





## Highlights

- During the eighteen years observed (1988-2005), there has been a steady increase in the percentage of veterans not employed, which is potentially due to an overall aging of the veterans population.
- Self-employment rates are lower for service-disabled veterans than for non-service-disabled veterans in all years and in both disability definitions used for this study.
- The study's models predict that the employment rate of service-disabled veterans would be over ten percentage points higher if service-connected disabilities did not interfere with employment. This would represent a 25 to 28 percent increase in their employment rate.
- These models further predict that the self-employment rate of service-disabled veterans would increase by about three percentage points if their disabilities were not a barrier. This would represent a 60 to 90 percent increase in their self-employment rate, depending on the model.
- The study's analysis predicts that, if all service-disabled veterans were computer owners, their employment rate would increase by over five percentage points, representing about an 11 percent increase in that rate.
- The study's models also predict that the self-employment rate of service-disabled veterans would increase by slightly more than one percentage point if all such veterans were computer owners, representing about a 23 percent increase in the self-employment rate.

## Scope and methodology

Data for this study were drawn from three sections of the Current Population Survey (CPS) conducted by the U.S. Census Bureau for the Department of Labor's Bureau of Labor Statistics between 1985 and 2005. These included the CPS's annual March demographic supplements, its biennial Veterans Supplements, and its Computer and Internet Use Supplement from 2001. Datasets were created for each survey month in which data was drawn. SAS programs developed by the National Bureau of Economic Research were used to assemble the raw CPS data. In order to fill gaps in the available SAS extraction programs and to account for year-to-year

differences in the structure of the datasets, the authors developed their own data extraction program for the March 1995 data and for survey years prior to 1988.

Tabulations and summary statistics are presented that identify the effects of particular factors, such as demographic variables (including age, gender, and race/ethnicity) and service-connected disability, on the propensity for veterans to become self-employed. The results are presented by implementing a bivariate probit model of veteran self-employment, in which the veteran makes a two-stage choice between employment and not working, and then between self-employment and other employment if employment is chosen in the first stage. The model provides formal hypothesis tests for the statistical significance of the factors tabulated. The research conducts simulations and provides estimates of the practical significance of the effects of service-connected disabilities on the self-employment outcomes of veterans.

This report was peer-reviewed consistent with Advocacy's data quality guidelines. More information on this process can be obtained by contacting the Director of Economic Research at [advocacy@sba.gov](mailto:advocacy@sba.gov) or (202) 205-6533.

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# Section 1: Summary

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## Introduction

The first Strategic Goal of the Department of Veterans Affairs (VA) is to "Restore the capability of veterans with disabilities to the greatest extent possible and improve the quality of their lives and that of their families."<sup>1</sup> With this goal in mind, in 2004 the VA gave a special task force the job of performing a complete review of the Department's Vocational Rehabilitation and Education (VRE) program. The VA Vocational and Rehabilitation Task Force recommended that the VRE program develop a five-track system for providing service-disabled veterans with rehabilitation services.<sup>2</sup> This system would include one track devoted to self-employment options for entrepreneurial service-disabled veterans.

Data collected in the Census Bureau's 2002 Survey of Business Owners and Self-Employed Individuals (SBO), part of its Economic Census conducted every five years, indicate that 7.2 percent of non-employer veteran business owners are service-disabled.<sup>3</sup> VA reported that in the same year 9.4 percent of all veterans were receiving compensation due to a service-connected disability.<sup>4</sup> The VA's 2001 National Survey of Veterans reported that 13.8 percent of veterans identified themselves as having a service-related disability (though not necessarily receiving compensation).<sup>5</sup> So, using "non-employers" as a proxy for self-employed individuals, we can say that service-disabled veterans choose self-employment at a rate approximately one-quarter to one-half lower than their percentage in the veteran population in general would otherwise suggest.

