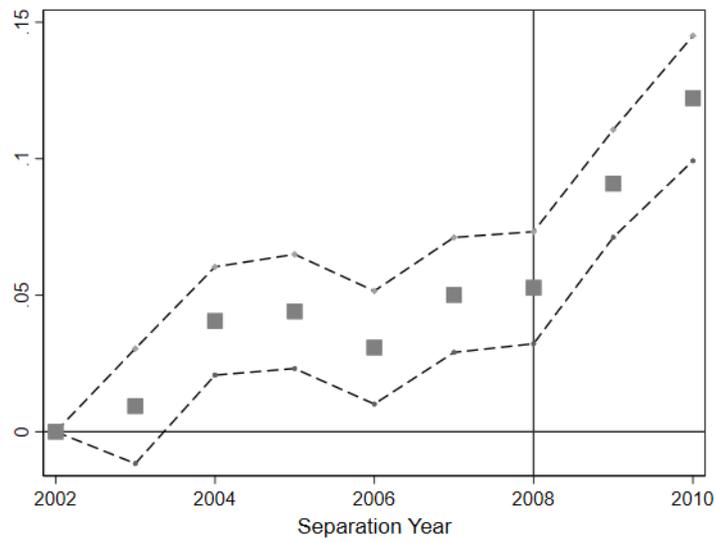
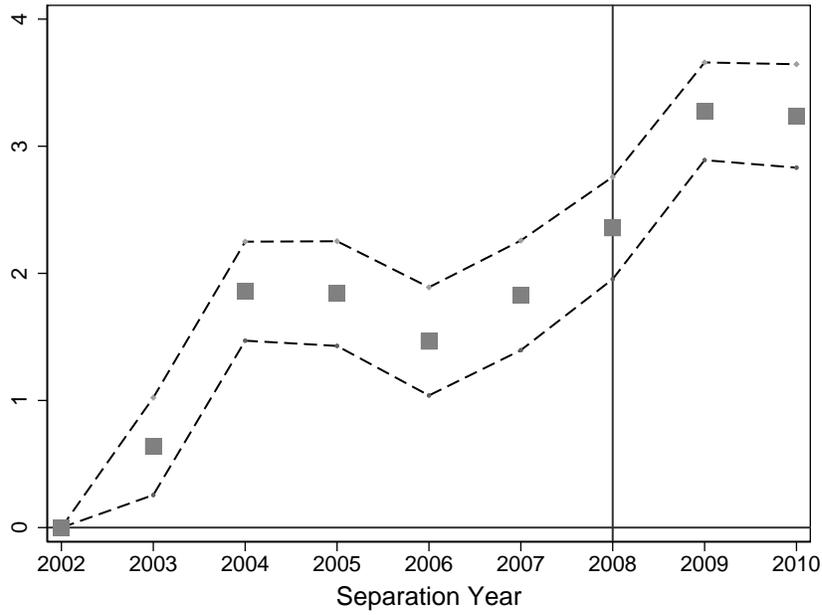


Figure A1: Event Study for Enrollment (NSC)

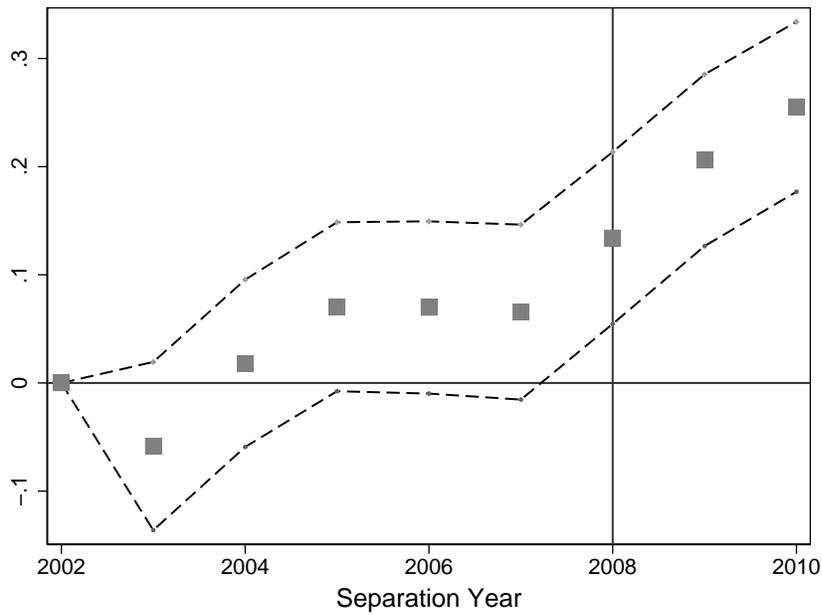


Notes: The figure presents estimated coefficients from a difference-in-difference event study regression that includes eligible and ineligible veterans who separated from the Army between 2002 and 2010. Regressions include the following controls defined at the time of enlistment: gender, race, age, educational attainment, marital status, and 3-digit home-of-record zip code. Regressions additionally include military grade at separation. Standard errors are clustered at the 3-digit zip code level.

Figure A2: Event Study on College Persistence



(a) Months of Benefits Used



(b) Years Enrolled

Notes: The top panel presents estimated coefficients from a difference-in-difference event study regression that includes eligible and ineligible veterans who separated from the Army between 2002 and 2010. Standard errors are clustered at the 3-digit zip code level. The bottom panel presents the relationship between actual benefits received and predicted benefit levels. Circles indicate the difference in average benefits received (including zeros) between the post (2008/09) and pre (2003/04) periods in \$1,000 bins of predicted PGIB benefits based on 3-digit home of record. The figure is restricted to homes of record between the 10th and 90th percentiles of predicted benefit levels.

