Differentials in Business Opportunities: Explaining the Gap – the Case of Black (African American) Small Business Owners

by

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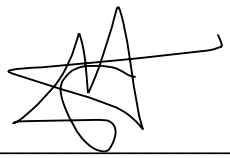
DECLARATION

I , Gashaw Asfaw Mekonnen, student number 60897740, declare that:

"*Differentials in Business Opportunities: Explaining the Gap – the Case of Black (African American) Small Business Owners*" is my own work and that all sources I have used or quoted have been indicated and acknowledged by means of complete reference.



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ABSTRACT

Small businesses have been playing crucial economic roles in generating revenues and reducing unemployment rates. The rate of entrepreneurship among Blacks has been on an increasing trend. However, this progress has not been matched by an increase in revenue and business sustainability. Black businesses, especially in the United States, lag businesses owned by other races. This study used secondary data collected by the US Census Bureau known as Survey of Business Owners Public Use Micro Sample to investigate factors considered to be influential in businesses success. Business owner characteristics (gender, immigration status, age, education, startup capital, past business experience, family ownership) and firm characteristics (firm size, firm age, sector, access to funding, use of technology, export, and region of operation) are analyzed to determine their effects on sale performance and risk of firm closure. Applying the Oaxaca-Blinder multivariate decomposition models, the effects of owner and firm characteristics in explaining racial differences in sales and closure rate is determined as well. Notably, many of these factors were ignored by previous studies in explaining racial disparities; among others, the role of owner immigration status, e-commerce, international trade, source of loans, age of firm and size are contributions of this study to the body of existing literature. Generally, the study found that owner background and firm characteristics, individually and jointly, have significant impacts on the success of Black small businesses. Differences in these characteristics explained significant gaps in sales performance and business survivability between White-owned and Black-owned, Asian- and Black-owned and between Hispanic- and Black-owned firms. The findings suggest the deployment of impactful policy and programs that would support Black entrepreneurship to close the gap, particularly access to funding and increase of equity of loan programs. The need for business experience and academic qualification are also documented as success factors, besides industry of operation and regional dynamics. The scholarly review of literature as well suggested a lack of theoretical model in capturing the context of Black entrepreneurial gap. Thus, developing a theoretical model will be useful to capture the root causes of racial disparity in entrepreneurship and close the gap in success. This academic lacuna may be explored in further studies.

Key Terms: Small business; Black business; Immigrant entrepreneurship; minority business; firm performance; Oaxacan-Blinder method; business success; women-owned firms; racial disparity; firm characteristics; business closure.

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LIST OF ABBREVIATIONS

ABS Annual Business Survey

AEO Association for Enterprise Opportunity

DBIS Department of Business, Innovation and Skill

DCLG Department for Communities and Local Government

GVIF Generalized Variance Inflation Factor

NGO Non-governmental organization

OLS Ordinary least squares

PUMS Public Use Micro Sample

RBV Resource-based view

SBA Small Business Administration

SBO Survey of Business Owners

VIF Variance Inflation Factor

CHAPTER 1

INTRODUCTION

1.1 Background

It is a broadly held consensus among policy makers and economics, and business researchers that small businesses are engines of growth for national economies (SBA, 2019; Gherghina, 2020). The propensity to own a business is on the rise globally, although there seems to be a regional entrepreneurial gap. For instance, in the United Kingdom, 64 percent of the workforce aspires to start their own businesses and become self-employed entrepreneurs (Rosling, 2020). In the United States, 55 percent of business owners stated that the primary reason of opening their own business was because they wanted to be their own bosses (Mohsin, 2020). Developing countries such as those in Africa are encouraging entrepreneurial inclination into micro businesses as a way of laying a foundation to become industrialized and to build a globally competitive economy. The role of small businesses in the national economy is immense as they account for a significant share of corporate earnings. For instance, at the start of 2020 small businesses in the United Kingdom accounted for 99.3 percent of all private businesses and employed 16.8 million with an annual turnover of £2.3 trillion (Department for Business, Innovation and Skill (DBIS), 2020). In the European Union, small businesses provide two thirds of private sector jobs and contribute more than half of the total added value created by businesses in the EU; they employ approximately 100 million people, constituting an essential source of entrepreneurial spirit and innovation (European Parliament, 2023).

Likewise, in the United States, statistics indicated that there are 31.7 million small businesses that employed 60.6 million or 47.1 percent of the private workforce (US Small Business Administration (SBA, 2020:1). The share of small businesses owned by major racial minorities (Black or African American, Hispanic, and Asian) has also been growing over time. According to the 2019 Annual Business Survey, approximately 18.3 percent of all US employer businesses in 2018 were owned by major racial minorities (US Census Bureau, 2021).

Although racial minority-owned businesses create employment and generate income, they are facing many challenges in the market, which are arguably peculiar to the ownership of the racial group. Among others, minority businesses face challenges such as restricted or limited access to

capital, limited business network/social capital, and lack of business opportunities. The identified challenges include racial discrimination, lack of education, and lack of essential business skills that adversely impact their success (Barr, 2015). It is thus opined that the prevailing constraints perpetuate low ownership rate among racial minorities. According to a study that is based on 2007 and 2012 US Census data (the most recent of such a dataset), the racial gap in business ownership costs the country as much as $300 billion in lost income and as many as nine million jobs (Austin, 2016).

Black-owned businesses face far greater obstacles than their white-owned competitors and consequently, have lower sales and higher closure rate than the non-minority White and other minority-owned businesses (Fairlie and Robb, 2008, 2010; McManus, 2016). Despite this reality, research focusing on Black entrepreneurship is scant, not to mention studies that draw relationship between racial affiliation, owner characteristics and business success. Thus, this research specifically focuses on investigating the constraining factors that inhibit the performance of Black-owned businesses. In specific, the study sets out to uncover the deterministic influence of owner-attributes of Black-owned small businesses in contrast with businesses owned by non-minority Whites and other minority groups in the United States.

1.2 Race and Small Business Defined in the American Context

United States is the world's most ethnically and racially diverse country. It is often referred to as a "melting pot," where diverse ethnicities come together (Mooring, 2010). The U.S history began with the influx of immigrants with different racial background who entered to America across the world. Almost every region of the world contributed to American culture. Most notably the English colonizing the country since early 1600s, Native Americans, Latin Americans, Africans, and Asians shaped the U.S society (McKelvie and Zimmermann, 2022).

While this diversity contributed to the making of America, it also brought its own challenges. This "melting pot" metaphor is now equally challenged by the multiculturalism metaphors such as "salad bowl" and "mosaic" (Mooring, 2010; Millet, 2020). This implies that immigrants are not as such mixed into a single "pot" but are transforming the U.S. into a multiracial mosaic (Millet,2020).

According to Roediger (2019), prior to the 1500s, the term "race" was used to identify groups of people with a kinship or group connection. However, in modern times it is a human-

invented, shorthand term used to describe and categorize people into different social groups based on characteristics like skin color, physical features, and genetic heredity. Little (2014) also discussed the historical concept of race, which has evolved across cultures and time, eventually eschewing the traditional affiliation to ancestral and familial ties. These authors contend that modern viewpoints about race have heralded superficial physical characteristics.

Along with this school of thought, contemporary discussion on race is now predominated by categorization of a set of people based on geographic regions, ethnicities, skin colors, language, accent, physique and more. Roediger (2019) argues that race is not a valid biological concept but is a real social construction that gives or denies benefits and privileges to a set of people based on the categorization. In the United States, the definitions of racial categories developed in 1997 by the Office of Management and Budget (OMB) also underlined that racial categories do not denote scientific definitions of anthropological origins. Roediger (2019) further argues, "American society developed the notion of race early in its formation to justify its new economic system of capitalism, which depended on the institution of forced labor, especially the enslavement of African peoples."

Thus, understanding the definition of race in the context of U.S. is essential to nuance the intricacies that motivate this study, situate its relevance in the body of literature on small businesses, and establish a distinguishing perspective on how racial categories are deployed throughout this study. It is also important to note that information on racial category is currently required for many Federal programs and is critical in making policy decisions. In addition, racial categorization plays a crucial role in accessing opportunities, such as employment. As Shapiro (2004) in his book entitled *"The hidden cost of Being African American: how wealth perpetuates Inequality*" reflected that these disparities take many forms, and they manifest in multi-dimensional ways. The most prominent among these considerations are disparities in wealth, education, employment, housing, mobility, health, rates of incarceration, as well as the form of misdemeanor that leads to incarceration for different racial categories.

The Office of Management and Budget (OMB), which is an appendage of the Executive Office of the U.S. President, is the agency providing the standard definition on race and ethnicity in the country. This standard also guides the U.S. Census Bureau in its mandate of data collection on responses related to race questions (US Census Bureau, 2018). The OMB requires five

minimum categories: White, Black, or African American, American Indian or Alaska Native, Asian, and Native Hawaiian or Other Pacific Islander (OMB, 1997). When data is collected both on race and ethnicity in a combined format, that minimum categories would be six as Hispanic could be of any race, either Black or White. According to the OMB categorization, the following racial profiles are documented as defined:

Hispanic or Latin - A person of Cuban, Mexican, Puerto Rican, South or Central American, or other Spanish culture or origin *regardless of race*.

Black or African American – A person having origins in any of the Black racial groups of Africa.

Asian – A person having origins in any of the original peoples of the Far East, Southeast Asia, or the Indian subcontinent, including for example, Cambodia, China, India, Japan, Korea, Malaysia, Pakistan, the Philippine Islands, Thailand, and Vietnam.

White - A person having origins in any of the original peoples of Europe, the Middle East, or North Africa.

American Indian or Alaska Native – A person having origins in any of the original peoples of North and South America (including Central America) and who maintains tribal affiliation or community attachment.

Native Hawaiian or Other Pacific Islander – A person having origins in any of the original peoples of Hawaii, Guam, Samoa, or other Pacific Islands.

The OMB also defines ***Ethnic Minority*** as those non-White individuals who belong to one or more of the following groups: Asian, Black, or Native-American. It is noteworthy, however, that individuals with Hispanic/Latino origin also belong to this group. Thus, in its data collection tasks, the U.S. Census Bureau adhere to these definitions and guidelines provided by OMB as baseline consideration in racial classifications.

Given the background information on the underpinning variable of this study (racial differentials in the United States), this research integrates racial profiles of business ownership of the first four racial categories (because they are predominantly ethnic/racial minorities in the United States) with business characteristics and performance. Similarly, defining the concept of small business is as relevant as defining owners ethnic/racial background.

The concept of small business varies from country to country. A review of the literature reveals that there is no single, uniformly acceptable definition of a small firm (Storey, 1994; Tongue, 2011; Lampadarios et al., 2017; Radzi et al., 2017). The debate concerning the definition of small business is an ongoing one as advanced by several sources such as the Bolton Committee Report (1971) and the European Commission. The classification of Bolton's report published in 1971 is perhaps the most widely used definition and understanding of small business, at least in Europe. In that Report, Bolton considered two aspects, namely the economic or qualitative definition and the statistical or quantitative definition (Tonge, 2001). According to this author (Tonge, 2001), the economic definition hinges on such criteria as:

(1) small share of their marketplace. That is, businesses that claim a small portion of the marketplace are regarded as small. However, what really constitutes "small" remains equivocal and inconclusive.

(2) managed by owners or part-owners in a personalized way and without a formalized management structure. Again, the fact that the business is managed by the owner with a fringe of informal structure or formalization renders a business outfit small. It however controversial to uphold this definition because large high-tech businesses, such as Microsoft, Amazon, Apple; and even large businesses like Berkshire Hathaway are managed by either the founder or co-founders.
(3) independence in the sense of not forming part of a larger enterprise. Again, the fact that a business maintains some degree of autonomy from mega corporate influence doesn't necessarily make it "small". For instance, most of the subsidiaries of mega corporations are quasi-autonomous and largely independent, especially if the business operates on a multidomestic strategic intent.

On the other hand, the statistical/quantitative definition takes into accounts:

(1) quantifying the current size of the sector in which the firm operates, and the contribution of the sector to economic functionalities, such as the gross domestic product, employment, exports, and innovation.

(2) trend on how the sector in which the business operates have evolved over time, especially as regards the strategic importance of the sector to the economy.

(3) a statistical comparison being made between the contributions of small firms in one country with that of other nations (Tonge, 2001).

However, definitions that are based on these criteria are found to be too complex to draw comparisons between countries or overtime. To overcome such complications, the term 'small and medium enterprise' (SME) was coined. This followed the lead of the European Commission (EC) in February 1996, which adopted a communication setting out a single definition of SMEs to be adopted after 31 December 1997. To define the category of enterprise, the SME definition considers the following three criteria (European Commission, 2015b: (1): number of employees; (2) annual turnover; (3) annual balance sheet.

The European Commission defines micro, small and medium-sized enterprises (SMEs) in the EU Recommendation 2003/361, where SMEs were defined as those enterprises employing fewer than 250, with annual revenue of no more than EUR 43 million. In addition, micro-enterprises are defined as enterprises that employ fewer than 10, and whose annual turnover or annual balance sheet total does not exceed EUR 2 million. Small enterprises on the other hand, are defined as enterprises employing fewer than 50, and having an annual turnover or annual balance sheet that does not exceed EUR 10 million, while medium-sized enterprises are defined as enterprises that employ fewer than 250, and either have an annual turnover that does not exceed EUR 50 million, or an annual balance sheet that does not exceed EUR 43 million. Despite being one of the most agreed upon definitions of SMEs (provided by the EU), it is far from being appropriated by Governments of States and policymakers. Although recommended by the EU, this definition is mandatory only for institutions and businesses that accede to non-refundable or partially refundable grants from EU20.

The World Bank as well use three quantitative criteria in defining SMEs: number of employees, total annual net assets denominated in USD, and annual sales also denominated in USD (Ayyagari et al, 2005; Alexandru Drăgan, n.d.). In order to be classified in one of three categories, micro-enterprise, medium enterprise or small enterprise, a business must meet the mandatory criterion such as the number of employees, and at least one of the other financial criteria (Alexandru Drăgan, n.d.). While the EU deploys indicators like the annual turnover and annual total balance sheet, the World Bank relies on total assets and total annual sales. Looking at the two sets of criteria, it could be concluded that the financial criteria used by the two institutions are not clearly comparable.

In the US, the definition of a small business varies from place-to-place, and it is often dependent on the industry or sector. According to the Small Business Administration, a business that is independently owned and operated and which is not dominant in its field of operation and in conformity with specific industry criteria is defined as small business. This definition depends on the North American Industry Classification System (NAICS) for a business. The U.S. Small Business Administration uses size as a standard to define businesses as "small" for the purpose of determining their eligibility for government grant programs (SBA,2022). The United States Small Business Administration (SBA) broadly indicates that a business with 1 to 500 employees is a small business (SBA, 2012). Firms that fit the definition employ 47.1 percent of the private workforce (SBA, 2020:1) and could be eligible for government small business programs.

In reality, each country exercises its freedom to define small business based on specific national conditions. The existence of diversity in the classification and categorization of businesses necessitates the need to modify definitions in the context of region, industry, or other characteristics. Thus, the implication is that researchers are more likely to continue applying their own definitions of small business that are appropriate to their 'target' group (Storey, 1994; Alexandru Drăgan, n.d.). This was true as Lampadarios et al., 2017 also later emphasized in the conceptual framework of understanding small business from broader elective perspective. In this study and given that the empirical aspect depends heavily on the dataset drawn from the U.S Bureau, the definition deployed tallies with those advanced by the SBA. More importantly, the data analysis and interpretation, as well as the conclusions and recommendations that will emanate, would be meaningless if the definition does not tally with the survey information deployed by the SBA.

1.3 Evolution of Black Entrepreneurship in the United States

Black entrepreneurship has a long history in the United States. It has roots in the days of slavery. Commons, Saposs, Sumner, Mittelman, Hoagland, Andrews, and Perlman (1918) documented that beginning in l600s, slave and free Africans used every opportunity to develop enterprises and participate as businesspeople in the commercial life of United States as a newly emerging nation. Free Black immigrants and enslaved Africans, including their descendants found means for self-sustainable income by selling goods and getting paid for their skilled services. Back in their homelands are observed to possess rich experience in market economies, which was

evidenced by their trading organizations, craft and merchant guilds, and cooperative arrangements. According to Walker (1999), their involvement in trade and merchandise was robust to both gender and natural characteristics. Africans in general, brought the skills and trades of their homeland to North America, and their expertise contributed meaningfully to shaping the landscape of industrial development in the United States (Duignan & Gann, 1984).

However, slavery denied the Blacks much needed economic freedom which is essential for any business undertaking. In addition, systemic racism against slaves and Black immigrants denied this group of commercial emancipation into the mainstream of commercial activities – an experience that is still evident in recent times. Notably, among the Black population that was estimated at 4.5 million during 1860, only 10% were free (Walker, 1999:39). Although African Americans experienced denial of education and employment during slavery, which was exacerbated by the post-Civil War segregation laws, this racial group continuously found ways to establish businesses in many areas of the economy. After the abolition of slavery, African Americans established several businesses that thrived in Black communities. According to Walker (2009), the era from 1900 to 1930 was a golden age of Black-owned businesses in the US. This was because Jim Crow laws forced African Americans to form more isolated communities that were separated from white dwellings. This resulted in the boom of entrepreneurship in the Black communities. One of such places was Tulsa, Oklahoma which was also known as "Black Wall Street" (Heath, 2020); and it served as the perfect metaphor for the wave of entrepreneurial success by Black people during that period. This growth in business formation in the early 20th century was due to the effect of the increasingly rigid Jim Crow system of segregation, which moved urban Blacks into isolated communities that were predominantly Black. These communities became large enough to support various business establishments. Because of laws prohibiting Blacks from patronizing white businesses, Black businesses, including clothing stores, salons, banks, and cafes, flourished in Greenwood due to a lack of competition.

Nonetheless, growing racial tensions and Jim Crow laws culminated in Black businesses being susceptible to destruction (Messer et al., 2018; Howard,2020; Albright et al., 2020). Given the financial fragility of the Blacks business owners, the destroyed businesses were unable to rebuild quickly, and some were never rebuilt. Owing to the decimation of various businesses and inability of owners to resuscitate, Black businesses began to decline steadily in the early 1940s,

and the few that remained in business stagnated. This led to a notable decline in Black businesses – a feat that began to reverse mildly in the early 1980s (Howard, 2020). While growth has been slow, Black business ownership has continued its upward trajectory over time, despite the ongoing challenges of persistent structural and institutional racism (Howard, 2020).

Thus, regardless of the impact of slavery, segregation and despite the fact that return on their investment is minimal, the Blacks have recorded some fringes of entrepreneurial accomplishments in the United States (Walker, 1998). Recent literature on Black business does as well suggest, despite the increasing trends in Black entrepreneurship in modern time, that Black businesses continue to face myriads of obstacles which other racial groups are institutionally immune against (Darity et al, 2018; Howard, 2022). Some of these challenges include underfunding, low profit margin, small business size, and higher probability of business closure.

1.4 Problem Statement

Minority-owned small businesses have been making a significant contribution in generating revenues and in reducing the high rates of unemployment, especially in the United States (SBA, 2014; US Census Bureau, 2021). More specifically, these businesses employ about 8.7 million workers and generate a substantial amount of revenue that cushions the national fiscus (US Small Business Administration (SBA), 2019). It is further observed that business ownership among minorities has been growing over time, as the size of Black small business ownership grew from 1.9 million in 2007 to 2.5 million in 2012 (with national population of about 14 percent), as compared to the growth from 1.6 million to 1.9 million for the Asian minority over the same period (a population group that accounts for less than 6 percent). Furthermore, and during the same period, business ownership within the Hispanic and Latin American racial group grew from 2.3 million to 3.3 million (a racial group with about 18 percent of the national population) (Lichtenstein, 2014; McManus, 2016).

Argument presented in the preceding paragraphs suggests an increasing trend in the growth of entrepreneurship, these statistics suggest that small business landscape in the United States is marked by uneven distribution of ownership and, by extension, uneven profitability by race – especially when comparing Black and other races. For instance, while Blacks account for 13 percent of the US population (Maxwell et al., 2020), this racial group owns less than 2 percent of small businesses (Maxwell et al., 2020). Conversely, the non-minority White constitutes about 60

percent of the US population but owns more than 82 percent of small businesses. More importantly, the identified progression in the number of business ownership among the Black racial group is not matched by an increase in revenue. For instance, the SBA (2016) survey revealed that 95 percent of Black-owned businesses earn less than $10 million, compared to $20 million for White non-minority businesses owners. Low financial capability and access to funding were identified by the source as a major culprit for low business profitability among the Black racial group.

According to Maxwell et al. (2020), supposing financing opportunity is evenly accessible and equitably appropriated without the vestiges of racial profiling and bias, about 860,000 additional Black-owned firms would have been established, which would have generated more than 10 million in additional direct employment. Given various racially charged challenges that have placed Black-owned businesses at greater disadvantage, revenue from Black-owned small businesses is not only lower than those of non-minority White firms, but also less than those of other businesses owned by minority racial groups. To buttress this point, racial disparities in business outcomes/profitability have been documented in a few national compilations (McManus, 2016; Federal Reserve Bank, 2019), revealing that Whites non-minority firms are more profitable than minority-owned firms. The gap is more pronounced between small businesses owned by non-minority Whites (58 percent profitability) as compared to 46 percent profitability of Black-owned businesses (Federal Reserve Bank, 2019).

Literature suggests that the differential in access to business opportunities and salient business discriminatory practices constitute noticeable bottlenecks for minority (especially Black-owned) small business success and expansion (Blanchflower et al. 2003; Asiedu et al. 2012; Howell, Kuchler, Snitkof, Stroebel & Wong, 2021). The prevalence and intensity of these practices are much higher among Black business owners than any other racial group. More specifically, Black business owners have less access to either take-off or business expansion funding compared to the other minority business owners. For example, the 2017 Small Business Credit Survey conducted by the Federal Reserve Bank found that applications for Black-owned business funding are in ten folds of the applications from White-owned small businesses, but the approval rates for Black-owned businesses are 19 percent lower. The survey also showed that more than 40 percent of Black-owned firms did not apply for financing because of systemic hindrances.

Previous studies noted racial disparities in access to loans, which were mainly attributed to subtle discrimination by the lenders (Blanchflower et al., 2003; Blanchard, Zhao & Yinger, 2008; Bates & Robb, 2015, 2016). To validate the findings, a series of studies were conducted by applying "mystery shopper" experiments (Bone et al., 2014; Bone et al., 2017). The findings of the "mystery shopper" experiments suggest that businesses owned by Blacks were prone to being denied loans. The studies further found that a few successful loan applications were pervaded by unfavorable terms and conditions, as opposed to those of non-minority White-owned businesses – even when all the businesses exhibit similar financial profiles. Furthermore, the study conducted by Bates and Robb (2016) confirmed that loan rejection rates are higher among businesses owned by Blacks, even after controlling for creditworthiness of applicants. This likely leaves Black entrepreneurs with no option but to rely on personal funding – inhibiting their ability to start relatively bigger, and constraining the expansion of their businesses, and ultimately scuttling their propensity to stay competitive in the marketplace.

The negative effects of disparity in access to initial and expansion capital also manifest in racially-skewed business survival rates. Black-owned small businesses generally have the highest closure rates as compared to small businesses owned by other racial groups. Smith and Tang (2013) found that 39 percent of Blacks newly founded businesses survived for barely four years. This survival rate is very much lower than the US average of five years, during which more than 51 percent of small businesses survive (US Small Business Administration - SBA, 2011). This finding is further collaborated by Kroeger and Wright (2021).

Furthermore, the increasing business failures among Black entrepreneurs have exacerbated downward wealth mobility among the racial group, especially due to the economic costs that are associated with business closure (Kroeger and Wright, 2021). Even when the businesses survive, their sales volume may be lower compared to the other racial groups. For instance, Kroeger and Wright (2021) suggest that about 59 percent of the Black-owned businesses fall in the 20 lowest percentile sales. This finding is also corroborated by Howell, Kuchler, Snitkof, Stroebel and Wong (2021). There was also a suggestion that small businesses owned by Blacks generally operate in low-cost businesses because of low capital outlay – a reason advanced for high competition in such business sectors (McManus, 2016). In addition, although Black women own more than 57% of all Black-owned small businesses, they generated significantly low monthly revenue (US$

24,000) as compared to US$142,900 average monthly revenue for all women-owned businesses in 2019 (American Express, 2019).

Thus, the reality in the United States appears to indicate the prevalence of an uneven entrepreneurial landscape. Blacks, regardless of gender or country of origin, encounter unique challenges, which is the main motivation for embarking on this study. Further rationale for this study is discussed in the following subheading.

Motivation for the study

It is to be reckoned that Blacks have a long history of entrepreneurship in America. This racial group is known to have undertaken business formation and successful administration over the centuries. For instance, the history of Black-owned businesses in the United States is well marked with the convergence of very successful small businesses in Tulsa, Oklahoma, where the historical "Black Wall Street" was established as a conglomeration of successful Black-owned firms. Unfortunately, the conglomeration was destroyed in 1921 because of White jealousy and bigotry (Messer et al., 2018; Albright et al., 2020). Furthermore, Black-owned businesses that brought liveliness to the oldest neighborhood in Washington DC (Association for Enterprise Opportunity (AEO, 2016), fondly referred to as the "Black Broadway" located along U Street Corridor in Washington DC, were racially dislodged, and faced an increasing onslaught as this neighborhood reshaped its cultural profile and business-ownership structure in favor of White business owners through gentrification (Summers, 2020).

However, today, Black-owned businesses are lagging businesses owned by the White racial group and other ethnic and racial minorities in both Oklahoma, Washington DC and the rest of the country. That is, the Black racial group has regressed to the point of having the lowest ownership rate, their businesses generate fewer sales, and they record the highest failure rates. As suggested in the preceding paragraph, racial profiling in loan approvals has realistically hindered access to funding for Black-owned businesses. According to recent data released by the Federal Reserve Bank (2020), the percentage of Black business owners that receive at least part of the funding they requested from a bank is 60.2 percent, in contrast to 80.2 percent for White, 77.1 percent for Asian, and 69.5 percent for Hispanic. This is particularly telling on the propensity of Black-owned businesses to create and nurture sustainable competitive advantage over businesses owned by more favored racial groups.

The motivation for this study lies in the reality that the comparative performance of Black entrepreneurship as opposed to the other racial groups is worthy of studying for several reasons. First, business ownership provides a path to economic empowerment for Black entrepreneurs and their families. Statistical evidence shows that Blacks have the lowest level of personal/family wealth in the United States. In specific, in 2019 the median Black household held $24,100 in wealth – which is 7.8 times less than the median White household at $188,200 (Creamer, 2021). Furthermore, the same source suggests that Blacks account for about 14 percent of the US population, but their share of poverty is 1.8 times greater than the national average (Creamer, 2021). More specifically, Black-Africans constituted 23.8 percent of the poverty-ridden population in the United States. Further to this point, the median household income for Black households in 2019 was $45,438 compared to $56,113 for Hispanic, $76,057 for White and $98,174 for Asian households (US Census, 2020). Evidence showed that one in four Black households had a negative net worth, while the figure is one in every ten for White households (Jones, 2017).

The adverse impact of household poverty, for instance, was abundantly clear during the COVID-19 pandemic. Its impact was felt differently depending on individual status. For instance, according to the Kaiser Family Foundation, 11.7% of African Americans in the United States had no health insurance, compared to 7.5% of Whites (Artiga, 2022). Nearly 98 out of every 100,000 African Americans died from COVID-19, a mortality rate that is a third higher than that for Latinos (64.7 per 100,000), and more than double that of Whites (46.6 per 100,000) and Asians (40.4 per 100,000). The huge percentage of Blacks in the confirmed COVID-19 cases and number of deaths underscores the fact that the coronavirus pandemic, far from being an equalizer, is amplifying social inequalities tied to race, class, and access to the health care system (Vasquez Reyes, 2020).

Furthermore, data from the U.S. census bureau on the characteristics of low-income families by race and ethnicity suggests that about 21% of 7.5 million low-income families with children in the United States were African American (US Census Bureau, 2019). Another important factor of note is that poor families are more likely to reside in densely populated areas and multigenerational households that enervates their exposure to the pandemic (Vasquez Reyes, 2020). Although, the COVID19 pandemic adversely affected all small businesses, Black business owners suffered the largest losses. According to SBA (2022), from 2019 to 2020, business owners' earnings overall fell by 5 to 17 percent. This decline was between 11 and 28 percent for Black

businesses, between 15 and 21 for Asian businesses, between 7 and 19 for Hispanic businesses, and between 2 and 15 percent for White businesses.

Black small business owners are not only the most hit by COVID-19 but also the hardest hit by inflation that resulted from various market swings after the pandemic. According to the study of small business owners by the U.S. Chamber of Commerce, inflation is the topmost challenge confronted by Black businesses (SBA, 2022), closely followed by overall systemic racism. This was confirmed in the SBA (2022) government's Payment Protection Program (PPP). The study shows that there are structural inequities "built-in to the administration of the program, the application process, and the fee structure."

Simultaneously, however, research reveals that households owning small businesses have higher income and wealth than households that do not own small businesses (Haynes, 2010). Compared to the other racial groups, White business owners are 12 times wealthier than the other small business owners in the other racial groups, apart from their high possibility for wealth mobility (Association for Enterprise Opportunity - AEO, 2017). Thus, to address socioeconomic inequality in a sustainable way, efforts is required to elongate the sustainability of Black businesses, and thereby ultimately promote generational wealth among the Blacks. As such, the overarching evidence is that entrepreneurship opens opportunities for upward mobility, creates jobs, reduces unemployment, and builds better and more peaceful neighborhoods. For instance, Whites entrepreneurs suffer lesser wealth immobility compared to their Black counterparts (Bradford, 2003).

Studies that investigate the entrepreneurial gap along racial lines in the United States are far from adequate. Existing empirical studies are not only based on time-specific datasets but are limited in scope of study. In a few other studies, mere similarity or divergence are drawn between White-owned and Black-owned businesses only, and the variables of analysis are mainly limited to racial profiles in a few others. Specifically, studies by Cavalluzzo and Wolken (2005) investigated the relationship between small business loan turndown and racial discrimination; Blanchflower et al. (2003) using the 1993 and 1998 National Surveys of Small Business Finances investigated the existence of racial discrimination in the small-business credit market. Likewise, Fairlie et al. (2016) analyzed the Kauffman Firm Survey (KFS) and Dun & Bradstreet (D&B) confidential dataset to investigate the effects of differential in access to credit market between White and Black.

In another study, Fairlie and Robb (2008), using the 1992 Characteristics of Business Owners (CBO), investigated the disparity between the success rates of Black-owned and White-owned businesses. The work of Fairlie and Robb (2008) could be regarded as the first major documented study on the implications of racial gaps between Black- and White-owned businesses on profitability. Even then, the study did not capture the possible effects of firm characteristics on business outcomes. In most instances, studies focus on Blacks versus Whites while, for instance, Kim et al (2021) using multiple firm level database documented that Black-owned businesses tend to operate with less finance and employ fewer workers than those owned by Whites.

In others, the scope of investigation is limited either in geography or industry or study target population segment. For example, a survey by Harper-Anderson (2019) entitled "Contemporary Black Entrepreneurship in the Professional Service (PS) Sector of Chicago" noted that the performance of Blacks lags their counterparts of other races. However, the study was limited to entrepreneurs in the highly skilled sectors. The sample thus contained highly educated entrepreneurs with better access to funding, and with more diverse customer bases than their counterparts. Acknowledging the inherent exclusion of most small business owners from the study, the researcher suggested a further robust model of inclusion. These identified gaps in literature form the basis for this study, and ultimately, the areas of scientific contribution to the body of existing literature.

Unlike some of the surveyed studies, the geographic scope of this research, however, covers all the states in the country (50 United States and the District of Columbia). The national data set not only covers a broader population but also major variables of interest that incorporates racial profile of business owners, business characteristics, profitability of businesses along racial and gender lines, and geographical clusters. The expanse and the robustness of variables covered in this study, apart from the methodological superiority, are the major contributions of this study and they constitute notable departure from historical studies.

1.5 Objectives

The main objective of this study is to investigate the underlying factors that influence the disparity in business performance between Black and other racial groups. In more specific terms, the study achieved the following sub-objectives:

Objectives of this study are:

(1) Investigate the disparities in business performance between Blacks and other ethnic minorities, and nonminority Whites.
(2) Investigate whether the performance of businesses owned by Black women are influenced by owner characteristics.
(3) Determine the effects of immigration status on business outcomes/performance.
(4) Determine the effects of racial profiling on access to funding for small business owners in the United States.
(5) Uncover the role of entrepreneurs' business location on the business performance.

1.6 Research Questions

To achieve the research objectives, the study addresses the following research questions:

(1) Do Black-owned small firms in America underperform their White-, Asian- and Hispanic-owned counterparts in sales and survival?
(2) Does the gender of ownership determine the performance of small businesses in the United States?
(3) Does the immigration status of owners influence business performance?
(4) Does racial profiling influence entrepreneurs' access to funding in the United States?
(5) Does geographical location of small businesses influence business performance in the United States?

1.7 Hypotheses

In line with the research objectives as well as the questions raised to achieve the study's objectives, the following hypotheses are proposed:

H_1: Black-owned businesses have lower level of performance compared to White, Asian and Hispanic-owned firms.

H2: The gender composition of the business owner explains racial disparities in sales performance and the risk of firm closure between Black-owned businesses and businesses owned by other races.

H_3: The immigration status of business owners causes racial disparities in sales and risk of closure between Black-owned businesses and businesses owned by other races.

H4: Access to funding explains racial disparities in sales performance and risk of firm closure between Black-owned businesses and businesses owned by other races.

H_5: The geographic location of business affects disparities in sales performance and the risk of firm closure between Black-owned and businesses owned by other races.

1.8 Interest in the Study

As indicated in the introductory statement to this chapter, small businesses offer various strategic micro/macroeconomic advantages in every country. The fact that they contribute meaningfully to job creation and economic growth is well documented in academic literature, as indicated in the preceding paragraphs. While these impacts are particularly felt in the economy of the United States, there is extensive polarization of operational outcomes and sustainability because of racial discrimination and disproportionate system favoritism along racial lines. While this reality is a household feeling and business commonplace in the country, studies on this issue are scarce, particularly a nationwide study on Black-business performance in relation to other minority groups, as well as the non-minority White racial groups. The availability of large national dataset covering all the U.S. States provides sound bases for such a study. Thus, this study was set out to fill these identified research lacunae by establishing the impacts of racial profile on the performance of small businesses in the United States.

1.9 Significance of the Study

This study is significant at least in three ways:

(1) The adverse impacts of slavery and past discrimination in achieving financial success through business ownership are still problems for Blacks in the United States. African Americans (Blacks) continue to experience a notable level of unemployment, far lower income, and lower business ownership. Despite these facts, there are limited studies that focus on the challenges of Black entrepreneurship in the United States. This research contributes to the existing knowledge by looking into an array of factors as to why Black-owned businesses lag businesses owned by other racial groups in the country. Studies on comparative outcomes with comprehensive analysis between Black and other minority groups barely exist, and a few that touch on a string of issues do not cover the entire country. That is, most of the documented studies focused predominantly on compassion

between Black and White, and ignored the other racial groups. More importantly, the findings of the study would contribute toward developing theorical underpinning for the empirical analysis in understanding the unique challenges that confront black entrepreneurship in the United States. According to documented studies, current dearth of scholarly academic theory or perspective that purportedly capture the unique history of Black African American often mistakenly categorize black entrepreneurship as ethnic minority entrepreneurship in the United States.

(2) There is also a lack of research that examines business performance among Black entrepreneurs themselves. Various challenges within the Black racial group are deemed to influence business performance. For instance, gender and immigration status are considered strong determinants of why Black-owned businesses experience different outcomes in terms of profitability and survival. This study thus becomes significant as it investigates the specific roles played by the immigration status of business owners, as opposed to native business owners. Furthermore, Black immigrant business owners may have different experiences than natives. Gender profiling may also affect the performance of businesses owned by Black women. Hence, this study attempts to shed light on these areas that have been marginalized in scientific academic investigations in the United States.

(3) From a policy perspective, it is important to know the impact of factors associated with Black-owned business performance and firm survival in order to racial wealth gaps in the country. That is, to understand what causes Black businesses to fail or exit from the market. This study becomes essential for policy makers and non-governmental organizations (NGO) to focus attention on efforts to support Black business ownership such as through minority-oriented grants and loans, and other tailored interventions. Evidence implied that funding for Black-owned businesses has been declining (Hydra et al, 2014; VEDC, 2015). For instance, SBA's flagship 7(a) program decreased loans to Black businesses by 35% in 2020, the largest drop in lending to any race or ethnic group tracked by the agency (Kish,2021). In general, systemic discrimination against Black businesses was impliedly acknowledge by the Treasury Secretary Janet Yellen, at the January 17 event marking Martin Luther King Jr. Day, "From Reconstruction to Jim Crow, to the present day, our economy has never worked fairly for Black Americans - or, really, for any American of color." This implies that U.S. policy has legacy issues that has become intergenerational,

which has hindered wealth creation/transfer among the Black racial group (African Americans - Broady, 2022). As recently as the PPP protection in COVID-19 pandemic, a study on the government's Payment Protection Program (PPP) revealed the existence of structural inequities in the administration of the program. This program was an SBA-backed loan with purpose to help businesses keep their workforce employed during the COVID-19 crisis, but its practical application was closely aligned to the legacy systemic discrimination.

1.10 Organization of the Study

This study is divided into seven chapters. The opening chapter (Chapter 1) sets the scene for the study by laying out the background to the importance of small businesses globally, with specific reference to the United States. The chapter also indicates the major challenges that confront small businesses, especially Black-owned businesses, in the United States, albeit briefly. The chapter also sets out the core research objectives – followed by critical research questions and hypotheses that the research addresses.

The next chapter (Chapter 2) provides an in-depth review of literature on small business studies around the world in general, and narrows it down into ethnic and minority entrepreneurship, especially in the United States. The chapter further explores existing conceptual and empirical understandings of small businesses. As such, the chapter reviews factors that influence small business success and the identified gaps in the existing studies, especially on racial deterministic factors with specific reference to Black entrepreneurship in the United States.

The methodological section of the study is presented in Chapter 3. The chapter illustrates the source of data, the type of data elements and variables involved, using advanced statistical approaches to address the research questions as a way of achieving the research objectives and ultimately testing the research hypotheses. The chapter also discusses in detail the method of analysis, particularly the choice of multivariate linear regression, logit models, and the Oaxaca-Blinder decomposition techniques.

The next chapters (Chapters 4 and 5) focus on the first aspect of the data analysis. In this phase, the study deploys descriptive analysis and presentation of the research findings using the PUMS raw cross-sectional data that adopted questionnaire survey in soliciting response from more than 26 million small businesses (26,392,237 small businesses) across the United States. Although

the dataset was collected in 2007, it remains the most recent and most comprehensive raw data on small business across the United States, and it is the only dataset that can be deployed (just as has been done in many recent studies) to achieve most of the objectives of this study (Heileman et al., 2016; Heileman and Pett, 2017; Heileman and Pett, 2018; Lafontaine et al., 2018; Kiefer et al., 2020; Oladipo et al., 2020). It must also be indicated that various other sources of recent dataset deployed in this study (not as elaborate as PUMS) suggest no meaningful changes from the 2007 documented realities across racial divides.

In this phase of the analysis, the characteristics of the business owner, their firm profiles, and outcomes are summarized in charts, percentages, and graphs in clear comparative fashions across racial background of business owners. The chapter also incorporates SBO data both prior to 2007 and the 2012 SBO data publications to compare if anything has changed substantially between 2007 and 2012. It also uses the 2018 and 2019 Annual Survey of Business on employer firms and the 2017 Annual Survey on non-employer firms to diagnose the pattern. In addition, the chapter lays the groundwork for Chapter 6 to perform critical statistical tests and analyses using further statistical models, which incorporates the use of more recent dataset in a set of confirmatory and robustness analyses.

In Chapter 6, the statistical models and procedures, as discussed in the research methodology section, are applied to test the research hypotheses in an effort to address the main research postulations. The major findings are highlighted, interpreted, discussed, and are substantiated in relation to other previous studies. The closing chapter (Chapter 7) summarizes the outcome of the study and discusses the policy implications of the findings. Based on the key findings, a set of recommendations for policy makers, small business agents, financial institutions, and other stakeholders are made. To conclude the chapter, the limitations of the study are acknowledged, and suggestions for future research are provided.

CHAPTER 2

A CONCEPTUAL REVIEW OF ETHNIC MINORITY ENTERPRENEURSHIP AND SMALL BUSINESS

This chapter reviews relevant literature on the conceptual understanding of ethnic/racial minority entrepreneurship. It begins with the conceptual appraisal of the main terms of interest in this study, namely ethnic, minority and immigrant entrepreneurship. The chapter proceeds to discuss a few of the dominant theories in this regard and presents arguments on why ethnic minorities venture into small businesses, as well as the challenges they face in the process. It discusses a broad spectrum of factors relating to the performance of small enterprises and a few of the performance measures are also discussed.

2.1 Understanding the Concepts of Ethnic Minority Entrepreneurship

The concept of ethnic minority in several literature often refers to immigrant groups. Scholars in the field of minority entrepreneurship mainly considered immigrant groups as minorities and plenty of literature considers immigrant population as minorities living in host country (Asante, 2018; Kazlou & Klinthal, 2019; Ram et al., 2011; Roth et al., 2012; Shin, 2014; Smith et al., 2012; Yazdanfar et al., 2015). In literature, various definitions for the term 'ethnic group' have also been suggested. According to Waldinger et al. (1990a:3), ethnic entrepreneurship is '*a set of connections and regular patterns of interaction among people sharing common national background or migration experiences*. Yinger (1985:27) also defined an ethnic group as '*a segment of a larger society whose members are thought, by themselves or others, to have common origin and to share important segments of a common culture and who, in addition, participate in shared activities in which the common origin and culture are significant ingredients*'.

Although the word 'ethnic' alternatively denotes 'immigrant' in the United States dictum, which include people who immigrated into the country over a few decades; this definition excludes, however, members of minority groups who have been living in the country for centuries, such as African Americans in the United States, Jews from Europe, or aborigines in general (Chaganti and Greene, 2002). According to Chaganti and Greene (2002), three terms are commonly used in reference to non-White entrepreneurs: *ethnic entrepreneurs, immigrant*

entrepreneurs, and minority entrepreneurs. Consequently, these concepts and their corresponding definitions are depicted in Table 2.1.

Table 2.1: Definitions Of "Minority" In the United States' Dictum

Concept	Definition
Immigrant Entrepreneur	An individual who as a recent arrival in the country, starts a business as a means of economic survival. This group may involve a migration network linking migrants, former migrants, and non-migrants with a common origin and destination (Butler and Greene, 1997a).
Ethnic Entrepreneur	"... a set of connections and regular patterns of interaction among people sharing common national background or migration experiences" (Waldinger, Aldrich, and Ward 1990, p. 3).
Minority Entrepreneurs	Business owners who are not of the majority population. U.S. Federal categories include Black, Hispanic or Latin American, Asian, Pacific Islander, American Indian, or Alaska Native descent. This group occasionally includes women.

As indicated in Table 2.1, the term "ethnic and immigrant entrepreneurs" are often used interchangeably, primarily due to the institutionalized framework that regards immigrant entrepreneurs as minority groups (Chaganti and Greene, 2002). This mantra possibility takes a cue from the middleman minority theory, which offers documented pioneer theoretical evidence on ethnic minority entrepreneurship (Fregetto, 2004). This theory provides the explanation that a minority group arrives in a geographical location where they are a recognizable minority; and as such are denied jobs in the main labor market. In order to survive, they turn to basic types of entrepreneurial activities of a specific type, mainly enterprises that require low capital outlay and less entry requirement (Greene, 2002; Fregetto, 2004; Aregbeshola, 2010).

The categorization of business approach tends to be "middleman" types of occupations, generally involving some type of trade. Another aspect of this theory relates to the fact that members of the immigrant group tend to collaborate strongly because of low integration into the host community, and inaccessibility of state support systems that would have galvanised some degree of allegiance. This component is largely referred to as social capital (Aregbeshola, 2010), and it also incorporates mutual solidarity into the considerations (Bonacich and Modell, 1980). The social capital that is generated through this process helps to mobile resources of all types and are circulated through the community (Butler and Greene 1997a). For some of these communities, the businesses created primarily serve the community as the communal market. These businesses also hire primarily co- ethnics, and the community functions as an ethnic enclave (Wilson and Portes 1980; Portes and Bach 1985; Nee and Nee 1986).

However, minority entrepreneurship as a caption fondly used in the United States does not have a theoretical basis, but it is used to describe all those entrepreneurs that are not qualified to be regarded as Whites (Chaganti and Greene, 2002; Greene and Owen, 2004). This implies that not all immigrant entrepreneurs are ethnically considered immigrant entrepreneurs, because such categorization excludes Northern European entrepreneurs. Minority entrepreneurs may or may not be immigrants and may or may not be ethnic entrepreneurs. The nuances of this categorization have prompted a few scientific enquiries. For instance, the Japanese-Americans in California (Light 1972; Bonacich and Modell 1980); Cubans in Florida (Portes and Bach 1985); Koreans in Atlanta (Min 1988); Chinese-Americans in New York (Zhou 1992, 1995); and Pakistani/Ismaili in Texas (Greene and Butler 1996). These community-level studies document the existence of patterns of relationships that assist business creation through some combinations of instrumental social capital and expressive support mechanisms.

It is noteworthy that a few studies have examined personal characteristics of business owners that are grouped according to their reported ethnicity (Bates and Furino 1985; Enz, Dollinger, and Daily 1990; Bates 1994) such as personal background, culture. values, and community linkages. Firm characteristics such as firm performance and sources of financing have also been reviewed by some interests (Bates 1994; Butler and Greene 1997a). This notwithstanding, Sithas and Surangi (2021) underlined the lack of standardized approach or a single unifying focus. Given this conundrum, studies that compare immigrants and minority entrepreneurs appears to blur an important distinction. Most authors tend to use the terms to identify two mutually exclusive groups. For instance, Light (1972) proposed to use "immigrant entrepreneur" to distinguish between the “first-generation immigrant entrepreneur and the second-generation ethnic entrepreneur”. Chaganti and Greene (2002) define "ethnic entrepreneur" as a function of the strength of an individual's identification with an ethnic enclave regardless of the longevity of generation. In a crystalized opinion, ethnic business begins when an entrepreneur begins serving other members of the ethnic community and satisfies their specific ethnic needs (Greene and Owen, 2004).

A second confusion is the use of surnames to identify ethnicity. Researchers have used ethnic surnames regardless of immigration status to measure immigrant and ethnic entrepreneurs based on data calibration on various entrepreneurship and national profiling. To complicate attempts made to define ethnic entrepreneurs further, Fairlie (1996) identified another component

as the sojourner entrepreneur. These set of entrepreneurs are regarded as immigrants who come to the United States to accumulate wealth rapidly and then return to their native countries. Therefore, such a person is not an immigrant seeking permanent residency, but rather to engage in trade and accumulate financial resources as quickly as possible before relocating back to the home country.

The complexity of calibrating this definition have made some scholars to argue that term used to describe or define ethnic minority or immigrant entrepreneurship overlooks the situation regarding Black African Americans. As cited in Gold (2016: 1684) Massey and Denton (1993) demonstrate that *"...being black is a much more powerful and longer lasting determinant of residential segregation and limited access to resources and life chances than is ethnicity*". Although some of the discriminations are associated with both racial and ethnic membership, these categories are hardly equivalent as a way of understanding social disadvantage, especially when it comes to entrepreneurial profiling (Gold, 2016). In practical terms, racial discrimination goes a long way in preventing blacks from acquiring resources of the sort associated with the most entrepreneurial ethnically defined groups.

To further convolute the fact that black immigrants are the most disadvantaged groups among all immigrant entrepreneurs, the U.S Federal Agency of Minority Business Development Agency (MBDA), which is dedicated exclusively to minority businesses, states that its "clients are U.S. minority business enterprises (MBEs) owned and operated by African Americans, Asian Americans, Hasidic Jews, Hispanic Americans, Native Americans, and Pacific Islanders." This agency was originally established by President Richard M. Nixon on March 5, 1969 (MBDA, 2022). Although most of these groups are categorized as minorities, it becomes inappropriate to refer to black entrepreneurs simply as minority entrepreneurs only without regard for further racial contextual understandings.

From the ongoing arguments, it can be deduced that scholars in ethnic entrepreneurship have built upon the rich foundation of the classics of Weber, Sombart, Marx, and Schumpeter to develop theoretical perspectives on immigrant, ethnic and minority entrepreneurs, and they have therefore, proposed several theories. However, there is little evidence of an emerging agreement on theoretical frameworks for the discussion on ethnic entrepreneurship.

2.2 Theories of Ethnic Minority Entrepreneurship

Research in ethnic entrepreneurship goes back to the classic works of Sombart (1914), Weber (1930), and Simmel (1950) - as documented by Volery (2007). This perspective was epitomized by the concept of "the stranger as trader" that nuanced social structure and religious norms – all that have influenced the scientific literature on ethnic entrepreneurship (Butler & Greene, 1997). Historically, certain immigrants were observed to excel in small trade engagements in the host country than the others. However, the mystery of why some ethnicity surpasses the other supposedly triggered Max Weber to question why Catholics in Germany had a lower rate of entrepreneurship than those in other European countries. This interrogation provided the fact that minority groups tend to turn to economic enterprises given the lack of choice in the mainstream economy (Cao, 2022). For Weber, the explanation lies in the Protestant ethic which encourages engagement with the secular world, including trade, leading to the accumulation of wealth through entrepreneurship.

Overtime, academic theories of ethnic entrepreneurship has evolved through various perspectives, namely economics, sociology, psychology, and anthropology (Renzulli, Aldrich and Moody, 2000; Smith-Hunter and Boyd, 2004; Simpeh, 2011). Although each of these theories have their own merits, the theories are largely tailed primarily to the field of sociology (Volery, 2007). The contributions of sociology are particularly emphasized and is often considered that ethnic entrepreneurship is a sociological phenomenon. This explains why the perspectives expressed in the preceding paragraphs are closely aligned to the cultural theory, the disadvantage theory, middlemen theory, ethnic enclaves, interactive model, as well as mixed embeddedness. Recently, cultural theory of race is emerging, which focuses on racial disparities of minority ethic group of black race.

Cultural Theory

The cultural theory of entrepreneurship is among the leading explanations for group differences in entrepreneurship. Its fundamental premise is that ethnic differences in business entry and success is associated with group differences in cultural norms and values that are essential for successful entrepreneurship – differences such as tendency toward risk taking, hard work, and delayed gratification (Fregetto, 2004; Volery, 2007). This suggests that some ethnic groups provide more resources that encourage entrepreneurial behavior and self-employment than others

(Fregetto, 2004). This theory implies, for instance, that by extension, minority (black) women business owners have been less successful than their white counterparts, because they have been hindered by cultural orientations that discourages their involvement in business as sole or co-owner (small-business ownership) (Smith-Hunter and Boyd, 2004).

Volery (2007: 31) also indicated that "ethnic and immigrant groups are equipped with culturally determined features such as dedication to hard work, membership of a strong ethnic community, economical living, acceptance of risk, compliance with social value patterns, solidarity and loyalty, and orientation towards self-employment" – all that have enhanced their possibility of success in entrepreneurial engagements These determination allows them to create awareness on vantage of such cultural resources and the benefits their cultural affiliation might offer after arriving in the new environment. The differences in ethnic resources act also as an explanation for the different rates of self-employment between equally disadvantaged ethnic groups (Waldinger et al., 1990a; Volery, 2007). For instance, some attributed the entrepreneurial tendency of Asians to cultural aspects (Haq, 2015). According to Leung (2002), many relate the predominance of Chinese in the catering businesses to certain cultural propensities that influence their engagement is this economic sector.

In a similar view, some scholars attribute low rates of black entrepreneurship engagement to lack of business tradition among this racial contraction. That is, a form of intergenerational weak apatite of black people who, over generations, have been largely reticent to engaging in buying and selling (Light 1980). Frazier (1957) 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. In his classic study (*Black Bourgeoisie, 1957),* Frazier contended that black business was of insignificant importance to the US economy and asserted that such enterprises were incapable of providing substantial employment or income to black Americans. Yet, Feagin and Imani (1994) have observed that overbearing focus on the culture and organization of minority groups have beclouded the focus of most academic investigation on minority entrepreneurship. Beyond the omission or discounting of racial discrimination in the self-employment literature, the claim (erroneously) 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).

Critics of this theory, however, emphasized its excessive focus on the characteristics of the minority ethnic group in explaining business entrepreneurship of its members (Volery, 2007; Vidicki, 2020). In other words, the cultural approaches completely neglected some other factors that might be of significance (Volery, 2007, p. 33). According to Gold (2016), the cultural theorists disregard institutional racism and discrimination, which act notably as major barriers to the mobility of blacks. Thus, theories attempting to compensate for the lack of cultural explanations have formed a new approach to entrepreneurship which is called a structural approach - the disadvantage theory.

The Disadvantage Theory

The disadvantage theory of entrepreneurship, proposed by Light (1979), suggests that individuals that face economic exclusion, disadvantages in the labor market, as well as discrimination (such as based on their race, ethnicity, gender, and age) acting as push factors, do propel minority groups' interest into entrepreneurship. This perspective states that structural characteristics of a society most often limit business activities of immigrants, which directs them to self-employment as a way of overcoming the existing obstacles (Fregetto, 200; Aregbeshola, 2010).

The thesis of blocked mobility is the basis of the explanations motivates entrepreneurial behavior of immigrants in response to institutional exclusion and social discrimination. This approach has been used to explain why immigrants and minorities often embrace entrepreneurship as an economic survival strategy (Light, 1979; Smith-Hunter and Boyd, 2004). Being disadvantaged, particularly being locked out of employment opportunities, or living on marginal wages, forces members of minority groups into entrepreneurship (Aregbeshola, 2010; Morris, Kuratko and Audretsch., 2020). As implied by Miller and Breton-Miller (2017:7), "some critical drivers of entrepreneurship come in the form of serious life challenges rather than personal advantages and strengths, or favorable contexts".

This theory has been used, under different contexts, to investigate entrepreneurship among racial minorities, women, and immigrants (Wilson et al., 1997; Boyd, 2000). However, the disadvantage theory plays a dual role when it comes to entrepreneurship. When minorities often have meagre economic resources, this disadvantage may deter them from entering business (Boyd, 2000). Even when they open their own firms, they are likely to encounter barriers, some of which

include expansion funds, legal hurdles, access to reliable and supportive lenders, and customer discrimination (Herring, 2004; Morris et al., 2020). Thus, disadvantage can act as a push factor as well as a deterrence to entrepreneurial success. According to Bradley (2016) ethnic minorities in the United States resort to small business activities to break the cycle of low wealth from being locked out of mainstream job opportunities, often compounded by lack of access to social capital, poor education, and systemic racism. Thus, small businesses are increasingly considered instrumental to break the cycle of low wealth among ethnic minorities by being an avenue to economic opportunities.

Notably, the disadvantage theory as applied to the participation of minority ethnic groups in entrepreneurship, challenges cultural theory suggesting that despite any cultural deficiencies that may exist, minorities have a strong desire to become self-employed often prompted out of necessity (Benson, 2016). However, this theory, which deploys a form of structural approach, suffers from the neglect of cultural characteristics of an ethnic group, while excessively emphasizing the impact of social factors.

Ethnic Enclave and protected market theory

The ethnic enclave's concept was introduced for the first time in the sociologic field referring to a geographic area with high ethnic concentration, characteristic cultural identity, and economic activity (Toussaint-Comeau, 2012). In 1981, Portes had developed this concept by defining the enclave economy as "immigrant groups which concentrate in a distinct spatial location and organize a variety of enterprises serving their own ethnic market and/or the general population" (1981:291). Portes's (1981) "immigrant enclave" concept has two requirements to exist: First, a critical mass of immigrant-owned business firms must employ a critical mass of co-ethnic workers. This means that an ethnic group needs to be relatively large and diversified in socioeconomic status, including at least a small number of members with sufficient economic resources to be able to establish businesses.

