Supplementary Appendix for Partisan Change with Generational Turnover: Latino Party Identification from 1989-2023

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1 Appendix

1.1 Summary of Datasets

Table 1: List of Datasets and Variables (1989-2011)

Survey	Year	Census Year	National Origin	Region/State	N
LNPS	1989	1990	Mex/PR/Cuba	Region	N = 1653
Kaiser	1999	2000	Mex/PR/Cuba	Region/State	N = 1969
Kaiser-Pew	2002	2002	Mex/PR/Cuba	Region/State	N = 2181
Pew	2004	2004	Mex/PR/Cuba	Region/State	N = 1653
CCES	2006	2006	NONE	Region/State	N = 1822
LNS	2006	2006	Mex/PR/Cuba/Dom/Salv	Region/State	N = 5814
Pew	2006	2006	Mex/PR/Cuba	Region	N = 1339
Pew	2007	2007	Mex/PR/Cuba/Dom/Salv	Region	N = 1583
CCES	2008	2008	NONE	Region/State	N = 1903
Pew	2008	2008	Mex/PR/Cuba/Dom/Salv	Region	N = 1719
CCES	2009	2009	NONE	Region/State	N = 1150
Pew	2009	2009	Mex/PR/Cuba/Dom/Salv	Region	N = 1380
CCES	2010	2010	NONE	Region/State	N = 5284
Pew	2010	2010	Mex/PR/Cuba/Dom/Salv	Region	N = 1128
CCES	2011	2011	NONE	Region/State	N = 1622
Pew	2011	2011	Mex/PR/Cuba/Dom/Salv	Region	N = 981

Note: Sample size estimates exclude respondents whose response for partisan identity was either "don't know," third party, or NA. These estimates only show respondents classified as either Democrat, Republican, or independent. "Census Year" shows which year we drew demographic data from (either from decennial censuses, or the ACS Public Use Microdata Sample) to calculate our post-stratified survey weights. The levels for the "Region" variable corresponds to the following groups: 1) Region: the dataset only includes broad regional categories (e.g., Northeast) 2) Region/State: the dataset includes a mixture of state and region data 3) State: the dataset includes specific data for each state.

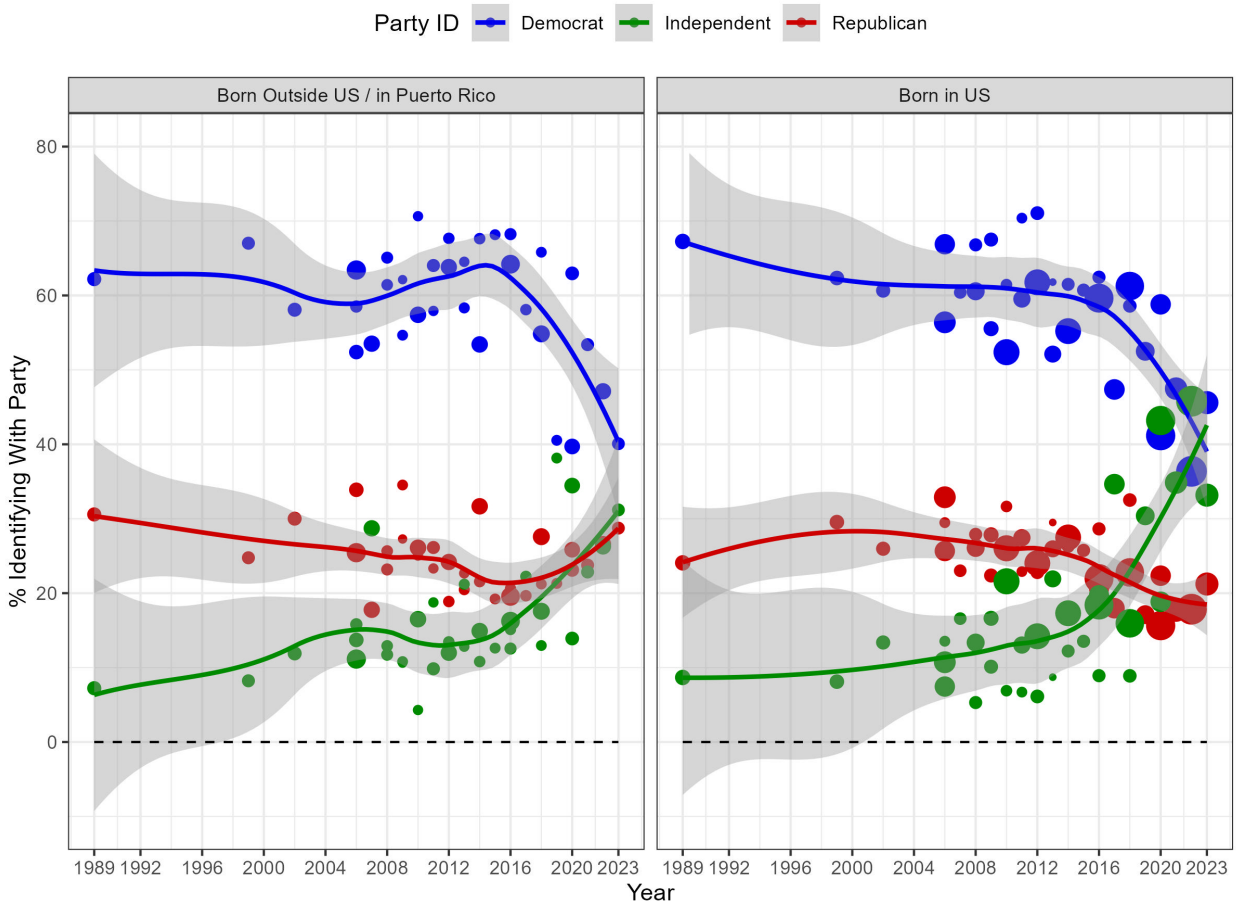
Table 2: List of Datasets and Variables (2012-2022)

Survey	Year	Census Year	National Origin	Region/State	N
CCES	2012	2012	NONE	Region/State	N = 5165
Pew	2012	2012	Mex/PR/Cuba/Dom/Salv	Region	N = 1501
CCES	2013	2013	NONE	Region/State	N = 1572
Pew	2013	2013	Mex/PR/Cuba/Dom/Salv	Region	N = 4495
CCES	2014	2014	NONE	Region/State	N = 5192
Pew	2014	2014	Mex/PR/Cuba/Dom/Salv	Region	N = 1416
Pew	2015	2015	Mex/PR/Cuba/Dom/Salv	Region	N = 1306
CCES	2016	2016	Mex/PR/Cuba/Dom	State	N = 7118
CMPS	2016	2016	Mex/PR/Cuba/Dom/Salv	State	N = 2772
Pew	2016	2016	Mex/PR/Cuba/Dom/Salv	NONE	N = 1361
CCES	2017	2017	Mex/PR/Cuba/Dom	Region/State	N = 2994
CCES	2018	2018	Mex/PR/Cuba/Dom	Region/State	N = 6495
Pew	2018	2018	Mex/PR/Cuba/Dom/Salv	NONE	N = 1305
CES	2019	2019	Mex/PR/Cuba/Dom	State	N = 2518
CES	2020	2020	Mex/PR/Cuba/Dom	State	N = 6467
CMPS	2020	2020	Mex/PR/Cuba/Dom/Salv	State	N = 3408
CES	2021	2021	Mex/PR/Cuba/Dom	State	N = 4066
CES	2022	2022	Mex/PR/Cuba/Dom	State	N = 7154
CES	2023	2023	Mex/PR/Cuba/Dom	State	N = 4298

Note: Sample size estimates exclude respondents whose response for partisan identity was either "don't know," third party, or NA. These estimates only show respondents classified as either Democrat, Republican, or independent. "Census Year" shows which year we drew demographic data from (either from decennial censuses, or the ACS Public Use Microdata Sample) to calculate our post-stratified survey weights. The levels for the "Region" variable corresponds to the following groups: 1) Region: the dataset only includes broad regional categories (e.g., Northeast) 2) Region/State: the dataset includes a mixture of state and region data 3) State: the dataset includes specific data for each state.