Figure A3: Benefit Months Used

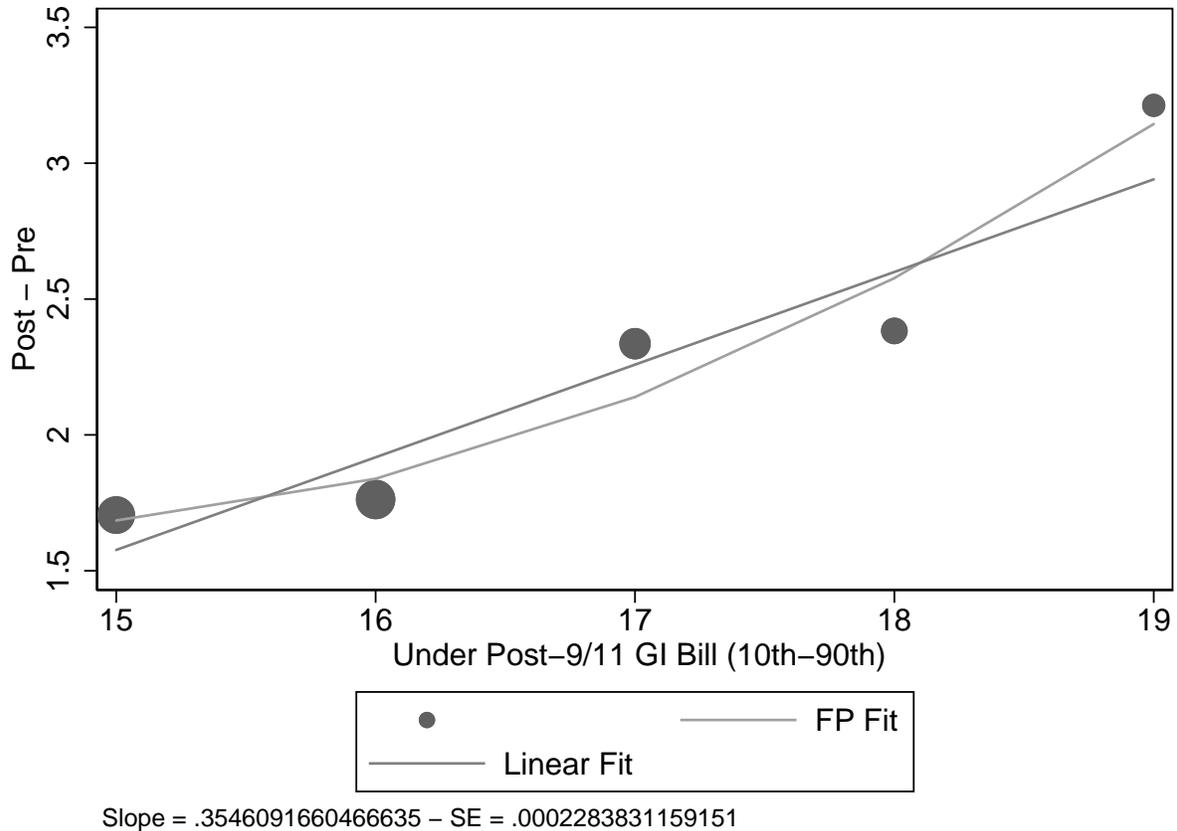
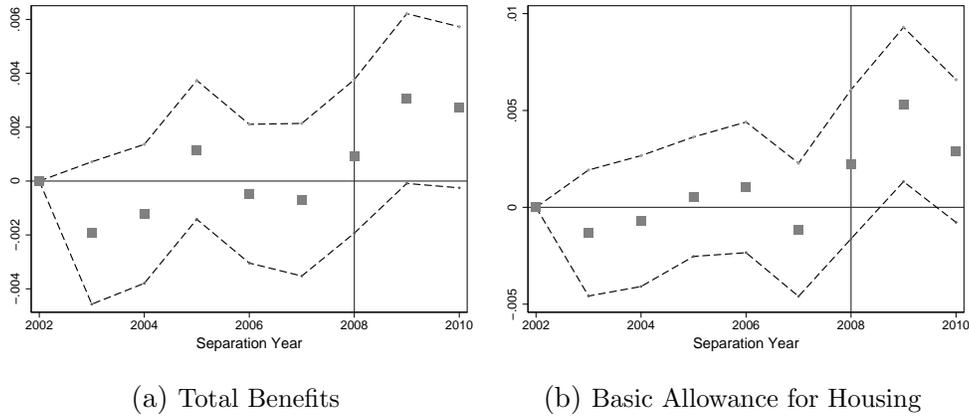


Figure A4: Relationship between Benefits Months Used and Predicted Total Benefit Levels

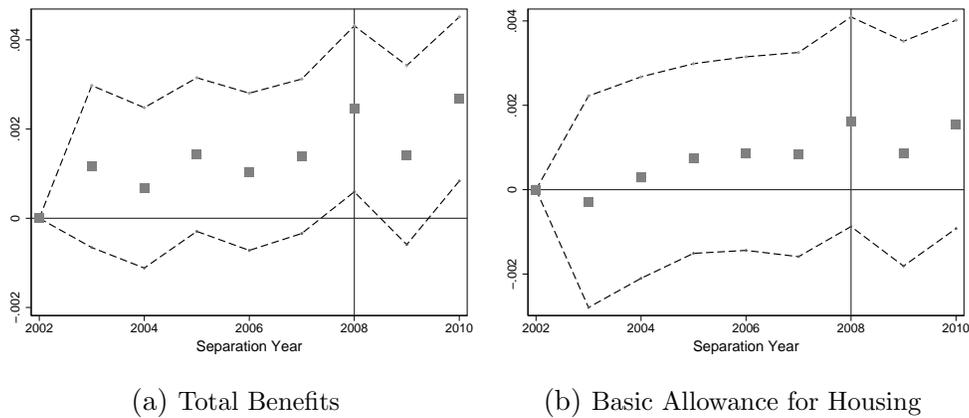
Notes: The top panel presents estimated coefficients from a difference-in-difference event study regression that includes eligible and ineligible veterans who separated from the Army between 2002 and 2010. Standard errors are clustered at the 3-digit zip code level. The bottom panel presents the relationship between actual benefits received and predicted benefit levels. Circles indicate the difference in average benefits received (including zeros) between the post (2008/09) and pre (2003/04) periods in \$1,000 bins of predicted PGIB benefits based on 3-digit home of record. The figure is restricted to homes of record between the 10th and 90th percentiles of predicted benefit levels.

