Online Appendix

Gender and race in Kamala Harris's defeat. A cross-state analysis of U.S. 2024 presidential election.

The dataset and code can be retrieved at:

- Unimi Dataverse: https://doi.org/10.13130/RD_UNIMI/VZUFWR
- Harvard Dataverse: https://doi.org/10.7910/DVN/FAG5GF

Contents

1. Codebook

Table A.1. Variables' description

Variable	Description	Source
Democratic pct	Pct votes received by Harris-Walz in 2024, and by Biden-Harris in 2020	Multiple official State sources (* see below)
Turnout	Pct of voting eligible population	Election Lab, University of Florida https://election.lab.ufl.edu/voter-turnout/
Female pct	Pct Female voting age population	Census.org (for 2020 official census data; for 2024 the most recent official estimate of the American Community survey data, i.e. 2023 data)
Black pct	Pct Afro-American population	same
Hispanic pct	Pct Hispanic population	same
Population over 65 pct	Pct of population over 65 years	same
Referendum	Dummy variable taking the value of 1 in states in which a referendum on abortion was held on the same day of the presidential election, and 0 otherwise.	
Competitive states	Dummy variable taking the value of 1 in the following states in which the competition was thought to be crucial for the final results: Arizona, Georgia, Michigan, Nevada, North Carolina, Pennsylvania and Wisconsin.	
Growth	GDP growth (2023)\	Bureau of Economic Analysis https://www.bea.gov/itable/regional-gdp-and-personal-income
Unemployment	Unemployment rate (2023)	Bureau of Labour Statistics https://www.bls.gov/opub/geographic-profile/home.htm
Inflation	Implicit regional price deflator change (2023)	Bureau of Economic Analysis https://apps.bea.gov/itable/?ReqID=70&step=1
Income	Real per capita personal income (1000 $)	same
Education attainment	Pct of population with college education	Census.org
Urban population pct	Pct of population living in urban areas	same

2. Electoral results

* Sources of State votes results (retrieved from Wikipedia)

Alabama https://www.sos.alabama.gov/alabama-votes

Alaska https://www.elections.alaska.gov/enr/

Arizona https://azsos.gov/elections/election-information/2024-election-info

Arkansas https://results.enr.clarityelections.com/AR/122502/web.345435/#/summary

California https://www.sos.ca.gov/elections/prior-elections/statewide-election-results/general-election-nov-5-2024/statement-vote

Colorado https://www.archives.gov/electoral-college/2024

Connecticut https://ctemspublic.tgstg.net/#/home

Delaware https://elections.delaware.gov/results/html/index.shtml?dc=report&electionId=GE2024

District of Columbia https://electionresults.dcboe.org/election_results/2024-General-Election

Florida https://floridaelectionwatch.gov/FederalOffices/President

Georgia https://results.sos.ga.gov/results/public/Georgia/elections/2024NovGen

Hawaii https://elections.hawaii.gov/election-results/

Idaho https://archive.voteidaho.gov/results/2024/general/

Illinois https://www.archives.gov/files/electoral-college/2024/ascertainment-illinois.pdf

Indiana https://www.archives.gov/files/electoral-college/2024/ascertainment-indiana.pdf

Iowa https://electionresults.iowa.gov/IA/122322/web.345435/#/summary

Kansas https://sos.ks.gov/elections/election-results.html

Kentucky https://www.archives.gov/files/electoral-college/2024/ascertainment-kentucky.pdf

Louisiana https://voterportal.sos.la.gov/graphical

Maine https://www.archives.gov/files/electoral-college/2024/ascertainment-maine.pdf

Maryland https://elections.maryland.gov/elections/2024/general_Results/gen_results_2024_1.html

Massachusetts https://electionstats.state.ma.us/elections/view/165300/

Michigan https://mvic.sos.state.mi.us/votehistory/Index?type=C&electionDate=11-5-2024

Minnesota https://www.archives.gov/files/electoral-college/2024/ascertainment-minnesota.pdf

Mississippi https://www.sos.ms.gov/elections-voting/2024-general-election

Missouri https://enr.sos.mo.gov/

Montana https://www.archives.gov/files/electoral-college/2024/ascertainment-montana.pdf

Nebraska https://sos.nebraska.gov/2024-elections

Nevada https://silverstateelection.nv.gov/USPresidential/

New Hampshire https://www.sos.nh.gov/2024-general-election-results

New Jersey https://www.nj.gov/state/elections/election-information-2024.shtml

New Mexico https://www.archives.gov/files/electoral-college/2024/ascertainment-new-mexico.pdf

