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**SELF-EMPLOYMENT TRENDS AMONG
MEXICAN AMERICANS***

by

Timothy Bates**

CES 90-9 August 1990

Abstract

Minority businesses are commonly aggregated into groups of 1) black, 2) Hispanic, and 3) Asian-owned firms. These analytical groupings may, in fact, be useful if blacks, Hispanics and Asians exhibit intra-group similarities and intergroup differences in terms of business development patterns. The applicable similarities and differences do appear to typify the Asian and black groups of self-employed, but they do not typify Hispanic-owned small businesses. In other words, "Hispanic" does not appear to be a useful category for analysis. The Hispanic subset, Mexican American-owned firms, is judged to be suitable for analysis.

Most minority-owned firms have traditionally been started with minimal financial capital inputs by owners who have not attended college. The resultant small scale firms have frequently oriented their operations toward serving a low income minority clientele. In this study, I investigate two closely interrelated broad hypotheses on minority business dynamics, utilizing a sample of Mexican American business establishments drawn from the Characteristics of Business Owners data base:

1. Traditional firms - these firms tend to a) be small scale, b) have high failure rates, c) and generate few jobs because of their minimal owner inputs of financial and human capital.
2. Emerging firms, in contrast, are most commonly started by better educated owners--many of whom have attended four or more years of college--and financial capital inputs are high relative to those observed in traditional lines of business. It is because of these larger financial and human capital inputs that emerging firms tend to be a) larger scale, b) have lower failure rates, and c) generate more jobs, relative to their traditional cohorts.

Sociologists have used the term "protected market" to describe the culturally-based tastes of ethnic minorities that can only be served by co-ethnic businesses. Particularly in the early years of settlement, immigrants are assumed to patronize co-ethnic enterprises, and this pattern of patronage seems to typify Hispanic enclaves in areas such as Southern California. Whether or not the resultant protected market is an asset to Mexican American firms--particularly those in traditional fields such as small-scale retailing--is investigated econometrically. The evidence indicates that the protected market provided by immigrants patronizing co-ethnic enterprises is an absolute hindrance to Mexican American business viability. The very low incomes of most recent immigrants constrain the attractiveness of this protected market. The state of the barrio business community reflects the economic circumstances of

its clientele.

*Research reported herein was supported by the National Science Foundation (NSF) under grants SES84-01460 and SES87-13643, "On-site Research to Improve the Government-Generated Social Science Data Base." The research was conducted at the U.S. Bureau of the Census while Timothy Bates was a participant in the American Statistical Association/Census Bureau Research Program, which is supported by the Census Bureau and NSF. Any findings or conclusions expressed herein are mine and do not necessarily reflect the views of the Census Bureau or NSF.

**Department of Economics, University of Vermont

A. Introduction

Self-employed Mexicans living in the United States have traditionally run small scale firms oriented toward serving a low income minority clientele. These businesses have most commonly been started with very small investments of financial capital. Relative to other minority (and nonminority) self-employed populations, low levels of educational attainment typify Mexican American business owners: fewer have graduated from college; more have not graduated from high school.

The longevity of businesses owned by Mexican Americans is investigated in this study, utilizing a nationwide random sample of entrepreneurs who entered self-employment between 1976 and 1982. The low owner inputs of financial and human capital manifest themselves in the types of businesses established by Mexican Americans. The three lines of small business in which average owner remuneration are highest--professional services, finance, insurance, and real estate (FIRE), and wholesaling--account for 15.4 percent of the Mexican American business startups, versus 27.3 percent and 24.8 percent, respectively, of the Asian and non-Mexican Hispanic business formations. Relative to these (and other minority and nonminority) groups, Mexican American firms are typically smaller, less profitable and more prone to failure. A key finding is that operating in the "protected" market--the ethnic enclave--is an absolute detriment to the viability of Mexican American small businesses. The firms that are least likely to survive are the tiny businesses that cater to a minority clientele.

Present trends indicate that a more diversified community of Mexican-owned small businesses is gradually emerging, one that is competing in the broader marketplace serving a clientele that is either ethnically diverse or largely nonminority. Furthermore, the incidence of highly educated Mexican Americans entering self-employment has been increasing in recent years, while the incidence of those possessing little formal education is declining rapidly. The "emerging" firms that are oriented to the broader marketplace are most commonly started by better educated owners, and investments of financial capital are high relative to those observed in traditional lines of business. While such

traditional fields as personal services and small scale retailing are declining in relative significance, emerging lines of business--FIRE, business services, and manufacturing, for example--are growing rapidly. Opportunities for business development appear to be greatest in the emerging lines of Mexican American-owned enterprise that compete in the broader marketplace.

