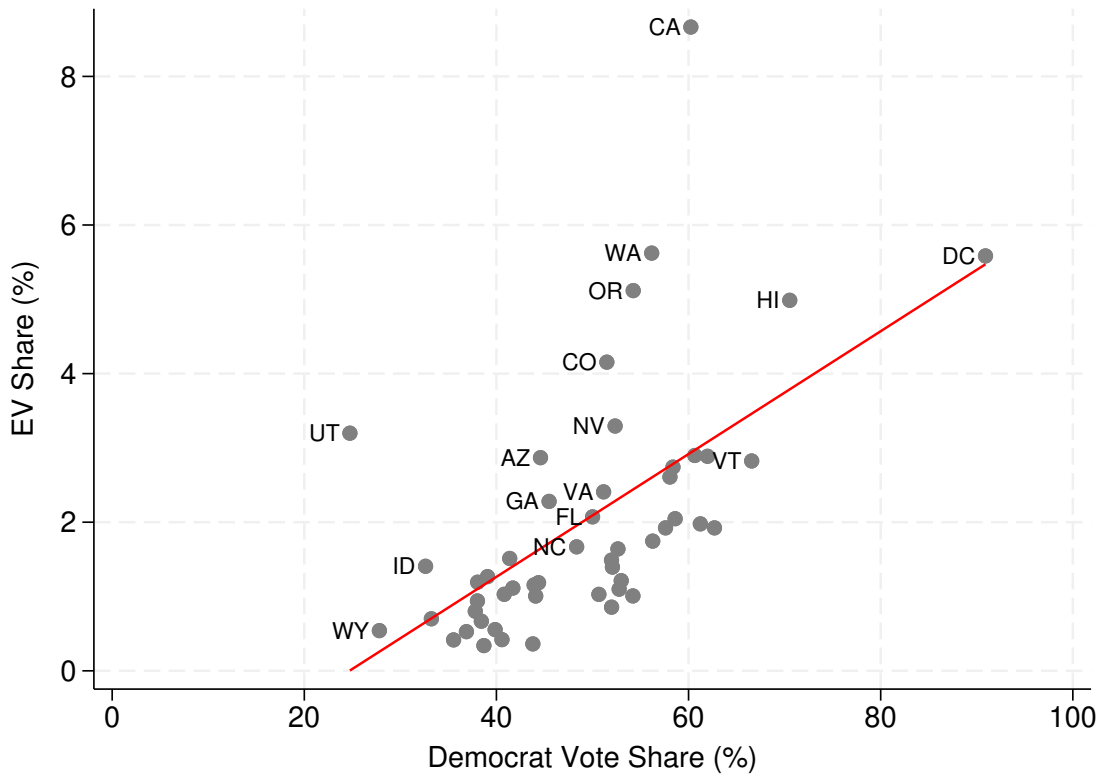


## Online Appendix

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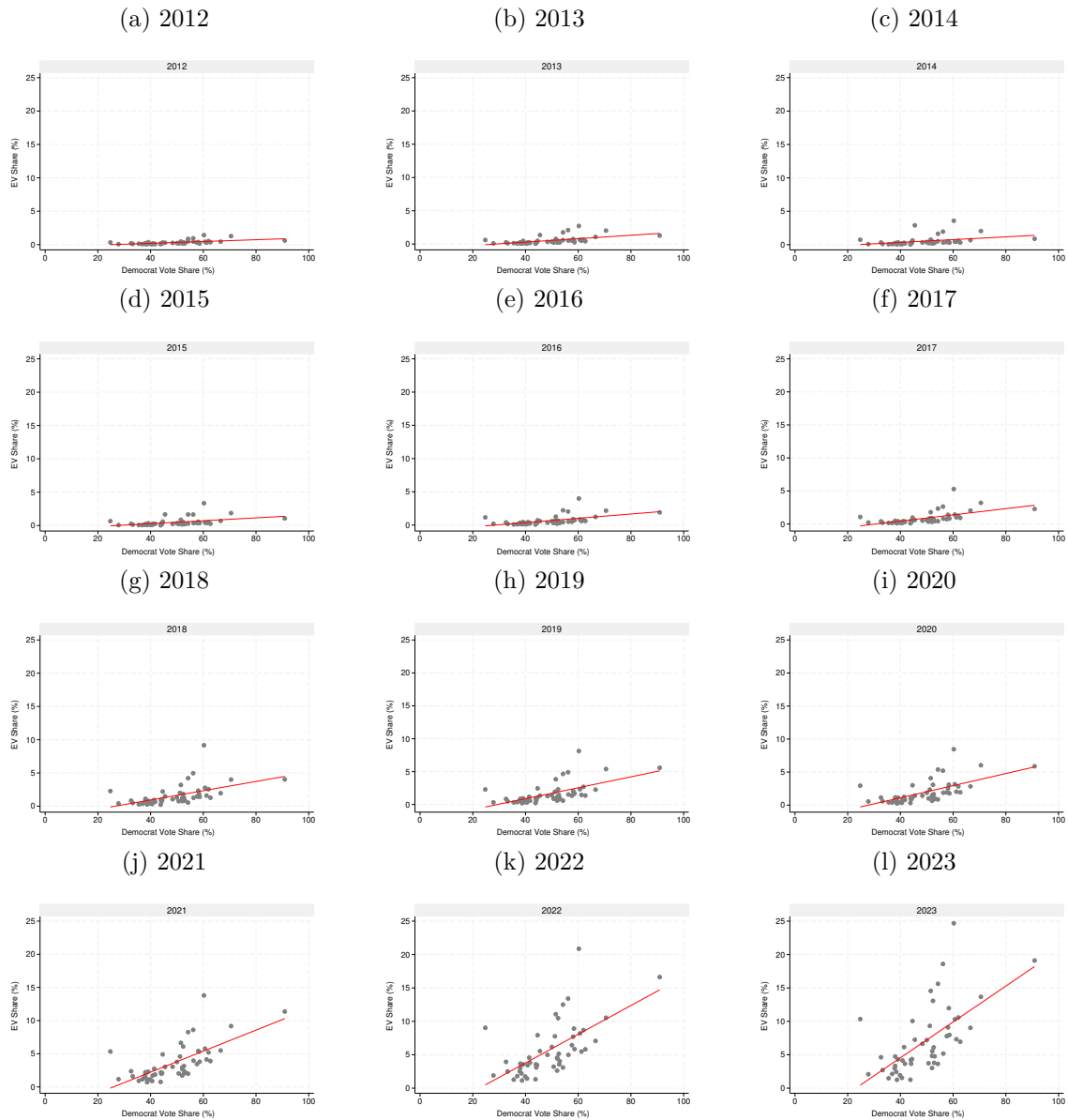
Appendix Figure 1: Political Ideology and EV Adoption, All Vehicle Types



*Notes:* This scatterplot has 51 observations, one for each state and one for Washington, DC. The x-axis is the share of voters in the 2012 U.S. presidential election who voted for Barack Obama. The y-axis is EVs as a share of all new vehicles registered during the period 2012 to 2023. We also plot a least squares linear regression line.

