

4 MINORITY ENTREPRENEURSHIP

Synopsis

Minority entrepreneurship continues to be an important facet of the American small business mainstream.¹ Of the various ethnic and racial groups in the United States, White non-Latinos and Asians have the highest self-employment rates. The likelihood of business ownership among Latinos is roughly 60 percent of that for White non-Latinos and the African-American self-employment rate is roughly 40 percent of the White non-Latino rate.

Trends among the groups differ by gender, so the analysis of trends in self-employment by race and ethnicity includes separate discussions for men and women. The White male self-employment rate rose by slightly more than 2 percentage points from 1979 to 1993, dropped the next year, and has essentially remained at the lower level. The male African-American self-employment rate remained roughly constant in the 1980s, increased in the early 1990s, decreased in the late 1990s, increased again in the 2000s, and hit a high point in 2003. Self-employment among Latino men has fluctuated around 8 percent, while the business ownership rate for Asian men declined by more than 2 percentage points from 1989 to 2003. Asian men continue to have the highest rate of business ownership among minority groups.

Female self-employment rates generally increased sharply from 1979 to the mid-1990s. Business ownership rates for African-American women and Latinas increased fairly steadily over the entire period. Self-employment rates for Asian women remained roughly constant over the period.

The research looks at causes for lower rates of minority business ownership, as well as the literature on racial differences in business outcomes and at contracting set-asides, a key public policy addressing minority business development.

1 This chapter was prepared under contract with the U.S. Small Business Administration, Office of Advocacy by Robert W. Fairlie, University of California, Santa Cruz, rfairlie@ucsc.edu, with review by Ying Lowrey of the Office of Advocacy.

Introduction

African-American and Latino business ownership rates, compared with White and Asian business ownership rates, reveal striking differences. Estimates from the 2000 Census indicate that 11.8 percent of White workers and 10.9 percent of Asian workers are self-employed business owners, whereas only 4.8 percent of Black workers and 7.2 percent of Latino workers are business owners. Furthermore, African-American/White differences in business ownership rates have remained roughly constant over most of the twentieth century.²

In addition to lower rates of business ownership, African-American and Latino firms are less successful on average than are White or Asian firms. In particular, businesses owned by African Americans and Latinos have lower sales, hire fewer employees, and have smaller payrolls than White-owned businesses.³ African-American-owned firms also have lower profits and higher closure rates than White-owned firms.⁴

The relatively smaller number and weaker performance of minority-owned businesses in the United States is a major concern among policymakers. A large number of federal, state, and local government programs have provided set-asides and loans to minorities, women, and other disadvantaged groups.⁵ In addition, many states and the federal government are promoting self-employment as a way for families to leave the welfare and unemployment insurance rolls.⁶ The interest in entrepreneurship and business development programs has been spurred by arguments from academicians and policymakers that entrepreneurship provides a route out of poverty and an alternative to unemployment.⁷ It has been argued, for example, that the economic success of several immigrant groups in the United States is in part because of their ownership of small businesses.⁸

Minority-owned firms hired more than 4.2 million employees in the United States in 1997, a disproportionate share of them minorities.⁹ Self-employed business owners are also unique in that they create jobs for themselves, and it has been argued that political influence comes with success in small business.¹⁰ Finally, business ownership is the main alternative to wage-and-salary employment for making a living, and thus has important implications for earnings and wealth inequality. Both African-American and White entrepreneurs are found to have more upward mobility and less downward mobility in the wealth distribution than wage-and-salary workers.¹¹

This review of the recent and rapidly expanding literature on minority business ownership will focus on four major research topics:

- Current patterns and recent trends in business ownership and outcomes by race and ethnicity in the United States and internationally,
- The major causes of low rates of business ownership among disadvantaged minorities identified in the literature,
- The relatively young and growing literature on racial differences in business outcomes, and
- A key public policy addressing minority business development: contracting set-asides.

For all of these topics, the discussion will focus on new estimates and previous research using large, nationally representative individual- and business-level data.

Trends in Minority Business Ownership

Before discussing the more substantive literature on minority business ownership, it is useful to first lay out the basic facts. A number of major trends in minority business ownership have occurred in the past few decades. Microdata from the 1979 to 2003 Outgoing Rotation Group Files to the Current Population Survey (CPS) are used for this analysis. These data provide an up-to-date estimate of the

2 Fairlie and Meyer, 2000.

3 U.S. Census Bureau, 2001, U.S. Small Business Administration, 2001.

4 U.S. Census Bureau, 1997, U.S. Small Business Administration, 1999.

5 See Bates, 1993a, for a description of programs promoting self-employment among minorities.

6 Vroman 1997, Kosanovich, et al., 2001, Guy, Doolittle, and Fink, 1991, and Raheim, 1997.

7 Glazer and Moynihan, 1970, Light, 1972, 1979, Sowell, 1981, and Moore, 1983.

8 Loewen, 1971, Light, 1972, Baron, et al., 1975, Bonacich and Modell, 1980, and Min, 1996.

9 U.S. Census Bureau, 1997, 2001.

10 Brown, Hamilton, and Medoff, 1990

11 Bradford, 2003.

rate of self-employment in the United States. They improve on published estimates from the same source by the Bureau of Labor Statistics (BLS). Regularly published estimates from the BLS, such as those reported in *Employment and Earnings*, do not include incorporated business owners, which represent roughly one-third of all business owners—and that share is growing.¹²

These data may also provide a more accurate representation of recent trends in minority business ownership than the Survey of Minority-Owned Business Enterprises (SMOBE). The scope of businesses included in the SMOBE has changed over the past two decades and the data possibly include a large number of side or “casual” businesses owned by wage-and-salary workers or individuals who are not in the labor force.¹³ The Current Population Survey (CPS) microdata include all individuals who identify themselves as self-employed in their own unincorporated or incorporated business on their main job, and thus capture only primary business owners.

Before discussing the trends by race and ethnicity, it is useful to compare overall rates of self-employment across groups (*Chart 4.1 and Table 4.1*).¹⁴ For this discussion of self-employment rates, the mean value from each of the last three years of the CPS is used to increase sample sizes and remove the emphasis placed on any specific year; therefore, the values will not correspond to any single year’s self-employment rate shown in the table.¹⁵ A clear ordering of self-employment propensities across ethnic and racial groups emerges. White non-Latinos and Asians have the highest self-employment rates. Among White non-Latinos, 10.7 percent of the work force is self-employed. The Asian self-employment rate is slightly lower, at 10.3 percent. Relative to these two groups, African Americans and Latinos are much less likely to be self-employed. The likelihood of business ownership among Latinos is roughly 60 percent of that

12 See Hipple (2004) for recent estimates of the number of unincorporated and incorporated business owners.

13 The data include individuals who file an IRS form 1040 Schedule C (individual proprietorship or self-employed person), 1065 (partnership), or 1120S (subchapter S corporation). Estimates from the confidential 1992 Characteristics of Business Owners (CBO), which is a sample partly drawn from the SMOBE, indicate that 44.2 percent of owners in the survey report that their businesses provided less than 25 percent of their total personal income (U.S. Bureau of the Census 1997).

14 See Fairlie, 2004c, for estimates for additional demographic groups.

15 In the discussion of trends that follows, the values do correspond to those shown in the tables for the years discussed.

Table 4.1 Self-Employment Rates by Race in Nonagricultural Industries (numbers in thousands; rates in percent)

Years	White, non-Latino						Black						Latino						Asian						Total											
	Self-employment			Labor force			Self-employment			Labor force			Self-employment			Labor force			Self-employment			Labor force			Self-employment			Labor force			Self-employment			Labor force		
	Rate	Number	Labor force	Rate	Number	Labor force	Rate	Number	Labor force	Rate	Number	Labor force	Rate	Number	Labor force	Rate	Number	Labor force	Rate	Number	Labor force	Rate	Number	Labor force	Rate	Number	Labor force	Rate	Number	Labor force						
1979	10.1	7,066	70,168	3.8	297	7,907	6.1	241	3,956	241	3,956	6.1	241	3,956	9.3	7,724	83,503	9.3	7,724	83,503	9.3	7,724	83,503	9.3	7,724	83,503	9.3	7,724	83,503							
1980	10.4	7,298	69,988	3.8	300	7,960	6.4	270	4,205	270	4,205	6.4	270	4,205	9.6	8,016	83,694	9.6	8,016	83,694	9.6	8,016	83,694	9.6	8,016	83,694	9.6	8,016	83,694							
1981	10.6	7,589	71,827	3.8	309	8,203	5.9	269	4,533	269	4,533	5.9	269	4,533	9.7	8,380	86,587	9.7	8,380	86,587	9.7	8,380	86,587	9.7	8,380	86,587	9.7	8,380	86,587							
1982	10.8	7,663	70,896	3.8	300	7,960	6.6	292	4,430	292	4,430	6.6	292	4,430	9.9	8,460	85,405	9.9	8,460	85,405	9.9	8,460	85,405	9.9	8,460	85,405	9.9	8,460	85,405							
1983	11.4	8,220	71,953	3.6	298	8,213	6.2	281	4,515	281	4,515	6.2	281	4,515	10.4	9,056	86,946	10.4	9,056	86,946	10.4	9,056	86,946	10.4	9,056	86,946	10.4	9,056	86,946							
1984	11.4	8,608	75,386	4.0	352	8,908	6.9	337	4,868	337	4,868	6.9	337	4,868	10.4	9,568	91,568	10.4	9,568	91,568	10.4	9,568	91,568	10.4	9,568	91,568	10.4	9,568	91,568							
1985	11.2	8,497	75,697	3.8	357	9,285	6.3	362	5,774	362	5,774	6.3	362	5,774	10.2	9,494	93,327	10.2	9,494	93,327	10.2	9,494	93,327	10.2	9,494	93,327	10.2	9,494	93,327							
1986	11.2	8,670	77,401	3.9	374	9,627	7.2	450	6,248	450	6,248	7.2	450	6,248	10.2	9,786	95,998	10.2	9,786	95,998	10.2	9,786	95,998	10.2	9,786	95,998	10.2	9,786	95,998							
1987	11.4	8,949	78,818	3.8	388	10,179	7.4	496	6,743	496	6,743	7.4	496	6,743	10.3	10,175	98,691	10.3	10,175	98,691	10.3	10,175	98,691	10.3	10,175	98,691	10.3	10,175	98,691							
1988	11.5	9,294	80,533	4.1	429	10,446	7.4	533	7,203	533	7,203	7.4	533	7,203	10.5	10,617	101,292	10.5	10,617	101,292	10.5	10,617	101,292	10.5	10,617	101,292	10.5	10,617	101,292							
1989	11.4	9,384	81,978	3.8	406	10,711	7.5	553	7,392	553	7,392	7.5	553	7,392	11.7	319	2,734	11.7	319	2,734	11.7	319	2,734	11.7	319	2,734	11.7	319	2,734							
1990	11.5	9,381	81,861	4.3	471	11,040	6.9	594	8,588	594	8,588	6.9	594	8,588	12.1	372	3,088	12.1	372	3,088	12.1	372	3,088	12.1	372	3,088	12.1	372	3,088							
1991	11.7	9,407	80,724	4.1	451	10,976	6.7	570	8,563	570	8,563	6.7	570	8,563	12.1	381	3,147	12.1	381	3,147	12.1	381	3,147	12.1	381	3,147	12.1	381	3,147							
1992	11.4	9,217	81,041	3.9	424	11,007	6.6	573	8,675	573	8,675	6.6	573	8,675	12.9	418	3,254	12.9	418	3,254	12.9	418	3,254	12.9	418	3,254	12.9	418	3,254							