The factors that influence lower rates of self-employment among the service-disabled veteran population are not well understood, in part because service-disabled veterans are seldom identified as a distinct group when studies of veteran entrepreneurship are performed. This study uses the Bureau of Labor Statistics' Current Population Survey (CPS) to examine cross-sectional statistics regarding the self-employment choices of veterans and service-disabled veterans in the United States.<sup>6</sup> Data are drawn from the CPS's annual March demographic supplements, its biennial Veterans Supplements, and its Computer and Internet Use Supplement from 2001.

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<sup>1</sup> Department of Veterans Affairs, "Department of Veterans Affairs Strategic Plan 2003-2008", which can be accessed at <http://www.va.gov/Partners/stratcap/>.

<sup>2</sup> VA Vocational Rehabilitation and Employment Task Force, "Report to the Secretary of Veterans Affairs, The Vocational Rehabilitation and Employment Program for the 21st Century Veteran," 2004, p. 61. This report can be accessed at [http://www1.va.gov/op3/docs/VRE\\_Report.pdf](http://www1.va.gov/op3/docs/VRE_Report.pdf).

<sup>3</sup> U.S. Census Bureau, "2002 Survey of Business Owners and Self-Employed Individuals, Characteristics of Business Owners (CBO)," p. 25, Table 4. This table depicts the veterans status of respondent business owners, including breakouts of both employer and non-employer business owners. Census reports that 156,229 veteran, non-employer business owners were service-disabled, or approximately 7.2 percent of the total 2,161,506 veteran, non-employer business owner respondents. The CBO can be accessed at <http://www.census.gov/csd/sbo/>.

<sup>4</sup> Data provided by the Department of Veterans Affairs and reported in the *Statistical Abstract of the United States, 2003* indicate that in 2002 there were 25.618 million veterans (p. 351, Table 530) and that 2.398 million, or 9.4 percent, of these veterans were receiving compensation for service-connected disabilities (p. 352, Table 531). These tables and related information can be accessed at <http://www.census.gov/prod/2004pubs/03statab/defense.pdf>.

<sup>5</sup> Department of Veterans Affairs, "National Survey of Veterans – Final Report", pp. 4-11 & 4-12. This report can be accessed at [http://www1.va.gov/vetdata/docs/survey\\_final.htm](http://www1.va.gov/vetdata/docs/survey_final.htm).

<sup>6</sup> The Current Population Survey (CPS) is a monthly survey of households conducted by the U.S. Census Bureau for the Department of Labor's Bureau of Labor Statistics. Additional information on the CPS can be found at <http://www.bls.gov/cps/>.

A deeper understanding of how computer technology interacts with veteran self-employment is required in order to facilitate the development of resources to assist veterans with the successful development of their own businesses. It is especially important that policymakers understand the effect that information-age tools like the Internet have had on the self-employment choices of service-disabled veterans, whose numbers are growing as a result of the wars in Iraq and Afghanistan. Lack of information on these issues, among other factors, caused the General Accountability Office to designate VRE as a "high risk" program.<sup>7</sup>

The goal of this paper is to provide the Administration, the Congress, and other stakeholders with information about veteran entrepreneurship that illustrates the experiences of self-employed veterans in the information-based economy. This will assist with the development of a self-employment training track that reflects current economic conditions. In particular, we address the following questions:

- **Estimates of the Number of Service-Disabled Veteran Entrepreneurs.** Much past SBA research into veteran entrepreneurship has focused on veterans as a group, without distinguishing between those veterans who have a service-connected disability and those who do not. We investigate two methods of using CPS data for identifying veterans with service-connected disabilities and assess the quality of these determinations with reference to other sources, such as VA benefits data.
- **Relationships between demographic characteristics, service-connected disability, and self-employment.** The centerpiece of our analysis is an econometric model that estimates the propensity for veterans to be labor force participants and for labor force participants to be self-employed. Past studies of veteran populations have found that there are significant differences in rates of self-employment based on demographic characteristics, such as self-identified ethnic categories and gender.<sup>8</sup> Local economic conditions might play a part in the decision to become self-employed, as could other demographic characteristics such as the age of the veteran. We estimate the effects of these characteristics on samples of veterans drawn from the CPS Veterans Supplements, the March CPS, and a matched group of veterans found in the CPS for August and September of 2001.
- **Relationships between Computer and Internet Technology and Service-Disabled Veteran Self-Employment and Entrepreneurship.** The use of computer technology offers disabled individuals opportunities for entrepreneurship they might not have chosen in earlier decades. Computer skills could also be one determinate of veterans, especially service-disabled veterans, finding employment. In order to investigate the role of computer technology in veteran self-employment, we match data from the CPS's August 2001 Veterans Supplement to its September 2001 Computer and Internet Use Supplement, producing a richer dataset that allows us to examine the interaction between computer ownership, service-connected disability, labor force participation and self-employment.

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<sup>7</sup> United States General Accounting Office, "VA Vocational Rehabilitation and Employment Program, GAO Comments on Key Task Force Findings and Recommendations." GAO-04-853; June, 2004; p.2. This report can be accessed at <http://www.gao.gov/new.items/d04853.pdf>.

<sup>8</sup> Fairlie, Robert W., "Self-Employed Business Ownership Rates in the United States 1979-2003." December, 2004. This report can be accessed at <http://www.sba.gov/ADVO/research/rs243tot.pdf>, and its accompanying Research Summary at <http://www.sba.gov/ADVO/research/rs243.pdf>.

Following Section 1's summary, the remainder of this report is organized into four additional sections, followed by appendices. Section 2 describes the manner in which we gathered data on veterans from the Current Population Survey. This section includes tabulations and summary statistics that identify the effects of particular factors, such as demographic variables (including age, gender, and race/ethnicity) and service-connected disability, on the propensity for veterans to become self-employed. Section 3 formalizes the results presented in Section 2 by implementing a bivariate probit model of veteran self-employment, in which the veteran makes a two-stage choice between employment and not working, and then between self-employment and other employment if employment is chosen in the first stage. The model used in Section 3 provides formal hypothesis tests for the statistical significance of the factors that were tabulated in Section 2. Section 4 presents simulation results that provide estimates of the practical significance of the effects of service-connected disabilities on the self-employment outcomes of veterans. Section 5 presents results and conclusions that may be derived based on the work presented in earlier sections of the document.

To summarize our results, we find that:

- **Substantially all of the difference between the self-employment rates of service-disabled veterans and those of other veterans results from the service-connected disabilities themselves, and not to differences in demographic or other characteristics.** Veterans with service-connected disabilities are self-employed at lower rates than veterans without such disabilities. Approximately one-half to two-thirds of the difference in self-employment rates is due to service-disabled veterans not working at all. Controlling for the effects of service-connected disabilities results in nearly identical rates of labor-force participation among service-disabled veterans vis-à-vis those without service-connected disabilities.
- **Veterans with service-connected disabilities do not prefer self-employment to working for others.** If anything, service-disabled veterans who are employed choose to work for others at higher rates than non-service-disabled veterans who are employed. This preference accounts for one-third to one-half of the difference in self-employment rates among service-disabled veterans, suggesting that beneficial characteristics ascribed to self-employment, such as flexibility or proximity to home, are differentially less appealing to service-disabled veterans rather than more so.
- **Computer use is correlated with higher employment rates and higher self-employment rates among all veterans.** Computer use benefits the employment rates of all veterans, with additional benefits for those who are service-disabled. Computer use also increases self-employment percentages among all veterans, but there is no additional effect on the choices of service-disabled veterans beyond that observed for all veterans.

