THE INFLUENCE OF POLITICAL AND DEMOGRAPHIC FACTORS ON CONGRESSIONAL EARMARK AWARDS

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By

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ABSTRACT

Earmarks (formally known as Congressionally-directed spending requests) given to lawmakers have come under increasing levels of scrutiny from the public and the media, as the growth of federal spending has been a growing cause of concern. Calls for reform and even outright bans of earmarks by spending watchdog groups increased prolifically during the 111th Congress. In order to assess the political and demographic factors that influence earmark awards given to members of the House of Representatives, I employed an OLS regression on earmarks awarded during FY2010. I found that Democrats, members of party leadership and members of the Appropriations Committee were awarded the most earmarks. Additionally, Members who represented larger districts were also awarded more earmarks. These findings were replicated when analyzing the dollar value of the earmarks awarded. Contrary to my hypotheses I found that the economic need of a Member’s district has no effect on the number or dollar amount of earmarks awarded. The results of my research are consistent with previous research on distributive federal spending. Political factors continue to be the key deciding factors in how earmarks are awarded and economic need does not appear to play a role. Because earmarks do not appear to be awarded based on merit, this finding could lead to a potential reform opportunity. My findings have important implications for those seeking reform of earmarks, showing that political factors have the greatest influence on how earmarks are awarded to Members.
The research and writing of this thesis could not have come together without the unconditional support of my family, friends and many of my colleagues.

I must especially thank Kevin Langone, whose belief in me as a scholar has sustained me every step of the way.

And finally, the guidance of my thesis advisor, Chris Toppe, ensured that this pursuit was as rewarding as it was challenging.

Thank You.

With Deepest Gratitude,
Jennifer E. Poos
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CHAPTER ONE: INTRODUCTION

Congressionally-directed spending requests, more colloquially known as “earmarks,” have become a hot-button political issue in recent years. Though earmarks, a form of distributive federal spending, have long been part of the federal budgeting process, the last decade has seen their increased use and unfortunately, abuse. The 2005 conviction of former California Congressman, Rep. Randy “Duke” Cunningham for taking bribes from private companies in return for requesting earmarks shed light on a process that previously had not received a lot of public and media attention. Since then, politicians from both sides of the aisle as well as citizen watchdog groups have stressed the importance of transparency and disclosure requirements for earmark spending.

Earmarks are generally defined as monetary requests for a specific program, project, institution or location\(^1\) and are made by members of Congress generally (though not always) on behalf of a constituent request. Though earmarks make up only a small percentage of overall federal spending, they have attracted political heat in recent years because they often circumvent normal voting processes and procedures. In essence, Members requests that these funds be set-aside (or “earmarked”) in the appropriations legislation. Earmark requests however are usually approved and added to the bill’s text after the full Appropriations Committee and/or relevant sub-committees have approved the text of the legislation. Because appropriation bills are often bundled together in large bills called omnibus spending bills that may also contain appropriations

\(^1\) This definition is used by the Taxpayers for Common Sense, a citizen watchdog group. While different studies may define earmarks slightly differently, I will use the TCS definition throughout my paper to be consistent with the data on earmarks, which are also provided by TCS.
for entire departments or agencies, specific earmarks almost never receive a vote before they are enacted as part of these larger bills.

Early on in the annual budget cycle, Members who want to make earmark requests do so in writing to the Appropriations Committee, which is responsible for crafting the twelve appropriations bills that dole out all discretionary spending for a given fiscal year. The earmark request is usually directed to the Appropriations subcommittee that has responsibility over a given area of spending. For example, a Member making a request for funding to improve a local pedestrian thoroughfare or initiate a bike-sharing program would direct the request to the chair of the Appropriations subcommittee on Transportation, Housing & Urban Development\(^2\). If approved by the relevant Appropriations subcommittee, the earmark award is added not to the appropriations legislation text (which is put to the full Appropriations Committee for a vote), but to the plain-language cover report that accompanies each appropriations bill. This report is usually added after the full text of the legislation has been approved. Federal agencies often treat the cover reports as practical guidance on how to distribute the funds in their particular bureaucratic program so its importance cannot be overstated.

Earmarking has become an important manner in which members of Congress ensure that they are helping their districts. Earmark awards have led to vital infrastructure improvements and provided funding for important local organizations. On the other hand, earmarks have also been used by private companies to circumvent the competitive bidding process on a federal grant or project. This corrupt behavior has not only landed more than one Member in hot water but it also has given rise to an image that all earmarking is wasteful government spending and many citizen

\(^2\) This particular example is drawn from a request made by Rep. Jim Moran (VA-8) for FY2011. More information about this particular request can be found here: http://moran.house.gov/transportation_requests.shtml.
watchdog groups have cried out for a more transparent process or to curb the earmarking process altogether\textsuperscript{3}.

In light of all this public scrutiny and prior to any permanent reform, it is important to understand how and why earmarks are awarded to Members. There has been some research conducted that has focused on political variables as the determining factor in earmark awards; however because earmarks are designed to benefit a certain district an argument can be made to control for demographic factors unique to each district. These political and demographic factors may or may not influence which Members are awarded earmarks. The goal of this paper is to examine both political and demographic factors and how they influence earmarks awarded to members of the House of Representatives.

\textsuperscript{3} A September 2010 joint press release by Taxpayers for Common Sense, Citizens Against Government Waste, Public Citizen and the Citizens for Responsibility and Ethics in Washington called for a number of reforms including limiting awards to campaign contributors, a searchable government-sponsored database, random GAO audits among others.
http://www.taxpayer.net/resources.php?category=&type=Project&proj_id=3775&action=Headlines%20By%20TCS%20PR.
CHAPTER TWO: LITERATURE REVIEW

While there has been a wealth of research on the factors that influence overall distributive federal spending (commonly referred to as “pork barrel spending”) and the political factors that influence spending decisions, there have been comparatively few studies which analyze earmarks as a stand-alone type of federal spending. However, before summarizing the more recent literature surrounding earmark spending it is first necessary to paint a broader picture of the theory behind distributive federal spending.

Theory

Much of the literature surrounding Congressional spending decisions, particularly those made by the House of Representatives, takes David Mayhew’s electoral connection theory (Mayhew 1974) as a starting premise. In his comprehensive study of legislative behavior, Mayhew theorizes that all members of Congress “are single-minded seekers of reelection” (p. 5) and this motivation leads to behaviors he describes as “electorally useful.” Mayhew claims that while in Congress all Members strive for reelection by obtaining seniority, achieving political influence and making good public policy. These goals lead Members to attempt to affect policy in their own individual districts (p. 33) so that they can claim credit for being effective legislators and use this claim to aid in their reelection quest. This “electoral connection” with their district also leads to a strong accountability relationship between Members and their constituents. Because all members of Congress (Senators and Representatives alike) are directly elected (as opposed to being nominated by party bosses), they are under constant pressure to ensure that they adequately represent their constituents at the federal level. In addition they must also
acquire enough resources and positive outcomes for the district to prove to the voters that they deserve reelection.

While Mayhew’s electoral connection theory seems a bit obvious in today’s hyper-polarized political atmosphere, most academic literature examining federal spending and earmarks takes his hypothesis as a given. Furthermore, it is a starting point for other works on congressional organization and legislative behavior; variables that most contemporary research has shown significantly affect distributive federal spending and earmark awards.

**Research Concerning Distributive Federal Spending**

An important study that builds on Mayhew’s electoral connection theory is Ferejohn’s work on pork barrel spending by the House Committee for Public Works on rivers and harbors spending (Ferejohn 1974). In his study of Corps of Engineers project funding, Ferejohn finds that “if a program has geographically divisible components, the members of Congress who are most strategically situated [by committee standing] should receive a disproportional share of the benefits” (p. 6). This finding underlines the importance of Mayhew’s idea of credit-claiming (1974): the purpose of Members earmarking money for district-specific projects and programs is to take credit for this spending. These projects are one of the few ways Members can prove to their constituents that they were effective in bringing resources directly to the district.

