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The Labor Market Effects of the VA's Disability Compensation Program

By Mark Duggan

The U.S. Department of Veterans' Affairs pays benefits to military veterans with medical conditions that were caused by or aggravated during their military service through the federal Disability Compensation (DC) program. Benefits paid are an increasing function of a DC recipient's combined disability rating (CDR), which varies in 10 percentage point increments from 10 percent to 100 percent, with higher values reflecting more severe disability. The minimum monthly benefit in 2014 was \$131 per month for those with a CDR of 10 percent, with this increasing steadily to \$2,858 per month for beneficiaries with a CDR of 100 percent.

From 1950 through 2001, both the number and percentage of military veterans receiving Disability Compensation benefits remained fairly stable. As shown in Figure 1, the percentage of veterans enrolled in the program declined from 10.5 percent in 1950 (the first year of the Korea War era) to 8 percent by 1964 (the start of the Vietnam War era). During the next 35 years, this share fluctuated between 7.5 percent and 9.0 percent, so that by 2001, 2.3 million of the nation's 26.1 million veterans (8.9 percent) were receiving

Disability Compensation benefits. The average monthly DC benefit in 2001 was \$747 (in 2013 dollars) and approximately one in five DC recipients had a combined disability rating of 60 percent or more.

Beginning in 2001, the growth rate of DC enrollment increased substantially, rising from 2.3 million to 3.9 million by 2014. This increase occurred despite a 16 percent reduction during that same period in the number of military veterans (from 26.1 million to 22.0 million). As a result of these two changes, the percentage of military veterans receiving federal DC benefits more than doubled, from 8.9 percent in 2001 to 18 percent by 2014.

This rapid rise in DC enrollment coincided with a substantial increase in the average, inflation-adjusted monthly DC benefit, which grew by 46 percent, from \$747 in 2001 to \$1,094 by 2013. This change was driven by a rise in the average combined disability rating, in part because current DC recipients can apply for an increase in their combined disability rating (and thus in their monthly benefit).

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About The Author

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Figure 1
Percentage of Veterans Receiving Disability Compensation Benefits

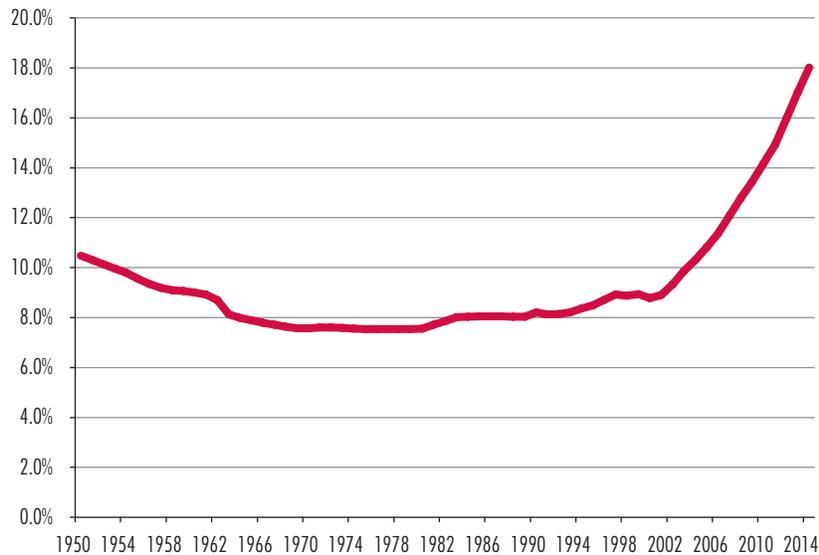


Table 1 demonstrates that while the number of DC recipients with the lowest CDR actually declined slightly during the 2001 to 2013 period, the number with a CDR of 60 percent or more approximately tripled. Because monthly benefits increase with the CDR, this led to the large increase in average inflation-adjusted benefits.

What Caused the Increase in Disability Enrollment among America's Veterans?

