CONSUMER FINANCIAL PROTECTION BUREAU | DECEMBER 2022

Protecting Those Who Protect Us

Evidence of activated Guard and Reserve servicemembers' usage of credit protections under the Servicemembers Civil Relief Act (SCRA)

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Executive summary

The Servicemembers Civil Relief Act (SCRA) provides important legal and financial protections to active duty servicemembers. [1] These protections include the ability to reduce the interest rate on any pre-service obligations or liabilities to a maximum of 6 percent; protections against repossession of certain property without a court order; protections against default judgments in civil cases; protections against certain home foreclosures without a court order; and the ability to terminate certain residential housing and automobile leases early without penalty.[2] The interest rate reduction benefit and protection against repossession are the subject of this report.

Existing literature suggests that the interest rate reduction benefit is underutilized, and continued enforcement efforts suggest that some creditors continue to violate protections against repossession, despite efforts to increase awareness of SCRA protections and improve information about servicemember eligibility for those protections. There is also limited information on utilization rates, making the development and evaluation of public policy efforts to increase benefit utilization difficult.

To address this information gap, this report seeks to quantify, for the first time, the use of the SCRA interest rate reduction benefit and the effect of the repossession protection. We limit this analysis to members of the National Guard and Reserves (collectively, reserve component servicemembers) serving in a federal active-duty status. Members of the reserve component are likely to have financial obligations that are taken out while they are inactive, predating a subsequent period of service. As a result, the interest rate reduction benefit provides considerable financial value.

We use statistical analysis of reserve component servicemembers' automobile and personal loan experience during periods of activation to determine interest rate reduction utilization and whether lenders are consistently applying the SCRA protection against repossessions without a court order when repossessing servicemembers' vehicles. We also examine reserve component servicemembers' experience with credit cards and first mortgages.

This report uses unique data from the CFPB's Consumer Credit Panel (CCP) from 2007 to 2018 matched to activation data from the Department of Defense (DoD). Because interest rate is not reported in the CCP, we impute it using the information on the original principal amount, term

[1] 50 U.S.C. §§ 3901-4043.
[2] 50 U.S.C. § 3931-3959.

length, and required monthly payment for auto and personal loans. For mortgages and credit cards, we instead examine a decline in monthly payments to coincide with an activation.

1. Data reflect that fewer than one in ten members of the reserve component with eligible auto loans, and only 6 percent of those with eligible personal loans, received an interest rate reduction from 2007 to 2018. We examine the overall probability that an interest rate is reduced from above 6 percent to below 6 percent over an individual activation period, provided that the loan was originated prior to the activation. While some borrowers are obtaining interest rate reductions consistent with the SCRA interest rate cap, the reductions occur in only a small portion of eligible loans. Among eligible loans that start with an interest rate above 6 percent, 9.5 percent of auto loans and 5.9 percent of personal loans experience a reduction to or below 6 percent interest in the CCP's reported data (as shown in Table 1).

2. Auto and personal loans that do not show evidence of SCRA interest rate reductions represent about $100 million in foregone savings. Over the approximately 11-year period we study, we estimate that auto loans with interest rates above 6 percent that are not reduced during activations represent about $77.3 million in foregone interest savings. For personal loans, the corresponding estimate is $23.9 million. Table 1 shows these values as well as the savings per activation period of each loan type.

TABLE 1: SUMMARY OF INTEREST RATE REDUCTIONS DURING ACTIVATION AND POTENTIAL FOREGONE SAVINGS

Loan Type	Frequency That Interest Rate is Reduced from Above to Below 6 Percent (%)	Potential Foregone Savings	
		Average Per Activation Period and Loan ($)	Population Total ($ million)
Auto	9.5	331	77.3
Personal	5.9	249	23.9

Source: Authors' calculations from CFPB's CCP merged to the DoD SCRA database for activated members of the reserve component. Figures represent results from quarter four of 2007 through 2018 inclusive for loans that start above 6 percent.

Note: See Tables 5 and 6 in the main text for additional notes.

3. Using a different method to measure rate reduction utilization, we find that members of the reserve component also infrequently benefit from the rate reduction benefit for credit cards and mortgage loans. Although we cannot apply the same method to credit cards (in part because they are open-end credit) and home mortgages (in part because their payments often include taxes and insurance), we do find evidence that payments on these loan types tend to decrease slightly more often during activation periods, compared to non-activated periods. Although we do not have estimates of the total potential savings, a hypothetical mortgage loan with interest rates of 6.5 to 7.5 percent would have foregone savings of $1,890-5,670 per activation, which is much larger than the savings for auto and personal loans.

4. Reserve component servicemembers are more likely to obtain a reduced interest rate during longer periods of activation. Even among the longest periods of activation (about a year or more), however, the likelihood of an interest rate reduction remains under 16 percent for auto and personal loans. These estimates do entail uncertainty given limitations in the information reported in the CCP. For instance, some additional interest rate reductions likely occur retroactively following an activation period (because members of the reserve component have 180 days after leaving service to request the reduction) and are thus not visible in the CCP data.

5. Reserve component servicemembers are less likely to experience reported repossessions during an activation. During activated periods, auto loans are two-thirds less likely to be reported in repossession, compared to non-activated periods.

We identify several approaches to increase servicemember access to SCRA protections:

1. **Apply SCRA interest rate reductions for all accounts held at an institution if a servicemember invokes protections for a single account.** Enterprise-wide invocation could reduce the duplication necessary to invoke the SCRA interest rate reduction for multiple accounts and address complexity that may be hindering utilization.

2. **Explore ways to automatically apply SCRA interest rate protections.** When automatic interest rate reductions were applied to servicemembers' federal student loans, utilization increased dramatically. The low utilization rates identified in this report suggest that automatic application of interest rate reduction benefits should be pursued where possible, and that public and private sector resources should be aligned to increase adoption of an automatic application process.

3. **Develop comprehensive and periodic indicators of SCRA benefit utilization.** Better and more frequent information on SCRA rate reduction utilization would help inform and evaluate future efforts to expand servicemembers' financial protections.

1. Introduction and policy background

This report considers effectiveness of SCRA implementation procedures by measuring the SCRA utilization rate of reserve component servicemembers when called to active duty. We believe this measure is of particular importance since it demonstrates the ability of creditors to identify covered servicemembers, process invocation notification, apply SCRA legal and financial protections where applicable, and ensure that they are applied for the duration of the active-duty period. The following sections describe the legal and financial protections provided by the SCRA, the implementation of the SCRA through existing supervision and enforcement mechanisms, and the circumstances in which the members of the reserve component are subject to SCRA protections. We then discuss prior research on SCRA implementation and utilization. We find little systematic evidence on how often servicemembers benefit from these protections. Based on these findings, we conduct a number of tests to determine SCRA utilization among Reserve component servicemembers using data from the Consumer Credit Panel (CCP) and additional data on servicemember activations from DoD.

1.1. About the SCRA

Congress established the SCRA to provide legal and financial protections to servicemembers on active duty to help ensure that financial or legal issues do not distract them from their mission.[3] These protections include the ability to reduce the interest rate on any pre-service obligations to a maximum of 6 percent; protections against repossession of certain property without a court order; protections against default judgments in civil cases; protections against certain home foreclosures without a court order; and the ability to terminate certain residential housing and automobile leases early without penalty.[4] The interest rate reduction benefit and protection against repossession are the subject of this report.

The SCRA applies to active-duty members of the Army, Marine Corps, Navy, Air Force, Space Force, and Coast Guard. It also applies to reservists when serving in a Title 10 status or members of the National Guard serving under a Title 32 502(f) status for more than 30

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[3] 50 U.S.C. § 3902. "The purposes of this chapter are— (1) to provide for, strengthen, and expedite the national defense through protection extended by this chapter to servicemembers of the United States to enable such persons to devote their entire energy to the defense needs of the Nation; and (2) to provide for the temporary suspension of judicial and administrative proceedings and transactions that may adversely affect the civil rights of servicemembers during their military service."

