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Do Per Capita Expenditures Affect the Quality of State Government Management?

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<table>
<thead>
<tr>
<th>Table of Contents</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Executive Summary</td>
<td>3</td>
</tr>
<tr>
<td>Introduction</td>
<td>4</td>
</tr>
<tr>
<td>Problem Statement</td>
<td>7</td>
</tr>
<tr>
<td>Research Question</td>
<td>8</td>
</tr>
<tr>
<td>Literature Review</td>
<td>11</td>
</tr>
<tr>
<td>Methodology</td>
<td>15</td>
</tr>
<tr>
<td>Findings</td>
<td>19</td>
</tr>
<tr>
<td>Recommendation</td>
<td>25</td>
</tr>
<tr>
<td>Conclusions</td>
<td>26</td>
</tr>
<tr>
<td>Limitations and future endeavors</td>
<td>26</td>
</tr>
<tr>
<td>References</td>
<td>28</td>
</tr>
<tr>
<td>Appendix</td>
<td>32</td>
</tr>
</tbody>
</table>
Executive Summary

In recent years, an increase in government accountability has come about in American society. The debate began about the consumer business model of government, with citizens demanding results, not just output, because most people viewed government as inefficient and ineffective. As a response, Vice President Gore National Performance Review endorsed the Government Performance and Results Act (1993) which required federal agencies to have “objective, quantifiable and measurable” goals into the federal government budget process (Kravchuk and Schack, 1996, p.348).

This, in turn, led the way to the Government Performance Project (GPP), a study orchestrated by the Governing magazine, in cooperation with several universities and journalists. Researchers formulated a set of criteria to evaluate state governments on performance and, more specifically, quality of management. States would have a comprehensive peer comparison which the researchers felt would help managers improve management, which in turn would lead to better results.

While the measurement of government performance appears to be a relatively recent phenomenon, in fact, a literature review reveals it has some old roots. In the early twentieth century, the New York Bureau of Municipal Research collected data in an attempt to promote the measurement of government performance (Williams, 2003, p.2). From there, subsets of variables which potentially affect government performance have been examined by a host of researchers. These variables include social capital, political affiliations, budget priorities, size of government, and management.

Due to the growing interest in performance measurement use, I have examined how the GPP may be influenced by per capita expenditures. I have expanded on a 2002 study performed by Steve Knack of the World Bank. More specifically, does a state that spends more have a higher quality management, thus producing a higher grade? I have used independent variables from other studies as controls.

For my analysis, I have used both GPP data and U.S. Census Bureau financial and demographic information to estimate a model relating the GPP measures of state government management quality to the characteristics of the state. Most importantly, I examined the effect of state expenditures in a number of alternative government functions on quality of management and found no correlation between expenditures and these performance measures. However, control variables, such as political affiliations of state population, and demographic information do relate to the grades.

Conclusions can be formed that expenditures and financial data were statistically significantly weakly related to the Government Performance Project grade. A more substantial implication of this study is that state can be in deficit in many socioeconomic and financial areas and yet still function at a high level of management performance.
Introduction

Politicians and pundits have tried to expose the inefficiencies of government. Especially in the United States, political parties campaign on these deficiencies and promise to run government more efficiently without cutting services to their constituents. The public seems to want government efficiency but it appears citizens perceive little evidence that governments are actually efficient. Lack of trust in government is one of the main reasons citizens perceive inefficiencies. (Bouckaret and Van de Walle, 2001).

Melkers & Wiloughby’s research suggested some ideas in bridging the gap:

• Government must be driven by citizen desires and needs, not by government rules and regulations.