Furthermore, Ferejohn finds that:

“Congressmen generally agree that constituency-oriented expenditures can be valuable to them. There appear to be three separate reasons why congressman value projects in their districts. First, projects are valuable in a reelection campaign as part of an incumbent’s record in office. Second, they maximize discretion over other legislative issues. Third, they ensure that a project will not be held against the congressman by groups who could enter or back an opposition candidate in the next election” (p. 49).
Ferejohn also claims that by “bringing home the bacon” a Congressman can take votes on other issues of interest to him that may not be as relevant for his constituents, although in a digital age where Congressional behavior is closely monitored it is not clear that this finding still holds.

Ferejohn’s overall findings support many of Mayhew’s (1974) original claims of an electoral connection. He finds that committee assignments (particularly Members who have a seat on the Appropriations Committee) have a significant and positive effect on federal spending in that Member’s district. He also finds that Democrats seemed to fare better than Republicans when being awarded projects, a factor for which my research controls.

Contemporary Findings– Federal Spending

Recent research has focused on trying to determine the specific political factors that influence distributive federal spending, of which earmarks make up a small but hotly debated part. The discretionary portion of the federal budget, which Congress must debate and authorize each fiscal year, makes up less than 50% of the overall federal spending. Indeed most of the budget is spoken for by mandatory entitlements, such as Social Security, Medicare and Medicaid programs. Furthermore, defense spending takes up a vast majority of the discretionary portion, leaving a relatively small sliver of the pie for other types of non-defense discretionary spending. Most of this money is doled out in the form of “grant-in-aid” or formulaic spending, which distributes money directly to the states, which then oversee the programs. Earmarks fall into this category of distributive spending, but they make up a relatively tiny portion of total distributive spending. As was mentioned above, earmarks are also one of the few types of spending whose benefits often accrue directly to a Member’s congressional district.
Most research has attempted to find a connection that proves that Members try to manipulate their clout to influence federal spending. Research has tried to document the effects of distributive spending and the factors that influence it by focusing on institutional factors such as a Member’s seniority, party affiliation, ideology and committee memberships. Fewer studies have looked at demographic factors such as Congressional district size, income levels and ideology.

One study that tests whether or not political factors influence federal spending in Congressional districts is Alvarez and Saving’s (1997) work that used data from the 100th and 101st Congresses. Interestingly, their literature review uncovered mixed results about the connection between federal spending and reelection. Some researchers found that distributive spending in a district helped the incumbent and some research found that there was no effect. However, Alvarez and Saving thought that the explanation for this discrepancy was likely related to how the previous research models were designed. They found “…considerable evidence that Congressional committees and politics play a major role in the allocations of federal benefits across congressional districts” (p. 56). Specifically they found that new federal spending was more likely to go to liberal districts, to Democratic members and to members of some of the more powerful committees (p. 68). They also found that political vulnerability or campaign contributions did not have a significant effect on new federal spending. Although Alvarez and Saving had predicted that distributive spending would tend to go more to pork-barrel projects (i.e. earmark awards), they actually found that political factors also had a strong impact on formulaic spending, which is sent directly to the state, and that the effect of political factors might actually be stronger for formulaic spending than for pork-barrel projects (p. 68).
Del Rossi (1995) takes a different approach than Alvarez & Saving by examining both political and economic factors as they relate to federal spending, using localized water projects as a case study. Her findings somewhat contradict the overwhelming emphasis placed on political factors as being the sole determinant for federal funding. She found that economic factors (GNP per capita) “played an important role in determining the amount of water resource project spending by the Corps of Engineers” (Del Rossi p. 299). Although she also found that political factors had an effect, her conclusions about the importance of economic factors show that in times of economic recession, when GNP per capita is low, economic factors also influence federal spending. Her research shows that political factors may not be the sole explanation for federal spending at the district level.

Some studies have found stronger relationships than others between federal spending and a Member’s political characteristics. Grossman (2006) found that party discipline, or how tightly the majority party controlled its member’s voting behavior, had an impact on pork barrel spending. He concludes that as party discipline increases (as measured by the percentage share of the seats controlled) campaign promises of federal spending and the actual levels of spending increase as well (p. 25). A 1997 study by Levitt and Snyder also found that “increased federal spending in congressional districts helps incumbents win votes” (p. 50). The authors found that this effect was particularly strong for federal grants as opposed to other types of federal spending. Levitt and Snyder’s findings show that federal money that goes directly to a district can have a positive electoral impact on that district’s member of Congress, and that Member is more likely to be reelected.
However, Lee in her 2003 study found that the exact relationship between geographic allocation of federal spending and House political forces was actually rather weak because electoral districts do not directly correlate with administrative units of federal spending (states, cities, counties etc.). Lee states that House members have trouble claiming credit for federal spending in their district because so much of it is given out at a level that may or may not affect their district. Her findings lend credence to the idea that House members make earmark requests because they perceive that requests will have a benefit that will accrue specifically to their district (as opposed to relying on other types of federal funding which may or may not affect their district) and they can benefit electorally (Lee 2003).

Another study found that party affiliation could be a determining factor in federal spending (Lazarus and Reilly 2010). The authors found that Democrats benefit more from direct distributive spending than Republicans. Republican members tended to benefit electorally when government provided funding as a “contingent liability” instead of a direct cash payment. The authors define a contingent liability as the type of spending when the government underwrites or guarantees the risk undertaken by private firms and entrepreneurs as opposed to simply awarding a contract or grant. The reason for their findings is mainly ideological– the idea of individual entrepreneurship is deeply ingrained in the Republican ideology while liberal districts are more likely to expect (and reward) direct government spending. Furthermore, businesses, which tend to benefit most from the federal government guarantees, tend to support Republican candidates who support such types of funding. Lazarus and Reilly reach the conclusion that earmark spending is more likely to be helpful to Democrats than Republicans because Democratic constituents are more likely to be supportive of direct assistance government programs.
Therefore, because Democrats accrue more benefits of earmark spending they are more likely to request this type of spending than Republicans.

*Contemporary Findings—Earmarking Process*

While most of the literature has surrounded federal spending and the electoral connection that underlies these spending patterns, comparatively fewer studies have isolated and analyzed earmark spending patterns. This lack of research is perhaps because despite their media attention, earmarks only represent a small portion of the federal funding that is doled out by Congress each year. Another reason may be that although it was possible to isolate earmarks from other types of spending, earmark requests were anonymous. Reform legislation passed in 2007 (partially in response to the Cunningham scandal) mandated that Congressional members disclose their name with the requested amount, the earmark’s purpose and its intended recipients. This identifying information was then included when the earmark award was published with the appropriations bill’s cover report. This additional transparency has allowed researchers to re-evaluate Mayhew’s (1974) electoral connection theory, because they now can see exactly which Member made the earmark request and on which specific program or project the money was intended to be spent as opposed to inferring which Member made the request based on the geographic location of the project.