Second, spatial clustering of enterprises. An ethnic enclave must be spatially bounded from the main economy so that it can function internally as a labor market. Without a spatially bounded labor market, ethnic entrepreneurs cannot count on the availability of co-ethnic laborers, and ethnic laborers cannot count on co-ethnic employers. Certain human capital skills, such as ethnic

language, cultural knowledge, and social network ties to the place of origin, are important and marketable only in the internal labor market defined by an ethnic enclave.

The term ethnic enclave economy has come to stand for the economic advantage of location clustering (Light and Gold 2000). Some argue that one of the benefits of ethnic enclaves is protection from discrimination (Portes and Bach 1985; Zhou 1992). Accordingly, ethnic enclaves allow workers from discriminated groups to overcome the barriers for which they are excluded from the mainstream labor markets. As such, the process of ethnic enclave formation compensates for background deficits and discrimination that ethnic groups encounter in the general labor market. Examples of successful groups in ethnic enclaves include Japanese Americans in the early twentieth century (Bonacich and Modell 1980) and Cubans in contemporary Miami (Portes and Jensen 1992).

The concept of a protected market was highly relevant to black business enterprises in the pre-civil right era, when white entrepreneurs generally refused to cater for the personal service needs of minority customers. During this time, many personal services – especially those requiring intimate contact between provider and customers such as hairdressing and beauty culture, were left to minority business owners (Boyd, 1996). Although the protected market theory focuses, too, on the importance of special skill, it is concerned mainly with the distance between service providers and customers. First introduced by Light (1972), the theory proposes that the distinct taste, and culturally specific needs of ethnic minority groups can only be provided by co-ethnic entrepreneurs. Protected market theory, therefore, is especially applicable to black business owners who provide personal services that meet the needs of their community, such as barbering and hair styling. The theory posits that co-ethnic entrepreneurs are protected from the mainstream market due to reduced competition from other ethnic groups, intense group solidarity evidenced through strong patronage from co-ethnic clients, and the geographical clustering of minority groups, which has the potential to create an ethnic enclave economy.

However, critics of the theory emphasize that business in enclaves that are proscribed from reaching outside of the enclave will find it difficult to grow. Studies found for instance, that African American entrepreneurs conducting business outside the ghetto's protected market consistently outperform their counterpart’s doing business within it (Morris et al., 2020). With minor exceptions, the findings suggest strongly that African American entrepreneurs would be wiser to

orient their business activities outside rather than inside the ethnic enclave (Cummings, 1999). Furthermore, ethnic enclaves and the co-ethnic networks that they often produce have also been found to engender intense competition among migrant-led businesses, thus reducing opportunities and profitability (Fairlie and Loftstrom, 2013). Thus, the relation between ethnic enclaves and self-employment remains unclear.

It is, however, important to point out that ethnic enclaves could affect the rate of self-employment of an immigrant group in different ways. On the one hand, these enclaves often provide prime settings for immigrant entrepreneurs to capture the market for "ethnic goods"—products (and services) that appeal strongly to members of a particular group. On the other hand, enclaves may be negatively related to self-employment for other reasons: Entry by potential immigrant entrepreneurs may become relatively difficult as established immigrants could block the entry of more recent immigrants. Also, some enclaves may be economically poor areas where residents have lower purchasing power, possibly restraining the potential business growth (Toussaint-Comeau, 2012).

Middleman Minority Theory

The name "middleman minorities" indicates those entrepreneurial ethnic groups which assume the central position in society and perform the function of mediation between the dominant group and other subordinated minority groups (Karen and Saenz, 2008: 147). This term was used by Blalock (1967) in his work of *Toward a Theory of Minority-Group Relations*; and subsequently further elaborated by Bonacich (1973) in the study entitled *Middleman Minority Theory*. Middleman minorities are minority ethnic groups that "tend to concentrate in trade and commerce, but also other 'middleman lines' such as agent, labor contractor, rent collector, money lender, and broker" (Bonacich, 1973: 583). The occupational specialization of these groups is seen as being caused by a combination of factors, such as discrimination and the status gap (Cobas, 1988). The status gap is conceived as the *"discontinuity... which occurs when superior and subordinate portions of a society are not bridged by continuous, intermediate degrees of status."* (Rinder ,1958: 253). This discontinuity creates difficulty in the interaction between the majority and minority groups, particularly in market and trade (Cobas, 1988). Rinder (1958: 254) pointed out that *"since trade relations require that buyer and seller play complementary and interdependent roles, members of the upper strata must consider trade beneath their dignity*". Being excluded by virtue

of discrimination from other positions, middleman minorities move in and fill the status gap (Cobas, 1988). In addition to structural elements such as the status gap, Bonacich (1973), placed a heavy emphasis on a sojourning orientation as an antecedent to middleman economic specialization.

This theory explains the middleman minorities of the early 19th Century, such as the Jews in Europe, the Chinese in Southeast Asia (Light & Gold, 2000) and the Japanese on the West Coast of the USA (Bonacich & Modell, 1980). Being 'middlemen', these entrepreneurs linked the two cultures as they possessed the necessary language, networks and skills that led to high rate of entrepreneurship (Light in Dana et al., 2013). According to Bonacich (1973), these so-called middleman minorities are referred to as sojourners and they do not plan to permanently live in the host country. The impact of sojourning is that there is a tendency toward thrift and concentration in certain occupations. A further result of sojourning is high levels of internal solidarity. Middleman groups also utilize their strong family and ethnic ties for preferential economic treatment (Bonacich, 1973). However, many middlemen do not return to their homeland despite their initial intention to make such a return.

Even though the middleman minority theory provided an explanatory framework for some ethnic groups, it failed to resonate well with African American entrepreneurial experiences, mainly for two reasons. According to Greene et al. (2013), first, original members of blacks were not voluntary immigrant to the US but brought as slaves with almost no chance of returning to their homeland. Second, a series of governmental laws restricted their access to resources and markets. Nonetheless, there is a discernible tradition of African American business ownership that dates before the civil war and is best explained by a *truncated middleman theory* that recognizes the artificial detour taken by the group due to external influence of slavery and long-term discrimination (Butler, 1991). This detour is seen to have prematurely cut off a large proportion of the entrepreneurial tradition among African Americans. In many ways, the middleman minority theory in its pure and truncated version explains more about community development than individual business creation (Greene et al., 2013:242)

The middleman minorities theory has received criticism on the grounds that it places too much emphasis on situational factors by overlooking the role of cultural factors (Cobas,1988). The extent to which the theory can be fully applied to immigrant groups now is open to debate. For

instance, some groups which retain strong ties with the country of origin, such as Puerto Ricans in the United States, are not middleman minorities (Light 1979). The sojourning hypothesis of the theory is problematic as many middleman minorities in the United States have settled or intend to settle in this country while others are transnational migrants, maintaining ties in the countries of origin and destination. The inconclusiveness of this theory in explaining minority (blacks) entrepreneurial experiences in the United States necessitate looking at the interactive model.

Interactive Model

This model was developed by Waldinger et al, (1990) in effort to explain the complexity of ethnic entrepreneurship from a broader perspective. According to this model, the development of an ethnic business cannot be traced back to a single characteristic that is responsible for the entrepreneurial success of an ethnic group (Volery, 2007). The model presents an explanation of the interacting elements that are essential in ethnic business development and success. This model describes the relationship between shared cultural tradition and the opportunity structure, and the strategies ethnic minorities use to exploit these opportunities (Waldinger et al, 1990). These opportunity structures and group resources steer the strategies an ethnic entrepreneur has to employ so as to create business in a host county (Volery, 2007).

The dimension of opportunity structures consisting of the market conditions such as opportunities and access to the labor market and institutional frameworks, are considered the bedrock of consideration. These opportunities are borne out of the evolution of a new ethnic community that has specific needs which can be met by co-ethnics (Volery, 2007). The greater the cultural differences between the ethnic group and the host country, the greater the need for ethnic goods and the bigger the potential of creating a niche market.

However, no matter how big the niche market is, the opportunities it offers are limited. Access to open markets, which are typically occupied by local entrepreneurs, is often blocked through high entry barriers, either on a financial or on a knowledge basis. But not all industries in Western economies are characterized by mass production or unattainable know-how. According to Volery (2007), especially markets with low economies of scale, such as the taxi industry, can offer opportunities which immigrants can successfully pursue. Further potential lies in markets either underserved or completely abandoned by the locals, because of insufficient returns and strenuous working conditions. On the other hand, immigrants and ethnic people of the same origin

can take advantage or draw on the resources provided by their cultural traditions and ethnic social networks to lessen the disadvantages they encounter in the host country (Waldinger et al. 2006; Volery, 2007).

However, Volery (2007) suggests caution not to overemphasize the role of culture (2007) but underlined importance of family and ethnic networks as resources. Thus, this interaction of opportunity structures and ethnic resources helps the development of ethnic entrepreneurship. For instance, strong ethnic networks could influence and harness the opportunity structure. Entrepreneurs could employ ethnic strategies when facing specific problems resulting from the interaction between the opportunity structures of the host society and the characteristics of their group (Volery, 2007). The problems ethnic entrepreneurs must contend with include the gathering of information, capital, training and skills, human resources, customers and suppliers, competition, and political attacks (Boissevain et al., 1990).

Although the framework incorporates relatively broad factors, critics of this model question its relevance in the context of migration to developed economies. This model of Waldinger et al (1990) was framed in the context of "Cuban refugees in Miami", Chinese and Korean immigration to the USA; and it focuses specifically on immigrant minorities. The expanse of the model does not apply equally to all racially minoritized entrepreneurs, especially for native black African Americans. Furthermore, Light and Bhachu (1993) argue that the Interactive Model tends to ignore the impact of the host country characteristics by indicating that immigrant entrepreneurs could have good connections with non-ethnic networks to mobilize and operate their enterprises. Furthermore, it has been pointed out that the model does not take account of the complex issue of regulatory and policy framework (Oliveira, 2007). Likewise, Kloosterman and Rath (2003) criticize the model as implying its assumption of all ethnic businesses are naturally different from the mainstream businesses. Given the inherent weaknesses identified in this model, the mixed embeddedness model is then evaluated.

Mixed Embeddedness Model

The mixed embeddedness is a further refinement of ethnic resources and opportunity structure by Kloosterman and Rath (2001) to account for the host country-specific institutional frameworks. This model suggests that immigrants are not only belonging to ethnic networks, "they are also entrenched in specific market conditions, socio-economic and politico-institutional

environments" (Peroni et al., 2016: 642). The model considers that the structures of a local economy and legal–institutional factors exert a strong influence on the creation and existence of the small business economy in general (Volery, 2007). The impact of these factors on the access of immigrants to small business is even greater (Razin, 2002). By and large, scholars in the field of immigrant entrepreneurship research based their arguments on the mixed embeddedness theoretical approach (Kloosterman and Rath, 2018).

However, scholars such as Volery (2007), argue that the economic environment differs widely on a national scale, offering substantially different opportunities from one region to another. In later work, *Mixed embeddedness revisited: A conclusion to the Symposium*, Kloosterman and Rath (2018) acknowledged that opportunity structures in various setting/environments differ. Specific cases of continental European welfare and those in Great Britain and the United States were mentioned and discussed. Opportunities for businesses are in essence about markets and national contexts are instrumental in shaping the division of labor regarding allocation through market, state, family, or commons (Raworth, 2017) as well as in regulating access to these markets in terms of educational and/or qualifications (Kloosterman & Rath, 2001).

Furtherance to this discussion, the mixed embeddedness model considers that immigrant entrepreneurs economic engagements are embedded in social structures at three levels:

(a) the micro-level of individual human capital and ethnic social capital,

(b) the meso-level of opportunity structure offered by the local economy, and

(c) the macro-level of larger politico-institutional environment (Kloosterman, 2010; Kloosterman et al., 2016).

At the micro level, the approach considers individual resources that immigrants bring to the host country such as human or financial capital. At the meso-level, access to social and ethnic capital is found to facilitate creativity. At the macro level, emphasis was placed on the fact that the meso-level opportunity structure is affected by the broader politico-institutional factors in the host country (Kloosterman 2010).

Nonetheless, critics indicated, by focusing just only on these three level factors from the host or destination country, the mixed embedded model overlooks the structural conditions in the

country of origin, which may act either as constraint or enabling factor on the success of an entrepreneur (Zhu et al. , 2023). Some authors (Collins, 2002; Jones et al., 2002; Peters, 2002) believed the model is still in an experimental stage and the validation of the phenomenon has not yet gone beyond descriptive case level. Furthermore, although immigrant entrepreneurs are commonly referred to as ethnic entrepreneurs, the approach lacks the framework to explain native born racial minorities such as native black African American entrepreneurs. This might fundamentally stem from the fact that; the mixed embeddedness model was originally conceptualized on the basis of the experiences of immigrants in advanced welfare states such as the Netherlands that structurally differ from United States (Kloosterman and Rath, 2018).

Critical Race Theory

Recent studies on African American entrepreneurship are inclining on the emerging theory of critical race theory (CRT) that seeks to identify the structural factors contributing to racial inequalities in business (Gold, 2016; Poole et al., 2021). Critical race theory was first developed by legal scholars in 1989 as an offshoot of legal studies. It was Kimberle Crenshaw that coined the term "Critical race theory" and "intersectionality" in 1989 (Crenshaw, et al., 1995; Delgado and Stefancic, 2000). The core of idea tenets of CRT suggests that both race and racism are socially constructed, rooted within underlying institutions so that racism becomes an important component of business decision making (Delgado & Stefancic, 2017 as cited in Gold, 2016). This theory suggests that various institutions in the United States are characterized by racism that is embedded laws, regulations, and institutional procedures that have strong deterministic properties on the outcomes of business ventures based on racial profile (Ray and Gibbons, 2021).

Putting CRT into theoretical perspectives with other previously discussed theories, Golden (2016) suggests that prevailing theories on minority entrepreneurship fail to categorize black Americans as a racial group, but rather as a cultural or ethnic group. These theories fail to capture the greater impact of racial inequality obstructing entrepreneurial success of black Americans as a racial group. It is further argued that the cultural theorists, for instance, do not acknowledge the impact of racism on black entrepreneurship. Likewise, despite the interactive and mixed embeddedness of the models that revolve around contextual factors (such as the nature of markets, local and national government policy) in an attempt to capture bigger structural issues, and to acknowledge disadvantages, these models too do not account for the unique impact of race that

limit blacks from becoming successful entrepreneurs unlike those who are able to access significant resources and enjoy positive contexts of reception (Gold, 2016). As Gold (2016: 1693) explains.

> … a number of social theorists and activists have emphasized the ability of disadvantaged groups to achieve financial success through minority entrepreneurship.... Many of the groups known for their entrepreneurial success were able to obtain assets due to their ethnicity, class background, education, co-ethnic communities, and country of origin ties. In contrast, black Americans not only bear significant disadvantages but also have limited access to resources because of their race. Many of these disadvantages are unique to American blacks or were not experienced to the same degree by other racial and ethnic groups.

Gold (2016) asserts that black entrepreneurs are disadvantaged because of their race and, consequently, they have difficulty gaining access to critical resources, such as finance. The CRT seeks to understand the role that race plays within entrepreneurship. As such, its underlying premise suggests that racism is pervasive, institutional, and systemic, advancing a narrative of supremacy, inequality, and discriminatory practices. This argument was also advanced earlier by Valdés, Culp, and Harris (2002). Although several scholarly works are prevalent in education, the application of CRT in the field of entrepreneurship remains in the embryonic stage. Brown (2022) in the work entitled *Entrepreneurship Challenges of Black African Caribbean Diaspora (BACD) in the United Kingdom,* used the lens of critical race to examine the entrepreneurship challenges faced by the black, African, and Caribbean Diaspora in the United Kingdom. In a similar study, Garcia and Baak (2022) also critiqued that existing business literature homogenizes the racially minoritized business owner regardless of race/ethnic origin and categorizes them as lacking in comparison to White entrepreneurs.

Nonetheless this theory is divergent from mainstream entrepreneurship. Gold (2016) acknowledges this:

"*… CRT offers few easy solutions. The kind of actions that it calls for to undo society's long standing and deeply rooted racial inequalities – such as the implementation of affirmative action, reparations, set-asides, anti-racist social movements, generous social spending, and legal activism on behalf of racialized groups – demand sacrifices from the white majority*".

Accordingly, CRT challenges mainstream outlooks, receiving criticism and creating ideological divides. In an earlier study, Delgado and Stefancic (2000:3) asserts that this theory

queries the fundamentals of liberal order, such as equality theory, legal; reasoning, and even the structure of constitutional law as regards incremental progress that is embedded in those doctrines.

From the ongoing, the different theories presented in preceding subheadings have made specific contributions in the conceptualization of minority entrepreneurship. Each of these theories and models ranging from the classical cultural and structural approaches to the evolving critical race theory provide their unique perspectives. Some of these theoretical explanations are complementary to one another, and yet some are excessively oriented towards one aspect of this complex phenomenon. However, sufficient, and conclusive understanding of ethnic entrepreneurship has not yet been attained. It appears the approaches vary both in the context of time and place, while ethnic entrepreneurship remains a scientifically relevant problem as it is increasingly dynamic and current.

It is noteworthy that the theories discussed in the preceding paragraphs largely overlooked the unique historic background of black African entrepreneurs in contrast to other minorities. The issue of racial disparity and small business performance therefore could also be laced with that dominant experience of the historical past that is unique to the black racial group. In this regard and given that the basic focus of this research focusses on the disparity in performance of small business owned by different racial groups, the deployment of an appropriate tool that sheds light on the understanding of small firm performance will be helpful. However, each of the theories discussed above primarily attempts to enlighten our understandings of why minority groups would venture into establishing a small business, rather than unveiling the causes of persistent divergence in business outcomes based on racial profile and characteristics of small business owners.

In modern times, literature on ethnic minority businesses have evolved across the world, notably in the United States (Fairlie and Robb, 2008; Bates, 2011; Bates and Robb, 2014) and the United Kingdom (Ram and Jones, 2008; Jones and Ram, 2011; Ma et al., 2013), particularly in recognizing the strategic economic roles of these set of businesses. The renewed awareness was largely due to the increasing contribution of minority businesses to economic growth and the strong entrepreneurial success shown by ethnic minorities, particularly of Asian origin (Bates, 2011; Haq, 2015). At the same time, it has been documented that minority owners face myriad of barriers in their attempt to grow and expand their business beyond the confines of communal relevance (Fairlie and Robb, 2008; Bates and Robb, 2014; Freeland and Keister, 2016). Scholars

have argued that minority business owners in general had less access to financial institutions than their non-minority counterparts for business loans and various expansion aspirations (Aregbeshola, 2010; Asiedu et al. 2012; Bates and Robb, 2014; Palia, 2016; Fairlie et al, 2020). Federal Reserve Bank (2017) and Fraser (2009), for instance, found that ethnicity was a significant factor in discouraging blacks in seeking loan from financial institutions.

In the United States, the paucity of minority-owned businesses in general and black-owned businesses, in particular, is well documented (Cole and Mehran, 2011; AEO, 2016). It is considered important to note that blacks make up the third largest population in the United States (US Census Bureau, 2015), yet they owned merely 7 percent of all US firms (SBA, 2015). This is particularly worrying, especially given the poverty rate within this community, hence the need for a study of this nature. Notably however, the main motivation for this study is not only because blacks are underrepresented in US business ownership, but their businesses also perform less than those of other major racial categories (Fairlie and Robb, 2008; Kaufmann Foundation, 2016; Association for Enterprise Opportunity (AEO), 2016).

More importantly, black-owned startups in the United States are three times less likely than white-owned startups to have loan approval, even when they have equal level of wealth and credit score (Fairlie, Robb and Robinson, 2020). Empirical findings show that black-owned businesses tend to be small in size and undercapitalized as compared to businesses owned by their white and other minority counterparts (Association for Enterprise Opportunity (AEO), 2016; McManus, 2016). Thus, the prevalence of disproportionate hinderances underpinned by varied racial profiles likely suggests that racial disparities is a strong determinant of varied business outcomes/performances.

2.3 Conceptual Approaches to Small Business Performance

Understanding business performance in today's economic world is a critical subject matter for researchers and business managers. Despite the well-recognized importance of small businesses, in the extant literature there is no universally accepted definition of business success (Lampadarios et al., 2017; Radzi et al., 2017) nor on the definition of small business (Aregbeshola, 2010; Gupta et al., 2013; Haq, 2015; Lampadarios et al., 2017). Some, in management research, equate business success with business growth (Mensah, et al., 2007; Isaga, 2018), while others relate it to business performance (Islam et al., 2011; Wang and Wang, 2012), which is usually

denoted by a firm's ability to yield desirable outcomes. Nonetheless, the use of performance metrics has its own complex dimensions of understandings (Radzi et al., 2017), especially because it includes financial metrics such as return on assets, sales, profits, job creation, and firm survival, as well as non-financial metrics focusing on qualitative aspects such as customer satisfaction, personal goal achievement, independence of style and quality of life (Islam et al., 2011; Lekovic and Maric, 2015).

In existing empirical studies, the choice of performance measures depends on the context of the research and data. For instance, Fairlie (1999; 2008), using the 1992 US Census CBO data, analyzed business outcome using firm annual sales, profit, and business survival. In a similar study in Kenya, Lucas (2017) used firm revenue to analyze the impacts of demographic and social factors on small firm performance; and Essel et al. (2019) in Ghana, used sales revenue and number of employees as measures of performance. Usually, small businesses are noted to be unwilling to reveal information on their actual financial performance and this precipitated scholars also to consider qualitative or subjective measures to gauge business performance (Zulkiffli, 2014). In instances where the context and data are allowed, researchers used both types of performance measures. The issue concerning the contents of success, conceptualizing it, and measuring small firm's performance remains open and is an ongoing subject matter (Lekovic and Maric, 2015). This complexity influences the approach deployed in this study, where secondary data is utilized with considerable measurable indicators of quantitative business outcomes/performance measures.

Existing studies not only focus on assessing business performance but also on theoretical frameworks to capture factors that determine such an outcome. One such proposition in business literature is the resource-based view (RBV) (Ismail et al. 2014; Rahman and Ramli, 2014; Essel et al., 2019). This theory was initially suggested by Wernerfelt (1984) and later expanded by Barney (1986). The RBV perspective of the firm is recognized as the most influential framework for understanding strategic management (Barney, 2001) and is used to describe and operationalize constructs of competitive advantage. The RBV states that firms differ from one another as each firm is unique in the resources it owns. Thus, differences in their internal resources equip competitive advantages where some firms could outperform others (Essel et al., 2019). The theory fundamentally suggests resource heterogeneity as necessity and assumes at least some resource bundles and capabilities underlying production are heterogeneous across firms (Alvarez and Busenitz, 2001). In this study, resource endowments are considered racially restricted and access

to critical resources is strongly influenced by racial profile. This assumption is based on the theories reviewed in the previous paragraphs.

These resources include both tangible and intangible. The resources of a firm include assets, capabilities, organizational processes, firm attributes, information, and knowledge possessed by a firm that enables the firm to conceive of and implement strategies that improve its efficiency and effectiveness (Essel et al., 2019). According to Barney (2001), such performance is generated from unique sets of resources that are not easily imitated and substituted. Thus, the differentials in the possession of resources among firms is the fundamental premise of the RBV theory. The RBV suggests that competitive advantage and performance results are a consequence of firm-specific resources and capabilities that are costly to copy by other competitors (Nikolaos et al., 2009:179). The RBV has been applied to understand the performances of businesses of all sizes: Ahmad et al. (2018) and Essel et al (2019) in small firms; Degravel (2012) in medium size firms; and Wernerfelt (2013) in large firms.

The literature review suggests that studies have generally used the RBV as the base approach to describing the resources required for a company of any size to achieve success in any area of business. However, this generalized application raised critical questions (Tehseen et al., 2019). For instance, Tehseen et al. (2019) argue that this approach, which considered that firms with rare, non-imitable, valuable, unique, and non-substitutable resources will outperform firms that do not own these resources, better fits to study large business than small firms. According to Tehseen et al. (2019), although small firms are common, they are unique, and their characteristics is different from large businesses. Tehseen et al. (2019) indicate that considering the context of small businesses is essential, as they are common types of business that need common resources.

However, and considering the fact that proponents of RBV hold that competitive advantage is best achieved by exploiting internal resources (strength and weakness), also brought critics who place more emphasis on external factors (threats and opportunities) – strategic planning, regulatory policy, and the activity of market competition. Thus, the likelihood is that significant amounts of business success can rely on both factors, even though studies have indicated that internal resources are indeed more important with regards to competitive advantage and overall business performance. Given the fact that both endogenously imbibed, and exogenously imposed conditions

are critical in determining business outcomes/performance, it makes a good academic sense to then suggest that RBV offers a unique theoretical underpinning to this study.

On the other hand, a profound review of extant literature by Lampadarios et al. (2017) suggests that, despite the efforts toward a unified theory, there has been no universally accepted model to include all factors of business success, with business literature featuring a wide range of success factors through several conceptual frameworks and with knowledge being more fragmented than cumulative. A success factor that appears to be relevant in the context of one country or business type might not be equally relevant in another country or industry (Smallbone et al., 2010; Unger et al., 2011; Simpson et al., 2012; Lampadarios et al., 2017). The extensive work of literature review by Lampadarios et al. (2017), entitled "Towards a new framework for SMEs success: a literature review", which was published in 2017 in the *International Journal of Business and Globalization*, deliberated on small business success literatures from early 1990 to 2014. Based on the review, Lampadarios et al. (2017) consolidated the evidence to provide a more holistic view on small business success or factors contributing to small business failure as well. According to this review, a considerable amount of research suggests that the factors of small business success can be grouped into three broad categories: factors relating to the individual (personal or entrepreneurial), factors relating to the firm (enterprise), and factors relating to the business environment.

Plenty of empirical studies suggest that small business outcome is directly influenced by individual determinants, external factors, and firm characteristics (Lin, 2006; Krasniqi et al., 2008; Kader et al., 2009; Alfaadhel, 2010; Karpak and Topcu, 2011; Lampadarios et al., 2017). To this extent, a clear understanding of the role of racial profile in determining business outcomes in the United States would not be comprehensive enough without looking at the racial profile of business owners, their immigration statuses, business characteristics, region of business operations and gender. The combination of these robust deterministic components makes this study unique and novel in the body of documented study.

2.3.1 Framework of Factors of Small Business Performance

Thus, the framework adopted from Lampadarios et al. (2017) also appears to include important attributes that are consistent with the RBV theory in examining internal resources (tangible or intangible) as well. These factors (owners or entrepreneur factors, firm,

environmental/institutional) are considered to influence business performance in sales revenue and firm survival status.

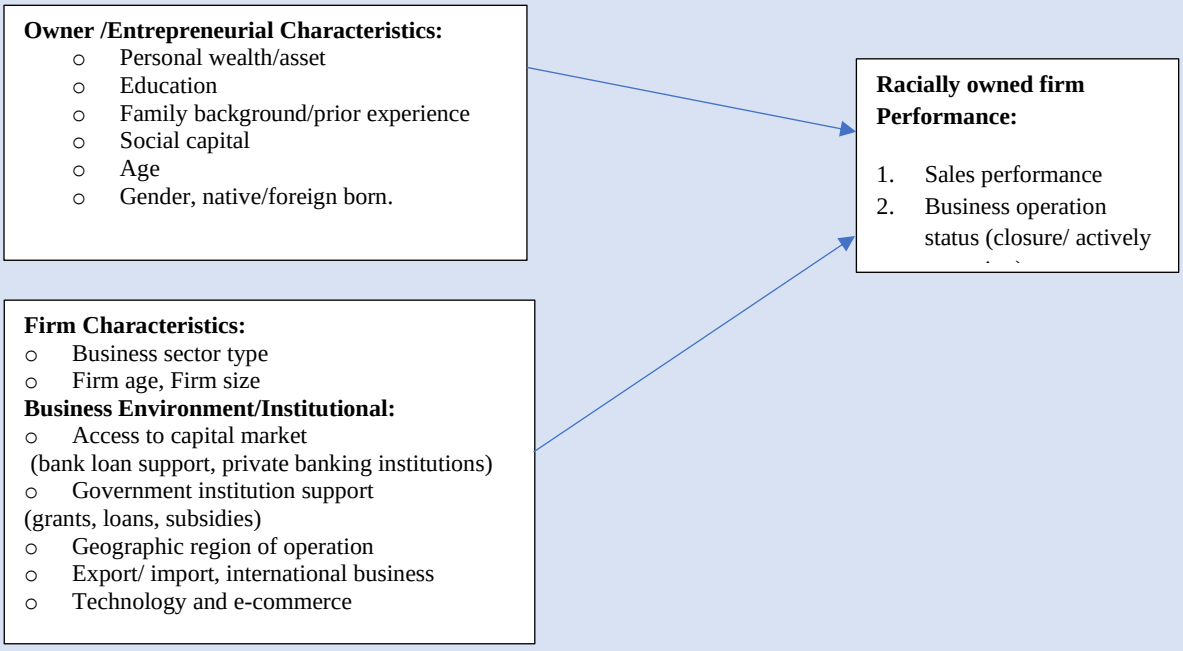


Figure 2.1: Conceptual Framework of the Effects of Entrepreneurial, Firm Characteristics, and Environmental Factors on Business Performance.

Source: Adapted and modified from Lampadarios, E., Kyriakidou, N. and Smith, G. (2017). Towards a new framework for SMEs success: a literature review. International Journal of Business and Globalisation, 18(2), p.194.

Looking at Figure 2.1 from a firm's perspective of resource possession, variances both in tangible and intangible resources are inherently associated with entrepreneur characteristics (assets, age, experience, human capital/education gender), firm characteristics (size or firm age), and institutional factors such as access to capital market, likely results in differences in business performances. Furthermore, conceptualizing and examining business outcomes/performances along contrasting racial lines would likely illustrate disparities in the possession or lack of these critical factors of business performance.

Thus, according to figure 2.1, those characteristics are considered as determinants of performance of small business where performance is measured in sales and business survival, separately. For instance, education attainment of a business owner (Black, White, Asian or Hispanic) is deemed to affect business performance, and it may result in widening wealth gaps

across racial lines. As will be discussed in the next methodology chapter (chapter three), the differences in other business owners' characteristics (between black and white, black and Asian, as well as between black and Hispanic) reveals the business performance disparity associated with each racial group. The conceptual thinking that emanates from Figure 2.1 captures the measurable indicators of business outcomes that are underpinned by racial profiles, and conspicuous gaps within these groups, as well as how much each factor contributes to the divergence in business performance/outcomes. The following section reviews existing literature on how the aforementioned factors are relevant in small business studies in general.

2.4 Business Owners Characteristics

The socio-demographic, economic, and family background characteristics of business owners, such as personal wealth, education, gender, family background, and past business experience, are considered important determinants of business outcomes/performance as indicated in the previous paragraph. In the paragraphs that follow, these demographics will be discussed to highlight their specific relevance to this study.

2.4.1 Asset/Wealth

Literature documented that personal wealth is a critical factor for the success of small businesses. Entrepreneurs with liquid assets are believed to have less difficulty in securing startup capital (Aregbeshola, 2010; Palia, 2016; Fairlie et al., 2020). They can also obtain larger business loans at a lower interest rate, which puts them in a favorable financial position for success. On the contrary, entrepreneurs with low personal wealth aspiring to start up their own businesses would likely encounter substantial hurdles to borrow external funds. Economists have investigated this phenomenon under the liquidity constraints theory. The theory proposes that the decision to become an entrepreneur is contingent on an individual's net worth (Frid, Wyman and Coffey, 2016). To the extent that the theory of liquidity constraints holds true, the business owner that lacks personal wealth would be faced with hurdles that could frustrate the process of transforming a viable opportunity into a successful new venture. Given that this scenario is widespread (Aregbeshola, 2010; Frid, Wyman and Coffey, 2016), entrepreneurship as a means of upward socioeconomic mobility would be limited to those with the prerequisite personal net worth (Frid et al., 2016).

Minority business owners, particularly blacks, have conspicuously lower levels of net worth, home ownership, and startup capital (Association for Enterprise Opportunity (AEO), 2016; Fairlie et al., 2020). Robb (2014), using US Census data, estimated that an average black person had the least level of wealth, estimating that their wealth level is 8 percent of the white non-minority wealth level. Furthermore, studies indicated that startup capital has a significant impact on business success (Fairlie and Robb, 2008). This low level of wealth is a major hurdle for blacks. It is of interest to further note that entrepreneurs with lesser size of startup capital are forced to enter into business sectors or industries with low capital requirements, yet with higher failure rates as their business could not buffer losses (Kauffman Foundation, 2016).

2.4.2 Education

An entrepreneur's achievement in education is found to contribute to the success of a business (Lofstrum at al., 2014; Lucas, 2017). Several explanations were provided on how education impacts business outcomes. Besides being an input for the creation of wealth, education enhances critical business skills like accountancy, customer service, and business management (Barringer and Jones, 2004; Fairlie and Robb, 2008; Lofstrum at al., 2014; Lucas, 2017). Educated business owners are found to have better understanding and skill to navigate through the complex business environment and are able to survive even in a volatile market (Lucas, 2017). To further this argument, Lucas (2017) documented a positive relationship between owner's level of education and revenue of their firms.

Similarly, Welsh et al. (2018) also indicated that higher education enhances entrepreneur's capability to cope with problems. Saidi et al. (2017) and Mozumdar et al. (2020) noted that educated entrepreneurs makes quality decisions that minimize the likelihood of business failure. Fairlie and Robb (2008) found that college graduate business owners had 25 percent higher sales and low failure rates than those owned by high school dropouts. According to Fairlie and Robb (2008), those firms owned by more educated managers have also been found to be larger in size and more successful. However, mainly due to the large wealth gap perpetuated by the cycle of meager intergenerational wealth transfer, black business owners generally have limited ability to access quality education, which is documented in this paragraph as an essential input for a successful entrepreneurship (AEO, 2016).

2.4.3 Family Business Background and Past Experience

The role of family background in entrepreneurship is well documented in business literature, where family business is regarded both as a provider of financial resource (Le Breton-Miller and Miller, 2018) and a training basis for future generation entrepreneurship (Mueller, 2006; Chaudhary, 2017). According to Carr and Sequeira (2007), entrepreneur families expose their children to entrepreneurship through the process of socialization and this intergenerational influence contributes to entrepreneurship intentions. The authors also argued that being raised in a business-oriented family exposes an entrepreneur to the business world and instills essential values like the culture of economic saving and competitiveness, which are critical for triumphing and surviving in business (Carr and Sequeira, 2007).

Lindquist et al. (2015) indicated that children who grew up with entrepreneur parents had a greater tendency to choose a self-employed career, and their tendency to be successful is notably high. The authors also contend that parental entrepreneurship increases the probability of children's entrepreneurship by about 60 percent (Lindquist et al., 2015). Fairlie and Robb (2007) showed that most of the successful entrepreneurs tended to have a self-employed mother or father in their family history. This suggests that parental role modeling is advantageous for entrepreneurial orientation and intention.

Le Breton-Miller and Miller (2018) indicated that entrepreneurs with family business background have less costly access to financial resources to open their businesses – resources that are difficult to secure from banks or other financial institutions, especially given that financial institutions would tend to fund take-ups at higher interest rates or decline loans altogether. Family provides critical resources of financial and human capital for running a firm. Empirical studies also documented that family-owned and operated businesses have better outcomes/performances than non-family businesses (Heileman and Pett, 2018).

Past business experience is also an important factor for the success of small businesses (Fairlie and Robb, 2008; Mothibi, 2015; Carranza et al., 2018). Carranza et al. (2018) found that longer previous entrepreneurial experience has a positive impact on business performance. Researchers such as Gray (1998) believe that the major factor for the failure of younger firms is entrepreneurs' lack of experience. Muogbo and John-Akamelu (2019) and Shakeel et al. (2020) argued that previous experience provides entrepreneurs with the knowledge and skills required to

identify and exploit opportunities, assess market trends, and intuitively make decisions pertaining to customer needs as well as competitors' moves, which a new or novice entrepreneur lacks. Entrepreneurs with prior business experience are also highly likely to have a business network of customers and suppliers that enable their firms to succeed (Winter et al., 2004).

2.4.4 Social Capital/Network

Although it was argued in the previous paragraph that the success of business relies on resources including financial and human capital, the role of social capital is considered in this paragraph. The role of social capital in small business has become an increasingly prominent research topic in business studies (Aregbeshola, 2010; Williams and Krasniqi, 2018; Yani et al. 2020). According to Schlepphorst et al. (2020), social capital is the resource available through a network of relationships owned by individuals or groups. Social resources can also be converted into useful capital (Hsiao, Lee and Chen, 2016). These network resources include information, financial capital, skilled labor, knowledge, physical resources, emotional support, and advice that can be obtained from social interactions (Reynolds and Curtin, 2008; Yani et al., 2020). Studies by Felício et al. (2014) and Kamaluddin (2016) documented that social capital is an influential factor for business success. The same sentiment was expressed in an earlier study by Aregbeshola (2010).

Social capital broadly involves relationships of trust and reciprocity that are rooted in social networks (Halpern, 2005; Ostrom, 2009). It favors entrepreneurs to generate and mobilize assets through networks (Nahapiet, 2009; Aregbeshola, 2010). Social networks help businesses to build their customer and supplier base, as well as improve access to debt and equity finance (Barr, 2015). Such networks are especially useful for new and small size businesses.

Existing studies suggest that ethnic entrepreneurs exploit social ties, family networks, and ethnic identity resources as their social capital, not only to gain financial resources but also to access business information, and to exploit market opportunities to start up and grow businesses (Light and Bonacich, 1988; Aldrich and Cliff, 2003). However, like financial and human capital, social capital is taken advantage by and is more available among affluent segments of society (Acs and Kallas, 2007; Thompson et al., 2012; Williams et al., 2017). According to Barr (2015), minority-owned businesses more often have trouble to access and build business networks than non-minority businesses. Despite the lack of contemporary research on social capital in the United

States, Fratoe (1988) found the prevalence of differential in social capital between black business owners and those of other ethnic groups. In the study, it was further argued that black business owners have had less exposure to entrepreneurial role models and training in firms run by close relatives than Asian, Hispanic, or non-minority male owners. Furthermore, Fratoe (1988) suggests that black small business owners do not rely on relatives or friends for business loans to the same extent as Asians. That is, black firms are more inclined to start businesses with personal savings than relying on their social capital for funding.

Furthermore, Frantoe (1988) suggest that black business owners are likely to sell to minority customers, hire employees from their minority ethnic groups, and are the least likely to be married; thereby implying less support from the key family network. More worrisome is the fact that black business owners largely show less reliance on moral supports from their ethic group than the other groups. Kim (2019) also found that male entrepreneurs exploit social capital in growing their businesses more than their female counterparts. Likewise, Neumeyer et al. (2018:483) in their study entitled *Entrepreneurship ecosystems and women entrepreneurs: a social capital and network approach*, found that female entrepreneurs that identify as ethnically white, had a higher degree of network connectivity, and very more easily access social capital, than black female entrepreneurs. The authors further contend that women entrepreneurs have a lower degree of social capital than their male entrepreneurs.

2.4.5 Demographics

From Figure 2.1, it is proposed that a range of demographic characteristics have been considered to have an influence on ethnic small businesses, such as age, gender, being a native or a foreign born, as well as language fluency. Among these many characteristics, existing empirical studies commonly focused on the influence of gender (Fairlie, 2008; Mothibi, 2015; Essel et al., 2019; Kim, 2019), immigration status (Fairlie, 2012; Fairlie and Lofstrom, 2014; Kerr and Kerr, 2016), and age (Fairlie, 2008; Lucas, 2017; Essel et al., 2019) of an entrepreneur to business outcome. Each of these identified demographics will be discussed in the paragraphs that follow.

2.4.5.1 Gender

Several studies have investigated the role of gender in small business success (Fairlie, 2008; Mothibi, 2015; Lucas, 2017; Essel et al., 2019). Empirical findings on gender disparity in business outcome are mixed. Evidence (Rodríguez-Gulías et al., 2018) suggest that female

entrepreneurs underperform male entrepreneurs even after controlling for many factors and demographic differences. Some argue the differences could be due to other factors like firm size, sector type, startup amount, or organizational structures (Amoroso and Link, 2017; Artz, 2017; Rodríguez-Gulías et al., 2018). Another line of research investigates the structural reasons behind differences in business outcome along gender line. For example, female entrepreneurs are found to be more likely to start up their business in low profit and unskilled service and retail sectors due to gender segregated education, labor market segmentation, and domestic responsibilities (Lee and Marvel, 2013; Marlow and Dy, 2017; Kim, 2019). However, Hardy and Kagy (2018) noted that even when male and female entrepreneurs operate in similar industry, the disparity in favorable business outcome tilts strongly towards males than females.

Evidence also suggests that women in general, minority women in particular, are lagging behind their male counterparts in rates of business ownership as well (Kim, 2019). In addition, women-owned business is found to be smaller in size than male-owned business (Aregbeshola, 2010; Cole and Mehran, 2011). On access to funding, it is further observed that gender barriers and stereotypes disadvantage women business owners in securing business loans (Roper and Scott, 2009). Cole and Mehran (2011:3) found that "female-owned firms are significantly more likely to be credit-constrained because they are more likely to be discouraged from applying for credit and more likely to be denied credit when they do apply." According to social capital theory, female entrepreneurs lack strong networks and resources to important business opportunities. Kim (2019), analyzing income dynamic data in the United States, found that women are less likely to utilize social capital for their business than men. It could be safely concluded then, that difference in social capital accumulation may lead to gender disparity in business outcome. In line with the argument presented in the previous paragraph, minority women business owners may lack some of the social capital and access to networks that would enhance business success (Smith-Hunter and Boyd, 2004).

2.4.5.2 Immigration

Another relevant demographic fact that influences business success is the entrepreneur's immigration status. Studies show that immigrants made significant contributions to the economy of their host countries through job creation, income generation, and business formation (Aregbeshola, 2010; Fairlie and Lofstrom, 2014; Kerr and Kerr, 2016). According to the 2000 US

Census Bureau data, immigrants accounted for more than 12 percent of the US total workforce; and about 1.5 million immigrants constituted 12.5 percent of the total US business owners (Fairlie and Robb, 2008). It is further observed that immigrants are more likely than non-immigrants to start new businesses (Fairlie and Robb, 2008; Aregbeshola, 2010; Fairlie and Lofstrom, 2014). Fairlie and Meyer (2003), analyzing the 1980 and 1990 US Census, observed that immigration could adversely impact a native's likelihood of self-employment. Kerr and Kerr (2016) examined immigrant entrepreneurship, the survival and growth of immigrant established firms in contrast to native founded businesses. They found that businesses founded by immigrant entrepreneurs are more likely to fail than native-founded business. However, those that survived showed faster growth and some degree of profitability that is still by far, lower than native-founded businesses.

Literature on immigrant entrepreneurship primarily rely on market disadvantages theory, arguing that immigrants face a lot of problems that preclude them from entering the labor market of their host country (Aregbeshola, 2010; Chrysostome, 2010; Lewis, 2013). Lewis (2013) also states the problems of weaker wage-based options coupled with limited language skills, less acceptance of their academic credentials, and other similar push factors into entrepreneurship. Under such circumstances, immigrants will resort to entrepreneurship rather than to look for formal employment (Chrysostome, 2010). According to Chrysostome (2010), these are necessity immigrant entrepreneurs who cannot afford the failure of their businesses as they have no alternative means of survival; in which failure of their businesses would ultimately equate to failure in their immigration dreams.

However, immigrant business owners earn less than native-born small businesses owners, especially because of their access to comparatively smaller markets (Bates and Robb, 2014). Compared to native-owned business, immigrant-owned firms on average have fewer workers and tend to be smaller in size (Lofstrom and Wang, 2019). Kerr and Kerr (2018) attribute this in part to the location of immigrant-owned business and the type of sector. More importantly, the immigrant business owners face myriads of challenges, some of which are not experienced by native entrepreneurs, such as unfamiliarity with US business practice, inadequate knowledge of regulations, insufficient or absence of credit history, lack of collateral, lack of management skill and weak financial literacy (Bowles, 2009).

As indicated earlier, the importance of financial resources is critical for the survival of small businesses. However, the scarcity of financial support from lending institutions is greater among immigrant small firm owners. Thus, literature shows immigrant entrepreneurs rely on family and friends of their ethnic community through social capital (Bates, 1997; Chrysostome, 2010).

On the other hand, findings on the success of non-native entrepreneurs, especially when it comes to racial categorization, are mixed. For instance, Asian business owners, with education achievement higher than the US average have been found to have higher-than-average earning (Fairlie et al., 2010). Evidence further shows that in the United States, the African diaspora had relatively higher educational attainment (Budiman, 2020). Budiman (2020) further suggest that about 40% of Sub-Saharan African immigrants had at least a bachelor's degree, compared to 30 percent of all foreign-born US immigrants. Whether such human capital and skill possessed by the diaspora was equally reflected in business formation, ownership, and success is worth looking into in this study. This is one of the important contributions of this thesis.

2.4.5.3 Age

In the literature of entrepreneurship, age is not only about at what point of one's life a person enters into business, but is also about the traits related to being a young or an old entrepreneur (Huss, 2020). Azoulay et al. (2020:66) highlighted younger entrepreneurs' advantages, particularly youth in technology: "young people are cognitively sharper, less distracted by family or other responsibilities, and more capable of transformative ideas". However, older entrepreneurs "might access greater human capital, social capital, or financial capital", which is advantageous for success.

Existing empirical evidence suggests that age plays a significant role in business success. According to Sajilan et al. (2015), in developing countries young entrepreneurs are observed to have more impact on business performance than old entrepreneurs. Findings in the United States by Azoulay et al. (2020), however, found that successful entrepreneurs are middle-aged, not young. On the other hand, other studies revealed that older business owners have accumulated more relevant experience, wealth, and networks that make their businesses more successful than young entrepreneurs (Disney et al., 2003; Kautonen et al., 2008). Soomro et al. (2019) also noted the impact of age of entrepreneurs on business success. However, Tanveer et al. (2013) argue that

although the likelihood of entering entrepreneurship decreases as age increases, age bears a positive effect on business outcome. In the United States, existing evidence reveals that small business is more dominated by older than younger business owners. However, according to the 2016 Small Business Administration, black business owners were substantially (75 percent) younger. This may explain why business failure is more pronounced among (younger) blacks than the other racial groups.

2.5 Firm Characteristics

The characteristics of the business sectors have been studied as important as the characteristics of the entrepreneurs themselves in determining the success of small businesses. This is one of the though-processes in Figure 2.1. Among others, the type of industry, its size and age have been regarded as being more relevant. We now proceed to review literature on the role of the business sector on the success rate of black business owners.

2.5.1 Business Sector

Different markets present entrepreneurs with different opportunities and challenges that require different skill sets and assets, which result in different business outcomes. This becomes more apparent when the performances of divergent profiles of ethnic minority businesses are considered. For instance, studies in the United Kingdom documented that South Asians mainly are concentrated in catering, clothing, and food retailing sectors (Parker, 2004; Carter et al., 2013); Chinese in the take-way trade (Song, 1997); and African-Caribbean's in the construction sector (Ram and Jones, 2008). In the United States, studies showed that industry involvement also varies by race. Existing evidence in the United States also show black- and white-owned firms are found in different industries (Robb, 2000). Black entrepreneurs are predominantly concentrated in retail and service business sectors that require less entry capital (AEO, 2016). On the other hand, ethnic non-minority owners are engaged in larger industries such as manufacturing and wholesale that demand larger startup capital.

The profitability inherent in the type of sector matters the most in determining the success or failure of a business. In addition, racial differences in industry distributions lead also to disparities in business success (Fairlie and Robb, 2008). A study by Mothibi (2015), in South Africa, found that the type of business sector affects the performance of small businesses.

Similarly, Essel et al. (2019) noted that the type of industry contributes to differences in sales and employee size of small firms in Ghana.

Evidence suggests that black entrepreneurs are found to be engaged more in vulnerable business activities than other ethnic groups (Comrie and Adeluwoye-Adams, 2008). These authors contend that black-owned businesses tend to be concentrated in a narrow range of sectors like personal services, hire and repair, catering and accommodation, retail, health, and social care, and located in some of the most deprived areas.

2.5.2 Business Size and Age

The importance of firm age and size and their impacts on business success have been discussed in many empirical studies. Prior studies, such as in Africa, showed that younger small businesses experience higher rates of growth than older businesses (Aregbeshola, 2010). A study in Uganda found out that much of the growth in small businesses occurs within the third year of their operation (Ishengoma and Kappel, 2008). Generally, the age of a firm reflects its accumulated experience, which is an important success factor (Takalashi, 2009). This suggests that older firms are more likely to establish broad network of business partners, customers, creditors, and business goodwill; thereby implying firm age as an important predictor of success. Another study by Cole and Sokolyk (2010) also revealed that younger businesses, because of their limited existence, are more likely to be denied loans and are less liquid than older businesses.

Conversely, other researchers have arrived at a different conclusion regarding the relationship between firm age and its performance. For instance, an argument has been advanced that the average growth rate of firms decreases with age (Davidsson and Henreksson, 2002). Legesse (2018), in his analysis of a developing economy in Ethiopia, could not establish a significant contribution of age of business on its financial performance. Another study by Lwango et al. (2017) also documented that business age in family-owned firms negatively affects performance, although family ownership has a positive effect on business outcomes/performance.

In addition, a study by Alasadi and Abdelrahim (2007) found that older businesses perform poorer than younger ones while Takahashi (2009) suggested that older businesses tend to be bigger, thereby exploiting their accumulated economies of scale to optimize resource utilization in a way that reduces costs and augment earnings. Similar study found that older firms benefit from past business experience and have better performance than younger businesses (Mothibi, 2015).

Available evidence in the United States indicates the existence of racial difference in the size as well as age of businesses. Even though some studies show that blacks in the United States are making progress in catching up with their white counterparts in the rate of business entry, they are very much trailing behind whites in business size, profitability, and survival rates, especially in their early first few years (Ahn, 2011).

2.6 Business Environment

Having looked at the business owner characteristics (2.4), and industry characteristics (2.5), we now proceed to review relevant literature on the business environment. The economic, legal, and political environment in which a business operates has an important role in the success of a business (Lampadarios et al., 2017). Business environment is such a broad and complex concept, involving national as well as global dynamics. However, small business literature mostly cited capital market, geographic location of the business operation (urban or rural, or international presence), and technological changes. This study takes a step further to look at the different regions of the United States and regress these location-specific effects against business performance.

2.6.1 Capital Market

The most recognized features of the economic environment for small businesses are access to capital market (Calcagnini and Favaretto, 2012; as cited by Lamapadrios et al., 2017). Access to such essential resources could be influenced by government policy (Hanlon and Saunders, 2007). According to De Maeseneire and Claeys (2012), policies on direct loans, interest subsidies, and loan guarantees, created to ease the financial constraints of small firms, so as to enhance their competitiveness through access to capital, are enacted by governments. This suggests that unfavorable government policies could hurt the growth and success of small businesses, as favorable ones enhance growth and the sustainability of operations of small businesses.

Furthermore, funding often plays an outstanding role in determining the success of a small business. Most importantly, access to external bank financial facilities is critical to entrepreneurial success (Elston and Audretsch 2011; Frid et al., 2016; Love, 2020). However, minority business owners have historically found it difficult to gain access to funding through banks. Researchers attribute this in part to racial disparity in access to capital market and higher probability of credit denial. Studies by Asiedu et al. (2012) and the Federal Reserve Bank (2017) have documented that black business owners experienced higher credit denial than other racial identities. For instance,

Palia (2016) found that African American loan applications are rejected at a rate of 17 to 33 percent higher than white business owners who carry similar amounts of risk; and attributed this to causal impacts of discrimination. In a similar study, Blanchflower et al. (2003) noted that black-owned firms borrow at much higher interest rates than those comparable firms owned by white owners. These challenges of securing loans are also faced by black African-Caribbean entrepreneurs in the United Kingdom – as documented by Comrie and Adeluwoye-Adams (2008). According to this study, black African and black Caribbean are more likely to have their loan applications denied than the Indian and white population in the United Kingdom.

Evidence suggests that black businesses not only have limited access to private bank loans but also face inequities from the US Small Business Administration (SBA) to secure government loans (Hyra et al., 2014; VEDC, 2015). The SBA's 7(a) and 504 loan guaranteed programs are critical in facilitating loans for small businesses as they provide federal guarantees, ranging from 40–75 percent of the origination amount, on loans made by private lenders (Hyra et al., 2014). According to Hyra et al. (2014), the SBA 7(a) government loan for black-owned firms declined from 5 percent in 2009 to 2 percent in 2014. The decline was observed to be worse in SBA's 504 loan guaranteed program, where their lending amount fell by 64 percent between 2009 and 2014. Another analysis further validates that SBA loan approval for blacks declined by 47 percent (between 2009 and 2013) when actually the SBA loan amount for the country grew by about 25 percent (Bates and Robb, 2013). The comparison by racial category for the most common SBA 7(a) loan depicts a worrisome picture: blacks have a 2 percent approval rate compared to 5 percent for Hispanic, 23 percent for Asian, and 70 percent for white borrowers (VEDC, 2015).

These inequities in accessing external funding have forced black business owners to rely more on internal resources such as owner equity, limiting the expansion and growth of their businesses. Studies noted that start up under-capitalization affects prospects of business growth, which may lead them into failure (Fairlie, 2008). The inability of a firm to access financial credit influences its likelihood of closure, which may further result from various constraining financial challenges, such as difficulties to respond to exogenous pressures and technological needs (Cefis et al., 2021).

2.6.2 Geographic Location

Literature has shown that the location of a firm influences the potential success of a business (Karlson et al., 2015; Maté-Sánchez-Val et al., 2018). Unlike many other factors, only a small minority of the existing studies consider the influence of the location on firm performance and the relation between the geographical space and the behavior of entrepreneurs and firms' prospects (Karlson et al., 2015). For instance, Santirelli and Vivarelli (2007) show that entrepreneurial engagements significantly vary across geographical space. The communal location of a business reflects factors like the type of customer base, industry and availability or lack thereof, of opportunities for potential business growth.

Important marketing factors (such as customers product preference), seasonality and weather, demographic factors like population size, age, gender, ethnicity, economic factors such as income and unemployment that varies by communities, are deemed to affect the distribution and sales of goods and services of businesses. For instance, Fertala (2008) finds that population density has a positive relationship with survival rates of businesses. In that study, it was further argued that unemployment varies across geographical regions. Fritsch et al (2015) found a positive relation between unemployment rate and business startup in Germany – suggesting this to be counter cyclical. Deller and Conroy (2016) also documented the presence of differences in firm's survival rates between rural and urban areas. Studies in the United States indicated that minority firms have a stronger presence in cities than in suburbs and rural settings, while non-minority-owned businesses operate more in the suburbs (Liu and Abdullahi, 2012).

Compared to the other minorities, black businesses are more congregated in urban areas. This reflects the prevalence of significant entry barriers in suburban business areas for aspiring black entrepreneurs (Liu and Abdullahi, 2012). It is therefore noteworthy that this disproportionate level of inaccessibility to suburban locations may lead to disparities in economically stronger customer base, ownership of larger business, growth, and profitability.

A study by Maté-Sanchez-Val et al. (2018), employing spatial econometric methodology, found geographical factors play a deterministic role in small business survival and failures. According to this study, geographic proximity, external agents and transport facilities have significant effect on small business failure; and failed firms are more likely to be surrounded by other failed firms as well. Maté-Sánchez-Val et al. (2018), further argued that although a firm does

not necessarily have to be closer to the center of areas of economic influence, geographical proximity to other agents of economic influences is beneficial to access better information and better mode of transportation.

However, the presence of strong location economies also implies the presence of several businesses in the actual sector, which indicate a tough competition, which might result in lower probability of survival for newly established businesses in the industry in that region (Karlsson, 2015). Karlson et al. (2015:5) suggest that "firms that are started in a region offering the 'right' type of regional economic milieu can take advantage of what that region offers in terms of demand, supply, and general other characteristics". In line with this argument, the author states the survivability of new firms depends on its region of formation.

