

Culture and entrepreneurship? African American and immigrant self-employment in the United States

Vicki Bogan^{a,*}, William Darity Jr.^{b,1}

^a Department of Applied Economics and Management, Cornell University, 454 Warren Hall, Ithaca, NY 14853-7801, United States

^b Department of African and African-American Studies and Economics, Duke University, 202A Sanford Institute, Durham, NC 27708, United States

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Abstract

This paper analyzes the evolution of African American entrepreneurship by comparing the patterns of development of African American entrepreneurship and immigrant entrepreneurship. Whereas most literature focuses on African American culture as the reason for limited entrepreneurial success compared to certain immigrant groups, this paper examines how social, economic, and political forces have adversely influenced the development of Black entrepreneurship compared to various immigrant groups. Using 90 years of census data, we also find empirical support consistent with our assertion that many immigrants have resources (not available to native non-Whites) that facilitate entrepreneurship.

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1. Introduction

Self-employment is a vital facet of the United States economy. Notably, entrepreneurship has been a means for the economic advancement of numerous ethnic groups. Policy makers and scholars alike consider self-employment as an alternative to unemployment and a route out of poverty. Also, small business owners have significant political influence in the United States. Accordingly, the under-representation of some racial groups in business ownership (see Table 1) implies that these groups may possess less political power than is warranted given their population share (Fairlie and Meyer, 2000).

The relatively low historical rate of African American entrepreneurship is a well-known fact (see Table 2).² Fairlie and Meyer (2000) studied patterns in self-employment among White and Black men from 1910 to 1990. With almost a century of data, they uncovered some unexpected findings (Fairlie and Meyer, 2000):

* Corresponding author. Tel.: +1 607 254 7219.

E-mail addresses: vlb23@cornell.edu (V. Bogan), william.darity@duke.edu (W. Darity Jr.).

¹ Tel.: +1 919 613 7336.

² Fairlie and Meyer (2000). Note that Fairlie and Meyer use data from eight decennial censuses of the population. Their statistics are based upon random samples of the population for each year to obtain approximately 40,000 individuals of each race, provided more than 40,000 are available.

Table 1
1997 U.S. firm ownership by race

U.S. firms ^a with paid employees	Percent
White non-Hispanic owned	82.6
Asian and Pacific islander owned	5.4
Hispanic owned	4.0
Black owned	1.8
American Indian and Alaska native owned	0.6
Other	5.6

Source: U.S. Census Bureau, 2003 Statistical Abstract of the U.S.

^a The data used by the U.S. Census Bureau defines a firm as a “business consisting of one domestic establishment or more that the reporting firm specified under its ownership or control at the end of 1997.”

Table 2
United States self-employment rates (%)

	1910	1920	1940	1950	1960	1970	1980	1990
Self-employment rates for								
Blacks	5.3	5.8	6.1	4.1	3.6	3.9	3.3	4.1
Whites	16.0	14.7	13.8	13.1	11.1	10.0	10.7	11.4

Source: Fairlie and Meyer (2000).

- In the period from 1910 to 1990, the Black self-employment rate generally followed the same direction of change as the White self-employment rate.
- For 80 years, the self-employment rate for Black men was consistently at a level of approximately 1/3 of the White rate.
- Based on evidence from simulations using a simple intergenerational model of self-employment, Fairlie and Meyer concluded that if not for “continuing factors” reducing Black self-employment (e.g., discrimination or capital that is passed intergenerationally), racial convergence in self-employment rates could occur within two generations.

Numerous researchers have tried to develop explanations for this huge, 100 year old, discrepancy between Black and White entrepreneurship levels that, according to Fairlie and Meyer, feasibly could be eradicated within a few generations (for examples, see Borjas and Bronars, 1989 and Kawaguchi, 2005). Using regression analysis and the same decomposition methodology used by Smith and Welch (1989), Fairlie and Meyer (2000) concluded that racial convergence in education levels and trends in demographic factors (including the Great Black Migration: 1915–1920) did not have large effects on the trend in the racial gap in the self-employment rate. They found that the large racial gap in self-employment throughout the 20th century was primarily due to the low Black self-employment rates within all industries and not simply the result of Blacks being over-represented in sectors characterized by low self-employment. Also, their empirical findings indicated that neither lower relative wages nor the initial lack of business experience could help to explain the current low levels of Black self-employment.

While low levels of education, low asset levels, smaller probabilities of having self-employed parents, demographic trends, and discrimination all have been cited as reasons for the limited level of entrepreneurship in the African American community, much of the “social capital” literature addressing African American entrepreneurship concentrates on African American culture as the primary reason for the paucity of Black entrepreneurs. For example, Light (1980) once argued that Black communities are too individualistic and do not have the networking and solidarity that support business in other communities (Feagin and Imani, 1994). General comparisons between African American and immigrant entrepreneurs are common. “Asian Americans are seen as the classic small-business success story while scholars and journalists often address Black entrepreneurship by asking *What’s wrong with Blacks?*” (Bates, 1997). Conflicting and disparate interpretations of the entrepreneurial performance of various ethnic groups typify the conclusions made by Light (1980) and others. Thus, in order to better understand the patterns and sources of entrepreneurial success,

this paper compares African American entrepreneurship with that of various immigrant groups. To the best of our knowledge, there is no comparison covering a time horizon longer than 20 years. Utilizing data from a 90 year time span, this paper will analyze the differences between native Black and immigrant entrepreneurship.

Unless otherwise noted, all statistics and analysis provided throughout the paper are based upon the 1% sample of the Integrated Public Use Microdata Series (IPUMS).³ The IPUMS contains all U.S. decennial censuses taken from 1850 through 2000 with two notable exceptions. The 1890 census was destroyed in a fire and the 1930 census is not yet included due to privacy restrictions. Additionally, we cannot utilize the pre-1910 census data for most of our analyses, since self-employment information was not collected.

The remainder of the paper proceeds as follows. Section 2 discusses the cultural hypothesis. Section 3 reviews African American entrepreneurship. Section 4 discusses immigrant entrepreneurship. Section 5 contains an econometric analysis of the significance of various structural factors with respect to entrepreneurship. Section 5 provides our concluding observations.

2. The cultural hypothesis

Frazier (1957, 1965) was one of the first to hypothesize that a lack of business traditions due to slavery was partially responsible for the failure of African Americans to achieve much entrepreneurial success.⁴ Despite the works of scholars like Butler, over time the cultural hypothesis, à la Sowell (1994, 1991), became the most common argument used to explain why African American business development has remained behind that of other ethnic and immigrant groups.⁵ Additionally, Light (1980) has asserted that Black cultural values do not foster entrepreneurial activity. Yet, Feagin and Imani (1994) have observed, “one weakness in much of this entrepreneurship literature is the too heavy focus on the culture and organization of minority groups and the frequent neglect of discriminatory treatment of certain non-European groups by the dominant White group.” Beyond the omission or discounting of racial discrimination in the self-employment literature, the claim often is made that racial discrimination is no longer a serious issue for African Americans, especially for those in the middle class (Feagin and Imani, 1994).

Light and Gold (2000), in particular, have slightly modified their stance over the years by acknowledging the discrimination experienced by Blacks. In their book, *Ethnic Economies*, they state that “historically, discrimination has limited African American entrepreneurs’ access to loans and business locations.” However, the cultural rationale for low African American entrepreneurship is still prevalent in Light’s most recent work:

Groups experience resource disadvantage when, as a result of some historical experience, such as centuries of slavery and peonage, their members enter the labor market with fewer resources than other groups. African Americans are in this position, as are Mexican immigrants. Resources include all attributes that improve the productivity of employees, including human capital, **a positive work ethic, good diets**, reliable health, contact networks, **self-confidence**, education, and so forth.⁶

Light also tends to minimize the significance of discrimination against African Americans by comparing it to the discrimination experienced by immigrants, and by contending that White men are “*invisible victims*” of discrimination. Not only is there no data offered by Light to support his claim that White men are *invisible victims* of discrimination, but this assertion is inconsistent with strong evidence and data offered by Royster (2003), Darity et al. (2001), and others. While most immigrant groups have endured formidable obstacles with respect to entrepreneurship, these challenges do not compare in kind or degree to the sweeping “exclusionary practices that historically have kept African Americans out of many business areas” (Feagin and Imani, 1994).

³ Ruggles et al. (2004).

⁴ While Frazier did propose that sociological factors affected the self-employment patterns of Blacks, he maintained that oppression and the experiences of slavery negatively influenced the traditions of Blacks such that they failed to develop the necessary networks and a “tradition of buying and selling.”

⁵ Butler (2005) argues that “the historical business tradition developed by this group [African Americans], when measured by theories which guide the sociology of entrepreneurship, was quite strong.” He also describes the documented Black entrepreneurship that existed *during* slavery and affirms that this is a testament to Black entrepreneurial traditions.

⁶ Light and Gold (2000), p. 199.

Table 3
U.S. Black barber employment 1880–1920

	1880		1910		1920	
	% Black of population	% Black of total barbers	% Black of population	% Black of total barbers	% Black of population	% Black of total barbers
Northeast	0.0156	0.1384	0.0190	0.0349	0.0228	0.0598
Midwest	0.0220	0.2670	0.0184	0.0591	0.0228	0.0867
South	0.3581	0.7162	0.2972	0.3201	0.2708	0.3505
West	0.0126	0.2204	0.0073	0.0192	0.0089	0.0351

Source: IPUMS 1% sample.

