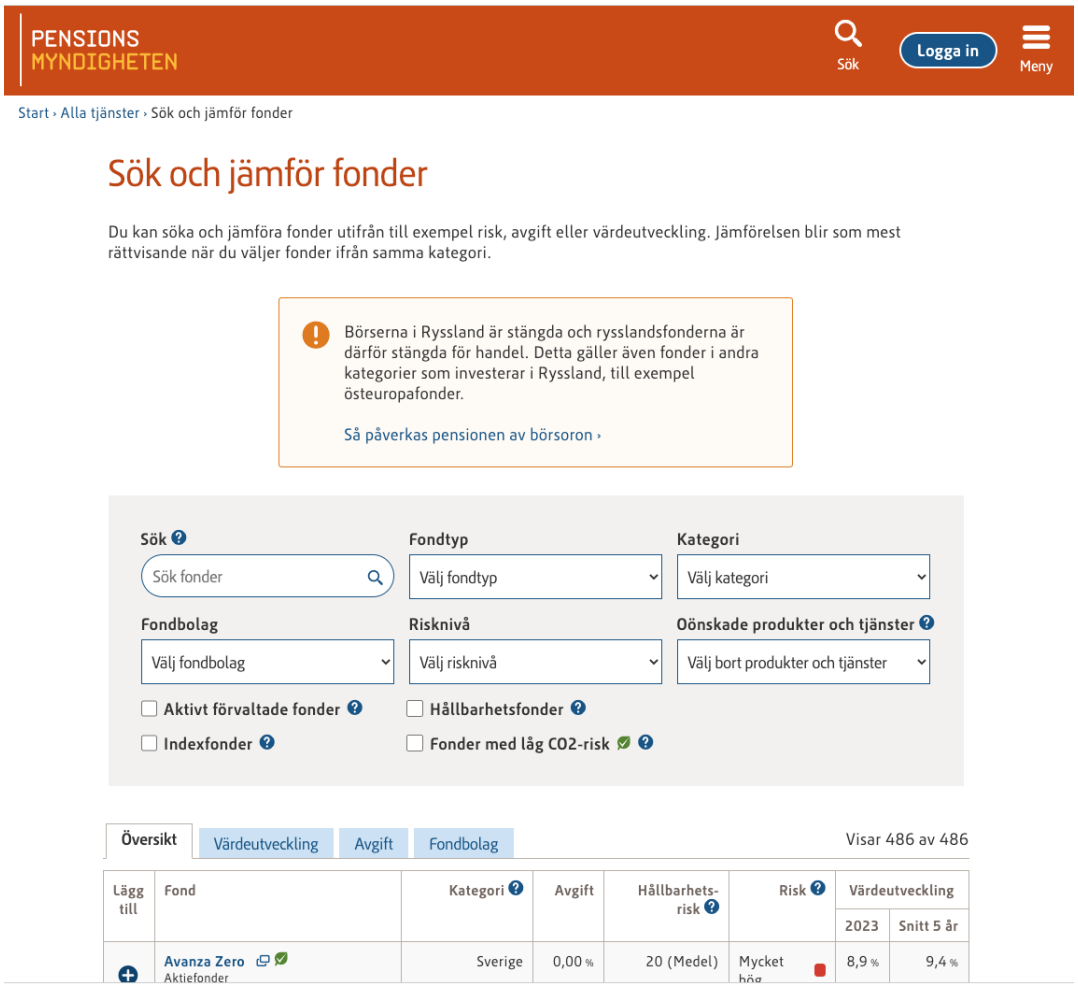


Figure F.2: Morningstar Climate Risk Scores

This figure presents the frequency distribution of Morningstar Climate Risk scores for the sample of 466 funds (out of 499) available in the Swedish pension system as of 2021 ("Fund offering," light grey). The dark grey bars show the distribution of fund-level climate risk scores weighted by total investments (AUM) from individuals in our sample ("Sample"). The orange area shows the corresponding distribution of fund scores weighted by total investments across all individuals in the Swedish pension system ("Market"). Morningstar Climate Risk score data are obtained from the Swedish Pension Authority.