

How Loyal are African Americans to the Democratic Party?

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Abstract: *Much has been made over the last several decades about the support of African Americans for the Democratic Party. While vote totals have gone overwhelming to Democratic candidates, has partisanship followed suit or have there been leaks to the ranks of independents and Republicans? Bositis (2003) has shown an abrupt upsurge of Republican identification between 1999 and 2002 among voters younger than 35. Tracking each 18-30 year old cohort over the 1972-2002 period in the General Social Survey, I find, contrarily to Bositis, that there has not been as rapid a change as his findings would indicate. Instead, I show, due to generational replacement within the African American electorate, a more gradual decay in Democratic partisanship among the younger group of African Americans. This decline is met with gains primarily in independence, but also with small upward shifts in all Republican categories.*

The passage of the Civil Rights Act in 1964 altered completely the partisan distribution within the American electorate. In the aftermath the Democratic Party saw its one party rule over the south eroded, but also gained the support of the newly amplified, and—in the south— formerly Republican, African American electorate. To an African American generation, the Democrats' passage of that legislation was a defining moment that kept them—come hell or high water—firmly entrenched in the Democratic Party's ranks. In the years since however, as new generations of blacks have entered the electorate, has the intensity of both the feelings about the civil rights struggle and the attachment to the political party that brought those efforts to fruition, come under any strain—as the generational replacement literature would argue—or have African American voters defied that notion and stood by the Democrats? In the voting booth the Democrats have yet to feel any ill effects of generational replacement—as blacks have voted almost unanimously Democratic over the last forty years. Partisanship among African Americans since 1964 begs for a more thorough investigation though, especially since questions of their loyalty to the Democrats pop up every election year.

Bositis (2003) has elucidated the argument for change in African American partisanship along generational lines, by revealing a distinct change in the percentage of respondents to his 1999-2002 Joint Center surveys claiming to be in the seven categories of the traditional National Election Studies party identification scale. The shift over this three year period was most stark among the 35 and under age group. Decreases in Democratic partisanship among African Americans under 36 over the course of these four survey years were counteracted by a nearly equivalent gain in partisans favoring the GOP.

While these findings are important they fail to grasp whether these changes are permanent or merely the temporary fluctuations of youth. If the latter is the case, then generational replacement is certainly not the reason for the change. The goal is to see if change has occurred over the span of several decades. Beck (1974), for example, ties generational replacement to the broader realignment literature. In his description, one generation—the “realignment generation”—is faced with a realigning event that

either changes or solidifies its members' partisan leanings. As time advances and those of the realignment generation have the "children of realignment" and their kids have the "children of normal politics," the intensity of the partisanship built around the issues of the original realignment increasingly fades and is called into question more with each passing generation. This generational partisan progression follows Jennings and Niemi's (1968) findings that "socializing agents" other than parents influence the political development of any generation, thus opening the door to the idea of generational replacement. Following this argument, studies using panel data (1965-1973 National Socialization Panel Study) have examined whether early adulthood is the formative period for someone's political orientation (Beck and Jennings 1982), how political orientations change in the face of a changing environment (Jennings 1978), and, most importantly, how rare or prevalent change in political orientation is after adolescence and what changes it, by comparing aggregate changes in each generation based upon different political issues (Jennings and Niemi 1975). Still more analyses using the updated version of the National Socialization Panel Study, 1965-1982 (with a third wave of responses) use ordinary least squares (OLS) to see if a realignment of partisan orientation occurred in the 1960s and 1970s (Beck and Jennings 1991). Niemi and Jennings (1991) take data from a longitudinal study from the Survey Research Center for Political Research at the University of Michigan and use OLS to explore cross-generational change in political partisanship as well. These studies serve as the backbone of the generational argument made here.