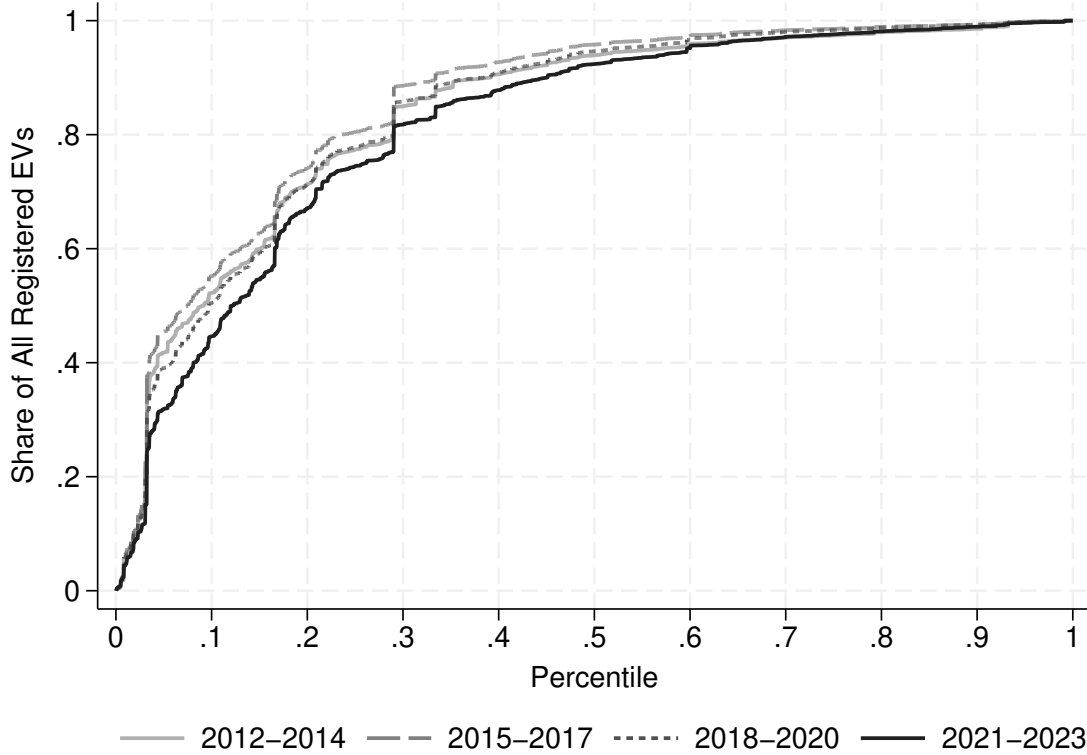
## Online Appendix

Appendix Figure 2: Political Ideology and EV Adoption, by Year



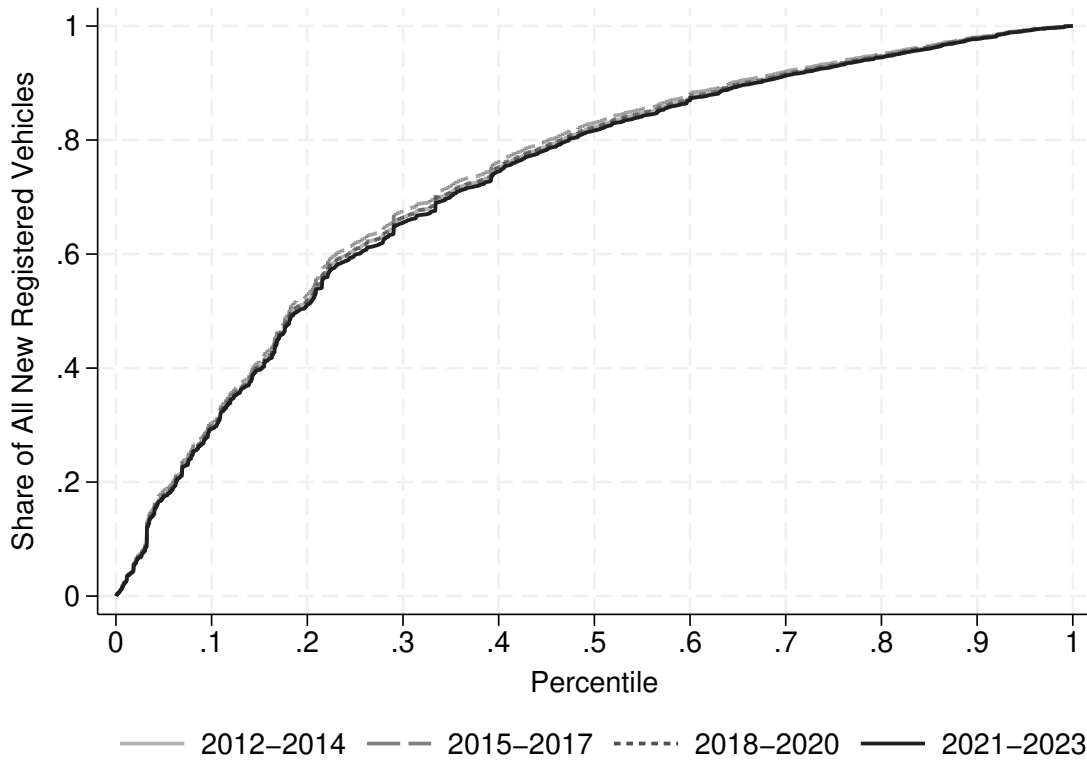
*Notes:* These scatterplots are identical to Appendix Figure 1, except we include a separate scatterplot for each year. We use the same y-axis range throughout to facilitate comparison across years. We also plot least squares linear regression lines. The figure reveals explosive growth in EV adoption during our sample period. In the early years of the sample, EV shares are near 0% in most states and below 5% everywhere. Adoption increases sharply year after year, with particularly notable growth in 2018, 2021, 2022, and 2023. By the end of the period, EVs represent more than 5% of the market for new vehicles in most Democratic states, while still less than 5% in most Republican states.