A firm's presence in global business operation is also regarded as a positive sign of business growth. Businesses enter into the international market either by exporting their goods and services or by having direct oversea offshore business operations (Lu and Beamish, 2001; Aregbeshola, 2022). In addition, international business strategy and operation is considered to increase sales and broaden customer bases (Dobbs and Hamilton, 2007; Aregbeshola, 2022). Although international business brings opportunities for growth and expansion, it also has risks for small businesses. Small firms could find it difficult to cope with intense global competition and, consequently, suffer losses that could endanger their survival. Besides, due to resource constraints they may encounter challenges to identify potential customers or suppliers and navigate complex requirements (Delehanty, 2015).

In the U.S, despite the challenges that small businesses face in tariffs, trade policy, financial risk, custom clearance, etc. these firms accounted for 97 percent of the international exporter firms in 2014 (Delehanty, 2015). However, this same study indicated that international business participation of small businesses in the United States varies by type of business sector. In addendum, the study suggests that racial disparity in industry type and size could reflect differences in international business opportunities.

2.6.3 Technology Adoption and Use

Further to the proposition contained in Figure 2.1, technology is seen as one of the key factors for a firm to grow and stay competitive in today's market. Online and e-commerce marketing could potentially help businesses to raise their efficiency, reduce operating costs, reach

diverse customers, as well as gain better return on investment. According to Kasap (2016), the digital economy enhances small firms' access to markets and integrates them in global value chains by reducing costs and barriers and consequently growing their sales and exports. Thus, an online presence is increasingly becoming a necessity for small firms. Those firms that do not have an online presence, such as websites to sell their products and services, could miss the opportunity to raise their revenue through e-commerce.

Furthermore, social media is a growing element of small business online strategy. LinkedIn and Facebook continue to lead the field in terms of social media outlets used for business purposes. Despite the growing practice of electronic and digital media, research indicates the presence of a digital divide across racial and demographic groups. A study by Smith (2014) documented that blacks are less likely than whites to use the Internet and high-speed broadband networks. This digital gap in access and use of technology could likely occur among entrepreneurs, and its influence on business outcomes/performance may be significant.

2.7 Chapter Summary

Ethnic minority businesses are clearly becoming the subject of growing interest because business ownership is the main employment alternative for making a living and creating wealth, especially among ethnic minority and immigrant communities. Different theories have been emerging to understand the concept of ethnic entrepreneurship. The importance of minority business ownership goes far beyond those that accrue to its owners. Evidence in this chapter suggests that the benefits of these businesses for the economy and society are immense as well. Literature supported the need for more studies on analyzing and finding factors that could contribute to the success and sustainability of black-owned small businesses. However, the previous broader perspectives of literature on the relevance of entrepreneurial activities on economic growth has marginalized the focus on black-owned small businesses.

To that extent, literature dealing with a broader comparative and analytical basis in addressing the challenges faced by minority entrepreneurs, particularly of black entrepreneurs, is inadequate. Indeed, inter-minority differences in business activities and experiences have scarcely been addressed in the extant literature. Prior empirical studies almost exclusively focused on differences between black-owned and white-owned businesses, while evidence indicates that black-owned firms lag behind other ethnic/racial minority businesses. Furthermore,

comprehensive analysis along racially-owned business lines, in terms of entrepreneurial, firm, and institutional characteristics, is lacking. It is tenable to say that the stereotype of the past, as Feagin and Imani (1994) indicated "African Americans are either neglected or used as an example of a group that has been unsuccessful in developing an ethnic economy as viable as that of other minority groups", does not seem to have changed, with academic literatures paying scant attention to the nuances of black entrepreneurship.

This research attempts to fill some of these identified knowledge gaps, given that the study expanded empirical investigation to the context of black-owned small businesses in a comparative fashion with other minority and non-minority businesses in the United States, by considering robust deterministic elements and characteristics that have been largely ignored in previous studies. Furthermore, the default assumptions that black entrepreneurship is just another ethnic entrepreneurship, is debunked through scientific evidence in a stylized and glossily unique manner through the deployment of robust owner-characteristics, business characteristics and regional dynamics. This specific contribution to existing literature unveils the intricacies of both endogenously-imbibed and exogenously imposed factors/characteristics that particularly constrains business outcomes/performance of black owned business as compared to other minority ethnicities and natives.

In the chapter that follows (chapter 3), discussion is centered around the data collection process. This is summed up under research design and methods; and approaches deployed in analyzing the data that is generated are provided. In addition, chapters 4 and 5 contain comprehensive statistical analysis of various elements and characteristics that influence business outcomes/performances of black-owned small firms in comparison with other ethnic groups.

CHAPTER 3

RESEARCH METHODOLOGY

3.1 Introduction

In Chapter 2, we looked at various characteristics of small businesses in the United States. In that chapter, conceptual issues on the racial components of business formation, with specific focus on the racial disparities of Black business owners, were discussed. More so, the role of racial profile in access to finance (both initial capital outlay and developmental funding) by small business owners was also discussed. In this chapter, discussion is focused on the research methodology chosen for the thesis, which is influenced by the approaches deployed in some of the theories, models, perspectives and studies surveyed in Chapter 2 .The conceptual framework of small business performance discussed in the preceding chapter is what the empirical analysis would apply to understand racial disparity in business outcomes, in the context of ethnically/racially owned and operated firms. In this chapter, attention is paid to the sources of data, the sample size, units of analysis, variables involved in the study and the statistical methods of analysis.

3.2 Source of Data

This study used survey data collected by the US Census Bureau, known as the Survey of Business Owners (SBO). In the descriptive analysis of the study (i.e., Chapter 4), historical published tables of SBO from 1992 to 2012 are used to depict the trend in racial disparities in business outcome, while SBO 2007 and 2012 are used for detailed descriptive comparisons. Besides, the recently published 2018 and 2019 Annual Business Survey (ABS) of employer firm's data tables and the 2017 ABS on non-employer firms are used to investigate for recent trends. However, the ABS do not have raw microdata set release, which would have aided further detailed statistical analysis, as done with the 2007 Public Use Microdata Sample (PUMS) dataset, which is the only usable dataset for statistical analysis on national small businesses to date in the United States.

It is important to point out that the ABS is a new joint project between the US Census Bureau and the National Science Foundation's National Center for Science and Engineering

Statistics that replaces the five-yearly SBO[1] data release. Where existing previously published SBO tables do not provide required data, analytical summary from the 2007 SBO PUMS raw dataset is used in Chapter 4. In Chapter 5, the 2007 PUMS[2] microdata is used to perform the major statistical tests and analysis. More importantly, the 2007 PUMS is very popular in literature that focuses on small businesses in the United States (Heileman et al., 2016; Carpenter and Loveridge, 2018; Heileman and Pett, 2018). The main reason for the dominant usage of this data in such studies is because the PUMS is the first-ever and only survey of business owners public use microdata sample available for public use to date. The US Census SBO is a nationally representative survey of business owners that used to be regularly carried out every five years. The SBO used a structured questionnaire (see Appendix C).

However, it is important to note that the US Census Bureau has released only statistical tables for SBO, and this was done until 2012 when the data collection exercise was terminated by the government. To that extent, only the 2007 survey has both the published tabulated summary tables and public use microdata sample (PUMS). Thus, the PUMS data file is used in the final analysis (Chapter 6) of this study as it allows access to the sample raw data file. It is considered important to mention here that the raw data returns an observation in excess of 26 million responses on some variables, while the range is between 1,698,097 (responses from Black business owners) and 20,193,261 (responses from White business owners). The observation also includes 1,411,248 (responses from Asian business owners) and 2,261,706 (responses from Hispanic business owners).

The US Census Bureaus created the PUMS data file from the 2007 SBO to give access and flexibility to researchers who are interested in creating statistical tables that are tailored to specific data needs, to apply statistical models, to investigate entrepreneurial activity and the relationships between business characteristics such as access to capital, firm size, minority- and women-ownership, and firm age, etc. (US Census Bureau, 2012). The data also provides information at the national and state levels by industry sector for businesses classifiable by gender and race of the majority owners. Thus, the following essential data elements are used from the PUMS file:

[1] https://www.census.gov/newsroom/press-releases/2018/annual-business-survey.html
[2] https://www.census.gov/data/datasets/2007/econ/sbo/2007-sbo-pums.html

- business owners' characteristics (education level, gender, age, race/ethnicity, percentage ownership, native or foreign born)
- firm characteristics and environment of business operation (how the business was acquired, age of the business, startup capital, years of experience, sales volume, employment capacity, firm type, firm size, international operations, and adoption of e-commerce).

3.3. Sample Size

Before justifying the choice of the sample size, it is considered important to reiterate that the PUMS is not only the first-ever public release dataset, but it is also the largest micro dataset on business owner survey in the United States. The data file has 199 variables and a total record of 2,165,680 firms. However, PUMS applied tabulated weights to estimate the total number of classifiable firms nationally – which is estimated at 26,392,237. The PUMS tabulation did not use single race. This was because the SBO survey questionnaire allowed Hispanic business owners to respond twice, both in the ethnicity and race category. This study, however, used single race so that distinct Hispanic minorities would be compared with distinct non-Hispanic Black minorities. Accordingly, the number of sample firms owned by non-Hispanic White, non-Hispanic Black, non-Hispanic Asian is given in Table 3.1.

Table 3.1: Study Sample Size by Ethnicity/Racial Group

Firm Ownership by Ethnicity/Racial Group	Unweighted: n	Weighted: n
Asian	130,715	1,411,248
Black	120,081	1,698,097
Hispanic	155,995	2,261,706
White (non-minority)	1,672,470	20,193,261
Equally minority/non-minority	44,485	435,203
Other minorities	41,934	392,722
All Firms	2,165,680	26,392,237

Source: US Census Bureau, 2007 Survey of Business Owners (PUMS) – own computed figures.

In the data, minority status is determined if the owner belongs to either of the categories of Hispanic, Black, American Indian, and Alaska Native, Asian, Native Hawaiian and Other Pacific Islander, or Some Other Races. The SBO questionnaire asked percentage ownership of the business up to four owners. Thus, when the total percentage for a racial group is greater than 50 percent, that business is classified as belonging to that racial group. Suppose there are three owners,

Owner 1 is non-Hispanic Black (owned 36 percent), Owner 2 is non-Hispanic White (owned 24 percent), and Owner 3 is non-Hispanic Black (owned 40 percent), then 76 percent of the company is referred to as Black-owned. This same procedure is used to determine whether the business is owned by the other minority groups, non-minority/White-owned, women-owned, or non-native/immigrant, and native- owned as well.

3.4 Limitation of Data

Although the SBO PUMS is the largest national dataset, being a secondary dataset collected across the country, some data elements that are considered potentially useful in the context of this study are not covered in the survey. These includes owner's household income or net worth, profit, dollar amount of loan accessed, satisfaction with financial institutions, loan interest rates, and policy regulations. This is not unexpected in a survey that is designed for a broad and general purpose. Furthermore, the SBO survey questionnaire was designed to gather data on essential continuous variables (startup capital amount, age of owner, level of education, etc.) in a predefined category. This limits the flexibility of data coding and analysis for better model predictions. For instance, business owners were asked to report their ages in either of these pre-coded age groups: under 25, 25–34, 35–44, 45–54, 55–64, and 65 or over. As a result, the responses generated were not continuous, but rather numeric values in categorization.

3.5 Variables Description

As informed by literature review, studies on small business and entrepreneurship are found to cover a wide range of variables on ownership characteristics and financial structures (Smith-Hunter and Boyd, 2004; Sawyer et al., 2018; Carpenter and Loveridge, 2018; Heileman and Pett, 2018). However, the choice of variable is determined by the specific interest or focus of the study. For instance, While Smith-Hunter and Boyd (2004) focused more on the racial profile of women entrepreneurs with predominant interest in access to enabling resources, Qian and Liu (2018) focused on the regional perspectives of cultural entrepreneurship in the United States. It must be admitted also that some other studies also focused on ownership profiles. For instance, Fairlie and Robb (2007) looked at the role of inheritance and family support as determinants of business success. In a similar study, Fairlie and Robb (2008) also deployed ownership characteristics, such as race and access to funding, as determinants of Asian business success in the United States. The present study thus draws lessons from these previous studies, and incorporates further approaches

(far more robust dataset, geographical coverage, and statistical approaches) that differentiates this study from the body of existing literature.

3.5.1 Dependent Variable

Based on the introduction provided in section 3.5, this sub-section looks at the categorization of variables used and their a priori deterministic expectations in the models. To this extent, this study focuses on the investigation of two dependent variables:

- business sales outcome, using annual sales as a proxy measure of performance.
- business survival or closure status of Black-owned firms in contrast with other racial categories.

These variables are considered relevant to achieve the stated objectives of this study and to answer the research questions. It is important to note that the SBO data file provides annual sales receipts as well as the firms operating status as part of the questions raised in the survey. Given that the data file is the only available dataset that can be utilized for these statistical analyses, we therefore benefit from the dataset as an empirical test of the models that are specified in this study.

3.5.2 Independent Variables

Through the survey of literature as presented in Chapter 2, which was further elucidated in section 3.5, various explanatory variables are identified as possible determinants of sales and survival. To that extent, this study captures a set of factors that are considered to exhibit strong explanatory powers on the sales outcomes of Black-owned businesses, as well as the risks associated with their survival status, in contrast with other racial minorities and non-minority White-owned businesses. These factors are categorized into owners' characteristics, business characteristics, and the business environment. The variables are recoded in these three categories accordingly to suit the analytical procedure adopted in this study, and to enhance statistical interpretability. The independent variables are cascaded down into gender, native/non-native, age, education, startup capital, prior business experience, family/non-family business, firm size, firm age, industry sector, access to financial startup (bank loan, government loan), adoption of e-commerce, export, and region of operation. Table 3.2 presents the list of variables and their

corresponding descriptions, assigned code values and data type (numeric or characters strings) in the PUMS raw datafile.

Table 3.2: Variable Descriptions

Variable Name	Description and Valid Values	Data Type
Dependent:		
Sales/	Annual sales revenue as reported in the sales receipt.	Num
Business operating/closed?	1 = Yes; 2= No.	Char
Independent:		
I: Owners' Characteristics:		
Gender[a]	F= Female; M= Male	Char
Native/non-native (born in the United States)?	1= Yes; 2= No	Char
Owner age	(1 = younger than 25 yrs); (2 = 25–34yrs); (3 =35–44 yrs); (4 = 45–54 yrs); (5 = 55–64 yrs); (6 = 65&+)	Char
Owner startup asset/capital	(1 = less than 5,000) ;(2 = 5,000–9,999) ;(3 = 10,000–24,999); (5 = 50,000–99, 999); (6 = 100,000–249,999); (7= 250,000–999,999); (8 = 1,000,000 &+)	Char
Owner education:	(1 = Below High); (2 = Highschool); (3 = Technical/Vocational); (4 = Some College); (5 = Associate); (6 = Bachelors); (7 = Masters &+)	Char
Prior business experience /Previously self-employed)?	1 = Yes; 2= No	Char
Family business/owned?	1 = Yes; 2= No	Char
II: Firm Characteristics and Business Environment:		
Firm size/ no. employee	Numeric value, starting with zero for non-employer	Num
Firm age (year business established)	(1 = before 1980); (2 = 1980–1989); (3 = 1990–1999); (4 = 2000–2002); (5 = 2003); (6 = 2004); (7 = 2005); (8 = 2006); (9 = 2007)	Char
Industry sector/NAICS – code/[b]	NAICS code used to generate type of industry	Char
Bank/financial institution loan -	1= Yes; 2 = No	Char
Government (federal, state, or local) loan	1 = Yes; 2 = No	Char
Business had website?	1 = Yes; 2 = No	Char
Export	1 = none; 2 = < 1%; 3 = 1–4 %; 4 = 5–9%; 5 = 10–19%; 6 = 20–49%; 7 = 50–99%; 8 = 100%	Char
Region/FIPS State Code[c]	FIPS state code used to generate states and thereby regions	Char

Source: US Census Bureau (2012). 2007 Survey of Business Owners (SBO) Public Use Microdata Sample (PUMS) Data Users Guide: Technical Documentation.

[a] Equally Male/Female is obtained for those not assigned values but have 50 percent share of firm ownership. [b] NAICS (North American Industry Classification System) codes applied to identify industry, e.g.: (42 = Wholesale); (44 = Retail trade); (31 = Manufacturing); (4 = Professional/ Technical); (48 = Transportation & warehousing); (23 = Construction), etc. [c] FIPS (Federal Information Processing Standard) codes are used to determine US States and consequently of regions as defined by US Census.

3.6 Statistical Analysis

The research applied both descriptive and advanced analytical methods in presenting the findings of the study. The results of the study are described and summarized in frequency tables, percentages, graphs, and charts. This approach is deployed to first establish the presence of

statistically significant annual mean sales differences between Black-owned businesses and businesses owned by each of the other races. To uncover these differentials, a statistical t-test is performed. The t-test estimate is deployed because it is efficient in determining the true difference between two group means. The t-test is calculated by using the ratio of the difference in group means over the pooled standard error of both groups, i.e., Black vs. White, Black vs. Asian, and Black vs. Hispanic. The formula for this estimation approach is depicted as:

$$t = \frac{\overline{x}_1 - \overline{x}_2}{\sqrt{(s^2(\frac{1}{n_1} + \frac{1}{n_2}))}}$$

Where, t is the t-value, $\overline{X}1$ and $\overline{X}2$ are the means of the two groups being compared, s^2 is the pooled standard error of the two groups, and n_1 and n_2 are the number of observations in each of the groups. The interpretation of t-test result is straightforward. In practice, a larger t-value shows that the difference between group means is greater than the pooled standard error. As such, a larger t-value is indicative of a significant difference between the groups being compared. A converse interpretation will hold in case the t-value is less than the pooled standard error.

Furthermore, analytical models and statistical procedures are employed to investigate the impacts of the explanatory variables that are presumed to affect sales and survival status of small businesses. First, the Generalized Variance Inflation Factor (GVIF) is used to check the presence of collinearity in the series. The deployment of statistical test to investigate if there are collinear predictor variables is essential to ensure stability and reliability of results. The basic idea is to regress each independent variable on all other independent variables. Since the standard Variance Inflation Factor (VIF) cannot be used for predictors with more than one degree of freedom such as categorical variables with more than two levels of augmentation (Feng and Sadeghpour, 2020). The GVIF is thus applied because of its power property in this complex scenario. In an earlier study, Fox, and Monette (1992) generalized the notion of variance inflation to explanatory variables that require more than 1 degree of freedom. In that study, the authors proposed GVIF as the most appropriate diagnostic approach.

Empirically, the GVIF is obtained by converting the value of VIF, as corrected to the number of degrees of freedom (df) of the predictor variable:

$$GVIF=VIF^{1/(2*df)}$$

Where the computation of VIF follows a statistical procedure in which VIF is calculated for each of the explanatory variables, by using the R-squared value of the regression of the variable against all other explanatory variables. The statistical computation is presented as:

$$\mathrm{VIF}_i = \frac{1}{1 - R_i^2}$$

By implication, the VIF value will be equal to GVIF in instance of independent variables with 1 df. The GVIF is invariant with respect to the coding of the categorical variables in the model. This means that it does not depend on the choice of baseline category or coding scheme for the dummy regressors. In simple terms, the rule of thumb in the derivation of the GVIF is to square the corrected VIF value and apply an established threshold for the VIF, which is generally given as 5. Currently, the only statistical program that does the GVIF multicollinearity diagnosis is the R Project for Statistical Computing. For this process, 2007 PUMS data is analyzed within the R environment, instead of Stata package that is utilized for the rest of the statistical estimations. After the deployment of the R program in the diagnostic procedure to check for possible collinearity, the following analytical models are applied within the Stata environment:

- Oaxaca-Blinder decomposition linear model
- Non-linear extension of Oaxaca-Blinder decomposition model

The need for each of the decomposition approaches are highlighted in section 3.6.1, beginning with the Oaxaca-Blinder linear decomposition model.

3.6.1 Oaxaca-Blinder Linear Decomposition Model

The Oaxaca-Blinder decomposition methodology had been used by scholars to study differentials of outcomes such as wage gaps by gender (Weichselbaumer and Winter-Ebmer, 2005; Blau and Kahn, 2017) and race-based differentials (Darity et al., 1996; Kim, 2010; Kamara, 2015). The model explains how much of the difference in mean outcomes across two groups is due to group differences in the levels of explanatory variables, and how much is due to differences in the magnitude of regression coefficients (Blinder 1973; Oaxaca 1973).

To investigate the differentials and the determinants of business performance, the Oaxaca-Blinder decomposition model is used. Thus, the model decomposed mean differences between

racial groups under study (Black vs. White; Black vs. Hispanics; Black vs. Asian) in natural log annual sales, based on linear regression models. Using the firm annual sale, being a continuous outcome variable (y), the Oaxaca-Blinder model is explained by a vector of determinants, *x*. For instance, sales made by Black-owned and White-owned businesses. This is expressed mathematically as:

$$y = \beta^{black} x_i + \epsilon_i^{black}, \text{ if black; } y = \beta^{white} x_i + e_i^{white}, \text{ if white} \quad (1)$$

The model estimates the mean outcome value of y at each value of x. The gap between the mean outcomes: y^{White} and y^{Black}, is equal to:

$$Y^{white} - Y^{black} = \beta^{white} x^{white} - \beta^{black} x^{black} \quad (2)$$

Where x^{white} and x^{black} are both vectors of explanatory variables evaluated at the means for the White and the Black-owned businesses, respectively. The annual sales are transformed into logarithmic "Ln" forms to avoid heteroscedasticity. Then, the sales function can be rewritten as follows:

$$\ln Y_j = \beta 0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \ldots \epsilon i \quad (3)$$

In the remodeled equation, the annual sales functions for Black and White-owned businesses are:

$$\ln Y^{white} = \beta 0 + \beta_1 X_1^{white} + \beta_2 X_2^{white} + \beta_3 X_3^{white}{}_e + \ldots + \epsilon_i \quad (4)$$

$$\ln Y^{black} = \beta 0 + \beta_1 X_1^{black} + \beta_2 X_2^{black} + \beta_3 X_3^{black} + \ldots + \epsilon_i$$

Accordingly, the Oaxaca-Blinder decomposition model is given as:

$$\ln \overline{Y}^{white} - \ln \overline{Y}^{black} = \bar{X}^{white} \hat{\beta}^{white} - \bar{X}^{black} \hat{\beta}^{black}$$

Thus:

$$\ln \overline{Y}^{white} - \ln \overline{Y}^{black} = (\bar{X}^{white} - \bar{X}^{black}) \hat{\beta}^{white} + (\hat{\beta}^{white} - \hat{\beta}^{black}) \bar{X}^{black} \quad (5)$$

The coefficients $\hat{\beta}$ are estimated by the ordinary least squares (OLS) regressions from each group. The left-hand side ($\ln \overline{Y}^{white} - \ln \overline{Y}^{black}$) of the equation is the observed disparity in annual sales performance between White-owned and Black-owned businesses. The first term of the right-hand side of the equation ($\overline{X}^{white} - \overline{X}^{black}$) $\hat{\beta}$ measures the disparity due to the differences in

characteristics such as the gap due to differences in amount of startup capital, access to financial loan, age of owner, prior business experience, firm size, level of education etc.

Whereas the second term [$(\hat{\beta}^{\text{white}} - \hat{\beta}^{\text{black}})\ \bar{X}^{\text{black}}$] measures the disparity due to the different effects of the observed characteristics, which is coefficient effect. This part, the coefficient effect, is commonly referred to as the unexplained or discrimination effect. Prior studies that applied the decomposition model did not delve into focusing on the unexplained part of the equation (Blinder 1973; Oaxaca 1973; Kim, 2010; Kamara, 2015; Blau and Kahn, 2017). This study did not do so due to the complexity of interpreting the unexplained part. Furthermore, the detailed decomposition procedure of the model subdivides these effects into the contributions of each covariate, which goes beyond the focus of this study. One of the few studies that adopted this technique was Jann (2008), whereby a new programming algorithm (**oaxaca**) was introduced into the estimation calculus within the Stata environment.

3.6.2 Nonlinear Extension of Oaxaca-Blinder Decomposition Model

First, to analyze the risk of business survival, a binary logistic regression model is used. Since the outcome variable is a dichotomous variable, either the business is closed (0) or active (1), logistic regression is thus an appropriate model. The model analyzed the effects of risk factors, separately for each racial group. Mathematically, the model is specified as:

$$Ln\ (ODDS) = ln\ (P/1\text{-}P); \qquad (6)$$

In equation 6, P is the predicted probability of success or failure (closure). The model predicts the logit, that is the natural log odds of success or failure. To further decompose equation 6 in a more expressive format, the mathemathical non-linear decomposition approach is depicted as follows in equation 7:

$$Logit(p) = \beta_o + \beta_1 x_1 + \beta_2 x_2 + \beta_3 x_3 + \ldots + \beta_k x_k \qquad (7)$$

In equation 7, the estimates of the coefficients are interpreted as increment or decrement in log odds for the categories coded as 1, as opposed to those coded as 0. The risk associated with $x_{1\ldots n}$ relative to an omitted reference category are also specified and estimated. Coefficients are estimated using the maximum likelihood method.

Nonetheless, the common logistic procedure does not decompose or measure the racial gap between Black and White; Black and Asians; and Black and Hispanics when using a set of

predicators simultaneously. Thus, a nonlinear logit model of an extension of Blinder-Oaxaca decomposition does help in estimating these differentials. Several studies have developed and used Blinder-Oaxaca decompositions for models with binary outcome variables (Gomulka and Stern, 1990; Even and Macpherson, 1990; Yun, 2004, 2005; Fairlie 1999, 2005; Powers and Pullum, 2006). Based on their approach, this study applied the nonlinear Blinder-Oaxaca method to decompose the main factors underlying racial differences in probability of business survival and obtain separate contributions of each factor. The nonlinear decomposition model is presented in equation 8 as follows:

$$\overline{Y}^{\text{White}} - \overline{Y}^{\text{Black}} = [F(X^{\text{white}}\,\beta^{White}) - F(X^{\text{Black}}\,\beta^{White})] + [F\,(X^{\text{Black}}\,\beta^{White}) - F(X^{\text{Black}}\,\beta^{Black})] \qquad (8)$$

In equation 8, β are estimated by logit model, and F () is the cumulative distribution function of the logistic distribution. It is important to note that X and β in this expression are in a vector form. As stated above, the first square parenthesis measures the differential attributable to differences in endowments or characteristics, usually called the explained component or characteristic effects. It is important to note that the estimated model generates outputs for both explained and unexplained. That is, the second parenthesis measures the differential attributable to differences in coefficients or effects, usually called the unexplained component. However, and in line with the complexities of estimating the specifics of unexplained variables as highlighted above, no effort is made to allocate the effects of unexplained coefficient. All analyses contained in Chapter 7 were performed using updated Oaxaca package in Stata version 17 (StataCorp LLC., 2021), except for the diagnostics as explained earlier. The detailed decomposition computed the contribution of each variable (explanatory variables) to the overall coefficient component of the model.

3.7 Chapter Summary

This chapter dealt with the research methodology. The sources of data were explained, and the sample size was also justified. Explanation was offered on various sources of dataset and the motivation for using the PUMS microdata file for the empirical estimations. The use of other sources to lay a robust background for the advanced empirical estimation approaches was also discussed and justified. Furthermore, essential data elements and the description of the variables deployed in the study were presented and motivated. In addition, the chapter also contained

explanation and justification on the choice of the statistical approach. Thereafter, the models of interest were specified and explained, and references were made to earlier studies that applied similar approach. Specifically, the model contains elements that specified the comparative perspectives of Black-owned vis-à-vis non-minority White-owned, minority Hispanic and minority Asian-owned businesses. In Chapter 4, the study presents the results of the data analysis and discusses the findings of the study. In addition, interpretation of the results is offered, and literature references are presented to situate the current research efforts within the body of existing literature.

CHAPTER 4

BUSINESS OWNER CHARACTERSTICS: TREND IN OWNERSHIP AND OUTCOME

This chapter presents the pattern and trend of small business owners and their business outcome using tabulated or published data from the US Census Bureau known as Survey of Business Owners (SBO) as well as from the analysis of sample raw dataset of 2007 SBO PUMS (public use micro data sample). The 2007 SBO PUMS dataset is the only publicly released raw data file to date. Analysis from this dataset is only made where published SBO surveys do not provide the required information. Besides SBO, the 2018 and 2019 published data of Annual Business Survey (ABS) of employer firms and the 2017 Annual Business Survey (ABS) of non-employer firms is used to validate the trend in business outcome for more recent years.

The presentation and analysis of the research starts with some important background characteristics of the business entrepreneurs themselves. These includes race, gender, age, education, national origin (native or non-native), experience, family background, and wealth. Beginning with these descriptions of small business owners helps to put and understand the data result in context. Descriptive contrasts of Black business owners with other minorities (Asian and Hispanic) and White non-minority business owners in terms of their age, gender, wealth, etc. profiles. The findings of the study are presented using statistical summaries, graphs, tables, and various charts, followed by discussion and interpretation of the evidence.

4.1 Racial Trend in Business Ownership and Outcome

Business ownership is one way to earn a livelihood and potentially create wealth. However, this engagement is not necessarily reflected in representative shares by race. Across the United States, Black and Hispanic business owners are underrepresented, while White and Asian business owners are overrepresented. Table 4.1 illustrates the trend in business ownership and percentage distribution of the total population by race. According to the 2012 tabulated SBO result, Whites accounted for 63 percent of the total population and about 70 percent of firms were White-owned. For the same year, 17 percent of the population were Hispanic, while 12 percent of firms were Hispanic owned. Likewise, Blacks were 12 percent of the US population and owned 9.5 percent of small businesses in the United States. Considering their share of population in the United States generally, minority entrepreneurs are underrepresented in the US small business landscape. The

largest minority groups, Black and Hispanic, own disproportionately fewer businesses than their White counterparts. Unlike Blacks and Hispanics, Asian entrepreneurs seemed to have better representation in the US small business landscape, as the percentage of their firms to all US firms is the closest to or slightly higher than their share of the total US population.

Table 4.1: Trend in Business Ownership by Owner Ethnicity/Race: 1992–2012

Ethnicity/Race	Year	Number of Firms	% Changes From Preceding Year	% of All US Firm	Percent of US Population**
Black	2012	2,584,403	34.5%	9.5%	12.0%
	2007	1,921,864	60.5%	7.3%	12.1%
	2002	1,197,567	45.4%	5.3%	12.3%
	1997	823,499	32.6%	4.0%	12.5%
	1992	620,912	—	3.6%	11.9
Asian	2012	1,917,902	23.8%	7.1%	5.0%
	2007	1,549,559	40.4%	5.9%	4.4%
	2002	1,103,587	23.5%	4.9%	4.3%
	1997	893,590	51.0%	4.4%	3.7%
	1992	591,838	—	3.4%	3.1
Hispanic	2012	3,305,873	46.3%	12.2%	17.0%
	2007	2,260,269	43.6%	8.6%	15.1%
	2002	1,573,464	31.1%	7.0%	13.3%
	1997	1,199,896	39.1%	5.9%	11.1%
	1992	862,605	—	5.0%	9.5
White/Nonminority	2012	19,278,260	-7.5%	70.9%	63.2%
	2007	20,100,926	10.9%	76.41%	66.1%
	2002	18,521,646	7.0%	82.4%	69.1%
	1997	17,316,796	14.1%	84.7%	71.9%
	1992	15,103,959	—	87.5%	74.8
All US Firms *	2012	27,179,380	3.4%	100.0%	100.0%
	2007	26,294,860	17.0%	100.0%	100.0%
	2002	22,480,256	10.0%	100.0%	100.0%
	1997	20,440,415	18.5%	100.0%	100.0%
	1992	17,253,143	—	100.0%	100.0%

Source: Author's calculation from the published tables of US Census Bureau Survey of Business Owners.
* Includes all other races (equally-owned and other racial minorities) besides Black, Hispanic, Asian, and White firms.
** US Census Bureau, Current Population Survey, 1997–2017.

The ratio of minority firms to all US firms may not adequately depict the disparity unless their share out of the total US sales is also factored into this. This provides a better idea about the performance of minorities in the business sector. Observations of the data reflects that minority businesses account for a much smaller share of sales revenue than even their share of all businesses (Table 4.2). For example, while Black firms represent about 9.5 percent of all businesses in 2012 (Table 4.1), they only account for 1.3 percent of all sales (Table 4.2). This gap between the share of businesses and sales is a vivid indicator of disparity. The level of disparity gets even bigger in 2012 than in all the preceding SBO survey years; it dropped from 17.0 percent in 2007 to 13.0

percent in 2012. Generally, all minority businesses appear to have sales disparity ratios under 100 percent; and, therefore, have larger shares of businesses than of sales.

Table 4.2: Trend in Annual Sales and Business Disparity: 1992–2012

Ethnicity/Race	Year	Annual Sales (1000)	Average Annual Sales	% Change in Average Sales per Firm Sales	% of Sales All US Firms	% of Firm of All US Firms	Disparity Ratio % sales ÷ % Firm
	2012	150,203,163	58,119	-17.7%	1.3%	9.5%	13.2%
	2007	135,739,834	70,629	-4.6%	1.2%	7.3%	17.0%
Black	2002	88,641,608	74,018	-14.4%	1.0%	5.3%	18.9%
	1997	71,214,662	86,478	66.8%	0.8%	4.0%	21.1%
	1992	32,197,360	51,855	—	1.0%	3.6%	26.9%
	2012	699,492,422	364,717	11.7%	5.8%	7.1%	82.9%
	2007	506,047,751	326,575	10.3%	4.6%	5.9%	78.4%
Asian	2002	326,663,445	296,002	-12.6%	3.7%	4.9%	75.8%
	1997	302,794,625	338,852	96.6%	3.6%	4.4%	82.5%
	1992	101,997,697	172,341	—	3.1%	3.4%	89.4%
	2012	473,635,944	143,271	-7.7%	4.0%	12.2%	32.5%
	2007	350,661,243	155,141	10.0%	3.2%	8.6%	37.3%
Hispanic	2002	221,927,425	141,044	-9.1%	2.5%	7.0%	36.1%
	1997	186,274,582	155,242	74.3%	2.2%	5.9%	37.8%
	1992	76,842,489	89,082	—	2.3%	5.0%	46.2%
	2012	10,964,831,537	552,079	13.1%	88.5%	70.9%	124.7%
	2007	9,816,196,729	488,345	16.5%	90.6%	76.4%	118.6%
White/Nonminority	2002	8,122,392,743	419,132	-22.2%	92.5%	82.4%	112.2%
	1997	9,816,196,728	556,860	174.9%	92.5%	84.7%	109.2%
	1992	3,114,460,247	206,202	—	93.7%	87.5%	107.0%
	2012	11,964,077,871	440,190	5.7%	100.0%	100.0%	100.0%
	2007	10,949,461,875	416,411	6.6%	100.0%	100.0%	100.0%
All US Firms*	2002	8,783,541,146	390,722	-4.8%	100.0%	100.0%	100.0%
	1997	8,392,001,261	410,559	113.1%	100.0%	100.0%	100.0%
	1992	3,324,200,000	192,672	—	100.0%	100.0%	100.0%

Source: Author's calculation from the published tables of US Census Bureau Survey of Business Owners.
* Includes all other races (equally-owned and other racial minorities) besides Black, Hispanic, Asian, and White firms.

Asian-owned businesses performance is significantly better than Hispanic and Black-owned firms. On the other hand, Black-owned businesses had the highest disparity, revealing that their share of sales, in 2012, is only 13 percent of their share of businesses. The level of disparity went up from all the prior years. Despite the number of Black firms growing consistently from year to year (grew at the fastest rate between 2002 and 2007 at 60.5 percent and for the period between 2007 and 2012 at 34.5 percent) their firms' sales revenue was experiencing declines. For

instance, in 2012, Black businesses average sales per firm was about six times less than Asian-owned, and about times ten less than White-owned firms. Over the period of ten years (1992 to 2012), the average annual sales per firm did not show significant change for Black-owned businesses while businesses owned by Asians almost doubled, White almost tripled, and Hispanics grew from $89,082 to $143,271.

Recent data based on 2019 and 2018 Annual Business Surveys (ABS) for employer firms and 2017 ABS for non-employer firm show no substantial improvements in closing the racial gap. More noticeably, Blacks are barely represented in employer firms. The disparity becomes even more evident in ownership of employer firms for Blacks and Hispanics. Asian and Whites not only accounted larger ownership but also greater share of sales. Blacks accounted for 2 percent of all US firms and 1 percent of the total sales of all US firms. While sales revenue grew for other minorities and non-minority firms, for Black-owned employer firms there was no growth at all.

Table 4.3: Number of Employer Firms by Race and Annual Sales: 2017–2018

Ethnicity/Race	Year	Number of Firms	Sales ($1,000)	% All US Firms	% Sales of All US Firms	Average Sale	% Firm Growth	% Sales Growth
	2018	124,551	128,012,399	2%	1%	1,027,791	0%	0%
Black	2017	124,004	127,850,815	2%	1%	1,031,022	—	—
	2018	577,835	863,324,218	11%	6%	1,494,067	4%	6%
Asian	2017	555,638	814,806,324	10%	6%	1,466,434	—	—
	2018	331,625	455,644,682	6%	3%	1,373,976	3%	8%
Hispanic	2017	322,076	422,573,589	6%	3%	1,312,031	—	—
	2018	4,364,169	12,741,759,927	79%	89%	2,919,630	0%	14%
Nonminority	2017	4,371,152	11,146,955,402	80%	88%	2,550,118	—	—
	2018	5,499,123	14,357,479,313	100%	100%	2,610,867	0%	13%
All US Firms	2017	5,474,722	12,689,937,307	100%	100%	2,317,914		

Source: 2019 and 2018 US Census Annual Business Survey (ABS). ABS for 2019 covers reference year 2018 and 2018 refers to 2017.

Although the 2017 ABS is the only current tabulated data on non-employer firms, this data revealed that Black business owners trail in sales compared to other races. Blacks appears to have larger share of ownership in non-employer firms than employer firms, which suggests the presence of barriers that limit them to enter in larger firms. Generally, employer firms have larger sales than non-employer firms. A heavier disparity in ownership of employer firms than non-employer firms carries much meaning. Despite the fact that Blacks have a fair share in the rate of ownership in non-employer firms, their average sales are far smaller than any other race. They accounted for 12 percent of all firms but made 6 percent of sales, which is the least compared to the other three races.

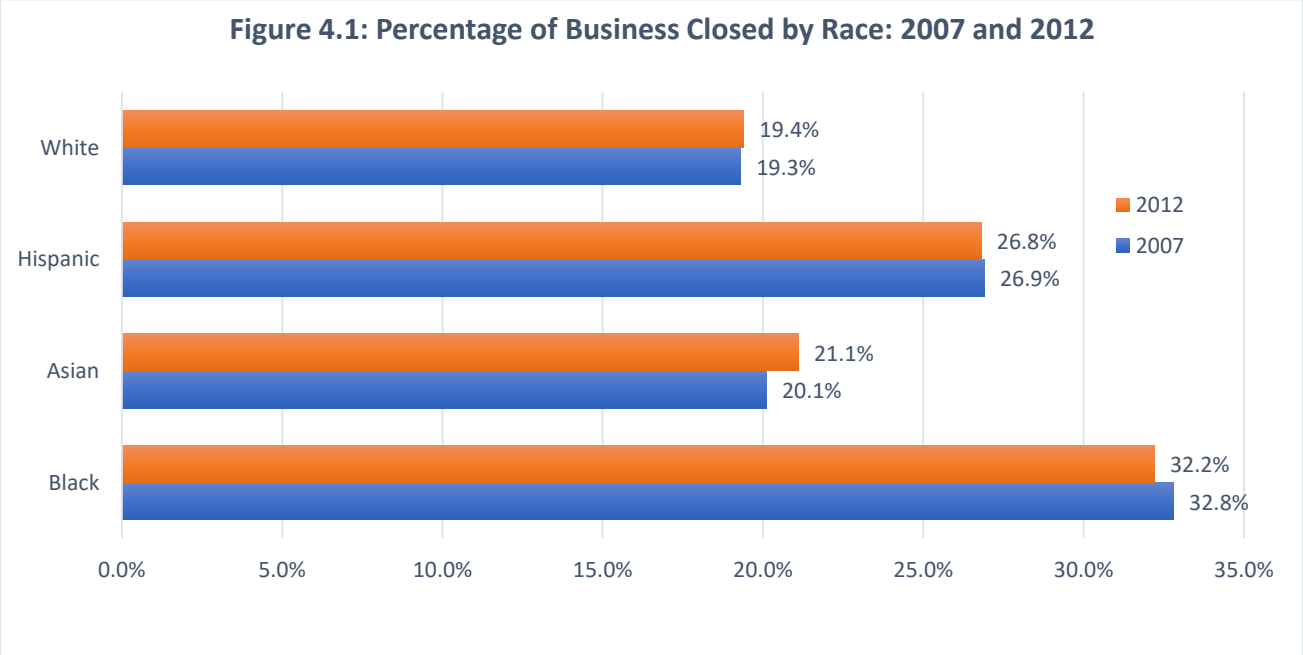
Table 4.4: Number of Non-employer Firms by Race and Annual Sales: 2017

Race	Number of Firms	Sales ($1,000)	Average	% Firm owned	% Sales
Black	2,951,000	65,580,103	22,223	12%	6%
Asian	1,960,000	94,077,567	47,999	8%	8%
Hispanic	3,635,000	129,572,088	35,646	14%	11%
Nonminority	16,830,000	846,317,398	50,286	67%	75%
All US Firms	25,072,000	1,134,088,186	45,233	100%	100%

Source: US Census Bureau, Non-employer Statistics by Demographics, Annual Business Survey Program: 2017.

4.2 Racial Trend and Pattern in Business Closure

Another relevant fact in the understanding of small business performance is their ability to stay competitive in the market and survive. Racial differences in the level of sustainability of business operation reflects disparities. The data presented in Figure 4.1 indicated that White-owned firms have lower risks of business closure than minority-owned firms. The pattern appeared to be similar both in the 2007 and 2012 estimates. Nonetheless, there is a substantial difference among minority-owned firms in terms of the magnitude of the risk. The 2012 survey estimate indicated that nearly 21 percent of Asian-owned firms were closed, compared to 27 percent of Hispanics and about 33 percent of Black-owned firms. A previous study (Fairlie, 2008) also found lower survival rates among Black-owned and Hispanic-owned than among non-minority and Asian-owned firms.



Source: Author's calculation from the published tables of US Census Bureau (2007 and 2012) Survey of Business Owners

Firms owned by Black entrepreneurs are more likely to experience the highest chance of business closure. This failure to survive in the market is likely to discourages the expansion and growth of businesses in general. Historical data on establishment age survival rate trend from the 2019 US Bureau of Labor Statistics also indicated that 20 percent of small businesses in the US fail in their first year. And the evidence (Figure 4.1) showed that only 68 percent of Black-owned firms survive while the remining 32 percent failed. However, the 2016 SBA report showed that nearly 80 percent of small businesses in the United States survived their first year.

Based on the analysis from the 2007 SBO PUMS dataset, the most frequently known reason for small firms' failure to survive in their operations, across business owned by all racial groups, is low cashflow (Table 4.5).

Table 4.5: Percentage of Business Closure by Major Known Reasons: 2007

Reason for Firm Closure	Black	Asian	Hispanic	White/Nonminority/	All US Firms*
Low sales/ Cashflow	33.2	23.7	31.2	29.0	29.3
Owner retired	6.8	7.2	6.7	14.2	12.7
Owner deceased	1.2	0.9	1.0	1.6	1.5
Lack of business credit	10.7	5.3	10.7	6.5	7.1
Lack of personal credit	7.4	3.3	4.2	3.3	3.6
Was one-time business	8.7	9.7	8.0	8.2	8.2
Sold the business	1.5	9.9	2.6	4.3	4.3
Started another business	2.8	4.1	3.5	3.3	3.4

Source: Author's Calculations from 2007 US Census Bureau SBO PUMS.
* Includes all other races (equally-owned and other racial minorities) besides Black, Hispanic, Asian, and White firms.

Nearly 32 percent of Black business owners cited lack of cashflow among the reasons why their businesses ceased operations compared with 29 percent for White and 24 percent for Asians businesses. While the second most important reason for White businesses closure is owner's retirement, for Black businesses lack of business credit is the second outstanding reason. Lack of business credit is also the second most important reason among Hispanic firms. Although, being a one-time business or temp operation is a reason for business closure across all owners, it is the highest among Asian owners. About 10 percent of Asian business owners sold their businesses compared with about 2 percent of Blacks. Asians are most likely to close their businesses to open another business while Blacks are less likely to close their operations to open another firm.

Thus, low cashflow resulting from low sales volume and lack of business loans appears to impact more Black-owned firms than firms owned by other races. It is likely that the disparity in business closure could be the reflection of these underlying factors as well. According to the Federal Reserve 2016 SBCS compiled data (Table 4.6), Black businesses are making less profit than businesses operated by other races. Thirty-eight percent of Black-owned employer firms compared with 25 percent of White-owned are operating at a loss. While more than 50 percent of firms owned by other races estimated that they are operating at profit – the estimate was 42 percent for Black firms. Particularly, the gap between Black and White small businesses is substantial.

Table 4.6: Percentage of Profitability of Employer Firms by Race

	At a Loss	Break Even	At a Profit
White/non-minority/	25 %	18 %	57%
Black	38%	20%	42%
Asian	28%	21%	51%
Hispanic	27%	22%	51%

Source: Author's compilation from the Federal Reserve Bank, 2016 Small Business Credit Survey.

4.3 Trend in Business Ownership and Outcome by Race and Gender

Literature documents that the gender of an entrepreneur is associated with business success. Many studies found that female entrepreneurs underperform male entrepreneurs even after controlling for many factors and demographic differences (Fairlie, 2008; Mothibi, 2015; Lucas, 2017; Essel et al., 2019). The level of small business ownership also varies by gender. The business ownership by race and gender profile is presented in Table 4.7. This indicates that overall, in 2012, women accounted for 36 percent of all small business ownership in the United States – which is a 27 percent increment over 2007. However, in the case of Black businesses, there are more women owners than male owners. But among the White nonminority, minority Hispanic and Asians, males dominate business ownership.

Despite the growth in firm ownership, Black women-owned firms experienced the highest decline in average sales compared to all business owners. On the other hand, equally-owned firms by Black entrepreneurs showed 140 percent growth in sales, although a decline is observed in the number of these firms. The literature suggests that firms owned and operated by multiple owners, such as family members, are more successful than those owned and run by a single owner (Heilman and Pett, 2018). In this regard, the percent of equally-owned firms is very low

among Blacks compared with other races. This characteristic could disadvantage Black businesses in their sales outcome as well as the sustainability of their firm operations.

Table 4.7: Percentage of Ownership and Average Sales by Race and Gender

Race	Owner	2012		2007		% Change in Firm Number	% Change in Average Sales
		% Business Owned	Mean Sales per Firm	% Business Owned	Mean Sales per Firm		
Black	Female-owned	59%	27,753	47%	40,367	67%	-31%
	Male-owned	39%	98,665	45%	103,310	18%	-4%
	Equally male-/female-owned	2%	163,175	8%	67,963	-69%	140%
	Total	100%	58,119	100%	70,629	34%	-18%
Asian	Female-owned	39%	181,096	34%	167,654	43%	8%
	Male-owned	52%	475,866	52%	426,330	24%	12%
	Equally male-/female-owned	9%	520,432	14%	339,133	-22%	53%
	Total	100%	364,718	100%	326,575	24%	12%
Hispanic	Female-owned	44%	53,524	35%	70,634	87%	-24%
	Male-owned	52%	210,917	54%	208,889	39%	1%
	Equally male-/female-owned	4%	268,959	11%	157,631	-46%	71%
	Total	100%	143,271	100%	155,141	46%	-8%
White/Nonminority	Female-owned	32%	189,037	28%	181,024	9%	4%
	Male-owned	58%	767,958	54%	705,915	1%	9%
	Equally male-/female-owned	10%	465,976	18%	301,645	-47%	54%
	Total	100%	552,079	100%	488,345	-6%	13%
All U.S Firms	Female-owned	36%	143,731	30%	153,567	27%	-6%
	Male-owned	55%	637,676	53%	609,918	7%	5%
	Equally male-/female-owned	9%	438,939	18%	276,967	-47%	58%
	Total	100%	440,190	100%	416,411	3%	6%

Source: Author's calculation from the published tables of US Census Bureau (2007 and 2012) Survey of Business Owners.

The data also shows that nearly 9 percent of the small businesses are equally owned by male and females. This category could be denominated largely as a joint husband and wife ownership. The largest equal ownership is noted among White-owned businesses and the least among Black-owned businesses. The gender composition of business owners does not alone reveal the performance of firms, until a detailed observation at their sales level is included. The figures in Table 4.7 suggest the existence of a wide gap in sales outcome of male- and female-owned

businesses. Male-owned businesses have large mean annual sales compared with female-owned firms. Even though females accounted for a larger percentage of ownership among Black firms, their businesses have lower sales than their male counterparts. On the other hand, equally-owned business across all ethnic/racial categories appears to have larger sales than female-owned firms.

However, recent trend based on the 2019 and 2018 ABS for employer firms do reveal a different pattern when it comes the share of Black women in employer businesses. It appears women are less represented in employer businesses and yet show similar pattern of lower sales.

Table 4.8: Percentage of Ownership and Average Sales by Race and Gender of Employer Firms: 2017–2018

		2018		2017			
Race	Gender	%Business Owned	Mean Sales per Firm	% Business Owned	Mean Sales per Firm	%Firm Growth	%Sales Growth
Black	Female	35%	705,246	36%	658558	-3%	4%
	Male	56%	1,266,783	55%	1318368	2%	-2%
	Equally male/female	9%	796,716	9%	768969	1%	5%
	Total	100%	1,027,791	100%	1031022	0%	0%
Asian	Female	27%	1,106,235	27%	1043131	3%	9%
	Male	58%	1,743,553	59%	1713654	3%	5%
	Equally male/female	15%	1,217,164	14%	1252592	9%	6%
	Total	100%	1,494,067	100%	1466434	4%	6%
Hispanic	Female	25%	1,078,202	24%	954095	8%	22%
	Male	63%	1,555,552	64%	1498831	1%	5%
	Equally male/female	11%	1,028,326	12%	1029431	0%	0%
	Total	100%	1,373,976	100%	1312031	3%	8%
Nonminority	Female	20%	1,730,631	20%	1424035	0%	21%
	Male	65%	3,559,940	65%	3147017	0%	13%
	Equally male/female	15%	1,686,071	15%	1438911	-1%	16%
	Total	100%	2,919,630	100%	2550118	0%	14%
All US Firms Classifiable	Female	21%	1,556,702	21%	1313561	1%	19%
	Male	64%	3,214,231	64%	2878560	0%	12%
	Equally male/female	16%	1,557,482	16%	1373665	0%	14%
	Total	100%	2,610,867	100%	2317914	0%	13%

Source: US Census Annual Business Survey (ABS). ABS for 2019 covers reference year 2018 and 2018 refers to 2017. ABS refers the collection year note.

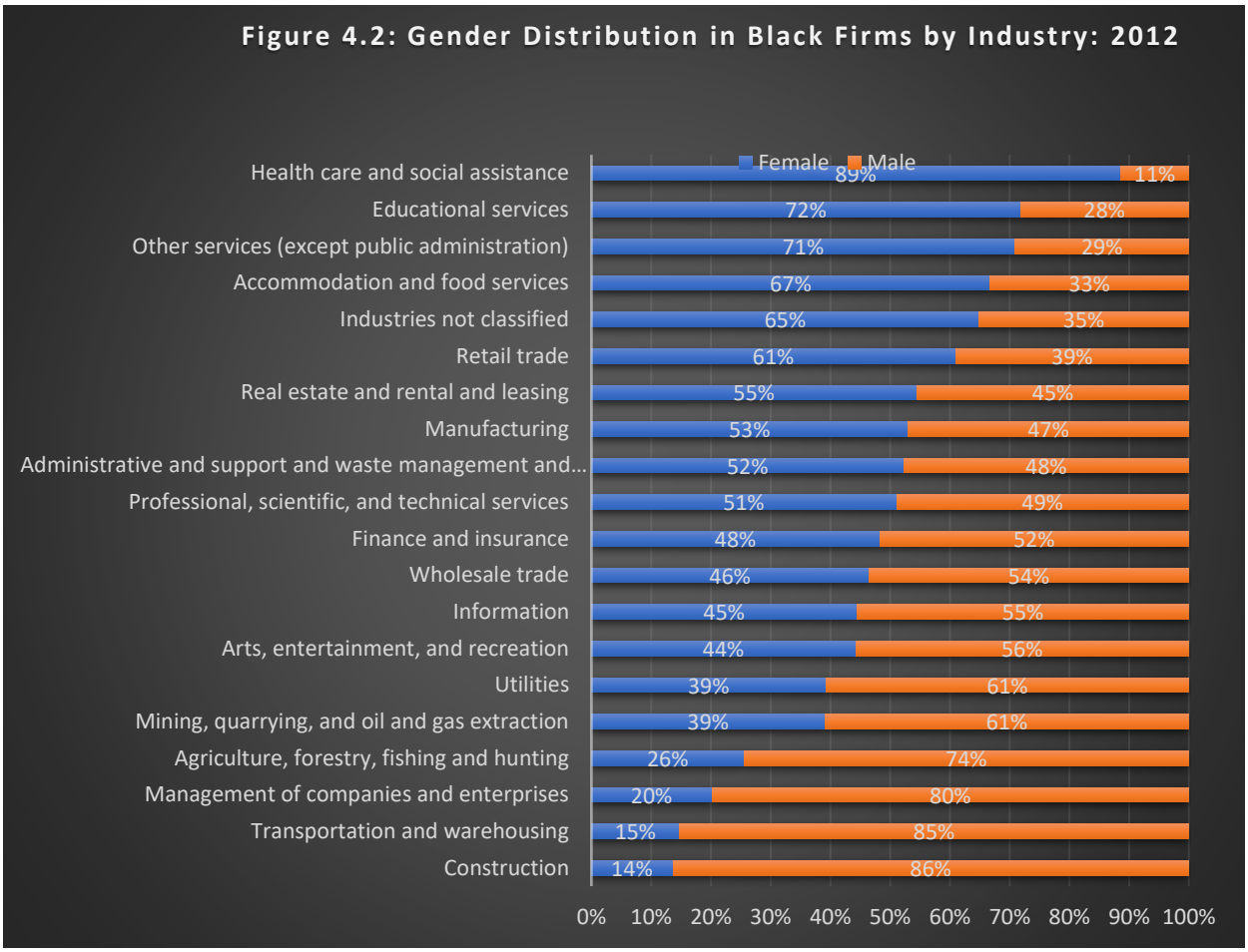
Whereas among non-employer firms, Black women accounted for the largest share of business ownership (53 percent) but have less annual sales revenue compared to Black men and businesses owned by all other ethnic group. The average sale of non-employer firms' Black female-owned business is $15,082, which is the least of all businesses. Black women accounting for 53 percent of all Black firms but making 36 percent of all sales significantly affects the overall performance of Black businesses in general. Generating significant sales revenue and presence of cashflow is critical for the continuity of any business, but the underperformance of Black female-owned firms in sales compared to all other business while constituting the larger share of Black business ownership disadvantages the success of Black entrepreneurship.

