

Veteran Unemployment of Transitioning Marines

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Photo credit line: Camp Pendleton, California. Servicemembers browse through booths at the Hiring our Heroes job fair at the Pacific Views Event Center on 19 September 2013. The fair was held to help servicemembers who are transitioning back into civilian life to find work (By: Cpl Brianna Christensen).

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Veteran Unemployment of Transitioning Marines

November 20, 2013

Dr. Shannon P. Desrosiers



Given high veteran unemployment rates and the continuing military drawdown, on November 21, 2011, President Obama committed to helping servicemembers successfully transition to the civilian workforce by signing the VOW To Hire Heroes Act. To help fulfill the President's commitment, the services were directed to identify the types of servicemembers who were collecting unemployment benefits.

At that time, the Marine Corps' Marine & Family Programs Division (MF) asked CNA to create a demographic profile of Marines who have a high likelihood of collecting Unemployment Compensation for Ex-Servicemembers (UCX). In addition, and separate from the UCX analysis, MF asked CNA to create a demographic profile of Marines who have a high probability of using Montgomery GI Bill (MGIB) benefits.

In this annotated briefing, we present the characteristics of recent Marine Corps separators, UCX recipients and nonrecipients, and MGIB recipients and nonrecipients. Next, we identify which demographic and service-related characteristics help to predict whether a separating Marine will draw UCX after separation, where the distinction is "collected UCX" versus "did not collect UCX." Then, we identify which demographic and service-related characteristics help to predict whether a separating Marine will use his or her MGIB benefits, where the distinction is "used MGIB" versus "did not use MGIB." To conclude, we present discovered inefficiencies and areas for future research.

Reasons for this study

- To better understand the types of transitioning Marines who are likely to:
 - Become unemployed and collect Unemployment Compensation for Ex-Servicemembers (UCX)
 - Become chronically unemployed and collect Extended Benefits (EB)
 - Go to school and use the Montgomery GI Bill (MGIB)
 - MGIB began in 1987 and is still available
 - Post-9/11 GI Bill began in 2009; data repository not available as of Nov. 2013
- Aligned with the VOW To Hire Heroes Act, signed by President Obama in Nov. 2011 to help servicemembers successfully transition



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This study was motivated by the need to meet President Obama's commitment to help servicemembers make a successful transition to civilian life. To help servicemembers with this transition, the services needed to identify the characteristics of transitioning servicemembers who are at risk of becoming unemployed and collecting UCX or EB and, separately, who have a higher likelihood of going to school using the GI Bill.

In late 2011, when reports of high veteran unemployment rates began circulating in the news, little was known about veterans who were collecting UCX or EB. While the Army had information on its applicants, the other services had information on neither their applicants nor their recipients.

After the President signed the VOW To Hire Heroes Act, he established an interagency Executive Steering Committee (ESC) to carry out the intentions the Act set forth. The ESC formed the Interagency Data Analysis Working Group to identify UCX data sources. CNA attended the Working Group on behalf of the Marine Corps for this study. A major contribution of this study was gaining access to UCX data and organizing it into a usable form.

In addition, we obtained access to MGIB data for this study. At the time of the analysis, data from the Post-9/11 GI Bill, which began in 2009, were not available. Because the MGIB was the only GI Bill option from 1987 to 2008, we make use of this restricted time period in our analysis.

Unemployment Compensation for Ex-Servicemembers (UCX) analysis

CNA

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We begin with the UCX analysis, follow with the MGIB analysis, and conclude with a comparison of UCX and MGIB findings.

Main UCX findings

- Data limitations prohibit robust conclusions
- Based on the available dataset, the following characteristics have a positive association with UCX receipt:
 - Nonwhite
 - Hispanic
 - Female
 - Married
 - Children
 - Lower quality (Armed Forces Qualification Test (AFQT) score < 50 or less than a high school diploma graduate)
 - Separate during or at the end of first term
 - Nondisabled or a < 30-percent disability rating
 - Separating to states with higher unemployment rates
 - Single deployment
 - Command and control (C2), combat service support (CSS) occupations
- The following have a negative association with UCX receipt:
 - Three or more deployments
 - Combat arms, combat support, aviation support occupations



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Data limitations (see p. 7) prevent us from drawing robust conclusions. This slide shows the demographic profile of Marines with a high probability of collecting UCX. We estimated whether UCX-eligible Marines collected regular UCX in CY11 or CY12, as a function of demographic and service-related characteristics. We report findings for recently separated active component (AC) enlisted Marines—81 percent of Marine Corps CY11–12 UCX recipients. The average recently separated Marine and the average Marine UCX recipient are young, white, high quality, male, with no children. Those more likely to collect are lower quality, nonwhite, married, female, with children.

Marines and nonveterans who are more likely to collect unemployment are both nonwhite and less educated [1]. Lower quality Marines may be more likely to collect UCX because they get fewer job offers than more qualified Marines. Women might be more likely to collect UCX because they separate earlier than men for reasons that qualify them for UCX, such as pregnancy, parenthood, and Early Release. Those who are married or have kids may be reduced by one income and may be struggling financially. Married Marines may move after separation and their spouses may have to quit jobs, which disqualifies them for civilian unemployment benefits and causes eligible veterans to apply for UCX. First-term separators may be more likely to collect UCX because they planned to serve only one term, regardless of the job market, whereas careerists may have timed their exits to have promising jobs lined up. Marines who deployed once may be more likely to collect UCX than (1) those with multiple deployments because they have more time between deployment and separation to learn about their benefits and (2) those who never deployed because they need time to decompress.

Combat arms military occupational specialties (MOSs)—the least likely to use UCX—might have an aversion to collection. Combat and aviation support MOSs have technical, transferable skills and may be able to secure jobs immediately. C2 MOSs might have a hard time finding certain types of jobs in their field without college degrees. CSS MOSs—utilities, administration, food service—may have skills that are transferable but less technical, and these Marines may face sector-related unemployment.

Marines who relocate to states with higher unemployment rates are more likely to collect UCX; they may have been recruited from and return home to high-unemployment states with tough job markets.

UCX facts

- Each service pays UCX benefits to its eligible recent veterans
- The Marine Corps pays for ≤26 weeks of regular UCX benefits
 - Then, the federal government pays for ≤53 weeks of Emergency Unemployment Compensation (EUC), if Congress authorizes
 - Then, the Marine Corps pays for 13 to 20 weeks of EB, depending on state unemployment rate



Source: Performance Improvement Council, Veteran Unemployment Insurance, Jan. 2012.

- Data include only recipients whose regular UCX or EB were paid for by the Marine Corps



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Each service pays for the regular UCX benefits and EB of its eligible recent veterans who apply after separation. Up to 99 weeks of unemployment benefits were available for 33 states in CY11. The length of regular UCX benefits varies by state, but the maximum is usually 26 weeks. Veterans who exhaust their regular UCX benefits when unemployment rates are high and EUC is in place are eligible to collect up to 53 weeks of EUC.¹ Veterans who exhaust their EUC when their state's unemployment rate is above a defined threshold are eligible to collect 13 to 20 weeks of EB.²

The UCX data analyzed in this study included only recipients whose benefits were paid for by the Marine Corps—regular UCX benefits and EB, but not EUC—in CY11 and CY12. Only ten states (Colorado, Connecticut, Idaho, Illinois, Maine, Michigan, North Carolina, Pennsylvania, Tennessee, Washington) report EB separately from regular UCX benefits, so our recipient data did not allow for a thorough analysis of EB recipients. See the appendix for a preliminary analysis of the EB data currently available.

¹ Congress authorized EUC on Jun. 30, 2008, and reauthorized it through Jan. 1, 2014 [2].

² A state insured unemployment rate (IUR) is the number of people collecting unemployment benefits divided by the number of people who could potentially collect unemployment benefits if they lost their jobs. A state must pay 13 weeks of EB if (1) its state IUR over the past 13 weeks exceeds 5 percent and is 120 percent of its average in that same 13-week period during each of the past 2 years, (2) its IUR is at least 6 percent, or (3) its 3-month seasonally adjusted unemployment rate is at least 6.5 percent and is 110 percent of what it was in that 3-month period in either of the last 2 years. A state must pay 20 weeks of EB if its unemployment rate is at least 8.0 percent and is 110 percent of what it was in that 3-month period in either of the last 2 years. The following numbers of states were paying EB at the end of April in each year: 2008, no states; 2009, 15 states paid 13 weeks and 11 states paid 20 weeks; 2010, 8 states paid 13 weeks and 31 states paid 20 weeks; 2011, 4 states paid 13 weeks and 29 states paid 20 weeks; 2012, 6 states paid 13 weeks and 10 states paid 20 weeks; and 2013, 1 state paid 13 weeks [3].

UCX facts (cont.)

- Servicemembers are eligible for UCX at separation if they were honorably discharged and met one of the following conditions:
 - Served their first full terms of service
 - Served at least 1 year but failed standards (physical or weight)
 - Served any amount of time but attrited for medical reasons, erroneous entry, or Early Release
- Veterans must file for UCX within 3 quarters of separation
- Reservists are eligible for UCX if they served at least 90 consecutive days on active duty
- Eligible veterans are treated the same as other unemployed workers with respect to:
 - Benefit levels and durations
 - Able to work, available to work, and work search requirements of state law



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In general, servicemembers are eligible for UCX on separation if they were honorably discharged and served their first full terms of service, but there are many length-of-service exceptions. For example, a servicemember is eligible if he or she was honorably discharged and (1) served at least one year but failed the Physical Fitness Test or (2) served any time but was injured and attrited.

Servicemembers must apply for UCX within three quarters of separation (in California, Colorado, Delaware, and Massachusetts, servicemembers have up to one year to apply) so that the state can determine eligibility based on at least one quarter of wages. This is because the weekly UCX payment is based on wages earned in the base period, which is roughly the last full year. The weekly UCX payment is about half of one's weekly wage, up to the average weekly wage in one's state, calculated using one's paygrade at separation. Once a veteran starts collecting, he or she has up to one year (his or her benefit year) to collect his or her 26 weeks of regular UCX benefits.

Reservists qualify for UCX if they served at least 90 consecutive days on active duty and were honorably discharged from active duty, even if they are currently affiliated with a reserve unit.

Because unemployment law is set at the state level, it applies equally to qualified veterans and nonveterans in terms of benefit amounts; durations; the waiting period for benefits; and able, available, suitable for work, and work search requirements [4].

UCX data

What we have	What we do not have
Recipients whose benefits were Marine Corps-paid (regular UCX or EB)	Recipients whose benefits were paid by federal government (EUC)
Six quarters of UCX data	All six quarters for each state
Amount paid in each quarter	
Weeks paid in each quarter (for 14 states)	Cumulative weeks paid
EB only reported in ten states	

- Caveats

- Cannot make causal assertions; all effects interpreted as associations
- Drawing conclusions from the results needs to be done cautiously
- We define UCX qualification based on separation code, discharge code, and length of service from Marine Corps personnel data
 - Actual determination based on DD214 separation form



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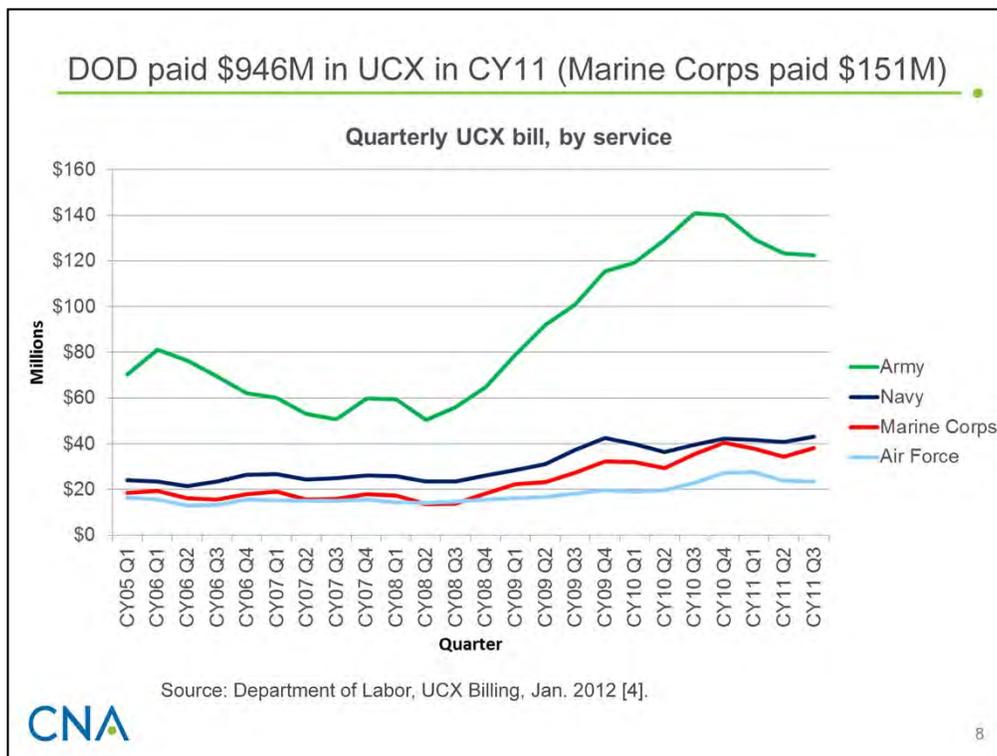
On this slide, we outline the UCX data that we have and do not have.

We do not observe completed unemployment spells because:

- (1) We only observe whether recipients collect unemployment benefits paid for by the Marine Corps (regular UCX or EB), not by the federal government (EUC), in CY11.
- (2) We had only six quarters of UCX data, and we did not have all six quarters of data for each state. We could not tell if a recipient started collecting in the unobserved previous year or continued to collect in the next unobserved year.
- (3) While all states report the amount of UCX benefits paid to each recipient in a particular quarter, only 14 states report the number of weeks paid in a particular quarter, and none report the cumulative number of weeks that a recipient is paid.

Regarding assumptions in our analysis, we defined UCX eligibility based on DOL's acceptable separation reasons [4]. We used Marine Corps personnel data because we did not have access to DD214 separation forms, which contain the information that states use to determine qualification.

The Early Release programs that the Marine Corps used during CY11 and CY12 include the Voluntary Enlisted Early Release Program and the Officer Voluntary Early Release program.



The services paid nearly \$1 billion in regular UCX and EB in CY11: the Navy, Marine Corps, Air Force, and Army paid 18, 16, 11, and 55 percent, respectively. Though the Army’s bill appears to have risen more than the other services’ between CY08 Q1 and CY10 Q4, its share just more than doubled, while the Navy and the Marine Corps shares roughly doubled, and the Air Force share less than doubled.

The across-service differences appear to be driven by differences in the number of recipients rather than differences in the size of payment per recipient. In fact, the size of payment per recipient should be similar—the Army’s, Navy’s, and Marine Corps’ payments were roughly \$6,000 per recipient in FY11, CY11, and CY11–12, respectively—since all services operate under the same rules.³ Given this, we expect each service’s share of the total number of UCX recipients to be in proportion to their shares of the total UCX bill shown in the above figure.

Which service has the highest share of separators collecting UCX? We would expect services with more low-quality members (i.e., the Army and Marine Corps) to have a higher percentage of separators collecting UCX because we find that veterans with lower AFQT scores are more likely to collect UCX.⁴ To verify this, we would need the number of separators in each service so we could approximate the share of each service’s separators who collected UCX in CY11.

³ The Army had 102,000 applicants in FY11, the Navy had 31,338 recipients in CY11, and the Marine Corps had 29,704 recipients in CY11–12. The Army’s UCX bill in FY11 was \$515M, the Navy’s bill in CY11 was \$174M, and the Marine Corps’ bill in the six quarters of CY11–12 was \$185M [5], putting the Marine Corps’ cost per recipient at \$6,229 in CY11–12—slightly more than the Army’s cost per recipient of \$5,610 in FY11 and the Navy’s of \$5,547 in CY11. For this exercise, we assumed that 90 percent of Army applicants received payment. To date, none of the services has compared its applicant and recipient populations. The numbers of Air Force applicants or recipients are not yet available [6].

⁴ On average, the Army has lower quality accessions than the other services (63 percent scored 50 or above on the AFQT, versus 99, 89, and 74 percent for the Air Force, Navy, and Marine Corps, respectively, in FY11; the DOD benchmark is 60 percent [7]).

What is the Marine Corps' UCX cost? (AC and RC personnel)*

Quarter	Cost	Number of states
Regular UCX cost (AC and RC), by quarter		
CY11 Q1	\$8,080,500	18
CY11 Q2	\$31,992,754	50
CY11 Q3	\$37,252,556	51
CY11 Q4	\$40,539,620	50
CY12 Q1	\$40,760,996	53
CY12 Q2	\$22,800,486	45
Subtotal	\$181,426,912 (98%)	
EB cost (AC and RC), by quarter		
CY11 Q1	\$30,985	1 (TN) (N=19)
CY11 Q2	\$102,492	1 (WA) (N=27)
CY11 Q3	\$997,216	7 (CT, ME, MI, NC, PA, TN, WA) (N=345)
CY11 Q4	\$833,234	6 (CO, CT, MI, NC, TN, WA) (N=289)
CY12 Q1	\$1,274,796	5 (CT, IL, NC, PA, WA) (N=439)
CY12 Q2	\$363,429	5 (CT, ID, NC, PA, WA) (N=196)
Subtotal	\$3,602,152 (2%)	
Grand total	\$185,029,064 (100%)	

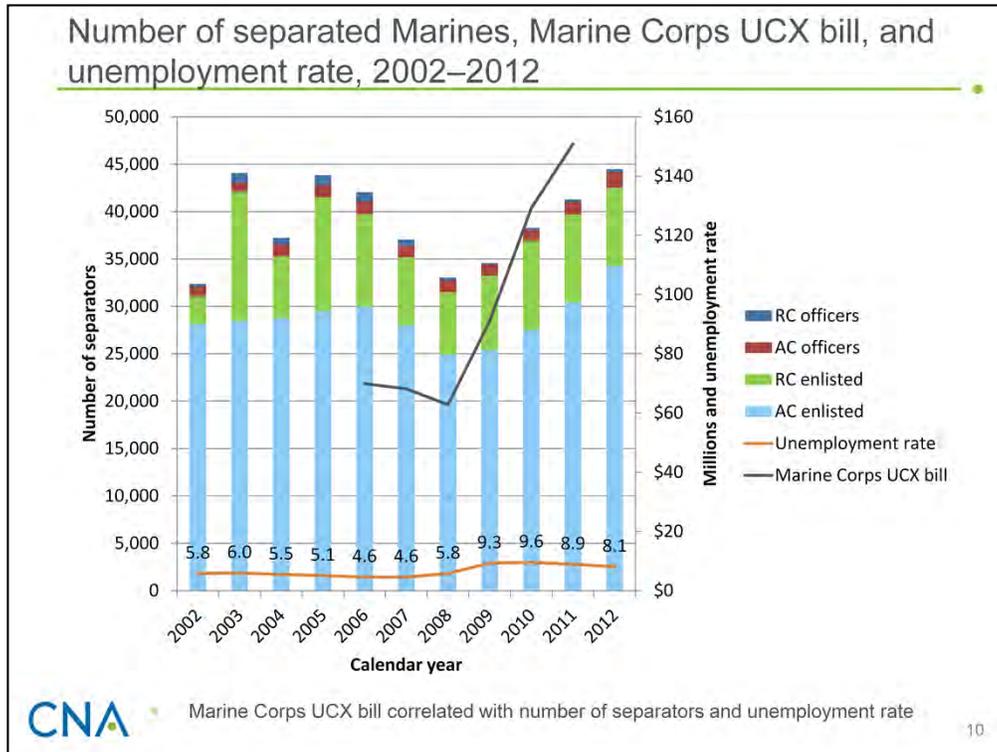


* AC is Active Component, RC is Reserve Component

The Marine Corps' regular UCX and EB cost in CY11–CY12 Q2 was \$185 million for all AC and RC personnel. The Marine Corps' AC cost in CY11 was \$181 million (98 percent of the total regular UCX and EB cost), while the RC cost was \$3.6 million (2 percent of the total cost).

In CY11-CY12 Q2, 34 states paid EB, but only 10 reported EB separately from regular UCX in CY11-CY12 Q2 (Colorado, Connecticut, Idaho, Illinois, Maine, Michigan, North Carolina, Pennsylvania, Tennessee, and Washington). For these 10 states, 7 percent of their CY11-CY12 Q2 cost was EB (\$3.6 million of \$51 million). If roughly 7 percent of recipients in all states that paid EB collected EB, the CY11-CY12 Q2 EB cost would be \$8.3 million (7 percent of \$185.0 million, multiplied by the 34 of 53 states and territories that paid EB). The CY11 regular UCX cost, then, would be \$176.7 million.

There is some seasonality in UCX costs. Costs are usually higher in the fourth quarter, as seen in the table above and in the previous figure. Because relatively more recruits enter recruit training in June, July, August, or September, they will likely separate in these months four years later. If separators apply for UCX in the quarter after they separate, this could explain the uptick in UCX costs in the fourth quarter (Q4).

