Dependency on Military Base Employment’s Effect on Defense Expenditure Voting in Congress: A BRAC Era Test of the Military Industrial Complex Theory

Kathleen Frawley

Introduction

According to Barry Holman, the Director of Defense Capabilities and Management at the Government Accountability Office, “Considering changes in the national security environment and emerging threats, along with ongoing changes in the United States defense strategy to address these threats and protect our homeland, DoD has come to realize the need to reshape its base structure to more effectively support its military forces” (Holman, 2005). In other words, the Department of Defense had come up with a list of 837 proposed military base cuts, closures and realignments to be placed before the 2005 Base Realignment and Closure (BRAC) Commission for approval. Included in this 2005 BRAC list were a recommended 33 major base closings and 30 major base realignments. The commission estimated that such closings and realignments would create a savings of $5.5 billion beginning in the year 2012 (2005). The wave of BRAC changes were planned in order to “free up funds to better maintain enduring facilities and meet other needs” (2005). However, while this plan allows the federal government to save money, the districts containing the military bases targeted for closure will feel the negative effects. Once the facilities are shut down, district jobs associated with the bases will be lost (Atkinson, 1993). According to Holman, affected communities will also see community infrastructure and even environmental impacts from the discontinued use of the establishments (Holman, 2005).

Based on the notion that Representatives will promote the interests of their own constituents in Congress, the military-industrial complex theory states that a Representative from a district that is more dependent on military spending will be more likely to support defense spending bills than a Representative from a less dependent district (Cobb, 1969 and Cobb, 1976). This
suggests that, in addition to economic, community infrastructure, and environmental impacts, the BRAC Commission base realignments and closures may also have a future political impact. If bases in a district are closed and the district becomes less dependent on military spending, its Representative may be less likely to support defense spending legislation.

Past studies examining this theory, completed mainly in the 1970s and 1980s, failed to find any strong evidence that the relationship predicted by the military-industrial complex exists (Clotfelter, 1970; Ray, 1981; Cobb 1976, etc), however, such behavior has been noted in Congress. For example, former Democratic Representative, Robert Leggett of California, who strongly favored spending cuts, lobbied for local projects such as the Mare Island Naval Shipyard and Travis Airforce Base that would allow defense funds to flow into his district (Ray, 1981). This study will look to see if such behavior exists today by updating these past tests using data from the 2000s. More specifically, this study will explore the relationship between a district’s dependency on military base employment and the Member’s vote on defense appropriations bills for over the past three fiscal years (FY 2004, 2005, 2006). Such an analysis can be used as a very preliminary test of whether there will be political impacts from the BRAC changes. While a more suitable study could be performed in the future using actual closure data and voting records, that data will not be available for several years. Still, an updated test of the military-industrial complex could give us a very early warning of the effects to come.

Theory

In explaining the military-industrial complex theory, James Lindsay stated that “Conventional wisdom holds that constituency benefits drive congressional voting on defense policy” (Lindsay, 1991). As the Department of Defense dumps more money into a district in the form of grants, contracts, or employment opportunities, the members of the district benefit. If citizens benefit from federal spending, it follows that they will be more likely to support that spending, as will their representatives in Congress. Because of this phenomenon, “the essential component
Res Publica

of the military-industrial complex is a high level of defense spending, which can be authorized and appropriated by the Congress” (Cobb, 1976). As defense spending and employment build up in a district, pressure will be placed on Congressmen and the Executive branch, by constituents, to continue to spend more and there will be greater support for aggressive foreign policies that will lead to increased spending (Cobb, 1969). According to the theory, the result of this pressure will be a group of Representatives that is more willing to vote for spending and militant policies in Congress (1969). For all policy and spending areas, Members of Congress must vote in ways that will support the “demands, interests, and economic involvements of the representative’s own constituents” (Ray, 1981). In other words, the military-industrial complex is based on a more general “need to ‘please the home-folks’” (1981).

While Members of Congress are usually responsive to the demands of the main parts of their constituencies and vote based on their constituencies’ characteristics, because they depend on their Election Day votes, constituents are also dependent on their Representatives who have the power to vote on policies and appropriations (Cobb, 1976). When a group of constituencies that relies on or supports a policy or federal expenditure, develops, a political force made up of the Representatives from these constituencies will also form to promote that policy or appropriation bill (Ray, 1981). On the other hand, there will also be an opposing force made up of those Members of Congress who represent districts that do not greatly benefit from or depend on such a policy or spending bill. More specifically, if Members from defense spending-dependent districts are strong advocates of defense appropriations, then Members from districts that are not dependent on defense spending will not be strong advocates of defense appropriations. Therefore, the military-industrial complex theory tells us that there should be a relationship between a district’s dependency on defense spending in the form of grants, contracts or employment and the Representative’s votes on defense appropriations bills.

