



ELSEVIER

Contents lists available at ScienceDirect

Journal of Purchasing & Supply Management

journal homepage: www.elsevier.com/locate/pursup

Supplier diversification by executive order: Examining the effect reporting compliance, education and training, outreach, and proximity to leadership have on government procurement behavior with minority business enterprises

Ian Y. Blount^{a,*}, James A. Hill^b

^a The Ohio State University, John Glenn School of Public Affairs, 1810 College Road, Columbus, OH 43210, United States

^b The Ohio State University Max Fisher School of Business, 2100 Neil Avenue, Columbus, OH 43210, United States

ARTICLE INFO

Article history:

Received 28 April 2014

Received in revised form

30 March 2015

Accepted 7 April 2015

Keywords:

Minority business enterprise

Government contracting

Implementation

ABSTRACT

Much of our understanding concerning the interaction between minority business enterprises (MBEs) and government procurement has focused on the legal aspects of set-asides. Therefore, it is difficult to ascertain what key determinants specifically affect government procurement behavior. In this paper, we investigate the implementation of an executive order that originated in 2009 to increase government expenditures on MBEs. We utilize implementation theory to hypothesize that after the intervention of the executive order, government expenditures on MBEs will increase. We also posit that government agencies closest to the governor (cabinet agencies) will spend more on MBEs than other agency types. Furthermore, we hypothesize that outreach, training and education, and reporting compliance will have a positive relationship with government expenditures on MBEs. Our findings suggest cabinet agencies have more expenditures on MBEs than colleges and universities; however, there was no significant difference between cabinet agencies and non-cabinet agencies. Moreover, there was no significant difference between non-cabinet agencies and colleges and universities with respect to their expenditures with MBEs. Our results also find that training and education as well as reporting compliance are positively associated with increased levels of government expenditures on MBEs. Unexpectedly, outreach was negatively associated with government expenditures on MBEs. We believe our findings may help government agencies and policy makers create and/or improve upon how they implement new policies directed at changing government procurement behavior.

© 2015 Elsevier Ltd. All rights reserved.

1. Introduction

This paper primarily focuses on the intersection of government policy and minority business enterprises (MBEs). Despite the interest given to minority set-aside programs and minority businesses in general, assessing the success of public subsidization of minority businesses has consistently produced mixed results (Barrett et al., 1996; LaNoue, 1994; Zehrt, 2009). This article seeks to address this deficiency by examining the impact of agency characteristics and agency decisions on the implementation of a new policy directive designed to increase government expenditures on MBEs. Addressing this deficiency is important for two reasons. First, it provides an opportunity to examine empirically the interaction between government policy and private organizations with secondary data. Our research answers the call by the

supply chain management community to incorporate more secondary data to improve the accuracy of research findings and build generalizable results (Calantone and Vickery, 2010). Second, it examines the key determinants that affect the implementation of a government policy directive.

We explore the effectiveness of implementing a government mandate procurement program with MBEs in Ohio, referred to as Executive Order 2008-S13 (2008). We examine this Executive Order to see if it is effective in changing the procurement behavior of 90 different government agencies that span three agency types in the state of Ohio: (a) cabinet, (b) non-cabinet, and (c) colleges and universities. Three agency decision components of the Executive Order are examined: buyer training and education, agency outreach to MBEs, and the threat of economic sanction for agencies that do not report their compliance metrics in a timely manner. Furthermore, this research examines the agency characteristic of “proximity to the leader” on government expenditures on MBEs. In addition to answering these questions, this study will draw broader inferences about the relevance and sustainability of

* Corresponding author. Tel.: +86 1614 580 6674.

E-mail addresses: blount.4@osu.edu (I.Y. Blount), hill.249@osu.edu (J.A. Hill).

government set-aside mandates in the 21st century and their ability to diversify government's supplier base.

Previous research suggests at least two sets of rationales for government mandates. First is the socially responsible rationale, that facilitating this access is not only the right thing to do, but will foster an environment in which all businesses have access to enter and compete fairly in the procurement process (Rawls, 1985; Snider et al., 2013). Second is the economic rationale, that a redistribution of government contract dollars to minority firms would provide business opportunities, thereby increasing those firms' long-run competitive viability (Bates, 2001; Marion, 2009). This leads some people to argue that mandates actually serve as an economic development tool, particularly in creating jobs for minorities (Bates, 1988, 2001). For example, recent statutory goals set by federal agencies are: 23% of prime contracts for small businesses; 5% of prime and subcontracts for small women-owned businesses; and 3% of prime and subcontracts for service-disabled-veteran-owned small businesses (www.sba.gov). In this study we do not argue for or against the rationale for government mandates. We accept that they exist and will continue to exist in some form in the future. Rather, we seek to understand the significance of a government mandate placed on procurement personnel and what aspects of the implementation processes affect change.

The state of Ohio MBE set-aside procurement program is explored in this paper for very specific reasons. First, Ohio implemented one of the most aggressive and comprehensive MBE set-aside programs in the United States (Executive Order 2008-S13). Second, according to Bendapudi (2009), Ohio, and specifically Columbus, the state capital, is ranked as one of the best test markets in America because of its proportion of diverse populations to the general population. Third, Ohio includes six cities with populations of at least 200,000 people, which makes Ohio a representative sample of the U.S. population. Lastly, as part of the implementation of Executive Order 2008-S13, a new data collection software system was introduced which enabled the authors to obtain data on the 90 agencies involved in the implementation of the executive order.