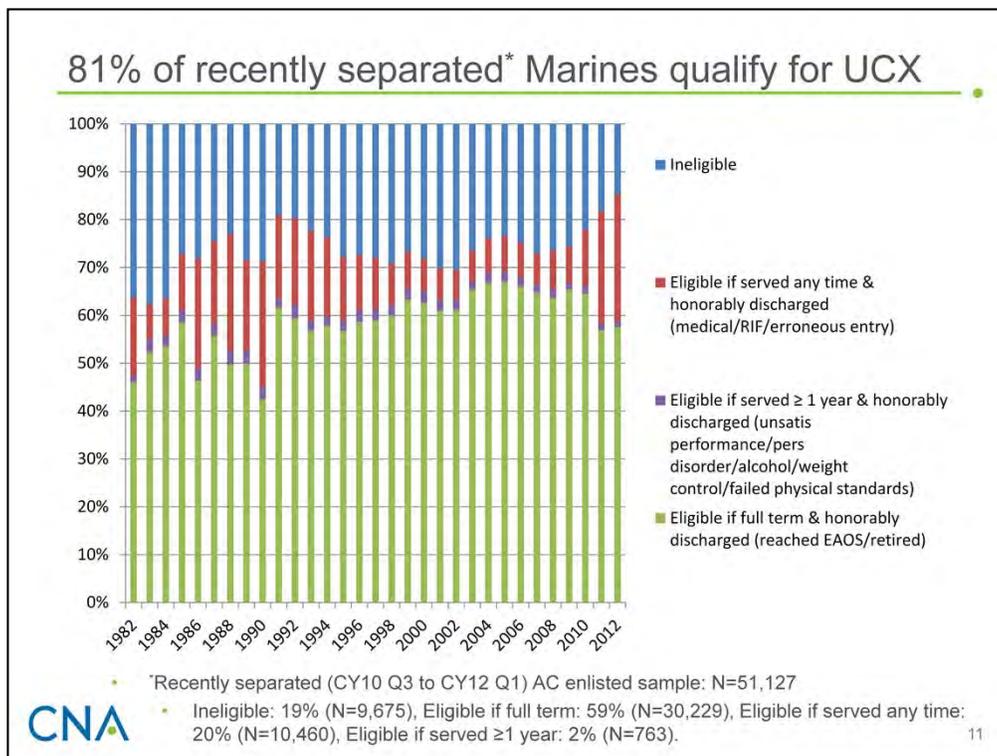


This figure displays the population of separators who are eligible to collect UCX. It includes all AC separators and deactivated reservists.⁵ Deactivated reservists include current and separated reservists who spent any time on active duty and all non-prior-service reservists who completed initial active duty for training.

The number of Marine Corps separators rose and fell in the first half of the decade and rose again in the second half. The fluctuations in the first five years are largely driven by reservists being activated for wartime duty. Separations began increasing between 2009 and 2011 as a result of the drawdown.

Marine Corps UCX costs are shown for the years that they are available (2006 to 2011). Notice the direct relationship between (1) the number of separators and the UCX bill and (2) the annual unemployment rate and the UCX bill. This suggests that the UCX bill is strongly tied to the civilian economy and to the number of separators. In a similar CNA study predicting Navy UCX receipt, conducted for the Assistant Secretary of the Navy (Manpower & Reserve Affairs), we found that the Navy's UCX bill was strongly tied to the civilian economy but not to the number of separators, which was counterintuitive [8]. However, an independent evaluation by the Performance Improvement Council (PIC) confirmed this, showing that the drawdown will not greatly affect the UCX bill because it will be phased in over several years and will be implemented using various tools, including a reduction in accessions and reenlistments [9].

⁵ The figure includes all deactivated reservists instead of all RC separations. Deactivated reservists were either mobilized or nonmobilized Active Duty Special Work. We also used all deactivated reservists in our analysis, not those who were activated for at least 90 days, as we could not easily make this restriction in our analysis.



A separating servicemember can qualify for UCX if he or she has an honorable discharge and has (1) served his or her full term, or, under certain separation reasons, (2) served at least one year, or (3) served for any amount of time.^{6, 7}

The share of Marine Corps AC enlisted separators who are eligible for UCX has increased from 70 to 86 percent in the last decade. The increase in UCX eligibility in the past decade is a result of the increase in the share who reached their End of Active Service (EAS) (due to the use of Stop Loss in the first half of the decade) and who have voluntarily separated through Early Release. The low-qualification periods in the mid-1980s and early 2000s were caused by the percentage reaching their EASs falling below 40 percent as well as little use of Early Release. The increase in the share qualifying from having completed their full terms increased during the 1990s as a result of growth in the share serving until retirement. The 1988 spike in eligibility from serving any time is due to the use of Early Release.

Among recent (CY10 Q3 to CY12 Q1) AC enlisted separators in the sample, 81 percent are eligible to receive UCX. The most common UCX-qualifying reason is having completed one’s full term (green in figure), which has varied between 40 and 70 percent over time. The next most common reason is having served any amount of time (red in figure), which has varied from roughly 10 to 25 percent over time. The least common reason is having served at least one year (purple in figure), which has varied between 2 and 9 percent. “Entry level separation”—which includes no characterization of service—also are eligible for UCX.

⁶ For the UCX analysis only, not the MGIB analysis, honorable discharge includes discharges that are “under honorable conditions (general).”

⁷ Separation reasons in parentheses in the figure are ordered from most to least common.

Marine Corps CY11 Q1 to CY12 Q2 regular UCX and EB recipient data

	All regular UCX and EB recipients	%	Recently separated regular UCX and EB recipients	%
AC enlisted	24,537	83	19,584	81
RC enlisted	4,772	16	4,284	18
AC officers	220	0.7	177	0.7
RC officers	175	0.6	115	0.5
Total	29,704	100	24,160	100

- “All...recipients” includes those who separated between 1983 and 2012; some may have paid back an erroneous payment between CY11 Q1 and CY12 Q2
- “Recently separated” refers to those who separated between:
 - CY10 Q3 and CY12 Q1 for the regular UCX analysis
 - CY08 Q3 and CY10 Q1 for the EB analysis



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For this study, we developed a database of Marine Corps UCX recipients (regular UCX and EB) merged with Marine Corps personnel data. We received six quarters of Marine Corps CY11 (Q1 to Q4) and CY12 (Q1 to Q2) UCX recipient data from the Defense Finance and Accounting Services (DFAS) in Cleveland.⁸

There was a 96-percent match rate of UCX recipients to personnel data. That is, for 4 percent of UCX recipients, their Social Security Numbers (SSN) did not match any SSNs in the Marine Corps personnel database.

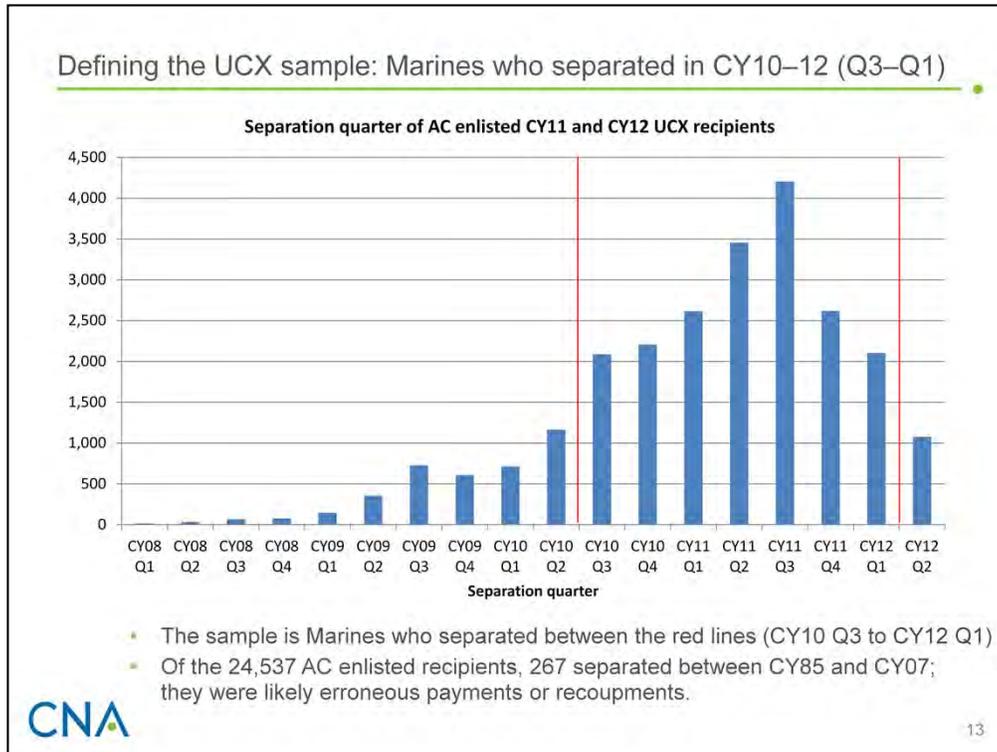
This table includes both regular UCX and EB recipients, regardless of UCX eligibility. The second and third columns show all Marines who collected regular UCX or EB in CY11, regardless of when they separated.

The fourth and fifth columns display only recently separated recipients. For example, AC enlisted (N = 19,584) includes those who separated between CY10 Q3 and CY12 Q1 and collected regular UCX (N = 19,189) and separated between CY08 Q3 and CY10 Q1 and collected EB (N = 395).⁹

Of the matches, 24,160 (81 percent) were recently separated recipients. Among recently separated recipients, 99 percent were enlisted Marines, 82 percent were in the AC, and 81 percent were AC enlisted Marines.

⁸ We would like to thank Steve Moroney in the Marine Corps’ Manpower Information Systems and Maj Aaron Knepel, CWO Charles Dennis, and LtCol Shane Nicklaus from the DFAS Cleveland staff for their management of UCX data scanning and delivery.

⁹ These numbers do not match the regular UCX numbers on slide 15 and the EB numbers on slide 65 because these numbers include ineligible recipients, whereas the other slides do not.



In this slide, we define the sample used for the analysis of CY11 and CY12 UCX recipients. That is, we identify which cohorts of separating Marines were eligible to receive UCX benefits in CY11 or CY12. Recall that servicemembers need to apply within 3 quarters of separation, UCX benefits run up to 26 weeks (~2 quarters), and servicemembers have up to one year to use their benefits. This means that those who separated in CY11 automatically were eligible for CY11 UCX benefits and those who separated in CY12 Q1 automatically were eligible for CY12 benefits. Those who separated in CY10 Q3 or Q4 and started receiving UCX benefits that quarter have until CY11 Q3 or Q4 to use their 26 weeks; they may still have been collecting in CY11 if they had not yet exhausted their 26 weeks or if they waited a quarter or two to apply.

Therefore, we define the sample used in our analysis of CY11 and CY12 regular UCX benefits as Marines who separated between the red lines, from CY10 Q3 to CY12 Q1. The figure shows the number of AC enlisted UCX recipients by quarter of separation. CY11 and CY12 regular UCX recipients were most likely to separate in, just before, or just after CY11, as seen by the discrete jump in the number of recipients inside and outside the red lines.

Cohorts who separated further back than CY10 Q3 were eligible for EB because EB kicks in at about 1.5 years from separation (6 quarters), give or take 3 quarters delay in applying for UCX benefits. We define Marines who separated between CY08 Q3 and CY10 Q1 as the sample for the EB analysis.

UCX-eligible recently separated AC enlisted Marines (N = 41,452)			
Characteristic	Average	Characteristic	Average
Age	25	Zone A—Before EAS (YOS 1-6)	23%
Female	7%	Zone A—Reached EAS (YOS 1-6)	57%
White	86%	Zone B (YOS 7-10)	11%
Black	9%	Zone C (YOS 11-14)	3%
Asian/Pacific Islander	3%	Zone D (YOS 15-20)	0.4%
Hispanic	12%	Zone E (YOS > 20)/Retired	6%
AFQT ≥ 50 th percentile	68%	Separation Reasons	
Tier 1 education	94%	Reached EAS	67%
Other Tier 1 education	3%	Early Release	15%
Tier 2 education	3%	Medical attrite	10%
High quality (Tier 1 and AFQT≥50)	63%	Combat arms	30%
Married	50%	Combat support	16%
Any children	27%	Combat service support	29%
Ever deployed	68%	Aviation support	16%
Deployed once	38%	Command and control	9%
Deployed twice	27%	Permanent disability (>30% rating)	1%
Deployed three or more times	3%	Temporary disability (>30% rating)	3%
YOS	6	Disability with severance pay (<30%)	4%

CNA • “Recently separated” refers to those who separated between CY10 Q3 and CY12 Q1.
 We discuss highlighted variables in the text. 14

This table shows the characteristics of recently separated Marines who were eligible to collect UCX.¹⁰ Data are shown only for AC enlisted separators because they make up the majority (81 percent) of all recent separators. The average AC enlisted separator who is eligible for UCX is a young (age 25), white, high-quality (i.e., AFQT ≥ 50 and at least a high school diploma graduate, considered a Tier 1 education), man with no children who separated at his EAS (see above).

At separation, 62 percent of AC enlisted Marines are 24 or younger, 26 percent are 25 to 29, 5 percent are 30 to 34, and 7 percent are 35 or over. Ninety-four percent have a Tier 1 education, 3 percent have an Other Tier 1 education (e.g., home school and AFQT ≥ 50), and 3 percent have a Tier 2 education (e.g., less than a high school diploma graduate). At separation, 80 percent of eligible AC enlisted Marines have served one to six years, and the average years of service (YOS) is six.

The average separating Marine looks similar to the average civilian his or her age in terms of race and education—they are both white and have a high school degree—but the Marine is more likely to be white, have a high school degree, and be married [7].

Marines who separate for the most common separation reasons listed above, plus retiring, under various lengths of service, are eligible for UCX. The remaining 3 percent who are UCX-eligible (not shown) separate for weight control failure, unsatisfactory performance, personality disorder, alcohol, hardship, erroneous entry, failing physical standards, homosexuality, pregnancy, or parenthood. Most who separate for drugs are ineligible for UCX. Fraudulent entry and misconduct are disqualifying regardless of YOS [4].

Most Marines are in combat arms and combat service support MOSs, followed by combat and aviation support MOSs, then command and control MOSs.

¹⁰ Recently separated refers to the population who separated between CY10 Q3 and CY12 Q1.

What share of Marines are collecting regular UCX?

	Eligible recent separators	Eligible regular UCX recipients	Percentage
AC enlisted	41,452	18,846	45%
RC enlisted	13,425	2,020	15%
AC officers	2,035	161	8%
RC officers	2,226	105	5%
Total	59,138	21,132	36%

- "Recent separators" refers to those who separated between CY10 Q3 and CY12 Q1.



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In the sample of UCX-eligible CY10 Q3 to CY12 Q1 separators, 45 percent of AC enlisted Marines collected regular UCX benefits in CY11, compared with 8 percent of AC Marine Corps officers.¹¹ The lower UCX claim rate of officers versus enlisted is consistent with the lower unemployment rate of college graduates versus high school graduates.

Among enlisted separators, a higher share of AC Marines than deactivated reservists collected UCX (45 vice 15 percent), as expected, since most of the former have no recent civilian labor market experience and most of the latter do. The UCX claim rate of deactivated reservists is lower but still quite high.

UCX take-up rates were similar for AC Sailors (CY11) and AC Marines (CY11–12) (43 and 7 percent for Navy AC enlisted and officers), but higher for RC Sailors than RC Marines (21 and 8 percent for Navy RC enlisted and officers) [8]. This could be because the Navy analysis was restricted to deactivated reservists who served at least 90 continuous days on active duty, whereas the Marine Corps analysis is not restricted because of the inability to do so with active-duty snapshot files that are reported quarterly.

Heaton attributes the high UCX claim rate of reservists to high rates of unemployment and UCX eligibility rather than to employer discrimination, skill mismatches/human capital depreciation, or poor health [10]. RAND found that the high UCX claim rate of Army reservists could be explained by rising UCX eligibility due to long deployments in 2002 to 2005 and an association between longer deployments and higher claim rates [11]. Among Army recipients in 2005, 19 percent of AC and 15 percent of RC soldiers collected UCX.

UCX receipt varies little among Marine Corps AC officers and deactivated officer reservists (8 and 5 percent)—maybe because UCX receipt is more correlated with a college degree than with the many other attributes that may differ between enlisted and officers.

¹¹ The differences between the AC enlisted sample on slide 12 and on this slide is that slide 12 includes EB recipients, whereas this slide is restricted to eligible recipients.

Characteristics of UCX-eligible AC enlisted separators

Characteristic	UCX nonrecipients	UCX recipients	Difference ¹
Age	26	24	2
Zone A—Before EAS (YOS 1-6)	23%	24%	-1%
Zone A—Reached EAS (YOS 1-6)	53%	61%	-8%
Zone B (YOS 7-10)	11%	12%	-1%
Zone C (YOS 11-14)	2.6%	2.5%	0.1%
Zone D (YOS 15-20)	0.4%	0.3%	0.1%
Zone E (YOS >20)	10%	1%	9%
YOS	7	5	2
Female	6%	8%	-2%
White	87%	84%	3%
Black	8%	11%	-3%
Asian/Pacific Islander	3.3%	3.5%	-0.2%
Hispanic	11%	15%	-4%
Married	50%	51%	-1%
Any children	28%	25%	3%
AFQT percentile	62	58	4
Tier 1 education	94%	93%	1%
Other Tier 1 education	3%	4%	-1%
Tier 2 education	2.7%	3.1%	-0.4%
High quality (Tier 1 and AFQT≥50)	67	59	8
N	22,606	18,846	

¹All differences are significant at the 1-percent level, except for Zone A—Before EAS, Tier 2 (5 percent), Zone D (10 percent), Zone C, and married (not significant).



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In this table, we compare the characteristics of eligible UCX recipients and eligible UCX nonrecipients. Combined, these two groups make up the sample of recently separated AC enlisted Marines who were eligible to receive UCX.

We found that, like the average recently separated Marine, the average UCX recipient, as well as the average UCX nonrecipient, is a young, white, non-Hispanic, high-quality man with no children who separated at the end of his first term. The average Marine Corps separator entered the civilian workforce in California in 2011 at age 25 after 6 years of service, with a high school diploma and no children.¹² The average separator, recipient, and nonrecipient are more likely to be white, married, and have a high school degree than the average civilian of a similar age [7].

Compared with UCX nonrecipients, UCX recipients are younger and more likely to be nonwhite, Hispanic, lower quality, female, and have no children. They are as likely to be married.

Compared with nonrecipients, for example, recipients are more likely to have attrited before their EAS or separated at their EAS, and less likely to be retirees. UCX recipients have fewer years of service when they separate (85 versus 76 percent separated with 10 YOS or less) and are lower quality (59 versus 67 percent) than nonrecipients. These results are intuitive because those with more YOS and education are more marketable.

¹² Compared with nonveterans his age, the average Marine Corps separator had fewer years of civilian work experience than those with high school diplomas and less education than those with college degrees. On these two measures alone, he may be less competitive than the average nonveteran for the same civilian job, though this ignores the skills/experience acquired through service.

Characteristics of UCX-eligible AC enlisted separators (cont.)

Characteristic	UCX nonrecipients	UCX recipients	Difference ¹
Served full terms			
Reached EAS	63%	72%	-9%
Retired	10%	1%	9%
Served any amount of time			
Medical attrite	12%	8%	4%
Early Release	13%	17%	-4%
Served at least 1 YOS			
Personality disorder	0.3%	0.3%	0%
Weight control failure	0.6%	0.8%	-0.2%
Alcohol	0.16%	0.25%	-0.09%
Combat arms	30%	30%	0%
Combat support	16.3%	14.6%	1.7%
Combat service support	28%	31%	-3%
Command and control	8%	9%	-1%
Aviation support	17%	16%	1%
Disability	9%	6%	3%
Ever deployed	67%	69%	-2%
Deployed once	37%	40%	-3%
Deployed twice	27%	27%	0%
Deployed three or more times	4%	3%	1%
N	22,606	18,846	

¹All differences are significant at the 1-percent level except alcohol, aviation support, weight control failure (5 percent), deployed twice, combat arms, and personality disorder (not significant).



Compared with eligible UCX nonrecipients, eligible UCX recipients are more likely to have reached their EAS or to have voluntarily separated through Early Release. They are less likely to have retired or attrited for medical reasons. Most unrated Marines attrited for erroneous entry (e.g., entering the service under age 18 without parental consent) and, though eligible, did not collect UCX.

Among recently separated AC enlisted UCX recipients, 73 percent qualified from serving full terms, 25 percent from serving any amount of time, and 1 percent from serving at least 1 YOS. Overall, based on DOL’s acceptable separation reasons, but using our Marine Corps personnel data instead of DD214 separation data, 1.2 percent of enlisted UCX recipients (N = 295) were ineligible to receive UCX, which amounts to \$1.4M in overpaid CY11–12 UCX benefits. These ineligible recipients may actually have been eligible if they applied for post-service discharge characterization upgrades, which we do not observe. Although overpayments are less than 1 percent of the annual UCX bill, they are potentially avoidable. Half of ineligible recipients were separated for misconduct—which is disqualifying regardless of length of service¹³—but were honorably discharged, while the rest were less than honorably discharged.