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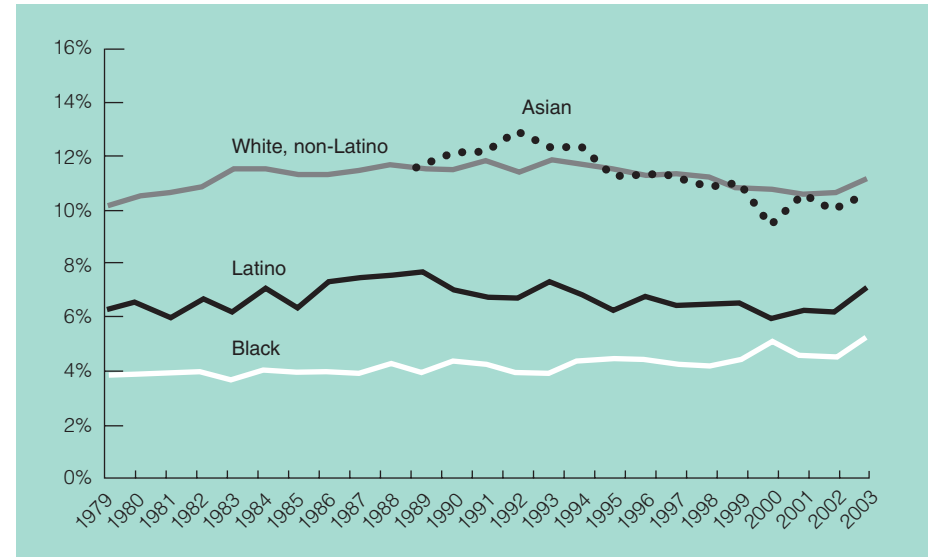
Table 4.1 (continued)

Years	White, non-Latino			Black			Latino			Asian			Total		
	Self-employment		Labor force	Self-employment		Labor force	Self-employment		Labor force	Self-employment		Labor force	Self-employment		Labor force
	Rate	Number		Rate	Number		Rate	Number		Rate	Number		Rate	Number	
1993	11.7	9,663	82,244	3.8	431	11,322	7.2	642	8,952	12.2	394	3,218	10.5	11,201	106,498
1994	11.6	9,714	84,005	4.3	507	11,704	6.8	632	9,342	12.2	362	2,953	10.4	11,287	108,801
1995	11.4	9,732	85,336	4.3	526	12,134	6.1	592	9,645	11.2	298	2,661	10.1	11,217	110,594
1996	11.2	9,550	85,032	4.3	538	12,386	6.6	661	9,953	11.3	460	4,074	10.0	11,258	112,238
1997	11.3	9,738	86,490	4.1	530	12,828	6.4	697	10,935	11.1	488	4,375	10.0	11,525	115,537
1998	11.1	9,710	87,353	4.1	544	13,407	6.4	734	11,466	10.8	494	4,595	9.8	11,557	117,730
1999	10.8	9,545	88,536	4.3	602	13,999	6.4	759	11,819	10.9	521	4,771	9.6	11,483	120,015
2000	10.7	9,510	89,108	4.9	697	14,220	5.9	732	12,490	9.4	466	4,977	9.4	11,460	121,743
2001	10.5	9,273	88,560	4.4	629	14,251	6.1	785	12,848	10.5	534	5,077	9.3	11,287	121,707
2002	10.6	9,290	87,788	4.4	621	14,062	6.1	782	12,842	9.9	502	5,077	9.3	11,268	120,803
2003	11.1	9,658	87,305	5.2	710	13,717	7.0	1,032	14,777	10.4	590	5,647	9.8	12,176	123,830

Notes: The sample includes individuals ages 16 and over who work 15 or more hours during the survey week. Agricultural industries are defined using the NAICS classifications and are excluded. Estimates for 1979 to 1991 also exclude veterinary services. Race and Spanish codes changed in 1989, 1996, and 2003, and the CPS was redesigned in 1994. Estimates for 2003 only include individuals reporting one race

Source: Author's calculations using microdata from the Current Population Survey, Outgoing Rotation Group Files (1979–2003).

Chart 4.1 Self-Employment Rates for All Workers
Current Population Survey, Outgoing Rotation Group Files (1979–2003)



for White non-Latinos. Of the four ethnic/racial groups identified in this analysis, African Americans have the lowest rates of business ownership. For example, the African-American self-employment rate of 4.7 percent is roughly 40 percent of the White non-Latino rate. Similarly low rates of African-American business ownership relative to Whites date back to at least 1910.¹⁶ Clearly, the two largest disadvantaged minority groups in the United States—African Americans and Latinos—are substantially underrepresented in business ownership.

Examining self-employed business ownership rates by race separately for men and women generally reveals similar differences, with women having lower rates than men for all groups (*Charts 4.2 and 4.3 and Tables 4.2 and 4.3*). The one exception is that Asian women have the highest business ownership rate at 8.3 percent instead of White women (7.3 percent). African-American and Latino men and women are much less likely to own businesses than White non-Latino men and women, respectively.

16 See Fairlie and Meyer, 2000.

Chart 4.2 Self-Employment Rates for Working Men
Current Population Survey, Outgoing Rotation Group Files (1979–2003)

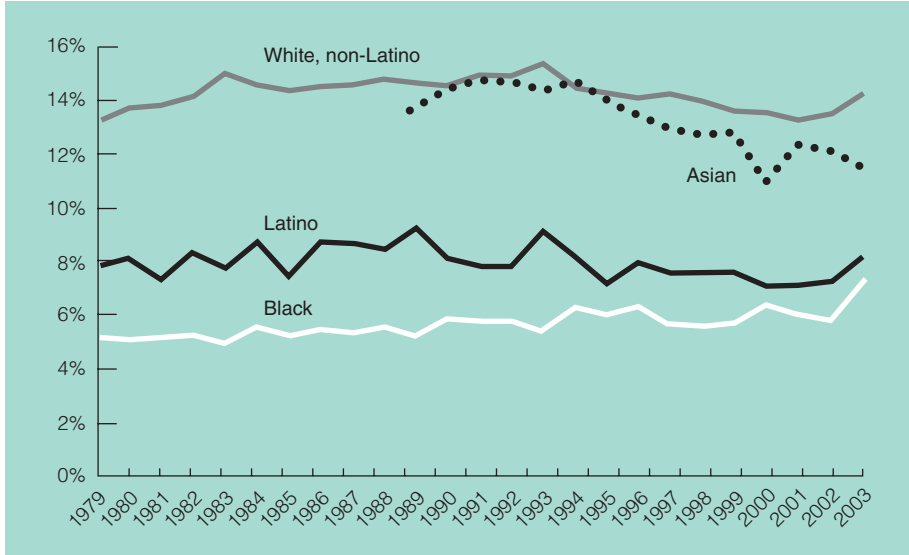


Chart 4.3 Self-Employment Rates for Working Women
Current Population Survey, Outgoing Rotation Group Files (1979–2003)

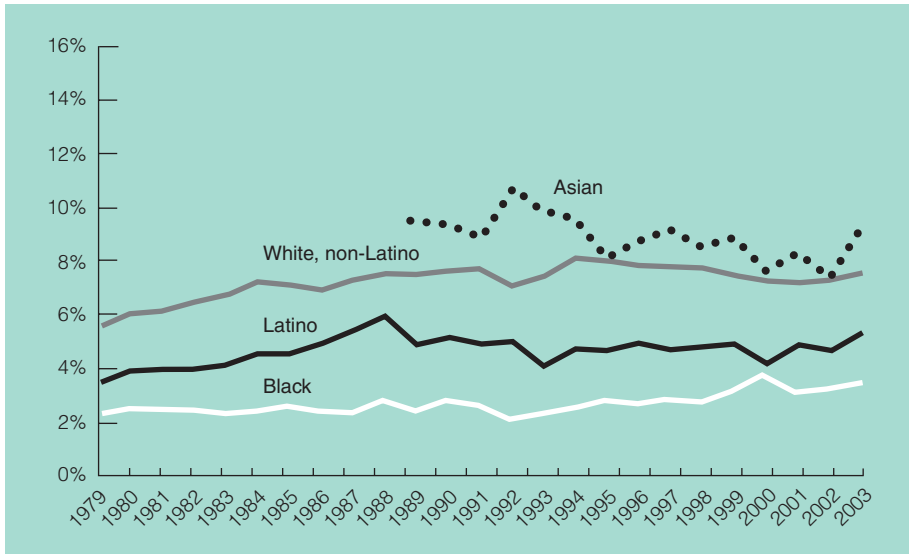


Table 4.2 Male Self-Employment Rates by Race in Nonagricultural Industries (numbers in thousands; rates in percent)