[4] 50 U.S.C. §§ 3902-3958.

consecutive days for the purpose of responding to a national emergency declared by the President and supported by federal funds.[5] The law also applies to active duty commissioned officers of the Public Health Service or the National Oceanic and Atmospheric Administration.[6] Some SCRA rights also apply to dependents. [7]

The interest rate reduction for pre-service obligations applies during the period of active-duty service for most obligations, and, for mortgages, for an additional year after the end of the active-duty service period.[8] If a member of the reserve component receives orders to report for active duty before beginning an activation, SCRA protections begin from the date orders are received.[9] Financial obligations—or new charges made on a revolving credit agreement—that were originated during any term of active duty are not eligible for the interest rate reduction, even during a subsequent activation.[10]

To receive the interest rate reduction, a servicemember must notify their lender in writing with a copy of their orders to active-duty service or any other appropriate indicator of military service, including a certified letter from a commanding officer, that shows the date they began active-duty service.[11] Creditors may also proactively grant the interest rate reduction by retrieving information retrieved from the Defense Manpower Data Center (DMDC) SCRA website (referred to as the DMDC site) to determine active-duty status in lieu of written notification.[12] Some lenders provide an online process, but others instruct servicemembers to provide written requests or supporting documentation by mail or fax.[13]

The request can be made at any time during active duty and up to 180 days after release from active duty and applies retroactively to the beginning of activation.[14]

In most circumstances, the interest rate reduction is not proactively applied and requires that the servicemember provide the lender with written notification. Federal student loans held by servicemembers, however, are entitled to receive an automatic interest rate reduction. Beginning in December 2014, the Department of Education requires federal student loan

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[5] 50 U.S.C. § 3911(2)(A).
[6] 50 U.S.C. § 3911(1)-(2).
[7] See, for e.g., dependents' rights related to the termination of a residential or vehicle lease at 50 U.S.C. § 3955.
[8] 50 U.S.C. § 3937(a) and (d)(1).
[9] 50 U.S.C. § 3917(a).
[10] 50 U.S.C. § 3937(a)(1). See also, Sibert v. Wells Fargo 863 F.3d 331 (4th Cir. 2017)
[11] 50 U.S.C. § 3937(b)(1)(A).
[12] 50 U.S.C. § 3937(b)(1)(B); DEPARTMENT OF DEFENSE, SERVICEMEMBER CIVIL RELIEF ACT WEBSITE, https://scra.dmdc.osd.mil/scra/ (last visited Oct. 18. 2022).
[13] CONSUMER FIN. PROT. BUREAU, SERVICEMEMBERS CIVIL RELIEF ACT AND MILITARY LENDING ACT PROTECTIONS, undated Available at https://files.consumerfinance.gov/f/documents/cfpb_ymyg-servicemembers-handout_scra-and-mla-protections.pdf .
[14] 50 U.S.C. § 3937(b)(1)(A).

servicers to check the DMDC site monthly to identify borrowers eligible for the SCRA interest rate cap.[15] Federal student loan servicers are required to retroactively grant benefits for periods of activation back to 2008 when the law began applying this protection to student loans. Some private student loan lenders also voluntarily adopted this proactive practice.[16]

In addition to the interest rate reduction, the SCRA protects active duty servicemembers from repossessions of certain property, such as automobiles, unless the lender obtains a court order or a valid waiver of SCRA rights.[17] In order to determine whether a servicemember is protected by the SCRA prior to a repossession attempt, creditors may use active-duty status information provided through the DMDC site. However, this is a strict liability provision, so even if the DMDC site shows no service, creditors will be liable if it turns out that the repossession occurred during a period of military service. Creditors are required to comply with this repossession protection and servicemembers are not required to affirmatively request relief.

1.2. Implementing SCRA protections

Financial institutions are examined for SCRA compliance by the prudential regulators where applicable. When violations occur, the SCRA is enforced by the Department of Justice (DOJ).[18]

Lenders may violate the SCRA interest rate reduction provision when they fail to reduce the interest rate for eligible accounts after receiving proper notice.[19] They may also violate the SCRA repossession protection when they repossess certain vehicles of servicemembers without court orders.[20]

SCRA compliance is a component of the supervision and examination procedures in place at the National Credit Union Administration[21], the Federal Deposit Insurance Corporation[22], the Office

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[15] U.S. Government Accountability Office, Student Loans: Oversight of Servicemembers' Interest Rate Cap Could Be Strengthened, GAO-17-4, Nov 15, 2016; Also see, https://studentaid.gov/sites/default/files/military-student-loan-benefits.pdf.

[16] *Id.*, at 19.

[17] 50 U.S.C. § 3952.

[18] Note conduct that violates the SCRA may also constitute unfair, deceptive, or abusive practices under the CFPA. See e.g., In re USA Discounters, Ltd., 2014-CFPB-0011 (August 14, 2014).

[19] 50 U.S.C. § 3937.

[20] 50 U.S.C. § 3952(a)(1).

[21] NAT'L CREDIT UNION ADMIN., FED. CONSUMER PROT. GUIDE (2019) available at https://www.ncua.gov/regulation-supervision/manuals-guides/federal-consumer-financial-protection-guide/compliance-management/lending-regulations/servicemembers-civil-relief-act-scra

[22] FED. DEPOSIT INS. CORP., CONSUMER COMPLIANCE EXAMINATION MANUAL V-11.1 et seq. (2020) available at https://www.fdic.gov/resources/supervision-and-examinations/consumer-compliance-examination-manual/documents/5/v-11-1.pdf .

of the Comptroller of the Currency[23], and the Board of Governors of the Federal Reserve System.[24] These procedures outline how SCRA activities can result in compliance, operational, strategic, and reputational risks; provide a mechanism to address any deficiencies or violations; and communicate any proposed enforcement.

The SCRA is enforced by the U.S. Attorney General, through the Civil Rights Division of the DOJ. The U.S. Attorney General is authorized to file a federal lawsuit against any person or entity who engages in a pattern or practice of violating the law or when the facts at hand raise an issue of significant public importance.[25] The U.S. Attorney General has the authority to seek monetary damages on behalf of individual servicemembers, in addition to civil penalties, equitable relief, and declaratory relief.[26] In 2022, the DOJ took action to settle allegations of failing to provide qualified servicemembers with the interest rate reduction for the entire period required under the SCRA as well as unlawful repossessions and for denying lease terminations, in addition to other actions.[27]

1.3. Military reserve service

The reserve component of the U.S. armed forces consists of the reserves for the five military branches (Army, Navy, Air Force, Marines, and Coast Guard) and the Army and Air National Guards. Collectively, we refer to these servicemembers as reserve component servicemembers.

While members of the reserve component are primarily civilians and often have regular civilian employment, they perform military service on a part-time basis (e.g., monthly drills). They are also called to active duty for a variety of reasons. Reserve members typically participate in two weeks of annual training on a full-time, active-duty basis. They can also be activated for military deployments and responses to national contingencies like natural disasters and the response to COVID-19. Such activations may range from a few days (for a short-term contingency) to a year or more (for overseas deployments). Some Reservists and members of the National Guard also

[23] OFFICE OF THE COMPTROLLER OF THE CURRENCY, COMPTROLLER'S HANDBOOK – CONSUMER COMPLIANCE – SERVICEMEMBER CIV. RELIEF ACT (2021) available at https://www.occ.treas.gov/publications-and-resources/publications/comptrollers-handbook/files/servicemembers-civil-relief/pub-ch-scra.pdf .

[24] BOARD OF GOVERNORS OF THE FED. RESERVE SYS., CONSUMER COMPLIANCE HANDBOOK SCRA 1-8 (2016) available at https://www.federalreserve.gov/boarddocs/supmanual/cch/cch.pdf .

[25] 50 U.S.C. 4041(a).

[26] 50 U.S.C. 4041(b).

[27] See DEPT. OF JUSTICE, GM FINANCIAL TO PAY OVER $3.5 MILLION TO RESOLVE SERVICEMEMBERS CIVIL RELIEF ACT CLAIMS (Oct. 5, 2022) available at https://www.justice.gov/opa/pr/gm-financial-pay-over-35-million-resolve-servicemembers-civil-relief-act-claims and DEPT. OF JUSTICE, WESTLAKE FINANCIAL TO PAY MORE THAN $225,000 TO RESOLVE SERVICEMEMBERS CIVIL RELIEF ACT CLAIMS (Sept. 28, 2022) https://www.justice.gov/usao-cdca/pr/westlake-financial-pay-more-225000-resolve-servicemembers-civil-relief-act-claims .

fill full-time positions and are termed Active Guard Reserve (AGR). AGR members typically serve for multiple years at a time and are on active duty during this period.

Army and Air National Guard members are under the jurisdiction of their state governors, who can order them to provide disaster or COVID-19 relief in their home state. Some states extend similar state protections to these state activations, while others do not.[28] In this report, we consider only federal activations.

Since the SCRA interest rate reduction benefit applies only to loans originated prior to a period of activation, it is especially applicable to reserve component servicemembers who have pre-service obligations and transition into and out of active-duty status over time. Indeed, a single loan may intersect with multiple periods of activation, each of which entitles the servicemember to SCRA protection, if the loan was not originated during a period of activation.

1.4. Previous research

Prior research suggests that SCRA benefit utilization, particularly the interest rate benefit, is relatively low compared to the financial benefit that it provides if invoked. This research examines general awareness of SCRA benefits, the effect of additional notification of benefits on utilization rates, and the effect of automatic application of benefits.

