**SMALL BUSINESSES DO APPEAR TO BENEFIT
FROM STATE/LOCAL GOVERNMENT ECONOMIC
DEVELOPMENT ASSISTANCE***

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ABSTRACT

This study analyzes traits of small businesses that received state/local government aid in such forms as managerial, technical assistance, help in obtaining loans or bonding, and procurement assistance. Over 13 percent of small firms nationwide were found to be involved in selling goods/services to state/local government. Among firms owned by nonminorities, aid recipients tend to be the larger small businesses, but this pattern did not typify minority-owned firms. Among the nonminority businesses, furthermore, those aided by state/local government are more likely than nonassisted firms to remain in operation, even when various form and owner characteristics are controlled for statistically; this pattern did not typify minority-owned firms. State/local government aid flows disproportionately to women-owned businesses and to firm owners who lack managerial experience. No evidence was found indicating targeting of assistance to specific industry groups.

Keywords: small business assistance, economic development programs

The effectiveness of state and local government efforts to assist small businesses is inherently difficult to evaluate. Relevant data are often lacking or difficult to assemble, and, when data are available, cause and effect relationships are hard to establish. Small business development programs are, in fact, not evaluated in any systematic fashion by some of the administering government units. (Eisinger, 1991). Rubin's amusing description of state economic development program administration —"shoot anything that flies; claim anything that falls"—highlights the uncertainty inherent in trying to figure out what various development initiatives are actually accomplishing. Strategic planning can become rather arbitrary in this milieu, when solid information on the payoff of various program initiatives is simply unavailable to economic development personnel.

This study puts forth concrete empirically-based approaches to evaluating the impact of state/local government assistance upon small business. Evidence on the traits of assisted businesses is presented and analyzed in order to infer (1) whether evidence of targeting assistance to select business sub-groups is present, and (2) whether the assisted small businesses somehow perform better through time than non-assisted firms. Overall, it is the larger scale small firms that are most likely to receive assistance from state/local government. Controlling for firm and owner characteristics, time series evidence indicates that the assisted small businesses are more likely to remain in operation than unassisted firms. Treatment of

minority-owned firms, furthermore, is shown to be quite unlike patterns of assistance provided by state/local government to nonminority-owned small businesses.

Types of Assistance Most Commonly Provided to Small Businesses

Broad patterns of state assistance to small business, described by Bartsch (1989), emphasize financial assistance most heavily. In terms of direct lending, "42 states have loan programs that focus on small business capital needs, 32 provide loans to help finance buildings, and 34 offer loans for equipment and machinery," (Bartsch, 1989, p. 163). Loan guarantees are provided by 22 states; equity financing is provided by both venture capital programs (25 states) and pension fund initiatives (12 states). Most states provide loan packaging programs to assist small firms often in conjunction with local development corporations. Numerous other sorts of small business assistance proliferated in the 1980s. Incubator facilities are offered to small businesses—often start-ups—in 29 states. Most states and large cities offer preferential programs designed to increase small business involvement in state procurement of goods and services (COSCDA, 1993). These preferential procurement efforts are often targeted to minority and women-owned businesses, particularly in large city governments (Bates, 1993).

While past studies have typically surveyed government units to measure availability of types of small business development assistance, this study relies upon samples of small firm owners

to self-report types and sources of assistance received. The
U.S. Bureau of Census Characteristics of Business Owners (CBO)
data base includes very large nationwide samples of small firms,
and all were questioned about their utilization of major forms of
government assistance, including (1) obtaining a contract to sell
to government, (2) obtaining bonding assistance, (3) obtaining
loan assistance, (4) obtaining managerial and technical
assistance, or (5) achieving significant sales to government with
or without a contract. The CBO contains comprehensive data on
tens of thousands of small businesses, as well as oversamplings
of minority and women-owned firms; this U.S. Census Bureau data
base is described in Bates (1990a). One important outcome of
this study is simply to document the patterns of state and local
government assistance to small business. A more substantive
outcome entails linking assistance to the viability of recipient
businesses.