Table 4
U.S. Black cook (caterer) employment 1880–1920

	1880		1910		1920	
	% Black of population	% Black of total cooks	% Black of population	% Black of total cooks	% Black of population	% Black of total cooks
Northeast	0.0156	0.3438	0.0190	NA	0.0228	0.1675
Midwest	0.0220	0.2312	0.0184	NA	0.0228	0.1436
South	0.3581	0.2149	0.2972	NA	0.2708	0.6965
West	0.0126	0.0000	0.0073	NA	0.0089	0.0376

Source: IPUMS 1% sample.

3. African American entrepreneurship

3.1. The evolution of African American entrepreneurship

The early Black entrepreneurs were freed slaves functioning in personal services and trades that Whites perceived to be too menial. They were concentrated in occupations such as hauling, local moving, restaurantship, and hotel keeping. Many Black entrepreneurs also were self-employed as barbers, mechanics, or artisans (Boyd, 1990b). By 1890, an estimated 5000 Blacks operated businesses. Most of these were small and involved retailing or personal services (Higgs, 1977).

For example, barbering was an important occupation for Blacks before the 1900s. Since it was a trade that could be learned in about a year, barbering provided an industrious man with the opportunity to have his own business in a relatively short period of time. Although Blacks made-up a small minority of the populations of Detroit and Cleveland, historical studies demonstrate that they were dominant in the barbering trade serving a White clientele in those cities (Boyd, 1990b). Our IPUMS data also support this assertion (see Table 3).

Before the 1900s, catering also was a popular route to Black business ownership (see Table 4). In the northern cities, Black caterers' reputation for good food and great service put them in high demand by affluent Whites (Boyd, 1990b). In his famous study, *The Philadelphia Negro*, DuBois (1899) documented that during the late 1800s, Blacks owned the city's leading catering firms and formed a successful caterers guild.

The Great Black Migration in the early 1900s fundamentally changed the environment for Black enterprise. In 1900, Blacks comprised 32.3% (7,923,000) of the South's total population (24,524,000), 1.9% (496,000) of the North Central's (Midwest's) total population (26,333,000), and 1.8% (385,000) of the Northeast's total population (21,047,000).⁷ By 1920, the Black population share in the South had declined to 26.9% (8,912,000 of 33,126,000 total) while the Black share had risen to 2.3% in both the Northeast (679,000 of 29,662,000 total) and North Central regions (793,000 of 34,020,000 total) (see footnote 7). This redistribution of the Black population within the U.S. had a profound effect on Black entrepreneurship (see Figs. 1 and 2).⁸

⁷ U.S. Department of Commerce, Bureau of the Census (1975), p. 22.

⁸ Farmers are not included in any of our self-employment statistics.

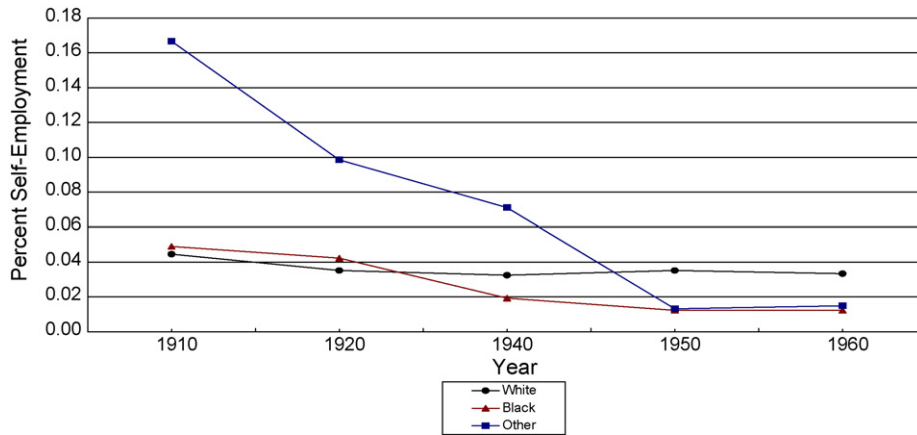


Fig. 1. U.S. non-immigrant, self-employment rates—Northeast region: 1910–1960.

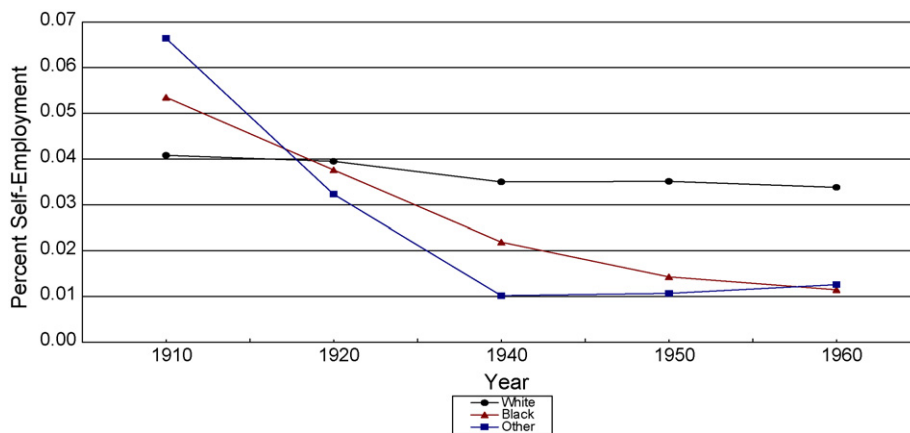


Fig. 2. U.S. non-immigrant, self-employment rates—Midwest region: 1910–1960.

The racial hostility that accompanied the Black population increase severely damaged the close relationships between Black service providers and affluent Whites and contributed to the demise of old-line Black businesses in northern cities (Boyd, 1990b). As racial tension increased due to the migration, the demand for Black service providers (e.g., barbers, caterers, laundresses, and live-in domestics) sharply declined.⁹ Black merchants became isolated from White manufacturers, wholesalers, legal and financial institutions, and, most importantly, the more lucrative White consumer market. Confined to serving Black residential areas, many Black-owned businesses struggled (Boyd, 1990b).

At this time, competition from immigrant groups also forced Blacks out of their entrepreneurial niches. For example, the influx of new European immigrants (mainly Italians and Germans) who entered the barbering trade in large numbers, further contributed to the precipitous decline in the number of Black-owned barbershops in northern cities (Boyd, 1990b).

Additionally, many of the difficulties encountered by Black business owners originated from the lack of public policies to protect the rights of Blacks to acquire property, pursue employment opportunities, and obtain human capital. For instance, in the south during the period 1880–1930, substantial decumulation of property by Blacks (and hence wealth) took place due to land seizures and other Jim Crow practices buttressed by White terrorism (Darity and Frank, 2003). The Southern Homestead Act, which was ostensibly intended to give freedmen the first chance at public lands in Alabama, Arkansas, Florida, Louisiana, and Mississippi, was hugely unsuccessful and de facto transferred land

⁹ An illustration of this decrease is evident in both Tables 3 and 4.

to Whites (McPherson, 1964). Conversely, government policies, such as the Homestead Act of 1862 which parcelled out farmland to German and Scandinavian immigrants, facilitated the entrepreneurial activities and social mobility of many European groups. Also, the National Labor Relations Act of 1937 institutionalized collective bargaining which provided Italian, Polish, and Jewish immigrants with both job and income security (Boyd, 1990b).

With little hope of eventual acceptance by White society, many Blacks sought to build their own community within the walls created by discrimination and segregation. In theory, this “group economy”, would allow Blacks to survive and prosper by substituting transactions with one another for transactions with the inimical White market (Higgs, 1977). Thus as the White market slipped from their grasp, Black entrepreneurs re-focused their attention on Black consumers. In Chicago between 1890 and 1930, the emergence of a considerable Black population and the subsequent segregation of this community facilitated the development of a racially interlocking market on the South Side of Chicago. These Black business undertook numerous innovations to overcome the problems of institutional racism, government support of competitors, and other types of discrimination.

For example, Silverman (1998) found that the Black manufacturers’ business strategies that were shaped by racial discrimination, actually created a competitive advantage for these Black businesses. Since Black manufacturers were undercapitalized, the high cost of advertising and product promotion made it difficult for Black entrepreneurs to compete. Additionally, retailing was not well developed in Black neighborhoods, and access to the few retailers in Black neighborhoods was hindered further due to racial discrimination by White and Jewish store owners¹⁰(Silverman, 1998; Razin and Light, 1998). Hence, the best way for smaller Black manufacturers to distribute their products was through door-to-door sales. Door-to-door sales allowed Black firms to accomplish three things: (1) circumvent racial barriers to market access encountered in White- and Jewish-owned stores, (2) lower the costs of advertising, and (3) increase the association of a company’s products with “the race” (Silverman, 1998).

The face-to-face approach was advantageous for another important reason. It enabled smaller Black companies to access the informal networks in the Black community to get direct feedback from customers. While the larger, White-owned companies had limited data about the demand for ethnic beauty aids, Black firms gained valuable information to better understand the tastes of the Black consumer (Silverman, 1998). Consequently, these smaller Black firms developed most of the major innovations in the ethnic beauty aids industry during this time.