These results suggest that the promotion of veteran entrepreneurship among the service-disabled veteran population must address why service-disabled veterans appear to prefer working for someone else to self-employment. Also, the promotion of veteran entrepreneurship, especially among service-disabled veterans, should take into account the importance of the large percentage of service-disabled veterans who are not employed at all. Technological factors appear to be able to address some, but not all, of the gap in entrepreneurship, leading to the hypothesis that successful policies to increase veteran self-employment and entrepreneurship will need to include technology training as one of several components designed to address different facets of this issue.

Finally, this study has shown the benefit to combining data from various portions of the CPS into a single dataset. Specifically, we use data from the August 2001 Veteran Supplement and the September 2001 Computer and Internet Use Supplement to investigate the technological issues discussed above. The possibility of combining these datasets was, in this instance, due more to good fortune than to design. We suggest that a single key question from each of these supplements be added to either the Veterans Supplements or to the March CPS to improve the quality of CPS data for research into veteran entrepreneurship. A complete discussion of this point is included in our Results and Conclusions section.

## Section 2: Data and Tabulations

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### Obtaining Data from Current Population Survey

The Current Population Survey (CPS) has recently been used successfully by SBA-sponsored researchers to address issues of veteran entrepreneurship, including yearly trends in veteran self-employment rates.<sup>9</sup> There are several reasons for the usefulness of the CPS to the study of veteran entrepreneurship and self-employment. The CPS comprises one of the longest-running, consistently administered data gathering efforts in the United States. It has been administered monthly for over five decades, and currently the CPS gathers data on about 57,000 households each month.<sup>10</sup> Furthermore, the CPS gathers information on veteran status as part of its standard set of questions, and additional information on veterans is gathered biennially using a special Veterans Supplement. Finally, the Computer and Internet Use Supplements gather data on computer ownership patterns that are potentially useful in relation to veteran self-employment.

The primary focus of this work extends CPS research already performed for the SBA Office of Advocacy. In "Self-Employed Business Ownership Rates in the United States: 1979-2003,"<sup>11</sup> Dr. Robert Fairlie uses microdata from the CPS to provide a detailed portrait of the self-employed in the United States. In a second, related paper,<sup>12</sup> Dr. Fairlie examines the probability that individuals will make the transition to self-employment conditional on computer ownership in the home. Using CPS data including the Computer and Internet Usage Supplements (CIUS), this study finds that ownership of a computer in the home increases the probability of transition to self-employment over a period of approximately one year by 0.6 percentage points for men and 0.7 percentage points for women.

Data for this study were drawn from three sections of the CPS administered between 1985 and 2005. The variables selected for analysis are presented in Appendix I. Datasets were created for each survey month from which we drew data. SAS programs developed by the National Bureau of Economic Research were used to assemble the raw CPS data. In order to fill gaps in the available SAS extraction programs and to account for year-to-year differences in the structure of the datasets, we developed our own data extraction program for the March 1995 data and for survey years prior to 1988. The CPS is structured so that in each month one-eighth of the sample is new, and one-eighth of the sample is in the last month of the survey, so that eight months of data are gathered for the same group of addresses, with an eight-month gap between the first four survey months and the last four for each household surveyed. This survey structure makes it possible to match two surveys administered to the same household and to identify some of the individuals participating in the matched surveys. This type of matching will be required when we examine computer and Internet use. Appendix I contains a complete list of the variables extracted from the various CPS survey months used in the analysis presented here.

Three definitional issues must be addressed in order to perform the analysis below. These are: (1) who is a service-disabled veteran; (2) what is the population of self-employed

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<sup>9</sup> Fairlie, *Ibid.*

<sup>10</sup> U.S. Bureau of the Census, "Current Population Survey 2006 Annual Social and Economic (ASEC) Supplement," p. 2-1. This report can be accessed at <http://www.census.gov/apssd/techdoc/cps/cpsmar06.pdf>.