One key driver of the growth in DC enrollment after 2001 was a liberalization of the program's medical eligibility criteria for Vietnam era veterans in that same year (Autor and Duggan, 2007; Duggan et al., 2010). This change was motivated by a 2000 Institute

of Medicine (IOM) report that found suggestive evidence of a link between exposure to Agent Orange (an herbicide used by the U.S. military during the Vietnam War to defoliate trees in Vietnam, Cambodia, and Laos) and diabetes. As a result of this IOM report, in November 2000 the Secretary of Veterans' Affairs made Type II diabetes a presumptively service-connected medical condition (and thus eligible for DC benefits) for veterans who had served in Vietnam, Cambodia, or Laos during the Vietnam War.¹ The medical eligibility criteria did not change for veterans who served during the Vietnam era but not in the "Vietnam theatre." This policy took effect in the summer of 2001, and Disability Compensation enrollment among Vietnam-era veterans grew substantially thereafter, as shown in Figure 2. In 2010, the VA further expanded the program's medical eligibility criteria for Vietnam-era veterans who served in theatre by adding ischemic heart disease, Parkinson's disease, and B-cell leukemia to the set of conditions presumed to be service connected.

The second primary reason for the increase in DC enrollment is that recent veterans are significantly more likely to receive DC benefits than are their counterparts from previous service eras. More specifically, nearly one in four veterans serving in the 1990s or later (defined as "Gulf War era" by the VA) are currently receiving DC benefits versus just one in seven veterans from earlier service eras. This higher rate of enrollment may be primarily driven by the VA's approval of presumptive conditions for Gulf War veterans who served

Table 1
Number of DC Recipients by Combined Disability Rating in 2001 and 2013

CDR	# in 2001	# in 2013	% Change	Average 2013 Monthly Benefit
10%	822,788	815,921	-1%	\$131
20% 30%	680,269	849,144	25%	\$342
40%, 50%	322,270	602,737	87%	\$738
60%, 70%	220,701	635,788	188%	\$1,599
80%, 90%, 100%	258,169	828,573	221%	\$2,700

¹ Up until this point, the presumptive conditions associated with Agent Orange were rare diseases that would have affected only a small share of veterans. The full list of presumed illnesses, including those added in 2010, can be found at: <http://benefits.va.gov/BENEFITS/factsheets/serviceconnected/presumption.pdf>.

in the Southwest Asia theater from 1990 to the present (including Iraq and Afghanistan). Qualifying disorders for these more recent veterans include chronic fatigue, fibromyalgia, and many medically unexplained illnesses linked to environmental exposures. Other recent policy changes have likely also contributed to this higher rate of DC enrollment, including the Quick Start Program. Launched in 2008, this program allows veterans to apply for DC benefits in the two months prior to discharge from service. Previously, the application had to occur at least 60 (though not more than 180) days before discharge. This policy change made it easier for recent veterans to apply for DC benefits before completing their service.

One final policy change that further expanded the DC program's medical eligibility criteria took effect in 2010. As a result of this change, veterans applying for DC with a diagnosis of post-traumatic stress disorder (PTSD) did not

have to document specific events that caused their condition such as bomb blasts, mortar attacks, or firefights. PTSD is currently the third most common service-connected disability among DC recipients, with 648,992 DC recipients (17 percent of total DC recipients) having this as one of their conditions in September of 2013. The corresponding number in September of 2000 was 133,789 (when PTSD was the tenth most common condition among DC recipients). Put another way, the percentage of all veterans on the Disability Compensation program with a diagnosis of PTSD has increased by a factor of six during this period, from 0.5 percent in 2000 to 3.0 percent in 2013.

The Labor Market Effects of the DC Program: Evidence for Vietnam Veterans

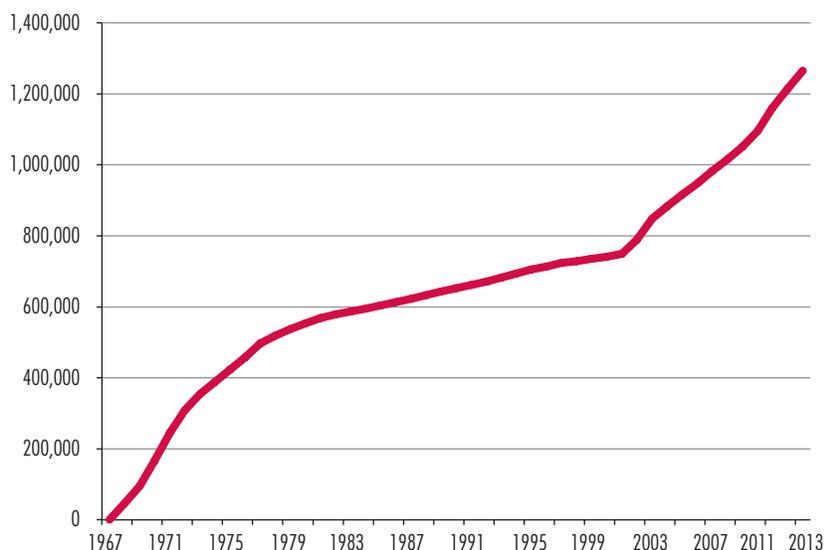
A large body of research has investigated the effect of federal disability programs on the labor market. U.S.-based studies have focused almost exclusively on