Table 4.9: Percentage of Ownership and Average Sales by Race and Gender of Non-employer Firms: 2017

	Gender	Number of Firms	Sales ($1,000)	Average	% Firm Owned	% Sales
	Female	1,561,000	23,543,725	15,082	53%	36%
	Male	1,377,000	41,089,671	29,840	47%	63%
	Equally male/female	12,000	946,707	78,892	0%	1%
Black	Total	2,951,000	65,580,103	22,223	100%	100%
	Female	835,000	28,594,526	34,245	43%	30%
	Male	1,077,000	59,371,360	55,127	55%	63%
	Equally male/female	49,000	6,111,681	124,728	3%	6%
Asian	Total	1,960,000	94,077,567	47,999	100%	100%
	Female	1,559,000	34,733,888	22,280	80%	27%
	Male	2,048,000	91,607,619	44,730	104%	71%
	Equally male/female	28,500	3,230,581	113,354	1%	2%
Hispanic	Total	3,635,000	129,572,088	35,646	185%	100%
	Female	6,765,000	201,806,144	29,831	40%	24%
	Male	9,586,000	595,619,762	62,134	57%	70%
	Equally male/female	476,000	48,891,492	102,713	3%	6%
Nonminority	Total	16,830,000	846,317,398	50,286	100%	100%
	Female	10,550,000	286,090,894	27,118	42%	25%
	Male	13,910,000	784,005,104	56,363	55%	69%
	Equally male/female	612,000	63,992,188	104,562	2%	6%
All US Firms	Total	25,072,000	1,134,088,186	45,233	100%	100%

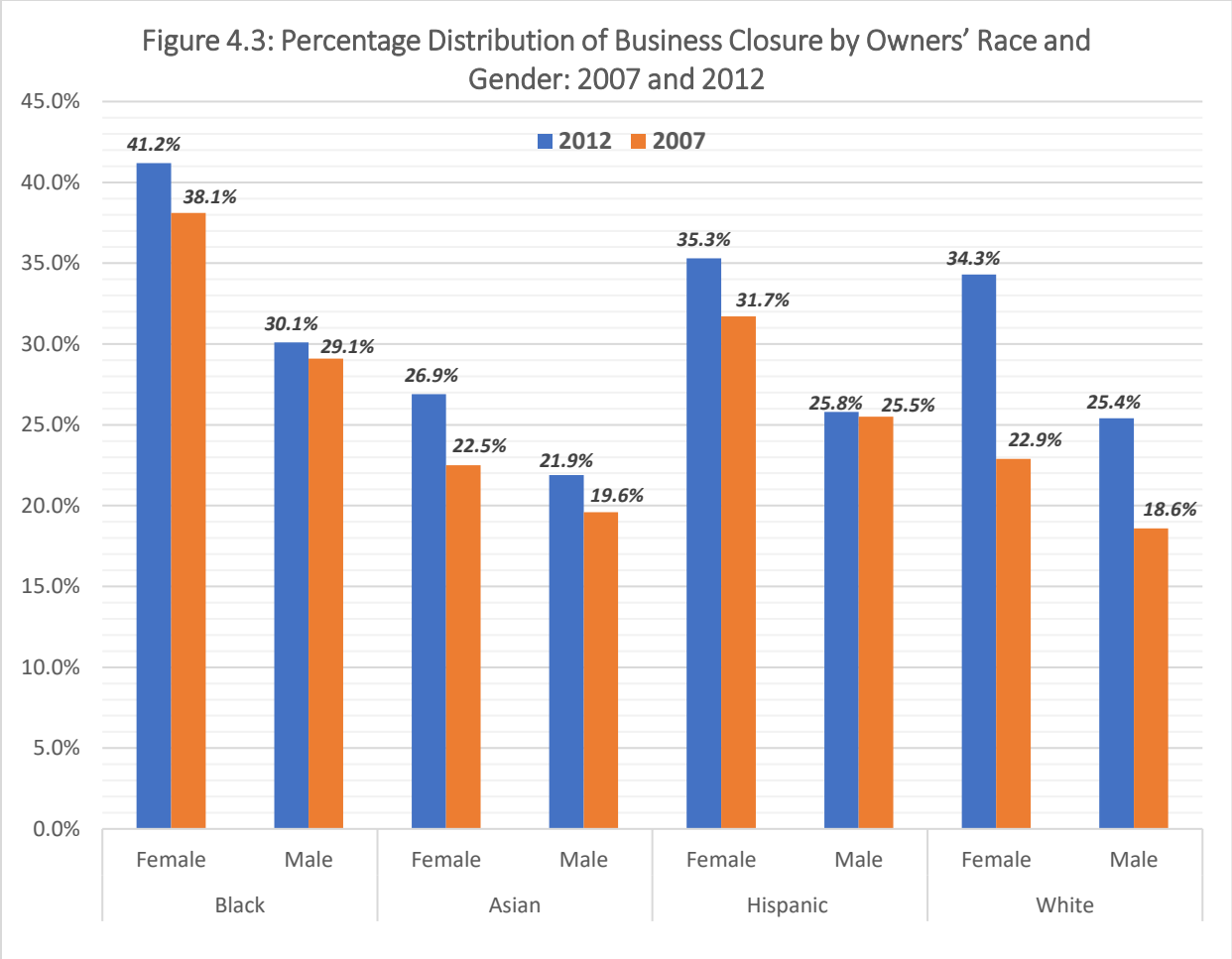
Source: US Census Bureau, Non-employer Statistics by Demographics, Annual Business Survey Program: 2017

The observed sales disparity between female- and male-owned businesses, among others, may also be a reflection of the sector the businesses they are operating. Figure 4.2 illustrates ownership across industries based on gender among Black-owned businesses – excluding equally-owned firms. Figure 4.2 shows the existence of substantial differences in the gender of owners by industry. Empirical evidence indicated female entrepreneurs are more likely than their counterpart male entrepreneurs to start up their business in low-profit sectors (Lee and Marvel, 2013; Marlow and Dy, 2017; as cited by Kim, 2019). According to Figure 4.2, Black women are more likely than Black men to own and operate small businesses in service industries. Women own 89 percent of health care and social assistance services; and heavily dominated other services (hair/nail salon, personal/laundry services, pet care, etc.); education; retail trade; and accommodation and food industry. On the other hand, Black men accounted for a larger percentage of ownership in the construction, transportation, agriculture, mining, management of companies, utilities, wholesale trade, and finance and insurance sectors.



Source: Author's calculation from the published tables of US Census Bureau (2007 and 2012) Survey of Business Owners.

A further observation of male- and female-owned businesses, in terms of their operation status, revealed a visible disparity between genders. Even though Black-owned businesses are predominantly women-owned (48 percent), the rate of closure is higher for women (about 37 percent) than male-owned businesses. Detailed analysis is presented in Figure 4.3:



Source: Author's calculation from the published tables of US Census Bureau (200 and 2012) Survey of Business Owners

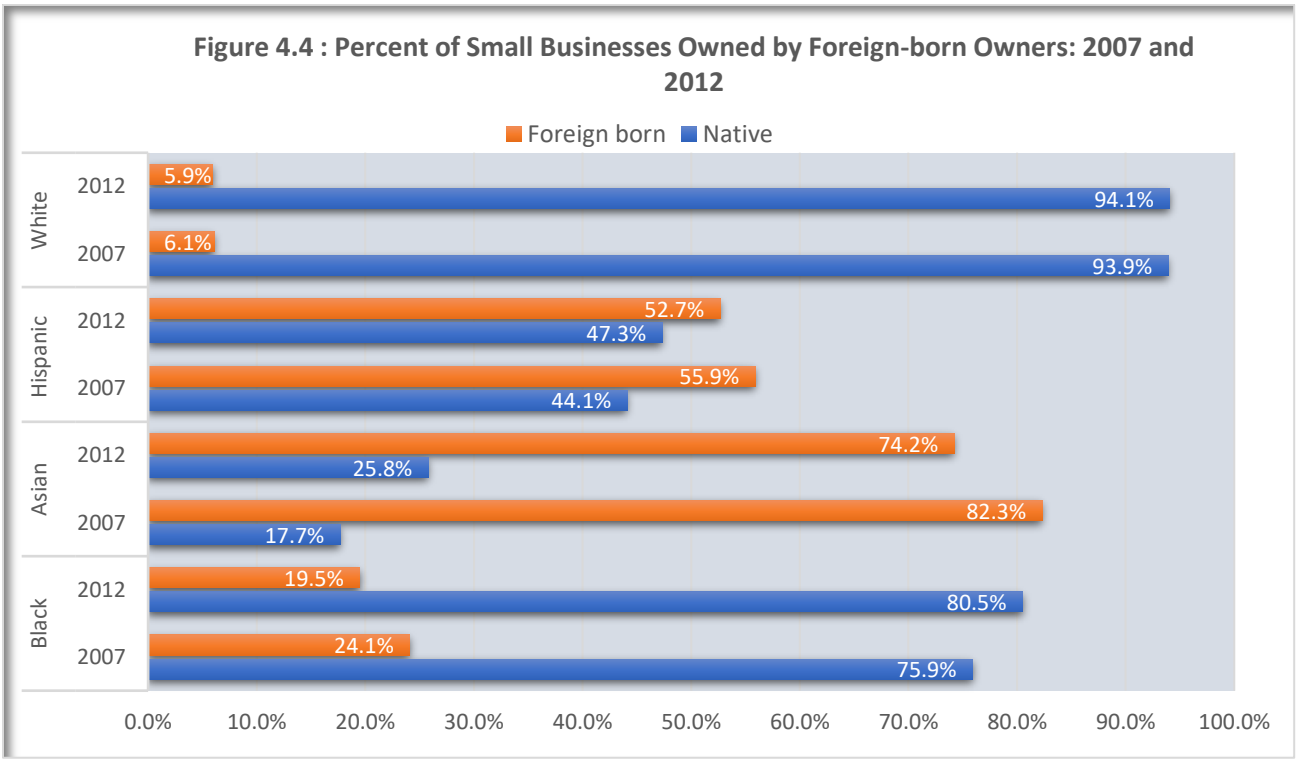
Thus, the statistical summary data presented so far reveals Black women-owned businesses generally lag behind all other businesses, both in terms of sales revenue and business survivability. The level of gap as seen in sales amount and business closure is substantial. On the other hand, the business ownership rate is higher among Black women than Black male or any other racial groups.

4.4 Foreign/Native-born Owners

Empirical evidence suggests that immigrants are observed to have considerable propensity to start businesses compared with natives (Aregbeshola, 2010; Fairlie and Lofstrom, 2014). This is particularity noted among Asian and Hispanic immigrants where they played an outsized role in business ownership rate compared with natives in their groups (Figure 4.4). From Figure 4.4, in 2012, nearly 82 percent of Asian and 53 percent of Hispanic firms are owned by immigrant entrepreneurs. On the other hand, Black and White firms are predominantly owned by native

owners. Black immigrants accounted for about 20 percent of all Black-owned establishments. Among the possible reasons why Black immigrants, unlike other minorities, have lower share of business ownership could be due to the lower numbers of Black immigrants coming from around the world into the United States.

According to the 2012 analysis by Fiscal Policy Institute (FPI) (2012), no African were countries observed to be on the list of the top ten countries of origins of immigrant small business owners that accounted for the bigger share of US business ownership. Many are from Asian origin countries (e.g., India, accounting for 7 percent) and Hispanic origin countries of Latin America (e.g., Mexico, accounting for 12 percent). Thus, the low business ownership rate of Black immigrants could just as well be due to their smaller share of Black foreign-born nationals in the total US population.



Source: Author's calculation from the published tables of US Census Bureau (2007 and 2012) Survey of Business Owners.

The share of immigrant business owners is also reflected in the sales revenue generated by their firms as well. Previous studies in general documented that immigrant business owners earn less than native-born small businesses owners (Bates and Robb, 2014). As noted in Table 4.10, immigrant firms, except for Asian, have lower average sales than non-immigrant businesses. The

average annual sales receipts of immigrant Black-owned firms are roughly $30,000 less than native Black-owned firms. Although Black-owned businesses generate least in sales receipts, unlike White and Hispanic firms, the disparity between immigrant and native Black firms in sales is smaller. Comparison of immigrant average sales suggested that foreign-born Black-owned businesses have lower sales than other races of foreign-born owned firms. Consistent with the overall gap, the disparity among immigrants of different races is clear – the gap in sales outcome is huge. Black immigrant firms have sales 5.6 times below White immigrant-owned firms, 4.7 times below Asian and 2.6 times below immigrant Hispanic-owned firms.

Table 4.10: Mean Annual Sales of Black Businesses by Immigration Status: 2007

	Black	**Asian**	**Hispanic**	**White**	**All US Firm***
Native born	$141,635	$445,756	$345,681	$638,247	$605,066
Foreign born	$111,8844	$471,272	$257,001	$561,104	$432,165

Source: Author's Calculations from 2007 US Census Bureau SBO Public Use Microdata (PUMS).
* Includes all other races (other minorities; multi-racial) besides Black, Hispanic, Asian, and White firms.

It is also worth noting that differences in industry engagement between non-native and native business owners potentially results in sales revenue disparity because some sectors are more profitable than other sectors. Likewise, barriers to enter businesses differ based on entrepreneurs' background, financial, immigration status, skill, etc. Kerr and Kerr (2018) attribute this in part to the location of immigrant-owned business and the type of sector they engage in.

Analysis of Black-owned firms by immigration status in Table 4.11 indicates the industry where Black immigrant-owned businesses are relatively represented in the overall Black businesses. According to the data, all industries are dominated by native Black business owners; however, the percentage of immigrant-owned firms in certain sectors is also fairly noticed. About 83 percent of the industries in company management and enterprise are owned by native Blacks, whereas about 17 percent of immigrants happened to be owners in such type of sector. As seen in the top rows, immigrants accounted for nearly 43 percent of Black-owned sectors like transportation and warehousing; 31 percent of wholesale trade; 24 percent of health care and social assistance; and about 23 percent of retail trade.

Table 4.11. Native and Foregn-Born Black business ownership by Industry: 2012 and 2007

	2012		2007	
Industry	**Foreign Born**	**US Born**	**Foreign Born**	**US Born**
Transportation and warehousing	43.3%	56.7%	43.8%	56.2%
Utilities	31.9%	68.1%	20.0%	80.0%
Wholesale trade	30.7%	69.3%	32.5%	67.5%
Health care and social assistance	23.7%	76.3%	27.1%	72.9%
Retail trade	22.6%	77.4%	29.6%	70.4%
Professional, scientific, and technical services	18.9%	81.1%	19.8%	80.2%
Manufacturing	18.4%	81.6%	23.7%	76.3%
Construction	17.9%	82.1%	25.4%	74.6%
Information	17.9%	82.1%	19.0%	81.0%
Mining, quarrying, and oil and gas extraction	17.9%	82.1%	20.1%	79.9%
Finance and insurance	17.9%	82.1%	18.2%	81.8%
Management of companies and enterprises	16.9%	83.1%	7.5%	92.5%
Real estate and rental and leasing	16.7%	83.3%	21.3%	78.7%
Accommodation and food services	14.7%	85.3%	23.0%	77.0%
Administration and support, and waste management and remediation	14.3%	85.7%	18.9%	81.1%
Other services (except public administration)	13.7%	86.3%	20.6%	79.4%
Educational services	13.1%	86.9%	14.1%	85.9%
Arts, entertainment, and recreation	10.2%	89.8%	12.6%	87.4%
Agriculture, forestry, fishing, and hunting	9.1%	90.9%	16.8%	83.2%
Industries not classified	0.0%	100.0%	24.4%	75.6%
Total for all sectors	19.5%	80.5%	24.1%	75.9%

Source: Author's calculation from the published tables of US Census Bureau (2007 and 2012) Survey of Business Owners.

That data contained in Table 4.11 further suggests that immigrant Black owners predominantly work in transportation and warehousing may not be unexpected. The appendage to the data suggests that most immigrants engage in taxicab businesses where they can operate at lower overhead costs in an urban setting. Further illustration of the 2007 SBO PUMS data in Table 4.12 appears to show no substantial disparity in rate of business closure between immigrant- and native-owned firms within the group, although the rate is slightly higher among immigrant Hispanic immigrants. However, Black immigrant-owned firms have a higher rate of closure when compared with immigrant-owned business across all other groups.

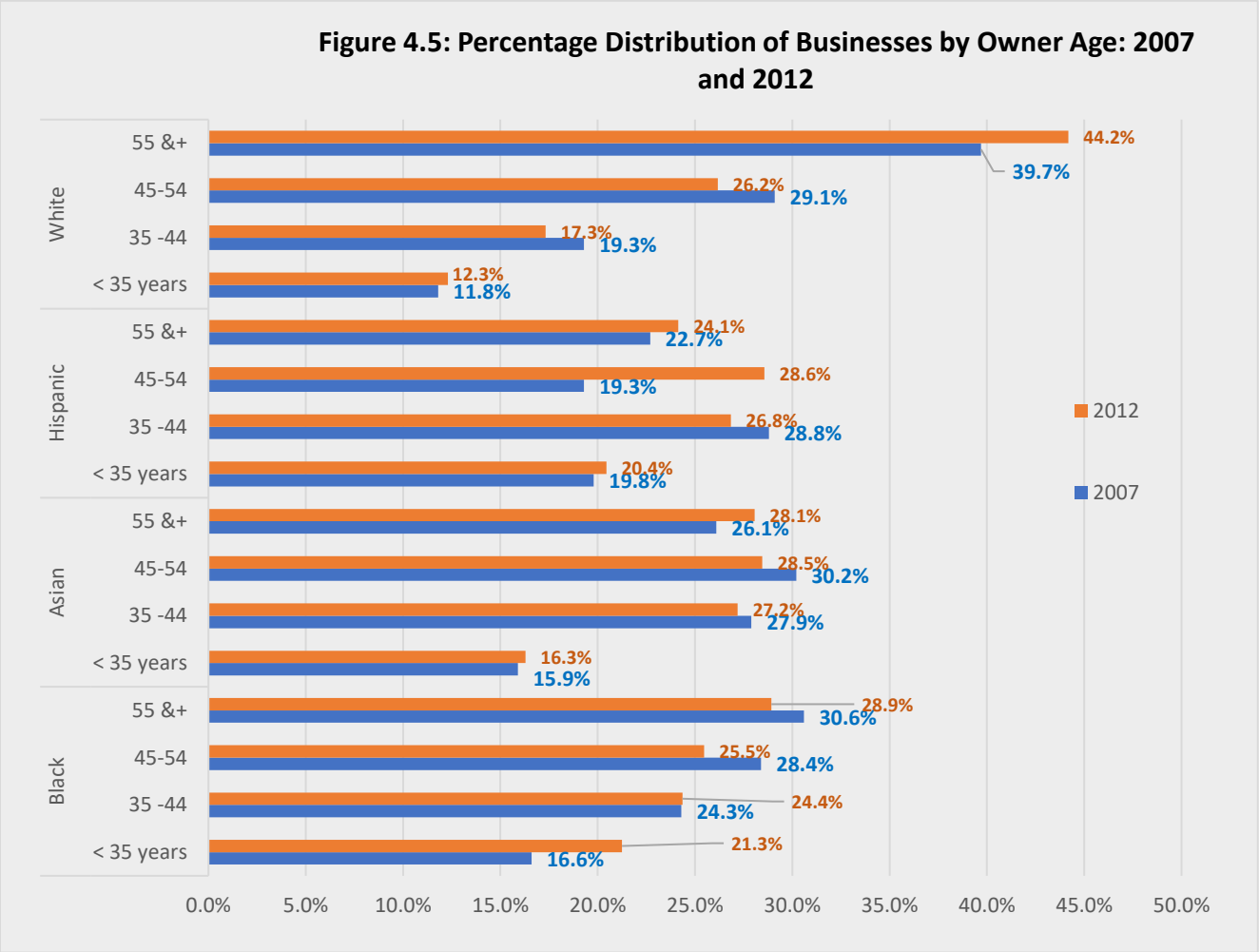
Table 4.12: Percentage of Firms Closed Among Immigrant- and Nonimmigrant-owned firms: 2007

	Black	Asian	Hispanic	White	All US Firm*
Native born	28.2	18.5	25.7	17.0	17.6
Foreign born	28.6	17.7	22.7	17.5	20.5

Source: Author's Calculations from 2007 US Census Bureau SBO PUMS.
* Includes all other races (other minorities; multi-racial) besides Black, Hispanic, Asian, and White firms.

4.5 Age of Business Owners

Empirical studies documented age is an important demographic characteristic associated with business entry and success (Sajilan et al., 2015; Soomro et al., 2019). The literature associates age of an entrepreneur with experience, resource, network, and motivations. Minority-owned businesses are more likely to have younger owners than non-minority firms. This is true for every minority group as revealed in Figure 4.5 below. Based on the recent 2012 data, while about 12 percent of White business owners are younger than 35 years, nearly 44 percent are 55 years and older.



Source: Author's calculation from the published tables of US Census Bureau (2007 and 2012) Survey of Business Owners.

From Figure 4.5, it is understood that young business owners in 2012 accounted for about 21 percent of Black business ownership and 16 percent among Asian-owned businesses. The age of business owners appears to relate to the survival and profitability of the firm. Findings indicated those young business owners starting new firms are the least likely to survive and the more likely to generate lower sales (Disney et al., 2003; Kautonen et al., 2008). The figures in Table 4.13**,** based on the analysis from the 2007 PUMS dataset, tend to show that pattern. Among those firms owned by owners under age 35, their closure rate is the highest across all racial categories. However, the incidence of closure is the highest in Black-owned businesses. About 40 percent of businesses owned by Blacks under age 35 years ceased their operations compared with about 27 percent for Asians and 31 percent for Whites. This shows substantial racial disparity in business

survival rate among young business owners and who potentially are likely to be new business starters.

Table 4.13: Percentage Distribution of Business Closure by Owner Age: 2007

Age	Black	Asian	Hispanic	White	All US Firm*
Under 35	40.2	27.6	36.2	30.6	31.5
35–44	28.8	17.5	23.0	17.6	18.6
45–54	25.6	15.3	19.6	13.6	14.4
55 and over	24.0	14.5	19.7	15.0	15.4
All Age	28.4	17.7	23.9	17.0	17.8

Source: Author's calculations from 2007 US Census Bureau SBO PUMS.
* Includes all other races (other minorities; multi-racial) besides Black, Hispanic, Asian, and White firms.
Note: Percentages are calculated within the specific age group, not out of the total of each race.

It is also observed that business survivability increases as the age of their owners increases. Those businesses owned by older owners relatively have lower closure rates than those owned by younger ones. However, still the pattern holds the same – revealing that Black-owned businesses experience the highest closure rates even among firms owned by those in older age groups.

Table 4.14: Mean Annual Sales by Owner Age and Race: 2007

Age	Black	Asian	Hispanic	White	All US Firm*
Under 35	$42,277	$178,288	$97,987	$137,518	$130,989
35–44	106,482	411,703	296,093	430,838	402,208
45–54	159,601	527,161	338,038	674,126	626,319
55&+	183,835	635,283	394,661	829,562	786,129

Source: Author's Calculations from 2007 US Census Bureau SBO PUMS dataset.
* Includes all other races (other minorities; multi-racial) besides Black, Hispanic, Asian, and White firms.

Likewise, businesses owned by younger owners are generating lower sales. Several compounding factors (experience and skill, size, etc.) that influence the sustainability of operation of a firm are likely to manifest through sales revenue and cashflow, which is regarded as the lifeline for all firms. Thus, less sales receipt is more likely to create disparity in business closure rates.

Consistent with the observations in business closure rate (Table 4.13), the information contained in **Table 4.14** depicts that the average annual sales of firms owned by all racial groups increases with the age of their owners. This suggests that firms operated by owners 55 years and older may likely have a cash buffer compared to those operated by people younger than 35 years. The larger their sales receipts the more likely they are to have cash buffers and may help their firms survive better than younger-owned firms. It is also important to note that the annual average

sales receipts among younger Black owners is substantially lower in contrast to all other racial groups for the same age category. This low sales performance that accounted for nearly 17 percent of the Black businesses, is expected to make young Black-owned businesses vulnerable to risk of business closure at their early years of business startup.

4.6 Education

Education is regarded as an important factor for entrepreneurial success. Differences in educational attainment of entrepreneurs are considered to cause differences in business outcome (Lucas, 2017; Welsh et al., 2018; Mozumdar et al., 2020). Thus, investigating the educational background of small business owners across different races could be informative. As presented in Table 4.15, except for Asian owners, Black and Hispanic firms have less educated owners. The percentage of Hispanic and Black owners with college degrees is far below Whites and Asians. Further to Table 4.15, nearly 45 percent of Black businesses are owned by college graduates compared with 55 percent of Whites. Asian business owners have the highest level of education – about 60 percent of them are estimated to be college graduates.

Table 4.15: Percentage of Businesses by Owner Education and Race: 2007 and 2012

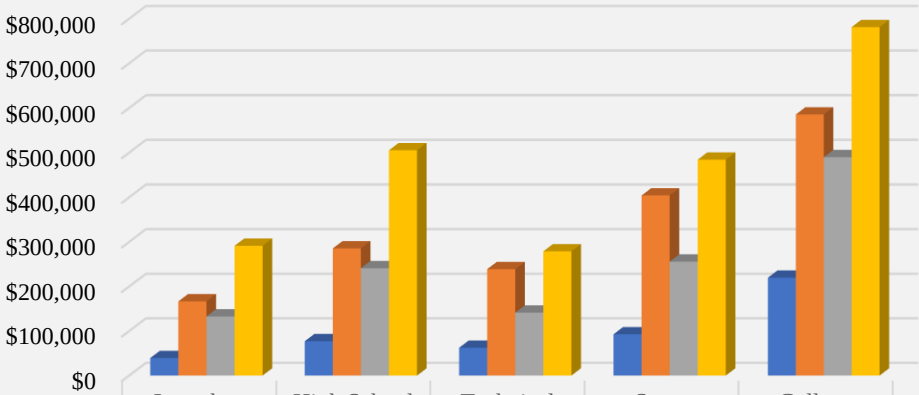
	Black		**Asian**		**Hispanic**		**White**	
Education	**2012**	**2007**	**2012**	**2007**	**2012**	**2007**	**2012**	**2007**
Less than high school	6.2%	9.4%	8.1%	8.3%	18.9%	18.7%	3.5%	4.0%
High school	20.3%	21.3%	16.2%	16.6%	22.9%	23.7%	18.7%	20.6%
Technical /vocational	8.6%	8.0%	4.1%	3.9%	8.0%	7.2%	6.7%	6.3%
Some college	19.9%	20.1%	11.2%	11.8%	16.6%	16.8%	16.2%	17.2%
College graduate	45.0%	41.2%	60.4%	59.5%	33.5%	33.5%	54.9%	51.8%
Total reporting	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

Source: Author's calculation from the published tables of US Census Bureau (2007 and 2012) Survey of Business Owners.

Conversely, a larger proportion of Black-owned firms have owners without a college degree: those with high school diploma and some college education (without degree) accounted for about 20 percent each. A previous study noted that differences in level of education can contribute to racial disparities in business outcome (Fairlie and Robb, 2008). Based on the analysis from the 2007 PUMS dataset contained in Figure 4.6, White firms generated the highest mean annual sales volumes for those owned by people with two or more years of college education.

Although the same holds true for other minorities, the extent of disparity is very high for Black-owned businesses. Businesses generating low average sales volumes are the converse of the above portrait. Firms with mean lower average sales volume are owned and managed by owners with low levels of education. And these firms are disproportionately Black owned.

Figure 4.6 : Mean Annual Sales Receipts by Owner Education: 2007



	Less than high school	High School	Technical School	Some College	College Graduate
Black	$39,191	$77,037	$62,436	$92,587	$219,627
Asian	166,608	285,403	238,800	404,060	585,331
Hispanic	$132,607	$241,024	$141,203	$255,762	$489,681
White	$291,233	$505,188	$278,797	$484,105	$781,020

Source: Author's Calculations from 2007 US Census Bureau SBO PUMS dataset.

Even though Black firms have lower sales, it appears they pay as competitive salaries to their paid employees as other ethnic-owned firms. Average payroll paid per worker for employer firms seems to illustrate this (Table 4.16). Generally, regardless of ownership, average payroll per employee is lower for those firms with their owner without college degree.

Table 4.16: Average Payroll per Employee of Employer Firms by Owner Education: 2007

Education	Black	Asian	Hispanic	White
Less than high school	$16,917	$15,563	$21,153	$26,080
High School	$22,631	$17,324	$23,331	$28,658
Technical school	$20,908	$20,642	$24,747	$28,836
Some college	$22,792	$20,153	$26,765	$30,141
College graduate	$31,937	$34,963	$36,429	$40,956
All education levels	$28,013	$29,073	$28,890	$35,520

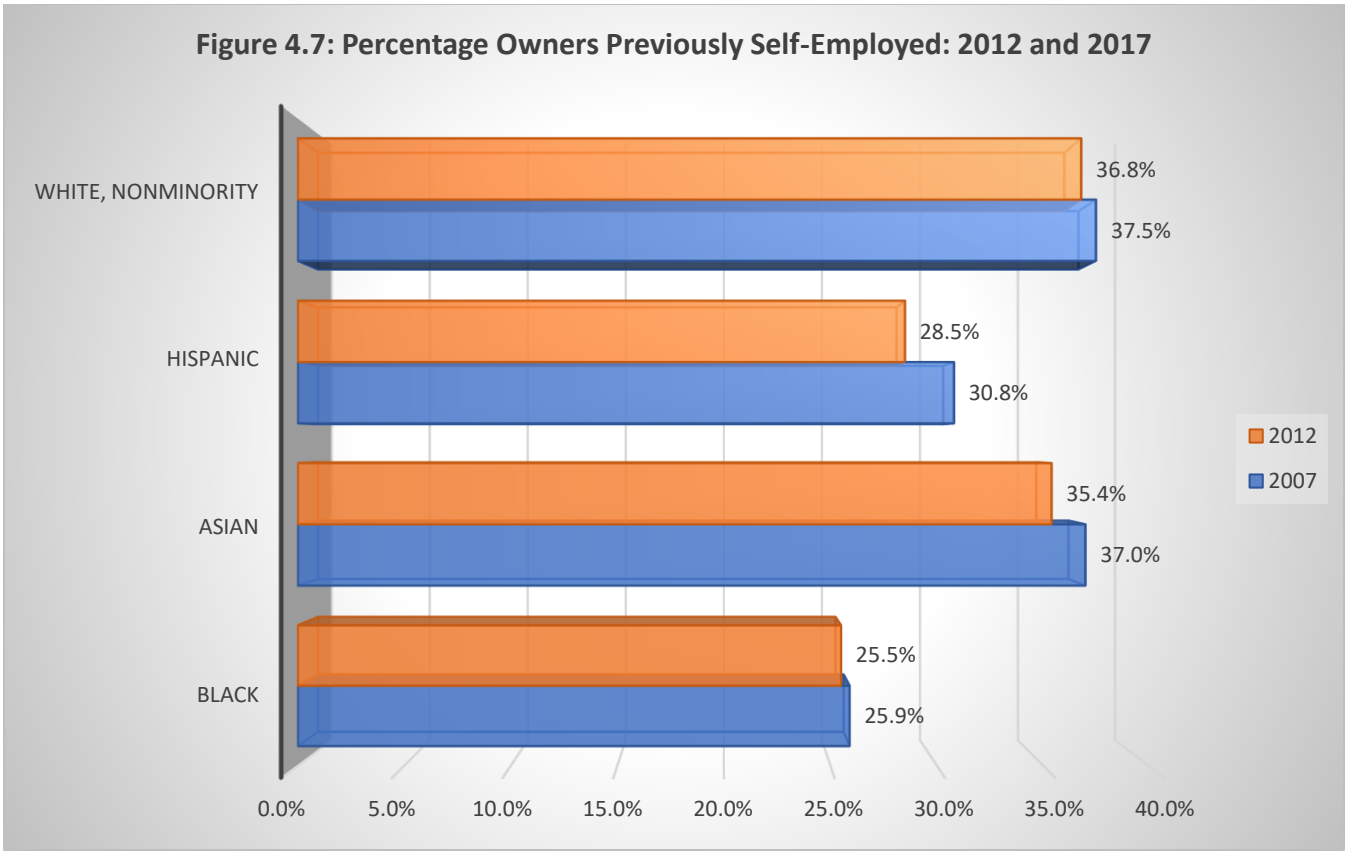
Source: Author's Calculations from 2007 US Census Bureau SBO PUMS dataset.
* Includes all other races (other minorities; multi-racial) besides Black, Hispanic, Asian, and White firms.

Still on Table 4.16, the average payroll payment per worker increases, like the annual sales, as the owner's level of education of the firm increases. However, minority-owned firms pay lower average payroll per their employee compared with White firms. College graduate Black-owned firms pay as competitive higher payroll as Asian and Hispanic-owned firms, and almost a similar overall average payroll per employee. Nonetheless, a wide difference is noted between Black-owned and White-owned businesses.

It is noted that education equips entrepreneurs with skills that are helpful to manage and operate their firms. Owners with better educational achievement are more likely to have the skill to navigate through the complex business environment and be able to survive in the market (Lucas, 2017). It is also more likely that owners with college degrees could have the potential to purchase ongoing firms and invest substantial financial capital at the point when they entered the ownership of the business than those without college degree. Thus, the racial gap in the level of education of business owners could lead to racial disparities in business performance.

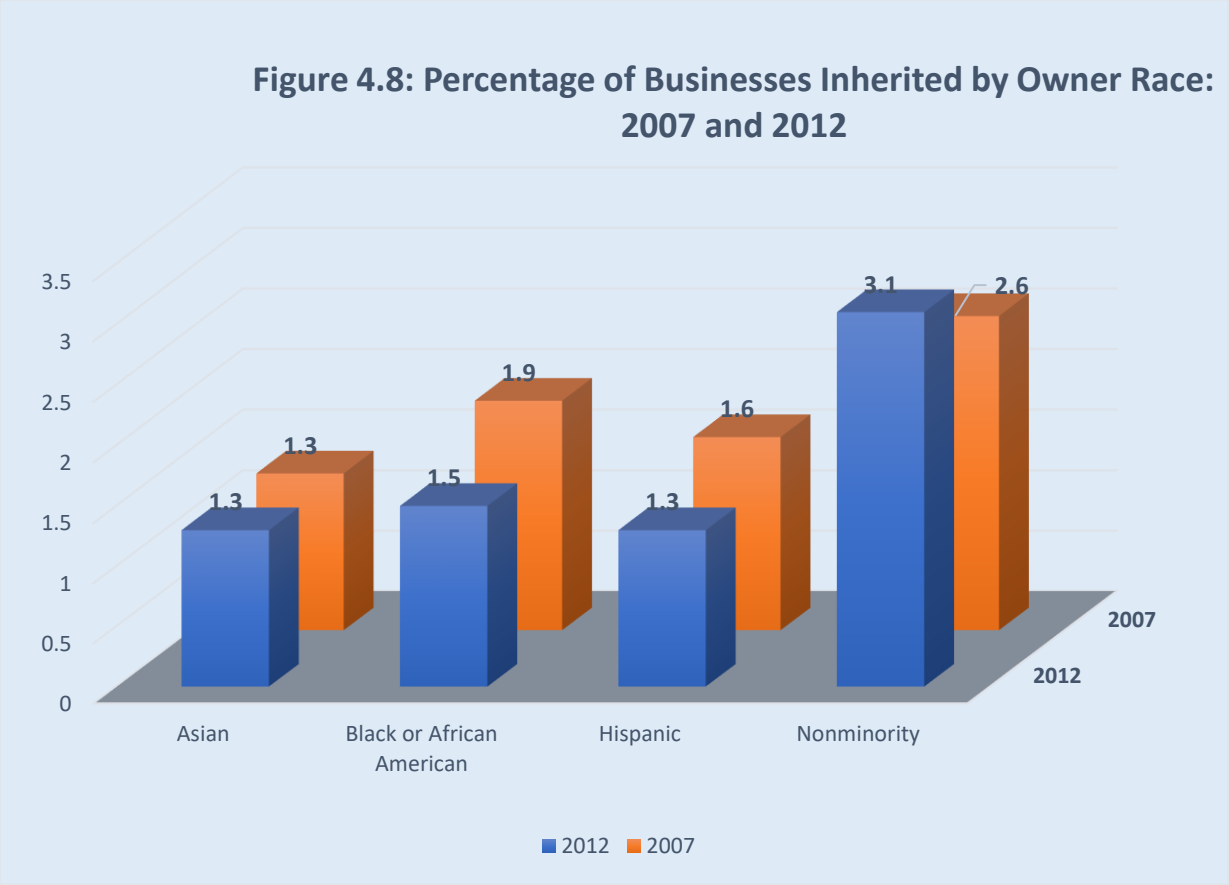
4.7 Business Experience and Inheritance

Possessing business experience prior to small business entry is considered useful for success in a later business undertaking as it helps owners acquire better business management skill (Muogbo and John-Akamelu, 2019; Shakeel et al., 2020); and even build customer networks (Winter et al., 2004). The analysis contained in Figure 4.7 reveals that Black business owners have the least prior self-employment experience among all owners: while about 26 percent of Black business owners have prior business experiences, about 37 percent of White and 35 percent of Asian owners each have prior business experience.



Source: Author's calculation from the published tables of US Census Bureau (2007 and 2012) Survey of Business Owners.

The importance of acquiring experience in family businesses has also been considered important for entrepreneurial success as this would also give an opportunity for children of business owners not only to acquire business skills but also to inherit the firms of their parents. Although Black owners have less prior business experience compared with other minority owners, they appear to have inherited family businesses slightly more than other minority owners.



Source: Author's calculation from the published tables of US Census Bureau (2007 and 2012) Survey of Business Owners.

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Nonetheless, and still on Figure 4.8, based on the 2012 report, 1.5 percent of Black firms are inherited compared with 3.1 percent of White-owned firms. Previous evidence suggested that a lesser proportion of Blacks than Whites acquired businesses from their parents though inheritance (Fairlie, 2008). However, the plausible reason why Black business owners have a slight edge over Hispanic and Asians, in terms of inheriting businesses, could be that Black businesses are predominantly (81 percent) owned by natives compared to Hispanics (47 percent) and Asians (26 percent), as indicated previously in Table 4.12. The fact that Black and White firms are predominantly owned by natives than Hispanic and Asian firms suggest the greater likelihood that they receive businesses from their parents.

4.8 Family Ownership and Customer

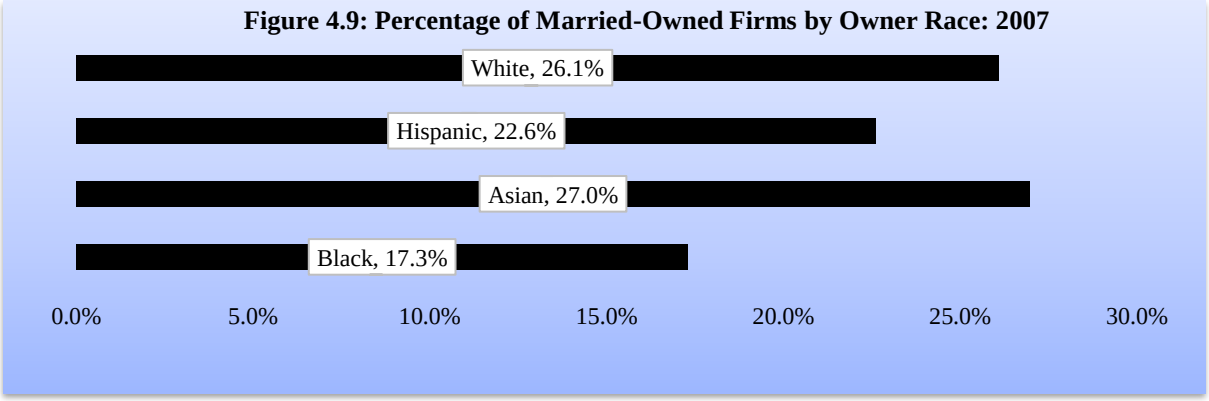
Previous research found that firms owned by family generally perform better and enjoy a stronger financial structure than non-family businesses (Heilman and Pett, 2018). Family-owned firms could be owned by two or more members of the same family. Family members can be parents, children, siblings, other close relatives, and spouses. The 2012 and 2007 published SBO results contained in Table 4.17 show that a lower proportion of Black businesses are family owned. This figure, for instance in 2012, is very low compared with Whites (19 percent) and Asians (20 percent). This pattern was similar to the prior 2007 survey.

Table 4.17: Percentage of Family-Owned Business by Race: 2007 and 2012

Ethnicity/Race	2012	2007
Black	9.2%	14.9%
Asian	18.7%	24.5%
Hispanic	13.4%	20.0%
Nonminority	19.9%	28.8%
All U. S Firms	19.3%	28.2%

Source: Author's calculation from the published tables of US Census Bureau (2007 and 2012) Survey of Business Owners,

It may be important to note that businesses run by family members benefit from shared responsibility, risk, ownership, and better management by working together. More than a quarter of all firms (26 percent) are husband and wife-owned businesses (Figure 4.9). The share of husband and wife-owned businesses is larger among White and Asian firms than Black and Hispanic. The percentage of firms owned by married couples (17 percent) is small among Black businesses, reflecting that Black firms are predominantly non-family owned compared to firms owned by other races. Thus, this less representation more likely leads to unfavorable business outcomes in Black-owned firms, because Black owners may not bank on family as much as firms owned by other races and generate social capital.



Source: Author's calculation from the published tables of US Census Bureau (2007 and 2012) Survey of Business Owners.

Across all small businesses, individual customers accounted for the largest share. White firms are more likely than minority-owned firms to sell to other businesses and organizations, and less likely than minority firms to sell to individual consumers. This information is further depicted in Table 4.18.

Table 4.18: Percentage of Customer Category and Annual Sales: 2007 and 2012

		Percentage of Customer		Percentage of Total Sales of the Customer Category	
Ethnicity/Race	**Customer Category**	**2012**	**2007**	**2012**	**2007**
Black	Federal government	3.4%	3.0%	11.9%	14.6%
	State and local government	6.8%	6.9%	17.5%	16.6%
	Individuals	79.5%	78.3%	49.4%	52.2%
	Other businesses and/or organizations	21.2%	23.4%	48.3%	40.2%
Asian	Federal government	3.1%	2.4%	6.7%	6.5%
	State and local government	4.1%	3.5%	6.1%	6.1%
	Individuals	75.6%	76.1%	54.5%	52.7%
	Other businesses and/or organizations	28.8%	28.9%	49.6%	51.8%
Hispanic	Federal government	2.8%	2.3%	7.6%	6.1%
	State and local government	4.8%	4.7%	9.7%	11.0%
	Individuals	77.7%	77.2%	56.1%	54.9%
	Other businesses and/or organizations	25.3%	27.5%	50.1%	53.1%
Nonminority White	Federal government	1.8%	1.7%	5.1%	4.2%
	State and local government	5.1%	5.1%	10.3%	10.2%
	Individuals	71.2%	72.3%	48.4%	49.1%
	Other businesses and/or organizations	35.9%	36.7%	62.1%	63.2%

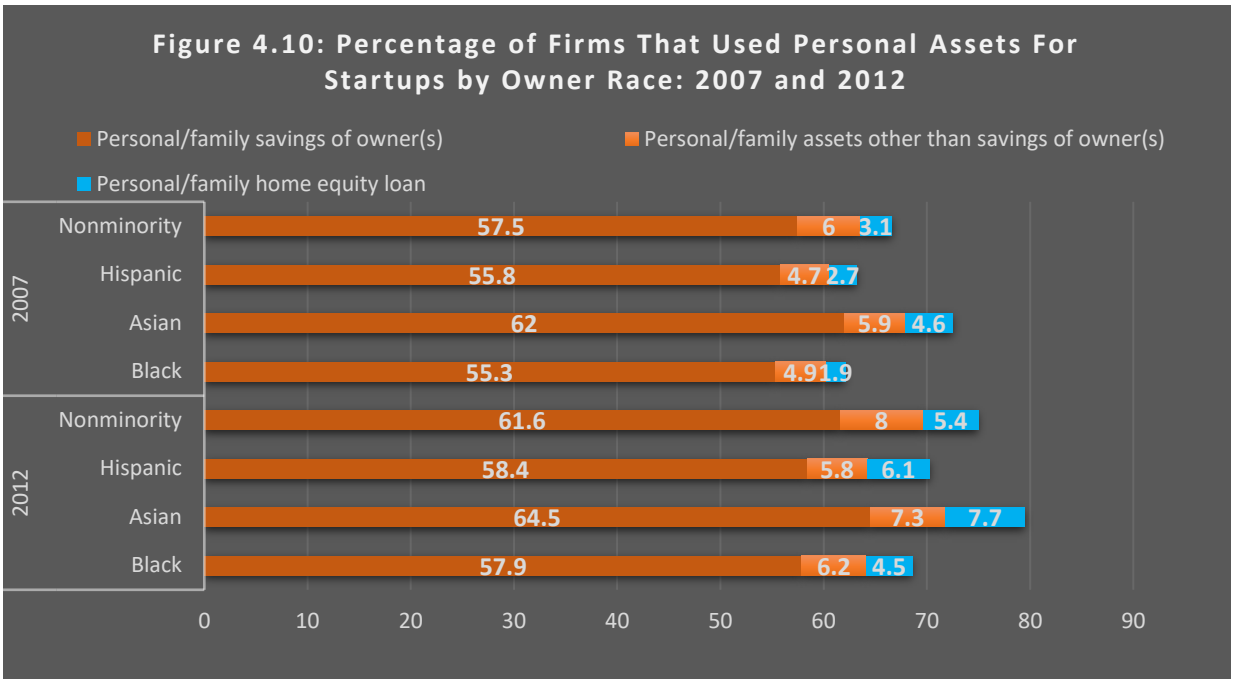
Source: Author's calculation from the published tables of US Census Bureau (2007 and 2012) Survey of Business Owners.

Black-owned firms drive most of their sales by doing business with individual customers compared with all firms owned by other races. In 2012, it is estimated that about 80 percent of them market their products or services to individual customers. This tends to imply that Black firms are concentrated in industries such as health care and social service and other services like hair/nail salon, transportation, which are based on individual consumers and are regarded as less profitable sectors.

Although the shares of major customers are similar for all firms in most categories, it is noteworthy that about 3 percent of Black-owned firms reported the federal government as a major customer, while only about 2 percent of firms owned by Whites did. On the other hand, in both 2007 and 2012 surveys, Black-owned businesses doing business with organizations or other businesses are fewer than the other races. Although other businesses customer share is less than individual customers, their contribution to the total sales revenue is large. For instance, in 2012 other businesses customers accounted about 36 percent among White-owned firms yet contributed 62 percent to their total sales revenue – which is larger than the share of revenues from their individual customers. Thus, Black-owned firms' business being predominantly with individual customers may have an impact on their sales volume. The disparity in the type of customers across racially-owned businesses likely contribute to the disparities observed in their sales revenue and overall business success.

4.9 Wealth

The importance of personal wealth has been a fundamental issue in the literature in the motive for self-employment. The rationale behind this is that individuals with low wealth levels are expected to face more liquidity constraints and are less likely to acquire outside financing to found businesses than are those with better household net worth (Fairlie et al., 2016; Palia, 2016). The size of personal assets invested in founding a firm could be a proxy indicator of the level of net worth of entrepreneurs. As the analysis in Figure 4.10 shows, firms across all groups make heavy use of personal equity, with over half using their own personal savings.



Source: Author's calculation from the published tables of US Census Bureau (2007 and 2012) Survey of Business Owners.

Further to Figure 4.10, Black-owned firms in 2012 reported lower use of personal or family savings (58 percent) for startup, compared with White (62 percent) and Asian (65 percent) firms. A similar pattern was also reported in the 2007 survey. This reflects that Black families have lower wealth levels than White and Asian families, which results in the lower equity levels of new Black businesses compared to White businesses. According to a study by Jones (2017), more than one in four Black households had a negative net worth compared to fewer than one in ten for White households. Blacks have the lowest median household held in wealth (US Census Bureau, 2020). The figure, thus, appears to suggest that Blacks have lower personal assets and home equity.

As a result, Black entrepreneurs likely enter industries with low capital requirements but with high failure rates, which weakens their firms' abilities to buffer losses and hamper their financial growth to survive in early stages. This level of disparity in level of wealth could potentially lead to disparities in business financial outcome.

4.10 Chapter Summary

The descriptive statistical results presented in this chapter appears to show that Black-owned businesses lag behind other minorities and non-minority White-owned businesses on several key attributes considered to be influential for success. Black business ownership accounts for 9.5 percent of all US small businesses, yet they account for about 1 percent of the total US aggregate

business sales. The disparity is more evident when the ratio of their ownership to sales is observed. Despite an increasing trend in the rate of small business participation, Blacks – unlike other minorities and Whites – experienced declining trend in sales revenue. The average annual sale of Black businesses is about ten times lower than White, six times below Asian, and about three times below Hispanic-owned firms. The data do not seem to suggest either that the gap is narrowing over time. Average sales for Black-owned firms, based on the recent consecutive SBO surveys, revealed a declining trend. Black firms saw a nearly 18 percent decline whereas average sales for White and Asian firms grew nearly by 13 and 12 percentage points, respectively.

The analyses suggest, overall, minority businesses experience more risk of business closure than White-owned businesses; however, Black-owned firms have the highest closure rate (33 percent) compared with White (19 percent), Asian (21 percent), and Hispanic (26 percent). The evidence from the 2007 SBO and 2012 SBO does not show an improving trend. The estimate in the level of business closure for Black-owned firms slightly increased in the 2012 SBO. Lack of cashflow is the major reported reason for business failure across all firms; and Black businesses comparatively appear to encounter most (33 percent) of this problem. Black business owners more than either White or Asian-business owners are found to close their operation due to lack of business or personal credit from financial institutions. About 11 percent of Black-owned firms compared with 3 percent of White-owned firms reported that the reason for their business closure is shortage of business credit. Although lack of credit is one of the major reasons for small businesses, it is disproportionately affecting Black entrepreneurs. Unlike businesses owned by other races, Black businesses are dominated by female ownership (59%); however, female-owned businesses perform much less well than male-owned businesses and are more likely to face risk of closure.

Black female-owned firms have the least ($27,753) sales average compared to all groups in comparison with Asian female-owned firms ($181,096), White female- ($189,037), and Hispanic female-owned firms ($53,524). This disparity along the gender of racially-owned firms results in an overall lag for Black-owned firms in sales. Contrastingly, Hispanic and Asian businesses are predominantly owned by immigrant owners, yet natives (about 81%) are the dominant owners in Black businesses. Overall, across all racial groups, except for Asians, native-owned businesses have higher average annual sales than non-native businesses; however, the gap between native-owned and immigrant firms in the case of Blacks is relatively narrow. Contrastingly, non-native

Black-owned firms perform worse both in sale and business closure than all other groups, which likely results in racial differences in business outcomes.

Another major challenge that confronts Black business owners is poor education. Evidence presented in this chapter indicates that a large proportion of Black business owners are without college diploma (55 percent), and most Black business owners are comparatively younger as compared to White owners – the younger age groups contrastingly generate lower sales. Nearly 40 percent of Black businesses of those under age 35 years are closed. Compared to Hispanic-, Asian-, and White-owned firms, Black-owned businesses are less family-owned, which likely hamper their opportunity to generate social capital and exploit better joint management.

It is also noted from the analyses that Blacks face more liquidity constraints for startup due to lack of net personal and /or family wealth. Likewise, the analyses reveal that White and Asian business owners have more prior business experience more than Blacks. These features seem to benefit White- and Asian-owned businesses in driving their sales volume as well.

Several of the attributes of business owners appeared to show distinctions of Black-owned firms from other firms in terms of their sales performance and business survival. The descriptive profiles provided evidence of clear presence of racial disparities. Chapter 5 covers aspects of business characteristics and environment along racial profiles and investigates the level of the performance gap due to such characteristics.

CHAPTER 5

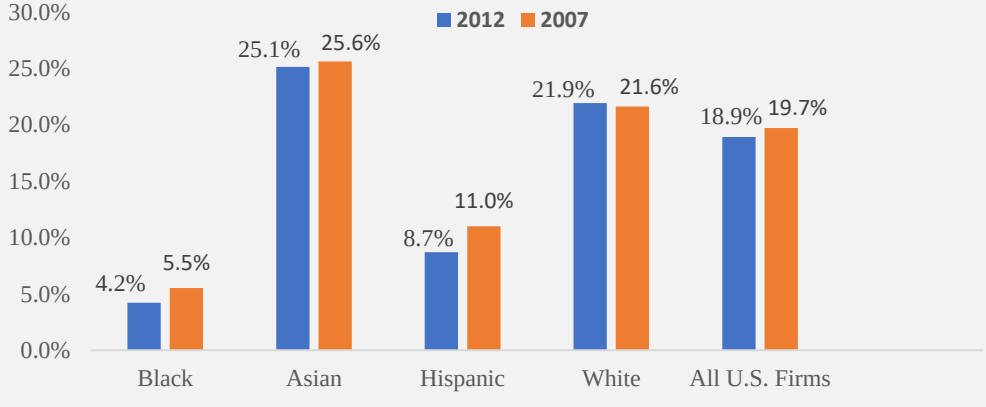
DESCRIPTIVE ANALYSIS OF BUSINESS CHARACTERSTICS AND ENVIRONMENT

This chapter investigates the business characteristics and environment that are essential attributes for the success of small firms. Those characteristics, such as firm nature and size (employer status, employee size), industry type, age of firm, access to financial markets (Bank loans), business internalization (outsourcing and exports), online marketing or e-commerce, and geographic regions are presented and discussed – contrasting those firms owned by Black entrepreneurs with those owned by other minority and non-minority entrepreneurs.

5.1 Employer Status

An important aspect of small businesses characteristics is an understanding of whether they are employer or non-employer firms. The nature of a firm, employer or non-employer, informs not only the size of the business but also the likelihood of its financial strength. Employer businesses are observed to be larger in size, more mature, and older than non-employer firms. According to the 2012 SBO, in Figure 5.1, about 19 percent of all US firms are employers while the remaining, the vast majority, are non-employers. This estimate was almost the same in 2007 – showing no significant substantial change occurring between the two SBO surveys in terms of employer vs. non-employer compositions.

Figure 5.1: Percent of Employer Firms by Owner Race: 2007 and 2012

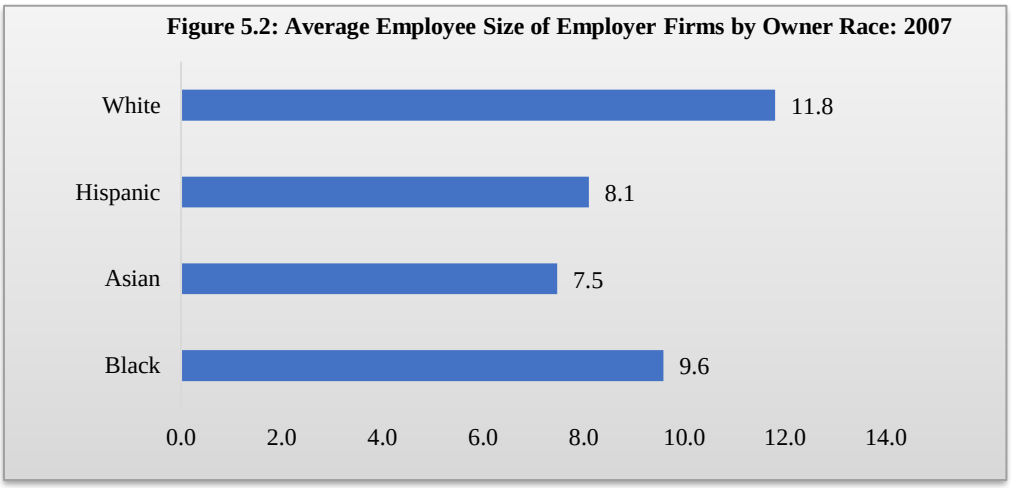


Source: Author's calculation from the published tables of US Census Bureau (2007 and 2012) Survey of Business Owners.

The extent of the compositions of being an employer, however, varies across businesses owned by different races. For instance, about 26 percent of Asian and 22 percent of White-owned firms are employers, compared with 4 percent for Black and 9 percent for Hispanic-owned firms. This large disparity observed between Black and other race/ethnic-owned firms points more to the likelihood that Black-owned businesses are predominantly non-employer, operating out of their homes, part-time operations used for supplemental income, and experience financial challenges forcing them to use personal fuds to cope with business-related challenges, as compared to Asian, White, and Hispanic-owned businesses.

