Proactive Management, Reactive Management, and Perceived Political Support

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Abstract
Starting from the assumption that political support is essential for public managers to manage their organizations, this study investigates factors that enhance political leaders’ support toward top executives in public organizations. Based on the literature of proactive behaviors, this study tests hypothesis that proactive managers are more likely to acquire political support. Analyses on more than 500 cases in Texas school districts find that superintendents perceive more support from their school board members as they proactively interact with their board members, proactively express their opinions to the board, protect their organizations from external events, and exercise strong discretion in decision making within their organization. However, too much proactiveness threatening discretion of school board members does not help obtaining political support. This study suggests that top managers need to take strategic approach to enhance political support. Lastly, this study preliminarily finds that political support is significantly and positively associated with organizational performance.

Keywords: proactive management; reactive management, political support, performance
Introduction

Public organizations have a three-level management chain consisting of political leaders, political appointees, and career bureaucrats. The relationship among them is quite complex, but it is critical for managing public organizations. Political leaders are elected officials and very much sensitive to the public; they have to take legal accountability and moral responsibility for any outcomes of policies that they design to the public (Presthus, 1975). Although big pictures of policies are designed by political leaders, it is implemented by career bureaucrats who are not as much sensitive to the outcomes as political leaders as long as policies are legally implemented. Two parties with different interests work together to serve the public, but it produces problems: principal-agent problems such as moral hazard. To resolve these problems and to link two parties, political appointees play significant moderating roles. They are direct subordinates to the political leaders and direct superiors to career bureaucrats. Political leaders appoint top managers to manage organizations in a way that they want (Pfiffner, 1987), while career bureaucrats expect appointed top managers to represent their interests to political leaders. A politically appointed position, thus, is fragile; failure to represent both sides’ voices lead to political appointees’ legal accountability and moral responsibility issues. For political appointees to successfully manage their organization, they need trust and support from both sides. This study focuses on support from political leaders.

A myth about the relationship between political leaders and their appointees is that political leaders appoint the managers because they support the managers. In reality, it may not be true. Political leaders are strained by many issues, and have limited time to give attention to particular issues unless the public gives much attention to the issues. Political leaders appoint many positions and the length of their term differs from that of appointed officials. Thus, political officials, according to Wamsley (1990), are not a
“powerful proconsul of an emperor but more like a tentative and lonely ambassador appointed to a beleaguered foreign outpost” (136). They want attention from their political leaders and they seek political leaders’ support. This study investigates how they can obtain political support with special attention to proactive management.

To test the hypothesis that proactive management enhances the level of political support, this study analyzes superintendents of Texas school districts with controlling for ethnicity of superintendents and their board members as well as districts’ resources. This study first reviews literature on political support in public management and proactive behavior to derive hypotheses. Then, data and method is explained followed by results. Lastly, this study concludes with discussing how political support influences organizational performance.

Political Support for Public Management
The relationship between political leaders and their appointees has been understood as a principal and agent relation (for instance, Moe, 1984; Waterman and Meier, 1998). According to the principal agent model, a principal makes a contract with an agent for various reasons, and the agent is expected to behave on behalf of the principal’s interests (Moe, 1984). However, the agent holds an advantageous position over the principal in terms of information, which results in adverse selection and moral hazard problems, and in order to correct such information asymmetry, the principal pays a great deal of costs for making a precise contract or having the agent under their surveillance through monitoring (Moe, 1984). In public bureaucracy, elected officials do not have full capacity to run bureaucracy; thus, they appoint executives to control bureaucracy through executives. However, once appointed, according to the principal agent model, executives enjoy information asymmetry and behave opportunistically without complying with their
appointers’ (the principal) expectation. In public bureaucracy, appointed executives’ opportunistic behaviors can cause serious threats to democracy. According to Moe (1984), elected officials are agents and their principals are the public. In other words, elected officials are accountable to the public. Thus, appointed executives’ misconduct hinders elected officials’ accountability to the public, which, in turn, harms the public (Moe, 1984). To correct the agent’s misbehavior, the elected officials develops rules and regulations to limit the agent’s discretion or monitor the activities of the agent (Waterman and Meier, 1998).