Figure A5: Geographic Variation Event Study for BA Attainment



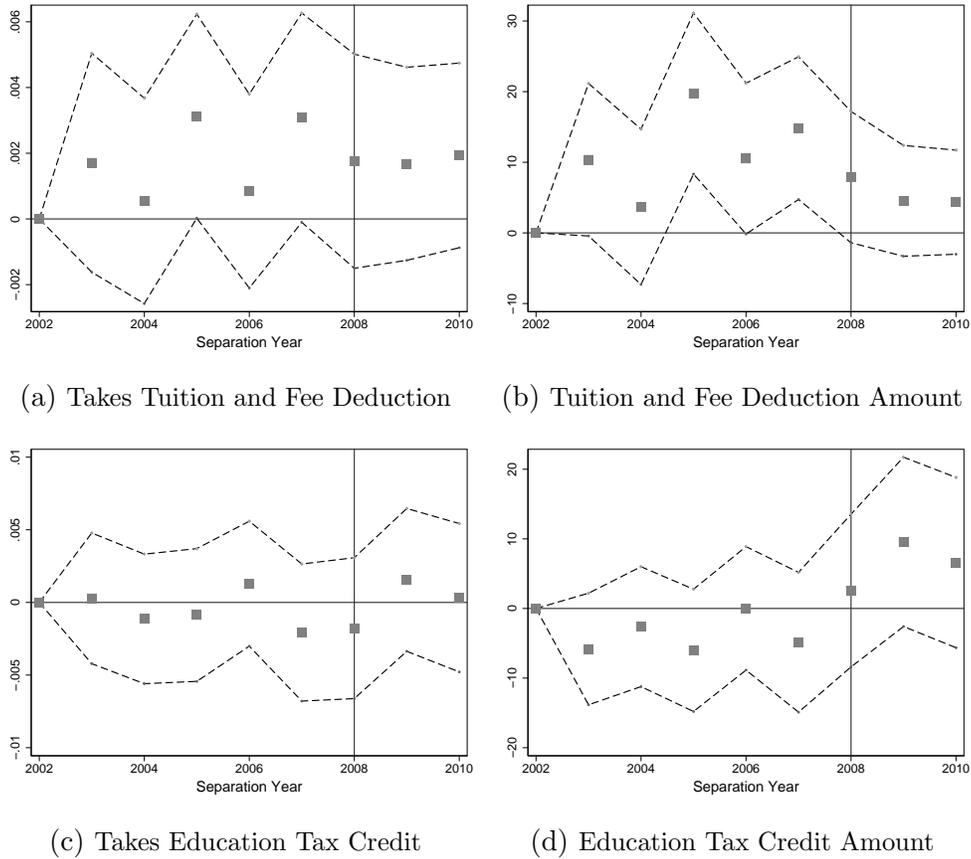
Notes: The figure presents estimated coefficients on indicator variables for each year of separation interacted with the generosity of a veteran’s home or record predicted total benefits under the PGIB. The regression includes eligible veterans who separated from the Army between 2002 and 2010. Regressions include the following controls defined at the time of enlistment: gender, race, age, educational attainment, marital status, and 3-digit home-of-record zip code. Regressions additionally include military grade at separation. Standard errors are clustered at the 3-digit zip code level.

Figure A6: Geographic Variation Event Study for AA Attainment



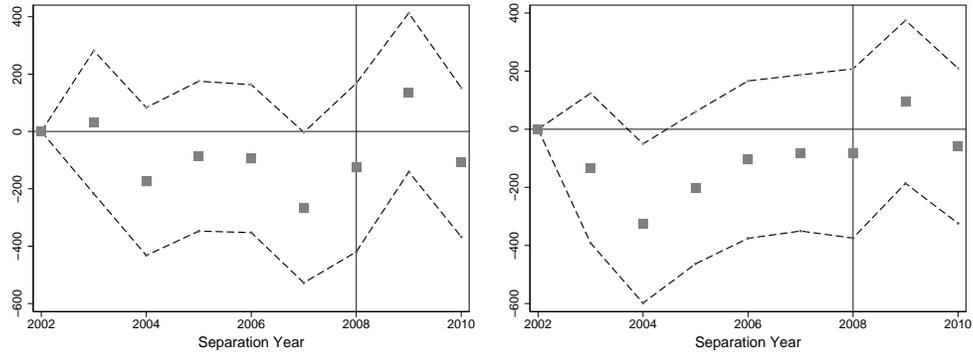
Notes: The figure presents estimated coefficients on indicator variables for each year of separation interacted with the generosity of a veteran’s home or record predicted total benefits under the PGIB. The regression includes eligible veterans who separated from the Army between 2002 and 2010. Regressions include the following controls defined at the time of enlistment: gender, race, age, educational attainment, marital status, and 3-digit home-of-record zip code. Regressions additionally include military grade at separation. Standard errors are clustered at the 3-digit zip code level.