New York https://elections.ny.gov/election-results

North Carolina https://s3.amazonaws.com/dl.ncsbe.gov/State_Board_Meeting_Docs/2024-11-26/Canvass/State_Composite_Abstract_Report-Contest.pdf

North Dakota https://results.sos.nd.gov/ResultsSW.aspx?text=All&type=SW&map=CTY

Ohio https://www.ohiosos.gov/elections/election-results-and-data/2024-official-election-results/

Oklahoma https://www.archives.gov/files/electoral-college/2024/ascertainment-oklahoma.pdf

Oregon https://sos.oregon.gov/elections/Pages/electionhistory.aspx

Pennsylvania https://www.archives.gov/files/electoral-college/2024/ascertainment-pennsylvania.pdf

Rhode Island https://www.ri.gov/election/results/2024/general_election/

South Carolina https://www.enr-scvotes.org/SC/122436/web.345435/#/summary

South Dakota https://sdsos.gov/elections-voting/upcoming-elections/general-information/default.aspx

Tennessee https://sos.tn.gov/elections/results#2024

Texas https://results.texas-election.com/races

Utah https://electionresults.utah.gov/results/public/utah/elections/general11052024

Vermont https://electionresults.vermont.gov/#/federal

Virginia https://enr.elections.virginia.gov/results/public/Virginia/elections/2024NovemberGeneral

Washington https://www.sos.wa.gov/sites/default/files/2024-12/Official%20Canvass%20of%20the%20Returns%20G2024_%20Certification%2012%2004%202024.pdf

West Virginia https://www.archives.gov/files/electoral-college/2024/ascertainment-west-virginia.pdf

Wisconsin https://elections.wi.gov/election-result/2024-general-election-results

Wyoming https://sos.wyo.gov/Elections/Docs/2024/2024GeneralResults.aspx

3. Descriptive statistics

Table A.2. Descriptive statistics of the main variables used

Variable	Obs	Mean	Std. Dev.	Min	Max
Democrats ticket pct 2024	51	46.49	11.61	25.84	90.28
Democrats vote change 2024-2020	51	-2.14	1.31	-5.36	0.16
Turnout 2024	51	64.93	6.16	50.27	76.64
Change in turnout 2024-2020	51	-2.12	1.94	-6.77	1.60
Female pct	51	50.96	1.12	47.20	53.60
Black pct	51	10.73	9.93	0.40	40.90
Hispanic pct	51	13.24	10.21	2.10	48.60
Referendum	51	0.20	0.40	0	1
Competitive states	51	0.14	0.35	0.00	1.00
Growth GDP	51	3.06	1.81	0.23	7.79
Unemployment	51	3.37	0.75	1.80	5.00
Regional price deflator	51	3.42	1.42	-0.70	6.09
Real income per capita (1000 $)	51	58.43	6.67	47.24	80.06
Population over 65 pct	51	18.19	2.17	12.20	22.90
Education attainment	51	34.98	7.16	24.12	63.05
Urban population pct	51	72.98	15.16	35.12	100.00

