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To What Extent Does Income Affect Voting Behavior When Accounting For Race?

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1 Introduction

Democrats represent low-income voters and Republicans represent high-income voters. Except they don't. In the United States lower-income voters do tend to be more Democratic. But factor in race and the link is much more tenuous.

This paper analyzes the effect of income on voting behavior, accounting for race. Specifically, it looks at the extent to which lower-income Hispanics vote more Democratic than upper-income Hispanics. The results have significant electoral implications.

2 Literature Review

Voting patterns by race and income as separate categories are well-known, although there has been surprisingly little academic work done on both. Exit polls are the primary source of analysis for political analysts. Political analysts also often analyze other types of polls, generally telephone surveys conducted by companies such as Gallup.

Academic research has also examined both income and the Hispanic community in American politics. Most academic research works with data from the American National Election Studies (ANES), a survey of voters before and after elections.

Exit polling generally shows that lower-income voters are more Democratic. The 2008 presidential election exit polls indicated that voters making under $15,000 gave 73% of their vote to President Barack Obama, whereas voters making more than $200,000 gave only 52% of their vote to Obama. Interestingly, however, Obama support amongst voters with more than $200,000 was higher than Obama support amongst voters making $50,000 to $200,000.

Exit polling also shows that Hispanics vote Democratic, giving Obama 67% of the vote compared with the 53% he received nationwide.

There are also exit poll data that adjust for race; the 2008 presidential exit poll indicates that whites making under $50,000 gave Senator John McCain 51% of the vote compared to the 56% of the vote he obtained with whites making over $50,000. The well-regarded Pew Research Center's analysis of the 2012 presidential exit poll indicates that 82% of Hispanics making less than $50,000 voted Democratic, compared with 59% of Hispanics making more than $50,000. Other studies, however, argue that income does not have a significant effect on Hispanic partisanship (Alvarez and Bedolla 2003, de la Garza and Cortina 2007).

One of the most well-known academics working with electoral politics is Professor Andrew Gelman. He has found that on an individual level higher-income individuals vote more Republican, and that this effect is stronger in more Republican states (Gelman, Shor, Bafumi, and Park 2007). Other studies agree that class continues to play an important role in American

politics, both in differing voting patterns (Brooks and Manza 1997; Brooks and Brady 1999) and different turn-out rates (Leighley and Nagler 1992).

Much academic research has also been done on the Hispanic vote, especially during the Bush years when Republicans made strong but temporary inroads into the Hispanic vote. This research has found that Hispanic turn-out is much lower than overall turn-out. National origin and generational differences play important roles in the Hispanic vote (Alvarez and Bedolla 2003). The role of racial identity in the Hispanic vote is also important; Hispanics, especially those of non-European descent, are more likely to vote for Latino candidates (Stokes-Brown 2006). Some studies, however, are more equivocal about this point (Abrajano, Nagler, and Alvarez 2005). Much attention has been focused on Republican attempts to gain Hispanic votes. Republican-leaning Hispanics generally put high trust in the government relative to other Republicans, have a more "American" identity relative to other Hispanics, and are more educated (Dutwin, Brodie, Herrmann, and Levin 2005). Republican appeals to moral values and national security played well amongst Hispanics during the 2004 United States presidential election (Abrajano, Alvarez, and Nagler 2008). On the other hand, Garza and Cortina (2007) argue that "Latinos are not Republicans and they know it."

It is often argued that racial voting patterns are different in the South due to its distinct history. This was true in the past, especially during the 1950s and the Civil Rights era. Since then, however, Southern and non-Southern voting patterns have converged to an extent (Aistrup 2010). This is true in terms both of race and class. This convergence and the increasing role of class in the South have been argued as factors behind Democratic decline in the South (Brewer 2001).

There are significant methodological problems with all this research. Firstly, there is far too much reliance on polling rather than actual election results. This is especially true with respect to exit polls. Exit polls are good for getting a general idea of voting groups in the United States. However, exit polls are unreliable and often flat-out wrong (Silver 2008). For instance, exit polls consistently overestimate the Democratic share of the vote.

Exit polls are especially bad with the immigrant groups, who are more difficult to contact due to language and cultural barriers. In the 2004 United States presidential election, the national exit poll famously stated that President George W. Bush won 44% of the Hispanic vote. This statistic is almost certainly wrong and a function of oversampling Cubans; it is contradicted by other exit polls and results from heavily Hispanic counties (Leal, Barreto, Lee, and de la Garza 2005). Differing polls often find radically different levels of Democratic support amongst Hispanics, based on differing population assumptions and interviewing methods. Of particular note is the polling firm Latino Decisions, which argues that normal exit polls – such as the 2010 mid-term exit poll – consistently overestimate Republican support amongst Hispanics (Segura and Barreto 2010). Hispanic loyalty to the Democratic Party in Latino Decisions polls is consistently higher compared to other pollsters that do not focus on the Hispanic community. Unfortunately, there is no way to know who is right.

Academic research also relies far too heavily on the ANES. With respect to the ANES, Garza 2004 argues that the survey needs to be modernized to incorporate Hispanic viewpoints more reliably:

> The first step in implementing this approach will be to modernize NES so that it includes a representative sample of the nation's new demography and questions that address the new issues that affect the political life of these new populations. This means more than having Latinos statistically represented; it means restructuring NES sampling procedures so that it is regularly possible to understand Latino perspectives and their impact on national political life.

There are many studies that look at the Hispanic vote and many studies that look at class in American politics. But there are few studies that look at income controlled for race, which leaves a substantial endogeneity problem since race changes income. Brooks, Clem and Brady (1999) do try to adjust their income statistics for race; however, they only do so for blacks and do not account for Hispanics as a separate racial category. In addition, there is disagreement as to whether or not income has an effect on the Hispanic vote at all. Exit poll results indicate that there is an effect; however, other studies running regressions based off ANES data indicate that there is no effect.

Disappointingly, only one study in this literature review looked at actual election results rather than polling. Election results have the advantage of being perfectly accurate. On the other hand, polling is subject to the assumptions of those conducting the poll and the difficulty of contacting Hispanics. I therefore looked at actual Census Block Group results to determine the effect of income on the Hispanic vote.

3 Data

I used Census Block Group data for California.