1.1. Overview of Ohio executive order 2008-S13

In an attempt to address the recurring disparity between MBEs and non-minority firms with government contracting opportunities (DJ Miller & Associates, 2001), then-Governor of Ohio Ted Strickland (D) introduced Executive Order 2008-S13 on June 25, 2008. Up until the executive order, state agency contract expenditures on MBEs in Ohio never rose above 3.1% on an annual basis (Carter, 2008–2011). Thus, the executive order was created to reinforce accountability to state agencies for the underutilization of MBEs in government contracting opportunities. The premise of the executive order is to augment state agency expenditures on MBEs to 15%. As part of the executive order, the state Equal Opportunity Division (EOD) is required to report to the governor the outcomes of the efforts of each state agency to achieve the goals set by their budget for expenditures on MBEs.

This article assesses the effect of implementing a government mandate on government contracting with MBEs. We examine the percentage change in expenditures over a four-year period. The analysis relied heavily on two unique data sets compiled by the state of Ohio. In order to accurately measure policy implementation success, the EOD developed a standardized measurement tool in the form of an MBE scorecard. The scorecard reflects the expenditures of each state agency in terms of both dollars and percentages with MBEs. The second data source is captured by the Office of Budget and Management (OBM). The OBM database captures agency characteristics, participation in outreach programs, training and education, and the timeliness of each agency's reporting documents to the governor's office.

The remainder of the article is organized as follows. First, we examine existing research on government programs assisting minority businesses. The next section leverages the implementation literature to develop the hypotheses. This is followed by a description of the data set and the methods used to analyze the data. The next section presents the analysis, the findings, and the theoretical and practical implications. We conclude with limitations of the study and areas for future research.

2. Theory and hypotheses

Government programs have been used to subsidize commercial enterprises for the past 100 years. Justifying or declaring the obsolescence of government programs such as those benefiting small businesses (Wallsten, 2000) and minority business enterprises (Rice, 1993; Marion, 2009) have been debated in the academic literature for decades. However, empirical studies to measure the effectiveness of these government programs have had mixed results. A recent survey of SBA firms completing one of the government programs identifies a number of flaws in implementation and administration (SBA.gov). Previous studies have not thoroughly evaluated the implementation process of government set-aside programs and what influence implementation has on the effectiveness of such programs to achieve their desired outcomes. Said differently, our focus is on the implementation of government set-aside programs and their ability to change agency procurement behavior with MBEs.

In order to investigate the effectiveness of Executive Order 2008-S13 (2008), the theoretical underpinning of implementation theory is used. The literature on implementation can be found in both the management literature and public policy literature. In the management literature, Coch and French (1948), in their seminal article on implementing change, found that successful implementation can be accomplished by effectively communicating the need for change and stimulating group participation in planning the change. Nutt (1986), by profiling 91 case studies, identified four implementation tactics used by managers: the intervention tactic, the participation tactic, the persuasion tactic, and the edict tactic. Nutt (1986) found that successful implementers using intervention carefully monitored the entire change process, regulating and controlling social and political issues as they arose. According to the persuasion tactic, implementation should hinge on experts who determine what should be done and use rational arguments to convince managers to go along (Nutt, 1989).

Implementation research in public policy originated with the work of Pressman and Wildavsky (1973), who measured implementation in terms of the relationship of policy between official documents and statutes. More precisely, policy implementation can be observed as the process of interaction between the setting of goals and the actions geared to achieve them (Pressman and Wildavsky, 1973). The authors postulate that the level of difficulty in the implementation process is often the predictor of whether the intended program should be carried out.

Building on the work of Pressman and Wildavsky (1973) and Mazmanian and Sabatier (1980) delineated policy implementation as the execution of the basic policy decision in the form of a statute; however, policy implementation is often structured as an executive order or court decision. Mazmanian and Sabatier (1980) asserted that authoritative and top-down decision makers are the starting point for policy development and implementation. They postulate that the influence of leadership holds great control over how effectively a policy will be implemented. Matland (1995) maintained that successful implementation is dependent upon the level of compliance that is obtained by subunits, and argued that policies under the umbrella of statutes, laws, or executive orders come from a top-down approach. Matland (1995) expanded upon the work of

Mazmanian and Sabatier (1980) to show that commitment and the motivation of subunit bureaucrats are critical in achieving a desired result, stating that motivation and commitment within subunit bureaucratic levels are hard to control, primarily because human beings are motivated by different incentives. He posited that lower-level bureaucrats require clear direction in conjunction with a minimal level of autonomy. To test our premise on the impact of government intervention to change procurement behavior, we propose the following hypothesis:

Hypothesis 1. The executive order will drive a significant increase in government expenditures with MBEs from pre-policy implementation (2008) to post-policy implementation (2009).

2.1. Proximity to the leader

Building on the implementation literature, this study examines three salient dimensions of policy implementation: (1) proximity of agency to the leader; (2) participation by agency type (cabinet, colleges/universities, and non-cabinet) in education and training, and outreach programs; and (3) the reporting compliance undertaken by the agency type. The three agency types are identified in Table 1. Cabinet agencies and colleges/universities are fairly straightforward to comprehend; however, understanding what functions non-cabinet agencies handle may not be as intuitive. Non-cabinet agencies are primarily regulatory bodies. For example, the Pharmacology Board would be an example of a non-cabinet agency. They are responsible for certifying pharmacists have obtained their college degrees, maintained their continuing education hour requirements, and function within the ethical criteria established by the Pharmacology Board to distribute medications in the state of Ohio. Some other examples would include the Accountancy Board, Board of Cosmetology, Athletic Commission, and the Civil Rights Commission. By examining these constructs we hope to shed light on our research question: Do agency characteristics or agency decisions affect policy implementation?