Recipients and nonrecipients are most likely to be in combat arms and combat service support occupations. Recipients are more likely than nonrecipients to be in combat service support and command and control occupations. They are less likely to be in combat or aviation support occupations. They are as likely to be in combat arms occupations.

UCX recipients are less likely than nonrecipients to have a disability. Roughly 70 percent of separators have ever deployed. Recipients are slightly more likely to have ever deployed; they are more likely to have a single deployment but less likely to have multiple deployments.

¹³ According to *Acceptable Narrative Reasons for Separation for the UCX program*, they should not have been eligible for UCX [4].

Characteristics of UCX-eligible AC officer separators

Characteristic	UCX nonrecipients	UCX recipients	Difference ¹
Age	38	31	7
Zone A—Before initial obligation (YOS 1-6)	9%	14%	-5%
Zone A—Completed initial obligation (YOS 1-6)	17%	48%	-31%
Zone B (YOS 7-10)	13%	19%	-6%
Zone C (YOS 11-14)	5%	12%	-7%
Zone D (YOS 15-20)	1%	1%	0%
Zone E (YOS >20)	55%	6%	49%
Female	7%	10%	-3%
White	89%	87%	2%
Black	6.6%	5.3%	1.3%
Asian/Pacific Islander	3%	7%	-4%
Hispanic	6%	12%	-6%
Married	72%	45%	27%
Any children	55%	22%	33%
YOS	16	7	9
N	1,874	161	

¹All differences except Zone B, Asian (5 percent), Zone A—Before initial obligation, female (10 percent), Zone D, white, black (not significant) are statistically significant at the 1-percent level.



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In the last two slides, we found that—among Marine Corps AC *enlisted* personnel—the average separator, recipient, and nonrecipient is a young, white, high-quality man with no children who separated at the end of his first term. As shown above, however, among Marine Corps AC *officers*, the average recipient and nonrecipient differ quite a bit. The average officer recipient is a young, white, college-educated, unmarried man with no children who separated at the end of his initial obligation. The average officer nonrecipient—like the average officer separator—is an older, white, college-educated, married man with children who is retiring. Most of these differences—including marriage and children—could be driven by officer recipients separating at a younger age than officer nonrecipients. Officer recipients are more likely than officer nonrecipients to be Asian, Hispanic, female, unmarried, childless, to have a college degree, to separate during or at the end of initial obligation, or to serve for 7 to 14 years. Like the average enlisted Marine, the average officer separator, recipient, and nonrecipient are more likely to be white and more educated than civilians their age [7].

In fact, the average officer recipient looks more like the average enlisted recipient than like the average officer nonrecipient. Because people tend to get married and have children after they complete their terminal degrees, officers may get married—to a spouse with a college degree—and have children at a later age than enlisted personnel [12]. Therefore, marriage among officers may confer a higher degree of stability and less UCX use.

Characteristics of UCX-eligible AC officer separators (cont.)

Characteristic	UCX nonrecipients	UCX recipients	Difference ¹
Some college or less	11%	5%	6%
Bachelor's degree	89%	95%	-6%
Completed initial obligation	26%	57%	-31%
Retired	46%	4%	42%
Medical attrite	2.9%	4.3%	-1.4%
Other losses	14%	18%	-4%
Ever deployed	49%	76%	-27%
Deployed once	30%	50%	-20%
Deployed twice	14%	22%	-8%
Deployed three or more times	4.7%	4.4%	0.3%
Disability	2.9%	4.3%	-1.4%
N	1,874	161	

¹All differences except deployed twice, some college or less, bachelor's degree (5 percent), deployed three or more times, disability, medical attrite, and other losses (not significant) are statistically significant at the 1-percent level.



Compared with eligible officer nonrecipients, eligible officer recipients are more likely to have completed their initial obligation and are less likely to have retired.

Three-quarters of UCX officer recipients have ever deployed, compared with half of UCX officer nonrecipients. Officers who are more often in deployed environments have less opportunity to do transition planning than those who are not deployed (or deployed as much). This could also be due to age, with younger, initial-obligation officers more likely to have deployed in the last decade of war than older, retirement-age officers. Recipients are more likely than nonrecipients to have deployed once or twice.

Twenty states with the most Marine Corps CY11–12 UCX recipients

State	N	%	CY11 state unemp. rate (%)	State	N	%	CY11 state unemp. rate (%)
CA	6,491	22	11.7	MA	803	3	7.4
NC	2,555	9	10.5	WA	733	2	9.2
TX	2,247	8	7.9	GA	634	2	9.8
NY	1,567	5	8.2	OR	574	2	9.5
PA	1,343	5	7.9	VA	573	2	6.2
IL	1,079	4	9.8	IN	484	2	9.0
MI	1,061	4	10.3	CO	456	2	8.3
FL	1,027	3	10.5	WI	456	2	7.5
OH	878	3	8.6	AZ	449	2	9.5
NJ	836	3	9.3	SC	446	2	10.3

- “Recently separated” refers to those who separated between CY10 Q3 and CY12 Q1.
- The national unemployment rate was 8.7 percent in CY11 and 8.1 percent in CY12.
- CY11 state unemployment rates are BLS annual non-seasonally-adjusted state unemployment rates.



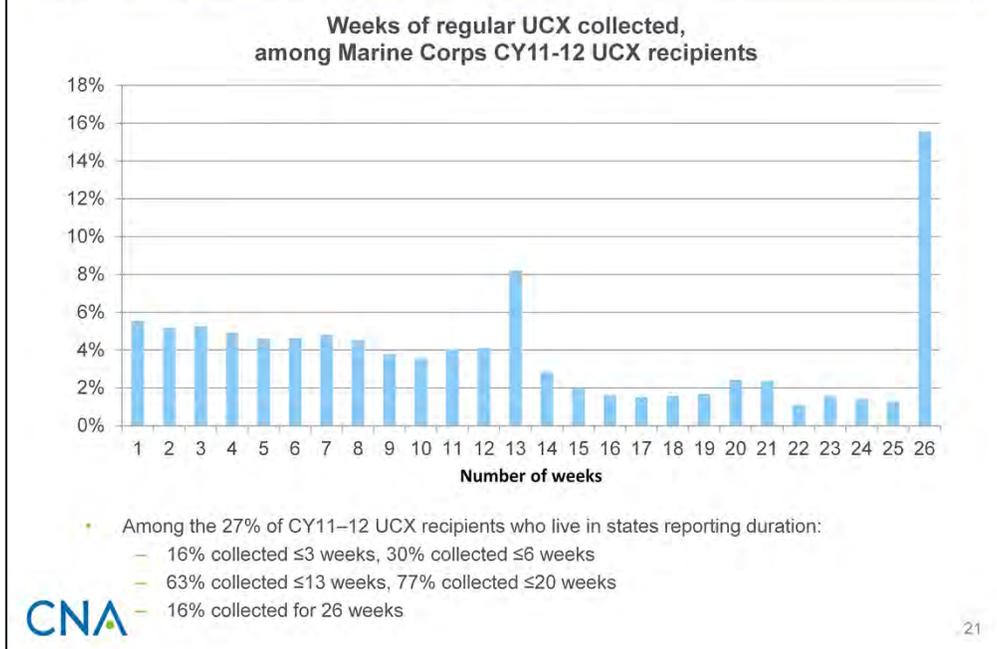
Eighty-three percent of CY11 and CY12 Marine Corps UCX recipients are collecting in the 20 states above; 12 have unemployment rates above the national CY11 unemployment rate of 8.7 percent. Twenty-two percent of all CY11–12 Marine recipients live in California. The next most Marine Corps UCX-populated states are North Carolina, Texas, New York, and Pennsylvania. Of these, only North Carolina has a CY11 annual state unemployment rate above the national average.

Veterans are likely drawn to states with big cities, which have more job opportunities; however, these states were affected disproportionately during the recession, and their unemployment rates rose above the average. In three states (California, Hawaii, and North Carolina), roughly half of recently separated AC enlisted Marines are collecting UCX.

According to Defense Manpower Data Center (DMDC) data, states with the largest separator populations (all services) in FY11 are Texas, California, Florida, Virginia, and Illinois. States with the largest employment growth in FY11 (according to the Bureau of Labor Statistics (BLS)), are Texas, California, Florida, New York, and Ohio. There are many DOD installations in these larger states with big cities and high employment growth. Separating Marines may remain in their last unit’s location because of the potential for getting job offers in these big cities, but this may lead to high UCX rates during transitions as they search for a good match.

Eighteen of the above states also are among the top 20 states with the most Army FY11 UCX applicants. Rounding out the Army’s top 20 are Louisiana and Kentucky (instead of Arizona and South Carolina). It could be that the Army recruits more heavily from these two states than the Marine Corps does, and separating Soldiers are returning home. Seventeen of the above states also are among the top 20 states with the most Navy CY11 recipients. Rounding out the Navy’s top 20 are Maryland, Connecticut, and Hawaii (instead of Arizona, Indiana, and South Carolina).

How long are AC enlisted recipients collecting regular UCX benefits (N = 5,075)?



This figure shows the number of weeks that recipients collected regular UCX benefits in CY11 and CY12 (not the cumulative number of weeks ever collected). Of 53 states and territories, 14 report *weeks* of UCX paid to each veteran in each quarter; 5,075 recently separated Marines (27 percent of the 18,846 eligible AC enlisted regular UCX recipients) live in these 14 states and territories.¹⁴ As a result, the number of recipients in the figure is smaller than the total number of recipients.

This one-year snapshot suggests that recipients simply move through the pipeline; most who start collecting reach 13 weeks. Some stop there, some stop at 20 weeks, and 16 percent max out at 26 weeks.¹⁵ But this view belies some of the complexity. In fact, recipients enter and exit the snapshot at different times for different reasons and are at various points in their collection of unemployment benefits when we observed them in this snapshot. Without additional data, we are unable to decipher precisely where they are. For example, we cannot distinguish between the following three recipients, each of whom collected 13 weeks of unemployment: (1) Person #1 started collecting in CY11 (regular UCX in CY11 and regular UCX and EUC in CY12), (2) Person #2 started and finished collecting in CY11 (13 weeks of regular UCX, then secured a job), and (3) Person #3 finished collecting benefits in CY11 (EB in CY11 after regular UCX in CY09 and EUC in CY10). This affected our ability to draw robust conclusions. Another year or two of data would allow us to track recipients in states other than those that report EB separately from regular UCX.

¹⁴ Some of the bigger states that report weeks include Florida, Michigan, Illinois, and North Carolina; 18 percent of recipients live in these seven states.

¹⁵ We top-coded those who collected more than 26 weeks as collecting for 26 weeks. Each state offers a different minimum number of weeks. Most offer variable maximums—usually 26 weeks—based on total payout. Part of the reason for the peaks at 13 and 20 weeks is that this distribution includes EB recipients from states that do not report EB separately from regular UCX, which we could not easily separate out.

UCX regression model

- Sample: Marines who separated between CY10 Q3 and CY12 Q1
- We predict a Marine's propensity to collect regular UCX in CY11 or CY12, given UCX eligibility, not his or her propensity to be unemployed
- It is a function of:
 - Demographic characteristics (gender, age, race, ethnicity, marital status, any children)
 - Service characteristics (high quality, YOS, disability, deployment, and occupational field grouping)
 - State unemployment rate
- Cannot make causal assertions; all effects should be interpreted as associations



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We estimate a logistic regression (logit) model that predicts one's propensity to collect UCX as a function of demographic and service-related characteristics, as well as the state unemployment rate. The dependent variable is an indicator for whether one collected regular UCX benefits in CY11 Q1 to CY12 Q2, given that one is eligible.¹⁶ We only estimate the propensity to collect UCX, not to be unemployed. Some may have never applied, exhausted their benefits, or applied too late.

Binary variables include female, zone,¹⁷ race,¹⁸ ethnicity (Hispanic), married, high quality,¹⁹ any children, disability,²⁰ number of deployments, and occupational field groupings. Continuous variables include age, age-squared, and the annual state unemployment rate. We use age-squared to test whether the effect of age on UCX receipt is linear or diminishes with age.

In the regression results, we report all statistically significant findings. We separately report results from regressions run using three different occupational field categorizations: civilian occupational classifications, combat/support occupations, and the 20 largest occupational fields.

¹⁶ We omitted the UCX-ineligible population because we are interested only in the population that is able to apply and qualify for UCX. Those who are ineligible are less likely to collect UCX, not for behavioral reasons, but because they could not collect even if they wanted to.

¹⁷ Zone A: YOS 1–6, B: YOS 7–10, C: YOS 11–14 (omitted), D: YOS 15–20, and E: YOS >20.

¹⁸ Includes black, Asian/Pacific Islander, other, with white omitted.

¹⁹ AFQT ≥ 50 and at least a high school diploma graduate.

²⁰ Includes disabilities that are permanent (>30 percent rating), temporary (>30 percent), with severance pay (<30 percent), and prior disability, with nondisabled omitted.

UCX regression results: AC enlisted

More likely to collect UCX:			
Active component		Reserve component	
Enlisted	Officers	Enlisted	Officers
Female		Female	Male
Zone A>B>C=D>E		Zone A>B=C=D>E	
Older within a zone		Older within a zone	
Lower quality		Lower quality	
Hispanic		Hispanic	
Black		Black	
Married		Married	
Any children			
Disability with severance pay			
Nondisabled			
Single deployment	Ever deployed	No deployments	
States w/higher unemployment	States w/higher unemployment	States w/higher unemployment	States w/higher unemployment
Less likely to collect UCX:			
Perm. or temp. disability			



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Recall that the average Marine AC enlisted UCX recipient is a young, white, high-quality man with no children (see slides 16-17). However, characteristics that are less prevalent among Marines put them at risk for collecting UCX—being less educated, lower quality, nonwhite, female, and having children (shown above). Half of AC enlisted Marines are married, and married Marines are more likely to collect UCX.

Being less educated or nonwhite is predictive of collecting unemployment benefits among both veterans and nonveterans. Marines of lower quality—who are less educated or have lower AFQT scores—may be less qualified and get fewer job offers than high-quality Marines.

Marines who are female, married, or have children also are at higher risk for collecting UCX. Women separate earlier than men for reasons that qualify them for UCX. Marines who are married or have kids may move after separation, in which case their spouses may quit their jobs and would be ineligible for civilian unemployment benefits, which incentivizes veterans to apply.

Marines who separated during or at the end of their first terms are the most likely to collect UCX. Each additional term decreased one's likelihood of collecting UCX, with retirees the least likely to collect. This is intuitive since veterans with more YOS may be more marketable in the civilian sector. Because retirement payments are offset by UCX payments, retirees are less incentivized to apply. Whereas careerists may have timed their exits to have promising jobs lined up, first-term separators may have planned to serve only one term, regardless of the job market. With only a high school diploma, it may take them time to find a job that uses the skills they developed in the military.

UCX regression results: AC enlisted (cont.)

More likely to collect UCX:			
Active component		Reserve component	
Enlisted	Officers	Enlisted	Officers
Female		Female	Male
Zone A>B>C=D>E		Zone A>B=C=D>E	
Older within a zone		Older within a zone	
Lower quality		Lower quality	
Hispanic		Hispanic	
Black		Black	
Married		Married	
Any children			
Disability with severance pay			
Nondisabled			
Single deployment	Ever deployed	No deployments	
States w/higher unemployment	States w/higher unemployment	States w/higher unemployment	States w/higher unemployment
Less likely to collect UCX:			
Perm. or temp. disability			



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Less-disabled Marines (with less than a 30-percent disability rating—no disability or disability with severance pay) are more likely to collect UCX than more-disabled Marines (with at least a 30-percent disability rating—permanent or temporary). It may be that more-disabled Marines are ineligible for UCX because they do not meet able-to-work requirements or there may be restrictions on collecting both disability payments and UCX and they do not want to put their lifelong VA benefits in jeopardy.

Collecting UCX takes a degree of planning, and Marines who have a single deployment—the most likely to collect UCX—may have more time between deployment and EAS to learn about and plan to use their benefits than those with multiple deployments. They may need more time to decompress after separation than those who never deployed, and are able to afford a longer job search by collecting UCX.

Those who deploy three or more times—the least likely to collect UCX—may have deployments closer to their EASs, and less time to prepare for transition. Health-related issues associated with multiple deployments (health worsened, hospitalized while deployed, screened positive for PTSD) may prevent them from beginning a job right after separation; if they are not applying for jobs, they are ineligible for UCX [11].

Marines who never deployed or deployed twice were as likely to collect UCX as one another. Marines who never deployed had uninterrupted family and social interactions and, in that way, are more like civilians and may be more prepared to secure jobs.

Marines who relocate to states with higher unemployment rates are more likely to collect UCX; they may have been recruited from these high-unemployment states, returned home to tough job markets, and not been able to find work. Enlisted Marines are more likely than officers to stay where their last unit was located, and many Marine installations are located in states with high unemployment rates (e.g., California, Virginia, North Carolina, New York, and Arizona).

UCX regression results: AC officers

More likely to collect UCX:			
Active component		Reserve component	
Enlisted	Officers	Enlisted	Officers
Female		Female	Male
Zone A>B>C=D>E		Zone A>B=C=D>E	
Older within a zone		Older within a zone	
Lower quality		Lower quality	
Hispanic		Hispanic	
Black		Black	
Married		Married	
Any children			
Disability with severance pay			
Nondisabled			
Single deployment	Ever deployed	No deployments	
States w/higher unemployment	States w/higher unemployment	States w/higher unemployment	States w/higher unemployment
Less likely to collect UCX:			
Perm. or temp. disability			



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Like AC enlisted Marines, recently separated AC officers who served fewer YOS are at greater risk for collecting UCX. Officers who separated during or at the completion of their initial obligation are more likely to collect UCX than those who continued serving after their initial obligation, particularly more so than retirees. Careerists and retirees may be more marketable and time their exits around job availability. Retirees may be disincentivized from collecting because their retirement payments are offset by UCX. Those who separated with 6 YOS or less are 4 percentage points more likely to collect UCX than those who separated with 7 to 10 YOS. Those who separated with 15 to 20 YOS are 19 percentage points more likely to collect UCX than those who retired with more than 20 YOS.

Like AC enlisted Marines, recently separated AC officers who live in states with higher unemployment rates are at greater risk for collecting UCX. For each percentage-point increase in the state unemployment rate, AC officers are 2 percent more likely to collect UCX. The UCX receipt of AC enlisted Marines is more than twice as sensitive to the state unemployment rate as AC officers and RC enlisted personnel and officers (5 versus 2, 2, and 2 percent, respectively). We also find that male UCX receipt is more sensitive than female UCX receipt to the state unemployment rate.

Unlike AC enlisted Marines, AC officers who ever deployed—rather than served a single deployment—have a greater chance of collecting UCX. This, too, may be associated with “wanting a break” before entering the civilian sector, or health-related issues that require time before one can transition to civilian employment or schooling; a veteran can afford a longer job search if he or she is collecting UCX.

No other characteristics were significant predictors of UCX collection.

UCX regression results: RC enlisted and officers

More likely to collect UCX:			
Active component		Reserve component	
Enlisted	Officers	Enlisted	Officers
Female		Female	Male
Zone A>B>C=D>E	Zone A>B=C=D>E		
Older within a zone		Older within a zone	
Lower quality		Lower quality	
Hispanic		Hispanic	
Black		Black	
Married		Married	
Any children			
Disability with severance pay			
Nondisabled			
Single deployment	Ever deployed	No deployments	
States w/higher unemployment	States w/higher unemployment	States w/higher unemployment	States w/higher unemployment
Less likely to collect UCX:			
Perm. or temp. disability			

CNA

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Among enlisted deactivated reservists, female, older, lower quality, Hispanic, black, and married reservists—like AC enlisted Marines—are more likely to collect UCX. Among officer deactivated reservists, males are more likely to collect UCX.

Unlike AC enlisted Marines, deactivated reservists who never deployed are more likely to collect UCX. Reservists could have been activated but never deployed if they were Active Duty Special Work mobilizations or nonmobilizations, or if they completed over 90 days of initial active duty for training. Many non-prior-service reservists may have joined the Marine Corps because they could not find civilian employment, and completing 90 days or more of initial active duty for training with an honorable discharge may qualify them for a small UCX payment.

On the other hand, reservists with civilian jobs before activation—whose jobs are protected by the Uniformed Services Employment and Reemployment Rights Act (USERRA) for up to 3 months after deactivation—who choose not to return to these preactivation jobs are ineligible because they refused suitable work. Yet, as RAND observed among Army reservists in 2005, most RC UCX recipients with preactivation jobs—who should have been ineligible because they voluntarily refused suitable work upon deactivation—were still able to collect UCX. The state is supposed to conduct fact-finding to detect this.²¹ Others may have been involuntarily without a job after deactivation because they were not given prompt reemployment or conditions changed.