Income: Income data were derived from the 2007 to 2011 five-year American Community Survey (ACS) estimates.

Voting: Voting results were taken from Census Block Group results for the 2008 United States presidential election and 2010 California gubernatorial election in which the Democratic candidates were President Barack Obama (facing Senator John McCain) and Governor Jerry Brown (facing businesswoman Meg Whitman). Census Block Group data were downloaded using Dave's redistricting application.

The data were compiled by Steve Gerontakis. Since California has a substantial absentee ballot vote that is mailed in, it is often difficult to assign absentee ballots to the exact Census Block Group in which the voter who cast the absentee ballot lives. Thus out of all the votes cast in the 2008 United States presidential election, 97.8% of them are assigned to Census Block Groups

and accounted for in this analysis. Out of all the votes cast in the 2010 California gubernatorial election, 99.4% are assigned to Census Block Groups and accounted for in this analysis. The problem is most acute in populous Los Angeles County and San Mateo County. In the former, 94.9% of the total 2008 United States presidential election vote is assigned to Census Block Groups and 98.5% of the total 2010 gubernatorial vote is assigned to Census Block Groups. In San Mateo County only 93.2% of the total 2008 United States presidential election vote is assigned; fortunately the county was not used in this study.

Race: Racial data by Census Block Group are available at Dave's redistricting application.

One should note two other things about the data set. First, voting results in Del Norte County are actually compiled at a more detailed level than Census Block Groups; however, this county was not used in this study. Second, both the 2008 United States presidential election and 2010 California gubernatorial election results do not include third-party votes. In general third-party votes are negligible due to the two-party, first-past-the-post structure of United States politics. Third-party votes accounted for 2.72% of the overall 2008 United States presidential election vote in the state of California. They accounted for 5.35% of the overall 2010 California gubernatorial election vote.

4 Results

I first looked at the effect of income on partisanship without accounting for any other variables.

There are 23,212 Census Block Groups in California. These Census Block Groups consist of groups of (generally) several thousand people. Thus the mean is the average of all these groups aggregated together; it does not reflect the true mean. For instance, the mean share of the two-party vote that Barack Obama gained in these Census Block Groups is not the same thing as the actual percentage of the vote that the president won in California in the 2008 United States presidential election.

<INSERT TABLE 1>

Values are missing for slightly more than one hundred of these block groups. This is because not all Census Block Groups are populated; some are airports, deserts, ocean, or unpopulated islands. These Census Block Groups have neither election results nor income statistics. Other Census Block Groups are very lightly populated and contain less than a dozen people (or even just one or two individuals). Some are parks populated by the homeless (or pranksters lying to the Census). Others are large estates owned by a single wealthy family. Since the American Community Survey is a statistical sample, these Census Block Groups lack data on income. It is also possible that data has been withheld out of privacy concerns. Election data is still available

for Census Block Groups with only one or two people, which implies that you could find out how certain individuals voted if you know that they live in a certain Census Block Group.

To find the effect of income on partisanship without accounting for any other variables, I ran the simple regression:

$$Democratic\ share_i = \beta_0 + \beta_1 * income + \varepsilon$$

Note that:
Democratic share_i = percentage of the two-party vote received by the Democratic candidate
Income = median household income (in thousands of dollars)

<INSERT TABLE 2>

As Table 2 indicates, median household income is indeed a statistically significant predictor of the Democratic vote share. However, income only accounts for 5% of the variation in the vote that the Democratic candidate won in the 2008 United States presidential election. The link is stronger but still weak in the 2010 California gubernatorial election; there income accounts for 10% of the variation in the vote that the Democratic candidate won.

A Breusch-Pagan test was performed to test for heteroskedasticity and found a chi-squared value of 0.23, corresponding to a 0.6323 chance under the null distribution. Accordingly, we cannot reject the null hypothesis of homoskedasticity.

To control for race and look specifically at the Hispanic vote, I excluded all California Census Block Groups that are less than 95% Hispanic. It also changed overall median household income to median household income for Hispanics only.

There are 483 observations for Census Block Groups that are more than 95% Hispanic. Of these Census Block Groups, Table 3 describes the median household income for Hispanics only, the percent Hispanic, the Obama share of the two-party vote, and the Brown share of the two-party vote.

<INSERT TABLE 3>

Then I ran the simple linear regression model again:

$$Democratic\ share_i = \beta_0 + \beta_1 * income + \varepsilon$$

Note that:
Democratic share_i = percentage of the two-party vote received by the Democratic candidate
Income = median household income of Hispanics only (in thousands of dollars)

At this point one might ask, why not go with the obvious solution? Why not simply add a variable incorporating the percent Hispanic of the overall population to the regression?

There are several problems with this, however. The percentage Hispanic of the overall population is often a poor predictor of the percentage Hispanic of the electorate. Hispanics vote at far lower rates than their overall numbers, for a variety of reasons. First, the Hispanic population is skewed young; relatively more Hispanics are children ineligible to vote. Thus the voting-age population (VAP) is less Hispanic than the overall population. Second, many Hispanics are immigrants who have not attained American citizenship and thus are ineligible to vote. The government attempts to estimate the citizen voting-age population (CVAP) of the electorate, but these figures are highly inaccurate. Finally, even Hispanic immigrants who have attained American citizenship vote at far lower rates than native citizens. To make things worse, VAP, CVAP, and voting participation rates differ greatly amongst different parts of the Hispanic community and reflect the extent to which the community has established itself. Thus a 70% Hispanic Census Block Group in California's rural Central Valley might have a majority-white electorate. On the other hand, a 70% Hispanic Census Block Group in Miami would probably have an electorate close to 70% Hispanic. Interestingly, the same general factors apply to the Asian vote.

I regressed median household income for Hispanics only to find the percentage of the vote that Barack Obama received in California during the 2008 United States presidential election and that Jerry Brown received in the 2010 California gubernatorial election results.

<INSERT TABLE 4>

Income is not statistically significant for either election; the p value for the 2008 United States presidential election is 0.27 while the p value for the 2010 California gubernatorial election is 0.44. With p values of 0.27 and 0.44, there is not enough evidence to conclude that there is a relationship between median income and partisanship.