B. "Hispanic" Firms--An Inappropriate Grouping?

Minority businesses are commonly aggregated into groups of 1) black, 2) Hispanic, and 3) Asian-owned firms. These groupings may, in fact, be useful if blacks, Hispanics, and Asians exhibit intra-group similarities and intergroup differences in terms of business development patterns. The applicable similarities and differences do appear to typify the Asian and black groups of self-employed, but they do not typify Hispanic-owned small businesses. In other words, "Hispanic" may not be a useful category for analytical purposes. Consider the following data describing businesses started between 1976 and 1982 by Asians, blacks, and Hispanics.

1. The proportions of those starting businesses who had attended four or more years of college were:

a. Asian	56.8%
b. black	28.5%
c. Hispanic	20.7%

The very low percentage of Hispanic college graduates, however, is rooted in the fact that only 16 percent of the Mexican Americans starting businesses had graduated from college. Other major groups of Hispanic self-employed, such as Cubans and European Spanish, do not lag significantly behind blacks regarding incidence of college attendance. Thus it is more insightful to disaggregate Hispanic firms on the basis of this human capital trait:

a. Mexican American	16.0%
b. All other Hispanic	26.5%

An examination of the other end of the educational spectrum reveals a similar pattern.

2. The proportions of those starting businesses who had attended less

than four years of high school were:

a. Asian	8.2%
b. black	18.5%
c. Mexican American	32.5%
d. All other Hispanic	22.1%

As in the case of college attendance, the performance of the non-Mexican subsample resembled that of blacks much more closely than that of self-employed Mexicans.

Mean owner financial capital investment at the point of business startup is a key determinant of firm viability (Bates, 1990a). Among the highly successful Asian business startup group, for example, financial capital invested by the owner averaged \$53,396. The corresponding figure for Hispanic firms formed in the 1976-1982 time period was \$25,103. Once again, however, a large and statistically significant difference in quantities of financial capital inputs typifies Mexicans versus other Hispanic-owned firms; the applicable mean values are:

a. Mexican American	\$22,358
b. All other Hispanic	\$28,235

All of the above statistics were computed utilizing the Characteristics of Business Owners (CBO) data base, which was compiled by the U.S. Bureau of the Census in 1987. According to IRS data, about 12 million proprietorships, partnerships, and small business corporations filed tax returns in 1982. The CBO data base was drawn from this universe. In 1986, questionnaires covering both owner traits and business characteristics were sent out to 125,000 persons who owned small businesses in 1982; minorities were oversampled. The survey produced an 81 percent response rate, and the completed questionnaires provided--in conjunction with tax return information--the basis for the CBO data base, the basis for the present study.¹

The lower owner inputs of human and financial capital that typify the Mexican American group of small business manifest themselves in the types of business that are established. The three lines of small business in which owner

remuneration are highest, on average--professional services, finance, insurance, and real estate (FIRE), and wholesaling--accounted for 15.4 percent of the Mexican American small business startups, versus 24.8 percent of the other Hispanic business formations. Mexicans predictably are overrepresented in the traditional lines of minority enterprise such as personal services and small scale retailing. Relative to Mexican-owned firms, the other Hispanic group establishes somewhat larger firms in more profitable lines of business; rates of business discontinuance are lower among the non-Mexican Hispanic firms.

Intragroup similarities among Hispanic firms are not altogether lacking. Both the Mexican American and the other Hispanic business groups are more likely to serve a clientele that is predominantly minority, in comparison to either Asian or nonminority-owned businesses. Black firms, however, are most oriented toward serving a minority clientele and they are geographically most concentrated in minority communities--particularly in large urban areas (Bates, 1989a). Asians, in contrast, are least likely to serve a clientele that is largely minority, and their business locations are geographically dispersed, rather than being concentrated in minority areas. Hispanic-owned businesses--whether Mexican or non-Mexican--occupy a middle group on the traits of clientele and business location. A high dependence upon a minority clientele clearly typifies Hispanic firms in comparison to all other groups except blacks. Similarly, Hispanic firms are second only to blacks in terms of their geographic concentration in minority communities.

This study focuses upon the Mexican American segment of the Hispanic small business community, which makes up over 50 percent of the Hispanic business universe. The underlying logic of this separation is broadly summarized below:

- 1) Mexican American firms, reflecting their lower average inputs of owner human and financial capital, tend to be heavily represented in the small scale traditional lines of minority enterprise. Lower levels of owner remuneration and higher business failure rates typify the Mexican-owned small businesses.
- 2) Non-Mexican Hispanic firms possess higher average inputs of owner

human and financial capital, and manifestations of this include their higher representation in larger scale, more profitable lines of business as well as lower rates of firm discontinuance.