The generational explanation is central to my analysis, but there also exists another theory that has either solely, or working in concert with generational differences, affected the partisanship of the African American electorate. This explanation has unfolded in two visible ways and holds that the African American electorate may have diversified economically and culturally, becoming less homogenous in their approach to the political world and thus more difficult to capture under the umbrella of one political party (Bolce and Gray 1979). Bositis (1996), for example, notes that more African

Americans than ever support Republican stances on some issues but remain loyal to the Democrats when it comes time to vote. Furthermore, Durant and Loudon (1986) and Hout (1984) make the case that, since the passage of civil rights legislation, both education levels and socioeconomic status within the African American community have risen, creating a black middle class. The emergence of a more heterogeneous social group has gone a long way toward creating a more varied yet more complex political approach. In other words, the changes brought on by the growing middle class of African Americans, shifted the goals, in some respects, from strictly racial to economic and cultural. Though the fight for civil rights had had some economic underpinnings, the economic conditions of the African American community were similar enough then to enable a clear goal that could help nearly every black person. As the black middle class grew though, the economic conditions of African Americans changed, and made creating an end that benefited all blacks even more difficult. In essence, African Americans were pulled partially into the economic discussions of the entire United States. Similarly, as the culture wars heated up in the 1980s, African Americans were forced to re-examine their culture and values as well, pulling them further into a more inclusive American debate instead of a strictly “us against them” argument. Inclusion in these broader debates created the groundwork for schisms within the black electorate, schisms which could affect the overall partisanship of African Americans.

The shift in goals is apparent in Bolce, DeMaio and Muzzio’s (1992)—*BDM hereafter*—isolation of several African American demographic categories. BDM theorized that African Americans... 1) in higher income brackets, 2) of a politically or culturally conservative ilk and/or 3) among the self-employed were those most vulnerable to the political maneuverings of the GOP. However, the results of their analyses of 1984 and 1988 ABC News exit polling revealed that these groups among the African American electorate were more intensely liberal than conservative in their voting as opposed to the average African American. While these variables were discounted as far as predicting those blacks most likely to be peeled away from the Democrats in 1984 and 1988, they may be of more importance today

than they were when BDM examined them originally.

Moreover, echoing the diversification of the African American electorate referred to above, the theoretical foci of BDM are the economic—like Hout (1984) and Durant and Louden (1986)—and cultural conditions within the black community. BDM bridge the gap between the economic and cultural divides that have emerged within the African American community with its inclusion in these broader national debates. Recently, more attention has been paid to the cultural conservatism of the black electorate and how that has fit into the broader culture wars since the 1980s. Bolce and DeMaio's (1999) findings reveal that African Americans' feelings toward Christian fundamentalists are beginning to affect where they are positioning themselves politically and ideologically. This is especially true among those blacks conservative on church affairs, who are moving further right.

The link between politics, the black community and its church has historically been strong. Harris (1994) notes that the black church was always the center of dissent during the civil rights era, providing a forum to not only speak out against the government endorsement of segregation, but to mobilize the black community behind those willing and able to fight for change in politically relevant venues. Calhoun-Brown (1996) contends that this is still the case today. With this strong bond between the church and politics come more conservative stances on the separation of church and state and on issues such as family values as culture has become more politicized. Seltzer and Smith (1985), for example, found that on the issue of the separation of church and state, African Americans are markedly more conservative than their white counterparts.

The diversification of the African American community gave rise to BDM's theory that the Republican Party could exploit newly formed economic and cultural schisms in that community to win over converts. While BDM's findings were null on both factors, the movement on the cultural front under the Bush administration requires further examination of the effects the variables capturing cultural conservatism have had among the African American electorate in the time since their analysis. With

President Bush's faith-based initiatives program, enveloped in the broader rubric of Christian conservatism, the GOP could potentially make inroads amongst a black community so politically tied to its church. Now the GOP has been aligned with the Christian Right for the better part of two decades and has yet to put any real dent into the level of African American support for the Democrats. Why would things change under Bush's watch?

The void left after the departure of Bill Clinton, a president wildly popular with African Americans may shed some light on this. Bolce, DeMaio and Muzzio (1993) and Cross and Slater (1997) find no movement in black partisanship during the 1992 and 1996 presidential elections primarily because of Clinton's presence in the race. Additionally, Cross and Slater reveal that Clinton actually won the 1996 election because of the black vote. He garnered just enough black support in the key swing states of that year to overcome losing the overall white vote to Dole. Now that Clinton has left the White House, the expectation is that black behavior could be more heterogeneous given the positioning of the Republican Party on issues attractive to the culturally conservative and the financially independent. As with Bositis' findings though, any changes witnessed since the Bush administration took office may be more a factor of temporary rather than permanent change in African American partisanship.

