# Debt and delinquency after military service

## A study of the credit records of young veterans in the first year after separation

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# Executive Summary

This report shows that a sizeable fraction of young enlisted servicemembers go delinquent on debt payments or have severe derogatories (for example, defaults) appear on their credit record around the time they leave active duty. The report focuses on three types of credit accounts: auto loans, revolving credit accounts (credit cards), and personal or retail installment loans. The report also analyzes medical and non-medical debt. These types of accounts were found in prior research to be the most likely sources of delinquency and default among young servicemembers.

The findings show that among those who serve at least seven months, delinquencies and defaults are between two and 10 times more likely to appear on a credit record in the six months after separation as compared to the six months before.

Late payments are more common among those who served between seven and 35 months—those who likely reached their first permanent assignment but separated before the end of their first contract—compared to those who serve shorter or longer terms. For example, of all servicemembers who exit with auto debt after seven to 35 months of service, one-third become 90 days delinquent or default on that debt within one year. By comparison, less than 15 percent of auto debt holders with longer terms of service went delinquent or defaulted within one year after separation. For both groups the post-separation rates of delinquencies and defaults for revolving account holders and for those with less-common types of installment debt (such as personal loans) are even higher than for auto debt.

As a result of these negative outcomes, servicemembers' credit scores decline just after separation, and do not recover for at least one year after leaving the military. The drop is most severe for those with tenures between seven and 35 months and for those who exit with a Near prime credit score or below, as opposed to a Prime score or better.

The data used in this report cannot explain what causes the observed patterns of delinquency and default. Publicly-available statistics suggest medical and less-than-honorable discharges are not common enough to explain delinquency and default among young veterans. Employment rates and average income of young veterans in the first year after service may explain some of the patterns, but ultimately the root causes remain important open questions for further study.

# Introduction

Poor financial decisions can lower an individual's credit score and stay on his or her credit record for years. For example, an auto, personal, or credit card loan that goes to collections stays on for seven years. Similarly, late payments may stay on one's credit history for equally as long, with more damage to one's credit score the longer the delay in payment and the greater the number of accounts with late payments.[1] A lower credit score can in turn affect eligibility for or terms of a loan, and other adverse information on a credit record can even affect eligibility for an apartment or a job.[2]

The findings of this report reveal a decrease in credit scores for enlisted servicemembers immediately following departure from active-duty military service. This drop coincides with increases in delinquencies and defaults, especially for revolving credit. These financial difficulties lessen six months after separation, partly because of the earlier account closures; however, their credit scores remain lower than they were prior to exiting.

The report focuses on two main groups of young veterans: those that make it through basic training but most likely leave service prior to the end of their first term contract and those that likely complete their first term. Policies to address these financial difficulties post-service may differ for these two groups given that some do not meet their service obligations, while others do. The report also includes results for those that serve less than six months in the military and thus did not make it to their first duty assignment. However, because these servicemembers do not build up much debt during military service they are not a primary focus of the analysis.

The individuals who have the most financial trouble are those who leave active duty prior to completing their first term contract (i.e., before completing three years of service). Their credit records decline in the months preceding exit, and they continue to decrease after service. Exiting (also called "separation" in military parlance) may occur for many reasons, and the current data do not indicate why a servicemember separated. It may be that part of the reason is because of financial difficulties. If so, helping servicemembers make better financial decisions may assist the Service branches in increasing retention with potentially large cost-savings.[3]

Even for those servicemembers who most likely completed their service contracts, the report reveals that credit scores also fall in the two quarters after leaving. In fact, across all groups,

[1] For this and more information about the credit reporting system: Consumer Financial Protection Bureau "Key Dimensions and Processes in the US Credit Reporting System: A Review of How the Nation's Largest Credit Bureaus Manage Consumer Data," (December 2012), *available at* https://files.consumerfinance.gov/f/201212_cfpb_credit-reporting-white-paper.pdf, hereinafter "Key Dimensions and Processes…"

[2] For information on how credit records are used outside of the financial industry, see: TransUnion (2015), "5 Things Landlords Look for When Screening Potential Tenants," blog post, September 5, *available at* https://www.transunion.com/blog/credit-advice/5-things-landlords-look-for-when-screening-potential-tenants; and Experian, "Do Employers Look at Credit Reports?" blog post, August 6, 20 *available at* https://www.experian.com/blogs/ask-experian/do-employers-look-at-credit-reports/.

[3] The GAO reports that between 2005 and 2015 the average cost to recruit, screen, and train a new enlistee was $75,000. In approximately the same time period, between 19 and 30 percent of enlistees separated within three years, depending on the service branch. See: Government Accountability Office, "Improvements Needed in the Management of Enlistees' Medical Early Separation and Enlistment Information," (July 2017), *available at* https://www.gao.gov/assets/690/685843.pdf; and James V. Marrone, *Predicting 36-Month Attrition in the U.S. Military: A Comparison Across Service Branches*, Santa Monica, CA: Rand Corporation Report RR-4258-OSD (2020), hereafter *Predicting 36-Month Attrition*.

regardless of length of service, the two quarters after separation appear to be a critical time in which servicemember borrowers fall delinquent on payments and sustain severe derogatories such as repossessions, charge-offs, and debt being sent to collections.

This report is a follow-on to our [Financially Fit research report that was an extensive study of the credit histories of young servicemembers](https://www.consumerfinance.gov/data-research/research-reports/financially-fit-comparing-credit-records-young-servicemembers-civilians/) as they join the military compared to similar aged civilians.[4] That study highlighted some key patterns explored more in depth in this report: namely, that servicemembers who join by age 21 have more trouble with debt than older servicemembers or civilians; that most debt problems are associated with auto loans, revolving credit accounts, and personal loans; and that severe debt problems appear to arise around the time servicemembers leave active duty. This report provides a more detailed analysis of these particular patterns and verifies the timing of severe derogatory outcomes with respect to the date of exit from active duty. This more precise analysis is made possible as a result of the omission of civilians from the sample and the use of a quarterly panel of credit report information, rather than annual.

[4] Consumer Financial Protection Bureau, "Financially Fit? Comparing the credit records of young servicemembers and civilians," (2020), *available at* https://www.consumerfinance.gov/data-research/research-reports/financially-fit-comparing-credit-records-young-servicemembers-civilians/, hereinafter "Financially Fit?"