²¹ In a 2005 survey of Army reservists, of the 57 percent of RC UCX recipients who were employed in the month before activation, 40 percent voluntarily chose not to return to that job (16 percent disliked their jobs, 24 percent decided to go to school, and 51 percent said they needed a break after activation). Thus, some reservists were not returning to their jobs and some states were not adequately gathering facts. Also, some employers may have been violating USERRA—14 percent of recipients reported that preactivation employers did not give them prompt reemployment—and, for other employers, conditions changed—33 percent stated that layoffs occurred, facilities closed, company ownership changed, or their contracts ended, and 5 percent that their employers went out of business [11].

Three ways to categorize Marine Corps MOSs

Civilian occupational classification	Active component enlisted	
	Combat/support occupations	Twenty biggest occfields
Services	Combat arms:	Infantry
Construction	Infantry	Motor Transport
Operators	Artillery	Aircraft Maintenance
Quasi-professional	Tanks	Engineer, Construction, Facilities
Admin	Combat support:	Supply Admin and Operations
Repair/Maintenance	Engineer, Construction, Facilities	Personnel and Admin
War/Combat	Military Police and Corrections	Artillery
Information Systems	Ordnance	Avionics
Unrated (Basic Marine, Misc.)	Combat service support (CSS):	Command and Control Systems
	Supply Admin and Operations	Military Police and Corrections
	Personnel and Admin	Food Service
	Food Service	Ordnance
	Command and control (C2):	Logistics
	Command and Control Systems	Tanks
	Data Systems	Ground Electronics Maintenance
	Aviation support:	Utilities
	Aircraft Maintenance	Aviation Ordnance
	Avionics	Airfield Services
	Aviation Ordnance	Air control/support
		Operational Communications

CNA

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We categorized enlisted MOSs in three ways. In the first, we translated Marine Corps enlisted ratings into nine civilian equivalencies using a military-to-civilian crosswalk. This measures the potential transferability of military skills. The civilian occupations came from DOL's Standard Occupational Classifications, and were cross-checked against Current Population Survey occupation codes. The categories are services, construction, operators, quasi-professional, admin, repair/maintenance, war/combat, information systems, and unrated.

In the second method, we grouped occupations into five categories: combat arms, combat support, combat service support, aviation support, and command and control. Examples of some of the occupational fields (occfields) in each category are listed above.

The third way of categorizing enlisted MOSs was to restrict the sample to Marines in the 20 largest occfields and include a binary for each of the occfield groupings, omitting one.

We ran a separate regression for each specification. Occfield groupings were included in the previous regressions but are reported separately in the next slide.

UCX regression results: AC occupational fields		
Active component enlisted		
Civilian occupational classification	Combat/support occupations	Twenty biggest occupational fields
<p><u>Most likely to collect UCX:</u></p> <p>Admin*</p> <p>Construction*</p> <p>Services</p>	<p><u>More likely to collect UCX:</u></p> <p>Command and control</p> <p>Combat service support*</p>	<p><u>More likely to collect UCX:</u></p> <p>Tanks*</p> <p>Utilities*</p> <p>Food Service</p> <p>Personnel and Admin</p> <p>Engineer, Construction, Facilities</p> <p>Command and Control Systems</p>
<p><u>More likely to collect UCX:</u></p> <p>Operators</p> <p>Information Systems</p> <p>War/Combat</p>	<p><u>Less likely to collect UCX:</u></p> <p>Aviation support</p> <p>Combat arms</p> <p>Combat support</p>	<p><u>Less likely to collect UCX:</u></p> <p>Ordnance</p> <p>Supply Admin and Operations</p> <p>Infantry</p> <p>Logistics</p> <p>Aviation Ordnance</p> <p>Aircraft Maintenance</p>
<p><u>Less likely to collect UCX:</u></p> <p>Quasi-professional</p> <p>Repair/Maintenance</p>		<p><u>Least likely to collect UCX:</u></p> <p>Artillery</p> <p>Ground Electronics Maintenance</p> <p>Military Police/Corrections</p> <p>Avionics</p>
<p><u>Least likely to collect UCX:</u></p> <p>Unrated (Basic Marine, Misc.)</p>		
<p>* Significantly different from below grouping</p>		



Civilian occupational classification

Recently separated AC enlisted Marines with ratings in admin, construction, and services are 1 to 3 percent more likely to collect UCX than Marines with operators, information systems, or war/combat occupations. The latter are 1 percent more likely to collect UCX than those with quasi-professional or repair/maintenance occupations. Marines with quasi-professional or repair/maintenance occupations are 11 percent more likely to collect UCX than unrated Marines.

Combat/support occupations

Combat arms MOSs—the least likely to use UCX—might have an aversion to collection. Combat and aviation support MOSs have technical, transferable skills and may be able to secure jobs right out of the Marine Corps. C2 MOSs might have a hard time finding a certain type of job in their field without a college degree. CSS MOSs—utilities, administration, food service—may have skills that are transferable, but less technical, and face sector-related unemployment.

Twenty largest occfields

If we break off the largest occupational fields from their groupings and let them stand alone, we are able to see that within combat arms, for example, tanks are more likely to collect UCX than infantrymen, who are in turn more likely to collect UCX than artillerymen. Within combat support, Marines within the engineer, construction, and facilities occfield are more likely to collect UCX than Marines in ordnance; both are more likely to collect than military police/corrections. Within CSS, Marines in utilities, food service, and personnel and admin occupations are more likely to collect UCX than Marines in supply admin and operations occupations. The latter are, in turn, more likely to collect than Marines in logistics and ground electronics maintenance.

Discovered inefficiencies

- What changes can be made to the UCX qualification system?
 - 1.2 percent of AC enlisted UCX recipients were ineligible to receive UCX
 - \$1.4M in overpaid benefits in CY11-CY12
 - Most separated for misconduct
 - How can erroneous payments be prevented or identified earlier?
 - Reservists who have civilian jobs to which they can return should not qualify for UCX
 - UCX is intended to mirror civilian unemployment benefits
 - Non-prior-service Selected Reserves (NPS SELRES) may qualify for UCX if bootcamp is ≥ 3 months



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Overall, based on DOL's acceptable separation reasons, but using Marine Corps personnel data instead of DD214 separation data, 1.2 percent of AC enlisted UCX recipients (N = 295) were ineligible to receive UCX; these discrepancies could amount to \$1.4 million of overpaid CY11 and CY12 UCX benefits. About half of ineligible recipients were separated for misconduct but honorably discharged, while the other half were less than honorably discharged. Policy-makers may want to consider how to enforce or modify existing procedures (e.g., Marines who separated for misconduct are ineligible) in order to prevent or identify erroneous payments earlier. Many servicemembers apply for changes to their separation codes and discharge characterizations following separation; this could be causing some of the discrepancy.

Reservists who choose not to return to their preactivation jobs who are protected by USERRA for up to 3 months after deactivation should not be eligible for UCX because they have refused suitable work.²² Unemployment benefits are intended to subsidize the search for a new job for the unemployed. Of course, some reservists may have been unemployed when they volunteered for activation, their jobs may have been eliminated, or they may have been denied reemployment.

NPS reservists who attend bootcamp and additional training may have spent more than 90 continuous days on active duty, which may qualify them for UCX. Two percent of CY11 and CY12 UCX recipients are NPS SELRES (N = 624) at a cost of \$3 million to the Marine Corps (average CY11–12 payment \$4,800). NPS SELRES who have USERRA-protected civilian jobs should be able to return to those jobs after bootcamp and should not qualify for UCX.

²² Loughran and Klerman [11] lay out policy suggestions:

Enforcing this requirement may entail developing new procedures that could be followed by state workforce agency personnel. For example, UCX regulations might require state workforce agencies to verify whether reservists were employed prior to activation and, if so, to determine whether the right to return to that job is protected by USERRA. Reservists claiming UCX might be required to sign a statement that they do not have a USERRA-protected job to which they could return. Reservists who do not return to a USERRA-protected job would be eligible to receive UCX only under special circumstances, such as when the job was eliminated or their employer refused them reemployment.

Directions for future research

- What characteristics predict longer unemployment spells?
 - Could conduct duration analysis with two or more years of recipient data
- How are applicants different from recipients?
 - With applicant and recipient data, we could observe:
 - The types of Marines who are denied UCX payments
 - Marines who should have been denied but received payment → policy changes
- Are EB recipients different from regular UCX recipients?
 - With current data, sample size of EB recipients not sufficiently large
- Add in Post-9/11 GI Bill data



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This study was conducted with six quarters of recipient data (CY11 Q1 to CY12 Q2). Two or three years of recipient data (and specifically CY09 and CY10 data) would allow for a more thorough analysis of the chronically unemployed at the height of the recession, as 26 states paid EB in CY09 and 39 states paid EB in CY10, compared with 33 in CY11, 16 in CY12, and 1 in CY13.

At present, EB data are available only for the ten states that report it separately. With two or more years of recipient data, we would not be restricted to analyzing states that report EB separately from regular UCX; we would be able to track the full unemployment spells (up to 99 weeks) of those who began collecting regular UCX at the beginning of the first year of data. This would mitigate the unobservability of EUC data, would reduce issues associated with censoring (not observing regular UCX collected in the quarters before data begin and not observing regular UCX, EUC, and EB collected in the quarters after data end), and would allow us to observe some completed spells (by working around the problem of states reporting weeks collected in that quarter rather than the cumulative number of weeks ever collected).

In addition, with overlapping quarters of applicant and recipient data, we could calculate the share of applicants who received payment and the types of Marines who were denied payment or received payment but should have been denied. This could help make UCX accounts more auditable.

To assess GI Bill use after 2009 would require the receipt of both MGIB and Post-9/11 GI Bill data. Because it has been roughly four years since the implementation of the Post-9/11 GI Bill, we would expect 80 percent of Marines who separated in late 2009 to have begun using these benefits. Receipt of both data repositories would allow us to observe usage and switching behavior among those eligible for both.

Directions for future research (cont.)

- Test whether longer deployments are associated with UCX receipt
 - Positive correlation found among Army veterans in 2005
- Test for poor post-deployment health and UCX receipt correlation
 - Positive correlation found among Army veterans in 2005
 - Request Post-Deployment Health Assessment forms (DD Form 2796)
 - Screens servicemembers returning from deployment for Post-Traumatic Stress Disorder (PTSD), worsening health, and hospitalizations
- Further test whether UCX and disability payments are substitutes
 - Could not reject in this analysis; request Department of Veterans Affairs (VA) data



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Loughran and Klerman [11] found that, among Army veterans in 2005, longer deployments were associated with higher UCX claim rates.²³ We could add deployment length and test this for the Marine Corps. They also showed that Army CY05 UCX receipt was correlated with poor post-deployment health (health worsened, hospitalized while deployed, screened positive for PTSD).

They show that longer deployments are associated with both higher UCX claim rates and worse health, in that they elevate the risk of injury, and explain that injured veterans may require more time to transition to civilian employment. We find potential evidence to support substitution between DOD and UCX disability payments for disabled veterans. We could test this and other theories on request and receipt of detailed VA disability data (status, payments).

²³ The authors explain that (1) longer deployments made it harder for predeployment civilian employers to accommodate reemployment (37 percent of RC soldiers who worked before deployment had a reemployment problem); (2) longer deployments may be associated with higher UCX claim rates because reservists “wanted a break” before returning to their civilian jobs, as reported by 55 percent of respondents to the Status of Forces Survey of Reserve Component Members (SOFS-R); and (3) longer deployments may have led reservists to reconsider their civilian careers, after being exposed to new people with different perspectives. Among SOFS-R respondents, 12 percent did not work following deactivation because they disliked their jobs, and 19 percent decided to attend school [11].

Montgomery GI Bill (MGIB) analysis



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Next, we analyze the types of transitioning Marines who are most likely to pursue further education with their MGIB benefits.

Main MGIB findings

- Based on the available dataset, the following characteristics have a positive association with MGIB receipt:
 - Nonwhite
 - Hispanic
 - Higher quality
 - Female
 - Unmarried
 - No children
 - Separate during or at end of first or second term
 - Single deployment
 - Relocating to states with higher unemployment rates
 - Nondisabled or a <30-percent disability rating
 - Combat arms occupations
- Negative association with MGIB receipt:
 - Three or more deployments
 - >30-percent disability rating
 - Combat support and combat service support occupations



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Possible reasons why certain MGIB-eligible transitioning Marines have a higher probability of using their MGIB benefits follow. Nonwhite and Hispanic Marines may have joined the Marine Corps because of education incentives. Higher quality Marines may know that they can get better-paying jobs if they get accepted to rigorous educational programs and complete additional years of schooling. Women are becoming an increasing share of college students.

It may be easier—logistically and financially—for a veteran who is young, single, and has no children to go to school using the MGIB than it is for a veteran who is older, married, or has children, in terms of the opportunity cost of one’s time and the forgone earnings from having a job. Yet, having a spouse at separation would seem to make it easier to go to school because one’s spouse could continue to be a wage earner while the veteran is in school. This may not be the case for enlisted Marines, if their spouses have high school degrees and are not be able to solely support their families.

It is not surprising that first-and second-term separators are the most likely to use the MGIB, because they are closest in age to college students and so less stigmatized by/removed from, the college campus mentality. Marines who had a single deployment were the most likely to use the MGIB. Marines with three or more deployments were the least likely to use the MGIB; they may have physical or mental health issues that prevent them from going to school or change their aspirations.

Marines who relocate to states with higher unemployment rates are more likely to use the MGIB; they were likely recruited from these high-unemployment states and return home to tough job markets when they decide to go to school instead. As with UCX, more-disabled Marines are less likely to use MGIB. There may be restrictions on the benefits that veterans collecting disability payments can use simultaneously; they may not want to jeopardize their lifelong disability benefits by using both.

Those in combat arms MOSs are the most likely to use the MGIB, followed by those in C2 MOSs. Combat arms Marines do not have directly transferable skills and may go to college to get trained in fields that are enhanced by their military experience. C2 Marines have high AFQT scores and work with information systems; they may pursue, for example, computer science degrees in college.

MGIB facts

- The MGIB was signed into law on June 1, 1987
- Enlisted personnel are automatically enrolled in MGIB at bootcamp and must disenroll within the first 3 days if they choose not to participate
- Servicemembers are eligible to use their MGIB-AD (Active Duty) benefits if they meet all of these criteria:
 - Continuously served for 3 years (or 2 years if National Call to Service (NCS), or 2 years if joined SELRES within a year and served for 4 years)
 - An honorable discharge (“under honorable conditions” and “general” are ineligible)
 - Completed high school, or 12 hours toward a college degree
 - Had military pay reduced by \$100/month for the first 12 months on AD



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The MGIB was signed into law by President Reagan on June 1, 1987, and is still available. Enlisted personnel fill in an MGIB enrollment/disenrollment form at the Military Entrance Processing Station, are automatically enrolled at bootcamp, and have 3 days to disenroll.²⁴

MGIB qualification criteria are stricter than UCX qualification criteria. In particular, for AC Marines to qualify for MGIB, they must serve at least 3 continuous years (or 2 years if they are NCS, or 2 years if they entered SELRES within a year of leaving active duty and served 4 years); to qualify for UCX, they must, in general, serve their first full terms of service, although there are many length-of-service (LOS) exceptions. For example, honorably discharged Marines who separated for unsatisfactory performance or weight control failure and served more than 1 but less than 3 years qualify for UCX but do not qualify for MGIB.²⁵

Also, AC Marines must receive a fully “honorable” discharge to qualify for MGIB. A discharge that is “under honorable conditions” or “general” does not qualify a Marine for MGIB, but does qualify a Marine for UCX. In addition, there is no education requirement to qualify for UCX, but AC Marines must have completed high school or 12 hours toward a college degree to qualify for the MGIB. This is not restrictive when quality is high, but it could be when quality is low.

Lastly, AC Marines must pay \$100 per month into the MGIB program for the first 12 months on AD to become eligible to use the MGIB.

²⁴ Officers are not automatically enrolled. They must enroll/disenroll before the Officer Basic Course, within 3 days of entering AD. Disenrollment is a one-time, irrevocable decision. Monies reduced are not taxable or refundable and cannot be stopped or suspended [13].

²⁵ MGIB-qualifying LOS exceptions are convenience of the government, medical condition preexisting service, Early Release, hardship, physical or mental condition interfered with duty, or service-connected disability [14].

MGIB facts (cont.)

- SELRES members are eligible to use MGIB-SR (SELRES) if they meet all of these criteria:
 - Signed a 6-year obligation and completed initial active duty for training
 - Remained in good standing while serving in an active SELRES unit
 - Completed high school or equivalency certificate
- The MGIB provides up to 36 months of education benefits
- MGIB-AD benefits are payable for 10 years following release from AD
- MGIB-SR benefits are payable while in the SELRES, for up to 14 years or until benefits run out
- Servicemembers may begin to use MGIB on AD, after 2 YOS



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For SELRES members, SELRES components determine MGIB eligibility and ensure opportunities to enroll/disenroll. To qualify for the MGIB, a SELRES member must have signed a 6-year obligation to serve in the SELRES (for officers, this is in addition to one's original obligation) and completed initial AD for training. SELRES members must have a high school diploma or equivalency certificate before completing initial AD for training and, unlike AC Marines, cannot qualify by having completed 12 hours towards a college degree. They must also remain in good standing in an active SELRES unit.

The MGIB provides up to 36 academic months of education benefits, the equivalent of 4 years of a college degree with a 9-month school year. Generally, AC Marines and PS reservists who completed at least 2 years on AD and served 4 years in the SELRES are eligible for the MGIB-AD and their benefits are payable for up to 10 years following their release from AD [15]. NPS reservists are eligible for MGIB-SR and their benefits are payable only while in the SELRES [14].

The maximum amount that a full-time MGIB recipient could receive, starting in FY13, was \$56,304 (\$1,564 per month for 36 months).²⁶ All Marines who qualify can receive payments for up to 36 months, as long as they verify school enrollment through the VA each month. But their monthly payments may be less than \$1,564, depending on their student status (full, half, or part time), duty status, type of educational training, LOS,²⁷ date of entry into AD, and whether the Marine paid into the GI Bill kicker (a match rate of 8 to 1). Marines can use the MGIB on AD after 2 YOS.²⁸

²⁶ Payment rates are adjusted for inflation and increase on Oct. 1 of each year [16].

²⁷ Monthly MGIB payment rates differ by LOS (more or less than 3 YOS) and for degree and certificate programs, flight training, apprenticeship/on-the-job training, and correspondence courses.

²⁸ They are not advised to do so unless tuition costs are high or they use the "GI Bill Top-up" to supplement tuition and fees not covered by tuition assistance. For example, a full-time student not on AD gets paid the monthly payment rate of \$1,564, even if his or her monthly tuition and fees cost \$1,000, whereas a full-time student on AD only gets his or her tuition and fees paid (\$1,000 per month), not the monthly payment rate (\$1,564 per month) [17].

Data caveats and limitations

• Data caveats

- In general, veterans cannot use both the MGIB and Post-9/11 GI Bill
 - MGIB cannot be transferred to one's dependents; Post-9/11 GI Bill can
- We use the VA's definition of MGIB eligibility
 - The VA's MGIB eligibility variable is not coded as it is defined; we update the code to match the definition by making those with less than a fully honorable discharge ineligible
- Difficult to analyze MGIB and UCX simultaneously because of differing eligibility criteria and windows in which to use these benefits
- We analyze MGIB data before 2009
 - It is not clear how to analyze MGIB recipients after Aug. 1, 2009, when many servicemembers became eligible for/switched to using Post-9/11 GI Bill
- Under the VOW to Hire Heroes Act of 2011, unemployed veterans age 35 to 60 are eligible to receive up to 1 year of MGIB for retraining²⁹

• Limitations

- We estimate only the propensity to use the MGIB, not to go to school
- Veterans not using the MGIB may:
 - Not yet have used their benefits
 - Be collecting Post-9/11 GI Bill benefits instead



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Only one VA education benefit is payable at a time. If a servicemember is eligible for both the MGIB and the Post-9/11 GI Bill, he or she must choose which to receive. A drawback of the MGIB is that benefits are not transferable to one's spouse or children. The Post-9/11 GI Bill rectified that.³⁰

We cannot simultaneously analyze UCX and MGIB receipt in CY11-CY12 because of the different eligibility criteria (discussed on the next slide) and windows of time that veterans have available to use their benefits. Veterans have up to 3 quarters after separation to apply for UCX and 1 year to use UCX; servicemembers must enroll in the MGIB program upon initial entry to AD and have up to 10 years after separation to use the MGIB. In other words, most CY11-CY12 UCX recipients will have separated in CY10-CY12, whereas most CY11-CY12 MGIB recipients will have separated in CY07-CY12, therefore we do not have one coherent sample of separators to use for analysis.

Because we do not have Post-9/11 GI Bill data, we cannot tell how many Marines are using the Post-9/11 GI Bill instead of the MGIB in the years after the Post-9/11 GI Bill went into effect. Without access to data from both GI Bill programs, it is difficult to analyze GI Bill recipients in FY10 and later, when many who would have chosen the MGIB switched to using the Post-9/11 GI Bill. We can only estimate the propensity to use the MGIB, not to go to school. Veterans who are not using the MGIB may still be going to school—in the future using the MGIB or at present using the Post-9/11 GI Bill.