The firms covered by the CBO data base self-report whether
or not they have gotten assistance from the following sources:
(1) federal government, (2) state or local government, (3)
private for-profit or non-profit firms or institutions. Among
all small businesses operating in the U.S. in 1987, well over
half utilized no paid employees.[1] Among CBO data base firms

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[1]Firms analyzed in this study filed a small business federal income tax return
in 1987 (either as a proprietorship, partnership, or corporation) and grossed
at least $5000 in total revenues that year. Firms discussed in the text
reflect CBO small business samples that have been weighted to be
representative of the nation's small business universe.

reporting receipt of assistance, in contrast, the majority did utilize paid employees in their operations in 1987. Table One provides an initial overview of the assisted small businesses that were operating in 1987; employers only are included. The Table One firms are based upon a sample of 1662 CBO firms, and these were weighted to represent the universe of employer small firms nationwide.[2]

The small businesses described in Table One report that the majority of their assistance comes from the private sector; the federal government is the second most common assistance source, while state/local government is third. Over half of all reported small employer business assistance is management assistance (Table One); loan assistance is second in frequency, assistance in getting a contract is third, the catch-all "other" grouping is fourth, and bonding assistance is the least common type of aid reported by these small firms. Table One indicates that specialization broadly typifies the assistance providers: (1) management assistance comes most commonly from the private sector; (2) loan assistance dominates aid from the federal government; (3)state/local governments specialize in contract and bonding assistance. Note that the source of assistance does not necessarily coincide with funding provision: many units of government contract with private sector organizations to provide

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[2]Although the nonresponse rate among sampled firms in the CBO was over 28 percent, nonresponding firm information was gleaned from income tax returns, and this tax information was used to weight the respondents so that they would be representative of the relevant firm universe.

small business assistance, and this type of arrangement appears to be quite common in the management assistance realm. Note, finally, that assisted firms often utilize aid from more than one source, which means that Table One data <u>cannot</u> be summed to estimate the total number of firms assisted by the public and private sectors, by type of assistance received.

TABLE ONE

Estimates of Nationwide Usage of Small Business Assistance
by Employer Firms
(frequency distribution)

TYPE	CONTRACT	LOAN	BOND	MANAGEMENT	OTHER	#FIRMS TOTAL
Source:						
State/Local Govt.	7,861	6,306	1,915	6,704	3,790	22,948
Federal Govt.	3,333	28,571	1,104	9,175	746	3,7110
Other	5,706	22,715	1,444	49,978	2,363	70,890

NOTE: Firms often use more than one type of aid and one source of
      aid. The firm owner responses reflect their personal
         judgment as to what constitutes "aid" and who provided
it.

SOURCE: CBO data base. Firms described above were in business
         during 1987.

Including nonemployer firms, 2.9 percent of the small businesses operating in 1987 are estimated to have received assistance from the public and private sector sources described in Table One. Mean 1987 sales figures indicate that the assisted firm groups were disproportionately composed of the larger small businesses.

	Assisted Firms	Unassisted Firms
Nonminority-owned	$288,536	$182,084
Minority-owned	$161,995	$ 92,803

These sales figures describe firms that (1) filed a small business federal income tax return in 1987, and (2) grossed at least $5,000 in revenues that year.

Table Two examines firm statistics for assisted businesses only, broken down into groups that reflect the source of assistance-state/local government, federal government, or other. Note that some firms appear in more than one of these subsamples: a firm assisted by both state/local and federal government, for example, is included in both of these Table Two groupings.

TABLE TWO

Characteristics of Assisted Small Businesses
by Type of Assistance
(weighted figures)

	State/Local Govt. Assistance	Federal Govt. Assistance	Other Assistance
Nonminority firms:			
1987 mean sales	$352,098	$478,334	$201,670
% of firms with paid employees	46.8%	72.6%	49.6%
% of firms utilizing multiple aid sources	24.0%	24.3%	15.0%
"	46,755	46,349	131,946
Minority firms:			
1987 mean sales	$108,182	$212,525	$141,440
% of firms with paid employees	31.1%	48.0%	38.8%
% of firms utilizing multiple aid sources	45.0%	28.4%	21.0%
"	3547	7210	14,034

SOURCE: CBO data base

Small businesses assisted by state/local government are, overall, much larger on average than unassisted firms as well as private sector-assisted firms, but assisted minority business enterprises (MBEs) do not fit this pattern. In fact, well over half of all MBEs assisted by state/local government reported 1987 sales revenues of under $25,000, while 50.3 percent of the nonassisted MBEs had 1987 sales of less than $25,000. This emphasis upon tiny firms is reinforced by the fact that state/local assistance was targeted overwhelmingly towards firms that have been operating for less than five years. A final peculiarity of MBEs aided by state/local government is the fact that 74.1 percent of them operated in the services industry.

Does State/Local Government Assistance Promote Small Business Viability?