# Data

The analysis in this report utilizes data from the Consumer Financial Protection Bureau's (CFPB) Consumer Credit Panel (CCP), a de-identified, nationally-representative panel of credit records. The data consist of a 1-in-48 random sample of credit files provided by one of the three nationwide consumer reporting agencies (NCRA).[5] The credit agency matched individuals in the CCP to the Servicemembers Civil Relief Act (SCRA) Website maintained by the U.S. Department of Defense (DoD).[6] The website provides the dates of active duty service along with the service component and service branch. The credit agency furnished the CFPB with active duty service information for people who served since December 2007. This information was then merged to the quarterly CCP panel to determine the active duty or veteran status of each person at each point in time, up to December 2018.[7]

This analysis includes quarterly credit record information for each individual in the merged CCP/SCRA panel who met three characteristics: they entered full-time active duty by the age of 21, they were observed at the time their service began, and they left active duty at least one year prior to the end of the observation window.[8] The age cutoff was chosen to focus on the group that was previously identified to have the most vulnerability to debt problems – those who enter service at a young age. Although the data provide no information on paygrade, entrants under age 21 are virtually all enlistees, and they account for the majority of enlisted accessions.[9]

The sample comprises 10,872 servicemembers. The plurality (40 percent) served in the Army, with 14, 20, and 24 percent respectively in the Air Force, Navy, and Marine Corps. One percent of the sample served in the Coast Guard. By construction, everyone entered active duty by age 21, but there is wide variation in age at separation: from 17 years old for those who enter at the youngest age and serve for a very short time, to 32 for those who serve for nearly the entire observation window.

The analysis splits servicemembers into groups based on how long they had served at the time of separation. Those in the shortest-tenure group separated within six months and were unlikely to ever reach their first permanent assignment (1,751 people). Contract length is unobservable in the data, but the majority of servicemembers have contracts that are at least three years long. Servicemembers who stay for at least six months but separate within 35 months were thus unlikely to have completed their first contract.[10] Around two thousand (2,219) people are in this group. Servicemembers who complete at least 36 months of active duty are more likely to be leaving at or after the end of their first contracts. Just under seven thousand (6,857) people are in this group.

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5 For more information about servicemembers in the CCP and the construction of the panel used here and in prior research, see "Financially Fit?" Appendix B.

6 Department of Defense (2019), "Servicemembers Civil Relief Act (SCRA) Website," *available at* https://scra-w.dmdc.osd.mil/scra/#/home.

7 Because new credit accounts are sometimes reported to the NCRA at a lag, a cutoff of December 2018 allowed for credit accounts to be identified retrospectively based on information through December 2019.

8 At ages for which a consumer has no credit record, they were assumed to have zero active accounts and zero balances. In this way servicemembers can be "observed" during periods of active duty prior to their establishing a credit record.

9 See "Financially Fit?" page 25 and footnote 29.

10 A small fraction of servicemembers may have two-year contracts; see "Financially Fit?" footnote 51.

The choice of sample maximizes the analytic sample size relative to the core question of what happens to credit profiles *at the end of active duty*. This allows for greater statistical power and precision in estimates compared to the prior study that used a sampling window based on age and birthyear. It is important to note that unlike the sample used in the prior report, this sample is not representative. The merged CCP/SCRA panel lists military service history only between 2007 and 2018, and individuals are sampled by the CCP only if they have a credit history.[11] Both of these facts imply that those who entered and separated during the observation window would *not* be a random set of all servicemembers who entered prior to age 21 and ever served during that time.[12] Instead, the population consists of all servicemembers who entered and separated during this time period and had a credit record by the time they separated.

The report focuses on the following credit outcomes: credit scores, third-party collections debt, 90-day delinquencies, and severe derogatory outcomes. Third-party collections are divided into medical and non-medical collections. Delinquencies and derogatories are analyzed for auto loans, revolving credit accounts (general credit cards and retail credit cards), and "other" installment debt grouped together. The study does not include mortgages and student loans, as these are used less often for this population.[13]

"Other" installment debt includes several types of loans. Eighty percent of these are personal loans, 10 percent are retail installment loans, 10 percent are of an unknown type, and only a negligible fraction are of other known types. Of the personal loans, 90 percent are unsecured and 10 percent are loan notes from banks or credit unions. Of the retail installment loans, the main types of retailers are jewelers (40 percent), sales financing companies (27 percent), department/variety stores (12 percent), and home furnishing stores (five percent). Of the unknown types of loans, 92 percent are secured and 97 percent are from banks or credit unions.

Severe derogatory actions refer to any of the following: repossession, surrender, charge-off, collections, foreclosure, or discharge in bankruptcy court. For the products and population analyzed here, repossession, surrender, charge-off, and collections are by far the most common types of severe derogatory actions.[14]

The analysis proceeds first by analyzing changes in credit scores around the time of separation. Then, the report shows how account ownership grows over the course of military service and declines shortly thereafter. The last section of analysis describes the rate of delinquencies and severe derogatories just prior to and just after separation. It shows how severe derogatories explain much of the decline in account ownership and decrease in credit scores following separation.

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[11] Individuals without a credit record are called *credit invisible*. Prior CFPB research estimates the fraction of the population that is invisible. Calculations in "Financially Fit" suggest that the fraction of young servicemembers who are invisible is no higher than for civilians of the same age. See: CFPB, CFPB, "Credit Invisibles," (May 2015), at 10, *available at* https://files.consumerfinance.gov/f/201505_cfpb_data-point-credit-invisibles.pdf.

[12] The researchers confirmed that the results show the same patterns when the analysis is limited the analysis to the smaller but representative sample of under-21 year-old entrants studied in the earlier report.

[13] For information about mortgages and student loans in this population, see "Financially Fit?"

[14] When a credit account is sent to a third-party collections agency, that debt will be counted in this analysis as both a severe derogatory for the original type of account, as well as third-party non-medical debt. Financial debt is a minority of all third-party collections debt, which also includes debt from residential leases, utility accounts, phone or cable bills, and a variety of other non-credit expenses.

# Credit Scores

The analysis begins by examining credit scores of servicemembers prior to and after leaving service. Although not a perfect measure of creditworthiness, credit scores take into consideration variables such as debt levels, debt usage, length of credit history, and payment history (delinquencies, collections, and bankruptcies).[15] Consumers with higher credit scores are considered to be more reliable borrowers with a lower probability of default.

Credit agencies and lenders often group credit scores into tiers based on credit riskiness. Those that have a credit score below 580 are considered Deep subprime. Those with a credit score between 580 to 619 are Subprime, those between 620 and 659 are Near prime, those between 660 and 719 are Prime, and those with scores above 720 are considered Superprime.