<sup>11</sup> Fairlie, *Op. cit.*

<sup>12</sup> Fairlie, Robert W., "Technology and Entrepreneurship: A Cross-Industry Analysis of Access to Computers and Self-Employment." June, 2005. This report can be accessed at <http://www.sba.gov/ADVO/research/rs259tot.pdf>, and its accompanying Research Summary at <http://www.sba.gov/ADVO/research/rs259.pdf>.

people; and (3) what is the definition of self-employment. These definitions are explained in detail before we turn to the descriptive statistical results.

## Identifying Service-Disabled Veterans

The Department of Veterans Affairs (VA) reports that there were approximately 2.398 million service-disabled veterans receiving compensation in 2002, or 9.4 percent of the 25.618 million total veterans in that year.<sup>13</sup> VA's 2001 National Survey of Veterans found that approximately 13.8 percent of veteran respondents identified themselves as having a service-connected disability, nearly half again as many as those actually receiving compensation.<sup>14</sup> While it is not possible to match veterans in the CPS to their benefit records to determine if the data is consistent, the level of service-connected disabilities observed using different definitions of disability may be examined to determine whether the aggregate number of CPS veterans identified as service-disabled is close to the expected population. We examine the correspondence between the expected levels of those with service-connected disabilities to evaluate two methods of identifying service-disabled veterans. The first method uses the results of direct questions asked in the Veterans Supplements, while the second method uses indirect financial measures of potentially service-connected disabilities found in the March CPS.

### Using the Veterans Supplements

The CPS Veterans Supplements were administered in August of 1995, 2001 and 2003, and in September of 1997 and 1999. They contain all of the basic monthly survey questions, together with information on veteran status and service-connected disability. As a result, these data provide a basis for examination of veteran entrepreneurship and the effects of service-connected disability on an ongoing basis for approximately a decade.

As part of the biennial Veterans Supplements, veterans are asked the following question:

*"Has the Department of Veteran Affairs (VA) or the Department of Defense determined that you have a service-connected disability; that is, a health condition or impairment caused or made worse by military service?"*<sup>15</sup>

We use affirmative responses to this question as an indicator of service-connected disability for these datasets.

### **Identifying Service-Disabled Veterans using the March Demographic Supplements**

While the Veteran Supplements provide useful direct information on the presence of service-connected disability, the supplements themselves are limited to only five recent years of data and are spaced two years apart. Other methods that provide a longer and more frequent series of observations might have the potential to improve the quality of conclusions that could be drawn from the CPS.

An alternative to the "direct" questioning of the CPS Veterans Supplements is the use of a proxy measure for service-disabled veteran status based on receipt of veterans disability benefits. The March supplement includes specific financial questions related to the sources of household income that include service-connected disability benefits as one of the potential income sources. The use of March CPS data to create a proxy measure would

<sup>13</sup> As reported in the *Statistical Abstract of the United States, 2003*. See footnote 4.

<sup>14</sup> Department of Veterans Affairs, "National Survey of Veterans – Final Report." See footnote 5.

<sup>15</sup> U.S. Bureau of the Census, "Current Population Survey Veteran Supplement File, August 2001 Technical Documentation," page 9-4. This document can be accessed at <http://www.census.gov/apsd/techdoc/cps/cpsaug01.pdf>.

have several benefits over the use of Veterans Supplement data, including increased frequency of response and better information on the financial situation of the veteran, based on the additional questions included in the March Supplement.

### ***Comparing Direct and Proxy Methods of Identification***

Table 1 below presents estimates of the number of veterans and service-disabled veterans identified in the March CPS and CPS Veterans Supplements. Results are organized by calendar year, with Veterans Supplements from August or September appearing alongside March supplements from the same calendar year.