Surprisingly, the results seem to hint that Hispanics with higher income voted more Democratic in the 2008 United States presidential election. Moreover, the fit for the 2010 California gubernatorial election is very poor. Indeed, the coefficients for both elections are not even the same sign. The coefficient for median household income for Hispanics only in the 2008 United States presidential election is positive, which might imply that wealthier Hispanics voted more Democratic. On the other hand, the coefficient for median household income for Hispanics only in the 2010 California gubernatorial election is negative, which might imply that wealthier Hispanics voted more Republican. With such low p-values, however, it's difficult to evaluate the practical significance of these variables.

<INSERT FIGURE 1>

<INSERT FIGURE 2>

Visually Figure 1 and Figure 2 show strikingly the relationship – or lack thereof – between income and partisanship amongst Hispanics.

5 Further Analysis

There are several ways to extend this analysis and confirm the robustness of these results.

Poverty Rates

While median household income is generally considered the gold standard of measuring income, it's possible that measurement error or some other problem makes it unsuitable for this type of regression.

An alternative way of measuring income is through the poverty rate of an area. The poverty rate of each Census Block Group can be found from 2007 to 2011 five-year American Community Survey (ACS) estimates.

<INSERT TABLE 5>

Instead of looking at median household income for Hispanics only, the next regression examined the poverty rate. Using all 23,212 Census Block Groups, I regressed the poverty rate to find the Democratic percentage of the vote (in both the 2008 United States presidential election and the 2010 California gubernatorial election). This regression used the overall dataset.

 <INSERT TABLE 6>

As with median household income, the poverty rate is statistically significant in this regression using the overall dataset. For both elections examined, it explains a slightly higher degree of the variation in the Democratic vote.

I then controlled for the effect of ethnicity by excluding all California Census Block Groups that were less than 95% Hispanic:

<INSERT TABLE 7>

These results are quite surprising. As with median household income, the poverty rate is not statistically significant. What is more surprising is that the coefficient for both elections is negative. The implication would be that as the poverty rate decreases, Hispanics voted more Democratic in both elections. This is contrary to what most political science would predict. Nevertheless, the lack of statistical significance in these results indicates that caution is needed before making any conclusions.

Non-Linear Regressions

It is also possible that income has a non-linear relationship with partisanship. For instance, it might argued that a high-income voter would be exponentially more likely to vote Republican

for varying reasons, such as income gains from tax cuts espoused by the Republican Party. On the other hand, it might also be argued that the highest-income voters are more Democratic-leaning than middle-income voters. This is based on the perception that the modern Democratic Party appeals to low-income and high-income voters (high school graduates and graduate-degree holders), whereas the Republican Party is supposedly dominant amongst middle-income voters.

If these arguments are valid, the traditional linear regression used so far in this analysis might not capture such a non-linear relationship.

To test for such a possibility, I ran two types of regressions. First, I ran a quadratic equation using both poverty rates and median household income for Hispanics only. The quadratic regression was run under the following formula:

$$Democratic\ share_i = \beta_0 + \beta_1 * income + \beta_2 * income^2 + \varepsilon$$

Note that:
Democratic share$_i$ = percentage of the two-party vote received by the Democratic candidate
Income = median household income of Hispanics only (in thousands of dollars) or the poverty rate

<INSERT TABLE 8>

Under this model, the results indicate that income does not have a statistically significant effect on partisanship amongst heavily Hispanic Census Block Groups.

I also ran two regressions using dummy variables. These regressions used the poverty rate of the heavily Hispanic Census Block Groups to create these dummies. Under the first regression, a dummy variable was created measuring whether or not the poverty rate of the Census Block Group was greater than the national poverty rate (14.3%). If the Census Block Group's poverty rate was below 14.3%, then the value "1" was used for the Census Block Group. If not, the value "0" was used for the Census Block Group. 82 out of the 483 heavily Hispanic Census Block Groups had poverty rates below the national poverty rate. The model used for this was:

$$Democratic\ share_i = \beta_0 + \beta_1 * income + \varepsilon$$

Note that:
Democratic share$_i$ = percentage of the two-party vote received by the Democratic candidate
Income = a dummy variable indicating if the poverty rate of the Census Block Group is below 14.3%

Under the second regression, the heavily Hispanic Census Block Groups were further divided into different categories using dummy variables. In addition to the previous dummy variable, two other dummy variables were created. One classified the heavily Hispanic Census Block Groups by whether or not the poverty rate in them was more than the national poverty rate but less than twice the national poverty rate. If the Census Block Group's poverty rate was between 14.3% and 28.6%, then the value "1" was used for the Census Block Group. Otherwise the value "0" was used. The other dummy variable classified the heavily Hispanic Census Block Groups by

whether or not the poverty rate in them was greater than twice the national poverty rate but less than 50%. If the Census Block Group's poverty rate was between 28.6% and 50%, then the value "1" was used for the Census Block Group. Otherwise the value "0" was used. The model used was:

$$Democratic\ share_i = \beta_0 + \beta_1 * income_1 + \beta_2 * income_2 + \beta_3 * income_3 + \varepsilon$$

Note that:
$Democratic\ share_i$ = percentage of the two-party vote received by the Democratic candidate
$Income_1$ = a dummy variable indicating if the poverty rate of the Census Block Group is below 14.3%
$Income_2$ = a dummy variable indicating if the poverty rate of the Census Block Group is between 14.3% and 28.6%
$Income_3$ = a dummy variable indicating if the poverty rate of the Census Block Group is between 28.6% and 50%

<INSERT TABLE 9>

In the first regression, the dummy variable for income is not statistically significant in either election analyzed. However, under the second regression Census Block Groups with poverty rates above the national poverty rate but less than twice the national poverty rate passed the 5% statistical significance test. If a Census Block Group had a poverty rate between 14.3% and 28.6%, it gave Barack Obama 2.5% more of the vote and Jerry Brown 2.9% more of the vote under the elections analyzed.

Puzzlingly, however, Census Block Groups with even higher rates of poverty were not statistically significantly more likely to vote Democratic.

Hispanics by Country of Origin

Another possible critique is that the previous analysis lumps together all Hispanics in one group. In reality, however, differences by country of origin are a key part of immigrant voting patterns. Mexicans vote differently from Cubans, who vote differently from Puerto Ricans. Is it possible that income is statistically significant once accounting for both ethnicity and country of origin amongst Hispanics?