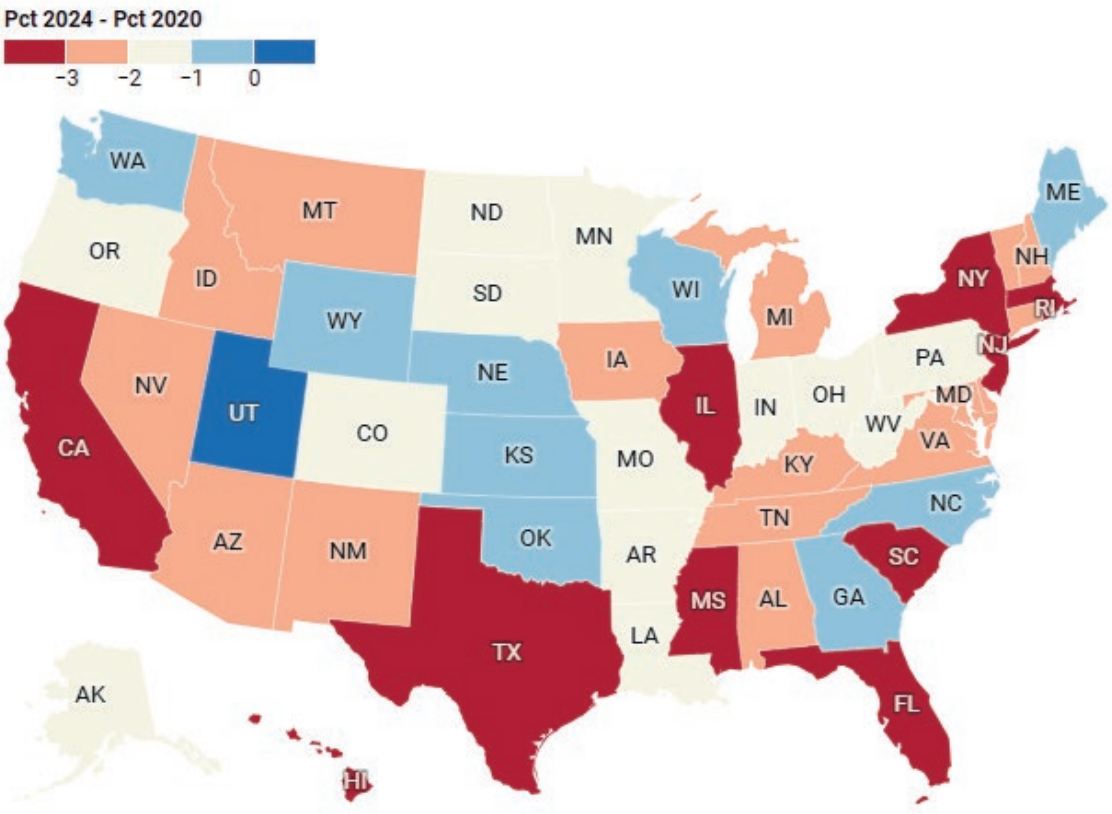

Figure 1. Change in support for the Democratic ticket

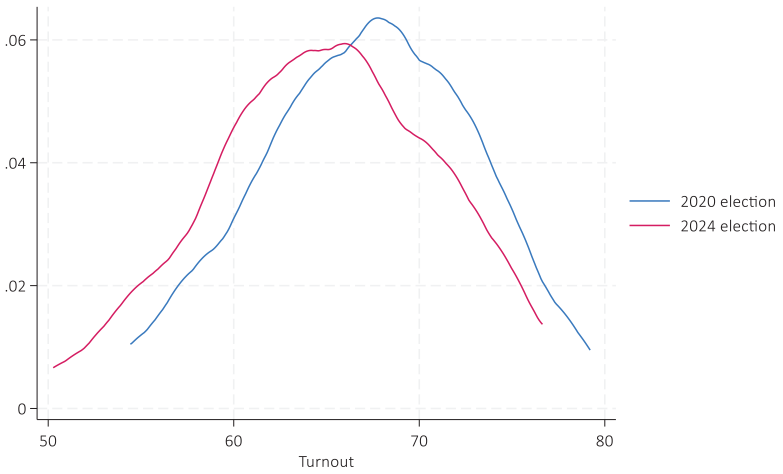

Figure 2. Distribution of turnout levels in 2020 and 2024.

4. Alternative regression models

Instead of controlling for turnout *levels*, it could alternatively be possible to control for turnout *change*. As demonstrated by the models in Table A.3, there are absolutely no differences in the results of the covariates of interest, and also of most other control variables.

Table A.3. Alternative specifications compared to Tables 4-5-6 (using change in turnout)

	(1) Change in Dem pct	(2) Change in Dem pct	(3) Change in Dem pct
Female VAP pct	-0.43***		0.15
	(0.14)		(0.30)
Black pct		-0.03**	-0.04
		(0.01)	(0.04)
Hispanic pct		-0.06***	-0.07**
		(0.02)	(0.03)
Referendum	-0.49		-0.03
	(0.42)		(0.42)
Competitive states	-0.04	0.54	1.15*
	(0.48)	(0.45)	(0.60)
Change in turnout	0.25**	0.10	0.06
	(0.12)	(0.11)	(0.11)
Growth			0.22**
			(0.10)
Unemployment			-0.24
			(0.24)
Inflation			-0.07
			(0.14)
Income pc (1000 $)			0.01
			(0.02)
Population over 65 pct			-0.24*
			(0.12)
Education attainment			-0.01
			(0.03)
Urban population pct			-0.00
			(0.02)
Constant	20.23***	-0.91***	-3.80
	(7.37)	(0.32)	(13.99)
Observations	51	51	51
R-squared	0.26	0.32	0.55

*Robust standard errors are in parentheses *** p<.01, ** p<.05, * p<.10*

We further included in the right hand-side of the equation a dummy variable for the District of Columbia, suspecting it could be an extreme case having some leverage on our results, and

replicated all the original analyses reported in Tables 4, 5 and 6. The variable is often statistically significant, but it never affects our main results.