But these two groupings do not necessarily capture all of the broad patterns of intra-group differences that typify the Hispanic business community. Most self-employed Mexican Americans, for example, were not born in the United States. Among those who were born in the U.S., mean years of schooling may be quite different relative to the average schooling levels that typify their Mexican-born cohorts. The data base under consideration does not delineate business owners by nation of birth, thus precluding investigation of this potentially important phenomenon. Important differences in owner traits may typify the non-Mexican Hispanic group, which is dominated by Cubans, European Spanish, Puerto Ricans, and other South American Spanish. Yet representation of these non-Mexican subgroups in the CBO data base is simply inadequate to permit separate analysis on a group by group basis. No definitive disaggregation of self-employed Hispanics is likely to be forthcoming in the near future.

C. Mexican-American Businesses: Size, Growth, and Diversity

Stereotypes about Mexican-owned firms are nearly as sparse as are empirical studies of the Hispanic business community. Ivan Light (1972) used the term "protected market" to describe the culturally-based tastes of ethnic minorities that can only be served by co-ethnic businesses. Particularly in the early years of settlement, immigrants are assumed to patronize co-ethnic enterprises, and this pattern of patronage seems to typify Hispanic enclaves in areas such as Texas and Southern California.

The CBO data base provides a direct source of information for drawing inferences about the changing nature of the Mexican American business community during the 1970s and 1980s. By comparing older, established Mexican American firms--defined as those entered into before 1976--with younger firms (those created between 1976 and 1982, by definition), trends in industry distribution, firm size, and owner traits become directly observable. Table 1 compares the industry distribution of older and younger Mexican firms.

Table 2 reports on the traits of owners and the businesses they operate:

Table 1: Industry Distribution: Mexican-American Businesses

	<u>older firms</u>	<u>newer firms</u>
Agriculture, forestry, mining	4.9%	3.5%
Construction	10.0%	11.4%
Manufacturing	6.5%	7.1%
Transportation, communication	5.3%	7.0%
Wholesale	1.8%	1.4%
Retail	27.1%	26.9%
Finance, insurance, real estate	3.4%	4.7%
Business services	4.0%	5.1%
Professional services	9.0%	9.3%
Personal services	11.1%	7.7%
Other services	10.6%	9.3%
Firms not classified	<u>6.3%</u>	<u>6.6%</u>
Total	<u>100.0%</u>	<u>100.0%</u>

Note: Older firms, by definition, were formed before 1976; newer firms were started during the 1976-1982 time period.

Table 2: Business Traits of Mexican-American Firms

	<u>older firms</u>	<u>newer firms</u>
A. <u>Business Traits</u> (mean values)		
1. Total sales, 1982	\$113,120	\$78,542
2. Number of employees, 1982	2.1	1.1
3. Total financial capital*	\$ 19,695	\$22,358
4. Equity capital*	\$ 12,755	\$10,488
5. Debt capital*	\$ 6,939	\$11,870
B. <u>Owner traits</u>		
1. Hours of labor input (mean)	45.7	43.6
2. Managerial experience (mean)	4.0	3.8
3. % with under 4 years of high school	46.5%	32.5%
4. % with 4 or more years of college	10.4%	16.0%
C. <u>% of firms still in business, 1986</u>	84.9%	72.2%

*At the date of entry into self-employment (\$ figures are not inflation adjusted).

Note: Firms formed before 1976 are defined as older firms; firms formed between 1976 and 1982 are defined as newer firms.

These statistics are calculated separately for the Mexican American subsamples of older and newer firms. Table 2 and all of the other tables in this report excludes all firms that had 1982 total sales of under \$5,000. Those having under \$5,000 in 1982 sales are defined as casual businesses: they are analyzed briefly elsewhere but they are ignored entirely in this report (Bates and Nucci, 1989).

Table 2 describes in detail the subsets of the older, more established Mexican American firms that were formed before 1976 and the newer enterprises formed between 1976 and 1982. Figures on the percentage of owners with four or more years of college are particularly revealing:

Mexican American

older firms	10.4%
younger firms	16.0%

At the other end of the educational spectrum, the differential educational progress of self-employed Mexicans is similarly pronounced. The proportion of Mexican American businesses operated by persons possessing under four years of high school is extraordinarily high in comparison to other self-employed groups: blacks, nonminorities, Asians, or non-Mexican Hispanics.² Yet figures on percentages of owners with less than four years of high school indicate very strong gains among the younger Mexican American enterprises:

Mexican American

older firms	46.5%
younger firms	32.5%

The low education grouping encompassed nearly half of the owners of older established Mexican American firms, versus less than one third of the owners who entered into business between 1976 and 1982. Among self-employed Mexicans, a comparison of the younger and older business groups indicates that the incidence of poorly educated owners is shrinking rapidly while the college educated group is growing rapidly. No such tumultuous changes typify the non-Mexican Hispanic owner group, nor the nonminority or Asian self-employed groups. Only among the black self-employed does one find such sharp declines in the percentages of

owners with less than four years of high school:

	<u>Black</u>
older firms	35.0%
younger firms	18.5%

Educational gains among Mexican Americans entering business in the 1976-1982 time period are reflected in the industry distribution (Table 1) of older and newer firms. Personal services, the line of business that reports the lowest mean profits of any industry group, was the second most common type of business, accounting for 11.1 percent of the older Mexican firms. Among the newer Mexican American grouping, however, personal services had dropped to become the fifth most common line of business, accounting for 7.7 percent of the firms. Among the skill intensive services* that often require high levels of owner education, the incidence of Mexican-owned businesses has shown a pronounced increase: whereas 16.4 percent of the older firms were in skill intensive services, 19.1 percent of the newer Mexican American firms were in these fields.

In terms of owner education and industry mix, a comparison of older and younger Mexican-owned firms indicates two pronounced trends: 1) relative to older firms, the younger Mexican American enterprises are less oriented toward the generally stagnant traditional lines of business; 2) relative to the older enterprises, younger Mexican-owned firms are moving much more rapidly in the direction of more skill intensive emerging lines of business. In spite of their progress, however, younger Mexican American enterprises still lag behind the older, more established Mexican business group in terms of both sales levels and survival rates.

The popular Jovanovic model provides one explanation of the differing size and survival rate patterns that typify younger and older small businesses. Jovanovic assumes that uncertainty characterizes the managerial ability factor at the point of small business startup. Those who enter self-employment gradually learn about their managerial abilities by engaging in the actual

*Professional services, finance, insurance, real estate, and business services.

running of a business and observing how well they do. As they learn more about their abilities, firm behavior changes through time: those who revise their ability estimates upward tend to expand output while those embracing downward estimates tend to contract or to dissolve their businesses (Jovanovic, 1982). Over time, survivors acquire through experience precise estimates of their abilities; the younger firms exhibit relatively more variable behavior because they have less precise estimates of their true abilities.

Data describing selected traits of small businesses run by Mexican Americans (Table 3) are consistent with Jovanovic's characterizations of entrepreneurship. The nationwide sample of 3,970 small firms is split into groups of younger and older businesses: the older firms, as in Table 2, are owned by Mexican Americans who entered self-employment before 1976; the younger firms involve entry over the 1976-1982 time period. Table 3 reports mean values of 1982 total sales, measures of sales variance, and finally, the percentage of

Table 3: Business Traits: Mexican Americans and Nonminorities Entering Self-Employment before 1976 versus those Entering Between 1976 and 1982.

	<u>Pre-1976</u> <u>entrants</u>	<u>1976-1982</u> <u>entrants</u>
A. <u>Mexican American</u>		
Discontinuance rate, 1986	15.1%	27.8%
1982 total sales (mean)	\$113,120	\$78,542
1982 total sales (std. dev./mean)	2.44	2.78
n	1367	2603
B. <u>Nonminority</u>		
Discontinuance rate, 1986	16.8%	26.0%
1982 total sales (mean)	\$198,908	\$118,791
1982 total sales (std. dev./mean)	4.26	4.73
n	3118	4111

The sample firms that had discontinued business operations by late 1986. For comparison purposes, Table 3 also reports the corresponding sales figures and discontinuance rates for large samples of identically defined nonminority

businesses.³ For both the Mexican American and the nonminority small business groups, the younger firms were 1) much more likely to discontinue operations by late 1986, 2) smaller regarding 1982 annual sales, and 3) more dispersed around the sales mean values. The younger firms clearly exhibit the less settled behavior that is consistent with Jovanovic's hypothesis that they are in the process of learning what their entrepreneurial abilities are.

If managerial uncertainty does typify firm startups, then new owners may reduce this uncertainty by buying into existing firms where managerial procedures of previous owners are imbedded in the business. If this process of piggybacking upon existing expertise is successful, then buying ongoing firms should be associated with lower business discontinuance rates. This hypothesis is tested empirically in the following section.