Table Two indicated that 3,547 MBEs and 46,755 nonminority-owned small businesses had been assisted by state and local government. These estimates of numbers of firms assisted represent most, by not all, of the assisted firms that were operating nationwide. First, we are analyzing only those firms reporting gross 1987 sales of $5,000 or more in 1987. Several million so called "firms" actually reported 1987 sales of under $5,000: most such reporters were employees who earned minor amounts of self-employment income in 1987 (Bates, 1990a). Some additional firms exist that are not covered by the CBO data base: (1) among corporations, the CBO covers S-corporations only;

(2) among firms covered by CBO, some provide so little useful information that they must be classified as nonrespondents. Abstracting from all of this, we are left with a sample of 45,838 CBO firms, representing 8,109,759 small businesses operating nationwide in 1987; 683,260 of these firms are minority-owned.[3] These numbers suggest that only a fraction of one percent of the small firms operating in 1987 feel that they have been assisted by state/local government. The 3547 assisted MBEs represent 0.5 percent of the 683,260 MBE firm universe while the 46,755 assisted nonminorities are 0.6 percent of the nonminority firm universe.

Many cities and states run very active procurement programs that seek to involve small businesses in government procurement. Among the small firms under consideration, an estimated 1,070,121 sold goods and/or services to state/local government in 1987. Thus, while over 13 percent of the relevant small business universe is actively selling to government clients, only a fraction of one percent of this universe perceives that it is being assisted by state/local government. This fact illustrates one of the difficulties inherent in quantitative analysis of small business assistance. While awarding a procurement contract to a small business may be "assistance" in the eyes of government, the receiving small business does not necessarily

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[3]Nearly 20 percent of the CBO-sampled responding firms did not provide complete information on their use (or non-use) of government and private sector assistance programs. These firms were dropped from consideration.

perceive that it is being assisted. Sales to government, from a firm perspective, may be viewed as the outcome of the firms considerable expertise and competitive pricing: clearly, most owners do not view these sales as "aid." If we accept the small business owners view that selling to government is a separate activity generally from being assisted by government, then the primary small business - state/local government interaction benefitting small business clearly is a seller-buyer relationship (and not an assistor-assistee relationship).

Does receipt of government aid promote small business viability? Does selling to government promote small business viability? Simply comparing assisted and nonassisted firms is not fruitful. Indeed, small businesses assisted by state/local government are larger, more profitable, and less likely to go out of business than nonassisted firms; these same patterns typify the small businesses that sell goods/services to state/local government. Thus, the greater viability of the assisted firms may reflect the benefits of being assisted, or their greater viability may reflect the fact that government targets its assistance to the stronger, larger scale firm subset in the small business universe. Consider the educational background of the owners of assisted and unassisted firms. Those receiving state/local government aid are disproportionately the college-educated; high school dropout owners are heavily underrepresented among the assisted firms. The selection process clearly targets

government aid to the stronger, more promising firms in the small business universe. The impact of aid on viability, therefore, can only be investigated meaningfully by controlling statistically for various owner and firm characteristics. The hypothesis investigated below is that aid from state/local government (as well as selling to state/local government) does increase the viability of assisted firms, holding firm and owner traits constant.

Over the 1987-late 1991 period, over 20 percent of the estimated 8,109,759 small businesses discussed above closed down their business operations. Firms sold to a new owner, merged, or otherwise altered are <u>not</u> counted as discontinued if they continued to operate. Logistic regression equations are estimated in this section to explain a measure of small business viability: longevity. Independent variables utilized to explain longevity among the sampled firms include measures of assistance, owner characteristics, and firm traits. While longevity is the primary business viability measure under consideration, firm size was also analyzed to test for the consistency (robustness) of the observed relationships between the explanatory variables and firm viability.

Based upon the findings of past econometric studies explaining small business longevity, greater owner investments of human and financial capital are expected to be related positively to the survival chances of small business (Bates, 1990b).

Quality of owner human capital is measured by two variables, level of formal education and presence of managerial experience prior to small business entry. Labor input quantity is measured by owner hours spent working in the business, as well as marital status. Married persons living with their spouses are expected to benefit from the availability of family labor, which potentially increase labor input quantity. Applicable demographic traits include owner race/ethnicity and gender. Exact definitions of relevant explanatory variables are summarized in Table Three.

Logistic regression equations delineating active from discontinued businesses are reported in Table Four (all nonminority firms) and Table Five (minority-owned firms only).

In Table Four's analysis of nonminority firms that were operating in 1987, positive coefficient values are associated with firms still operating in 1991, and vice versa; four types of explanatory variables are particularly strong for explaining survival and discontinuance patterns for nonminority-owned firms.