Theory

While the numbers that Bositis' Joint Center surveys reveal give us an answer our question to some degree, the number of variables considered is limited in scope. This analysis will go beyond the raw numbers that Bositis has provided and look more deeply at the question of African American partisanship coupling some of his variables and concepts—differences between age groups—with some of the variables—economic and cultural—used by BDM (1992). Essentially, what I am after are changes in self-identification among the youngest age groups using the Cumulative GSS Survey data from 1972-2002. An ordinal logistic regression model with fixed effects for the survey years—to account for the

passage of time—will be utilized because the dependent variable—party identification—is ordered. The objective is to see how changes in the independent variables affect the probability of observing a particular party identification category being chosen over time. Simply by entering the electorate while their older counterparts leave it, younger African Americans may shape the overall partisan leaning of the community. I propose that these younger African Americans are further removed from the reality that was the struggle for civil rights, and that they are thus more vulnerable to Republican efforts to woo them away from their community’s traditional alliance with the Democrats. In other words, I am attempting to prove dealignment of African Americans from the Democratic Party—not necessarily to the Republicans but certainly away from the Democrats. I will also include control variables that account for cultural and economic divisions alluded to above within the African American community. This model allows us to look at my question without having to be dependent upon panel survey data as Jennings, Beck and Niemi were. Though panel surveys are a great source of useful data, it is not always affordable. Consequently, this methodology allows the ability to branch out and should yield accurate results.

Variables & Hypotheses

The ordinal regression model allows for the use of an ordered, categorical variable as a dependent variable. In this analysis we use the traditional, NES-style, seven point measure of party identification (*partyid*).¹ From this, I hypothesize that the younger a generation of African Americans is (main independent variable), the weaker that generation’s ties to the Democratic Party are (dependent variable with a Democratic baseline) when controlling for the year in which the surveys were administered, education, class, sex, region, self-employment, religious affiliation, level of religious liberalism, and frequency of church attendance. I use a transformation of the GSS age (*age*) variable as my main independent variable.² The remaining control variables also required some manipulation from the

¹ See Appendix for operationalizations.

² The original age variable was collapsed into age groupings ranging from 18-30 to over 81 with increments of 10 years

original GSS form in order to draw out from the data what is necessary in our analysis. For example, the region variable (*region*) is treated as a South/border state and non-South/border state dummy variable.³ Also, I have included three variables to account for the impact of religion on the self-identification of the respondents. Religious denomination, frequency of church attendance and a measure of religious liberalism are all accounted for in this model. Finally, a control for the year in which the surveys were conducted (*year*),⁴ along with dummy variables for each survey year except 1972 were included to account for the effects over time.

First and foremost, I hypothesize that the *age1830* dummy variable will have a positive relationship with the party identification dependent variable. If the value of the dummy variable equals one (meaning that the respondent is within that age group), then that person is more likely to have a higher (more Republican) response on the party identification scale. The expectation is that negative relationships between the party identification variable and the *sex* and *region* variables respectively exist.⁵ It will be assumed that the older a respondent is the more likely they are to be better educated (*degree*), higher class (*class*) and/or self employed (*wrkslf*). Having set those parameters, the relationships between those variables and the party identification variable will be negative with the BDM's (1992) analysis in mind. My expectation here is that those respondents who consider themselves theologically liberal (*lib*) would be negatively related to party identification whereas the other respondents who are more fundamentalist would have an increasingly positive relationship with the party identification variable as the scale moves from fundamentalist to moderate to liberal/reform. A negative relationship between party identification and both the frequency with which a respondent attends church (*attend*) and

in between. A dummy variable was then created for the 18-30 age group (*age1830*), which allows for a direct look at the partisan changes this group exhibits from survey year to survey year.