However, the relationship between elected officials and their appointed executives is not always spurious. A more fundamental principal-agent relation in public bureaucracy is established between elected officials and career bureaucrats who are not appointed by elected officials but serve the bureaucracy for which elected officials are responsible. To limit the spoil system and to protect career bureaucrats from political pressure and to pursue political neutrality, career bureaucrats are secured their job; thus, they have more incentives to conduct opportunistic behavior when their preference does not match the elected official’s priorities. To control problems of principal agent relationship between elected officials and career bureaucrats, politically appointed executives played significant roles. Pfiffner (1987) argued that elected officials’ distrust of the bureaucracy leads to increasing political appointees. Politically appointed executives are primarily accountable and loyal to the elected officials who appoint them (Bertelli and Feldmann, 2006; Brewer and Maranto, 2000; Heclo, 1988). Thus, they manage and control their organization in favor of elected officials by, for instance, prioritizing the organization’s policies similar to elected officials preference (Heclo, 1988; Pfiffner, 1987; Rainey, 2009). As a result, the relationship between elected officials
and their appointed executives is more friendly or strategic than hostile or distrust (Bertelli and Feldmann, 2006).

Of course, one cannot conclude that appointed executives fully represent elected officials’ interests; they are still in a principal-agent relationship from which adverse selection and moral hazard may result (Moe, 1984). However, appointed executives know what elected officials want more than anyone, and it is likely that appointed executives think and behave like elected officials to comply with elected officials goals (Bertelli and Feldmann, 2006; Brewer and Maranto, 2000; Heclo, 1988; Wood and Waterman, 1991). Once a confident relationship is built between elected officials and appointed executives, a significant amount of discretion is given to appointed executives to run the bureaucracy in favor of elected officials (Pffiner, 1987). Thus, appointed executives seek political support to exercise their discretion to manage their bureaucracy. Longing for political support for appointed executives is deeply rooted in the nature of appointed executives. Brewer and Maranto (2000) compared appointed executives and career bureaucrats based on Down’s (1967) five types of bureaucrats and argued that politically appointed executives do not hold job security and are politically similar to elected officials; thus, appointed executives are more likely to be climbers who pursue self-interested power or zealots who have loyalty to a particular sets of policies. On one hand, in order for the appointed executives to obtain and maintain power in the bureaucracy, the elected officials must approve to delegate power to appointed executives; otherwise, appointed executive’s power can be overused against the elected officials. Thus, to be climbers in the bureaucracy to pursue power, appointed executives need political support. On the other hand, zealots tend to be dominant in a relatively young bureau, and they struggle for political supports to build bureau’s legitimacy and to obtain necessary resources (Rainey, 2009). Whether appointed executives are climbers or zealots, political supports
of elected officials to appointed executives are essential for appointed executives to manage their bureaucracy. However, the fact that elected officials appoint executives does not guarantee political support, and the extent to which appointed executives receive supports can vary. Thus, to run bureaucracy more efficiently, appointed executives continually seek to obtain political supports through various managerial strategies.

Proactive Management, Reactive Management, and Political Support

This study finds managerial strategies to strengthening political supports from proactive management behavior literature. Proactive management is to take initiatives to “change things in an intended direction” (Bateman and Crant, 1999, 63) or to “[improve] current circumstances or [create] new ones” (Crant, 2000, 436). Reactive management is opposite to proactive management. Reactive managers sit back and wait until others make things happen by hoping that such changes work out fine (Bateman and Crant, 1999). For them, political support is still needed, but they do not try to obtain it; rather, they hope political leaders provide support for their sake. This is unlikely. Proactive managers do not passively wait until opportunities come to them. They proactively identify opportunities to improve their organizations, challenge the status quo for constructive changes, and create favorable conditions (Bateman and Crant, 1999; Crant, 2000). Because political support is essential to manage organizations, proactive managers create favorable condition in which they can make full use of political support (Crant, 2000). This study broadly hypothesizes that proactive managers are likely to obtain more support from their appointees while reactive managers are less likely to obtain political support. The following elaborates this hypothesis.
Proactive interaction, reactive interaction, and political support

Public management literature has emphasized the positive impact of managerial networking on organizational performance (Meier and O’Toole, 2003). According to Meier and O’Toole (2003), organizational performance is influenced by organizational environment, which can be manageable through a manager’s networking with environmental actors. O’Toole, Meier, and Nicholson-Crotty (2005) elaborated the dimension of networking based on Moore’s (1995) concept of management; they include managing upward, managing downward, and managing outward. Here, managing upward is to deal with overhead political leaders and can be accomplished through managerial interaction with their political principals (O’Toole, Meier, and Nicholson-Crotty, 2005). In this interaction, who initiates matters. The characteristics and outcomes of interaction between political principals and executive agents can be affected by who initiates the interaction because whoever initiates the interaction may be able to predominate agendas (Goerdel, 2006) and to lead the interaction in their intended direction. Thus, if appointed executives proactively initiates interaction with their political principals more frequently, they are more likely to create favorable environments between them, which, in turn allows more political support.