The effect of proximity of an agency to the governor and its performance against the set-aside goal is explored. Previous research suggests that physical distance decreases the opportunities for direct influence and potentially the effectiveness of the relationship between the leader and follower (Napier and Ferris, 1994). It has also been shown that physical proximity between leaders and followers facilitates the communication process (Bass, 1990). Kerr and Jermier (1978) observed that physical distance creates circumstances in which effective leadership may be impossible. On the other hand, Howell and Hall-Merenda (1999) found that a positive relationship will make leading from a distance possible. This study posits that cabinet agencies that interface with the governor more frequently would have a higher level of accountability as opposed to non-cabinet agencies and the more autonomously functioning colleges and universities. Additionally, because cabinet agency leadership is appointed by the governor, the leaders' efforts would be more in alignment with the governor's than would those of agencies whose leaders are elected by citizens or appointed by

college or university boards of trustees. On the basis of this literature, we propose the following hypothesis:

Hypothesis 2. Government agencies closer in proximity to the leader (i.e. cabinet agencies) will have greater expenditures on MBEs than other government agencies.

2.2. Participation in outreach programs

Prior research in business and social contexts has posited that, in order to improve the likelihood of a successful and sustainable policy implementation, a well prepared outreach plan to engage relevant stakeholders is necessary (Hossain and Phillips, 1996; Lazarus, 2006). Outreach programs link and coordinate an organization with key constituents (e.g. schools, nonprofit agencies, government agencies) in its external environment. Organizations often initiate such programs to acquire and/or disseminate information about critical issues and problems in their communities and take action on such issues through active, participative, organized involvement (Tichy et al., 1997). Other scholars have concluded that such participatory programs typically have only modest influence on task performance, decision performance, motivation, satisfaction, and acceptance (Wagner and Gooding, 1987). In this study, agency outreach was empirically investigated to determine if agency participation in outreach programs increased agency expenditures on MBEs. Agency members who participate in outreach programs are expected to deliver high-quality service through personal interaction. Bartel (2001) found that community outreach affected organizational identity and identification. Thus we expect to see a positive relationship between agency outreach programs and government expenditures on MBEs. As agencies participate through outreach programs, they are likely to provide a higher degree of assistance to minority firms.

Hypothesis 3. Agency participation in outreach programs will have a positive, significant impact on agency expenditures on MBEs.

2.3. Training and education

The importance of training and education on implementation success has been thoroughly examined in business fields such as strategy and human resources (Barrett and O'Connell, 2001; Bartel, 2000). Authors such as Lee and Grewal (2004) and The Economist Intelligence Unit (2010) found the implementation of new information technologies (IT) improved both private and public firm performance when training occurred. A new computer software package and various procurement management trainings were initiated by Executive Order 2008-S13. The software system captures each component of the interactions between the agency and the MBEs related to agency expenditures, the total number of registered MBEs, reporting compliance, and buyer outreach programs.

In addition to the upgraded software system, there were also several education initiatives introduced to enhance the ability of each state agency to effectively implement the executive order. Adobor

Table 1
State of Ohio agency types.

Type	Cabinet agencies	Non-cabinet agencies	Colleges and universities
Proximity to sovereign	Close and direct contact with the governor.	Indirect or infrequent contact with governor.	Little to no contact with governor.
Who	23 departments led by the director or commissioner.	53 non-cabinet agencies represented by elected officials.	14 Ohio public colleges and universities.
Term length	Varies by administration.	Ranging between 4 and 6 years.	Unlimited.
Function	The executive branch with broad authority to enforce the laws.	Primarily focused on regulating a specific profession.	Administer the state funded policies and procedures of the institution.

and McMullen (2007) specifically explain that procurement managers must first be educated on how having a diverse supply base is beneficial to the organization. Mazmanian and Sabatier (1983) discuss how managers must be given tools and training to help them facilitate their efforts to be able to reach their policy objectives. Through Executive Order 2008-S13 (2008), agency procurement managers were offered instructional opportunities to enhance their ability to engage MBE suppliers in a substantive manner, such as training to create and implement an agency inclusion plan (AIP). According to the *MBE/EDGE Utilization Guidance Manual (State of Ohio Equal Opportunity Division, 2012)*, an AIP is a comprehensive plan developed by each state agency. The AIP includes the identification of the eligible budget for MBE contracting of the agency, its procurement projections, and proposed expenditures to meet the MBE set-aside goals, and how each agency plans to interact with MBEs through outreach efforts (*State of Ohio Equal Opportunity Division, 2012*). The management literature is clear on the importance of gaining “buy-in” from senior management down through the organization to achieve success in the implementation of new strategies and policy directives (Cole, 2008). Therefore, we propose that training and education on IT systems, supplemented with other management trainings on how to interact with MBEs, will bolster the success of the government mandate.

Hypothesis 4. Training and education will have a positive, significant impact on agency expenditures on MBEs.

2.4. Reporting compliance

The effectiveness of mandatory reporting compliance in changing behavior at the employee or agency level has a rich history in the political science and public policy literature (Schneider and Ingram, 1993; May and Burby, 1996). Executive Order 2008-S13 grants the EEO state officer the authority to suspend budgetary funds for state agencies that do not comply with the MBE reporting aspect of the executive order. If requisite MBE expenditure data along with agency activities in outreach and education are not submitted 30 days after the fiscal year ends, the state EEO officer begins the economic sanctioning process. Based on the theory of social influences via subjective norms, we expect mandatory reporting compliance to influence government expenditures on MBEs. Subjective norm is defined as a “person’s perception that most people who are important to him think he should or should not perform the behavior in question” (Fishbein and Ajzen, 1975, p. 302). In our context we posit that most government agency personnel will believe that the governor thinks they should increase their expenditure with MBEs. The rationale for the direct effect of reporting compliance on government expenditures on MBEs is explored by Hartwick and Barki (1994). The authors found that subjective norms had a significant effect on intention in mandatory settings but not voluntary settings. In general, the direct compliance effect is theorized to operate whenever an individual perceives that a social actor wants him or her to perform a specific behavior, and the social actor has the ability to reward the behavior or punish inaction (Kelman, 1958, Warshaw, 1980, Venkatesh and Davis, 2000). Based on previous research, we posit Hypothesis 5.