To explore this possibility, I looked at the 2007-2011 American Community Survey estimates of Hispanics by country of origin.

<INSERT TABLE 10>

It should be noted that there is a difference between "Percent Other Hispanic or Latino" and "Percent All Other Hispanic or Latino." "Percent Other Hispanic or Latino" is a grouping encompassing the categories "Percent Spaniard," "Percent Spanish," "Percent Spanish American," and "Percent All Other Hispanic or Latino." This is simply how a function of how the government classifies its data.

Additionally, a value of 0.0% indicates that the value for the mean or standard deviation rounds to zero (but is not exactly zero). A value of "--" indicates that the value for the mean, median, or minimum is exactly zero.

Unfortunately, the data for country of origin only go as deep to the Census Tract level. The data on election results and income are on the Census Block Group level; the data on Hispanics by country of origin are on the Census Tract level. Each Census Tract is composed of several Census Block Groups. This makes the results of the following regression somewhat less reliable.

Finally, it's useful to note that the Hispanic population in California is heavily composed of Mexicans and Central Americans; other groupings (even Cubans and Puerto Ricans) are negligible.

Several regressions were run, using differing methods of measuring country by origin. The first regression simply added a variable incorporating the percent Mexican of a Census Tract to the regression. This was done due to the fact that Mexicans compose the great majority of Hispanics in this dataset. The second regression added variables incorporating the percent of Hispanics with origins in each continent (Central America, South America, and other). Finally, the third regression replaced the continental variables with variables incorporating the percent of Hispanics from each country with data available in the 2007 to 2011 American Community Survey. Regression were ran using both the 2008 United States presidential election and the 2010 California gubernatorial election, as well as using median household income for Hispanics only and the poverty rate.

<INSERT TABLE 11>

<INSERT TABLE 12>

Median household income for Hispanics only is never statistically significant. The poverty rate, however, has a statistically significant negative effect when regressing with the term percent Mexican in both elections. This means that once taking into account the percent Mexican of heavily Hispanic Census Block Groups, rising poverty indicates a smaller Democratic vote share. Again, this is contrary to what most political analysis indicates.

Whites

One can also run the same analysis with non-Hispanic whites in California. Here I took all Census Block Groups that are more than 95% white by voting-age population (VAP). Despite being the largest racial group in California, however, there are surprisingly only 21 Census Block Groups that are more than 95% VAP white.

<INSERT TABLE 13>

For these Census Block Groups, I then used regressions to examine the relationship between income (using both ways of measuring income) and the Democratic share of the two-party vote in both elections.

<INSERT TABLE 14>

Income is not statistically significant. The low t-statistics of the above regressions do not imply a relationship between income and the Democratic percentage of the two-party vote.

Surprisingly, amongst non-Hispanic whites the coefficient for income is positive. This hints that as income increases amongst whites, the Democratic share of the vote increases. Again, however, the low p-values make such a conclusion very tentative.

6 Discussion and Conclusion

The income of a neighborhood has little to no effect on partisanship in California. Income is statistically significant without controlling for any other factor. However, even then, it only accounts for 5-10% of the variation in the Democratic share of the vote in the two California elections analyzed. This holds true whether the income of an area is measured by median household income or the poverty rate.

Once accounting for race, however, income tends to lose all statistical significance. The wealth of heavily Hispanic Census Block Groups in California appears to have no effect on whether or not the area votes Democratic. This holds true whether or not one uses median household income or the poverty rate to measure wealth, whether or not one uses a linear or quadratic model to measure wealth, and whether or not one looks at the 2008 United States presidential election or the 2010 California gubernatorial election.

There are two puzzling exceptions in which income was found to be statistically significant. These are puzzling because they lend to opposite conclusions. Under a dummy variable model, heavily Hispanic Census Block Groups with poverty rates less than twice the national poverty rate, but still above the national average, were found to be more likely to vote Democratic.

Each Census Block Group is located in a Census Tract. Under an analysis in which the percent Mexican of the Census Tract was added to the original regression, as poverty rates increased the Democratic share of the vote was found to decrease. The former result implies that the income of an area is positively correlated with the Democratic share of the vote; the latter result implies that the income of an area is negatively correlated with the Democratic share of the vote. Indeed, throughout this analysis the coefficients on income do not remain the same.

Amongst whites, one finds that the affluence of a neighborhood also has no effect. However, great caution is warranted in this analysis due to the low sample size of the extremely white

Census Block Groups. Nevertheless, the white vote also appears unaffected by whether or not one uses median household income or the poverty rate to measure income, and whether or not one looks at the 2008 United States presidential election or the 2010 California gubernatorial election.

It is often taken for granted that higher-income areas vote more Democratic, whereas lower-income areas vote more Republican. The party platforms appear to substantiate these assumptions. Democrats argue for the need of a more progressive income tax, for instance, while Republicans emphasize the advantages of job-creating (small) business owners. The most recent 2012 United States presidential election was marked by Democratic attacks on the Republican candidate as a very wealthy boss disconnected from the working class. Republicans argued that the Democratic candidate was a tax-and-spend believer in socialism. These appeals are not unique to the 2012 United States presidential election; rather they are typical of the rhetoric and strategy employed in political campaigns in the United States.

These arguments are also heavily weighted in appeals to income. And yet – at least in the state of California – they appear to have little effect. At most 10% of the variation in the Democratic share of the vote in either the 2008 United States presidential election or the 2010 California gubernatorial election is explained by the affluence of a neighborhood. Once accounting for race the effect disappears altogether.

One caveat is that California may have differences compared to the rest of the United States. California is more diverse, more populous, more urbanized, more western, and more Democratic than the typical state. This may affect voting patterns in the state. The last factor is particularly important; research indicates that the income gap is greater amongst more Republican states. Nevertheless, California is important. More than one in ten Americans live in California. The state is heavily Hispanic, and Hispanics are a rapidly growing and much-analyzed political group in the United States.

The findings of this study have important political implications. Both parties will take important lessons from this point. Republicans can conclude that income is not destiny. The fact that Hispanics generally tend to live in poorer communities need not make them an inevitably Democratic group. Hispanics, especially immigrants, are often said (especially by Republicans) to be more conservative than the norm. A Republican strategist might be heartened by the evidence from this study, which implies that economics are not the determinate factor in the Hispanic vote. The Hispanic community might be wide open to appeals based on social values.