Even with these innovations and creativity, Black retailers still had difficulty competing with non-Black retailers for many reasons (Boyd, 1990b):

- Poverty in the Black community made it difficult for proprietors to generate the cash-flow necessary for business growth.
- Potential Black entrepreneurs could not obtain formal business training.
- Black merchants were disadvantaged by limited access to capital due to discrimination in lending by White-owned banks and the underdevelopment of Black banking.^{11,12}
- Due to restrictive covenants in real estate and business licensing, Black store owners often were unable to acquire locations on main business streets.

Restrictive covenants for both Black and Jewish people were quite apparent on the South Side of Chicago in the 1930s. However, a number of inequalities existed *between* the Black-owned and Jewish-owned entrepreneurs. For example, most of the 2600 Black businesses on the South Side were small retail stores and service enterprises on side streets or in the older, less desirable communities. In contrast, the 2800 Jewish-owned businesses on the South Side typically were located on main streets and in major shopping districts (Silverman, 1998).

¹⁰ Razin and Light (1998) differentiate Jewish from White on the basis of non-mainstream group criteria.

¹¹ Various studies have demonstrated that Blacks are less likely than Whites to have their business loans approved, and the loans they do receive from financial institutions are much smaller than those received by White business borrowers (Bates, 1997).

¹² Since Blacks had limited access to most banks, there were numerous Black-owned financial institutions that attempted to satisfy the monetary needs of Black entrepreneurs. Nonetheless, the Black banking system met with meager success. From 1888 to 1934, Blacks organized no fewer than 134 banks. Yet, due in large part to the collapse of national banks associated with the stock market crash and the Great Depression, by 1936 only 12 of these banks were still in existence (Harris, 1936).

Segregation did have some positive effects on the earnings of self-employed Blacks as purported by *the Brimmer Hypothesis*.¹³ While social and demographic changes led to the collapse of Black businesses serving affluent Whites, these factors eventually brought about “protected markets” for Black entrepreneurs providing services to other Blacks (Boyd, 1990b). Additionally, protected markets for Black entrepreneurs were nurtured in part because most White-owned firms did not pursue Black customers. Moreover, White-owned firms’ that chose to compete in the Black community’s market, were severely handicapped by their ignorance of ethnic-specific demands (Boyd, 1990b).

Black life insurance companies are classic examples of firms that prospered due to the existence of a protected market created by segregation and discrimination. Beginning in the 1880s, the major life insurance companies either refused to sell policies to Blacks or sold policies on the basis of different actuarial tables that greatly increased the insurance costs to Blacks (Brimmer and Terrell, 1971). This practice actually created an environment where Black life insurance companies (companies that were not able to solicit White clientele) were able to grow and flourish. Some viewed these protected markets as good for the Black community. For a while, many business leaders tried to convince the Black masses that the economic independence of the race required them to support Black entrepreneurs and Black banks, even if Black businesses’ charged higher prices for inferior goods and services (Harris, 1936).

Until the 1960s, Black business developed within this sheltered environment where Black firms exclusively served a Black clientele who had no option of patronizing White-owned businesses (O’Hare, 1990). This created a virtual racial bifurcation in the United States economy, formalized in Anne Krueger’s well-known paper, “The Economics of Discrimination.” Krueger (1963) illustrated how the Black and White sectors of the U.S. economy could be thought of as operating as separate “countries” in an international trade model with distinct capital-labor ratios. De facto, Krueger’s model of restricted capital inflows into the Black community treats Black businesses as if they were protected from White competition in the same way a tariff protects an industry from foreign competition.

In the 1960s, increased social awareness, civil rights legislation, and profit seeking by large corporations made White-owned businesses increasingly available to the Black consumer. When this occurred, most Black businesses were unable to compete in the expanded market place (Levine, 1972). A Federal Trade Commission (FTC) Report in the 1960s found that the low-income/Black market was a very expensive place to buy durable goods.¹⁴ Consequently, when desegregation opened up alternatives for Black consumers, payment of this racial tariff was no longer sustainable. Black consumers were easily drawn away from many Black-owned firms. Given higher priced merchandise and lower quality services, White consumers did not have strong incentives to do business with Black merchants either. In the absence of policies requiring Whites to purchase from Black businesses, these firms suffered greatly (O’Hare, 1990).

Despite the challenges, the desire for entrepreneurship within the Black community still did not disappear with the breakdown of protected markets. Between 1957 and 1967 the absolute number of self-employed managers, officials and proprietors declined by 39.6%. During the same period, the share of non-White, self-employed proprietors rose from 2.9% to 4.2% (Brimmer and Terrell, 1971). Thus, the increase in the share of non-Whites proprietors was not due to an ability to gain employment in an expanding arena. Surprisingly, Blacks were relatively reluctant to abandon the self-employment arena which was declining (see Fig. 3).

In 1968, the National Business League (NBL) conducted a survey of 564 Black-owned businesses in seven cities. The survey revealed that the typical Black business was a very small-scale operation. As the national retail sector began to focus on larger stores in which receipts per establishment were rising rapidly, the survey data showed that the Black-owned businesses actually tended to have more employees on average than the typical firm. The average White-owned firm had receipts per employee three to six times larger than the firms responding to the NBL survey (Brimmer and Terrell, 1971). Small-scale, Black-owned businesses were running against the strong industry trends.

In 1969, the receipts of Black firms equaled 13.5% of Blacks’ after-tax income. By 1977, the proportion had dropped to 9.9% and by 1985 to 6.6% (Boyd, 1990b). This decline was partially attributable to increased competition from larger, White-owned firms. Also during the 1970s, the number of Black unincorporated business owners fell by 8%. While these statistics were discouraging, there was one indicator of the success of Black entrepreneurship. There was a growth of incorporated business ownership among Blacks (Boyd, 1990b).

¹³ See Brimmer (1966), pp. 251–336.

¹⁴ For example, the study found that television sets sold in the Black communities could be as much as 92% higher than the general market retail price. Clothes dryers sold for over 100% of the general market price, and vacuum cleaners were sold for 33% more than the general retail price (Tabb, 1970).

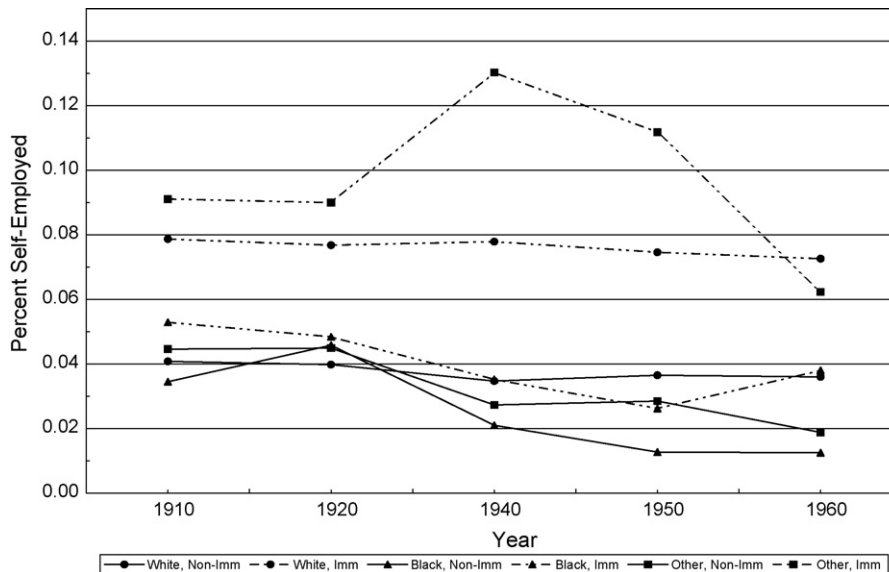


Fig. 3. U.S. self-employment rates: 1910–1960.

Between 1970 and 1980 the number of Blacks owning incorporated businesses increased by 92% (Boyd, 1990b). This occurrence is believed to be an indirect result of government assistance, since small-scale Black entrepreneurs are less capable of exploiting lucrative government programs. This reinforced the Brimmer and Terrell (1971) conclusions about small-scale businesses. They performed multiple regression analysis on the NBL data and concluded that economies of scale were important to both profit efficiency per worker and absolute profits.

Between 1977 and 1982, inflation adjusted receipts of Black businesses declined by 14% for sole proprietorships, by 13% for partnerships, but only by 1% for corporations. Furthermore, the number of Black businesses with gross sales over \$1 million (over \$1.5 million in 2000 dollars) increased by 15% (Boyd, 1990b). There was the growing divergence between small and large-scale Black businesses. Although the number of Black owned firms increased during 1972–1982, their receipts from aggregate gross sales fell by \$400 million (around \$600 million in 2000 dollars) (Boyd, 1990b). This decline in receipts was not distributed uniformly across all types of Black businesses. Sole proprietorships, which comprised over 90% of Black owned businesses, were affected disproportionately. As Boyd (1990b) notes, these trends in Black business also mirrored the widening gap between upper and lower class Blacks.