Of the more recent research that has focused specifically on analyzing earmark spending, the findings echo previous research that spending tends to follow Members who have political power, such as members of the party leadership or the majority party (Engstrom & Vanberg 2010). In their 2010 study, Engstrom & Vanberg evaluate Mayhew’s electoral connection theory that Members seek to claim individual credit with earmark projects as well as the claim of
universalism, that all Members of Congress will receive some funding specifically for their
district (Weingast 1979). While Engstrom & Vanberg found that the distribution of earmarks
does support the idea of universalism (i.e. most members of Congress received at least one
earmark, either solo or in conjunction with other Members), there were important variations in
the number of earmarks awarded that lend support to the idea of “electoral connection”.
Engstrom & Vanberg also found that intraparty dynamics are important sources of variation in
the distribution of earmarks with party leaders (both majority and minority), and that freshmen
members and members from marginal districts are more likely to receive earmarks regardless of
party. They also found that being in the majority has its perks, with majority party leaders more
likely to receive earmarks than their minority counterparts. Again, an important caveat to their
work is that due to a lack of party change, majority always refers to Democrats and minority to
Republicans. Given the absence of longitudinal data on Congresses when the Republicans were
in power, they were not able to determine that their findings were unique to majority status and it
may be likely that their findings are simply valid only for Democrats (p. 982).

Jeffrey Lazarus’ recent study “Giving the People What They Want?” (2010) serves as a
model for my research question. In his analysis of earmark data from FY2008, Lazarus
hypothesizes that both political factors (what he terms “Chamber-based”) as well as district
demographic factors (termed “demand-side”) influence both the amount and number of earmarks
awarded to a Member. His study calls into question the commonly held belief that distributive
federal spending is entirely determined by political factors. Lazarus tests a number of Chamber-
based factors as well as demand-side factors to see which have an effect on earmark allocations.
On the Chamber-based political factors he finds that political vulnerability, Member ideology,
seniority, party leadership and committee membership all affect the number of earmarks awarded to varying degrees. He finds that committee membership, party leadership and Member ideology have the most significant impact on the number of earmark awards, with Democrats, members of the Appropriations House Committee and members of each party’s leadership positioned to gain the greatest amount of earmarks. These findings are not particularly shocking given that the majority party, party leaders and members of the Appropriations Committee are often “gatekeepers” on appropriations legislation and bills are unlikely to move forward if they do not gain approval from those groups who wield control. Furthermore, Lazarus’ findings also support the previous research that found the power of political factors such as seniority and committee membership to steer funds to a particular district.

What sets Lazarus’ study apart is his inclusion of demand-side factors, testing the hypothesis that even earmarks, arguably some of the most “political” spending are still subject to constituent preferences. Lazarus also includes variables to control for the ideology of the district, the district’s physical size and its unemployment rate. Interestingly he finds that only land size has a significant effect on the earmark requests, but it only correlates to about two additional earmarks given a 1% increase in physical size. His findings of the effect of demographic factors contradict the common wisdom in the media and critics’ claims that earmarks are distributed on a purely political basis, but his model seems to uphold that electoral connection theory is the driving motivation behind congressional behavior.

Lazarus concludes that earmarks are not all that different from other types of federal funding since they are influenced by many of the same factors. Even though earmarking is often
done is secret (though there is strong movement to end this behavior), Members are still responsive to local needs when making their requests.

**Proposed Research Question**

While there has been a wealth of research on the factors that influence overall distributive federal spending (commonly referred to as “pork barrel spending”) and the political factors that influence spending decisions, there have been comparatively few studies which analyze earmarks as a stand-alone type of federal spending. The Lazarus study makes an important contribution to this field of research with his study of 2008 data; however, I test his model further. Do his conclusions about the political factors still hold for FY2010 even though the end of the fiscal year coincided with an important mid-term election, and one in which the majority party found itself struggling to regain control? Do his hypotheses about demographic factors hold up when testing median household income and other demographic factors in a time of economic decline?

For this project, I modify and update Lazarus’ model using FY2010 earmark spending data as well as updated election data from the 2008 general election and data from the 2009 American Community Survey as conducted by the U.S. Census Bureau. My research question is which political and demographic factors have the greatest effect when determining the number and dollar amount of earmarks awarded to a Member?
CHAPTER 3: METHODOLOGY AND CONCEPTUAL FRAMEWORK

To study the relationship between earmark awards and political and demographic factors I use the model described below. This model is modified from the Lazarus (2010) study by using slightly different political variables and expanding some of the demographic variables:

\[
Y_1 \text{ (# of earmarks awarded per House Member)} = \beta_0 + \beta_1 \text{ (Party affiliation)} + \beta_2 \text{ (Seniority)} + \beta_3 \text{ (Member of House leadership)} + \beta_4 \text{ (Member of Appropriations committee)} + \beta_5 \text{ (Appropriations subcommittee chair)} + \beta_6 \text{ (Standing committee chair)} + \beta_7 \text{ (Prior vote share in 2008 elections)} + \beta_8 \text{ (Prior vote share of President Obama in 2008 elections)} + \beta_9 \text{ (Congressional district size)} + \beta_{10} \text{ (Median household income)} + \beta_{11} \text{ (Unemployment rate)} + E
\]

\[
Y_2 \text{ ($ amount of earmark amounts awarded per House Member)} = \beta_0 + \beta_1 \text{ (Party affiliation)} + \beta_2 \text{ (Seniority)} + \beta_3 \text{ (Member of House leadership)} + \beta_4 \text{ (Member of Appropriations committee)} + \beta_5 \text{ (Appropriations subcommittee chair)} + \beta_6 \text{ (Standing committee chair)} + \beta_7 \text{ (Prior vote share in 2008 elections)} + \beta_8 \text{ (Prior vote share of President Obama in 2008 elections)} + \beta_9 \text{ (Congressional district size)} + \beta_{10} \text{ (Median household income)} + \beta_{11} \text{ (Unemployment rate)} + E
\]

Most studies (Lazarus 2010, Ferejohn 1974, Alvarez & Saving 1997) have found that political factors have a strong influence on federal spending. In particular, seniority and political influence can be useful in directing dollars to a district. Other studies (Lee 2003, Levitt & Snyder 1997), have found that party affiliation can be a determining factor. These studies have found that Democrats are more likely to engage in federal distributive spending though it is important to note that this is not a universal finding. In keeping with Mayhew’s (1974) electoral connection theory, some scholars have also put forth the idea that high political vulnerability is closely tied to increased federal dollars, meaning that Members who are in danger of losing their seats receive more money than those who are from “safe” districts (Engstrom & Vanberg 2010).

Significantly less research has been conducted on the influence of demographic factors on earmark awards. What role, if any, does district need play when earmarks are awarded? Is the
decision to award earmarks entirely political? It has been found that the size of a Congressional
district (as measured by square miles) influences earmark spending, meaning that Members who
represent larger districts tend to be awarded more money (Lazarus 2010). The relationship
between other demographic variables such as unemployment and median household income is
less understood and the same study that found that size was a statistically significant factor found
that the district unemployment rate had no effect on earmark spending.

The conceptual framework for my research is summarized in Table 1. I expect to find
positive relationships between a Member’s seniority, political influence, their district’s
unemployment rate, “ideology” and physical size and earmark awards. I expect to find negative
relationships between a Member’s political vulnerability and their district’s median household
income and earmark awards.

Hypotheses

My research further explores the factors that affect earmark spending by members of the
House of Representatives in a given fiscal year. The variables that inform my research are
political variables, such as a Member’s political affiliation, political vulnerability, seniority and
committee memberships; and demographic variables, such as congressional district size,
unemployment rate, ideology and median household income. My dependent variables include
both the number of earmarks awarded to a particular Member as well as the total dollar amount
of earmarks awarded to a particular Member.