• Taxpayers will pay for results, not effects

• Government must better communicate progress toward goals and objectives

(Melkers & Wiloughby, 1998, pg 2)

As Melkers and Wiloughby suggest, communication is important, but how do you show results to taxpayers? One way is the adoption of performance-based measures. By 1992, one-third of U.S. counties used performance-based measurement and one-fifth reported high usage (Hatry and Wholey, 1992, p. 1). Also, both the executive and legislative branches of state and federal governments are users of the measurements. Melkers and Wiloughby explain that, “Executive and legislative budget players are increasingly alike in their consumption of performance data and program analysis for purposes of budgetary decision making” (Melkers & Wiloughby, 1998, pg 2). States use performance-based measures extensively. “Thirty one states
have legislation that requires performance-based budgeting and thirty two percent have some form of performance-based budget instituted because of administrative requirements such as through budget instruments or guidelines and six of the thirty one states use benchmarks” (Melkers & Wiloughby, 1998, pg 2). Performance-based budgeting varies across states, but the most used involves the identification of performance indicators (Hackbart and Jordan, 1999, p. 9).

The issues of performance-based measures as found by Hatry and Wholey (1992) include:

- Outcome vs. impact
- Validity and reliability issues
- Acceptable performance levels
- Cost
- Reporting fears
- Lack of utility for program managers

The key concerns for each issue are as follows: Is the program really affecting the outcome or are external factors? Are there enough valid indicators of program quality to avoid production of misleading information? Zero defects may not be a feasible performance based level but what is? Performance-based monitoring can be costly; the information may not always be accessible. The information may then be used against program managers by elected officials, interest groups, and the media. Lastly, the information may not be useful to the program managers and too aggregated for their specific responsibility.

The main goal of performance-based measurements in government is accountability, but this can be broken down into various purposes suggested by Behn. “As part of their overall measurement strategy, the leaders of public agencies can use
performance management to (1) evaluate (2) control (3) budget (4) motivate (5) promote (6) celebrate (7) learn and (8) improve” (Behn, 2003, p.1). Then citizens use this information to judge their government by four criteria: instrumental, bureaucratic, contingency, and symbols and values (Bouckaert and Van de Walle, 2001, p.23).

Local governments especially are pressured to perform because of the close proximity to the individual citizens. The reasons most listed by local governments for the use of performance measures are citizen demands, pressure from elected officials, and to make better management decisions. Particularly, local governments more often use benchmarking even though there is little citizen participation in the process. Only three percent of municipalities have citizens involved in reporting but sixty to eighty percent use performance-based budgeting. (Poister and Streib, 1999, p. 3)

One of the first places government became accountable to its citizens was at the New York Bureau of Municipal Research, an incorporated organization. “The bureau stamped out waste, connected to academics, exported information to other communities, and promoted its ideas to government officials, government agencies, and the federal government” (Williams, 2003, p.1).

There are ways other than performance-based measurements which hold public officials accountable, such as elections, legal actions, and external audits. In this paper, my primary focus is the effect of expenditures levels on the quality of management in government. If the level of quality goes up due to expenditures then the outcomes associated with that higher level of management will also be better. It is a domino effect, if A causes B, and B causes C, then A and C also have a causal relationship.
**Problem Statement**

Much attention has been given to the performance-based measurements movement. It would be interesting to examine if money makes a difference in the quality of management of states and leads to an effective government. For decades, there has been a focus on procedures which lead to outcomes. There has also been a belief that leadership and good management are key components of whether a program or policy is successful. In 2004, this was proved empirically by Ingraham and Moynihan using a model in which the dependent variable was decision making and the independent variables concerned leadership styles. Extreme examples of this may be New York Mayor Rudolph Gianni’s leadership during 9-11 (when leadership works well) and the delayed response to Hurricane Katrina by the Federal Emergency Management Agency (when leadership works poorly). However, not much has been done on how public outlays play a part in the overall performance of a state.