By the time of separation, 82 percent of servicemembers in the sample have a credit score. The likelihood of having a credit score, as well as the average credit score, varies by the length of service, as shown in Table 1. The longer they serve, the more likely servicemembers are to have a credit score at the time they exit. Those who stay in for at least three years have higher credit scores than those who leave earlier. Servicemembers who exit with between seven and 35 months of service have, on average, Subprime scores, and those who serve 36 months or more exit, on average, with Near prime scores.

**TABLE 1:** CREDIT SCORES AT TIME OF EXIT FROM ACTIVE DUTY, BY MONTHS SERVED

| Time spent in active duty service | Percent with credit score at time of exit | Average credit score, if scored | Tier for average credit score |
|---|---|---|---|
| 0-6 months | 41% | 627 | Near prime |
| 7-35 months | 81% | 607 | Subprime |
| 36 months or more | 92% | 654 | Near prime |

Source: Author calculations from CFPB's CCP merged to DoD's SCRA database.

To examine how individual borrowers' credit information changes over time and to take advantage of the panel nature of the data, the first analysis uses a fixed-effect regression at the individual level. The advantage of a fixed-effect regression is that it controls for individual-level, time-invariant characteristics such as race, gender, hometown, birth year, and initial wealth levels, which are unobserved in the CCP data but may affect credit scores. The regressions then measure within-person changes in credit score around the time of exit from active duty. Equation 1 gives the regression specification.

$$Y_{it} = \alpha_i + \sum_{q=-2}^{4} \beta_q \cdot \{Quarter\ since\ exit_t = q\} + Year_t + \epsilon_{it} \qquad (1)$$

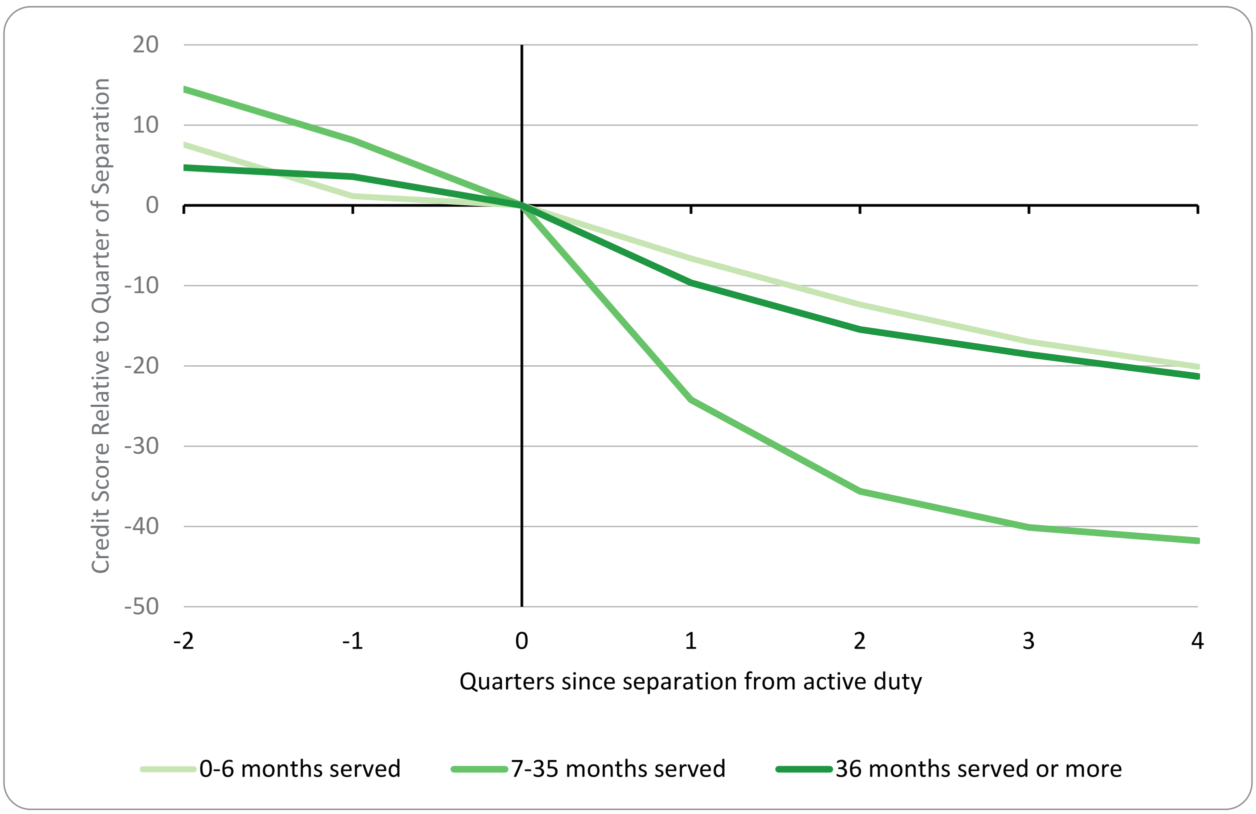
$Y_{it}$ is credit score for individual $i$ at observation number $t$. The variable $\alpha_i$ represents an individual-level fixed effect which controls for the characteristics about the individual that do not change over time. The dummy variables $Quarter\ since\ exit_t$ indicate the timing of each

[15] Consumer Financial Protection Bureau, "You have many different credit scores," *available at* https://files.consumerfinance.gov/f/documents/201702_cfpb_credit-score-explainer.pdf.

observation relative to the date of exit, from two quarters prior to exit to four quarters after exit. $Year_t$ represents a dummy variable for the year of observation, which helps control for macroeconomic factors which may be affecting credit score in that year for all individuals. A separate regression is calculated for each tenure group listed in Table 1, restricted to servicemembers who have a credit score at least two quarters prior to exit to ensure a balanced panel.

The coefficients on quarter relative to exit ($\beta_q$) are plotted in Figure 1. The omitted quarter is the quarter of exit ($q$=0). $\beta_q$ can then be interpreted as the credit score in a particular quarter *relative* to the quarter of separation. Positive coefficients mean that, on average, credit scores are *greater* in that quarter relative to the quarter of separation and negative coefficients indicate credit score is *lower* in that quarter. As the figure shows, credit scores are falling for two quarters prior to separation. They continue to fall after separation, with the largest drop in the two quarters after separation.