Hypothesis 1-1: Appointed executives who proactively interact with their political principals are likely to get more support from their appointees.

Hypothesis 1-2: Appointed executives who passively interact with their political principals are likely to get more support from their appointees.

Proactive participation in decision-making and political support

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1 This study investigates the positive effects of proactive interaction on political support, and reactive interaction is treated as a null hypothesis.
Related to the previous hypothesis, managers can acquire political support when they proactively express their opinions to their political agents and participate in decision-making. Proactive managers do not sit back and let others to make decision (Baterman and Crant, 1999). They proactively express what they think or want in order to obtain support from their political principals. Even when tension exists between political principals and executive agents, proactive executives proactively express their opinions to persuade their political principals. Proactive managers actively participate in decision making as well in order to obtain political support (Parker, 1998). According to Parker (1998), proactive managers participate in decision-making in order to control their environment and change environment in their desired direction. As a result, proactive managers can obtain support from their political environment. Leaving policies to their political principals may result in uncertain or unfavorable environments with which executives may struggle. Therefore, proactive managers limit such possibility by actively taking part in a policy making process. Based on the literature, this study hypothesizes as follows:

Hypothesis 2: Appointed executives who proactively express their opinion to their appointees are likely to get more support from their political principals.

Hypothesis 3: Appointed executives who proactively participate in policy making are likely to get more support from their political principals.

Managerial buffering and political support

A modern organization theory admits that organizational environment influences organizations in many ways, and failure to manage turbulent environment can cause organizational demise. When environmental threats are evident and significant, organizations that buffer against environmental threats can survive. However, not all
types of managers can buffer their organizations against the threats. According to Bateman and Crant (1999), reactive managers tend to be afraid of challenging threats, and let the threats penetrate into the organizations by hoping that not bad things happen. Meanwhile, proactive managers actively seek solutions to limit the threats and to protect their organizations. They even try to find and create opportunities from the threats. Organizational survival from environmental threats affects political principals because their accountability to the public depends on the performance of public organizations in an turbulent environment. Therefore, political principals are likely to support executive agents when the agents proactively limit the influence of environmental threats on their organizations.

Hypothesis 4: Appointed executives who limit the influence of external events on their organization are likely to get more support from their political principals.

Top manager’s discretion and political support
Discussion on top-down or bottom-up decision making is inclusive. Top-down decision making emphasizes top executives’ authoritative decision making (Matland, 1995; Sabatier, 1986), which allows top executives to develop clear goals and implement constant policies across sub-organizations (Matland, 1995). Bottom-up decision focuses on street-level bureaucrats who actually interact with organizational clients. Since centrally-set policies are limited to cope with organizational clients’ realistic needs, street-level bureaucrats need to develop their own programs and make decisions (Matland, 1995). This study does not aim to find compromising solutions to this debate although balance between two approaches may be needed to manage organizations effectively. In proactive management point of view, proactive managers would rather enjoy exercising their discretion to make decision. Or, at least they attempt to put their influences on
decision made at the sub-organization level. Proactive managers’ discretion meets political principals’ interest as well. Political principals just need to control only executive agents when the executives exercise discretion. It is direct control. If street-level bureaucrats exercise discretion to make policies, political principals can indirectly control street-level bureaucrats through executives. Therefore, political principals prefer executives who seize authority to make decision and provide political support when managers proactively exercise discretion to make decision in the organization.

Hypothesis 5: Appointed executives who seize authority of making decision in the organizations are likely to get more support from their political principals.

