Hispanic Entrepreneurship: An Analysis of Industry Choice and Entrepreneurial Success

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Introduction

- Data from the Survey of Business Owners (SBO) shows that between 2002 and 2007, the number of non-farm Hispanic-owned businesses in the U.S. increased by 43.7 percent compared to a 14.5 percent increase for those owned by non-Hispanics.

- The largest increases occurred among Hispanics in the southeast in states such as Arkansas, Tennessee, North Carolina, and South Carolina, which also saw their Hispanic populations more than double between 2000 and 2010.

Table 1: Hispanic owned businesses, 2002 and 2007

	2002	2007
Hispanic or Latino	1,573,464	2,260,269
Mexican, Mexican American, Chicano	701,078	1,035,920
Puerto Rican	109,475	156,466
Cuban	151,688	250,976
Other Spanish/Hispanic/Latino	596,125	778,721

Source: U.S. Census Bureau, Survey of Business Owners, 2002 and 2007

Introduction (cont.)

- If business ownership is a pathway for upward economic mobility and can serve as a route out of poverty (Light and Rosenstein 1995, Moore 1983, Sowell 1981), then the strong growth in Hispanic-owned businesses may represent a promising economic outlook for Hispanics.

- Research has shown that the self-employed eventually earn more than wage and salary workers (Holtz-Eakin et al. 2000, Fairlie 2004, Lofstrom 2011)

- Furthermore, Hispanic-owned businesses can benefit individuals living in the communities in which they operate by serving as a source of job creation, providing access to credit, contributing to economic development, and serving as a facilitator between the Hispanic population and the local government (Delgado 1997 and 2011, Boston 2006).

- However, the impact of self-employment on the economic well-being of Hispanics may prove to be less than promising if Hispanics are unable to achieve successful self-employment outcomes.

Introduction (cont.)

- Hispanic business owners have been less successful relative to non-Hispanic whites in terms of business earnings, business survival, number of paid employees, and business equity.
  - In 2007, the average receipts for Hispanic owned businesses was $152,700 compared to $445,000 for non-Hispanics.
  - The number of Hispanic businesses with no paid employees accounted for 89.9 percent of the total number of Hispanic-owned businesses, but only accounted for 20.5 percent of the total gross receipts for all Hispanic-owned businesses.
  - Fairlie (2004) finds that self-employed Hispanic men have 52 percent less business equity than self-employed white men.
  - Lofstrom and Wang (2007) show that Hispanics have higher self-employment exit rates compared to non-Hispanic whites, particularly in industries that require high levels of education and financial capital.

Introduction (cont.)

- Previous research has shown that education, start-up capital, prior business work experience, and English language ability are strong determinants of entrepreneurial success (Fairlie and Robb 2010, Fairlie and Woodruff 2010, Lofstrom and Bates 2009, Bates 1990).

- However, the industry of the business may also have an impact on self-employment outcomes. If business outcomes vary across industries and if certain racial or ethnic groups are blocked out of more successful industries, then industry may explain a portion of the racial/ethnic gap in business outcomes.

- Certain racial or ethnic groups could be prevented from entering and/or surviving in more successful industries, as a result of large capital requirements, low levels human capital, or discrimination (Lofstrom and Wang 2007, Fairlie and Robb 2010).

Industry Choice

- Fairlie and Robb (2010) mention that if discrimination prevents entrepreneurs from creating networks or acquiring the capital necessary to enter a particular industry, then industry choice may play a role in determining business outcomes among entrepreneurs.

- However, the authors also argue that if high ability entrepreneurs are more likely to enter high-growth or high-risk industries and low ability entrepreneurs are more likely to enter low-growth industries, then the ability of the entrepreneur influences the choice of industry, as opposed to obstacles that may prevent entrepreneurs from freely choosing a particular industry.

Industry Choice, cont.

- Fairlie and Woodruff (2010) find that industry explains only a small portion of the difference in self-employment outcomes between Mexican business owners and non-Latino business owners. They find that industry explains approximately 5 percent of the difference in self-employment income between Mexican men and non-Latino men, but 20 percent of the difference in self-employment income among women.

- Industry may matter little if Hispanics are similarly distributed across industries as non-Hispanics or if industry choice is a reflection of entrepreneurial ability.

- However, Fields and Wolff (1995) find that industry plays a bigger role in explaining earnings differentials between two groups when detailed, as opposed to broad, industry categories are used in the analysis.

Data

- This study uses data from the Integrated Public Use Microdata (IPUMS) 5-percent sample of the 2000 U.S. Census.

- The primary advantage to using the decennial Census microdata is the large sample size of self-employed Hispanics.

- A large sample size is important when analyzing the impact of industry choice on income differentials between self-employed non-Hispanic whites and Hispanics, particularly Hispanic subgroups. Sample size is also important when analyzing the impact of industry using detailed, as opposed, to broad industry categories.

- Drawbacks to using the Census include detailed firm-level characteristics such as sales receipts, business longevity, and number of paid employees, lack of data on business equity and start-up capital, and lack of data on business-specific human capital.