**FIGURE 1:** CREDIT SCORE RELATIVE TO QUARTER OF SEPARATION, BY TIME SPENT IN ACTIVE DUTY




Source: Author calculations from CFPB's CCP merged to DoD's SCRA database. See text for details on sampling strategy. The graph plots coefficients from the regression specification in Equation 1, run separately by time spent in active duty.

The biggest downward trends throughout the time period are for those who serve between seven and 35 months, for whom credit scores drop by an average of 15 points in the two quarters prior to separation and an additional 36 points in the two quarters after separation. The average score in this group moves from Subprime to Deep subprime.

For those who spent at least three years in the military, credit scores were fairly steady prior to exiting the service, dropping by just 5 points on average in the two quarters prior to separation. However, by *four* quarters after separation credit scores had dropped by 21 points. The largest drop was again within the first two quarters of separation.

Comparing transitions between credit tiers in the six months after separation shows that the decreases in Figure 1 occur across all tiers, and dropping to a lower tier is more common than moving up to a higher tier. In the sample as a whole 23 percent of servicemembers moved down to a lower score tier within six months of separation, compared to 12 percent that moved up. Those with Near prime or Subprime scores were more likely to have downward movements: 40 and 47 percent, respectively, drop down to a lower tier. Ninety percent of those who were Deep subprime at the time of separation were still Deep subprime six months later.

Table 2 disaggregates the transitions based on time spent in active duty. Panel A shows the transitions for those who serve between seven and 35 months, and Panel B shows the transitions for those who serve at least 36 months. A comparison of the two panels shows that conditional on a servicemember's credit score tier a decrease was more likely if they served less than 36 months. For example, among those with Subprime scores at the time of exit, 62 percent who served less than 36 months were Deep subprime six months later, compared to 44 percent who served at least 36 months. Further, among those with a Superprime score at the time of exit, 58 percent of those with less than 36 months of service were still Superprime six months later, compared with 79 percent of those with at least 36 months of service.

**TABLE 2:** TRANSITIONS BETWEEN CREDIT SCORE TIERS IN TWO QUARTERS AFTER EXIT

**PANEL A:** 7-35 MONTHS SERVED

| | **Credit score tier two quarters after exit** | | | | |
|---|---|---|---|---|---|
| **Credit score tier in quarter of exit** | Deep subprime | Subprime | Near prime | Prime | Superprime |
| Superprime | 7% | 5% | 6% | 24% | 58% |
| Prime | 23% | 8% | 14% | 41% | 15% |
| Near prime | 39% | 9% | 29% | 19% | 3% |
| Subprime | 62% | 23% | 14% | 0% | 0% |
| Deep subprime | 93% | 6% | 1% | 0% | 0% |

**PANEL B:** 36 MONTHS SERVED OR MORE

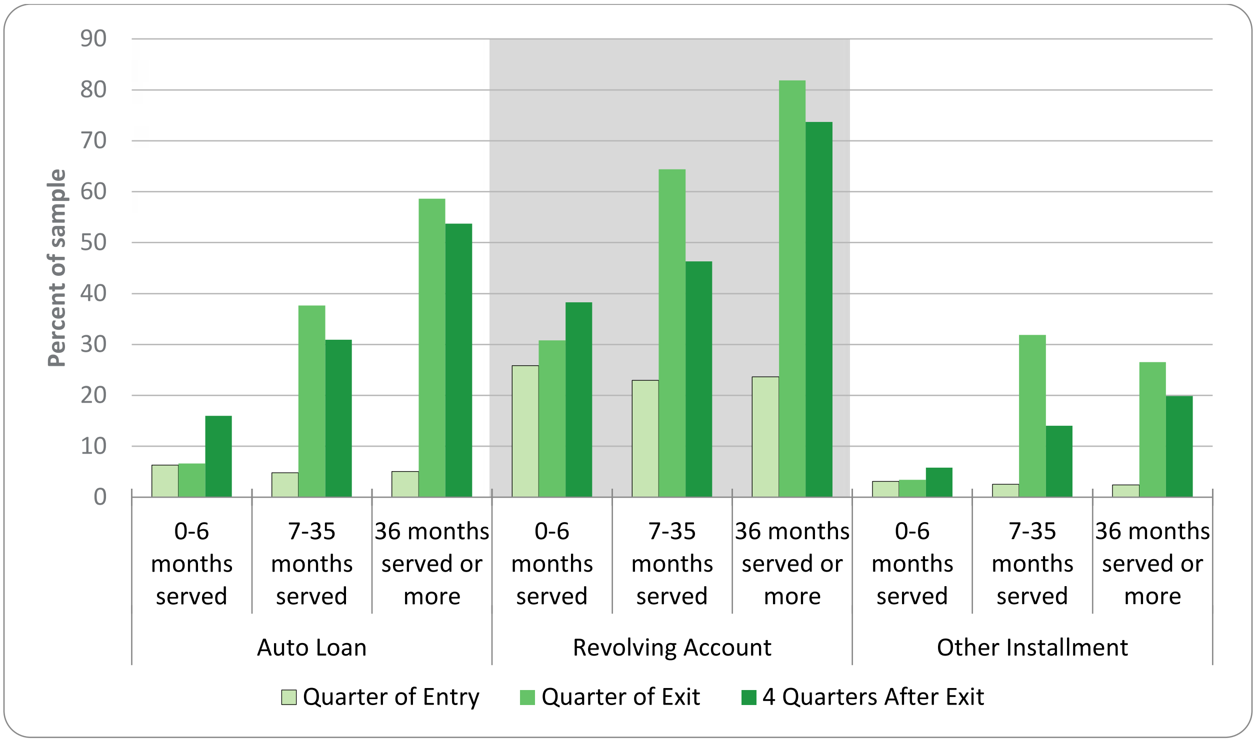
| | **Credit score tier two quarters after exit** | | | | |
|---|---|---|---|---|---|
| **Credit score tier in quarter of exit** | Deep subprime | Subprime | Near prime | Prime | Superprime |
| Superprime | 1% | 1% | 2% | 16% | 79% |
| Prime | 7% | 5% | 13% | 58% | 17% |
| Near prime | 22% | 18% | 39% | 19% | 2% |
| Subprime | 44% | 33% | 19% | 3% | 1% |
| Deep subprime | 88% | 10% | 2% | 0% | 0% |

Source: Author calculations from CFPB’s CCP merged to DoD’s SCRA database.

# Account Ownership

The analysis above reveals that regardless of tenure length, some servicemembers experience financial issues after leaving service. To begin understanding how this relates to credit product usage, this section examines the probability of having particular types of accounts at the time of entry, just before exit, and one year after exit. Figure 2 plots the fraction of servicemembers with auto debt, revolving credit accounts (mostly general-purpose and retail credit cards), and other installment debt at each point in time.

