



THE STATE OF VETERAN Entrepreneurship Research

What We Know and Next Steps

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Introduction

Military service and small business ownership share a distinctive relationship, dating back more than a half century. Veterans remain more likely to own a business than nonveterans (Fairlie, 2012; Sobota & Lichtenstein, 2012; Lichtenstein, 2013; Hipple & Hammond, 2016). Although veteran entrepreneurial activity may vary by age and length of service (Hope, Oh, & Mackin, 2011; Fairlie, 2012), veteran entrepreneurs also tend to out-earn nonveteran entrepreneurs (Haynes, 2014). Meanwhile, high-performing entrepreneurs tend to demonstrate good decision-making in chaotic environments, confidence, independence, and high self-efficacy and achievement (Hipple & Hammond, 2016)—all traits commonly found in service members and veterans (IVMF, 2012).

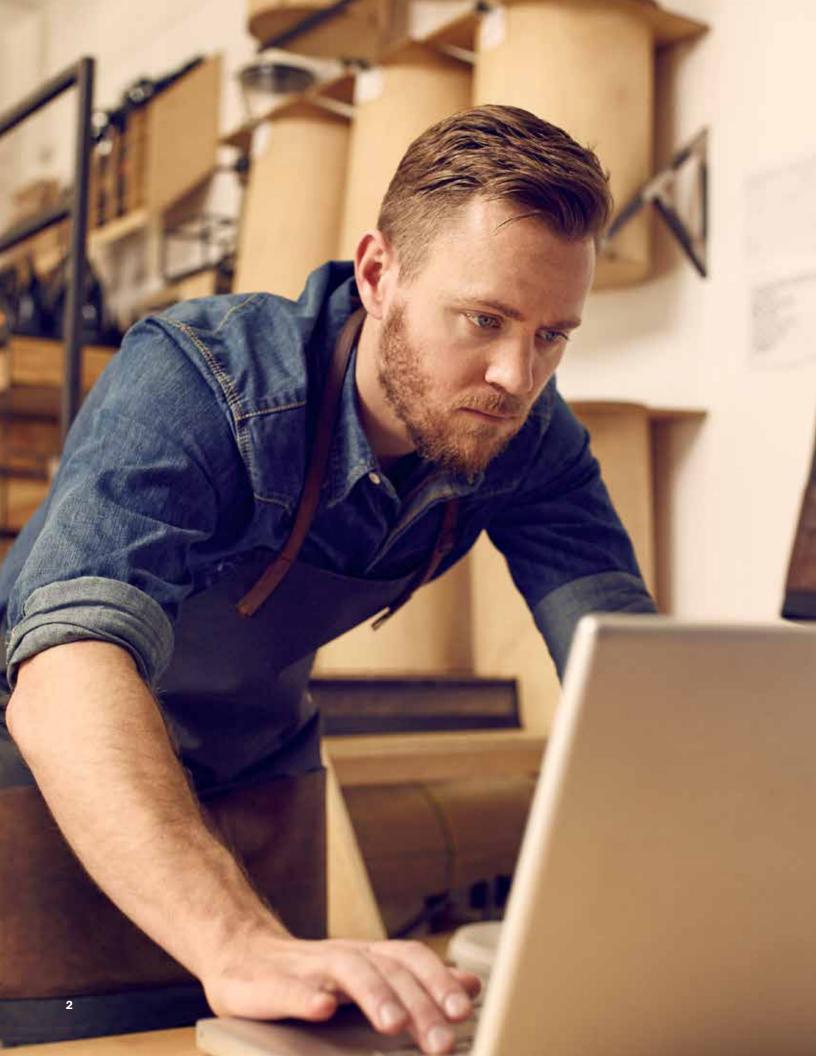
Why do veterans seem more naturally drawn to careers in entrepreneurship? What are the key drivers of veteran entrepreneurship and entrepreneurial success? What are the barriers? How can government and the private sector advance veteran entrepreneurship and entrepreneurial success? Given the nearly 200,000 service members transitioning out of the military each year, these are critical questions for researchers and, more importantly, policy and practice.

Today, there is a strong and growing body of research centered on the social, economic, and wellness impacts of military service (e.g., Wilmoth & London, 2013). Popular topics include military service motivation; post-service careers and earnings; benefits and services (e.g., Post 9/11 G.I. Bill); and the individual and family consequences of deployment, combat exposure, and service connected disability, among others. However, the impact of military service on post-service entrepreneurial activity is a topic yet to receive a similar level of scholarly attention.

Moreover, much of the extant research on veteran entrepreneurship is descriptive. In other words, most of the current work is limited to key statistics on veteran business owners and their changing demographic characteristics over time. Far fewer studies are truly explanatory, that is, research that identifies key drivers of veteran business ownership and answers action-oriented questions on why and how veteran entrepreneurs find their way to business ownership, overcome barriers, learn from failures, and achieve or sustain success.

This paper reviews the current state of research on veteran entrepreneurship, identifies critical gaps, and offers recommendations for future research. The authors reviewed federal datasets and scholarly literature (via Web of Science, Scopus, PubMed, and Google Scholar). This review reveals that a majority of the knowledge on veteran entrepreneurship is concentrated on veteran-specific traits, how these traits equip them to be successful entrepreneurs, and employment assistance programs for veterans with a service-connected disability. The paper is organized into three sections: a background section on national- and veteran-owned business ownership trends, a review of the current academic literature on veteran entrepreneurship, and a final section that identifies key research gaps and next steps, including emerging topics of interest such as women veteran and minority veteran business owners.