Figure A7: Geographic Variation Event Study for Education Tax Benefits: Total Benefits



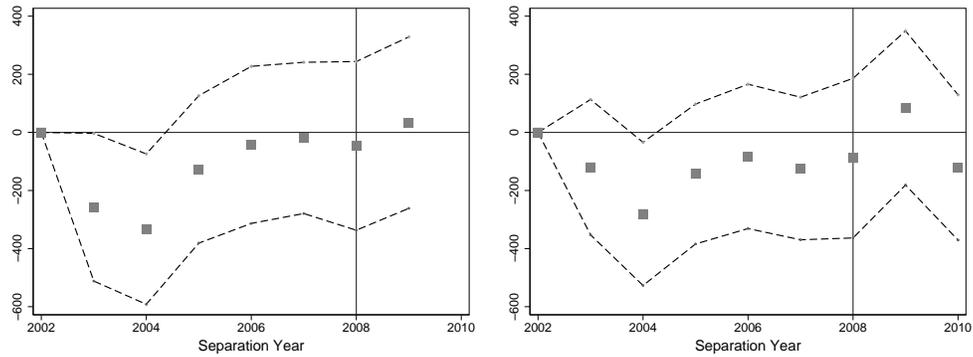
Notes: The figure presents estimated coefficients on each year of separation year interacted with the generosity of a veteran's home of record predicted total benefits under the PGIB (see text for details). The regression includes eligible veterans who separated from the Army between 2002 and 2010. The 2002 interaction is omitted. Regressions include the following controls defined at the time of enlistment: for gender, race, age, educational attainment, marital status, 3-digit home-of-record zip code, and AFQT score interacted with enlistment year. Regressions additionally include military grade at separation, separation month, and military specialization (PMOS) interacted with enlistment year. Standard errors are clustered at the 3-digit zip code level.

Figure A8: Geographic Variation Event Study for Labor Income: Total Benefits



(a) 7 Years After Separation

(b) 8 Years After Separation

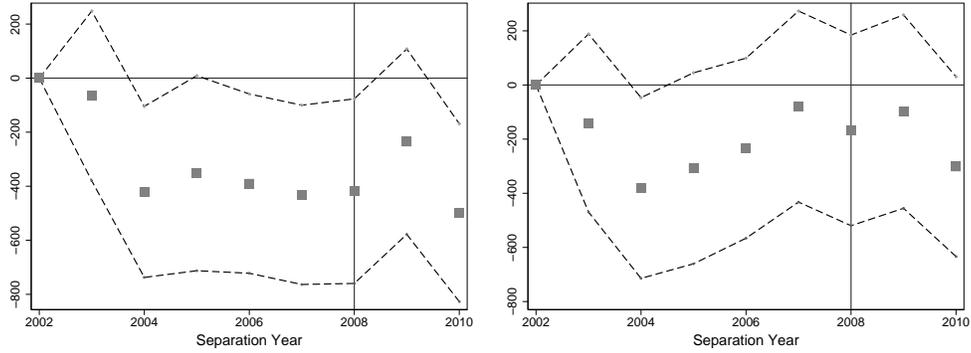


(c) 9 Years After Separation

(d) Average 7–9 Years After Separation

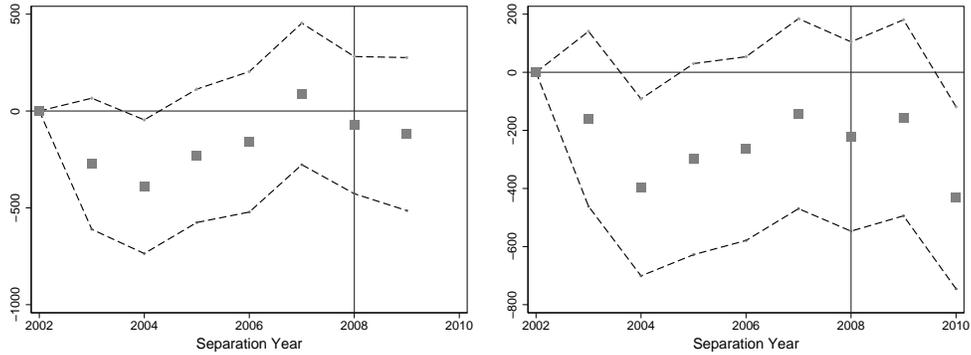
Notes: The figure presents estimated coefficients on each year of separation year interacted with the generosity of a veteran’s home of record predicted total benefits under the PGIB (see text for details). The regression includes eligible veterans who separated from the Army between 2002 and 2010. The 2002 interaction is omitted. Regressions include the following controls defined at the time of enlistment: for gender, race, age, educational attainment, marital status, 3-digit home-of-record zip code, and AFQT score interacted with enlistment year. Regressions additionally include military grade at separation, separation month, and military specialization (PMOS) interacted with enlistment year. Standard errors are clustered at the 3-digit zip code level.