**FIGURE 2:** ACCOUNT OWNERSHIP AT VARIOUS POINTS OF ACTIVE DUTY SERVICE, BY LENGTH OF SERVICE




Source: Author calculations from CFPB's CCP merged to the DoD SCRA database. Other installment debt includes: personal loan, retail installment loan, home equity loan, business installment loan, agricultural, commercial, or unspecified debt.

Six percent or less of any tenure group had auto loan debt when entering service; around 25 percent had revolving credit accounts; and only three percent or less of each group had other installment debt prior to service.

By the time of separation, servicemembers who leave within two quarters tended not to have opened new accounts. But for those who serve longer, a significant number have opened some sort of account. "Financially Fit?" shows that servicemembers take on auto debt around a year after they join and that the fraction with an auto loan continues to rise during service.[16] Figure 2 shows that at the time of exit, over one-third of servicemembers who served at least seven months have an auto loan (and over half of those who served at least three years). Even more have revolving accounts: almost two-thirds of those who serve between seven and 35 months, and over 80 percent of those who serve at least three years have revolving accounts. Over one-quarter of both groups have other installment debt.

In the four quarters after leaving service people tend to close these accounts. The net decrease in account ownership is particularly true of those who serve between seven and 35 months. Over half of those servicemembers who exited with other installment debt close those accounts within a year, and about one-third of those with revolving accounts close them in the same period. The decline in account ownership is smaller among those who spent more than three years in service. Only the group that serves six months or less has an opposite pattern, with these servicemembers having a net increase in account ownership after separation rather than a decrease.

Account closures are not necessarily a bad sign. They may be a sign that new veterans no longer need the same types of loans or credit that they required during active duty, and if accounts are closed by paying off a loan or credit card balance then it would be a sign that borrowers are managing their debt well. Closing an account due to default, however, can have serious implications for young veterans' credit scores. The next section shows that a substantial fraction of accounts are closed through charge-offs, repossessions and surrenders, or because the debt is sent to collections. These constitute severe derogatory actions that help explain the declines in credit score highlighted in Figure 1.

[16] See "Financially Fit?" Figures 5 and 8.

# Collections, Delinquency, & Derogatory Outcomes

At the time of entry, few servicemembers had delinquencies or derogatories on their credit records, partly because most barely had any credit history at all. In total, only 8 percent of the sample had any delinquency, default, or third-party collections account. Most often, people had some non-medical debt in collections, such as a telecommunications bill or utility bill (around 6 percent of the sample). About 3 percent had medical debt in collections, and barely 1 percent had been 120 days delinquent on a revolving account. Therefore, these servicemembers typically did not appear to be saddled with poor credit histories at the time they joined the military.

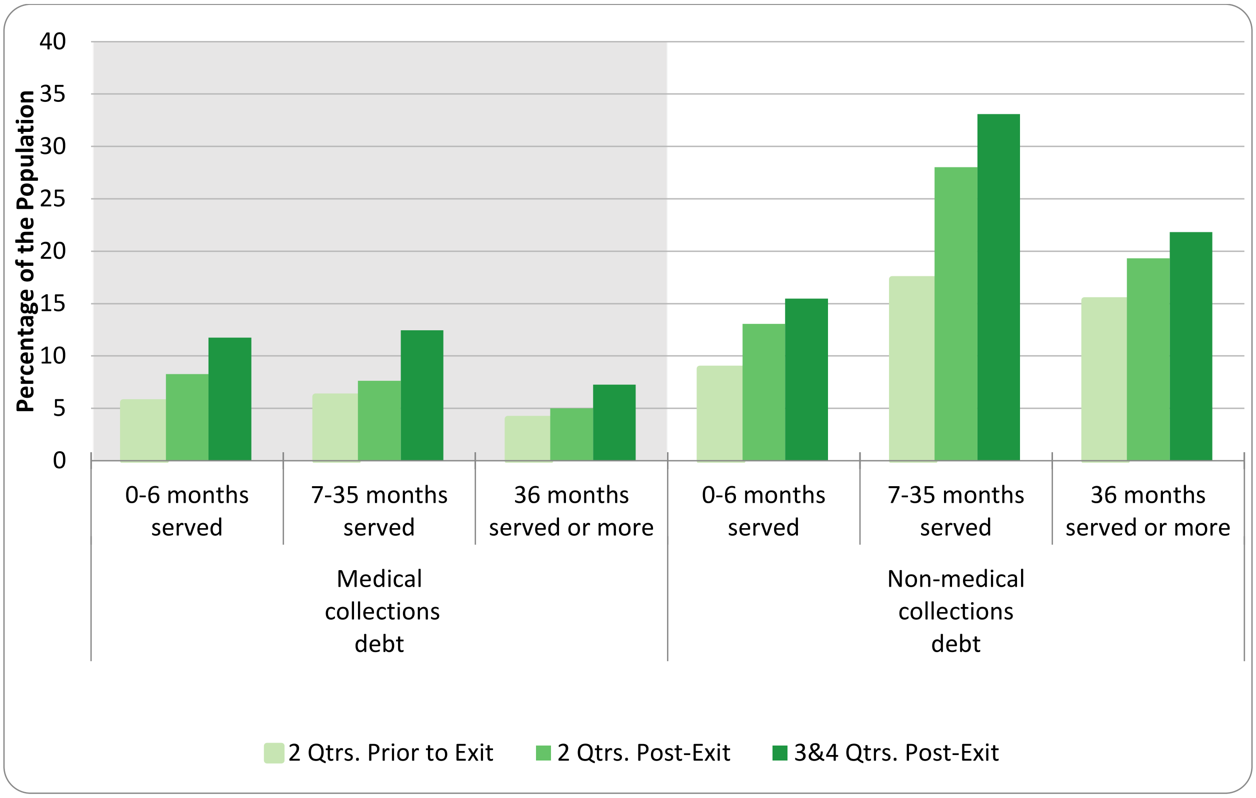
Even if they did not have a credit history when they enter the military, Figure 1 showed that most servicemembers had opened at least a revolving account by the time they exit. They may also have opened other accounts, such as for cellphones or utilities, that constitute further payment obligations and which could go to collections if the servicemember falls behind on payments. To observe if and when delinquencies or defaults occur, this section compares three periods in time: the two quarters prior to exit, the two quarters following exit, and the third and fourth quarter following exit. The quarter of separation is excluded because the timing of debt relative to the precise date of separation cannot be determined.