²⁹ The one year of MGIB benefits for retraining is limited to 45,000 participants from Jul. 1, 2012, through Sep. 30, 2012, and 54,000 participants from Oct. 1, 2012, through Mar. 31, 2014 [18].

³⁰ Post-9/11 GI Bill benefits are transferable to one's *spouse* if, on or after Aug 1, 2009, the servicemember served at least 6 YOS and agreed to serve another 4 YOS, or to one's *spouse or children* if the servicemember reached 10 YOS on or after Aug. 1, 2009 [19].

Comparison of MGIB and Post-9/11 GI Bill

	MGIB	Post-9/11 GI Bill
Signed into law	Jun. 1, 1987	Aug. 1, 2009
Eligibility criteria: Months of service (AC)	Continuously served for 36 months	At least 36 cumulative months since Sep. 10, 2001 for maximum
Eligibility criteria: Months of service (RC)	Signed a 6-year obligation and completed initial AD for training	At least 90 cumulative days of AD since Sep. 10, 2001
Eligibility criteria: Discharge	Honorable discharge (“under honorable conditions” and “general” are ineligible)	Honorable discharge (“under honorable conditions” and “general” are ineligible)
Eligibility criteria: Education	Completed high school, or 12 hours toward a college degree	None
Eligibility criteria: Pay in	Military pay reduced by \$100/month for first 12 months on active duty	None



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The table above compares the MGIB and Post-9/11 GI Bill. The MGIB has been in effect since 1987. The Post-9/11 GI Bill, signed into law in 2009, expanded benefits beyond the MGIB program for veterans who served since Sep. 10, 2001. Servicemembers can choose only one.

The Post-9/11 GI Bill has less stringent qualification criteria and, in general, is more generous than the MGIB.³¹ Under both GI Bills, AC servicemembers must serve for 3 years; years must be continuous for the MGIB but can be cumulative for the Post-9/11 GI Bill. Under the Post-9/11 GI Bill, benefits are tiered based on time on AD.³²

Under both GI Bills, RC servicemembers must serve 90 days of AD. This time is initial AD for training for the MGIB, whereas it is cumulative AD days after 9/11 for the Post-9/11 GI Bill.

Under both GI Bills, servicemembers must receive a fully honorable discharge to be eligible. There is no education qualification or \$1,200 pay-in to qualify for the Post-9/11 GI Bill, as there is for the MGIB. Both provide up to 36 months of benefits. Post-9/11 GI Bill benefits are payable for a longer duration than MGIB benefits (15 versus 10 years). Both can be used on AD, after 2 YOS for the MGIB, whereas there is no such restriction for the Post-9/11 GI Bill.

³¹ MGIB payments may be higher than Post-9/11 GI Bill payments (1) in some locations, if the tuition, fees, books, and housing payments are less than the MGIB payment and (2) in some states, where veterans do not have to pay tuition at selected state colleges. Under the Post-9/11 GI Bill, the VA would only pay the housing benefit and the book stipend at these colleges, not the tuition costs, since there are none [20].

³² To receive 100 percent of the amount payable under the Post-9/11 GI Bill, all 3 years—or 30 continuous days if discharged due to a service-connected disability—must have been served since Sep. 10, 2001. Still, 40 percent of the maximum amount payable can be awarded if 90 aggregate days have been served since Sep. 10, 2001. The prorated percentages are 90, 80, 70, 60, and 50 percent of the maximum amount payable awarded for 30, 24, 18, 12, or 6 months of active duty since Sep. 10, 2001.

Comparison of MGIB and Post-9/11 GI Bill (cont.)

	MGIB	Post-9/11 GI Bill
Benefits: Maximum months	36 months	36 months
Benefits must be used within	10 years	15 years
May use on AD	Yes	Yes
Tuition and fees	Yes	Yes
Book stipend	No	Yes
Housing stipend	No	Yes
Transferability to dependents	No	Yes
Tuition & fees paid directly to	Student	School
Housing stipend paid directly to	N/A	Student



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Under the MGIB, recipients receive a monthly payment (VA pays students directly) at a rate set by Congress that does not vary based on one's expenses. Under the Post-9/11 GI Bill, recipients receive payments for tuition and fees (VA pays school directly) and books and housing (VA pays student directly). For a public school, the VA pays the full cost of tuition and fees for in-state students. For a private or foreign school, the VA pays tuition and fees up to the national maximum of \$18,078 per academic year (\$72,310 for a 4-year degree). The housing stipend is the same as the basic allowance for housing for an E-5 with dependents based on one's school's ZIP code and averages \$1,368 per month. Those enrolled in an online program are eligible for half of the housing stipend; students on AD or enrolled in school half-time or less are not eligible for the housing stipend. The book stipend is up to \$1,000 per year. Prorated percentages apply to housing and books, as well as tuition and fees.³³

For the MGIB, Marines may pay an additional \$600 while on AD in order to receive an extra \$150 per month for 36 months after they leave AD (called "The GI Bill Kicker").³⁴

³³ There are exceptions in certain states [21].

³⁴ The GI Bill Kicker also can be offered as an enlistment or reenlistment incentive (known as the College Fund), whereby the Marine does not need to pay the additional \$600 while on AD. Each service, rather than the VA, determines who receives the College Fund. College Funds also are payable under the Post-9/11 GI Bill, with some limitations and restrictions. The GI Bill Kicker is also available for reservists [22].

What is the Marine Corps' MGIB cost, by separation CY?

1987	\$1,016,293	2000	\$217,900,000
1988	\$2,737,601	2001	\$250,000,000
1989	\$19,895,378	2002	\$292,000,000
1990	\$36,528,788	2003	\$364,700,000
1991	\$71,738,544	2004	\$329,700,000
1992	\$85,286,032	2005	\$323,700,000
1993	\$91,168,856	2006	\$297,900,000
1994	\$89,695,728	2007	\$223,700,000
1995	\$93,233,000	2008	\$108,700,000
1996	\$111,700,000	2009	\$27,625,260
1997	\$143,300,000	2010	\$14,167,303
1998	\$169,000,000	2011	\$12,092,705
1999	\$206,800,000	2012	\$7,463,258

- Costs in table are shown by separation CY, not payment CY
 - For example, Marines who separated in 2000 used nearly \$218 million in MGIB benefits while on AD and in the 10 years after separation
 - Annual costs are available for payment CY10-CY12:
 - CY10: \$226M, CY11: \$164M, CY12: \$74M
- Average MGIB payment for 218,473 recipients is \$16,442.

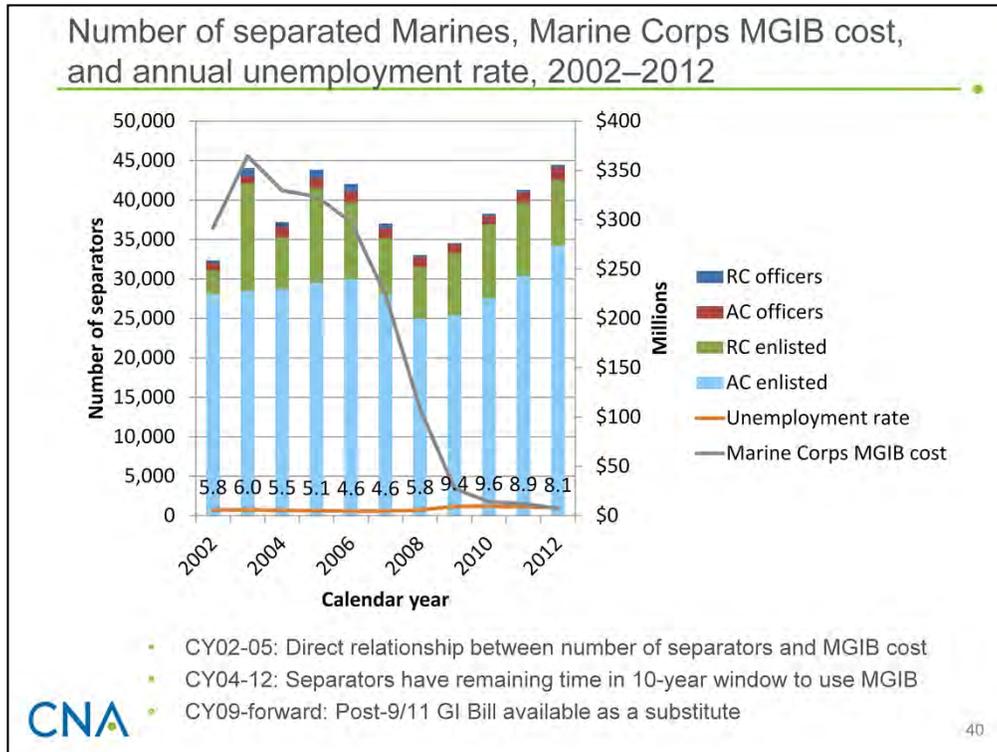


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The dataset contains cumulative dollar amounts that each MGIB recipient was ever paid. We report the total costs in the above table by the year that Marines separated, not by the year that the payment was received. The MGIB program began in June 1987. Those who were new recruits in 1988 could have enrolled in the MGIB, served for 4 years, separated in 1992, and taken until 2002 to use their MGIB benefits.

We observe payments increase each year for Marines who separated between 1990 and 2003, as expected.³⁵ We expect payments to increase because, as new recruits enter the Marines Corps each year after 1987, they are enrolled in the MGIB and can begin using their benefits when they separate. But there are also separators from previous years—up to 10 years of separators because of the window of eligibility—who are using their MGIB benefits in any given year. Each year after 2003, payments look smaller because these accounts have not yet closed; separators still have time to use their benefits. For this reason, the last 10 years of benefits will always appear to be declining. Another factor that may be contributing to the decline in MGIB benefit usage after 2008 is the implementation of the Post-9/11 GI Bill in 2009, as some Marines who would have used the MGIB may have opted to switch to the Post-9/11 GI Bill instead. The average cumulative amount that the VA paid to a MGIB recipient between CY03 and CY07 was \$23,400.

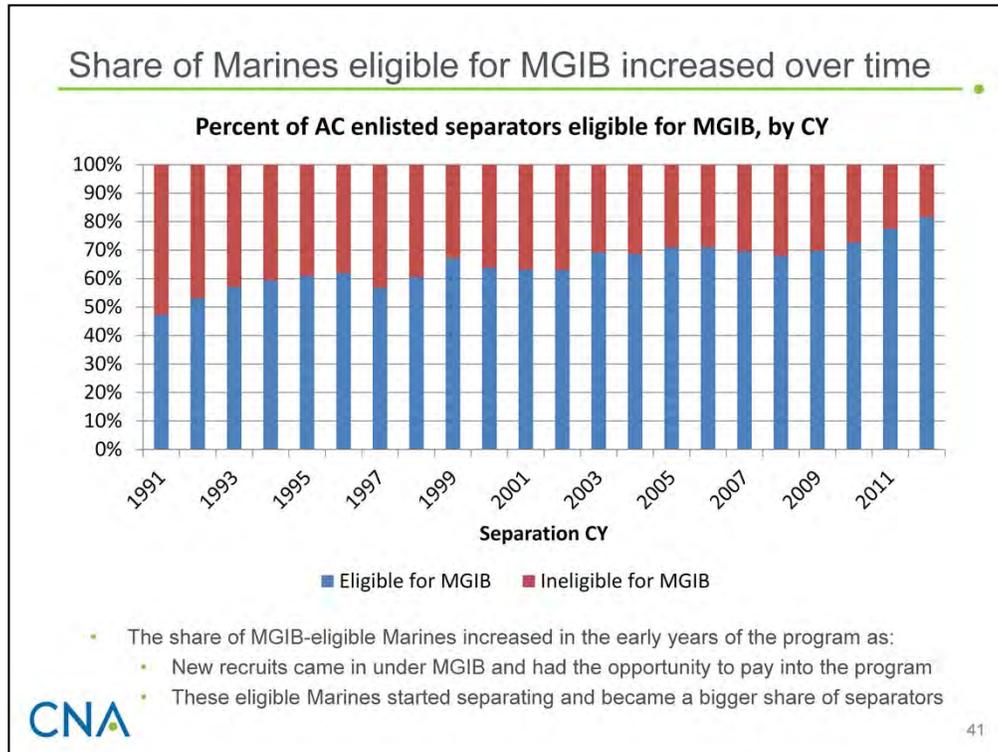
³⁵ It is somewhat puzzling that we observe payments made to Marines who separated between 1987 and 1989, but there are eligibility categories for AD entrants before 1985—including Veterans Educational Assistance Program (VEAP) to MGIB conversions—that may explain this [13].



The gray line in the figure displays the annual Marine Corps MGIB costs from 2002 to 2012 that were shown on the last slide. The costs from 2004 to the present are not yet complete because the MGIB window is still open for Marines who separated during this time. However, the MGIB payments for 2004 and 2005 separators are likely near completion, as MGIB payments nicely track the number of separators from 2002 to 2005. We cannot make any assessment about the MGIB cost (the gray line) and the number of separators (the vertical bars) during the recession because the MGIB costs for 2006 to 2012 are still pending.

Another reason why the MGIB costs from 2009 onward are smaller is that, from Aug. 1, 2009 to the present, the Post-9/11 GI Bill was available as a substitute. Without seeing the costs from both programs, it is difficult to assert what the relationship between the MGIB cost and the number of separators will be, now that the Post-9/11 GI Bill is available as an alternative. Post-9/11 GI Bill costs will only now start accruing on a larger scale for those who separated from FY10 to the present.

Share of Marines eligible for MGIB increased over time



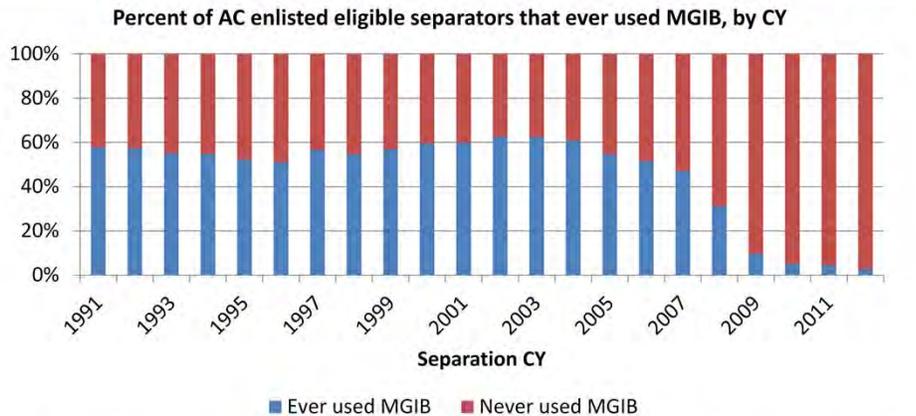
The figure above displays the percentage of AC enlisted Marines who were eligible for and paid into the MGIB program. The VA defines “eligible” to mean that the Marine paid into the MGIB program in his or her first year, separated with an honorable discharge after 3 years of service, and completed high school or 12 hours toward a college degree.

This figure is in accordance with the costs in slide 39. Here, we start from 1991, the year that MGIB costs started accruing at an increasing rate. Those who separated in 1991 could have entered the Marine Corps and enrolled in the MGIB in 1987, served four years, separated in 1991, and used their MGIB benefits at any time between 1991 and 2001. It is also possible for those who entered the Marine Corps before 1987 to become eligible for the MGIB through other categories, such as a VEAP to MGIB conversion.

We observe that about half of Marines who separated in 1991 were eligible for the MGIB. The other half of separators in 1991 who were ineligible could have entered the Marine Corps well before 1987 and not been eligible through any category. With each additional year of separations, a larger percentage of separators will have entered under the MGIB program and will be eligible for MGIB. Likewise, with each additional year of separations, older Marines who entered the Marine Corps well before 1987 will separate.

As expected, we see eligibility increase each year as eligible Marines begin separating and become a larger share of separators. Eligibility plateaus as it reaches 100 percent.

Share of eligible Marines that ever used MGIB



- About 60 percent of eligible Marines who separated between 1991 and 2005 ever used MGIB
- The share of eligible separators between 2006 and 2009 who ever used MGIB is lower than average because they still have time to use MGIB; their 10-year window has not yet run out
- The share of separators between 2009 and 2012 who ever used MGIB is likely low because the Post-9/11 GI Bill is also available, more generous, and Marines can only choose one

CNA

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The more interesting finding is not the increasing eligibility of Marines in the years since the MGIB program's inception (previous figure) but the take-up rate of Marines (shown above). In fact, only about 60 percent of Marines who are eligible for and pay into the MGIB program ever use their MGIB benefits. Each MGIB-eligible Marine paid \$1,200 into the MGIB program, which cannot be refunded, stopped, or suspended.

Marines who are eligible for and pay into the MGIB program may never use this benefit for a number of reasons. It could be that, (1) because Marine recruits are typically in a period of "confusion" during their initial days at recruit training, they simply sign up for benefits that they have no expectation of using—in essence, following the crowd so as not to make waves in this stressful environment, (2) they are given advice not to turn MGIB down, as it is a good insurance policy and the decision is irrevocable, (3) they are rationally deciding to buy into the program with the intention of pursuing further education after separation, but then their goals change (i.e., they decide not to pursue an undergraduate degree) or their life circumstances change (i.e., they get married or have children), (4) they get a good job upon separation and do not need further education (i.e., they use their military training to get a job), (5) they are irrationally buying into the program (i.e., not weighing the perceived cost of the forgone \$1,200 against the probability of pursuing further education upon separation), or (6) they do not have full information on the amount that will be taken out of their paychecks (i.e., they made a rational decision based on lack of information).

DOD actuarial officials use the low MGIB benefit use rate to maintain program solvency.

Marine Corps MGIB recipient data

	All MGIB recipients	%	Recent sample of MGIB recipients	%
AC enlisted	198,382	91	55,907	85
RC enlisted	15,843	7	8,508	13
AC officers	2,986	1.4	862	1
RC officers	1,246	0.6	781	1
Total	218,457	100	66,058	100

- “All MGIB recipients” includes those who ever used the MGIB from 1987 (the year the program went into effect) to present
- “Recent sample” refers to those who separated between CY03 and CY07



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In this table, we show the number of Marines who have ever used MGIB benefits (1) since the program began in 1987 (columns 2 and 3) and (2) that separated more recently (columns 4 and 5).³⁶ There are 218,457 Marines who have ever used MGIB benefits. Here, MGIB recipient refers to any Marine who received an MGIB payment. Among all MGIB recipients, 91 percent were AC enlisted (for comparison, 82 percent of Marine separators during this time—CY91 to CY12—were AC enlisted), 2 percent were officers (AC or RC), and 7.6 percent were reservists (enlisted or officers).

The shares in columns 3 and 5 are similar, except that a larger share of the recent sample of MGIB recipients (columns 4 and 5) are RC enlisted (and a smaller share are AC enlisted). During the wartime period from CY03 to CY07, reservists were activated more frequently, which could explain the increase in MGIB eligibility. MGIB eligibility for SELRES does not require AD service, but AD service does extend MGIB eligibility. In general, reservists only need to sign a 6-year obligation, have a high school degree, and remain in good standing to be eligible for the MGIB.³⁷

³⁶ We define CY03 to CY07 separators as the sample for MGIB analysis on slide 45.

³⁷ SELRES members can use their MGIB benefits during their eligibility period, which is 14 years from the date of their first 6-year obligation with the SELRES and generally ends the day that they leave the SELRES. SELRES members can receive benefits until their eligibility period ends or they use all of their MGIB benefits, whichever comes first. An exception is that, if a reservist is mobilized, MGIB eligibility may be extended for the amount of time that he or she is mobilized, plus 4 months. For example, a 12-month mobilization extends the period that a reservist can receive benefits by 16 months. Even if a reservist leaves the SELRES upon demobilization, he or she is eligible for 16 months after leaving the SELRES [23]. If discharged from the SELRES due to a disability not caused by misconduct, eligibility can be retained and the eligibility period extended [24].

When do AC enlisted Marines begin using MGIB?