Table A.4. Gender and change in support for the Democratic party

	(1) Change in Dem pct	(2) Change in Dem pct	(3) Change in Dem pct
Female VAP pct	-0.46***	-0.49***	-0.48***
	(0.14)	(0.15)	(0.14)
District of Columbia	1.51***	1.61***	1.58***
	(0.47)	(0.45)	(0.46)
Referendum		-0.50	-0.53
		(0.49)	(0.47)
Competitive states		0.76*	0.58
		(0.41)	(0.43)
Turnout			0.03
			(0.03)
Constant	21.25***	22.95***	20.28**
	(7.32)	(7.39)	(7.99)
Observations	51	51	51
R-squared	0.14	0.20	0.21

*Robust standard errors in parentheses *** p<.01, ** p<.05, * p<.10*

Table A.5 Race and change in support for the Democratic party

	(1) Change in Dem pct	(2) Change in Dem pct	(3) Change in Dem pct	(4) Change in Dem pct	(5) Change in Dem pct
Black pct	-0.03*	-0.03*			-0.04***
	(0.02)	(0.02)			(0.02)
Hispanic pct			-0.06***	-0.06***	-0.06***
			(0.02)	(0.02)	(0.02)
District of Columbia	1.19**	1.35**	0.20	0.31	1.66***
	(0.54)	(0.51)	(0.16)	(0.19)	(0.46)
Competitive states		0.57		0.66*	0.93**
		(0.45)		(0.36)	(0.39)
Turnout		0.03		0.02	0.00
		(0.03)		(0.03)	(0.03)
Constant	-1.84***	-3.68*	-1.38***	-2.45	-1.05
	(0.25)	(1.95)	(0.23)	(1.91)	(2.03)
Observations	51	51	51	51	51
R-squared	0.04	0.09	0.21	0.25	0.33

*Robust standard errors in parentheses *** p<.01, ** p<.05, * p<.10*

Table A.6. Gender, race and other controls on the change in Democratic vote

	(1) Change in Dem pct	(2) Change in Dem pct	(3) Change in Dem pct
Female VAP pct	-0.48*	-0.11	0.23
	(0.25)	(0.24)	(0.23)
Black pct	0.00	-0.02	-0.06*
	(0.03)	(0.02)	(0.03)
Hispanic pct	-0.06***	-0.06***	-0.07**
	(0.02)	(0.02)	(0.03)
District of Columbia	1.54***	2.33***	3.64**
	(0.42)	(0.63)	(1.34)
Competitive states	0.81**	1.03**	0.90*
	(0.38)	(0.41)	(0.48)
Turnout	0.01	0.02	0.07**
	(0.03)	(0.03)	(0.03)
Referendum	-0.24	-0.31	0.05
	(0.43)	(0.40)	(0.37)
Growth		0.29***	0.25**
		(0.10)	(0.11)
Unemployment		-0.28	-0.41
		(0.28)	(0.24)
Inflation		0.06	-0.14
		(0.10)	(0.14)
Income pc (1000 $)			-0.01
			(0.03)
Population over 65 pct			-0.24*
			(0.12)
Education attainment			-0.08**
			(0.04)
Urban population pct			0.01
			(0.02)
Constant	22.17*	2.60	-8.41
	(12.75)	(13.07)	(10.09)
Observations	51	51	51
R-squared	0.39	0.52	0.62

*Robust standard errors in parentheses *** p<.01, ** p<.05, * p<.10*

5. Using county data

In the following tables we employ county electoral results instead of state results. Since there have been some redistricting in 3 states between 2020 and 2024 – Alaska, Connecticut and District of Columbia – we have been unable to include the corresponding counties do the impossibility of computing consistent differences in the results between the two elections.

Table A.7. Replicating Tables 4-5-6 using county data (clustered s.e.)