Appendix Figure 3: Political Ideology and EV Adoption, Cumulative Distribution Function by Time Period



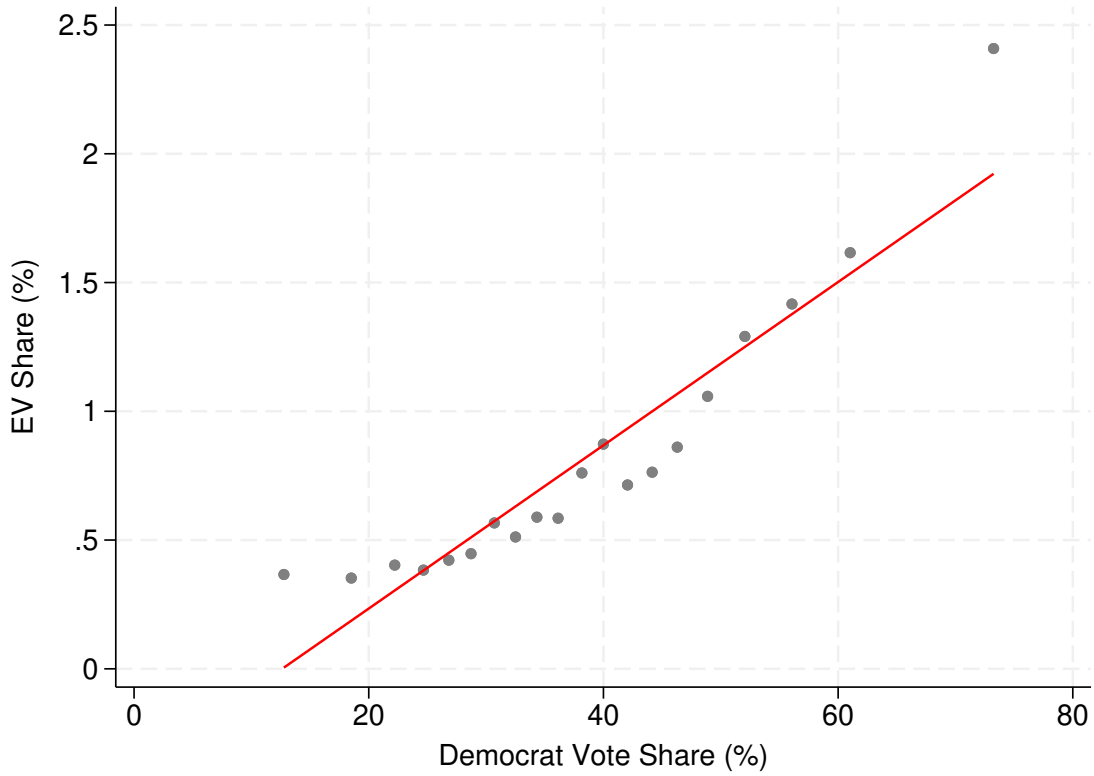
*Notes:* An alternative approach for examining the concentration of EVs in the most Democratic counties is to examine the cumulative distribution function. This approach is more flexible in that it does not emphasize the specific 5% and 10% thresholds, but yields very similar results overall. This figure plots the distribution separately by 3-year periods from 2012 to 2023. The x-axis is the percentile of counties based on Democrat vote shares, from highest to lowest. The y-axis is the share of all new U.S. EV registrations. Thus, for example, in all 3-year time periods about 80% of EV adoption occurred in the 30% most Democratic counties. The distribution shifts modestly to the right during the second half of our sample, but in all years the distribution is very steep, with a high degree of concentration among the most Democratic counties.

Appendix Figure 4: Political Ideology and New Vehicle Registrations, Cumulative Distribution Function by Time Period



*Notes:* The most Democratic counties are also some of the most populous counties, so the concentration in the previous figure in part reflects higher overall levels of new vehicle registrations. This figure is constructed in exactly the same way as the previous figure, except that it uses all new U.S. vehicle registrations, not just EVs. This figure shows, for example, that in all 3-year time periods about 80% of new vehicle registrations occurred in the 50% most Democratic counties. There is almost no change over time in the distribution, as illustrated by the nearly completely overlapping cumulative distribution functions across different 3-year time periods. The distribution for all new vehicles is much flatter compared to the distribution for EVs in the previous figure, indicating that the concentration of EVs in the most Democratic counties is much more than would be expected based on the overall concentration of new vehicle registrations.

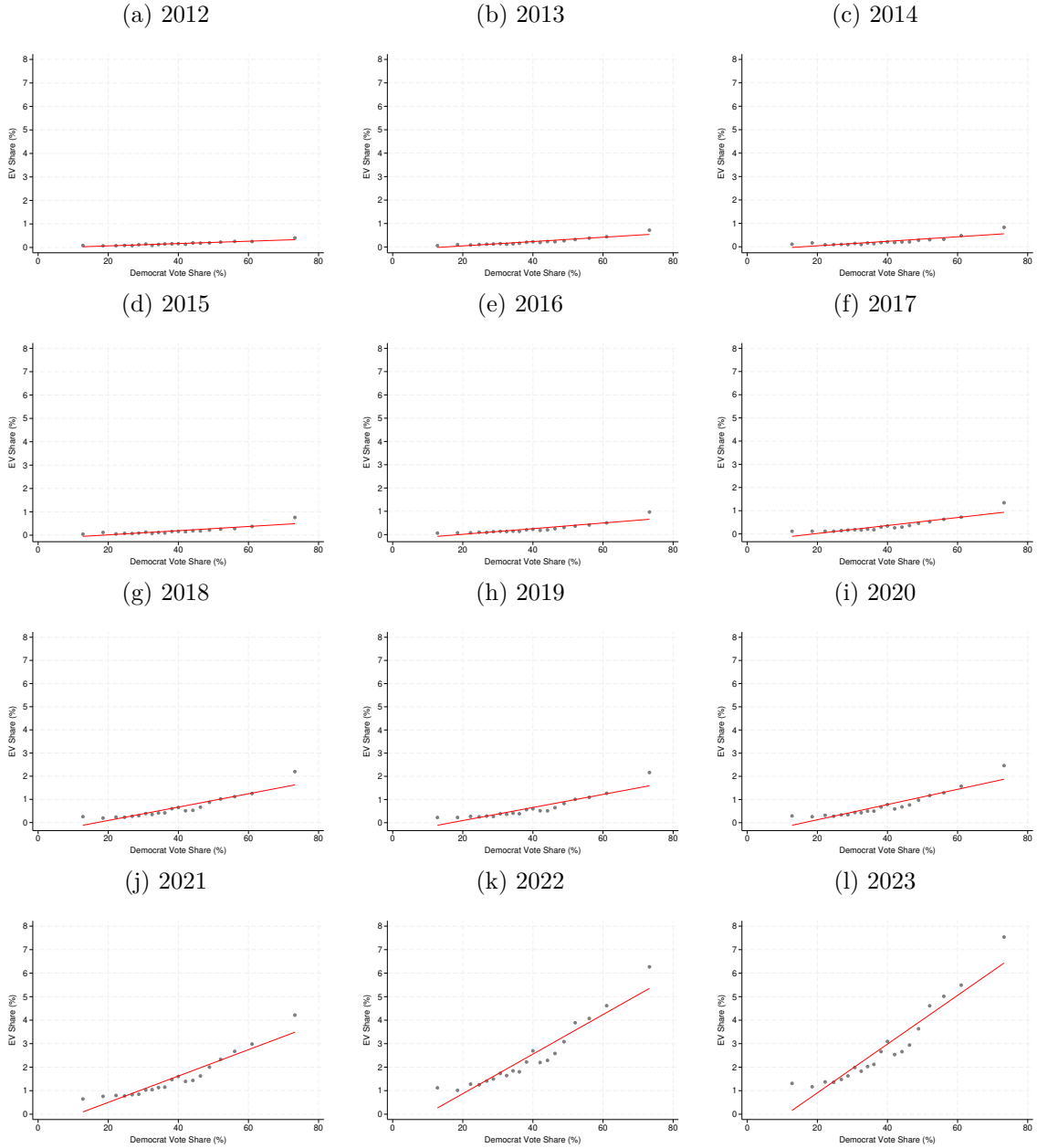
Appendix Figure 5: Political Ideology and EV Adoption, Binned Scatterplot



*Notes:* For this figure we group counties into twenty equal-sized “bins” on the basis of Democrat vote share, and then plot the mean EV share and Democrat vote share for each bin. We also plot a least squares linear regression line. The x-axis is the share of voters in the 2012 presidential election who voted for Barack Obama. The y-axis is EVs as a share of all new vehicles registered during the period 2012 to 2023.