Years	White, non-Latino			Black			Latino			Asian			Total		
	Self-employment			Self-employment			Self-employment			Self-employment			Self-employment		
	Rate	Number	Labor force	Rate	Number	Labor force	Rate	Number	Labor force	Rate	Number	Labor force	Rate	Number	Labor force
1979	13.1	5,496	41,888	5.1	213	4,182	7.8	191	2,456	12.1	5,982	49,318	12.1	5,982	49,318
1980	13.6	5,609	41,230	5.0	207	4,141	8.0	207	2,592	12.6	6,124	48,774	12.6	6,124	48,774
1981	13.8	5,784	41,998	5.1	216	4,244	7.2	200	2,782	12.7	6,349	50,155	12.7	6,349	50,155
1982	14.1	5,788	41,050	5.1	208	4,042	8.3	222	2,678	13.0	6,370	48,949	13.0	6,370	48,949
1983	14.9	6,178	41,390	4.9	207	4,203	7.6	207	2,707	13.7	6,777	49,553	13.7	6,777	49,553
1984	14.6	6,329	43,473	5.5	247	4,519	8.6	247	2,863	13.4	7,012	52,165	13.4	7,012	52,165
1985	14.4	6,216	43,246	5.2	242	4,698	7.4	262	3,550	13.0	6,900	52,907	13.0	6,900	52,907
1986	14.5	6,355	43,842	5.4	263	4,861	8.7	334	3,846	13.2	7,137	54,041	13.2	7,137	54,041
1987	14.5	6,461	44,460	5.3	273	5,143	8.6	357	4,138	13.2	7,318	55,331	13.2	7,318	55,331
1988	14.7	6,659	45,228	5.5	286	5,228	8.4	366	4,349	13.4	7,562	56,516	13.4	7,562	56,516
1989	14.6	6,693	45,862	5.2	280	5,374	9.2	412	4,497	13.2	7,619	57,540	13.2	7,619	57,540
1990	14.6	6,637	45,588	5.8	319	5,488	8.1	426	5,279	13.1	7,667	58,424	13.1	7,667	58,424
1991	14.9	6,668	44,782	5.7	313	5,451	7.8	408	5,242	13.4	7,693	57,622	13.4	7,693	57,622

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Table 4.2 (continued)

Years	White, non-Latino			Black			Latino			Asian			Total		
	Self-employment		Labor force	Self-employment		Labor force	Self-employment		Labor force	Self-employment		Labor force	Self-employment		Labor force
	Rate	Number		Rate	Number		Rate	Number		Rate	Number		Rate	Number	
1992	14.9	6,664	44,871	5.7	308	5,413	7.7	406	5,275	14.6	263	1,796	13.3	7,679	57,752
1993	15.3	6,942	45,374	5.3	298	5,576	9.1	502	5,511	14.3	250	1,751	13.7	8,038	58,624
1994	14.4	6,694	46,421	6.2	356	5,750	8.1	462	5,714	14.7	232	1,582	13.0	7,796	59,919
1995	14.2	6,693	47,213	6.0	354	5,946	7.1	418	5,861	13.9	197	1,412	12.7	7,711	60,890
1996	14.1	6,607	46,997	6.2	369	5,970	7.8	472	6,061	13.4	298	2,218	12.6	7,781	61,675
1997	14.2	6,736	47,568	5.6	346	6,137	7.5	500	6,677	12.9	305	2,371	12.6	7,939	63,257
1998	13.9	6,694	48,080	5.6	356	6,407	7.5	523	6,951	12.7	319	2,515	12.3	7,943	64,454
1999	13.5	6,614	48,869	5.7	373	6,575	7.5	525	6,995	12.8	326	2,560	12.0	7,869	65,472
2000	13.5	6,606	49,007	6.3	420	6,684	7.0	519	7,365	10.9	292	2,684	11.9	7,868	66,258
2001	13.2	6,422	48,675	5.9	398	6,699	7.1	529	7,508	12.3	343	2,793	11.7	7,738	66,189
2002	13.4	6,423	48,109	5.8	386	6,682	7.2	535	7,460	12.0	332	2,760	11.8	7,722	65,570
2003	14.1	6,668	47,317	7.2	461	6,399	8.1	731	9,053	11.5	351	3,058	12.4	8,336	67,080

Notes: The sample includes individuals ages 16 and over who work 15 or more hours during the survey week. Agricultural industries are defined using the NAICS classifications and are excluded. Estimates for 1979 to 1991 also exclude veterinary services. Race and Spanish codes changed in 1989, 1996, and 2003, and the CPS was redesigned in 1994. Estimates for 2003 only include individuals reporting one race

Source: Author's calculations using microdata from the Current Population Survey, Outgoing Rotation Group Files (1979–2003).

Table 4.3 Female Self-Employment Rates by Race in Nonagricultural Industries (numbers in thousands; rates in percent)

Years	White, non-Latino			Black			Latino			Asian			Total		
	Self-employment		Labor force	Self-employment		Labor force	Self-employment		Labor force	Self-employment		Labor force	Self-employment		Labor force
	Rate	Number		Rate	Number		Rate	Number		Rate	Number		Rate	Number	
1979	5.6	1,570	28,280	2.2	84	3,725	3.3	50	1,500	5.1	1,741	34,185			
1980	5.9	1,689	28,758	2.4	93	3,819	3.9	62	1,613	5.4	1,892	34,921			
1981	6.1	1,805	29,829	2.4	94	3,959	3.9	68	1,751	5.6	2,031	36,432			
1982	6.3	1,875	29,847	2.4	92	3,918	4.0	69	1,752	5.7	2,089	36,456			
1983	6.7	2,043	30,563	2.3	91	4,009	4.1	74	1,808	6.1	2,279	37,394			
1984	7.1	2,279	31,912	2.4	105	4,388	4.5	90	2,005	6.5	2,556	39,403			
1985	7.0	2,281	32,452	2.5	115	4,587	4.5	100	2,224	6.4	2,595	40,420			
1986	6.9	2,315	33,559	2.3	112	4,766	4.8	116	2,402	6.3	2,649	41,957			
1987	7.2	2,488	34,358	2.3	115	5,037	5.4	139	2,606	6.6	2,857	43,360			
1988	7.5	2,635	35,305	2.7	143	5,218	5.8	167	2,853	6.8	3,055	44,776			
1989	7.5	2,691	36,116	2.4	126	5,337	4.9	141	2,894	9.4	120	1,280	6.7	3,091	45,892
1990	7.6	2,743	36,273	2.7	152	5,551	5.1	168	3,308	9.3	130	1,399	6.9	3,213	46,824
1991	7.6	2,739	35,942	2.5	138	5,525	4.9	162	3,321	8.8	123	1,386	6.9	3,187	46,492

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Table 4.3 (continued)

Years	White, non-Latino			Black			Latino			Asian			Total		
	Self-employment			Self-employment			Self-employment			Self-employment			Self-employment		
	Rate	Number	Labor force	Rate	Number	Labor force	Rate	Number	Labor force	Rate	Number	Labor force	Rate	Number	Labor force
1992	7.1	2,553	36,170	2.1	116	5,593	4.9	167	3,400	10.6	155	1,459	6.4	3,011	46,935
1993	7.4	2,720	36,869	2.3	133	5,746	4.1	140	3,441	9.8	144	1,466	6.6	3,163	47,874
1994	8.0	3,020	37,585	2.5	151	5,954	4.7	170	3,628	9.4	129	1,371	7.1	3,491	48,883
1995	8.0	3,039	38,123	2.8	172	6,189	4.6	175	3,784	8.1	101	1,249	7.1	3,506	49,704
1996	7.7	2,943	38,035	2.6	169	6,416	4.9	189	3,892	8.7	162	1,856	6.9	3,478	50,563
1997	7.7	3,002	38,921	2.7	184	6,692	4.6	197	4,258	9.1	182	2,004	6.9	3,586	52,279
1998	7.7	3,016	39,273	2.7	188	7,000	4.7	211	4,515	8.4	175	2,080	6.8	3,613	53,276
1999	7.4	2,932	39,667	3.1	230	7,425	4.8	234	4,824	8.8	195	2,211	6.6	3,615	54,544
2000	7.2	2,904	40,101	3.7	277	7,536	4.1	213	5,125	7.6	174	2,293	6.5	3,592	55,485
2001	7.1	2,851	39,886	3.1	231	7,553	4.8	255	5,340	8.3	190	2,284	6.4	3,549	55,518
2002	7.2	2,867	39,680	3.2	235	7,380	4.6	247	5,382	7.3	170	2,317	6.4	3,546	55,233
2003	7.5	2,990	39,989	3.4	249	7,318	5.3	301	5,724	9.2	239	2,589	6.8	3,839	56,750

Notes: The sample includes individuals ages 16 and over who work 15 or more hours during the survey week. Agricultural industries are defined using the NAICS classifications and are excluded. Estimates for 1979 to 1991 also exclude veterinary services. Race and Spanish codes changed in 1989, 1996, and 2003, and the CPS was redesigned in 1994. Estimates for 2003 only include individuals reporting one race

Source: Author's calculations using microdata from the Current Population Survey, Outgoing Rotation Group Files (1979–2003).