Democrats, on the other hand, can take heart in another fact. Despite the results of this study, Hispanics are undeniably still voting strongly Democratic. It therefore must be another factor that is drawing Hispanics to the Democratic Party. A Democratic strategist might argue that immigration and racial issues are drawing the Hispanic community to his or her party. The Democratic Party has traditionally been seen as more sympathetic than the Republican Party to

immigrants and a path to citizenship for undocumented immigrants. This is a concern that resonates heavily with the Hispanic community. As long as the Republican Party remains hostile to immigration reform, a Democrat might claim, Hispanics will continue to vote Democratic even if their incomes increase. Similarly, the Republican Party is often accused of being more hostile to minorities, such as Hispanics, than the Democratic Party. This may continue to drive Hispanics to the Democratic Party. Democrats might derive comfort from the belief that the growing Hispanic community will strengthen Democratic dominance even as it integrates into the American fabric.

All in all, it is striking the extent to which an area's affluence and partisanship are unrelated. This is a unique and not necessarily intuitive finding. It goes strongly against common strains of thought in political science. Indeed, in many countries income is strongly predictive of one's vote. To take one example, in the United Kingdom the Labour Party is very strong amongst the working class, whereas the Conservative Party has a strong hold on the upper classes. Yet apparently neither in California nor the United States is this true (if California is a good representation of the United States). At least in California, whether you live in a rich or poor neighborhood has absolutely no effect on whether or not you vote Democratic or Republican.

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Table 1: Descriptive Statistics, Overall Dataset

Variable	Number of Observations	Mean	Median	Standard Deviation	Minimum	Maximum
Population	23,212	1,604.9	1,420	929.2	0	37.452
Median Household Income	23,068	68.3	61.2	35.5	2.5	250.0
Obama Percent of Two-Party Vote	23,146	64.9%	65.9%	17.1%	0%	100%
Brown Percent of Two-Party Vote	23,129	61.0%	61.4%	18.5%	0%	100%

Table 2: General OLS Regressions for Overall Dataset, on Obama and Brown Percent of Two-Party Vote

Variable	(1) Obama	(2) Brown
Median Household Income, Thousands	-0.001	-0.002
	(-34.45)***	(-50.11)***
Constant	0.721	0.722
	(304.68)***	(289.00)***
Observations	23,059	23,058
R-squared	0.05	0.10

Absolute value of t-statistics in parentheses
* significant at 5% level; ** significant at 1% level; *** significant at 0.1% level

Table 3: Descriptive Statistics, Heavily Hispanic Census Block Groups

Variable	Number of Observations	Mean	Median	Standard Deviation	Minimum	Maximum
Population	483	1,755.8	1,630	837.8	7	8,704
Median Household Income for Hispanics Only, Thousands	483	39.7	38.6	12.6	14.8	88.1
Percent Hispanic	483	97.0%	97.0%	1.1%	95%	100%
Obama Percent of Two-Party Vote	481	85.2%	85.8%	5.8%	50%	100%
Brown Percent of Two-Party Vote	483	85.2%	86.1%	6.4%	40.9%	100%

Table 4: General OLS Regressions for Heavily Hispanic Census Block Groups, on Obama and
Brown Percent of Two-Party Vote

Variable	(1) Obama	(2) Brown
Median Household Income for Hispanics Only, Thousands	0.00231	-0.0180
	(1.10)	(-0.77)
Constant	0.843	0.859
		(87.65)**
	(97.12)***	*
Observations	481	483
R-squared	0.06	0.06

Absolute value of t-statistics in parentheses

* significant at 5% level; ** significant at 1% level; *** significant at 0.1% level