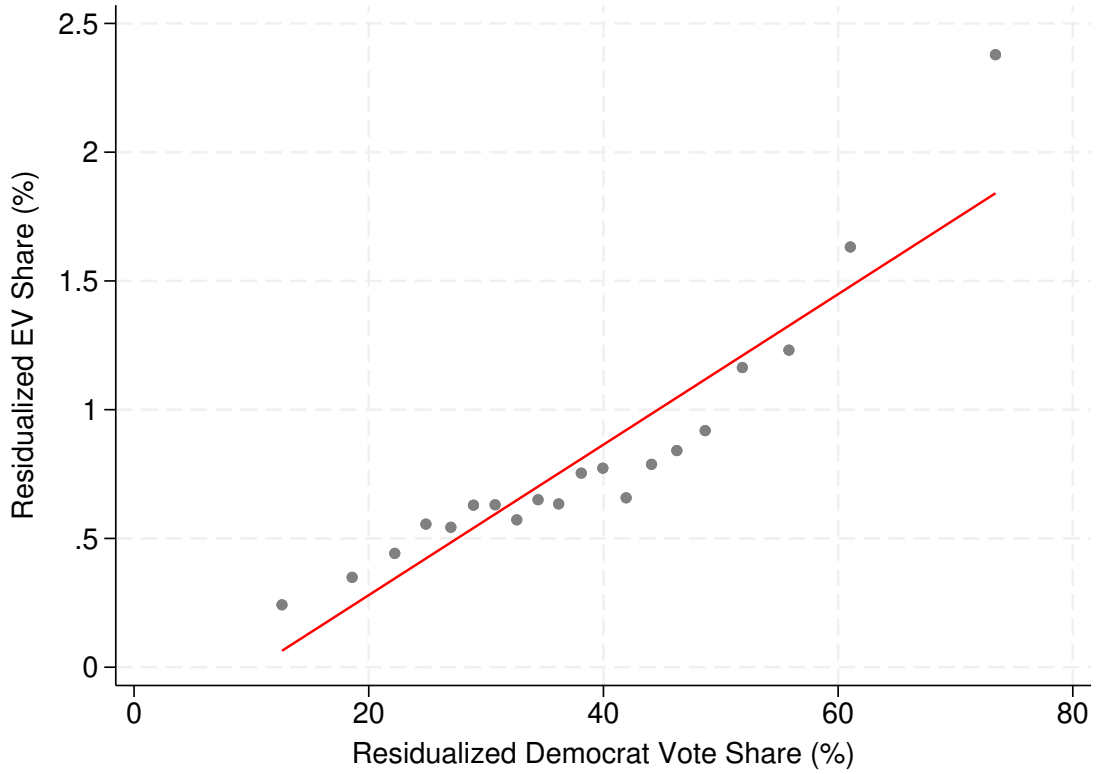
# Online Appendix

## Appendix Figure 6: Binned Scatterplots by Year



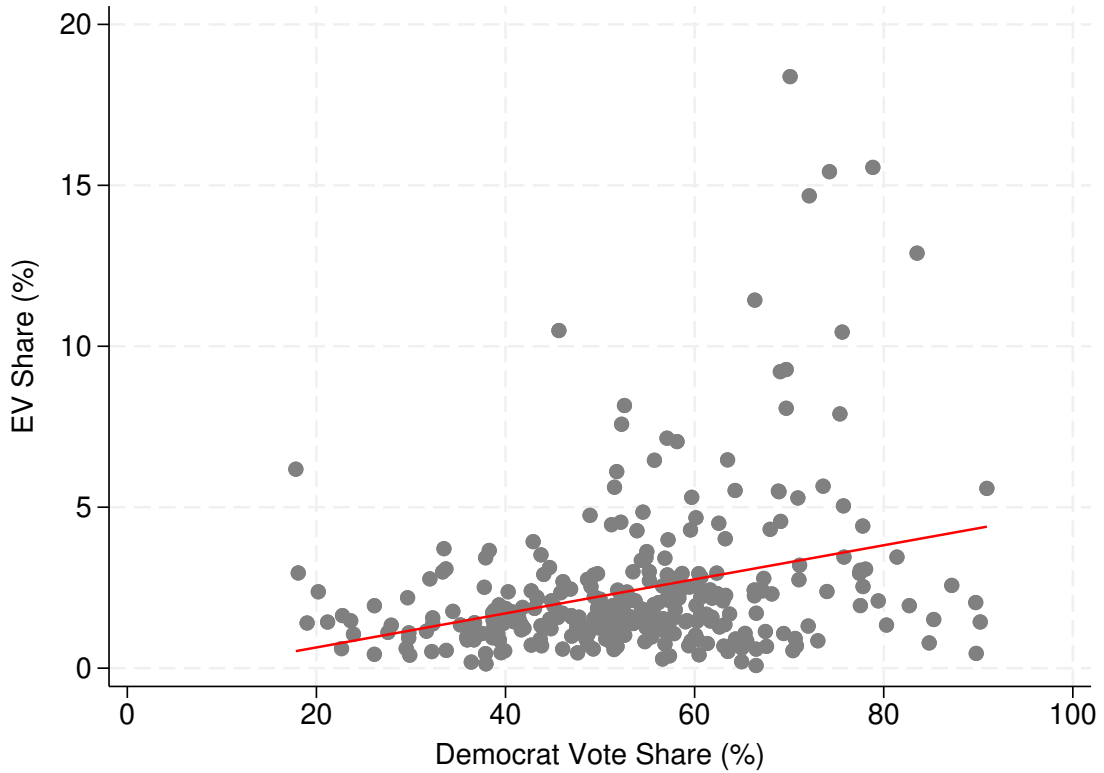
*Notes:* These binscatter plots are identical to Appendix Figure 5, except we include a separate scatterplot for each year with a least squares linear regression line.

Appendix Figure 7: Political Ideology and EV Adoption, Controlling for Income



*Notes:* This binscatter plot shows the relationship between county-level residualized Democrat vote shares and residualized EV shares. The x-axis is the share of voters in the 2012 presidential election who voted for Barack Obama. The y-axis is EVs as a share of all new vehicles registered during the period 2012 to 2023. Both variables were residualized with respect to county-level median household income in 2012, and then the sample mean was added back. We also plot a least squares linear regression line.