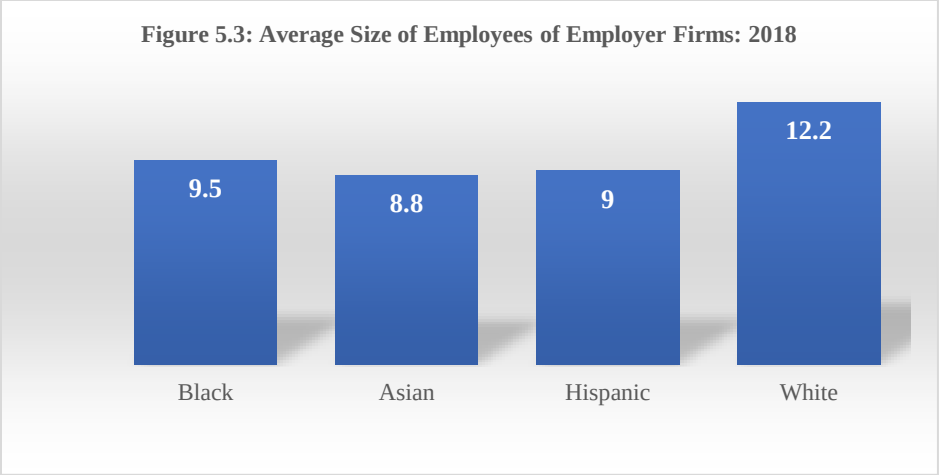
5.2 Employee Size

Minority-owned firms are usually known to have employed a fewer number of employees compared to White-owned businesses. Even when a minority firm is an employer, it tends to hire fewer workers on average than White-owned firms (Figure 5.2). However, this appears to be an area where Asian-owned firms lag behind other racial minority groups, with an average of 7.5 employees per firm, compared with 9.6 for Black-owned and 8.1 for Hispanic-owned businesses.



Source: Author's Calculations from 2007 US Census Bureau SBO PUMS dataset.

The evidence from the recent 2019 ABS in Figure 5.3 also suggests a similar level of disparity in the average size of employees across firms owned by the different races – non-minority White-owned firms employed on average more workers than minority-owned small businesses.



Source: US Census 2019 Annual Business Survey of Employer Firms, Author's calculation.

The literature documented that sales volume and profitability, among others, could vary depending on the size of firm. For instance, Takahashi (2009) argues that larger businesses exploit economies of scale by exploiting their accumulated resources better than smaller firms. Thus, the size of a firm could be informative of its revenue size as well. Accordingly, the figures in Table 5.1, the average annual sales of firms appear to be larger for businesses with a higher number of employee size and vice versa across all races. However, the racial comparison of average annual sales reveals Black-owned businesses have the least revenue for all sizes of businesses. For instance, Black-owned firms with 1–4 employees generate mean annual sale of $238,861 compared with Asian- ($444,186) and White-owned firms ($402, 833). This gap is very large – implying Black-owned firms made 1.9 times less than Asian- and 1.7 times White-owned firms in average annual sales. The disparity becomes even bigger for larger firms with ten or more employees, particularly in comparison with White-owned firms – Black-owned firms generating 3.8 million vs. White 7.2 million.

Table 5.1 Average Annual Sales by Employee Size and Race: 2007

Employee Size	Black	Asian	Hispanic	White
Non-employee	21,922	59,393	38,802	56,239
1–4 employees	238,861	444,186	334,215	402,833
5–9 employees	628,146	987,983	840,353	1,021,721
10&+ employees	3,846,370	4,095,113	4,450,625	7,233,498

Source: Author's Calculations from 2007 US Census Bureau SBO Public Use Microdata (PUMS).

Likewise, the risk of business closure varies across different sizes of firms. As presented in Table 5.2, a smaller proportion of businesses with larger employee size, across all races, closed their operations than those with no or fewer employee sizes. In other words, the proportion of firm closure decreases as the size of its employee increases. Nonetheless, a clear disparity is observed when Black-owned firms are compared with other minorities and non-minority White-owned firms. For all comparative categories, Black-owned firms have the highest proportion of business closure.

Table 5.2: Percentage of Closure Among Different Firm Size of Employees by Race: 2007

	Firm Employee Size and % Closed among:			
	Non-employee	**1–4**	**5–9**	**10 and more**
Black	33.51	8.52	4.77	4.14
Asian	26.73	6.9	5.05	3.86
Hispanic	30.17	6.9	4.66	3.42
White	23.29	6.46	4.23	3.06

Source: Author's Calculations from 2007 US Census Bureau SBO Public Use Microdata (PUMS).

Although Asian-owned businesses appear to have lower employee size (as shown earlier in Figures 5.2 and 5.3) their firms are run more by full-time employees than firms owned by other races. According to Table 5.3, nearly 31 percent of Asian-owned firms are using full-time workers. This is more than double the size of full-time workers employed by Black-owned firms (13 percent). However, Black-owned firms contract more workers, almost the same as other minority-owned firms.

Table 5.3: Percentage of Firms by Type of Workers Used in Their Businesses: 2007

Types of Workers Used by This Business	**Black**	**Asian**	**Hispanic**	**White**
Full-time paid employees	12.8	30.8	21.1	25.0
Part-time paid employees	13.9	27.7	17.0	21.3
Paid day laborers	6.1	4.7	7.8	4.6
Temporary staffing obtained from a temporary help service	2.0	3.4	2.4	2.8
Leased employees from a leasing service or a professional employer organization	0.8	0.9	0.7	0.7
Contractors, subcontractors, independent contractors, or outside consultants	20.1	20.2	22.2	25.8

Source: Author's Calculations from 2007 US Census Bureau SBO Public Use Microdata (PUMS).

A firm's capacity to hire more full-time workers likely suggests its financial strength and the sustainability of its operation. On the other hand, according to the 2016 SBCS data (as analyzed

and presented in Table 5.4), a considerable proportion of Black-owned businesses are estimated to have a revenue size under $100,000.

To that extent, the size of revenue of a firm can suggest how big or small the business is; while 34 percent of White firms, 26 and 21 percent of Asian and Hispanic firms (respectively) belong to at least $1,000,000 revenue size, 14 percent of Black firms are within this category. This potentially validates that Blacks are largely operating smaller firms than White and other minorities – reflecting similarity with the PUMS SBO results summarized in Table 5.1.

Table 5.4: Percent of Employer Firms by Revenue Size: 2016

Race	<$100,000	$100,000–$1M	$1M–$10M	>$10M
White	17%	50%	29%	5%
Black	42 %	44%	12%	2%
Asian	21%	54%	23%	3%
Hispanic	24%	55%	18%	3%

Source: Author's compilation from the Federal Reserve Bank, 2016 Small Business Credit Survey.

5.3 Number of Owners

Minority firms are more likely owned by a single owner than multiple business partners (Tables 5.5 and 5.6). This is more apparent among Hispanic- and Black-owned firms. On the other hand, White- and Asian-owned firms are operated by multiple owners compared with Black and Hispanic firms. This could account for the large proportion of family-owned businesses in these groups. According to the 2012 SBO estimates in Table 5.4, almost 11 percent of Black-owned businesses had at least two owners, compared with about 23 percent of Asian and 25 percent of White-owned businesses.

Table 5.5: Distribution of Number of Owners per Business by Race: 2012

Number of Owners	Black	Asian	Hispanic	Nonminority
1 person	89.0%	76.8%	85.4%	74.7%
2–4 people	10.7%	21.9%	14.1%	23.6%
5–10 people	0.3%	1.2%	0.5%	1.3%
11 or more people	0.1%	0.2%	0.1%	0.4%
Total	**100.0%**	**100.0%**	**100.0%**	**100.0%**

Source: Author's calculation from the published tables of US Census Bureau (2012) Survey of Business Owners.

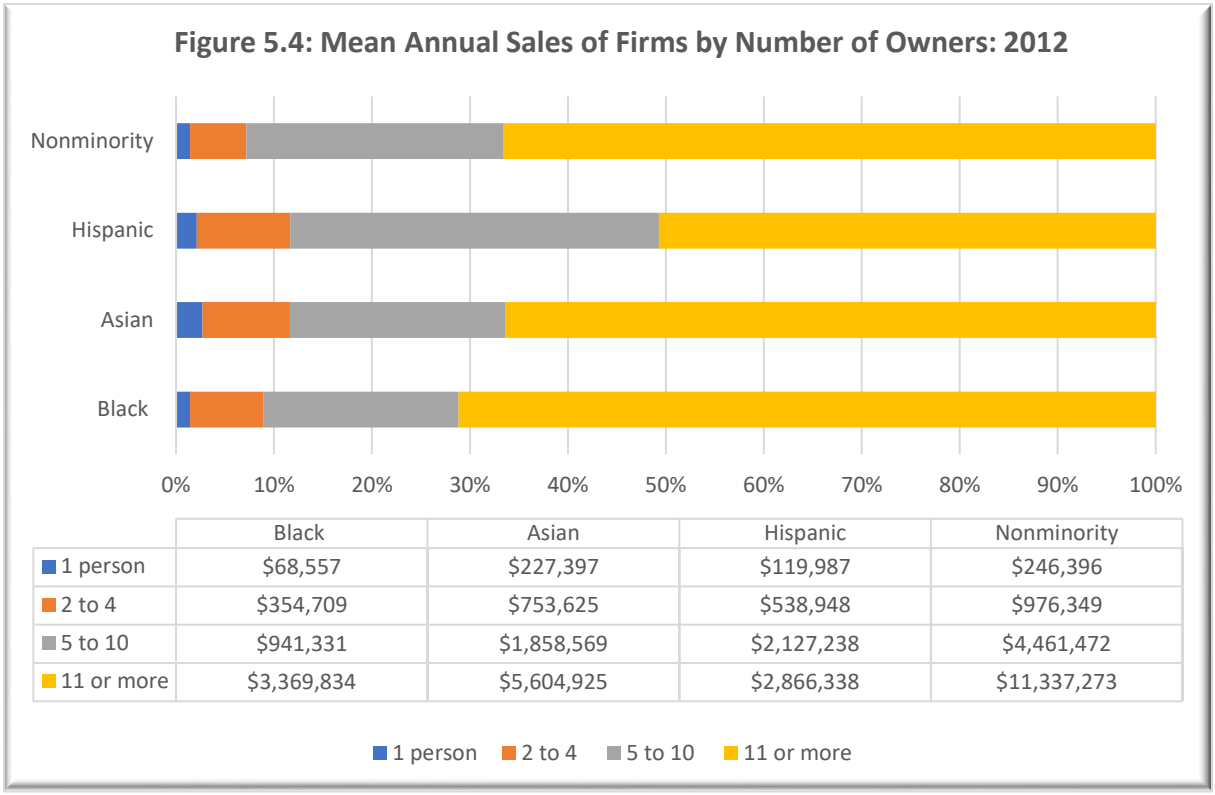
The disparity in terms of number of owners was also reflected in the previous 2007 published estimates. As indicated in Table 5.6, about 80 percent of Black-owned firms had one owner compared with 67 and 62 percent for Asian and White-owned businesses, respectively.

Table 5.6: Distribution of Number of Owners per Business by Race: 2007

Number of Owners	Black	Asian	Hispanic	Nonminority
1 owner	80.1%	66.7%	73.8%	61.7%
2 owners	17.4%	26.3%	22.3%	30.8%
3 owners	1.3%	3.3%	2.2%	3.5%
4 owners	0.6%	1.8%	1.0%	1.9%
5–9 owners	0.4%	1.5%	0.6%	1.6%
10–49 owners	0.1%	0.3%	0.1%	0.4%
50 or more owners	0.1%	0.1%	0.1%	0.1%
Total	**100.0%**	**100.0%**	**100.0%**	**100.0%**

Source: Author's calculation from the published tables of US Census Bureau (2007) Survey of Business Owners.

Although multiple owners accounted for a lower percentage of businesses, they substantially outperform single-owned businesses in sales receipt. Among Black-owned businesses, firms owned by 2–4 owners generated nearly five times more in average sales than single-owned firms (Figure 5.4). However, there appear marked differences when Black-owned firms are compared with ethnic businesses owned by a least two owners. The more firms are run by multiple owners, the more their sales receipt.



	Black	Asian	Hispanic	Nonminority
1 person	$68,557	$227,397	$119,987	$246,396
2 to 4	$354,709	$753,625	$538,948	$976,349
5 to 10	$941,331	$1,858,569	$2,127,238	$4,461,472
11 or more	$3,369,834	$5,604,925	$2,866,338	$11,337,273

Source: Author's calculation from the published tables of US Census Bureau (2012) Survey of Business Owners.

Among the possible explanations why firms owned by Whites and Asians with more multiple owners perform better on sales than Black-owned firms could be the underlying disparities within industry, as the composition of homebased and non-home-based industry likely reflects sales performance.

5.4 Business Sector

Small businesses tend to concentrate in broad industries with noted differences among minority and non-minority firms**.** The analysis contained in Table 5.7, taken from the 2012 published SBO statistics, shows how Black-owned firms compare in percentage terms among all sectors available. It appears that Black-owned firms are less represented in those areas, particularly where Asian and White firms generate more sales.

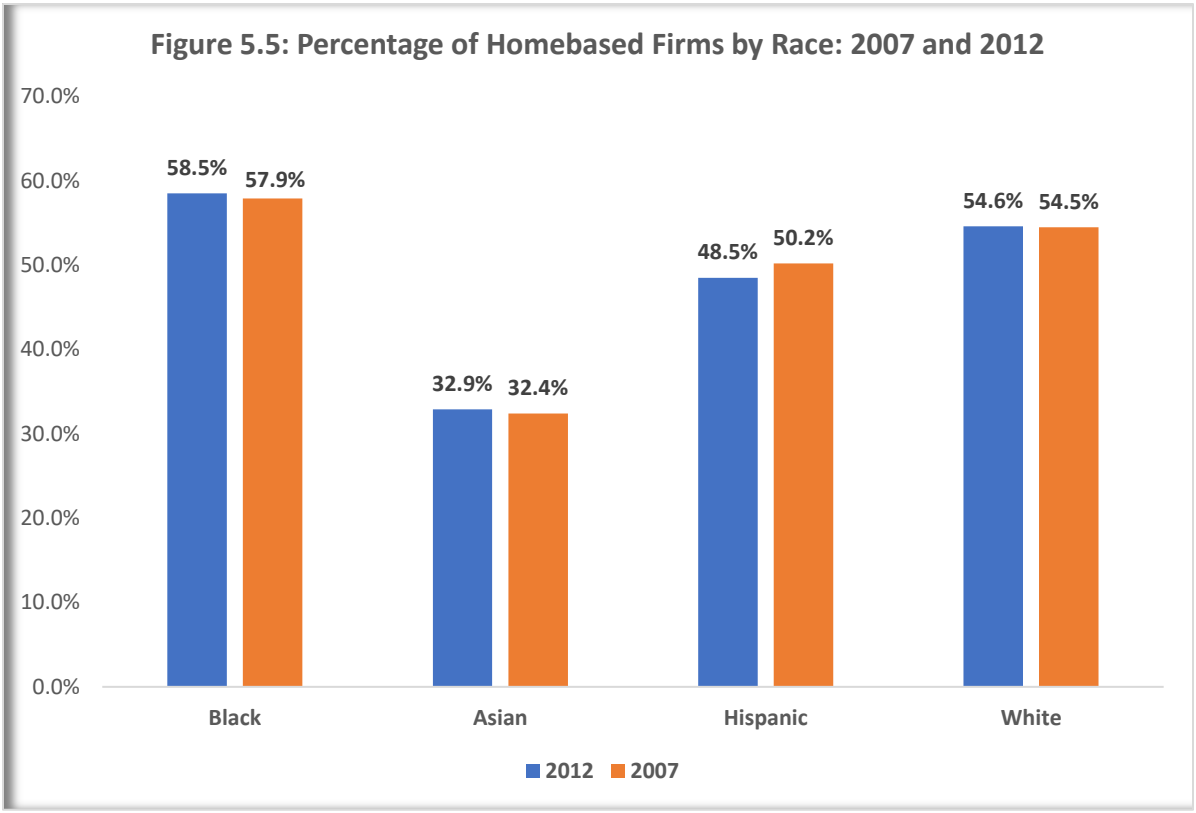
Table 5.7: Percentage Distribution of Industry and Their Sales by Race: 2012

Industry	Black		Asian		Hispanic		Nonminority	
	% of Total Firm	% of Total Sales	% of Total Firm	% of Total Sales	percent Total Firm	% of Total Sales	% Total Firm	% of Total Sales
Accommodation and food services	2.3%	5.7%	8.2%	10.9%	3.0%	6.0%	2.6%	3.5%
Administrative and support and waste management	11.4%	8.2%	4.5%	2.2%	16.0%	5.6%	7.2%	3.4%
Agriculture, forestry, fishing, and hunting	0.2%	0.2%	0.3%	0.1%	0.5%	0.2%	1.1%	0.3%
Arts, entertainment, and recreation	4.8%	2.5%	2.9%	0.4%	3.1%	0.8%	5.2%	1.0%
Construction	5.3%	7.4%	4.0%	2.2%	14.4%	11.8%	11.6%	10.5%
Educational services	2.6%	1.1%	2.2%	0.4%	1.6%	0.4%	2.5%	0.4%
Finance and insurance	1.7%	2.4%	2.5%	1.4%	1.7%	1.6%	4.0%	3.9%
Health care and social assistance	19.1%	16.1%	10.6%	8.7%	10.5%	6.1%	7.4%	4.8%
Industries not classified	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Information	1.1%	1.7%	1.2%	1.5%	0.9%	0.9%	1.5%	1.9%
Management of companies and enterprises	0.0%	0.3%	0.0%	0.2%	0.0%	0.4%	0.1%	0.5%
Manufacturing	0.9%	5.5%	1.4%	6.1%	1.6%	5.3%	2.4%	11.9%
Mining, quarrying, and oil and gas extraction	0.0%	0.0%	0.1%	0.1%	0.1%	0.5%	0.6%	1.0%
Other services (except public administration)	25.1%	7.3%	20.1%	3.3%	16.7%	4.3%	10.6%	2.0%
Professional, scientific, and technical services	8.0%	10.4%	14.4%	9.7%	8.4%	7.1%	16.1%	7.1%
Real estate and rental and leasing	3.0%	3.0%	7.8%	2.8%	4.3%	2.6%	11.3%	3.9%
Retail trade	6.2%	11.4%	11.4%	22.4%	7.7%	19.4%	9.6%	17.3%
Transportation and warehousing	7.1%	8.2%	4.9%	2.0%	7.4%	6.6%	3.5%	3.1%
Utilities	0.1%	0.0%	0.0%	0.1%	0.1%	0.1%	0.1%	0.2%
Wholesale trade	0.9%	8.6%	3.5%	25.4%	1.9%	20.3%	2.7%	23.3%
Total for all sectors	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

Source: Author's calculation from the published tables of US Census Bureau (2012) Survey of Business Owners.

Relatively, larger percentage of White-, Asian-, and Hispanic-owned firms are operating in wholesale trade; manufacturing; construction; professional, scientific, and technical services that generated larger percentage of their total sales. On the other hand, Black-owned firms are relatively concentrated in health care and social assistance; administrative support and waste management and remediation services; and transportation and warehousing, which appeared to drive lower sales volume in firms owned by other races. This preference of Black entrepreneurs in this sector could be influenced by several factors; and financial resource may be one. This could

be seen by looking at the distribution of homebased and non-home-based firms. The racial divide on operational location of small businesses is represented in Figure 5.5:



Source: Author's calculation from the published tables of US Census Bureau (2007 and 2012) Survey of Business Owners/

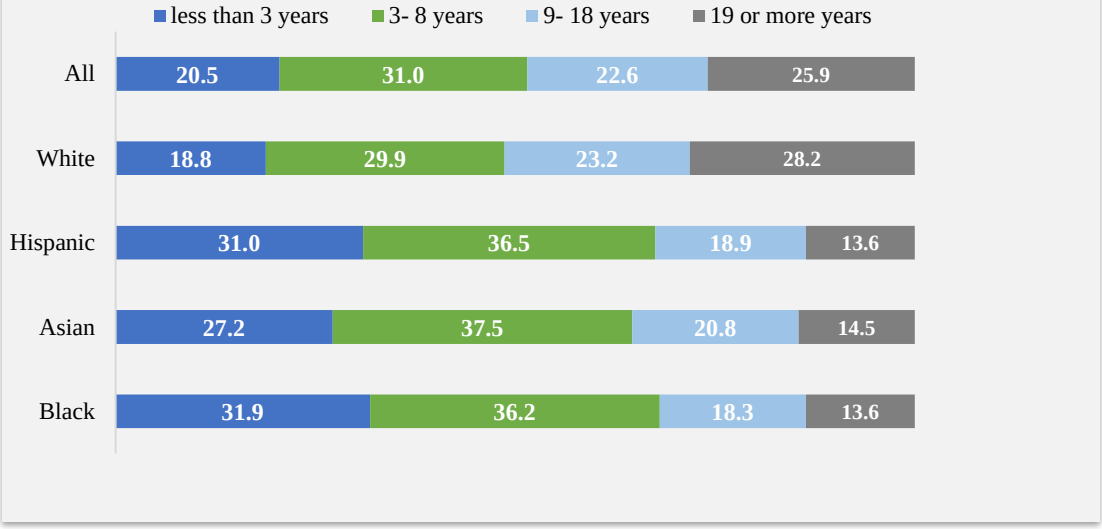
According to Figure 5.5, Black-owned firms are disproportionately homebased compared with other minority and non-minority-owned businesses. This choice of homebased operation reflects the strategy adopted to reduce overhead cost where these firms tend to be small, using more part-time workers and generate less sales compared with non-home-based firms. The fact that about 59 percent of Black businesses are homebased suggests the nature of their firms and the likely constraints to growth, expansion, and survival.

5.5 Age of Business

Firms differ in terms of the number of years they have been in business operations. The age of a business, either young or established, has important implications on its performance. Minority firms tend to be younger than White-owned firms (Figure 5.6). Estimates from the PUMS data show that a significant proportion of White-owned firms were established nine or more years

ago. More than a quarter of White-owned businesses are older than 18 years. Contrastingly, a smaller percentage of Black, Hispanic, and Asian businesses are as old as the non-minority firms for the same year category.

Figure 5.6: Percentage Distribuation of Age of Firms: 2007



Source: Author's Calculations from 2007 US Census Bureau SBO PUMS dataset.

Figure 5.6 further suggests that among minority-owned businesses, Black businesses tend to be the youngest. About 32 percent of Black businesses are as old as two years, compared with 19 percent of White businesses; and about 14 percent are older than 18 years, which is half the proportion of White firms. The estimates from the 2012 SBO survey also validate that Black-owned businesses are disproportionately younger than non-minority businesses. Nearly, 23 percent of Black-owned businesses were established in 2012 compared to 13 percent of White-owned firms. At the other end of the distribution, about 6 percent of Black-owned firms compared with about 18 percent of White-owned firms were established earlier than 1999. It appears that the experiences of Hispanic-owned firms follow a similar pattern to Black-owned firms.

Table 5.8: Distribution of Businesses by Year of Establishment or Acquired by Owner: 2012

Year	Black	Asian	Hispanic	Nonminority
2012	22.7%	18.2%	22.2%	12.5%
2011	12.9%	11.3%	11.3%	8.1%
2010	9.1%	8.9%	9.3%	6.6%
2009	7.1%	6.8%	6.3%	5.3%
2008	5.7%	6.2%	5.8%	4.7%
2000–2007	26.3%	29.5%	28.1%	27.7%
1990–1999	10.3%	12.1%	11.2%	17.1%
1980–1989	4.1%	4.9%	4.1%	10.2%
Before 1980	1.9%	2.0%	1.8%	7.8%
Total	**100.0%**	**100.0%**	**100.0%**	**100.0%**

Source: Author's calculation from the published tables of US Census Bureau (2012) Survey of Business Owners.

It has been documented in previous studies that older firms generally have better performance than new and younger firms (Sorensen and Stuart, 2000; Mothibi, 2015). According to the 2007 PUMS data in Table 5.9, the percentage of businesses closed among those established less than three years ago is the highest (37 percent) for all firms. However, the proportion varies for each race. In Black-owned firms, about 45 percent of the incidence occurred among those firms established less than three years ago.

Table 5.9: Percentage of Firms Closed by Age of the Business: 2007

Race	Less than 3 Years	3–8 Years	9–18 Years	19 or More Years
Black	44.8	24.4	16.0	12.8
Asian	33.8	16.0	9.1	7.9
Hispanic	40.8	19.3	11.2	10.9
White	36.2	18.0	11.2	9.3
All U.S Firm*	36.8	18.2	11.2	9.4

Source: Author's Calculations from 2007 US Census Bureau SBO PUMS Dataset.
* Includes all other races (other minorities; multi-racial) besides Black, Hispanic, Asian, and White firms.

5.6 Capital Market Access

One of the most critical barriers indicated in empirical studies discouraging entrepreneurs from starting small businesses, as well as growing and expanding their businesses, is lack of access to financial capital (Calcagnini and Favaretto, 2012; as cited by Lamapadrios et al, 2017). Access to outside financial resources through bank loans or other lending financial institutions is essential for aspirant entrepreneurs. Businesses founded with low startup capital are more likely facing

challenges to bring their business to fruition. Black and Hispanic firms use lower levels of startup capital than Asian and White firms (Table 5.10).

Table 5.10: Percentage Distribution of Size of Startup Capital by Race: 2007 and 2012

Amount of Startup Capital	Black		Asian		Hispanic		Nonminority	
	2012	2007	2012	2007	2012	2007	2012	2007
Less than $5,000	62.7%	56.3%	36.9%	30.6%	54.9%	48.6%	50.9%	45.2%
$5,000–9,999	15.3%	14.5%	12.3%	10.7%	16.2%	15.0%	12.2%	12.0%
$10,000–24,999	10.4%	12.0%	13.8%	14.5%	12.7%	13.8%	11.7%	12.7%
$25,000–49,999	4.9%	6.8%	10.1%	11.0%	6.4%	8.4%	7.2%	8.3%
$50,000–99,999	3.4%	4.9%	9.7%	12.0%	4.6%	6.4%	6.2%	7.8%
$100,000–249,999	2.1%	3.5%	9.3%	12.2%	3.0%	4.8%	6.1%	7.4%
$250,000–999,999	1.0%	1.6%	6.1%	7.1%	1.6%	2.4%	4.2%	4.9%
$1,000,000 or more	0.2%	0.4%	1.8%	2.0%	0.5%	0.5%	1.6%	1.7%

Source: Author's calculation from the published tables of US Census Bureau (2007 and 2012) Survey of Business Owners.

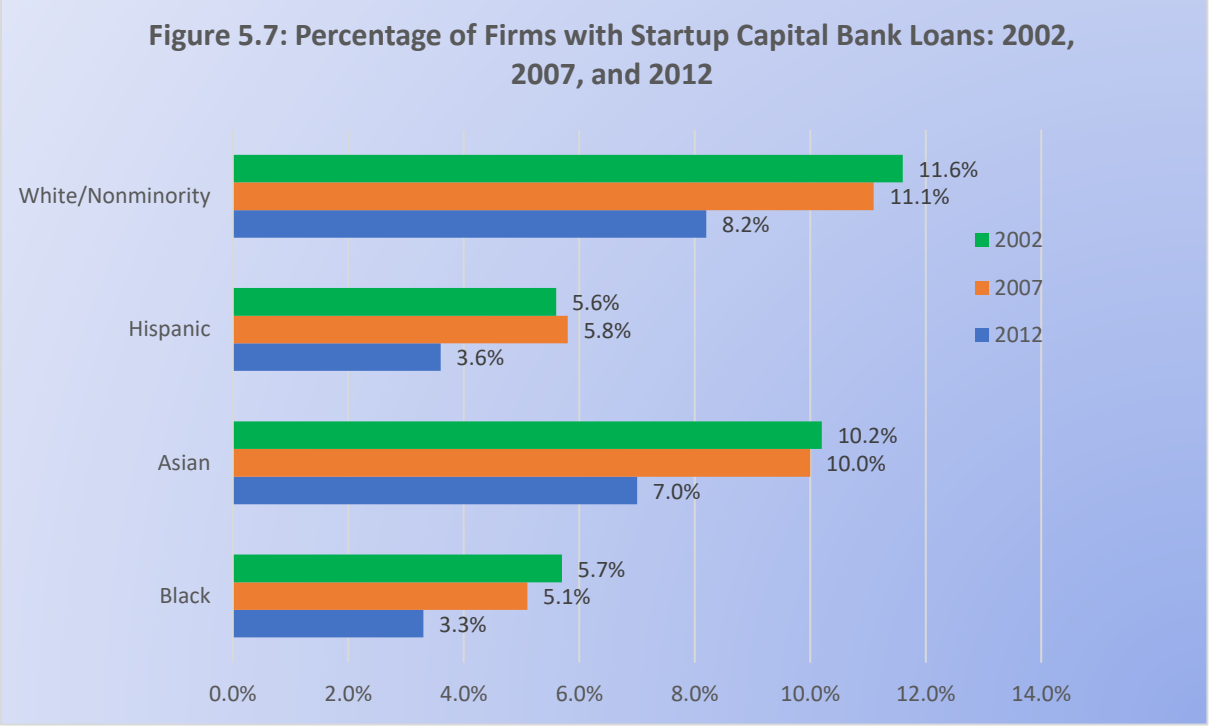
According to Table 5.10, in 2012 about 78 percent of Black-owned firms started their businesses with less than $10,000 in startup capital, compared with about 49 percent and 63 percent of Asian-owned and White-owned firms, respectively. Hispanic are second in line to the Black business startups at about 71 percent. This pattern of disparity in startup amount was also large in the 2007 survey.

At the other end of the distribution, Table 5.10 further show that Black firms are less represented in the highest startup capital levels. According to the 2012 published data, nearly 7 percent of Black-owned firms started with $50,000 or more in startup capital compared with 27 and 18 percent of Asian- and White-owned firms, respectively. This differential in low startup, besides differences in level of wealth, among others, may be attributed to disparity in access to loans.

Lending to small businesses, particularly for startups, is considered a riskier undertaking for banks than lending to larger established firms. However, studies noted minority-owned small firms face a much harder time in accessing bank loans than White non-minority firms (Cavalluzzo and Wolken, 2002; Blanchflower et al., 2003; Asiedu et al., 2012). Minority-owned firms are much less likely to be approved for small business loans than White-owned firms. Some attribute this practice of Bank loan rejection to lower net personal wealth and others to systemic discrimination. Palia (2016), for instance, found that Blacks who had a similar amount of borrowing risk as Whites

experienced 17–33 percent higher loan application rejections, and implied this practice amounted to lending discrimination.

The SBO historical trend data summary illustrated in Figure 5.7 shows that about 8 percent of White firms received bank loan for startups, more than double the proportion of Black firms. The trend was the same for in all the other prior survey years. Black and Hispanic firms received lower startup bank loans compared with White and Asian businesses. The figures vividly show that Black firms are undercapitalized, with just 3 percent of their firms, in the recent 2012 SBO, securing bank loans for startup. As a result of being undercapitalized, Black firms are more susceptible to generate lower sales, and may fail more than businesses owned by other races that received more bank loans at their startup.



Source: Author's calculation from the published tables of US Census Bureau (2007 and 2012) Survey of Business Owners.

Besides obtaining outside startup capital in their founding years, firms as well need capital in subsequent years of their operations to expand their businesses. Firms that are constrained in access to capital will likely struggle to expand or grow their operations. Black firms not only disproportionately receive lower bank loan at their startups, but also in subsequent years of their

business undertakings. About 2 percent of Black firms received loans for their business expansion (Table 5.11). This figure is substantially less than the percentage of all firms received. A similar pattern is also observed from the prior 2007 PUMS published data.

Table 5.11: Firms Received Bank Loan for Business Expansion: 2007 and 2012

Firm Owned	2012	2007
Black	1.7%	3.6%
Asian	4.0%	6.1%
Hispanic	2.6%	4.9%
Nonminority	4.6%	5.0%

Source: Author's calculation from the published tables of US Census Bureau (2007 and 2012) Survey of Business Owners.

While access to start-up bank loans is a big challenge for Black firms, access to expansion funding from other sources appears to create challenges even for businesses owned by every racial group. The detailed analysis of this proposition is contained in Table 5.12:

Table 5.12: Percent of Firms Received Government Loans for Startup or Expansion: 2007

	Government Loan		Government Guaranteed Loan	
	Startup	Expansion	Startup	Expansion
Black	0.6	0.5	0.5	0.3
Asian	0.7	0.4	0.7	0.4
Hispanic	0.5	0.4	0.4	0.3
White	0.6	0.4	0.6	0.3
All US Firm*	0.6	0.4	0.6	0.3

Source: Author's Calculations from 2007 US Census Bureau SBO PUMS dataset.
* Includes all other races (other minorities; multi-racial) besides Black, Hispanic, Asian, and White firms.

According to Table 5.12, the proportion of Black businesses obtaining expansion loans from the government, either through direct or guaranteed loans, rather than from banks, does not show marked difference from firms owned by other races as well. In other words, a similar percentage of firms received government-secured loans from banks or loans from the government. Specifically, Table 5.12 shows that less than 1 percent of all businesses obtained government loans, guaranteed or direct loans.

It is worth noting that disparity in access to bank loans likely manifests itself in differences of profitability in businesses. Table 5.13 demonstrates that those firms that have received bank loans generated a higher volume of average sales receipts than those who have not received such loans. Their sales performance gap is observed to be noticeably wider. According to the analysis of the 2007 PUMS dataset, on average Black-owned firms that received bank loans have average annual sales of $615,598, which is $527,461 greater than those that have not received bank loans.

This practice of lending and limited access to capital markets leaves Black firms disproportionately facing more obstacles to establish themselves.

Table 5.13: Bank Loan and Mean Annual Sales: 2007

Bank Loan	Black	Asian	Hispanic	White	All US Firm*
Yes	$615,598	$994,107	$920,715	$1,256,414	$1,206,891
No	$88,137	$342,236	$209,027	$469,386	$425,491

Source: Author's Calculations from 2007 US Census Bureau SBO PUMS dataset.
* Includes all other races (other minorities; multi-racial) besides Black, Hispanic, Asian, and White firms.

Likewise, there appears a difference in the risk of business closure due to differences in access to bank loans. As indicated in Table 5.14, the proportion of firms that ceased operation is higher among those that did not obtain secured loans. Nearly, 31 percent of Black-owned businesses without bank loan startups were closed. This magnitude of closure is the highest compared with businesses owned by other races. Empirical evidence in general documented that a firm's inability to access financial loans increases its likelihood of closure due to the difficulties to obtain financial supports (Cefis et al., 2021).

Table 5.14: Percentage of Firm Closure in Relation to Bank Loans Received by Race: 2007

	% Closed Among Firms Receiving Bank Loans	% Closed Among Firms Not Receiving Bank Loans
Black	14.08	31.64
Asian	7.67	22.42
Hispanic	11.04	27.04
White	9.00	20.42

Source: Author's Calculations from 2007 US Census Bureau SBO PUMS dataset.

According to the analysis contained in Table 5.15, based on the 2016 Small Business Credit Survey, Black small business owners are more discouraged to apply for loans than other races. The results from this data further corroborate the challenges Black entrepreneurs face in the financial market.

Table 5.15: Reasons for Not Applying for Credits: 2016

	Discouraged	Sufficient Financing	Debt Averse	Credit Cost Too High	Search Too Difficult	Other
White	14%	52%	26%	3%	4%	1%
Black	40%	22%	29%	3%	6%	1%
Asian	21%	37%	26%	6%	8%	1%
Hispanic	21%	32%	32%	7%	6%	2%

Source: Author's compilation from the Federal Reserve Bank, 2016 Small Business Credit Survey.

The consequence of being discouraged from applying for bank loans deters Black-owned firms from growth and expansion. The results of this same survey show the magnitude of the challenge experienced by Black firms. According to Table 5.15, 40 percent of Blacks reported they are discouraged to apply for Bank loans. This level of discouragement, likely caused by fear of rejection, is substantially higher than in firms owned by Whites (14 percent) and both Asian and Hispanics, each with 21 percent. On the other hand, as shown in Table 5.16, 62 percent of Black firms with revenue size under $1,000,000 reported that they experienced financial challenges to expand their businesses in the past 12 months prior to the survey. The unmet need and constraints are substantially higher for Black businesses than firms owned by the other races.

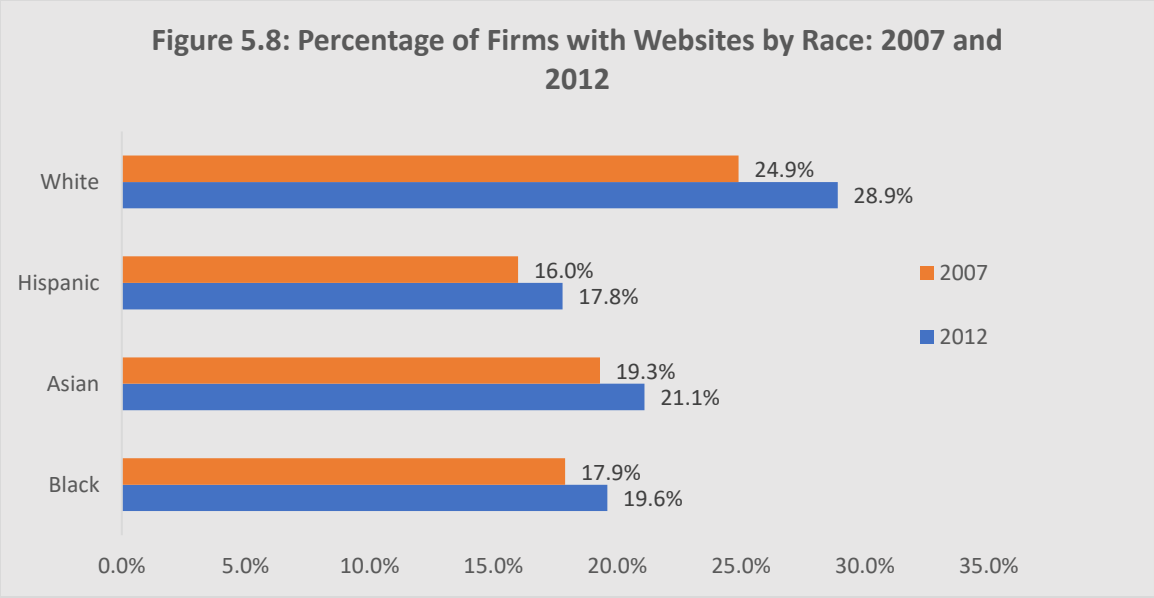
Table 5.16: Funds for Expansion – Financial Challenges – Past 12 Months: 2016

Race	Percentage of Employer Firms With <$1M in Revenue
White	31 %
Black	62%
Asian	45%
Hispanic	47%

Source: Author's compilation from the Federal Reserve Bank, 2016 Small Business Credit Survey.

5.7 E-commerce

Online marketing is an important business strategy to stay competitive in today's business environment. The advantages of e-commerce over traditional retail are increasingly becoming evident, as e-commerce websites help businesses to reach customers without limit of geographic areas, allowing to generate additional sales revenue. The digital divide in the use of and access to online marketing may lead to disparities in business performance. The SBO data presented in Figure 5.8 reflects that a lower percentage of minority-owned businesses have websites than White-owned businesses. According to the 2012 SBO data, more Black-owned businesses (19.6 percent) have websites than Hispanic (17.8 percent) businesses, but they lag behind Asian and White businesses. Although a slight increment in website adoption is observed in 2012, when compared with the 2007, still the pattern holds the same.



Source: Author's calculation from the published tables of US Census Bureau (2007 and 2012) Survey of Business Owners.

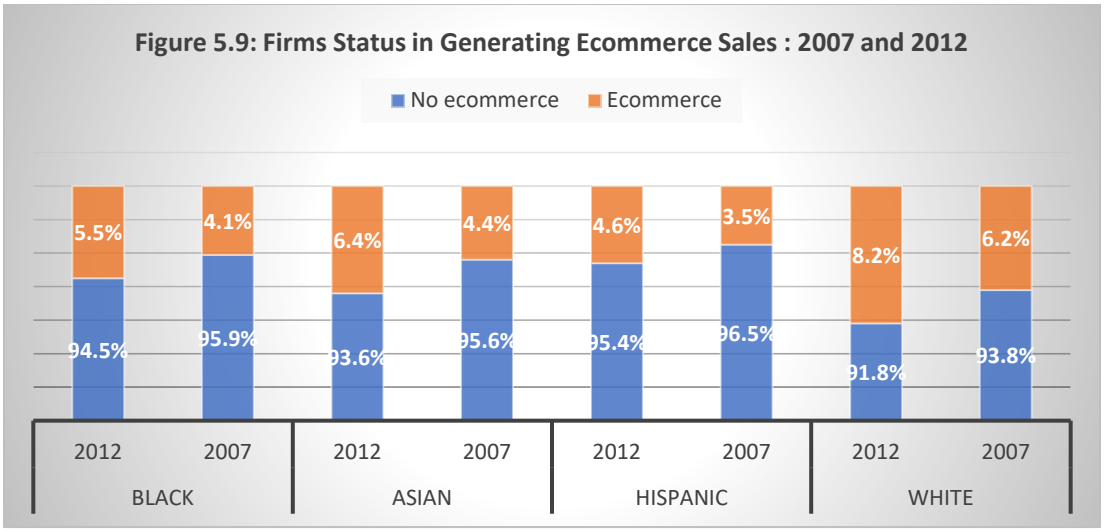
It is evident that average sales of firms that have websites serving as their digital shopfront is larger than those without website (Table 5.17). Black-owned businesses with websites generated six times larger operating revenue than other Black firms that have not adopted digital shopfronts to sell their products or services. It is tenable to expect that online technology helped small businesses to reach out to their customers and expand their market share.

Table 5.17: Website Adoption and Mean Annual Sales of Firms: 2012

Firm	Black	Asian	Hispanic	Nonminority
Without Website	47,092	226,060	93,001	184,765
With Website	342,117	978,719	648,675	1,416,218

Source: Author's calculation from the published tables of US Census Bureau (2012) Survey of Business Owners.

The estimates from the 2012 SBO published data presented in Figure 5.9 showed that about 6 percent of Black-owned business compared with 8 percent of White-owned firms generated their revenue from e-commerce sales.



Source: Author's calculation from the published tables of US Census Bureau (2007 and 2012) Survey of Business Owners.

Among those firms where e-commerce sales contributed to their total sales of goods and/or services, about 42 percent of Black-owned businesses reported that e-commerce accounted for less than 10 percent of their overall sales (Table 5.18) – implying that firms owned by other races drive their sales revenue more from online than Black firms.

Table 5.18: Percentage of Total Sales of Businesses Practicing E-commerce: 2012

Percentage of Total Sales	Black	Asian	Hispanic	Nonminority
Less than 10 %	42.3%	27.1%	33.2%	36.7%
10–49%	22.3%	24.9%	23.8%	25.2%
50% or more	35.4%	48.0%	43.0%	38.0%

Source: Author's calculation from the published tables of US Census Bureau (2012) Survey of Business Owners.

Disparities in the adoption of an e-commerce strategy were not only reflected in differences in average sales among firms owned by different races, but also disparities in the likelihood of their survivability. The figures in Table 5.19 indicate overall that the risk of closure is higher among those businesses operating without an e-commerce site than those with an e-commerce site. Nonetheless, Black-owned firms appeared to have the highest business closure.

Table 5.19: Percentage of Firm Closure Among Those with or without Website by Race: 2007

	% Closed AMONG Firms with E-commerce Website	% Closed Among Firms Without E-commerce Website
Black	16.86	34.31
Asian	10.79	23.66
Hispanic	13.55	28.86
White	10.08	22.32

Source: Author's Calculations from 2007 US Census Bureau SBO PUMS dataset.

In the contemporary business world, marketing is increasingly dynamic, and its praxis is a moving target; so are technology and customer behavior changing. Small firms that are slow in adopting technology are failing to get the reward and may ultimately fail to minimize the overheads associated with traditional bricks and mortar stores.

5.8 Business Internalization

Global markets and the business environment play important roles in the growth and success of businesses of all sizes. Growth is a major strategic decision for all enterprises; and global expansion is one of the wide arrays of choices for small businesses to consider in the formulation of their growth strategy. Awareness of and access to international markets or establishing operations in foreign markets could be a viable option to sell products and/or services for small firms. The data in Table 5.20 illustrates that about 1 percent of all US small firms have foreign operations. A slight upward change in international operation is observed across all races; however, the change between 2007 and 2012 appeared to be very marginal.

Table 5.20: Percentage of Firms with Outside Operations: 2007 and 2012

	Outside Operation	
Race	**2012**	**2007**
Black	1.3%	0.9%
Asian	1.9%	1.4%
Hispanic	1.7%	1.2%
White	1.2%	0.5%
All*	1.4%	0.6%

Source: Author's calculation from the published tables of US Census Bureau (2007 and 2012) Survey of Business Owners.

A potential measure of a thriving and successful business could be its adoption of export as a business strategy to drive sales revenue. The ability of firms to export goods and/or services to overseas markets suggest their financial strength and business knowledge. As Table 5.21 shows, most firms have not generated their sales or augmented their sales from export. Whereas across all racial categories, exporting firms have higher average annual sales than non-exporting firms.

Table 5.21: Firms by Exporting Status and Annual Sales: 2007 and 2012

Exporting Status and Annual Sales: 2012						
Ethnicity/Race	**Exporting status**	**Number of Firms**	**Annual Sales ($1,000)**	**Average Sales ($1,000)**	**Sales from Exports ($1,000)**	**% of Sales from Export**
Black	Exporting	*1,426*	*13,563,271*	*9,511*	*1,347,082*	*9.9%*
	Non-exporting	2,582,977	136,639,892	53		
Asian	Exporting	17,876	174,433,109	9,758	24,477,416	14.0%
	Non-exporting	1,900,026	525,059,313	276		
Hispanic	Exporting	12,212	133,712,863	10,949	18,617,904	13.9%
	Non-exporting	3,293,661	339,923,081	103		
Nonminority	Exporting	134,498	3,045,824,219	22,646	185,573,863	6.1%
	Non-exporting	18,853,420	7,437,007,318	394		
Exporting Status and Annual Sales: 2007						
Ethnicity/Race	**Exporting status**	**Number of Firms**	**Annual Sales ($1,000)**	**Average Sales ($1,000)**	**Sales from Exports ($1,000)**	**% of Sales from Export**
Black	Exporting	1,566	12,656,230	8,082	640,978	5.1%
	Non-exporting	1,920,298	123,083,604	64	--	--
Asian	Exporting	16,451	123,150,886	7,486	19,731,130	16.0%
	Non-exporting	1,533,109	382,896,865	250	--	--
Hispanic	Exporting	9,868	70,670,842	7,162	9,473,890	13.4
	Non-exporting	2,250,401	279,990,401	124		--
Nonminority	Exporting	132,330	2,526,765,686	19,094	137,414,794	5.4%
	Non-exporting	19,968,596	7,289,431,042	365	--	--

Source: Author's calculation from the published tables of US Census Bureau (2007 and 2012) Survey of Business Owners.

The data from the 2012 SBO survey suggest that Black-owned exporting firms have an average annual sale of $95,111,000, compared with $53,000 their non-exporting counterparts. Export business contributed about 10 percent of the total sales of Black-owned exporting firms. In the 2007 data, its contribution was about 5 percent. According to the figures in Table 5.21, Asian-owned firms are the most likely to export. Exports contributed about 14 percent of the total sales of Asian exporting firms in 2012 and 16 percent in 2007. The disparity in the ability to access and operate businesses by reaching broader customer bases outside of the country could precipitate a disparity in sales revenue.

Table 5.22: Percentage of Closure Among Exporting and Non-exporting Firms by Race: 2007

	% Firms Closed Among Exporting Firms	**% Firms Closed Among Non-Exporting Firms**
Black	19.91	30.32
Asian	12.08	20.73
Hispanic	13.73	25.92
White	19.37	8.66

Source: Author's Calculations from 2007 US Census Bureau SBO PUMS dataset.

Differences in the export status of firms not only showed disparities in the volume of sales they generated but also disparities in the sustainability of their operation. As indicated in Table 5.22, exporting firms in general have a lower percentage of business closures than non-exporting firms. About 30 percent of non-exporting firms owned by Black entrepreneurs closed their operations compared with about 9 percent of White-owned non-exporting firms. More minority-owned non-exporting businesses have a higher proportion of closures than their counterpart non-minority firms.

However, exporting White-owned firms, next to Black-owned firms, have a higher proportion of closure compared with Hispanic and Asian exporting firms. This might be due to the higher percentage of immigrant Hispanic and Asian owners who likely run businesses in their place of origin as a foreign business, which therefore gave them the advantage to navigate and cope with the business practice outside of the United States. As Black and White businesses are dominated more by native-born owners than non-natives, they might not benefit at the same level as Asian- and Hispanic-owned businesses. The literature indicates that international trade benefits immigrant entrepreneurship more than natives as immigrant-owned firms more likely to be exporters because they may tie into business networks in their home countries and share languages and other cultural ties with businesspeople there (Lofstrom and Wang, 2019).

5.9 Geographic Region/Location

Minority enterprises operate across all states and regions of the United States. However, a considerable variation is observed in their distribution by regions, as presented in Table 5.23. Asian-owned firms are most concentrated in the western part of the United States, and least concentrated in Midwest. A similar pattern is observed among Hispanic businesses. Their businesses are largely concentrated in the south (about 46.8 percent) and west (about 33.5 percent), with about 5.8 percent in the Midwest. On the other hand, White-owned firms appeared to be fairly distributed across all regions, although the largest proportion (34.6 percent) of their businesses are concentrated in the south. Like Hispanic-owned and White-owned firms, Black firms are mostly distributed in the south; however, Black businesses are disproportionately concentrated more in the south than other regions of the United States.

Table 5.23: Percentage Distribution of Firms by US Geographic Regions: 2012

	Black	Asian	Hispanic	White	All US
Midwest	17.8%	9.7%	5.8%	23.9%	20.1%
North	14.9%	21.9%	13.9%	19.7%	18.5%
South	57.7%	26.3%	46.8%	34.6%	37.6%
West	9.6%	42.1%	33.5%	21.7%	23.8%
All Regions	100.0%	100.0%	100.0%	100.0%	100.0%

Source: Author's calculation from the published tables of US Census Bureau (2007 and 2012) Survey of Business Owners.

Geographic location may play a role in sales revenue discrepancy, as the largest percentage of Black-owned firms are in the south. According to the 2019 US Census Bureau Survey, the southern states are having the lowest median household income; alternatively, they have the highest poverty rate in the country. Thus, a customer base in a low-income region could influence the volume of sales. The mean annual sale of Black-owned firms in Table 5.24 shows that firms in the south have the least ($56,580 in 2007 and $50,800 in 2012).

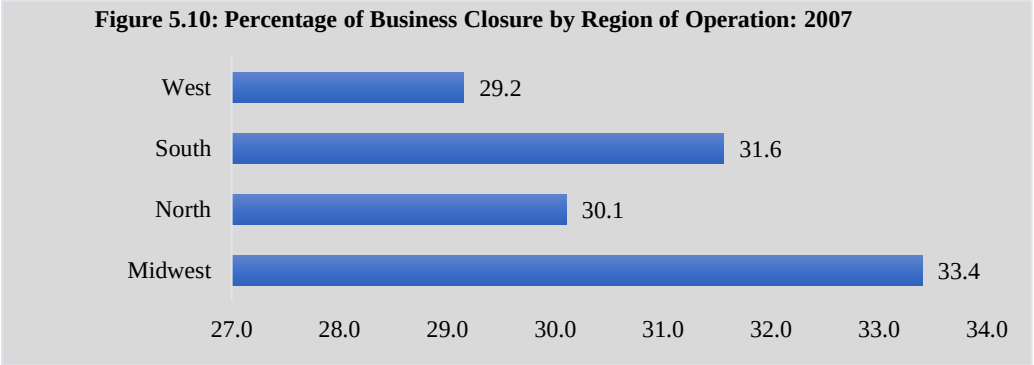
Table 5.24: Mean Annual Sales of Black Firms by US Geographic Region: 2007 and 2012

	2012	2007
Midwest	70,670	76,111
North	54,465	67,293
South	50,800	58,677
West	84,355	130,806
All Regions	58,100	69,744

Source: Author's calculation from the published tables of US Census Bureau (200 and 2012) Survey of Business Owners.

It is also noted that firm closure rates vary by region of operation. Empirical studies such as Deller and Conroy (2016) found that firm survival rates vary by region. As indicated in Figure 5.10, for instance, Black-owned firms in the Midwest and south appear to have a slightly higher proportion of business closure than those in the West and North.

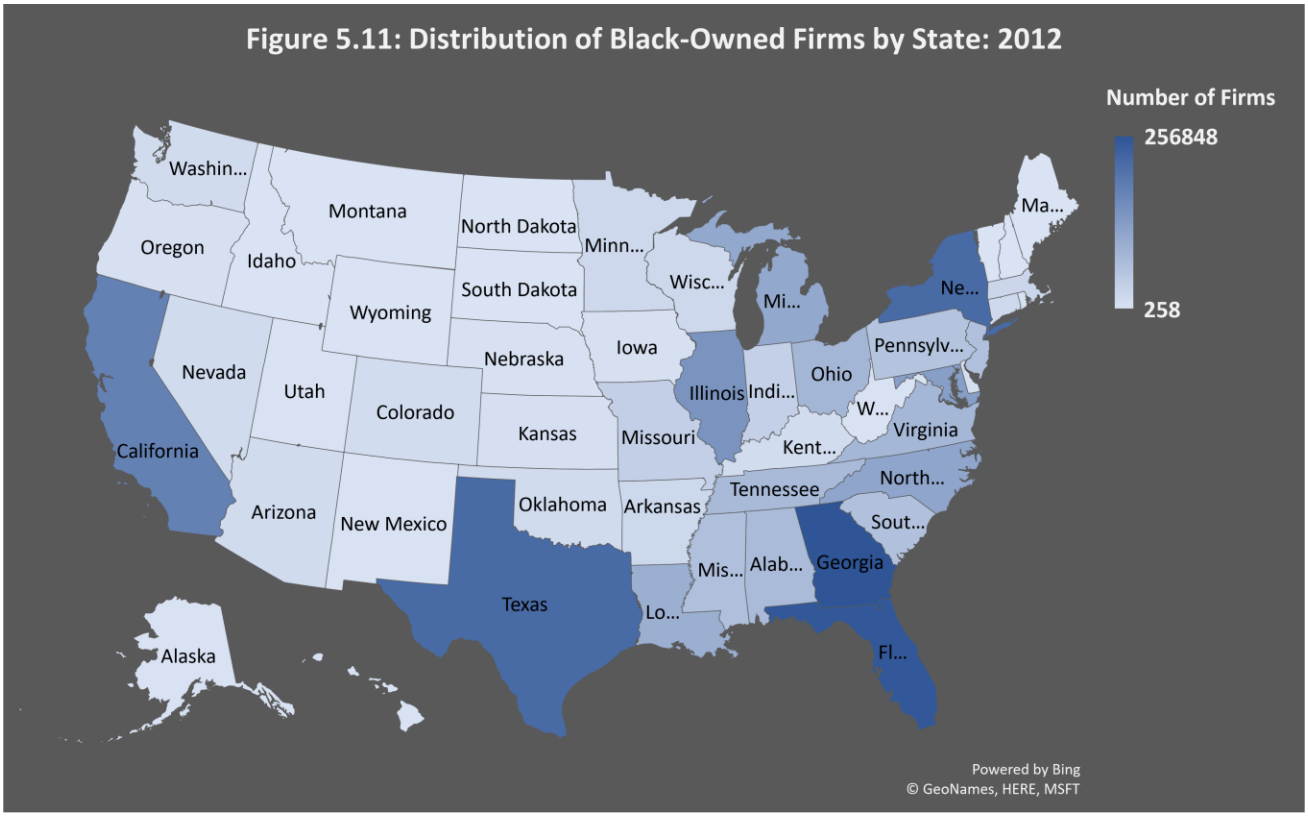
Figure 5.10: Percentage of Business Closure by Region of Operation: 2007



Source: Author's Calculations from 2007 US Census Bureau SBO PUMS dataset.