There is evidence that servicemembers are entering active duty with debt that may be covered by the SCRA interest rate reduction benefit. In a 2016 paper, Skimmyhorn finds that, in the year prior to military entry, 68 percent of new Army enlistees had debt balances, 55 percent had a credit card balance, and 27 percent had an auto loan.[29]

While we are unaware of any comprehensive analysis of SCRA benefit utilization there is evidence that benefits are underutilized. A 2014 GAO report based on data from three mortgage servicers and a credit union found that many SCRA-eligible borrowers had not taken advantage of the interest rate reduction benefit. At one institution 82 percent of SCRA-eligible borrowers had mortgages with interest rates over 6 percent.[30] The paper noted that SCRA education efforts could be improved but that an assessment of those efforts was still warranted.[31]

[28] For information on state provisions, see Servicemembers Civil Relief Act Centralized Verification Service, SCRA State Laws, 2022. Available at: https://www.servicememberscivilreliefact.com/blog/scra-state-laws/ .

[29] William Skimmyhorn, *Assessing Financial Education: Evidence from Bootcamp,* 8(2) Am. Econ. J.: Econ. Pol'y. 322, (2016) available at http://dx.doi.org/10.1257/pol.20140283.

[30] U.S. Gov't Accountability Off., Servicemember Civil Relief Act: Information on Mortgage Protections and Related Education Efforts 12 (Jan. 2014) available at https://www.gao.gov/assets/gao-14-221.pdf.

[31] *Id.* at 16.

In the Fiscal Year 2016 National Defense Authorization Act, Congress added a requirement that DoD increase financial education for servicemembers to improve their understanding of and access to their legal rights.[32] DoD responded by mandating increased financial education for servicemembers to educate them on their consumer rights, including the SCRA. The CFPB also provides materials informing servicemembers of their SCRA rights.[33]

In a 2020 study, Castleman, Patterson, and Skimmyhorn conduct a randomized controlled trial to determine if gain/loss framing and reminder messaging through email and text message could increase the utilization of the interest rate reduction benefit.[34] The results suggest that financial education or information interventions delivered by email faced challenges to their effectiveness. The study also notes that there was significant attrition throughout the SCRA application process and only a small number of servicemembers that initially engaged completed the necessary steps to receive the SCRA financial protections.[35]

A 2016 GAO report also found low SCRA utilization rates for federal student loans when servicemembers were required to provide proper written notice.[36] The GAO found, however, that automatic application of SCRA interest rate benefits increased the utilization of the SCRA rate reduction benefit.[37] Since 2014, student loan servicers have been required to match borrowers with federal student loans against the DMDC site on a monthly basis to determine which borrowers have eligible military service that qualifies them for SCRA benefits. Servicers of commercial Federal Family Education Loans have been required to implement the automatic eligibility check since 2016.[38] The 2016 GAO report shows that more than twice as many borrowers benefited from the automatic retroactive application of the SCRA interest rate cap compared to those who had made written requests before there was an automatic process.[39]

Taken together, these studies point to a possible information gap, or other frictions, related to the utilization of SCRA benefits.[40] It also suggests the need for periodic and comprehensive

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32 National Defense Authorization Act for Fiscal Year 2016, Public Law 114-92 § 661.

33 See, e.g. CONSUMER FIN. PROT. BUREAU, *Consumer advisory: Know your rights under the Servicemembers Civil Relief Act (SCRA)* (Jul. 23, 2021) available at https://www.consumerfinance.gov/about-us/newsroom/consumer-advisory-know-your-rights-under-the-servicemembers-civil-relief-act-scra/. See also CONSUMER FIN. PROT. BUREAU, *Misadventures in Money Management* available at https://www.consumerfinance.gov/consumer-tools/educator-tools/servicemembers/mimm/

34 Benjamin L. Castleman, et al., *Benefits left on the table: Evidence from the Servicemembers' Civil Relief Act*, Econ. of Educ. 101868 (2020) available at https://www.sciencedirect.com/science/article/abs/pii/S0272775718303480 .

35 *Id.* at 11.

36 U.S. GOV'T ACCOUNTABILITY OFF., Student Loans: Oversight of Servicemembers' Interest Rate Cap Could be Strengthened 14 (Nov. 2016) available at https://www.gao.gov/assets/gao-17-4.pdf.

37 *Id.* at 13.

38 *Id.* at 13 n. 26.

39 Authors' calculation for federal loans with interest rate reductions from GAO, 2016, Table 10, p. 46.

40 See, for example, Benjamin Handel and Joshua Schwartzstein, "Frictions or Mental Gaps: What's Behind the Information We (Don't) Use and When Do We Care?" *Journal of Economic Perspectives*, 32 (1): 155-78 (2018).

information on SCRA interest rate reduction utilization rates which could both inform and evaluate future efforts to increase rates and ensure that servicemembers receive the legal and financial protections afforded them under the SCRA.

1.5. Objectives and overview of this report

In this report, we undertake statistical analysis of reserve component servicemembers' automobile and personal loan experience during periods of activation. We examine whether consumers' interest rates change from above the SCRA's 6 percent interest rate cap to below the cap during periods of activation that follow the origination of a loan. We also examine reserve component servicemembers' experience with credit cards and first mortgages. These experiences can add to our understanding of whether SCRA interest rate protections are implemented. In addition, we look at whether consumers' experiences with automobile repossessions are consistent with the SCRA's protections.

The remainder of this report is organized into five sections. Section 2 reviews how we developed the data and sample for this project and the methods we apply. Section 3 conducts statistical tests for evidence of application of the SCRA interest rate reduction for loans held by activated reserve component servicemembers. It also examines how servicemembers' credit scores evolve during activation. Section 4 goes into greater depth in examining the frequency of interest rate reductions for auto and personal loans and the factors that may be related to rate reductions. Section 5 estimates the total foregone benefits from auto and personal loans that do not receive interest rate reductions during activations. Section 6 concludes the report with a discussion of specific actions that could increase servicemember access to SCRA protections.

2. Data and methods

2.1. Data sources and sample construction

This project built on significant work undertaken in the CFPB's prior analysis of the credit experiences of young active duty servicemembers.[41] We used the source data files from that project and further developed them to meet our research objectives.

The data for our work come from two sources.[42] One source is the CFPB's CCP. This is a de-identified 1-in-48 sample of credit records from one of three nationwide consumer reporting agencies (NCRAs). The CCP includes tradeline data for the sample, such as auto loans, personal installment loans, and various revolving loans. We focus on four types of tradelines: auto loans, credit cards, personal installment loans, and home mortgages. The tradeline data are submitted to the NCRA by a variety of furnishers, such as a lender, a collections agency, a government entity, or some other furnisher. The tradeline data includes information on when loans are opened and closed, the payment status, the required and actual monthly payment amounts, and the type of business of the lender.

The second data source identifies military servicemembers and their activation status. To make these identifications, the NCRA matched the CCP records to the DMDC SCRA website. The NCRA conducted this match for the CCP records for the period from the fourth quarter of Calendar Year 2007 to the end of 2018 by providing a de-identified SCRA match file with the activation status of each CCP member over this period. This file included the dates of activation and the military component the member served in during the activation. Information from the DMDC SCRA website can no longer be used for research purposes after 2018, however, so we are unable to analyze the activation status of panel members after that date.[43]

[41] See James V. Marrone and Susan P. Carter, *Financially Fit? Comparing the credit records of young servicemembers and civilians,* Consumer Fin. Prot. Bureau (Jul. 2020), available at https://files.consumerfinance.gov/f/documents/cfpb_financially-fit_credit-young-servicemembers-civilians_report_2020-07.pdf; and James V. Marrone, *Debt and delinquency after military service: A study of the credit records of young veterans in the first year after separation,* Consumer Fin. Prot. Bureau (Nov. 2020), available at https://files.consumerfinance.gov/f/documents/cfpb_debt-and-delinquency-after-military-service_report_2020-11.pdf.

[42] This discussion is adapted from Marrone and Carter (2020), pp. 8-15.

[43] As explained in Marrone and Carter (2020, p. 12), "This data was acquired prior to a 2017 settlement between DoD and the Vietnam Veterans of America. The settlement prohibits further access to the DMDC SCRA site for the purposes used in this research. See Vietnam Veterans of America, "SCRA Settlement," available at https://vva.org/scra-settlement/.

We used the SCRA match file to identify our sample of 23,736 individuals in the CCP who were activated as Guard or Reservists between 2007 and 2018. Our data is organized with one calendar quarter per observation so that we can observe an individual and their specific tradelines each quarter.

2.2. Methods

In this report, we compare experiences within a single tradeline for each individual. Looking within the history of each tradeline allows us to observe changes in that tradeline and its relationship to the periods of servicemember activation. Because we can hold constant the characteristics of the servicemembers and individual tradelines that do not change over time, we can develop reliable estimates of how changes are related to activation periods.

In order to carry out this method, we first identify activation stints in our data and how these intersect with open tradelines at different points in time.