First, Figure 3 shows the fraction of servicemembers with a third-party collections account in each of these time periods. The calculations reflect all third-party collections accounts that are open at the time, so the debt must have been incurred some time before and the account could remain open for several months or years until the debt is discharged. Changes between time periods in Figure 3 show whether servicemembers have a net increase or decrease in open collections accounts.

The figure reveals that during service, some servicemembers have had non-medical debt enter collections. At the time of entry, about 3 percent had such debt in collections. Among those who serve at least seven months, over 15 percent have some such debt just prior to separation. (In contrast, the fraction with medical debt just prior to separation is approximately the same as at the time of entry.)

After separation, the rates of non-medical collections debt go even higher. This is particularly true among those who served between seven and 35 months, for whom there is a net increase in non-medical collections account of 11 percentage points (on a base of 17 percent) in the six months after separation. Around 40 percent of these non-medical debt accounts are from a telecommunications account; another 15 percent are from a utility account; 15 percent from a residential lease; and about 10 percent from a retailer.

**FIGURE 3:** COLLECTIONS DEBT AROUND THE TIME OF SEPARATION FROM ACTIVE DUTY




Source: Author calculations from CFPB's CCP merged to the DoD SCRA database.

Medical debt collections increase, as well, but not until three or four quarters after separation. Again, this is most significant for those who served less than three years, for whom the fraction with medical debt collections nearly doubles. It is not possible to determine from the data if this debt was incurred prior to, during, or after service, or whether the debt is due to injuries or conditions developed during service. Moreover, it is not clear whether those with medical debt in collections were eligible for or made use of veterans health benefits.

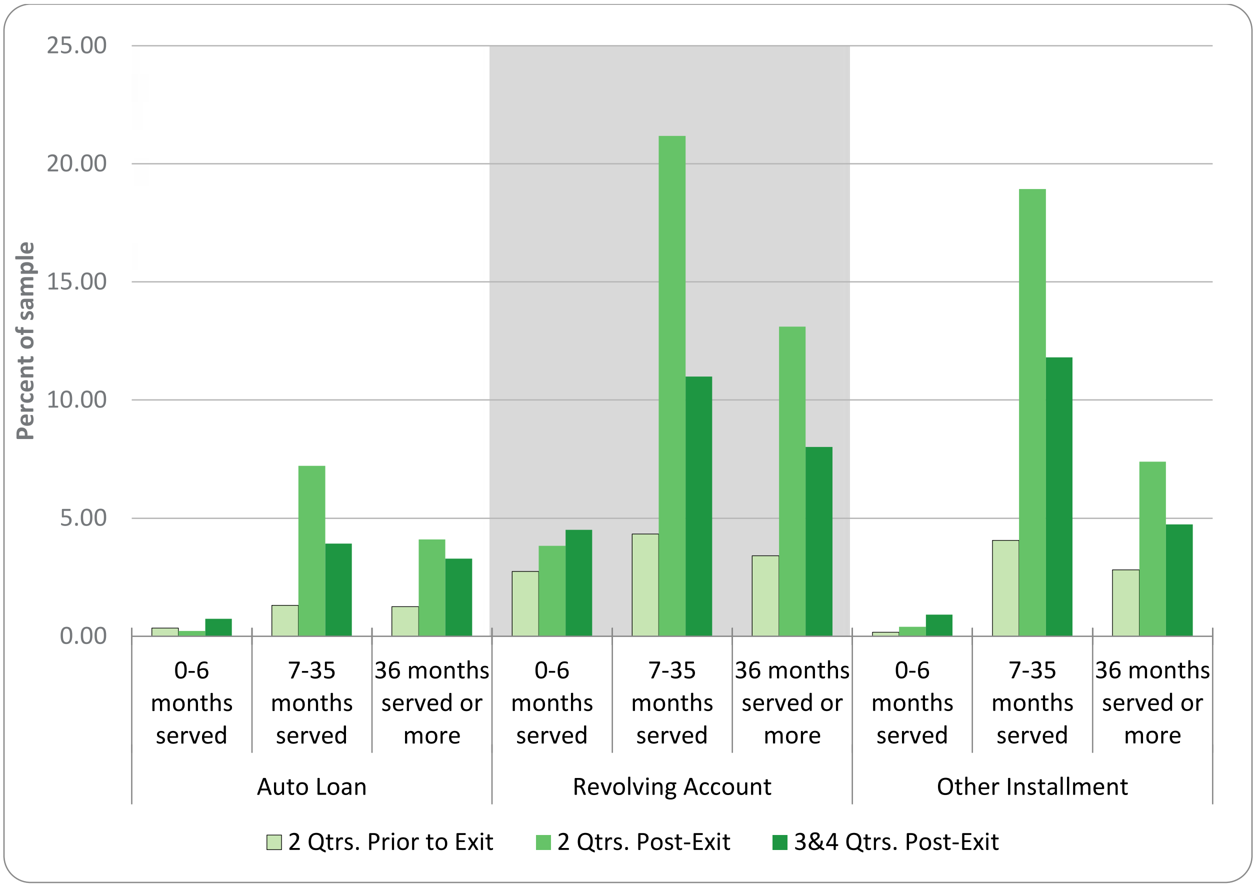
Figure 4 shows 90-day delinquencies on credit accounts before versus after separating from military service. The calculations include all servicemembers, not just those who have accounts. The graphs show time-period-specific outcomes: the fraction of the sample that was currently delinquent in the respective time period.

Two patterns are consistent across all account types: delinquencies are more common after separation than before, and they rise by substantially more for those who serve between seven and 35 months than for those who serve at least 36. Notably, in the six months before separation delinquency rates are fairly similar for both groups.

For those who exit within seven to 35 months, the figure shows 7.2 percent are 90 days behind on auto loan payments, 21 percent are late on revolving debt, and 19 percent are late on other installment debt. These represent four- or five-fold increases compared to the six months prior to separation. In the third and fourth quarter after separation, delinquency rates decrease by about half but remain higher than prior to separation.

For those who serve at least 36 months, delinquency rates across account types are: 4 percent (auto), 13 percent (revolving), and 7 percent (other installment) in the six months after separation. These are smaller fractions than for the shorter-tenure group, but are still roughly four times as large as the delinquency rates in the six months prior to separation. The delinquency rates fall slightly in the next six months, remaining lower than among those who served between seven and 35 months.