The ordering of self-employment rates across ethnic/racial groups is similar to that reported in previous studies using alternative data sources and years. These include, but are not limited to, estimates for some or all groups from the 1980 Census,¹⁷ the 1990 Census,¹⁸ the General Social Survey,¹⁹ the Panel Study of Income Dynamics,²⁰ and the Survey of Income and Program Participation.²¹

Because the trends differ by gender, the analysis of trends in self-employment by race and ethnicity includes separate discussions for men and women. The White male self-employment rate rose by slightly more than 2 percentage points from 1979 to 1993.²² It then dropped by a percentage point the next year and has essentially remained at this lower level. Some caution is warranted, however, in interpreting the drop from 1993 to 1994 as it may simply be a result of the 1994 CPS redesign.²³ Although the rate was relatively flat in the late 1990s and dipped in the early 2000s, the White male business ownership rate of 14.1 percent is very similar to the rate of 14.4 percent in 1994. Over the entire period, the self-employment rate rose by 1 percentage point.

The male African-American self-employment rate remained roughly constant in the 1980s, increased in the early 1990s and decreased in the late 1990s (*Chart 2.2*). In the 2000s the rate of business ownership increased again and hit a high point in 2003. The 2003 estimate appears to be an outlier. Overall, business ownership rates have increased over the past 24 years by a full percentage point, from roughly 5 to 6 percent. These trends indicate that business ownership for African-American men is rising at a faster rate than for White men, suggesting that the racial gap is closing in percentage terms. At the same time, it is clear that African-American men had lower self-employment rates than any other group of men for the entire period.

17 Borjas, 1986, Borjas and Bronars, 1989, Light and Rosenstein, 1995.

18 Fairlie and Meyer, 1996 and Razin and Light, 1998.

19 Hout and Rosen, 2000.

20 Fairlie, 1999.

21 Meyer, 1990, Bates, 1997.

22 Estimates reported in Aronson, 1991, Blau, 1987, and Fairlie and Meyer, 2000, indicate that the upward trend in the male self-employment rate dates back to the early 1970s.

23 See Polivika and Miller, 1998, and Fairlie and Meyer, 2000, for more discussion.

Over the past 24 years, the self-employment rate among Latino men has fluctuated around 8 percent. The self-employment rate was 7.8 percent in 1979 and 8.1 percent in 2003. The constancy of the business ownership rate is somewhat surprising in light of the rapid increase in the Latino work force over this period. These two trends have led to a large increase in the total number of Latino business owners over the past 24 years.

The business ownership rate for Asian men declined by more than 2 percentage points from 1989 to 2003. Unfortunately, the CPS does not allow identification of Asians prior to 1989. In 1989, the self-employment rate was 13.7 percent and by 2003 the rate dropped to 11.5 percent. Although the group's self-employment rate has declined over the past decade, Asian men continue to have the highest rate of business ownership among minority groups and have rates only slightly lower than those of White men.

Several previous studies provide evidence that levels of female self-employment have been increasing rapidly in recent decades.²⁴ In contrast to the male trends, female self-employment rates increased sharply from 1979 to the mid-1990s (*Chart 4.3*). The White female self-employment rate was 5.6 percent in 1979 and rose to 7.4 percent in 1993 and 8.0 percent in 1994. The rapid convergence of male and female business ownership rates, however, appears to have ended or at least flattened. Since the late 1990s, the White female self-employment rate has declined slightly from the mid-1990s highs.

Trends for minority women are different. For African-American women and Latinas, the business ownership rate increased fairly steadily over the entire period. African-American self-employment rates were 2.2 percent in 1979 and 3.4 percent by 2003, and Latina rates rose from 3.3 percent to 5.3 percent. In relative terms, African-American women and Latinas made gains on both White women and minority men over this period. In contrast to these sharp trends, self-employment rates for Asian women remained roughly constant over the period.

24 See Aronson, 1991, Devine, 1994 and U.S. Small Business Administration, 1998, for example.

Although there is little evidence in the literature on what has contributed to these trends, especially in the past few years, there is some evidence on the causes of racial differences in trends from 1979 to 1998. Using a dynamic decomposition technique, Fairlie explores the causes of racial differences in trends in self-employment rates over this period.²⁵ Several interesting patterns are revealed. For example, increasing levels of education among African-American men relative to White men may have contributed to the narrowing of the White/African-American self-employment rate gap between the 1979–1981 and 1996–1998 periods. In contrast, the White/Latino gap increased over the period partly because Latino men did not experience gains in education relative to White men. Differential trends in the age distribution of the work force across racial groups may also have contributed to relative trends in self-employment rates. For all minority groups, the work force aged less rapidly than for Whites, reducing the self-employment rates of these groups relative to the White self-employment rate.

International Comparison

Are the ethnic and racial differences in business ownership unique to the United States? The answer to this question has important implications for the thinking about the causes and potential solutions to racial disparities in business ownership. Using aggregate data from the 2001 Canadian and United Kingdom Censuses and microdata from the 2000 U.S. Census, the researcher provides estimates of self-employment rates by ethnicity and race (*Table 4.4*). All ethnic/racial groups that are roughly comparable for at least two of the three countries are selected. Black self-employment rates are higher in the United Kingdom than in Canada and the United States, but remain relatively low. Even in the United Kingdom, where 8.3 percent of Blacks are self-employed business owners, this represents less than two-thirds of the White rate of business ownership. Latinos have similarly low self-employment rates in both Canada and the United States. For example, only 7.2 percent of Latinos are self-employed business owners in the United States and 7.9 percent of Latinos in Canada are self-employed. Finally, Asians have substantially higher rates of business ownership in the United Kingdom than in Canada and the United States. In the United Kingdom, they also have higher rates than Whites.

25 See Fairlie, 2004b.

Table 4.4 Self-Employment Rates by Race/Ethnicity for Selected Countries, 2000–2001

	Canada		United Kingdom		United States	
	Self-employment rate (percent)	Workers (thousands)	Self-employment rate (percent)	Workers (thousands)	Self-employment rate (percent)	Workers (thousands)
Total	12.0	15,516	13.7	22,796	10.6	115,146
White	12.4	13,208	13.6	21,277	11.8	85,743
Black	6.1	315	8.3	424	4.8	11,368
Latino	7.9	114			7.2	10,696
Asian	11.0	1,284	18.7	849	10.9	4,034

Notes: Canadian minority groups include multiracial responses to the race question. Canadian Whites, and all U.S. and U.K. groups include only monoracial responses to the race question.

Sources: Estimates are from the Canadian 2001 Census, the United Kingdom 2001 Census and the U.S. 5 Percent Public Use Microdata Sample from the 2000 Census.

The estimates indicate a clear pattern in ethnic/racial entrepreneurship—disadvantaged groups, such as Blacks and Latinos, have relatively low rates of business ownership in all of the countries reported. Thus, low rates of business ownership among these ethnic/racial groups are not peculiar to the United States or one country. Although more cross-country research is needed, disadvantaged groups may have similar characteristics associated with lower levels of entrepreneurship or face similar institutional barriers such as consumer or lending discrimination in each of the countries.

Minority Business Outcomes

Although racial disparities in business ownership have been the focus of many previous studies, there is less evidence in the literature on whether the businesses created by disadvantaged minorities are also less successful. In this section, the researcher presents results from firm-level datasets. Estimates from the 1997 Survey of Minority Owned Business Enterprises (SMOBE) indicate that African-American and Latino firms have lower sales, hire fewer employees, and have smaller payrolls than White or Asian-owned firms

(Table 4.5).²⁶ Average sales and receipts are \$86,478 for African-American-owned firms and \$155,242 for Latino-owned firms. In contrast, White-owned firms have average sales of \$448,294 and Asian-owned firms have average sales of \$338,852. For each reported measure of employment, White-owned businesses are significantly larger than African-American- and Latino-owned businesses. Asian-owned businesses are more likely to hire at least one employee than White-owned businesses, but hire fewer employees on average and have a much lower average payroll.

Estimates from other data sources paint a similar picture for the state of minority business. Estimates from the 1992 Characteristics of Business Owners (CBO) indicate that African-American-owned firms have lower revenues and profits, hire fewer employees, and are more likely to close than White-owned businesses.²⁷ Latino-owned firms are also less successful than White-owned firms, but the differences are smaller and, for profits and closure rates, the differences are negligible. Estimates from the 1998 Survey of Small Business Finances indicate that African-American- and Latino-owned businesses hire fewer employees than White-owned businesses.²⁸ Minority-owned businesses also have lower sales and end-of-year assets, and are younger than businesses owned by Whites. Additional evidence indicates that closure rates are high among African-American-owned firms.²⁹ Finally, Asian-owned firms have somewhat lower average sales than White-owned firms, but slightly higher survival rates and profits than White-owned firms.³⁰

Focusing on employer firms, two recent studies use special administrative panel data on minority-owned businesses to examine survival and other dynamic outcomes. Robb links Business Information Tracking Series (BITS) data from 1992 to 1996 to SMOBE microdata from 1992 and examines firm survival

26 See U.S. Bureau of the Census, 2001 and U.S. Small Business Administration, 1999, 2001 for more details including recent trends in business outcomes.

27 U.S. Department of Commerce, 1997.

28 Bitler, Robb, and Wolken, 2001.

29 Bates, 1997, Boden and Headd, 2002, and Robb, 2000, 2002.

30 Bates, 1997.

Table 4.5 Business Outcomes by Race

	White-owned firms	African-American-owned firms	Latino-owned firms	Asian-owned firms
Total number of firms	17,316,796	823,499	1,199,896	893,590
Mean sales and receipts (dollars)	448,294	86,478	155,242	338,852
Firms with paid employees (percent)	25.3	11.3	17.7	32.1
Mean number of paid employees	3.1	0.9	1.2	2.4
Mean annual payroll for employer firms (dollars)	319,051	153,615	140,785	158,185

Source: U.S. Department of Commerce, Bureau of the Census, Company Summary, Economic Census, Survey of Minority Business Enterprises (2001).

rates by race.³¹ She finds that 48.7 percent of White employer firms and 51.7 percent of Asian employer firms survived from 1992 to 1996. In contrast, only 34.8 percent of African-American employer firms and 43.7 percent of Latino employer firms survived over this period. Lowrey uses a special Census dataset that tracks 1997 SMOBE respondents over time to examine racial differences in survival, contraction, and expansion among employer firms from 1997 to 2001.³² She also finds lower survival rates among African-American- and Latino-owned establishments than among nonminority and Asian-owned establishments. In contrast to these results, however, she finds that Latino-owned establishments had a higher expansion rate, and African-American- and Latino-owned establishments had lower contraction rates than White-owned establishments. Asian-owned establishments had a higher expansion rate, but a slightly higher contraction rate than firms owned by Whites.