A Primer on Veteran Business Ownership

Small businesses make up a significant segment of the U.S. economy. Of the 5.75 million employer firms in the United States, 99.7 percent have fewer than 500 employees and 89.5 percent have fewer than 20 employees (SBA, n.d.; Census, 2013). Small businesses—particularly young firms—also play a key role in economic growth, accounting for at least 80 percent of new net jobs (Gebremariam, Gebremedhin, & Jackson, 2004; Decker, Haltiwanger, Jarmin, & Miranda, 2014; Haltiwanger, Jarmin, Kulick, & Miranda, 2016). Small businesses provide economic stability and resilience, too. For example, small businesses played a conspicuous role in both the response to and economic recovery from Hurricane Katrina in 2005, which led to a Congressional mandate on the utilization of small businesses in federal contracts the following year (Clark & Saade, 2010; Sherman, 2006). Recent data, however, also reveal a downward trend in new small businesses (Decker et al., 2014).

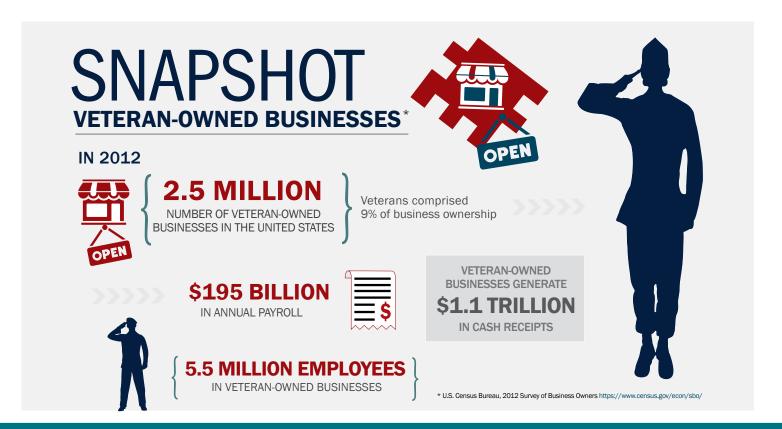
THE ECONOMIC IMPACT OF VETERAN OWNED BUSINESSES

Notwithstanding the sliding overall trends in new business creation, veteran-owned businesses remain a historically important and growing segment of that population (Sobota &

Lichtenstein, 2012; Lichtenstein, 2013). There are currently 2.5 million veteran-owned businesses in America, representing 9.1 percent of all U.S. businesses. Combined, these businesses generate nearly \$1 trillion in cash receipts and employ nearly 6 million Americans. These numbers have risen over recent years despite a decline in the overall number of veterans in the population. See Table 1 for more details on the veteran population as a subset of the total U.S. population.

From 2007 to 2012, total veteran business ownership rose by more than 100,000 firms nationwide, from 2.4 to 2.5 million—or from 8.9 to 9.1 percent of all U.S. businesses. This total figure climbs further to 3.1 million veteran-owned businesses (11.3 percent nationwide) when including half-owners. California (252,377) and Texas (213,590) have the highest number of veteran owned businesses, with Los Angeles County having the highest number of veteran-owned businesses by county. Of the 50 most populous cities in 2012, Virginia Beach had the highest proportion of veteran-owned businesses with 15.2 percent.

In 2012, the 2.5 million veteran-owned businesses employed more than 5 million people and generated \$1.1 trillion in cash receipts, or about 3.4 percent of all business generated receipts for the year. Businesses in which veterans were majority or half-owners numbered 3.1 million, representing 11.3 percent of all businesses nationwide and accounting for more than \$1.4 trillion in receipts in 2012. These 3.1 million businesses employed 6.7 million people.



UNDERSTANDING THE VETERAN POPULATION

To understand the context of veteran entrepreneurship, it is important to know the veteran population. The U.S. Department of Veterans Affairs (VA) estimates a total veteran population of about 22.3 million. The U.S. Bureau of Labor Statistics estimates a slightly lower figure of 21.2 million veterans, or roughly 9 percent of the total U.S. population (DoL, 2016). Of this latter estimate, Post-9/11 veterans comprise 3.5 million individuals—17 percent of all U.S. military veterans, but only 1.5 percent of the total U.S. population. Gulf War Era I veterans (those serving between August 1990-August 2001) represent about 3.4 million individuals—or 16 percent of all veterans. Combined, both Gulf War and Post 9/11-era veterans represent 2.9 percent of the U.S. population. Those among the World War II, Korean War, and Vietnam veteran populations (combined) represent the largest and oldest cohort of 8.9 million individuals, or 42 percent of all U.S.

military veterans (3.7 percent of the U.S. population). Veterans who only served during peacetime periods represent a cohort of about 5.2 million individuals, or 25 percent of all U.S. military veterans.

Of those still serving in uniform, the most recent U.S. Department of Defense (DoD) Defense Manpower Data Center (DMDC) data indicate a population of about 1.3 million service members and about 820,773 service members in the Selected Reserves, which represents the Active Duty personnel. Activated selective reserves represent an additional 1 percent of the total service member population. It is estimated that more than 200,000 service members are transitioning from the military each year and projected that more than 1 million will transition over the next five years (VA, 2007).



Table 1. Veteran Population by Period of Service, CPS 2015

TOTAL POPULATION	ESTIMATED NUMBER	PERCENT
All Americans (18 and over)	241,949,000	
Nonveterans	220,740,000	91.23%
All veterans	21,209,000	8.77%
PERIOD OF SERVICE	ESTIMATED NUMBER	PERCENT
Total Veteran Population	21,209,000	
Gulf War Era II (post-9/11)	3,594,000	16.95%
Gulf War Era I	3,440,000	16.22%
WWII, Korean War or Vietnam era	8,901,000	41.97%
Other Service Period	5,273,000	24.86%

NOTE: Bureau of Labor Statistics, Current Population Survey, 2015 annual averages, population 18 and over, not seasonally adjusted. For this data, veterans who served in more than one wartime period are classified by the most recent wartime period of service only.