Table 2: Self-Employment Income by Ethnic and Nativity Groups

	Mean	Median	Standard Deviation	N
Non-Hispanic White Men	$63,213.32	$37,433.38	$81,010.27	202,106
U.S.-born Hispanic Men	48,577.66	31,412.63	64,068.29	5,968
Foreign-born Hispanic Men	38,528.41	23,559.47	54,677.00	9,592
Non-Hispanic White Women	34,383.77	19,632.89	52,211.11	96,274
U.S.-born Hispanic Women	30,080.42	16,360.74	49,003.93	3,291
Foreign-born Hispanic Women	22,301.89	14,397.45	33,676.15	5,335

Notes: Sample includes self-employed between the ages of 20-64, who worked 15 or more
hours per week and 20 or more weeks per year, and who had positive self-employment earnings.
Sampling weights used in calculations.
Source: U.S. Census 2000, 5-percent Integrated Public Use Microdata File

Table 3: Business Income by Ethnicity and Industry

Industry	Non-Hispanic White Men	U.S.-born Hispanic Men	Foreign-born Hispanic Men	Non-Hispanic White Women	U.S.-born Hispanic Women	Foreign-born Hispanic Women
Agr., Forestry, Mining	$44,161.70	$38,848.01	$32,877.44	$29,944.82	$36,825.80	$31,119.79
Construction	44,470.16	41,106.23	35,257.05	32,094.19	31,508.05	25,684.23
Manufacturing	57,646.18	49,416.83	43,690.41	29,392.46	32,801.86	26,221.38
Wholesale Trade	67,551.09	50,351.01	48,543.96	43,664.26	38,069.34	36,079.30
Retail Trade	54,635.72	42,763.70	32,748.85	31,806.98	27,639.03	28,334.08
Trans. and Warehousing	54,899.68	55,610.04	48,251.92	37,158.96	63,761.08	32,675.81
Information and Comm.	54,969.47	59,682.97	42,587.15	35,774.36	37,998.56	24,578.42
FIRE	91,336.54	69,903.98	58,689.41	59,963.17	47,244.93	47,333.14
Professional and related	89,131.41	52,997.25	33,460.60	45,933.67	46,143.93	25,552.95
Education, Health, Social	143,131.91	108,201.47	127,836.50	29,260.07	26,586.79	22,370.78
Arts, Enter., Rec., Food	47,582.12	44,255.51	33,983.33	30,845.38	26,564.72	30,592.53
Other Services	36,898.34	33,753.07	30,809.45	20,534.48	18,292.85	16,448.75
N	202,106	5,968	9,592	96,274	3,291	5,335

Notes: Sample includes self-employed between the ages of 20-64, who worked 15 or more hours per week and 20 or more weeks per year, and who had positive self-employment earnings. Sampling weights used in calculations.
Source: U.S. Census 2000, 5-percent Integrated Public Use Microdata File

Table 4: Summary Statistics by Ethnicity and Nativity

Industry	Non-Hispanic White Men	U.S.-born Hispanic Men	Foreign-born Hispanic Men	Non-Hispanic White Women	U.S.-born Hispanic Women	Foreign-born Hispanic Women
Log Income	10.144	9.938	9.763	9.478	9.354	9.243
Age	44.806	40.740	39.932	43.996	41.135	41.561
English Only	0.939	0.388	0.047	0.939	0.412	0.048
High School Dropout	0.114	0.266	0.561	0.071	0.208	0.548
College	0.315	0.166	0.102	0.318	0.173	0.094
Married	0.736	0.658	0.747	0.699	0.614	0.580
Number of kids	0.964	1.133	1.595	0.953	1.184	1.451

Notes: Sample includes self-employed between the ages of 20-64, who worked 15 or more hours per week and 20 or more weeks per year, and who had positive self-employment earnings. Sampling weights used in calculations.
Source: U.S. Census 2000, 5-percent Integrated Public Use Microdata File

Table 5: Summary Statistics by Ethnicity and Nativity, cont.

Industry	Non-Hispanic White Men	U.S.-born Hispanic Men	Foreign-born Hispanic Men	Non-Hispanic White Women	U.S.-born Hispanic Women	Foreign-born Hispanic Women
Agriculture	0.094	0.028	0.040	0.030	0.006	0.008
Construction	0.275	0.303	0.300	0.029	0.026	0.015
Manufacturing	0.041	0.036	0.037	0.029	0.020	0.030
Wholesale	0.029	0.032	0.027	0.014	0.011	0.013
Retail	0.074	0.076	0.091	0.102	0.089	0.088
Transportation	0.047	0.065	0.082	0.011	0.010	0.007
Information	0.014	0.014	0.007	0.018	0.016	0.005
FIRE	0.075	0.054	0.026	0.082	0.064	0.027
Professional	0.180	0.178	0.192	0.204	0.162	0.133
Educ., Health, Social	0.051	0.040	0.023	0.225	0.288	0.184
Arts, Enter., Food	0.043	0.052	0.054	0.065	0.060	0.051
Other	0.077	0.122	0.120	0.191	0.249	0.439