The surviving firms that are active in 1991 are disproportionately those started with the larger investments of financial capital, the older firms, and those headed by owners who had attended college, particularly those completing college and doing additional graduate work. Furthermore, firms receiving state/local government assistance are <u>clearly</u> more likely than

unassisted cohorts to survive through 1991, other factors constant.

Three other types of explanatory variables were important predictors of firm survival, although less so than the above factors. First, firms headed by owners who were working full-time (as opposed to part-time) in their business were more likely to survive, other things equal. Second, firms selling to state/local government clients in 1987 were more likely to still be operating in 1991 than others. Third, firms in certain industry groups emerge as more likely/less likely to remain in operation, even after owner traits and various firm traits such as capitalization and age are controlled for: significantly greater survival chances are associated with manufacturing, while greater likelihood of discontinuance is found in transportation, retail, and wholesale. A final factor that is a statistically significant predictor of firm survival is management experience: owners having this trait prior to self-employment entry are more likely to have their firms survive, other factors constant.

Aside from the significance of aid, this pattern of findings is highly conventional: the very youngest firms are most prone to failure, and the survivors are well endowed with owner human capital and financial capital.

TABLE THREE

Definitions of Variables Used in
Logistic Regression Analysis of Firm Survival.

A. <u>Dependent variable</u>: whether or not the business that was
operating in 1987 is still functioning in late 1991. Businesses
still operating are active firms; those that have closed down are
discontinued.

B. <u>Explanatory variables</u>:

    <u>Education 2</u>: for owners completing four years of high school,
       education 2 = 1; otherwise education 2 = 0.

    <u>Education 3</u>: for owners completing at least one but less than
       four years of college (and those not attaining a
       bachelor's degree), education 3 = 1; otherwise education 3
       = 0.

    <u>Education 4</u>: for owners awarded a bachelor's degree,
       education 4 = 1; otherwise education 4 = 0.

    <u>Education 5</u>: for owners who attended graduate school,
       education 5 = 1; otherwise education 5 = 0.

    <u>Management experience</u>: for those working in a managerial
       capacity prior to owning the business they owned in 1987,
       management experience = 1; otherwise, management
    experience = 0.

    <u>Asian</u>: for Asians (male and female), this variable = 1;
       otherwise, Asian = 0.

<u>Black</u>: for African Americans, this variable = 1; otherwise,
Black = 0.

<u>Latino</u>: for Latinos (including whites), this variable = 1;
otherwise, Latino = 0.

<u>Nonminority female</u>: for non-Hispanic white women, this
variable = 1; otherwise, nonminority female = 0.

<u>Nonminority male</u>: for non-Hispanic white males, this variable
= 1; otherwise, nonminority male = 0.

<u>Wed</u>: for married owners living with their spouse, wed = 1;
otherwise, wed = 0.

<u>Labor input</u>: number of hours during the 1987 calendar year
spent by the owner working in the relevant small business,
divided by 100.

<u>Capital</u>: the log of the sum of debt and equity capital used
to start or become owner of the business.

<u>Leverage</u>: the ratio of debt to equity capital invested in the
firm at the point of entry.

<u>Local aid</u>: for firms assisted by state/local government,
local aid = 1; otherwise, local aid = 0.

<u>Multiple aid</u>: for firms assisted by state/local government
and one or more other sources of aid, multiple aid = 1;
otherwise, multiple aid = 0.

<u>Time 84</u>: if the business was started or ownership was
acquired during 1984 or 1985, then time 84 = 1; otherwise
time 84 = 0.

Time 86: if the business was started or ownership was

acquired during 1986, then time 86 = 1; otherwise, time 86

= 0.

Time 87: if the business was started or ownership was

acquired during 1987, then time 87 = 1; otherwise, time 87

= 0.

Construction, Manufacture, Transportation, Wholesale, Retail,

Fire (finance, insurance, and real estate), and Service:

these self-explanatory binary variables identify firm

industry affiliation.

TABLE FOUR

Logistic Regression: Explaining Firm Survival
over the 1987-1991 Period: Nonminority Firms

Variable	Regression Coefficient	Standard Error	Mean
Constant	.534	.187	--
Education 2	.029	.071	.291
Education 3	.191*	.076	.227
Education 4	.552*	.083	.191
Education 5	.992*	.095	.177
Management experience	.150*	.051	.322
Male	.011	.053	.772
Labor input	.018*	.002	20.934
Capital	.075*	.018	9.041
Leverage	.009*	.004	2.958
Wed	.023	.057	.821
Time 84	-.600*	.062	.154
Time 86	-.677*	.062	.146
Time 87	-1.406*	.057	.156
Local government sales	.280*	.067	.139
Local aid	.654*	.293	.007
Multiple aid	1.721	1.289	.002
Construction	-.116	.099	.131
Manufacture	.415*	.148	.040
Transportation	-.744*	.116	.050
Wholesale	-.286*	.131	.039
Retail	-.276*	.093	.189
Finance, insurance and real estate	-.053	.112	.078
Service	.089	.088	.400
n	14,149		
-2 Log L (Chi square)	13,412.2 (1270.6)		