The Government Performance Project (GPP), a research study orchestrated by *Governing* magazine, makes this assertion about the link of management and performance, “To a large extent, policy outcomes depend on the quality of the underlying management systems – child welfare systems fail if the state doesn't have an appropriate employee recruitment and training system; getting a drivers license is a nightmare if the information systems are not up to date; classroom sizes grow as unexpected budget shortfalls cause teachers to be laid off. (GPP website, 2005)”

Education in the United States is one major area that has been studied concerning expenditures and performance outcomes. In 1994, Hedges, Lane, and
Greenwald found that total expenditures do affect outcomes if allocated to the right areas (global resources and other input costs). They completed a meta analysis using Hanushek’s 1989 data. Another study completed by Jaggia and Vachharajani in 2004 of Texas schools also suggests direct expenditures are linked to student performance when those expenditures are for teacher instruction. Nikolova comments in her capstone literature review, “The most exhaustive and famous research on this topic is a study by Card and Krueger (1992). The authors estimate the rate of return to additional schooling for men born between 1920 and 1949, concluding that cost and quality of educational inputs on the one hand, and the gain in earnings attributable to educational attainment on the other, are related in a meaningful manner.” Therefore, given education spending is a part of overall government spending, an exploration into effects of expenditures on management and consequently into performance is warranted.

As noted above by the GPP citation, managers are key players in programs. Expenditures are also key in program outcomes, therefore public outlays must in some way lead to better managers. Coffe and Greys note in their study, “financial management constitutes a crucial part of the government’s functioning and good performance in this area is at the basis of future well-being.” (Coffe and Greys, 2005, p.6) In this paper, I am asserting that good financial management is not only using resources wisely but making sure you have enough resources to allocate.

**Research Question**

My research question is do state expenditures affect the quality of state management? To set the stage for my research question, an article by Jacoby and
Schneider examines the history of expenditures effect on government and finds, “Expenditure commitments are often the targets of those who would influence government, such as parties and interest groups, as well as individual citizens (Raimondo 1996: Winters 1999). All astute observers of the political system know that adequate financing is a necessary precondition for any meaningful policy activity (Garand and Hendrick 1991). Therefore, public expenditures have a profound effect on the ways that state governments ultimately address issues and ameliorate social problems” (Jacoby and Schneider, 2001, p. 546).

My capstone assesses the effects of expenditures and other characteristics of the state on the quality of management. What impact does money have on quality of management and therefore performance? Overall, I think it is important to look at the underlying assumption that if money is put into infrastructure, information, and people, then quality of management will be better. Therefore, my hypothesis is: the more resources the better the quality of management.

To complete my analysis I used the grades assigned by the Government Performance Project (GPP) as an indicator of good management. I factored in socio-demographic, and financial information of the state to estimate what could be correlated with the grade. These factors include what other studies have looked at: political factors and social capital factors. As a side note, Kentucky did well in the GPP assessment, scoring a B+ overall. The some of the reasons cited were last year’s increase in the Commonwealth’s “rainy day fund” and the Kentucky Transportation Cabinet’s new “one stop shop” which allows Kentuckians to purchase any type of vehicle registration at one location.
My program theory for this project is: more expenditure lead to more resources at the disposal of management which, in turn, causes quality of management to increase which will then lead to better performance and a more effective government.

My logic model for this theory includes a whole host of assumptions which must be made for the program theory to hold. I assume throughout my model that a state has the ability to increase its expenditures. I also assume that if there is more money, money will be spent on not only public program delivery but also the administration costs. Both will lead to better state management and management systems. As noted in this paper, good management can lead to better outcomes and performance.

Later, I will expand on how expenditures priorities for state budget officials reflect the preferences of those officials. It would also be logical to assume your preferences can be connected to managerial styles. If you prefer one program over another you will dedicate more of your time and resources in seeing that program succeed. Managerial capacity is also directly linked to government performance; therefore expenditures must be linked to the managerial capacity and performance.

The quality of management is key in the performance of a program. How people choose to lead and how these leaders then make decisions have a direct impact on organization. The leadership of an agency can make the performance of the agency weak or strong. In this study, I wanted to piece together all these factors and find if my assumptions held true. A casual relationship may exist been expenditures and the
managerial capacity of state government and if so then there is a relationship between performance.

**Literature Review**

All citizens, regardless of the form of government want maximized results from their taxation. This has stemmed back before the twentieth century, before the New York Bureau of Municipal Research (BMR), and probably before a government was called a government. This preoccupation with return on investment is as old as time. There has been study after study on performance-based governing. For my purposes, I began in 1904 with the Schachter’s study on Dr. William H. Allen, Henry Bruere, and Fredrick Cleveland at the BMR which focused on citizen education and performance-based reporting of all financial matters by compiling transaction data (Schachter, 1995 pg. 3).