**FIGURE 4:** 90-DAY DELINQUENCY RATES AROUND TIME OF SEPARATION FROM ACTIVE DUTY

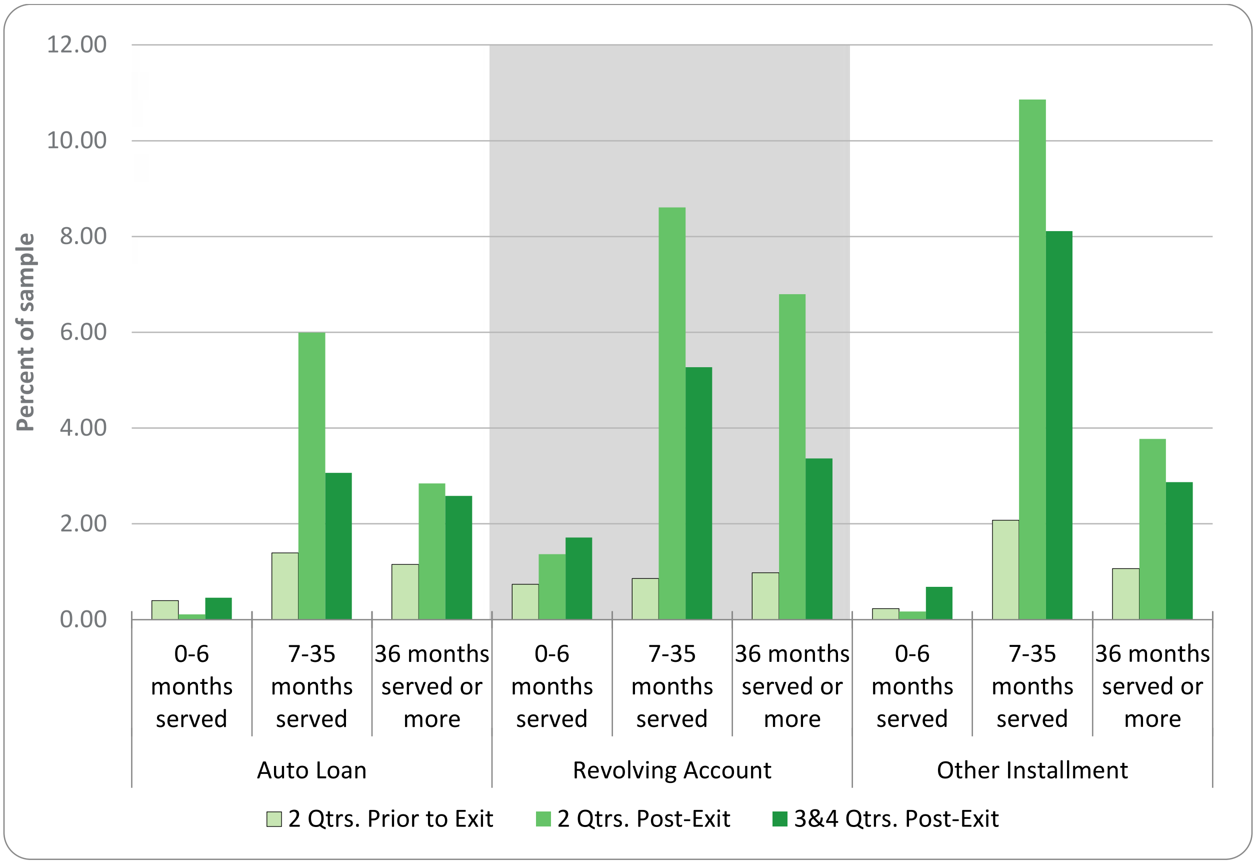



Source: Author calculations from CFPB's CCP merged to the DoD SCRA database.

Figure 5 shows the fraction of individuals having a new severe derogatory or default appear on their credit report in each time period. As a reminder, a severe derogatory action is any of the following: repossession, surrender, foreclosure, charge-off, collections, or discharge in bankruptcy court. In any of these instances, the individual is losing possession of property or having their account closed with negative repercussions on his or her credit record.

As was true of delinquencies, those who leave within seven to 35 months are more likely to have a severe derogatory than are those who serve at least 36 months. For both groups, severe derogatories appear on credit records most often in the six months after separation. Among those who served seven to 35 months, 6 percent default on an auto loan, 8.6 percent default on a revolving account, and 10.9 percent default on other installment debt in the six months after separation. These are between four and ten times the rates observed in the six months prior to separation. By comparison, the rates among those with longer tenures are 2.8, 6.8, and 3.8 percent, between two and seven times the rates in the six months prior to separation.

**FIGURE 5:** FRACTION OF SERVICEMEMBERS WITH NEW SEVERE DEROGATORIES AROUND TIME OF SEPARATION FROM ACTIVE DUTY




Source: Author calculations from CFPB's CCP merged to the DoD SCRA database.

Some of the delinquent accounts in one period could turn into defaults the next. Combining all delinquencies and defaults within the first year of separation, debt repayment issues are still more common among those who serve seven to 35 months. For example, 13 percent of the seven to 35-month group are delinquent and/or have defaulted on auto debt within one year of separation, compared to 9 percent of those with longer tenures.

Conditioning on those who actually have an account at the time of separation (Figure 2), it is particularly likely that those with other installment loans will have trouble paying off that debt. Looking at the fraction of *accountholders* with either a delinquency *or* default within *one year* of separation, the numbers for those who serve seven to 35 months are as follows: 34 percent (auto loans), 38 percent (revolving accounts), and 64 percent (other installment accounts). For those who serve longer, the numbers are: 33 percent (auto loans), 21 percent (revolving accounts), and 33 percent (other installment accounts).

Further, the increase in defaults immediately after separation are not due to an overall increase in account closures; rather, defaults constitute an increasing fraction of all account closures. Consider account closure rates: in the two quarters *prior* to separation, between six and seven percent of all open accounts were closed. In the two quarters following separation, a similar fraction (seven percent) of open accounts were closed, and in the third and fourth quarter after separation six percent of still-open accounts were closed.

Now, consider the reasons for account closures. In the two quarters prior to separation, 74 percent of closures were because accounts were fully paid. Less than 10 percent of closures were due to a severe derogatory action.  The remainder were for a variety of other reasons, such as having been transferred to another servicer or closed due a lost credit card.  In the two quarters after separation, severe derogatories account for 25 to 30 percent of account closures, depending on the type of account (20 percent are due to chargeoffs alone).  In the third and fourth quarters after separation, the fraction associated with a severe derogatory is only slightly lower, between 20 and 25 percent.