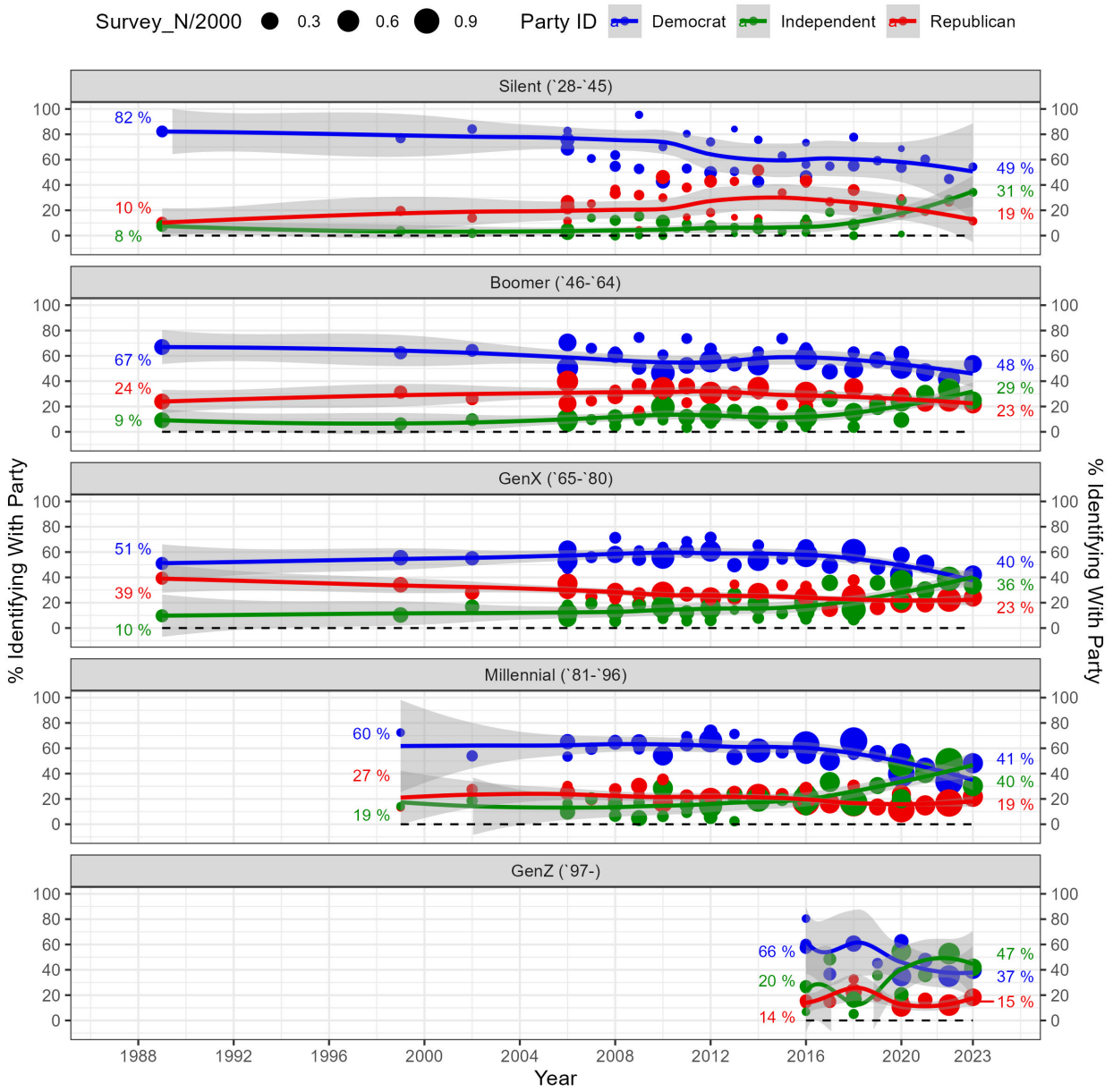
1.2 Additional Results

Figure A.1: Partisanship Among Latino Voters by Nativity, 1989-2022 (Including Points)



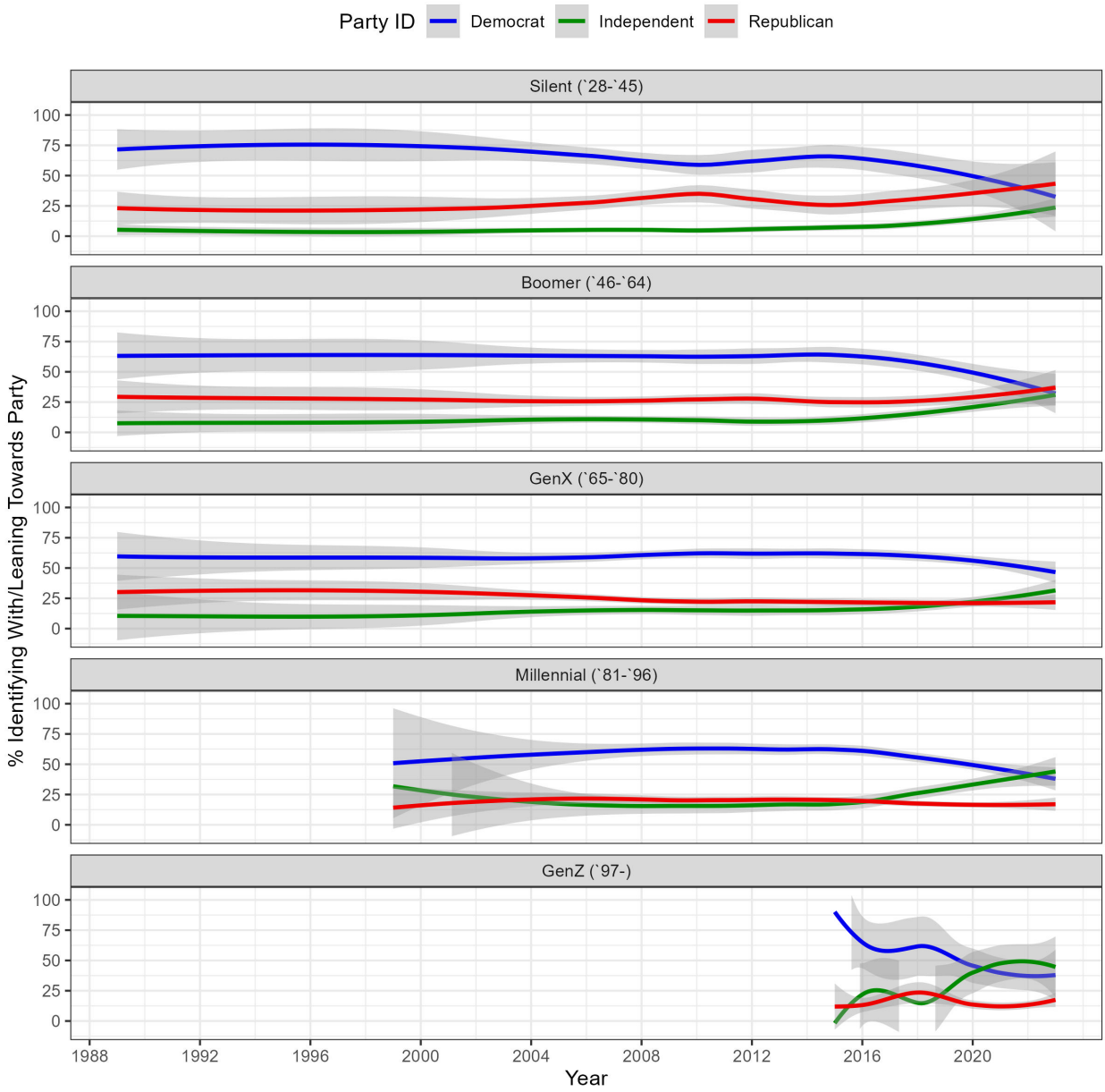
Note: This graph shows a weighted estimate from 35 public opinion surveys of the percentage (Y-Axis) of Latino adults identifying as either Democrat/lean Democrat (blue), Republican/lean Republican (red), or independent (green) over the 1989-2022 time period (X-Axis). "Don't know" and third-party responses are not included. Points (not shown for clarity) are based on the average partisanship estimate for each individual survey, which are calculated using post-stratification weights based on Census/ACS demographics. Lines show a loess best-fit estimate using inverse variance weights and a 95% confidence band. The left graph shows results for respondents born outside of the US or in Puerto Rico and the right graph shows results for those born in the US.