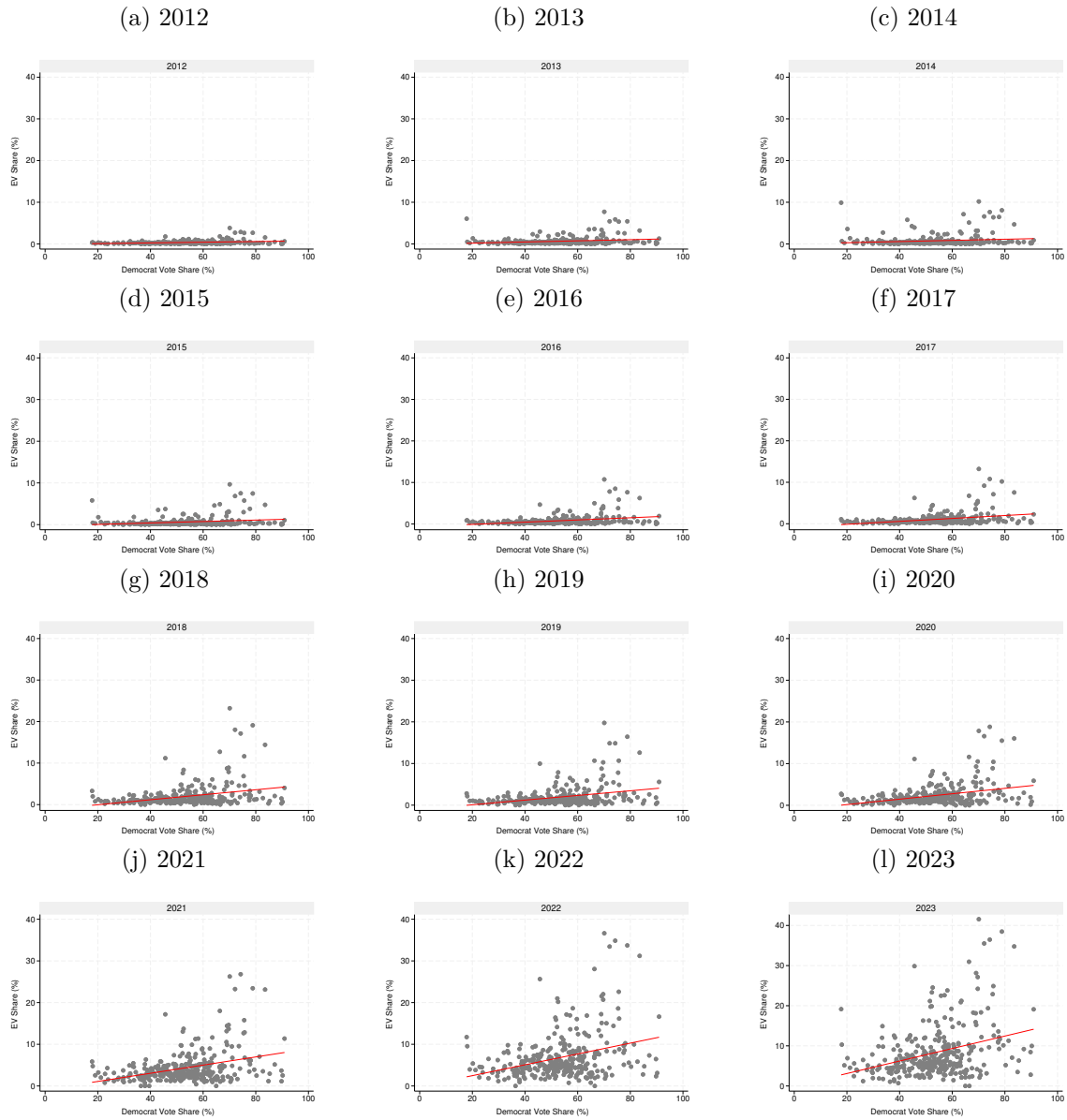
Appendix Figure 8: EV Adoption in High Population Density Counties



*Notes:* This figure is a county-level scatterplot, restricted to high population density counties (above 90th percentile). The x-axis is the share of voters in the 2012 presidential election who voted for Barack Obama. The y-axis is EVs as a share of all new vehicles registered during the period 2012 to 2023. We also plot a least squares linear regression line. Population density is defined at the county level as population divided by land area. A strong positive correlation remains even after restricting the sample to high population density counties. Among Republican-majority counties, EV adoption tends to range between 0 and 2.5%, whereas among Democratic majority counties, EV adoption tends to range from 0% to 10%, with adoption above 10% in some outlier counties.

## Online Appendix

Appendix Figure 9: EV Adoption in High Population Density Counties, by Year



*Notes:* This figure is identical to Appendix Figure 8, except we include a separate scatterplot for each year with a least squares linear regression line. The figure shows the dramatic growth in EV adoption in Democratic counties. During the first half of the sample period, adoption tends to be below 10% almost everywhere, but there are clear bursts in EV adoption in Democratic counties in 2018, 2021, 2022, and 2023. The difference in adoption between Democratic and Republican counties remains pronounced throughout the sample period.

## Online Appendix

Appendix Table 1: Descriptive Statistics

	Obs	Mean	Std dev.	Min	Max
EV Share	37,344	0.84	1.95	0	41.6
Democrat Vote Share	37,344	38.5	14.8	3.45	93.4
County Median Household Income (\$1,000)	37,344	44.7	11.3	22.1	121
County Population (10,000 persons)	37,344	10.1	32.1	0.009	993
County Population Density (100 persons per square mile)	37,344	2.67	17.7	0.001	711
State-Level Gasoline Prices (\$/gallon)	37,344	2.85	0.60	1.85	5.55
State-Level Electricity Prices (cents/kWh)	37,344	12.4	2.61	8.37	43.0
College-Educated Population Share	37,344	19.5	8.76	3.70	72.8
County Tesla Station Count	37,344	2.21	14.6	0	1,212
County 12-month Heating Degree Days (1,000°Df)	37,284	4.76	2.26	0.08	11.6

*Notes:* This table provides descriptive statistics for our county-level dataset. The unit of observation is county-by-year and the sample period covers 2012 to 2023. See the online appendix for a detailed description of data sources. EV share is the share of all new vehicles registered in a given county and year that are EVs. Democrat vote share is the share of voters in the 2012 presidential election who voted for Barack Obama. In 2012, Barack Obama received 51% of all votes (i.e. the popular vote), but the mean is lower here because these statistics are not weighted by population. County-level voting records are not available for Alaska for 2012, so Alaska is dropped in all county-level analyses. We also drop Kalawao county, Hawaii, in all county-level analyses as it is a very small county that only has non-zero new vehicle registrations in about half of the years in our sample. County median annual household income is from 2012 and measured in thousands of dollars. County population is from 2012 and measured in ten thousands of people. Population density is measured at the county-level and measured in hundred persons per square mile. Gasoline prices are measured at the state-by-year level, in dollars per gallon. Electricity prices are measured at the state-by-year level, in cents per kilowatt-hour. County-level share of population aged 25 and over with a bachelor's degree or higher is from 2012 and measured as a percentage. County Tesla station counts are measured as the total number of Level 3 Tesla charging outlets. County-level 12-month heating degree days are the sum of negative differences between the mean daily temperature and the 65°F base, measured in Fahrenheit degree-days. Heating degree days are not available for Hawaii and Lexington County, VA.