Figure 1: Relationship Between Median Household Income for Hispanics Only and Obama
Percent of Two-Party Vote in the 2008 United States Presidential Election
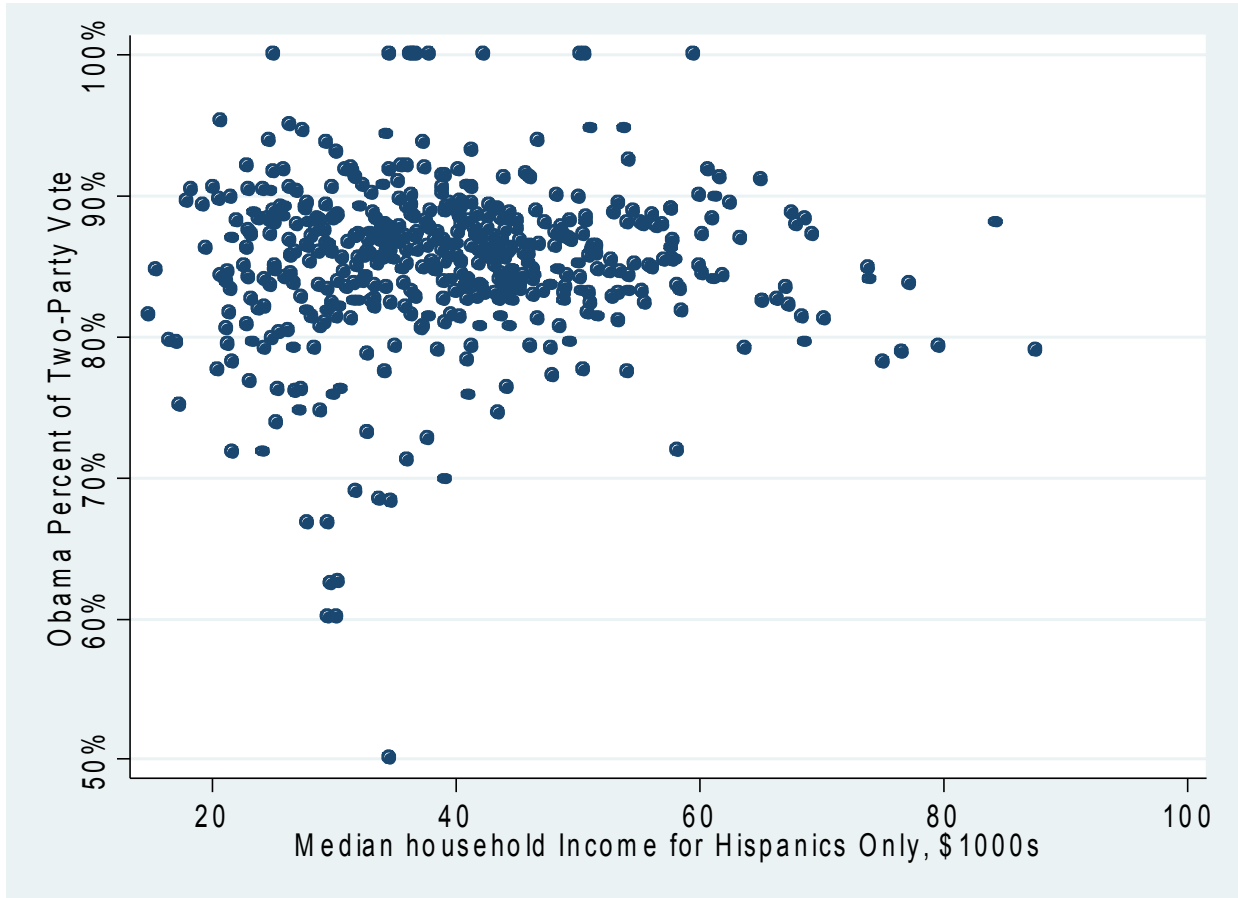
Figure 2: Relationship Between Median Household Income for Hispanics Only and Brown Percent of Two-Party Vote in the 2010 California Gubernatorial Election
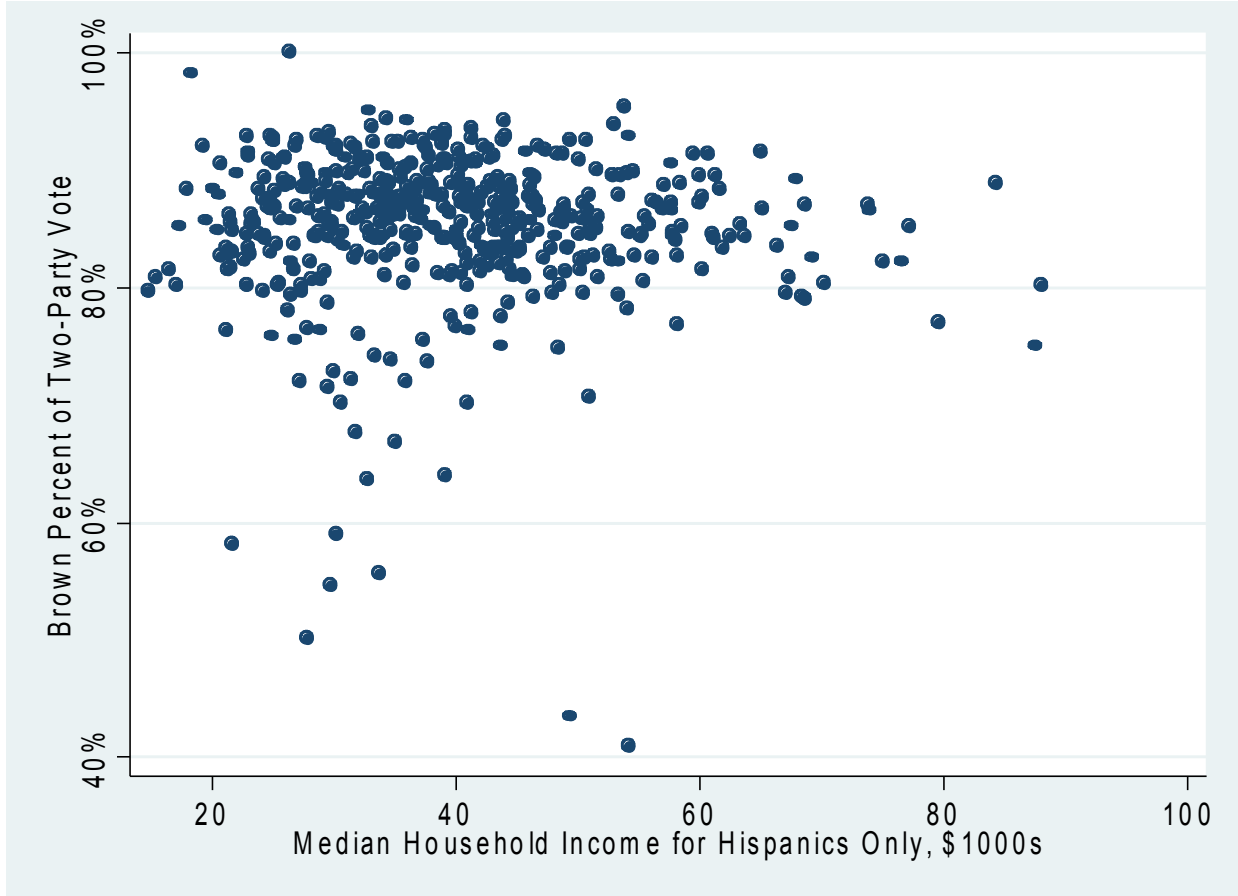
Table 5: Descriptive Statistics, Poverty Rates

Variable	Number of Observations	Mean	Median	Standard Deviation	Minimum	Maximum
Poverty Rate	23,098	14.3%	10.2%	13.4%	0%	100%
Poverty Rate (Heavily Hispanic Census Blocks)	482	27.0%	25.4%	13.6%	0%	74.0%

Table 6: General OLS Regressions for Overall Dataset Using Alterative Measure of Income, on Obama and Brown Percent of Two-Party Vote

Variable	(1)	(2)
	Obama	Brown
Poverty Rate	0.367	0.464
	(45.30)***	(54.45)***
Constant	0.597	0.544
	(380.43)***	(326.14)***
Observations	23,059	23,058
R-squared	0.08	0.11

Absolute value of t-statistics in parentheses
* significant at 5% level; ** significant at 1% level; *** significant at 0.1% level

Table 7: General OLS Regressions for Heavily Hispanic Census Block Groups Using Alterative Measure of Income, on Obama and Brown Percent of Two-Party Vote