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SELF-EMPLOYED VETERANS

KEY HIGHLIGHTS

FROM 2010-2014 A HIGHER PERCENTAGE OF VETERANS (12%) REPORTED BEING SELF-EMPLOYED COMPARED TO NONVETERANS (10%).



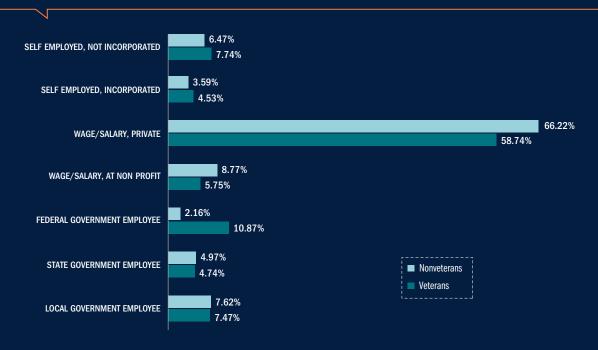
VETERANS ARE MORE LIKELY THAN NONVETERANS TO BE SELF-EMPLOYED.

The figure below presents the class of worker for veteran and nonveteran respondents using the 5 year data set (2010-2014) from the American Community Survey.1 The class of worker is a category that describes the type of ownership of the employing organization. This classification identifies whether the respondent is salaried or self-employed, whether the person works in the private sector or in government, as well as other information. There are two main types of self-employed workers, those that are incorporated and those that are not. Businesses that are not incorporated include people who worked for profit or fees in their own unincorporated business, professional practice, or trade or who operated a farm. Self-employed workers who own incorporated businesses include private wage and salary workers because they are paid employees of their own companies.

The figure below shows that, while most Americans are private sector workers, veterans are more likely to be federal employees (5.032 times) or business owners (1.220 times) than their nonveteran counterparts. Notably, more veterans are self-employed (12.3 percent)—both incorporated and non-incorporated—than nonveterans (10.0 percent).

Veterans are more likely to be self-employed, both incorporated and not incorporated, as well as a federal government employee compared to nonveterans. Overall, veterans are 1.220 times more likely to be self-employed compared to their nonveteran counterparts. When looking at incorporated self-employed workers, veterans were 1.262 times more likely to be incorporated self-employed worker compared to their nonveteran counterparts. When looking at not incorporated self-employed workers, veterans are 1.196 times more likely to be a not incorporated self-employed worker compared to nonveteran counterparts. The largest odds ratio is for federal government employees; veterans are 5.032 times more likely to be a federal government employee than their nonveteran counterparts. Across all government levels (federal, state, and local), veterans are 1.565 times more likely to be a government employee than their nonveteran counterparts.

Class of Worker



¹ The American Community Survey, the class of worker categorizes workers based on their relationship to the business for which they work. The following are self-employed worker definitions: self-employed in own not incorporated business workers; self-employed in own not incorporated business workers includes people who worked for profit or fees in their own unincorporated business; professional practice, or trade or who per a feet of the profit or fees in their own unincorporated business; professional practice, or trade or who per a feet of their own companies. The analysis includes only those that are 18 and over and in the labor force only.

SELF-EMPLOYED VETERANS BY AGE

KEY HIGHLIGHTS

OLDER VETERANS (56+) ARE MORE LIKELY THAN YOUNGER VETERANS (18 TO 55) TO BE SELF-EMPLOYED.

VETERANS 56 AND OLDER ARE TWICE AS LIKELY TO BE SELF-EMPLOYED THAN NONVETERANS OF SIMILAR AGE.

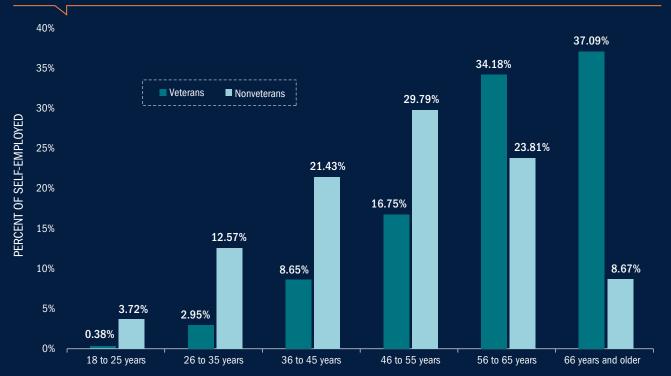
The figure below presents the age distribution of self-employed workers for veteran and nonveteran respondents using the 5- year data set (2010-2014) from the American Community Survey.² Generally, the older the veteran, the more likely they are to be selfemployed; 88 percent of self-employed veterans are older than 46 years of age. For veterans, the largest percentage of self-employed respondents are of those that are 66 years of age or older (37%), followed by self-employed veterans between the ages of 56 to 65 years of age (34%) and self-employed veterans between the ages of 46 to 55 years of age (17%).

This trend is slightly different for nonveteran counterparts. For nonveterans, the largest percentage of self-employed respondents are of those between 46 to 55 years of age (30%), followed by selfemployed nonveterans between the ages of 56 to 65 years of age (24%) and self-employed nonveterans between the ages of 36 to 45 years of age (21%).