the Social Security Disability Insurance (SSDI) program, which currently pays an average monthly benefit of about \$1,100 to nearly 9 million disabled workers. Though the estimates vary somewhat, these studies have tended to find that the program substantially reduces labor force participation. While there are several important differences between SSDI and DC, the programs are similar in that they provide cash benefits and health insurance (Veterans Health Administration for DC, Medicare for SSDI) to individuals with disabilities.

The substantial rise in DC enrollment in recent years suggests that this program may be affecting labor market outcomes for military veterans. There are two primary channels through which this could occur, which economists often refer to as the "income effect" and the "substitution effect." The income effect can reduce a DC recipient's propensity to work because — with the additional income — he may now prefer additional leisure to work. The substitution effect operates through a change in incentives — additional work may prevent a veteran from qualifying for a higher level of DC benefits — and thus increase the effective tax rate on work.²

In recent research with David Autor (M.I.T.), Kyle Greenberg (West Point), and David Lyle (West Point), I have investigated the effect of the DC program on labor market outcomes of Vietnam veterans. In our analysis, we compare outcomes for Vietnam veterans who had "boots-on-the-ground" (BOG) in Vietnam, Cambodia, and Laos with other Vietnam-era veterans who did not serve in the Vietnam theatre.

Figure 2
Number of Vietnam-Era Veterans Receiving DC Benefits



² If a DC recipient has a combined disability rating of 60 percent or more, he/she can qualify for the full 100 percent monthly benefit amount if he/she meets an unemployability standard. Approximately one in ten DC recipients currently qualify for the enhanced monthly benefit through the individual unemployability benefit.

The first group was directly affected by the expanded medical eligibility criteria for Type II diabetes while the second group was not.

Our findings demonstrate that DC enrollment surged beginning in 2001 among the BOG Vietnam-era veterans as compared to their counterparts who served elsewhere during the Vietnam era. This differential growth in DC enrollment is displayed in Figure 3. DC enrollment among BOG veterans was higher even prior to the policy change, with this baseline difference presumably reflecting the greater strain placed on the average veteran who served in the Vietnam theatre. However, the gap in enrollment between the two groups grows significantly after 2001.

After demonstrating that DC enrollment grew much more rapidly among BOG than other Vietnam era veterans after the 2001 policy change, we explore whether labor force participation between the two groups diverged as well. Using administrative data on earnings

for our Army sample, we show that labor force participation fell significantly more rapidly among BOG veterans than among their non-BOG counterparts after 2001. Our estimates suggest that for every 100 veterans made newly eligible for DC benefits as a result of the 2001 policy change, approximately 18 dropped out of the labor force by 2007. This estimated average effect is similar to the results from recent research regarding the corresponding effect of the SSDI program on labor force participation (Maestas et al., 2013; French and Song, 2014).

Changes in Labor Force Participation for Other Veterans

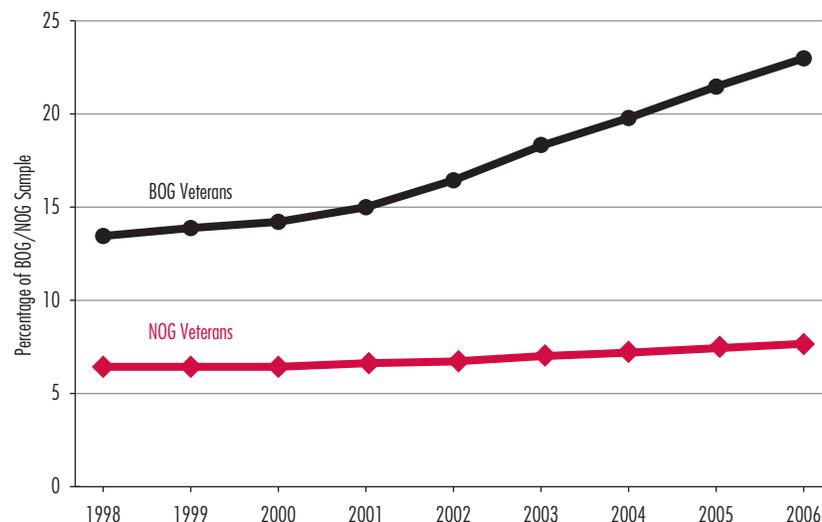
In another project, Courtney Coile (Wellesley College), Audrey Guo (Stanford University), and I are exploring how DC enrollment has evolved in more recent years and whether it has coincided with a reduction in labor force participation among other groups of veterans, including those who served in the