## Online Appendix

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Appendix Table 2: Growth in Electric Vehicle Availability, 2012–2023

Model Year	Number of Brands Offering EVs	Number of EV Models Offered
	(1)	(2)
2012	9	12
2013	11	16
2014	17	26
2015	18	30
2016	19	34
2017	20	50
2018	22	56
2019	23	74
2020	24	85
2021	26	99
2022	26	137
2023	34	121

*Notes:* Column (1) reports the number of brands offering at least one EV model, and Column (2) presents the number of EV models offered by model year. Data are from the U.S. Department of Energy’s Alternative Fuels Data Center (AFDC) annual Alternative Fuel and Advanced Technology Vehicles lists for model years 2012–2023. EVs include battery electric vehicles (BEVs), plug-in hybrid electric vehicles (PHEVs), and fuel cell vehicles (FCVs), with models defined following the AFDC classification.

## Online Appendix

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Appendix Table 3: Correlation Between County-level Democrat Vote Shares and EV Shares, by Year

Year	Correlation	P-value
2012	0.260	0.000
2013	0.295	0.000
2014	0.241	0.000
2015	0.261	0.000
2016	0.325	0.000
2017	0.345	0.000
2018	0.341	0.000
2019	0.352	0.000
2020	0.364	0.000
2021	0.384	0.000
2022	0.386	0.000
2023	0.396	0.000

*Notes:* This table reports correlations by year between county-level EV shares and Democrat vote shares in the 2012 presidential election.

## Online Appendix

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Appendix Table 4: Correlation Between State-level Democrat Vote Shares and EV Shares

Year	Correlation	P-value
2012	0.574	0.000
2013	0.538	0.000
2014	0.351	0.012
2015	0.428	0.002
2016	0.537	0.000
2017	0.591	0.000
2018	0.530	0.000
2019	0.610	0.000
2020	0.627	0.000
2021	0.675	0.000
2022	0.625	0.000
2023	0.622	0.000

*Notes:* This table presents correlations by year between state-level EV shares and Democrat vote shares from the 2012 Presidential Elections.

## Online Appendix

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Appendix Table 5: Alternative Measures of Political Ideology

Year	2012 vote	2016 vote	2020 vote
2012	0.260	0.311	0.351
2013	0.295	0.363	0.407
2014	0.241	0.318	0.353
2015	0.261	0.332	0.366
2016	0.325	0.406	0.446
2017	0.345	0.423	0.467
2018	0.341	0.427	0.471
2019	0.352	0.445	0.492
2020	0.364	0.465	0.515
2021	0.384	0.488	0.547
2022	0.386	0.500	0.564
2023	0.396	0.512	0.575

*Notes:* This table is identical to Appendix Table 3, but uses alternative measures of political ideology. Column (1) shows our baseline results using the share of voters in the 2012 Presidential Election who voted for Barack Obama. Columns (2) and (3) repeat the exercise, but using Democrat vote share from the 2016 and 2020 Presidential Elections, respectively.

## Online Appendix

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Appendix Table 6: Political Ideology and EV Adoption, Regression Estimates With Population Weights

	(1)	(2)	(3)	(4)	(5)
Democrat Vote Share	0.081* (0.033)	0.070** (0.026)	0.079* (0.030)	0.059** (0.016)	0.058** (0.015)
County Median Household Income	No	Yes	Yes	Yes	Yes
County Population Density	No	No	Yes	Yes	Yes
State-Level Gasoline Prices	No	No	No	Yes	—
State-by-Year Fixed Effects	No	No	No	No	Yes
Observations	37,344	37,344	37,344	37,344	37,332
R-squared	0.076	0.157	0.162	0.375	0.855

*Notes:* This table is exactly the same as Table 2 in the paper except we use population weights in all regressions. In contrast, Table 2 in the paper uses no weights, so implicitly puts equal weight on all counties. The number of observations is smaller in Column (5) because Washington DC is a single county, so those observations are dropped when state-by-year fixed effects are included. \*\* Significant at the 1% level, \*Significant at the 5% level.

## Online Appendix

Appendix Table 7: Political Ideology and EV Adoption, Regression Estimates with Additional Controls

	(1)	(2)	(3)	(4)
Democrat Vote Share	0.017** (0.005)	0.017** (0.005)	0.014** (0.005)	0.013** (0.004)
County Median Household Income	0.024** (0.008)	0.024** (0.008)	0.021** (0.006)	0.021** (0.006)
County Population Density	0.002 (0.002)	0.002 (0.002)	0.001 (0.002)	0.001 (0.002)
State-Level Gasoline Prices	5.833** (1.510)	4.992** (0.747)	4.068** (0.719)	4.068** (0.737)
College-Educated Population Share	0.054** (0.004)	0.054** (0.004)	0.049** (0.004)	0.050** (0.005)
State-Level Electricity Prices		0.395** (0.116)	0.269** (0.094)	0.280** (0.096)
County Tesla Station Count			0.035** (0.007)	0.035** (0.007)
County Heating Degree Days				-0.030 (0.033)
State Fixed Effects	Yes	Yes	Yes	Yes
Year Fixed Effects	Yes	Yes	Yes	Yes
Observations	37,344	37,344	37,344	37,284
R-squared	0.590	0.611	0.665	0.665

*Notes:* Similar to Table 2 in the paper, this table reports coefficients and standard errors from four separate least squares regressions. All regressions are estimated using county-by-year observations for 2012 to 2023. In all regressions, the dependent variable is the share of all new registered vehicles that are EVs. All regressions include state fixed effects and year fixed effects. Standard errors are clustered by state. Heating degree days are not available for Hawaii and Lexington County, VA. \*\* Significant at the 1% level, \*Significant at the 5% level.

## Online Appendix

Appendix Table 8: Descriptive Statistics for Survey

	(1) Democrats n=499	(2) Republicans n=498	(3) <i>p</i> -value (1) vs (2)
Basic Demographics			
Age	42	42	.80
Male	39%	46%	.02
Household Size	2.7	3.3	.00
Annual Household Income \$1000s	71	74	.24
Student	12%	11%	.63
Employment Status			
Employed Full-Time	56%	52%	.22
Employed Part-Time	13%	14%	.77
Not in Paid Work (e.g. retired)	11%	16%	.01
Unemployed or Other	12%	10%	.27
Employment Status Not Available	8%	7%	.82
Education			
High School Graduate	100%	100%	.56
College Graduate	62%	55%	.02
Race			
Asian	7%	2%	.00
Black	12%	5%	.00
Mixed	4%	2%	.08
White	74%	88%	.00
Other	2%	2%	.82
U.S. Census Region			
Northeast	16%	15%	.87
Midwest	22%	21%	.60
South	42%	47%	.09
West	20%	16%	.14
Survey Details			
Survey Completion Time (Minutes)	4.1	4.9	.02
Previously Completed Surveys	2,392	1,499	.00

Note: This table reports descriptive statistics for the individuals we surveyed in January 2025 on Prolific. We restricted the survey to respondents living in the United States, fluent in english, with a drivers license, and with either an owned or leased car. Prolific asks participants, “In general, what is your political affiliation?” and we surveyed 500 Democrats and 500 Republicans. Participants identifying as “Independent,” “Other,” or “None” were not surveyed. Three participants failed to correctly submit their survey responses resulting in a sample with 499 Democrats and 498 Republicans. Household income is elicited by Prolific using 13 categories. For the purposes of the table we calculated mean income based on the bottom of each range, e.g. “\$60000–\$69999” is treated as \$60,000 and “More than \$150,000” is treated as \$150,000.