31 Robb, 2004.

32 Lowrey, 2005.

Explanations for Racial Differences in Business Ownership

What are the causes of lower business ownership rates among African Americans and Latinos in the United States? A number of factors are addressed in the previous literature. Emphasis is placed here on previous research that provides estimates of the magnitude of explanatory factors in explaining racial differences in business ownership rates in addition to identifying these factors.

The Opportunity Cost of Owning a Business

The standard economic model of the self-employment decision posits that individuals choose the work sector that provides the highest utility—wage-and-salary work or self-employment.³³ The main component of this comparison is potential earnings in the two sectors. Minorities may be less likely to choose self-employment than Whites because of lower relative earnings in the self-employment sector. Opportunities in self-employment may be less attractive for minorities and/or opportunities in the wage-and-salary sector may be more attractive relative to those for Whites. Previous research focusing on highly educated workers finds that African-American scientists and engineers were less likely than Asian scientists and engineers to enter business ownership because of more favorable returns in the wage-and-salary sector.³⁴

The mean, median, and standard deviation of total annual earnings of self-employed and wage-and-salary workers by race provide some useful information (*Table 4.6*). Only full-year, full-time workers are included in the sample to control for differences in hours worked. For all groups of men, the self-employed earn substantially more on average than do wage-and-salary workers. Self-employed African American and Latino men earn \$9,444 and \$11,052 more than their wage-and-salary counterparts, respectively.³⁵ These differences are large, representing roughly 25–30 percent of average wage-and-salary earnings. A comparison of means can create a distorted picture, however,

33 Kihlstrom and Laffont, 1979, and Evans and Jovanovic, 1989.

34 Tang, 1995.

35 Higher average self-employment earnings are also found after controlling for individual characteristics (see Portes and Zhou 1999 and Fairlie 2004a for example).

Table 4.6 Self-Employment and Wage-and-Salary Earnings by Race and Ethnicity (dollars, except sample sizes)

	Men		Women	
	Self-employed	Wage/salary	Self-employed	Wage/salary
White, non-Latinos				
Mean	71,695	57,105	36,349	39,223
Median	45,000	44,878	25,570	32,729
Standard deviation	83,024	51,483	46,622	32,607
Sample size (number sampled)	14,163	96,058	5,057	72,885
Blacks				
Mean	48,775	39,331	30,716	31,924
Median	36,000	32,590	20,779	27,451
Standard deviation	60,359	32,645	44,413	25,796
Sample size (number sampled)	682	12,073	413	14,624
Latinos				
Mean	45,442	34,390	28,164	27,726
Median	30,300	27,013	20,779	22,439
Standard deviation	64,428	33,984	37,782	24,800
Sample size (number sampled)	1,436	19,614	579	12,934
Asians				
Mean	64,266	58,349	39,653	41,114
Median	44,178	44,178	25,570	33,133
Standard deviation	76,439	53,464	56,588	36,252
Sample size (number sampled)	800	6,104	445	5,067

Notes: (1) The sample consists of individuals who work at least 40 weeks and 35 hours per usual week in the previous year. (2) All calculations use sample weights provided by the CPS.

Source: Author's calculations using microdata from the Current Population Survey, Annual Demographic Files (2000–04).

if a few business owners are extremely successful. Comparing median income levels removes these concerns. For both African American and Latino men, median self-employment earnings are substantially higher than median wage-and-salary earnings; however, the differences are much smaller.

Although average and median earnings are higher for self-employed African American and Latino men, it is important to also compare the variance of earnings in the two sectors. For both races, the standard deviation of self-employment income is substantially higher than that of wage-and-salary income, suggesting that a much larger percentage of the self-employed men have very high or very low earnings than male wage-and-salary workers.

The researcher also reports characteristics of the earnings distribution for White men. The most notable difference is that White men earn substantially more than either African-American or Latino men in both the self-employment and wage-and-salary sectors. Of interest to this analysis, however, is the difference between the two sectors. Using mean earnings, self-employed White men earn substantially more than their wage-and-salary counterparts, whereas in median earnings there is essentially no difference. Asian men also experience higher average self-employment earnings, but similar median self-employment earnings to those of Asian wage-and-salary workers.

For men, the earnings estimates do not shed light on why African Americans and Latinos have substantially lower business ownership rates than Whites and Asians. The most consistent differences between self-employment and wage-and-salary earnings are for African Americans and Latinos. The self-employed earn substantially more than wage-and-salary workers for these two groups, and even for average earnings, the differences in percentage terms are comparable for African Americans and larger for Latinos than for Whites.

Estimates of the mean, median, and standard deviation for self-employment and wage-and-salary earnings for women by race offer insight into the earnings picture for women (*Table 4.6*). In contrast to men, self-employed White, African-American, Latina, and Asian women earn less than women working in the wage-and-salary sector.³⁶ The only exception is that mean self-employment

36 Fairlie (2004a) finds higher average self-employment earnings after controlling for individual characteristics for Latinas and no difference for African-American women.

earnings are higher for Latinas than mean wage-and-salary earnings. Similar to the results for men, African-American women and Latinas earn substantially less than White and Asian women in both the self-employment and wage-and-salary sectors. Another interesting finding is that the self-employment/wage-and-salary earnings difference is very similar in percentage terms for African Americans, Whites, and Asians. The self-employment/wage-and-salary earnings differential is positive or smaller for Latinas. These patterns clearly do not provide an answer to why substantially lower rates of business ownership are observed among African-American women and Latinas than White and Asian women.

Although the earnings comparison is a key component of the standard theoretical model of entrepreneurship, the decision between wage-and-salary work and self-employment is actually based on a comparison of utility in the two sectors. In addition to earnings in the two sectors, characteristics of the type of work may be important. Theoretical models by Rees and Shah (1986) and Blanchflower and Oswald (1998) specifically take into account “the flexibility associated with hours worked and the independence entailed,” and “the nonpecuniary utility from being independent and one’s own boss” from self-employment, respectively. A potential explanation for low rates of business ownership may be that minorities have less preference for entrepreneurship.

Overall, the desire for entrepreneurship is strong in the United States and many other countries in the world. When individuals are asked the question of whether they would prefer “being an employee or being self-employed” a large percentage report “self-employment.”³⁷ Slightly more than 70 percent of respondents in the United States express a desire to be self-employed. Interest in self-employment is also strong among minorities. More than 75 percent of young African Americans report being interested in starting their own business.³⁸ For comparison, 63 percent of young Whites are interested in starting a business.³⁹ Interestingly, these findings suggest that minorities may have a stronger desire for self-employment, suggesting that different preferences cannot explain racial disparities in business ownership.

37 Blanchflower, Oswald, and Stutzer, 2001.

38 Walstad and Kourilsky, 1998.

39 African-American youth are also more likely than White youth to report that it is important “for our nation’s schools to teach students about entrepreneurship and starting a business” (Walstad and Kourilsky 1998).

Assets

The importance of assets has taken center stage in the literature on the determinants of self-employment. Numerous studies using various methodologies, measures of assets, and country microdata explore the relationship between assets and self-employment. Several recent studies estimate the relationship by modeling the decision of wage-and-salary workers or other non-business owners to switch into self-employment over a fixed period of time.⁴⁰ These studies generally find that asset levels (such as net worth or asset income) measured in one year increase the probability of entering self-employment by the following year, suggesting that entrepreneurs face liquidity constraints.⁴¹

A few recent studies use inheritances, gifts, lottery winnings or insurance settlements as a measure of assets.⁴² Inheritances and other unanticipated, or at least less anticipated, lump sum payments represent a more exogenous or externally derived measure of assets than net worth. Inheritances and other lump sum payments are found to increase the probability of entering or being self-employed, suggesting that entrepreneurs face liquidity constraints.⁴³ Additional studies find that home prices and home ownership, among other things, increase the likelihood of business creation and self-employment.⁴⁴

40 For examples, see Evans and Jovanovic, 1989, Evans and Leighton, 1989, Meyer, 1990, Holtz-Eakin, Joulfaian, and Rosen, 1994, Dunn and Holtz-Eakin, 1999, and Fairlie, 1999; and Hurst and Lusardi, 2004, for evidence from U.S. microdata; Holtz-Eakin and Rosen, 2004, for the United States and Germany; and Johansson, 2000, for Finland.

41 The focus on transitions to self-employment attempts to avoid the endogeneity problem of including assets in a static model of self-employment. A positive relationship found in a cross-sectional analysis may simply reflect the possibility that business owners accumulate more wealth, instead of wealth increasing the likelihood of owning a business.

42 See Holtz-Eakin, Joulfaian, and Rosen, 1994, Fairlie, 1999, and Hurst and Lusardi, 2004, for U.S. microdata; Blanchflower and Oswald, 1998, and Taylor, 2001, for British microdata; and Lind and Ohlsson, 1994, for Swedish data.

43 Hurst and Lusardi, 2004, however, find that future inheritances also increase the probability of self-employment entry, suggesting that liquidity constraints are not the underlying cause of the positive relationship.

44 Fairlie, 2005b, Black, de Meza, and Jeffreys, 1996, Johansson, 2000, and Earle and Sakova, 2000.

Several previous studies also show that African Americans have substantially lower levels of assets than Whites.⁴⁵ Although less research focuses on Latinos, disparities in asset levels may be large and may explain why this group is also less likely to become business owners. Indeed, a few recent studies indicate large disparities in wealth between Latinos, especially Mexican-Americans, and White non-Latinos.⁴⁶ Estimates from the Survey of Income and Program Participation indicate that the median levels of net worth among native-born and foreign-born Mexicans are \$28,690 and \$6,276, respectively.⁴⁷ The median net worth for African Americans is \$23,278. Clearly, all three groups have median levels of net worth that are substantially lower than the median net worth for White non-Latinos, at \$76,685.