Activation stints and loan stints

We refer to periods of activation as *activation stints*. Figure 1 illustrates activation stints for a hypothetical servicemember. This servicemember is activated twice during the period depicted. We refer to the period of activation as an *activated* status. We refer to the period that lasts four quarters following an activation (or shorter if another activation begins during that period) as *post-activated* status. All other periods are in a *non-activated* status.

FIGURE 1: ACTIVATION STINTS AND STATUS

Source: Authors' creation.

Note: Depiction of an example timeline of a servicemember's activation status.

Since tradelines are opened and closed at different points in time, the tradelines we analyze may intersect with a single activation stint, multiple activation stints, or no activation stints. We refer to each intersection between a tradeline and an activation stint as a *loan stint*. Table 2 provides a summary of the number of tradelines and loan stints that we include in our analysis for the four types of tradelines. Since some loans do intersect with multiple activation stints, the number of loan stints is somewhat higher than the number of loans.

TABLE 2: NUMBER OF LOAN AND LOAN STINTS BY LOAN TYPE

Type of Loan	Number of Loans	Number of Loan Stints
Auto	14,716	16,490
Personal	4,467	4,921
Credit Card	52,233	62,675
Mortgage	8,667	10,592
Total	80,083	94,678

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

Note: Activations between 2007 and 2018 inclusive for all loan types.

Interest rate imputation

Furnishers do not report interest rates for tradelines, so the CCP does not contain this information. For closed-ended loans without additional charges (like taxes and insurance) we can impute the interest rate using the original principal balance, term length, and required monthly payment. We conduct that imputation by forming the payment ratio, which is the required monthly payment per $1,000 of the original principal balance. We built a lookup table that gives the payment ratio for each interest rate between -0.5 percent and 36 percent and each term between one and 480 months (40 years).[44] For each quarterly observation of each tradeline, we look up the closest value of its payment ratio in the lookup table to estimate the interest rate.

Because values in the CCP are reported in whole dollars only, these estimates are imprecise, including the possibility of estimating an interest rate slightly below zero. We therefore allow

[44] We are concerned that loans with imputed interest rates well below zero, above 36 percent, or with reported terms longer than 40 years represent data entry errors, so we exclude them.

our match to determine interest rates down to -0.5 percent. We treat these negative interest rates as zero for our purposes. If our match would result in interest rates lower than -0.5 percent or greater than 36 percent, or the loans have terms greater than 480 months, we do not use those observations. Such observations reflect about 5 percent of auto loans and 11 percent of personal loans, as reported later in Table 5.

We also remove observations where the tradeline is not in a repayment status (e.g., closed, in deferment, collections, or repossession) or where the most recent report is earlier than the quarter of observation (i.e., stale reporting).

Figure 2 illustrates the results of this imputation process for auto loans. As the figure indicates, imputed interest rates range from zero to around 30 percent, with substantial numbers both above and below 6 percent. The median imputed interest rate is 6.4 percent, which is consistent with other analyses of auto loan interest rates.[45]

Figure 3 provides similar results for personal loans. The median imputed interest rate is 10.9 percent, which is consistent with other analyses of personal loan interest rates.[46]

In the case of personal loans, we find a substantial number of tradelines with a zero imputed interest rate because the sum of the required monthly payments exactly (or very nearly) matches the original principal balance. Figure 3 depicts these loans with a mass at the zero-interest rate point. Although we do not think such loans are common, these may reflect either reporting errors or misclassification of the lender type (e.g., a true zero-interest retail installment loan classified as a personal loan). Because we focus on loans with interest rates that begin above 6 percent, these zero interest rate loans do not contribute to our analyses.

As we discuss below, we cannot impute interest rates for mortgages and credit cards using this method.

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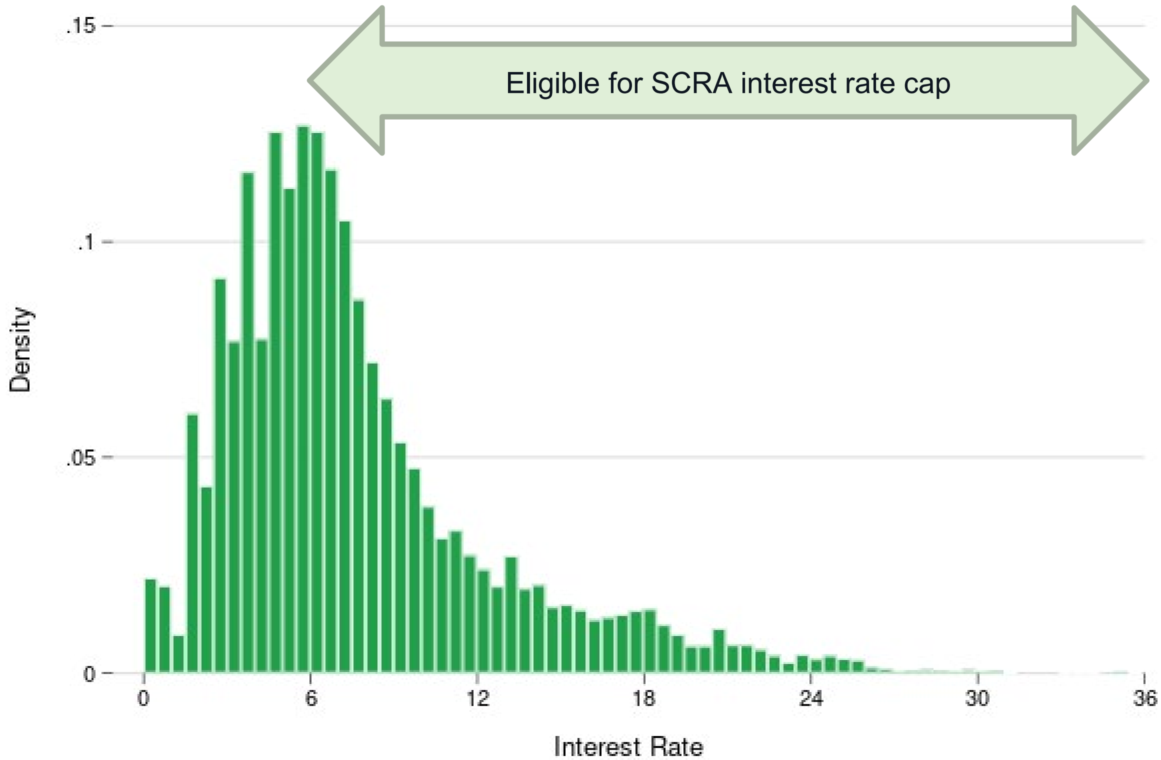
[45] For example, Board of Governors of the Federal Reserve System, Consumer Credit G.19, reports that commercial banks and finance companies offer quarterly average auto loan interest rates ranging generally between five and seven percent over the 2007 to 2018 period we study. Available at: https://www.federalreserve.gov/releases/g19/hist/cc_hist_tc_levels.html .

[46] For example, Board of Governors of the Federal Reserve System, Consumer Credit G.19, reports that commercial banks offer quarterly average interest rates on 24- month personal loans ranging generally between 10 and 11 percent over the 2007 to 2018 period we study. https://www.federalreserve.gov/releases/g19/hist/cc_hist_tc_levels.html