Past studies approach the test of this hypothesis in various ways. Stephen Cobb (1969, 1976) examined the military
employment aspect of defense expenditures. While the data used is rather outdated, Cobb, in 1969, hypothesized that, “a Congressman from a district dependent upon a defense industry or military base will be more likely than his nondependent colleague to vote for defense appropriations measures because it will be in his political interest to stimulate the economy of the area he represents” (Cobb, 1969). Cobb tested this hypothesis by using two measures – “defense involvement” and “defense dependency” (1969). While “defense involvement” represented contracts granted to the district, the “defense dependency” variable measured dependency as the total number of jobs generated by defense spending divided by the total state work force (1969). However, Cobb found little evidence of a relationship between dependency and voting behavior and that stronger relationships exist between a Congressman’s voting behavior and his party or region (1969).

In 1976, Cobb hypothesized that, “A member of the United States House of Representatives who represents a district economically dependent on defense spending will be more likely to vote for... measures which serve to retain high levels of defense spending than will his colleagues who represent districts not dependent upon defense expenditures” (Cobb, 1976). In testing this hypothesis, Cobb used military and civilian defense payrolls as a percentage of total income in a district as his independent variable (1976). He found that, while region and party were the strongest factors in determining a Member’s vote, there was some evidence of a relationship between these percentages and votes among the more senior and therefore more powerful Representatives (1976).

In a more recent effort to find support for the military-industrial complex theory, James Lindsay (1991) narrowed down defense spending issues to a very specific case. He examined the Strategic Defense Initiative (SDI) and the effects of district benefits from defense spending on support for “weapons acquisition” (1991). While Lindsay still found his district benefit variable to be insignificant, he explained the failure to support the military-industrial complex theory as a result of weapons issues being viewed differently than other spending areas (1991).
According to his study, "weapons programs have clear implications for national security and members feel some responsibility for promoting the common good" (1991). He goes on to explain that, although support for weapons programs does not seem to be influenced by defense spending within a district, past studies have shown that the military-industrial complex theory does hold for other aspects of military spending, such as military bases (1991).

While previous studies have found only a few cases of evidence that support the military-industrial complex theory, it is still possible that a relationship will be found in an updated test. As Lindsay explained in his conclusion, just because the hypothesis was not supported in past tests does not mean that it does not hold true for other defense spending issues (Lindsay, 1991). Most of the studies performed in the past used data from the period before the Vietnam War when there was not a strong opposition to defense spending. Also, district level data were not available at the time, so the authors of past studies had to create them own by aggregating county and city level or state and town level data (Ray, 1981 and Lindsay, 1991). This study will add to these previous works by narrowing Cobb's (1969) "defense dependency" variable down to dependency on military base employment in order to test the hypothesis that Members of Congress from districts that are more dependent on military base employment will be more likely to support military spending bills than those from less dependent districts.

Model

In order to determine the effect of a district's dependency on military base employment on its member's defense expenditure voting, a model must be estimated for congressional voting that includes other constituency characteristics and additional influences on a Member's vote. This model will use data for the House of Representatives and include variables deemed significant by past literature – party, region, district partisanship, and membership in a defense related committee.
The House of Representatives

The House of Representatives will be used in this study instead of the Senate for several reasons. First of all, there is a stronger link between constituency opinion and representative voting behavior in the House (Cobb, 1969). Members of the House are subject to shorter term limits. A Member must pay close attention to the wants and needs of his constituents if he expects to get re-elected every two years (1969). In addition, the congressional district that comprises a Representative's constituency is generally smaller and more homogenous than a state as a whole, which is represented in its entirety by a Senator. We can see differences in dependency on military base employment between congressional districts that are within the same state (Lindsay, 1991). Congressmen were also chosen over Senators in this study because of the larger role they play in appropriating funds. Members of the House of Representatives are more likely to be able to determine where defense spending will go by placing earmarks in the appropriations bills for specific expenditures and locations (Cobb, 1969). A final reason for using the House of Representatives is the sheer size. With the House, we can look at a sample of 435 cases; the Senate presents only 50 constituencies with 100 Senators. The larger number of districts allows a greater amount of variation between the cases to appear (1969).