Two insightful comparisons emerge from Table 3:

1. The Mexican American firms are a younger group of businesses overall. Whereas 56.9 percent of the nonminority firms were started after 1975, 65.6 percent of the Mexican American businesses belong to this younger firm grouping. Thus, the overall smaller mean firm size and higher discontinuance rates that typify all Mexican American small businesses (relative to nonminorities) are partially a reflection of the relative youth of the community of Mexican-owned businesses.
2. The younger Mexican American business group reports mean 1982 sales (Table 2) that are 69.4 percent of the corresponding sales figure for the older Mexican firms. Among nonminorities, in contrast, the younger firm mean sales are 59.7 percent of the corresponding sales figure for older, more established firms (Table 3). The gap between the younger and older Mexican American business groups is much smaller than the corresponding gap that typifies the nonminority small business community.

C. Discriminant Analysis: Active versus Discontinued Firms

This section empirically addresses the question--who are the entrepreneurs that are likely to survive the sorting out process that characterizes early years of self-employment? While Jovanovic captures the essence of the turmoil

that typifies recently entered small businesses, other studies have addressed the question: who are the likely survivors of the sorting out process? Some of their findings are straightforward: surviving entrepreneurs are relatively well educated.⁴ Other studies emphasize the financial capital investment made at the point of startup: those beginning operations with greater financial capital resources become the larger scale, more viable small businesses. Greater quantities of both debt and equity capital inputs are expected to improve the viability of small businesses startups (Bates, 1990a). Indeed, scale economies are expected to be operative, thus reinforcing the positive relationship between quantity of financial capital inputs and firm viability. High indebtedness, however, may increase the potential for future bankruptcy. The basic hypothesis--greater financial capital inputs (whether debt or equity) increase firm viability--is therefore qualified: higher leverage may heighten the risk of failure (Brennan and Schwartz, 1978).

Consistent with Jovanovic's model, Evans has shown that the youngest firms are the least likely to remain in business (1987). Bates has shown that owner age influences the likelihood of firm survival: the more successful firms are started by owners in the middle of (rather than in the tails of) the age distribution (1990a).

Variables utilized in Table 4's discriminant analysis include measures of owner human capital, financial capital investment in the firm, year of entry into self-employment, age of owner, quantity of owner labor input, nature of the clientele served by the firm, and whether the owner created the firm de novo or entered an existing business. The discriminant analysis dependent variable is, by definition, whether or not the business is still operating in late 1986: businesses that are still operating are active firms; those that have closed down are discontinued. The sample of young Mexican American businesses described in Table 2 is the data base utilized in discriminant analysis. Definitions of discriminant analysis explanatory variables appear below:
Ed2: for owners completing four years of high school, the value of ED2 = 1; otherwise ED2 = 0.

Ed3: for owners completing at least one but less than four years of college, the value of Ed3 = 1; otherwise Ed3 = 0.

Ed4: for owners completing four years of college, the value of Ed4 = 1; otherwise Ed4 = 0.

Ed5: for owners completing five or more years of college, the value of Ed5 = 1; otherwise Ed5 = 0.

Management experience: for owners who had worked in a managerial capacity prior to owning the business they owned in 1982, Management = years of managerial experience.

Age2: for owners between the ages of 35 and 44, Age2 = 1, otherwise Age2 = 0.

Age3: for owners between the ages of 45 and 54, Age3 = 1; otherwise Age3 = 0.

Age4: for owners 55 or older, Age4 = 1; otherwise Age 4 = 0.

Method of acquiring the business - if the owner entered a business that was already in operation, Ongoing = 1; if the owner was the original founder of the business, then Ongoing = 0.

Year in which the business was started or acquired - a series of two variables reflecting the following categories:

1. Time82: if the business was started or ownership was acquired during 1982, then Time82 = 1; otherwise Time82 = 0;
2. Time80: if the business was started or ownership was acquired during 1980 or 1981, then Time80 = 1; otherwise Time80 = 0.

Log Capital: the logarithm of the sum of debt and equity capital that was invested in the firm at the point of startup.

Leverage: the ratio of debt capital to equity capital.

Input: Average number of hours per week that the owner spent working in, and, or managing the business.

Minority: for firms having over 75 percent minority customers in 1982, minority = 1; otherwise minority = 0.

The objective of Table 4's discriminant analyses is to weigh and combine

the explanatory variables in a fashion that forces the groups to be as statistically distinct as possible.⁵ The exercise is successful in the sense that the active and discontinued firms are shown to be statistically distinct.⁶ In Table 4's discriminant analysis, the education variable group excludes owners having less than 12 years of formal schooling (ed1) and the age variable group excludes owners who were under age 35 (age1).