Notes: Sample includes self-employed between the ages of 20-64, who worked 15 or more hours per week and 20 or more weeks per year, and who had positive self-employment earnings. Sampling weights used in calculations.
Source: U.S. Census 2000, 5-percent Integrated Public Use Microdata File

Decomposition Model

Following Fields and Wolff (1995) the differential is decomposed into the portion due to the different employment distributions of non-Hispanic whites and Hispanics across industries, the portion due to the differences in estimated industry coefficients between self-employed non-Hispanic whites and Hispanics, and the portion due to other factors, such as human capital. The decomposition takes the following form:

$$\bar{Y}^w - \bar{Y}^h = [(\hat{\alpha}^w - \hat{\alpha}^h) + \bar{X}^h(\hat{\beta}^w - \hat{\beta}^h) + \hat{\beta}^w(\bar{X}^w - \bar{X}^h)] + \sum_j \hat{\gamma}_j^w(INDUST_j^w - INDUST_j^h) + \sum_j INDUST_j^h(\hat{\gamma}_j^w - \hat{\gamma}_j^h)$$

Earnings equation

The decompositions are based on standard earnings equations for Hispanic and non-Hispanic whites. Earnings equations are run separately for men and women and for US.-born Hispanics and Hispanic immigrants. The basic regression model estimated for each group is given in the equation below:

$$lnY_i^g = \alpha^g + \beta^g X_i^g + \sum \gamma_j^g INDUS_{ji}^g + \epsilon_i^g$$

Table 6: Decomposition Results for Hispanics

| | All Hispanics | | U.S.-born | | Foreign-born | |
	(Men)	(Women)	(Men)	(Women)	(Men)	(Women)
Ethnic Log Income Gap	.276	.167	.176	.116	.338	.169
	(.009)	(.013)	(.016)	(.023)	(.011)	(.015)
Explained						
Industry	.007*	.056*	.001	.037*	.011*	.068*
	(.002)	(.003)	(.002)	(.004)	(.002)	(.003)
Other	.136*	.075*	.064*	.017	.157*	.101*
	(.010)	(.014)	(.011)	(.011)	(.014)	(.020)
Unexplained						
Industry	.003	.044***	-.012	.026	.021	.053***
	(.013)	(.024)	(.019)	(.039)	(.016)	(.030)
Other	-.014	-.278*	-.076	-.547*	-.160*	-.159
	(.048)	(.071)	(.075)	(.120)	(.080)	(.098)
Intercept	.144*	.269*	.198**	.583*	.308*	.135
	(.053)	(.076)	(.079)	(.126)	(.087)	(.104)

Notes: Sample includes self-employed between the ages of 20-64, who worked 15 or more hours per week and 20 or more weeks per year, and who had positive self-employment. earnings.
Source: U.S. Census 2000, 5-percent Integrated Public Use Microdata File

Table 7: Decomposition Results for Hispanic Subgroups

	Mexican	Cuban	Puerto Rican	Other Hispanics
Ethnic Log Income Gap	.286	-.010	.183	.271
	(.010)	(.032)	(.039)	(.013)
Explained				
Industry	.024*	-.009	.049*	.052*
	(.002)	(.007)	(.007)	(.003)
Other	.150*	.016	.036*	.099*
	(.009)	(.015)	(.011)	(.009)
Unexplained				
Industry	-.013	-.005	.076**	.037**
	(.017)	(.028)	(.037)	(.016)
Other	-.114**	-.122	-.151	.203*
	(.050)	(.176)	(.228)	(.069)
Intercept	.239*	.109	.174	-.120
	(.055)	(.180)	(.226)	(.073)

Notes: Sample includes self-employed between the ages of 20-64, who worked
15 or more hours per week and 20 or more weeks per year, and who had positive
self-employment earnings.
Source: U.S. Census 2000, 5-percent Integrated Public Use Microdata File

Table 8: Decomposition Results for Hispanics, Broad and Detailed Industry Categories

	Broad Categories	Detailed Categories
Ethnic Log Income Gap	.259	.259
	(.008)	(.008)
Explained		
Industry	.032*	.124*
	(.002)	(.003)
Other	.134*	.054*
	(.008)	(.008)
Unexplained		
Industry	.014	-.010
	(.01)	(.022)
Other	-.024	-.046
	(.040)	(.040)
Intercept	.103**	.138**
	(.043)	(.047)

Notes: Sample includes self-employed between the ages of 20-64, who worked 15 or more hours per week and 20 or more weeks per year, and who had positive self-employment earnings.
Source: U.S. Census 2000, 5-percent Integrated Public Use Microdata File

Conclusion

- Industry may explain a bigger portion of the self-employment earnings differential between Hispanics and non-Hispanics whites when detailed as opposed to broad industry categories are used in the analysis.

- Important to explore in more depth what may be preventing Hispanics from moving into more high-growth, high-risk industries.

- Would programs to increase access to financial capital, as well as programs to increase business experience help Hispanics enter more successful industries.