Data, Variables, and Method

Data

This study utilizes “2007 Superintendent Management Survey” conducted by researchers of the Project of Equity, Representation, and Governance at Texas A&M University in 2007. This survey particularly targeted superintendents in Texas school districts. Appointed by school board members, superintendents in Texas school districts are top manager of school districts who can make autonomous decisions on budget and personnel matters in their district. Also, a school district is an independent local government, which has a power of taxing. Moreover, almost half of local budget is spent in the field of education. Thus, studying superintendents of school districts is significant in public management (Meier, O’Toole, and Hicklin, 2010). However, a school district is unique organization as compared to other public organizations because most street-level bureaucrats in school districts are teachers who are professionals. Therefore, this study admits that any results from this study may be carefully applied to other public
organizations hoping that future research confirms this study’s findings in different contexts.

The survey items include superintendents’ time allocation on networking and managerial activities, leadership and management practices, district facilities and goals, diversity programs, and a district’s environment. The survey was sent to all superintendents in Texas, and 67% of superintendents completed survey.

This study also employs a district’s student performance and demographic information, staff’s personnel information, financial information as well as school board members’ and superintendents’ demographic information all obtained from the Texas Education Agency.

Variables
Measuring political support
Political support in this study is support from political leaders elected by the public toward administrative executives who are appointed by the political leaders. In school districts, school board members are elected by the public and they appoint superintendents although there are some exceptional states such as Alabama or Florida where superintendents are elected. In Texas, elected school board members appoint a superintendent in their district.

Political support from school board members toward a superintendent is measured from the survey, which asked superintendents to rate school board support ranging from inadequate (=1) to excellent (=5).

Measuring proactive management
Proactive/reactive interaction
A superintendent’s proactive interaction with school board captures two dimensions: 1) frequency of interaction and 2) initiation. The survey asked how often a superintendent
interacts with school board members ranging from daily (=6) to never (=1). In addition to this question, the survey asked who initiated contact in a superintendent’s last interaction. If the last contact was initiated by a superintendent, it is coded as 1; if school board initiated the last contact, it is coded as 0. To generate a variable of proactive interaction, the first and the second variables are multiplied. Reactive interaction is measured with using the same questions but in a different way. The first interaction question is used as it is, but the initiation question is reversed; if school board members initiated the last contact, it is coded as 1; otherwise 0. This method of measuring proactive and reactive interaction may not be perfect because the initiation question is limited only to the last contact. However, Goerdel (2006) argues that considering the initiation of the last contact allows to differentiate those who initiate from those who do not initiate the last contact, and “future results using improved initiation measures could only prove more compelling” (358).

Active expression of opinion
To measure a superintendent’s active expression of his/her opinion to the school board, this study employs a 4-Likert scale survey item ranging from strongly agree (=4) to strongly disagree (=1) which asked superintendents how much they agree or disagree with the following statement: “A superintendent should offer the school board an opinion only when his/her opinion is requested.” The original statement captures a superintendent’s passive expression of an opinion. Thus, this study reversed answers.

Active participation in decision-making
Active participation in decision-making, like the previous variable, is an reversed answer to the following statement: “A superintendent should act as an administrator and leave policy matters to the board.” Consequently, those who strongly disagree with the statement are coded as 4 while those who strongly disagree with the statement become 1.
Protective management

Protective management is how much a superintendent limit external turbulence and protect the organization. To measure it, a superintendent was asked how much agree or disagree with the following statement: “I always try to limit the influence of external events on my principals and teachers.” Answers as strongly agree are coded 4 while answers as strongly disagree are coded as 1.

Top manager’s discretion

To measure a top manager’s discretion, the reversed answers to the following statement is used: “I give my principals a great deal of discretion in making decisions.” By reversing answers to this statement, those superintendents who exercise discretion in making decision by themselves instead of giving discretion to principals are coded as 4.

Control variable

This study controls for some administrative capacity variables which include students’ performance on Texas Assessment of Knowledge and Skill which is a state-wide exam, percentage of central administration, quality of principal, and management stability. The quality of principal was measured by a superintendent’s perception on their principal while management stability is the length of superintendents’ service in their districts. It is expected that administrative capacity help superintendents focusing on getting more support from school board members.

In addition to administrative capacity, this study controls for ethnicity matches between superintendents and the majority of school board members. For this purpose two variables are controlled. The first variable is coded as 1 if a superintendent is Hispanic and the majority of school board members is Hispanic; otherwise, coded as 0. The second variable is coded as 1 if a superintendent is African American and the majority of school board members is African American; otherwise, coded as 0. It is expected that more
support may be possible if ethnicity matches between a superintendent and a majority of school board members.