1990s and 2000s. These more recent veterans are much more likely than earlier veterans – including those from the Vietnam era – to receive DC benefits. To the extent that the program has caused these more recent veterans to drop out of the labor force, the potential effects are larger given more working years potentially affected.

Our results using data from the Bureau of Labor Statistics Current Population Survey demonstrate that during the 1980s and 1990s veteran males were significantly more likely than non-veteran males to be in the labor force. The estimated difference between the two groups is approximately one percentage point for men between the ages of 25 and 64 during this time period. However, beginning in the 2000 to 2004 period (when DC enrollment began to surge, not only due to the Type II diabetes change), this difference is reversed with the magnitude of the gap growing substantially over the last fifteen years. For example, from 2000 to 2004, veteran males are 0.9 percentage points less likely to be in the labor force than non-veterans. This then increases to a 1.7 percentage point gap from 2005 to 2009 and finally to a 4.3 percentage point gap in the 2010 to 2014 period. This significant reduction in labor force participation among veterans closely coincides with their increase in DC enrollment during this same period. We also show that there has in recent years been a differential decline in labor force participation among elderly veterans, many of whom served during the Vietnam era. In contrast to the SSDI program, the VA's Disability Compensation program pays benefits to elderly individuals, with about one-third of DC recipients aged 65 and up.

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Figure 3
Percentage of BOG and NOG Vietnam Era Veterans Receiving DC Benefits



Other Possible Explanations for Veterans' Changing Labor Market Outcomes

The differential decline in labor force participation among veterans since 2000 may have been driven by the growth in DC enrollment. But it is plausible that other factors have contributed as well. For example, veterans are much more likely than non-veterans to work for federal, state, and local governments. Employment growth in this sector of the economy — which accounts for about one in seven jobs — has lagged that of the private sector during the last several years. Thus, part of the differential decline in labor force participation could reflect the adverse shocks to opportunities in federal, state, and local governments.

Additionally, and as shown in Table 2, the percentage of men who are veterans has been steadily declining for decades. As the table shows, more than half of men aged 75 and up in 2014 were veterans, whereas only 5.4 percent of men in the 25 to 34 year old age range were.³ Given these changes, it is possible that the differential changes in labor force participation partly reflect the effects of changing veteran characteristics. However, cohort-level analyses suggest that this is not the only factor, as Vietnam-era veterans became less likely to participate in the labor force only after the 2001 policy change.

Another possible explanation for the change is that military service has become more demanding over

³ Approximately 1.5 percent of men in this 25 to 34 age range are currently serving in the military, so the eventual share in this group that are veterans will be closer to 7 percent.

Table 2
Percentage of Males who are Veterans by Age: Data from the March 2014 CPS

	25-34	35-44	45-54	55-64	65-74	75+
% Veterans	5.4%	7.7%	12.4%	18.8%	42.5%	57.1%

time so that a person who serves in the military is more likely to incur a disability. Consistent with this explanation, veterans have become more likely than non-veteran males to report that their health is poor or just fair rather than excellent, very good, or good.

Future Research on the Disability Compensation Program

One challenge for research on the Disability Compensation program is that it comprises essentially ten distinct programs reflecting the ten possible values of the combined disability rating. As shown by Autor et al. (2014), many DC recipients — after receiving their initial award — are “promoted” to a higher CDR and thus receive an increase in the monthly benefit. Because of these promotions, the average monthly benefit is almost twice as high five years after receiving an initial DC award. A veteran may not drop out of the labor force after receiving DC with a 10 percent or 20 percent CDR, though this may be more likely with a CDR of 50 percent or more. Additional research that examines the effect of the DC program is clearly warranted given its rapid growth since 2001 and its potential impact on the economic well-being of veterans and on the overall U.S. labor market.

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