Sixty-eight percent of self-employed nonveterans are between the ages of 18 to 55 years of age. This percentage is lower for selfemployed veterans, where only 29 percent are between the ages of 18 to 55 years of age. Veterans between the ages of 18-55 years of age are 0.426 times less likely to be self-employed compared to nonveteran counterparts. For veterans,

71 percent of self-employed veterans are older than 56 years of age. This percentage is lower for self-employed nonveterans, where only 32 percent are older than 56 years of age. Veterans who are over the age of 56 years of age are 2.194 times more likely to be selfemployed compared to nonveteran counterparts.

Self-Employment by Age



² The American Community Survey, the class of worker categorizes workers based on their relationship to the business for which they work. The following are self-employed worker definitions: 6self-employed in own not incorporated business workers; self-employed in own not incorporated business workers includes people y ETERA (or ENT REPRENEURS) the business; professional practice, or trade or who operated a farm; and self-employed in own incorporated business workers. This final category is included with private wage and salary workers because they are paid employees of their own companies. For this analysis both those that are incorporated and not incorporated were combined for self-employment. The analysis includes only those that are 18 and over and in the labor force only.

Veterans and Entrepreneurship

The literature shows many factors that shape veteran entrepreneurship, including characteristics, skills, finances, and programs and services to support entrepreneurial activity. This section presents a broad overview of some of the more recent literature and discussions on veterans and entrepreneurship.

FACTORS THAT INFLUENCE VETERAN ENTREPRENEURSHIP

Individual Characteristics

Successful entrepreneurship is often associated with distinguishable characteristics, such as tendency to engage in risks, creativity, and leadership (Koh, 1996; Barron, 2007; Gupta et al., 2003; Ward, 2004). Thompson, Alvy, and Lees (2000) describe these characteristics as being necessary to successful entrepreneurship because they pair well with being a visionary, being capable of operationalizing an idea, and being willing to partake in risks often associated with building from an idea to a sustainable business. Several researchers found that veterans possess many of these characteristics. For example, in an analysis of Israeli service members, Avrahami and Lerner (2003) found a relationship between serving in combat and risk-taking propensity, showing that within the sample, service members who served in combat and were likely to partake in risks were more likely to be entrepreneurs.

Henry, Hill, and Leitch (2005) and Zimmerer and Scarborough (1998) assert that entrepreneurship is a discipline that can be learned. Thus, it could be possible that some of the skills learned in the military may instill an interest in entrepreneurship. Furthermore, Waldman Associates and REDA International (2004) found that military service equips individuals with the tools to be effective leaders, thus, helping them learn how to establish and effectively communicate their vision (Richard, 2016). Military service can also help service members learn how to devise a plan or vision that will have employee buy-in (Richard, 2016). Richard (2016) also asserts that the military helps veterans value teams. Valuing a team encompasses more than the importance of teamwork, it includes investing in those involved in your entrepreneurial pursuits, which includes encouraging employees to build on their strengths and helping them improve their weaknesses (Richard, 2016). Military service also helps veterans understand the value of financial planning. For example, before deploying, service members are encouraged to address legal matters, such as power of attorney, and ensuring finances are in order for their family, including understanding personal finances before deploying (Military OneSource, 2012).

External Factors that Might Impact Veteran Entrepreneurship Despite the assumed relationship between military service and entrepreneurship, Hope, Oh, and Mackin (2011) assert that for



younger veterans, their individual characteristics might shape their entrepreneurial ventures more than their military training. Therefore, veterans who pursue self-employment might already have personal traits that encourage their entrepreneurial endeavors. Conversely, an analysis by the Small Business Administration conducted in the early 2000s determined that entrepreneurial pursuits are influenced by more than personal characteristics (Small Business Administration [SBA], 2004). The SBA paper suggested that the ability to obtain funding and the availability of public or private sector small business programs significantly shape a veteran's entrepreneurial endeavors.

Access to Capital

One of the biggest challenges to starting or sustaining a business is access to capital. This challenge is not unique to veterans. However, there are several resources available to veterans, including loans (Small Business Administration [SBA], 2004). In addition to government entities supporting veteranowned businesses, many corporations support veteranowned businesses. For example, recently, JPMorgan Chase announced plans to increase funds available to women, minorities, and veterans who own businesses and who might not qualify for many business loans (3BL Media, 2016). JPMorgan Chase is committing more funds to these groups, which includes veterans because the corporation recognizes the growth of these groups and contribution these businesses make to the economy and communities (3BL Media, 2016), thus further supporting the findings regarding the impact of veteran-owned businesses.

Military Skills

In a study of U.S. veterans who served in World War II (WWII), Korean War, and Vietnam War, Masters and Gibbs (1989) found that there was no difference between the risk-taking propensity of veterans by era. In more recent studies on mental health and veterans, scholars found that veterans exposed to combat during their service are more likely to engage in risk-taking behaviors after returning home (Kelley, Athy, Cho, Erickson, King, & Cruz, 2012). Overall, entrepreneurs are typically risk-takers, and that same propensity to accept risks is necessary for entrepreneurship (Brockhaus, 1987). Consequently, veterans might have a higher inclination to engage in risks, including those associated with entrepreneurship.

Moreover, studies found a relationship between sensation seeking and entrepreneurship. Given the importance of sensation seeking to entrepreneurship, some authors even studied if there is a genetic relationship between sensation-seeking and entrepreneurship (Nicolaou, Shane, Cherkas, & Spector, 2008). Given that entrepreneurship can be associated with many risks, sensation seeking in veterans is worth further exploration.