Four lessons we can take from BMR:

1. Measurement for a practical use
2. Effective measurement is both efficient and effective
3. Be aware of political constraints but get support for long term
4. Focus not only on outcomes but inputs

(Williams, 2003, p.12)

Before one can jump empirically into the notion of performance-based government we must look at two models of government: are we reinventing government or reinventing the idea of a citizen. Another way to approach this is a consumer-business model or an owner-business model. Are citizens consumers of government, meaning they can just pick and choose their services and find alternate
sources for roads, schools and defense if the government does not please them, or is
government more a collective ownership in which the citizens work through the
difficult times to ensure that the government functions properly? Hindy Schachter
makes the argument for an owner-citizen model in which the citizen must be educated
from an early age to actively watch the government’s actions (Schachter, 1995, pg.8).

The study of performance-based management is very extensive. Coggburn and
Schneider describe the history of the model I am drawing from, “Similar positive
results have been obtained by researchers using the concept of “managerial capacity”.
Donahue, Selden and Ingraham (2000) find a link between local governments’ human
management capacity and the performance of its human resources. Similarly,
O’Leary and Yandle (2000) find a relationship between state institutional capacity
and state environmental dispute resolution programs: States with greater institutional
capacity tend to have stronger environmental dispute resolution programs. Coggburn
and Schneider go on to comment, “Although the substantive areas addressed vary, as
do the specific administrative and managerial features examined, findings generally
point to the importance of public management to government performance”
(Coggburn and Schneider, 2003, pg 10)

Another factor that has been addressed in government performance is social
capital: the positive externalities derived from belonging to a group which includes
civic engagement and social connectedness. Robert Putnam first explored this
concept in Democracy at Work; the book was derived from his research studying
Italian municipalities. During this time, Putnam compared the North and South
regions, looking at the development of social capital in each region. The interesting
part of the research is that the North appeared to have a higher level of civic
genagement because of the long history of having city-state government whereas the
South region had a period of authoritarian style government beginning in 900 AD.
(Fisher, 1995) Later in 1995, Putnam explored the decline of social capital in
America and created a social capital index derived from answers given on the Life
Alone*, his research examined social trust in government, the frequency of visiting
with friends, club meeting attendance, and membership in groups interested in a
better government. One interesting fact he found was Americans bowl more than
ever but not in leagues where interacting builds social capital.

Steve Knack (2002) created a model using Robert Putnam’s research in 1993
as factors associated with government performance. Knack specifically looked at
GPP grades as the dependent variable and then used both Robert Putnam’s
measurements and found more recent data from the United States Census Bureau to
calculate measurements for volunteering, and census response. Knack used social trust,
index of informal socializing, attendance at club meetings, membership in good
government groups, volunteering and census response as independent variables.
Overall, with constants added, income and education variables are significant when
looking at social capital. The financial management GPP grade had significance with
volunteering, census response, and good government members. The capital
management grade was significantly correlated with the volunteering census response
and good government members. The human resources grade correlates with census
response and social trust.
Schneider and Coggburn used the grades as an independent variable along with state-level public opinion, interest group (number of state employee per capita), state budget priorities, and state government ideology. The dependent variable: state budget priorities were derived from an earlier piece of research where Schnedier collaborated with Jacoby. “Specifically, management capacity is directly related to state policy priorities: It has a profound influence on the state official’s allocation decisions. From an analytical standpoint, this suggests that management capacity affects state policy in distinct ways—both in establishing state priorities and (as suggested by other research) in shaping program outcomes” (Coggburn and Schneider, 2003, p. 6). They then draw this conclusion, “In short, we assert that governments with more management capacity have the ability to perform better than governments with less management capacity, all else being equal.” (Coggburn and Schneider, 2003, p. 4) Schnieder and Jacoby used a spatial proximity model and concentrated on how states divided up their available pools of money to reach their state priorities model. Coggburn and Schnder also comment in the study that “the strong relationships observed between citizen and state government ideology measures and state policy priorities generally supports earlier research depicting the importance of political factors, to state policy outputs studied by Jacoby and Schneider 2001, Leighley and Hill, and Wright, Erikson, and McIver 1987” (Coggburn and Schneider, 2003, p. 4).