Figure A.2: Partisanship Among Latino Voters by Generation, 1989-2022 (Including Points)



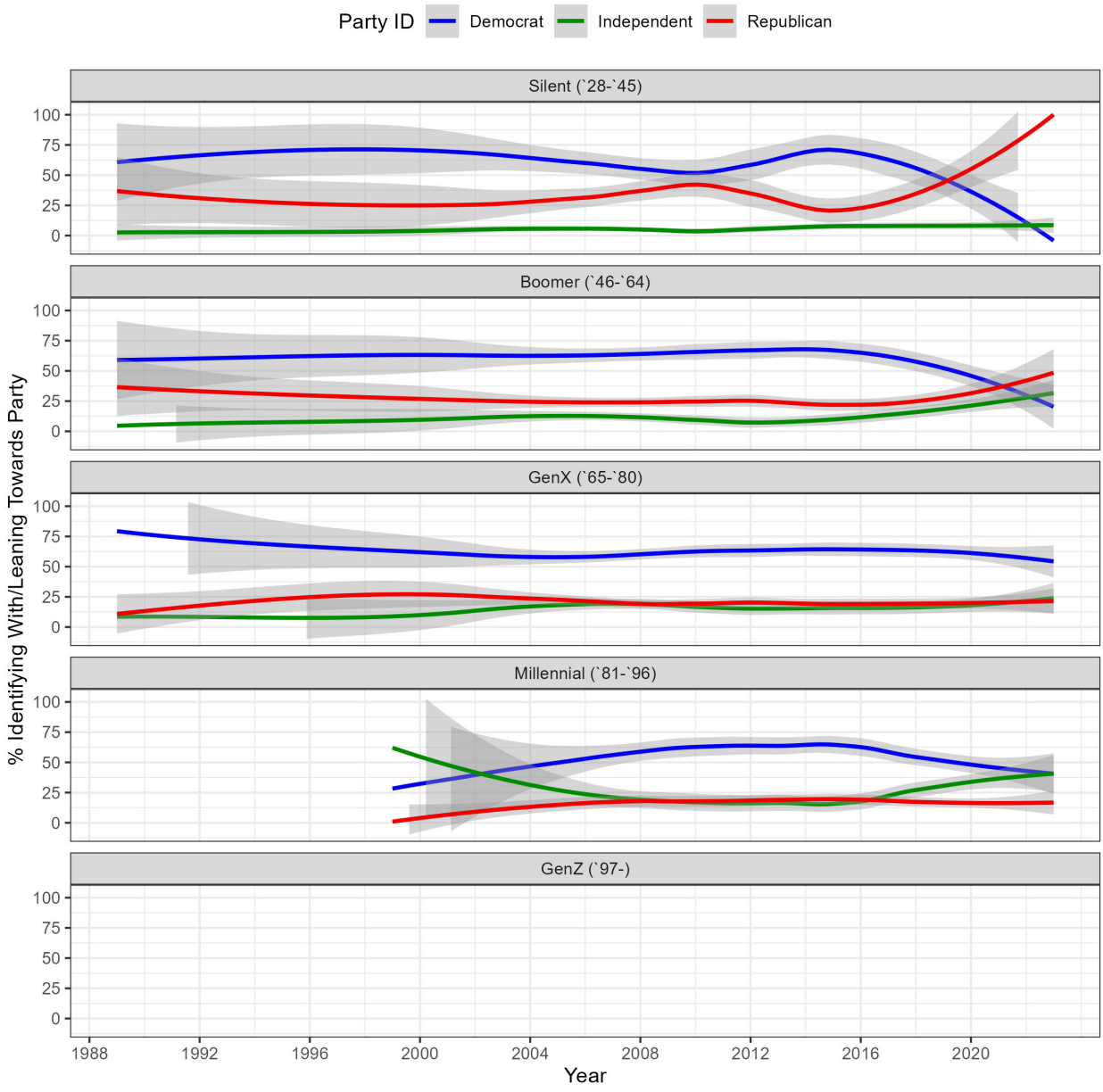
Note: This graph shows a weighted estimate from 35 public opinion surveys of the percentage (Y-Axis) of Latino adults identifying as either Democrat/lean Democrat (blue), Republican/lean Republican (red), or independent (green) over the 1989-2022 time period (X-Axis). "Don't know" and third-party responses are not included. Points are based on the average partisanship estimate for each individual survey, which are calculated using post-stratification weights based on Census/ACS demographics. Lines show a loess best-fit estimate using inverse variance weights and a 95% confidence band.

Figure A.3: Partisanship Among Latino Voters by Generation, 1989-2022 (Including Foreign-Born)



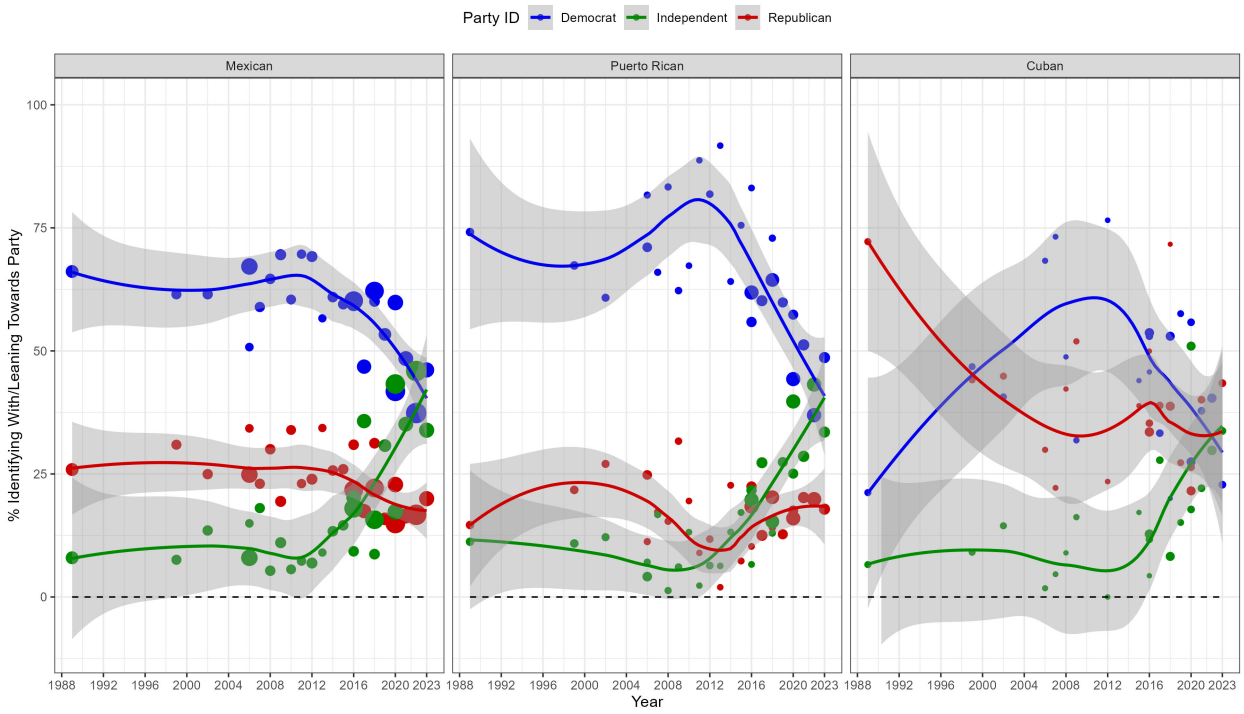
Note: This graph shows a weighted estimate from 35 public opinion surveys of the percentage (Y-Axis) of Latino adults (including both US-born and foreign-born) identifying as either Democrat/lean Democrat (blue), Republican/lean Republican (red), or independent (green) over the 1989-2022 time period (X-Axis). "Don't know" and third-party responses are not included. Points (not shown for clarity) are based on the average partisanship estimate for each individual survey, which are calculated using post-stratification weights based on Census/ACS demographics. Lines show a loess best-fit estimate using inverse variance weights and a 95% confidence band.

Figure A.4: Partisanship Among Latino Voters by Generation, 1989-2022 (Only Foreign-Born)



Note: This graph shows a weighted estimate from 35 public opinion surveys of the percentage (Y-Axis) of Latino adults (only born outside of US/in Puerto Rico) identifying as either Democrat/lean Democrat (blue), Republican/lean Republican (red), or independent (green) over the 1989-2022 time period (X-Axis). "Don't know" and third-party responses are not included. Points (not shown for clarity) are based on the average partisanship estimate for each individual survey, which are calculated using post-stratification weights based on Census/ACS demographics. Lines show a loess best-fit estimate using inverse variance weights and a 95% confidence band.

Figure A.5: Partisanship Among US-Born Latino Voters by National Origin, 1989-2022 (With Points)



Note: This graph shows a weighted estimate from 35 public opinion surveys of the percentage (Y-Axis) of Latino adults identifying as either Democrat/lean Democrat (blue), Republican/lean Republican (red), or independent (green) over the 1989-2022 time period (X-Axis). "Don't know" and third-party responses are not included. This graph also only includes US-born respondents. Points (not shown for clarity) are based on the average partisanship estimate for each individual survey, which are calculated using post-stratification weights based on Census/ACS demographics. Lines show a loess best-fit estimate using inverse variance weights and a 95% confidence band. The left graph shows results for Mexican-origin respondents, the middle for Puerto Rican-origin respondents, and the right for Cuban-origin respondents.