Veteran Entrepreneurs and Social Networks

Researchers who study entrepreneurship have determined that entrepreneurs make business decisions based on their social relationships (Hansen, 1995; Birley, 1985). Becoming an entrepreneur requires more than just an idea; people need to be able to access capital and information. Cooper, Folta, and Woo (1995), Hansen (2001), and Greve and Salaff (2003) found that entrepreneurs often acquire capital, information, and other necessary resources, including skills from their networks. Thus, social capital is an integral part of successful entrepreneurship (Greve & Salaff, 2003; Burt, 1992). Putnam (1995) asserts that social capital in the United States has dropped. However, veterans as a whole have unique access to social capital and networks, including VA resources, thus distinguishing veteran entrepreneurs.



PROGRAMS AND SERVICES FOR VETERAN ENTREPRENEURS

In 2003, the Veterans Benefits Act was passed and enacted into law (Civic Impulse, 2016). The purpose of this law is to improve benefits, including employment assistance services, that are provided to veterans with service-connected disabilities (Library of Congress, 2003). While analyzing the Service-Disabled Veteran-Owned Small Businesses (SDVOSB) program, Sherman (2006) found that while the Veterans Benefits Act reduced the information gap for some veterans, it might not effectively reach veterans with the greatest need for employment assistance. The indictment of Arthur Wayne Singleton, a construction contractor who misrepresented his company as being a disabled veteran-owned to receive government contracts, accentuates problems with the SDVOSB program and the Veterans First Contracting Program (VFCP), especially in regards to their access by service-connected disabled or other disadvantaged veterans (Couret, 2013; Best, 2013). Despite concerns about the potential for fraud and abuse with government sponsored employment benefits for veterans (Kutz. 2011: Dilger & Lowry. 2014) and whether the programs sufficiently reach veterans with service-connected disabilities, studies show that many of the employment programs now available to veterans with and without service-connected disabilities are making a difference.

Additionally, in 2009 President Barack Obama enacted Executive Order 13518-Veterans Employment Initiative to improve and expand employment opportunities for veterans in the federal government. It is plausible that this increased effort by the federal government might be affecting entrepreneurship among veterans. However, notably, analysis of the impact of the Initiative is missing from academic literature.

Since the mid-2000s, there has been a proliferation of veteran-specific entrepreneurship programs in the United States, including the Entrepreneurship Boot Camp for Veterans (EBV), Boots to Business, and Veteran Entrepreneurship Program (VEP), along with programs and services through the U.S. Department of Veterans Affairs (VA) and SBA's Office of Veterans Business Development (OVBD). Of the programs SBA is affiliated with, more than 200,000 military connected individuals who are or either want to become self-employed have been served (SBA, n.d). These efforts have resulted in key demographics being targeted, such as women veterans. Additionally, SBA found that the federal procurement goal has been reached since 2012.

Access to capital for veteran entrepreneurs has also increased in recent years. Between 2012 and 2015, lending increased 37 percent; in 2014 the SBA implemented SBA Veterans Advantage, which ensures that loans totaling over \$150,000 for veteranowned small businesses (VOSBs) will have a reduced guaranty fee. Additionally, in 2015, President Barack Obama signed into law the Veterans Entrepreneurship Act of 2015 which waives the guarantee fee typically associated with SBA loans for veterans and their spouses (Library of Congress, 2015; SBA, n.d.).

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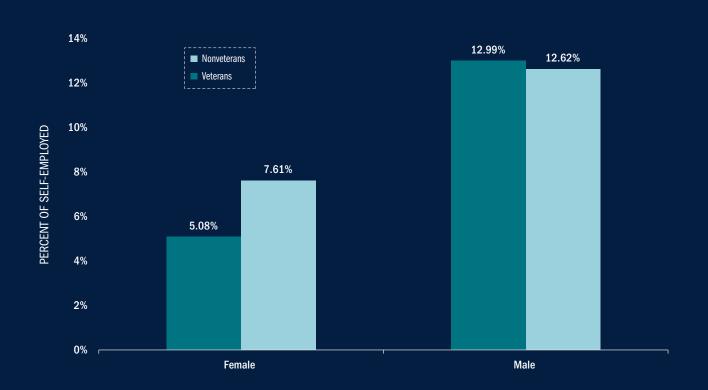
SELF-EMPLOYED VETERANS BY GENDER

KEY HIGHLIGHTS

- MALE VETERANS ARE MORE LIKELY THAN NONVETERAN MALES TO BE SELF-EMPLOYED.
- FEMALE VETERANS ARE LESS LIKELY THAN NONVETERAN FEMALES TO BE SELF-EMPLOYED.

The figure below presents the gender distribution of selfemployed workers for veteran and nonveteran respondents using the 5-year data set (2010-2014) from the American Community Survey.³ Approximately 13.0 percent of male veterans are self-employed which is slightly higher to their nonveteran male counterparts, where 12.6 percent are selfemployed. Male veterans are 1.029 times more likely to be self-employed compared to their nonveteran counterparts. Approximately 5.0 percent of female veterans are self-employed compared to 7.6 percent of female nonveterans. Female veterans are 0.668 times less likely to be self-employed compared to their nonveteran counterparts.

Self-Employment by Gender



³ The American Community Survey, the class of worker categorizes workers based on their relationship to the business for which they work. The following are self-employed worker definitions: self-employed in own not incorporated business workers includes people who worked for profit or fees in their own unincorporated business; professional practice, or trade or who operated a farm; and self-employed in own incorporated business workers. This final category is included with private wage and salary workers because they are paid employees of their own companies. For this analysis both those that are incorporated and not incorporated were combined for self-employment. The analysis includes only those that are 18 and over and in the labor force only.