Figure A9: Geographic Variation Event Study for Labor Income: BAH



(a) 7 Years After Separation

(b) 8 Years After Separation

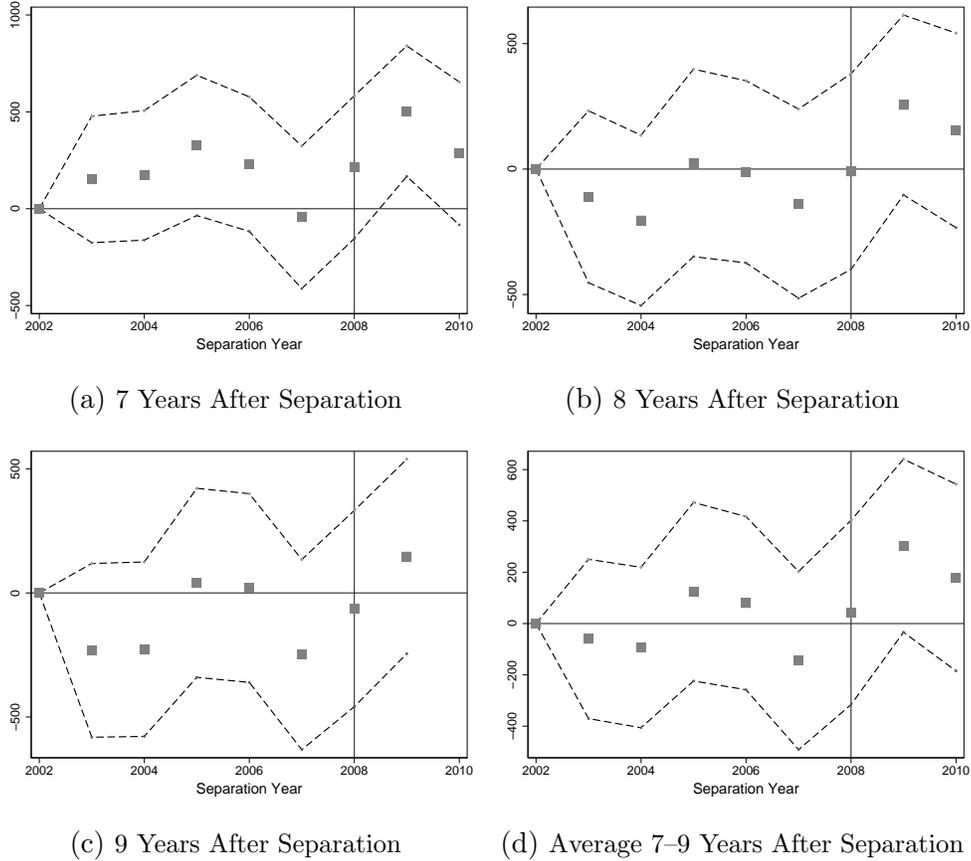


(c) 9 Years After Separation

(d) Average 7–9 Years After Separation

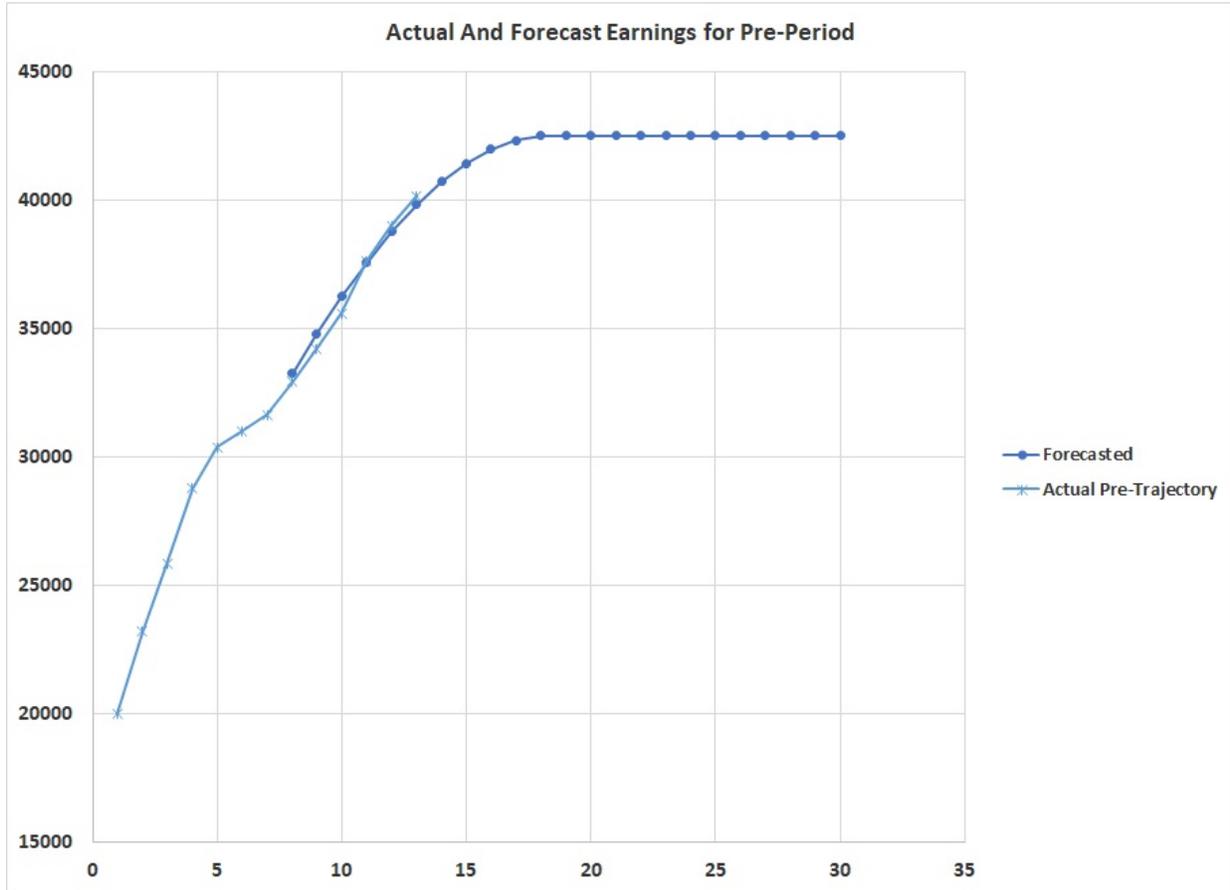
Notes: The figure presents estimated coefficients on each year of separation year interacted with the generosity of a veteran’s home of record predicted total benefits under the PGIB (see text for details). The regression includes eligible veterans who separated from the Army between 2002 and 2010. The 2002 interaction is omitted. Regressions include the following controls defined at the time of enlistment: for gender, race, age, educational attainment, marital status, 3-digit home-of-record zip code, and AFQT score interacted with enlistment year. Regressions additionally include military grade at separation, separation month, and military specialization (PMOS) interacted with enlistment year. Standard errors are clustered at the 3-digit zip code level.