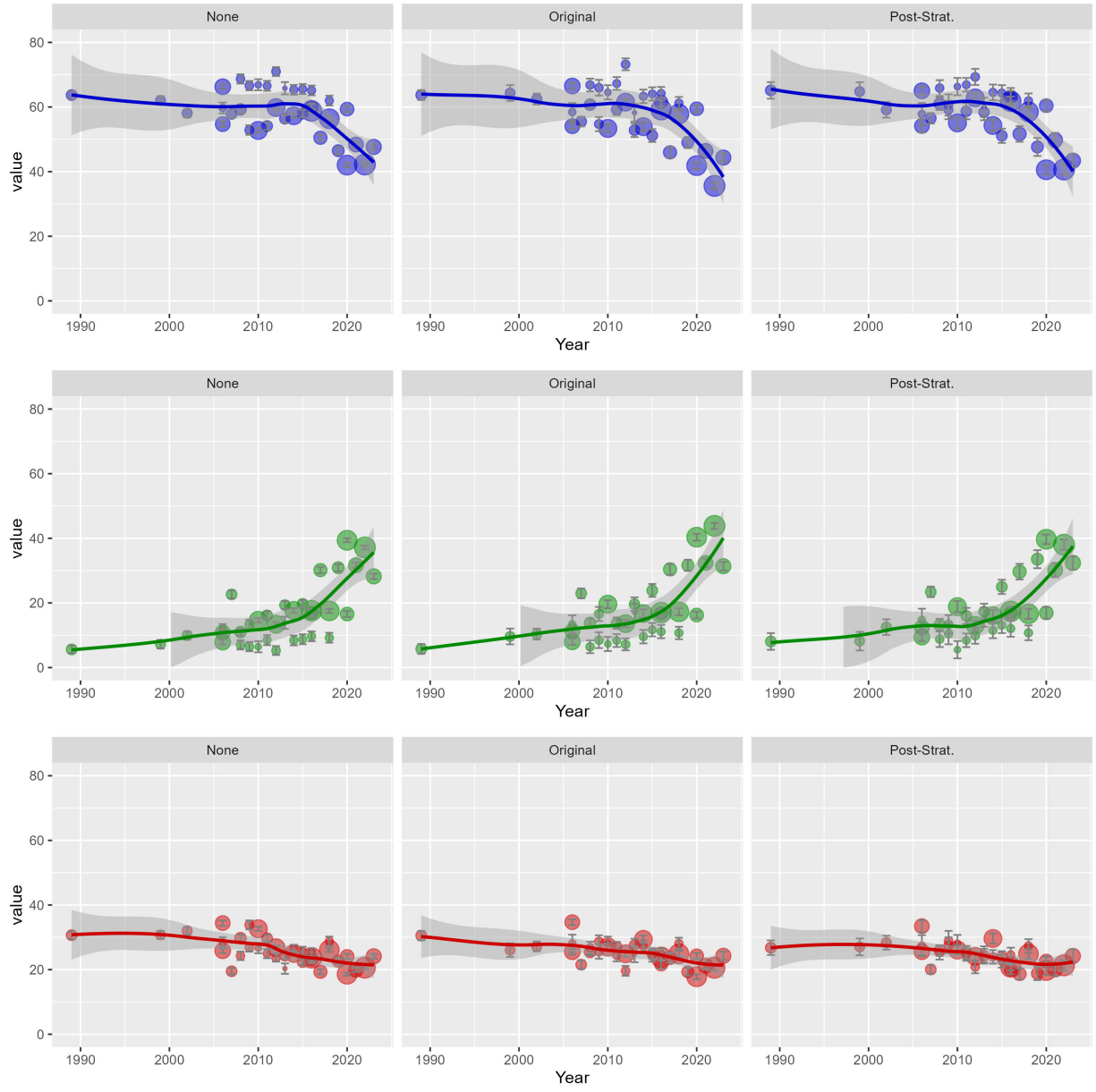
1.3 Post-Stratification Weights

We estimate our post-stratification weights following recommendations by extant literature on the topic, which have applied these methods to estimate public opinion using large-scale but potentially biased survey data (Ghitza and Gelman 2013; Leemann and Wasserfallen 2017). These studies have argued that a potentially biased sample can be corrected by calculating weights based on the distribution of subgroups based on more reliable data, such as the Census or ACS. For example, it is possible that survey samples of Latino Republicans consist too much of Cuban Americans, or of US-born Latinos, which could lead to under-estimates of Republican partisanship among non-Cubans and foreign-born Latinos (Jones-Correa, Al-Faham, and Cortez 2018). These corrections are crucial for our analyses of Latino partisanship because past research has identified that data on Latino political opinions remains limited, especially in past years (Fraga et al. 2006; Jones-Correa, Al-Faham, and Cortez 2018; Pérez and Cobian 2024).

We use a number of demographic variables when estimating these post-stratified survey weights. We first identify what variables are present in the survey datasets (see Appendix Tables 3/4). Then, we draw on Census data from either the decennial Census or from the Census's Public Use Microdata Sample (PUMS). The variables we use include 1) state/region (e.g., some majority-Latino states like CA and TX, otherwise general regions like Midwest), 2) US nativity (i.e., US-born or foreign-born/born on Puerto Rico), 3) Latin American national origin (Mexican, Puerto Rican, Cuban, and Other; see Appendix Section "Compositional Trends in National Origin" for more details), 4) Gender (male or female), 5) age group (grouped into Census-designated age bins), and 6) college graduate status (has any degree, or does not). We use Census data from the corresponding year for almost every survey dataset.

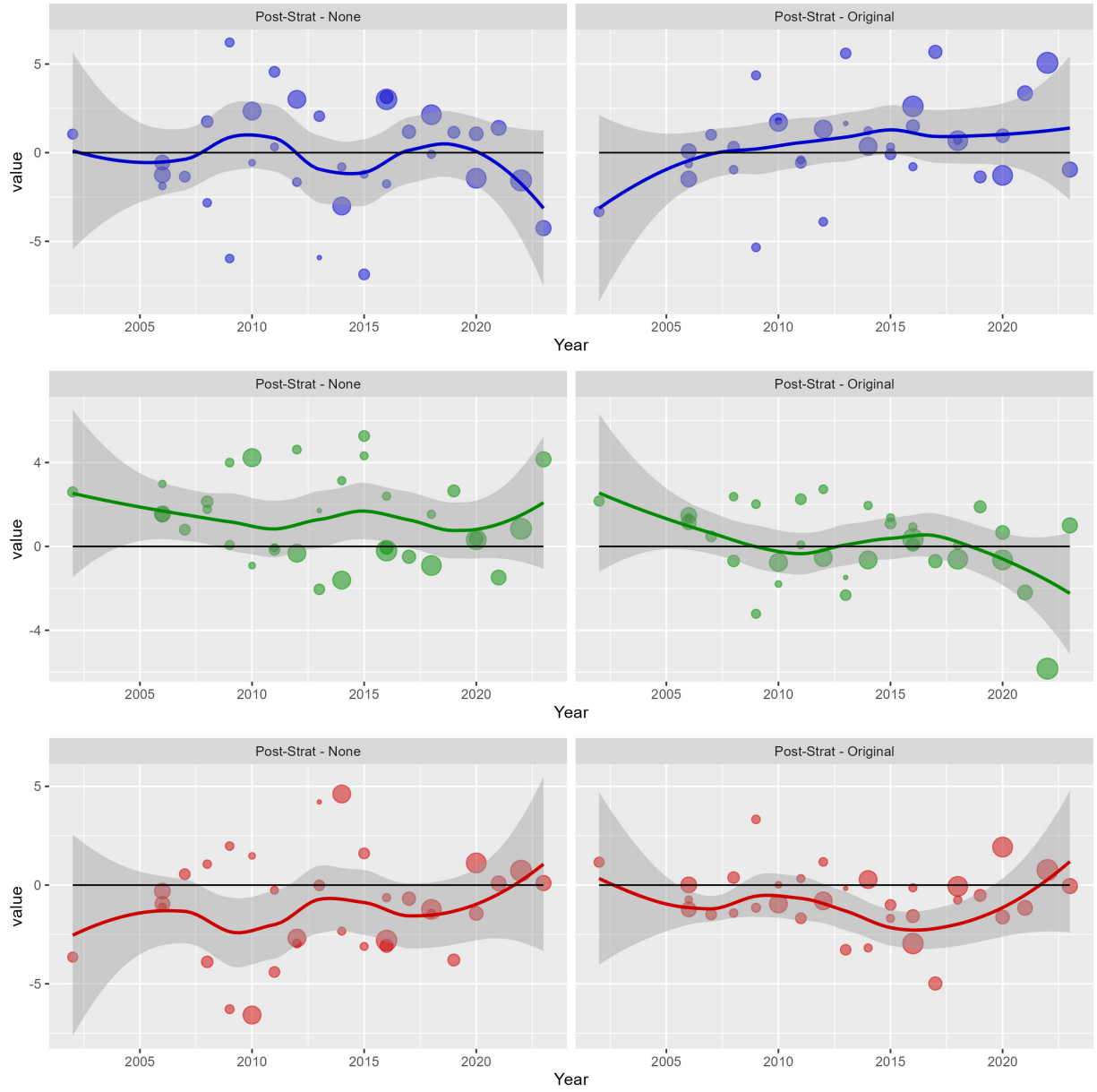
To provide a visual representation of the effects of our post-stratification weights on our estimates, we produce additional appendix figures that compare estimates between different weighting schemes (see Section 8.2). We first re-estimate every figure separately using 1) no weights, 2) the originally provided survey weights from each dataset, and 3) our post-stratified weights. Then, the comparison for each figure shows differences between the partisanship estimates using our post-stratification weights and an unweighted survey estimate, and between the post-stratification weights and the weights provided in the original survey data. This comparison helps illustrate what corrections are occurring based on our post-stratification weights—for example, if applying the post-stratification weights results in higher estimates for Democratic partisanship during one time period but not for another.