*Statistically significant at the .05 level

How do these findings hold up when minority-owned firms only are being analyzed? The Table Five findings for MBEs differ in one important respect. The recipients of aid from state/local government overall are <u>not</u> more likely to survive than unassisted firms. Only among the MBEs receiving <u>multiple</u> sources of assistance is aid positively (and very strongly) associated with enhanced firm survival.

Two of the strongest variables for predicting survival among nonminorities are similarly important for delineating surviving MBEs from those discontinuing operations by late 1991: firm age and capitalization are key. The youngest, least capitalized MBEs are highly prone to failure, other factors constant.

Other variables associated with MBE survival in the Table Five regression exercise mirror the findings of Table Four's analysis of nonminority firms. Firms in manufacturing show greater survival chances among MBEs, other things equal, and firms in transportation and retail fields are significantly less likely to survive. Further, owners working full-time in their firms are more likely to see their businesses remain in operation than MBE part-time entrepreneurs. In contrast to nonminority firms, two additional MBE lines—service and construction—are positively associated with firm survival. Among the human capital variables, owner managerial experience and higher education at the graduate level are positively associated with firms remaining in business. At lower levels of college

education, the survival prospects of MBEs are not nearly as clear-cut as they were among nonminority owners. The generally weaker relationship between firm survival and owner higher education among MBEs has been analyzed in detail in Bates (1989). College graduate minorities creating firms in inner city areas that cater to minority clienteles are particularly prone to abandon self-employment.

TABLE FIVE

Logistic Regression: Explaining Firm Survival over
the 1987-1991 Period: Minority-Owned Businesses

Variable	Regression Coefficient	Standard Error	Variable Mean
Constant	.157	.173	--
Education 2	.027	.052	.222
Education 3	.049	.054	.208
Education 4	.076	.059	.190
Education 5	.403*	.068	.164
Management experience	.154*	.044	.261
Asian	.052	.100	.339
Black	.140	.101	.285
Latino	.113	.099	.345
Labor input	.022*	.001	20.726
Capital	.090*	.015	9.059
Leverage	.023*	.003	2.438
Wed	.125*	.043	.806
Time 84	-.417*	.051	.171
Time 86	-.837*	.051	.148
Time 87	-1.085*	.045	.216
Local government sales	-.016	.056	.119
Local aid	.094	.368	.006
Multiple aid	1.095*	.648	.003
Construction	.283*	.088	.080
Manufacture	.264*	.125	.028
Transportation	-.484*	.082	.078
Wholesale	-.107	.116	.029
Retail	-.241*	.069	.242
Fire	.016	.097	.054
Service	.260*	.067	.411

n	20,326
-2 Log L (Chi square)	20,456.3 (1573.8)

*Statistically significant at the .05 level

Recapping the survival analyses summarized in Tables Four and Five, firm survival prospects for both minorities and nonminorities are explained by factors that are broadly similar. The older, more established firms that were created with the larger owner investments of financial capital are the firms most likely to remain operating. Regarding state/local government assistance to small firms, the minority/nonminority results diverge sharply. First, nonminorities aided by state/local government are clearly more likely to remain in business than nonassisted firms. Among MBEs, only those firms receiving aid from multiple sources—state/local as well as federal or private sector—show enhanced survival prospects, other factors constant. Second, nonminority firms selling goods and/or services to state/local government clients in 1987 were significantly more likely to remain in operation, other things equal. Among MBEs, in contrast, sales to state/local government is a minor, statistically insignificant factor in explaining firm survival patterns over the 1987-1991 period. Possible explanations of these differential impacts of state/local aid on MBE and nonminority firm survival prospects are investigated below.

Further Analysis of Assisted Firms: Who Gets Aid?

The conventional wisdom is that assistance to small business is most effective when it is channeled to the larger scale, more established firms. If this is true, it may explain why assisted

minority-owned firms (mean sales = $108,182: Table Two) were not more likely to survive than nonassisted cohorts, while the assisted nonminorities (mean sales = $352,098) did improve their longevity: both assistance recipients and those selling to state/local government were more likely to survive than cohort nonminority firms.[4] The broader issue here is one of targeting: who are the favored recipient groups when state/local government seeks to assist the small business community?