My null hypothesis of no difference can be stated as such:

\[ H_0 = \text{neither demographic nor political variables have a statistically significant effect on} \]
\[ \text{the number of earmarks awarded to an individual House member.} \]
My research is designed to see whether or not demographic and political factors have an effect on the number of earmarks awarded to an individual House member. Therefore, I test the following alternative hypothesis:

\[ H_1 = \text{Ideology, seniority, political vulnerability as well as district ideology, size and employment levels have a statistically significant effect on the number of earmarks awarded to an individual House member. I expect that Member ideology and seniority as} \]

\[ \text{negative, respectively.} \]
well as district ideology, size and unemployment levels will have a positive effect on the
number of earmarks awarded to an individual House member. I expect that a Member’s
political vulnerability will have a negative effect.

I am also interested in the dollar value of the earmarks that are awarded to House members.
Using dollars per House member as the dependent variable, I test the following null hypothesis:

\[ H_0: \text{neither demographic nor political variables have a statistically significant effect on} \]
\[ \text{the dollar amount of earmarks awarded to an individual House member.} \]

My alternative hypothesis can be stated as such:

\[ H_1: \text{Ideology, seniority, political vulnerability as well as district ideology, size and} \]
\[ \text{employment levels have a statistically significant effect on the dollar amount of} \]
\[ \text{earmarks awarded to an individual House member. I expect that Member ideology and} \]
\[ \text{seniority as well as district ideology, size and unemployment levels will have a positive} \]
\[ \text{effect on the dollar amount of earmarks awarded to an individual House member. I} \]
\[ \text{expect that a Member’s political vulnerability will have a negative effect.} \]

To summarize, I expect that the relationships between the independent variables and the dollar
amount of earmarks awarded and the number of earmarks awarded will be in the same direction.

Most studies (Lazarus, Engstrom & Vanberg) find that the direction and significance of the
relationships among the various variables do not change when earmark count is used the
dependent variable as opposed to the total dollar amount.

**Description of Data and Sources**

To test this model I use data from the Taxpayer’s for Common Sense (TCS) FY2010
earmark database. Additionally I use data from the 2009 American Community Survey
(conducted by the Census Bureau) and data from the 2000 Decennial Census (also conducted by the Census Bureau). While the TCS dataset contains many of the political variables I use in my model, it is necessary to combine the TCS dataset with additional Census Bureau datasets that contain demographic information about each Congressional district. I use demographic data that are collected at the Congressional-district level. For my research, the unit of analysis is the individual Member or Congressional delegate, and the restricted sample includes all Members and delegates who represent a Congressional district who were awarded at least one earmark (either solo or jointly with other Members) during FY2010.

*Taxpayers for Common Sense (TCS) FY2010 Earmark Database*

Each year TCS compiles and publishes a database containing all earmarks for that particular fiscal year (spanning October 1 – September 30). The FY2010 database, released on February 17, 2010, contains information about earmarks that were included in the regular spending bills passed by Congress during 2009 to allocate funds for FY2010, which began on October 1, 2009 and ended on September 30, 2010. TCS compiles the database by searching through the text and cover reports of the appropriations legislation as well as any supplemental or continuing resolutions that fund government programs. Additional information about the earmark request is also obtained through each individual Member’s website, as Members are now required to post all earmark requests (regardless of whether or not they are approved) on their websites. The final TCS database contains the earmark’s dollar amounts, a description of the earmarked project, the section and subsection of the appropriations bill in which the earmark appears, the Member (or Members) who requested the earmark, the party and state of the requestor(s), as well as supplemental information about the intended beneficiary of the earmark.
TCS conducts additional analysis and aggregation of its earmark database by reporting the number of earmarks and the dollar amount of earmarks for each member of the House and Senate as well as the number of earmarks and the dollar amount for each state. While TCS reports earmarks awarded to a House member on a solo basis as well as earmarks award to a House member in groups (because Members may make joint requests), I use the latter as my dependent variable to make sure that I am capturing all earmarks. In order to run the regression the dollar variable (as found in Table 2) is logged to account for outlying variables and skewedness of the data. Logging continuous variables measured in dollars is also a common practice in federal spending research. Table 2 summarizes the two dependent variables from the TCS database.

Table 2:

Descriptive Statistics (dependent variables)

<table>
<thead>
<tr>
<th>Dependent Variables</th>
<th>N</th>
<th>Mean</th>
<th>Std. Dev.</th>
<th>Min</th>
<th>Max</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of Earmarks</td>
<td>400</td>
<td>22.93</td>
<td>13.88</td>
<td>1</td>
<td>89</td>
</tr>
<tr>
<td>Dollar Amount of Earmarks (in thousands)</td>
<td>400</td>
<td>$25,209</td>
<td>$22,175</td>
<td>$350</td>
<td>$128,573</td>
</tr>
</tbody>
</table>

It is interesting to note that the top “winners” of earmark awards are both Republicans, despite the fact that Democrats held a strong majority (65% of the House, see Table 3). Rep. Rehberg, (MT-At large) was awarded the highest number of earmarks (89) and Rep. Young (FL-10) was awarded the highest dollar amount ($128.6 million). Both of these Members also sit on the Appropriations committee. Indeed, Members who are awarded the most earmarks all sit on the Appropriations committee.

The TCS database also contains additional political information about the House members, and with some manipulation and coding, provides data for party affiliation and
membership on the various committees. To the TCS data on earmarks I added dummy variables for party leadership (elected leadership in both the Democratic and Republican parties) as well as information about seniority of each House member (as measured by the number of consecutive two-year terms served)\(^4\). Table 3 summarizes the dummy variables for influence from the TCS database, information about the seniority and political vulnerability of each Member as well as district demographic information, collected from the Census Bureau.

The TCS database provides both dependent variables as well as several of the independent variables for my regression. This database has been used extensively in recent research on how political and demographic variables specifically affect earmark requests. Lazarus (2010) found that certain political factors and demographic factors had a significant effect on the amount of earmarks made by a House member, thereby showing that earmark spending is somewhat tied to district factors and that Representatives are sensitive to their constituent concerns when they make earmark requests.

\(^4\) The data were downloaded from the Clerk of the House of Representatives website at http://clerk.house.gov/member_info/index.html.
Table 3:
*Descriptive Statistics (independent variables)*

<table>
<thead>
<tr>
<th>Independent Variables</th>
<th>N</th>
<th>Mean</th>
<th>Std. Dev.</th>
<th>Min</th>
<th>Max</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Political Characteristics</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tenure (Number of Consecutive 2-Year Terms Served)</td>
<td>396</td>
<td>6.26</td>
<td>4.59</td>
<td>1.00</td>
<td>28.00</td>
</tr>
<tr>
<td>Percentage of Vote Won in the 2008 General Election&lt;sup&gt;a&lt;/sup&gt;</td>
<td>397</td>
<td>67.81%</td>
<td>13.61%</td>
<td>24.35%&lt;sup&gt;b&lt;/sup&gt;</td>
<td>100.00%</td>
</tr>
<tr>
<td>Party (dummy variable; Democrat=1)</td>
<td>400</td>
<td>0.65</td>
<td>--</td>
<td>0.00</td>
<td>1.00</td>
</tr>
<tr>
<td>Member of the House Appropriations committee (dummy variable; Yes=1)</td>
<td>400</td>
<td>0.15</td>
<td>--</td>
<td>0.00</td>
<td>1.00</td>
</tr>
<tr>
<td>Chairman of an Appropriations subcommittee (dummy variable; Yes=1)</td>
<td>400</td>
<td>0.03</td>
<td>--</td>
<td>0.00</td>
<td>1.00</td>
</tr>
<tr>
<td>Chairman of standing committee (dummy variable; Yes=1)</td>
<td>400</td>
<td>0.06</td>
<td>--</td>
<td>0.00</td>
<td>1.00</td>
</tr>
<tr>
<td>Member of Party Leadership (dummy variable; Yes=1)</td>
<td>400</td>
<td>0.01</td>
<td>--</td>
<td>0.00</td>
<td>1.00</td>
</tr>
<tr>
<td><strong>Demographic Characteristics</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Percentage of Vote Won by President Obama in the 2008 General Election (in a congressional district)</td>
<td>395</td>
<td>54.85%</td>
<td>15.01%</td>
<td>23.00%</td>
<td>95.00%</td>
</tr>
<tr>
<td>Physical Size (land area of district in square miles)&lt;sup&gt;c&lt;/sup&gt;</td>
<td>395</td>
<td>8,116.63</td>
<td>31,753</td>
<td>10.29</td>
<td>571,951.30</td>
</tr>
<tr>
<td>District Median Household Income (in thousands)</td>
<td>396</td>
<td>$51.44</td>
<td>$14.02</td>
<td>$18.31</td>
<td>$101.92</td>
</tr>
<tr>
<td>District Unemployment Rate</td>
<td>396</td>
<td>10.11%</td>
<td>2.81%</td>
<td>3.80%</td>
<td>25.90%</td>
</tr>
</tbody>
</table>

<sup>a</sup>The data were compiled from individual state Board of Election websites and verified against data publicly available from the Federal Election Commission.