Black-owned businesses, in general, appeared to be less concentrated in the higher income regions of the West, Midwest and Northeast regions of the country. As Figure 5.10 illustrates, many Black firms are densely located in five states in the South – Georgia, Texas, Florida, Maryland, and South Carolina. In the other regions they are sparsely isolated. For instance, in the Northeast, they are mainly in New York; while they only operate in Southern California in the West, and Illinois in the Midwest. It may be expected that most Black-owned businesses, even in these states, are more likely located in urban areas than in rural or suburban localities.

The geographical location of Black firms is depicted in the regional-orientated map of the United States presented in Figure 5.11 The distribution of firms and their annual sales across by States of is also presented in appendix **Table A**.



Source: Source: Author's calculation from the published tables of US Census Bureau (2012) Survey of Business Owners.

5.10 Chapter Summary

In this chapter, using the SBO data, characteristics of firms owned by different races and their sales outcomes, as well as operation status, was presented and discussed. The evidence from different years of SBO data suggests the presence of a clear disparity in business success in the

United States. Apparently, non-minority Whites are the most successful, followed by minority Asians. However, Black- and Hispanic-owned firms are less successful. Black-owned firms appeared to have the lowest achievement of all the races considered in the chapter, i.e., the lowest average annual sales and lowest firm survivability.

Analysis of firm characteristics revealed that the composition of Black-owned firms tends to concentrate more on the unfavorable firm profiles for sales growth and business sustainability. For instance, the comparative analysis of features of industries show that Black-owned firms are predominantly younger in age and homebased or non-employer. Unlike White-owned firms, they sell their goods and/or services more to individual customers than business-to-business transactions. It is also noted that Black business owners operate predominantly in sectors with low sales or profit areas, which are also characterized by high failure rates. These apparent disparities are reflected in sales receipts and business survival rates. Disparities in size of startup capital and bank loans, either for startup or business expansion, appears to affect Black-owned firms more adversely than firms owned by the other races.

Specifically, about 3 percent of Black firms are able to secure bank loans for startup, while 8 percent of White firms benefited from bank loans. Although the SBO survey does not ask detailed questions regarding loan applications and approval, data from the 2016 Federal Credit survey, presented in this chapter, imply that Black entrepreneurs are discouraged the most to apply for financial loans, which could emanate from fears of loan rejections. Prior empirical studies suggested that Black entrepreneurs, more than entrepreneurs of other racial background, are discriminated against in the financial market.

Adoption and use of online marketing are one of the strategic choices small businesses utilize to reach a broader customer base. In this pursuit, Black-owned firms appear to be as competitive as firms owned by Asians and Whites in having e-commerce sites serving as their digital shopfronts. The evidence from the SBO data revealed firms with e-commerce sites perform better in sales volume and are more sustainable in their operations. Nonetheless, a larger percentage of Black-owned firms (42 percent) than all other firms, reported that e-commerce accounted for less than 10 percent of their total sales. Likewise, Black firms are observed to be less exporters to overseas markets than other firms. This might, in part, be attributed to the smaller composition of non-native Black entrepreneurs, as immigrant entrepreneurs are known to be more likely to export

than natives, because of their business network in their country of origin. Black firms are disproportionately concentrated in the Southern region of the United Sates where the national median household income is the lowest.

The business characteristics discussed in this chapter revealed the prevalence of racial disparities in sales outcome and risks associated with firm closure. Black-owned firms underperform firms owned by other races – they have lower annual sales and high closure rates. The descriptive comparison of business profiles across race revealed the racial gap in business success. Chapter 6 makes an in-depth statistical analysis and tests to establish how much of the disparities in performance are explained by these and other owner-essential characteristics, individually or collectively.

CHAPTER 6

DETERMINATS IN RACIAL DIFFERNTIALS IN SMALL BUSINESS PERFORMANCE

In this chapter, the effects of the background characteristics of business owners and their firms on sales performance and risks of closure are discussed. First, the separate effects of owner background and firm characteristics that have been described in the previous chapters, through various descriptive analyses, are further expanded. Second, following the same analytical procedure, the joint effects of owner and firm characteristics on Black businesses are estimated, using advanced statistical approaches.

As discussed earlier in the methodology section of Chapter 3, multiple linear regression and logit models are applied to investigate the determinants of sales performance and risk of business closures, respectively. Furthermore, to determine racial disparities in sales, the Oaxaca-Blinder multilinear decomposition model is used, while the non-linear Oaxaca-Blinder model is applied for investigating racial gaps in business survivability. In this multivariate analysis section, sales receipts are transformed into natural log sales for a better normal distribution unaffected by extreme outliers in sales values. This transformation is also necessary to conveniently interpret regression coefficients. Although the means of certain variables from the 2007 PUMS dataset are discussed in Chapters 4 and 5, an illustration with the full list of variables is provided in Appendix C.

Furthermore, and as discussed in Chapter 3, PUMS dataset is deployed in this chapter as the only available robust dataset that permits regression analysis. As a test of robustness check, we presented results from multiple sources in Chapters 4 and 5 to ascertain variation between 2007 and pre-Covid American reality. Our findings from those analyses (contained in Chapters 4 and 5) suggest that there has not been any meaningful variance between the deterministic properties of small business performance and firm/owner characteristics. To that effect, the utilization of PUMS dataset in this chapter is simply confirmatory and an additional contribution to knowledge because the advanced statistical approach deployed in this study is rarely found in entrepreneurship-related studies.

6.1 Effects of Background Characteristics

The socioeconomic and demographic background of entrepreneurs are influential determinants of small businesses success. Empirical studies reviewed in Chapter 2 lend credence

to the role of entrepreneurial background characteristics in determining small business outcome (Dobbs and Hamilton, 2007; Lampadarios et al., 2017). These attributes may also result in disparities among business owners of different ethnic/racial backgrounds. Although the descriptive statistics in Chapters 4 and 5 revealed the levels of average annual sales differ by racial background of firm owners, further statistical tests are performed to determine whether the level of differences are statistically significant. Therefore, t-test is carried out using the natural log sales of Black-, White-, Asian-, and Hispanic-owned firms. The result of this analysis is presented in Table 6.1.

Table 6.1: Test of Equal Variance of Mean Ln Sales

Race	Mean ($\bar{X}$) Ln sales	Std. error	Std. Deviation (SD)	95 percent C.I.	df	t
Black	10.61	0.01	1.70	(10.60,10.62)		
White	12.35	0.00	2.29	(12.34, 12.35)	1,600,000	t = 223.71***
Asian	11.65	0.01	1.99	(11.64,11.66)	204,539	t = 125.25***
Hispanic	11.00	0.01	1.88	(10.99,11.01)	220094.00	t = 49.21***

***p < 0.0001

The results in Table 6.1 suggest the presence of significant difference in average sales performance of firms owned by Blacks in contrast with each of the other three races. From the analysis, there is a significant difference in mean sales, between Asian ($\bar{X}$ = 11.65, SD =1.99) and Black ($\bar{X}$= 10.61, SD = 1.70); t (204.54) =125.25, p < 0.0001; White ($\bar{X}$ = 12.35, SD =2.29) and Black ($\bar{X}$= 10.61, SD = 1.70); t (1,600) =223.71, p < 0.0001; and Hispanic ($\bar{X}$ = 11.00, SD =1.88) and Black ($\bar{X}$= 10.61, SD = 1.70); t (4220094) =49.21, p < 0.0001. The mean sales difference between White and Black is the largest, suggesting the presence of the largest White/Black gap whereas the gap between Hispanic and Black is the least as indicated by the t-value. As discussed in the descriptive analysis section in Chapter 4, the average annual sale of Black-owned businesses is about ten times lower than White-, six times below Asian-, and about three times below Hispanic-owned firms. Thus, the t-test conducted in this chapter has validated the presence of this disparity in a more scientific manner.

In Table 6.2, the generalized variance inflation factor (GVIF) is also performed to check the presence of multicollinearity among the independent variables, before applying the multivariate analyses.

Table 6.2: Multicollinearity Test of Independent Variables on Ln Sale

Variable	GVF	DF	GVIF^(1/(2*DF))
Gender	1.5723	2	1.1198
Native/non-native	1.0757	1	1.0372
Owner education	1.4829	6	1.0334
Owner age	1.2813	3	1.0422
Startup	1.3970	1	1.1820
Prior experience	1.1053	1	1.0513
Family business	1.4826	1	1.2176
Firm size	1.4875	2	1.1044
Industry type	1.9946	11	1.0319
Firm age	1.3881	2	1.0854
Bank loan	1.2038	1	1.0972
Government bank loan	1.0135	1	1.0067
Website	1.2396	1	1.1134
Export	1.1765	1	1.0846
Region	1.0492	3	1.0080

The GVIF analysis contained in Table 6.2 gauges whether the variances of estimated regression coefficients are inflated due to collinearity. The summary showed that none of the GVIFs are greater than 5, indicating that incidence of multicollinearity is not worrisome.

To determine the separate effect of owner characteristics on the sales and risks of closure of Black-owned firms, multilinear and logit regressions models are carried out as illustrated in Table 6.3.

Table 6.3: Multilinear and Logit Regression on the Effects of Owner Characteristics on Sales (ln Sale) Performance and Risk of Closure Black-Owned firms

	Linear Model				Logit				
Variables	**β**	**SE β**	**t**	**95 % C.I.**	**β**	**Odd Ratio exp(β)**	**SE β**	**Z**	**95 % C.I.**
Gender									
Female	-0.366***	0.021	-17.45	(-0.407, -0.325)	0.248***	1.281	0.044	5.69	(0.162,0.333)
Equally male–female	-0.378***	0.042	-9.02	(-0.46, -0.296)	0.143*	1.154	0.083	1.73	(-0.019,0.305)
Male	---	---	---	---	---	1.000	---	---	---
Native/Nonnative									
Native	---	---	---	---	---	1.000	---	---	---
Non-native	-0.069***	0.025	-2.77	(-0.117, -0.02)	0.085	1.088	0.053	1.61	(-0.019,0.188)
Age									
Under 35	---	---	---	----	---	1.000	---	---	---
35–44	0.257***	0.03	8.52	(0.198,0.316)	-0.358***	0.699	0.06	-5.94	(-0.476, -0.24)
45–54	0.336***	0.03	11.38	(0.278,0.394)	-0.495***	0.61	0.059	-8.34	(-0.611, -0.379)
55&+	0.293***	0.03	9.69	(0.234,0.353)	-0.704***	0.494	0.062	-11.34	(-0.826, -0.583)
Education									
No high school	---	---	---	----	---	1.000	---	---	---
High school	0.106**	0.042	2.54	(0.024,0.188)	-0.009	0.991	0.092	-0.1	(-0.190,0.172)
Technical school	0.116**	0.046	2.53	(0.026,0.206)	-0.393***	0.675	0.106	-3.69	(-0.601, -0.184)
Some college	0.124***	0.041	3.03	(0.044,0.205)	-0.197**	0.821	0.092	-2.15	(-0.377, -0.018)
Associate	0.095*	0.05	1.91	(-0.003,0.192)	-0.327***	0.721	0.111	-2.96	(-0.544, -0.11)
Bachelors	0.331***	0.043	7.75	(0.247,0.414)	-0.49***	0.613	0.093	-5.26	(-0.672, -0.307)
Masters' +	0.402***	0.043	9.28	(0.317,0.487)	-0.664***	0.515	0.097	-6.88	(-0.854, -0.475)
Startup Capital									
Under $10,000									
10,000–49,000	0.636***	0.027	23.8	(0.583,0.688)	-0.319***	0.727	0.055	-5.77	(-0.427, -0.21)
50,000 &+	1.467***	0.04	36.89	(1.389,1.545)	-0.583***	0.558	0.079	-7.41	(-0.737, -0.429)
Prior Business Experience:									
Self employed	---	---	---	----	---	1.000	---	---	---
No	-0.058***	0.022	-2.6	(-0.101, -0.014)	0.071	1.074	0.046	1.55	(-0.019,0.162)
Family/Nonfamily Business:									
Family	---	---	---	----	---	1.000	---	---	---
Nonfamily	-0.134***	0.034	-3.95	(-0.201, -0.068)	0.151**	1.163	0.067	2.27	(0.021,0.281)
Constant	10.06***	0.057	177.99	(9.949,10.17)	-0.701***	0.496	0.119	-5.9	(-0.933, -0.468)
R-squared = 0.1889 Adj. R-squared = 0.1883 Number of obs. = 20,675 N (weighted) = 197,610 F (16, 20658) = 194.01 Prob > F = 0.000					χ^2 (16) = 459.49 Prob > chi^2 = 0.000 Number of obs. = 24,901 N (weighted) = 262,386				

*** p<0.01, ** p<0.05, * p<0.10; --- is for an omitted reference category

As contained in Table 6.3, the linear regression result indicated that owner characteristics collectively explained 18.89 percent of the variance in the sales outcome among Black businesses, [F (16, 20659) = 194.17, $p < 0.001$, $R^2 = 0.1889$, Adj. $R^2 = 0.1883$)]. Likewise, the output from the logit regression ascertains the association between owner characteristics and the probability of business closure; and the model was statistically significant [(χ^2 (16) = 28.72, $p < 0.001$)].

The final model in Table 6.4, accounting for the joint effects of owner and firm characteristics, confirmed that owner characteristics are significant influential factors even when the more proximate firm characteristics are considered. From Table 6.4 it is evident that owner background and firm characteristics jointly explained 50.79 percent of the variances in sales performance [(F (35, 19034) = 578.864, $p < 0.001$, $R^2 = 0.5079$, Adj. $R^2 = 0.5070$)].

Table 6.4: Multilinear and Logit Regression on the Joint Effects of Owner and Firm Characteristics on Sales (ln Sale) Performance and Risk of Closure

	Linear Model				Logit				
Variables	**β**	**SE β**	**t**	**95 % C.I.**	**β**	**Odds Ratio**	**SE β**	**z**	**95 % C.I.**
a) Owner Characteristics									
Gender									
Female	-0.228***	0.02	-11.36	(-0.267, -0.188)	0.225***	1.252	0.052	4.35	(0.124,0.326)
Equally male–female	-0.190***	0.036	-5.26	(-0.261, -0.119)	0.051	1.053	0.091	0.57	(-0.126,0.229)
Male	—	—	—	—	—	1.000	—	—	—
Native/Nonnative									
Native	—	—	—	—	—	1.000	—	—	—
Non-native	-0.013	0.023	-0.56	(-0.058,0.032)	0.072	1.075	0.06	1.21	(-0.045,0.189)
Age:									
Under 35	—	—	—	—	—	1.000	—	—	—
35 &+	0.052**	0.025	2.08	(0.003,0.1)	-0.290***	0.748	0.059	-4.91	(-0.406, -0.174)
Education									
No high school	—	—	—	—	—	1.000	—	—	—
High school	0.066*	0.04	1.65	(-0.013,0.144)	-0.029	0.971	0.102	-0.28	(-0.23,0.171)
Technical school	0.112**	0.044	2.52	(0.025,0.198)	-0.333***	0.717	0.118	-2.83	(-0.563, -0.102)
Some college	0.062	0.039	1.57	(-0.015,0.139)	-0.108	0.897	0.102	-1.06	(-0.308,0.092)
Associate	0.016	0.047	0.35	(-0.075,0.107)	-0.209*	0.812	0.123	-1.7	(-0.449,0.032)
Bachelors	0.162***	0.041	3.97	(0.082,0.242)	-0.256**	0.774	0.105	-2.45	(-0.462, -0.051)
Masters' &+	0.22***	0.042	5.23	(0.138,0.303)	-0.448***	0.639	0.11	-4.06	(-0.664, -0.232)
Startup Capital									
Under $10,000	—	—	—	—	—	1.000	—	—	—
$10,000&+	0.387***	0.023	17.03	(0.342,0.431)	-0.147***	0.863	0.057	-2.58	(-0.259, -0.035)
Prior Business Experience:									
Self employed	—	—	—	—	—	1.000	—	—	—
No	-0.057***	0.02	-2.89	(-0.096, -0.018)	0.063	1.065	0.052	1.23	(-0.038,0.164)
Family/Nonfamily Business:									
Family									
Nonfamily	-0.052*	0.028	-1.87	(-0.107,0.003)	0.116	1.123	0.074	1.56	(-0.029,0.261)
b) Firm Characteristics									
Firm Size:									
No Employee	—	—	—	—	—	1.000	—	—	—
1–4 employees	1.318***	0.027	48.99	(1.266,1.371)	-0.936***	0.392	0.085	-10.96	(-1.104, -0.769)
5&+ employees	2.854***	0.033	86.69	(2.79,2.919)	-1.415***	0.243	0.132	-10.69	(-1.674, -1.155)
Firm Age									
9 years or more	—	—	—	—	—	1.000	—	—	—
2–8 years	-0.15***	0.026	-5.69	(-0.202, -0.098)	0.544***	1.723	0.082	6.61	(0.382,0.705)
less than 2 years	-0.479***	0.033	-14.35	(-0.544, -0.413)	1.355***	3.878	0.092	14.67	(1.174,1.536)
Industry									

Variables	Linear Model β	SE β	t	95 % C.I.	Logit β	Odds Ratio	SE β	z	95 % C.I.
Manufacturing	0.07	0.082	0.84	(-0.092,0.231)	-0.213	0.808	0.176	-1.21	(-0.558,0.132)
Wholesale	0.404***	0.081	4.99	(0.245,0.563)	-0.398**	0.671	0.193	-2.07	(-0.776, -0.021)
Construction	0.208***	0.049	4.23	(0.112,0.305)	-0.1	0.905	0.111	-0.9	(-0.317,0.117)
Retail trade	—	—	—	—	—	1.000	—	—	—
Transport	0.295***	0.045	6.59	(0.207,0.383)	-0.134	0.874	0.102	-1.31	(-0.335,0.066)
Professional	-0.068*	0.04	-1.68	(-0.148,0.011)	-0.462***	0.63	0.094	-4.93	(-0.646, -0.278)
Health care	-0.045	0.039	-1.16	(-0.122,0.032)	-0.238*	0.788	0.092	-2.58	(-0.419, -0.057)
Admin support	-0.19***	0.042	-4.55	(-0.271, -0.108)	-0.216**	0.805	0.097	-2.23	(-0.407, -0.026)
Food service	-0.066	0.063	-1.05	(-0.189,0.057)	0.293**	1.34	0.149	1.96	(0,0.585)
Real estate	-0.142***	0.045	-3.16	(-0.231, -0.054)	-0.188*	0.829	0.105	-1.79	(-0.393,0.018)
Finance	-0.052	0.057	-0.91	(-0.164,0.06)	-0.183	0.833	0.137	-1.34	(-0.451,0.085)
Others	-0.230***	0.036	-6.37	(-0.301, -0.159)	-0.367***	0.693	0.082	-4.51	(-0.527, -0.208)
Access Financial at Startups:									
a) Bank loan?									
Yes	—	—	—	—	—	1.000	—	—	—
No	-0.199***	0.036	-5.58	(-0.269, -0.129)	0.304***	1.355	0.107	2.85	(0.095,0.513)
b) Government?									
Yes	—	—	—	—	—	1.000	—	—	—
No	-0.137	0.087	-1.58	(-0.307,0.033)	-0.113	0.893	0.258	-0.44	(-0.618,0.392)
E-commerce Website:									
Yes	—	—	—	—	—	1.000	—	—	—
No	-0.179***	0.022	-7.96	(-0.223, -0.135)	0.496***	1.642	0.06	8.32	(0.379,0.613)
Export:									
Yes	—	—	—	—	—	1.000	—	—	—
Yes	0.186***	0.05	3.68	(0.087,0.284)	-0.185	0.831	0.129	-1.44	(-0.438,0.068)
Region									
Midwest	-0.079***	0.034	-2.35	(-0.145, -0.013)	-0.269***	0.764	0.087	-3.1	(-0.439, -0.099)
West	—	—	—	—	—	1.000	—	—	—
Northeast	-0.100***	0.035	-2.82	(-0.169, -0.03)	-0.244***	0.784	0.093	-2.62	(-0.426, -0.061)
South	-0.068***	0.029	-2.35	(-0.126, -0.011)	-0.123*	0.885	0.072	-1.7	(-0.264,0.019)
Constant	10.815***	0.116	92.93	(10.587,11.044)	-1.807***	0.164	0.325	-5.56	(-2.445, -1.17)
R-squared = 0.5079					χ^2 (35) = 1105.48				
Adjusted R- Square = 0 .5070					Prob > chi^2 = 0.000				
Number of obs. = 19,070					Number of obs. = 22,844				
N (weighted) = 178,874					N (weighted) = 236,541				
F (35, 19034) = 578.64					Log likelihood = -113559.82				
Prob > F = 0.000									

*** p<0.01, ** p<0.05, * p<0.10; --- is for an omitted reference category

According to the results in the same Table 6.4, the logit regression model on Black-owned firms as well revealed that these factors do jointly play a statistically significant deterministic role on firm survivability – [(χ^2 (35) = 1105.48, p < 0.0001)]. This suggests a large amount of difference is explained by these factors.

Considering only the singular effects of owner characteristics, the Oaxaca-Blinder decomposition methods in Tables 6.5 and 6.6 revealed the magnitude of disparities between White–Black, Asian–Black, and Hispanic–Black, and the gap explained due to owner characteristics.

Table 6.5: Oaxaca-Blinder Linear Decomposition of Black/White, Black/Asian, and Black/Hispanic Sales Outcome by Owner Characteristics

	White–Black			**Asian–Black**			**Hispanic–Black**		
	Coefficient	**Contribution (%)**	**Std. Error**	**Coefficient**	**Contribution (%)**	**Std. Error**	**Coefficient**	**Contribution (%)**	**Std. Error**
Differential:[3]									
Prediction 1	11.210***		0.002	11.325***		0.009	10.789***		0.0074
Predicted 2	10.326***		0.008	10.326***		0.008	10.326***		0.0080
Difference	0.884***	100%	0.008	0.999***	100%		0.463***	100%	0.0110
Explained	0.298***	33.7%	0.004	0.452***	45.2%	0.012	0.077***	16.6%	0.0068
Unexplained	0.586***	66.3%	0.008	0.548***	54.8%	0.015	0.386***	83.4%	0.0108
Explained Detailed Decomposition									
Gender	0.102***	11.6%	0.002	0.047***	4.7%	0.002	0.053***	11.4%	0.0023
Origin	-0.007***	-0.8%	0.001	0.004	0.4%	0.01	-0.023***	-5.0%	0.0042
Age	0.033***	3.7%	0.002	0.005***	0.5%	0.001	-0.008***	-4.7%	0.0012
Education	0.020***	2.2%	0.001	0.065***	6.5%	0.003	-0.022***	-5.7%	0.0014
Startup capital	0.128***	14.5%	0.002	0.297***	29.7%	0.005	0.058***	12.5%	0.0035
Family business	0.023***	2.6%	0.001	0.016***	1.6%	0.002	0.014***	3.0%	0.0012
Prior self-employment	-0.001	-0.1%	0.001	0.016***	1.6%	0.002	0.005***	1.1%	0.0007
Unexplained Detailed Decomposition									
Gender	-0.081***	-9.2%	0.002	-0.001	-0.1%	0.008	-0.051***	-11.1%	0.0075
Origin	0.015***	1.7%	0.001	0.024*	2.4%	0.014	-0.014**	-3.0%	0.0065
Age	0.237***	26.8%	0.002	0.100***	10.0%	0.023	0.035*	7.6%	0.0197
Education	-0.054***	-6.1%	0.001	0.027***	2.7%	0.01	-0.025***	-5.4%	0.0079

[3] Prediction 1 is predicted mean sales of White-, Asian-, and Hispanic-owned firms, respectively. Prediction 2 is predicted mean sales of Black-owned firms.

	White–Black			Asian–Black			Hispanic–Black		
	Coefficient	**Contribution (%)**	**Std. Error**	**Coefficient**	**Contribution (%)**	**Std. Error**	**Coefficient**	**Contribution (%)**	**Std. Error**
Startup capital	-0.015***	-1.7%	0.002	-0.010	-1.0%	0.007	0.018***	3.9%	0.0061
Family business	0.017	2.0%	0.001	0.029***	2.9%	0.006	0.052***	11.2%	0.0052
Prior self-employment	-0.034***	-3.9%	0.001	0.008	0.8%	0.007	-0.006	-1.3%	0.0064
Constant	0.500***	56.6%	0.020	0.371***	37.1%	0.034	0.377***	81.4%	0.0262
No. Observations	999,043			94,792			90,902		

*** p<0.01, ** p<0.05,

[1]Black Mean sales; [2] Mean sales for each corresponding races

[3] Female = 1, otherwise = 0; [4]Age 35 &+ = 1, otherwise = 0; [5]Less than high School = 1; otherwise = 0

[7]family owned = 1, non-family = 0; [8]prior experience, yes = 1, no experience =0

According to Table 6.5, the associated coefficients with total gap in sales difference is substantially higher in Asian–Black (0.999) and White–Black (0.884) than in the Hispanic–Black gaps (0.463). Collectively, owner characteristics alone explained 33.7 percent of the sales performance gap between White-owned and Black-owned firms; 45.2 percent of the gap between Asian and Black, and 16.6 percent of the sales difference between Hispanic and Blacks. These differences, arising due to differences in owner characteristics, are statistically significant.

Furthermore, data on the racial disparity in risk of business closure due to entrepreneurial background is contained in Table 6.6. The results of the analysis indicated that the gap between White–Black (-0.884) and Asian–Black (-0.079) is larger while Hispanic–Black (-0.035) is relatively narrower than the other two racial groups.

Table 6.6: Nonlinear Decomposition of Black/White, Black/Asian, and Black/Hispanic on Risk of Business Closures by Owner Characteristics

	White–Black			Asian–Black			Hispanic–Black		
	Coeff.	**% Contribution**	**Std. error**	**Coeff.**	**% Contribution**	**Std. error**	**Coeff.**	**% Contribution**	**Std. error**
Total difference[4]	-0.084***	100%		-0.079***	100.0%	0.0040	-0.035***	100.0%	0.0042
Total explained	-0.021***	25%		-0.017***	21.4%	0.0052	-0.005***	15.5%	0.00214
Total unexplained	-0.064***	75%		-0.062***	78.6%	0.0067	-0.030***	84.5%	0.00475
Explained Detailed Decomposition									
[1]Gender	-0.0028***	3.4%	-0.003	-0.008**	1.0%	0.0004	-0.0020***	5.8%	0.0005
[2]Origin	0.0004	-0.4%	0.000	0.0141***	-17.9%	0.0033	-0.0027**	7.6%	0.0019
[3]Age	-0.0036***	4.2%	-0.004	0.0004***	0.6%	0.0000	0.0022***	-6.3%	0.0002
[4]Education	-0.0018***	2.2%	-0.002	-0.0031***	3.9%	0.0007	0.0033***	-9.4%	0.0006
[4]Startup capital	-0.0100***	11.8%	-0.010	-0.0241***	30.5%	0.0017	-0.0041***	11.8%	0.0004
[5]Family business	-0.0030***	3.5%	-0.003	-0.0020***	2.5%	0.0004	-0.0015***	4.4%	0.0002
[6]Prior self-employment	0.0000	0.0%	0.000	-0.0007	0.8%	0.0005	-0.0006	1.6%	0.0002
Unexplained Detailed Decomposition									
Gender	-0.004	4.8%	0.002	-0.0083***	10.5%	0.0032	-0.0039	11.3%	0.0033
Origin	-0.004**	4.2%	0.002	0.0025	-3.1%	0.0021	-0.0046**	13.1%	0.0018
Age	-0.015**	17.5%	0.007	-0.0033	4.1%	0.0085	-0.0042	11.9%	0.0085
Education	0.009***	-10.6%	0.003	0.0131***	-16.6%	0.0039	0.0144***	-41.0%	0.0042
Startup capital	-0.004**	4.5%	0.001	-0.0086***	10.8%	0.0017	-0.0034*	9.6%	0.0019
Family business	-0.002	2.7%	0.002	-0.0029	3.6%	0.0020	-0.0070***	19.9%	0.0021
Prior self-employment	0.004**	-4.9%	0.002	0.0017	-2.1%	0.0025	0.0003	-0.9%	0.0026
Constant	-0.048***	57.2%	0.009	-0.0564	71.3%	0.0132	-0.0212	60.6%	0.0114
No. Observations	715,888			71,757			65,392		

*** p<0.01, ** p<0.05, * p<0.1

- % are calculated dividing each coefficient by total difference, e.g., White – Black gap due to gender = **(-0.0028÷ -0.084) x 100.**

[1] Female =1, otherwise = 0.

[2] non-natives =1, natives = 0.

[3] Older than 35 years =1, younger than 35 years = 0.

[4] Startup $25,000 &+ =1, under $25,000e = 0.

[5] Family =1, non-family = 0.

[6] self-employed =1, non-self-employed = 0

The fact that the associated coefficients with the total differences or gaps are negative indicate that being in the White, Asian, or Hispanic racial category more likely reduces the risk of

[4] Black (0.2248416); Asian (0.1457494); White (0.1403834); Hispanic (0.1897499). The model computed the total difference based on these predicted values.

business closure than being in the Black racial category – suggesting that Black-owned firms have lower probability of survivability. These individual owner characteristics also collectively explained 25 percent of the gap in the likelihood of closure between White and Black, 21 percent between Asian–Black; and 16 percent Hispanic–Black.

In the final model, contained in Table 6.7, when the joint effects of the owners and business characteristics environment are simultaneously considered, the results of the linear decomposition technique on sales outcome revealed higher White–Black gap and Asian–Black gap; little but significant Hispanic–Black gap in sales outcome is also observed. In terms of explaining the gap, most of the owner characteristics remained influential factors in explaining racial disparities in small business success. Owner background and firm characteristics jointly explained 73.9, 67.8, and 53.4 percent of the sales differential between White–Black, Asian–Black, and Hispanic–Black, respectively. The unexplained portion of the differences, for instance, which accounted for 26.3 percent of the disparity between White and Black, 32.2 percent Asian–Black, and 46.6 percent Hispanic–Black in sales may be due to other residual factors not added into the model – including discrimination effects.

Table 6.7: Linear Decomposition of the Joint Effects of Owner and Firm Characteristics on Sales

	White–Black			Asian–Black			Hispanic–Black		
	Coeff.	**% Contribution**	**Std. error**	**Coeff.**	**% Contribution**	**Std. error**	**Coeff.**	**% Contribution**	**Std. error**
Differential									
Prediction_1	11.210***		0.002	11.3254***		0.009	10.789***		0.007
Prediction_2	10.326***		0.008	10.3262***		0.008	10.326***		0.008
Difference	0.884***	100.0%	0.008	0.9992***	100.0%	0.012	0.463***	100.0%	0.011
Explained	0.651***	73.7%	0.006	0.6779***	67.8%	0.013	0.247***	53.4%	0.009
Unexplained	0.232***	26.3%	0.232	0.3213***	32.2%	0.013	0.216***	46.6%	0.009
Explained Detailed Decomposition									
a) Owner Character									
Gender	0.050***	5.6%	0.001	0.0261***	2.6%	0.001	0.028***	6.0%	0.001
National origin	-0.012***	-1.3%	0.001	0.0112	1.1%	0.008	0.004	0.9%	0.003
Age	0.006***	0.7%	0.000	0.0009***	0.1%	0.000	-0.001***	-0.2%	0.000
education	0.015***	1.8%	0.001	0.0269***	2.7%	0.002	-0.010***	-2.2%	0.001
Startup capital	0.045***	5.1%	0.001	0.1173***	11.7%	0.004	0.024***	5.2%	0.002
Family business	0.001**	0.1%	0.001	0.0052***	0.5%	0.001	0.004***	0.9%	0.001
Prior self-employment	0.012***	1.3%	0.001	0.0145***	1.5%	0.001	0.004***	0.9%	0.001
Firm size	0.336***	38.1%	0.004	0.3964***	39.7%	0.006	0.148***	32.0%	0.005
Firm age	0.104***	11.7%	0.002	0.0193***	1.9%	0.002	0.004*	0.8%	0.002
Industry	0.042***	4.8%	0.002	0.0436***	4.4%	0.004	0.036***	7.7%	0.003
Bank Loan	0.015***	1.7%	0.001	0.0120***	1.2%	0.001	0.001*	0.2%	0.000
Govt Loan	0.000	0.0%	0.000	0.0000	0.0%	0.000	0.000	0.0%	0.000
E-commerce	0.037***	4.2%	0.001	0.0047***	0.5%	0.001	-0.004***	-0.9%	0.001
Export	-0.007***	-0.8%	0.001	0.0020***	0.2%	0.000	0.001***	0.2%	0.000
Region	0.005***	0.6%	0.000	-0.0023	-0.2%	0.004	0.008***	1.8%	0.003
Unexplained Detailed Decomposition									
b) Firm Character									
Gender	-0.030***	-3.4%	0.006	0.0039	0.4%	0.007	-0.024***	-5.2%	0.007
National origin	0.013***	1.4%	0.003	-0.0036	-0.4%	0.011	-0.003	-0.7%	0.005
Age	0.048***	5.4%	0.014	0.0206	2.1%	0.020	-0.013	-2.9%	0.018
education	0.002	0.2%	0.006	-0.0044	-0.4%	0.009	-0.006	-1.3%	0.007
Startup capital	-0.026***	-2.9%	0.004	-0.0168	-1.7%	0.006	0.004	0.9%	0.005
Family business	0.003	0.3%	0.003	0.0160***	1.6%	0.004	0.022**	4.8%	0.004
Prior self-employment	-0.001	-0.1%	0.004	0.0111	1.1%	0.006	-0.006	-1.4%	0.005
Firm size	0.020***	2.3%	0.003	-0.0387	-3.9%	0.005	-0.007*	-1.5%	0.004
Firm age	-0.020	-2.2%	0.016	-0.0332	-3.3%	0.023	0.058***	12.5%	0.021
Industry	-0.383***	-43.4%	0.038	0.0926*	9.3%	0.051	-0.760***	-164.1%	0.054
Bank loan	0.001	0.1%	0.002	0.0001	0.0%	0.003	0.001	0.3%	0.002
Government loan	0.000	0.0%	0.001	0.0000	0.0%	0.001	0.000	-0.1%	0.001
E-commerce	0.035***	4.0%	0.003	0.0202***	2.0%	0.004	0.015***	3.2%	0.004
Export	0.017***	1.9%	0.002	0.0041	0.4%	0.003	0.003	0.6%	0.003
Region	-0.004	-0.4%	0.002	-0.0197***	-2.0%	0.004	-0.008	-1.8%	0.004
Constant	0.558***	63.1%	0.046	0.2690***	26.9%	0.062	0.941***	203.3%	0.063
Observation	999,043			94,792			90,902		

** p<0.01, ** p<0.05, * p<0.1

In Table 6.8, the final non-linear decomposition of the joint effects of owner background and firm-related characteristics are considered to investigate the racial gap in risks of business closure. The result from the model revealed the presence of a higher proportion of closure gaps in the White–Black and Asian–Black gap than Hispanic-Black gap, although Hispanic-owned firm have a lower risk of closure. When all entrepreneurial background, business, and environment characteristics are accounted in the final decomposition model contained in Table 6.8, the disparity in closure rate is substantially larger between White–Black (-0.884) and Asian–Black (-0.079) than is in Hispanic–Black (-0.035) gap. Accordingly, Black-owned firms have the highest probability of closure than all the other races.

Table 6.8: Nonlinear Decomposition of the Joint Effects of Owner and Firm Characteristics on Risk of Closure

	W-B			A-B			H-B		
	Coef.	**Contribution (%)**	**Std. error**	**Coef.**	**Contribution (%)**	**Std. error**	**Coef.**	**Contribution (%)**	**Std. error**
Total difference[5]	-0.0805***	100.0%	0.0035	-0.0755***	100.0%	0.0041	-0.0331***	100.0%	0.0042
Total explained	-0.0379***	47.1%	0.0006	-0.0182***	24.0%	0.0061	-0.0176	53.0%	0.0028
Total unexplained	-0.0426***	52.9%	0.0036	-0.0574***	76.0%	0.0074	-0.0156	47.0%	0.0052
Detailed Decomposition, explained effect									
a) Owner Characteristics									
Gender	-0.0010***	1.3%	0.0002	-0.0003	0.3%	0.0003	-0.0013**	3.9%	0.0004
National origin	0.0007*	-0.9%	0.0004	0.0104	-13.8%	0.0025	-0.0053***	15.9%	0.0018
Age	-0.0022***	2.7%	0.0001	-0.0003**	0.4%	0.0000	0.0012***	-3.6%	0.0001
Technical/some college	0.0006***	-0.8%	0.0001	0.0020**	-2.6%	0.0008	-0.0001	0.28%	0.0002
College graduate	-0.0018***	2.2%	0.0001	-0.0013***	1.7%	0.0006	0.0014**	-4.3%	0.0006
Startup capital	-0.0040***	4.9%	0.0002	-0.0095***	12.5%	0.0015	-0.0013***	3.8%	0.0003
Prior self-employment	-0.0003***	0.4%	0.0002	-0.0004	0.6%	0.0004	-0.0004	1.1%	0.0002
Family business	-0.0023***	2.9%	0.0002	-0.0012***	1.6%	0.0003	-0.0009***	2.7%	0.0002
b) Firm Characteristics									
Firm size	-0.0166***	20.6%	0.0002	-0.0176***	23.2%	0.0021	-0.0109***	32.8%	0.0007
Firm age	-0.0060***	7.5%	0.0001	-0.0012***	1.6%	0.0002	0.0008***	-2.4%	0.0001
Industry	-0.0011***	1.3%	0.0001	0.0012***	-1.6%	0.0004	0.0012**	-3.7%	0.0003
Bank loan	-0.0018***	2.3%	0.0002	-0.0016***	2.1%	0.0004	-0.0002***	0.5%	0.0001
Govt loan	0.0000	0.0%	0.0000	0.0000	0.0%	0.0000	0.0000	0.0%	0.0001
E-commerce site	-0.0024***	2.9%	0.0001	0.0006***	-0.8%	0.0001	0.0018***	-5.3%	0.0002
Export	-0.0004***	0.5%	0.0000	-0.0003***	0.4%	0.0003	-0.0005*	1.6%	0.0002
Region	0.0006***	-0.7%	0.0002	0.0012***	-1.6%	0.0011	-0.0033***	9.8%	0.0011
Detailed Decomposition, unexplained effect									
a) Owner Characteristics									
Gender	-0.0068**	8.4%	0.0029	-0.0080*	10.6%	0.0035	-0.0068	20.4%	0.0038
National origin	-0.0034*	4.2%	0.0018	0.0031	-4.0%	0.0023	-0.0057**	17.1%	0.0021
Age	-0.0107	13.3%	0.0078	-0.0049	6.5%	0.0095	-0.0021	6.4%	0.0096
Technical/some college	0.0035	-4.4%	0.0027	0.0013	-1.8%	0.0037	0.0098	-29.6%	0.0036
College graduate	0.0061	-7.5%	0.0043	0.0183***	-24.2%	0.0051	0.0199***	-60.1%	0.0061
Startup capital	-0.0047**	5.8%	0.0019	-0.0080***	10.6%	0.0021	-0.0037	11.0%	0.0023
Prior self-employment	0.0014	-1.8%	0.0022	0.0005	-0.6%	0.0027	-0.0004	1.1%	0.0028
Family business	-0.0026	3.2%	0.0018	-0.0025	3.3%	0.0022	-0.0047	14.2%	0.0024
b) Firm Characteristics									
Firm size	0.0021	-2.6%	0.0015	0.0029*	-3.8%	0.0017	-0.0007	2.2%	0.0018
Firm age	0.0081	-10.0%	0.0073	0.0225*	-29.8%	0.0090	-0.0004	1.2%	0.0089
Industry	0.0007	-0.8%	0.0020	-0.0025	3.3%	0.0024	0.0002	-0.6%	0.0105
Bank loan	0.0014	-1.7%	0.0012	-0.0002	0.3%	0.0014	0.0005	-1.5%	0.0015
Govt loan	0.0002	-0.2%	0.0004	-0.0004**	0.5%	0.0005	-0.0001	0.2%	0.0005
E-commerce site	0.0031	-3.8%	0.0022	-0.0044	5.8%	0.0028	0.0032	-9.6%	0.0031
Export	-0.0024***	3.0%	0.0008	-0.0007	0.9%	0.0009	-0.0015	4.5%	0.0010
Region	-0.0015	1.9%	0.0012	-0.0015	1.9%	0.0013	-0.0045***	13.4%	0.0015
Constant	-0.0369***	45.8%	0.0127	-0.0728***	96.4%	0.0174	-0.0188	56.3%	0.0191
No. Observations	689,717			67,076			61,243		

*** p<0.01, ** p<0.05, * p<0.1

[5] Total differences or gaps are estimated subtracting mean proportion of closure; White–Black, Asian–Black; Hispanic–Black. The mean proportion of closure for White (0.1348), Asian (0.1398), Hispanic (0.1821482), and Black (0.2153). Thus, total difference or W–B closure gap is 0.1348 – 0.2153 = – 0.0805.

Thus, it can be safely suggested that entrepreneurial background and business characteristics significantly contributed to explaining racial disparities in business closure and sales outcome in small businesses. The results obtained in the t-test (Table 6.1) and the multivariate decomposition analysis (Tables 6.6 and 6.8) provide clear evidence to answer research question 1: "Do Black-owned small firms in America underperform their White-, Asian- and Hispanic-owned counterparts in sales and survival?" and the associated hypothesis:

H1: *Black-owned businesses have lower level of performance compared to White, Asian, and Hispanic-owned firms.*

As a result of this statistical evidence, we fail to reject the null hypothesis, and uphold the realism that racial differential in the success of small business does prevail in the United States. Thus, it is compelling to further examine and discuss in detail the contributions of each individual predictors involved in the multivariate models, in terms of their impact on Black-owned firms as well as their contributions in explaining differentials in White–Black gap, Asian–Black, and Hispanic–Black gap.

6.1.1 Effects of Gender

The gender of an entrepreneur is documented in small business literature as a crucial factor in business performance (Fairlie and Robb, 2008; Lucas, 2017). After controlling for the effects of other owner characteristics (age, education, national origin, age, education, startup capital, experience, and family), gender is found to be one of the important demographic factors influencing sales and business survivability (Table 6.3).

The regression results in Table 6.3 found that the sales outcome of firms run by Black female small business owners is 36.6 percent lower than the sales of firms run by Black male business owners. Also, the sales of equally Black male–female-owned firms are 37.8 percent less than the sales of firms run by Black male entrepreneurs. In both cases, the coefficients are statistically significant at $p < 0.001$ suggesting that firms owned and operated by Black males perform better than firms run by Black female and equally male–female-owned businesses.

The result on the risk of business closure (Table 6.3) also indicated that Black female-owned businesses have a 1.281 times larger risk of closure than Black male-owned firms – implying that female-owned firms have 28.1 percent higher likelihood of ceasing their operation

compared to Black male-owned firms. Gender also emerged as a strong determinant factor even when significant firm characteristics are added into the final regression models in Table 6.4. After accounting for the effects of firm and owner attributes, women appear to have 22.8 percent lower sales than men; and 25.2 percent more likelihood of closing their businesses.

Racial differences in male–female composition of business owners play a significant role in explaining the differences in sales performance as well as incidences of closure. The decomposition models analyzed on the separate effects of owner characteristics in Tables 6.5 and 6.6 revealed the gap between Black and the other ethnic/racial groups. In Table 6.5, gender explains 11.6 percent of the difference between the White–Black gap, 4.7 percent between Asian–Black; and 13.7 percent between Hispanic–Black gaps in sales performance. These differentials are found to be statistically significant ($p < 0.01$) – with all the comparative racial categories. The result illustrates, for instance, 11.6 percent of the White–Black gap is explained due to gender composition of business owners, which the data suggests favored White-owned firms in terms of reducing the risk of firm closure.

Similarly, in Table 6.6, disparities due to gender are also noted in business closure as well. From the analysis, gender explained 3.4 percent of the differences in White–Black and 5.8 percent (Hispanic–Black) with a high level of significance. However, it explained a substantially smaller gap (1percent) between Asian–Black in risk of business closure.

The effect of gender on racial disparity remains significant after accounting for the effects of firm characteristics (Tables 6.6 and 6.8) – although the magnitude of the coefficients appears to be smaller than the coefficients found in the separate model from the singular effects of business owner characteristics. The estimation in Table 6.7 explained 3.0, 1.5, and 5.3 percent of the sales gap between White–Black, Asian–Black, and Hispanic–Black, respectively. The results are significant at $p< 0.001$. Its effect in explaining risk of business failure as well remained significant, after the model added significant firm attributes (Table 6.8). Significant contribution of gender, in general, is observed, because a higher percentage of Black-owned businesses than White-owned, Asian-owned, and Hispanic-owned are operated by females.

Thus, the statistical results obtained in Tables 6.7 and 6.8 provide sufficient evidence to address research question 2: “Does the gender of ownership determine the performance of small businesses in the United States?” and the related hypothesis:

H_2: The gender composition of the business owner explains racial disparities in sales performance and the risk of firm closure between Black-owned businesses and businesses owned by other races.

A critical observation of the level of significance and the magnitude of the coefficients suggests failure to reject the null hypothesis. Hence, gender is found to be one of the factors why Black-owned business underperform White-, Asian-, and Hispanic-owned businesses as well. Previous research also documented that gender differences in small business engagement results in business outcome disparity (Fairlie and Robb, 2008). The descriptive result in Chapter 4 also showed that Black businesses are predominantly owned by females; and female-owned firms are found to have lower sales and higher chance of closure. The literature documented in general that female business owner faces more challenges than their male counterparts in securing business loans, which disadvantages them (Roper and Scott, 2009; Cole and Mehran, 2011).

Prior evidence also noted female entrepreneurs are more likely to start up their business in low profit and unskilled service and retail sectors (Gottschalk and Niefert, 2013; Lee and Marvel, 2013; Marlow and Dy, 2017; as cited by Kim, 2019). Unlike other races, Black women enter business at a higher rate but exit at a much higher rate. Their higher participation rate might be attributed to their disadvantage in the main economic stream. The theory of disadvantage states that discrimination in the labor market against gender, ethnicity, and other form of profiling, acts as a push factor to entrepreneurship, while it may also retard entrepreneurial success due to their meagre financial resources often compounded with lender and customer discrimination (Morris et al., 2020).

6.1.2 Effects of Immigration Status

In many developed countries, rates of business formation are generally higher among the foreign-born than natives (Fairlie, 2013; Fairlie and Lofstrom, 2014; Kerr and Kerr, 2016). Even though immigrants have higher rates of business formation, their business outcome in growth and survivability has been documented as having intriguing volatility (Aregbeshola, 2010). A study of immigrant entrepreneurship by Kerr and Kerr (2016) found that immigrants are more likely to be engaged in more volatile, up-or-out type dynamics than natives. According to this study, immigrant businesses underperformed native owned firms in terms of payroll growth; and immigrant founded firms closed at faster rate than their native counterpart. However, those that

are able to survive grow at a faster rate both in payroll and size of employee for the next 6-years. Likewise, Desiderio (2014) documented that immigrant-owned firms have significantly lower probability of survival than those ran by native born.

The multivariate analyses from the 2007 SBO PUMS dataset, considering only owners characteristics in Table 6.3, appear to show that non-native Black business owners have 6.8 percent lower sales than native Black business owners; and this difference is found to be statistically significant ($p < 0.01$), and the logit regression outcome also suggested that non-native Blacks have a 1.088 slightly higher probability of closure than native Blacks. However, the result is not observed to be significant. In the final model as presented in Table 6.4, where firm characteristics are added and accounted for, no significant difference in sales performance between native and non-native Black business owners was observed – although the pattern appears to suggest non-native owners have a slightly lower sale. The logit model in Table 6.4 showed no significant difference in risk of business closure between non-native and native Black business owners.

The result in the decomposition models in Tables 6.5 and 6.6 showed that owner's immigration status has very little effect in explaining disparities between White–Black, Asian–Black, and Hispanic–Black businesses. However, 5 percent of the gap in sales outcome (Table 6.5) between Hispanic and Black business owners is due to differences in non-native ownership. The percentage point in the negatives between Hispanic and Black suggests that if Black businesses have a lower proportion of immigrant owners than they have now, the current gap would be even larger.

According to the result in Table 6.6, owner immigration status as well explains differentials in small business survival between Asian–Black and Hispanic–Blacks – it explained little in the White–Black gap. The coefficient suggests that 7.6 percent of the Hispanic–Black gap in risk of business closure is due to business owners' immigration origin. This suggests that Hispanic-owned firms were favored to reduce the level of closure associated with a substantial proportion of nonnative entrepreneurs. Thus, an increase by 7.6 percent in non-native Blacks will likely equalize Black-owned and Hispanic-owned survival rates; whereas, if the gap on this covariate falls below 17.9 percent, the differential in firm survival rate between Asian–Blacks will get even wider, considering business owner characteristics only.

In the final decomposition models, where the joint effects of owner and firm characteristics are involved, the results tend to validate that business owner's national origin appeared to have a strong contribution in explaining risk of firm closure, particularly in the Hispanic–Black and Asian–Black gap (Table 6.8).

Depending on the final decomposition results in Tables 6.7 and 6.8, it is tenable to answer research question 3 "Does the immigration status of owners influence business performance?" by testing the proposed research hypothesis:

H_3: Immigration status of business owners causes racial disparities in sales and risk of firm closure between Black-owned and businesses owned by other races.

Although the analyses contained in Table 6.7 appear to show little disparity in sales due to owner's immigration status, the result in Table 6.8 showed that owner immigration status appears to be substantial in explaining the disparity between Hispanic–Black and Asian–Black firms in risk of closure. As a result, we failed to reject the null hypothesis H_3. Nonetheless, among Black-owned firms, no statistical difference between native and non-native was established in Table 6.4 – either on sales performance or business closure.

6.1.3 Effects of Age

In small business literature, the age of a business owner has an impact on the likelihood of the success of a firm (Sajilan et al., 2015; Azoulay et al., 2020). According to the multivariate analysis from the 2007 SBO PUMS, the age of entrepreneurs is found to be a determinant factor in the outcome of Black-owned businesses. The linear regression in Table 6.3, based on the singular effects of owner characteristics, showed that owners older than 35 years have better sales outcome than younger owners. Owners aged 35–44 years, on average, have 25.7 percent better outcome as measured in sales than owners younger than 35 years (which is reference category); and the difference is highly significant ($p < 0.01$). The effect is noticed to be larger among the older age groups. It is also observed that firms owned by younger owners have higher risk of closure. The chances of business failure for firms owned by age 35–44 years is 30.1 percent (odds ratio i.e., 1.00–0.699) lower than firms owned by younger than 35 years. The magnitude of the effect becomes larger when younger owners are contrasted with those older than 45 years – firms owned by those older than 54 years have a 50.6 percent less likelihood of ceasing their operations ($p < 0.01$).

Age also appears to be one of the significant demographic factors even when significant firm characteristics are included into the final regression models of Table 6.4. The result indicated owners older than 34 years are observed to have 5.2 percent higher sales than younger Black business owners. The finding in the final logit model (Table 6.4) also suggested that Black business owners older than 34 years have 25.2 percent higher likelihood of reducing the risk of business closure. The final multivariate models in Tables 6.4 imply that firm characteristics are more proximate or direct determinants to business outcome, in general, than owner demographic profile. Previous studies of small businesses have found that the age of a business owner influences its performance, indicating that older owners have better outcomes than younger owners (Disney et al., 2003; Kautonen et al., 2008; Soomro et al., 2019).

When it comes to explaining racial gaps in sales performance, age has a significant role, both before and after controlling for the effects of firm characteristics. In the owner characteristics, the decompositions effect model (Table 6.5) indicates that 3.7 percent of the sales disparity between White–Black businesses is explained due to differences in owners' age composition; and its effect is highly significant ($p < 0.01$). However, age composition appears to have a smaller contribution in explaining sales disparities between Asian–Black (0.5 percent) and Hispanic–Black (-1.9 percent) – although the coefficients in Table 6.5 are significant. The negative coefficient, in the case of Hispanic–Black, implies that if Black owner age composition are normalized to reflect Hispanic business owners' age composition, their sales outcome would be much less than it is now.

Likewise, in Table 6.6, age explained 4.2 percent of the gap in closure of business between Whites and Blacks. However, there appears to be no substantial gap in incidence of firm closure between Asians and Blacks due to differences in age of owners. Thus, 4.2 percent increase in age composition would most likely equalize firm survival rates of Blacks with Whites.

The effect of age on racial disparity (Table 6.7) remains significant after accounting for the effects of firm characteristics as well – although the sizes of the coefficients are smaller than the coefficients obtained in the owner's characteristics only effect model in Table 6.5. After controlling for the effects of owners and firm characteristics (Table 6.7 and 6.8), age explained about 1 and 3 percent of the sales and risk of firm closure gaps between Whites and Blacks, respectively. Its effects in both models are significant ($p< 0.01$). The descriptive results in Chapter

6 showed that minority owners have a much more similar feature in terms of age of owners. Thus, age appears to explain less in the comparison of Black with Asian and Hispanic minorities but have a relatively larger contribution in explaining between White–Black gap. The evidence in Chapter 4 suggests that White business owner are relatively older than Black business owners and empirical studies indicated that older business owners accumulated more experience, wealth, and networks that make their businesses more successful than young entrepreneurs (Disney et al., 2003; Kautonen et al., 2008; Soomro et al. 2019).

6.1.4 Effects of Education

The literature on small business studies documented that education plays a determinant role in small business performance (Fairlie and Robb, 2008; Lofstrom et al., 2013; Mothibi, 2015; Lucas, 2017). Researchers, such as Welsh et al. (2018) suggested higher education particularly increases entrepreneurs' capability to cope with the challenges in their business engagements. The results presented in Table 6.3 (only owners characteristics effect models) and Table 6.4 (owners and firm characteristics joint effect models) for Black business owners also revealed the importance of education. In Table 6.3, where the contrasting reference category was less than a high school education, a significant increase in coefficients from high school to master's degree graduates is observed for its effect on sales performance – even though the coefficient of associate degree appears to be smaller and significant at $p < 0.10$. This suggests that as the level of education of Black business owners increases, their sales performance increases as well. For instance, Black business owners with master's and above degree, on average, have 40.2 percent better or improved sales than owners with below high school education.

In addition, the logit regression result in the same Table 6.3 measured the risk of business closure. The analysis contained in the table also revealed that Black business owners without high school education have a higher likelihood of ceasing their business operations compared with those with a college degree. The result indicated that owners with master's degrees have 48.5 percent more likelihood of averting closure than those without a high school education. A significant difference is not observed in terms of risk of closure between owners without and with High school diploma.

The effect of education was found to be strong and significant even after including firm attributes in the final regression models in Table 6.4. Particularly, higher level of education at

baccalaureate and master's levels are highly significant. The final model indicated that Black business owners with graduate degrees have 22 percent better sales than those without high school diploma. Having a graduate degree also reduces the risk of business failure by 36.1 percent, compared with less than high school achievements (Table 6.4). This implies that education is one of the strongest socioeconomic success factors of business owners, even when the more direct or proximate firm characteristics are factored into the analysis.

The analysis further suggests that owner education also explained racial disparities in sales performance and risk of business closure – both with and without accounting for the effects of firm characteristics. In Table 6.5, education explained 2.2 percent of the gap between White–Black, 6.5 percent (Asian–Black), and -5.7 percent (Hispanic–Black). The wider gap between Asian and Black businesses sales performance is explained by the fact that the larger proportion of Asian businesses owners attained a higher level of education than Black business owners.

According to the 2012 SBO data discussed in Chapter 4, nearly 60 percent of Asians compared with about 45 percent of Black owners have obtained a college degree, while the figures are about 51 percent among White and 34 percent among Hispanic business owners (Table 4.15). The level of disparity in level of educational attainment from the prior 2007 SBO data holds a similar pattern. The lower educational attainment of Hispanic owners is reflected for the size of the explained gap in the negative percentage figure. The non-linear decomposition results in the only owner characteristics effect model (Table 6.6) also revealed that education explained 2.2 percent of the gap in closure between White–Black, 3.9 percent Asian–Black, and -9.4 percent Hispanic–Black. A previous study by Fairlie and Robb (2008) also noted that education is a factor for Black businesses to lag behind White-owned businesses.