Lastly, Moynihan and Ingraham explored the model of decision making (dependent variable) and the effects political leadership, central agency leadership, citizen demand, politics, and professionalism have on it to construct a model of
performance-information use. They go on to confirm decision making does make a difference. (Ingraham and Moynihan, 2004 p.1). Ingraham goes on to expand in *Integration of Management Systems* that leadership is key in managing for results but other factors need to be addressed.

**Methodology**

I looked at the GPP grade as a measurement of effective management for state government. In effect, the grades are a set of benchmarks or criteria that I used to explain the effectiveness of government management using per capita expenditures for each state, along with political affiliation, social capital, gross state product, and state demographic information. This information is measurable and obtainable for all fifty states. This grade will be my dependent variable.

The GPP is an exploration into the quality of management of state governments. This endeavor was started by the Maxwell School of Syracuse University and *Governing* magazine. They examined several factors which include management of people, information, infrastructure, and money. GPP has looked at both states and cities. Started in 1999 and funded by the Pew Charitable Trusts, the project most recently decided to focus more on certain outcomes of management rather than just reporting. Originally, they concentrated more on capital management, information technology, financial management, and managing for results. Now, they have streamlined their criteria. Using information that is mostly self-reported in surveys or on websites, the GPP team would formally assess what closely fits the criteria.
The items assessed by the GPP are too extensive to list here but I will highlight the different indicators in each segment.

**People**

- The state regularly conducts and updates a thorough analysis of its human resource needs.
- The state acquires the employee it needs.
- The state retains a skilled workforce.
- The state develops its workforce.
- The state manages its workforce.
- The state manages its workforce performance programs effectively.

**Money**

- Long-term: The state uses a long term perspective to make decisions.
- Budget Process: The state’s budget process is transparent and easy to follow.
- Structural Balance: The state’s financial management activities support a structural balance between ongoing revenues and expenditures.
- Contracting and Purchasing: The state effectively manages procurement activities.
- Financial Controls and Reporting: The state systematically assesses the effectiveness of its financial operations and management practices.

**Information**

- The state actively focuses on future policy and collecting information to support that policy direction.
- Elected officials, the state budget office, and agency personnel have appropriate data on the relationship between costs and performance, and they use these data when making resource allocation decisions.
- Agency managers have the appropriate information required to make program management decisions.
- The governor and agency managers have appropriate data that enables them to assess the actual performance of policies and programs.
- The public has appropriate access to information about the state, the performance of the state programs and state services and is able to provide input to state policymakers.
Infrastructure

- The state conducts a thorough analysis of its infrastructure needs and has a transparent process for selecting infrastructure projects.
- The state has effective process for monitoring infrastructure projects throughout their design and construction.
- The state maintains its infrastructure according to generally recognized engineering practices.
- The state comprehensively manages its infrastructure.
- The state creates effective intergovernmental and interstate infrastructure management networks.

The GPP offers transparency, comparability, and systematic assessment. It grades all states using the same criteria and focuses on procedures. It sets a criterion that expresses a clear goal. However, GPP is not without critics, Kirlin stated there is no evidence of outcomes on any one of the measured effects (Kirlin, 2001, pg. 2). Additionally, it is important to mention not all report cards are created equal as determined by Coe and Brunet in 2006; one has to look at the issuer and focus on their intents. Also, people in the field have commented GPP has little independent verification.

Between 2001 and 2005, leadership of the project shifted from Syracuse University to Governing magazine. In 2005, the grades carry a disclaimer from the developers that grades are not comparable to previous years because the new criteria are focused on the ability of state governments to produce results. I agree somewhat because the criteria has become more defined but has the same underlining themes throughout. Some topics where dropped or renamed in 2005, the new categories are as follows money, infrastructure, information, and people. The main focus is still on practice and process. They believe there is a connection between the quality of
management and management systems and performance. They want to help states get better results.