Figure A10: Geographic Variation Event Study for Labor Income: Tuition and Fees



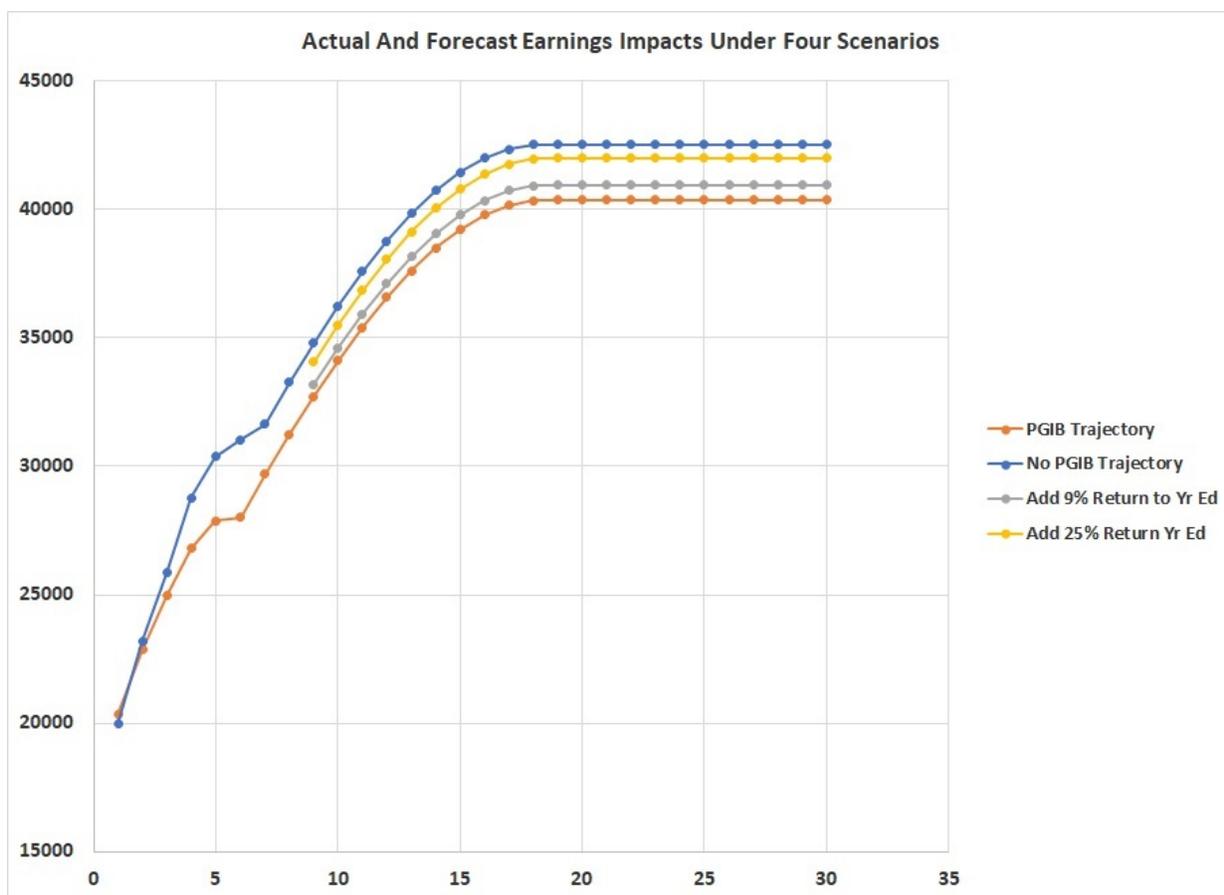
Notes: The figure presents estimated coefficients on each year of separation year interacted with the generosity of a veteran’s home of record predicted total benefits under the PGIB (see text for details). The regression includes eligible veterans who separated from the Army between 2002 and 2010. The 2002 interaction is omitted. Regressions include the following controls defined at the time of enlistment: for gender, race, age, educational attainment, marital status, 3-digit home-of-record zip code, and AFQT score interacted with enlistment year. Regressions additionally include military grade at separation, separation month, and military specialization (PMOS) interacted with enlistment year. Standard errors are clustered at the 3-digit zip code level.

Figure A11: Validation of Earnings Forecast



Notes: The figure compares actual and forecasted earnings for veterans separating in the pre-period. We use the first seven years of post-separation earnings to forecast future earnings in years 8 through 30 post-separation as described in the text. These forecasts are based on measures of earnings and experience the seventh year after separation. We parameterize the return to additional experience using the estimated coefficient on experience in the American Community Survey (ACS) for veterans age 25-55 (7.3 percent per year of experience). Because we estimate minimal effect of work experience squared among veterans in the ACS, we set the coefficient equal to the civilian equivalent (-0.23 percent). Actual earnings for veterans separating in the pre-period are plotted for the first thirteen years post-separation.

Figure A12: Imputed Long-Run Earnings Trajectories



Notes: The right panel compares actual and forecasted earnings impacts of the PGIB under various scenarios. We plot the first seven years of post-separation earnings for eligible veterans separating in the pre-period (i.e., No PGIB) and the post-period (i.e., PGIB). We use the first seven years of post-separation earnings to forecast future earnings in years 8 through 30 post-separation as described in the text and Figure A11. These trajectories are plotted in blue and orange. The two other trajectories plotted add returns to additional educational attainment: a 9 percent return to additional years of schooling (in grey), and a 25 percent return (in yellow).

Table A3: Summary of Enrollments Captured in Tax and NSC Data

	IRS Form 1098-T		NSC	
	Mean	SD	Mean	SD
Overall Enrollment	0.55	0.50	0.45	0.50
Four-Year Public	0.17	0.38	0.11	0.31
Four-Year Private	0.05	0.21	0.02	0.13
Community College	0.27	0.44	0.25	0.43
For-Profit	0.15	0.36	0.04	0.19
Observations	121323		121323	

Note: The table provides summary statistics of enrollments within two years of Army separation, as measured using IRS Form 1098-T and the National Student Clearinghouse data. The sample includes all eligible veterans and ineligible veterans with a general discharge who separated from the Army in 2003/2004 (pre-period) and 2008/2009 (post-period). In years when a veterans is enrolled in more than one institution in the NSC data, the first enrollment is used. In years when a veterans receives a 1098-T from multiple institutions, we rank college sectors to construct a unique sector of enrollment according to the following: four-year public, four-year private, two-year, and for-profit institution.