Robinson and Pierce (1984) claim that state governments seek to target growing, entrepreneurial firms—not small businesses generally—when they aid small businesses. Job creation—a la David Birch—is another guiding criterion often mentioned in the context of targeting government assistance to small businesses. Since the empirical literature quantifying concrete traits of "entrepreneurial" firms (as opposed to small businesses generally), job creating gazelles, and the like is basically nonexistent, evidence of targeting is gleaned in this section by delineating econometrically the traits of assisted versus nonassisted small firms.

The selection of firms that actually do receive assistance is expected to be the outcome of supply, demand interactions. The state/local government providers of aid (the suppliers) target aid to small businesses based upon their own varying

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[4]While assisted minority firms reported mean 1987 sales of $108,182, the subsample of all minority firms with sales to state/local government in 1987 reported total mean sales of $162,600.

priorities. The small firms seeking aid (the demanders) are hard to quantify, since the targeting process means that many will not, in fact, be assisted by state/local government. Since the supply of assistance is assumed to be low relative to the demand, it is expected that the firm group actually assisted will be a reflection of the priorities of the aid suppliers, largely.

Table Six's logit exercise addresses these issues by delineating firms receiving state/local aid from all other firms. The dependent variable in Table Six's logistic regression is whether or not the business received aid from state/local government. The explanatory variables introduced and defined in Table Three account for most of the explanatory variables utilized in Table Six's logistic regression exercise. Three additional explanatory variables—utilized in Tables Six and Seven—are defined below:

Federal aid: for small businesses receiving assistance from the federal government, federal aid = 1; otherwise, federal aid = 0.

Other aid: for small businesses receiving assistance from nongovernmental providers, other aid = 1; otherwise, other aid = 0.

Log owner's equity: the log of the sum of equity capital used to start or become owner of the business.

Table Six analyzes all nonminority-owned firms that were operating in 1987; positive coefficient values are associated

with firms receiving aid and vice versa. Six types of
explanatory variables are strong determinants of aid recipients;
the receiving firms, other factors constant, have these traits:

1. The firms most likely to receive state/local aid are
   firms that have also received small business
   assistance from the federal government. This _may_
   reflect the fact that state/local governments target
   for assistance the same sorts of firms that the
   federal government seeks to assist. Alternatively,
   there may be a subset of small businesses that is
   particularly adept at attracting assistance from
   governments. The characteristic of receiving federal
   aid is the single strongest trait in predicting which
   firms are assisted by state/local government.

2. Firms receiving state/local government aid are not
   likely to be headed by owners who have not graduated
   from high school. Having at least a high school
   degree appears to be a prerequisite for receiving
   small business assistance.

3. Nonminority women are much more likely than male
   owners to receive small business aid. This finding
   may reflect the growing government practice of
   targeting assistance to women-owned businesses.

4. Owners employed full-time in their businesses are much more likely to be aid recipients than part-time owners.

5. It is the youngest firms—those operating for less than five years—that are most likely to receive assistance from state/local government.

6. Persons with managerial experience prior to self-employment, finally, are less likely to seek aid than those lacking experience.

TABLE SIX

Logistic Regression: Delineating Firms Seeking and
Receiving State/Local Government Aid from
Other Firms: Nonminority-Owned Businesses

Variable	Regression Coefficient	Standard Error	Variable Mean
Constant	-9.691*	1.062	--
Education 2	2.228*	.910	.291
Education 3	3.022*	.905	.227
Education 4	1.845*	.936	.191
Education 5	2.897*	.923	.177
Management experience	-.495*	.223	.322
Nonminority male	-.857*	.213	.772
Federal aid	3.917*	.311	.008
Other aid	.287	.474	.019
Labor input	.069*	.010	20.934
Log owner's equity	-.019	.031	7.661
Wed	.343	.267	.821
Time 84	1.964*	.284	.154
Time 86	1.232*	.324	.146
Time 87	2.252*	.281	.156
Construction	.223	.466	.131
Manufacture	.006	.601	.040
Transportation	-1.118	.818	.050
Wholesale	.116	.596	.039
Retail	.294	.408	.189
Finance, insurance and real estate	-.483	.568	.078
Service	-.015	.396	.400

n	14,149
-2 Log L (Chi square)	1096.7 (300.5)

*Statistically significant at the .05 level

It is interesting to note that industry targeting does <u>not</u> appear to be an important factor in allocating aid to small businesses. None of the variables identifying major industry groups had any explanatory power in delineating the small firm aid recipients from the nonassisted firms.