Variable	(1)	(2)
	Obama	Brown
Poverty Rate	-0.041	-0.043
	(-2.19)	(-2.01)
Constant	0.863	0.863
	(149.95)***	(133.32)***
Observations	480	482
R-squared	0.06	0.06

Absolute value of t-statistics in parentheses
* significant at 5% level; ** significant at 1% level; *** significant at 0.1% level

Table 8: General OLS Regressions for Heavily Hispanic Census Block Groups Using Quadratic Model, on Obama and Brown Percent of Two-Party Vote

Variable	(1)	(2)	(3)	(4)
	Obama		**Brown**	
Median Household Income for Hispanics Only, Thousands	0.003		0.002	
	(2.53)		(1.62)	
(Median Household Income for Hispanics Only, Thousands)^2	0.000		0.000	
	(-2.35)		(-1.81)	
Poverty Rate		0.015		0.001
		(0.22)		(0.01)
(Poverty Rate)^2		-0.094		-0.074
		(-0.86)		(-0.59)
Constant	0.795	0.857	0.818	0.858
	(35.70)***	(86.56)***	(33.15)***	(76.39)***
Observations	481	481	483	483
R-squared	0.06	0.06	0.06	0.06

Absolute value of t-statistics in parentheses

* significant at 5% level; ** significant at 1% level; *** significant at 0.1% level

Table 9: General OLS Regressions for Heavily Hispanic Census Block Groups Using Dummy Variables, on Obama and Brown Percent of Two-Party Vote

Poverty Rate Is…	(1)	(2)	(3)	(4)
	Obama		**Brown**	
Below National Poverty Rate	0.002	0.020	0.001	0.022
	(0.30)	(1.64)	(0.18)	(1.58)
Above National Poverty Rate, But Less Than Twice National Poverty Rate		0.025		0.029
		(2.22)*		(2.30)*
More Than Twice National Poverty Rate, But Less Than 50%		0.013		0.013
		(1.15)		(1.05)
Constant	0.852	0.834	0.852	0.0831
	(299.79)***	(80.71)***	(262.44)***	(70.55)***
Observations	481	481	483	483
R-squared	0.00	0.06	0.00	0.06

Absolute value of t-statistics in parentheses

* significant at 5% level; ** significant at 1% level; *** significant at 0.1% level

Table 10: Descriptive Statistics, Country of Origin

Variable	Number of Observations	Mean	Median	Standard Deviation	Minimum	Maximum
Percent Mexican	483	86.0%	86.9%	7.3%	47.5%	98.8%
Percent Puerto Rican	483	0.3%	--	0.6%	--	4.3%
Percent Cuban	483	0.3%	--	0.7%	--	6.6%
Percent Dominican	483	0.0%	--	0.3%	--	3.2%
Percent Central American	483	7.2%	6.1%	5.8%	--	28.7%
Percent Costa Rican	483	0.0%	--	0.2%	--	1.3%
Percent Guatemalan	483	2.1%	1.0%	2.6%	--	13.1%
Percent Honduran	483	0.5%	--	1.4%	--	16.4%
Percent Nicaraguan	483	0.4%	--	0.9%	--	6%
Percent Panamanian	483	0.0%	--	0.2%	--	1.9%
Percent Salvadorean	483	4.0%	3.2%	3.6%	--	20.5%
Percent Other Central American	483	0.1%	--	0.3%	--	3.2%
Percent South American	483	0.4%	--	0.8%	--	4.1%
Percent Argentinean	483	0.1%	--	0.2%	--	2.0%
Percent Bolivian	483	0.0%	--	0.1%	--	1.7%
Percent Chilean	483	0.0%	--	0.2%	--	1.6%
Percent Colombian	483	0.1%	--	0.3%	--	2.9%
Percent Ecuadorian	483	0.1%	--	0.4%	--	4.0%
Percent Paraguayan	483	--	--	--	--	--
Percent Peruvian	483	0.0%	--	0.4%	--	3.4%
Percent Uruguayan	483	0.0%	--	0.0%	--	0.4%
Percent Venezuelan	483	0.0%	--	0.0%	--	0.6%
Percent Other South American	483	0.0%	--	0.1%	--	1.0%
Percent Other Hispanic or Latino	483	1.1%	0.9%	1.1%	--	7.2%
Percent Spaniard	483	0.1%	--	0.3%	--	3.0%
Percent Spanish	483	0.1%	--	0.2%	--	2.3%
Percent Spanish American	483	0.0%	--	0.0%	--	0.3%
Percent All Other Hispanic or Latino	483	0.1%	0.7%	1.0%	--	6.6%

Table 11: General OLS Regressions for Heavily Hispanic Census Block Groups by Country of Origin, on Obama Percent of Two-Party Vote in the 2008 United States Presidential Election

Variable	(1)	(2)	(3)	(4)	(5)	(6)
			Obama Percent of Two-Party Vote			
Median Household Income for Hispanics Only, Thousands	0.000 (1.39)	0.000 (1.60)	0.000 (1.83)			
Poverty Rate				-0.044 (-2.32)**	-0.031 (-1.69)	-0.032 (-1.72)
Percent Mexican	0.111 (3.11)***	0.387 (7.17)***	0.371 (6.60)***	0.108 (3.07)***	0.373 (6.90)***	0.386 (6.33)***
Percent Central American		0.425 (6.59)***			0.412 (6.35)***	
Percent South American		0.086 (0.26)			0.025 (0.07)	
Percent Other Hispanic or Latino		0.57 (2.33)*			0.5444 (2.23)*	
Percent Puerto Rican			-0.986 (-2.16)*			-0.951 (-2.08)*
Percent Cuban			0.986 (0.25)			0.079 (0.20)
Percent Dominican			0.920 (0.96)			0.949 (0.99)
Percent Costa Rican			-2.40 (-1.44)			-2.350 (-1.41)
Percent Guatemalan			0.653 (5.43)***			0.647 (5.37)***
Percent Honduran			0.346 (1.66)			0.290 (1.40)
Percent Nicaraguan			0.145 0.45			0.099 (0.30)
Percent Panamanian			-0.823 (-0.53)			-0.749 (-0.48)
Percent Salvadorean			0.355 (3.93)***			0.35 (3.88)***
Percent Other Central American			0.141 (0.19)			0.058 (0.08)
Percent Argentinean			-0.690 (-0.53)			-0.709 (-0.55)
Percent Bolivian			0.249 (0.08)			0.338 (0.11)
Percent Chilean			1.125 (0.76)			1.083 (0.74)
Percent Colombian			0.447			0.503