The majority of my independent variable data came from the US Census Bureau. The following are special variables I used in my model: majority vote in states during the Bush and Kerry presidential election, log of total expenditures per capita and per capita gross state product for 2004 along with Steve Knack’s variables of percent with of high school diploma (2000), percent African American (2000), the Gini coefficient of income inequality for 1999 and the log of population for 2004. For my purposes, I used median family income for 2000 instead of per capita income.

When looking at Hawaii and Alaska, the social capital variable was not calculated and therefore these states were dropped from the study. District of Columbia was not included in the model because no GPP grade was calculated.

First, I performed a correlation matrix of all the coefficients on one another to obtain the relationships. I concentrated most on the overall grade dependent variable because it is the most representative of the general quality of the state management as a whole. I found no heteroscedasiticty in my model. To control for heteroscedasicity I ran STATA using the robust command. I also considered endogeneity between the X variables and Y but because the grades are not that widely known, used only in the public sector, the grades do not cause the X variables especially when looking at education, income and other race variables. In other words, people do not make residence choices based on the “grades” and therefore well-performing states do not attract the best and brightest. Social capital may be the only variable with real concerns of endogeneity as cited in the Coffe and Greys study,
Social capital can be an endogenous variable when talking about performance but when I completed the correlation matrix, there is weak correlation.

**Findings**

The findings after running a correlation matrix, show that little colinearity exist between my explanatory variables. Most of my R squares are very low. I first checked the distribution of my overall grade on the subparts. The adjusted R squared is 96 percent. Therefore, I can assume the composition of the overall grade is truly its parts.

**Table 1**

<table>
<thead>
<tr>
<th>Correlation Matrix</th>
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<tbody>
<tr>
<td>Overall</td>
</tr>
<tr>
<td>Overall</td>
</tr>
<tr>
<td>Money</td>
</tr>
<tr>
<td>People</td>
</tr>
<tr>
<td>Infrastructure</td>
</tr>
<tr>
<td>Information</td>
</tr>
</tbody>
</table>

**Table 2**

<table>
<thead>
<tr>
<th>Overall Grade</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mean</td>
</tr>
<tr>
<td>Standard Error</td>
</tr>
<tr>
<td>Median</td>
</tr>
<tr>
<td>Mode</td>
</tr>
<tr>
<td>Standard Deviation</td>
</tr>
<tr>
<td>Minimum</td>
</tr>
<tr>
<td>Maximum</td>
</tr>
<tr>
<td>Count</td>
</tr>
</tbody>
</table>
I completed both a Pearson coefficient in SPSS and an OLS regression in STATA on many different models, combining some relevant independent variables with each dependent variable. Table 7 in the appendix is a correlation matrix. Because I started with five dependent variables, I could assess multiple models to see what correlated, however nothing significantly correlated using my own models.

Knack’s model

In my major analysis, I completed a recreation of Steve Knack’s model using the overall GPP grades for 2005. To complete the recreation on social capital I included Putnam’s social capital index and used log family income in place of log per capita income. I did find some similar results, however when I added per capita total expenditures to the model it did not explain any more of the variation in the overall grade. Thus, expenditures are not significant in any of the social capital models and therefore had no effect on the GPP overall grade. The overall grade is the dependent variable in each of these regressions.
### Table 4
Knack’s Model