Voting Model Control Variables

Party

Party must be included as a control variable in the congressional voting model because of the strong influence it can have on the way a Congressman votes. Past studies have found that many Representatives consult party views when determining how they will vote on certain issues. In a typical year, as many as two-thirds of votes are "party unity votes," or votes in which a majority of Republicans oppose a majority of Democrats. As many as one in ten votes (and probably even more today) result in 90% of one party opposing 90% of the other party (Ornstein, Mann, & Malbin, 1998). Congressional voting studies have also found that a legislator will usually vote along party lines in four out of
every five votes (Davidson & Oleszek, 2000). Party has come to play an even stronger role in Congressional voting decisions today than in the past. The Republican Party has become more uniformly conservative since Southern conservatives began voting for Republican candidates. In his research, David W. Rhode (1992) found that this “decline in archconservative Democrats” has led to greater cohesion within parties and the way they vote. Finally, parties promote partisanship in Congress through their activities. New Member orientation is run by each party, committee assignments are granted by parties, Members form partisan “class clubs,” and party leadership places pressure on its Members to vote along party lines (Norpoth, 1976 and Kondracke, 1995). All of these factors combine to make party an important variable in determining how a Congressman votes and therefore a variable that must be controlled for in the model.

Region

With defense issues especially, region can play a significant role in how a Member votes. Along with party, Cobb found region to be the other important factor in determining how a Congressman will vote on defense spending (Cobb, 1969). The region that is focused on in this model is the South. We find a more jingoistic attitude in the South that would promote more militaristic policies and higher defense spending regardless of the military spending dependency in the area (Atkinson, 1993 and Cobb, 1969). The strength of the hawkish attitudes and large number of military enlistees that comes from the South have even led some studies to call this region “more military” than any other (Bachman, 2000). In order to control for the support for military spending that may come simply from the militaristic attitude of the South rather than its military base employment dependency, a “South” (eleven former Confederate States plus Oklahoma) variable will be included in the model.

District Partisanship

District partisanship or ideology influences how a Member votes because it plays such a strong role in which candidate gets elected to Congress. Erikson and Wright (1997) explain that a
Member can “enhance his or her electoral chances” by representing the “constituency’s prevailing [ideological] view”. Alternatively, if a candidate takes up an extremist ideological stance, “the constituency can enhance its representation by electing the opponent” (1997). What this process results in, is “much higher levels of policy representation than most observers would expect.” Erikson and Wright illustrate this with a high correlation between a district’s vote for President (district partisanship) and its Member’s behavior in roll call votes in Congress (1997). Districts elect Members whose votes will be influenced by the constituents’ partisanship or ideology. While this effect can be measured in a variety of ways, this study will use the vote for President Bush in the 2000 Presidential Election as a determinant of district partisanship.

Committee Membership

Membership in a defense-related committee must be included in the voting model because of the power being on one of these committees can give to a Member. If a Congressman is part of the Armed Services Committee or the Defense or Military Construction (now part of Military Quality of Life) Appropriations Subcommittees, he will play a role in creating defense spending bills and is more likely to get earmarks in the bills. This means more defense spending will flow into his district and he will offer greater support for the bills. The influence committee membership has on a Member’s vote will be controlled for in the model with a dummy variable that indicates whether or not he is on one of the committees mentioned above.

While the model includes several control variables that have been found to influence congressional voting decisions, it does not contain every possible variable that could influence a Member’s decisions. Davidson and Oleszek noted in their review that, “Legislative voting models, no matter how elegant, cannot capture the full range of factors shaping decisions”.

Res Publica
Independent Variable

Originally, the main independent variable, military base employment dependency, was to be measured as the ratio of military base employees in a district to the total district work force. However, district work force data were unavailable. As an alternative, the dependency is measured by dividing the number of military base employees in a district by the total population of the district. The percentages of the population over 64 and under 18 will then be included to control for those who have not yet entered the work force and those who have exited the work force into retirement. Once this is done, what we have, in essence, is still the ratio of military base employees to total work force in each district. It is expected that larger ratios will be positively related to support for defense spending bills.