Figure A.6: Partisanship Trends Among Latino Voters, 1989-2022 (Survey Weights)



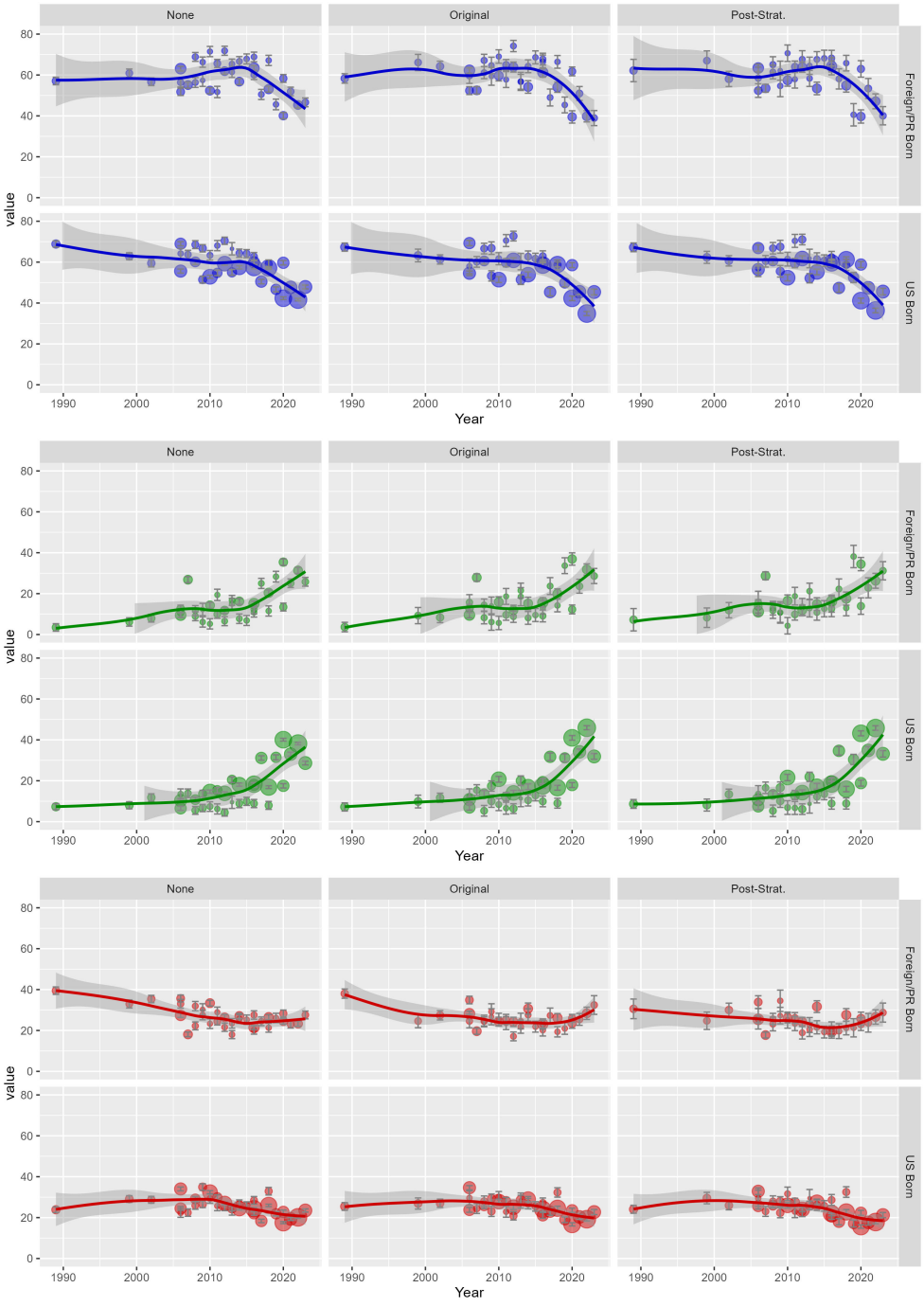
Note: This graph shows a weighted estimate from 35 public opinion surveys of the percentage (Y-Axis) of Latino adults identifying as either Democrat/lean Democrat (blue), Republican/lean Republican (red), or independent (green) over the 1989-2022 time period (X-Axis). "Don't know" and third-party responses are not included. Points show the average partisanship estimate for each individual survey. The left graph shows estimates with no weights, the middle graph for the original survey weights, and the left is calculated using post-stratification weights based on Census/ACS demographics. Point size is proportional to survey N. When an estimate is possible, lines show a loess best-fit estimate using inverse variance weights and a 95% confidence band.

Figure A.7: Partisanship Trends Among Latino Voters, 1989-2022 (Survey Weights Comparisons)



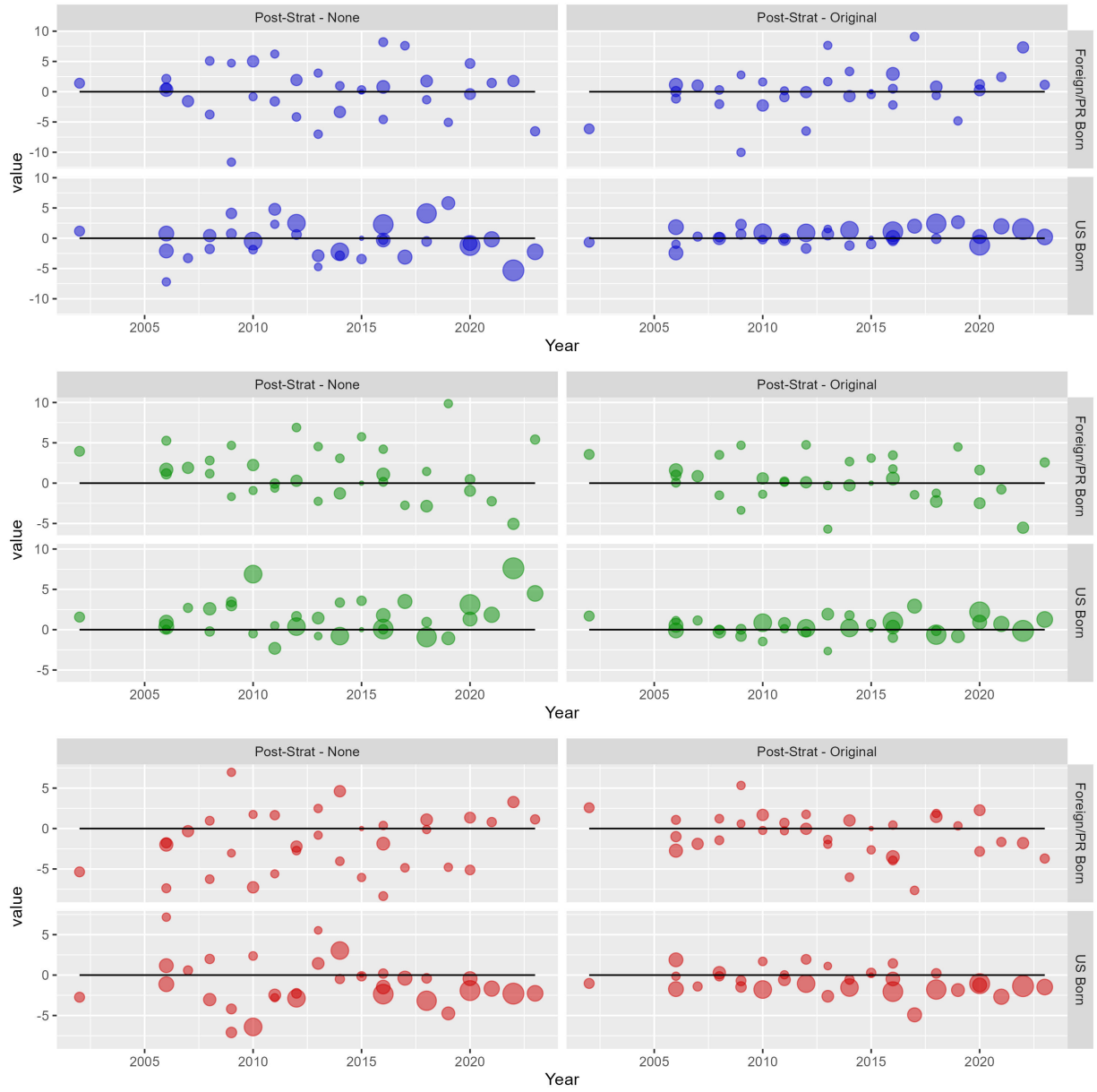
Note: This graph shows a comparison of the weighted estimates from 35 public opinion surveys of the percentage (Y-Axis) of Latino adults identifying as either Democrat/lean Democrat (blue), Republican/lean Republican (red), or independent (green) over the 1989-2022 time period (X-Axis). "Don't know" and third-party responses are not included. Points show the difference in the average partisanship estimate for each individual survey/weighting scheme. Point size is proportional to survey N. When an estimate is possible, lines show a loess best-fit estimate using inverse variance weights and a 95% confidence band.