	(1) Change in Dem pct	(2) Change in Dem pct	(3) Change in Dem pct
Female VAP pct	-0.35**		0.30
	(0.14)		(0.26)
Black pct		-0.03***	-0.07***
		(0.01)	(0.02)
Hispanic pct		-0.03***	-0.08***
		(0.01)	(0.01)
Referendum	0.12		0.36
	(0.35)		(0.24)
Competitive states	0.63**	0.67**	1.25***
	(0.29)	(0.29)	(0.26)
Turnout	0.01	-0.00	-0.02
	(0.02)	(0.02)	(0.03)
Growth			0.11*
			(0.07)
Unemployment			-0.24
			(0.19)
Inflation			-0.29***
			(0.10)
Income pc (1000 $)			0.00
			(0.03)
Population over 65 pct			-0.24***
			(0.05)
Education attainment			-0.01
			(0.03)
Urban population pct			0.03**
			(0.01)
Constant	15.58*	-0.84	-10.31
	(7.86)	(1.45)	(14.61)
Observations/states	3103/48	3103/48	3103/48
R-squared	0.05	0.07	0.16

*State-clustered standard errors in parentheses *** p<.01, ** p<.05, * p<.10*

County data would be preferable for this kind of analyses, but unfortunately only electoral results are available with this granularity at this stage. For this reason, we had to match those data with state

level data for all other covariates, which is clearly suboptimal, and are here presented only as supplementary analyses.

Table A.8. Replication of Table A.7 but with change in turnout (clustered s.e.)

	(1) Change in Dem pct	(2) Change in Dem pct	(3) Change in Dem pct
Female VAP pct	-0.33**		0.31
	(0.12)		(0.22)
Black pct		-0.03***	-0.07***
		(0.01)	(0.02)
Hispanic pct		-0.02**	-0.07***
		(0.01)	(0.01)
Referendum	0.15		0.39*
	(0.29)		(0.23)
Competitive states	-0.07	0.12	0.77***
	(0.39)	(0.36)	(0.28)
Change in turnout	0.24**	0.17*	0.10
	(0.10)	(0.10)	(0.07)
Growth			0.12*
			(0.06)
Unemployment			-0.11
			(0.18)
Inflation			-0.28***
			(0.10)
Income pc (1000 $)			0.01
			(0.03)
Population over 65 pct			-0.24***
			(0.05)
Education attainment			-0.02
			(0.02)
Urban population pct			0.03***
			(0.01)
Constant	15.48**	-0.64**	-12.12
	(6.34)	(0.28)	(12.12)
Observations/states	3103/48	3103/48	3103/48
R-squared	0.08	0.08	0.17

*State-clustered standard errors in parentheses *** p<.01, ** p<.05, * p<.10*

Using level of turnout, as in Table A.7, or change in turnout, as in Table A.8, as control variables, does not make any difference in the results. These analyses, confirm the cross-state results presented in the article with gender being irrelevant for the change in support for the Democratic ticket, and the size of the Hispanic community being negatively associated with that electoral result. The only difference is that, using county results, also the size of the African American community matters, and is negatively associated with the electoral performance of Kamala Harris, thus supporting our second hypothesis.

Table A.8. Multilevel hierarchical models with county data nested within states

	(1) Change in Dem pct	(2) Change in Dem pct
Female VAP pct	0.31	0.08
	(0.28)	(0.28)
Black pct	-0.06**	-0.04
	(0.03)	(0.03)
Hispanic pct	-0.06***	-0.06***
	(0.02)	(0.02)
Referendum	0.52*	0.44
	(0.30)	(0.30)
Competitive states	0.69*	0.33
	(0.39)	(0.46)
Turnout	0.05*	
	(0.03)	
Change in turnout		0.18**
		(0.08)
Growth	0.18**	0.14*
	(0.08)	(0.08)
Unemployment	0.02	0.14
	(0.21)	(0.22)
Inflation	-0.21**	-0.16
	(0.10)	(0.10)
Income pc (1000 $)	0.02	0.01
	(0.03)	(0.03)
Population over 65 pct	-0.29***	-0.24***
	(0.07)	(0.07)
Education attainment	-0.06	-0.02
	(0.03)	(0.03)
Urban population pct	0.01	0.01
	(0.01)	(0.01)
Constant	-13.97	-0.96
	(14.31)	(13.63)
Observations/states	3103/48	3103/48
Random effects		
Var (constant)	0.45	0.43
	(0.11)	(0.11)
Var (residual)	2.14	2.14
	(0.05)	(0.05)

*Standard errors in parentheses *** p<.01, ** p<.05, * p<.10*

Instead of simply clustering the standard errors at the state level, we could specify a multilevel hierarchical analysis, with counties nested within states, and random intercepts (Table A.8). Here again, the results confirm what already found in the article regarding the role played by gender and Latinos. However, in model 1, using level of turnout amongst the control variables, the

size of the Black community is negatively associated with the vote for Kamala Harris relative to that obtained by Joe Biden in 2020, whereas it is not if we used change in turnout.