	(1)	(2)	(3)	(4)	(5)	(6)
			(0.53)			(0.60)
Percent Ecuadorian			0.297			0.215
			(0.48)			(0.35)
Percent Peruvian			0.247			0.196
			(0.39)			(0.31)
Percent Uruguayan			-10.488			-9.695
			(-0.76)			(-0.70)
Percent Venezuelan			-0.778			-0.192
			(-0.13)			(-0.03)
Percent Other South American			-1.781			-1.934
			(-0.81)			(-0.88)
Percent Spaniard			-0.344			-0.203
			(-0.38)			(-0.23)
Percent Spanish			0.505			-0.588
			(-0.47)			(-0.55)
Percent Spanish American			9.390			8.456
			(0.94)			(0.84)
Percent All Other Hispanic or Latino			0.778			0.725
			(2.92)**			(2.77)**
Constant	0.745	0.470	0.483	0.771	0.504	0.519
	(22.91)***	(9.02)***	(8.97)***	(25.00)***	(9.73)***	(9.50)***
Observations	481	481	481	481	481	481
R-squared	0.06	0.10	0.10	0.06	0.05	0.10

Absolute value of t-statistics in parentheses

* significant at 5% level; ** significant at 1% level; *** significant at 0.1% level

Table 12: General OLS Regressions for Heavily Hispanic Census Block Groups by Country of Origin, on Brown Percent of Two-Party Vote in the 2010 California Gubernatorial Election

Variable	(7)	(8)	(9)	(10)	(11)	(12)
			Brown Percent of Two-Party Vote			
Median Household Income for Hispanics Only, Thousands	0.000	0.000	0.000			
	(-0.30)	(-0.23)	-0.05			
Poverty Rate				-0.048	-0.025	-0.247
				(-2.28)**	(-1.26)	(-1.23)
Percent Mexican	0.191	0.646	0.631	0.195	0.641	0.622
			(10.50)***			
	(4.77)***	(11.30)***		(4.93)***	(11.21)***	(10.29)***
Percent Central American		0.722			0.713	
		(10.57)***			(10.38)***	
Percent South American		0.192			0.118	
		-0.55			(0.34)	
Percent Other Hispanic or Latino		0.542			0.544	
		(2.09)*			(2.10)*	
Percent Puerto Rican			-0.137			-0.155
			(-0.28)			(-0.32)
Percent Cuban			0.369			0.354
			(0.86)			(0.83)
Percent Dominican			1.062			1.031
			(1.03)			(1.00)
Percent Costa Rican			-0.298			-0.297
			(-0.17)			(-0.17)
Percent Guatemalan			0.716			0.702
			(5.64)***			(5.52)***
Percent Honduran			0.573			0.575
			(2.57)**			(2.62)**
Percent Nicaraguan			0.738			0.696
			(2.13)*			(2.01)*
Percent Panamanian			-1.220			-1.358
			(-0.73)			(-0.83)
Percent Salvadorean			0.713			0.705
			(7.41)***			(7.32)***
Percent Other Central American			1.551			1.558
			(1.97)*			(1.98)*
Percent Argentinean			0.548			0.449
			(0.39)			(0.32)
Percent Bolivian			2.02			1.654
			(0.59)			(0.49)
Percent Chilean			0.096			0.036
			(0.06)			(0.02)
Percent Colombian			0.158			0.091

	(1)	(2)	(3)	(4)	(5)	(6)
			(0.18)			(0.11)
Percent Ecuadorian			0.340			0.325
			(0.51)			(0.49)
Percent Peruvian			-0.798			-0.854
			(-1.18)			(-1.27)
Percent Uruguayan			-5.14			-5.526
			(-0.35)			(-0.37)
Percent Venezuelan			0.095			0.525
			(0.16)			(0.08)
Percent Other South American			0.240			0.192
			(0.10)			(0.08)
Percent Spaniard			-0.740			-0.801
			(-0.76)			(-0.83)
Percent Spanish			0.489			-0.438
			(-0.42)			(-0.38)
Percent Spanish American			19.231			18.373
			(1.80)			(1.72)
Percent All Other Hispanic or Latino			0.680			0.672
			(2.40)*			(2.38)*
Constant	0.690	0.239	0.251	0.697	0.249	0.267
	(18.83)***	(4.32)***	(4.35)***	(20.18)***	(4.54)***	(4.59)***
Observations	483	483	483	483	483	483
R-squared	0.04	0.06	0.06	0.06	0.06	0.06

Absolute value of t-statistics in parentheses

* significant at 5% level; ** significant at 1% level; *** significant at 0.1% level

Table 13: Descriptive Statistics, Heavily White Census Block Groups

Variable	Number of Observations	Mean	Median	Standard Deviation	Minimum	Maximum
Population	21	474.2	228	566.5	1	1,860
Median Household Income for Whites Only, Thousands	13	74.0	59.3	58.5	6.8	250.0
Poverty Rate	16	11.0%	6.1%	17.4%	0.0%	70.8%
Percent White	21	97.6%	96.6%	2.1%	95.0%	100%
Obama Percent of Two-Party Vote	18	57.2%	62.5%	24.7%	0%	100%
Brown Percent of Two-Party Vote	19	42.0%	44.6%	26.5%	0%	100%

Table 14: General OLS Regressions for Heavily White Census Block Groups, on Obama and Brown Percent of Two-Party Vote

Variable	(1)	(2)	(3)	(4)
	Obama		Brown	
Median Household Income for Whites Only, Thousands	0.001		0.000	
	(0.96)		(0.48)	
Poverty Rate		0.007		0.503
		(0.02)		(1.31)
Constant	0.483	0.540	0.432	0.503
		(7.41)**		(4.95)
	(6.42)***	*	(5.38)***	***
Observations	13	16	13	16
R-squared	-0.01	-0.07	-0.07	0.04

Absolute value of t-statistics in parentheses

* significant at 5% level; ** significant at 1% level; *** significant at 0.1% level