By 1982, Blacks still fell far behind most other groups in their rate of entrepreneurship. In the U.S., in 1982, there were about 64 businesses for every 1000 people in the population, yet the rate of business ownership among Blacks was only 12.5 per 1000 (O'Hare, 1990). Blacks lagged behind Whites and all other major minority groups. The business ownership rate of Latinos was almost 50% higher than that of Blacks, and the business ownership rate of Asian-Americans was 260% higher than that of Blacks. Out of the 50 largest ethnic groups, only Puerto Ricans had a lower rate of self-employment than Blacks. Moreover, most Black-owned firms still tended to be small; the receipts of these firms amounted to just 0.16% of all business receipts (O'Hare, 1990).

In the 1980s, increased racial integration in many aspects of American life expanded alternatives of both Black consumers and entrepreneurs. Yet, despite having greater access to capital, knowledge, and experience, there were other impediments to entrepreneurship. Declining segregation also meant that Black consumers gained admittance to the more diverse national economy and in the process became less inclined to patronize the still growing number of Black-owned firms. As Black disposable income increased, the portion of their income spent on Black owned businesses decreased (Boyd, 1990b). Additionally, Black businessmen often had difficulty in obtaining employees with high levels of education and work experience. The acquisition of human capital by Black community residents did not necessarily increase the supply of qualified labor to the Black businesses. Many of the qualified Black workers were drawn to the “higher expected returns and the increased job security with firms operating in the national economy.” (Brimmer and Terrell, 1971). Furthermore, in the 1980s the Republican administration altered policies that had contributed to the growth of the Black middle class. Policies that had a direct impact on Black middle class opportunities, including

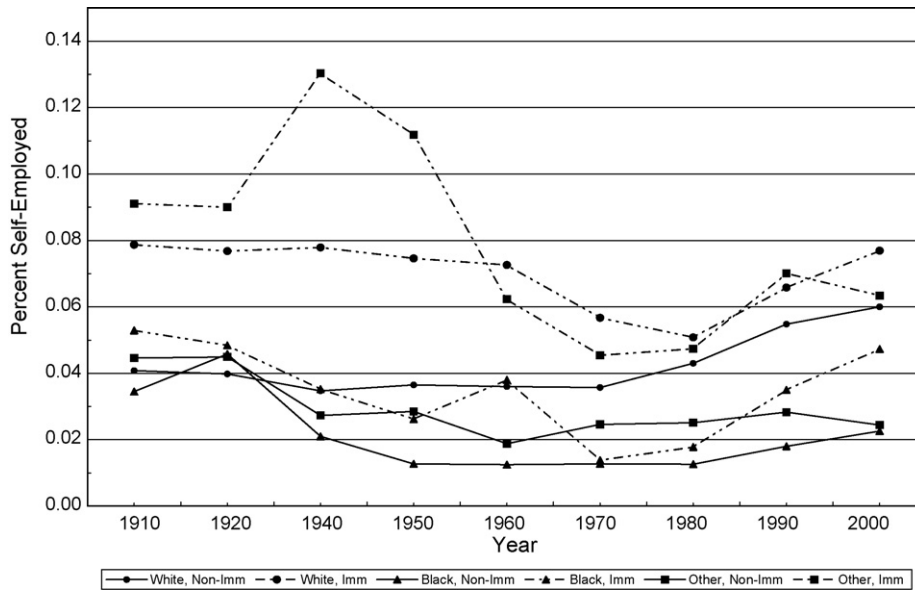


Fig. 4. U.S. self-employment rates: 1910–2000.

affirmative action in hiring and promotions, underwent weakened enforcement. Using Current Population Survey (CPS) data, Fairlie (2004) did calculate that from 1979 to 1998, the number of African American business owners increased by 83%. However, he demonstrated that the observed increase in African American business ownership was primarily due to expansions in the Black labor force.

4. Immigrant entrepreneurship

The data comparing Black and other ethnic group U.S. self-employment rates has been well studied (for example, see Fairlie and Meyer, 2000; Boyd, 1991a, 1990a; Bearnse, 1984). While the “Theory of the Economic Detour” has been well developed, there have not been a large number of empirical studies comparing immigrant and native self-employment.¹⁵ Based only on 1980 census data, Boyd (1990a) and Light and Rosenstein (1995) report that Asian immigrant groups did not displace native Blacks. Light and Rosenstein (1995) also report that Asian immigrant entrepreneurs did not reduce the rate of or mean returns to self-employment among native born Whites. Utilizing data covering a longer period of time (1980–1990) Fairlie and Meyer (2003), however, did find evidence suggesting that self-employed immigrants displace self-employed natives.

Using the 1976 Survey of Income and Education, Bearnse (1984) attempted to associate standard demographic variables such as income, education, ethnicity, background, etc. with the choice of entrepreneurial employment. A fundamental finding of the Bearnse study is that the likelihood of a Black being an entrepreneur is significantly lower than for other groups. Bearnse (1984) also found that foreign-born Blacks are more likely to be engaged in entrepreneurship than U.S. born Blacks. This fact is consistent with anecdotal evidence and some isolated area surveys. For example, in New York in the 1920s, West Indians constituted 25% of the city’s Black population but owned 50% of the Black businesses in Harlem (Walker, 1998). Nevertheless, Boyd (1991b) reinforced the view that Black immigrants and native Blacks share race-related disadvantages.

Thus far, we have focused on the historical development of African American entrepreneurship over the past century. Since the main focus of this paper is to utilize a comparative and historical approach to analyze the difference between native Black and immigrant self-employment rates, we now turn our attention to immigrant entrepreneurship. From our IPUMS data we see that over the past 90 years, White immigrants, Asian immigrants, and even Black immigrants have had a substantially higher proportion of self-employment than native Blacks in the U.S. (see Fig. 4).

¹⁵ Butler (2005) and others have asserted that the primary difference between Black and immigrant entrepreneurs was that Black business owners were forced to develop separate enterprises and sell in a restricted marketplace while immigrants were allowed to operate in the economic mainstream.

Table 5
 Characteristics of firms nationwide: formed 1979–1987

	Asian immigrant	African American	Non-minority
Firm characteristics (mean values)			
Gross sales 1987 (\$)	121,596	64,526	154,274
Total financial capital (\$)	53,550	14,226	31,939
Equity capital (\$)	26,838	7,010	14,195
Debt capital (\$)	26,711	7,216	17,744
Percent started with zero financial capital	16.2	28.9	23.7
Percent still operating in 1991	81.2	73.6	76.9
Owner characteristics (mean values)			
Percent college graduates	57.8	30.2	37.7
Annual owned-labor input (in h) (\$)	2,064	1,803	1,960

Source: Bates (1997).

4.1. Characteristics of the immigrant entrepreneur

In reality, there is little consensus as to why certain immigrant groups (Asian immigrants in particular) are successful (Bates, 1997). However, the data on Asian immigrant start-up capital does not support the stereotype of the poor immigrant starting a business on a shoestring (see Table 5). Note that Asian immigrants receive much more debt capital (370% more) than African Americans, while over 12% fewer Asian businesses started with zero financial capital. A similar pattern is found when looking at the entrepreneurially successful Arab immigrants, who since World War II have tended to be from the “capitalist classes – landed gentry and influential urban-based families – replaced by new leadership in their various home countries.”¹⁶

Of all of the Asian immigrant groups, most recently the Koreans have been touted as entrepreneurially superior and the data do support their entrepreneurial dominance. The 1980 U.S. Census indicates that about 12% of Korean Americans were self-employed in 1979, compared with less than 7% of the general population (Yoon, 1997). Korean immigrants had the highest rate of self-employment among 17 groups that arrived in the U.S. between 1970 and 1980. By 1990, Korean Americans ranked the highest in self-employment rates followed by Israelis and Palestinians. African Americans ranked a distant 95 out of 100 (Yoon, 1997).

According to the cultural hypothesis, the inclination of some immigrant and ethnic groups toward entrepreneurship can be explained by their ethno-national attributes (Yoon, 1997). Historically, a predominant feature of Korean culture was the influence of Chinese civilization, especially through Confucianism which ostensibly emphasizes hard work, future orientation, social mobility, and family connections (Min, 1988b). This cultural tradition could have an effect on the business activities and behavior of Korean immigrants. However, “unlike the Jews or overseas Chinese, Koreans are not known to have a strong business oriented tradition. It would therefore be misleading to think that Korean immigrant entrepreneurship is solely a by-product of their culture.” (Min, 1988b).

Traditionally, researchers have paid limited attention to other factors contributing to the entrepreneurial roles of minorities. However, in the case of Korean entrepreneurial success, class resources, urban racial segregation patterns, and immigrant disadvantages all have had a substantial impact on a Korean American’s ability to become self-employed.

4.1.1. Class resources

An urban, middle class background characterizes many immigrant groups, and class resources of the middle class have been critical for the business enterprises of these immigrant groups. The urban middle class background is most evident with Korean immigrants who are primarily self-selected from the educated, urban, middle-class segment of the Korean population (Yoon, 1997; Light and Rosenstein, 1995; Min, 1988b)(see Table 6). This middle class background of Korean immigrants suggests that many Korean immigrants are able to bring money with them that can be used as start-up capital.

¹⁶ Allied Media Corp. – Arab American Demographics – Community Outreach.