Hypothesis 5. Reporting compliance will have a positive, significant impact on agency expenditures on MBEs.

3. Research methodology

3.1. Data collection

Objective performance measures, as compared with subjective measures, are less prone to common method bias and are especially helpful in assessing financial performance (Calantone and Vickery,

2010). In this study, we relied on two unique databases prepared by the state of Ohio: the state of Ohio MBE Scorecard (2008–2011), which captures state agency expenditures on MBEs, and the Office of Budget and Management database, which captures their participation in education and training, outreach, and reporting compliance as per the executive order. The EEO state officer exported the information into Excel spreadsheets for parsimony. The data cover 90 agencies spanning three agency groups: cabinet, non-cabinet, and colleges and universities.

Statistical analysis for this research was conducted with SPSS Version 20. In this study, traditional parametric and non-parametric statistical methods were used. A *t*-test was conducted to investigate the difference between the means for 2008 (pre-policy implementation) and 2009 (post-policy implementation) as it relates to government expenditures for all 90 agencies. In our effort to conduct comparative analysis between each agency type, we recognized our data suffer from small and unequal sample sizes. In order to handle this shortcoming, Non-Parametric tests were employed. Lastly, to test the impact training and education, outreach, and reporting compliance have on government procurement behavior with MBEs, hierarchical linear regression was used.

3.2. Control variables

3.2.1. Agency size

We assess agency size by examining each state agency’s eligible contract expenditure budget available to MBEs. We postulate that different sizes and types of agencies may have different procurement needs, which may impact their ability to purchase from MBEs. For example, if the Department of Transportation (DOT) has a large MBE expenditure budget and is in need of construction project fulfillment, there are usually multiple minority construction contractors to choose from (Rice, 1993), making it easier for DOT to reach its set-aside goals. In contrast, if the Department of Veterans Services (DVS) has a large contract opportunity but requires specially trained nurses to assist disabled veterans in home settings, how many MBEs have this expertise? Previous research by Bates (2001) and Fairlie and Robb (2008) speak of the fact that the majority of MBEs function in lower margin, commoditized businesses because of the lower threshold to market entry. They also posit, that their smaller scale may inhibit their ability to handle larger contracts. Therefore, the potential shortage of MBEs in this specialized category may adversely affect the ability of the DVS to reach its MBE expenditure goal as set forth by EO 2008-S13 (2008).

3.2.2. Minority leadership

We suggest here that minority leadership (i.e. African American, Hispanic, Asian American, Native American, or women of any race) will play an important role in helping minorities gain access to government contracts. Recent research on set-aside programs at the federal level conducted by Smith and Fernandez (2010) examined the number of contracts awarded to MBEs from the representative bureaucracy theoretical framework. They found that agencies with high proportions of minorities in leadership supported MBEs with increased levels of expenditures through government contracts. Specifically as it relates to this executive order, each cabinet, non-cabinet, and college and university leader was tasked directly by the governor to make the 15% set-aside goal a reality. Although agency leaders may not be directly responsible for procurement activities, they are being held responsible by the governor to meet their set-aside goal. Based on this premise, we postulate that agency leaders will have direct influence on their procurement teams to make good faith efforts to reach their 15% set-aside goal (Mazmanian and Sabatier, 1983). To control for minority leadership we created a dummy variable which is equal to 1 if an agency director belongs to

a minority group and 0 otherwise. About 45% of our observations are from agencies headed by a minority.

3.3. Independent variables

3.3.1. Government agency type

The Ohio MBE scorecard identified each agency type, and we coded cabinet as 1, non-cabinet as 2, and colleges and universities as 3. Of the 90 agencies in the sample, 23 were cabinet agencies, 53 non-cabinet agencies, and 14 colleges and universities. This study posits that cabinet agencies that interface with the governor more frequently and are in closer proximity to the governor would have a higher level of accountability as opposed to non-cabinet agencies and the more autonomously functioning colleges and universities.

3.3.2. Training and education

Education and training was deemed a critical component to the success of the government mandate. To measure an agency's effort in educating itself, we created a continuous variable that measures the percentage of times an agency participated in training that was offered by the EEO state office. We counted the number of training programs attended by each agency and divided by the total number of training programs offered for a given period.

3.3.3. Outreach

Under Executive Order 2008-S13, three main outreach programs were sponsored to communicate set-aside contracts and purchasing needs for the state of Ohio: the Ohio Business Expo, Minority Business Outreach Symposium, and MBE Certification Workshops. The OBM database tracks the number of outreach programs attended by an agency. We counted the number of programs attended by each agency and divided by the total number of outreach programs offered for a given period. Again we created a continuous variable that measures the percentage of outreach programs an agency attended per period. We assumed all outreach programs to have the same level of effectiveness.

3.3.4. Reporting compliance

The OBM collects data on whether state agencies comply with the submission of all requisite documents. If requisite MBE expenditure data along with agency activities in outreach and education are not submitted 30 days after the fiscal year ends, the state EEO officer begins the non-compliant sanctioning process. Good faith efforts, as determined by Executive Order 2008-S13 (2008), consist of submitting documentation in a timely manner. If none of the good faith efforts can be demonstrated to a satisfactory level, a corrective action plan must be submitted to rectify prior poor performance to the EEO state officer prior to the new calendar year. Under Executive Order 2008-S13, a baseline scoring system is identified to determine the good faith efforts of an agency to use MBEs whenever possible. If the agency is unable to demonstrate that it has made a good faith effort, its cumulative score may fall below the acceptable threshold and result in economic sanctions. For our analyses, we calculated the number of times an agency received the threat of economic sanction over a three-year period (during the implementation of the EO 2008-S13) and divided it by the total number of opportunities an agency had to be sanctioned.