**Table 1: Percentage of Service-Disabled Veterans In Two CPS Datasets**

March CPS	% Vets Service-Disabled	# Vets Service-Disabled	Total Veterans	CPS Vet Supplements	% Vets Service-Disabled	# Vets Service-Disabled	Total Veterans
Mar-88	5.8%	1,582,223	27,069,969				
Mar-89	4.9%	1,314,248	26,903,700				
Mar-90	5.2%	1,381,038	26,733,204				
Mar-91	5.1%	1,358,243	26,712,424				
Mar-92	5.3%	1,424,456	26,636,680				
Mar-93	5.0%	1,301,243	26,200,254				
Mar-94	5.0%	1,298,372	26,056,534				
Mar-95	5.2%	1,358,607	26,009,748	Aug-95	8.8%	2,276,436	26,008,936
Mar-96	5.2%	1,328,992	25,465,072				
Mar-97	4.8%	1,195,793	25,143,506	Sep-97	9.1%	2,283,095	25,013,908
Mar-98	4.9%	1,233,152	25,133,679				
Mar-99	4.9%	1,196,624	24,336,295	Sep-99	9.1%	2,240,113	24,559,739
Mar-00	5.5%	1,320,568	24,224,204				
Mar-01	5.0%	1,190,195	23,630,666	Aug-01	9.1%	2,117,900	23,304,071
Mar-02	5.5%	1,309,277	23,697,471				
Mar-03	5.5%	1,269,635	23,078,360	Aug-03	9.1%	2,081,474	22,769,539
Mar-04	5.1%	1,151,792	22,750,080				
Mar-05	5.7%	1,277,572	22,525,162				

Table 1 shows that the weighted percentage of veterans reported to be receiving compensation for service-connected disabilities in the March CPS is approximately 5 percent for the eighteen years in which this type of financial data is available. This is not a good match with the 8 to 11 percent range estimated by the VA for this timeframe.<sup>16</sup> In contrast, approximately 9 percent of veterans identified themselves as having a service-connected disability in the CPS Veterans Supplements, which approximates closely the VA estimates for the comparable timeframe of 1995-2003.<sup>17</sup>

It appears from this tabulation that the financial information provided in the March CPS does not identify all veterans receiving benefits due to a service-connected disability, and that the understatement of the number of veterans receiving these occurs in all sample years. This systematic underreporting could be due in part to mistaken identification of veteran's

<sup>16</sup> Data provided by the Department of Veterans Affairs and reported in the *Statistical Abstract of the United States* for the various years in the period 1988 – 2005 show a decreasing total number of veterans in this timeframe, but an increasing number of service-disabled veterans. VA estimated that there were 27.155 million veterans in 1988, a number which gradually decreased to 24.128 million in 2005. In the same period, there were estimated to be 2.199 million veterans receiving compensation for service-connected disabilities in 1988, a number which gradually increased to 2.637 million in 2005. Accordingly, the percentage of compensated service-disabled veterans rose from 8.1 percent in 1988 to 10.9 percent in 2005.

<sup>17</sup> *Ibid.* The share of compensated service-disabled veterans ranged from 8.5 percent in 1995 to 9.9 percent in 2003.

disability benefits as other types of veteran's benefits or as disability benefits not due to a service-connected disability. Regardless of the source of the error, the March CPS income questions consistently misidentify the source of some income attributed to service-disabled veterans.

It is also important to note that the percentage of veterans with a service-connected disability in the CPS Veterans Supplements is nearly equal to the number of veterans with *compensated* disabilities reported by the VA. However, as described above, nearly 14 percent of veterans identified themselves as service-disabled in the VA's 2001 National Survey of Veterans, although many do not necessarily receive compensation as a result of such disabilities.<sup>18</sup> Accordingly, it is not completely clear that either definition of disability presented above is flawless, although the direct questions posed in the CPS Veteran Supplements appear to yield results superior to the proxy method using March CPS data.

In order to test the robustness of the results produced below with respect to disability definitions, we will estimate models using both data sources and compare the conclusions to determine if definitional issues influence the results. Obtaining similar results from both samples would indicate that the results are robust to the choice of definition of service-connected disability. To foreshadow our results, we do not find material differences in our conclusions based on disability definitions.