Table 6
Social and economic status of Korean immigrants (percentages)

Characteristics	Year of entry				
	All periods	1985–1990	1975–1984	1965–1974	Before 1965
Educational level					
Some high school or less	17.3	17.1	17.7	16.9	17.0
High school graduates	26.1	28.9	28.1	19.2	18.4
Some college	21.0	17.2	22.5	22.2	22.4
4-year college graduates	22.8	22.5	21.6	26.1	20.7
Graduate school graduates	12.8	14.4	10.0	14.7	21.5
Mean years of schooling	11.2	11.2	11.1	11.5	11.7
Employment status					
Labor force participants	72.3	60.6	75.8	77.6	77.6
Unemployed	4.2	6.4	3.9	3.2	2.4
Year-round, full-time	41.4	26.2	44.5	50.7	51.2
Occupational distribution					
Professional workers	13.6	12.6	10.8	18.3	23.8
Managerial workers	12.4	10.5	12.1	14.3	15.7
Service workers	15.5	18.5	15.4	13.8	11.1
Operators and laborers	13.7	15.3	13.6	13.0	9.7
Occupational prestige scores (no.)	42.0	40.0	41.0	44.9	47.3
Economic well-being					
Mean personal income (\$)	19,226	10,313	18,894	27,907	30,909
Mean family income (\$)	46,812	30,679	46,084	63,425	64,852
Percentage below poverty level	13.0	25.0	10.3	5.7	7.4
English speaking ability					
Speak only English	6.9	3.0	4.1	11.0	36.5
Speak English very well	25.8	14.8	24.5	38.4	40.5
Speak English well	34.7	27.0	39.4	37.4	18.3
Do not speak English well	28.1	44.8	28.5	12.8	3.8
Do not speak English at all	4.5	10.3	3.5	0.6	1.0
Total number of immigrants	18,598	4,911	8,614	4,208	865

Source: Yoon (1997).

In a 1982 study in Atlanta, approximately 25% of the selected Korean business owners reported that money brought from Korea accounted for at least 50% of their start-up capital (Min, 1988a). Korean immigrants' class resources for their business activities not only include financial capital but also human capital. Korean immigrants with middle class backgrounds possess the knowledge and motives that are required for successful entrepreneurship. "College-educated Korean immigrants have advantages in terms of management skills and attitudes over native-born, non-Korean small business owners, who usually have less education." (Min, 1988b).

Korean class-based social behavior is also supportive of Korean immigrant entrepreneurship. While pre-war Japanese and Chinese immigrants organized ethnic associations largely based on sharing the same surname and place of origin (clan ties), educated Korean immigrants use the "origin of school in Korea" as a basis for organizing ethnic associations (Min, 1988b). In this way the Korean network contains only people of similar economic means.

It would be artificial to consider Korean immigrants' active ethnic network involvement a reflection of Korean culture. Historically, factionalism has permeated Korean politics, and the Korean community in the U.S. is known to have suffered from internal conflicts (Min, 1988b). Korean immigrants meet with fellow Koreans on a formal and informal basis primarily because of the adjustment difficulties connected with their alien status. "That is, Korean immigrants maintain what Light (1984) calls *reactive solidarity* as a survival mechanism that in turn facilitates the development of Korean immigrant business." (Min, 1988b).

4.1.2. Racial segregation and discrimination against African Americans

The racial segregation within American cities has been a major structural factor contributing to the rise of Korean immigrant businesses. Ironically, discrimination against Blacks has helped Korean entrepreneurs. Large corporations

do not want to invest in inner-city, minority communities because of the lower spending capacity and high crime associated with these areas. Moreover, “many Jewish and Italian shopkeepers, whose second and third generation descendants have already moved into mainstream occupations, are retiring from their businesses located in the inner city.” (Min, 1988b). Therefore, the reticence of corporations to invest in inner-city, minority areas and the retirement of White business owners from these areas created a small business void which was happily filled by the Korean immigrants (Min, 1988b; Light and Rosenstein, 1995); a void that Black entrepreneurs were unable to fill due to lack of resources, capital, etc.^{17,18} Furthermore, Light and Rosenstein (1995) found evidence that native Blacks, as consumers, slightly *increased* the income-defined self-employment rates of Koreans in metropolitan areas. Korean businesses established in Black neighborhoods could be more prosperous because they were not hampered by much competition from corporations or independent native entrepreneurs. In essence, the Koreans usurped the *protected markets* once served by the Black entrepreneurs.

4.1.3. Immigrant disadvantages

Immigrant disadvantages also play a role in immigrant self-employment. For example, the Koreans’ situation as disadvantaged immigrants may be a more significant influence on their business behavior patterns than the cultural influence of their Korean background. Like other immigrant groups, Korean immigrants turn to small business because they are disadvantaged in the general labor market. In one 1982 study, more than 90% of the selected Korean business owners indicated disadvantages in gaining access to other occupations as one of the major reasons for their decision to start a small business (Min, 1988b). Small business offers an alternative to low-paying, menial jobs in the secondary sector. The Korean immigrants’ belief that they are hindered less in small business than in the general labor market proves to be substantiated when one compares their earnings and the earnings of White natives. 1980 census data show that the mean dollar income per year of education for Korean self-employed workers was 92% of that of native U.S. self-employed workers, while this ratio was 70% for other Korean workers (Min, 1988b).

4.2. Immigrant response to discrimination and impact on entrepreneurship

Not dissimilar from the African American experience in the general labor market, Asian Americans also suffer from discrimination. Many studies have demonstrated that, despite their investments in human capital, minority workers (including immigrants) are systematically excluded from employment that offers high salaries, job security, and promotion opportunities (Yoon, 1997). We have already discussed how this affects entrepreneurship. Additionally, this discrimination drives some Asian minorities to return migration and this emigration affects the relative position of Asian immigrants in the United States.

¹⁷ Bearse (1984) found that ownership of financial assets was positively correlated with the likelihood of an individual becoming an entrepreneur. Yet, start-up capital for Black entrepreneurs always has been difficult to acquire. Historically, the wealth of Black households has reflected the same pattern of deficits as with money income but the shortfall in wealth has been much greater. Due to a long history of deprivation, Blacks in the United States have had much less opportunity than Whites to accumulate wealth to pass on to their descendants. Additionally, during the Jim Crow period in the U.S., there was a decumulation of wealth through the illegal seizure of land and other personal property. These lower wealth levels of Blacks have not provided much seed capital from personal or family assets to support business development. In 1967, the first comprehensive assessment of stock ownership by Blacks was done for the Survey of Economic Opportunity (SEO) conducted by the Office of Economic Opportunity (OEO). The survey estimated that stocks held by Blacks were a mere 0.13% of the total amount of stock reported (Brimmer, 1988). Even by 1991, Black mean net worth was only 25% of White net worth (Fairlie and Meyer, 1999). Fairlie and Meyer (1999) found, for the period from 1962 to 1991, that low levels of and a slow rate of growth in Black assets relative to White assets may very well have contributed to the lack of convergence in racial self-employment rates. While Fairlie and Meyer do not focus on the importance of this empirical finding, low asset levels historically have proven to be a significant contributor to the low self-employment rates. As personal wealth proved to be an inadequate source of entrepreneurial funds, Blacks attempted to obtain funds from the banking industry. However, for decades, many Black, would-be entrepreneurs were isolated from this institution that is so vital to business start-up. Stronger firms typically use debt for start-up funding, and inadequate access to such debt, constrains the size and the scope of Black businesses. Among White, Asian-immigrant, and Black-owned firms, the survival rate among non-borrowing firms was consistently lower than those firms using debt to finance their start-up (Bates, 1997). Using data from the 1993 and 1998 National Surveys of Small Business Finances, Blanchflower et al. (2003) found that Black-owned small businesses were about twice as likely to be denied credit even after controlling for differences in creditworthiness and other factors.

¹⁸ Light and Rosenstein (1995) assert that immigrant firms filled economic niches that went unfilled when no foreign or Korean entrepreneurs were present to fill them.

Table 7
U.S. self-employment rates: 1910–2000

	1910	1920	1940	1950	1960	1970	1980	1990	2000	Sample average
Non-immigrants (%)										
White	4.1	4.0	3.5	3.7	3.6	3.6	4.3	5.5	6.0	4.3
Black	3.5	4.6	2.1	1.3	1.3	1.3	1.3	1.8	2.3	1.8
Asian	3.8	2.8	3.8	6.1	2.9	3.7	3.1	2.5	2.4	2.8
Native American	5.4	5.8	2.4	1.0	0.9	1.2	2.2	3.3	3.4	2.8
Immigrants (%)										
White	7.9	7.7	7.8	7.5	7.3	5.7	5.1	6.6	7.7	6.5
Black	5.3	4.8	3.5	2.6	3.8	1.4	1.8	3.5	4.7	3.5
Asian	12.2	9.4	13.9	11.6	6.8	5.1	5.0	7.0	7.4	6.0
Observations	366,239	1,050,634	1,303,489	461,400	1,799,888	2,029,633	2,267,320	2,500,052	2,818,644	14,597,299

Source: IPUMS 1% sample. Note: While Fairlie and Meyer (2000) use census data, their statistics, as presented in Table 2, are based upon random samples of the population for each year to obtain approximately 40,000 individuals of each race. Our statistics are from the entire 1% IPUMS sample.