Together these observations show that defaults increase both in absolute and relative terms soon after servicemembers leave active duty.

# Conclusion

This report shows that a sizeable fraction of young enlisted servicemembers go delinquent on debt or have severe derogatory marks appear on their credit record around the time they leave active duty. These problems are most likely to arise in the six months following separation, compared to the six months before separation. Problems are also more likely to arise among servicemembers who left the military between seven and 35 months of service—those who likely reached their first permanent assignment but separated before the end of their first contract.

Servicemembers are particularly likely to default on a personal, retail, or other type of installment loan, if they have one at the time of separation. Because such loans are associated with a variety of different purposes and types of businesses, it is difficult to discern clear patterns for this type of debt. Further research could help to better understand why servicemembers acquire such debt and whether those with these loans tend to be particularly credit-constrained.

Income and employment are unobserved factors that likely drive some of the patterns observed here. A servicemember with over three years of experience in 2015 made around $25,000 per year in base pay. On top of that, he or she either lived in the barracks or received money to cover monthly expenses, plus healthcare was covered and $4,400 per year was provided to cover meals. Altogether, but not including health care, a servicemember with over three years of experience made the equivalent of at least $35,000.[17]

Recently-released data from the U.S. Census Bureau show that across the years analyzed here, veterans with zero to five years of service earned a median income of roughly $30,000 in the first year after separation.[18] For those who separate before the age of 25, the median is even lower, and for those who separate at paygrade E-3 or less, it is lower still. These statistics suggest that at least some young veterans may experience a significant drop in income in the year after separation.

Further, these median incomes post-service are based on the sample of veterans who are employed and does not include those without jobs. The Congressional Budget Office estimates that around 92 percent of male veterans ages 22 to 24 were in the labor force, and of those in the labor force, just under 15 percent were unemployed between 2008 and 2015. For those aged 25 to 34, the average labor force participation rate was 94.5 percent and the average unemployment rate was 8.2 percent.[19] These rates likely varied with the macroeconomy, as around half of all active-duty servicemembers in the Army applied for unemployment insurance when leaving the

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[17] An E4 with over three years of service made $2,238 per month in base pay, and an E3 made $2,055.30 per month. Monthly Basic Allowance for Subsistence for all enlisted servicemembers was $367. Housing pay was at least $540 per month. All numbers came from Defense Finance and Accounting Service, *Basic Pay – Effective January 1, 2015*, *available at* https://www.dfas.mil/Portals/98/2015MilitaryPayChart_2.pdf.

[18] Calculations come from the U.S. Census Bureau, Longitudinal Employer-Household Dynamics, Veterans Employment Outcomes Explorer, *available at* https://lehd.ces.census.gov/applications/veo/occupation/detail/. Calculations were based on all information available, i.e. not limited to particular years of service. Separate calculations were performed based on years of service, age at exit, and paygrade at exit, without conditioning on other characteristics.

[19] Congressional Budget Office, *Labor Force Experience of Recent Veterans* (May 2017), *available at* https://www.cbo.gov/system/files/115th-congress-2017-2018/reports/52418-laborforceveterans_0.pdf. For women the labor force participation rate was 75 and 76 for the two groups, respectively, and the unemployment rate was 15% and 10%.

Army in 2013, signaling that they did not have a job lined up; however, usage and duration of unemployment benefits fell significantly in the following years.[20]

The reason for separation could be an additional unobserved factor behind defaults. Servicemembers leaving due to disability may face greater challenges on the civilian labor market and may therefore also have more trouble managing existing debt. Yet discharges due to disability are unlikely to explain the differences observed by time in service. Recent analyses show that medical discharges constitute the same share of separations during the first four years of service as in the next four years.[21] Moreover, the number of medical discharges is too small to explain the number of delinquencies and defaults. Between 2002 and 2011, less than 4 percent of servicemembers in any service branch had a medical discharge in the first four years of service (and in most years it was around 1 percent). By comparison, 36-month attrition (for any reason) averaged at least 18 percent across all service branches.[22]

Finally, servicemembers with less-than-honorable discharges may be unable to access veterans' benefits and may also be more likely to have difficulty on the civilian labor market.[23] Still, such discharges are too few to account for the fraction of delinquencies and defaults. For example, the Department of Defense reported that 9 percent of all 207,000 discharges in 2014 were less-than-honorable, with 2 percent being Other Than Honorable. Only a few hundred were Bad Conduct or dishonorable discharges.[24]

The data for this report cannot connect credit outcomes with employment, so it is unclear whether those who were struggling with debt are also the ones without a job or with lower levels of income. To identify the proper policy response to young veterans struggling with debt, it would be critical to understand the connection between delinquency and employment and whether they are in turn connected to veterans' service histories.

[20] Congressional Budget Office, *Transitioning from the Military to the Civilian Workforce: The Role of Unemployment Compensation for Ex-Servicemembers* (2017) *available at* https://www.cbo.gov/system/files/115th-congress-2017-2018/reports/52503-transitionreport.pdf.

[21] Compare Figures 3.4 and 3.5 in Heather Krull, Philip Armour, Kathryn Edwards, Kristin Van Abel, Linda Cottrell, and Gulrez Shah Azhar, *The Relationship Between Disability Evaluation and Accession Medical Standards*, Santa Monica, CA: RAND Corporation Report RR-2429-OSD (2019).

[22] Compare Figure 3.4 in Krull, et al. (2019) to Table 2.2 of *Predicting 36-Month Attrition*.

[23] Among less-than-honorable discharges, a general discharge under honorable conditions will still retain eligibility for veterans benefits. Other discharge categories may not. Further, military unemployment compensation is only available for discharges under honorable conditions. For the different types of discharges, see: MilitaryBenefits.info, "Types of Military Discharges" (undated), *available at* https://militarybenefits.info/types-of-military-discharges-2/. For veterans benefits rules, see: Veterans Benefits Administration, "Applying for Benefits and Your Character of Discharge" (May 19, 2015), *available at* https://www.benefits.va.gov/benefits/character_of_discharge.asp. For unemployment compensation rules, see: Department of Defense, "Military Compensation: Unemployment Compensation (UCX)" (undated), *available at* https://militarypay.defense.gov/Benefits/Unemployment-Compensation/.

[24] The remaining 7 percent of less-than-honorable discharges were general discharges under honorable conditions, which may pose fewer barriers to accessing benefits or employment, as noted in the previous footnote.