3.4. Dependent variable

Expenditure on MBEs is used in assessing agency performance. The 2008 expenditure data were skewed. Following instructions by Osborne (2002), we utilized the natural log function to normalize the 2008 expenditure data. All other years were normal. Subsequently,

a mean of 2008 percentages was calculated along with a mean composite of the 2009, 2010, and 2011 percentages. A difference in percentage score (i.e. 2011 from 2008) was calculated and represents the change in expenditure on MBEs from pre- to post-implementation.

4. Results

Hypothesis 1: In order to examine the impact of Executive Order 2008-S13 on government agency expenditures on MBEs, a *t*-test was conducted to compare the mean percentage of expenditures pre- and post-implementation (mean of 2008 versus mean of 2009). Results of the *t*-test shows there is a statistically significant difference ($t = -3.871$, $p = 0.000$) in the mean agency expenditures between 2008 ($M = 0.05$, $SD = 0.08$, $n = 90$) and 2009 ($M = 0.10$, $SD = 0.16$, $n = 90$) with a 95% confidence interval of -0.09 to -0.02 . Results provide evidence that government agency expenditures in 2009 were statistically significantly higher than 2008, thereby supporting Hypothesis 1.

Hypothesis 2: It was hypothesized that change in percentage of expenditures from pre- to post-implementation of Executive Order 2008-S13 (2008) would differ across type of agency and that cabinet agencies would have the highest mean change in percentage of expenditures. Because agency types have unequal and small sample sizes, we employed a Mann-Whitney *U* test.

The Mann-Whitney *U* test comparative findings for cabinet versus non-cabinet agencies were $U = 4752$, $Z = -1.61$, $p = 0.11$. Therefore, there was no significant difference in expenditures between cabinet and non-cabinet agencies. A subsequent Mann-Whitney *U* test was conducted to compare cabinet agency expenditures versus colleges and universities. The results ($U = 1108$, $Z = -2.07$, $p = 0.04$) illustrate that there was a significant difference in the expenditure on MBEs between cabinet agencies and colleges and universities. Lastly, we employed another Mann-Whitney *U* test to compare non-cabinet agencies and colleges and universities. Results ($U = 3225$, $Z = -0.34$, $p = 0.73$) indicate that there is no significant difference between non-cabinet agencies and colleges and universities. Therefore, the findings only partially support our hypothesis that government agencies closer in proximity to the leader will have significantly greater expenditures on MBEs.

Hypotheses 3-5: It was hypothesized that reporting compliance, education and training, and outreach would predict the change in the percentage of expenditures from pre- to post-implementation. A difference in percentage score (i.e., between 2008 and 2011) was calculated and regressed on total reporting compliance, education and training, and outreach from 2009 to 2011. Because the difference in score was distributed normally, it was appropriate to use a hierarchical linear regression procedure. Tolerance values for the independent variables ranged from 0.60 to 0.65, thus indicating that there were no multicollinearity problems. To test our hypotheses, we started with only the control variables (Model 1). We then added the linear explanatory variables (Model 2). Table 2 summarizes the results.

In terms of the effects of the control variables, (Model 1) agency size (as determined by each state agency's eligible contract expenditure budget available to MBEs) had a significant, negative impact on change in expenditures. The sign of the coefficient was negative, thus indicating that the smaller the agency, the larger the change in percentage of agency expenditures on MBEs. A possible explanation for this may be that some state agencies that are smaller in size may have contracts that better fit within the scale and capabilities of an MBE. This result supports similar findings at the federal procurement level by Smith and Fernandez (2010). An alternative explanation is that in larger agencies government officials may be more concerned with policy issues than with management functions. Consequently they do not focus their

Table 2
Summary of hierarchical regression analysis for variables predicting agency expenditures on MBEs from 2008–2011 ($N=360$).

Variable	Model 1			Model 2		
	<i>B</i>	SE <i>B</i>	β	<i>B</i>	SE <i>B</i>	β
Leadership	–0.00	0.02	–0.00	–0.01	0.02	–0.03
Agency size	–4.763E–10	0.00	–0.13*	–5.174E–10	0.00	–0.14*
Education				0.06	0.02	0.20**
Outreach				–0.06	0.02	–0.19**
Compliance				0.08	0.02	0.25***
R^2	0.02			0.14		
<i>F</i> for change in R^2	2.39			8.25***		

* $p < 0.05$.

** $p < 0.01$.

*** $p < 0.001$.

attention on supplier diversity as much as their smaller agency counterparts. We encourage future research on government procurement to include organization size and other such structure variables. Minority leadership had no significant impact on government expenditures with MBEs in either Model 1 or Model 2.

Outreach significantly predicted the change in the percentage of expenditures. However, what was not expected was that the coefficient would be negative. Thus, the more outreach, the lower the mean change in percentage of expenditures. Therefore, Hypothesis 3 is not supported. As expected, training and education significantly predicted the change in percentage of expenditures; therefore, Hypothesis 4 is supported. Reporting compliance significantly predicted the change in the percentage of expenditures: the more times agencies complied with the reporting requirements of Executive Order 2008-S13 (2008), the higher the mean change in the percentage of expenditures. Consequently, Hypothesis 5 is supported.

5. Discussion

Previous authors have examined the relationship between implementation and outcomes (Montjoy and O'Toole, 1979; Nutt, 1998; Heinrich, 2002). We contribute to this body of literature by exploring the effect of implementation of an executive order on government expenditures on MBEs. The findings from this analysis offer insight from both theoretical and applied perspectives. First, this study uncovered that agency proximity to the sovereign provides a partial explanation for the levels of government expenditures with MBEs. Our results are consistent with those found by Howell and Hall-Merenda (1999) in which they determined that effective leadership can occur from a distance. We also show that education and training has a significant impact on the increase in MBE expenditures. Given that the government mandate had been executed, our study revealed the importance of not only the structural aspects of organizations, (such as, does eligible budget size impede or facilitate outcomes?), but also the knowledge base of organizations (do managers receive the necessary training to accurately assess and build relationships between their own organizations and minority businesses?). Education and training programs included guidance in how to assist buyers of MBE products and services in building relationships with minority vendors. Our results indicate that to increase the percentage of agency expenditures on MBEs, education and training in this area should be encouraged.

On the other hand, outreach programs had a significant negative impact on the increase in government expenditures. It might be possible that repeated exposure to minority outreach programs where the primary focus is on expanding minority business enterprises can lead to such a negative outcome. For example, Mobley and Payne (1992) found that corporate minority outreach

programs to encourage human resource managers to participate in “minority job fairs” caused a backlash effect amongst hiring managers. They found that hiring managers self-determine the value of these activities. In fact, in many cases they decide that minority job fairs lose their effectiveness in finding the best candidates to fill their corporation's needs by reducing their talent pool to diverse candidates. Another possible explanation is that some agencies conducting outreach may have a smaller or non-existent base of MBEs capable of doing the work. They used outreach to try to create a base, but were unsuccessful due to the nature of the buy. Ultimately, this is an empirical question worthy of further exploration.

In a similar context Austen and Seymour (2009) discussed how government policy interventions are likely to result in high levels of avoidance activity and generate very few benefits. The authors concluded that for policy action to be successful, reporting compliance issues must be addressed. In fact, we show that mandatory reporting compliance had a positive and significant impact on MBE expenditures. Formal reporting compliance programs have been shown to be a vital means of managing organizational legitimacy (Ashforth and Gibbs, 1990). Our results show that reporting compliance is not only important for reinforcing appropriate behaviors (Weaver et al., 1999) but also for ensuring that agencies are effectively meeting their goals and objectives.

We show compelling evidence that it is not just outreach, education and training, or reporting compliance that influence MBE expenditures. In the present context, it is important to consider the effect of agency size. Historically, size has been shown in the organizational studies literature to be related to bureaucratic variables such as standardization, formalization, and centralization (Grinyer and Yasai-Ardekani, 1981). Our results raise the possibility that the relationship between government expenditures and agency size may relate more with each agency's specific procurement needs and the size of their eligible contract expenditures.

6. Conclusions

The overarching motive of then-Governor Strickland to craft Executive Order 2008-S13—that it was for the betterment of society (i.e., equal access/fairness and economic development)—aligns with Rawls (1985), who argued that distributive justice should undergird economic and political decisions. From this perspective, Executive Order 2008-S13 can be viewed as a success. Scholars such as Worthington et al. (2008) have written extensively about the “browning of America” and the explosive growth of MBEs across America. The exponential growth of MBEs from the perspectives of both economic development and job creation has refocused some politicians' efforts at creating and/or strengthening set-aside programs or

at least creating something of similar effect to a set-aside program, but perhaps calling it by a different name. Executive Order 2008-S13 may provide some guidance to other cities, states, or federal agencies on how to develop and implement a successful set-aside program for government contracting.

A question that almost always follows any policy implementation is, will it be sustainable? Although the primary focus of this study was examining the effectiveness of Executive Order 2008-S13, the question of sustainability must also be addressed. According to Mazmanian and Sabatier (1980), there can be a “gradual erosion scenario” in which committed and well-trained staff depart or there is a loss/change in the major proponent (i.e., governor and his appointed cabinet) of the mandate. The transition of administrations is a reflection of Matland's (1995) perspective: having committed and well-trained subunits is necessary for a successful policy implementation. A source of expenditure growth was found to have occurred with cabinet agencies appointed by the governor. Thus, it stands to reason that if the new governor and his supporting cabinet leaders are not as committed as his predecessor, the level of cabinet agency expenditures on MBEs will erode over time.

6.1. Limitations and future research

Although the data have many positive attributes, there are limitations. Data on government expenditures on MBEs prior to FY 2008 were not usable. Another limitation of this research is that every unobserved variable cannot be accounted for. Although a thorough review of the academic literature was conducted, only a small set of explanatory variables was captured in this study. It is possible that variables deemed important in both political and business environments may have been omitted in this study. For example, the implementation framework of Mazmanian and Sabatier (1980) identified many other variables that affect implementation (e.g., media attention, public support, and socioeconomic conditions). Lastly, the data set spanned four years and was confined to one state. Implementation scholars have encouraged researchers interested in bringing a resurgence of the theory to conduct research over longer time periods whenever possible to ensure the policy of interest is accurately assessed (Schofield, 2001).

There are several promising research streams that would expand our knowledge of MBEs, government procurement, and set-aside programs in the public sector as well as supplier diversity programs in the private sector. Future research could examine set-aside and supplier diversity programs from the perspective of the MBE in a quasi-bottom-up approach. Worthington et al. (2008) posit that garnering a better perspective from the bottom up will yield new knowledge on why and how MBEs interact with large purchasing organizations that have decided to implement a set-aside or supplier diversity program.