The experience of Chinese and Japanese immigrants in the American labor market prior to World War II is a good example of return migration. The immigrants initially were welcomed when they came to fill the labor shortages on Hawaii's sugar plantations and in the mines and railroad construction camps on the West Coast. But when labor competition developed during economic depressions, they became the targets of anti-oriental campaigns and institutional discrimination (Yoon, 1997). For example, between 1913 and 1925, nine states passed alien land laws banning the purchase and leasing of farmland by Japanese immigrants (Suzuki, 1995).

Suzuki (1995) investigated the seeming contradiction between the imposition of anti-Japanese laws and the economic gains of Japanese Americans during the 1920s. He discovered that most of the Japanese immigrants of the time did not stay in the United States. There was a large net emigration of Japanese from the United States and this emigration was selective. "Most of the net out-migration was by Japanese in the lowest occupational categories." (Suzuki, 1995). This suggests that much of the measured occupational improvement of Japanese immigrants during these years could be a result of this selective return migration. Suzuki also calculated that almost 50% of the increase in Japanese occupational status between 1920 and 1930 could be accounted for by the selective return migration.

5. Empirical support

Similar to Barse's (1984) analysis of the 1976 Survey of Income and Education data, we perform an econometric analysis designed to assess the significance of the various structural factors on self-employment rates. However, we utilize the 1% IPUMS sample covering the period from 1910 to 2000. (Given that the IPUMS sample covers 90 years, it is preferable to other commonly used data sets such as the Panel Survey of Income Dynamics.) For descriptive statistics comparing immigrant and non-immigrant self-employment rates, see Table 7.¹⁹ The data clearly support the Fairlie and Meyer (2000) finding of a low African American self-employment rate.²⁰ However, the gap between native White and native Black self-employment rates has increased over time. Additionally, we can see distinctions between native Blacks and various immigrant groups. Asian immigrants have the highest self-employment rates. Asian immigrant self-employment rates have been consistently above the rates of native born Whites and non-Whites but also have surpassed even White immigrant self-employment rates for much of the period studied. Black immigrants, like native Blacks, have lower rates of self-employment. However, Black immigrants still maintain higher rates of self-employment than native Blacks throughout the period studied.

¹⁹ As noted previously, farmers are not included in our self-employment statistics. The Asian category is an aggregate of several ethnic groups including Chinese, Japanese and Korean. Additionally, we do not have a Latino classification due to limitations of the census data.

²⁰ Note that while Fairlie and Meyer (2000) use census data, their statistics, as presented in Table 2, are based upon random samples of the population for each year to obtain approximately 40,000 individuals of each race. Our statistics are from the entire 1% IPUMS sample.

5.1. Univariate probit models

The results of probit regressions further support our claim that immigrant entrepreneurship in the U.S. has been facilitated by factors not available to African American entrepreneurs. We examine the results from a set of probit regressions where the dependent variable is a binary variable for self-employment. In our first regression, IMPUS data for the period from 1910 to 2000 are used. We include three race dummy variables: Black, Asian, and Native American.²¹ We also include a dummy variable indicating if the person was an immigrant, race-immigrant status interaction variables, region dummy variables, decade dummy variables, personal characteristic variables, occupation dummy variables, and industry dummy variables. The specification of this probit model is

$$\begin{aligned} \text{SELFEMP}_{it} = & \beta_0 + \beta_1 \text{BLACK}_{it} + \beta_2 \text{ASIAN}_{it} + \beta_3 \text{NATIVEAM}_{it} + \beta_4 \text{IMMIGRANT}_{it} + \beta_5 \text{BLACK} \\ & \times \text{IMMIGRANT}_{it} + \beta_6 \text{ASIAN} \times \text{IMMIGRANT}_{it} + \beta_7 \text{NORTHEAST}_{it} + \beta_8 \text{MIDWEST}_{it} \\ & + \beta_9 \text{SOUTH}_{it} + \sum_{j=10}^J \beta_j \text{DECADEDUMMIES}_{itj} + \sum_{k=18}^K \beta_k X_{itk} + \sum_{l=28}^L \beta_l Z_{itl} + \epsilon_{it}, \end{aligned} \quad (1)$$

where X_{itk} is the set of personal characteristic control variables (age, age-squared, male, household head, male household head, married, married male, number of children, male with children, English speaking) and Z_{itl} are occupation and industry dummy variables.

We can see from Table 8 that except for age-squared and married male, all of the personal characteristics were associated with an increased likelihood of self-employment.²² Not surprisingly, BLACK contributes negatively to the probability of being an entrepreneur.²³ The Black dummy variable decreases the probability of being self-employed by 0.0043.²⁴ The immigrant dummy variable also has a negative sign. However, the marginal effect of IMMIGRANT on the probability of self-employment is negligible at -0.0002 .²⁵

While Boyd (1991b) documented that native and foreign born Blacks share race related disadvantages, we find that the BLACK \times IMMIGRANT interaction variable is not at all significant in our sample. Consistent with our characterization of Korean (Asian) immigrant entrepreneurs, we see that the Asian dummy variable is negative while the ASIAN \times IMMIGRANT interaction variable is positive. Native and foreign born Asians do not share race related disadvantages. Being Asian *decreases* the probability of entrepreneurship by 0.0015 while being an Asian immigrant *increases* the probability of entrepreneurship by 0.0015.²⁶ Since we also control for personal characteristics, regional differences, and industries, this attests to some type of resource (beyond that of the native U.S. Asians) that Asian immigrants have which facilitates entrepreneurship.²⁷

5.2. Robustness checks

Wilson (1978, 1987) makes an important distinction between historical and contemporary discrimination. However, when we add decade and BLACK interaction variables to our model specification (Eq. (1)), our results do not show any notable differences in the link between decade and probability of self-employment for African Americans. Interestingly, when we add BLACK-region-decade interaction variables to Eq. (1), the results are consistent with our discussion of

²¹ The omitted category contains White and other. The Asian category is an aggregate of several ethnic groups including Chinese, Japanese and Korean. We do not control for Latino ethnicity due to the limitations of the census data. With regard to identifying Latinos, the IPUMS documentation states the following: "The racial classification of people of Hispanic origin poses particular problems. . . Hispanic is not considered a race by the Census Bureau and has been ascertained in a separate question since 1970. The great majority of Hispanics have probably been classified as White over the years."

²² All of the personal characteristics are significant at the 1% level except for the male with children dummy variable.

²³ All of the race dummy variables are significant at the 1% level.

²⁴ With a 95% confidence interval of $[-0.0044, -0.0042]$.

²⁵ With a 95% confidence interval of $[-0.0002, -0.0001]$.

²⁶ With 95% confidence intervals of $[-0.0019, -0.0012]$ and $[0.0010, 0.0021]$, respectively.

²⁷ As in much of the economic literature, we assume that within each ethnic group/race there are general cultural tendencies. Thus, we treat race and culture as synonymous.

Table 8
Coefficients from the probit self-employment equation: 1910–2000

	Coefficient	S.E.	t-Ratio
Intercept	−4.1676	0.0075	−552.56
Age	0.0495	0.0003	187.79
Age-squared	−0.0004	0.0000	141.09
Male	0.3903	0.0036	108.56
Head of household	0.1241	0.0034	36.40
Male head of household	0.0370	0.0043	8.68
Married	0.1834	0.0032	57.21
Married male	−0.0799	0.0041	−19.68
Number of children	0.0035	0.0007	5.04
Male with children	0.0023	0.0025	0.93
Speaks English	0.0511	0.0012	40.92
Black	−0.2950	0.0030	−96.95
Asian	−0.0891	0.0107	−8.36
Native American	−0.0960	0.0103	−9.36
Immigrant	−0.0080	0.0025	−3.14
Black × immigrant interaction	−0.0023	0.0131	−0.18
Asian × immigrant interaction	0.0737	0.0124	5.96
Northeast region	−0.1017	0.0022	−46.46
Midwest region	−0.0875	0.0021	−40.78
Southern region	−0.0162	0.0020	−7.93
Occupation—manager	0.8450	0.0026	320.53
Occupation—service provider	0.1454	0.0023	63.04
Occupation—laborer	0.2143	0.0027	80.85
Occupation—craftsman	0.3229	0.0029	110.05
Industry—construction	1.0401	0.0037	283.84
Industry—manufacturing	0.1328	0.0035	37.78
Industry—utilities	0.3635	0.0042	85.68
Industry—wholesale/retail	0.9270	0.0032	292.97
Industry—finance	0.8440	0.0041	203.62
Industry—business services	1.1487	0.0028	415.93
Industry—public service	−1.4141	0.0217	−65.22
1920 Census	0.3719	0.0051	72.44
1940 Census	0.1725	0.0051	33.58
1950 Census	0.1092	0.0063	17.37
1960 Census	0.0097	0.0050	1.94
1970 Census	−0.0526	0.0049	−10.67
1980 Census	−0.1640	0.0053	−30.68
1990 Census	−0.0828	0.0053	−15.71
2000 Census	−0.1028	0.0053	−19.54
Observations			15,100,139
Log likelihood			−1, 886, 800.4

the Great Black Migration's effects on entrepreneurship. Both the BLACK-Northeast-1940 interaction variable and the BLACK-Midwest-1940 interaction variable are positive, significant at the 5% level, and indicate a decrease in the probability of self-employment by 0.0030. The results also show a significant link between increased entrepreneurship and southern Blacks in 1920. Being an African American in the south in the 1920s, increased the probability of being self-employed by 0.0192.²⁸ None of the other BLACK-region-decade interaction variables that were significant had any notable effects on the probability of entrepreneurship.