Table A4: Balance Between Treatment and Baseline Covariates

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
	Black	Male	Age	Married	GED	HS dropout	HS grad	Some college
Post * BAH	-0.0039 (0.0026)	0.0021 (0.0018)	0.0112 (0.0160)	-0.0031* (0.0017)	-0.0039*** (0.0013)	0.0003 (0.0004)	0.0018 (0.0017)	0.0020** (0.0009)
R-squared	0.2408	0.0309	0.0383	0.0274	0.0258	0.0088	0.0306	0.0194
Post * TF	-0.0081*** (0.0024)	0.0023 (0.0019)	0.0202 (0.0168)	0.0028 (0.0019)	-0.0012 (0.0015)	-0.0004 (0.0005)	0.0038** (0.0017)	-0.0016 (0.0010)
R-squared	0.2410	0.0309	0.0383	0.0274	0.0257	0.0088	0.0307	0.0193
Post * Benefits	-0.0057*** (0.0020)	0.0026** (0.0013)	0.0214* (0.0129)	0.0000 (0.0014)	-0.0030*** (0.0011)	0.0000 (0.0003)	0.0029** (0.0013)	0.0003 (0.0007)
R-squared	0.2410	0.0309	0.0383	0.0274	0.0258	0.0088	0.0307	0.0193
Number of Obs.	101,273	101,273	101,273	101,273	101,273	101,273	101,273	101,273

Note: The table present estimates from regressions that include only eligible veterans who separated from the Army in 2003/2004 (pre-period) and 2008/2009 (post-period). All regressions include the following controls, defined at the time of enlistment: gender, race, age, educational attainment, marital status, and home of record 3-digit zip code fixed effects. Standard errors are clustered at the 3-digit zip code level.

Table A5: Impact of the PGIB Expansion on Enrollment, Geographic Variation Using Ineligible Control

	(1)	(2)	(3)	(4)	(5)
	Enrolled	4-Yr. Public	4-Yr. Private	Community College	For-Profit
<i>Panel A: Total Benefits</i>					
Post * Eligible	0.002 (0.007)	-0.017*** (0.004)	0.002 (0.002)	0.007 (0.006)	0.015*** (0.005)
Post * Eligible * TB	0.003 (0.003)	0.003 (0.002)	0.001 (0.001)	0.003 (0.003)	-0.005** (0.002)
Observations	121,293	121,293	121,293	121,293	121,293
R-squared	0.106	0.089	0.032	0.082	0.040
<i>Panel B: BAH and Tuition & Fees</i>					
Post * Eligible	0.002 (0.007)	-0.016*** (0.004)	0.002 (0.002)	0.007 (0.006)	0.015*** (0.005)
Post * Eligible * BAH	0.001 (0.004)	0.002 (0.003)	0.001 (0.001)	0.005 (0.004)	-0.006** (0.003)
Post * Eligible * TF	0.005 (0.005)	0.003 (0.003)	0.001 (0.001)	0.002 (0.004)	-0.002 (0.003)
Observations	121,293	121,293	121,293	121,293	121,293
R-squared	0.106	0.089	0.032	0.083	0.040

Note: The table presents the estimated coefficient on the interaction between eligibility status and the post-treatment period, and the interaction between eligibility status, post-treatment period, and predicted benefits. The regression includes veterans who separated from the Army in 2003/2004 (pre-period) and 2008/2009 (post-period). All regressions include the following controls, defined at the time of enlistment: gender, race, age, educational attainment, marital status, and home of record 3-digit zip code fixed effects. Standard errors are clustered at the 3-digit zip code level.

Table A6: Impact of PGIB on College Persistence and Degree Attainment, Geographic Variation Using Ineligible Control

	(1)	(2)	(3)	(4)
	Months Used	Years Enrolled	BA Degree	AA Degree
<i>Panel A: Total Benefits</i>				
Post * Eligible	1.448*** (0.134)	0.173*** (0.025)	0.012*** (0.003)	0.004** (0.002)
Post * Eligible * TB	0.167*** (0.064)	0.019 (0.012)	0.002 (0.001)	0.001 (0.001)
Observations	121,293	121,293	121,293	121,293
R-squared	0.239	0.135	0.070	0.027
<i>Panel B: BAH and Tuition & Fees</i>				
Post * Eligible	1.432*** (0.130)	0.170*** (0.025)	0.012*** (0.003)	0.004** (0.002)
Post * Eligible * BAH	0.377*** (0.082)	0.026 (0.016)	0.003* (0.002)	0.001 (0.001)
Post * Eligible * TF	-0.109 (0.086)	0.008 (0.016)	0.001 (0.002)	0.000 (0.001)
Observations	121,293	121,293	121,293	121,293
R-squared	0.240	0.135	0.070	0.027

Note: The table presents the estimated coefficient on the interaction between eligibility status and the post-treatment period, and the interaction between eligibility status, post-treatment period, and predicted benefits. The regression includes veterans who separated from the Army in 2003/2004 (pre-period) and 2008/2009 (post-period). All regressions include the following controls, defined at the time of enlistment: gender, race, age, educational attainment, marital status, and home of record 3-digit zip code fixed effects. Standard errors are clustered at the 3-digit zip code level.