## Identification of the Sample Population and Self-Employed Individuals

Creation of a self-employment rate requires that the potential population of self-employed individuals be specified and that a definition of self-employment be created. In defining the population of veterans who are potentially self-employed, we use a population definition based on previous CPS studies of self-employment published by the SBA. The population of potentially self-employed individuals is limited to those who identify themselves as veterans. Self-employed individuals may be either incorporated or not incorporated. The next step in the categorization is to determine whether the veteran is either employed or not employed. Employed veterans met the following criteria:

- Worked 15 hours or more in the CPS reference week
- Primary occupation is not an agricultural field (as classified by North American Industry Classification System [NAICS] codes)
- Primary occupation is not as an unpaid family worker

Working veterans are further categorized as working for themselves (self-employed) or working for someone else (other employed). Self-employed veterans are those who report themselves as self-employed on the CPS "class of worker" question.

## Describing Employment and Self-Employment Rates

Studies of self-employment and entrepreneurship often define a self-employment rate as the ratio of self-employed individuals to all individuals who are working. While these self-employment rates are often sufficient for groups with high labor force participation, such as prime-age males without disabilities, the issue of labor force participation itself should be taken into consideration when examining the self-employment outcomes for groups where not working is a more prevalent outcome. When examining the careers of disabled individuals, there is a strong possibility that the individual in question might not be employed

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<sup>18</sup> See footnote 5.

due to a disability. While disability is defined by some programs as a condition that prevents any work at all, the disability determination process for veterans is more subtle, and takes into account the possibility that a particular medical condition caused or aggravated by military service might limit some work choices, but might not prevent all kinds of employment. As a result, service-disabled individuals might be self-employed, working for someone else, or not employed. In order to capture all of these potential states, the work we present below includes information on those veterans, whether service-disabled or not, who are not employed.<sup>19</sup>

The first set of columns in Table 2 below, illustrates self-employment rates computed for those veterans who are likely to be service-disabled, as identified by the CPS March income proxy variable, versus those who are not. The second set of columns presents similar results for veterans found in the CPS Veterans Supplement samples. Several trends in the employment outcomes of veterans can be observed in the March CPS results. First, in the eighteen years observed, there has been a steady increase in the percentage of veterans who are not employed. This is potentially due to an overall aging of the veteran population, as shown in the columns providing the average age. Second, self-employment percentages are lower for service-disabled veterans than for non-service-disabled veterans for all years and all definitions of service-connected disability. Finally, while non-service-disabled veterans have shown a fairly steady decline in their level of employment by others from a high in 1988 of 52.9 percent to a low in 2005 of 41.7 percent, the rate of employment by others of service-disabled veterans has remained near thirty percent for most of the time period examined. Similar employment patterns are evident between the March CPS data and the Veterans Supplements, including potential age effects on employment outcomes.

Computing the average self-employment rate for the March CPS years in which Veteran Supplement data are available yields an average self-employment rate of 3.8 percent for service-disabled veterans and 7.2 percent for non-service-disabled veterans. Both of these figures are lower than the values for the Veterans Supplements, indicating the potential for seasonal effects to result in differences in findings between the samples.<sup>20</sup>

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<sup>19</sup> As noted, studies on self-employment and entrepreneurship often define a self-employment rate as the ratio of self-employed individuals to all individuals who are working (i.e., who are in the labor force). We depart from this "standard" usage in this study for the reasons explained above and instead use three categories of employment status (not employed, self-employed, and employed by others). However, to facilitate the comparison of our findings with other research, we have included in Appendix IV three tables which display in a "standardized" format the percentage shares **within the veteran labor force** for those veterans who are self-employed and those who are employed by others. These three tables correspond with Tables 2, 3, and 4 in the main report.

<sup>20</sup> All of the CPS Veterans Supplements were administered in August and September 2001.



































