Dependent Variable

The dependent variable in the model measures support for defense spending bills. Because the study looks to update past tests of the military industrial complex theory, yet avoid complications from redistricting, initial House votes on defense appropriations bills from Fiscal Years 2004 through 2006 will be used. Support will be determined by a vote for the bill. Not voting at all expresses no support for the bill and therefore will be included with those who voted against the spending bill. Putting the model together, we get the following linear equation:

\[
\text{DefVote} = \alpha + \beta_1(\text{MilEmp}) + \beta_2(\text{Party}) + \beta_3(\text{South}) + \beta_4(\text{DistPartisan}) + \beta_5(\text{CommMem}) + \beta_6(\text{Over64}) + \beta_7(\text{under18}) + \mu
\]

The data used to run an OLS regression of this equation for each fiscal year come from *Politics in America* and the *Almanac of American Politics*. Both of these sources produce district level data so that aggregates do not need to be created from state or municipal level numbers. Predictions for the signs on each of the regression coefficients are listed in Table 1. The main focus will be in the “MilEmp” variable and its effect on defense spending voting.
Table 1: Variables, Definitions and Predicted Signs

<table>
<thead>
<tr>
<th>Variable</th>
<th>Defined</th>
<th>Expected Sign</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dependent</td>
<td></td>
<td></td>
</tr>
<tr>
<td>DefVote</td>
<td>Vote on FY2004-2006 Defense Appropriations Bills (1=yes 0=no)</td>
<td></td>
</tr>
<tr>
<td>Independent</td>
<td></td>
<td></td>
</tr>
<tr>
<td>MilEmp</td>
<td>Number of military and civilians employed at military bases in the district divided by the total population of the district</td>
<td>+</td>
</tr>
<tr>
<td>Party</td>
<td>Party of Member from district (0=Dem 1=Rep)</td>
<td>+</td>
</tr>
<tr>
<td>South</td>
<td>Whether region is in the South or not; former Confederate States plus Oklahoma (1=South 0=all other)</td>
<td>+</td>
</tr>
<tr>
<td>DistPart</td>
<td>District partisanship as measured by the percent Republican vote in the 2000 Presidential election</td>
<td>+</td>
</tr>
<tr>
<td>CommnMem</td>
<td>Whether or not Representative from district is member of Armed Services Committee or Defense, MilCon or MilQual Appropriations Subcommittee (1=member 0=not)</td>
<td>+</td>
</tr>
<tr>
<td>Over64</td>
<td>Percent of total district population over age 64</td>
<td>?</td>
</tr>
<tr>
<td>Under18</td>
<td>Percent of total district population under age 18</td>
<td>?</td>
</tr>
</tbody>
</table>

Results

Looking at the regression results in Table 2, we see that while the military-industrial complex theory tells us that a Congressional district’s dependency on military base employment should affect the representative’s vote on defense spending bills, statistics show that it does not.
Table 2: Unstandardized Regression Coefficients for FY2004-2006
(t-statistics in parentheses)

<table>
<thead>
<tr>
<th>Variable</th>
<th>FY 2004</th>
<th>FY 2005</th>
<th>FY 2006</th>
</tr>
</thead>
<tbody>
<tr>
<td>MilEmp</td>
<td>-0.435</td>
<td>0.240</td>
<td>-0.203</td>
</tr>
<tr>
<td></td>
<td>(-0.830)</td>
<td>(0.492)</td>
<td>(-0.391)</td>
</tr>
<tr>
<td></td>
<td><strong>.003</strong></td>
<td><strong>.005</strong></td>
<td><strong>.004</strong></td>
</tr>
<tr>
<td></td>
<td>(2.586)</td>
<td>(4.041)</td>
<td>(3.238)</td>
</tr>
<tr>
<td>Bush2000</td>
<td>0.034</td>
<td>-0.006</td>
<td>-0.006</td>
</tr>
<tr>
<td></td>
<td>(-0.942)</td>
<td>(-1.167)</td>
<td>(-1.166)</td>
</tr>
<tr>
<td>Party</td>
<td>-0.021</td>
<td>-0.063*</td>
<td>-0.057</td>
</tr>
<tr>
<td></td>
<td>(-0.710)</td>
<td>(-2.273)</td>
<td>(-1.931)</td>
</tr>
<tr>
<td>South</td>
<td>0.052</td>
<td>0.057</td>
<td>0.022</td>
</tr>
<tr>
<td></td>
<td>(1.543)</td>
<td>(1.801)</td>
<td>(0.855)</td>
</tr>
<tr>
<td>Committee</td>
<td>-0.001</td>
<td>0.000</td>
<td>0.004</td>
</tr>
<tr>
<td>under18</td>
<td>(-.119)</td>
<td>(-.095)</td>
<td>(.006)</td>
</tr>
<tr>
<td>over64</td>
<td>.003</td>
<td>.003</td>
<td>.000</td>
</tr>
<tr>
<td></td>
<td>(.571)</td>
<td>(.697)</td>
<td>(.047)</td>
</tr>
<tr>
<td>Adj. R²</td>
<td>0.045</td>
<td>0.069</td>
<td>0.037</td>
</tr>
<tr>
<td>n</td>
<td>429</td>
<td>429</td>
<td>428</td>
</tr>
</tbody>
</table>