SELF-EMPLOYED VETERANS BY RACE/ETHNICITY

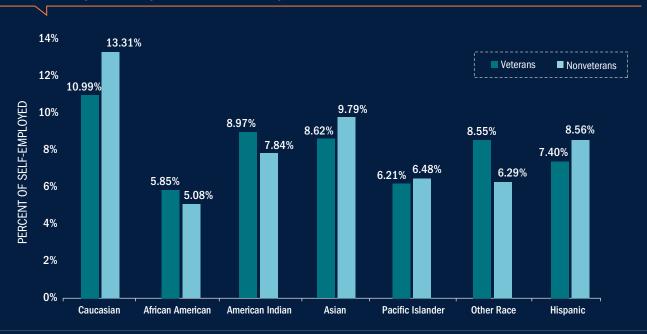
KEY HIGHLIGHTS

- **○** CAUCASIAN NONVETERANS HAVE THE HIGHEST PERCENTAGE OF SELF-EMPLOYED RESPONDENTS (13%)
- AFRICAN AMERICAN NONVETERANS HAVE THE LOWEST PERCENTAGE OF SELF-EMPLOYED RESPONDENTS (5%)
- CAUCASIAN VETERANS ARE LESS LIKELY THAN CAUCASIAN NONVETERANS TO BE SELF-EMPLOYED.
- AFRICAN AMERICAN VETERANS ARE MORE LIKELY THAN
 AFRICAN AMERICAN NONVETERANS TO BE SELF-EMPLOYED.
- HISPANIC VETERANS ARE LESS LIKELY THAN HISPANIC NONVETERANS TO BE SELF-EMPLOYED.
- ASIAN VETERANS ARE LESS LIKELY THAN ASIAN NONVETERANS TO BE SELF-EMPLOYED.
- PACIFIC ISLANDER VETERANS ARE LESS LIKELY THAN PACIFIC ISLANDER NONVETERANS TO BE SELF-EMPLOYED.
- AMERICAN INDIAN VETERANS ARE MORE LIKELY THAN
 AMERICAN INDIAN NONVETERANS TO BE SELF-EMPLOYED.

The figure below presents the race/ethnicity distribution of selfemployed workers for veteran and nonveteran respondents using the 5-year data set (2010-2014) from the American Community Survey.⁴ Approximately 11 percent of veterans who are Caucasian are self-employed. This is lower than their nonveteran counterparts of which 13.3 percent are self-employed. Caucasian veterans are 0.826 times less likely to be self-employed compare to nonveteran counterparts. Approximately 5.85 percent of African American veterans are self-employed. This is slightly higher than their nonveteran counterparts where 5.1 percent are self-employed. African American veterans are 1.152 times more likely to be selfemployed compare to nonveteran counterparts. Approximately 9.0 percent of American Indian veterans are self-employed. This is slightly higher than their nonveteran counterparts of which 7.84 percent are self-employed. American Indian veterans are 1.441 times more likely to be self-employed compare to nonveteran

counterparts. Approximately 8.62 percent of Asian veterans are self-employed. This is slightly lower than their nonveteran counterparts of which 9.8 percent are self-employed. Asian veterans are 0.881 times less likely to be self-employed compare to nonveteran counterparts. Approximately 6.2 percent of Pacific Islander veterans are self-employed. This is slightly lower than their nonveteran counterparts of which 6.5 percent are self-employed. Pacific Islander veterans are 0.958 times less likely to be selfemployed compare to nonveteran counterparts. Approximately 8.6 percent of veterans who identify with an unlisted race are self-employed. This is higher than their nonveteran counterparts of which 6.3 percent are self-employed. Approximately 7.4 percent of Hispanic veterans are self-employed. This is slightly lower than their nonveteran counterparts of which 8.6 percent are self-employed. Hispanic veterans are 0.865 times less likely to be self-employed compare to nonveteran counterparts.

Self-Employment by Race/Ethnicity



⁴ The American Community Survey, the class of worker categorizes workers based on their relationship to the business for which they work. The following are self-employed worker definitions: self-employed in own not incorporated business workers includes people who worked for profit or fees in their own unincorporated business; professional practice, or trade or who operated a farm; and self-employed in own incorporated business workers. This final category is included with private wage and salary workers because they are paid employees of their own companies. For this analysis both those that are incorporated and not incorporated were combined for self-employment. The analysis includes only those that are 18 and over and in the labor force only.



Next Steps

This literature review highlights several gaps in the scholarly literature on veteran entrepreneurship. For example, prior searches on veterans and unemployment indicate that some veterans are more likely to pursue entrepreneurship because of limited employment options or other motivations (Solomon, 2012; Jennings, 2014). However, there is a lack of dedicated research on these areas, thus, presenting significant gaps and opportunities for future veteran entrepreneurship research.

Key Gaps and Next Steps for Stakeholders

The following list includes some of the key gaps in veteran entrepreneurship literature and suggested next steps that are discussed in detail in this section:

>> Entrepreneurship Among Women Veterans

 As more women veterans engage in entrepreneurial activity, research is needed on their motivations, needs, and challenges.

>> Entrepreneurship Among Racial Minority Veterans

 Minorities, especially African Americans and Latinos are becoming self-employed at higher rates. But there is still a relatively large gap between entrepreneurial activity and business ownership. More research is needed on their challenges, successes, and motivations.

Entrepreneurship Among Service-Disabled Veterans

 There are many efforts to support entrepreneurship among service-disabled veterans. Yet, there are also concerns of fraud and abuse and self-employed veterans are selfemployed at a significantly lower rate. More research is needed on effectiveness of current resources and additional resources needed.

>>> Programs and Initiatives for Veteran Entrepreneurs

 Further research is needed on impact of programs and initiatives, including employment initiatives, on veteran entrepreneurship.

>> Other Influential Factors

- More research is needed on how period of service and length of service influences the likelihood to become self-employed.
- Research is also needed on socioeconomic factors that might influence a veteran's decision to become an entrepreneur.