<sup>b</sup>In the 2008 general election a delegate candidate from the Northern Mariana Islands won with only the plurality of the vote that was split amongst 5 candidates.

<sup>c</sup>I used data from the 110th Congressional districts instead of the 111th because there were no changes in the districts between the two Congresses.
After the completion of every decennial census, Congress uses that information to redraw Congressional districts to allow for changes in the population during the last 10 years. The most recent census available for my research was completed in 2000. In order to obtain land area for each Congressional District (a variable that Lazarus (2010) found to have a statistically significant impact on the number of earmarks awarded to a Member) I downloaded a file from the Census Bureau that contains land area for each district according to changes made from the 2000 census. The unit of analysis is square miles. To account for the fact that Congressional districts vary greatly in size (from small urban districts in major cities to entire states such as Alaska, Montana etc), the variable is also logged in my regression. This variable is added to my dataset (see Table 3).

Similar to the decennial census, the American Community Survey (ACS) is a nation-wide survey designed to provide information about U.S. communities. The ACS collects a variety of demographic information about individuals and households and then aggregates this information to a variety of different levels. Most importantly for my study, it collects this information at the Congressional district level. The ACS collects and produces population and housing information every year instead of every ten years, allowing policy makers and researchers to have more up-to-date information at the local and community level.

Approximately three million households (in geographic areas that have at least 65,000 individuals) are selected annually across the country to participate. The surveys include a wealth of population and household information including age, citizenship, health insurance coverage,
labor force status etc. From this survey I include median household income and unemployment rate. In addition to the TCS database and the 2000 census, the ACS data provide the remainder of my demographic variables, and I use this survey to expand on the research that others have done in this area, which mainly focused on political factors.

**Putting it All Together: Analysis Plan**

To test these hypotheses I first compiled data from the various sources outlined above.

*Population of Study*

My population of study is all Members and delegates of the 111th Congress, which initially totaled 446 observations. However, since the bulk of my research focuses on the factors that influence earmark awards, I drop all Members and delegates who either did not request earmarks or who had no earmark data because they started mid-session. After removing these individuals I had 400 remaining observations.

*Regression Models*

My regressions are run in three separate stages. In each stage the dependent variables are the total number of earmarks that were awarded to that Member (either individually or in conjunction with other Members) and the total dollar amount of earmarks that were awarded to a Member (either individually or in conjunction with another Member). Given the distribution of the dollar amounts (values range from $350,000 to $12.8 million) it was necessary to log this variable to compensate for skewedness.

In the first stage I conduct an ordinary least squares (OLS) regression on a model that includes only what I term “political” variables. These variables are the Member’s party affiliation, tenure (as measured by the number of consecutive terms served), political influence
(measured by dummy variables for member of either party’s leadership, member of the Appropriations committee, chairman of the one of the Appropriations Subcommittees and chairman of a standing committee) and political vulnerability (measured by the percentage of the vote earned in the 2008 general election). Therefore this first stage (termed Model 1) is as follows:

\[ Y_1 = \beta_0 + \beta_1 P + E \]
\[ Y_2 = \beta_0 + \beta_1 P + E \]

where \( Y_1 \) is the number of earmarks awarded to a House member, \( P \) represents the political variables (party affiliation, tenure, political influence and vulnerability) and \( Y_2 \) is the total (logged) dollar amount of earmarks awarded to a House member.

I then conduct an OLS regression on a model that includes only what I term “demographic” variables. These variables are the district ideology of the Member (as measured by the percentage of the vote captured by President Obama in the 2008 general election), size (as measured by the square miles the district encompasses) and economic condition (as measured by median household income and the unemployment rate). Because of the large variety of size amongst congressional districts, ranging from 10.3 square miles to 572,000 square miles, this variable as also logged. This second stage (termed Model 2) is as follows:

\[ Y_1 = \beta_0 + \beta_1 D + E \]
\[ Y_2 = \beta_0 + \beta_1 D + E \]

where \( Y_1 \) is the number of earmarks awarded to a House member, \( D \) represents the demographic variables (district ideology, size and economic condition) and \( Y_2 \) is the total (logged) dollar amount of earmarks awarded to a House member.
Finally, I combine Model 1 and Model 2 into a full model (Model 3) that contains both political and demographic factors. This model is as follows:

\[ Y_1 = \beta_0 + \beta_1 P + \beta_2 D + \epsilon \]

\[ Y_2 = \beta_0 + \beta_1 P + \beta_2 D + \epsilon \]

Results from these models are included in the next chapter.
CHAPTER 4: RESULTS

Each model was run with two separate dependent variables (count of total earmarks awarded and logged total dollar amount of earmarks awarded). The results of each dependent variable are presented together with robust standard errors in Tables 4 and 5. I first turn to the analysis of the number of total earmarks awarded.

Results Concerning the Number of Earmarks Awarded to a Member

A cursory look at Table 4 reveals that, consistent with previous research, political factors are of paramount importance in determining the number of earmarks awarded to a Member. The variables that have the greatest impact (measured in both significance and magnitude) are party affiliation, Appropriations committee membership and party leadership. Each variable has a positive relationship with earmarks, as predicted in my original conceptual model (see Table 1 for reference).

Holding all else equal Democrats are awarded an additional four earmarks, while party leaders of the 111th Congress garnered approximately an additional 18 earmarks. It should be noted that for FY2010, no Republican leaders made any earmark requests, likely for ideological reasons so party leaders in this sample are also Democrats. Membership on the Appropriations committee is clearly beneficial for a Member’s district; Appropriations members receive an additional 20 earmarks as compared to their colleagues who do not sit on this committee. This result in particular shows the power those who sit on the Appropriations committee wield; because they write the legislation in which the language for earmark requests are included, it is not surprising that earmarks that benefit their district are included more frequently. It is interesting to note that when district demographic variables are excluded (Model 1), the
coefficients on these three variables do not change much between Model 1 and Model 3 perhaps indicating that the effect of party leadership, party affiliation and Appropriations committee membership are the three key indicators as to whether or not a Member is awarded an earmark.