When the effects of firm characteristics are included into the final model (Tables 6.7 and 6.8), the impact of education remained a significant owners characteristic in terms of explaining racial differentials in small business performance as well. College-level education (Table 6.7), for instance, explained about 2 and 3 percent of the sales differentials between White–Black and Asian–Black, respectively. About 2 percent of the gap in business closure rates between White–Black and Asian–Black, in each case, are explained due to differences in the educational achievements of business owners (Table 6.8). Therefore, differences in educational achievement contributed to the gap between White and Black; and Asian and Black. However, education is not

a reason for the performance gap between Hispanic and Black-owned businesses, this probably was because Hispanic business owners have lower educational achievement than Black entrepreneurs. That is, Black-owned firms did not lag behind Hispanic-owned firms due to differences in level of education. The descriptive analysis in Chapter 4 from the SBOs indicated White and Asian business owners achieved a higher level of education than Black and Hispanic business owners. Higher education enhances an entrepreneur's capability to cope with problems, make better business decisions, and minimize risk of business failure (Saidi et al.; 2017; Welsh et al., 2018; Mozumdar et al., 2020). Thus, the lower educational achievement of Blacks appears to be reflected in the disparity of business outcome that Blacks experienced in contrast with Whites and Asians.

6.1.5 Effects of Startup Capital

In the literature review (Chapter 2), it was documented that personal wealth plays a deterministic role in self-employment initiatives (Robb and Robinson, 2014; Palia, 2016). The rationale behind the level of personal wealth is that having own assets is expected to lessen financial constraints to business entry as well as increase the ability in securing bank loans. The SBO survey did not collect data on personal net worth of business owners at the time of business entry, which would have been an essential direct measure of levels of liquidity constraints. However, SBO gathered size of startup capital. This analysis used the size of startup capital the owners invested at business formation. The designated reference category for invested capital size is "less than $10,000".

Accordingly, the result in Table 6.3 (owners characteristics only effect model) indicated that those owners with a startup capital of more than $10,000 have 63.6 percent higher sales than those with startup capital under $10,000 ($p < 0.01$). The larger the size of startup, the higher its impact on sales performance. Startups with $50,000 or more capital size even have 1.47 times larger sales than undercapitalized startups. Size of startup capital accounted for the largest share of deterministic properties of sales outcome of the business owner attributes considered in the model. Likewise, the size of startup capital has a significant impact on the probability of business closure. Considering owner characteristics alone, Black owners with a startup capital under $10,000 have a higher likelihood of closing their firms than those with over $50,000 and more in

startups ($p < 0.01$). Startups with a capital size of $50,000 or more have a 44.2 percent likelihood of averting business closure than startups under $10,000 at their business entry.

In the final multivariate models in Table 6.4, after accounting for the effects of significant firm attributes, startup capital remained among the strongest and significant factors influencing the performance of Black-owned businesses. The result suggests that Black business owners with startup capital of at least $10,000 have 38.7 percent higher average sales than those below $10,000 at startup ($p < 0.01$). The logit model in Table 6.4 also implies that larger financial resources at the early stage of business entry has significant impact in reducing the risk of business failure among Black business owners.

Considering separate effects of owner characteristics (Tables 6.5 and 6.6) alone, the finding in the decomposition methods also revealed that the size of capital invested at startup is the single most significant explanatory variable of racial disparities in business performance. It explained 14.5 percent of sales differentials between White–Black, 29.7 percent Asian–Black, and 12.5 percent Hispanic–Black. The low level of startup assets among Black business owners is also reflected in the higher probability of firm closure (Table 6.6). Startup capital explained the substantial gap in business failures. It accounted for 30.5 percent of the difference in survival rate between Asian-owned and Black-owned firms. Also, about 12 percent of the differentials with White and Hispanic are due to differences in the size of startup capital. This appears also to be one of the areas of strengths observed among Hispanic business owners.

The contribution of startup capital in explaining racial disparity remains significant even after accounting for the effects of firm characteristics as well (Tables 6.7 and 6.8). It explained 5.1, 11.7, 5.2 percent of the sales gap between White–Black, Asian–Black, and Hispanic–Black, respectively (Table 6.7). Its contribution in explaining differentials in business closure is also large and significant. Differences in startup capital, in Table 6.8, explained about 5 percent of the White–Black gap; about 13 percent of the Asian–Black gap, and nearly 4 percent of the Hispanic–Black disparity in probability of firm closure. The study by Fairlie and Robb (2008) also found that startup capital is accountable for the poor performance of Black-owned firms.

The findings contained in the descriptive analysis from Chapter 5 showed that about 57, 40, and 36 percent of Asian, White, and Hispanic business owners respectively have startup capital greater than $10,000; whereas about 26 percent of Black business owners invested more than

$10,000 at their business entry. And this huge difference in level of capital is reflected in larger differentials in sales performance and business survivability. In Chapter 1 of the problem statement, it is evidenced that the wealth gap between Black households and households of other races, particularly Whites, is very large. The average household net worth of Black families is 7.8 times below White families (US Census Bureau, 2020). To the extent, the theory of liquidity constraints holds true, individuals lacking wealth would be prevented from transforming viable opportunities into successful new ventures (Fird, 2016). It is of interest to further note that entrepreneurs with a lesser size of startup capital are forced to enter into industries with low capital requirements, yet with higher failure rates, as their businesses could not buffer losses (Kauffman Foundation, 2016). Thus, financial constraints affect Black entrepreneurship more than other races in the United States.

6.1.6 Effects of Prior Self-Employment

A reference to the literature review contained in Chapter 2 documented that past business experience is among the many factors linked with entrepreneurial success (Fairlie and Robb, 2008; Mothibi, 2015; Carranza et al., 2018). Prior exposure to self-employment provides entrepreneurs the opportunity to obtain skills and knowledge for coping with liabilities associated with new ventures (Muogbo and John-Akamelu, 2019; Shakeel et al., 2020). The findings in Table 6.3 from the 2007 SBO PUMS show that prior self-employment has a positive and significant impact on the sales performance of Black business. In Table 6.3, where the models considered business owners characteristics alone, owners who started their operations without experience on average have 5.8 percent lower sales than those with past business experience. It appears that an entrepreneur's prior experience has a positive relationship with the survivability of their firms.

The logit regression output (Table 6.3) also indicates that Black business owners that venture into business with no prior self-employment have a 7.4 percent higher risk of closure. However, the coefficient of the logit estimate is not statistically significant. In Table 6.4, after controlling for the effects of firm characteristics, past business experience is found to have significant influence on sales outcome. However, in the final logit model (Table 6.4), although experience appears to reduce the probability of closure, the result is not statistically significant.

Even though fewer number of Black business owners (26 percent) compared with 38, 37, and 31 percent of White, Asian, and Hispanic, have prior business experience (Figure 4.7), it

appears past self-employment has little effect in explaining disparities both before and after adding firm characteristics into the model. In Table 6.5, when owner characteristics are only considered in the estimation, the results suggest no significant effect in explaining observable gap between White and Black – the model merely accounted for 1.6 and 1.1 percent in explaining sales differential from Asians and Hispanics, respectively. In Table 6.6, 1.6 percent of the disparity in rates of business closure between Hispanics and Blacks is explained due to differences in prior business experience.

However, after controlling for the effects of firm characteristics in Table 6.7, the model still explained 1.3 percent in the White–Black gap in sales; about 1 percent in Hispanic–Black gap; and 1.5 percent of the sales gap in Asian–Black. Likewise, in Table 6.8, it explained under 1 percent of the business closure gap with White and Asian, and about 1 percent with Hispanic. Prior self-employment in explaining disparities in risks of business closure given all factors was thus noted to be not statistically significant.

6.1.7 Effects of Family

The role of family in small businesses has been noted by previous studies as being one of the key factors of success (Lindquist et al., 2015; Le Breton-Miller and Miller, 2018). The review of literature in Chapter 2 documents that entrepreneurs operating family businesses have better outcomes than those running non-family businesses (Heilman and Pett, 2018). Family provides critical resources of financial and human capital for running a firm. Before accounting for the effect of firm characteristics, the findings in Table 6.3 from the small business survey PUMS data indicated that Black business owners operating non-family-owned firms on average have 13 percent lower sales than those operating with family members.

Likewise, non-family business owners are 16.3 percent more likely to close their firms than those running family firms. In Table 6.4, when firm attributes are considered, operating non-family businesses decreases average sales outcome by 5.9 percent; with a significance level at $p < 0.10$. Although running a non-family firm appears to have a higher likelihood of closure, in the final model (Table 6.4) the result is not statistically significant.

The low rate of family ownership in small businesses among Blacks also contributed to racial disparities in sales and rate of firm closure. According to the 2012 SBO data about 9 percent of Blacks, compared with 20 percent (White), 19 percent (Asian), and 13 percent (Hispanic), are

family owned (Table 4.17). The 2007 PUMS also indicated that the share of firms owned by husband-and-wife teams is fewer among Black-owned firms than among Asian- and White-owned firms. Without controlling for the effects of firm characteristics (Table 6.5), family ownership alone explained 2.6 percent, 1.6 percent, and 3.0 percent of the difference in sales performance from White, Asian, and Hispanic, respectively. In terms of the probabilities of closure (Table 6.7), it also explained 3.5 percent, 2.5 percent, and 4.4 percent of the gap from White, Asian, and Hispanic, respectively.

Even though the magnitude is smaller, the contribution of family remains significant even when firm attributes are added into the decomposition models. Afte controlling for the effects of firm and other owner characteristics in Table 6.7, family ownership explained under 1 percent of the sales gap with each race. However, in Table 6.8 it explained about 3 percent of the differential in business closure between White and Black, 2 percent between Asian and Black, 3 percent between Hispanic and Black.

6.2 Effects of Business Characteristics and Environment

The literature on small business research, in Chapter 2, documented the role of business characteristics and business environment in business outcome (Lampadarios et al., 2017; Essel et al., 2019). Among the many attributes, the analysis in this section deals with major features, namely: firm size, firm age, industry type, access to capital market (bank loans), e-commerce, export and region or firm location. The descriptive results from the 2012 SBO and 2007 SBO PUMS in Chapter 5 demonstrated that the mean annual sales outcome and rate of closure of small firms vary across the different composition of these business characteristics. The evidence further indicated the presence of differential in business outcome across racial profile, in which Black-owned firms were observed to be underperforming White-, Asian- and Hispanic-owned firms in much of the comparisons along these characteristics.

In this section of the study, the 2007 SBO PUMS dataset is further analyzed following multivariate statistical models, first to investigate the effect of these characteristics on Black-owned firm, and second to analyze the effect of these attributes in racial disparity of business outcome. Accordingly, the regression output for Black-owned businesses indicated that firm characteristics and environment are predictors of sales performance as well as risk of business closure. The multilinear result presented in Table 6.9 showed that these characteristics collectively

explained 48.5 percent of sales performance in Black-owned firms, [F (22, 34002), $p < 0.001$, $R^2 = 0.485$]. The coefficients obtained from the logit model likewise validate the important role of small business characteristics in their survivability. The detailed analysis is presented in Table 6.9:

Table 6.9: Multiple Linear and Logit Regression of the Effects of Business Characteristics on Sales (ln Sale) Performance and Risk of Closures of Black-owned firms

	Linear				Logit				
Variables	**B**	**SE of β**	**t**	**95 percent C.I. of β**	**β**	**Odds Ratio**	**SE of β**	**Z**	**95 percent C.I. of β**
Firm Size:									
Non-employee	—	—	—	—	—	1.000	—	—	—
1–4 employees	1.55***	0.022	71.04	(1.507,1.592)	-1.236***	0.290	0.066	-18.68	(-1.366, -1.107)
5&+ employees	3.188***	0.025	125.6	(3.138,3.238)	-1.769***	0.170	0.103	-17.11	(-1.972, -1.567)
Firm Age:									
2- 8 years	-0.158***	0.018	-8.69	(-0.194, -0.123)	0.734***	2.084	0.054	13.65	(0.629,0.84)
less than 2 years	-0.509***	0.021	-23.83	(-0.551, -0.467)	1.711***	5.536	0.058	29.33	(1.597,1.826)
9 years or more	—	—	—	—	—	1.000	—	—	—
Industry:									
Manufacturing	0.153***	0.058	2.64	(0.039,0.267)	-0.199	0.819	0.125	-1.59	(-0.445,0.046)
Wholesale trade	0.444***	0.06	7.35	(0.326,0.563)	-0.402***	0.669	0.137	-2.94	(-0.67, -0.134)
Construction	0.295***	0.035	8.49	(0.227,0.364)	-0.183**	0.832	0.075	-2.43	(-0.331, -0.036)
Retail trade	—	—	—	—	—	1.000	—	—	—
Transport	0.475***	0.031	15.29	(0.414,0.536)	-0.224***	0.800	0.069	-3.23	(-0.36, -0.088)
Professional	0.066***	0.029	2.28	(0.009,0.123)	-0.430***	0.651	0.063	-6.82	(-0.553, -0.306)
Health care	-0.063**	0.026	-2.39	(-0.115, -0.011)	0.017	1.017	0.059	0.3	(-0.098,0.132)
Admin support	-0.187***	0.029	-6.45	(-0.244, -0.13)	-0.096	0.909	0.065	-1.47	(-0.223,0.032)
Food service	-0.031	0.047	-0.65	(-0.124,0.062)	0.214*	1.239	0.11	1.94	(-0.002,0.43)
Real estate	-0.014	0.033	-0.41	(-0.078,0.051)	-0.308***	0.735	0.076	-4.04	(-0.457, -0.158)
Finance	0.110**	0.043	2.55	(0.025,0.194)	-0.209**	0.812	0.095	-2.19	(-0.396, -0.022)
Others	-0.176***	0.025	-6.98	(-0.225, -0.126)	-0.261***	0.77	0.055	-4.72	(-0.37, -0.153)
Financial Access at Startups:									
a) Bank loan?									
Yes	—	—	—	—	—	1.000	—	—	—
No	-0.406***	0.029	-14.05	(-0.462, -0.349)	0.521***	1.684	0.084	6.17	(0.356,0.687)
b) Government?									
Yes	—	—	—	—	—	1.000	—	—	—
No	-0.203***	0.073	-2.79	(-0.345, -0.06)	0.117	1.124	0.215	0.54	(-0.304,0.537)
E-commerce Website:									
Yes	—	—	—	—	—	1.000	—	—	—
No	-0.219***	0.017	-12.69	(-0.253, -0.185)	0.686***	1.987	0.043	15.79	(0.601,0.772)
Export:									
Yes	0.242***	0.039	6.18	(0.165,0.319)	-0.382***	0.682	0.101	-3.8	(-0.58, -0.185)
No	—	—	—	—	—	1.000	—	—	—
Region:									
Midwest	-0.165***	0.023	-7.09	(-0.211, -0.12)	0.029	1.030	0.056	0.52	(-0.08,0.139)
West	—	—	—	—	—	1.000	—	—	—
Northeast	-0.129***	0.025	-5.21	(-0.177, -0.08)	-0.057	0.944	0.059	-0.97	(-0.174,0.059)
South	-0.116***	0.021	-5.62	(-0.156, -0.075)	0.011	1.011	0.048	0.23	(-0.083,0.105)
Constant	11.071***	0.084	131.85	(10.906,11.235)	-2.798***	0.061	0.239	-11.72	(-3.265, -2.33)
R-squared = 0.4847					χ^2 (22) = 2673.35				
Adj. R-squared =0.4844									
Number of obs. = 34,002					Prob > chi^2 = 0.000				
N (weighted) = 363,355					Number of obs. = 42,513				
F (22, 33979) = 1467.62					N (weighted) = 499,393				
Prob > F = 0.000									

*** p<0.01, ** p<0.05

Firm characteristics are also observed to have strong influence in explaining racial disparities in sales outcome. The decomposition output obtained in Table 6.10 indicates the effect of business characteristics is substantial. These variables alone explained 63.2 percent of the White–Black gap in sales, 59.7 percent of the Asian–Black gap, and 56.2 percent of Hispanic–Black gap in sales.

Table 6.10: Oaxaca-Blinder Linear Decomposition of Black/White, Black/Asian, and Black/Hispanic Sales Outcome by Business Characteristics

	White–Black			Asian–Black			Hispanic–Black		
	Coefficient	**% Contribution**	**Std. Error**	**Coefficient**	**% Contribution**	**Std. Error**	**Coefficient**	**% Contribution**	**Std. Error**
Differential:									
Prediction 1	10.9746***		0.0017	10.9920***		0.0059	10.3682***		0.0040
Predicted 2	9.9745***		0.0036	9.9745***		0.0036	9.9745***		0.0036
Difference	1.0000***	100%	0.0040	1.0175***	100%	0.0069	0.3936***	100.0%	0.0054
Explained	0.6317***	63.2%	0.0027	0.6076***	59.7%	0.0057	0.2211***	56.2%	0.0037
Unexplained	0.3684***	36.8%	0.0036	0.4099***	40.3%	0.0060	0.1726***	43.8%	0.0047
Explained Detailed Decomposition		0.0%			0.0%			0.0%	
Firm size	0.4039***	40.4%	0.0018	0.4484***	44.1%	0.0041	0.1193***	30.3%	0.0025
Firm age	0.1368***	13.7%	0.0016	0.0599***	5.9%	0.0022	0.0239***	6.1%	0.0012
Industry	0.0870***	8.7%	0.0013	0.0734***	7.2%	0.0023	0.0593***	15.1%	0.0017
Bank loan	0.0263***	2.6%	0.0004	0.0185***	1.8%	0.0008	0.0031***	0.8%	0.0003
Govt loan	0.0003***	0.0%	0.0000	0.0004***	0.0%	0.0001	-0.0000	0.0%	0.0000
E-commerce	0.0461***	4.6%	0.0006	0.0120***	1.2%	0.0006	0.0016***	0.4%	0.0003
Export	-0.0780***	-7.8%	0.0014	-0.0175***	-1.7%	0.0017	-0.0066***	-1.7%	0.0006
Region	0.0093***	0.9%	0.0004	0.0126***	1.2%	0.0024	0.0205	5.2%	0.0014
Unexplained Detailed Decomposition		0.0%			0.0%			0.0%	
Firm size	0.0011	0.1%	0.0010	-0.0348***	-3.4%	0.0022	-0.0065***	-1.7%	0.0015
Firm age	-0.0105	-1.1%	0.0048	-0.0013	-0.1%	0.0075	0.0329***	8.4%	0.0062
Industry	0.2371	23.7%	0.0359	0.3559***	35.0%	0.0428	-0.3755***	-95.4%	0.0453
Bank loan	-0.0004	0.0%	0.0006	-0.0006	-0.1%	0.0010	0.0011	0.3%	0.0008
Govt loan	-0.0001	0.0%	0.0002	0.0000	0.0%	0.0003	-0.0001	0.0%	0.0003
E-commerce	0.0142***	1.4%	0.0011	0.0097***	1.0%	0.0018	0.0072***	1.8%	0.0014
Export	0.1227***	12.3%	0.0085	0.0280***	2.8%	0.0106	0.0210**	5.3%	0.0107
Region	-0.0074***	-0.7%	0.0012	-0.0274***	-2.7%	0.0026	-0.0106***	-2.7%	0.0019
Constant	0.0118***	1.2%	0.0383	0.0803*	7.9%	0.0467	0.5031***	127.8%	0.0489
No. Observations	1,562,817				204,541		220,096		

*** p<0.01, ** p<0.05

[1]Firm size 1= employer, otherwise = 0

[2]Bank loan 1= received loan at startup, otherwise =0

[3]Govt. loan 1= received govt. loan, otherwise = 0

[4]E-commerce 1= has e-e-commerce site, otherwise =0

[5]Export 1= exporter, non-exporter = 0;[6]Region 1= West, else = 0

Likewise, these attributes as well showed significant effect in explaining racial differentials in risk of closure of small firms in the United States. The results contained in Table 6.11 indicate that firm characteristics alone explained 44 percent of the total difference of the White–Black gap; 34.6 percent of the Asian–Black gap and 33.9 percent of the Hispanic–Black gap – the disparity in firm closure being higher with White and Asian while the least being with Hispanic.

Table 6.11. Nonlinear Decomposition of Black/White, Black/Asian, and Black/Hispanic on Risk of Closures by Business Characteristics

	White – Black			Asian – Black			Hispanic – Black		
	Coeff.	**Contribution (%)**	**Std. error**	**Coeff.**	**Contribution (%)**	**Std. error**	**Coeff.**	**Contribution (%)**	**Std. error**
Total difference	-0.1021***	100%	0.0026	-0.0928***	100.0%	0.00314	-0.0441***	100.0%	0.0032
Total explained	-0.0454***	44%	0.0003	-0.0321***	34.6%	0.00168	-0.0149***	33.9%	0.0012
Total unexplained	-0.0567***	56%	0.0026	-0.0607***	65.4%	0.00367	-0.0291***	66.1%	0.0035
Explained Detailed Decomposition									
Firm size[1]	-0.0218***	21.3%	0.0002	-0.0259***	27.9%	0.0008	-0.012***	27.4%	0.0004
Firm age[2]	-0.0129***	12.7%	0.0001	-0.0037***	4.0%	0.0001	0.000***	-0.2%	0.0000
Industry[3]	-0.0016***	1.5%	0.0001	0.0001	-0.1%	0.0002	-0.001***	1.7%	0.0002
Bank Loan[4]	-0.0037***	3.7%	0.0001	-0.0032***	3.4%	0.0003	0.000***	1.1%	0.0001
Govt Loan[5]	0.0000	0.0%	0.0000	0.0000	0.0%	0.0000	0.000	0.0%	0.0000
E-commerce[6]	-0.0050***	4.9%	0.0001	-0.0006***	0.7%	0.0000	0.002***	-3.8%	0.0001
Export[7]	-0.0003***	0.3%	0.0000	-0.0004	0.4%	0.0002	0.000	0.5%	0.0001
Region[8]	-0.0001	0.1%	0.0001	0.0017	-1.8%	0.0010	-0.003***	7.2%	0.0008
Unexplained Detailed Decomposition									
Firm size	0.0028***	-2.7%	0.0009	0.0029*	-3.2%	0.0011	0.000	0.2%	0.0011
Firm age	-0.0224***	21.9%	0.0046	-0.0013	1.4%	0.0063	-0.020***	44.8%	0.0055
Industry	-0.0058***	5.7%	0.0015	-0.0138***	14.8%	0.0021	-0.008***	18.7%	0.0021
Bank loan	0.0004	-0.4%	0.0007	-0.0007	0.8%	0.0009	-0.001	1.5%	0.0009
Govt loan	0.0001	-0.1%	0.0002	-0.0002	0.2%	0.0003	0.000	-0.3%	0.0003
E-commerce	0.0019	-1.9%	0.0014	0.0014***	-1.5%	0.0020	0.004**	-8.8%	0.0019
Export	-0.0009	0.9%	0.0006	0.0001	-0.1%	0.0008	0.000	0.1%	0.0008
Region	0.0007	-0.7%	0.0009	0.0018	-1.9%	0.0010	-0.001	2.4%	0.0010
Constant	-0.0336***	32.9%	0.0057	-0.0509***	54.8%	0.0080	-0.003	7.4%	0.0068
No. Observations	1,168,313			115,201			112,668		

*** p<0.01, ** p<0.05

[1]Firm size 1= employer, otherwise = 0

[2]Firm age 2 or more years older = 1, Under 2 years =0

[3]Industry, all sectors other than retail, food service, social assistance health care = 1, else = 0

[4]Bank loan 1= received loan at startup, otherwise =0

[5]Govt. loan 1= received govt. loan, otherwise = 0

[6]E-commerce 1= has e-e-commerce site, otherwise =0

[7]Export 1= exporter, non-exporter = 0

[8]Region 1= West, else = 0

Focus will now be shifted towards the details of the effects of these essential characteristics on Black-owned small businesses and the magnitude of racial differentials that are explained due to them.

6.2.1 Effects of Firm Size

The size of a firm is among the key variables influencing business performance as documented in previous studies presented in Chapter 2 (Takahashi, 2009; Vijayakumar and Tamizhselvan, 2010). The size of a firm may be measured by its payroll size, number of employees, or size of revenue. In this analysis, number of employees provided in the PUMS data is used. The results, both in Table 6.9 and Table 6.4, revealed that non-employer Black firms have fewer sales than employer firms.

In Table 6.9, before adjusting the effects of owner background factors, firms with 1–4 employees on average generate 1.55 times higher sales than non-employer firms. The magnitude becomes remarkably high for firms run with at least five employees. Its effect is also very much observed in the risk of closure. Employer firms are observed to have higher likelihood of averting the odds of closure than their non-employer counterparts (Table 6.9). On average, Black firms operating with at least five paid workers have 0.17 likelihood of closure compared with 1.00 non-employers. The effect of firm size both on sales performance and business survivability remained larger and highly significant even when owner characteristics are added into the final models in Tables 6.4. Firms with five or more employees have on average have 2.85 times larger sales and 0.13 lower chance of business closure compared with no employee firms.

Differences in the size of businesses operated by entrepreneurs may cause differences in their potential for success. Firm size appears to be the single most influential factor that explained the gap between Black firms and White, Asian, and Hispanic firms. In Table 6.10, before accounting for the effects of owner characteristics, firm size explained 40.4 percent of the sales difference in White–Black firms, 44.1 percent in the Asian–Black gap and 30.3 percent in the Hispanic–Black gap. In Table 6.11, before accounting the effect of owner background characteristics, its contribution in explaining disparities in closure rate is the largest compared with other firm attributes involved in the model. It explained 21.3 percent of the White–Black gap; 27.9 percent of the Asian–Black gap, and 27.4 percent of Hispanic–Black gap in firm closure.

After including owner characteristics into the final model in Table 6.7 and Table 6.8, firm size still accounts for the largest percentage share in explaining disparities in sales and business closure rates. It explained about 38, 40, 32 percent of the sales gap between White–Black, Asian–Black, and Hispanic–Black, respectively (Table 6.7). Likewise, nearly 21, 23, and 33 percent of the differential in business closure between White–Black, Asian–Black, and Hispanic–Black, respectively is due to difference in their firm sizes (Table 6.8). This is largely because Black-owned firms are disproportionately non-employers compared with the other races. Estimates in Figure 4.9, showed that 5.4 percent of Black-owned firms are employers. This figure is extremely small compared to 22, 27, and 11 percent for White, Asian, and Hispanic, respectively. Being predominantly small and homebased implies that Black firms are more likely to experience financial challenges, often forcing them to use personal funds instead of bank loans to cope with the challenges.

6.2.2 Effects of Firm Age

The age of a business, either being young or established, has an important impact on its success. Previous studies found that older firms benefit from past business experience and have better performance than younger businesses (Sorensen and Stuart, 2000; Mothibi, 2015). It could be interpreted that for a firm that has been in business for longer, its learning curve may not be as steep as it might be for its younger counterpart. The results obtained in the regression coefficients in Table 6.9 and Table 6.4 (before and after accounting for owner characteristics, respectively) also suggest the presence of a strong and significant positive relationship between firm age and sales performance as well as closure rates.

Considering the separate effects of firm attributes (Table 6.9), firms younger than two years have 50.9 percent lower sales than firms older than nine or more years. Younger firms have 5.536 times higher likelihood of ceasing their operations. The associated risk of closure decreases with an increase in age of operation. Firms aged between two and eight years have 2.084 times higher risk of closure than the reference category – a relatively smaller magnitude when contrasted with much younger firms. In Table 6.4, when the owner characteristics are added into the regressions models, age of business is observed to have large and strong effects both on sales and on risk of closure. Firms younger than two years on average have 47.9 percent lower sales than firms at least older than nine years; and 3.878 times higher risk of business closure.

Racial disparity in the age of businesses owned and run by entrepreneurs can cause disparities in business outcome as measured in sales and closure rates. The results obtained from the decompositions models both before adjusting for the effects of owner characteristics in Tables 6.10 and 6.11 and after the joint effects in Tables 6.7 and 6.8 confirm this proposition. The result in the initial decomposition model (Table 6.10) shows that firm age is the second most determinant characteristics next to firm size and has explained about 14 percent of sales differential between White–Black; 6 percent between Asian–Black as well as Hispanic–Black firms. Age of business also accounted for the larger share for explaining business closure rate between White and Black firms (Table 6.11). It explained about 13 percent of the White–Black gap in closure rates and 4 percent in the Asian–Black, but little in the Hispanic–Black disparity in firm closure rate.

When owner characteristics are factored into the equation (Table 6.7 and Table 6.8), the impact of age of business remained substantial in explaining racial disparities in sales performance and firm closure between White and Black businesses. It contributed 11.7 and 7.5 percent in explaining the White–Black gap in sales and firm closure, respectively. Firm age explained about 2 percent of the differentials between Asian and Black, both in sales and closure rate. It also explained about 3 percent and 2 percent of the sales and firm closure in the Hispanic–Black gap where in this case Black-owned firms performed relatively better than Hispanic-owned firms when firm age is considered.

The evidence from the descriptive study in Chapter 5 (Figure 5.6), from the 2007 SBO PUMS dataset, indicated about 32 percent of Black businesses are as old as two years, compared with 19 percent of White businesses; and about 14 percent are also older than 18 years, which is half the proportion of White firms accounted. The estimates from the recent 2012 SBO survey also revealed that Black-owned businesses are disproportionately younger than non-minority businesses. The fact that Black-owned firms are disproportionately less old than White-owned caused disparities in business outcome. Previous empirical findings (Takahashi, 2009; Mothibi, 2015) documented that older firms generally have better performance than new and younger firms, because the age of a firm reflects accumulated experience, networks of customers and business partnership.

6.2.3 Effects of Industry

The type of business sector of an entrepreneur is linked to the success of the firm. Previous studies found that industry affects the performance of small businesses (Fairlie and Rob, 2008; Mothibi, 2015; Essel et al., 2019). Essel et al. (2019) found that the type of business sector contributes to differences in sales among small firms in Ghana. Certain industries are more profitable and experience a more sustained operations than others. The choice of business sectors, among others, is influenced by the size of financial and human capital of an entrepreneur. Thus, differences in such essential inputs are likely to result in differences in success.

In this analysis and having indicated that the SBO dataset is adopted, it is important to note that the data gathered on more than 18 industries other than non-classifiable and others, 11 industry categories and one category for the remaining industries referred to as "others" are created in that dataset. In this study, the retail trade is used as a contrasting reference category both in the linear and logit regression models. The result in the initial decomposition model (Table 6.9) indicates that manufacturing, wholesale trade; construction; transportation and warehousing; professional, scientific, and technical; finance and insurance have average higher sales than retail trade, whereas all the other sectors appear to have lower sales in comparison with retail trade. Black business owners in wholesale and transportation sectors on average have 44.4 and 47.5 percent higher sales than those in retail trade, respectively, whereas health care and social assistance has 10.78 percent less sales than retail trade.

While wholesale trade and transportation appear to be the two best performing sectors, administrative and support and waste management; and all other sectors are worst in sales – they have 18.6 and 17.6 percentage lower sales than retail trade, respectively. The odds ratios in the logit model (Table 6.9) appear to reflect an almost similar situation; although, it was found that several of the other industries are found to be better in survivability. However, the two sectors namely, accommodation and food service; and health care and social assistance, seem to have a higher closure rate than retail – although the result is not statistically significant. On the other hand, working in wholesale trade industry and the professional, scientific, and technical sector reduces the risk of business failure by 33.1 and 34.9 percentage respectively, in contrast to the retail sector. The result is highly significant as well ($p<0.01$).

When firm characteristics are added into the final model (Table 6.4), wholesale trade, construction and transport are found to have a strong positive significant effect on sales. Wholesale trade is observed to be the most sales-generating industry – owners operating wholesale record on average 40.4 percent higher sales than retail trade ($p < 0.001$). According to the result in the logit model (Table 6.4), except accommodation and food service, all other industries are found to have lower odds of risk of closure compared with retail trade, although the level of significance varies across industries.

Differentials in small business outcomes may as well result from differences in the choice and composition of types of business sectors. Without accounting for the effects of owner characteristics, differences in industry (Table 6.10) explained 8.7 percent, 7.2 percent, and 15.1 percent of the gap between Black and White, Asian, and Hispanic-owned firms respectively in sales performance. Furthermore, in the result presented in Table 6.11, it appeared to explain about 2 percent of the closure rate from White- and Hispanic-owned firms.

When business owner characteristics are simultaneously considered (Table 6.7), industry explained 4.8, 4.4, and 7.7 percent of the sales differential with White, Asian, and Hispanic, respectively – suggesting that differences in business sector contributes to racial gap in sales outcome. It is noteworthy that the larger effect explained between Black and Hispanic is mainly because more Hispanic than Black are running construction businesses. According to the 2012 SBO data in Table 5.7, about 14 percent of Hispanic compared with 5 percent of Blacks are running construction businesses; and construction is the third most profitable sector driving larger sales. Also, about 12 percent of the total sales of Hispanic is generated from the construction sector. On the other hand, White and Asian, including Hispanics firms' sales, benefited from higher sales than Black firms, largely because of the differences in their participation in wholesale trade, which is the highest industry consisting of the total sales of all firms. A large percentage (about 11 percent) of White firms, like Hispanic firms, benefit from higher sales revenue from construction businesses.

The result in Table 6.8 also showed industry appeared to have an effect on the business closure gap. In this case, industry distribution among Whites tends to favor reducing the risk of closure; however, Hispanic and Asian firms would have experienced higher closure if their industry composition fell below the level of corresponding explained percentages. Although

Hispanic entrepreneurs are found to be engaged in the construction sector and drive more sales revenue, the construction sector might be more of a temporary or short-term business than the sector Blacks tend to operate.

The disparity in industry choice and entry reflected itself in the disparity in business outcome. Previous empirical findings documented that Black entrepreneurs are predominantly concentrated in retail and service business sectors that require less capital (AEO, 2016). Thus, Black entrepreneurs are found to be engaged more in vulnerable business activities than other races.

6.2.4 Effects of Access to Capital

Access to capital plays a critical role in entrepreneurship. The importance of access to external private institutional capital (namely bank loans and venture capital) to entrepreneurial success is supported by plenty of studies as documented in Chapter 2 (Elston and Audretsch, 2011; Frid et al., 2016; Love, 2020). Despite the importance of capital for entrepreneurs, many small business owners face barriers to securing base and early startup capital, which consequently forces them to rely on meager personal savings. The analysis on Black firms in Table 6.9 and Table 6.4 revealed a positive and strong relationship between securing bank loan and sales performance.

In Table 6.9, before controlling for the effects of owner characteristics, Black-owned firms that did not receive bank loans on average have 40.6 percent less sales and 1.684 times (68.4 percent) higher likelihood of closing their businesses than firms that obtained bank loans at their early stage of startups. Although, the magnitude of the coefficients appears to be smaller than private bank loans, before accounting for the effects of owner characteristics, firms that received government loans performed better than firms that did not receive government loan. However, in the logit model (Table 6.9), government loans appear to have no significant effect in terms of averting the odds of business closure.

After owner characteristics are simultaneously included (Table 6.4), businesses without private bank loans appear to have 19.9 percent less sales and about 35.6 percent higher probability of closure ($p < 0.01$). However, government loans appeared to have no significant effect either on sales or on business survivability – when owner characteristics are included in the joint effect models (Table 6.4).

Racial differentials in access to capital among small business owners can also lead to disparities in business outcomes. Previous studies indicated the differential lending practices of banks as the main culprit (Cavalluzzo et al., 2002; Blanchflower et al., 2003). The results obtained by the decomposition method from the PUMS data (Table 6.10) show the presence of racial disparity in receiving bank loan at startup. Bank loan explained about 3 percent of the difference between White–Black sales, 2 percent Asian–Black, and about 1 percent (Hispanic–Black) – before including the contribution of owner characteristics.

According to the analysis contained in Table 6.11, bank loans also explained the gap in the closure rates of firms showing that lack of access to business loan is more prevalent among Black firms. When the effects of owner characteristics are added into the final model (Table 6.7 and Table 6.8), access to bank loans remained a significant factor in explaining racial disparities. Relatively, the magnitude appears to be larger in explaining the differentials from White as well as Asian firms than Hispanic firms. On the other hand, according to the results in Table 6.7 and Table 6.8, no significant disparity is noticed both in sales and closure of businesses along racial lines as interacted with differences in government loan at startup.

Therefore, the findings in the joint effect models (Table 6.7 and Table 6.8) address research question 4: "Does racial profiling influence entrepreneurs' access to funding in the United States?" and the related hypothesis:

H_4: Access to funding explains racial disparities in sales performance and risk of firm closure between Black-owned and businesses owned by other races.

As a result of the statistical evidence in Table 6.7 and Table 6.8., we fail to reject the null hypothesis. Fewer number of Black businesses than White, Asian, and Hispanic businesses have access to bank loans at startup, which leads to disparities in outcome. The figures in Table 6.4 also reflect that Black firms that did not receive bank loans have poor performance compared with their counterpart Black firms that obtained loans.

Other than the low level of personal net worth and credit score, whichever is used by the bank as the criteria of loan approval, discrimination in lending practices have been documented by studies (Blanchflower et al., 2003; Cavalluzzo and Wolken, 2005). The recent (2016) survey data obtained from the Federal Small Business Survey (as documented in Table 5.15), revealed that Black small business owners reported higher loan denial and are more discouraged to apply for

business loans than other races. The result from this survey reported that the single most important reason (40 percent) that Black entrepreneurs do not try applying for credit is because they are discouraged to do so by the financial institutions – owing to fear of disapproval. The figure for this same reason is 14 percent for White and 21 percent for Asian and Hispanic. The practice of high denial rate creates and leaves wider unmet financial needs for Black entrepreneurs. Constraints in access to working capital limits the growth and sustainable operation of many promising Black small businesses.

6.2.5 Effects of E-commerce

Businesses of all size, small or large, are increasingly using e-commerce for advertising their goods and/or services and for carrying out sales transactions. Online technology is helping entrepreneurs to reach a broader customer base and increase their sales (Parker and Castleman, 2007). The results from the PUMS data (Table 6.9) suggest, before accounting for owner characteristics, that Black firms that lack business websites on average have 21.9 percent lower sales and 1.987 times higher probability of business closure. When owner characteristics are simultaneously included into the joint effect final models (Table 6.4), firms without an e-commerce site are observed to have 17.9 percent less sales and 1.642 times higher likelihood of closure. The results in both multivariate models are statistically significant.

The digital divide in the use of and access to online marketing may cause disparities in business outcomes. In Figure 4.15, estimates from the 2012 SBO data show that 19.6 percent of Black-owned firms have e-commerce sites compared to 28.9, 21.1, and 17.8 percent of White-, Asian-, and Hispanic-owned firms, respectively. These figures suggest that Black-owned firms trail behind White firms by a higher percentage than Asian firms. The results from the decomposition models both in Table 6.10 and Table 6.11 showed that the presence of an e-commerce website explained relatively large sales differentials between White and Black.

After accounting the effects of all factors in Table 6.7, the e-commerce website contributed 4.2 percent of in explaining the sales difference between White and Black firms. It explained little of the gap between Asian and Black firms both in sales and probabilities of business closure (Table 6.8). Based on the final decomposition result in Table 6.8, the Hispanic–Black gap explained in firm closure due to e-commerce site is about 5 percent. It also explained about 3 percent of the gap between White and Black in averting risk of business closure. In today's world, marketing is

increasingly dynamic, largely due to fast changes in technology. Thus, the disparity in strategy and adoption of e-commerce technology can lead to disparities in getting rewards associated to it.

6.2.6 Effects of Export

Participating in international markets allow firms to expand their businesses and reach out to more customers (Dobbs and Hamilton, 2007). The evidence presented from the PUMS data in Tables 6.4 and 6.9 suggests that Black firms that engaged in export trade have better sales than their non-exporting counterparts. When firm characteristics are considered alone (Table 6.9), export increases sales by 24.2 percent and lowers risk of business closure by 31.5 percent ($p < 0.01$). After accounting for effects of owner characteristics (Table 6.4), exporting firms on average have 18.6 percent higher sales ($p < 0.01$) and 16.9 percent higher probability of averting business closure; however, its effect on firm closure status is observed to be statistically non-significant.

Small percentages of firms across racial categories are engaged in international market or export trade. As contained in Table 6.10, before accounting the effects of entrepreneurial background characteristics, there appear to be fewer disparities between Black-owned firms and the other three racial groups even if none of the explaining coefficients are zero as estimated by the initial decomposition models (Tables 6.10 and 6.11) – even though the model in Table 6.10 shows a 7.8 percent decline in Black firms' participation in export.

However, after accounting for the contributions of owner characteristics (Table 6.7 and Table 6.8), export explained almost no gap both in sales and risk of business closure with White and Asian firms. However, export explained about 2 percent of closure in the Hispanic–Black gap. Thus, participation in export activities appears to have no effect in explaining racial gaps in the White–Black or the Asian–Black gap, but it does so to explain the Hispanic–Black risk of business closure.

6.2.7 Effects of Region

The geographical location of a business operation may play a determinant role in its potential for success. The literature has documented that the location of a firm impacts its potential success in business (Karlson et al., 2015; Maté-Sánchez-Val et al., 2018). Location affects small businesses through myriads of ways, such as regulations, administrative bureaucracy, competition, economic and financial strength of communities, households and customers' purchasing power,

etc. The results in the separate models for effects of firm characteristic (Table 6.9), analyzed along the US Census regions, show the presence of variations in sales performance and closure rates of Black firms by regional locations. Omitting the geographical region of the west as a reference category, all the three regions included in the analysis have lower sales. After controlling for all other firm characteristics (Table 6.9), Black firms in the Midwest region appears to have a 16.5 percent, Northeast 12.9 percent and south 11.6 percent lower sales than firms located in the west; and these regional variations appears to be significant ($p< 0.01$). Nonetheless, the logistic regression results in the same Table 6.9 suggest, its effect on risk of firm closure is not statistically significant.

After owner characteristics are simultaneously included in Table 6.4, all the three regions are observed to have lower sales performance than the Western region and the result is statistically significant for each geographic region. However, the result in the logit model on the risk of survival is found to be different than the logit result in Table 6.9. When all factors are considered, Black firms operating in the Western region appeared to have a lower survival rate than the rest of the three regions – despite they seem to have a relatively higher sale. This might be a case where better sales might not necessarily often have positive relation with sustainability as there could be other latent regional underlying factors such as higher operating costs and heavy market competition with large businesses that could create an unfavorable business environment for smaller firms.

Although Black-owned firms are located more in the Southern region than in the other regions of United States, racial differences in business location have smaller effects in explaining the sales gap between White–Black and Asian–Black (Table 6.10 and Table 6.7). Considering only the effects of firm characteristics (Table 6.10), regional dynamics explained about 1 percent of the gap with White and Asian firms. However, differences in geographical location explained 5.2 percent of the sales performance gap between Hispanic and Black firms. In Table 6.7, after accounting for the effect of owner background factors, its effect in explaining the sales gap between White and Black is below 1 percent and showed little effect in contributing to the sales gap between Asian and Black firms. Nonetheless, region explained about 2 percent of the sales gap between Hispanic and Black small businesses.

The results in Table 6.11 and Table 6.8 also confirmed that region has shown no effect for Black firms to underperform White firms in terms of survivability. When firm characteristics alone

are considered in the non-linear decomposition model in Table 6.11, region contributed a substantial percentage in explaining the Hispanic–Black gap in firm closure. It accounted for 7.2 percent in explaining the gap. The geographic location of small businesses appears to have a larger impact, when the effects of business owner are simultaneously included in the model. It accounted for the differential in business closure between Black and Hispanic firms (Table 6.8) and explained 10.4 percent of the disparity.

Primarily, based on the statistical findings in Table 6.4 research question 5 "Does geographical location of small businesses influence business performance in the United States?" and the related hypothesis are addressed.

H_5: The geographic location of business affects disparities in sales performance and the risk of firm closure between Black-owned and businesses owned by other races.

The test of significance associated with the predicted coefficients provided sufficient reason not to reject the null hypothesis. The evidence in Table 6.7 and Table 6.8, which reinforces the intricacies of regional variations in the location and operation of firms, is one of the reasons for Black businesses to underperform Hispanic-owned firms. Regional difference played a role in explaining the lower closure rate of Hispanic-owned businesses in contrast with Black-owned businesses.

According to the estimates in the descriptive result in Table 5.23, 33.5 percent of Hispanic businesses are operating in the west compared to 9.6 percent of Black firms. The western region appears to be wealthier than the southern region, where nearly 58 percent of Black-owned firms are found. Besides regional wealth differentials, Hispanic-owned firms operating in the western region might have benefited from ethnic markets because of the larger size of the Latino community. For instance, looking at the two states, Georgia in the south, where Blacks accounted for 32.6 percent of the total population and Hispanic 9.9 percent, and California in the west, where Blacks account for 6.5 percent and Hispanic 39.4 percent, may illustrate the differential in customer base and market advantages due to locations (US Census Bureau, 2019). The literature documents that those firms started in regions that offer favorable economic milieu to exploit the advantages of what that region offers in terms of demand, supply, and other characteristics (Karlson et al., 2015). Thus, it is tenable to say that the survivability of a firm's operation depends on its region of establishment and operation.

6.3 Chapter Summary

The multivariate analysis from the 2007 SBO PUMS data set show that Black-owned businesses have lesser outcomes than White-, Asian-, and Hispanic-owned firms. Black-owned firms have lower average annual sales and higher closure rates than firms owned by each of the other races. Both the linear and non-linear decomposition methods were used to measure the disparity as well as the contribution of owner- and firm-related characteristics.

The results of the analysis validated the research hypotheses put forward at the beginning of the study. The findings in the multivariate analyses, in general, confirmed that owner background and business characteristic have significant impacts on small business success. These factors jointly accounted for about 51 percent of the variation in sales performance among Black-owned small businesses; and have been found to have significant effect on risk of business failure.

Furthermore, the results obtained from the decomposition methods revealed the presence of racial disparities in small business performance. The outcome from the linear decomposition technique showed higher sales gap with White- and Asian-owned firms; little but significant gap from Hispanic-owned firms. In terms of explaining the gap, owner background and firm attributes explained nearly 74, 68 and 53 percent of the sales differential between White–Black, Asian–Black; and Hispanic–Black, respectively. The unexplained portion of the differences, for instance, which accounted for about 26 percent in the White–Black gap, 32 percent Asian–Black, and 47 percent Hispanic–Black in sales could be due to other residual or missing factors excluded from the estimated model – including discrimination effects.

Similarly, the results from the non-linear decomposition method showed the presence of a higher proportion of closure in the White–Black and Asian–Black gap than the Hispanic–Black gap, although Hispanic-owned firm have lower risk of closure than Black-owned firms. Thus, entrepreneurial background and business characteristics significantly contributed to explaining disparities in risk of business closure and sales outcome in small businesses.

When the singular effects of owner characteristics are considered among Black-owned firms, the results suggested that the gender of owners, national origin, age, education, personal wealth/startup capital, family business and prior business experience collectively explained about 19 percent of the variance in sales performance among Black business owners. This is particularly evident as regards startup capital and educational achievements at the baccalaureate level and

beyond as they exhibit larger magnitude in their effects. These factors have been observed to have significant impact on business survivability as well. After accounting for the influence of firm attributes, most of the demographic and socio-economic characteristics are found to be significant determinants of business success, and they contributed significant percentage shares in explaining racial disparities.

Likewise, the results indicated that firm characteristics have a strong and large effect on the success of Black firms – both after and before accounting for owner background characteristics. Without considering owner characteristics, firm-related factors (namely, firm size, firm age, industry type, access to capital market (bank loans), e-commerce, export trade, and region) jointly explained 48.5 percent of the sales variance among Black firms. They are also found to have strong and large deterministic impacts on business survivability. Firm size, firm age, access to bank loan, and industry type (particularly wholesale trade) apparently have larger effects.

Likewise, firm characteristics explained the larger percentages of racial disparities in sales performance and firm closures. These factors explained 63.2 percent of the sales gap between White and Black firms, 59.7 percent between Asian and Black; and 56.2 percent of the difference between Hispanic and Black firms. Business characteristics also significantly accounted for the racial gaps in risks of business closure.

The models estimate, using SBO PUMS dataset, revealed that entrepreneurial and business characteristics play a determining role in business outcome, and consequently of racial gaps in such outcome. In the entire analysis, the estimate indicated that Black-owned firms lag behind each of the other three races included in the comparison. Despite Blacks having a strong desire for entrepreneurship, the presence of critical constraints that make them less successful than other races should be a concern for policy makers, small business agents, financial institutions, and other stakeholders. The explained performance gap being uniquely the widest for Blacks could trigger one to ponder on the usefulness of the theory of disadvantage, blocked opportunities, and critical race theory. Gold (2016: 1693), in his critical race theory, suggests that "many of these disadvantages are unique to American blacks or were not experienced to the same degree by other racial and ethnic groups". In the following chapter, based on the findings, the study draws important policy recommendations, which are believed to be feasible and helpful.

CHAPTER 7

SUMMMARY OF FINDINGS, CONCLSUION, AND RECOMMENDATIONS

7.1. Introduction

Several studies have suggested that small businesses are cardinal to job creation, income generation, innovation, and economic growth (Fairlie, 2008; Essel et al., 2015; AEO, 2016; Lampadrios et al., 2017). Business ownership, especially among the blacks, is seen as an avenue to wealth creation and better income. Research indicated that households owning small businesses have higher income and wealth than those households that do not own small businesses (Haynes, 2010; AEO, 2016).

The problem statement in Chapter 1, however, discussed that Black households have the least level of wealth in the United States, with a median household wealth 7.8 times below those of White households. More than one in four Black households had a negative net worth compared to fewer than one in ten for White households (Jones, 2017). While Blacks accounted for nearly 13 percent of the US population, their share of poverty is 1.8 times greater than their share of the total US population (US Census Bureau, 2020). The fact that Blacks have the least amount of wealth suggests they are not only economically insecure but also have far fewer opportunities for economic mobility through business ownership.

The introductory chapter (chapter 1) revealed that the rate of business ownership and entrepreneurship inclination varies widely across racial lines in the United States. The landscape of business ownership in the United States is dominated by Whites, while business ownership withing the ethnic minority Blacks and Hispanics is conspicuously anemic. Unlike Blacks and Hispanics, Asians have better representation in small businesses ownership in the country. Although recent SBO data showed a rise in Black business ownership, a persistent decline in their firm revenue has been documented. This fact was further buttressed in the review of literature presented in the chapter that followed (chapter 2).

Nonetheless, studies investigating the entrepreneurial gap in the United States are far from adequate. Even when a string of such studies exists, they are limited in scope, by focusing purely on specific business aspects that border on White and Black – with little emphasis between Black

and other racial minorities. In a few other instances, studies considered partial analysis of limited factors, such as income gap, access to funding or employment opportunities. Thus, this research attempted to fill some of the identified gaps in literature by conducting a critical review of the literature as a basis for the research approach. The study also draws on various recent datasets to generate a trend decomposition in a way that shows recent changes on the main variables of interest in this study, and it also exploited the US Census SBO national dataset (PUMS), relatively with a comprehensive list of deterministic factors in advanced mathematical environments to test the magnitude of racial gaps in business outcomes and survivability across racial lines in the United States. As such, the study was set out to achieve its main objectives – which are to investigate the factors that influence disparity in business outcomes among major racial groups in the United States, and to uncover the specific characteristics (owner and business) that influence these business outcomes.

A further reflection on chapter 2 shows the nuances of theoretical and conceptual discussions, as well as some leading empirical findings relating to small business operations, ethnic dynamics of small businesses, as well as factors associated with business success. Although, there is an absence of universal measurement of business success (Lampadarios et al., 2017; Radzi et al., 2017), attempt was made to situate this study within the ongoing elements of definition and measurement of small business performance (Lekovic and Maric, 2015). To that extent, the lead provided in literature to measure business outcomes, such as financial result (e.g. sales revenue - Fairlie, 1999; Fairlie, 2008; Lucas, 2017; Essel et al., 2019), and business survivability (Fairlie, 1999; Fairlie, 2008) are also deployed. This study measured business outcome in terms of sales revenue and risk of business failure or survivability.

On the theoretical and conceptual appraisal, it was found that literature on business ownership is multidisciplinary in nature and is characterized by many theoretical understandings (Renzulli et al., 2000; Smith-Hunter and Boyd, 2004; Simpeh, 2011). The most common theories of ethnic entrepreneurship are the cultural theory, the disadvantage theory/blocked opportunity theory and recently, critical race theory (CRT) which is beginning to find its way into academic prominence. A critical review of both theories lend credence towards the disadvantage theory of entrepreneurship, which suggests that individuals encountering exclusion, disadvantages in the labor market, as well as discrimination (such as based on race and ethnicity) push them into entering into entrepreneurship; however, their disadvantages also continue to act as deterrence to

entrepreneurial success. Despite the fact, Blacks starts several firms faster than other races, they close their firms at faster rate than their counterparts; this might be due to underlying disadvantages act as barrier to post-entry success. Although the cultural theory emphasizes heavily on cultural differences, with its fundamental premise that ethnic differences in business entry and success are associated with group differences in cultural norms and values (Fregetto, 2004; Volery, 2007), the influences of family role model in business and social network could not be underemphasized. On the other hand, Golden (2016), from the perspective of critical race theory, argues that existing theories on minority entrepreneurship fail to categorize black Americans as a racial group, but rather as a cultural or ethnic group. Accordingly, the various models (such as cultural theory, mixed embeddedness theory, etc.) do not account for the unique impact of race that limit blacks from becoming successful entrepreneurs, unlike those who are able to access significant resources and enjoy positive contexts of reception (Gold, 2016:1693). Although CRT has not been adequately applied and widely tested with repeated empirical findings, particularly in the field of entrepreneurship, the fact that the overall gap discerned in the finding and how wide black firms lag other races could be indicative of an underlying issue; and especially when the lag has been consistently observed for years – implying the quest for holistic model and theory that capture the unique challenges of African Americans.

The study, in chapter 3, discussed the source of data and the analytical procedures. The use of the largest national dataset till date (the PUMS), and the application of advanced techniques of Oaxaca-Blinder multivariate decomposition as an analytical tool, enabled the study to evaluate and determine racial disparity in business outcome as measured in sales and closure rates. The descriptive analysis using historical SBO data in chapters 4 and 5 presented the profile of business ownership and outcome across racial groups in the United States. Throughout the analysis, the results clearly suggested the presence of racial disparity in small business success and the rate of business closure, and the detailed analysis contained in chapter 6 validated the role of owner and business characteristics as strong determinants. The empirical findings of the study are now summarized in the paragraphs that follow.

7.2 Summary of Key Findings

The descriptive statistics presented in chapter 4 showed that black-owned businesses lag behind other minorities and non-minority white-owned businesses, on several owner

characteristics that were considered to be influential for small business success. The analysis suggests that black business ownership accounts for 9.5 percent of all US small businesses, yet they account for about 1 percent of the total US aggregate business sales. Further evidence gleaned from the SBO data that was deployed in the analysis revealed that the average annual sale of black-owned businesses is about ten times lower than white-, six times lower than Asian-, and about three times lower than Hispanic-owned businesses. The result of the analysis further suggests that the disparity/gap in business outcomes along racial lines have not been narrowing over the time considered in this study. It could be safely suggested therefore, that average sales for black-owned firms, based on the recent consecutive SBO surveys that were deployed in the analysis, revealed a declining trend. Black firms saw nearly 18 percent decline in average sales, whereas average sales for White and Asian firms grew by nearly 3 and 12 percent, respectively.

The analyses further suggest that in all, minority businesses experience more risk of business closure than white-owned businesses. More specifically, black-owned firms have the highest closure rate (33 percent) compared to 19 percent for whites, 21 percent for Asians, and 26 percent for Hispanic. It is important to note that the evidence from the 2007 SBO and 2012 SBO dataset do not show an improving trend either. The estimate in the level of business closure for black-owned firms slightly increased in the 2012 SBO survey. Likewise, the findings in chapter 5, based on characteristics of firms, revealed that the composition of black-owned firms tends to concentrate more in the unfavorable economic sector that requires very limited entry resources, and with high rate of business failures. Businesses in those economic sectors, therefore, have limited potential to increase revenue through sales, and are characterized by compromised business sustainability. Consistent with the results in chapter 4, the descriptive statistics contained in chapter 5 that are based on firm characteristics, also provided evidence of racial disparities.