³ Due to the way the GSS distributed these states into regions, I was unable to collapse the variable into a simple South/non-South dummy variable without including some states from outside the traditional conception of the South. Most of these additional states are border states (Delaware, Maryland, the District of Columbia, West Virginia, Kentucky and Oklahoma), and share some of the characteristics with the South.

⁴ 24 non-consecutive surveys were conducted from 1972-2002 with African American oversamples for 1982 and 1987.

⁵ I should point out that the direction of the relationships of all the variables is based on the fact that as the scale of party identification increases, it becomes more Republican.

whether or not the respondent is Protestant (*relig*) is also expected. Obviously, I consider the relationship between the *year* variable and party identification to be a positive one since the hypothesis is that, as time passes, younger age groups of African Americans are less likely align themselves with the Democratic Party.

Results⁶

Most of the hypotheses above were gleaned from the work of BDM (1992) and Bositis (2003), and the results on them are mixed. Table 1 reveals that of the hypotheses that were in the wrong direction, only the liberalism (*lib*) and class variables were significant. The two remaining religion-related variables (*relig* and *attend*) were both negatively related to the party identification variable and significant. The other variables with relationships in the opposite direction of that predicted were control variables that were insignificant. Most importantly, *age1830* and *year* were correctly predicted and are both significant. My hypothesis that the probability of a Democratic response would decline over time in the youngest age group proved correct.

[Insert Table 1 about here]

Figure 1 provides a great visual for what has happened over the thirty year period of the GSS which was examined. The probability of a “strong Democratic” response to the party identification questions decreased significantly as the “weak Democratic” response dropped slightly. Declining probabilities of those responses were met with rather significant increases in the probability of a “pure

⁶ I should note that the distribution of the party identification variable did change over the course of these GSS surveys. The percentage of respondents in each year claiming any type of Democratic partisanship decreased while the percentage of respondents claiming independence rose. There were also subtle changes in the percentage of respondents indicating identification with the Republicans.

I should further note that a variance inflation factors test was run to check for multicollinearity. As with the correlation matrix constructed (not shown), the VIF finds no real collinearity problem. The only variable in the danger zone is the *year* variable and that is due to the presence of the dummy variables included to account for the over time portion of the model. A Breusch-Pagan/Cook-Weisberg test for heteroskedasticity was also run, finding no evidence of heteroskedasticity.

Independent” or “Independent leaning Democratic” responses with the gains in all three Republican-related categories. What is most surprising about these findings is that, given Bositis’ findings of an abrupt shift in partisanship between 1999 and 2002, there has been a slow and steady decay in the probability of the two most Democratic responses.

[Insert Figure 1 about here]

In addition, the three religion variables have been isolated in order to get a closer look at the effect they have on the probabilities of responses to the party identification questions within this model. I set all the control variables to their mean values and separately held the church attendance variable at its highest—attends church several times a week—and lowest—never attends church—values as time varied. The results are shown in Figures 2 and 3. A message to take from these two figures is that, contrary to Calhoun-Brown (1996) and Harris (1994), the church may not be as powerful a Democratic mobilizer as it was in the past. However, the church has certainly been significant over this period. That fact is clear between the two figures. The probability of a “strong Democrat” response is consistently below that of the “weak Democrat” response over the course of the entire thirty year period examined for those in the “never attend church” category. In Figure 3 the probability of the “strong Democrat” response is greater among the “several times a week” churchgoers in 1972 but drops below the probability of a “weak Democrat” response over time.

[Insert Figures 2 & 3 about here]

To get a better idea of how much partisanship has changed during this period, I collapsed the dependent variable—party identification—from a seven point scale to a three point scale with simply Democrat, Republican or independent as response options and ran a second model. This will show how much the probabilities of these blanket categories have changed. Table 2 reveals that the relationships of

the independent variables to the new party identification variable are all in the same direction they were in the original model. In this model however, the *sex* variable is significant and the *degree* variable nearly reaches significance at the .05 level. Graphically, Figure 4 paints a similar picture to that of Figure 1. The over .15 drop in the probability of a “Democrat” response during the thirty years examined is made up for with a nearly .1 increase in the probability of the “independent” response and subtle gains in the probability of a “Republican” response. Again, the difference between the sudden shift in partisanship shown by Bositis and this decided decay of Democratic partisanship in the GSS is the important concept to grasp.