## Online Appendix

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Appendix Table 9: Survey Results By Political Party and State of Residence

(1) Democrats in Blue States n=311	(2) Republicans in Blue States n=276	(3) Democrats in Red States n=188	(4) Republicans in Red States n=222	(5) <i>p</i> -value (1) vs (2)	(6) <i>p</i> -value (3) vs (4)
A. Distinguishing EVs from non-EVs, Overall Percentage Correct					
79%	79%	78%	78%	.83	.79
B. Knowledge About EVs, Overall Percentage Correct					
67%	62%	66%	62%	.02	.22
C. General Automotive Knowledge, Overall Percentage Correct					
69%	71%	68%	72%	.32	.22

Note: This table is similar to Table 3, but reports statistics separately by both political party and state of residence. Blue and red states are defined based on the 2012 presidential election.

## Online Appendix

Appendix Table 10: Do Democrats Know More Than Republicans? Regression Evidence

	Distinguish EVs from non-EVs		Knowledge About EVs		General Automotive Knowledge	
	(1)	(2)	(3)	(4)	(5)	(6)
1(Democrat)	.00 (.01)	.00 (.01)	.04* (.02)	.04** (.02)	-.03 (.02)	-.02 (.02)
1(Male)		.04** (.01)		.06** (.02)		.11** (.02)
1(College Grad)		.01 (.01)		.05** (.02)		.02 (.02)
Household Income (in \$10,000s)		.00 (.00)		.00 (.00)		-.00 (.00)
Age (in years)		-.00 (.00)		.00 (.00)		.01** (.00)
Mean Dependent Variable	.79	.79	.64	.64	.70	.70
Observations	997	996	997	996	997	996
R-squared	.00	.02	.01	.03	.00	.09

Note: This table reports coefficients and standard errors from six separate least squares regressions. The dependent variable for each regression is indicated in the column headings. Columns (1) and (2), for example, focus on the nine questions for which we showed respondents images of vehicle models and asked them to identify each as either an EV or a non-EV. The dependent variable is the percentage of questions answered correctly so, for example, is equal to 1.0 for a respondent who answered all nine questions correctly or 0.555 for a respondent who answered 5 of 9 questions correctly. There are no additional independent variables other than those listed in the row headings. The number of observations is smaller in Columns (2), (4) and (6) because the respondent's age was not available for one respondent. \*Significant at 5% and \*\* significant at 1%.

### A Additional Data Details

As we explain in the paper, the core dataset for our analysis is the Experian North American Vehicle Database. See <https://www.experian.com/automotive/auto-vehicle-data>. This proprietary dataset describes the universe of U.S. new vehicle registrations. New vehicle registrations include “retail” buyers, i.e., households and small businesses, as well as “non-retail” buyers, i.e., government, dealer, and fleet/commercial buyers. Non-retail as a share of all new vehicle registrations ranges from 12% to 19% across years. In our analysis, we restrict the sample to retail buyers only.

As we mention in the paper, the Experian data include both sales and leases. Vehicle leasing varied widely during our sample period, increasing from 21% in 2012 to 30% in 2016, and then decreasing again to 27% in 2020, and to below 20% in 2022.<sup>8</sup> The Experian data provide a record of all new vehicles as they become initially registered, regardless of whether they are purchased or leased.

The Experian data record the state and county where the vehicle was initially registered, even if the vehicle was purchased or leased elsewhere. Consider, for example, a household that lives in Nevada but purchases a vehicle in California. Or consider a household that lives in a rural Pennsylvania county, but travels to an urban Pennsylvania county to lease a vehicle. In both cases these vehicles will appear in the Experian data based on the household’s location of residence, which is what we want for a study correlating adoption decisions with state- and county-level characteristics.

As we mention in the paper, our primary measure of political ideology is Democrat vote share from the 2012 U.S. presidential election. An alternative to using vote shares would be to measure political ideology using opinion polls. Market research organizations like Ipsos and YouGov, for example, frequently run surveys asking respondents if they consider themselves a Democrat or a Republican. Although there are potentially some advantages with opinion polls, these data do not have the county-level granularity that we need for our analysis. In the 2012 election, there were 26 states plus Washington DC won by the Democratic party and 24 states won by the Republican party. Less than 2% of voters selected the Libertarian or other third parties.

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<sup>8</sup>See “Car Buyers Shun Leases as Deals and Vehicles Dwindle” Nora Eckert, *Wall Street Journal* March 24, 2022, and “Car Leasing Plummeted During Pandemic, Could Take Years to Recover,” Ryan Felton, *Wall Street Journal* January 28, 2023.

## Online Appendix

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Certain specifications also include additional controls. We account for median household income, population density, gasoline prices, electricity prices, educational attainment, the number of Level 3 Tesla charging stations, and heating degree days.

We use county-level median household income estimates for 2012 from the U.S. Census Bureau Small Area Income and Poverty Estimates (SAIPE) Program. See <https://www.census.gov/programs-surveys/saipe/data/datasets.html>. In some specifications, we use state-level median household income estimates for 2012 from the U.S. Census Bureau, Current Population Survey. See <https://www2.census.gov/programs-surveys/cps/tables/time-series/historical-income-households/h08.xlsx>.

In some specifications we control for population density. Densely populated urban areas tend to have more robust charging infrastructure which encourages EV adoption. In addition, shorter commuting distances and more frequent stop-and-go driving make EVs a practical choice for households in more densely populated environments. We define population density as county-level population divided by total county land area. We obtain county-level population estimates for 2012 from the U.S. Census Bureau Population Estimates Program and information on land area for 2012 comes from the U.S. Census Bureau TIGER/Line Shapefiles. See <https://www.census.gov/programs-surveys/popest/data/tables.html> and <https://www.census.gov/programs-surveys/geography.html>.

We use state-by-year average gasoline prices from 2012 to 2023 from the U.S. Department of Energy, Energy Information Administration, *State Energy Data System* (SEDS). See <https://www.eia.gov/state/seds/>.

Certain specifications also control for electricity prices. We use state-by-year average retail price of electricity to residential customers from 2012 to 2023 from the U.S. Department of Energy, Energy Information Administration. See <https://www.eia.gov/electricity/data/state/xls/861/HS861%202010-.xlsx>.