Table 4's discriminant function identifies the traits that typify the

Table 4: Discriminant Analysis: Mexican Americans Entering Business in the 1976-1982 Time Period

<u>Variable</u>	<u>Discriminant Function</u> <u>Coefficients</u>	<u>Group Mean</u> <u>Vectors</u>	
	Standardized coefficients	Active firms	Discontinued firms
Ed2	-.1297	.320	.307
Ed3	-.1175	.203	.209
Ed4	-.0556	.064	.064
Ed5	-.0538	.097	.093
Management	-.0496	3.899	3.694
Input	.2587	44.582	41.012
Age2	-.0136	.365	.358
Age3	-.0393	.220	.204
Age4	-.0885	.094	.095
Log Capital	.6200	9.016	8.715
Leverage	-.1629	3.571	3.654
Ongoing	-.0724	.259	.257
Time80	-.6033	.356	.416
Time82	-.6760	.229	.308
Minority	-.3486	.232	.304
n		1879	724

Multivariate test for differences between the two groups:

canonical correlation = .182
approx. standard error = .019

likelihood ratio = .967
 F = 5.94 indicating that the group differences are statistically significant;
 = .01 level.

Mexican-owned firms that are most likely to remain in business:

- 1) investment of substantial amounts of financial capital at the point of business startup;
- 2) being in business for at least three years (prior to 1982);
- 3) not relying upon a clientele that is predominantly minority;*
- 4) working full-time in one's small business.

None of the human capital variables--education or years of managerial experience--were related to business survival in the hypothesized fashion. Another measure of owner human capital, family small business background, had no explanatory power for delineating active from discontinued firms. Past studies attributing the family business background trait to firm viability did not control for factors such as the size of owner financial capital inputs; this may account for the differing findings (Shapiro, 1979).

The finding that years of owner education has little relevance for identifying surviving firms contrasts sharply with the findings of other recent findings utilizing the CBO data base. Among nonminority males, for example, owner education was the single most important factor for distinguishing active from discontinued businesses (Bates, 1990a). The Mexican American business subset is typified by minimal owner education. Among the active young Mexican American firms--those surviving in late 1986--the distribution of owners by education level is listed below:

less than four years of high school	31.6%
four years of high school	32.0%
less than four years (but at least one year) of college	20.3%
four plus years of college	<u>16.1%</u>
all	<u>100.0%</u>

*if 75 percent or more of the firm's customers are minorities, then the clientele is considered to be "predominantly minority".

Among a nonminority comparison group drawn from the CBO data base, the owner education distribution of those who survived in business through late 1986 was:

less than four years of high school	10.5%
four years of high school	31.6%
less than four years (but at least one year) of college	20.4%

four plus years of college	<u>37.5%</u>
all	<u>100.0%</u>

We commonly associate less than four years of high school with all around substandard performance; high school dropouts, not surprisingly, make up a very small portion of the viable small business universe in this country. College graduates, in contrast, are dominant in the larger scale, more viable small businesses to such an extent that we tend to equate the college trait with likely business success (Bates, 1990a).

The cultural connotations that we attach to educational backgrounds may not be appropriate for analyzing Hispanic entrepreneurs, the majority of whom were born abroad. Foreign-born Cubans in 1980 had a median educational attainment of 11.7 years*, which suggests the high school degree may be an adequate guide for identifying the above and below average segments of the Cuban population regarding the human capital trait (Bean and Tienda, 1987). The high school dropouts are, by and large, the substandard Cuban labor force participants. Among foreign-born Mexicans, however, the high school degree is not indicative of median educational background, and the term "high school dropout" is really quite inappropriate. The median education level in Mexico is less than fourth grade. Most labor force participants cannot be characterized as high school dropouts because they never had the opportunity to attend a high school. The self-selective nature of the Latin immigrant population is such that arrivals in this country tend to be highly motivated and much better educated than their countrymen. One study of Mexicans who immigrated in the 1970s found that their median level of education was six years (Portes and Bach, 1985). Mexican Americans born in the United States showed a much higher median educational attainment: 11.1 years.

Among the sample of self-employed Mexican Americans under consideration, an immigrant with ninth grade education might be distinctly above average (relative to all Mexican immigrants) while a native born person with a tenth grade education may be below average. If we equate less than high school education

*the corresponding figure for non-Hispanic whites was 12.0 years.

with business marginality, then we are writing off over 30 percent of the young business survivors, as well as nearly half of the older, established Mexican-owned firms. Similarly, if we expect viable startups to be headed by college graduates, then we are faced with a relative paucity of college graduates, as well as the finding (table four) that better educated Mexican Americans are less likely to remain in business than high school dropouts.