<table>
<thead>
<tr>
<th></th>
<th>Informal socializing</th>
<th>Social trust</th>
<th>Volunteering</th>
<th>Census response</th>
<th>Club meeting</th>
<th>Good Govt Member</th>
</tr>
</thead>
<tbody>
<tr>
<td>Constant</td>
<td>41.498</td>
<td>42.852</td>
<td>14.239</td>
<td>19.297</td>
<td>41.498</td>
<td>38.616</td>
</tr>
<tr>
<td></td>
<td>20.064</td>
<td>18.679</td>
<td>20.926</td>
<td>24.953</td>
<td>20.064</td>
<td>18.005</td>
</tr>
<tr>
<td>Social Capital</td>
<td>0.192</td>
<td>0.136</td>
<td>0.14</td>
<td>0.129</td>
<td>0.018</td>
<td>0.446</td>
</tr>
<tr>
<td></td>
<td>0.28</td>
<td><strong>0.066</strong></td>
<td>***0.040</td>
<td>0.054</td>
<td>0.048</td>
<td>*0.232</td>
</tr>
<tr>
<td>Log_median income</td>
<td>-3.073</td>
<td>-3.79</td>
<td>-0.279</td>
<td>-2.142</td>
<td>-2.795</td>
<td>-2.631</td>
</tr>
<tr>
<td></td>
<td>1.904</td>
<td>*1.733</td>
<td>1.841</td>
<td>2.107</td>
<td>1.859</td>
<td>1.72</td>
</tr>
<tr>
<td>HS_diploma</td>
<td>0.003</td>
<td>0.003</td>
<td>0.033</td>
<td>0.085</td>
<td>0.04</td>
<td>0.012</td>
</tr>
<tr>
<td></td>
<td>0.068</td>
<td>0.066</td>
<td>0.054</td>
<td>0.063</td>
<td>0.071</td>
<td>0.079</td>
</tr>
<tr>
<td>Log_pop</td>
<td>0.843</td>
<td>0.961</td>
<td>0.882</td>
<td>0.509</td>
<td>0.822</td>
<td>0.89</td>
</tr>
<tr>
<td></td>
<td>0.286</td>
<td>***0.275</td>
<td>***0.276</td>
<td>0.319</td>
<td>***0.289</td>
<td>**0.372</td>
</tr>
<tr>
<td>Afr. Amer</td>
<td>0.056</td>
<td>0.079</td>
<td>0.07</td>
<td>0.073</td>
<td>0.053</td>
<td>0.066</td>
</tr>
<tr>
<td></td>
<td>0.033</td>
<td><strong>0.037</strong></td>
<td><strong>0.031</strong></td>
<td><strong>0.029</strong></td>
<td>0.032</td>
<td><strong>0.031</strong></td>
</tr>
<tr>
<td>Gini Coefficient</td>
<td>-0.582</td>
<td>-0.054</td>
<td>-0.466</td>
<td>-0.371</td>
<td>-0.57</td>
<td>-0.536</td>
</tr>
<tr>
<td></td>
<td>***0.135</td>
<td>***0.147</td>
<td>***0.122</td>
<td>**0.169</td>
<td>***0.14</td>
<td>***0.145</td>
</tr>
</tbody>
</table>

Standard Errors in italics
.10 = *
.05 = **
.01 = ***
Table 5  
Recreation of Knack's Model with Expenditures using 2005 Grades  
Overall Grade is the dependent variable

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<th>Informal socializing</th>
<th>Social trust</th>
<th>Volunteering</th>
<th>Census response</th>
<th>Club meeting</th>
<th>Good Govt Member</th>
<th>Soc Capital Index</th>
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Standard Errors in italics
.10 = *
.05 = **
.01 = ***
Table 6
Recreation of Knack’s Model Using 2005 Grades
Overall Grade is the dependent variable

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<th>Census response</th>
<th>Club meeting</th>
<th>Good</th>
<th>Govt Member</th>
<th>Soc Capital</th>
<th>Index</th>
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Standard Errors in italics
.10 = *
.05 = **
In both my models high school diploma, log of population, and African American coefficients had a significant impact in most if not all my regressions between the 5 and 10 percent levels. Good government member proved to be significant at the 10 percent level in the first model but not in the second model when I added gross state product and the dummy variable for Kerry/Bush election results. High school diploma, population, and African American all had statistical significant results in the positive direction on my overall grade.

The positive effect of high school diploma could indicate populations that are educated create a higher quality pool of applicants to pull managers from. Also, the greater the size of the population the greater the demands on the government and therefore quality of management goes up. African American could be a signal of diversity and therefore the higher the diversity of a state the greater the quality of management. The independent variable red (majority of the state voted Bush) proved have a significant effect on the overall grade when social trust and club meeting was the social capital variable in the model. I don’t want to assume too much here but maybe the more conservative states are more active in monitoring the state’s quality of management.