[Insert Table 2 and Figure 4 about here]

Conclusions

What much of this indicates is that the African American voting bloc may not be as loyal to the Democratic Party as it once was. New voters have emerged and are very different from the ones in the electorate that they replaced. A generation removed from the fight for civil and voting rights, new African American voters are looking outside the past in order to determine to whom they are loyal. Only time will tell whether this trend will continue or whether it is just a flash in the pan. The above results reveal that we are witnessing more than just a quick change in response to the policies of one administration. Over the thirty years of the GSS there has been a gradual erosion of Democratic support as younger groups have entered the fray. The younger 18-30 group is more open than anyone else to potentially seeing the advantages of voting Republican.

My analysis of African American partisanship actually fits in nicely with the “unmoved mover” theory of partisanship espoused by *The American Voter*. If African American party identification had shifted all over the place during this thirty year span, then my argument would have been compromised by the partisanship instability theory advanced by MacKuen et al. (1989). If black partisanship would

have been found to have been unstable during this period then trying to find a trend would have been difficult at best and the basis for my argument would have been trivialized. While there have been changes in African American partisanship since 1972, they have been consistent and gradual and not marked by wild fluctuations.

The good news is that I have found a result that bolsters what Bolce et al. (1992) posited and what Bositis (2003) demonstrated recently.⁷ We have a trend and can now track it. The divisions on the horizon are class based and not necessarily race based. That leaves open the possibility that the once solid African American voting bloc could be cracked on class lines, ushering in a new crop of black Republicans. Getting to the root of those issues, however, will require more research than the diversification hypotheses advanced here. More research is necessary, but only the passage of time will tell if this dealignment of African Americans from the Democratic Party translates into gains for the GOP. As it stands now, with this research in mind, the changes in partisanship remain a tale of potential defection to the Republican Party by African Americans and not definite defection.

⁷ Though Bositis' findings were short term, the fact that he also found support for a decline in Democratic partisanship among African Americans is important.

Appendix

party-id—Zero indicates a strong Democratic identifier and six represents a strong Republican identifier.

age1830—A respondent is a one if that respondent is within this age group and is zero otherwise.

region—One indicates that the respondent is from a Southern or border state and otherwise it carries a value of zero

sex—One equals female and zero designates a male.

degree (the education variable)—A zero to four point scale where the values correspond to levels of educational attainment. 0 = less than high school

1 = high school

2 = junior or community college

3 = bachelor's degree

4 = master's degree

class—A subjective measure of socioeconomic status (on the part of the respondent) measured on a four point scale.

1 = lower class

2 = working class

3 = middle class

4 = upper class

wrkslf (the employment variable)—A dummy variable that differentiates between those who are self employed (= 1) and those who are not (= 0).

relig—This variable is collapsed from the original GSS variable into a dummy variable where a value of one equals a respondent who is Protestant and a zero denotes a respondent who is in any other denominational category.

attend—This variable measures the frequency of church attendance on a nine point scale.

0 = Never

5 = 2-3 times a month

1 = Less than once a year

6 = Nearly every week

2 = About once or twice a year

7 = Every week

3 = Several times a year

8 = Several times a week

4 = About once a month

fund—This a trichotomous variable that equals one if the respondent considers his/her religious convictions to be from the more conservative, fundamentalist school, two if the respondent is moderate and three if the respondent is more liberal and/or reform-minded.

year—The year variable refers to the year in which the surveys were conducted.