Figure A.8: Partisanship Trends Among Latino Voters by Nativity, 1989-2022 (Survey Weights)



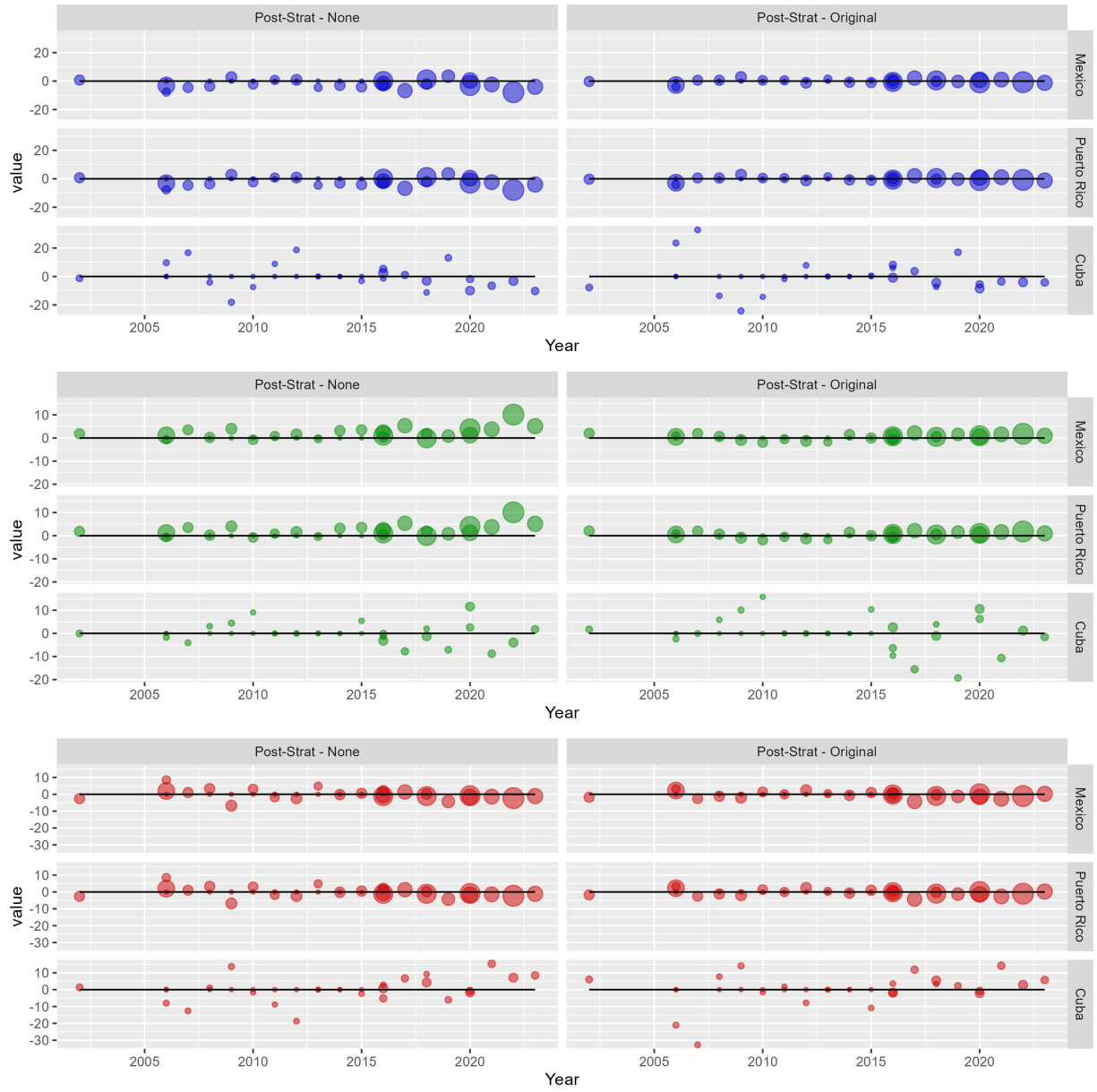
Note: This graph shows a weighted estimate from 35 public opinion surveys of the percentage (Y-Axis) of Latino adults identifying as either Democrat/lean Democrat (blue), Republican/lean Republican (red), or independent (green) over the 1989-2022 time period (X-Axis). "Don't know" and third-party responses are not included. Points show the average partisanship estimate for each individual survey. The left graph shows estimates with no weights, the middle graph for the original survey weights, and the left is calculated using post-stratification weights based on Census/ACS demographics. Point size is proportional to survey N. When an estimate is possible, lines show a loess best-fit estimate using inverse variance weights and a 95% confidence band.

Figure A.9: Partisanship Trends Among Latino Voters by Nativity, 1989-2022 (Survey Weights Comparison)



Note: This graph shows a comparison of the weighted estimates from 35 public opinion surveys of the percentage (Y-Axis) of Latino adults identifying as either Democrat/lean Democrat (blue), Republican/lean Republican (red), or independent (green) over the 1989-2022 time period (X-Axis). "Don't know" and third-party responses are not included. Points show the difference in the average partisanship estimate for each individual survey/weighting scheme. Point size is proportional to survey N. When an estimate is possible, lines show a loess best-fit estimate using inverse variance weights and a 95% confidence band.

Figure A.10: Partisanship Trends Among Latino Voters by National Origin, 1989-2022 (Survey Weights Comparison)



Note: This graph shows a comparison of the weighted estimates from 35 public opinion surveys of the percentage (Y-Axis) of Latino adults identifying as either Democrat/lean Democrat (blue), Republican/lean Republican (red), or independent (green) over the 1989-2022 time period (X-Axis). "Don't know" and third-party responses are not included. Points show the difference in the average partisanship estimate for each individual survey/weighting scheme. Point size is proportional to survey N. When an estimate is possible, lines show a loess best-fit estimate using inverse variance weights and a 95% confidence band.

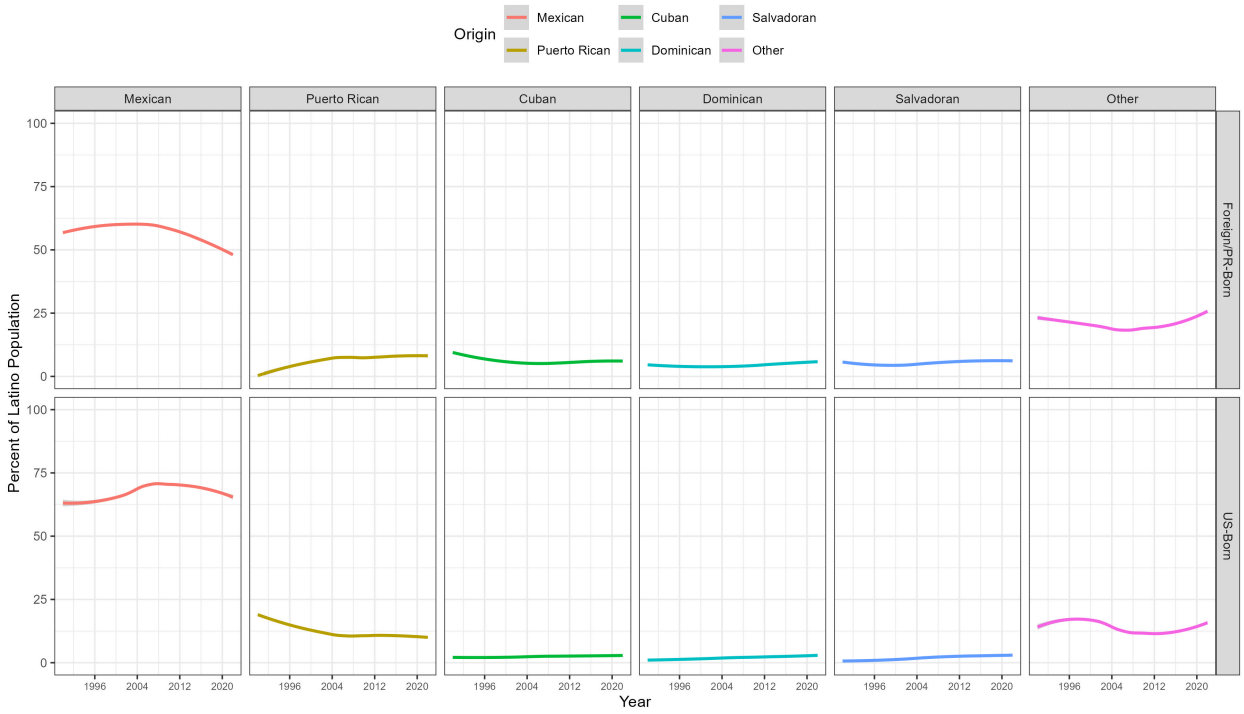
1.4 Compositional Trends in National Origin