Table A7: Impact of the PGIB on Longer-Run Earnings, Geographic Variation Using Ineligible Control

Years Since Separation	(1)	(2)	(3)	(4)	(5)
	6	7	8	9	Mean(7,8,9)
<i>Panel A: Total Benefits</i>					
Post * Eligible	-2,980.651*** (346.086)	-1,916.041*** (351.187)	-1,341.089*** (363.246)	-878.146** (384.939)	-1,378.426*** (346.558)
Post * Eligible * TB	109.592 (174.118)	247.626 (173.259)	157.716 (184.391)	110.160 (188.132)	171.834 (172.478)
Observations	121,293	121,293	121,293	121,293	121,293
R-squared	0.133	0.132	0.135	0.136	0.149
<i>Panel B: BAH and Tuition & Fees</i>					
Post * Eligible	-2,950.586*** (351.476)	-1,935.635*** (356.835)	-1,369.182*** (370.581)	-882.935** (391.949)	-1,395.917*** (353.656)
Post * Eligible * BAH	-97.847 (231.979)	-42.329 (231.216)	-84.467 (247.660)	29.420 (254.904)	-32.459 (233.513)
Post * Eligible * TF	173.009 (240.570)	396.923 (245.212)	289.447 (260.716)	42.210 (264.326)	242.860 (244.107)
Observations	121,293	121,293	121,293	121,293	121,293
R-squared	0.133	0.132	0.135	0.136	0.149

Note: The table presents the estimated coefficient on the interaction between eligibility status and the post-treatment period, and the interaction between eligibility status, post-treatment period, and predicted benefits. The regression includes veterans who separated from the Army in 2003/2004 (pre-period) and 2008/2009 (post-period). All regressions include the following controls, defined at the time of enlistment: gender, race, age, educational attainment, marital status, and home of record 3-digit zip code fixed effects. Standard errors are clustered at the 3-digit zip code level.

Table A8: Impact of PGIB on College Outcomes for Already Enrolled, Institutional Variation in Total Benefits

	(1)	(2)	(3)	(4)
	Years Enrolled	Months Used	BA Degree	AA Degree
<i>Panel A: All Sectors</i>				
Post * Eligible	0.007* (0.003)	0.001 (0.021)	0.001 (0.001)	0.002 (0.001)
Observations	49,472	49,472	49,472	49,472
R-squared	0.106	0.123	0.143	0.103
<i>Panel B: Four-Year Public</i>				
Post * Eligible	-0.002 (0.008)	0.032 (0.060)	0.003 (0.002)	0.003 (0.002)
Observations	13,883	13,883	13,883	13,883
R-squared	0.092	0.136	0.128	0.112
<i>Panel C: Four-Year Private</i>				
Post * Eligible	0.001 (0.007)	0.035 (0.063)	0.001 (0.002)	0.003 (0.002)
Observations	2,840	2,840	2,840	2,840
R-squared	0.160	0.217	0.212	0.184
<i>Panel D: Community College</i>				
Post * Eligible	0.002 (0.007)	0.145*** (0.048)	0.003 (0.002)	0.001 (0.002)
Observations	24,650	24,650	24,650	24,650
R-squared	0.098	0.108	0.072	0.073
<i>Panel E: For-Profit</i>				
Post * Eligible	0.008 (0.006)	-0.007 (0.064)	0.005*** (0.002)	-0.011** (0.004)
Observations	8,050	8,050	8,050	8,050
R-squared	0.127	0.122	0.121	0.127

Note: The table presents estimates from regressions that include eligible veterans who first enrolled in college in 2003/2004 (pre-period) and 2008/2009 (post-period). The sample is restricted to veterans who enrolled within two years of their Army separation. All regressions include institution fixed effects along with the following controls, defined at the time of enlistment: gender, race, age, educational attainment, and marital status. Standard errors are clustered at the institution level.

Table A9: Impact of PGIB on Earnings Outcomes for Already Enrolled, Institutional Variation in Total Benefits

Years Since Enrollment	(1) 6	(2) 7	(3) 8	(4) 9	(5) Mean(7,8,9)
<i>Panel A: All Sectors</i>					
Post * Eligible	-30.313 (54.195)	-45.050 (51.036)	-29.002 (50.629)	-21.437 (50.144)	-31.830 (47.745)
Observations	49,472	49,472	49,472	49,472	49,472
R-squared	0.121	0.122	0.128	0.131	0.139
<i>Panel B: Four-Year Public</i>					
Post * Eligible	121.342 (128.440)	21.896 (142.226)	71.678 (145.408)	75.130 (142.551)	56.235 (135.293)
Observations	13,883	13,883	13,883	13,883	13,883
R-squared	0.111	0.117	0.121	0.129	0.135
<i>Panel C: Four-Year Private</i>					
Post * Eligible	92.242 (146.372)	230.135 (140.767)	167.805 (133.859)	102.140 (161.529)	166.693 (130.947)
Observations	2,840	2,840	2,840	2,840	2,840
R-squared	0.206	0.204	0.217	0.208	0.223
<i>Panel D: Community College</i>					
Post * Eligible	-202.136* (119.227)	-139.233 (127.081)	-58.724 (116.859)	47.393 (106.659)	-50.188 (107.729)
Observations	24,650	24,650	24,650	24,650	24,650
R-squared	0.106	0.105	0.114	0.116	0.122
<i>Panel E: For-Profit</i>					
Post * Eligible	98.865 (185.261)	254.761 (155.277)	187.970 (143.388)	144.563 (147.571)	195.765 (142.873)
Observations	8,050	8,050	8,050	8,050	8,050
R-squared	0.153	0.144	0.141	0.139	0.153

Note: The table presents estimates from regressions that include eligible veterans who first enrolled in college in 2003/2004 (pre-period) and 2008/2009 (post-period). The sample is restricted to veterans who enrolled within two years of their Army separation. All regressions include institution fixed effects along with the following controls, defined at the time of enlistment: gender, race, age, educational attainment, and marital status. Standard errors are clustered at the institution level.