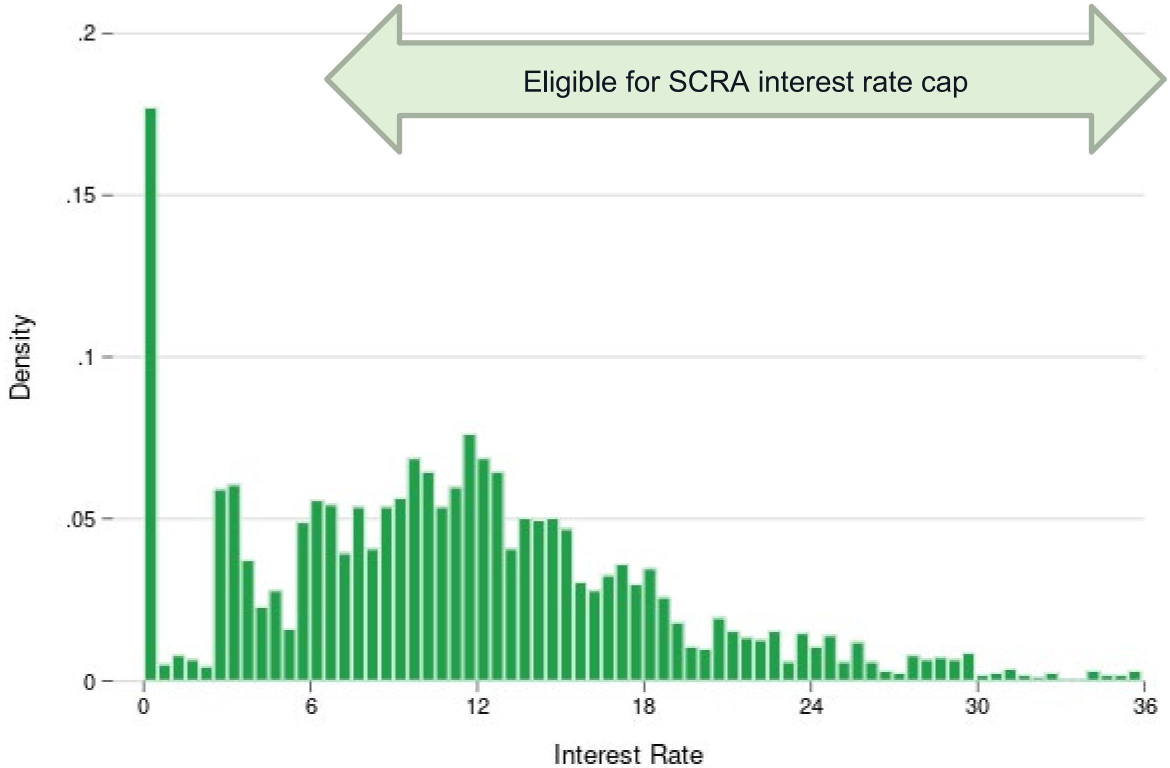
FIGURE 2: DISTRIBUTION OF IMPUTED INTEREST RATES, AUTO LOANS 2007–2018



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

Note: This graph shows the distribution of imputed interest rates for reserve component servicemembers' auto loans. Loans with an interest rate above 6 percent are likely to be eligible for SCRA protections. Further discussion on the limitations in determining SCRA eligibility is provided on p. 20. Density indicates the proportion of loans with each interest rate.

FIGURE 3: DISTRIBUTION OF IMPUTED INTEREST RATES, PERSONAL LOANS 2007-2018



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

Note: This graph shows the distribution of imputed interest rates for reserve component servicemembers' personal installment loans. Loans with an interest rate above 6 percent are likely to be eligible for SCRA protections. Further discussion on the limitations in determining SCRA eligibility is provided on p. 20. Density indicates the proportion of loans with each interest rate.

Outcome definitions

We focus on four types of tradelines for this report: auto loans, personal installment loans, credit cards, and home mortgages. With the exception of credit cards, all of these loans are closed-end loans.

For the closed-end loans for which we were able to calculate the interest rates, we examine if imputed interest rates drop to or below 6.5 percent during activation, provided that the loan was opened before the current activation stint. While the SCRA allows for loans to drop to 6 percent, we use 6.5 percent to allow for a loss of precision due to the use of imputed interest rates.

The SCRA's interest rate reduction does not apply to an obligation incurred during any term of service, even if there is a subsequent activation. Because we do not observe the history of activations prior to the fourth quarter of 2007 for tradelines already open at that time, we cannot model this restriction and do not impose it in our analysis. Instead, we consider each loan stint as eligible if the loan was opened at least one quarter prior to activation and the imputed interest rate in that prior quarter is above 6.5 percent. Thus, there may be some loans that we view as eligible for an interest rate reduction that are not actually eligible.

Many of the closed-end loans in our sample are fixed-rate loans, but there may be some variable-rate closed-end loans, especially among mortgages. Loans with a variable rate may show a reduction of the interest rate from above 6.5 percent to 6.5 percent or below during an activation because the creditor implemented a change in the variable interest rate rather than because the borrower invoked SCRA rights. In Section 3, we conduct statistical tests to distinguish these possibilities.

For auto loans, in addition to interest rate reductions, we also look at instances of auto repossessions reported by furnishers.

For mortgages and credit cards, we cannot use the method described above to impute interest rates. Because mortgage payments often include property taxes, property insurance, and private mortgage insurance, we are unable to impute the interest rate for these loans. Instead, we look at mortgages that have their monthly payment reduced by at least 10 percent. Such a reduction corresponds approximately to a reduction of interest from 7.5 percent to 6 percent.

Since credit cards are revolving credit, it was not possible to impute their interest rate. Credit cards typically require a monthly payment sufficient to repay 1 percent of the outstanding balance, the accumulated interest for the month, and any fees outstanding. We calculate a *net payment* as the required monthly payment less 1 percent of the outstanding balance. If no fees are owed, this net payment is a reasonable measure of the interest on the balance. We use an outcome of net payment decreasing by at least 50 percent, since we expect interest charges to decline by 50 percent or more if the original interest rate is at least 12 percent, which is common in the credit card market.[47] If the credit card is completely paid off in a quarter, i.e. the balance and required payment decline to zero, we omit that observation and do not treat it as a reduced net payment outcome (even though the net payment is decreasing).[48]

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[47] See Consumer Fin. Prot. Bureau, *CARD Act Report: A review of the impact of the CARD act on the consumer credit card market* 31 (October 1, 2013) (average credit card interest rates from 2008 to 2012 ranged from 16 to 19 percent.)

[48] Issuer's minimum payments complicate the analysis because the required principal portion of the payment will not decrease as the outstanding balance does if 1 percent of outstanding balance is less than the minimum payment. In some cases, reduction in the interest portion of the payment would still be visible in the measure we use; in other cases, it will not.

In addition to outcomes related to specific tradelines, we examine the trends in reserve component servicemembers' credit scores when they are activated.

We also look at reserve component servicemembers' experiences with student loans, but because of the significant limitations related to these loans in the CCP data (discussed below), we do not include them in our analysis. We do not examine other types of loans, such as retail loans or personal revolving loans. These are either uncommon types of closed-end loans or revolving loans that we are unable to analyze using the methods described previously.

Limitations

We rely on the information that furnishers report to the NCRAs, which then provides the CCP data. There are a variety of reasons why furnisher information may be inaccurate, so there is always some error in any estimates made from the CCP. For our purposes, an important limitation is that we are using snapshots of the credit files that do not capture retroactive changes made after the snapshot is taken.

In some cases, servicemembers can, and likely do, receive reductions in interest rate that are entirely applied to a prior time period rather than the current calendar quarter. Since a servicemember may submit a valid written request up to 180 days after their activation, the lender may not apply the reduction until after the period of activation. While the servicemember receives a refund for excess interest paid during activation, the tradeline reporting will not be revised retroactively to show such adjustments. As a result, our data does not reflect adjustments that are applied only after the activation period.

While we explored reserve component servicemembers' student loan experiences using these data, these analyses face significant limitations. The CCP does not include information on whether student loans are federal or private and thus covered by the automatic interest rate protection (which is required for federal loans and optional for private loans). The tradeline information also does not include whether borrowers are enrolled in income-driven repayments, which would make our imputation of interest rates inaccurate. For these reasons, we do not report detailed results of our student loan analyses.

As we note above, our data is limited to activations during the period from quarter four of 2007 to 2018. Because access to the DoD SCRA data is no longer available for research purposes, we cannot observe activations beyond 2018. Therefore, we cannot examine more recent time periods and the issues they may raise, such as potential effects of changes to DoD financial education practices or interactions with responses to the COVID-19 pandemic.

For a similar reason, some activation periods are censored. Specifically, we do not know the actual end date of activations if we do not observe servicemembers after their final activation ends. This is always the case for activations that extend to the last period of our data, the fourth quarter of 2018, and is sometimes true even for earlier time periods. For portions of our analysis that depend on analyzing an entire activation stint, we exclude these censored observations.

As noted above, we do not verify if a loan was opened during an earlier activation and thus ineligible for an SCRA interest rate reduction in a future activation. However, we expect this to affect relatively few loans since the data reported in Table 2 above indicate that most loans intersect with just one activation during the 11-year period we observe.

The DoD SCRA database also does not record state activations that can trigger similar state protections where available. Because we do not observe state activations, differences we estimate between activated and non-activated periods may be biased downward, although we do not think this is a large effect.

Because we impute interest rates and use other proxy measures of payment reductions, our estimates are necessarily somewhat imprecise. Based on an examination of the imputed interest rates in the data, we use a threshold of 6.5 percent when measuring whether a loan is below the 6 percent SCRA interest rate cap, allowing some margin for imprecise imputation. Our data may also include some variable-rate loans that exhibit similar interest rate reductions due to changes in the variable rate or changes in insurance premiums rather than invocation of SCRA rights.

As we explain in Section 3, we use statistical tests to compare our estimates of interest rates and our other proxies during periods of activation and non-activation. If our estimates were so imprecise that they did not convey information about interest rate reductions during activation, we would expect that we could not statistically distinguish the values during activated and non-activated periods.

3. Incidence of interest rate reductions and other protections

To test whether the outcomes we define are more likely during periods of activation, we define these outcomes for each quarter of our data and statistically compare them during three periods of time corresponding to the periods in Figure 1 above: non-activated, activated, and (four quarters) post-activated. Table 3 reports these outcomes for each loan type and period, indicating with an asterisk those values for which the activated or post-activated value is significantly different from the non-activated, or baseline, value.