Lastly, as school district characteristics, this study controls for total expenditure per pupil as well as student’s composition.

Method
To test hypotheses, this study employs an ordinal probit regression analysis with reporting marginal effects. To test if the analysis meets the proportional odds assumption, this study conducted an LR test using omodel command in STATA 12 (Wolfe and Gould, 1998), which finds no objection in the assumption.

Results
Results of ordinal probit regression analysis are shown in Table 1. Because proactive interaction and reactive interaction is perfectly correlated, two models are analysed: Model 1 in the table includes proactive interaction with school board while Model 2 includes reactive interaction with school board. In Model 1, it is found that if superintendents proactive interact with their school board members, they get more support from the board. Model 2, on the other hand, shows that reactive interaction, although the statistical power is weak, decreases the expected level of support from the school board. Both findings support Hypothesis 1-1 and 1-2. It is also found from both models that superintendents get more support from their school board members as they actively express their opinion to the board. Hypothesis 2 is supported. Unlike the expectation, Hypothesis 3 that the level of political support is associated with active participation in decision-making is not supported. In fact, the direction of its coefficient is against the expectation. It is not clear to find reasons that result in these outcomes at this moment. Results from the both models also reveal that superintendents perceive higher
support from their school board members as they limit external events on their organization as well as they take strong discretion in decision-making over their subordinates. Hypothesis 4 and 5 are supported.

Hypotheses tested above clearly suggest that executive agents are better off to take proactive management in their organization in order to strengthen support from their political principals.

Control variables also provide some interesting implication. Findings show that superintendents are likely to perceive high levels of support from their political leaders as their organization performs better (TAKS pass rate), has higher portion of central administration, and good quality of principal. However, it is found that superintendents’ length of service in their districts is not statistically associated with the level of perceived political support.

This study expects that the level of perceived political support increases as a superintendent’s ethnicity matches with the ethnicity of majority of the school board. However, this expectation has gone wrong. The findings show that African American matches between a superintendent and the majority of school board members are not statistically significant while Hispanic matches between them are negative and statistically significant. Discussion on this matter will be followed in the next section.

Conclusion and Discussion
This study emphasizes political support and investigates managerial strategies to enhance political support. Literature and empirical findings from Texas school districts suggests that the high level of political support is associated with a top manager’s proactive management including proactive interaction with school board members, active
expression of a top manager’s opinion to school board, protective management limiting external events on an organization, and strong discretion in decision making within the organization. This finding may be particularly interesting to public managers who desperately seek political support to get things done.

Unlike expectation, however, this study failed to support the hypothesis that a top manager’s active participation in policy making is associate enhances the level of political support. It suggests that proactive management may win political leaders’ favor, but it should not threaten political leaders’ turf. Political leaders may accept a top manager’s proactive management up to active expression of a top manager’s opinion to them but the final decision should be left to political leaders. This is one possibility to explain non-significant and perhaps negative relationship between active participation in decision making and the level of political support.

It is also found that ethnical matches between a superintendent and the majority of school board is negatively associated with political support. According to social network theory, birds of a feather flock together; in other words, people sharing common sociodemographic characteristics are more likely to form more favorable interpersonal relationship (McPherson, Smith-Lovin, and Cook, 2001), which helps getting things done easily. However, the findings do not support the theory; findings contradict the theory. In a certain sense, this finding contradict ideas of active representation. Active representation refers that officials exercise their discretionary authority to produce more favorable policies for the people they represent (Sowa and Selden, 2002, P. 701). Based on this concept, if a majority of school board members are Hispanic, then the board would support Hispanic top managers. The empirical findings are opposite to the concept. Future research should be followed to investigate a black box of this finding.
This study assumes that political support is essential for public managers to manage organizations. Although the scope of this study does not include testing the assumption, but as discussion topic, this study provides brief empirical findings that possibly test the assumption. They are shown in Table 2. Following a series of O’Toole and Meier’s studies (for instance, Meier and O’Toole, 2002, 2008; O’Toole and Meier, 2003, 2009), the models investigate effects of school board support on various performance indexes of school districts controlling for district’s resources. This model controls for explanatory variables used in Table 1 as instrumental variables. Findings in Table 2 show that the level of school board support perceived by superintendents are statistically significantly and positively associated with almost all performance indicators. It confirms the assumption of this study that political support is essential for public managers. These findings shown in Table 2 are preliminary, and future research need to follow for elaboration.