References

- Beck, Paul Allen. 1974. "A Socialization Theory of Partisan Realignment." In *The Politics of Future Citizens: New Dimensions in the Political Socialization of Children*. Richard G. Niemi and associates, eds. San Francisco: Jossey-Bass.
- Beck, Paul Allen and M. Kent Jennings. 1982. "Pathways to Participation." *American Political Science Review* 76: 94-108.
- Beck, Paul Allen and M. Kent Jennings. 1991. "Family Traditions, Political Periods, and the Development of the Partisan Orientations." *Journal of Politics* 53: 742-763.
- Bolce, Louis and Susan Gray. 1979. "Blacks, Whites, and Race Politics." *The Public Interest* 53: 61-75.
- Bolce, Louis, Gerald De Maio and Douglas Muzzio. 1992. "Blacks and the Republican Party: The 20 Percent Solution." *Political Science Quarterly* 107: 63-79.
- Bolce, Louis, Gerald De Maio and Douglas Muzzio. 1993. "The 1992 Republican 'Tent': No Blacks Walked In." *Political Science Quarterly* 108: 255-270.
- Bolce, Louis and Gerald De Maio. 1999. "The Anti-Christian Fundamentalist Factor in Contemporary Politics." *Public Opinion Quarterly* 63: 508-542.
- Bositis, David A. 1996. "African Americans and the Republican Party, 1996." Washington, DC: Joint Center for Political and Economic Studies.
- Bositis, David A. 2003. *2002 National Opinion Poll: Politics*. Washington, DC: Joint Center for Political and Economic Studies.
- Calhoun-Brown, Allison. 1996. "African American Churches and Political Mobilization: The Psychological Impact of Organizational Resources." *The Journal of Politics* 58: 935-953.
- Cross, Theodore and Robert Bruce Slater. 1997. "The 1996 Elections: The Real Victor was Black Voter Apathy." *The Journal of Blacks in Higher Education* 14: 120-127.
- Durant Jr., Thomas and Joyce E. Loudon. 1986. "The Black Middle Class in America: Historical and Contemporary Perspectives." *Phylon* 47: 253-263.
- Harris, Frederick. 1994. "Something Within: Religion as a Mobilizer of African American Political Activism." *The Journal of Politics* 56: 42-68.
- Hout, Michael. 1984. "Occupational Mobility of Black Men: 1962 to 1973." *American Sociological Review* 49: 308-322.
- Jennings, M. Kent and Richard G. Niemi. 1968. "The Transmission of Political Values from

Parent to Child.” *American Political Science Review*, 62: 169-184.

Jennings, M. Kent and Richard G. Niemi. 1975. “Continuity and Change in Political Orientations: A Longitudinal Study of Two Generations.” *American Political Science Review* 69: 1316-1335.

Jennings, M. Kent. 1978. “The Persistence of Political Orientation: An Over Time Analysis of Two Generations.” *British Journal of Political Science* 8: 333-363.

MacKuen, Michael B., Robert S. Erikson and James A. Stimson. 1989. “Macropartisanship.” *American Political Science Review*, 83: 1125-1142.

Niemi, Richard G. and M. Kent Jennings. 1991. “Issues and Inheritance in the Formation of Party Identification.” *American Journal of Political Science* 35: 970-988.

Seltzer, Richard and Robert C. Smith. 1985. “Race and Ideology: A Research Note on Measuring Liberalism and Conservatism in Black America.” *Phylon* 46: 98-105.

Tables and Figures

Table 1: Results for Ordinal Regression Model⁸

| | Coefficients | Z | Significance |
|------------------------------|--------------|-------|--------------|
| Survey Year | 0.0166 | 3.32 | 0.001 |
| Self-Employed | 0.0209 | 0.74 | 0.457 |
| Highest Degree | -0.035 | -1.61 | 0.108 |
| Sex | -0.0399 | -0.8 | 0.424 |
| Region | 0.0559 | 1.16 | 0.248 |
| Religion | -0.2803 | -3.75 | >0.001 |
| Church Attendance | -0.0724 | -7.17 | >0.001 |
| Social Class (subjective) | 0.0611 | 2.42 | 0.016 |
| Religious Liberalism | 0.0625 | 3.48 | >0.001 |
| 18-30 Age Group | 0.7217 | 4.52 | >0.001 |