In our analyses of national origin, we focus primarily on separate trends for Latinos of Mexican, Puerto Rican, and Cuban origin. These three were historically the three largest and most politically influential Latino subgroups, which also meant that polls of Latinos during this time period usually included sufficiently large and representative samples of these three (Jones-Correa, Al-Faham, and Cortez 2018). Unfortunately, for other Latino subgroups, there are numerous issues that make subgroup analyses infeasible over the observed time period. We still include this "Other" category in our full population estimates but are unable to provide sufficiently rigorous analyses of smaller subgroups for our observed timeframe.

We first draw on Census data to examine change over time in the US resident[1] population (in millions) with Mexican, Puerto Rican, Cuban, or another national origin. We also produce separate estimates for Latinos born in another country or in Puerto Rico (top) and for Latinos born in the continental United States. The first clear trend is that Mexican national origin remains a large majority, and that this is driven particularly by growth in the US-born Mexican American population. Puerto Rican national origin is a smaller proportion but they remain the second-largest subgroup through the most recent data (Pérez and Cobian 2024). Cuban national origin is proportionately lower, but their size has remained fairly stable over time. Lastly, for the "Other" category, we observe significant growth over our observed time period. However, it is important to note that this group includes more than fifteen Latino national origins, many of which have extremely divergent political behaviors (Jones-Correa, Al-Faham, and Cortez 2018). This caveat would potentially be true for Cuban origin, as they are a small group, but their particular circumstances (being politically more influential and easier to poll due to their concentration in Florida; see Torres 2001; Mora 2014) means that there are less issues over the full time period.

[1] Note that the Census does not ask a question about citizenship status.

Figure A.11: Trends in Latino Population by National Origin (Census Data)

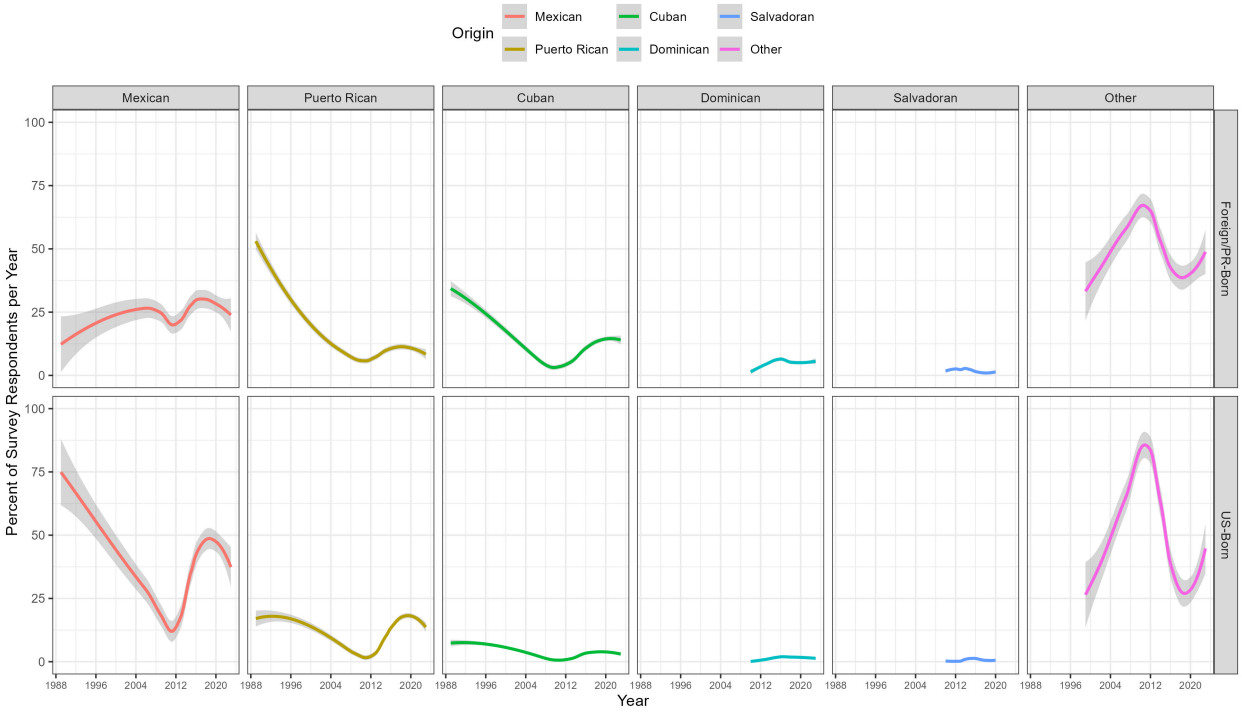


Note: This graph shows change over time in the number of Latino/Hispanic adults (note: this includes resident non-citizens) who are recorded in Census and American Community Survey data (Y-axis, population in millions). We then display change over time (X-axis). The top panels show change among those born outside of the continental US (e.g., born in Mexico, Puerto Rico, etc.) and the bottom shows those who were born in the continental US. Panels are then separated to show population change by Latino national origin (Mexican, Puerto Rican, Cuban, and Other).

We next examine trends by national origin in our recorded survey data by plotting the number of Latino respondents for each given year (with a sum of the count from multiple surveys if they occurred in the same year). We again separate by Mexican, Puerto Rican, Cuban, and any other national origin and also include an NA category, as a large number of surveys in later time periods lacked any national origin data. We also again show foreign-born/Puerto-Rican-born respondents on the top, and US-born respondents on the bottom. We observe broadly similar trends to the Census data, including significant increases in the number of US-born Mexican American respondents, and modest but still sufficiently powered samples of Puerto Rican and Cuban Americans. For the "Other" category, however, we see significant spikes in both the foreign-born and US-born respondent counts that do not correspond with shifts in the Census data. Furthermore, a large proportion of respondents in our collected dataset also lack any national origin data. Given these issues, we are unable to provide similarly rigorous estimates of Latino subgroups included in this "Other" category while also taking into account population-level composition change, the

dynamics of immigration and US nativity, and less reliable survey samples.

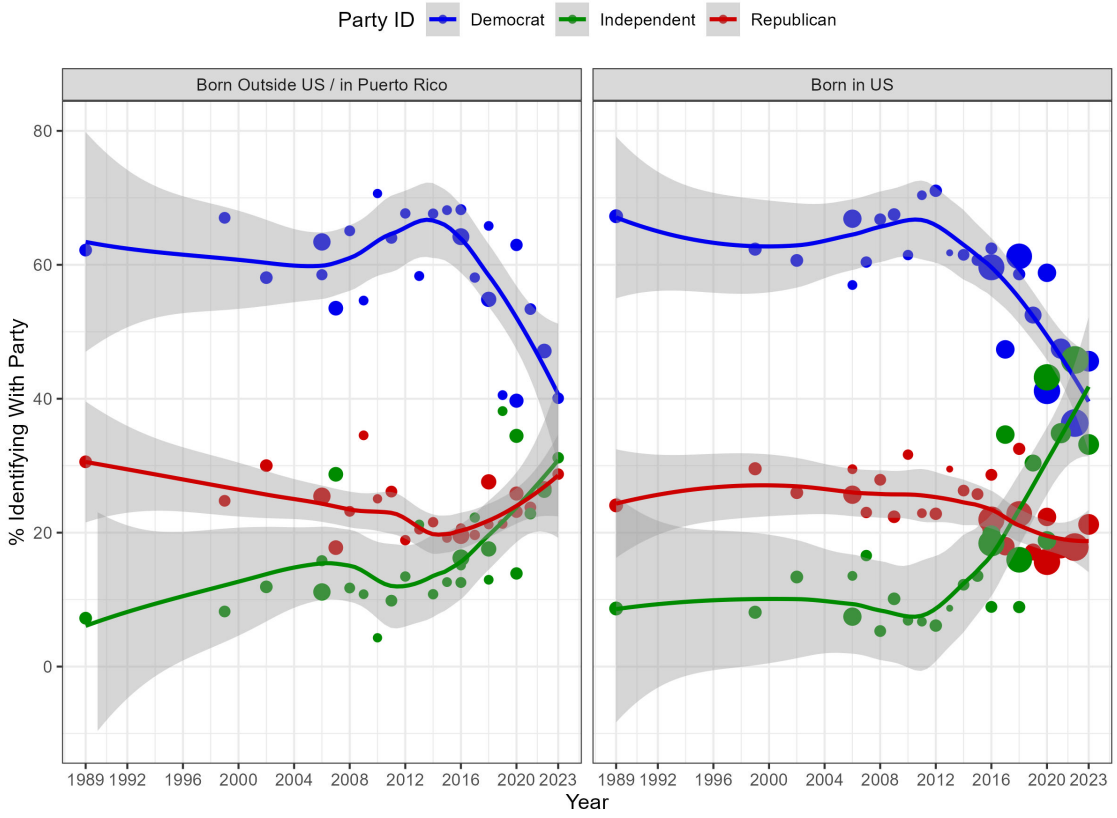
Figure A.12: Trends in Latino Population by National Origin (Survey Data)