>> Further Data and Study Needs on Veteran Entrepreneurship

 Qualitative studies on motivations are needed along with more quantitative studies that use veteran-specific data.

ENTREPRENEURSHIP AMONG WOMEN VETERANS

Demographic analyses show an increase in women veterans entering entrepreneurship (Sobota & Lichtenstein, 2012; Lichtenstein, 2013). Estimates from the Census Bureau Survey of Business Owners show that in a five-year period (2007-2012), the total number of businesses owned by women veterans increased from 130,000 to more than 350,000 businesses (SBO, 2007; SBO, 2012; Weisul, 2016a; 2016b). Furthermore, despite a decrease in the total percentage of male veteran business

owners, there was a marginal increase in total veteran-owned businesses in the United States, (SBO, 2007; SBO, 2012; Weisul, 2016a; 2016b), further supporting the demographic findings that the number of women veterans pursuing entrepreneurship is increasing.

Moreover, analyses of Census and Survey of Business Owners data indicate that women veterans are changing the landscape of veteran entrepreneurship, and arguably superseding the percentage of male veterans who are now pursuing entrepreneurship. However, academic research has yet to thoroughly study women veteran entrepreneurs, especially as it relates to their motivations, challenges, and needs. Additionally, past studies have found that women business owners are more likely to experience forms of discrimination (Riding & Swift, 1990; Orhan, 2001; Brush, 1992), particularly around financing their business. Given these various findings, more research is needed on why women are starting businesses at this increased rate.

ENTREPRENEURSHIP AMONG RACIAL MINORITY VETERANS

In recent years, there has been an increase in racial minority veteran entrepreneurs. Though studies on racial and gender minorities are increasing, there is an apparent gap in veteran entrepreneurship research and minority groups (Sobota & Lichenstein, 2012; SBO, 2012, Fairlie, 2012; Census, 2013). Sobota and Lichtenstein (2012) and Lichtenstein (2013) found that the percentage of racial minority veterans owning businesses has increased since 2008, especially among Hispanic veterans. Using data from the Kauffman Foundation, Quittner (2016) found that the percentage of new business owners who are either African American, Asian, or Latino has increased from 23 percent in 1996 to 40 percent in 2015. A similar study that monitors entrepreneurship on a global level further supports Quittner. Kelly et al. (2015) found that African Americans (14%) and Hispanics (9%) made up 23.0 percent of all entrepreneurs in the United States. However, a deeper analysis of business ownership activity showed that there is a relatively large gap between entrepreneurial activity and business ownership activity for African Americans and Latinos. The gap was smaller for whites and Asians (Kelley et al., 2015).

These trends, though important to understanding overall entrepreneurship in the U.S., are mostly on the entire civilian population, rather than entrepreneurship among veteran entrepreneurs. Thus, further research on entrepreneurship for veterans should include veterans who are part of a racial minority group. This research is critical, especially given Weisul's (2016) findings that the increase in veteran entrepreneurship among women veterans is being led by racial minorities.

ENTREPRENEURSHIP AMONG SERVICE-DISABLED VETERANS

Haynie and Shepherd (2011) highlight that conventional employment opportunities are not always realistic for service-disabled veterans. However, there is limited research on this area. Given that servicedisabled veterans are self-employed at a significantly lower rate, further research is needed on entrepreneurship among servicedisabled veterans. Data from 2007 show that only 8.3 percent of veteran businesses are started by a veteran with a service-connected disability. Given the opportunities that entrepreneurship can allot an individual, it would be beneficial to investigate what attracts or deters veterans with a service-connected disability to entrepreneurship. This investigation should also examine what, if any, additional resources veterans with a service-connected disability need to start a business. Veterans who have a service-connected disability may find selfemployment a more attractive option than traditional employment because of the flexibility and accommodating work environment, but currently there is not research to support such speculation.

PROGRAMS AND INITIATIVES FOR VETERAN ENTREPRENEURS

The trend analyses presented in this paper show that self-employment declined among veterans from 2005 to 2014. From 2010 to 2014, there was no growth in entrepreneurial activities for veterans. Higher self-employment percentages are exhibited for veterans before 2007 compared to after 2007. More research is needed to explain the decline in veteran entrepreneurship that is shown through the self-employment time period spotlight. Given that the recession is included in the trend analysis, research is needed that examines what, if any, impact the recession has had on veteran entrepreneurship. Additionally, given the concern about veteran employment rates (Loughran, 2014), many initiatives have been implemented to get veterans employed. Research on veteran entrepreneurship should explore if these competing veteran employment initiatives are counteracting the veteran self-employment trend. Research on veteran employment initiatives could also help veteran entrepreneurship programs better understand if they are missing an opportunity to help veterans interested in self-employment.

Researchers assert that the entrepreneurial programs currently available to veterans with a service-connected disability are often unknown to veterans (Frochen, 2015). Market research could help stakeholders address how to expand their exposure to veterans most in need of assistance and would help re-evaluate funding opportunities and policies supporting SDVOSB firms and start-ups. These studies highlight that there is a gap in veteran entrepreneurship research that investigates whether the available services, programs, and trainings are adequately serving veterans in financial need, particularly after the veteran has officially launched his or her start-up.

OTHER INFLUENTIAL FACTORS

Analysis of federal datasets (i.e., Current Population Survey (CPS),

SBO, and DMDC) show that military service has a strong association with entrepreneurship. Veterans are at least 45 percent more likely than those with no active-duty military experience to be selfemployed (Hope et al., 2011). The research also found a negative association between time in service and entrepreneurship, except among veterans with twenty or more years of service (career veterans); career veterans are more likely to own a business (Fairlie, 2012; Hope et al., 2011). Research is needed to further examine what factors contribute to the positive association between entrepreneurship and longer careers in the military. The analysis of federal data also shows that older veterans are more likely to own a business than younger veterans (Hope et al., 2011). However, the circumstances that have led to the higher likelihood of entrepreneurship among older veterans is unclear. Research is needed on longevity of veteran-owned businesses and whether longer military service better positions veterans financially for their own business (Hope et al., 2011; Fairlie, 2012).