When we add BLACK-birthplace region interaction variables to Eq. (1), we do not find strong evidence that northern born Blacks were more likely to engage in entrepreneurship than southern born Blacks. The BLACK-Northeast born

²⁸ Significant at the 1% level with a 95% confidence interval of [0.0089, 0.0296].

Table 9
Coefficients from the probit self-employment equation: 1960–2000

	Coefficient	S.E.	t-Ratio
Intercept	−4.1917	0.0076	−550.95
Age	0.0544	0.0003	182.81
Age-squared	−0.0004	0.0000	−139.38
Male	0.3854	0.0043	90.61
Head of household	0.0775	0.0038	20.44
Male head of household	0.0558	0.0048	11.68
Married	0.1741	0.0037	47.66
Married male	−0.0640	0.0046	−14.04
Number of children	0.0207	0.0008	25.05
Male with children	−0.0115	0.0028	−4.13
Speaks English	−0.0088	0.0017	−5.33
Income	−0.0948	0.0034	−27.52
High school graduate	0.0792	0.0021	37.99
College graduate	0.1365	0.0023	59.51
Black	−0.3556	0.0036	−99.46
Asian	−0.0910	0.0109	−8.35
Native American	−0.1236	0.0108	−11.40
Immigrant	0.0579	0.0032	18.06
Black × immigrant interaction	0.0243	0.0138	1.77
Asian × immigrant interaction	0.0712	0.0127	5.60
Northeast region	−0.0946	0.0024	−39.70
Midwest region	−0.0871	0.0023	−37.31
Southern region	−0.0289	0.0022	−13.21
Occupation—manager	0.7065	0.0030	239.09
Occupation—service provider	0.2136	0.0027	79.55
Occupation—laborer	0.2336	0.0032	71.99
Occupation—craftsman	0.3665	0.0034	106.64
Industry—construction	0.9829	0.0042	232.62
Industry—manufacturing	0.0217	0.0042	5.23
Industry—utilities	0.2848	0.0049	57.59
Industry—wholesale/retail	0.7577	0.0037	202.71
Industry—finance	0.6661	0.0047	140.33
Industry—business services	0.9320	0.0034	276.32
Industry—public service	−2.4868	0.1092	−22.78
1970 Census	−0.0713	0.0030	−23.48
1980 Census	−0.0043	0.0060	−0.71
1990 Census	0.0689	0.0060	11.48
2000 Census	0.0476	0.0060	7.91
Observations			11,415,537
Log likelihood			−1,537,299.8

interaction variable was negative in sign and not significant at the 15% level. The BLACK-Southern born interaction variable was also negative in sign but significant at the 10% level.

Due to data limitations, we can only utilize a subsample of the data if we also want to control for education and/or income levels.²⁹ Using a subsample for the years 1960–2000, we use the following model specification which includes variables for education and income:

$$\text{SELFEMP}_{it} = \beta_0 + \beta_1 \text{BLACK}_{it} + \beta_2 \text{ASIAN}_{it} + \beta_4 \text{NATIVEAM}_{it} + \beta_4 \text{IMMIGRANT}_{it} + \beta_5 \text{BLACK} \\ \times \text{IMMIGRANT}_{it} + \beta_6 \text{ASIAN} \times \text{IMMIGRANT}_{it} + \beta_7 \text{INCOME}_{it}$$

²⁹ Since wealth levels are not contained in the IPUMS data used, we use the available income data. While we recognize that there are endogeneity issues with any measure for wealth, assets or income, the results from this subsample are not markedly different from those presented in Table 8. Thus, to the extent possible, we address the endogeneity issue.

$$\begin{aligned}
 & +\beta_8\text{HSGRAD}_{it}+\beta_9\text{COLLEGEGRAD}_{it}+\beta_{10}\text{NORTHEAST}_{it}+\beta_{11}\text{MIDWEST}_{it}+\beta_{12}\text{SOUTH}_{it} \\
 & +\sum_{j=13}^J\beta_j\text{DECADEDUMMIES}_{itj}+\sum_{k=21}^K\beta_kX_{itk}+\sum_{l=31}^L\beta_lZ_{itl}+\epsilon_{it},
 \end{aligned}$$

where X_{itk} is the set of personal characteristic control variables (age, age-squared, male, household head, male household head, married, married male, number of children, male with children, English speaking) and Z_{itl} are occupation and industry dummy variables.

Table 9 shows the results from the probit equation which includes education and income variables. Even after controlling for education and income levels, we observe that BLACK contributes negatively to the probability of being an entrepreneur while IMMIGRANT contributes positively to entrepreneurship. As with our first regression, we find that native and foreign born Asians do not share race related advantages. The Asian dummy variable decreases the probability of being self-employed by 0.0016 while the ASIAN \times IMMIGRANT interaction variable increases the probability of being self-employed by 0.0015. We can also see from Table 9 that the ASIAN \times IMMIGRANT interaction variable increases the probability of being self-employed almost as much as the high school graduate (HSGRAD) dummy variable. The marginal effect of BLACK \times IMMIGRANT, while positive and significant at the 10% level, is very small at 0.0004.

5.3. Bivariate probit model

Using a bivariate probit model, we can jointly estimate equations for both self-employment and immigrant status by assuming that the errors are jointly normally distributed. With this type of model specification, we further examine our claim that immigrant entrepreneurship in the U.S. is supported by factors beyond culture (race)³⁰ while controlling for any unobserved heterogeneity resulting from household-specific factors.³¹

Specifically, our bivariate probit model is set-up such that Y_1 is a binary dependent variable for self-employment, Y_2 is a binary dependent variable for immigrant status, and the independent variables are region dummy variables, decade dummy variables, occupation dummy variables, industry dummy variables, and personal characteristics (age, age-squared, male, household head, male household head, married, married male, number of children, male with children, English speaking). When we partition the data set by race, the bivariate model generates coefficients that can be used to compare the group differences in family patterns and calculate average joint and conditional probabilities by race (see Tables 10 and 11).

Table 10
Coefficient estimates from the bivariate probit model—Asian subsample

	Self-employed			Immigrant		
	Coefficient	S.E.	t-Ratio	Coefficient	S.E.	t-Ratio
Intercept	-4.3952	0.0747	-58.82	-0.6761	0.0334	-20.26
Age	0.0693	0.0024	29.19	0.0622	0.0008	75.41
Age-squared	-0.0006	0.0000	-23.44	-0.0006	0.0000	-59.62
Male	0.0723	0.0252	2.87	-0.0083	0.0086	-0.97
Head of household	0.0509	0.0233	2.19	-0.1154	0.0133	-8.66
Male head of household	0.2112	0.0291	7.26	-0.0123	0.0170	-0.72
Married	0.1378	0.0216	6.40	0.1522	0.0111	13.72
Married male	-0.0326	0.0288	-1.13	0.0683	0.0166	4.11
Number of children	0.0177	0.0051	3.43	0.0519	0.0037	13.89
Male with children	0.0537	0.0197	2.73	0.0359	0.0150	2.39
Speaks English	0.0863	0.0052	16.60	0.3295	0.0026	126.70
Northeast region	-0.0031	0.0141	-0.22	0.6217	0.0088	70.83
Midwest region	-0.0242	0.0189	-1.28	0.5299	0.0109	48.70

³⁰ Again note that as in much of the economic literature, we assume that within each ethnic group/race there are general cultural tendencies. Thus, we treat race and culture as synonymous.

³¹ With correlation ρ between the disturbances for each household i .