***indicates significance at the .001 level
** indicates significance at the .01 level
* indicates significance at the .05 level

The first major result to note in Table 2, is that the “MilEmp” variable is insignificant for each of the fiscal year models. In fact, the variable is not even close to being significant, with sig. values of .407, .623, and .696 for the years 2004-2006 respectively. This means that, after controlling for district partisanship, member’s party, region, and committee assignment, dependency on military base employment has no effect on how a district’s Member votes on defense appropriations bills. While this finding does not support the hypothesis, it does seem to support most of Lindsay’s and Cobb’s findings in their previous research. In their studies, Lindsay and Cobb both found little evidence of military spending dependency having an effect on a Member’s vote on defense spending bills. When looking at the “MilEmp” variable in isolation, we might conclude, as they did, that the failure to find a relationship in this study may be attributed to the
fact that defense spending in one district can benefit citizens of the surrounding districts. This would cause Members to support defense spending bills even though the funds are not flowing directly into their districts, consistent with Lindsay (1991). In this case, it is possible that many of the jobs created by a military base in one district are filled by citizens commuting from a neighboring district, creating a core of support for defense spending bills outside of the district containing the base. In addition, Cobb (1969) offers that the dependency on military spending may not affect votes on defense spending bills because, “A widespread belief in the importance of defense production to the health of the economy helps ensure the acceptance of high defense budgets.” Whatever the reason, this result gives a very early indication that the BRAC Commission’s actions will not have a political impact.

Although the “MilEmp” variable results tend to support the findings of Cobb and Lindsay, the variable that is actually influencing Members’ votes differs here. In each of his studies, Cobb found that most of the variance in voting was being explained by the party and region of the Member (1969, 1976). In Table 2, however, we see that, contrary to his findings, the one variable that shows up significant in every model is district partisanship as measured by a district’s vote for President Bush in the 2000 election. While the low adjusted R² values for each fiscal year (.045, .069, and .037) tell us that district partisanship is not explaining very much of the variance in Members’ votes on defense spending bills, the standardized beta values of .282, .235, and .183, for fiscal years 2004-2006 respectively, are higher than those for any other variable, telling us that the effect of district partisanship is trumping that of military dependency and even party and region.

Though the reason why district partisanship is affecting Members’ votes on defense spending bills over party and region is not apparent, this finding does offer an alternative explanation for the insignificance of the “MilEmp” variable. It appears that rather than allowing a specific constituency characteristic to influence their votes, Members are voting based on their constituents’ ideological views as a whole. If a Member is disregarding
constituency characteristics, military employment dependency will not be significant. The effect of district partisanship here also supports Erikson and Wright's position that, while, "The average voter knows little about his or her representative... Elections bring about much higher levels of representation than most observers would expect based on the low levels of citizen awareness" (Erikson & Wright, 1997).

Conclusion

While the military-industrial complex theory suggests that a dependency on military base employment effects how a Congressman votes on defense spending bills, the results of this study show that such a specific constituency characteristic does not influence voting. Instead, district partisanship or the overall ideological views of a constituency play the biggest role in determining how a Representative votes on defense spending issues. The failure to find a relationship between defense spending dependency and how a Representative votes on defense spending bills gives us a very early indication that the BRAC Commission's base realignments and closures will not have political implications in terms of reduced support for defense spending and it will be interesting to see if future tests using specific closure and voting data play out the same way.

More importantly, however, the significance that was found for district partisanship in defense spending voting decisions means that constituents' ideological views are being manifested in their Representatives' voting behaviors in Congress – more so than the constituency's characteristics. It also means that, at least in this case, despite the current power and cohesion of political parties, they are having no bearing on how a member votes. Future studies should explore the influence of district partisanship compared to party, region and constituency characteristics in other issue areas as well. By adding such findings to the conclusions here, we would be able to see if district partisanship is now the major player in all Congressional votes or if recent military spending happens to be a very unique case.
Works Cited


All Data Taken From:


