THE RELATIONSHIP BETWEEN MINORITY BUSINESS ENTER-PRISES AND CORPORATE PURCHASING PERSONNEL: PERCEPTIONS FROM BOTH SIDES OF THE TABLE

James C. Wimbush

Marc J. Dollinger

Dan R. Dalton Indiana University Bloomington, IN

Cathy A. Enz Cornell University Ithaca, NY

Catherine M. Daily Purdue University West Lafayette, IN

Abstract

This paper addresses the nature of the difficulties MBEs face when conducting business with large companies through MBE purchasing programs. Data collected from MBEs and purchasing personnel were analyzed with logistic regression to demonstrate that MBEs and their corporate purchasing counterparts have different perceptions across human, environmental, and organizational dimensions of transaction cost economics. These differences help to explain the problems: (1) that MBEs have in selling to large companies and the problems that MBEs and purchasing personnel have in implementing MBE purchasing programs; (2) of reaching agreement in the marketplace; and, (3) of collectively pursuing the economic development of the minority business community. We offer recommendations for improving the relationship between these parties.

Introduction

The development of a strong and independent minority business sector has been recognized as a major societal priority by all levels of government, the business community, and communities of racial minorities (Bates & Furino, 1985). The federal government, for example, requires large corporations with

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government contracts to contract and procure from minority business enterprises (MBEs). According to Public Law 95-507 of 1978, contractors must report the percentage of their business that is allocated to small minority firms. The more directive Public Law 99-661 of 1986 requires Department of Defense contractors to purchase at least five percent of their business from small minority enterprises that are owned and operated by black, native, hispanic, and Asian/pacific Americans. However, each of these legislative mandates has been severely narrowed due to two recent Supreme Court rulings. In Richmond v Croson 1989 (Gray and Peery, 1990; Rice, 1991) the court ruled that states must demonstrate specific patterns of discriminatory purchasing in order to justify set-asides. In Adarand v Pena 1995 (Mydans, 1995) the court applied the strict test of Croson to the federal government.

But, in addition to federal legislation, programs have been established to provide minority business enterprises with opportunities for greater access to the mainstream of American business. To this end, hundreds of corporations not under federal mandate voluntarily pursue minority suppliers and vendors to increase opportunities for MBEs, to generate minority employment, and to be socially responsible (Spratlen, 1978; Dollinger and Daily, 1989). Whether the action is voluntary or due to legislative mandate, the goal is for large companies to promote full participation of minorities in the American economic system.

Although the establishment of relationships between large companies and MBEs is an indication of progress compared to the nature of the relationship several years ago, for many businesses, the MBE/large company relationship is wrought with problems. Thus, attempts to meet legal requirements and voluntary efforts to aid in the economic development of minority businesses often end in failure and frustration for all parties (Dollinger, Enz and Daily, 1991; Bates, 1985; Dowst, 1981; Giunipero, 1980).

This paper focuses on one aspect of the effort towards improving opportunities for MBEs in corporate America: the nature of the difficulties small minority businesses have when conducting business with large companies through MBE purchasing programs. To this end we try to identify the reasons why the programs have not been as successful as they were expected to be by examining the perceptions of MBEs and their corporate counterparts, corporate purchasing personnel (CPPs), on key variables which affect the relationship. An understanding of the problems which exist between MBEs and CPPs in a purchasing relationship will enable mechanisms to be devised to improve their working relationships and, concomitantly, improve the role of the purchasing programs. The theoretical framework and perspective for the study is based on transaction costs economics (TCE) theory. According to TCE, high transaction costs impose a burden on the parties to a transaction, above and beyond issues such as price, quality, and delivery. This burden can prove to be an impediment to bringing the buyer and vendor together; a burden which may cause the negotiation process to break down (Williamson, 1975; 1981; Coase, 1952; Simon, 1957; Thompson, 1967). Thus, the major research question we address is: Do MBEs and CPPs differ in their perceptions of the various costs of doing business; and, if so, does it impact the likelihood of successful transactions?

We will proceed to address the research question by: (1) briefly describing TCE and how it provides the basis for understanding the nature of the MBE/CPP relationship; (2) discussing how the major factors which influence transaction costs affect the MBE/CPP relationship; (3) suggesting avenues which may be taken to improve the MBE/CPP relationship; and, (4) providing implications for research and practice.

Transaction Costs Economics and the MBE/CPP Relationship

TCE and its Basis for MBE Purchasing Programs

Transaction cost economics combines elements of organizational theory and microeconomics to explain market failure (Walker & Weber, 1984). Transactions are the transfer of goods and services between technologically separate units, and 'transaction costs' are the costs associated with exchanges that vary independent of the prices of the goods and services sold (Robbins, 1987). According to Ouchi (1980, p. 130), transaction costs foster cooperation between parties who enter into an economic exchange arrangement. These costs are usually the result of difficulty in determining the value of the goods or services being exchanged, or from a lack of trust between the parties—a lack of trust which may stem from the uncertainty associated with engaging in new relationships. Because parties to a transaction rarely have identical goals, an interdependency must be established to develop trust between the parties and to assure each party to the transaction a cooperative arrangement.

A lack of trust may very well exist between MBEs and CPPs who have not entered into previous working relationships. Large companies are concerned about whether MBEs will be able to deliver the agreed upon services at or within the agreed upon time period, the quality of the services or goods rendered, and the overall stability of the MBE. Especially if the MBE folds during the contract period or even after the goods or services have been delivered, the CPP may have substantial problems with future procurements, resolving any problems which develop with the already delivered goods or services, procuring replacement parts, or with obtaining follow-up service. In an attempt to alleviate these problems, according to TCE theory, if mistrust exists then the mistrusting party will want, even demand, additional contractual protections (Ouchi, 1980). However, placing costly, extra contractual obligations upon the MBEs may foster in the MBE a mistrust of the large companies. The MBEs mistrust in the large company may also stem from a feeling of vulnerability because the large company could decline to renew a contract after the MBE has undertaken the major expense to meet the company's needs. Thus, due to a lack of trust, there would be a certain anxiety, if not reluctance, on the part

of both parties about entering into a relationship. While the lack of trust is costly to both parties, however, we would argue that the cost is likely to be greater for MBEs than large companies.

Corporate purchasing programs were developed to facilitate an exchange arrangement between the MBEs and large companies. The arrangement is consistent with TCE theory for these programs were established to eliminate barriers which may hinder the development of a relationship between the parties. The purpose of the program is to reduce the uncertainty which fosters the mistrust at most, and concern at the very least, about the performance and sustenance of MBEs.

Major Factors Which Influence Transaction Costs

TCE theory specifies that the costs of contracting across a market can vary by three factors: human decision makers, properties of the markets (environmental factors), and the internal structures (organizational factors) of the firms (Pearson, Fawcett and Cooper, 1993). If the costs of overcoming these factors are too high or the gap between the parties too large, no contract will be forthcoming. This type of situation defines market failure.

Human factors. The major human factors which may lead to market failure are complexity and opportunism. Complexity refers to the limits people experience in formulating and solving problems and in processing information. People intend to be rational, but when there is a great deal of complexity, rationality may be difficult. Perceptions and values may differ, adding to the complexity (Enz, Dollinger and Daily, 1990). The presence of complexity leads to high contracting costs (e.g., time consuming negotiations, legal expenses, etc.). However, the costs imposed by complexity may be borne more heavily by the MBE than the CPP of a large company because the owner of a relatively small MBE probably participates in the work flow of the business, performs and supervises several tasks, and represents the firm in major negotiations with CPPs. The purchasing agent, on the other hand, has significantly fewer duties-all of which are related to procuring a narrow set of specialized items. To reduce complexity, the purchasing agent can often refer to a purchasing manual of procedures or call upon staff specialists to sort out the details of complex specifications or contracts. The MBE does not have these resources at her or his disposal and, therefore, must readily engage in complex information processing in which multiple concepts related to both procurement and other tasks associated with the business must be juggled simultaneously.

Opportunism, too, may affect MBEs and CPPs differentially. Opportunism represents shrewd, egoistic behavior whereby, people act according to their own exclusive self-interest without regard for the impact their actions have on their employer, peers, customers, employer's competitors, or society-at-large. People who intentionally make inaccurate statements and empty promises, for example, are behaving opportunistically. The consequences of opportunistic be-

havior may affect the MBE more severely than the CPP. Most companies with MBE purchasing programs, for example, espouse the importance of the program's contribution to corporate objectives. However, all agents, including CPPs, are susceptible to the moral hazard of acting in their own personal best interests which may diverge from corporate objectives. The presence of opportunism, then, can lead to increased costs of monitoring transactions, auditing contracts and/or structuring incentives so that agents' motives coincide with corporate objectives. In addition, corporate purchasing personnel can mislead MBEs. The false promise of a large contract can result in the overextension of an MBE's financial and operating resources. The sudden cancellation of an on-going relationship without explanation by the CPP can devastate the MBE. So, while MBE opportunism is little threat to the survival and success of a large company, many forms of corporate opportunism can have major detrimental consequences for the MBE. Therefore, we hypothesize that:

- H1: Due to resource differences, complexity of contracting is perceived to be higher by the MBE than by CPPs.
- H2: The threats to survival due to opportunistic behaviors are perceived to be higher by MBEs than by CPPs.

Environmental factors. The major environmental factors which influence transaction costs are the presence of small numbers of MBEs and uncertainty about their performance. Small numbers can increase searching costs for purchasing personnel since MBEs in certain industries and geographical areas are hard to find or do not even exist. Pearson et al (1993) reported that increasing minority business visibility was a major objective of minority firms. The small numbers problem makes renegotiation of MBE contracts more challenging and awkward because a buyer will not want to lose a high performing MBE knowing how difficult it will be to replace that firm in the buyer's portfolio. Moreover, many CPPs have no experience at all in dealing with minority firms. This unfamiliarity increases the time and energy that CPPs must devote to understanding the MBE firm. Lastly, the sparsity of MBE firms in certain geographic/industry areas places a strategic constraint on the buyer. Having multiple MBEs from which to choose will help to foster a favorable degree of competition among the MBE firms, enabling the large companies to receive the best service or goods. Thus, corporate purchasing programs may work best where there are a number of firms available to large companies.

Performance uncertainty refers to the managerial and technical ability of the parties to fulfill the specifications of the contract. For many minority owned firms, the opportunity to do business within an MBE purchasing program may be the big "break" that turns a struggling business into a profitable one. This makes it necessary for the MBE to minimize the perception of per-

formance uncertainty when pursuing corporate contracts. However, larger volumes, strict performance tolerances, and short deadlines can prove to be challenges that tax the resources of the MBE. These uncertainties can impose costs on CPP which can jeopardize the contract. Uncertainty may lead to increased monitoring of MBE firms, increased inspection, and the provision of training and managerial assistance for MBEs. Therefore, we hypothesize that:

- H3: Due to the small number of MBEs, the costs of finding and understanding MBEs is perceived to be higher by CPPs than by MBEs.
- H4: Due to managerial and technical ability, performance uncertainty is perceived to be higher by the CPPs than by the MBEs.

Organizational factors. The major organizational factors which can potentially increase transaction costs are information asymmetry and negotiation atmosphere. When asymmetry is present, the party to the transaction without the needed information has to incur a cost to procure this information (or negotiate a suboptimal contract). Information asymmetry may affect either the corporation or the MBE, but is likely to be a larger problem for the MBEs. Buyers have information costs related to finding, certifying the qualifications, and monitoring the performance of MBEs. But, MBEs face an even higher cost. They typically are not a part of the network which provides advance notice and information concerning forthcoming contracts. Thus, they become aware of potential contracts very late in the process or even after bids are due. Moreover, the MBE owner often must negotiate alone in the bureaucratic maze that often characterizes procurement programs.

Atmosphere refers primarily to the nature of the climate in which negotiations evolve and take place. When the atmosphere of a negotiation is hostile and discriminatory the parties may never reach agreement. The costs of this fiasco are borne by both sides, but perhaps more heavily by the MBE. There may be several plausible explanations for a hostile atmosphere. First, many CPPs have had limited experience dealing with racial and cultural minorities and may have unfavorable preconceived notions about engaging in a working relationship with an MBE (Enz et al, 1990). These preconceived notions may be linked to a certain degree of stigmatization associated with being in an MBE program. Secondly, CPPs report a "backlash" against the actual and perceived special treatment for, and affirmative action given to, MBEs. Therefore, the use of "old-boy networks" composed of "comfortable" vendors instead of the employment of competitive bidding may seem to be prudent from the CPPs' viewpoint, but is a violation of purchasing ethics and often serves to discriminate against racial and cultural minorities. Therefore, we hypothesize that:

H5: Due to information asymmetry, MBEs are perceived to incur a higher cost to procure information than CPPs.

H6: Due to the atmosphere of negotiations, MBEs are perceived to incur a higher cost of doing business than CPPs.

Avenues for Improving the MBE/CPP Relationship

Activities which may serve to prevent the potential market failure facing MBEs and corporations fall into five general categories: (1) monitoring activities, (2) searching activities, (3) activities designed to improve performance quality, (4) activities designed to mitigate the atmosphere problem, and, (5) activities which internalize the MBE/CPP relationship (Pearson et al, 1993).

Monitoring activities are designed to provide contracting parties control and audit capabilities over the contracting process. Included in this process are the MBE purchasing program itself as well as the formal contract negotiation. Examples of monitoring activities include performing credit checks on MBEs, auditing the corporate MBE purchasing program and monitoring subcontractors' compliance with federal regulations. These activities may help to reduce uncertainty and information asymmetry by providing the parties with timely data.

Monitoring may also mitigate problems of opportunism by reducing the chances of non-detection of opportunistic behavior. If each party stands to gain from its own opportunism, then it must be deterred in order to provide a climate conducive to good faith negotiations and for sustenance of a mutually beneficial reciprocity norm. Monitoring will enable CPPs to receive assurances, through certification of the MBE, that the MBE will help them meet the company's goals and target level of MBE involvement. By the same token, MBEs benefit from certification because the process eliminates "front" organizations that are not truly minority owned and operated, thereby, providing maximum opportunity for authentic MBEs. Furthermore, a series of successful certifications for an MBE may enhance its legitimacy and reputation with buyers.

Searching activities are designed to assist large companies with identifying potential MBE parties with whom to contract. These search activities may include attending MBE trade fairs, placing advertisements in the MBE press to publicize opportunities, or automating procurement lists for MBE bidding. Search activities represent an effort to overcome the problems of small numbers, bureaucratic complexity, and information asymmetry. These activities are hypothesized to benefit MBEs because they supplement the MBE's marketing system by bringing the corporate customer directly to the MBE's door.

Quality assurance activities are designed to increase the probability that MBEs will successfully perform the contract. These activities are achieved by the large company providing MBEs with management, financial, and technical

assistance to minimize expense to the MBEs. However, MBEs invest time, energy, and human resources for these activities. Thus, quality assurance activities not only cost large companies but MBEs, too.

Cultural interaction activities promote racial and cultural understanding between the parties. Examples include affirmative action for the hiring of minority buyers, special training for buyers in the problems of MBEs and multicultural diversity, and social events at which MBEs and buyers have the opportunity to interact. These activities may partially ameliorate the atmosphere problem previously discussed. To the extent that the parties to the contract are able to relate to each other well interpersonally, they will be able to conduct their negotiations without rancor and racial prejudice.

Internalization activities bring the MBE within the usual arms length contracting relationship. Efforts toward internalization include engaging in joint ventures with MBEs, investing in venture capital pools for MBEs, and giving MBEs access to corporate training programs. By bringing the MBE partially inside the large company, many of the human, environmental, and organizational barriers may be offset. To the extent that business uncertainty is a cost factor, for example, corporate equity participation in the MBE venture may help insure the success of the MBE as an on-going firm.

MBEs, therefore, have potentially much to gain by the lowering of the transaction costs which may inhibit the success of MBE purchasing programs. Thus, MBEs may tend to look more favorably than CPPs upon the policies, procedures and activities that remove, shift, delay, or mitigate the incurring of transaction costs of MBEs. Typically, these policies and activities have the effect of transferring costs to the corporation. CPPs may also favor these policies and activities but only to the extent that they shift costs away from the individual buyer and onto another administrative unit, either somewhere else in the organization or outside the organization, (e.g., a governmental agency that certifies minority status). Therefore, it is hypothesized that:

H7: MBEs will favor more strongly than CPPs, activities designed to improve the performance of MBE purchasing programs in the following areas: monitoring, searching, quality assurance, cultural interaction, and internalization.

Methodology

Sample

A field study was conducted in two phases in order to test the seven hypotheses (Dollinger and Daily, 1989). In the first phase, interviews were held around the country with the owners of ten MBE firms as well as CPPs from thirteen large companies. Corporate participants were selected at random from the membership lists of the National Association of Purchasing Management. Among the corporate participants in this stage were Northern Telecom, US

WEST, ARCO, Nabisco Brands, and Eli Lilly. Minority participants were selected from the <u>Try Us '88 Directory of Minority Business</u>. The interviews were conducted at the subjects' places of business and provided preliminary support for the applicability of the TCE framework.

The problems of complexity and bounded rationality emerged from our interviews. Subjects repeatedly referred to the problems of the corporate bureaucracy and details of bidding procedures. Both MBEs and corporate purchasing agents were able to give many examples of opportunistic behavior. False promises were often mentioned by MBEs as examples. Purchasing personnel were sensitive to the minority "front" organization.

From the interviews we discerned the issues of small numbers and performance uncertainty. These were emphasized by the purchasing people, but also acknowledged as problems by the MBEs. Without a critical mass of high quality suppliers, the MBEs felt they were always going to be viewed suspiciously and would incur extra monitoring costs.

Lastly, the "atmosphere" problem was discussed in the interviews. Neither side was reluctant to talk about racism, although most admitted it was usually hidden within the protocols of the bidding procedure. The corporate people mentioned what they called a "give-me" attitude that polluted their negotiations. The MBEs noted the distasteful remarks and condescending attitudes by purchasing agents.

The initial phase provided the basis for the development of the questionnaire used in phase two. The second phase of this study was then administered in three parts. MBEs were surveyed at random from the <u>Try Us '88</u> <u>Directory of Minority Business</u> (Minneapolis, Minn.). Four hundred and seventy five questionnaires were sent, 166 usable responses were received (two mailings) for a response rate of 35 percent. The MBEs surveyed represented 83 different 4-digit SIC codes and 112 different 3-digit ZIP codes. The second group sampled consisted of CPPs. Twenty three of 83 firms approached from the membership of the National Minority Supplier Development Association agreed to participate (27.7%). From these 23 firms, 547 usable questionnaires were returned from CPPs—purchasing agents (buyers), their managers, corporate staff involved in MBE purchasing programs, and corporate executives with MBE responsibility. The corporate respondents represented 103 corporate divisions, 102 separate 3-digit ZIP codes and 21 4-digit SIC codes.

Measures

Scales were developed from a list of items to capture the transaction cost dimensions and activities (See Appendix A). A factor analysis of scale items revealed that uncertainty was two dimensional, therefore two scales, one for business uncertainty and one for production uncertainty were created. Similarly, monitoring and searching were separated into two dimensions, one for MBEs and one for large companies. Quality assurance had three dimensions: financial, managerial, and technical. Table 1 presents an overview of the measures,

summary statistics and reliabilities for the scales. In every case, the reliability of the measures were well within acceptable standards (Nunnally, 1978).

Table 1
Overview of Dimensions of Transaction Cost and Activities Variables

DIMENSIONS OF TRANSACTION COST VARIABLES
Complexity Costs imposed by complex rules and procedures. 17 items, alpha = .70
Opportunism Costs of opportunistic, unethical, or illegal behavior. 4 items, alpha = .62
Small Numbers
Business Uncertainty Costs of firm's uncertain future. 4 items, alpha = .79
Production Uncertainty Costs of uncertain production quality. 5 items, alpha = .71
Information Asymmetry Costs of both parties not having information. 7 items, alpha = .77
Atmosphere
Monitoring MBEs Control and audit capabilities. 6 items, alpha = .71
Monitoring Companies
Searching for MBEs Identification of MBEs for contracts. 6 items, alpha = .64
Searching for Companies
Financial Assurance
Managerial Assurance Activities to reduce managerial uncertainty. 4 items, alpha = .56
Technical Assurance
Cultural Interaction Promoting racial and cultural understanding. 3 items, alpha = .64
Internalization Activities to bring MBEs within reach of company. 4 items, alpha = .78

Results

Demographics

The MBE sample was mostly nonwhite (84.3%) and male. The respondents in the MBE sample who identified themselves as white were either women or may have represented a cultural minority such as Hispanic. On the other hand, the CPP sample was mostly white. Blacks represented 7.7% of the CPP sample. There was no statistical difference in responses based on race. Table 2 presents an overview of the characteristics and demographics of the sample.

Table 2
Characteristics of the MBE and CPP Samples

		IBE		<u>PP</u>
	(n= #	=166) %	(n= #	:547) %
D		70		
Race: Caucasian	26	(5.7)	474	(86.7)
Black	65	(39.2)	42	(7.7)
Hispanic	41	(24.7)	10	(1.8)
Asian-American	26	(15.7)	8	(1.5)
Native American	8	(4.8)	13	(2.4)
Sex:				
Male	109	(65.7)	370	(67.6)
Female	56	(33.7)	174	(31.8)
Not Stated	1	(.6)	3	(.6)
Education:				
Less than High School	3	(1.8)	0	(0.0)
High School Graduate	16	(9.6)	38	(6.9)
Some College	43	(25.9)	128	(23.4)
College Graduate	39	(23.5)	203	(37.1)
Some Graduate School	25	(15.1)	100	(18.3)
Graduate Degree	40	(24.1)	74	(13.5)
Age in years: (mean)		45.5	•	41.4
Tenure on Job in years: (mean)		11.2		5.6
Title (MBE)	<u>#</u>	<u>%</u>		
Owner	138	(83.1)		
Senior Manager	28	(16.9)		
Title (CPP):			<u>#</u>	<u>%</u>
Buyer			374	(68.4)
Manager			173	(31.6)

With regard to education, the CPP group was comprised of more college graduates. Interestingly, however, the high percentage of minority respondents with graduate degrees (24.1%) suggest that minorities who might otherwise be productively employed in large companies, have found an alternative in entrepreneurship.

There was a statistically significant (F=19.70, p<.001) difference between the MBE (11.2 years) and CPPs (5.6 years) for the length of tenure on the job. This may be indicative of the turnover which occurs in corporate purchasing. The ownership of a small, established business is apparently a more stable endeavor.

The MBE sample was composed of owners (83%) and senior level managers (28%), the people in the best position to know their firm's experience with corporate purchasing programs. Over half of the corporate respondents identified themselves as buyers (68.4%), while 31.6 percent identified themselves as managers of buyers. The respondents in the CPP sample occupied positions which had direct line responsibility for executing MBE purchasing programs.

Hypotheses Testing

Hypotheses 1-7 explored whether there were differences between the MBEs and CPPs on the following transaction costs: complexity, opportunism, small numbers, performance uncertainty, production uncertainty, information asymmetry, atmosphere, monitoring of MBEs, monitoring of large companies, searching for MBEs, searching for large companies, financial assurance, technical assurance, managerial assurance, cultural interaction, and internalization. To test these hypotheses two sets of analyses were conducted. t-tests were conducted to identify differences between the two groups on each variable. The results, as shown in Table 3, revealed that significant differences existed on all variables except for two—cost of monitoring MBEs and the small number of MBEs. While these results are instructive, a more conservative approach would dictate a multi-variate procedure whereby all independent variables can be simultaneously assessed.

Accordingly, the next set of analyses relied upon logistic regression for hypotheses testing. Because the Wald statistic rapidly loses power as the absolute value of the regression coefficient increases (e.g., Hosmer & Lemeshow, 1989; Norusis, 1990), we will use the likelihood-ratio (L-R) approach. The L-R approach also has the advantage of ease of interpretability inasmuch as it can be used as the functional equivalent of hierarchical multiple regression. Moreover, the L-R approach also has elements of a discriminant function analysis in that it provides familiar "hit-rate" information as well.

Table 4 shows the results of logistic regression analysis. The initial (i.e., baseline) log-likelihood statistic was 464.09 (based only on the constant of the regression equation in an L-R approach, not any of the 16 transaction cost variables) and the hit-rate was 78.43 percent. This result

Table 3 t-test for Differences Between MBEs and CPPs on Transaction Cost Variables

	MBE	CPP	
Variables	Mean	Mean	t
Complexity	42.28	47.92	-5.80***
Opportunism	21.43	16.18	14.72***
Small Numbers	34.80	34.18	.89
Business Uncertainty	13.63	15.83	-4.38***
Production Uncertainty	18.11	19.47	-2.91***
Information Asymmetry	35.54	25.93	15.17***
Atmosphere	31.49	23.36	13.21***
Monitoring of MBEs	36.01	36.48	88
Monitoring of Corps.	62.44	54.63	7.94***
Searching for MBEs	34.22	30.66	7.39***
Searching for Corps.	35.56	31.08	9.90***
Financial Assistance	14.48	9.46	12.23***
Managerial Assistance	22.07	21.14	2.64**
Technical Assistance	15.03	12.28	7.77***
Cultural Interaction	16.71	15.17	5.04***
Internalization	20.99	16.40	10.34***

^{*}p < .05; **p < .01; ***p < .001

Table 4 Results of Logistic Regression Model

Variables	Log- Likelihood	Model Chi- Square	Model Improve	Sig.	Hit Rate
Baseline	464.09			.000	78.43
Final Model	248.134	215.96	215.96	.000	88.54
MBEs Searchi	ng				
Financial Assu	rance				
Managerial As	surance				
Atmosphere					
Internalization					
Small Number	rs				
Production Un	certainty				
Opportunism	•				
Information A	symmetry				

is intuitive. Based on the sample itself, we know that 78.43 percent of the subjects are corporate. Clearly, then, any observer would simply choose the corporate designation if asked to guess which category that any given data point might appear. This person would be correct, of course, some 78.43 percent of the time.

The next step considers the importance of the inclusion of independent variables into the model. Initially, 16 variables were entered. Based on an iterative procedure, the L-R approach evaluates each variable in turn and determines which subset of independent variables results in the most robust model. Table 4 in the "final model" section illustrates the results of this procedure. Notice that only variables (1) MBEs searching for large companies, (2) financial assurance, (3) managerial assurance, (4) atmosphere, (5) internalization, (6) small numbers, (7) production uncertainty, (8) opportunism, and, (9) information asymmetry are so included. The final model log likelihood is 248.13, for a model chi-square and improvement chi-square of 215.96 (p<.000). Notice, too, that the hit rate has been improved to 88.54 percent. From this we see that the inclusion of: MBEs searching for large companies, financial assurance, managerial assurance, atmosphere, internalization, small numbers, production uncertainty, opportunism, and information asymmetry result in a far more robust model.

Table 5 provides a more precise indication of the contribution of independent variables to the model. As expected, all variables in the final model are statistically significant. In addition, the odds ratio (noted as exp[B] in Table 5) provides some indication of the magnitude of contribution as well. An odds ratio of "1," for example, would indicate no relationship with the dependent variable. Such a variable, of course, would not be included in the final model. As odds ratios deviate from 1, greater absolute deviations are properly interpreted as stronger individual relationships with the dependent variable. Accordingly, it would seem that, while all the included variables are statistically significant, managerial assurance, atmosphere, and opportunism provide the greatest explanatory power.

Table 5
Logistic Coefficients in Final Model

Variable	В	S.E.	Wald	df	Sig	R	Exp(B)
Search for Company	1594	.0416	14.7048	1	.0001	1655	.8526
Financial	.1864	.0565	10.8798	1	.0010	1383	.8299
Managerial	.3104	.0624	24.7393	1	.0000	.2214	1.3639
Atmosphere	.1962	.0732	- 7.1801	1	.0074	.1056	1.2168
Internalization	1417	.0587	5.8356	1	.0157	0909	.8678
Small Numbers	.1014	.0312	10.5582	1	.0012	.1358	1.1067
Production Uncertainty	.0986	.0365	7.3056	1	.0069	.1069	1.1036
Uncertainty							
Opportunism	2583	.0534	23.3733	1	.0000	.2146	.7723
Information Asymmetry	0838	.0304	7.5804	1	.0059	1097	.9196
Constant	3.8522	1.2616	9.3236	1	.0023		

Discussion

The results of this study demonstrate that MBEs and their corporate purchasing counterparts have different perceptions across all three dimensions of transaction costs: human, environmental, and organizational (Hypotheses 1-6). MBEs and purchasing personnel differed on all the variables except the effects of small numbers. These differences empirically demonstrate, the problems that MBEs have in selling to large companies and the problems that MBEs and purchasing personnel have in implementing MBE purchasing programs, in reaching agreement in the marketplace, and in collectively pursuing the economic development of the minority business community.

For the MBE, the stakes of successfully participating in an MBE purchasing program are quite high; therefore, they view the transaction costs as hurdles to be overcome regardless of cost (to the large company). Corporate purchasing people have a lower stake in the problem. While they too identify transaction costs as hurdles, they are rather less willing to engage in costly activities to overcome barriers to contracting. On all of the activities variables (i.e., activities to prevent MBEs from market failure with large companies), except monitoring of MBEs, there was a significant difference between the MBEs and CPPs (Hypothesis 7). Thus, when considered in tandem with the results of the analysis of the transaction costs variables, the implication here is that MBE purchasing programs do not prevent "market failure." The transaction costs which impede contracting between minority firms and large companies are borne more heavily by MBE firms, and activities designed to shift or remove these costs are less favored by corporate personnel.

Although the mission of MBE purchasing programs, to increase MBE procurement, is simple, the implementation of these programs is complex and challenging. Within an efficiency context, the logic of MBE procurement would dictate the internalization, or takeover, of these minority firms. This, of course, is a common reaction by large companies experiencing supply problems. However, this strategy fails to meet federal guidelines or social objectives. Based on this study, it can be concluded that currently MBE purchasing programs are ineffective as a means of equalizing or mitigating MBE transaction costs. Structures designed to reduce or shift transaction costs for both MBEs and corporate personnel would seem to be in the interests of both.

Implications for MBEs

The results of the study suggest that selling to large companies is not a panacea for MBEs, especially those that utilize the MBE purchasing programs. For all of the benefits derived from having large corporate customers, MBEs still incur costs. These costs are inherent in the transaction, and may not be recognized directly as accounting type costs, but they nonetheless reduce the effectiveness of the MBE firm. MBEs would be advised to broaden their customer base beyond corporate purchasing programs and sell to other small firms

and mid- to large-size firms that do not have special MBE purchasing responsibilities.

A second recommendation for the MBE owners is for them to recognize that there are structural impediments that occur when selling to a large company; that is, not all conflict is racially motivated. When transaction costs are present, the MBE can do at least three things to make it easier for the corporation to do business. First, MBEs should freely provide information to reduce uncertainty about their business operations and their capabilities to deliver quality goods and services. Secondly, MBEs should request information from corporations concerning their procurement needs, policies and timetables before becoming involved in costly and prolonged negotiations and conflicts. This information seeking would help to reduce the information asymmetry which currently exists. The prepared MBE helps reduce the costs of complexity by being prepared for the transaction.

A final recommendation for MBEs is for them to make use of organizations which exist to reduce the transaction costs between large companies and MBEs (e.g., Regional Supplier Development Councils). Effective liaisons are designed to be matchmakers and bring MBEs together with corporate managers who have procurement responsibilities. They also help to monitor MBE and corporate behavior within these transactions, and can serve as ombudsman for either side when the transaction costs increase such that they threaten the relationship.

Implications for Corporate Management

The present study suggests new directions for MBE purchasing programs. The first recommendation for CPPs and MBEs is to work harder at implementing the programs as they are now configured. This means addressing the impediments directly and focusing on those activities which reduce transaction costs between MBEs and CPPs. Reducing complexity, increasing the pool of qualified MBEs, improving the atmosphere for negotiations, encouraging trust while implementing disincentives for opportunistic behavior, minimizing business uncertainty, and keeping information lines open in both directions may have this effect. However, it serves to the advantage of the CPP, not MBE.

A second recommendation is to employ mechanisms to shift transactions costs away from the decision makers, namely, the CPPs and the MBE owners. This may uncouple the decision to contract from the high costs of executing and monitoring the contract. Administrative units or personnel are needed to absorb these shifted costs. This could take the form of staff specialists who are outside of purchasing, specialists within purchasing but not responsible for contract negotiating, or units outside of the firm altogether such as Minority Purchasing councils. Effective Minority Purchasing Councils are capable of absorbing these transaction costs (and covering the expense with its dues and membership fees) and facilitating agreements. They can also provide economies of scale (size) and scope (range of activities) that a single purchasing

organization can not achieve. However, it is recognized that the Minority Purchasing councils may also have problems similar to those faced by the MBE: barriers and insufficient power.

A third recommendation addresses the criteria for evaluating the results of MBE purchasing programs. It is recommended that corporations adopt multiple criteria for evaluating their programs and the performance of their purchasing personnel. Quantitative goals like total sales dollars and the federal quota are useful, but limited. Indeed, sometimes these targets can be used against promoting minority business because a filled quota is often frowned upon and an unattainable dollar figure (in the absence of sanctions) tends to make people cynical. Qualitative goals and criteria with the flexibility to allow many different modes of success are recommended to augment current methods.

The final recommendation is to experiment with some innovative programs suggested by the results of the study. These innovations fall under the heading of "internalization." They require the mixing of corporate and MBE resources, assets, money and people in a manner that is less than arms-length contracting. Internalization is a way to bring the MBE and corporation together either physically or contractually for a self-defined limited time period, so that, once the firms are separated and once again legally distinct, the transaction costs will be permanently reduced. An MBE incubator facility, for example, would reduce the business and production uncertainty transaction costs factors by providing resources and by securing monitoring capability. An incubator facility is an overhead sharing device that allows a number of small businesses to share space costs, administrative overhead, and specialist employees. With corporate financial assistance and monitoring, an incubator would enable CPPs to directly observe the progress of the MBEs, and enable the MBEs immediate access to corporate personnel and information. The MBEs would no longer be "outsiders" with all the barriers of selling to a large company to overcome.

Another example of internalization would be a program similar to an affirmative action program for recruiting college students. Except with this program, minority students would be recruited for special training with the goal of eventually pursuing an entrepreneurial opportunity. During the minority person's training, he or she would be exposed to the large company's operations which might be best suited to MBE procurement. Then, when the trainee leaves the company, that individual is uniquely suited to act as a supplier to his or her prior employer. While it is recognized that this may be a relatively expensive program for the large company, it serves the purpose of lowering the transaction costs of later procurement. There is also potential for product innovation and development.

Implications for Human Resources Management

There are implications from the findings for human resources management for the large company as well as the MBE. These implications are grounded in the basic premise of TCE. According to Ouchi (1980), organizations can rely upon socialization as an efficient, and the principle mechanism, for mediation or control. Socialization is necessary because new or prospective employees will not share the same devotion to the values and mission of the organization. Such socialization would allow the basis for reciprocity to be established and maintained among employees of both parties. However, it is important for both parties to recognize that the socialization is more than mere discussions about what is valued at the company (be it an MBE or large company), but an inclusive approach to shaping employees' behavior. We believe companies should be more socially responsible to minority firms therefore, socialization would consist of formal and informal programs for teaching new employees about the values and philosophy of the firm as well as the procurement programs and their purpose, a mechanism for evaluating performance, and a reward system designed to further reinforce the company's value of working with minority firms. For it is through common values and beliefs that the occurrence of opportunistic behavior is mitigated, if not eliminated. It is also through this process of socialization that the nature of the MBE/CPP relationship is more fully understood, hopefully, to the extent that any stigmatization for MBE participation is erased.

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Appendix A Minority Business Enterprise Purchasing Program Survey

The purpose of this survey is to investigate some of the issues of Minority Business Enterprise (MBE) purchasing programs and the potential solutions to these problems. Your cooperation is vital. Please answer all of the questions as best you can. Your answers are completely **confidential**; only the researchers at the Center for Advanced Purchasing Studies and Indiana University will see this survey. Thank you for your help.

Instructions: On the following pages are statements used to describe problems of Minority Business Enterprise (MBE) purchasing programs. Read each statement carefully and think about your own company. Then indicate whether you (1) Strongly Disagree, (2) Moderately Disagree, (3) Slightly Disagree, (4) Neither Agree nor Disagree, (5) Slightly Agree, (6) Moderately Agree, or (7) Strongly Agree with the statement by circling the appropriate number next to the statement.

	•		_	-	9	U				,			
	Strongly Disagree	Moderately				Moderat	-	7			_	-	
	Disagree	Disagree	Disagree	_	Agree	Agree	;		P	Agr	ee		
*****	***************************************	······································	······································	Disagree									
,	D 11	* 141 1			٠-	. 11 6		_	•			_	
i.	MBEs.	usiness with l	arge corpor	rations is not	very proti	table for	1	2	3	4	5	6	7
2.		contracts to b	id is time.	consuming fo	r MRFc		1	2	2	4	5	6	7
3.	-	ave difficulty		-						4			
4.		ions apply th	-	•						4			
4 . 5.		icult for MBI								4			
6.		ions don't ge	-		•					4			
7.	-	ions don't ge i to match th			•	-	-		_	4	_	-	•
		gnation of "n			-	, need.				4			
		actors don't l	•		WIDES.				-	4			-
			-						-		_	_	-
		an't compete			ad firms					4			
	-	don't know m eed technical		•	eu mms.					4			
					ADE		-	_	-	4	_		
	-	are inconsister	•		VIBE prog	ram.				4			
	-	ise MBEs jus	•							4			
		don't work cl			• F* .					4			
		ons don't giv			SES.					4			
	-	tions take too	-	-				_	-	4	-	-	
		for MBEs to	_						-	4	_	-	
		ecome disillu			ireaucracy.					4			
		re often unde	•							4			
21		a lack of co	rporate con	nmitment to I	MBE purch	ıasing	1	2	3	4	5	6	7
	programs	S.											

Appendix A
Minority Business Enterprise Purchasing Program Survey cont'd

1	2	3	4	5	6	7	
Strongly	Moderately		Neither	Slightly	Moderately		lv
Disagree	Disagree		Agree Nor	Agree	Agree	Agree	•
Ü	Ü	Ü	Disagree	Ü			
22. MBEs at	e powerless	to negotiate	favorable te	rms.	1	2 3 4 5	6.7
	misunderstan					2 3 4 5	
	eed long lead					2 3 4 5	
	ely on their '		• •	•		2 3 4 5	
	all-volume or					2 3 4 5	
•	ernment does	•				2 3 4 5	
purchasii					-		
•	es for MBE	quotes are	too short.		1	2 3 4 5	6 7
	es for MBE					2 3 4 5	
	e not availab					2 3 4 5	
	re not aware	-				2 3 4 5	
-	on't expand t			corporate r	needs. 1	2 3 4 5	6 7
	e naive/inexp					2 3 4 5	67
	re not price-c		•			2 3 4 5	
	ack informati	•	E capability.			2 3 4 5	
36. MBEs ca	an't handle th	e paperwoi	k.		1	2 3 4 5	6 7
37. MBEs ca	an't meet bid	quote dead	llines.		1	2 3 4 5	6 7
38. MBEs hi	ide problems	that they a	re having.		1	2 3 4 5	6 7
39. Racial bi	iases hurt ME	BE purchasi	ng programs		1	2 3 4 5	6 7
40. Buyers h	ave no incen	teive to ma	ike MBE pur	chasing	1	2 3 4 5	6 7
program	work.						
	ave a "give-n				1	2 3 4 5	6 7
	E pruchasing		-		1	2 3 4 5	6 7
	e clustered in		-		1	2 3 4 5	6 7
	re clustered in	_		s.	1	2 3 4 5	6 7
	ince by MBE					2 3 4 5	
	ave poor bidd					2 3 4 5	
	eel stress and		-	purchasing		2 3 4 5	
	ave inefficien	_	-			2 3 4 5	
	actors are im	-				2 3 4 5	
	stributor and agreements.	wholesale t	ousiness blocl	ked by	1	2 3 4 5	6 7
	prevent subco	ntracting to	MBEs.		1	2 3 4 5	6 7
52. Corporat	e resources to	develop N	MBEs is a co	stly proces	s. 1	2 3 4 5	6 7
53. Corporat programs	ions don't ha s work.	ve the imag	gination to m	ake MBE	1	2 3 4 5	6 7
	ng and qualif	ying MBEs	is a costly t	process.	1	2 3 4 5	67
	al buyers are					2 3 4 5	
•	yer turnover l	nurts long-t	erm relations	hips with I	MBEs. 1	2 3 4 5	6 7

	Ap	pendix A			
Minority Business	Enterprise	Purchasing	Program	Survey	cont'd

		_		8 8					
1	2	3	4	5	6			7	
Strongly	Moderately	Slightly	Neither	Slightly	Moderat	tely	Stro	ongl	y
Disagree	Disagree	Disagree	Agree Nor	Agree	Agree	e	A	gree	
			Disagree						
57. MBE pu	rchasing prog	rams are a	t odds with e	efficient pu	rchasing	1 2	2 3 4	4 5	6 7
practice.									
58. MBE pro	ograms lead b	ouyers to co	ompromise th	eir profess	ional	1 2	2 3 4	4 5	6 7
standards	s.								
59. MBEs h	ave high failu	ire rates.				1 2	2 3 4	4 5	6 7
60. MBEs so	ometimes act	as a "front	" for non-mi	nority busi	ness.	1 2	2 3 4	4 5	6 7
61. MBEs la	ck qualified	engineering	personnel.			1 2	2 3 4	4 5	6 7
62. MBEs la	ck qualified	managerial	personnel.			1 2	2 3 4	4 5	6 7
63 MBEs la	ck qualified	sales person	nnel.			1 2	234	4 5	6 7

Instructions: Below are activities that are sometimes used to implement aspects of Minority Business Enterprise (MBE) purchasing programs. Read each statement carefully and think about your own company. Then indicate whether you (1) Strongly Disagree, (2) Moderately Disagree, (3) Slightly Disagree, (4) Neither Agree nor Disagree, (5) Slightly Agree, (6) Moderately Agree, or (7) Strongly Agree that the activity should be part of a large corporation's MBE program by circling the appropriate number next to the statement.

1	2	3	4	5	6	7
Strongly	Moderately	Slightly	Neither	Slightly	Moderately	Strongly
Disagree	Disagree	Disagree	Agree Nor	Agree	Agree	Agree
			Disagree			

This item should be part of a large company's MBE purchasing program

1. Provide or use a certification process.	1 2 3 4 5 6 7
2. Offer management assistance.	1 2 3 4 5 6 7
3. Engage in joint ventures.	1 2 3 4 5 6 7
4. Employ company expediters to offer aid to MBEs.	1 2 3 4 5 6 7
5. Give MBEs access to company technical resources.	1 2 3 4 5 6 7
6. Make company internal training available to MBEs.	1 2 3 4 5 6 7
7. Sponsor MBE attendance at business education programs.	1 2 3 4 5 6 7
8. Offer materials management and supply help.	1 2 3 4 5 6 7
9. Hold quality assurance meetings.	1 2 3 4 5 6 7
10. Offer loans or loan guarantees to MBEs.	1 2 3 4 5 6 7
11. Offer subsidies to MBEs.	1 2 3 4 5 6 7
12. Develop national agreements with black/Hispanic groups.	1 2 3 4 5 6 7
13. Attend MBE trade fairs.	1 2 3 4 5 6 7
14. Place ads in the minority press.	1 2 3 4 5 6 7
15. Establish prepayment agreements.	1 2 3 4 5 6 7

Appendix A
Minority Business Enterprise Purchasing Program Survey cont'd

1	2	3	4	5	6	7	
Strongly	Moderately	Slightly	Neither	Slightly	Moderately		
Disagree	Disagree	Disagree	Agree Nor	Agree	Agree	Agre	ee
			Disagree				
17. Invest in	venture capi	tal pools fo	or MBEs.			2 3 4	
	estrictive requ					2 3 4	
	automated mo	_		BE agreem		2 3 4	
	MBE particip		bcontracts.		•	2 3 4	
	nt program a				_	2 3 4	
•	th bid prepara					2 3 4	
	rchasing agen		ems of MBE	S.		2 3 4	
	performance 1					2 3 4	
=	credit checks					2 3 4	
26. Check re						2 3 4	
	etters of credi					2 3 4	
	ific purchasin				_	2 3 4	
	an MBE ad				,	2 3 4	
•	capability to		-			2 3 4	
-	y and commen	ndations fo	r buyer parti	cipation in	1	2 3 4	5 6 7
MBE pr		involved in	MDE nurch	asing prop	rom 1	2 3 4	567
	management			asing prog	,	2 3 4	
	e a permanent			ant or avec		2 3 4	
MBE go	onetary incent oals.	iives ioi bi	iyeis who me	et of exce	.cu i	2 3 4	507
	leadership role	e in MBE	economic de	velopment	in the 1	2 3 4	5 6 7
commun	•				_		
•	ge non-minori		s to become	involved.		2 3 4	
	y bidding pro			_		2 3 4	
	MBE vendo	_		-	_	2 3 4	
	h an MBE pr				1	2 3 4	
	automated da			urement.	1	2 3 4	
	nate long-terr	-	_		1	2 3 4	
	feedback to					2 3 4	
	general infor		supply procu	dures.	1	2 3 4	
	list of buyer		_		1	2 3 4	
	list of comm		_			2 3 4	
46. List larg	ge volume op	portunities.			1	2 3 4	5 6 7