TABLE 3: STATISTICAL SUMMARY OF OUTCOMES

	Prevalence of Outcome (% per quarter)				
Loan Type Outcome	**Non-activated**	**Activated**	**Post-activated**	**Difference Activated vs. Non-activated**	**N (loan-quarters)**
Auto					
Interest rate reduction	0.34	2.72*	0.53*	+2.38	139,311
Reported repossession	0.32	0.11*	0.16*	-0.21	415,889
Personal installment					
Interest rate reduction	0.20	1.93*	0.48*	+1.73	56,176
Credit card					
Reduced net payment (50%)	9.63	11.06*	9.08*	+1.43	1,021,752
Mortgage					
Reduced payment (10%)	0.90	1.27*	1.07*	+0.37	228,328

Source: Authors' calculations from CFPB's CCP merged to the DoD SCRA database. For all outcomes the data cover 2007-2018, inclusive.

Note: * indicates t-test significant at .05 level compared to non-activated. Interest rate reductions are computed for loans that begin with an imputed interest rate above 6.5%.

In the activated period, all five of the outcomes show statistically significant changes over the baseline, non-activated period. Throughout this report, we refer to an *interest rate reduction* if the auto or personal loan tradeline transitions from an imputed interest rate above 6.5 percent to an imputed interest rate equal to or below 6.5 percent. The higher prevalence of such interest rate reductions and lower prevalence of reported auto repossessions shown in Table 3 are consistent with SCRA protections.

For auto loans, the chance that a loan originated with an imputed interest rate greater than 6.5 percent experiences an interest rate reduction to or below that level is 2.72 percent during an activated quarter, versus just 0.34 percent in a non-activated quarter. Auto loans thus experience a 2.38 percent greater chance of such interest rate reductions during an activated quarter. Personal loans experience a 1.73 percent greater chance of such interest rate reductions during an activated quarter (1.93 percent vs. 0.20 percent of loans originated with an imputed interest rate greater than 6.5 percent).

Interest rate reductions occur for both auto and personal loans during post-activated periods, although at much lower rates than during activations. SCRA interest rate caps do not apply during these post-activation periods, but there may be some reductions that are reported in the data with delay during this period. During activated periods, auto loans are two-thirds less likely to be reported in repossession (0.11 vs. 0.32 percent). During post-activated periods they are half as likely to be reported in repossession (0.16 vs. 0.32 percent).

Auto loans are also less likely to be reported as repossessed during activated and post-activated periods, consistent with SCRA protections.

Our information about credit cards and mortgages is less precise because we cannot impute their interest rates. Nonetheless, we see some evidence that payment reductions occur more frequently in activated periods, although the differences are smaller than our findings for auto and personal loans. Mortgages also experience higher frequency of payment reductions in the post-activated period. This finding is consistent with the SCRA which extends the interest rate cap for one year following activation for mortgages.

We conduct a further test to see if our results are consistent with SCRA protections. Using a similar approach but with the outcomes defined in reverse, we examine whether interest rates increase from below 6.5 percent to above 6.5 percent after an activation. We find statistically significant rates of increasing interest rates for auto and personal loans after an activation.

We use a similar approach to examine changes in consumers' credit scores during activations, reported in Table 4. Changes in credit scores are approximately zero in non-activated periods, on average, while they increase by about two points per quarter during activated periods. Reserve component servicemembers are thus faring a little better during activation periods compared to their baseline of civilian employment, consistent with the prior research we reviewed in Section 1.

We further explore reduction rates in the next section.

TABLE 4: CREDIT SCORE DYNAMICS

Outcome	Change in Credit Score (points per quarter)		N (consumer-quarters)
	Non-activated	Activated	
Credit score	0.06	2.01*	795,986

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

Note: * indicates t-test significant at .05 level compared to non-activated. Analysis is conducted using quarterly observations for each consumer (called "consumer-quarters").

4. Detailed analysis of interest rate reductions and credit score dynamics

4.1. Overall level of interest rate reductions

We conduct further analyses of the reduction rates of auto and personal loans. In order to determine which loans were eligible for SCRA interest rate reductions, we restrict the sample of loan-stints to loans that were open at least one quarter prior to activation with an imputed interest rate above 6.5 percent in this quarter. We drop loan-stints that are censored at the end.

As noted in Section 2, we do not include observations when the tradeline is not in repayment status or the reporting is stale. There are some observations where we cannot impute the interest rate, typically because the reported required monthly payments are either well below or well above the amount required to repay the principal balance. We think these observations likely represent reporting errors. Such observations represent 5 percent of auto loans and 11 precent of personal loans, as shown in the table.

About 10 percent of all interest rate reductions are first recorded in the quarter prior to activation for both auto and personal loans. As noted in Section 1, creditors are required to begin the interest rate reduction from the date on the orders, rather than the start of the activation, which may account for these early reductions. We include these reductions in our analysis.

This leads to 5,665 auto loan stints and 2,163 personal loan stints that were eligible for SCRA protections, as shown in the third column of Table 5. Among these eligible loan stints, we see a modest share of loans with an imputed interest rate reduction from greater than 6.5 percent to at most 6.5 percent. Specifically, we observe a 9.5 percent share of auto loans and a 5.9 percent share of personal loans experiencing such an interest rate reduction at some point during an activated time period (shown in the second column of the table). As we noted in Section 2.2 (Limitations), additional interest rate reductions that we do not observe may be applied retroactively after a period of activation.

TABLE 5: SHARE OF LOANS EXPERIENCING INTEREST RATE REDUCTIONS BY LOAN TYPE

Loan Type	Share of Loans with Interest Rate Reduction	Loan Stints (N)			
		Starting above 6.5%	Starting at or below 6.5%	Missing interest rate	Total
Auto	9.5%	5,665	5,921	673	12,259
Personal	5.9%	2,163	779	358	3,300

Source: Authors' calculations from CFPB's CCP merged to the DoD SCRA database. Figures represent results from quarter four of 2007 through 2018 inclusive.

Note: Censored loan stints are excluded, where the activation stint is still active during the last observation for that tradeline.

4.2. Stint length

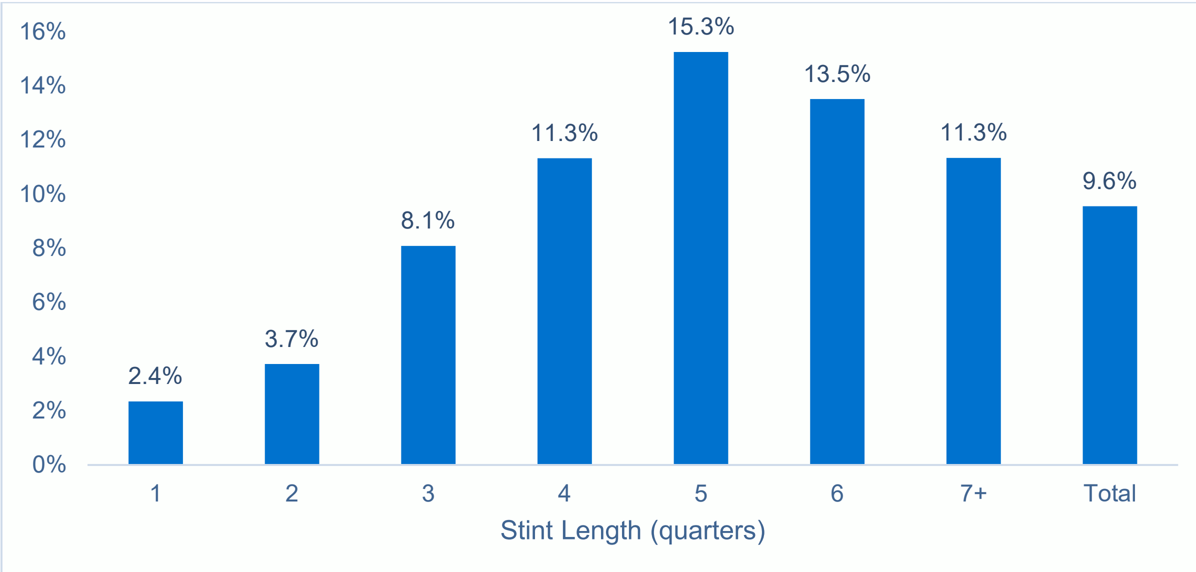
For each of these two loan types, we look at the relation between the reduction rate and the activation stint length, which is the number of quarters the servicemember was activated during that loan stint. Figures 4 and 5 depict the percentage of eligible loans dropping to an interest rate below 6 percent during activation, organized by stint length. In this analysis, we report the reduction rates for stint lengths of one to six quarters. We group all longer stints into a single category, representing seven or more quarters.