Steve Knack’s model found that population, African American, and the Gini coefficient all had statistical significance in his model. Social trust and volunteering was also statistical significant. I was most surprised about not finding any significance with my Gini coefficient, after Knack found it to be significant at the .01 level on most of his social capital variables models.
One of the reasons why my results may not be conducive to Knack’s is he used 1999 grades for dependent variables. He also separated out social capital into five areas, three from Putnam’s index and he created two variables census response and volunteering from outside sources. I added the combined social capital index variable to my model and derived all but census response from Putnam’s data. Also, I logged family income whereas Knack logged per capita income. Additionally, there is a gap in time from Putnam’s data and my data, therefore the explanatory power of my model is weakened.

The GPP contained a disclaimer that 2005 grades are not comparable to previous years. As I have found here, this may be true because my results not match Knack’s perfectly. Also, the generalization of Knack’s model comes into question.

**Recommendation**

I would like to recommend states need to focus also on their financial outlays and socio-economic characteristics in order to increase the quality of management but my analysis shows otherwise. It would be logical to assume that a state’s demographics have a direct relationship to the quality of its management and thus its performance and things one might consider: is the population educated, are they aging, and what resources do they have available to them? I have found in my model only certain things matter: population, education, and race. However, given my results, I would like to recommend states **not** focus on expenditures to improve the quality of management but on the size of the, education level of the state and diversity of the state.
Conclusions

- States, whether poor or rich, can be well managed.
- Expenditures, state productivity, and income inequality were weakly correlated with quality of management.
- Political affiliations of states may be a factor in overall quality.
- The overall grade is normal distribution among the subparts.
- Expenditures functions are a normal distribution of total expenditures.

As suggested by Moynihan in 2006, the New Public Management policy ideas adopted in New Zealand, Australia, and United Kingdom may not be as successful in the United States because of the checks and balances we have which limit managerial authority. Managerial authority is one of the key criteria in New Management Policy.

It is clear that certain social, political, and institutional conditions create incentives for governments to do well as Kaufmann and Pritchett suggests in 1998 but there is still no clear answer as to what mix of conditions specifically helps. There is more than one reason to perform performance-based measurement though.

“Performance measurement may be done annually to improve public accountability and policy accountability and policy decision making” write Wholey and Newcomer, “or done more frequently to improve management and program effectiveness (Behn, 2003, p. 2).

One reason my model may have failed to produce any strong explanatory power could be the model focused on expenditures with controls but other factors may contribute that are not measurable and captured in the error term.

Limitations and future endeavors

If I had more time and resources I would have looked more at qualitative variables such as leadership styles. Due to time and lack of quantifiable data I could not gather information on all states concerning leadership and administrative data.
Examples of administration data I could have gathered: employee evaluations, retention rates for employees and rainy day fund amounts. This way I could confirm the calculation of the grade.

In short, I would like to expand this to obtain a more representative model of government performance and not use only political factors and demographic factors, but try to capture per capita expenditures over a longer time period. Jaggia and Vachharajani 2004 suggest time-series analysis can show more causality in expenditures and outcomes (they were specifically looking at education) but time was not a factor considered in my model.
References

**Literature**


http://www.la.utexas.edu/chenry/civil/archives95/csspapers.html


Kirlin, J. J. (2001) Big questions for a significant public administration. Public Administration Review, 61(2) 140-144 Retrieved from ProQuest


Data


## Appendix

### Table 7

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<tr>
<th>Overall</th>
<th>Soc_cap index</th>
<th>Census response</th>
<th>Volunteering</th>
<th>Social Trust</th>
<th>Club meeting</th>
<th>Good govt member</th>
<th>Informal socializing</th>
<th>log family income</th>
<th>HS degree</th>
<th>Log-pop</th>
<th>Afr American</th>
<th>Red</th>
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