Marines who separated in CY91-02 (N=121,121)	Percentage	Cumulative percentage
While on active duty	1	1
Year separated	23	24
1 year after separation	27	51
2 years after separation	13	64
3 years after separation	9	73
4 years after separation	7	80
5 years after separation	5	85
6 years after separation	5	90
7 years after separation	4	94
8 years after separation	3	97
9 years after separation	2	99
10 years after separation	1	100
Total	100	

- 80 percent of Marines begin using MGIB within 4 years of separation
- 50 percent begin in the year they separate or the year after they separate
- 1 percent begin using MGIB while on AD
- We display this for 1991 to 2002 separators so that we may observe MGIB receipt for 10 years after separation

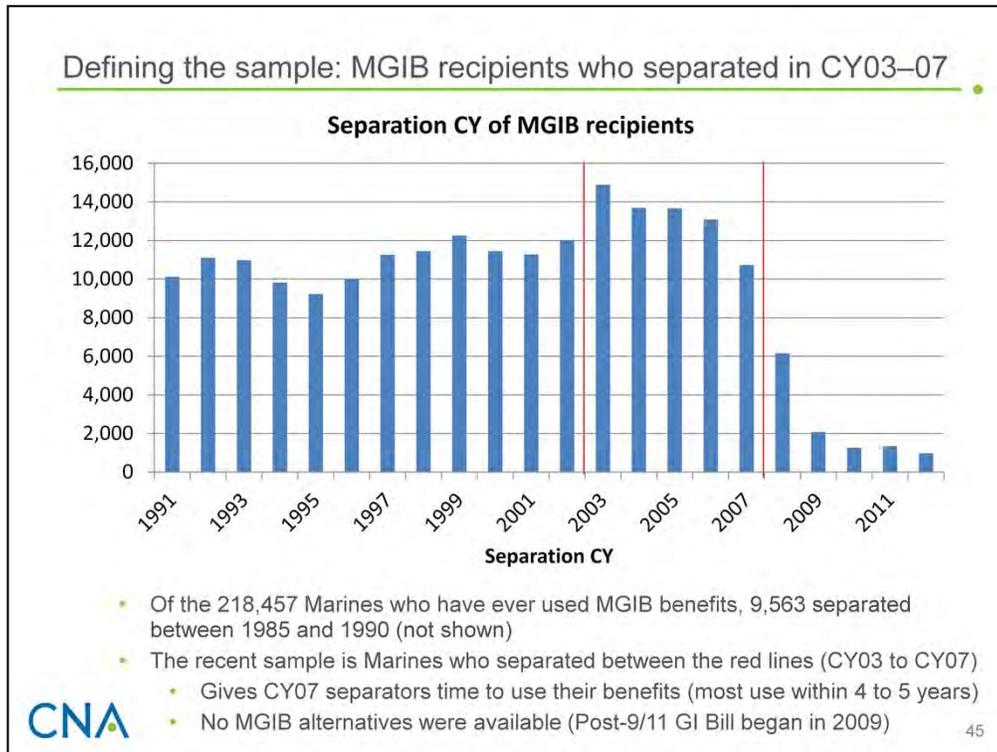
CNA

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In this table, for the 121,121 AC enlisted MGIB recipients who separated between CY91 and CY02, we display the percentage that *began* using their benefits while on AD and in each of the 10 years after separation. We restrict the sample to CY91–02 separators so that all separators have a full 10-year window after separation in which to use their MGIB benefits. We restrict to AC enlisted Marines so that we can observe use behavior among those with the same use criteria (i.e., we exclude reservists because they do not need to have completed 2 YOS to begin using their MGIB benefits—they may begin immediately).

As expected, most Marines who ever use their MGIB benefits begin using them almost immediately after separation; the first use of MGIB is highest in the year after separation, with the likelihood of MGIB use falling thereafter. Eighty percent begin their schooling within 4 years of separation. The average age of MGIB recipients at separation is 24, and the average age of MGIB recipients at their first use of MGIB is 25, which is substantially older than the average age of the incoming undergraduate student. In the data, we cannot tell whether MGIB recipients are enrolled in online or brick-and-mortar educational institutions. We might expect that the age gap between veterans and the average undergraduate student would lead more veterans to enroll in online programs. School type variables are recorded in tuition assistance data, but not MGIB data.

Among MGIB recipients, 1 percent began using their benefits while on AD, and 50 percent began school in the year that they separated or the year after they separated, meaning that most begin the school application process while serving or shortly thereafter.



We define the sample for MGIB analysis as Marines who separated between CY03 and CY07 (between the red lines above). We chose CY03–07 separators as the MGIB sample because (1) it gives CY07 separators time to use their MGIB benefits after separation (85 percent begin using benefits within 5 years), (2) it gives CY03 separators their full 10-year window to use their benefits, and (3) it restricts the sample to before Aug. 1, 2009, when the Post-9/11 GI Bill became an alternative to the MGIB.

We would have liked to simultaneously analyze the UCX and MGIB receipt of a coherent cohort of separators (e.g., CY11 separators), but this would not allow for sufficient time after separation to observe MGIB use because we would prefer at least a 5-year observation window. Therefore, we opted to use an MGIB sample that separated 5 to 10 years ago (CY03 to CY07).

In this figure, we display the separation years of MGIB recipients, where an MGIB recipient is defined as a Marine veteran who has received any MGIB payment. Notice the dropoff in MGIB receipt over the years in the sample. Presumably, the number of recipients in CY04 may still rise because, for example, roughly 3 percent of MGIB-eligible CY04 separators who will ever use their benefits will begin to do so in their 9th and 10th years after separation (CY13–14, see slide 44), and the number of recipients in CY07 may rise by more because 15 percent of MGIB-eligible CY07 separators who will ever use their benefits will begin to do so in their 6th through 10th years after separation (CY13–17).

But this cannot explain the low MGIB use in CY09 to CY12. We would expect about 73 percent of MGIB-eligible CY09 separators who will ever use their MGIB benefits to have used them on AD or in their first 3 years after separation (CY09–12). But because CY09 separators who separated after Aug. 1, 2009 and served at least 36 cumulative months since Sep. 10, 2001 are eligible for 100 percent of the Post-9/11 GI Bill payable amount, it is likely that many MGIB-eligible separators who previously would have chosen the MGIB instead chose the Post-9/11 GI Bill.

Source of MGIB eligibility

Timing of MGIB offers and the enrollment decisions of eligible servicemembers, CY03-CY07 separators	
Enrolled (offered at initial entry on AD)	113,832
Enrolled (VEAP to MGIB conversion offered during 1-year periods in 1996 and 2000)	1,283
Enrolled (implied)	668
Enrolled (offered prior to involuntary separation)	191
Enrolled (open season Dec. 1988 – Jan. 1989)	59
Enrolled (offered prior to VSI/SSB separation from AD)	50
Enrolled (24 months on active duty – PS SELRES)	40
Enrolled (NCS member, offered at reenlistment/extension)	14
Total eligible	116,137
Ineligible (not offered or less than honorably discharged)	44,219
Declined enrollment	4,558
Deferred enrollment	3
Total ineligible	48,780



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We use the VA’s definition of MGIB eligibility in this study, but we identified that the VA’s MGIB eligibility variable is not coded as it is defined. We updated the code to match the definition by defining those with less than a fully honorable discharge as ineligible. It is possible that some servicemembers’ discharge characterizations are upgraded after they separate, which could explain why some are seemingly ineligible.

In this table, among CY03–07 separators, we list the number of Marines who were eligible and paid into the MGIB program (99.5 percent of those who were eligible paid into the program), by the timing of their MGIB offer and enrollment decision, as well as the number who were ineligible (because of their discharge, LOS, education, or failure to pay in), and who declined or deferred enrollment. Receiving and accepting an offer at initial entry into AD was most common.

For those Marines who separated between CY03 and CY07, not just those who were eligible, we list the share with each discharge code that received a MGIB payment so that we can ascertain whether the MGIB eligibility definition is being implemented. We find that 50 percent of those with fully honorable discharges used their MGIB benefits, compared with 17 percent of those with dishonorable discharges, 5 percent of those with “general, under honorable conditions” discharges, 5 percent of those with bad conduct discharges, 2 percent of those with “under other than honorable” discharges, and 2 percent of those with uncharacterized discharges. It is unclear whether the VA is consistently implementing its definition of MGIB eligibility. Significant savings could accrue from ensuring that only those eligible for MGIB benefits are paid. Using the updated MGIB eligibility variable, the VA erroneously paid MGIB benefits to 1.7 percent of recipients since 1985 (3,742 of 218,457 MGIB recipients), at an average cost of \$13,000, for a total cost of \$49 million. Of course, veterans may have applied for post-service upgrades of their discharge characterization that we do not observe.

What share of eligible Marines used MGIB?

	Eligible recent sample of separators	Eligible recent sample of MGIB recipients	Row percentage
AC enlisted	99,734	54,956	55%
RC enlisted	13,278	8,420	63%
AC officers	1,755	806	46%
RC officers	1,370	740	54%
Total	116,137	64,922	56%

- Recent sample of separators refers to those who separated between CY03 and CY07



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This table shows the percentage of MGIB-eligible CY03–07 Marine separators who ever used their MGIB benefits. About 80 percent of Marines who separated between CY03 and CY07 were eligible for MGIB (i.e., 80 percent of Marines enrolled in the MGIB program on entry into the Marine Corps and paid a nonrefundable \$1,200). Of those who paid into the program, only 56 percent of CY03–07 separators ever used their benefit by the end of CY12.

That percentage varies by AC/RC and enlisted/officer. Slightly more than half—55 percent—of AC enlisted Marines used their MGIB benefit. Enlisted Marines are more likely to use the MGIB than officers; enlisted Marines are pursuing college degrees, which officers already have and may decide to keep as their terminal degrees. RC Marines are more likely to use the MGIB than AC Marines. This may be because RC Marines are ineligible for tuition assistance, whereas AC Marines can fund their schooling through both tuition assistance and the GI Bill.

It is difficult to analyze reservists' MGIB use because their windows are not 10 years from the date of separation, as they are for AC personnel. Instead, their MGIB use windows are open while they are in the SELRES and close for most, but not all, when they leave the SELRES. For those who spend more than 14 years in the SELRES, their windows are capped at 14 years. Unlike AC Marines, for whom 99 percent of MGIB use is after separation, for RC Marines, most MGIB use is while they are serving.

Our “AC enlisted” and “AC officer” data in the above table include all AC Marines the VA has deemed eligible for MGIB-AD (which can be used for 10 years after separation), which includes AC Marines who served for 3 continuous years, or 2 continuous years as National Call to Service.

Our “RC enlisted” and “RC officer” data include all NPS reservists who completed initial AD for training—who are eligible for MGIB-SR (which can be used while in the SELRES)—and PS reservists who completed at least 2 years of AD before serving in the SELRES for 4 years—who are eligible for MGIB-AD. Also eligible for MGIB-SR are PS reservists who completed less than 2 years of AD before signing 6-year obligations with the SELRES.

Characteristics of MGIB-eligible AC enlisted separators

Characteristic	MGIB nonrecipients	MGIB recipients	Difference ¹
Age	24.3	24.0	0.3
Zone A—Before EAS (YOS 1-6)	19%	7%	12%
Zone A—Reached EAS (YOS 1-6)	65%	81%	-16%
Zone B (YOS 7-10)	10%	9%	1%
Zone C (YOS 11-14)	2.5%	1.5%	1%
Zone D (YOS 15-20)	0.3%	0.2%	0.1%
Zone E (YOS >20)	3.2%	1.5%	1.7%
Years of service (YOS)	4.8	4.8	0
Female	5%	8%	-3%
White	85%	83%	2%
Black	11.0%	11.6%	-0.6%
Asian/Pacific Islander	2.4%	3.6%	-1.2%
Hispanic	13%	17%	-4%
Married	48%	41%	7%
Any children	27%	19%	8%
Disability	8%	5%	3%
Tier 1 education	94.7%	95.9%	-1.2%
Other Tier 1 education	1.9%	2.0%	-0.1%
Tier 2 education	3.2%	2.0%	1.2%
N	44,778	54,956	

¹All differences are significant at the 1-percent level except for YOS and Other Tier 1 (not significant).



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In this table, we compare the characteristics of MGIB recipients and nonrecipients who are eligible for MGIB. The main contrast is that MGIB recipients are more likely to have reached their EAS than MGIB nonrecipients; to qualify for MGIB, servicemembers must have completed at least 3 YOS. Other contrasts are that recipients are more likely to be female, Hispanic, Asian, unmarried, and childless, and are slightly more educated.

The average MGIB recipient is a young, white, non-Hispanic, high-quality, unmarried man with no children who separated at the end of his first term.³⁸ Compared with the average UCX recipient, the average MGIB recipient is more likely to have reached EAS, to be high quality, or to be Hispanic, as likely to be black, female, or the same age, and less likely to be married or have children.

We cannot directly compare the average MGIB recipient with the average separator because a separator who is (1) not using the MGIB could still be attending school (unlikely), (2) not collecting UCX could still be unemployed (more likely), and (3) neither using the MGIB nor collecting UCX could be employed or have dropped out of the labor force. But, we can compare MGIB recipients and separators without making such assessments. The average MGIB recipient looks very similar to the average Marine separator, except that he or she is slightly younger, more likely to have reached EAS, to be high quality, black, Hispanic, or female, and less likely to be married or have children.

The average Marine separator, MGIB recipient, and nonrecipient are more likely than the average civilian of a similar age to be white, married, and have a high school degree [7].

³⁸ All variables in the table are at the time of separation, not at first use of the MGIB.

Characteristics of MGIB-eligible AC enlisted separators (cont.)

Characteristic	MGIB nonrecipients	MGIB recipients	Difference ¹
AFQT percentile	56.6	61.8	-5.2
High quality (Tier 1 and AFQT≥50)	59%	69%	-10%
Ever deployed	70%	73%	-3%
Deployed once	37%	40%	-3%
Deployed twice	28%	29%	-1%
Deployed three or more times	5.5%	4.9%	0.6%
Combat arms	26%	27%	-1%
Combat support	16%	15%	1%
Combat service support	31%	30%	1%
Command and control	9%	9%	0%
Aviation support	18%	19%	-1%
Reached EAS	76%	90%	-14%
Drugs	1.0%	0.1%	0.9%
Medical attrite	12%	6%	6%
Other misconduct	1.4%	1%	0.4%
Fraudulent entry	0.9%	0%	0%
Unsatisfactory performance	1.0%	0.1%	0.9%
Personality disorder	1.6%	0.6%	1.0%
Erroneous entry	1.0%	0%	1.0%
Weight failure	0.2%	0.1%	0.1%
N	44,778	54,956	



¹All differences are significant at the 1-percent level except aviation support (5-percent level).

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The average MGIB recipient is more likely than the average nonrecipient to have ever deployed, which is driven by a larger share having deployed once or twice. MGIB recipients are more likely to have reached their EAS than nonrecipients and, therefore, are less likely to have attrited for a myriad of other reasons (drugs, medical, misconduct, fraudulent entry, etc.). MGIB recipients are more likely to be in combat arms and aviation support occupations.

The average MGIB recipient is less likely to have been in a combat arms MOS (27 versus 30 and 30 percent) and more likely to have been in aviation support (19 versus 16 and 15 percent) than the average separator and UCX recipient. Though the minimum ASVAB score needed to enter combat arms MOSs is relatively low, there is a big demand for infantry PEFs (Program Enlisted For) among high-quality applicants; this type of person—smart, with an innate taste for the Marine Corps—will likely go to college after separation. Put another way, among MGIB-eligible CY03–07 separators, a higher share of Marines in combat arms and C2 MOSs used the MGIB (59 percent; average AFQT scores are 56 and 59) than Marines in CSS and aviation support (57 percent; AFQT scores are 54 and 59) or combat support (55 percent; AFQT score of 61) MOSs.

The average MGIB recipient is more likely to have ever deployed (73 versus 68 and 69 percent) or to have had multiple deployments (33 versus 30 and 29 percent) than the average separator or UCX recipient. AC enlisted separators who ever deployed had slightly higher AFQT scores and were more likely to be in combat arms MOSs than those who did not deploy. The same factors that motivate Marines to request infantry PEFs may motivate them to pursue degrees after separation.

The average MGIB recipient is more likely to have reached EAS (81 versus 57 and 61 percent) and less likely to have attrited for medical reasons (6 versus 10 and 8 percent) or Early Release (<1 versus 15 and 17 percent) than the average Marine separator and UCX recipient.

The average CY03–07 MGIB recipient used \$23,300 of cumulative MGIB benefits over an average span of 12 months and used 40 percent of the academic months to which he or she is entitled.

Twenty states with the most Marine Corps MGIB recipients

State	CY03– CY07 %	CY11– CY12 %	CY11 state unemp. rate (%)	State	CY03– CY07 %	CY11– CY12 %	CY11 state unemp. rate (%)
CA	13	12	11.7	NJ	2	2	9.3
TX	10	10	7.9	NC	2	3	10.5
FL	6	7	10.5	WA	2	2	9.2
NY	6	5	8.2	AZ	2	2	9.5
IL	5	7	9.8	MO	2	2	8.6
OH	4	4	8.6	MD	2	2	7.0
PA	3	3	7.9	WI	2	2	7.5
MI	3	3	10.3	MA	2	1	7.4
VA	3	3	6.2	IN	2	2	9.0
GA	3	3	9.8	TN	2	2	9.2

- We show the states with the most Marine Corps MGIB recipients who:
 - Separated between CY03 and CY07 and ever used MGIB
 - Used MGIB in CY11 or CY12, regardless of separation date



CY11 state unemployment rates are BLS annual non-seasonally-adjusted state unemployment rates. 50

In this table, we show the states with the most Marine Corps MGIB recipients who separated between CY03 and CY07 (first column) and who used MGIB in CY11 or CY12, regardless of separation date (second column).

We show Marines who separated between CY03 and CY07 because that is the sample we are using for the MGIB analysis. For comparison with the 20 states with the most UCX recipients, we also show the sample who used MGIB between CY11 and CY12, regardless of when they separated. For example, 13 percent of Marines who separated between CY03 and CY07 used their MGIB benefits in California at some point in their 10-year windows. Also, among Marines who used their MGIB benefits in CY11 or CY12, 12 percent were in California.

The states in which Marines used the MGIB are very similar to the states in which Marines collected UCX. States that Marines most frequently relocate to/stay in when they separate are states that have a larger Marine Corps presence. Seventeen of the 20 states with the most MGIB recipients are also states that have the most UCX recipients. Rounding out the Army's top 20 are Oregon, Colorado, and South Carolina (instead of Missouri, Maryland, and Tennessee).

We see that there is little variation over time in the order of states with the most MGIB recipients.

Degrees sought by different cohorts of Marines using MGIB

Degrees sought by Marine Corps MGIB recipients			
Degree	CY91–CY02 %	CY03–CY07 %	CY11–CY12 %
Graduate	4.5	5.8	7.1
Undergraduate	82.6	81.3	84.8
Vocational/Technical	9.6	9.1	5.2
Non-degree college courses	3.3	3.8	3.0
N	135,665	72,964	22,740

- Marines are increasingly pursuing:
 - Undergraduate and graduate degrees in lieu of vocational/technical degrees and non-degree college courses (AC enlisted and RC enlisted)
- AC officers pursued undergraduate degrees more between CY03 and CY07 than in the periods before or after
 - This could be a result of enlisted Marines becoming officers



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Most Marines used their MGIB benefits to pursue an undergraduate degree in the past 22 years. Increasingly, AC enlisted and RC enlisted Marines are pursuing undergraduate and graduate degrees with the MGIB in lieu of vocational/technical degrees and non-degree college level courses. Most recruits join the Corps as high school graduates, but this may mean that more recent cohorts who are entering are more educated or more motivated than previous cohorts. This makes sense, as quality among Marine Corps recruits is at an all-time high.

Most Marines wait until they have separated to begin using their MGIB benefits (only 1 percent of CY03–07 AC enlisted separators used the MGIB while in the Marine Corps). Enlisted Marines interested in becoming officers, however, have an incentive to go to school while in the service. Opposite of the pattern seen above for all Marines, a higher percentage of officers pursued undergraduate degrees in the wartime period of CY03–07 than during the 1990s and in CY11–12. This could be because competition was starker for enlisted promotions at that time and pursuing the enlisted-to-officer track was a reasonable way to make a career in the Marine Corps. It could also be that officers were going for second degrees, or that officers were going for their first degrees, because some commissioning programs—such as the Enlisted Commissioning Program—did not require undergraduate degrees from 2005 to the present. Another factor could be that, because tuition assistance did not pay for 100 percent of tuition and fees until 2006 (before that, the service paid 75 percent and the servicemember paid 25 percent), servicemembers may have been using their MGIB as top-up to their tuition assistance. Since 2006, servicemembers tend to use their tuition assistance and conserve their GI Bill.

MGIB regression model

- Sample: Marines who separated between CY03 and CY07
- We predict a Marine's propensity to use MGIB benefits, given MGIB eligibility
- It is a function of:
 - Demographic characteristics (gender, age, race, ethnicity, marital status, any children)
 - Service characteristics (high quality, YOS, servicemember type, disability, occupational field, deployment)
 - State unemployment rate
- Cannot make causal assertions; all effects should be interpreted as associations



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We estimate a logistic regression (logit) model that predicts one's propensity to go to school using the MGIB as a function of demographic and service-related characteristics, as well as the state unemployment rate. The dependent variable is an indicator for whether one used MGIB benefits between CY03 and CY07, given that one is eligible. "Used MGIB" refers to the VA having paid MGIB benefits to the school that the veteran is attending.³⁹

We use the same variables in the MGIB regression that we used in the UCX regression. Binary variables include female, zone,⁴⁰ race,⁴¹ ethnicity (Hispanic), married, high quality,⁴² any children, disability,⁴³ number of deployments, and occfield groupings. Continuous variables include age, age-squared, and the annual state unemployment rate.

In the regression results, we report all statistically significant findings. As with UCX regressions, we separately report results from MGIB regressions run using three different occfield categorizations—civilian occupational classifications, combat/support occupations, and the 20 largest occfields.