N = 5983 Log likelihood = -9432.088

Table 2: Results for Ordinal Regression Model—Collapsed Party ID

| | Coefficients | Z | Significance |
|------------------------------|--------------|-------|--------------|
| Survey Year | 0.0182 | 2.99 | 0.003 |
| Self-Employed | 0.0138 | 0.43 | 0.664 |
| Highest Degree | -0.0512 | -1.95 | 0.051 |
| Sex | -0.1645 | -2.85 | 0.004 |
| Region | 0.0387 | 0.68 | 0.495 |
| Religion | -0.2444 | -2.91 | 0.004 |
| Church Attendance | -0.056 | -4.81 | >0.001 |
| Social Class (subjective) | 0.1095 | 3.88 | >0.001 |
| Religious Liberalism | 0.0781 | 4 | >0.001 |
| 18-30 Age Group | 0.5159 | 2.83 | 0.005 |

N = 5983 Log likelihood = -5071.3057

⁸ The dummy variables for survey years are not included in the results because the variables were only included in the analysis to account for the over time component. The survey year variable itself is significant while the only three of the survey year dummies were. The dummy variables for the other age groups were excluded from Table 1 as well. As with the survey year dummies, all except the *age3140* variable failed to show significance.

Figure 1: Probabilities for Responses(Age 18-30)

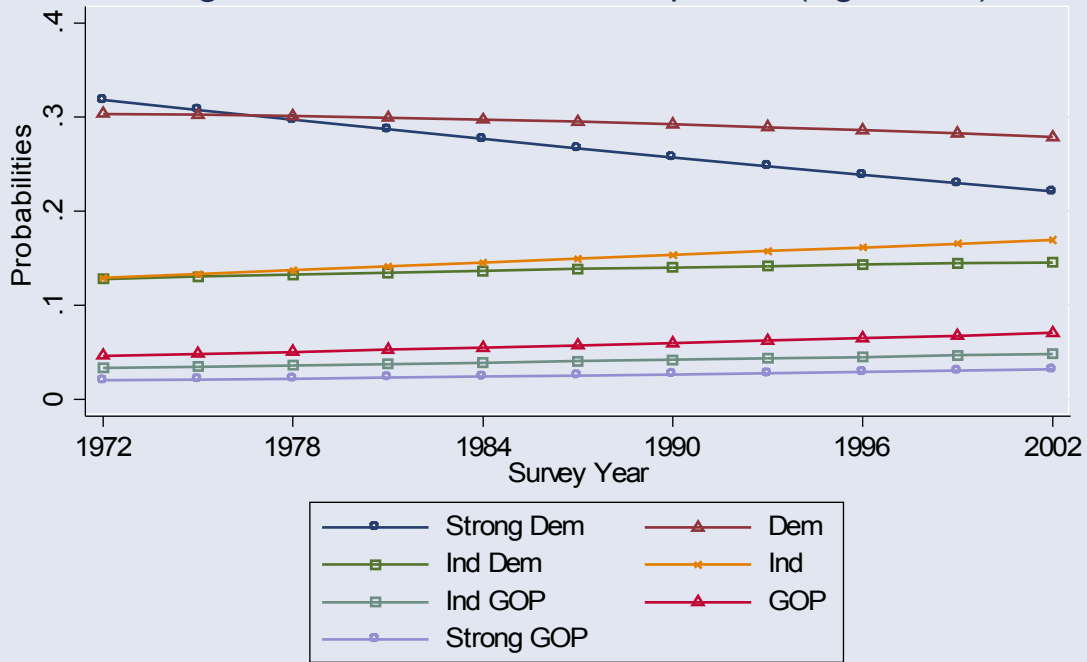


Figure 2: Probabilities for Never Church (Age 18-30)