Table 4:

**OLS Regression Results (DV: Count of Earmarks)**

<table>
<thead>
<tr>
<th></th>
<th>MODEL 1: Political Model</th>
<th>MODEL 2: Demographic Model</th>
<th>MODEL 3: Full Model</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tenure</td>
<td>0.2*</td>
<td>--</td>
<td>0.3*</td>
</tr>
<tr>
<td></td>
<td>(0.1)</td>
<td>(0.1)</td>
<td>(0.1)</td>
</tr>
<tr>
<td>2008 Percentage of Vote Gained (Member)</td>
<td>-3.6</td>
<td>--</td>
<td>-0.6</td>
</tr>
<tr>
<td></td>
<td>(3.8)</td>
<td>(4.1)</td>
<td>(4.1)</td>
</tr>
<tr>
<td>Party</td>
<td>3.1**</td>
<td>--</td>
<td>4.4***</td>
</tr>
<tr>
<td></td>
<td>(1.2)</td>
<td>(1.4)</td>
<td>(1.4)</td>
</tr>
<tr>
<td>Appropriations Committee Member</td>
<td>20.5***</td>
<td>--</td>
<td>20.2***</td>
</tr>
<tr>
<td></td>
<td>(2.6)</td>
<td>(2.5)</td>
<td>(2.5)</td>
</tr>
<tr>
<td>Appropriations subcommittee chair</td>
<td>9.4*</td>
<td>--</td>
<td>8.6*</td>
</tr>
<tr>
<td></td>
<td>(4.7)</td>
<td>(4.8)</td>
<td>(4.8)</td>
</tr>
<tr>
<td>Standing committee chair</td>
<td>-1.7</td>
<td>--</td>
<td>-1.9</td>
</tr>
<tr>
<td></td>
<td>(1.9)</td>
<td>(2.0)</td>
<td>(2.0)</td>
</tr>
<tr>
<td>Party leader</td>
<td>17.9***</td>
<td>--</td>
<td>17.7***</td>
</tr>
<tr>
<td></td>
<td>(4.9)</td>
<td>(4.)</td>
<td>(4.)</td>
</tr>
<tr>
<td>2008 Percentage of Vote Gained (President)</td>
<td>--</td>
<td>11.6‡</td>
<td>4.6</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(7.2)</td>
<td>(5.9)</td>
</tr>
<tr>
<td>District Size (logged)</td>
<td>--</td>
<td>1.1*</td>
<td>1.2**</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(0.6)</td>
<td>(0.4)</td>
</tr>
<tr>
<td>District Median Household Income</td>
<td>--</td>
<td>-0.003</td>
<td>0.008</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(0.06)</td>
<td>(0.05)</td>
</tr>
<tr>
<td>District Unemployment Rate</td>
<td>--</td>
<td>-0.2</td>
<td>-0.3</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(0.3)</td>
<td>(0.2)</td>
</tr>
<tr>
<td>Constant</td>
<td>18.5***</td>
<td>10.7</td>
<td>6.0</td>
</tr>
<tr>
<td></td>
<td>(2.4)</td>
<td>(9.0)</td>
<td>(8.2)</td>
</tr>
<tr>
<td>R²</td>
<td>0.40</td>
<td>0.02</td>
<td>0.43</td>
</tr>
<tr>
<td>N</td>
<td>394</td>
<td>395</td>
<td>389</td>
</tr>
</tbody>
</table>

1 All p-scores are computed using a one-tailed test. Robust standard errors are in parentheses.
‡ p<0.1
* p<0.05
**p<0.01
*** p<0.001
Seniority and chairing an Appropriations subcommittee also have a positive and statistically significant effect on earmark awards. Chairing an Appropriations sub-committee is associated with approximately nine additional earmarks. However, the role of seniority is less clear. An additional two-year term in Congress is only associated with an additional 0.3 earmarks, hardly a practical effect. Chairman of standing committees in Congress do not receive more earmarks than Members who are not chairs. Interestingly, and contrary to some research, I did not find that political vulnerability had a statistically significant effect on the number of earmark awards. Therefore, Members who are considered vulnerable do not receive more earmarks than those who represent safer districts.

I found that the only demographic characteristic that affects earmark awards is the size of the congressional district, implying that Members that represent bigger districts do in fact get more earmarks. Although the effect of district size is statistically significant, the practical significance may be limited given that doubling a congressional district’s size is only associated with 1.24 additional earmarks. In Model 2, the variable measuring district ideology (the percentage of the vote gained by President Obama) is also significant, though only at the 90% level. A one-percentage point increase in the vote gained by President Obama (implying that district became more liberal) is associated with approximately twelve additional earmarks. However when I include political variables in the full model (Model 3), the coefficient on district ideology drops to about five additional earmarks and is no longer significant. This is likely due to the fact that district ideology is highly correlated with the Member’s party affiliation. When party affiliation is removed from the full model, the coefficient on district ideology is positive and statistically significant at the 95% level. Contrary to my hypothesis, the variables measuring
 district need (median household income and unemployment rate) are not significant. This implies
district need does not play a role when determining where earmarks should be awarded.

The importance of the political variables, particularly party, party leadership and a
position on the Appropriations committee can be seen when comparing the three models in Table
4. The demographic model (Model 2) is relatively weak with an R-squared of only 0.02. When
combining both models the R-squared is basically the same (approximately 0.4) for the full
Model as it is for Model 1 (the political model), and the coefficients on the key variables are also
similar, showing that political factors explain the bulk of the model’s variation and are leading
predictors of which Members will receive earmarks.

Results Concerning the Dollar Amount Awarded to a Member

Another way to measure earmarks is using the total dollar amount of earmarks awarded
to each Member. Given the range of this variable (see Table 2), it was logged before the OLS
regression was conducted. Full results are included in Table 5.

Similarly the OLS regression using the dollar amount of earmarks as the dependent
variable, shows that the same three political variables (party affiliation, Appropriations
committee membership and party leadership) also have the greatest impact, however party leader
is slightly less significant (p<0.01) in this model. On average, Democrats receive about 44%
more earmark money than their Republican counterparts and this effect is highly statistically
significant. Members of the Appropriations committee receive about 89% more earmark money
than those who do not sit on the committee, showing that Appropriations committee members
were exceptionally good at “bringing home the bacon” to their districts. Party leaders also
receive more money, bringing home about 89% more than rank-and-file members. These
findings mirror what I found in the model using earmark count as the dependent variable.

Table 5:

**OLS Regression Results (DV: Dollar Amount of Earmarks-logged)**

<table>
<thead>
<tr>
<th></th>
<th>MODEL 1: Political Model</th>
<th>MODEL 2: Demographic Model</th>
<th>MODEL 3: Full Model</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tenure</td>
<td>0.01‡</td>
<td>--</td>
<td>0.02*</td>
</tr>
<tr>
<td></td>
<td>(0.01)</td>
<td>(0.01)</td>
<td></td>
</tr>
<tr>
<td>2008 Percentage of Vote Gained (Member)</td>
<td>-0.42</td>
<td>--</td>
<td>-0.14</td>
</tr>
<tr>
<td></td>
<td>(0.35)</td>
<td>(0.34)</td>
<td></td>
</tr>
<tr>
<td>Party</td>
<td>0.21*</td>
<td>--</td>
<td>0.44***</td>
</tr>
<tr>
<td></td>
<td>(0.10)</td>
<td>(0.10)</td>
<td></td>
</tr>
<tr>
<td>Appropriations Committee Member</td>
<td>0.94***</td>
<td>--</td>
<td>0.89***</td>
</tr>
<tr>
<td></td>
<td>(0.12)</td>
<td>(0.12)</td>
<td></td>
</tr>
<tr>
<td>Appropriations subcommittee chair</td>
<td>0.04</td>
<td>--</td>
<td>-0.03</td>
</tr>
<tr>
<td></td>
<td>(0.23)</td>
<td>(0.20)</td>
<td></td>
</tr>
<tr>
<td>Standing committee chair</td>
<td>-0.05</td>
<td>--</td>
<td>-0.10</td>
</tr>
<tr>
<td></td>
<td>(0.16)</td>
<td>(0.15)</td>
<td></td>
</tr>
<tr>
<td>Party leader</td>
<td>0.86*</td>
<td>--</td>
<td>0.89**</td>
</tr>
<tr>
<td></td>
<td>(0.39)</td>
<td>(0.35)</td>
<td></td>
</tr>
<tr>
<td>2008 Percentage of Vote Gained (President)</td>
<td>--</td>
<td>0.28</td>
<td>-0.39</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(0.43)</td>
<td>(0.36)</td>
</tr>
<tr>
<td>District Size (logged)</td>
<td>--</td>
<td>0.09**</td>
<td>0.10***</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(0.03)</td>
<td>(0.03)</td>
</tr>
<tr>
<td>District Median Household Income</td>
<td>--</td>
<td>0.003</td>
<td>0.003</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(0.004)</td>
<td>(0.004)</td>
</tr>
<tr>
<td>District Unemployment Rate</td>
<td>--</td>
<td>0.0007</td>
<td>-0.004</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(0.02)</td>
<td>(0.02)</td>
</tr>
<tr>
<td>Constant</td>
<td>9.70***</td>
<td>8.82***</td>
<td>8.70***</td>
</tr>
<tr>
<td></td>
<td>(0.22)</td>
<td>(0.57)</td>
<td>(0.59)</td>
</tr>
<tr>
<td>R²</td>
<td>0.18</td>
<td>0.03</td>
<td>0.25</td>
</tr>
<tr>
<td>N</td>
<td>394</td>
<td>395</td>
<td>389</td>
</tr>
</tbody>
</table>