These findings in the previous literature suggest that relatively low levels of assets among African Americans and Latinos may be a source of racial differences in rates of business ownership. Recent research provides evidence supporting this hypothesis. Using matched CPS Annual Demographic Files (ADF) data from 1998 to 2003, Fairlie finds that the largest single factor explaining racial disparities in business creation rates are differences in asset levels.⁴⁸ Lower levels of assets among African Americans account for 15.5 percent of the White/African-American gap in the probability of entry into self-employment. This finding is consistent with the presence of liquidity constraints and low levels of assets limiting opportunities for African Americans to start businesses. The finding is very similar to estimates reported in Fairlie for men using the Panel Study of Income Dynamics (PSID).⁴⁹ Estimates from the PSID indicate that 13.9 to 15.2 percent of the African-American/White gap in the transition rate into self-employment can be explained by differences in assets.

Fairlie also reports separate estimates for native-born and immigrant Latinos.⁵⁰ The most important factor in explaining the gaps between the two Latino groups and native-born Whites is also assets. Relatively low levels of assets explain more than half of the entry rate gap for native-born Latinos and slightly less than half of the gap for immigrant Latinos. Apparently, low levels of assets are limiting opportunities for Latinos to start businesses and this factor, at least in percentage terms, is more important for Latinos than for African Americans.

Also contributing to the low rate of business ownership among minorities is a higher rate of exit from self-employment. In fact, the steady-state self-employment rate is simply equal to $E / (E+X)$, where E is the entry rate into self-employment and X is the exit rate from self-employment. Investigating the causes of the higher rate of self-employment exit for African Americans than Whites, Fairlie finds that racial differences in asset levels explain 7.3 percent of the gap using CPS data.⁵¹ This estimate is in the range of estimates from the PSID reported in Fairlie's earlier work.⁵² Estimates from the PSID indicate that 1.8 to 11.1 percent of the male African-American/White gap in exit rates from self-employment is explained by differences in asset levels. Recent estimates from the CBO survey indicate that 43.2 percent of the gap in business closure rates is explained by differences in the amount of required startup capital,⁵³ but the focus on businesses, startup capital, and closure rates makes the results difficult to compare.⁵⁴

Both native-born and immigrant Latinos have substantially higher exit rates than native-born Whites. Lower levels of assets partly explain why Latinos are more likely to leave self-employment. Racial differences in assets explain roughly 10 percent of the gap in self-employment exit rates for each Latino group.

Overall, low levels of assets limit entry into business ownership and increase business exit among minorities. These two patterns combine to create lower rates of business ownership among African Americans and Latinos.

45 See Blau and Graham, 1992, Oliver and Shapiro, 1995, Menchik and Jianakoplos, 1997, Altonji and Doraszelski, 2001, and Gittleman and Wolff, 2004, for a few recent studies on racial differences in asset levels, and Bradford, 2003, on wealth holding among African-American and White entrepreneurs.

46 See Wolff, 2000, and Cobb-Clark and Hildebrand, 2004.

47 Cobb-Clark and Hildebrand, 2004.

48 Fairlie, 2005a.

49 Fairlie, 1999.

50 Fairlie, 2005a.

51 Fairlie, 2005a.

52 Fairlie, 1999.

53 Fairlie and Robb, 2003,

54 Using the 1982 CBO, Bates, 1989, finds that racial differences in levels of financial capital partly explain racial patterns in business failure rates.

Human Capital

Education has been found in the literature to be a major determinant of business ownership. Are relatively low levels of education among African Americans and Latinos partly responsible for limiting opportunities in entrepreneurship? Using CPS data, Fairlie finds that 6.0 percent of the African-American/White gap in self-employment entry rates is explained by racial differences in education levels.⁵⁵ African Americans are found to have lower levels of education than Whites. For example, 14.3 percent of African Americans are high school dropouts compared with only 6.2 percent of Whites. Estimates from the PSID reported in Fairlie are similar in one specification and close to zero in another specification.⁵⁶

Latinos, especially immigrants, have very low levels of education, which may translate into a limiting factor in business creation. A surprisingly high 53.1 percent of immigrant Latinos and 20.4 percent of native-born Latinos did not complete high school. Estimates from the CPS indicate that education differences account for 44.8 percent of the entry rate gap for Latino immigrants and 34.3 percent of the entry rate gap for Latino natives.⁵⁷ The only factor more important in explaining Latino/White differences in business entry rates is assets.

Examining exit rates using the CPS, Fairlie finds that education plays only a minor role in explaining high exit rates for African Americans.⁵⁸ Education explains 3.2 percent of the gap in exit rates. Estimates from the PSID are similar.⁵⁹ In contrast, estimates from the Characteristics of Business Owners indicate a larger role for differences in education levels in explaining racial differences in business closure rates. Fairlie and Robb find that group differences in education levels explain 6.5 to 7.8 percent of the African-American/White gap in business closure rates.⁶⁰

55 Fairlie, 2005a.

56 Fairlie, 1999.

57 Fairlie, 2005a.

58 Fairlie, 2005a.

59 Fairlie, 1999.

60 Fairlie and Robb, 2003.

Using earlier CBO data from 1982, Bates finds that differences in failure rates between African-American-, nonminority-, and Asian male-owned businesses are partly attributable to the fact that Asian owners tend to be more educated.⁶¹

Education plays a stronger role in explaining Latino/White differences in exit rates. Group differences in education explain 6.8 and 20.7 percent of the gap in exit rates for native-born Latinos and Latino immigrants, respectively.

Another measure of human capital relevant for Latinos is language ability. Difficulty speaking English may limit opportunities in the wage-and-salary sector, resulting in an increased likelihood of becoming self-employed for some Latinos. In fact, previous research indicates that English language ability affects earnings in the wage-and-salary sector.⁶² Interestingly, however, Fairlie and Meyer find that better command of the English language is associated with more self-employment among men, whereas the opposite holds among women.⁶³ Recent research focusing on Mexican immigrants also finds that English language ability is associated with self-employment rates among men but not among women.⁶⁴ The male self-employment rate among those with lower English language ability is 4.7 percent; the comparable number among those who speak English well or fluently is 7.3 percent. The raw differences among women are much smaller. Women with lower language ability have self-employment rates of 5.4 percent; those with fluency or near fluency have self-employment rates of 5.7 percent. The differences do not change substantially after controlling for differences in observable characteristics such as education, age, marital status and children.

Intergenerational Progress and Family Business Capital

A major reason for concern about the lack of business success among African Americans is that they have made little progress in rates of business ownership, even in light of the substantial gains in education, earnings, and civil rights made during the twentieth century. Estimates from Census microdata

61 Bates, 1989.

62 McManus, Gould, and Welch, 1983, Dustman and van Soest, 2002, Bleakley and Chin, 2003.

63 Fairlie and Meyer, 1996.

64 Fairlie and Woodruff, 2005.

reported in Fairlie and Meyer (2000) indicate that the 3 to 1 ratio of White to African-American self-employment rates has remained roughly constant over the past 90 years. The question of why there was no convergence in racial self-employment rates over the twentieth century is an important one. Early researchers emphasized the role that past inexperience in business played in creating low rates of business ownership among African Americans. In particular, Du Bois (1899), and later Myrdal (1944), Cayton and Drake (1946), and Frazier (1957) identify the lack of African-American traditions in business enterprise as a major cause of low levels of African-American business ownership at the time of their analyses.

Arguments about the lack of tradition in business ownership for African Americans rely on a strong intergenerational link in business ownership. Theoretically, we might expect the link to be strong because of the transmission of general business or managerial experience in family-owned businesses (“general business human capital”), the acquisition of industry- or firm-specific business experience in family-owned businesses (“specific business human capital”), the inheritance of family businesses, and the correlation among family members in preferences for entrepreneurial activities.⁶⁵ Past empirical research supports this conjecture. The probability of self-employment is substantially higher among the children of the self-employed.⁶⁶ These studies generally find that an individual who had a self-employed parent is roughly two to three times as likely to be self-employed as someone who did not have a self-employed parent.

Recent research has examined directly whether the strong intergenerational link in business ownership is detrimental to disadvantaged minorities. Hout and Rosen note a “triple disadvantage” faced by African-American men in terms of business ownership.⁶⁷ They are less likely than White men to have self-employed fathers, to become self-employed if their fathers were not self-employed, and to follow their fathers in self-employment. Fairlie provides evidence from the PSID that current racial patterns of self-employment are in part determined by

racial patterns of self-employment in the previous generation.⁶⁸ Finally, Fairlie and Robb find related evidence that the lack of prior work experience in a family business among African-American business owners, perhaps by limiting their acquisition of general and specific business human capital, increases the probability of business closure.⁶⁹ They also find that racial differences in business inheritances are negligible and cannot explain differences in closure rates.

Networks and Ethnic Enclaves

The finding that having a self-employed family member increases the likelihood of owning a business and the finding that working for that family member’s business increases business success suggest that racial differences in networks more generally may be important in creating disparities in ownership. Previous research indicates that the size and composition of social networks is associated with self-employment.⁷⁰ If minority firms have limited access to business, social, or family networks, or have smaller networks, they may be less likely to enter business and create successful businesses. These networks may be especially important in providing financing, customers, technical assistance, role models, and contracts. These same networks, however, are likely to also be useful for finding employment in the wage-and-salary sector, creating a dampening effect on self-employment.