My earlier studies have shown that reliance on a minority clientele is strongly associated with business discontinuance, whether the firm is black or nonminority owned (Bates, 1989a). This same finding holds true for Mexican American firms, suggesting that the "protected market" provided by immigrants patronizing co-ethnic enterprises is an absolute hindrance to business viability. This seemingly nonintuitive finding is actually quite logical. The very low incomes of most recent immigrants constrain the attractiveness of this protected market. The state of the barrio business community reflects the economic circumstances of its clientele. Mexican American firms catering to a predominantly minority clientele are disproportionately traditional lines of business--particularly small scale retailing. A comparison of the entire Mexican American business sample (described in Table 2), disaggregated into groups of firms competing in the general economy and those serving a minority clientele, is illuminating:

	<u>Firms serving predominantly minority clientele</u>	<u>Firms operating in the broader economy</u>
1982 sales (mean)	\$81,203	\$93,553
Proportion of firms in retailing	.360	.240
Percentage of owners with less than four years high school	44.4%	34.9%
Financial capital input at startup (mean)	\$16,748	\$23,016
Percentage of firms still in operation, 1986	72.5%	77.9%

Note the lower human capital and financial capital inputs typifying the Mexican American firms that are oriented to serving a minority clientele. Yet it is the client base that is causally related to higher failure rates for these firms;

the discriminant analysis exercise attributes a major negative influence to the minority clientele factor when the financial capital input and owner education levels are controlled for.

D. Access to Debt

The accessibility of debt capital to Mexican American business startups appears to be good, particularly in comparison to black business startups. Among firms started between 1976 and 1982, mean values for debt capital were:

Mexican American	\$11,870
Black	\$10,012

The discriminant analysis section of this study indicated that firms having greater financial capital inputs at startup tend to be the larger scale more viable firms. In general, borrowers tend to be larger scale, more viable firms than nonborrowers. Table 5 indicates that Mexican American small business borrowers are the larger scale businesses; borrowers also exhibit higher survival rates than nonborrowers. I am not suggesting that indebtedness, by itself, causes greater firm viability. Rather, the fact that stronger businesses tend to be debtors reflects prevailing lending practices: lenders simply do not permit weak business startups to borrow in most instances.

Table 5 reveals the sources of debt used by borrowing Mexican-owned firms. Debt sources for Mexican American and nonminority firms are quite similar, with commercial banks clearly being dominant for both groups of business borrowers. The owner that invests a large sum of equity capital in his or her small business is going to have maximum access to commercial bank debt capital. Herein lies a major cause of the smaller amounts of debt that typify the Mexican business group. Among Mexican American bank loan recipients only, the mean equity investments at business startup were \$10,974.

A linear regression model was estimated to quantify the relationship between equity and debt inputs for Mexican Americans using bank loans to finance business startups. Controlling for owner education, age, sex, and managerial experience, one dollar of equity is associated with an additional \$1.71 in debt

among Mexican American business startups receiving loans from commercial banks.*

Table 5: Selected Statistics on Mexican-Owned Firms Formed
in the 1976-1982 Time Period

I. Nonborrowers only

A. Business traits
(mean values)

1. Total sales, 1982	\$58,310
2. Number of employees, 1982	0.8
3. Total financial capital	\$ 9,768

B. <u>% of firms still operating in 1986</u>	70.5%
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*Debt coefficient = 1.71, standard error of debt coefficient = 0.08,
corresponding t statistic = 20.43.

II. Borrowers onlyA. Business traits

(mean values)

1. Total sales, 1982		\$98,115
2. Number of employees, 1982		1.4
3. Total financial capital		\$34,539
4. Debt capital		
a. mean	\$23,354	
b. median	\$ 7,125	
5. Sources of debt capital (frequency)		
a. family	392	(25.5%)
b. friends	148	(9.6%)
c. commercial bank	710	(46.1%)
d. former owner	128	(8.3%)
e. other	161	(10.5%)
f. total # of borrowings	1,539	(100.0%)
6. Mean loans per firm	1.19	

B. % of firms still operating in 1986

73.8%

Mean debt inputs for these bank loan recipients were \$25,555. Relative to nonminority small business startups, the Mexican American business owner group gets smaller bank loans, on average, because their equity investments are low. These investment amounts may reflect, in turn, the fact that Mexican American owners are a relatively low income group in U.S. society. Commercial bank treatment of Mexican American borrowers lags only slightly in comparison to nonminority male business startups when it comes to leveraging a dollar's worth of equity; resultant estimated amounts of debt per equity dollar are:⁷

Nonminority male	\$1.84
Mexican American	\$1.71

Note, however, that Mexican American borrowers are much more successful than black business recipients of bank loans: an additional dollar of equity generates only \$1.16 in debt for the group of black enterprise startups.