Do the factors that identify the nonminority small business aid recipients hold up to MBEs? Table Seven replicates the Table Six logistic analysis of aid recipients for the minority small business sample. Five types of explanatory variables effectively delineate the recipients of state/local government small business aid from other firms; the MBE receiving firms, other factors constant, have these traits:

1. Mirroring table six's finding for nonminorities, the MBEs most likely to receive aid are those receiving assistance from the federal government as well. Receipt of federal aid, once again, is the single strongest trait for identifying the MBEs that are assisted by state/local government. In contrast to nonminority firms, MBEs, further, were <u>much</u> more likely to receive state/local aid if they had also been assisted by other nongovernment aid providers (either from the for-profit or non-profit sectors). Hence, the high incidence of multiple source aid recipients in the MBE community, as identified earlier in this report.

2. The owners lacking managerial experience prior to
    self-employment entry are the ones most likely to
    receive state/local government small business
    assistance. This finding replicates Table Six's
    pattern of aid being strongly associated with lack
    of managerial experience among nonminority owners.

3. The excluded "other minority" group, which is
    dominated by Native Americans, is the owner group
    most likely to be aided by state/local government.
    Hispanic owners, in contrast, are much less likely
    to be assisted than any other group. African
    Americans and Asians are in the middle, with blacks
    being more likely than Asians to receive small
    business assistance.

4. The younger minority firms are generally less
    likely to receive state/local government
    assistance, other things equal. The firm age, aid
    relationship is clearly weaker among minority firms
    than among nonminorities.

5. College graduates, finally, are the minority owner
    group that is highly likely to receive small
    business assistance from state/local government.
    This finding reinforces the pattern of little aid
    to Latino owners, since they are the group in which
    college graduates are least common.

TABLE SEVEN

Logistic Regression: Delineating Firms Seeking and
Receiving State/Local Government Aid from
Other Firms: Minority-Owned Businesses

Variable	Regression Coefficient	Standard Error	Variable Mean
Constant	-4.929*	.769	--
Education 2	.356	.384	.222
Education 3	-.028	.411	.208
Education 4	1.401*	.366	.190
Education 5	.478	.398	.164
Management experience	-.740*	.267	.261
Asian	-1.410*	.452	.339
Black	-.599	.432	.285
Latino	-1.891*	.482	.345
Federal aid	3.855*	.223	.013
Other aid	1.868*	.332	.020
Labor input	-.007	.009	20.726
Log owner's equity	.038	.040	7.904
Wed	-.246	.245	.806
Time 84	-1.514*	.420	.171
Time 86	-.169	.280	.148
Time 87	-.756*	.318	.216
Construction	.024	.624	.080
Manufacture	-.229	.861	.028
Transportation	-1.274	.890	.078
Wholesale	-.599	.996	.029
Retail	-.387	.532	.242
Fire	-1.438	1.135	.054
Service	.784	.470	.411

n	20,326
-2 Log L (Chi square)	1013.8 (403.9)

* Statistically significant at the .05 level

Do these patterns suggest state/local government priorities for targeting assistance to small firms? Such priorities do not leap out of the data. Among nonminorities, the findings do clearly suggest that women-owned businesses have been targeted for state/local government assistance. Among MBEs, it appears that Latinos have been targeted as a group not to be assisted. Since Latino firms are very heavily concentrated in several geographic areas—Texas, Florida, California, New York—aversion to assisting Latinos may reflect the policies of several of these areas, either not to aid MBEs generally, or not to aid Latinos specifically. Casual relationships are not clear-cut.

If an economic development logic is driving state/local governments in their decisions about whom to assist, it is only weakly apparent in the data. The larger scale small businesses are those headed by the better educated, experienced owners who posses the necessary funds to make large financial investments in their firms; such owners also pursue self-employment on a full-time basis. The fact that full-time nonminority owners have more success in being assisted than part-timers is consistent with an economic development rationale. Among MBEs, in contrast, the part-time owner has no more (or less) access to aid than the full-time owner. For nonminority-owned firms, the least educated have the least access to assistance, which is consistent with pursuit of economic development, but the least educated minority owners have the same access to aid as MBEs whose owners possess

education short of a bachelor's degree. Governments that truly
were targeting owners having the human capital needed for
economic development creating (large, growing firms) would bend
over backwards to aid owners possessing managerial experience.
In fact, they do just the opposite: experienced managers are much
less likely to be assisted than others. One suspects that no
strong or systematic economic development underlies the nation's
state/local government MBE assistance efforts. A possible
economic development goal is to target sectors—such as
construction and manufacturing—where firms generate numerous
blue collar jobs. No such targeting effort is apparent in the
data.