In an earlier study, Fratoe finds that African-American business owners were less likely to have business role models, obtain loans from other family members and use family members as unpaid labor.⁷¹ Social networks may be especially important in industries such as construction, in which deals are often made in informal settings.⁷² If minorities are blocked from these industries, perhaps because of discrimination (as discussed below), their business networks may be restricted. Examining the retail industry in New York, Rauch finds evidence that African-American-owned businesses were less able to organize “mutual

65 Dunn and Holtz-Eakin, 2000, consider an additional explanation. Successful business owners may be more likely to transfer financial wealth to their children, potentially making it easier for them to become self-employed. Their empirical results, however, suggest that this plays only a modest role.

66 Lentz and Laband, 1990, Fairlie, 1999, Dunn and Holtz-Eakin, 2000, and Hout and Rosen, 2000.

67 Hout and Rosen, 2000.

68 Fairlie, 1999.

69 Fairlie and Robb, 2003.

70 See Allen, 2000, for example.

71 Fratoe, 1988.

72 Feagin and Imani, 1994.

self-help” than immigrant businesses.⁷³ On the other hand, Bates finds evidence that less successful Asian immigrant-owned businesses were associated with extensive use of social support networks.⁷⁴

Ethnic and racial groups may differ, not only in the size of their networks, but also in their ability to transfer information related to running a business among co-ethnics. Experience as an employee of a small business and transfers of information can be important.⁷⁵ Strong patterns of industry concentrations for businesses owned by many ethnic groups are consistent with this explanation.⁷⁶ Interestingly, however, the industry concentration of African-American-owned businesses has become more similar to that of White-owned businesses over time, while there has been no convergence in rates of business ownership.

A major limitation of these explanations is that they are difficult to analyze empirically. The problem is that success in business for some groups may simply create larger and more efficient business and social networks. Thus, it is difficult to identify the direction of causation between networks and success. Co-ethnic networks may also create a multiplier effect, whereby small differences in initial business success between groups may lead to large differences in future business success. This point is related to the argument that the lack of a tradition of business enterprise among African Americans is a major cause of current low levels of African-American business ownership.⁷⁷

Ethnic enclaves represent one method of creating and facilitating entry into networks. Of particular importance is that locating in an ethnic enclave may provide a market for special products and services and access to co-ethnic labor.⁷⁸ Using a measure of enclave at the Standard Metropolitan Statistical Area (SMSA) level, Borjas finds that self-employment among Mexicans, Cubans, and “other Hispanics” is increasing in the percentage of Hispanics in

an SMSA.⁷⁹ The effect is larger among the immigrant population than among the population born in the United States. Using 2000 Census data, Fairlie and Woodruff find that Mexican immigrant self-employment rates are higher for men, but not for women, who live in ethnic enclaves.⁸⁰ Ethnic enclaves may explain why some immigrant groups are successful in business, but enclaves can also dampen opportunities for entrepreneurs by creating intense competition among co-ethnics.⁸¹ Ethnic enclaves also cannot explain why native-born African Americans and Latinos have lower rates than native-born Whites.

Discrimination

Additional factors that might explain differing rates of business ownership across ethnic and racial groups are labor market, lending, and consumer discrimination. Unlike the other forms of discrimination, labor market discrimination may increase business entry for some minority groups. Wage and employment discrimination represent disadvantages in the labor market causing some groups to favor self-employment.⁸² On the other hand, Coate and Tennyson present a theoretical model positing that labor market discrimination can reduce the incentive for minorities to enter self-employment.⁸³ This happens because lenders provide less favorable terms in the credit market, such as higher interest rates, to the discriminated group because of the difficulty in observing entrepreneurial ability. Empirical evidence for 60 detailed ethnic/racial groups indicates that more advantaged ethnic/racial groups—measured by wage-and-salary earnings, self-employment earnings and unearned income—and not the more disadvantaged groups—have the highest self-employment rates.⁸⁴ Finally, discrimination may occur directly in self-employment through limited opportunities to penetrate networks, such as those in construction.⁸⁵

73 Rauch, 2001.

74 Bates, 1994.

75 Portes and Zhou, 1992, and Meyer, 1990.

76 Fairlie and Meyer, 1994.

77 Du Bois, 1899, Myrdal, 1944, Cayton and Drake, 1946, and Frazier, 1957.

78 Earlier studies making this argument include Kinzer and Sagarin, 1950, Glazer and Moynihan, 1970, and Light, 1972.

79 Borjas, 1986.

80 Fairlie and Woodruff, 2005.

81 Aldrich and Waldinger, 1990, and Razin and Langlois, 1994.

82 Light, 1972, 1979, Sowell 1981, and Moore, 1983.

83 Coate and Tennyson, 1993.

84 Fairlie and Meyer, 1996.

85 Bates, 1993b, Feagin and Imani, 1994, Bates and Howell, 1997.

Using microdata from the 1980 Census, Borjas and Bronars explore whether the large observed variance in self-employment rates across racial groups is partly due to consumer discrimination.⁸⁶ They find that minorities negatively select into self-employment, with the most able minorities remaining in the wage-and-salary sector, whereas Whites positively select into self-employment and negatively select into wage-and-salary work. These findings are consistent with White consumers having a distaste for purchasing goods and services from minority-owned businesses. Using recent panel data from the CPS, Kawaguchi finds that among African Americans, low earners are the most likely to enter into business ownership, whereas both low- and higher-earning Whites are the most likely to enter self-employment.⁸⁷ He notes that this finding is consistent with the theoretical predictions of consumer and credit market discrimination against African Americans. In contrast to these results, Meyer does not find evidence supporting the consumer discrimination hypothesis.⁸⁸ Using data from the 1987 Characteristics of Business Owners, he finds that African-American-owned businesses are relatively more common in industries in which White customers more frequently patronize African-American-owned businesses.

Several previous studies use data from the Federal Reserve's Survey of Small Business Finances (SSBF) to study lending discrimination and find that minority-owned businesses experience higher loan denial probabilities and pay higher interest rates than White-owned businesses even after controlling for differences in creditworthiness, and other factors.⁸⁹ For example, a comparable loan application filed by a firm owned by African Americans is twice as likely to be denied than if the application was filed by a White owner.⁹⁰ Minorities are found to have higher denial rates even after controlling for personal net worth, home ownership, underwriting standards, and selection.⁹¹ Research

using the SSBF also indicates that African-American and Latino owners were less likely to apply for loans because they believed they would be denied, and denial rates for African-American-owned businesses appear to decrease with lender market concentration.

Cavalluzzo and Wolken also estimate the magnitude of contributions from group differences in characteristics to racial gaps in loan denial rates.⁹² They find that group differences in personal wealth play only a modest role in explaining African-American/White differences in denial rates. Credit history differences are found to explain most of the difference. Personal wealth, however, is found to explain more of the Latino/White and Asian/White gaps in denial rates.

Overall, consumer and lending discrimination are likely to discourage would-be minority entrepreneurs and reduce the longevity of minority-owned businesses. These patterns are consistent with relatively low rates of business ownership among discriminated-against groups. The theoretical predictions and empirical evidence on the effects of labor market discrimination on minority business ownership, however, are less clear. The hypothesis is also not consistent with the finding of low current and historical rates of business ownership among African Americans and Latinos.

Explanations for Racial Differences in Business Outcomes

The extensive literature on minority business ownership provides evidence that access to financial capital and lower levels of family, business, and human capital limit opportunities for African Americans and Latinos to start businesses. A much smaller body of literature focuses on why these businesses are less successful than White- or Asian-owned businesses. Relatively few studies focus specifically on explaining disparities in business outcomes.

Using data from the 1992 CBO, Fairlie and Robb explore why African-American-owned firms have lower profits and sales, hire fewer employees, and are more likely to close than White-owned businesses.⁹³ They find that

86 Borjas and Bronars, 1989.

87 Kawaguchi, 2004.

88 Meyer, 1990.

89 Blanchard, Yinger, and Zhao, 2004, Blanchflower, Levine, and Zimmerman, 2003, Cavalluzzo, Cavalluzzo, and Wolken, 2002, Cavalluzzo and Wolken, 2004, Coleman, 2002, 2003.

90 Evidence from the CBO indicates that Black and Latino firms are substantially less likely to use bank loans for startup capital than White firms. See Christopher, 1998.

91 Cavalluzzo and Wolken, 2004, and Blanchard, Yinger, and Zhao, 2004.

92 Cavalluzzo and Wolken, 2004.

93 Fairlie and Robb, 2003.

African-American business owners have a relatively disadvantaged family business background compared with White business owners. African-American business owners are much less likely than White business owners to have had a self-employed family member prior to starting their business and are less likely to have worked in that family member's business.⁹⁴ The finding is that racial differences in small business outcomes are more linked to the lack of prior work experience—which may limit African Americans' acquisition of general and specific business human capital—than to their relatively lower probability of having a self-employed family member prior to business startup.

Estimates from the 1992 CBO also indicate that worse business outcomes are also related to African Americans' limited opportunities for acquiring specific business human capital through work experience in businesses providing similar goods and services. Lower levels of education among African-American business owners relative to White business owners explain a modest portion (2.4 to 6.5 percent) of the African-American/White gaps in small business outcomes (closure, profits, employment, and sales). Finally, lower levels of startup capital among African-American-owned firms are associated with less successful businesses. Racial differences in startup capital explain 14.5 to 43.2 percent of the gaps in small business outcomes. The results should be interpreted with caution because of endogeneity issues.