Overall, longer activations are associated with a higher likelihood of an interest rate reduction. In both loan types, stint lengths of one and two quarters have the lowest shares of loans with interest rate reductions. The most frequent interest reductions occur during activations of five and six quarters, with lower frequency at stint lengths of seven or more quarters. These patterns still hold when controlling for the loan's interest rate, the reservist component servicemember's credit score, the type of lender, year of activation, and the branch of military service, as reported in Section 4.3 below and Appendix A.

For both loan types, the share of loans with such an interest rate reduction rate is far from universal (100 percent), even at their respective peaks. Personal and auto loans remain under 16 percent.

As we noted in the limitations discussion (Section 2.2), our data are imperfect. Some interest rate reductions from above 6 percent to 6 percent or below may not be visible in our data because of furnisher errors or reductions that occur retroactively that we do not observe.

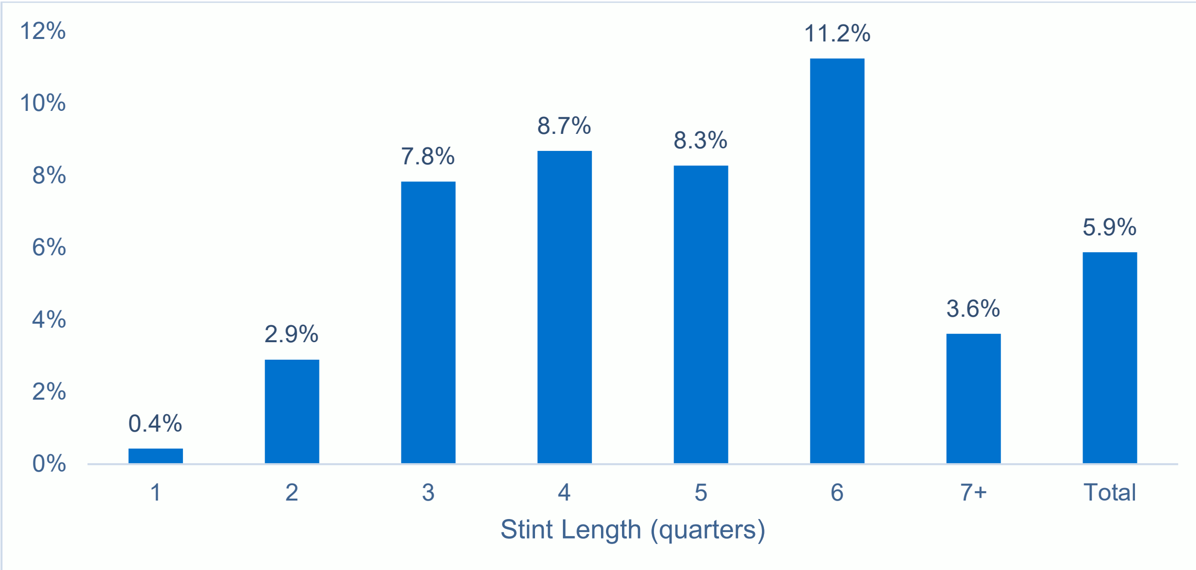
FIGURE 4: SHARE OF AUTO LOANS EXPERIENCING INTEREST RATE REDUCTION BY STINT LENGTH



Source: Authors' calculations from CFPB's CCP merged to the DoD SCRA database. Years included are 2007-2018, inclusive.

Note: Censored data is excluded.

FIGURE 5: SHARE OF PERSONAL LOANS EXPERIENCING INTEREST RATE REDUCTION BY STINT LENGTH



Source: Authors' calculations from CFPB's CCP merged to the DoD SCRA database. Years included are 2007-2018, inclusive.

Note: Censored data is excluded.

4.3. Credit score, interest rate, time, and component

We conduct a series of logit regressions to examine the associations between interest rate reductions and five sets of variables aside from stint length. These regressions allow us to control for additional variables and to understand whether the impact of stint length is coming from its possible correlation with some other observable variable. The regression results are reported in Appendix A, and we summarize the main findings here.

Aside from stint length, additional variables represent the loan interest rate prior to activation, the reserve component servicemember's credit score prior to activation, the type of lender, the year of the activation, and the branch of military service (Army, Navy, Air Force, Marines, and Coast Guard). We estimate separate regressions for auto and personal loans.

For both loan types, loans with higher interest rates are statistically less likely to experience interest rate reductions. This finding raises a concern because servicemembers with high-interest loans are the ones who stand to benefit most from SCRA protections. It may be that servicemembers with high-interest loans are less aware of how to receive these benefits during activation.

Consumers may hold high-interest loans because they have lower credit scores. In the regressions, we find some positive association with the reserve component servicemember's credit score for personal loans, but not for auto loans. Note that these scores are measured at the start of the activation and they may differ from the score when the loan was made and upon which the lender made its pricing decision.

We examine the association with the type of lender for auto and personal loans. While we did not find a significant association for personal loans, we did find that auto loan stints associated with credit unions are significantly less likely to experience interest rate reductions compared to auto finance companies, commercial banks, and savings banks. Although we do not report detailed results here, we also find large variation by individual lenders (across all lender types) in the likelihood of interest rate reductions, raising the question of whether all lenders make it equally possible for servicemembers to request their legal protections.

When we examine the reserve component servicemembers' military service in these regressions, we generally find no statistically significant patterns. In total, a few of these regression coefficients meet statistical significance at the 0.05 level, but considering the number of regressions and variables included, it is expected that a small number of coefficients would show statistical significance by chance, so we do not interpret them further. In examining the year of activation, we saw no clear patterns of statistical significance.

Credit scores generally increase during activations as we saw earlier in Table 4. In a regression analysis, we find that the increase in credit scores is statistically significant for stints of at least four quarters. Stints of one to three quarters are not associated with any statistically significant change in credit score.

This finding supports the findings shown in Figures 4 and 5. Reserve component servicemembers are more likely to benefit from the SCRA interest rate reduction when their activation stint is at least three quarters and they experience increases in their credit score, on average, when their activation stint is at least four quarters.

5. Estimating foregone savings

We estimate the total population of loans affected by SCRA provisions using the 1-in-48 sampling design of the CCP.

Over the approximately 11-year period that we study (late 2007 to 2018), we estimate that auto loans with interest rates above 6 percent that did not experience an interest rate reduction below 6 percent during an activation represent about 234,000 total loan stints in the full population. During the average such loan stint, we estimate that the borrower paid $331 in excess interest, for a total estimate of $77 million in foregone savings on auto loans. For personal loans, we estimate about 96,000 loan stints with average excess interest of $249, for a total of $24 million in foregone savings. The figures represent totals over the 11-year period and have not been adjusted for inflation.

Although the average activation stint is about 15 months, some tradelines are paid off before the end of a stint. We estimate the average time that a borrower stands to benefit from an interest rate reduction is seven months for auto loans and six months for personal loans. Additional details are provided in Table 6.

TABLE 6: ESTIMATED FOREGONE SAVINGS BY LOAN TYPE

Loan Type	Number of Loan Stints	Average Per Loan			Estimated Foregone Savings	
		Loan Balance ($)	Interest Rate (%)	Time to Benefit (months)	Per loan stint ($)	Total ($m)
Auto	233,856	13,026	11.3	7	331	77.3
Personal	95,808	8,562	14.4	6	249	23.9

Source: Authors' calculations from CFPB's CCP merged to the DoD SCRA database, fourth quarter of 2007 to 2018, inclusive.

Notes: Loan stints are included for loans with imputed rates above 6.5 percent for which we do not observe a reduction in interest rate below 6.5 percent at any time during the stint.

We construct these estimates by selecting the eligible loan stints where we do not observe a reduction below 6.5 percent interest at any point during the activation. (In other words, we assume that the borrower receives the full SCRA benefit if we observe such an interest rate reduction even in a single quarter.)

For the selected loan stints, we estimate the foregone savings each quarter using the reported balance and imputed interest rate for that quarter. Because we do not know the exact timing of activation during the quarter, we assume that the first and last quarters of an activation stint contribute 1.5 months each of potential savings. All other quarters contribute three months. If a quarterly observation is missing any required data to impute the interest rate or observe the balance, we do not impute any foregone savings to that quarter. Although this is not a common occurrence, we make this conservative assumption, possibly omitting some of the foregone benefits.

For mortgages we do not have this same detailed information, but we can make illustrative estimates. The average mortgage balance outstanding in our data at the time of activation is about $168,000. Although average interest rates on new mortgages originated during this time period are near or below 6 percent,[49] it is likely that some loans have interest rates above this level. For example, some borrowers may have higher-rate loans because their credit scores are lower than average or their loan-to-value ratios are higher than average. In addition, since loans originated prior to 2002 had average interest rates above 7 percent, loans from this era that are still active during our time period may have interest rates above 6 percent.