Our research specifically examines one state; future research comparing and contrasting various states and regions would provide new insight into how different states and regions view government procurement with MBEs. This line of research could also be extended to examining ethnic minority businesses (EMBs) in Europe. To date, there has been scant research on these immigrants' abilities to set up entrepreneurial enterprises and participate in private or public procurement processes. Barrett et al. (1996) and Ram and Smallbone (2003) speak to the surge of ethnic immigrants from North Africa, India, and Asia into Europe and the need for innovative policies to create an inclusive procurement environment. Understanding the global increase of minority businesses and the policy systems needed to support them could provide much needed insight for policy makers, government agencies, and their procurements managers as well as for private sector procurement professionals Worthington et al. (2008).

As previously mentioned, examining the political dynamic from which an executive order is initiated and then implemented holds great promise. Understanding the executive order initiator's reasoning and the political environment within which the executive order is created may provide a clearer understanding of how that executive order will affect the likelihood of having a successful policy implementation (Pressman and Wildavsky, 1973; Mazmanian and Sabatier, 1980). In 2015, there will be an opportunity to review the State of Ohio's agency expenditures on MBEs over two administrations, providing eight years of data. A comparative analysis between the Democratic initiator of Executive Order 2008-S13 and the subsequent Republican governor's administration will afford practitioners and scholars an opportunity to see how each party values diversity, at least from a procurement perspective. Revisiting this subject matter in the near future will also afford scholars adequate time to examine whether the set-aside program is sustainable across time and political parties.

References

- Adobor, H., McMullen, R., 2007. Supplier diversity and supply chain management: a strategic approach. *Bus. Horiz.* 50, 219–229.
- Ashforth, B.E., Gibbs, B.W., 1990. The double-edge of organizational legitimation. *Organ. Sci.* 1 (2), 177–194.
- Austen, S., Seymour, R., 2009. Can governments use their construction contracts to improve training outcomes? *J. Purch. Supply Manag.* 15 (1), 43–50.
- Barrett, A., O'Connell, P.J., 2001. Does training generally work? The returns to in-company training. *Ind. Labor Relat. Rev.* 54, 647–662. <http://dx.doi.org/10.2307/2695995>.
- Barrett, G.A., Jones, T.P., McEvoy, D., 1996. Ethnic minority business: theoretical discourse in Britain and North America. *Urban Stud.* 33 (4–5), 783–809.
- Bartel, A.P., 2000. Measuring the employer's return on investments in training: evidence from the literature. *Ind. Relat.* 39, 502–524. <http://dx.doi.org/10.1111/0019-8676.00178>.
- Bartel, C.A., 2001. Social comparisons in boundary-spanning work: effects of community outreach on members' organizational identity and identification. *Adm. Sci. Q.* 46 (3), 379–413.
- Bass, B.M., 1990. Bass and Stogdill's handbook of leadership. Theory, Research & Managerial Applications.
- Bates, T., 1988. Do black-owned businesses employ minority workers? New evidence. *Rev. Black Polit. Econ.* 16, 51–64.
- Bates, T., 2001. Minority business access to mainstream markets. *J. Urban Aff.* 23, 41–56. <http://dx.doi.org/10.1111/0735-2166.00074>.
- Bendapudi, N. (2009, October 14). Columbus, Ohio: Test city, USA [Interview transcript]. Retrieved from (<http://www.npr.org/templates/story/story.php?storyId=113795356>).
- Calantone, R.J., Vickery, S.K., 2010. Introduction to the special topic forum: using archival and secondary data sources in supply chain management research. *J. Supply Chain Manag.* 46 (4), 3–11.
- Carter, M., 2008–2011. MBE/EDGE annual report and scorecard. Ohio Department of Administrative Services, Columbus, OH.
- Coch, L., & French Jr, J.R., 1948. Overcoming resistance to change, *Human Relations*.
- Cole, M., 2008. A critical assessment of professional skills and knowledge in supplier diversity: a Delphi study Doctoral dissertation. Antioch University, Antioch College, OH.
- DJ Miller & Associates, 2001. State of Ohio predicate study final report. Ohio Department of Administrative Services, Columbus, OH.
- Economist Intelligence Unit. (2010, January). Enabling efficient policy implementation. Retrieved from (<http://www.oracle.com/us/industries/public-sector/economist-report-193495.pdf>).
- Fishbein, M., & Ajzen, I., 1975. Belief, attitude, intention and behavior: an introduction to theory and research.
- Fairlie, R.W., Robb, A.M., 2008. Race and entrepreneurial success. MIT Press, Cambridge, MA.
- Grinyer, P.H., Yasai-Ardekani, M., 1981. Strategy, structure, size and bureaucracy. *Acad. Manag. J.* 24 (3), 471–486.
- Hartwick, J., Barki, H., 1994. Explaining the role of user participation in information system use. *Manag. Sci.* 40 (4), 440–465.
- Heinrich, C.J., 2002. Outcomes-based performance management in the public sector: implications for government accountability and effectiveness. *Public Adm. Rev.* 62 (6), 712–725.
- Hossain, M.B., Phillips, J.F., 1996. The impact of outreach on the continuity of contraceptive use in rural Bangladesh. *Stud. Fam. Plan.* J. 27, 98–106. <http://dx.doi.org/10.2307/2138137>.
- Howell, J.M., Hall-Merenda, K.E., 1999. The ties that bind: the impact of leader-member exchange, transformational and transactional leadership, and distance on predicting follower performance. *J. Appl. Psychol.* 84 (5), 680.
- Kelman, H.C., 1958. Compliance, identification, and internalization: three processes of attitude change. *J. Conf. Resolut.* 2, 51–60.