Using earlier CBO data, Bates also finds evidence that business outcomes are associated with higher levels of education and startup capital.⁹⁵ He finds that the success of Asian-owned firms relative to African-American-owned firms is related to these two factors. Asian immigrant-owned firms have average startup capital of \$53,550 compared with \$14,226 for African-American-owned firms. Interestingly, however, he finds that firms owned by Koreans have lower sales and profits per dollar of invested capital than African-American-owned firms.⁹⁶

The small body of literature on the causes of racial differences in business outcomes is expanding. Although much of the literature focuses on differences in the roles of financial and human capital, a few studies have examined additional inputs. For example, the use of technology varies substantially by the race of the business owner. Using data from the 1998 SSBF, Bitler finds that 76 percent of all small businesses use computers.⁹⁷ In comparison, 62 percent of African-American-, 66 percent of Asian-, and 70 percent of Latino-owned businesses use computers. The evidence on the relationship between computer use and entrepreneurship and firm performance, however, is mixed.⁹⁸

Affirmative Action Programs

In the late 1970s and 1980s, the value of federal, state, and local government contracts reserved for minority-owned businesses grew substantially. The purpose of these minority business set-aside programs was to develop minority enterprise, counter the effects of past discrimination, and reduce unemployment among minorities in urban communities. These programs originated in government policies that attempted to strengthen the viability of small businesses. Initially, set-asides were focused on economically disadvantaged entrepreneurs with the goal of increasing the number of minority-owned firms during the late 1960s and early 1970s. During the following 15 years, however, set-asides were increasingly targeted to businesses that had greater future growth potential.⁹⁹

In general, there are two types of set-aside programs. In one type, a specified percentage of the number or total dollar value of government contracts is allotted to minority-owned businesses. In the other type, prime contractors are required to allot a specified percentage of the total amount of government contracts to minority-owned subcontractors and/or suppliers.¹⁰⁰ Data on local set-aside programs listed in a report by the Minority Business Enterprise Legal Defense and Education Fund (MBELDEF) indicate that these goals

94 Only 12.6 percent of African-American business owners had prior work experience in a family member's business compared with 23.3 percent of White business owners.

95 Bates, 1994, 1997.

96 Bates, 1994.

97 Bitler, 2004.

98 Fairlie, 2005, and Bitler, 2002.

99 Bates, 1985.

100 Rice, 1991, and Myers, 1997.

range from 1 to 50 percent, with most programs having goals of 5 to 15 percent.¹⁰¹ A large proportion of the program coverage appears to be targeted towards the construction sector. Set-aside programs are also often complemented with procurement officials who aid minority-owned businesses in obtaining assistance.¹⁰²

Set-aside programs exist at the federal, state, city, county, and special district (airport, water, sanitary, park, and school) levels. Minority business set-asides were mandated for federal transportation and highway construction; national defense; National Aeronautics and Space Administration contracts; international development grants; and for the development, construction, and operation of the super collider.¹⁰³ The federal government reported \$4.4 billion in contract awards to minority and disadvantaged firms in FY 1986.¹⁰⁴ Most states also created set-aside programs for minority-owned businesses, and more than 200 local governments created minority business set-aside programs.¹⁰⁵ Most of the local government programs were created in the early to mid-1980s,¹⁰⁶ and many of them, especially in large central cities, were quite substantial.¹⁰⁷

Although minority business set-asides represent a multi-billion-dollar annual governmental expenditure, relatively little is known about their effectiveness. The first obvious question is whether set-aside programs actually increased the number and/or total dollar amount of government contracts received by minority-owned businesses. Myers and Chan examine the award of public procurement and construction contracts to minority- and nonminority-owned firms before, during, and after the implementation of the state of New Jersey's set-aside program.¹⁰⁸ They

find that the average number of contract awards going to African-American-owned firms submitting bids remained unchanged from the period before set-asides (1980–1984) to the period during set-asides (1985–1988) and decreased from the period during set-asides to the period after set-asides (1989–1990). In contrast, average contract awards for White male-owned firms increased from the 1980–1984 to the 1985–1988 period and decreased markedly over the period from 1985–1988 to 1989–1990. The authors conclude that New Jersey's set-aside program did not have a substantial impact on the average number of contracts awarded to African-American-owned firms submitting bids on state contracts.

Some additional evidence on the “first-stage” relationship between set-aside programs and contract awards is provided in a recent review of 58 disparity studies conducted in response to the *Richmond v. Croson* decision by the Urban Institute.¹⁰⁹ Disparity is defined as the ratio of the percentage of total contract dollars awarded to minority-owned firms to the percentage of all available firms that are minority-owned. The study finds evidence of greater disparity in contract awards (i.e., lower disparity ratios) in jurisdictions without affirmative action programs, suggesting that such programs positively affect the amount of government contracts received by minority-owned firms.

The next natural question is whether set-aside programs had an effect on the growth and viability of minority-owned firms. Boston uses published data from the Survey of Minority-Owned Business Enterprises (SMOBE) to examine the growth rate in the number of African-American-owned businesses in cities that implemented affirmative action programs in the 1980s relative to cities that did not.¹¹⁰ He finds that the average growth rate from 1982 to 1992 was 65 percent in cities with programs and 61 percent in cities without programs and that this difference is not statistically significant.

Bates and Williams provide additional indirect evidence on the effectiveness of minority business set-asides.¹¹¹ They find that from 1982 to 1987, total sales by African-American-owned businesses and the number of African-American-owned firms increased more in cities with than without African-American mayors.

101 Minority Business Enterprise Legal Defense and Education Fund, 1988.

102 Bates and Williams, 1993.

103 Myers, 1997.

104 Rice, 1991.

105 Rice, 1991, Myers, 1997.

106 MBELDEF, 1988.

107 Rice, 1991, Bates, 1985, and Boston, 1998.

108 See Myers and Chan, 1996. New Jersey's set-aside program started in 1985 and was suspended in 1989 because of the *City of Richmond v. Croson* decision. The authors define the pre-, during, and post-periods as 1980–1984, 1985–1988, and 1989–1990, respectively.

109 Enchautegui, et al., 1996.

110 Boston, 1998.

111 Bates and Williams, 1993.

Citing evidence from case studies suggesting that African-American mayors place a high priority on contracting with minority-owned businesses, Bates and Williams argue that the positive effect of these mayors on African-American business outcomes is partly due to their support of minority business set-aside programs.

In a later study, Bates and Williams use data from the U.S. Census Bureau's Characteristics of Business Owners survey to examine the survival rates of minority-owned enterprises that sell to state and local governments relative to minority-owned firms that do not.¹¹² Controlling for many owner and firm characteristics, they find that minority firms with local government sales are no more likely to survive than minority-owned firms with no local government sales from 1987 to the end of 1991. They also find that minority-owned firms that derive at least 25 percent of their sales from state and local government are less likely to survive than minority-owned enterprises that are less reliant on state and local government.

Bates and Williams also explore whether the characteristics of preferential procurement programs have an effect on survival among minority-owned businesses.¹¹³ The authors and the Joint Center for Political and Economic Studies (JCPES) collected detailed information on minority business set-aside programs in 28 large cities in the United States.¹¹⁴ They find higher survival rates among minority-owned businesses that derive 1–24 percent of their sales from state and local governments in cities with affirmative action programs that have a rigorous certification process and a staff assigned to assist minority firms, that routinely waive bonding requirements or provide bonding, and/or that provide working capital assistance to minority firms receiving contracts. Their results are less clear for minority-owned firms that derive at least 25 percent of their sales from state and local governments.

More recently, Chatterji, Chay, and Fairlie use the staggered introduction of set-aside programs across U.S. cities during the 1980s to estimate their impact on minority self-employment rates.¹¹⁵ They find large increases in African-American

self-employment soon after program implementation concentrated in industries most heavily affected by contract set-asides from city governments. Blanchflower and Wainwright provide evidence from a series of natural experiments indicating that once the programs are removed—which often occurs by court injunction following the Supreme Court's finding in the case of *City of Richmond v. Croson* in 1989—utilization of minority and women's business enterprises drops precipitously.¹¹⁶ Finally, Marion explores the costs of set-aside programs using program changes attributable to California's Proposition 209.¹¹⁷ Proposition 209 ended preferences for minority-owned businesses on state-funded contracts, but had no effect on federally-funded contracts. He finds that after Proposition 209, the value of the winning bid on state-funded contracts for highway construction projects fell by 4–6 percent relative to federally-funded contracts, which continued to include preferences.

Conclusions

African Americans and Latinos are less likely to own businesses than are Whites and Asians. Minority-owned businesses are also less successful than White-owned businesses, on average. Recent trends indicate some improvement in the state of minority entrepreneurship, but a major convergence in racial patterns in business ownership and outcomes is unlikely in the near future.

Three major barriers to minority-owned business are identified in the literature. First, relatively low asset levels appear to be limiting business entry among minorities. Higher rates of business closure, lower sales and profits, and less employment are also found to be associated with low levels of startup capital among minorities. Second, relatively disadvantaged family business backgrounds appear to limit entry and success in small business. In terms of business success, the lack of prior work experience in a family business among minority business owners may be severely limiting their acquisition of general and specific business human capital useful to running successful businesses.

112 Bates and Williams, 1996.

113 Bates and Williams, 1995.

114 Joint Center for Political and Economic Studies, 1994.

115 Chatterji, Chay, and Fairlie, 2004.

116 Blanchflower and Wainwright, 2004.

117 Marion, 2004.

Lack of access to business, social, and co-ethnic networks may also represent an impediment to business creation for some groups. Finally, other forms of human capital, such as education and prior work experience in a related business, appear to limit the potential for minority business creation and success.

In light of these findings and the trend toward reducing and eliminating affirmative action contracting programs, future policies promoting minority entrepreneurship need to be creative. Programs targeted toward alleviating financial constraints and providing opportunities for work experience in small businesses may be especially useful. In particular, programs that directly address deficiencies in family business experience, possibly through an expansion of apprenticeship-type entrepreneurial training programs, may be needed to break the cycle of low rates of business ownership and negative business outcomes being passed from one generation of minorities to the next.

Barriers to business entry and success for minority-owned businesses that are created by imperfect capital markets, discrimination, and lack of opportunities to acquire business human capital may impose a large efficiency loss in the overall U.S. economy. Furthermore, the potential benefits of promoting minority business ownership in terms of increasing minority employment should not be overlooked. In 1997, there were 2.9 million minority-owned firms hiring 4.3 million employees in the United States. Estimates from the CBO indicate that more than 40 percent of African-American and Latino employer firms hire at least 90 percent minority employees.¹¹⁸

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