Note: This graph shows change over time in the number of Latino/Hispanic respondents in our dataset of 35 public opinion surveys. For each year (X-axis), we show the cumulative sum of the number of respondents in our dataset (Y-axis). The top panels show change among those born outside of the continental US (e.g., born in Mexico, Puerto Rico, etc.) and the bottom shows those who were born in the continental US. Panels are then separated to show population change by Latino national origin (Mexican, Puerto Rican, Cuban, Other, and NA—which indicates a given survey lacked national origin data.)

To identify potential issues created by survey datasets which lack national origin data entirely, we re-calculated our estimates after dropping those surveys. We do not observe significant changes in our estimates relative to our estimates in the main manuscript that include these surveys. We still find that foreign-born Latinos shifted towards Democratic identity during Obama but towards Republican identity during Trump, whereas US-born Latinos decreased in Democratic identity and increased in independent identity over the full time period.

Figure A.13: Partisanship Among Latino Voters by Nativity, 1989-2022 (No Surveys Without National Origin)



Note: This graph shows a weighted estimate from 26 public opinion surveys (note: this figure excludes surveys that do not have a national origin variable) of the percentage (Y-Axis) of Latino adults identifying as either Democrat/lean Democrat (blue), Republican/lean Republican (red), or independent (green) over the 1989-2022 time period (X-Axis). "Don't know" and third-party responses are not included. Points (not shown for clarity) are based on the average partisanship estimate for each individual survey, which are calculated using post-stratification weights based on Census/ACS demographics. Lines show a loess best-fit estimate using inverse variance weights and a 95% confidence band. The left graph shows results for respondents born outside of the US or in Puerto Rico and the right graph shows results for those born in the US.

1.5 State-level Trends

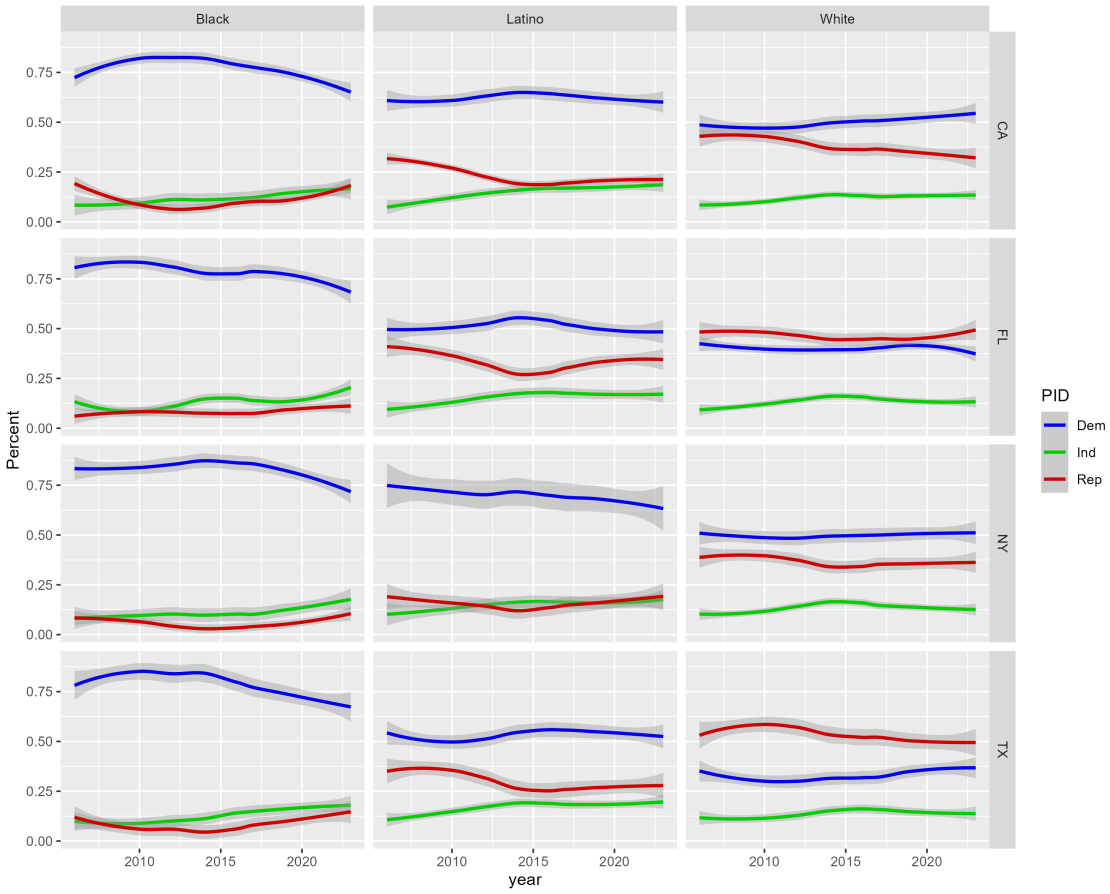
Another potential concern when estimating aggregate Latino macro-partisanship is that, due to their concentration in several states that have experienced their own significant political shifts over our observed time period, shifts in overall estimates may be driven by state-level trends. We examine the potential for this to be the case by comparing trends in Latino partisan identity with those among Black and White respondents within the four states that have the largest share of the Latino population (CA, FL, NY, and TX). These four states have historically contained more than half of entire national Latino population (Mora 2014; Funk and Lopez 2022).

To conduct these analyses, we drew on the Cooperative Election Study (CCES/CES) multi-year dataset, which runs from 2006 to 2023, has detailed partisan identity questions, and includes representative samples of Latino, Black, and White likely voters (Ansolabehere, Schaffner, and Luks 2021). For each state (CA, FL, NY, TX), we then estimate shifts in each racial group's overall partisan identity (as in the main manuscript, separated by Democrats/Dem. leaners, Republicans/Rep. leaners, and independents who do not lean towards either party) over time. Because these states contain a majority of the Latino population, examining their subgroup trends can help identify whether Latino likely voters are behaving distinctively from Black or White likely voters when exposed to similar political circumstances.

We show our results in A.14 beginning with California, as it contains a disproportionately large percentage of the Latino population (almost 25%). Much academic literature has also argued that Latinos have steadily shifted towards Democrats due to Republican xenophobia (see Jones-Correa, Al-Faham, and Cortez 2018 for a review). While Blacks became steadily less Democratic and Whites became more Democratic, Latinos remained stable in their Democratic partisanship, decreased in their Republican partisanship, and steadily increased in identifying as independent. While the drop in Latino Republican identity is notable, there is an almost equal drop among Whites during the same period. These trends among Latinos mirror our overall estimates and especially our US-born estimates, which makes sense given that the US-born share of the Latino population has steadily increased over time. For the remaining states, we do not observe significant divergences from these broad trends, especially when comparing Black and Latino respondents (whose partisanship differs relatively less across states compared to Whites). While these analyses are not as robust as our full results due to our original 35 datasets only consisting of Latino voters, we are generally able to posit that Latino populations in a given state are not shifting in ways that either differ significantly from their White and Black neighbors or

from Latinos in other states.

Figure A.14: Party ID by Race/State (CES 2006-2023)



Note: This graph includes weighted estimates (note: not post-stratified) from the Cooperative Election Study 2006-2023 of partisan identity by race (Black, Latino, White) within states with large Latino populations (CA, FL, NY, TX). "Dem" includes Democratic identifiers and independents who lean Democrat; "Rep" includes Republican identifiers and independents who lean Republican; "Ind" only includes independent identifiers who do not lean towards either party.