- Kerr, S., Jermier, J.M., 1978. Substitutes for leadership: their meaning and measurement. *Organ. Behav. Hum. Perform.* 22 (3), 375–403.
- LaNoue, G.R., 1994. Standards for the second generation of Croson: inspired disparity studies. *Urban Lawyer* 26, 485–540.
- Lazarus, J., 2006. Community engagement in higher education. *JET Bull.* 16, 1–6.
- Lee, R.P., Grewal, R., 2004. Strategic responses to new technologies and their impact on firm performance. *J. Mark.* 68, 157–171. <http://dx.doi.org/10.1509/jmkg.68.4.157.42730>.
- Marion, J., 2009. How costly is affirmative action? Government contracting and California's Proposition 209. *Rev. Econ. Stat.* 91 (3), 503–522.
- Matland, R.E., 1995. Synthesizing the implementation literature: the ambiguity: conflict model of policy implementation. *J. Public Adm. Res. Theory* 5, 145–174.
- May, P.J., Burby, R.J., 1996. Coercive versus cooperative policies: comparing inter-governmental mandate performance. *J. Policy Anal. Manag.* 15, 171–201.
- Mazmanian, D.A., Sabatier, P.A., 1980. The implementation of public policy: a framework of analysis. *Policy Stud. J.* 8, 538–560.
- Mazmanian, D.A., Sabatier, P.A., 1983. Implementation and public policy. Scott, Foresman, Glenview, IL.
- Mobley, M., Payne, T., 1992. Backlash! the challenge to diversity training. *Train. Dev.* 46 (12), 45–52.
- Montjoy, R.S., O'Toole Jr., L.J., 1979. Towards a theory of policy implementation: an organizational perspective. *Public Adm. Rev.* 39, 465–476. <http://dx.doi.org/10.2307/3109921>.
- Napier, B.J., Ferris, G.R., 1994. Distance in organizations. *Hum. Resour. Manag. Rev.* 3 (4), 321–357.
- Nutt, P.C., 1986. Tactics of implementation. *Acad. Manag. J.* 29 (2), 230–261.
- Nutt, P.C., 1989. Making Tough Decisions: Tactics for Improving Managerial Decision Making. Jossey-Bass Publishers, San Francisco, CA.
- Nutt, P.C., 1998. Leverage, resistance and the success of implementation approaches. *Journal of Management Studies* 35 (2), 213–240.
- Osborne, Jason, 2002. Notes on the use of data transformations. *Pract. Assess. Res. Eval.* 8 (6), 1–8.
- Pressman, J.L., Wildavsky, A.B., 1973. Implementation. University of California Press, Berkeley.
- Ram, M., Smallbone, D., 2003. Policies to support ethnic minority enterprise: the English experience. *Entrep. Reg. Dev.* 15 (2), 151–166.
- Rawls, J., 1985. Justice as fairness: political not metaphysical. *Philos. Public Affairs* 14, 223–251.
- Rice, M.F., 1993. State and local government set-aside programs, disparity studies, and minority business development in the post-Croson era. *J. Urban Affairs* 15, 529–553.
- Schneider, A., Ingram, H., 1993. Social construction of target populations: implications for politics and policy. *Am. Polit. Sci. Rev.* 87, 334–347. <http://dx.doi.org/10.2307/2939044>.
- Schofield, J., 2001. Time for a revival? Public policy implementation: a review of the literature and an agenda for future research. *Int. J. Manag. Rev.* 3, 245–263. <http://dx.doi.org/10.1111/1468-2370.00066>.
- Smith, C.R., Fernandez, S., 2010. Equity in federal contracting: examining the link between minority representation and federal procurement decisions. *Public Adm. Rev.* 70, 87–96. <http://dx.doi.org/10.1111/j.1540-6210.2009.02113.x>.
- Snider, K.F., Halpern, B.H., Rendon, R.G., Kidalov, M.V., 2013. Corporate social responsibility and public procurement: how supplying government affects managerial orientations. *J. Purch. Supply Manag.* 19 (2), 63–72.
- State of Ohio Equal Opportunity Division, 2012. FY2012 MBE/EDGE utilization guidance manual. Columbus, OH.
- Tichy, N.M., McGill, A.R., Clair, L.S. (Eds.), 1997. Corporate Global Citizenship: Doing Business in the Public Eye. Lexington Books, San Francisco, CA.
- Venkatesh, V., Davis, F.D., 2000. A theoretical extension of the technology acceptance model: four longitudinal field studies. *Manag. Sci.* 46 (2), 186–204.
- Wagner, J.A., Gooding, R.Z., 1987. Shared influence and organizational behavior: a meta-analysis of situational variables expected to moderate participation-outcome relationships. *Acad. Manag. J.* 30 (3), 524–541.
- Wallsten, S.J., 2000. The effects of government-industry R&D programs on private R&D: the case of the Small Business Innovation Research program. *RAND J. Econ.* 31 (1), 82–100.
- Warshaw, P.R., 1980. A new model for predicting behavioral intentions: an alternative to fishbein. *J. Mark. Res.* 17 (2), 153–172.
- Weaver, G.R., Trevino, L.K., Cochran, P.L., 1999. Integrated and decoupled corporate social performance: management commitments, external pressures, and corporate ethics practices. *Acad. Manag. J.* 42 (5), 539–552.
- Worthington, I., Ram, M., Boyal, H., Shah, M., 2008. Researching the drivers of socially responsible purchasing: a cross-national study of supplier diversity initiatives. *J. Bus. Ethics* 79 (3), 319–331.
- Zehrt, L.R., 2009. A decade later: Adarand and Croson and the status of minority preferences in government contracting. *Natl. Black Law J.* 21 (1), 1–26.