Research is also needed on socioeconomic factors that might contribute to a veteran pursuing entrepreneurship, such as family history of entrepreneurship, impoverishment, homelessness, and difficulty maintaining employment in a conventional work setting. Federal analysis indicates that younger veterans, including some millennials are interested in entrepreneurship but are pursuing entrepreneurship activity at lower rates (Hope et al., 2011). Several sites, including Forbes, report that there is a surge in younger peoples' interest in entrepreneurship (Asghar, 2014). Thus, it is a cause for concern that the perceived interest translates into so little entrepreneurial activity. More studies are needed on barriers to entrepreneurship and motivations, including desire for quick success in the workforce (Ng, Schweitzer, & Lyons, 2010).

FURTHER DATA AND STUDY NEEDS ON VETERAN ENTREPRENEURSHIP

Though a majority of the data available for analysis is quantitative, the gaps in the literature highlight the need for qualitative studies that explore the nuances of veteran entrepreneurship, particularly for disadvantaged veterans. More quantitative studies that examine trends in the veteran population are also needed. There are some multi-method studies on veteran entrepreneurship; these mostly focus on overall trends and veterans' individual experiences (Kerrick, Cumberland, Church-Nally, & Kemelgor, 2014). The Current Population Survey and the Survey of Business Owners are examples of research approaches that attempt to gather data from the population. However, due to potential sampling and response biases, some veteran business owners might be excluded from the studies. For example, though Haynes' study on the income and net worth of veteran entrepreneurs addresses an important gap, the data used did not have a large sample of veterans, which is concerning. Additionally, as more studies are conducted on veteran entrepreneurship, veteran-specific databases will be beneficial to replicate studies to confirm the validity of findings on veteran entrepreneurship.

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KEY HIGHLIGHTS

FROM 2005 TO 2014 VETERANS REPORTED HIGHER PERCENTAGES OF SELF-EMPLOYMENT COMPARED TO NONVETERANS.

✓ VETERAN SELF-EMPLOYMENT HAS DECLINED SINCE 2005.

The figure below presents the distribution of self-employed workers for veteran and nonveteran respondents for the 2005 to 2014 time period using the American Community Survey.⁵ In 2005, approximately 15.0 percent of veterans were self-employed. This is higher than their nonveteran counterparts where 11.0 percent were self-employed. In 2014, approximately 12.1 percent of veterans were self-employed. This is higher than their nonveteran counterparts where 10.0 percent were self-employed. Overall, self-employment has declined for veterans from 2005 to 2014. Beginning in 2010 and through 2014, self-employment remained flat for veterans. Higher self-employment percentages are exhibited for veterans before 2007 compared to after 2007.

Self-Employment by Year (2005 to 2014)



⁵ The American Community Survey, the class of worker categorizes workers based on their relationship to the business for which they work. The following are self-employed worker definitions: self-employed in own not incorporated business workers; self-employed in own not incorporated business workers includes people who worked for profit or fees in their own unincorporated business; professional practice, or trade or who operated a farm; and self-employed in own incorporated business workers. This final category is included with private wage and salary workers because they are paid employees of their own companies. For this analysis both those that are incorporated and not incorporated were combined for self-employment. The analysis 15 includes only those that are 18 and over and in the labor force only.



Conclusion

The review of the literature and available data indicates that not only are military veterans entrepreneurial, but that veterans possess many skills found to be present in successful entrepreneurs, including capacity to thrive in a dynamic environment, ability to be a leader and a team player, desire to achieve, and willingness to engage in risks. Currently, veteranowned businesses outnumber nonveteran-owned businesses. However, the analysis of self-employment from 2005 to 2014 highlights the importance of continued studies on veteran entrepreneurship, especially since there was a decline during the same time period. Despite this decline, analysis of selfemployment among veterans show that the percentage of women and minorities pursuing entrepreneurship is rising. As shown in the gaps and next steps section, the increased interest among women and racial minorities to pursue entrepreneurship should be studied.

Furthermore, despite the gaps in veteran entrepreneurship research, the current literature solidifies that there is an association between military service and entrepreneurial activity. The businesses created by veterans have a strong impact and are worth studying further. Though connections can be made about characteristics veterans have that are also present in

entrepreneurs, the reasons veterans enter entrepreneurship are unclear. Understanding veterans' motivations for entering entrepreneurship are especially important given the decline in veteran entrepreneurship from 2005 to 2014 and the increase in women and racial minorities becoming self-employed.

Additionally, throughout the review, it was rather noticeable that the data available on veteran entrepreneurs is mostly quantitative, illuminating the need for more qualitative research and data sources that have a higher percentage of veterans. More information is needed on veterans and entrepreneurship, including challenges and as noted in the previous paragraph, more information is needed on motivations. To effectively capture these challenges and motivations, qualitative interviews are necessary to increase understanding on needs of veterans with a service-connected disability who are business owners.

In closing, based on the literature review and data analyses, it is not hard to hypothesize why veterans might pursue self-employment. Entrepreneurship might offer forms of financial security and allow veterans to apply some of their skills and traits, (e.g., leadership and creativity). Thus, next steps should include understanding how programs and interventions can be designed to further veteran entrepreneurship in the future, especially as it relates to younger veterans.



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