³⁹ We omitted the MGIB-ineligible population because we are interested only in the population that is able to apply and qualify for MGIB. Those who are ineligible are less likely to collect MGIB, not for behavioral reasons, but because they could not collect even if they wanted to.

⁴⁰ Zone A: YOS 1-6, B: YOS 7-10, C: YOS 11-14 (omitted), D: YOS 15-20, and E: YOS >20.

⁴¹ Includes black, Asian/Pacific Islander, other, with white omitted.

⁴² AFQT \geq 50 and at least a high school diploma graduate.

⁴³ Includes disabilities that are permanent (>30 percent rating), temporary (>30 percent), with severance pay (<30 percent), and prior disability, with nondisabled omitted.

MGIB regression results

More likely to use MGIB:			
Active component		Reserve component	
Enlisted	Officers	Enlisted	Officers
Female		Female	
Zone A=B>C=D=E	Zone A<B<C=D=E		Zone B>D
		Older within a zone	
Higher quality		Higher quality	Less than a Bachelor's degree
Hispanic	Hispanic	Hispanic	Non-Hispanic
Black	Black		
Asian/Pacific Islander		Asian/Pacific Islander	
Unmarried		Unmarried	
No children		No children	
Disability with severance pay			
Nondisabled			
Single deployment	No deployments		
States w/higher unemployment			
Less likely to use MGIB:			
Perm. or temp. disability			
3+ deployments	3+ deployments		



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The following MGIB-eligible AC enlisted transitioning Marines have a higher probability of going to school using their MGIB benefits.

Nonwhite and Hispanic Marines may have joined the Marine Corps because of education incentives, so they are more likely to use their MGIB benefits. Higher quality Marines may be more likely to use their MGIB benefits because they know that they can reap greater returns on investment if they get accepted to rigorous educational programs. The fact that female Marines have a higher likelihood of using the MGIB is consistent with women becoming an increasing share of college students.

It may be easier—logistically and financially—for a veteran who is young, single, and has no children to go to school using the MGIB than it is for a veteran who is older, married, or has children, in terms of the opportunity cost of one's time and the forgone earnings from having a job. Yet, having a spouse at separation would seem to make it easier to go to school since one's spouse could continue to be a wage earner while the veteran is in school.⁴⁴ This may not be the case for enlisted Marines whose spouses have high school degrees, because their spouses' incomes could not solely support their family.

⁴⁴ Of course, if the household decides to relocate after the Marine's separation, the interstate transition may not be seamless, with a spouse undergoing a job search and the veteran (and his or her children) searching for a school.

MGIB regression results (cont.)

More likely to use MGIB:			
Active component		Reserve component	
Enlisted	Officers	Enlisted	Officers
Female		Female	
Zone A=B>C=D=E		Zone A<B<C=D=E	
		Zone B>D	
Older within a zone			
Higher quality		Higher quality	Less than a Bachelor's degree
Hispanic	Hispanic	Hispanic	Non-Hispanic
Black		Black	
Asian/Pacific Islander		Asian/Pacific Islander	
Unmarried		Unmarried	
No children		No children	
Disability with severance pay			
Nondisabled			
Single deployment	No deployments		
States w/higher unemployment			
Less likely to use MGIB:			
Perm. or temp. disability			
3+ deployments	3+ deployments		



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Most Marines separate at the end of their first term (80 percent), with almost all separating by the end of their second (91 percent), and first- and second-term separators are the most likely to use the MGIB. This may be because they are closest in age to college students and so less stigmatized and less removed from the college campus mentality.

Marines who had a single deployment were the most likely to use the MGIB. The first deployment, in particular, seems to be the pivotal one after which a transitioning Marine will use his or her MGIB benefits. Marines with a second deployment are no more likely to pursue a degree than those with no deployments, while Marines with three or more deployments are the least likely to use their MGIB benefits. This could be because every Marine wants to deploy, but multiple deployments may increase the risk of long-term adverse consequences, such as PTSD or Traumatic Brain Injury, and have a dampening effect on one's post-service career goals. Of course, instead, it could be that Marines with three or more deployments are the most likely to secure employment after separation; without employment data, we are unable to test this.

Marines who relocate to states with higher unemployment rates are more likely to use the MGIB; they may have been recruited from these high-unemployment states, returned home to tough job markets, and decided to go to school instead.

As with UCX, more-disabled Marines are less likely to use the MGIB, which may be because they are collecting disability payments from DOD or the VA. It is also possible that their disabilities make it more difficult to attend school, or prevent them from doing so, or that they otherwise have motivations different from the typical separating Marine.

MGIB regression results: AC occupational fields

Active component enlisted		
Civilian occupational classification	Combat/support occupations	Twenty largest occupational fields
<p style="text-align: center;"><u>Most likely to use MGIB:</u> Admin*</p> <p style="text-align: center;"><u>More likely to use MGIB:</u> Quasi-professional War/Combat* Unrated (Basic Marine, Misc.)*</p> <p style="text-align: center;"><u>Less likely to use MGIB:</u> Information Systems* Services* Repair/Maintenance*</p> <p style="text-align: center;"><u>Least likely to use MGIB:</u> Operators Construction</p>	<p style="text-align: center;"><u>Most likely to use MGIB:</u> Combat arms*</p> <p style="text-align: center;"><u>More likely to use MGIB:</u> Command and control* Aviation support*</p> <p style="text-align: center;"><u>Least likely to use MGIB:</u> Combat service support Combat support</p>	<p style="text-align: center;"><u>Most likely to use MGIB:</u> Operational Communications* Ground Electronics Maintenance* Personnel and Admin* Military Police/Corrections Avionics* Aviation Ordnance* Infantry* Supply Admin and Operations* Tanks*</p> <p style="text-align: center;"><u>More likely to use MGIB:</u> Aircraft Maintenance* Logistics* Artillery*</p> <p style="text-align: center;">Command and Control Systems* Food Service* Air control/support*</p> <p style="text-align: center;"><u>Least likely to use MGIB:</u> Airfield Services Utilities Ordnance Engineer, Construction, Facilities Motor Transport</p>
<div style="border: 1px solid black; padding: 2px; display: inline-block;">* Significantly different from below grouping</div>		

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Marines in administration MOSs are the most likely to go to school using the MGIB, followed by Marines in quasi-professional MOSs. They may seek a change in profession for which they need a degree. Marines in war/combat occupations may wish to stay in their profession but need a degree to move up. Unrated Marines may have attrited unexpectedly, realized they qualified for the MGIB, and decided to pursue schooling. Some Marines in information systems may need a degree, such as computer science, to make their military skills transferable, while others may not. Marines in services, repair/maintenance, operator, and construction occupations may be able to continue in their profession without further education, may not be interested in getting a degree, or may not have gotten into a preferred school.

Those in combat arms are the most likely to use the MGIB, followed by those in C2 occupations. Combat arms Marines do not have directly transferable skills and may go to college to get trained in fields that are enhanced by their military experience. C2 Marines have high AFQT scores and work with information systems. They may have skills that transfer to the civilian sector, but an advanced degree may be necessary. They also may get college credit for their Marine Corps training [25] and be closer to completing a degree. The type of people who request PEFs in combat arms or C2 MOSs—who are smart and have an innate taste for the Marine Corps—may be motivated to pursue further education.

If we look at the 20 largest occfields, we can break apart combat arms, for example, and find that Marines in infantry and tanks MOSs are as likely to use the MGIB, and both are more likely to use the MGIB than those in artillery MOSs. Within combat support, Marines in operational communications MOSs are more likely to use the MGIB than those in military police/corrections MOSs, and both are more likely to use the MGIB than those in ordnance and in engineer, construction, and facilities MOSs. Within combat service support, Marines in ground electronics maintenance, personnel and administration, and supply administration and operations MOSs are more likely to go to school using the MGIB than those in logistics and food service, who are more likely to use the MGIB than those in utilities and motor transport.

Occupations in each combat/support MOS

Aviation support

Air control/support
 Aircraft Maintenance
 Airfield Services
 Aviation Logistics
 Aviation Ordnance
 Avionics
 Meteorological & Oceanographic services
 Navigation Officer & Enlisted flight
 Pilots/NFOs

Combat support

Ammo & Explosive Ordnance Disposal
 Engineer, construction, facilities
 Intellegence
 MAGTF plans
 MP/corrections
 Nuclear, Biological, Chemical weapons
 Operational Communications
 Ordnance

Command and control

Command & Control Systems
 Data Systems

Combat service support

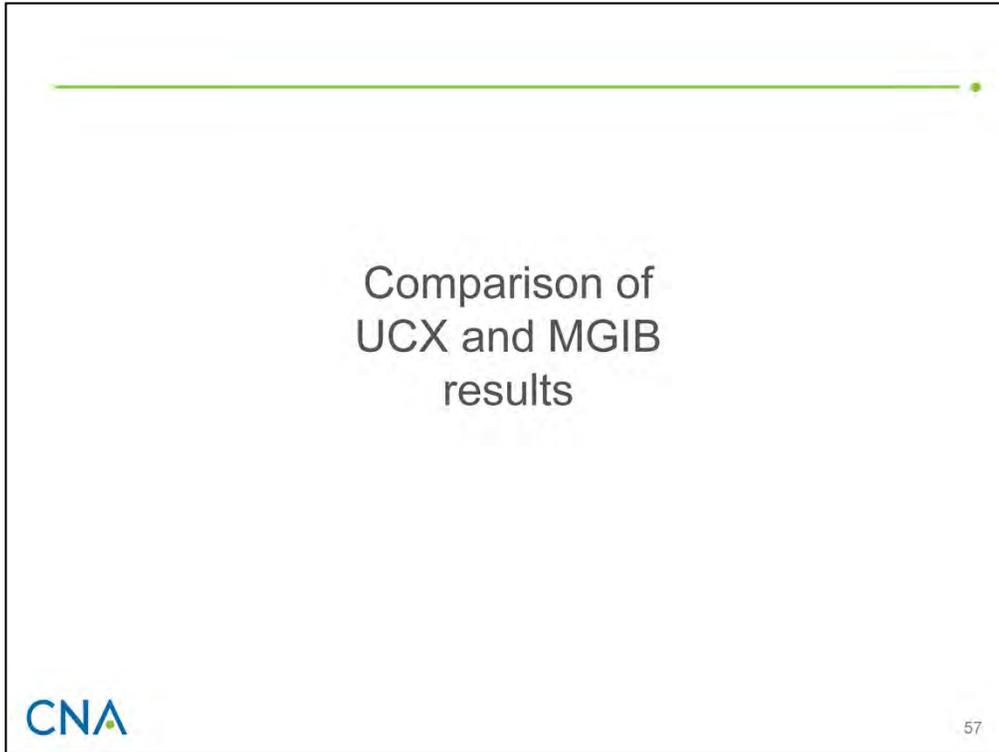
Electronics Maintenance
 Financial Management
 Food Service
 Ground Electronics Maintenance
 Legal Services
 Logistics
 Marine Corps Exchange
 Motor Transport
 Music
 Personnel & Admin
 Public Affairs
 Recruiter
 Recruiting and retention
 Supply Admin & Operations
 Traffic Management
 Utilities
 Visual Information

Combat arms

Field Artillery
 Infantry
 Tank
 Assault Amphibious Vehicle



In this slide, we list the occfields in each combat/support MOS that is used in the regression analysis.



Finally, we analyze the characteristics of Marines who have a higher likelihood of collecting UCX and using their MGIB benefits.

Comparison of UCX and MGIB findings

- The following have a positive association with both UCX and MGIB receipt:
 - Nonwhite
 - Female
 - Separate during or at end of first term
 - Single deployment
 - Separating to states with higher unemployment rates
 - Nondisabled or a <30-percent disability rating
- Negative association with UCX and MGIB receipt:
 - >30-percent disability rating
 - Three or more deployments
 - Combat support
- Positive association with MGIB, negative association with UCX receipt:
 - High quality
 - Combat arms
- Negative association with MGIB, positive association with UCX receipt:
 - Married
 - Children
 - Combat service support (CSS)



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We find that transitioning Marines who have a higher likelihood of collecting UCX *and* using the MGIB are nonwhite, female, separate after their first terms, and have a single deployment. High-quality Marines are more likely to use the MGIB and less likely to collect UCX. Marines who are married and have children are more likely to collect UCX and less likely to use the MGIB.

Marines in CSS MOSs are the most likely to collect UCX and the least likely to use MGIB, holding all else constant. These MOSs have the closest counterparts to civilian occupations—utilities, administration, food service—but the lowest AFQT scores. They may not need a degree to continue on in their profession, but may be facing sector-related unemployment.

Marines in combat arms MOSs are the least likely to collect UCX and the most likely to use MGIB. These Marines often have Type A personalities, may be averse to collection and feel that there is a stigma to accepting UCX, whereas they feel that they earned the MGIB. Unlike other occfields that have direct civilian licenses, Marines in combat arms may feel that they need additional training because their skills are not as transferable, and that a college degree coupled with their leadership skills can help them obtain the type of job that they want.

Marines who are the least likely to use either benefit are in combat support MOSs. They have the highest AFQT scores and tend to be in technical occupations. A plausible explanation is that their skills are sufficiently transferable that they could get a job right out of the Marine Corps and did not need to go back to school or collect UCX.

Collecting UCX takes a degree of planning, and Marines with a single deployment—38 percent of the sample and the most likely to use UCX and MGIB—may have more time between deployment and EAS to properly learn about their benefits than those with multiple deployments, but they may need more time to decompress after separating than those who never deployed. Marines who deploy three or more times may have physical or mental health issues associated with multiple deployments that prevent them from beginning a job or school right after separation or that change their aspirations; if they are not applying for jobs, they are ineligible for UCX.

Summary of data limitations

- Use caution in drawing definitive conclusions from the results
- We are estimating propensity to collect UCX, not to be unemployed, and propensity to use the GI Bill, not to go to school
- There are challenges with UCX data
 - EUC paid by federal government not available
 - EB only reported in ten states, so cannot fully analyze
 - Cumulative number of weeks not reported (left- and right-censored)
 - People enter and exit snapshot at different times for different reasons
 - Sample sizes change between different analyses
- There are challenges with MGIB data
 - We have only MGIB data, not Post-9/11 GI Bill data
 - We analyze MGIB data only before 2009
 - We do not analyze MGIB and UCX simultaneously
 - We use the VA's definition of MGIB eligibility.
- Interpret effects as associations, not causal assertions



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The following data limitations prevented us from drawing robust conclusions.

UCX data limitations

We could not observe completed unemployment spells because:

1. We had only six quarters of data in which we observed regular UCX recipients and EB recipients, but not EUC recipients.
2. Weeks reported are not cumulative, but quarterly, and less than half of states report duration.
3. People enter and exit the one-year snapshot at different times. If three people collect 13 weeks of unemployment benefits in CY11, we cannot distinguish whether they start to collect regular UCX and then obtain jobs, finish their regular UCX benefits and then begin collecting EUC (unobserved), or are collecting EB.

The effects are not causal; they should be interpreted as associations. In addition, we estimated only the propensity to collect UCX, not to be unemployed.

MGIB data limitations

We have only MGIB data, not Post-9/11 GI Bill data; we analyze MGIB data only before 2009 because it is not clear how to analyze MGIB recipients after Aug. 1, 2009, when many servicemembers became eligible for and switched to using Post-9/11 GI Bill benefits. It is difficult to analyze MGIB and UCX simultaneously because of differing eligibility criteria and windows in which to use these benefits.

We use the VA's definition of MGIB eligibility.

We estimate only the propensity to use the GI Bill, not to go to school.

Appendix A:
Transitioning Marines
who used both
UCX and MGIB

In this appendix, we discuss the number of Marines who collected UCX and used MGIB in CY11 or CY12, their characteristics, and the states in which they live.

Who used both UCX and MGIB?

- Of all Marine veterans who used UCX and/or MGIB in CY11-CY12:
 - 1 percent used both (N=608)
 - 56 percent used UCX, not MGIB (N=29,096)
 - 43 percent used MGIB, not UCX (N=22,163)
- Does not necessarily mean that they used UCX and MGIB *at the same time*
 - Could have used UCX first, then MGIB
- Marine veterans collected UCX and MGIB in CY11-CY12 in 43 states
- But only 21 states allow students to collect unemployment benefits while they are in school:
 - CO
 - DC
 - DE
 - FL
 - IN
 - IA
 - KY
 - MA
 - MI
 - MT
 - NH
 - NC
 - NV
 - OH
 - OK
 - OR
 - PA
 - SC
 - UT
 - VI
 - WV



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Of the 51,867 Marine veterans who used UCX and/or MGIB in CY11 or CY12, only 1 percent used both UCX and MGIB (N=608). Because such a small share of Marines are using both benefits within the same time period, it is not a huge cause for concern.

Marines who used both benefits in CY11-CY12 did not necessarily use them at the same time. Only 21 states (listed above) allow students to collect unemployment benefits while they are in school (they are normally considered out of the labor force, not unemployed, so they would not qualify for UCX), but we observe Marines collecting both benefits in 43 states during this time period. This means that some Marines are collecting UCX first (they must apply within 3 quarters of separation), then MGIB (they have up to 10 years to use MGIB).

Of course, we may be underestimating the share of Marines who use both UCX and the GI Bill because we do not have full information on GI Bill use. That is, Marines who collected UCX in CY11-CY12 will have separated in or around CY11, and Marines who separated in CY11 may not yet have used their MGIB benefits. Also, many CY11 separators may be using the Post-9/11 GI Bill instead of the MGIB.

Descriptive statistics: AC enlisted separators, UCX and/or MGIB recipients

Characteristic	Average separator	UCX recipients	MGIB recipients	UCX & MGIB recipients
Age	25	24	24	24
Years of service (YOS)	6	5	5	5
Zone A—Before EAS (YOS 1-6)	23%	24%	7%	15%
Zone A—Reached EAS (YOS 1-6)	57%	61%	81%	67%
Zone B (YOS 7-10)	11%	11%	9%	13%
Zone E (YOS >20)	6.1%	1.1%	1.5%	1.1%
Female	7%	8%	8%	11%
White	86%	84%	83%	86%
Black	9%	11%	12%	10%
Asian/Pacific Islander	3%	4%	4%	3%
Hispanic	12%	15%	17%	18%
Married	50%	51%	41%	53%
Any children	27%	25%	19%	32%
High quality	63%	59%	69%	63%
Combat arms	30%	30%	27%	27%
Combat support	16%	15%	15%	15%
Combat service support	29%	31%	30%	30%
Command and control	9%	9%	9%	10%
Aviation support	16%	15%	19%	18%
Disability	8%	6%	5%	6%
Ever deployed	68%	69%	73%	73%
N	41,452	18,846	54,956	544

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Of the 608 Marine veterans who used both UCX and MGIB in CY11-CY12, 99 percent are enlisted and 90 percent are in the AC. For consistency with the other samples, we show characteristics for AC enlisted Marines (N=544).

As expected, Marines who used both UCX and MGIB look like a mix of UCX recipients and MGIB recipients. They look like eligible MGIB recipients in that they meet the stricter MGIB eligibility criteria. That is, they are more likely to have reached their EAS and be high quality. They are also like MGIB recipients in that they are both more likely to be Hispanic and in aviation support MOSs, less likely to be in combat arms MOSs, and more likely to have deployed than UCX recipients.

In other ways, Marines who collected both UCX and MGIB look more like the average separator than those collecting UCX. They are the most likely to be white and are as likely to be high quality.

Marines who collected both UCX and MGIB are different from the other samples in that they are the most likely to be female.

Twenty states with the most CY11-CY12 UCX and MGIB usage

State	Separators					CY11 state and unemp. rate (%)	State	Separators					CY11 state and unemp. rate (%)
	%	UCX %	MGIB %	MGIB %	UCX %			%	UCX %	MGIB %	MGIB %	UCX %	
CA	13	22	11	20	11.7	MA	2	3	1	1	7.4		
TX	10	9	10	11	7.9	WA	2	2	2	2	9.2		
NC	4	8	4	13	10.5	GA	3	2	3	2	9.8		
NY	5	5	5	3	8.2	VA	3	2	3	1	6.2		
PA	4	5	3	2	7.9	OR	2	2	2	3	9.5		
IL	4	4	7	11	9.8	AZ	2	2	2	2	9.5		
FL	5	4	7	5	10.5	IN	2	2	2	1	9.0		
MI	3	4	3	2	10.3	CO	2	2	1	1	8.3		
OH	4	3	4	2	8.6	SC	2	2	2	1	10.3		
NJ	2	3	2	2	9.3	WI	2	2	2	1	7.5		

- CY11-CY12 separators: N=84,166
- CY11-CY12 UCX recipients: N=29,704
- CY11-CY12 MGIB recipients : N=22,636
- CY11-CY12 UCX and MGIB recipients: N=608
- CY11 state unemployment rates are BLS annual non-seasonally-adjusted state unemployment rates.



Marines who used both UCX and MGIB are living in the same locations as those who used UCX or MGIB. Compared to the average separator, Marines who used both UCX and MGIB are more likely to live in California, North Carolina, or Illinois.⁴⁵ UCX recipients are overrepresented in California; 22 percent of UCX recipients are collecting UCX in California, while only 13 percent of CY11-CY12 separators are from there or returned there.