[Table 2 about here]
Reference


Table 1. Ordered Probit Regression of Perceived Support From School Board

<table>
<thead>
<tr>
<th>Model (1)</th>
<th>Model (2)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Raw Coefficient</td>
</tr>
<tr>
<td>Proactive Interaction w/ School Board</td>
<td>0.057**  (0.027)</td>
</tr>
<tr>
<td>Reactive Interaction w/ School Board</td>
<td></td>
</tr>
<tr>
<td>Active Expression of Opinions</td>
<td>0.139**  (0.069)</td>
</tr>
<tr>
<td>Active Participation in Decision Making</td>
<td>-0.055  (0.070)</td>
</tr>
<tr>
<td>Protective Management</td>
<td>0.165*  (0.087)</td>
</tr>
<tr>
<td>Top Manager's Discretion</td>
<td>0.241**  (0.105)</td>
</tr>
<tr>
<td>TAKS Pass Rate</td>
<td>0.021*** (0.005)</td>
</tr>
<tr>
<td>Percentage of Central Administration</td>
<td>0.036*  (0.020)</td>
</tr>
<tr>
<td>Quality of Principal</td>
<td>0.406*** (0.073)</td>
</tr>
<tr>
<td>Management Stability</td>
<td>-0.003 (0.011)</td>
</tr>
<tr>
<td>Superintendent-Majority School Board Ethnicity Match: Hispanic</td>
<td>-0.861*** (0.262)</td>
</tr>
<tr>
<td>Superintendent-Majority School Board Ethnicity Match: African American</td>
<td>-0.564 (0.706)</td>
</tr>
<tr>
<td>Total Expenditure per Pupil (x 1000)</td>
<td>-0.010 (0.018)</td>
</tr>
<tr>
<td>Percentage of African American Students</td>
<td>0.001 (0.006)</td>
</tr>
<tr>
<td>Percentage of Hispanic Students</td>
<td>0.007*** (0.003)</td>
</tr>
<tr>
<td>Observations</td>
<td>522</td>
</tr>
</tbody>
</table>

Standard errors in parentheses; constants are omitted
*** p<0.01, ** p<0.05, * p<0.1
Table 2. Effects of School Board Support on Various Performance Indicators