1 All p-scores are computed using a one-tailed test. Robust standard errors are in parentheses.
‡ p<0.1
* p<0.05
**p<0.01
*** p<0.001
Seniority has a statistically significant effect on earmark awards. An additional term of Congress is associated with a 2% increase in the dollar amount awarded, however unlike the model using earmark count, chairing an Appropriations committee actually has a negative effect, though it is not significant. This means that while Members who chair an Appropriations subcommittee may receive more earmarks, they actually don’t receive more money on average than their colleagues who do not have this chairmanship. Similar to the regression looking at the count of earmarks, politically vulnerable Members and Members who chair other standing committees do not receive additional earmark dollars on average.

The demographic variables tell a similar story as they do in the model using earmark counts in that district size is the only variable that has a statistically significant effect on earmark dollars awarded. Doubling the size of a Congressional district is associated with a 10% increase in the amount of money awarded to a district. District ideology is not significant in either the full model (Model 3) or the purely demographic model (Model 2). The coefficients on the variables for district need (unemployment rate and median household income) are also not significant in this model.

Unlike the model using earmarks counts, the model using earmark dollars as the dependent variable shows some interesting differences. The percent increase in dollars awarded based on party increases from 21% in the political model to 44% in the full model. It’s not clear why this change is seen in this model, because looking at the counts of earmarks the coefficient on party stays the same in both the political and full models. However, the coefficients on Appropriations committee membership and party leadership do not change much from Model 1 to the full model, which is similar to the results in Table 4. The coefficient on the only significant
demographic factor, congressional land size, also does not change much when the two models are combined.

Overall the model using dollars as the dependent variable is actually a bit weaker than the model using earmark counts, as using earmark dollars also explains less of the overall variation in the model. In this model, only about 25% of the dollar amounts variation is explained, compared to the 43% explained variation in the number of earmarks awarded.

Re-evaluating the Hypotheses

The results of the regressions conclude that I can reject my null hypothesis (that neither demographic nor political variables) had an effect on earmarks and earmark dollars awarded to a Member. Tenure, party affiliation, appropriations committee members and party leadership all had a significant and positive impact on both the number of earmarks awarded and the dollar amount of earmarks awarded, however political vulnerability and chairmanship of a standing committee did not have an effect on either earmarks or earmark dollars awarded. Amongst the political variables, the greatest magnitude change was seen in the coefficients for party affiliation, Appropriations committee membership and party leadership. For the demographic variables, only congressional district size proved to have a positive and significant effect on earmarks or earmark dollars awarded. I failed to reject the null hypothesis for the other district demographic variables (district ideology, median household income and unemployment rate) in both models

Overall my findings were mostly in line with my expectations, with the major exception being the variables that measured the economic condition of the district. I had initially expected that the economic downturn that took place would lead Members to request more money for their
districts, especially if they represented lower- or middle-income districts. My findings show that there is no significant relationship between district economic condition and earmarks awarded to a Member that represents that district.

**Putting it All Together: Answering My Research Question**

My regressions show some interesting findings, some which were expected and some that were unexpected. My model reveals the importance of political seniority when it comes to securing earmarks, findings that have long been substantiated by the field of research surrounding discretionary spending. It comes as no surprise that on average, being a Democrat means an individual is awarded more earmarks, as previous research has shown that Democrats tend to spend more discretionary funds than their Republican counterparts. It is also well-documented that members of the Appropriations committee receive more earmarks than their colleagues who are not assigned to this committee. Appropriations committee members receive substantially more earmarks than Members who do not have a seat on this committee. This result is likely because it is the Appropriations committee members who are the “gatekeepers” of the Appropriations legislation that funds all discretionary spending. Because earmarks are added to the cover reports of these bills, it is a bit easier for Appropriations members to reward their own districts than for other Members who must make formal requests for earmarks in writing to the members of the Appropriations committee. Lastly, party leadership has a very significant impact on earmark awards. Party leaders tend to be more senior and wield enormous power in the legislature, with majority party leaders setting the agenda. Because party leaders often informally approve earmark requests, again it is not surprising to see that they tend to steer more earmarks to their districts.
**District Need**

One of the most relevant findings was that according to my research, district need plays no role in the awarding of earmarks. Neither variable that I included in my measure to capture “need” (based on the economic condition of the district) was significant, and the coefficients on both unemployment rate and median household income were extremely small, indicating that these variables played very little, if any, role in helping to explain how earmarks were awarded. This was contrary to my hypothesis as I had expected to find a negative relationship between median household income and a positive relationship between unemployment rate. The only significant variable when testing the demographic model was congressional district size, a result also found in Lazarus’ 2010 work. However, although the effect was positive and statistically significant, it didn’t have a large practical effect on the number of earmarks awarded. Doubling the size of a congressional district was associated with only 1.2 additional earmarks and an increase of 10% in terms of dollars awarded.

Overall, my findings do not differ significantly from the conclusions of Jeffery Lazarus, whose model I used as a starting point for my analysis. He also found that party, party leadership and being a member of the Appropriations committee were highly significant. He found that while land size does have a positive statistically significant effect on earmarks awarded, other demographic variables such as district ideology and economic condition (measured by unemployment rate and median household income) do not. However, my findings are different in that I did not find a Member’s political vulnerability to be significant when looking at either the number of earmarks or the dollar amount awarded. Not only was this finding contrary to my hypothesis, but others have found that political vulnerability does matter (Lazarus 2010,
Engstrom & Vanberg 2010). However, this finding is not universal as other studies (Alvarez and Saving 1997) have found no effect. A lack of consensus means that further research is probably necessary to further evaluate the relationships between vulnerability and earmark awards.
There are a number of important policy implications and conclusions which stem from this research project. Perhaps the most important finding is that political factors seem to be the most relevant factors when explaining how earmarks are awarded. By extension, this argument also implies that constituent need does not play a large role in determining how earmarks are awarded. This conclusion is an important one because given all the recent public scrutiny, it points to the fact that any earmark reforms should include a way for earmarks to be awarded (or at least evaluated) using needs-based criteria. It also points to hurdles that reformers will face from those who are deeply entrenched in the current political atmosphere.