Table 10 (Continued)

	Self-employed			Immigrant		
	Coefficient	S.E.	t-Ratio	Coefficient	S.E.	t-Ratio
Southern region	0.0208	0.0151	1.37	0.5268	0.0092	57.24
Occupation—manager	0.9135	0.0173	52.66	−0.0872	0.0149	−5.85
Occupation—service provider	0.1029	0.0154	6.70	−0.0171	0.0105	−1.63
Occupation—laborer	0.3625	0.0189	19.20	0.1228	0.0130	9.48
Occupation—craftsman	0.4070	0.0244	16.67	−0.1441	0.0172	−8.39
Industry—construction	0.7661	0.0349	21.94	−0.4502	0.0240	−17.97
Industry—manufacturing	0.0118	0.0274	0.43	0.1289	0.0145	8.88
Industry—utilities	0.3987	0.0343	11.64	−0.2991	0.0204	−14.68
Industry—wholesale/Retail	0.9206	0.0241	38.20	−0.0195	0.0138	−1.41
Industry—finance	0.6223	0.0313	19.87	−0.0685	0.0192	−3.56
Industry—business services	0.9574	0.0218	43.98	−0.0637	0.0110	−5.78
Industry—public service	−5.8623	4867.46	−0.00	−0.4093	0.0184	−22.20
1920 Census	0.1351	0.0651	2.08	−0.9151	0.0382	−23.96
1940 Census	0.3713	0.0719	5.16	−0.7921	0.0423	−18.71
1950 Census	0.3591	0.0872	4.12	−0.9693	0.0514	−18.86
1960 Census	−0.0354	0.0612	−0.58	−1.1141	0.0344	−32.34
1970 Census	−0.0072	0.0577	−0.13	−1.0203	0.0331	−30.84
1980 Census	−0.3651	0.0578	−6.32	−1.7099	0.0332	−51.44
1990 Census	−0.2922	0.0569	−5.14	−1.6202	0.0329	−49.27
2000 Census	−0.3301	0.0567	−5.82	−1.5989	0.0328	−48.71
ρ	−0.0075	0.0083				
Log likelihood: −151, 169.3						
Observations: 238,840						

Ethnic group differences in family patterns have been emphasized in the literature as a possible explanation for different levels of entrepreneurship between African Americans and Asians. However, consonant with Bates (1997), our results provide inconsistent support for this “social resources” argument.³² From Tables 10 and 11 we see various group differences in slope coefficients. We find that the “number of children” coefficient is positive for Asians and negative for African Americans suggesting that, with respect to entrepreneurship, Asians benefit from the presence of children more than Blacks. Also, the “age” and “male with children” coefficients are larger for Asians than for African Americans. We see that the “married”, “male”, and “head of household” coefficients are larger for African Americans than for Asians. Yet, the “male head of household” coefficient is over five times larger for Asians than for African Americans. Consequently, there is not consistent support for the argument that more stable family patterns for Asians (e.g., married) promote self-employment.

Table 11
Coefficient estimates from the bivariate probit model—African American subsample

	Self-employed			Immigrant		
	Coefficient	S.E.	t-Ratio	Coefficient	S.E.	t-Ratio
Intercept	−3.6828	0.0246	−149.74	−3.3025	0.0229	−143.96
Age	0.0296	0.0009	32.53	0.0131	0.0006	21.14
Age-squared	−0.0002	0.0000	−20.70	−0.0001	0.0000	−18.97
Male	0.1761	0.0111	15.84	0.0035	0.0071	0.49
Head of household	0.0724	0.0104	6.95	−0.0892	0.0084	−10.66
Male head of household	0.0383	0.0138	2.79	−0.0974	0.0115	8.47
Married	0.1586	0.0101	15.69	0.1250	0.0081	15.37
Married male	−0.1203	0.0138	−8.74	0.0042	0.0120	0.35

³² Bates (1997) maintains that “the self-employment behavior of Asian-immigrant subgroups is broadly explainable without reliance on ethnic solidarity or social capital.”

Table 11 (Continued)

	Self-employed			Immigrant		
	Coefficient	S.E.	t-Ratio	Coefficient	S.E.	t-Ratio
Number of children	-0.0194	0.0023	-8.43	-0.0041	0.0023	-1.81
Male with children	0.0254	0.0104	2.43	0.0498	0.0106	4.69
Speaks English	0.0903	0.0042	21.49	0.4008	0.0030	133.18
Northeast region	-0.1643	0.0123	-13.38	0.6638	0.0087	76.27
Midwest region	-0.1484	0.0124	-11.99	-0.3383	0.0108	-31.27
Southern region	-0.0596	0.0106	-5.61	-0.2283	0.0087	-26.32
Occupation—manager	1.2704	0.0136	93.24	-0.0420	0.0148	-2.84
Occupation—service provider	0.4432	0.0103	43.26	-0.0545	0.0086	-6.33
Occupation—laborer	0.6222	0.0101	61.77	-0.1457	0.0102	-14.29
Occupation—craftsman	0.9776	0.0134	73.03	0.0206	0.0131	1.58
Industry—construction	0.5893	0.0140	42.12	0.1794	0.0168	10.67
Industry—manufacturing	-0.3173	0.0149	-21.34	0.1489	0.0123	12.07
Industry—utilities	0.2680	0.0147	18.26	0.2411	0.0146	16.46
Industry—wholesale/retail	0.4390	0.0127	34.52	0.2327	0.0118	19.72
Industry—finance	0.3401	0.0197	17.25	0.3935	0.0154	25.58
Industry—business services	0.7544	0.0107	70.63	0.3110	0.0092	33.88
Industry—public service	-1.6592	0.0983	-16.88	-0.0127	0.0146	-0.87
1920 Census	0.5195	0.0157	33.14	-0.6103	0.0269	-22.71
1940 Census	0.1534	0.0167	9.16	0.8174	0.0219	37.52
1950 Census	-0.1184	0.0240	-4.94	0.7516	0.0255	29.48
1960 Census	-0.1632	0.0169	-9.67	0.4517	0.0222	20.39
1970 Census	-0.1661	0.0165	-10.05	0.6518	0.0211	30.92
1980 Census	-0.4333	0.0174	-24.83	-0.2213	0.0206	-10.72
1990 Census	-0.3123	0.0171	-18.25	-0.0674	0.0206	-3.27
2000 Census	-0.2595	0.0168	-15.47	0.0497	0.0204	2.43
ρ	0.0310	0.0067				
Log likelihood: -278, 103.0						
Observations: 1,637,957						

Conditional probabilities are estimated from the bivariate normal results using

$$P(Y_1 = y_{i1} | Y_2 = y_{i2}) = \frac{P(Y_1 = y_{i1}, Y_2 = y_{i2})}{P(Y_2 = y_{i2})}$$

Table 12 shows the average probability of self-employment, $P(Y_1^{\text{selfemp}} = 1)$, the average probability of being an immigrant, $P(Y_2^{\text{imm}} = 1)$, the average conditional probabilities of self-employment given that the individual is an immigrant, $P(Y_1^{\text{selfemp}} = 1 | Y_2^{\text{imm}} = 1)$, and the average conditional probabilities of self-employment given that the individual is not an immigrant, $P(Y_1^{\text{selfemp}} = 1 | Y_2^{\text{imm}} = 0)$ for both the Asian subsample and the African American subsample.

Table 12
Probability estimates of self-employment and immigrant status by race

	Asians	African Americans
P (self-employed)	0.05	0.02
P (immigrant)	0.61	0.03
P (self-employed given immigrant)	0.07	0.04
P (self-employed given not an immigrant)	0.03	0.02

From these conditional probabilities, a strong connection between increased self-employment, race and immigrant status is even more apparent. Foreign born Blacks have a slightly higher probability of being self-employed than

native born Blacks. Native Asians and native Blacks have similar probabilities of self-employment. However, Asian immigrants are more than three times as likely as native Blacks to engage in entrepreneurship.

Since our probit models control for culture (race), personal characteristics, and household specific factors, only resource and/or discrimination related factors remain. We can rule out any universal aspect of Asian culture that facilitates increased entrepreneurship. Thus, our empirical analysis provides further evidence in support of our assertion that many Asian immigrants have additional resources/capital (not available to native non-Whites) that facilitate entrepreneurship.

6. Conclusion

Due to slavery, the starting point for the economic progress of Blacks in the U.S. was extremely low. After emancipation, Blacks were largely illiterate, were relatively unskilled, had little wealth, earned subsistence level incomes, were denied equal protection of person and property, and were excluded from governmental decision making (Higgs, 1977). Only during the last 40 years, have Blacks experienced an existence free of legally sanctioned discrimination and much progress has been made. However, racism still exists in our society and continues to serve as a formidable obstacle to Blacks' full and equal participation in the national economy. There has been much focus on the *declining significance of race* within the business sector. Yet, the continued pervasiveness of discrimination against African Americans is being documented by a rising number of researchers (see for example, Royster, 2003). Specifically, there is an expanding body of literature that suggests there has been no such decline with respect to entrepreneurship.³³ By examining the trends in African American and immigrant entrepreneurship, we try to identify non-cultural sources for the relatively low African American entrepreneurship rate.

The long, arduous, and diverse road of the African American entrepreneur has been shaped by slavery and institutional racism balanced against ingenuity and perseverance. While there is a history dotted with success stories, Black entrepreneurs still struggle to even approach the success of most immigrant groups. The ratio of Black to White entrepreneurship has remained amazingly steady over the past century. The reasons for Black under-representation may have shifted over time. Yet, there is one constant theme. Much of the conventional literature tries to account for this situation by suggesting that it is the result of cultural differences. However, comparisons with immigrant groups points to a different explanation. Consistently throughout history, discriminatory practices, institutions, and legislation have restricted African American entrepreneurs at every stage of business development.

In spite of continuing racial discrimination, a strong interest in creating businesses can be found in African American communities today. There is evidence that Black business ownership produces non-economic benefits (Boyd, 1990b). "The social welfare effect of Black entrepreneurial activity is indirect, operating through sociological variables. This finding is consistent with the *social buffers* argument for it implies that the visibility of Black firms may be more important than their actual economic performance." (Boyd, 1990b). Given the plight of the African American in business, perhaps this is the one valid "cultural reason" that we have observed progress at all.

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³³ For example, Feagin and Imani (1994) discovered that "social networks play a central role in the discrimination faced by African American business people in the construction industry. The informal organization of the construction industry amplifies the effects of racial discrimination frequently to the point of excluding or severely hamstringing African American contractors."

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