We use county-level educational attainment from the 2008–2012 American Community Survey (ACS) 5-Year Estimates, published by the U.S. Census Bureau. See <https://data.census.gov/table>. We use the 2012 estimates of the share of the population aged 25 and over with a bachelor’s degree or higher.

We also control for the number of Level 3 Tesla charging stations in some specifications.

## Online Appendix

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Tesla may have planned and built its charging network in areas with high EV adoption potential, and the entry of Tesla stations may have contributed to EV adoption in those locations. We compiled county-by-year counts using data from the U.S. Department of Energy, Alternative Fuels Data Center (AFDC). Tesla charging station counts are defined as the number of Level 3 charging outlets at stations with Tesla connectors on the last day of each year from 2012 to 2023. For this purpose, we use daily snapshots from 2014 to 2023 obtained from the U.S. Department of Energy, Alternative Fuels Data Center (AFDC). For the period 2014 to 2023, we use the daily snapshot from January 1st of the following year to represent the total number of installed chargers on the last day of a given year. Since daily snapshots are not available for 2012 and 2013, we use opening dates indicated for those specific years from the January 2014 snapshot of the AFDC U.S. charging stations database. In most cases, these stations only have Tesla Level 3 connectors. However, at a small number of Tesla stations, a Chademo or Combo connector is also present alongside Tesla connectors. Since the data report only total Level 3 outlet counts rather than counts by connector type, we cannot isolate Tesla-specific outlets in these cases and instead use the total Level 3 count as a proxy. See [https://afdc.energy.gov/data\\_download](https://afdc.energy.gov/data_download).

Finally, we control for heating degree days. Colder climates may deter EV adoption due to reduced battery range and performance in low temperatures, longer charging times, and increased energy use for cabin heating. Heating degree days are a widely used measure of cold which captures both the number of cold days as well as the intensity of cold on those days. We use county-level 12-month heating degree days between 2012 and 2023 from the National Oceanic and Atmospheric Administration, National Centers for Environmental Information. See <https://www.ncei.noaa.gov/access/monitoring/climate-at-a-glance/county/mapping>.

## B Survey Details

We conducted our survey from January 31, 2025 to February 6, 2025, yielding 997 completed responses out of 1,000 targeted participants. Survey participants were recruited through Prolific. We selected participants based on the following criteria: location in the United States, English fluency, car ownership (owning a car, leasing a car, or both), possession of a valid driving licence, and U.S. political affiliation (Democrat or Republican).

The survey conducted for this paper was reviewed and approved by the Research Ethics Board of HEC Montréal (Project No.: 2025-6083) and was deemed exempt from review by the IRB at Tufts University (IRB ID: STUDY00005289). The full survey instrument appears in the subsequent pages of this document.

## Transportation Survey

The following pages contain an anonymous questionnaire, which we invite you to complete. This questionnaire was developed as part of a research project at HEC Montréal that assesses general knowledge of automobiles.

If you agree to take part in this study, you will be directed to a Google form to answer the survey questions. Since your first impressions best reflect your true opinions, we would ask that you please answer the questions included in this questionnaire without any hesitation. There is no time limit for completing the questionnaire, although we have estimated that it should take about 5 minutes.

The survey responses received by the research team will be anonymous and the researchers will do their best to keep your information strictly confidential. It may be used for the advancement of knowledge and the dissemination of the overall results in academic or professional forums. No personal identifiable information will be collected.

The online survey service that informed you of this study, Prolific, agrees to refrain from disclosing any personal information (or any other information concerning participants in this study) to any other users or to any third party, unless the respondent expressly agrees to such disclosure or unless such disclosure is required by law.

You are free to refuse to participate in this project and you may decide to stop answering the questions at any time. By completing this questionnaire, you will be considered as having given your consent to participate in our research project and to the potential use of the anonymous data collected from this questionnaire in future research.

All survey data collected will be securely stored on encrypted cloud-based hosting services. If you have any questions about this research, please contact the principal investigator, Katalin Springel, at the telephone number or email address indicated below.

HEC Montréal's Research Ethics Board has determined that the data collection related to this study meets the ethics standards for research involving humans. If you have any questions related to ethics, please contact the REB secretariat at (514) 340-6051 or by email at [cer@hec.ca](mailto:cer@hec.ca).

Thank you for your valuable cooperation!

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## Online Appendix

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If you give your consent to take part please click "I agree" below. \*

- I agree
- I do not agree

### Prolific ID

Please enter your Prolific ID \*

Your answer

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### Main Survey

Each vehicle below is either an electric vehicle (i.e. a vehicle powered by an electric motor) or a gasoline-powered vehicle. We have not included any plug-in hybrid, conventional hybrid, or other types of vehicles.

## Online Appendix

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What is this? \*



- Electric Vehicle
- Gasoline Vehicle

Online Appendix

What is this? \*



- Electric Vehicle
- Gasoline Vehicle

## Online Appendix

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What is this? \*



- Electric Vehicle
- Gasoline Vehicle

## Online Appendix

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What is this? \*



- Electric Vehicle
- Gasoline Vehicle

## Online Appendix

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What is this? \*



- Electric Vehicle
- Gasoline Vehicle

Online Appendix

What is this? \*



- Electric Vehicle
- Gasoline Vehicle

Online Appendix

What is this? \*



- Electric Vehicle
- Gasoline Vehicle

Online Appendix

What is this? \*



- Electric Vehicle
- Gasoline Vehicle

## Online Appendix

What is this? \*



- Electric Vehicle
- Gasoline Vehicle

## Online Appendix

### Additional Questions

Answer each question the best you can but please don't search online for the answers.

With an electric vehicle, what is Level 2 charging? \*



- The fastest type of charging available
- Charging at a standard household outlet
- Charging using a 240-volt outlet, typically found in homes and public charging stations
- Charging using renewable energy sources

## Online Appendix

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What is the most common battery type used in electric vehicles today? \*

- Lead-acid batteries
- Nickel-metal hydride batteries
- Lithium-ion batteries
- Solid-state batteries

With an electric vehicle, approximately how many miles do you get for 30 minutes \*  
of Level 3 (DC Fast) charging?

- 0-5 miles
- 10-20 miles
- 40-50 miles
- 100-200+ miles

## Online Appendix

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In a gasoline-powered vehicle, what is the purpose of the alternator? \*



- To improve steering stability
- To transmit power from the engine to the wheels
- To cool the engine
- To charge the battery

## Online Appendix

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If the inner edges of a vehicle's tires look worn, what is the most likely cause? \*



- The vehicle's tires are underinflated
- The vehicle is too heavy for the tires
- The vehicle's wheel alignment is off
- The vehicle's shock absorbers need replacing



## Online Appendix

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### End of Survey

Please complete the following steps to record your survey response and receive your reward:

- 1) Make a note of this completion code: C1I3EEYK
- 2) Click 'Submit'.
- 3) Enter the completion code on Prolific.