The results generated through the multivariate analysis contained in chapter 6 covered a number of influential factors that address the research objectives, questions, and hypotheses. This section, like the findings in chapters 4 and 5, documented the presence of significant difference in business outcome along racial lines (between white–black, Asian–black, and Hispanic–black races). The findings contained in chapter 6 suggested that disparities remained conspicuously highest in sales and business survival, particularly when businesses owned by blacks are compared to those owned by whites and Asians.

The results further suggested that major factors accounting for black businesses to lag other races are related both to racial background characteristics, attributes of their firms, and business location. It is found that black business owners have lower educational attainment (compared to white and Asian business owners), are relatively younger, lack prior business experience, and predominantly operate non-family businesses. Furthermore, elements of firm characteristics, such as size of firm, age of business, business sector, and e-commerce site play significant roles in determining business outcomes across racial lines as well.

The results confirmed that the gender of business owner, size of startup capital, and access to private bank loan have a strong influence on business outcome. However, the immigration status of owners did not show any notable difference in performance between non-native and native black businesses. On the other hand, geographic region is noted to have an effect in the performance of black businesses. It is noted that black businesses in the Western region have better sales than those in the South, Northeast and Midwest. However, in terms of business sustainability, the multivariate model predicted that businesses operating in the Western region experience a higher risk of closure than the other regions. Putting this into practical perspective, most of the black businesses operate in the Western region, and they operate in high-risk business sectors.

7.3 Findings Related to Research Hypotheses

The results of the study related to the five research hypotheses are now summarized. In each case, efforts are made to unpack the specific practical importance of these findings, and references are made to areas in the study where the finding is situated – backed up with statistical evidence. Furthermore, the findings are juxtaposed against documented studies to situate them within the body of existing literature.

7.3.1 Impact of Racial Profile (Hypothesis 1)

The influence of racial profile, tested in hypothesis *H_1: Black-owned businesses have lower level of performance compared to White, Asian and Hispanic-owned firms.,* has been clearly found in the study. Black businesses are found to have lower average sales and higher closure rates than White, Asian, and Hispanic businesses. According to the results generated from the 2012 SBO dataset, the estimated average annual sales of Black firms are $8,119, compared with White - $552,079, Asian - $364,717, and Hispanic - $143,271. The share of sales by Blacks is about 13.2 percent of their share of businesses, in contrast to 124.7, 82.9, 32.5 percent for White, Asian, and

Hispanic, respectively – indicating the presence of huge disparities across owner characteristics (more specifically, racial profile).

The study further found that black businesses receive the lowest bank loans (3 percent) in contrast to 8, 6, and 5 percent for White, Asian, and Hispanic, respectively. Consequently, about 9 percent of black firms had startup capital of $50,000 or more, while 20 percent of White and 31 percent of Asian firms had startup amount for the same category. The findings contained in chapter 6 further confirmed that the racial background of the owner influences business outcomes. In terms of the predicted figures, the total estimated gaps between White–Black and Asian–Black applying the Oaxaca-Blinder techniques are large, while the difference, though significant, with Hispanic is smaller. This finding has clear policy implication in terms of closing the racial gap in entrepreneurial success in the United States, and by extension, improving the wealth conditions of the minority groups.

7.3.2 Influence of Gender (Hypothesis 2)

The statistical test of hypothesis 2, *The gender composition of the business owner explains racial disparities in sales performance and the risk of firm closure between Black-owned businesses and businesses owned by other races*, vindicates the validity of this claim. The results found that the gender of business owners has a strong association with small business performance. Unlike businesses owned by White, Asian, and Hispanic, Black firms are predominantly female owned. Despite their impressive rate of entrepreneurship, the study found that Black female-owned businesses have 28 percent lower sales and 1.56 times higher likelihood of closure than Black male-owned businesses. The sales gap is even higher when compared to businesses owned by Whites.

Furthermore, results contained in chapter 4 showed that female businesses have an estimated average annual sale of $40,436 versus $102,058 for Black male-owned businesses. This estimate declined in the 2012 SBO to $27,753 versus $98,665 comparatively. Nearly 37 percent of female-owned firms compared with 28 percent of male-owned firms experience closure. Gender is also among the significant factors accounting for racial disparities in business outcome as found in chapter 6. It contributed about 6 percent of the sales outcome gap between White–Black and Hispanic–Black firms.

7.3.3 Impact of Immigration Status (Hypothesis 3)

The influence of business owner background, such as being a US native or non-native, analyzed in hypothesis 3, *Immigration status of business owners causes racial disparities in sales and risk of firm closure between Black-owned and businesses owned by other races* showed an inconclusive result. On the one hand, the results from the multivariate decomposition models showed owners' immigration status have substantial impact in explaining the disparity between Hispanic–Black and Asian–Black firms in risk of business closure. On the other hand, however, there was no statistical support for the proposition that the performance of Black business owners (as juxtaposed against native immigrant business owners) is influenced by immigration status. There was, therefore, no evidence to suggest a deterministic property of immigration status on business outcomes. On average, both native and non-native Black-owned firms perform less than White, Asian, and Hispanic-owned firms.

The estimated absolute figures on sales and closure rate in chapter 4 indicated a closer gap between native and non-native Blacks. Native Black-owned firms have estimated average annual sales of $141,635 vs. $111,884 for non-natives. Likewise, 28.2 percent native and 28.6 percent non-native firms experienced high risk of business closure. However, based on the decomposition model in chapter 6, owner immigration status is found to have explained about 16 percent of the performance gap between Hispanic and Black firms.

7.3.4 Impact of Financial Support (Hypothesis 4)

The importance of financial resources and support, especially at the early stage of business formation, is critical; and this study, in hypothesis 4 endeavored to ventilate this: *Access to funding explains racial disparities in sales performance and risk of firm closure between Black-owned businesses and businesses owned by other races.* The findings of this study confirmed that Black businesses that have access to bank loans have better performance than their Black counterparts that do not. The results of analysis contained in chapter 6 found that Black firms without bank loans at their startup have about 14 percent lowers sales and 36 percent higher likelihood of closure than startups with bank loans. The results also confirmed that Blacks have less access to financial resources at the early stage of their businesses, as opposed to the other races.

Results from the analysis further suggests that Black firms with larger startup capital have higher average sales and lower risk of closure. Relative disadvantages in access to securing bank

loans are among the significant factors that contributed to racial disparities in business outcome, as found in chapter five. Likewise, racial disparities in amount of capital at initial startup substantially contributed toward the underperformance of Black firms as compared to the White, Asian, and Hispanic businesses. Categorically, lack of access to bank loans is estimated to have caused 12 percent in the sales performance gap between Asian and Black firms, and 6 percent each with White and Hispanic businesses.

7.3.5 Impact of Geographic Region (Hypothesis 5)

The region of a business's operation plays a deterministic role in terms of its sales and the sustainability of its operation. The findings relating to hypothesis 5: *The geographic location of business affects disparities in sales performance and the risk of firm closure between Black-owned and businesses owned by other races,* confirmed that the performance of small businesses in the United States varies across regions. Although Black firms are concentrated in the South, they have lower average annual sales than businesses in the West. The findings in Chapter 4 showed that Black firms in the West have larger than average sales compared to the other regions. However, the outcome based on the logit model (after factoring in all variables) found that Black firms in the West are less sustainable than businesses in the South, Northeast and Midwest. The findings in Chapter 6, in the decomposition models, confirmed that geographic region of business operations influences the disparity in business outcomes of Blacks as compared to the Hispanic businesses; but not with White and Asian. Nearly 10 percent of the firm survivability difference between Hispanic and Black firms is found to be associated with the difference in the business region of operation.

7.4 Contributions of the Study

Evidence generated in this study, through the methodological approaches, are useful additions to the existing body of knowledge on racial disparities in business outcomes in the United States. In the preceding paragraphs, various estimation evidence and contextual analyses were presented to nuance the major findings of this study, and to present the practical implications of the major findings. In the paragraphs that follow, efforts are made to decompose the main contributions of this study to the body of existing literature.

7.4.1 Methodological Contribution

Among others, the application of the Oaxacan-Blinder multivariate decomposition techniques, rarely found in studies of small businesses/entrepreneurship, is one important contribution of this research. The mathematical approach deployed in the study enabled a valid and reliable illustration of the comparison between Black small business performance with three other distinctive races: White, Asian, and Hispanic. This effort to investigate disparities with the other three major racial categories in the United States further distinguishes this study from the body of existing literature where most studies concentrated on comparing Blacks and Whites business opportunities.

The advanced mathematical approach that was deployed decomposed method to uniquely estimate the overall and detailed results of how much of the differences in business outcomes are explained by owners' characteristics and firm specifics. The adoption of this methodological approach has furthered the scientific argument in support of advanced statistical methods in predicting business outcomes, especially in comparative manners and situations.

Furthermore, the study exhaustively reviewed and analyzed the different theories of minority entrepreneurship and the evolution thereof. However, the analytical review was able to establish the absence of a theoretical model that fits the context of Black entrepreneurship in America. This is essential because the general term "minority" does not deal with the unique history of African American. Although, the critical race theory sets a divergent prism, it is yet to be tested widely in entrepreneurship research. This study, although its major theme is investigating small business opportunity gaps and explaining this nexus in measurable data, unravels the dearth of available theories and conceptual frame that underpin the empirical analysis. This study made a modest contribution to serve as an input for future scholars in the area.

7.4.2 Statistical Data

The detailed statistical analysis of owner characteristics along with firm characteristics, which have not received scientific attention in previous studies, has been covered broadly in this study. Undoubtedly, this is one of the major contributions of this study to the body of academic literature. Among others, the results on the analysis of business owner and firm characteristics, which were adopted separately in discriminant and system models, allow research consumers a

flexible and customized observation of the singular and combined effects of these characteristics/variables on small business outcomes in the United States.

Furthermore, the study has successfully analyzed unique variables rarely covered in the US small business studies using multivariate analyses. These include firm size, firm age, e-commerce, export trade, private bank loan, and access to financial support in the form of government loan. The results of the study found, except for government loans, the significant roles played by each variable in operational success of small businesses in the United States.

7.5 Policy Implications and Conclusions

Small businesses, in general, play a significant role in the economy by creating employment opportunities, fueling innovation, and spurring growth. However, Black-owned businesses lag behind White, Asian, and Hispanic firms in the United States. This research has uncovered important differences in business ownership rates and outcomes between Black and non-minority White, Asian, and Hispanic. Important differences along gender divide have been revealed among Black business owners as well.

Thus, addressing the challenges that are disproportionately faced by Black entrepreneurs is an imperative task by policy makers and stakeholders to deliver economic justice to the Black community. Therefore, opportunities for Black entrepreneurs to succeed are critical for economic empowerment in Black communities, where lower net worth and high unemployment is pervasive. Policies and strategies aimed at bridging the gap in economic disparities among racial lines would have to focus on creating equal opportunities and support for every entrepreneur across board. Thus, the findings inform policy makers, financial institutions, and small business agencies to critically examine the existing strategies that are found to be discriminatory against Black entrepreneurs. A genuine and strategic approach to atone the inherent systemic inequalities would not only contribute to wealth creation among the Blacks, but also reduce unemployment and its associated social maladies.

7.6 Recommendations

7.6.1 Specific Recommendations

The following specific recommendations are generated from the research questions and the associated hypotheses as discussed earlier under subheading 7.3.

(1) To close the business outcome gap associated with racial profile, it is important to tackle the disparity in access to financial services – both at startup and in subsequent years as financial injections become critical for business expansions. Especially, small business programs designed by lending institutions and local and federal government for Black entrepreneurs by lowering the risk management standard that accommodate the financial needs of those with low level of wealth and income will be instrumental. Support programs in identifying, educating, and encouraging Blacks to enter more profitable business sectors could enable their businesses to triumph and be as sustainable as businesses of other races.

(2) Gender equity and representation in small business success has economic advantages, beyond the legal and political justifications. Thus, supporting Black female entrepreneurs through programs that facilitates access to not only financial services, but also desirable skills and knowledge could make them as competitive as their male counterparts. Programs and training on how Black female entrepreneurs should improve their creditworthiness, develop sound business plans, acquire better financial management skills and understand basic financial statements will be helpful.

(3) Immigrants are known to enter businesses at faster rates than natives. This group of people also make an invaluable contribution to the economy of their host country. Non-native Black entrepreneurs experience the same challenges that native Blacks have experienced. However, it could be unique in instances where language barriers and limited knowledge of the business rules of the country or region becomes challenging. The gap noticed between Blacks and Hispanics due to differences in their immigrant entrepreneur composition vindicates that reality. Therefore, supporting immigrants not only at the same level as natives but also through special programs designed to overcome cultural, linguistic, and legal barriers would be helpful. Immigrant businesses could benefit from as much customer traffic as native businesses, especially where their own ethnic community or market enclaves are rare in the geography of their operations, probably as in the Western region.

(4) Initial financial support upon business entry is the most important input for the success of small businesses in the United States, particularly for the many financially constrained Black entrepreneurs. Special programs designed by the government to support Black entrepreneurs, in collaboration with private banks, more importantly at the embryonic stages

of business stage, may be very helpful in ensuring business survivability and potential growth.

(5) Regional variations in terms of the extent of favorability of the business environment for the success of small firms is a relevant issue that local and regional governments must heed. Supporting small businesses in terms of cutting their operation costs through tax reductions, cutting expensive and obstructive legal constraints, extending loans or incentives, and providing government contracts may help them withstand competitive pressure from larger firms in their respective regions, especially where the cost of living and running business is high.

7.6.2 General Recommendations

Given the size of factors involved in the investigation, and the broad nature or context of the issues raised, it is plausible to suggest general recommendations that are consistent with the specific objectives of this study. These recommendations are grouped under two subheadings:

7.6.2.1 Improving Access to and Quality of Financial Services

Startup finance is a key factor in business formation, sustainability, and success. The inadequate financial resources that characterize Black entrepreneurs have put them on a rough road right away from startup, and this may determine the ultimate survivability of the business. This impediment does not only bar many aspiring Blacks from starting and owning their own businesses, but also predominantly forces Black entrepreneurs to enter less profitable and high-risk economic sectors. The difference between Black and other races, especially White and Asian, in startup capital is manifested in the coagulated impediment that subjugates Blacks to concentrate on small homebased firms as these require smaller funds than are needed to start more capital-intensive and profitable businesses, such as manufacturing and wholesale distribution centers.

Therefore, the elimination of such financial barriers for Black entrepreneurs requires the financial institutions to break their perpetual culture of prejudice and systemic discrimination against funding applications from Blacks. Furthermore, the reluctance and negligence of banking institutions to the unique financial incapacitation of Blacks are preponderant and unchecked. Financial institutions (particularly private banks) must embrace systematic rejuvenation to value the businesses of African American and genuinely undo the more potent unwritten systemic discriminatory lending approaches. Diversity in their banking workforce is one practical step in

the right direction, which private lending institutions should consider in order to augment wealth creation through entrepreneurship among minorities in general, and Blacks in particular.

The financial needs of entrepreneurs go beyond the early stage of startup. Business owners require capital to expand their operations, hire more workers, and supply more products or services to the market. Thus, obtaining financial resources from external lenders besides their personal equity fund is deemed essential for Black entrepreneurs. Being mostly reliant on their own meager liquid assets (which is common among Black entrepreneurs) could spell doom to the business from the very beginning. Such businesses may also be concentrated in the small markets, stuck in less revenue-generating business, and be immobile to avert business failure.

Ensuring and putting in place strong functional legal remedies dealing with the illusive but real incidence of discriminatory (at times predatory) loan services by banks is essential. Regulatory institutions, like the US Consumer Financial Protection Bureau, must be instrumental to help aspiring Black entrepreneurs reach their American dream. Furthermore, it is imperative for the Small Business Administration to seek strategies to effectively address the unmet financial needs of Black entrepreneurs. Strategies such as increasing the equity of its guaranteed loan program from private banks for Black entrepreneurs could be helpful. This initiative will benefit several Black small businesses, especially young businesses and those run by women, operating with little or no cashflow. Non-government and local Black business organizations must make impactful advocacy work, raise funds where possible, which could serve as seed money or financial injections to operating Black-owned small firms.

7.6.2.2 Education, Entrepreneurial Training and Mentoring Opportunities

Empowering entrepreneurs with relevant skills and applicable knowledge are a necessary input to manage a successful business. Getting focused and impactful training on how to develop and run a small business can compensate for the deficits in prior business experiences that hinder the competence of most Black entrepreneurs. New business owners that are well trained and knowledgeable on the nuances of business operations would have a better chance of standing against failures. This could potentially improve the longevity of Black small businesses. Local governments, small business agents, non-profit organizations, and banking institutions could play an active role in offering such support and guidance.

Particularly, banking or lending institutions must play a key part in proactively orienting and supporting Black small firms to put both existing and new entrepreneurs on the right path to success, right from inception. Furthermore, using or sharing success stories of Black-owned businesses and their business strategies will be a helpful model. Successful strategies may have multiplier effects and could be instrumental to raise Black business ownership rates by inspiring others. Furthermore, supportive initiatives and advisory services could enable Blacks to enter new and emerging markets. In today's digital world, online marketing opportunities are just as important as physical stores. If adopted, online marketing would not only enable offshore expansion for Black small businesses, but also enable them to have a fair share in business-to-business transactions.

It is also imperative to raise the higher education participation rate of the Black population. Formal education is the gateway to the economy and the labor force. Education does not only equip Blacks with requisite skills and knowledge, but also improves the income and wealth of Black families. Bridging the educational gap for the underserved Black communities is crucial. Local governments, states, federal government, and non-profit organizations can help make college education more accessible and affordable to Black households. Support through scholarships, free tuition, subsidized study loans can better serve young Blacks to access quality and affordable education. Notably, human capital investment in four-year degrees or above is a currency in today's economy. It is an understatement to suggest that Black families deserve equity in the US education; and they should be able to achieve at least a bachelor's degree, enroll in high demand fields such as in science, technology, engineering, and mathematics (STEM), and business management competencies.

7.7 Limitations of the Study

With the reality that the dataset deployed in this study is secondary in nature, several important data elements are not covered in the US Census Bureau Small Business survey (such as household income or net worth, dollar amount of loan, satisfaction with financial institutions, etc.), as the survey was more of a general-purpose type. The SBO survey questionnaire gathered data on some essential continuous variables (startup capital amount, age of owner, level of education, etc.) in predefined category. This limits the flexibility of data coding and analysis for better model prediction. Although no major variations are expected (as demonstrated in chapters 4 and 5), the

absence of recent PUMS data release, that is as comprehensive as the 2007 PUMS, has not allowed this research to draw comparison across time.

7.8 Future Research

Despite the many challenges, Blacks entrepreneurship is growing at a notable pace in the United States. The estimated rate of entrepreneurship shows that the Black business ownership rate has increased from 7.3 percent in 2007 to 9.5 percent in 2012, despite the decline in average annual sales per firm. This increasing aspiration in business ownership fueled by a growing Black population in the United States needs further efforts in expanding this research. Future research, using a special survey (preferably prospective longitudinal study) and qualitative studies will be useful for a possibly more robust understanding of the long-term success of Black entrepreneurship. The fact that Black business ownership, unlike other races, is predominantly female-owned demands research. This unique pattern might call for further research to investigate Black female entrepreneurship to validate whether Black females are facing more disadvantages in the labor market or have exceptional aspiration for entrepreneurship – despite their lower odds of success compared to other groups in the United States.

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APPENDIX A: Estimated Number of Businesses and Annual Sales by Race and US States

State	Black		Asian		Hispanic		Non-minority		All US	
	No. of Business	Annual Sales ($1000)	No. of Business	Annual Sales ($1000)	No. of Business	Annual Sales ($1000)	No. of Business	Annual Sales ($1000)	No. of Business	Annual Sales ($1000)
Alabama	73,015	3,087,663	9,353	4,617,052	6,725	1,557,746	272,651	148,768,375	366,396	160,529,051
Alaska	1,281	151,998	3,033	778,420	2,091	409,252	51,147	29,939,171	66,035	32,526,796
Arizona	15,341	1,044,411	22,088	6,122,106	89,383	9,510,360	344,981	159,719,395	489,635	180,901,948
Arkansas	20,556	806,933	4,753	2,442,130	7,982	1,536,872	189,029	100,126,703	226,646	105,956,165
California	177,302	14,924,763	604,870	229,512,016	815,304	98,901,378	1,819,107	1,131,645,330	3,488,448	1,510,325,910
Colorado	12,286	1,192,806	18,629	5,560,477	51,141	6,060,200	442,365	180,150,170	534,958	195,212,685
Connecticut	17,720	842,615	13,799	4,866,141	23,996	2,980,144	259,614	153,290,859	317,701	162,834,170
Delaware	7,767	342,921	3,854	1,512,460	2,722	411,306	54,782	30,403,137	69,704	32,965,859
District of Columbia	22,097	2,517,344	3,974	2,173,766	4,169	1,186,923	29,521	20,920,610	59,842	27,156,002
Florida	251,216	11,215,492	80,938	24,890,576	604,128	89,684,353	1,121,749	482,567,669	2,070,523	619,900,060
Georgia	256,848	9,586,641	56,856	20,846,707	56,339	6,814,863	538,893	302,201,527	915,264	342,871,511
Hawaii	1,460	177,600	60,967	19,482,939	5,544	564,552	38,510	17,059,813	115,239	39,392,204
Idaho	571	62,173	2,354	474,698	6,265	619,107	130,973	50,219,111	143,341	52,235,286
Illinois	144,780	7,470,106	72,665	27,273,015	92,231	15,664,093	795,129	481,267,962	1,113,330	535,582,927
Indiana	34,036	3,780,893	12,192	6,113,752	13,559	2,043,529	405,090	227,221,518	468,603	240,477,647
Iowa	4,918	493,243	4,310	1,310,270	4,695	1,065,971	236,561	127,566,765	252,104	130,828,378
Kansas	7,198	573,444	6,464	2,441,350	10,076	1,576,547	204,562	115,274,015	232,757	121,165,144
Kentucky	13,548	1,122,725	7,019	2,770,029	5,236	1,832,083	296,155	130,812,484	324,579	137,062,519
Louisiana	94,450	3,361,653	14,459	4,421,855	14,829	3,806,283	277,676	172,830,184	406,461	185,973,513
Maine	916	109,672	1,621	389,954	906	67,913	131,322	49,049,866	136,092	49,780,902
Maryland	124,729	8,565,275	41,634	15,345,235	37,319	4,654,263	314,902	184,496,024	521,649	215,709,386
Massachusetts	23,108	1,921,932	33,875	11,238,471	30,022	3,855,791	499,959	289,033,140	592,989	308,238,306
Michigan	106,457	5,137,001	26,672	11,604,821	19,890	4,644,836	657,237	327,724,684	820,100	352,453,200
Minnesota	19,889	1,600,741	15,486	3,786,181	8,781	1,656,616	428,716	238,966,446	478,404	247,452,722
Mississippi	65,295	2,085,035	5,447	2,041,068	3,334	531,160	155,094	82,120,309	230,615	87,098,586
Missouri	36,230	2,426,888	13,022	4,080,602	8,802	1,740,068	415,972	211,414,776	480,084	220,807,300
Montana	258	20,965	947	276,791	1,487	273,106	102,746	36,016,254	109,296	37,197,538
Nebraska	4,558	296,272	3,189	719,944	6,048	1,041,297	144,122	89,010,803	159,820	91,619,516
Nevada	15,430	853,131	21,717	4,925,971	33,678	5,647,066	144,944	89,346,159	220,669	102,664,128
New Hampshire	816	76,744	2,749	1,007,183	1,913	316,046	121,297	51,167,023	127,948	52,857,897
New Jersey	63,686	4,176,973	81,898	44,001,818	93,336	12,187,439	533,808	361,202,589	777,009	425,832,128
New Mexico	2,096	255,431	4,312	1,603,165	46,477	6,938,258	83,857	41,225,495	147,335	51,893,540
New York	219,036	10,602,665	243,105	65,963,632	266,624	20,890,524	1,248,304	739,191,863	1,970,543	845,099,165
North Carolina	112,892	6,059,369	27,112	8,729,685	34,894	4,782,767	603,182	281,758,668	791,226	303,695,329
North Dakota	493	40,778	678	275,460	576	S	62,271	46,722,223	65,893	47,923,360
Ohio	81,244	9,149,759	21,679	10,762,432	16,012	2,750,619	759,569	406,903,707	885,755	431,561,602
Oklahoma	13,935	754,089	9,643	2,799,682	14,632	2,731,587	249,027	133,889,485	320,668	149,120,161
Oregon	5,076	546,777	16,173	6,116,104	15,437	2,194,489	285,028	130,882,757	331,229	141,740,608
Pennsylvania	56,748	3,083,306	39,602	15,772,304	34,808	4,532,307	818,858	449,138,970	954,119	475,318,785
Rhode Island	3,364	187,533	2,937	907,316	8,439	471,689	77,042	36,776,145	92,123	38,524,265
South Carolina	61,943	3,353,199	9,492	3,895,094	10,265	1,851,634	276,269	123,952,244	360,974	134,224,735
South Dakota	528	40,625	790	675,463	830	626,527	74,228	41,091,955	78,837	42,886,011
Tennessee	73,688	2,967,734	14,364	7,411,981	13,743	3,256,668	434,025	206,425,402	541,087	221,770,154
Texas	217,343	11,909,263	155,784	62,965,284	687,570	90,774,549	1,224,845	882,355,745	2,321,368	1,068,013,251
Utah	1,808	379,542	6,286	1,352,595	13,735	2,174,725	218,826	105,526,141	245,816	110,614,224
Vermont	391	10,389	870	255,124	684	144,817	70,491	25,165,706	73,279	25,827,050
Virginia	80,124	7,870,853	58,390	19,634,198	43,856	8,616,125	450,109	229,860,679	640,013	269,331,955
Washington	14,828	1,287,638	46,054	17,139,942	24,440	34,464,492	426,697	215,302,193	528,356	272,926,053
West Virginia	2,275	173,080	1,988	901,942	943	269,884	104,785	49,106,982	110,902	50,610,083
Wisconsin	19,339	1,474,980	9,848	5,090,396	8,830	2,818,753	379,934	236,469,116	422,489	247,085,661
Wyoming	350	30,102	802	212,826	2,471	270,515	55,397	29,553,189	60,228	30,302,496
Total	**2,585,263**	**150,203,165**	**1,920,743**	**699,492,423**	**3,307,197**	**473,402,092**	**19,061,358**	**10,482,831,536**	**27,258,481**	**11,964,077,872**

Source: US Census Bureau 2012 Survey of Business owners. Statistics for All US Firms by Industry, Gender, Ethnicity, and Race for the US, Abiy States, Metro Areas, Counties, and Places: 2012.Table: SB1200CSA01.
Note: Symbol S – denotes Withheld because estimate did not meet publication standards

APPENDIX B: Mean Annual Sales in Dollars of Independent Variables – 2007 SBO PUMS

Variables	Black Mean	Std. err.	Asian Mean	Std. err.	Hispanic Mean	Std. err.	White Mean	Std. err.
Gender:								
Female	40,436	6,708	176,912	3,787	70,534	1,179	180,617	3,550
Male	102,058	2,150	442,710	8,108	208,882	7,218	700,919	4,571
Equally male/female-owned	65,226	1,417	342,910	10,098	157,361	2,663	301,181	2,064
Native/non-native:								
Native	141,635	3,656	445,756	16,021	345,681	24,068	638,247	3,480
Non-native	111,844	3,236	471,272	10,037	257,001	9,225	561,104	15,947
Age:								
Under 35	42,277	1,177	177,744	3,951	97,987	3,579	137,518	1,546
35 &+	153,004	3,541	522,598	10,329	339,029	13,495	690,878	3,723
Education:								
Less than high school	39,191	1,190	166,608	4,910	132,607	2,757	291,233	5,480
High school	77,037	2,897	285,403	6,294	241,024	4,827	505,188	5,310
Technical school	62,436	2,478	238,800	13,186	141,203	4,074	278,797	2,594
Some college	92,587	3,608	404,060	9,770	255,762	7,143	484,106	3,672
Associate	96,673	7,957	384,743	52,612	235,740	7,884	354,618	7,129
Bachelors	254,268	13,404	600,454	17,605	626,587	71,697	953,081	8,388
Master's +	233,735	7,986	605,056	24,476	437,930	22,591	674,124	10,267
Startup Capital:								
Under $10,000	53,948	1,330	134,758	3,335	105,731	1,672	182,108	1,339
$10,000 &+	352,650	12,260	648,204	13,139	556,240	20,813	926,787	5,615
Prior Experience:								
Yes	220,175	9,882	593,270	15,493	358,765	8,146	666,577	6,125
No	106,245	2,205	398,048	10,677	262,968	15,246	598,911	3,767
Family Business:								
Yes	203,552	7,317	694,881	16,743	590,233	21,603	930,186	7,181
No	117,236	3,110	388,053	10,105	213,258	12,110	503,999	3,602
Firm Size:								
No employee	21,922	83	59,393	282	38,802	104	56,239	106
1 -4 employees	238,861	2,341	444,186	2,656	334,215	2,680	402,833	1,119
5& + employees	2,288,106	179,912	2,469,326	48,095	2,654,874	102,980	4,485,333	30,110
Firm Age:								
9 years or more	280,376	9,750	1,017,052	42,094	701,456	28,441	1,368,399	12,617
2 -8 years	122,000	3,257	416,926	8,211	259,436	13,616	335,676	1,797
Less than 2 years	19,236	1,302	58,938	1,110	32,770	570	52,091	2,050
Industry:								
Manufacturing	433,446	53,433	1,343,631	120,470	609,217	26,442	2,428,051	53,298
Wholesale	811,830	327,469	2,178,520	72,743	1,453,299	100,332	3,704,589	62,509
Construction	105,707	3,526	265,732	9,525	166,603	2,524	504,474	4,009
Retail trade	124,884	5,872	574,210	9,158	325,674	39,700	849,432	10,375
Transport	66,694	1,742	140,522	3,951	106,573	1,378	344,597	6,966
Professional	76,640	2,222	206,116	4,009	120,317	2,446	213,000	1,363
Health care	46,727	584	282,802	9,179	82,373	1,391	294,318	1,802
Admin support	46,642	2,616	158,346	7,190	63,319	1,930	229,251	3,622
Food service	174,167	9,232	390,924	5,811	282,541	5,683	617,876	15,509
Real estate	41,541	1,019	117,076	1,515	78,231	2,211	179,514	2,175
Finance	75,436	3,350	277,940	27,652	209,301	29,966	480,788	17,309
Others	29,792	1,100	84,249	8,808	51,552	1,232	150,444	2,355
Bank Loan at startup:								
Yes	615,598	38,928	994,107	28,218	920,716	81,827	1,256,414	12,785
No	88,137	1,671	342,236	7,506	209,027	8,037	469,386	3,500
Gov't loan at Startup:								
Yes	421,453	44,374	666,268	30,070	642,826	37,995	1,044,929	22,977
No	108,938	2,312	397,783	7,332	242,783	8,713	544,797	3,416
E-commerce Website:								
Yes	352,340	11,878	1,112,384	37,153	867,059	54,862	1,623,066	13,852
No	58,874	1,110	238,088	3,096	131,187	1,732	212,284	992
Export Trade:								
Yes	565,948	61,139	1,705,286	87,514	1,213,968	175,131	2,748,485	40,927
No	102,927	1,804	316,819	3,804	206,833	4,124	439,614	2,306
Region:								
Midwest	76,635	3,837	337,116	9,156	230,502	14,507	486,987	5,450
Northeast	66,822	2,110	316,673	9,920	115,132	3,441	507,772	5,681
South	56,581	964	331,230	9,713	157,843	4,211	473,696	5,202
West	145,624	35,385	357,507	7,354	157,033	9,844	485,522	4,837

APPENDIX C: SBO Survey Questionnaire

10017010

U.S. DEPARTMENT OF COMMERCE
Economics and Statistics Administration
U.S. CENSUS BUREAU

FORM **SBO-1** (01-02-2008)

2007 SURVEY OF BUSINESS OWNERS AND SELF-EMPLOYED PERSONS

OMB No. 0607-0943: Approval Expires 12/31/2010

DUE DATE
30 days after receipt of form

Mail *your completed form to:*

U.S. CENSUS BUREAU
1201 East 10th Street
Jeffersonville, IN 47132-0001

- OR -

Report online at:

www.census.gov/econhelp/sbo

Need help or have questions about completing this form?

Visit www.census.gov/econhelp

Call 1-888-824-9954, between 8 a.m. and 6 p.m., Eastern time, Monday through Friday.

- OR -

Write to the address above. Include your 11-digit Census File Number (CFN) printed in the mailing address.

INFORMATION COPY
DO NOT USE TO REPORT

(Please correct any errors in this mailing address.)

YOUR RESPONSE IS REQUIRED BY LAW. Title 13, United States Code, requires businesses and other organizations that receive this questionnaire to answer the questions and return the report to the U.S. Census Bureau. By the same law, **YOUR CENSUS REPORT IS CONFIDENTIAL.** It may be seen only by persons sworn to uphold the confidentiality of Census Bureau information and may be used only for statistical purposes. Further, copies retained in respondents' files are immune from legal process.

Start Here

The Census Bureau is responsible for collecting information on the U.S. economy.

- The data that you provide will be combined with the responses from other businesses and business owners.
- Survey results will contain information on the demographic and economic composition of businesses in the United States.
- Your response is important, and we keep your answers confidential.

This form asks for two types of information:

- specific information about the business
- information about the principal business owners

INSTRUCTIONS
Please read the enclosed insert before answering the questions.

- Use blue or black ink.
- Place an "**X**" inside the box. [X]
- Center numbers in boxes.
- Do not put slashes through 0 or 7. 7 0

Please PRINT the first and last name of the person who is filling out this form.

Name

Include today's date and a telephone number so we can contact you if there is a question.

Today's Date (MM/DD/YYYY)

Telephone number (Include Area Code)

Extension

Please turn to the next page to continue.

U.S. CENSUS BUREAU

10017028

Please answer the following questions for the self-employment or business activity of the person(s) or business named in the mailing label even if the business has since been sold, reorganized, or discontinued.

You may use **estimates** if this form requests information that is not available in your business records.

An enclosure with answers to the most frequently asked questions regarding this survey has been provided.

1 In 2007, did another company or organization own more than 50% of this business?

☐ Yes - *Go to* **65** *on Page 7* ☐ No

2 In 2007, did employees under an Employee Stock Ownership Plan (ESOP) own more than 50% of this business?

☐ Yes - *Go to* **65** *on Page 7* ☐ No

3 In 2007, did members in a cooperative or club own more than 50% of this business?

☐ Yes - *Go to* **65** *on Page 7* ☐ No

4 In 2007, did an estate or trust own more than 50% of this business?

☐ Yes - *Go to* **65** *on Page 7* ☐ No

5 In 2007, did an Alaska Native Regional or Village Corporation or an American Indian tribal entity own more than 50% of this business?

☐ Yes - *Go to* **65** *on Page 7* ☐ No

6 In 2007, was this business a nonprofit organization?

☐ Yes - *Go to* **65** *on Page 7* ☐ No

7 In 2007, was this business a publicly held corporation?

☐ Yes ☐ No

8 In 2007, did any individual own 10% or more of the rights, claims, interests, or stock in this business?

☐ Yes ☐ No - *Go to* **65** *on Page 7*

9 **A.** In 2007, was this business jointly owned by a husband and wife?

☐ Yes, equally operated by husband and wife

☐ Yes, but primarily operated by husband

☐ Yes, but primarily operated by wife

☐ No

B. In 2007, did two or more members of the same family own the majority of this business? *(Family refers to spouses, parents/guardians, children, siblings, or close relatives.)*

☐ Yes ☐ No

C. As of December 31, 2007, how many owners were there in this business?

- *Do not combine two or more owners to create one owner.*
- *Count spouses and partners as separate owners.*

☐ 1 ☐ 5 – 9

☐ 2 ☐ 10 – 49

☐ 3 ☐ 50 or more

☐ 4 ☐ Unknown

D. For the person(s) owning the largest percentage(s) in this business in 2007, please list the **percentage owned by each person** and his or her **position title**.

- ***Do not report*** *percentages owned by parent companies, estates, trusts, etc.*
- *If more than 4 persons owned this business equally, select any 4.*
- *Round percentages to whole numbers. For example, report 1/3 ownership (33.3%) as:* 33.0 %

	Percentage Owned (Estimates are acceptable)	**Position Title** (Example: sole owner, co-owner, shareholder, president, vice president, etc.)
Owner 1:	.0 %	
Owner 2:	.0 %	
Owner 3:	.0 %	
Owner 4:	.0 %	

FORM SBO-1 (01/02/2008)

Owner 1

Please answer the following questions about Owner 1 listed in 9 D on Page 2.

10 How did ***Owner 1*** initially acquire ownership of this business?

- ☐ Founded
- ☐ Inherited
- ☐ Purchased
- ☐ Received transfer of ownership/gift

11 When did ***Owner 1*** acquire ownership of this business?

- ☐ Before 1980
- ☐ 2005
- ☐ 1980 – 1989
- ☐ 2006
- ☐ 1990 – 1999
- ☐ 2007
- ☐ 2000 – 2004
- ☐ Don't know

12 In 2007, which of the following best represents ***Owner 1's*** function(s) in this business?
Mark x all that apply.

- ☐ Providing services and/or producing goods
- ☐ Managing day-to-day operations
- ☐ Financial control with the authority to sign loans, leases, and contracts
- ☐ None of the above

13 In 2007, what was the average number of hours per week that ***Owner 1*** spent managing or working in this business?

- ☐ None
- ☐ 40 hours
- ☐ Less than 20 hours
- ☐ 41 – 59 hours
- ☐ 20 – 39 hours
- ☐ 60 hours or more

14 In 2007, did this business provide ***Owner 1's*** primary source of personal income?

- ☐ Yes
- ☐ No

15 Prior to establishing, purchasing, or acquiring this business, had ***Owner 1*** ever owned a business or been self-employed?

- ☐ Yes
- ☐ No

16 Prior to establishing, purchasing, or acquiring this business, what was the highest degree or level of school ***Owner 1*** completed?
Mark x ONE box only *for the highest level completed or degree received.*

- ☐ Less than high school graduate
- ☐ High school graduate - Diploma or GED
- ☐ Technical, trade, or vocational school
- ☐ Some college, but no degree
- ☐ Associate Degree
- ☐ Bachelor's Degree
- ☐ Master's, Doctorate, or Professional Degree

17 What is the sex of ***Owner 1***?

- ☐ Male
- ☐ Female

18 What was the age of ***Owner 1*** as of December 31, 2007?

- ☐ Under 25
- ☐ 45 – 54
- ☐ 25 – 34
- ☐ 55 – 64
- ☐ 35 – 44
- ☐ 65 or over

19 Was ***Owner 1*** born in the United States?

- ☐ Yes
- ☐ No

☞ **NOTE: Please answer BOTH Question 20 about Hispanic origin and Question 21 about race. For this survey, Hispanic origins are not races.**

20 Is ***Owner 1*** Spanish/Hispanic/Latino?

- ☐ No, not of Hispanic, Latino, or Spanish origin
- ☐ Yes, Mexican, Mexican Am., Chicano
- ☐ Yes, Puerto Rican
- ☐ Yes, Cuban
- ☐ Yes, another Hispanic, Latino, or Spanish origin - *Print origin, for example, Argentinean, Colombian, Dominican, Nicaraguan, Salvadoran, Spaniard, and so on.*

21 What is ***Owner 1's*** race?
Mark x one or more races.

- ☐ White
- ☐ Black, African Am., or Negro
- ☐ American Indian or Alaska Native - *Print name of enrolled or principal tribe.*
- ☐ Asian Indian
- ☐ Japanese
- ☐ Chinese
- ☐ Korean
- ☐ Filipino
- ☐ Vietnamese
- ☐ Other Asian - *Print race, for example, Hmong, Laotian, Thai, Pakistani, Cambodian, and so on.*
- ☐ Native Hawaiian
- ☐ Guamanian or Chamorro
- ☐ Samoan
- ☐ Other Pacific Islander - *Print race, for example, Fijian, Tongan, and so on.*
- ☐ Some other race - *Print race*

22 **A.** Is ***Owner 1*** a veteran of any branch of the U.S. military service including the Coast Guard?

- ☐ Yes
- ☐ No - *Go to* **23**

B. (If Yes) Was ***Owner 1*** disabled as the result of injury incurred or aggravated during active military service?

- ☐ Yes
- ☐ No

23 Was more than **1** owner listed in **9** **D** on Page 2?

- ☐ Yes
- ☐ No - *Go to* **65** *on Page 7*

FORM SBO-1 (01/02/2008)

10017044

Owner 2

Please answer the following questions about Owner 2 listed in 9 D on Page 2.

24 How did ***Owner 2*** initially acquire ownership of this business?

- ☐ Founded
- ☐ Inherited
- ☐ Purchased
- ☐ Received transfer of ownership/gift

25 When did ***Owner 2*** acquire ownership of this business?

- ☐ Before 1980
- ☐ 1980 – 1989
- ☐ 1990 – 1999
- ☐ 2000 – 2004
- ☐ 2005
- ☐ 2006
- ☐ 2007
- ☐ Don't know

26 In 2007, which of the following best represents ***Owner 2's*** function(s) in this business?
Mark x all that apply.

- ☐ Providing services and/or producing goods
- ☐ Managing day-to-day operations
- ☐ Financial control with the authority to sign loans, leases, and contracts
- ☐ None of the above

27 In 2007, what was the average number of hours per week that ***Owner 2*** spent managing or working in this business?

- ☐ None
- ☐ Less than 20 hours
- ☐ 20 – 39 hours
- ☐ 40 hours
- ☐ 41 – 59 hours
- ☐ 60 hours or more

28 In 2007, did this business provide ***Owner 2's*** primary source of personal income?

- ☐ Yes
- ☐ No

29 Prior to establishing, purchasing, or acquiring this business, had ***Owner 2*** ever owned a business or been self-employed?

- ☐ Yes
- ☐ No

30 Prior to establishing, purchasing, or acquiring this business, what was the highest degree or level of school ***Owner 2*** completed?
Mark x ONE box only *for the highest level completed or degree received.*

- ☐ Less than high school graduate
- ☐ High school graduate - Diploma or GED
- ☐ Technical, trade, or vocational school
- ☐ Some college, but no degree
- ☐ Associate Degree
- ☐ Bachelor's Degree
- ☐ Master's, Doctorate, or Professional Degree

31 What is the sex of ***Owner 2***?

- ☐ Male
- ☐ Female

32 What was the age of ***Owner 2*** as of December 31, 2007?

- ☐ Under 25
- ☐ 25 – 34
- ☐ 35 – 44
- ☐ 45 – 54
- ☐ 55 – 64
- ☐ 65 or over

33 Was ***Owner 2*** born in the United States?

- ☐ Yes
- ☐ No

☞ **NOTE: Please answer BOTH Question 34 about Hispanic origin and Question 35 about race. For this survey, Hispanic origins are not races.**

34 Is ***Owner 2*** Spanish/Hispanic/Latino?

- ☐ No, not of Hispanic, Latino, or Spanish origin
- ☐ Yes, Mexican, Mexican Am., Chicano
- ☐ Yes, Puerto Rican
- ☐ Yes, Cuban
- ☐ Yes, another Hispanic, Latino, or Spanish origin - *Print origin, for example, Argentinean, Colombian, Dominican, Nicaraguan, Salvadoran, Spaniard, and so on.*

35 What is ***Owner 2's*** race?
Mark x one or more races.

- ☐ White
- ☐ Black, African Am., or Negro
- ☐ American Indian or Alaska Native - *Print name of enrolled or principal tribe.*
- ☐ Asian Indian
- ☐ Japanese
- ☐ Chinese
- ☐ Korean
- ☐ Filipino
- ☐ Vietnamese
- ☐ Other Asian - *Print race, for example, Hmong, Laotian, Thai, Pakistani, Cambodian, and so on.*
- ☐ Native Hawaiian
- ☐ Guamanian or Chamorro
- ☐ Samoan
- ☐ Other Pacific Islander - *Print race, for example, Fijian, Tongan, and so on.*
- ☐ Some other race - *Print race*

36 **A.** Is ***Owner 2*** a veteran of any branch of the U.S. military service including the Coast Guard?

- ☐ Yes
- ☐ No - *Go to* **37**

B. (If Yes) Was ***Owner 2*** disabled as the result of injury incurred or aggravated during active military service?

- ☐ Yes
- ☐ No

37 Were more than **2** owners listed in **9** **D** on Page 2?

- ☐ Yes
- ☐ No - *Go to* **65** *on Page 7*

FORM SBO-1 (01/02/2008)

Owner 3

Please answer the following questions about Owner 3 listed in 9 D on Page 2.

38 How did ***Owner 3*** initially acquire ownership of this business?

- ☐ Founded
- ☐ Inherited
- ☐ Purchased
- ☐ Received transfer of ownership/gift

39 When did ***Owner 3*** acquire ownership of this business?

- ☐ Before 1980
- ☐ 2005
- ☐ 1980 – 1989
- ☐ 2006
- ☐ 1990 – 1999
- ☐ 2007
- ☐ 2000 – 2004
- ☐ Don't know

40 In 2007, which of the following best represents ***Owner 3's*** function(s) in this business?
Mark x all that apply.

- ☐ Providing services and/or producing goods
- ☐ Managing day-to-day operations
- ☐ Financial control with the authority to sign loans, leases, and contracts
- ☐ None of the above

41 In 2007, what was the average number of hours per week that ***Owner 3*** spent managing or working in this business?

- ☐ None
- ☐ 40 hours
- ☐ Less than 20 hours
- ☐ 41 – 59 hours
- ☐ 20 – 39 hours
- ☐ 60 hours or more

42 In 2007, did this business provide ***Owner 3's*** primary source of personal income?

- ☐ Yes
- ☐ No

43 Prior to establishing, purchasing, or acquiring this business, had ***Owner 3*** ever owned a business or been self-employed?

- ☐ Yes
- ☐ No

44 Prior to establishing, purchasing, or acquiring this business, what was the highest degree or level of school ***Owner 3*** completed?
Mark x ONE box only *for the highest level completed or degree received.*

- ☐ Less than high school graduate
- ☐ High school graduate - Diploma or GED
- ☐ Technical, trade, or vocational school
- ☐ Some college, but no degree
- ☐ Associate Degree
- ☐ Bachelor's Degree
- ☐ Master's, Doctorate, or Professional Degree

45 What is the sex of ***Owner 3***?

- ☐ Male
- ☐ Female

46 What was the age of ***Owner 3*** as of December 31, 2007?

- ☐ Under 25
- ☐ 45 – 54
- ☐ 25 – 34
- ☐ 55 – 64
- ☐ 35 – 44
- ☐ 65 or over

47 Was ***Owner 3*** born in the United States?

- ☐ Yes
- ☐ No

☞ **NOTE: Please answer BOTH Question 48 about Hispanic origin and Question 49 about race. For this survey, Hispanic origins are not races.**

48 Is ***Owner 3*** Spanish/Hispanic/Latino?

- ☐ No, not of Hispanic, Latino, or Spanish origin
- ☐ Yes, Mexican, Mexican Am., Chicano
- ☐ Yes, Puerto Rican
- ☐ Yes, Cuban
- ☐ Yes, another Hispanic, Latino, or Spanish origin - *Print origin, for example, Argentinean, Colombian, Dominican, Nicaraguan, Salvadoran, Spaniard, and so on.*

49 What is ***Owner 3's*** race?
Mark x one or more races.

- ☐ White
- ☐ Black, African Am., or Negro
- ☐ American Indian or Alaska Native - *Print name of enrolled or principal tribe.*
- ☐ Asian Indian
- ☐ Japanese
- ☐ Chinese
- ☐ Korean
- ☐ Filipino
- ☐ Vietnamese
- ☐ Other Asian - *Print race, for example, Hmong, Laotian, Thai, Pakistani, Cambodian, and so on.*
- ☐ Native Hawaiian
- ☐ Guamanian or Chamorro
- ☐ Samoan
- ☐ Other Pacific Islander - *Print race, for example, Fijian, Tongan, and so on.*
- ☐ Some other race - *Print race*

50 A. Is ***Owner 3*** a veteran of any branch of the U.S. military service including the Coast Guard?

- ☐ Yes
- ☐ No - *Go to* **51**

B. (If Yes) Was ***Owner 3*** disabled as the result of injury incurred or aggravated during active military service?

- ☐ Yes
- ☐ No

51 Were more than **3** owners listed in **9** **D** on Page 2?

- ☐ Yes
- ☐ No - *Go to* **65** *on Page 7*

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Owner 4

Please answer the following questions about Owner 4 listed in 9 D on Page 2.

52 How did ***Owner 4*** initially acquire ownership of this business?

- ☐ Founded
- ☐ Inherited
- ☐ Purchased
- ☐ Received transfer of ownership/gift

53 When did ***Owner 4*** acquire ownership of this business?

- ☐ Before 1980
- ☐ 1980 – 1989
- ☐ 1990 – 1999
- ☐ 2000 – 2004
- ☐ 2005
- ☐ 2006
- ☐ 2007
- ☐ Don't know

54 In 2007, which of the following best represents ***Owner 4's*** function(s) in this business?
Mark X all that apply.

- ☐ Providing services and/or producing goods
- ☐ Managing day-to-day operations
- ☐ Financial control with the authority to sign loans, leases, and contracts
- ☐ None of the above

55 In 2007, what was the average number of hours per week that ***Owner 4*** spent managing or working in this business?

- ☐ None
- ☐ Less than 20 hours
- ☐ 20 – 39 hours
- ☐ 40 hours
- ☐ 41 – 59 hours
- ☐ 60 hours or more

56 In 2007, did this business provide ***Owner 4's*** primary source of personal income?

- ☐ Yes
- ☐ No

57 Prior to establishing, purchasing, or acquiring this business, had ***Owner 4*** ever owned a business or been self-employed?

- ☐ Yes
- ☐ No

58 Prior to establishing, purchasing, or acquiring this business, what was the highest degree or level of school ***Owner 4*** completed?
Mark X ONE box only *for the highest level completed or degree received.*

- ☐ Less than high school graduate
- ☐ High school graduate - Diploma or GED
- ☐ Technical, trade, or vocational school
- ☐ Some college, but no degree
- ☐ Associate Degree
- ☐ Bachelor's Degree
- ☐ Master's, Doctorate, or Professional Degree

59 What is the sex of ***Owner 4***?

- ☐ Male
- ☐ Female

60 What was the age of ***Owner 4*** as of December 31, 2007?

- ☐ Under 25
- ☐ 25 – 34
- ☐ 35 – 44
- ☐ 45 – 54
- ☐ 55 – 64
- ☐ 65 or over

61 Was ***Owner 4*** born in the United States?

- ☐ Yes
- ☐ No

☞ **NOTE: Please answer BOTH Question 62 about Hispanic origin and Question 63 about race. For this survey, Hispanic origins are not races.**

62 Is ***Owner 4*** Spanish/Hispanic/Latino?

- ☐ No, not of Hispanic, Latino, or Spanish origin
- ☐ Yes, Mexican, Mexican Am., Chicano
- ☐ Yes, Puerto Rican
- ☐ Yes, Cuban
- ☐ Yes, another Hispanic, Latino, or Spanish origin - *Print origin, for example, Argentinean, Colombian, Dominican, Nicaraguan, Salvadoran, Spaniard, and so on.*

63 What is ***Owner 4's*** race?
Mark X one or more races.

- ☐ White
- ☐ Black, African Am., or Negro
- ☐ American Indian or Alaska Native - *Print name of enrolled or principal tribe.*
- ☐ Asian Indian
- ☐ Chinese
- ☐ Filipino
- ☐ Japanese
- ☐ Korean
- ☐ Vietnamese
- ☐ Other Asian - *Print race, for example, Hmong, Laotian, Thai, Pakistani, Cambodian, and so on.*
- ☐ Native Hawaiian
- ☐ Guamanian or Chamorro
- ☐ Samoan
- ☐ Other Pacific Islander - *Print race, for example, Fijian, Tongan, and so on.*
- ☐ Some other race - *Print race*

64 A. Is ***Owner 4*** a veteran of any branch of the U.S. military service including the Coast Guard?

- ☐ Yes
- ☐ No - *Go to* 65 *on Page 7*

B. (If Yes) Was ***Owner 4*** disabled as the result of injury incurred or aggravated during active military service?

- ☐ Yes
- ☐ No

FORM SBO-1 (01/02/2008)

Business

65 In what year was this business originally established?

- ☐ Before 1980
- ☐ 1980 – 1989
- ☐ 1990 – 1999
- ☐ 2000 – 2002
- ☐ 2003
- ☐ 2004
- ☐ 2005
- ☐ 2006
- ☐ 2007
- ☐ Don't know

66 A. For the owner(s) as of December 31, 2007, what was the source(s) of capital used to start or acquire this business?
Mark X all that apply.

- ☐ Personal/family savings of owner(s)
- ☐ Personal/family assets other than savings of owner(s)
- ☐ Personal/family home equity loan
- ☐ Personal/business credit card(s)
- ☐ Business loan from federal, state, or local government
- ☐ Government-guaranteed business loan from a bank or financial institution
- ☐ Business loan from a bank or financial institution
- ☐ Business loan/investment from family/friend(s)
- ☐ Investment by venture capitalist(s) *(An early-stage investment in exchange for ownership equity by an individual, outside group, or business not directly involved in the overall operation and management of the business.)*
- ☐ Grants
- ☐ Other source(s) of capital
- ☐ Don't know
- ☐ None needed – *Go to* **67**

B. For the owner(s) as of December 31, 2007, what was the total amount of capital used to start or acquire this business? *(Capital includes savings, other assets, and borrowed funds of owner(s)).*

- ☐ Less than $5,000
- ☐ $5,000 – $9,999
- ☐ $10,000 – $24,999
- ☐ $25,000 – $49,999
- ☐ $50,000 – $99,999
- ☐ $100,000 – $249,999
- ☐ $250,000 – $999,999
- ☐ $1,000,000 or more
- ☐ Don't know

67 In 2007, did this business operate primarily from somebody's home?

- ☐ Yes
- ☐ No

68 In 2007, did this business operate as a franchise?

- ☐ Yes
- ☐ No

69 In 2007, did a franchiser own more than 50% of this business?

- ☐ Yes
- ☐ No

70 In 2007, were any of the following sources used to finance expansion or capital improvement(s) for this business?
Mark X all that apply.

- ☐ Personal/family savings of owner(s)
- ☐ Personal/family assets other than savings of owner(s)
- ☐ Personal/family home equity loan
- ☐ Personal/business credit card(s)
- ☐ Business loan from federal, state, or local government
- ☐ Government-guaranteed business loan from a bank or financial institution
- ☐ Business loan from a bank or financial institution
- ☐ Business loan/investment from family/friend(s)
- ☐ Investment by venture capitalist(s) *(An early-stage investment in exchange for ownership equity by an individual, outside group, or business not directly involved in the overall operation and management of the business.)*
- ☐ Business profits and/or assets
- ☐ Grants
- ☐ Other source(s) of capital
- ☐ Don't know
- ☐ Did not have access to capital
- ☐ Did not expand or make capital improvement(s)

71 In 2007, which of the following types of customers accounted for 10% or more of this business's total sales of goods and/or services?
Mark X all that apply.

- ☐ Federal government
- ☐ State and local government, including school districts, transportation authorities, etc.
- ☐ Other businesses and/or organizations, including distributors of your product(s)
- ☐ Individuals

72 In 2007, what percent of this business's total sales of goods and/or services consisted of exports outside the United States?

- ☐ None
- ☐ Less than 1%
- ☐ 1% - 4%
- ☐ 5% - 9%
- ☐ 10% - 19%
- ☐ 20% - 49%
- ☐ 50% - 99%
- ☐ 100%
- ☐ Don't know

73 In 2007, did this business establish operations outside the United States?

- ☐ Yes
- ☐ No

74 In 2007, did this business outsource or transfer any business function and/or service to a company outside the United States?

- ☐ Yes
- ☐ No

➔ **Please turn to the next page to continue.**