<table>
<thead>
<tr>
<th>VARIABLES</th>
<th>(Model 1)</th>
<th>(Model 2)</th>
<th>(Model 3)</th>
<th>(Model 4)</th>
<th>(Model 5)</th>
<th>(Model 6)</th>
<th>(Model 7)</th>
<th>(Model 8)</th>
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</thead>
<tbody>
<tr>
<td></td>
<td>Coefficient</td>
<td>Coefficient</td>
<td>Coefficient</td>
<td>Coefficient</td>
<td>Coefficient</td>
<td>Coefficient</td>
<td>Coefficient</td>
<td>Coefficient</td>
</tr>
<tr>
<td>School Board Support</td>
<td>7.293***</td>
<td>2.422</td>
<td>5.706***</td>
<td>7.517***</td>
<td>0.205</td>
<td>45.500***</td>
<td>0.494***</td>
<td>6.033***</td>
</tr>
<tr>
<td></td>
<td>(1.169)</td>
<td>(2.070)</td>
<td>(1.383)</td>
<td>(1.360)</td>
<td>(0.133)</td>
<td>(11.906)</td>
<td>(0.177)</td>
<td>(1.409)</td>
</tr>
<tr>
<td>Percentage of Low-income Students</td>
<td>-0.242***</td>
<td>-0.187***</td>
<td>-0.210***</td>
<td>-0.067</td>
<td>-0.011***</td>
<td>-2.435***</td>
<td>-0.055***</td>
<td>-0.386***</td>
</tr>
<tr>
<td></td>
<td>(0.035)</td>
<td>(0.063)</td>
<td>(0.045)</td>
<td>(0.041)</td>
<td>(0.004)</td>
<td>(0.357)</td>
<td>(0.006)</td>
<td>(0.045)</td>
</tr>
<tr>
<td>Percentage of African American Students</td>
<td>-0.171***</td>
<td>-0.200***</td>
<td>-0.050</td>
<td>-0.227***</td>
<td>-0.009*</td>
<td>0.891**</td>
<td>-0.010</td>
<td>0.113*</td>
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<tr>
<td></td>
<td>(0.045)</td>
<td>(0.073)</td>
<td>(0.056)</td>
<td>(0.050)</td>
<td>(0.005)</td>
<td>(0.433)</td>
<td>(0.008)</td>
<td>(0.058)</td>
</tr>
<tr>
<td>Percentage of Hispanic Students</td>
<td>-0.060**</td>
<td>0.067</td>
<td>-0.012</td>
<td>-0.106***</td>
<td>0.000</td>
<td>0.532**</td>
<td>-0.006</td>
<td>0.035</td>
</tr>
<tr>
<td></td>
<td>(0.026)</td>
<td>(0.050)</td>
<td>(0.034)</td>
<td>(0.029)</td>
<td>(0.003)</td>
<td>(0.271)</td>
<td>(0.004)</td>
<td>(0.032)</td>
</tr>
<tr>
<td>Teachers Salary in dollar</td>
<td>0.000***</td>
<td>0.001***</td>
<td>0.001***</td>
<td>0.000***</td>
<td>0.000</td>
<td>-0.002</td>
<td>0.000</td>
<td>0.001**</td>
</tr>
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<td></td>
<td>(0.000)</td>
<td>(0.000)</td>
<td>(0.000)</td>
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<td>(0.000)</td>
<td>(0.000)</td>
<td>(0.000)</td>
<td>(0.000)</td>
</tr>
<tr>
<td>Teachers Experience</td>
<td>0.839***</td>
<td>0.224</td>
<td>0.637***</td>
<td>0.657***</td>
<td>0.051**</td>
<td>7.894***</td>
<td>0.071**</td>
<td>0.203</td>
</tr>
<tr>
<td></td>
<td>(0.193)</td>
<td>(0.346)</td>
<td>(0.242)</td>
<td>(0.219)</td>
<td>(0.022)</td>
<td>(2.177)</td>
<td>(0.035)</td>
<td>(0.264)</td>
</tr>
<tr>
<td>Class Size</td>
<td>-0.769**</td>
<td>-0.529</td>
<td>-0.950**</td>
<td>-0.665**</td>
<td>-0.284***</td>
<td>2.873</td>
<td>0.028</td>
<td>0.048</td>
</tr>
<tr>
<td></td>
<td>(0.302)</td>
<td>(0.553)</td>
<td>(0.383)</td>
<td>(0.338)</td>
<td>(0.034)</td>
<td>(3.192)</td>
<td>(0.053)</td>
<td>(0.399)</td>
</tr>
<tr>
<td>Instructional Expenditure per Pupil</td>
<td>-0.001*</td>
<td>-0.002</td>
<td>-0.001</td>
<td>-0.001</td>
<td>-0.000***</td>
<td>-0.006</td>
<td>-0.000</td>
<td>-0.001</td>
</tr>
<tr>
<td></td>
<td>(0.001)</td>
<td>(0.001)</td>
<td>(0.001)</td>
<td>(0.001)</td>
<td>(0.000)</td>
<td>(0.008)</td>
<td>(0.000)</td>
<td>(0.001)</td>
</tr>
<tr>
<td>Constant</td>
<td>40.093***</td>
<td>35.656**</td>
<td>31.317***</td>
<td>26.470***</td>
<td>98.135***</td>
<td>851.695***</td>
<td>18.104***</td>
<td>-11.542</td>
</tr>
<tr>
<td></td>
<td>(8.279)</td>
<td>(14.324)</td>
<td>(10.261)</td>
<td>(9.860)</td>
<td>(0.940)</td>
<td>(102.306)</td>
<td>(1.587)</td>
<td>(11.740)</td>
</tr>
</tbody>
</table>

Observations: 525  353  500  524  525  362  451  474
R-squared: 0.337  0.179  0.190  0.106  0.273  0.180  0.435  0.282

Standard errors in parentheses; *** p<0.01, ** p<0.05, * p<0.1
Instrumented Variable: School Board's Support; instrument Variables: All explanatory variables in Table 1