These conclusions, coupled with the perceived lack of earmark transparency, have understandably made the public wary of earmarks. They perceive them as wasteful and unnecessary pork barrel projects, when in many cases the money is the only way for a Member to directly benefit his or her community. Most other federal aid that is doled out is done so by block grants or formulaic spending, which may or may not benefit a certain community. However my results show that overall earmark award distribution is mainly influenced by political factors and not district need.

Political power, though less so in the House than in the Senate, tends to reside with those who have served the longest. This positive relationship can be seen in the coefficient on tenure in both earmarks and earmark dollars, though the coefficient isn’t of great magnitude in either regression. Therefore, as expected, as seniority increases earmark awards also increase. Perhaps one of the most surprising findings was that political vulnerability (as measured by the percentage of the vote the Member gained in the 2008 general election) did not have a significant
relationship to earmark. I had been expecting to see a negative relationship between the two variables, indicating that as a Member became more vulnerable, he/she would be awarded more earmarks to hopefully help him/her win the next election more convincingly. This finding has been clearly demonstrated in research by Engstrom & Vanberg and is also implied by some of the research done on distributed federal spending by David Mayhew and Ferejohn. A possible explanation for the insignificant finding could be that as the tide of political opinion began to turn against earmarks in 2009 and 2010, party leaders did not see the value of distributing earmarks to vulnerable Members if it was going to be seen as a liability. In fact, for FY2010 all four minority party leaders, which were Republicans, did not make any earmark requests, perhaps reflecting a line of political attack that could be used in the 2010 elections. By late 2009 (the beginning of FY2010) earmarks were seen as a political liability and Members (particularly those who were in danger of losing their seat or looking to capitalize on the public’s discontent) did not want to be seen requesting them.

A potential explanation for the insignificance of district need could also be that district need simply is not a factor when doling out earmarks awards, and that they are given out for solely political reasons, such as to reward or secure vote, placate an opposing view or to simply reward a Member who has hung around the longest. While there is no quantitative research to support this theory, it is common knowledge in political circles that earmarks are often most frequently given to those who are the “friends” of the Speaker. If he or she is trying to push a difficult vote, she may use earmark awards to help ease the controversial bill’s passage to the Floor. Since all bills, even Appropriations bills’ passage to the Floor is subject to the Speaker’s control, the Speaker may use the privilege of his/her office to remove or add additional earmarks
at a later stage. However, because we cannot control for the fact that someone is a “friend” of the Speaker, we cannot test this theory. The R-squared on each model shows that demographic variables alone do a poor job of explaining earmark variation, indicating that Model 2 is leaving out some crucial variables.

Given that earmarking is inherently political, it is not surprising that FY2010 earmark funds that have yet to be disbursed are already on the chopping block as part of the negotiations between Democrats and Republicans on continuing resolutions to fund the government until a FY2011 budget is formally agreed upon. It is also not surprising that given the watershed elections that took place in fall 2010 in which the Republicans gained back the control of the House, the earmarking process is increasingly frowned upon. In fact, President Obama promised to veto any spending bill that came across his desk that contained earmarks. At the time of this writing, none of the FY2011 appropriations spending bills had been approved, meaning that technically speaking no earmarks had been officially awarded for FY2011.

According to the Taxpayers for Common Sense, a moratorium on earmarks has been declared for the 112th Congress (which began in early January 2011). However, it is probably premature to say that earmarks are dead, given the number and amount of earmarks that were requested of the Appropriations committee for FY2011 (before the moratorium went into effect). In fact, the FY2011 requests compiled by TCS total more than $50 billion and number more than 18,0005 showing that Members aren’t ready to completely abandon earmarks despite the popular outcry urging them to do so. Earmark reformers would do well to keep in mind the power of

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5 The FY2011 earmark request database is found on the TCS website here: http://taxpayer.net/search_by_category.php?action=view&proj_id=4053&category=Earmarks&type=Project
politics when crafting reforms on how to make the process more transparent and to ensure funds are spent on projects that benefit appropriate groups.

**Suggestions for Further Research**

Unfortunately what I cannot control for in this experiment is the relationships between the various House members and their party leaders, which is probably a driving factor behind earmarks awards. Given that earmarks are sometimes awarded by the House leadership to placate Members upset about a particular issue or to secure their vote on a contentious bill means that no researcher may ever be able to fully control for all variables that affect earmarks awards. My research is also limited in that I did not conduct a cross-sectional analysis across different Congresses, because I was limited by the fact that prior to 2007 earmark data was confidential and Members were not required to give their names. One avenue for further research, provided that earmarking is not entirely eliminated would be to compare a Democrat-majority Congress with the new Republican-majority Congress. That way, one could see if party affiliation is actually capturing the true effect of being in the majority, in that there are certain perks that accrue to the majority party and its leaders. My findings show that Democrats are awarded more earmarks, but it is not clear if that happens because they are Democrats or because their party is in the majority.

Another avenue for research would be to conduct a similar analysis of the Senate, to see if the same conclusions about party, Appropriations committee membership and party leadership also apply for Senators. It would also be interesting to see if state need and physical size affected whether or not certain Senators were awarded more earmarks.
CHAPTER SIX: CONCLUSIONS

Overall, my research points to results that for the most part justify research that is currently already in the field. My regression results show that political variables are paramount when it comes to determining earmark awards. District economic condition does not appear to play a role in distributing earmarks. This was contrary to my initial hypothesis since I had expected to find that districts that had high unemployment or low income would receive more earmarks than those that were comparatively well off. This is an important finding because it lends credence to the idea that political strategies play a bigger role in awarding earmarks than does district need. Because the earmarking process is coming under increasing scrutiny, the fact that earmarks are awarded based more on political standing than economic need is an important finding and shows potential ways the earmarking process can be reformed.

This analysis of earmarks also lays bare some of the dynamics of discretionary spending. While I did find that Democrats tend to be awarded more than their Republican counterparts, the biggest winners when it came to earmarks were those Members who sat on the Appropriations Committee. Not only is this finding upheld by previous research, but it is not surprising because Congressional appropriators are essentially the gatekeepers (along with party leaders) on discretionary spending. In order for an appropriations bill (and any earmarks that are included in it) to reach the floor for a vote by the full House, it must muster the approval not only of the approval of the relevant Appropriations subcommittee and full committee, but it must also get tacit approval from the Speaker. These nods of approval are important and help explain why Appropriations committee members (regardless of party) and party leaders tend to get more earmarks. It is simply easier for them to insert their favored earmarks into the bill. A regular
Member has to make a request of an Appropriations committee member in order to have his earmark included in the bill’s text.

Despite their outsized role in the media, Congressional earmarks still account for less than 1% of overall federal spending each year. Yet they continue to attract calls for reform as concerns about the federal budget deficit grow. Many voters and citizen watchdog groups take issue with the fact that once an earmark request is approved by the relevant Appropriation sub-committee chairman, that earmark is included into the bill and almost never receives an up-or-down vote. Furthermore, as Engstrom and Vanberg (2010) found, once the earmark is inserted into the conference report it is unlikely to be removed once the appropriations bill is sent to the other chamber for debate. Therefore many have come to see earmarking as an opaque process that breeds corruption and is purposely shielded from public view.

During the recently concluded 111th Congress, calls for reform became a rallying cry for Republicans eager to trim federal spending. Yet, as described in the literature review, most scholars who have studied the allocation of federal funds by Congress have focused on other types of federal spending such as formulaic or “grant-in-aid” spending. A handful of new studies, taking advantage of recent House rule changes, have specifically examined earmarks and have found that their award follows generally accepted methods of distribution such as awarding to members of party leadership, members of the Appropriations Committee and Democrats. It is my hope that my research expands the dialogue surrounding earmarks awards and why they are made, issues that should be taken into consideration when considering earmark reform proposals.
REFERENCES