Would greater access to debt capital lessen the failure rates for the Mexican American business startup groups? Perhaps in some cases it would, but

the overall pattern emerging from the Table 4 discriminant function suggests otherwise. The estimated standardized coefficient for the leverage variable (-.1629 for Mexican Americans) indicates that greater debt--in the absence of more equity--raises borrower leverage, other things equal. This higher leverage, in turn, heightens the risk of borrower default and hence business discontinuance. The active firms described in Table 4 are less highly leveraged, on average, than the discontinued firms. Major increases in debt capital inputs, by themselves, could potentially cause more problems than they alleviate among Mexican American business startups. Business development strategies commonly emphasize increased loan availability and larger loan sizes as tools for promoting minority business progress. Recent studies indicate that select groups--highly educated blacks, for example, who possess little equity capital--would indeed benefit greatly from increased access to debt capital (Bates, 1989a). The evidence for Mexican Americans, in contrast, is that increased levels of indebtedness would tend to undermine the viability of many firms that could have survived if they had avoided the pitfalls of being highly leveraged. This statement is not intended to contradict the basic hypothesis that greater financial capital inputs tend to increase business viability. My intent, instead, is to qualify this hypothesis: higher leverage heightens the risk of failure, particularly for heavily indebted firms. When borrowing is pushed to the point where incremental debt inputs fail to generate returns exceeding borrowing costs, business viability suffers.

E. Concluding Remarks

The key finding of this report is that younger Mexican-owned businesses are shifting, as a group, away from their traditional, small scale lines of enterprise. Among owners, the change in educational backgrounds is really rather remarkable: the incidence of highly educated persons entering small businesses is increasing very rapidly, while the incidence of those possessing less than a high school degree is declining rapidly. In absolute terms, the least educated group is twice as numerous among the younger business startups, in comparison to the college graduates. The dynamics of small business,

however, simply cannot be understood by focusing upon numerically numerous groups such as the least educated, because the key to explaining the growth trajectory of Mexican-owned businesses lies elsewhere. The more relevant question--will the highly educated continue to pursue self-employment at such accelerated rates--is, unfortunately, unanswerable at present. Highly educated Mexican Americans were widely observed solely in the professional service lines of business prior to 1976. Since then, Mexican Americans with four or more years of college have been entering a wider range of nontraditional businesses--finance, insurance, and real estate, for example. Will they persevere? Table 4's discriminant analysis indicated that highly educated Mexican Americans were slightly less likely to remain in business than high school dropouts. The continued transformation of the Mexican American business community away from traditional lines of marginal enterprise, toward larger scale emerging lines of business, depends vitally upon the degree to which the most capable groups of entrepreneurs--particularly those who are younger and highly educated--continue to pursue self-employment.

Part of the mystery about the relationship between owner education and small business viability among Mexican Americans would be resolved by dividing the owner group into subsets of those born in Mexico versus the United States. Among the Mexican born, years of owner education is simply a very poor proxy for the quality of owner human capital. Clearly, most of the skills needed for successful business operation are learned after formal schooling is completed in those cases where owners possess less than a high school degree. Self-employed Mexicans, for example, were heavily represented in construction (Table 1). This industry typifies those where owner human capital is acquired on the job, though actual work experience rather than in the classroom. Perhaps the best proxy for owner human capital quality in such cases is the levels of one's wage and salary income immediately prior to entering self-employment. The highly skilled will tend to have the higher earnings, level of formal education notwithstanding.

Another important conclusion of this report is that operating in the protected market, the ethnic enclave, is a detriment to small business

viability. The opportunities for business development lie largely in the broader marketplace. Indeed, the greater progress of the Mexican American owner group--relative to self-employed blacks--appears to be partially rooted in the greater emphasis of black firms on catering to a clientele that is overwhelmingly minority. Well over half of the Mexican-owned businesses serve a customer base that is over 50 percent nonminority in composition. Particularly in the emerging lines of Mexican American enterprise, most firms are not narrowly focused upon serving a minority clientele.

Notes

1. A detailed description of the CBO data base appears in Bates (1990b).
2. Comparison statistics on Asians, blacks and nonminorities appear in (Bates, 1989b).
3. The nonminority sample of the CBO data base consists largely of male-owned firms. The Table 3 figures for nonminorities are from (Bates, 1990a).
4. Ibid.
5. A straightforward description of discriminant analysis appears in (Klecka, 1980).
6. Alternative statistical techniques such as logit analysis could be used in the Table 4 exercise to establish the statistical significance of the individual explanatory variables. Use of logit in Table 4 would be inappropriate because multicollinearity problems would compromise the interpretation of individual variable coefficients. Age, education, and management variables are often highly correlated. Thus logit's power to establish variable coefficient significance is sacrificed, but the choice of the discriminant technique has produced clearcut results without resorting to violating the underlying assumptions that discriminant analysis is built upon.
7. The entire regression equation used to estimate loan size for commercial bank borrowers is spelled out in (Bates, 1990a).

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