We also looked at whether Marines are returning to their home of record states. We were able to do this for Marine UCX recipients (N=29,704) because we have data on the states in which they are collecting UCX and their home of record states. The Marine Corps may care about Marines returning to their home states—which have relatively high unemployment rates—after they separate because it makes it more difficult for transitioning Marines to obtain jobs and adds to the UCX bill.

Among UCX recipients, we find that most AC enlisted Marines are returning to their home states (70 percent). This share is higher than among AC officers (46 percent). Because UCX is costly in times of high unemployment (i.e., \$151M in FY11), one interpretation of Marine UCX recipients returning to their home states—which have high unemployment rates—is that it is costly to recruit from states with higher unemployment. Of course, Marines from high-unemployment states may have enlisted in the Marine Corps because they could not find a job, which makes it easier to recruit in these states. They may also be moving to states with high unemployment rates because they have good universities. One possible mitigating solution is to inform separators of state unemployment rates prior to their decision points so that they may make informed decisions based on job potential, rather than just returning home.

⁴⁵ Among UCX recipients, state is the state in which they are collecting UCX. Among UCX nonrecipients, state is their home of record state.

Appendix B: Extended Benefits (EB)

In this appendix, we provide analysis on our limited sample of EB recipients in the ten states that report EB separately.

EB regression model and sample size

- Sample: Marines who separated between CY08 Q3 and CY10 Q1 in ten states (CO, CT, ID, IL, ME, MI, NC, PA, TN, and WA)

	Eligible separators between CY08 Q3 and CY10 Q1	EB recipients	
		N	%
AC enlisted	7,569	376	5.0
RC enlisted	637	34	5.3
AC officers	476	0	0
RC officers	66	0	0
Total	8,748	410	4.7

- The dependent variable is an indicator for whether one collected EB in CY11 or CY12, given that he or she is eligible for benefits



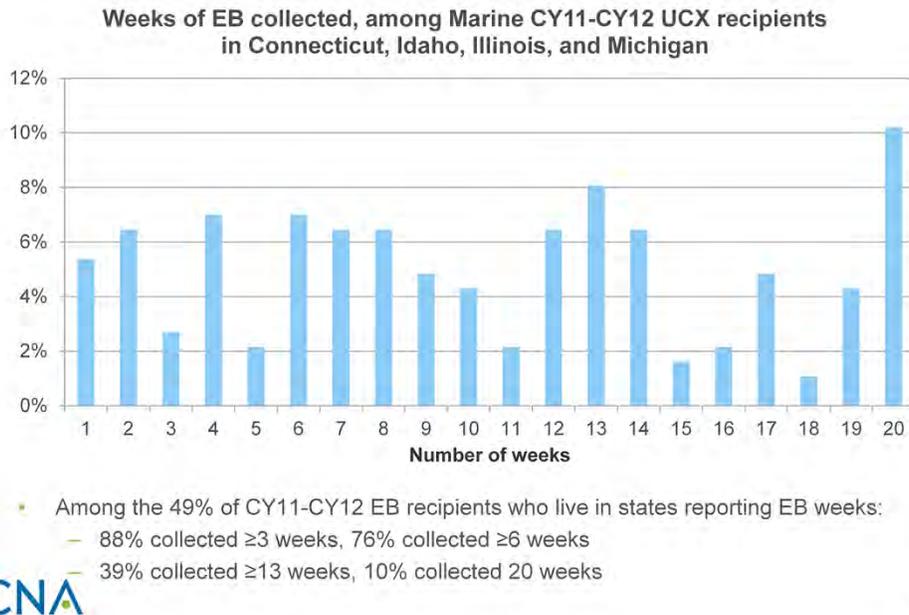
65

The EB sample is restricted to eligible Marines who separated between CY08 Q3 and CY10 Q1 and lived in one of the ten states that report EB separately (Colorado, Connecticut, Idaho, Illinois, Maine, Michigan, North Carolina, Pennsylvania, Tennessee, and Washington). None of these states has a high concentration of current or veteran Marines. Therefore, these EB results may be of limited applicability to the Marine Corps. The regression sample was restricted to eligible EB recipients and eligible nonrecipients; it excluded regular UCX recipients. In these four states, 5.0 percent of qualified AC enlisted separators collected EB (N=376/7,569), compared with 5.3 percent of RC enlisted separators (N=34/637).

There were no officer EB recipients.

The EB regression model is a logistic regression (logit) that predicts one's propensity to collect EB as a function of the same demographic and service-related characteristics used in the regular UCX regressions. The dependent variable is an indicator for whether one collected EB in CY11 or CY12, given that he or she is eligible for benefits.

How long are AC enlisted recipients collecting Extended Benefits (N = 186)? CT, ID, IL, and MI



This figure shows the number of weeks in which EB were collected in Connecticut, Idaho, Illinois, and Michigan. These were the only four states that reported EB weeks. There were 186 EB recipients (49 percent of AC enlisted EB recipients (N=186/376)) in these four states.

The distribution of EB durations contains more spikes than the regular UCX benefit durations, partly because of the small sample size. The duration of EB offered by state varies from 13 to 20 weeks, which explains the peaks. About 10 percent of recipients in these four states maxed out their EB.

There is some recent evidence that among the chronically unemployed, the more weeks one collects unemployment, the less intense one's job search becomes [26]. It may be that those who begin collecting their 80th week of unemployment compensation will continue until their 99th week is completed. This suggests that those who use all of their benefits will still be unemployed in the following weeks, and that the intention of UCX payments—to subsidize one's job search so that one may find a more stable, high-paying job—did not materialize. Therefore, maxing out one's benefits likely could be viewed as an indicator of an unsuccessful transition to civilian life.

Characteristics of eligible AC enlisted separators

Characteristic	EB recipients	UCX recipients	Difference ¹
Age	24.3	24.5	-0.2
Zone A—Before EAS (YOS 1-6)	11%	24%	-13%
Zone A—Reached EAS (YOS 1-6)	77%	60%	17%
Zone B (YOS 7-10)	9%	12%	-3%
Zone C (YOS 11-14)	2%	3%	-1%
Zone D (YOS 15-20)	0.3%	0.3%	0%
Zone E (YOS >20)/retired	0.5%	1.0%	-0.5%
Years of service	5	5	0
Female	9%	8%	1%
White	84%	84%	0%
Black	13%	11%	2%
Asian/Pacific Islander	1%	3%	-2%
Hispanic	10%	15%	-5%
Married	50%	51%	-1%
Any children	25%	25%	0%
High-quality	55%	59%	-4%
N	376	18,864	

¹All differences except Zones B, C, D, and E, YOS, female, white, black, married, and any children are statistically significant at at least the 10-percent level.



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Before we show regression results comparing EB recipients and nonrecipients, we first compare the characteristics of regular UCX and EB recipients. We did not conduct regression analysis on regular UCX and EB recipients because they separated in different time periods. Instead, we conducted t-tests to assess differences between the sample of EB recipients (in ten states) and UCX recipients (in all states).

The average regular UCX recipient and the average EB recipient are both young, white, high quality, male, have no children, and separate during or at the end of their first terms.

Compared with UCX recipients, EB recipients are more likely to complete their first terms and be black, non-Hispanic, and lower quality. Like with UCX recipients, characteristics that are less prevalent among Marines increase their likelihood of collecting EB. That is, the Marine who has an increased probability of collecting UCX also has an increased probability of becoming chronically unemployed and collecting EB.

There is more work to be done—with a second or third year of recipient data—on defining Marines who have a high probability of collecting EB.

Characteristics of eligible AC enlisted separators (cont.)

Characteristic	EB recipients	UCX recipients	Difference ¹
Reached EAS	86%	72%	14%
Early Release	11%	8%	3%
Medical attrite	0.3%	17%	-17%
Combat arms	33%	30%	3%
Combat support	10%	15%	-5%
Combat service support	30%	31%	-1%
Aviation support	19%	16%	3%
Command and control	8%	9%	-1%
Ever deployed	80%	69%	11%
Single deployment	33%	40%	-7%
Two deployments	41%	27%	14%
Three or more deployments	5.3%	2.5%	2.8%
Disability	9%	6%	3%
N	376	18,864	

¹All differences except combat arms, combat service support, and command and control are statistically significant at at least the 10-percent level.



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EB recipients are more likely than UCX recipients to have reached their EAS or volunteered for Early Release. Ninety-seven percent of EB recipients and 80 percent of UCX recipients qualified for these reasons.

EB recipients are more likely than UCX recipients to be in combat arms or aviation support MOSs, to have multiple deployments (46 versus 30 percent), and to have a disability (9 versus 6 percent).

Characteristics of eligible RC enlisted separators

Characteristic	EB recipients	UCX recipients	Difference ¹
Reached EAS	100%	92%	8%
Early Release	0%	8%	-8%
Female	3%	7%	-4%
White	82%	81%	1%
Black	18%	13%	5%
Asian/Pacific Islander	0%	4%	-7%
Hispanic	6%	21%	-15%
Married	41%	43%	-2%
Any children	21%	30%	-9%
High-quality	59%	58%	1%
Combat arms	29%	29%	0%
Combat support	12%	14%	-2%
Combat service support	32%	38%	-6%
Aviation support	12%	9%	3%
Command and control	15%	10%	5%
Single deployment	42%	44%	-2%
Two deployments	45%	28%	17%
Three or more deployments	6%	3%	3%
Disability	0%	0%	0%
N	34	1,982	

¹The only statistically significant differences are Hispanic, two deployments (5-percent level) and reached EAS (10-percent level).



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Among deactivated enlisted reservists, EB recipients are more likely to reach their EAS and have multiple deployments and less likely to be Hispanic. Because of the small sample size of RC enlisted EB recipients, no other differences are statistically significant.

EB regression results

More likely to collect EB:	
Enlisted	
Active component	Reserve component
Zone A=B>C=D>E	
Lower quality	
Black	Black
Aviation support	
Command and control	
Combat service support	
Combat arms	
States with higher unemployment rates	
Less likely to collect EB:	
Combat support	
EB recipients (N = 376)	EB recipients (N = 34)
Nonrecipients (N = 6,890)	Nonrecipients (N = 572)

CNA

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Among recently separated UCX-eligible AC enlisted Marines in the ten states that report EB, controlling for other factors, Marines who have a higher likelihood of collecting EB look similar to those who have a higher likelihood of collecting UCX. They separate with fewer YOS and are nonwhite and lower quality. That is, the type of Marine who starts collecting UCX appears to be the same as the type of Marine who continues to collect for more than 1.5 years.

However, gender, marital status, and having children are not associated with EB receipt, as they are with UCX receipt. Although among AC enlisted Marines, women, married Marines, and those with children are more likely to collect UCX, that effect goes away at some time after six months; that is, men and women are equally likely to be chronically unemployed, as are married and unmarried Marines, and those with and without children.

Marines in combat support MOSs—technical occupations, with high AFQT scores—were the least likely to collect UCX.

The only consistency among deactivated enlisted reservists in terms of regular UCX and EB collection is that black Marines have a higher likelihood of collecting UCX and, in the ten states that report EB, collecting EB.

Characteristics that increase one's chance of collecting EB

- The average regular UCX recipient and EB recipient look similar
- Compared with UCX recipients, EB recipients are more likely to:
 - Complete their first terms
 - Volunteer for Early Release
 - Be black
 - Be non-Hispanic
 - Be lower quality
 - Have combat arms or aviation support MOSs
 - Have multiple deployments
 - Have a disability



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The average regular UCX recipient and the average EB recipient look similar—they are both young, white, high quality, male, have no children, and separate at the end of their first terms.

Compared with UCX recipients, EB recipients are more likely to complete their first terms, volunteer for Early Release, and be black, non-Hispanic, and lower quality. EB recipients are more likely than UCX recipients to be in combat arms or aviation support MOSs, and are much more likely to have multiple deployments (46 versus 30 percent) or to have a disability (9 versus 6 percent).

Like with UCX recipients, characteristics that are less prevalent among Marines increase their likelihood of collecting EB. That is, the Marine who has an increased probability of collecting UCX also has an increased probability of becoming chronically unemployed and collecting EB.



Appendix C: Post-Hoc Analysis

In this appendix, first, we conduct a sensitivity test on the EB results by classifying recipients from all states who separated between CY08 Q3 and CY09 Q3 as EB recipients instead of allowing the ten-state sample reporting to define the sample.

Second, we display the point estimates from the regular UCX regression results that we showed on slide 23.

Third, we display the point estimates from the MGIB regression results that we showed on slide 53.

EB sensitivity test using expanded sample: AC enlisted Marines

More likely to collect EB:		More likely to collect regular UCX:
Expanded sample	10-state sample	Regular sample
		Female
Zone A>B=C>D>E	Zone A=B>C=D>E	Zone A>B>C=D>E
Older within a zone		Older within a zone
Lower quality	Lower quality	Lower quality
	Black	Black
Hispanic		Hispanic
Combat service support	Other four occupations	Married
		Any children
		Single deployment
		Command and control
		Combat service support
Less disabled		Less disabled
States w/higher unemployment	States w/higher unemployment	States w/higher unemployment
Less likely to collect EB:		Less likely to collect regular UCX:
Other four occupations	Combat support	Other three occupations
More disabled		More disabled
EB recipients (N =1,301)	EB recipients (N = 376)	Regular UCX recipients (N = 18,851)
Nonrecipients (N = 22,493)	Nonrecipients (N = 6,890)	Nonrecipients (N = 22,205)

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As a sensitivity test, we classify all recipients who separated between CY08 Q3 and CY09 Q3 as EB recipients because there is a high probability that those who separated in this window are not regular UCX recipients. By classifying all recipients who separated between CY08 Q3 and CY09 Q3 as EB recipients instead of allowing the ten-state sample reporting to define the sample, we increased the EB recipient sample from 376 to 1,301 (5.5 percent of the 23,794 CY08 Q3 and CY09 Q3 separators).

We find that the EB results for this expanded sample are very similar to those found among the ten-state sample, which strengthens the results. The contrasts to the ten-state sample are that (1) Marines who separated with 15 to 20 YOS are more likely to collect EB than those who separated with 11 to 14 YOS, (2) Marines who are older are more likely to collect EB, (3) Hispanic Marines are more likely to collect EB, but not black Marines, (4) Marines in combat service support occupations are the most likely to collect EB (which is consistent with the regular UCX findings), and (5) Marines who are less disabled are more likely to collect EB.

In contrast to the regular UCX results, women and men, married and unmarried Marines, and Marines with and without children are as likely to collect EB, and the number of deployments is not a significant predictor of EB receipt. Like the regular UCX results, the state unemployment rate is again positively associated with EB receipt.

UCX regression results (marginal effects): AC enlisted

Characteristic	Active component enlisted	Characteristic	Active component enlisted
Female	0.06***	Single deployment	0.02***
Zone A	0.09***	Two deployments	0.01
Zone B	0.04**	Three or more deployments	-0.06***
Zone D	-0.03	Command and control	0.03**
Zone E	-0.42***	Combat service support	0.03***
Age	0.06***	Aviation support	0.01
Age-squared	-0.001***	Combat arms	0.01
High-quality	-0.06***		
Hispanic	0.06***		
Black	0.11***		
Asian/Pacific Islander	0.002		
Married	0.01*		
Any children	0.02***		
Disability with severance pay	-0.06***		
Prior disability	-0.10*		
Perm. or temp. disability	-0.18***		
State unemployment rate	0.05***		

*** Statistically significant at the 1-percent level, ** at the 5-percent level, * at the 10-percent level



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Above, we display the point estimates from the regular UCX regression results on slide 23.

Women are 6 percent more likely to collect regular UCX than men. Marines who separated at 1 to 6 YOS are 5 percent more likely to collect UCX than those who separated at 7 to 10 YOS; the latter are 4 percent more likely to collect UCX than those who separated at 11 to 14 YOS; the latter are 3 percent more likely to collect UCX than those who separated at 15 to 19 YOS; the latter are 39 percent more likely to collect UCX than retirees.

Within a zone, Marines who separated a year older than their counterparts are 6 percent more likely to collect UCX, but that effect diminishes with age. High-quality Marines are 6 percent less likely to collect UCX than low-quality Marines. Hispanic Marines are 6 percent more likely to collect UCX than non-Hispanic Marines. Black Marines are 11 percent more likely to collect UCX than white Marines.

Married Marines are 1 percent more likely to collect UCX. Marines with children are 2 percent more likely to collect UCX. Marines with a >30-percent disability rating (with a permanent or temporary disability) are 12 percent less likely to collect UCX than Marines with a <30-percent disability rating (with severance pay), who are, in turn, 6 percent less likely to collect UCX than nondisabled Marines. Marines are 5 percent more likely to collect UCX for each percentage point increase in the state unemployment rate.

Marines with a single deployment are 2 percent more likely to collect UCX than Marines who never deployed, 1 percent more likely to collect UCX than Marines with two deployments, and 8 percent more likely to collect UCX than Marines with three or more deployments. Marines in command and control or combat service support MOSs are 2 percent more likely to collect UCX than those in aviation support or combat arms MOSs, and 3 percent more likely to collect UCX than those in combat support MOSs.

MGIB regression results (marginal effects): AC enlisted

Characteristic	Active component enlisted	Characteristic	Active component enlisted
Female	0.15***	Single deployment	0.02***
Zone A	0.06***	Two deployments	0.01
Zone B	0.05**	Three or more deployments	-0.03***
Zone D	0.03	Combat arms	0.02***
Zone E	0.01	Command and control	-0.01
Age	0.004	Combat service support	-0.02***
Age-squared	-0.002	Combat support	-0.03***
High-quality	0.11***		
Hispanic	0.06***		
Black	0.05***		
Asian/Pacific Islander	0.09***		
Married	-0.08***		
Any children	-0.08***		
Disability with severance pay	-0.06***		
Prior disability	-0.04		
Perm. or temp. disability	-0.12***		
State unemployment rate	0.01***		

*** Statistically significant at the 1-percent level, ** at the 5-percent level, * at the 10-percent level



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In this slide, we display the point estimates from the MGIB regression results on slide 53. Women are 15 percent more likely to use MGIB than men. Marines who separated at 1 to 6 YOS are 1 percent more likely to use MGIB than those who separated at 7 to 10 YOS; the latter are 5 percent more likely to use MGIB than those who separated at 11 to 14 YOS; Marines who separated at 11 to 14 YOS, 15 to 20 YOS, or who retired with more than 20 YOS are as likely to use MGIB.

Age is not a significant predictor of MGIB use. High-quality Marines are 11 percent more likely to use MGIB than low-quality Marines. Hispanic Marines are 6 percent more likely to use MGIB than non-Hispanic Marines. Black Marines are 5 percent more likely and Asian/Pacific Islander Marines are 9 percent more likely to use MGIB than white Marines.

Married Marines are 8 percent less likely to use MGIB. Marines with children are 8 percent less likely to use MGIB. Marines with a >30-percent disability rating (with a permanent or temporary disability) are 6 percent less likely to use MGIB than Marines with a <30-percent disability rating (with severance pay), who are, in turn, 6 percent less likely to use MGIB than nondisabled Marines. Marines are 1 percent more likely to use MGIB for each percentage point increase in the state unemployment rate.

Marines with a single deployment are 2 percent more likely to use MGIB than Marines who never deployed, 1 percent more likely to use MGIB than Marines with two deployments, and 5 percent more likely to use MGIB than Marines with three or more deployments. Marines in combat arms MOSs are 2 percent more likely to use MGIB than those in aviation support MOSs, 3 percent more likely than those in command and control MOSs, 4 percent more likely than those in combat service support MOSs, and 5 percent more likely than Marines in combat support MOSs.

Glossary



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AC	Active Component
AD	Active Duty
AFQT	Armed Forces Qualification Test
BLS	Bureau of Labor Statistics
C2	Command and Control
CSS	Combat Service Support
CY	Calendar Year
DFAS	Defense Finance and Accounting Services
DMDC	Defense Manpower Data Center
DOD	Department of Defense
DOL	Department of Labor
EAS	End of Active Service
EB	Extended Benefits
ESC	Executive Steering Committee
EUC	Emergency Unemployment Compensation
FY	Fiscal Year
IUR	Insured Unemployment Rate
LOS	Length of Service
MF	Marine & Family Programs Division
MGIB	Montgomery GI Bill
MOS	Military Occupational Specialty

Glossary (cont.)



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NCS	National Call to Service
NPS	Non-Prior-Service
Occfield	Occupational Field
PEF	Program Enlisted For
PIC	Performance Improvement Council
PS	Prior Service
PTSD	Post-Traumatic Stress Disorder
RC	Reserve Component
SELRES	Selected Reserve
SOFS-R	Status of Forces Survey of Reserve Component Members
SSN	Social Security Number
UCX	Unemployment Compensation for Ex-Servicemembers
USERRA	Uniformed Services Employment and Reemployment Rights Act of 1994
VA	Department of Veterans Affairs
VEAP	Veterans Educational Assistance Program
VOW	Veterans Opportunity to Work (as in VOW To Hire Heroes Act of 2011)
YOS	Years of Service

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