To illustrate the potential savings, we make several estimates. For a loan with an interest rate of 7.5 percent that does not experience a reduction to below 6 percent, the foregone savings is approximately represented by 1.5 percent excess interest times the outstanding balance times the average length of activation (15 months) plus 12 months (since the benefit for mortgages extends to this time). For this loan, the foregone benefit is $168,000*(0.015/12)*27=$5,670 per activation stint.

For loans with interest rates closer to 6 percent, savings are smaller. For a loan with an interest rate of 7 percent that does not experience a reduction to below 6 percent, the foregone savings is approximately $3,780 (two-thirds of the amount above for a 7.5 percent loan). For a loan at 6.5 percent, the foregone savings is approximately $1,890 (one-third of the amount above for a 7.5 percent loan).

We estimate there are 508,000 mortgage loan stints in the full population. Although we do not have estimates of how many of these have interest rates above 6 percent and how many of those received interest rate reductions, given the evidence of low application of benefits for other loan types, it is likely that a substantial number of borrowers are affected.

While the 30-year fixed mortgage rate rarely climbed over 6 percent during the observation window of this report, rates have risen sharply in 2022 to the highest level in 20 years. With

[49] Freddie Mac, 30-year Fixed-Rate Historic Tables, 2022. Available at: https://www.freddiemac.com/pmms/pmms30.

average 30-year fixed mortgage rates surpassing 7 percent in October 2022[50], the SCRA interest rate reduction benefit could provide many activated members of the reserve component with substantial savings.

[50] Black Knight Originations Market Monitor, October 2022. Available at: https://www.blackknightinc.com/black-knights-october-2022-originations-market-monitor/

6. Steps to increase use of SCRA benefits

This report aims to fill an important gap in knowledge about the use of SCRA among members of the reserve component called to active duty. In our analysis of the CCP and SCRA website data, we find evidence that the interest rates on common forms of credit are reduced in line with SCRA requirements during periods when reserve component servicemembers are activated. But the evidence shows that few members of the reserve component are obtaining such reductions. For auto and personal loans, we find less than one in ten loans that were outstanding prior to activation and have an interest rate above 6 percent experience a reduction to or below 6 percent.

Longer periods of activation are associated with a greater chance of interest rate reductions from greater than 6 percent to 6 percent or less. But even considering the longest activations, just 13 to 16 percent of these loans with rates greater than 6 percent have rate reductions to below 6 percent. While these findings do entail some uncertainty, it seems that many members of the reserve component are not benefiting from SCRA legal and financial protections during activations.

The interest rate reduction represents a substantial financial benefit, and one that increases in value in a higher interest rate environment, where the servicemember has taken out a larger loan, or is on active duty for a longer period of time. An increasing number of new auto and mortgage loans may exceed the 6 percent interest rate threshold and benefit from the SCRA interest rate reduction. For products such as credit cards, where most borrowers' interest rates are likely to exceed 6 percent, the value of the interest rate reduction will increase. Likewise, adjustable-rate loans may create situations in which a loan rate previously fell below 6 percent, but as a result of an interest rate adjustment is now eligible for an SCRA rate reduction.

To address these challenges, we urge continued efforts to identity opportunities to increase benefit utilization, including the automatic application of those benefits where possible. There is also a clear need for comprehensive and periodic indicators of SCRA benefit utilization to develop and evaluate future efforts to increase benefit utilization.

6.1. Apply SCRA interest rate reductions for all accounts held at that institution if a servicemember invokes protections for a single account

Servicemembers often have more than one account with a financial institution. Some institutions have implemented processes to apply SCRA protections to all applicable accounts held at the institution if a servicemember invokes their SCRA rights for a single account.[51] Similar procedures could be widely adopted to increase interest rate reduction utilization, reduce the duplication necessary to invoke the SCRA interest rate reduction for multiple accounts and address complexity that may be hindering utilization.

6.2. Explore ways to automatically apply the SCRA interest rate reduction

When the SCRA interest rate reduction benefit is automatically applied, as has been done for many student loans, eligible servicemembers are substantially more likely to benefit than if they are required to submit proper written notification.[52] Existing literature also suggests that some types of notification requirements may have a limited effect, and that when servicemembers attempt to provide notification, there is significant attrition throughout the process.[53] The low utilization rates identified in this report suggest that automatic application of the interest rate reduction benefit should be pursued where possible, and that public and private sector resources should be aligned to increase adoption of an automatic application process.

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[51] *Justice Department Reaches $12 Million Settlement to Resolve Violations of the Servicemembers Civil Relief Act by Capital One*, Dept. of Justice (Jul. 26, 2012). https://www.justice.gov/opa/pr/justice-department-reaches-12-million-settlement-resolve-violations-servicemembers-civil.

[52] U.S. Gov't Accountability Off., *supra* note 33, at 13.

[53] Castleman, et al. *supra* note 33, at 11.

6.3. Develop comprehensive and periodic indicators of SCRA benefit utilization

A comprehensive and periodic review of SCRA rate reduction utilization would provide beneficial information to inform and evaluate future efforts to expand servicemembers' financial protections.

Increasing SCRA benefit utilization requires the development and implementation of interventions that would be well-served by comprehensive and periodic indicators to evaluate those efforts. This report provides SCRA utilization information for the reserve component only and is limited to a single period of time. A review of existing literature suggests a continued lack of information about SCRA benefit utilization rates for all active duty servicemembers, although limited information suggests these rates are low. This report confirms those findings and provides one possible method of developing such indicators. It also describes the data necessary to carry out the development of such indicators which can help inform interagency data sharing requirements.

APPENDIX A: REGRESSION RESULTS

TABLE 7: AUTO LOAN LOGIT REGRESSION

	Odds Ratio	z-Statistic	Prob.>|z|
Stint length			
2	1.68	1.58	0.114
3	4.04	4.36	0.000
4	6.18	5.62	0.000
5	8.82	7.02	0.000
6	7.41	6.12	0.000
7+	6.52	5.66	0.000
Interest rate	0.96	-3.07	0.002
Credit score (per 10 points)	1.00	-0.17	0.863
Lender type			
Auto finance	1.11	0.66	0.509
Commercial bank	1.24	1.40	0.163
Savings bank	1.29	0.98	0.329
Credit union	0.48	-3.93	0.000
Year			
2007	0.81	-1.19	0.236
2009	0.82	-1.27	0.205
2010	0.93	-0.45	0.656
2011	1.08	0.44	0.658
2012	0.94	-0.26	0.795
2013	0.72	-1.23	0.219
2014	1.40	1.34	0.179
2015	1.28	1.06	0.290
2016	1.50	1.80	0.071
2017	1.80	2.32	0.020
2018	2.08	1.72	0.085

Note: Logit on whether interest rate starting above 6.5% ever goes to or below 6.5% over a loan stint. The omitted categories are stint length 1, lender type other, and year 2008. N=5,603.

TABLE 8: PERSONAL LOAN LOGIT REGRESSION

	Odds Ratio	z-Statistic	Prob.>|z|
Stint length			
2	6.65	1.81	0.071
3	19.21	2.87	0.004
4	23.32	3.03	0.002
5	21.77	2.98	0.003
6	25.91	3.12	0.002
7+	9.96	2.12	0.034
Interest rate	0.95	-2.67	0.007
Credit score (per 10 points)	1.03	2.11	0.035
Lender type			
Personal finance	2.52	1.78	0.075
Commercial bank	1.56	0.96	0.336
Credit union	0.98	-0.04	0.966
Year			
2007	0.82	-0.51	0.613
2009	0.79	-0.64	0.522
2010	1.48	1.05	0.295
2011	0.79	-0.50	0.617
2012	0.58	-1.04	0.297
2013	0.72	-0.62	0.537
2014	1.47	0.87	0.384
2015	0.89	-0.26	0.796
2016	2.79	2.96	0.003
2017	1.14	0.28	0.777
2018	0.48	-0.68	0.494

Note: Logit on whether interest rate starting above 6.5% ever goes to or below 6.5% over a loan stint. The omitted categories are stint length 1, lender type other, and year 2008. N=2,145.

TABLE 9: CREDIT SCORE REGRESSION

	Coefficient	Standard Error	t-Statistic	Prob.>|t|
Stint length				
2	0.059	0.560	0.110	0.916
3	0.062	0.562	0.110	0.913
4	1.803	0.556	3.240	0.001
5	2.595	0.549	4.730	0.000
6	2.255	0.567	3.980	0.000
7+	2.161	0.635	3.400	0.001
Military service				
Coast Guard	0.710	0.925	0.770	0.443
Air Force	0.542	0.286	1.900	0.058
Marine Corps	-0.915	0.513	-1.780	0.074
Navy	0.389	0.431	0.900	0.366
Constant	0.310	0.540	0.570	0.566

Note: Linear regression on credit score change per quarter of activation. The omitted categories are stint length 1 and service Army. N=22,176. R^2=.005.