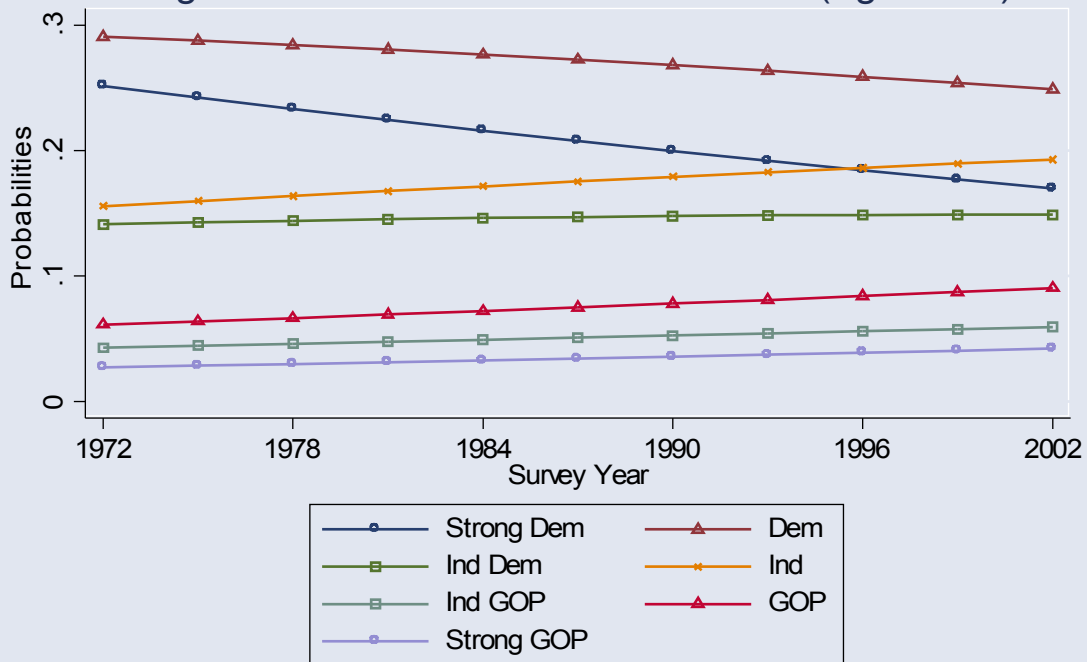


Figure 3: Probabilities for Several Times (Age18-30)

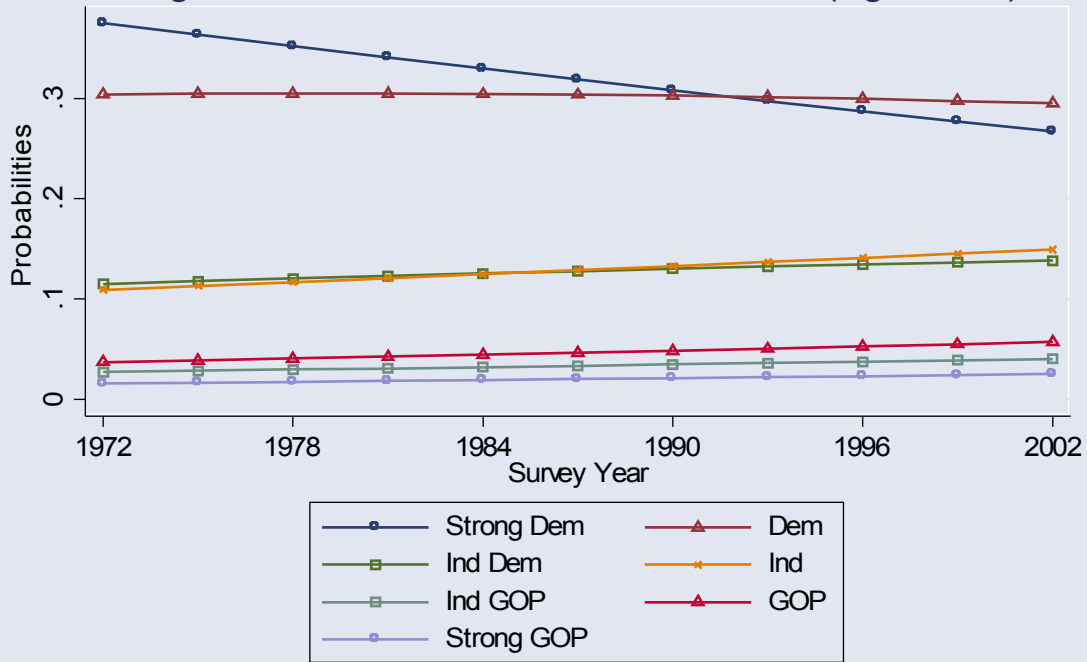


Figure 4: Probabilities for Responses (Age18-30)