Concluding Comments

No comprehensive explanation for minority/nonminority firm
differentials in survival patterns among recipients of
state/local government assistance is forthcoming in this study.
Minorities clearly appear to be less likely than nonminority
firms to have their survival prospects boosted by aid from
state/local government. Eisinger points out that small business
assistance is often targeted to distressed areas (1988), and the
minority owner characteristic may be correlated with the
"distressed" designation. In his examination of very large
metropolitan areas, Bates (1994) found that nearly three-fourths
of black-owned businesses were located in minority communities,
versus less than one-sixth of nonminority-owned small firms.

Furthermore, Bates (1989) demonstrated that the urban minority community milieu generally was inhospitable for small business development. Difficulties peculiar to targeting economic development assistance to depressed urban areas may therefore explain the tendency of minority firms to benefit less than nonminorities from state/local government aid.[5]

The methodological innovation in this study involves making inferences about impacts of government aid to small businesses by observing assisted and unassisted firm groups at one point in time, and then observing at a later point in time the survival patterns of these small business groups. Other things equal, the assisted firms—particularly those owned by nonminorities—were less likely to shut down their business operations over the 1987-late 1991 period than the unassisted firms. The conventional wisdom in economic development circles is that the larger scale small firms are more likely than small operations to benefit from assistance in areas such as financing, procurement, and management. The findings of this study—for both minority and nonminority-owned firms—are consistent with this conventional wisdom. The assisted minority firms—in clear contrast to the nonminorities—were not, on average, larger than their unassisted minority cohorts, and they did not appear to benefit as consistently from assistance as did their nonminority cohorts.

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[5]This issue is explored, in detail, in Timothy Bates, Margaret Simms, and Darrell Williams, "Preferential Procurement Programs Do Not Necessarily Assist Minority-Owned Businesses," (unpublished manuscript, 1994).

Despite the relatively clear-cut findings of this study concerning firm assistance and survival patterns, my initial statement about difficulties inherent in evaluating impacts of small business assistance programs still stands. Particularly in areas such as financing, bonding, and management assistance, a tremendous problem for the policy analyst is rooted in the fact that assisted firms <u>very</u> often utilize more than one type of assistance. Thus, we have no direct way of pinning down what types of assistance may be more or less effective for aiding the firm that utilizes several types (and perhaps several different sources) of small business assistance.[6] But the findings of this study do provide some insight into the utility of specific types of aid for small firms. The econometric findings from Tables Four and Five clearly indicate that the poorly capitalized small firm—whether minority or nonminority-owned—has weaken survival prospects, other things equal, than the well capitalized firm. Aid in the realm of securing financing directly addresses this problem. Small firms that borrow too heavily and find themselves overleveraged certainly can suffer from greater access to debt financing; results from Tables Four and Five indicate, however, that overborrowing is not the norm, since the leverage variable coefficients are consistently positive (i.e. the survival prospects of the most active borrowers are actually better than

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[6]An alternative approach is to analyze only those firms reporting that they have utilized one source (only) and one type (only) of aid. Even with the very large sample size utilized in this study, this approach is unfeasible due to sample size constraints.

those of the less active, and the nonborrowers, on average).

Finally, Table Four's positive local government sales coefficient

is consistent with the hypothesis that government procurement

opportunities are beneficial to nonminority-owned firms.

The methodology of studying economic development assistance

impacts on small firms via (1) control samples, (2) time series

analysis, and (3) econometric control of firm and owner traits,

could potentially lessen the ambiguity of program evaluation in

this field. All too often, unsophisticated studies utilizing

inadequate controls are the norm, and the results are often self-

serving; parties conducting shoddy evaluations sometime have a

vested interest in producing a specific pattern of results.

Consider the HUD (1986) finding that enterprise zones were

responsible for the creation of $6 billion in new capital

investment and the creation (or retention) of over 100,000 jobs.

This finding stands in sharp contrast to the General Accounting

Office December 1988 finding (cited in Wolf, 1990) that

employment gains in Maryland enterprise zones could not validly

be attributed to zone incentives. Such diametrically opposed

conclusions from official studies—not uncommon in economic

development—tend to undermine the credibility of policy analysis

generally in this field. The sort of policy analysis techniques

spelled out in this study have the potential to upgrade

evaluation efforts in important segments of the economic

development field.

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