# BUDGETARY COSTS OF MILITARY EDUCATIONAL BENEFITS

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#### PREFACE

Under the provisions of the "new GI Bill" that took effect on July 1, 1985, the Department of Defense is required to set aside current funds or "accrual charges" for its share of future payments of educational benefits for veterans. These funds are transferred to and held by the Veterans Administration, which also bears part of the cost of the program and is permitted to budget on the basis of actual outlays rather than accrual charges. Projections of future use of benefits by current service members thus affect both agencies' budgets in fiscal year 1986 and beyond.

In the course of the deliberations leading to enactment of the new GI Bill, the Congressional Budget Office (CBO) developed data and analytical techniques for estimating the percentage of benefits that service members will use. As presented in this staff working paper, CBO's estimates differ from the implicit projections of both the Department of Defense and the Veterans Administration. The differences have implications for those agencies' budget requests for fiscal year 1986 and beyond. In keeping with CBO's mandate for impartial and objective analysis, this report makes no recommendations.

This working paper was prepared by Ed Shephard of CBO's National Security Division, under the general supervision of Neil Singer and Robert Hale, and Kelly Lukins and Marianne Deignan of the Budget Analysis Division. The authors benefited from data kindly supplied by the Office of the Comptroller of the Department of Defense and the Veterans Administration. Helpful comments were received from Charles Seagrave and Kathleen Shepherd of BAD and John Enns of NSD. The report was edited by Paul Houts. G. William Darr prepared the report for publication.

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The Veterans Educational Assistance Act of 1984 (referred to here as the "new GI Bill") was enacted as part of the 1985 Department of Defense (DoD) authorization bill (P.O. 98-525). It provides differing benefits for new entrants to active duty, certain members of the current active-duty forces who served during the Vietnam era, and the Selected Reserve. This paper compares CBO's budget projections for the new GI Bill in fiscal years 1986-1990 with those included in the April 1985 revision of the Administration's budget request. The comparison suggests that, relative to CBO's estimates, the Administration is overfunding the new GI Bill in the defense function (budget function 050) of the budget in fiscal years 1986 through 1990. In the budget as a whole, however, the GI Bill is underfunded in fiscal years 1986 through 1989 but overfunded in 1990.

In the defense function of the budget, funds are appropriated to be set aside or "accrued" to pay future costs of all but the basic benefits under the new GI Bill. By CBO's estimate, the Administration has set aside \$49 million too much in 1986 and \$186 million too much in 1986 through 1990 in the defense function (see function 050 in Table 1). Elsewhere in the budget, funds are appropriated for the basic benefits of the new GI Bill (in budget function 700, Veterans Benefits and Services) and other charges. By CBO estimates, funding in these areas is too low by \$113 million in budget authority in 1986, but by 1990 it is too high by \$77 million (see Table 1).

The differences between the CBO and Administration estimates occur because the Administration assumes substantially higher rates of benefit use under the new GI Bill. CBO's estimates of these rates are closer to historical experience.

The following sections provide a summary of the program's provisions, a description of the differences between the Administration's and CBO's underlying cost assumptions, and the budgetary implications of these differences.

#### PROVISIONS OF THE NEW GI BILL

Benefits under the new GI Bill vary depending on whether the recipients are new entrants to active duty, active duty personnel from the Vietnam era, or reserves.

## New Entrants

New entrants into the active-duty forces may become eligible for benefits under this new GI Bill if they begin active duty service between July 1, 1985

TABLE 1. COMPARISON OF ADMINISTRATION AND CBO BUDGET PROJECTIONS FOR THE NEW GI BILL (By fiscal year, in millions of current year dollars)

		1986	1987	1988	1989	1990	Total 1986- 1990
Function 050							
Administration	BA O	216 216	220 220	185 185	0	0 0	621 621
СВО	BA O	167 167	156 156	112 112	- 0 0	0	435 435
Function 700 <u>a</u> /							
Administration	BA O	19 -199	-43 -255	-41 -190	17 89	20 <i>5</i> 304	157 -251
СВО	BA O	132 -34	115 -32	87 -8	35 63	128 163	497 152
Function 950							
Administration	BA O	-216 -216	-220 -220	-185 -185	0	0	-621 -621
СВО	BA O	-167 -167	-156 -156	-112 -112	0	0	-435 -435
Total Budgetary Impac	et						
Administration	BA O	19 -199	-43 -255	-41 -190	17 89	20 <i>5</i> 304	157 -251
СВО	BA O	132 -34	115 -32	87 -8	35 63	128 163	497 152
Difference <u>b</u> /	BA O	-113 -165	-158 -223	-128 -182	-18 26	77 141	-340 -403

Function 700 numbers include participant pay reductions that are treated as offsetting receipts (both budget authority and outlays). Administration projections less CBO projections.

b.

and June 30, 1988, and serve for a minimum of three years (or two years on active duty and four years in the Selected Reserve). The program provides for a basic educational benefit of \$300 per month for 36 months for active duty members. (For a two-year enlistment only, the basic benefit is reduced to \$250 per month.) At the discretion of the Secretary of Defense, members who enlist into critical skills may have their monthly benefit increased by up to \$400 in "discretionary" benefits.

To be eligible for these benefits, new entrants must agree to a \$100 per month pay reduction during their first 12 months on active duty. Eligibility is further restricted to members who have earned a high school diploma or its equivalent. Academy and ROTC graduates are not eligible.

After completing two years of service, participants who continue on active duty may use their benefits to train on a part-time basis. Post-service use is limited to members who have separated with an honorable discharge.

## Vietnam Era Eligibles

The older, Vietnam Era GI Bill is available only to those who entered service by December 31, 1976. Benefits must be used before December 31, 1989. By remaining on active duty until June 30, 1988, however, current active duty members who are eligible for the Vietnam Era GI Bill and have served without a break in service since December 31, 1976 may receive the \$300 basic benefit under the new GI Bill plus one-half of what they would have been entitled to under the old GI Bill. This entitlement may be used after December 31, 1989. No pay reduction is required.

## Supplemental Retention Benefits

If retention problems dictate, the Secretary of Defense may supplement the above benefits—for both new entrants and Vietnam Era personnel—by up to \$600 per month for eligible members who, after completing the required service for entitlement to the basic benefits, reenlist and serve for five additional years in designated skills.

#### Reserve Benefits

People who enlist, reenlist, or extend service for six years in the Selected Reserves (between July 1, 1985 and June 30, 1988) may receive \$140 per month for 36 months under the new GI Bill. No reduction in pay is required

for establishing eligibility. The use of reserve benefits is restricted to individuals who have earned a high school diploma or its equivalent. Reserve benefits may not be used for post-baccalaureate training.

## Funding of Benefits

The basic benefit and benefits for Vietnam Era veterans are to be paid from funds appropriated to the Veterans Administration (VA). Appropriations will be requested to cover outlays as they occur. Thus, no appropriations are anticipated in function 700 until 1988, when the first participants will be eligible to begin training. The discretionary and reserve benefits are to be financed through appropriations to DoD, which are then transferred to the VA. The DoD financing is appropriated on an accrual basis, so that appropriations are requested in each year to cover the expected future cost of benefits for those service members currently earning entitlement to benefits. The accrual payments are held in function 700, from which they will outlay when the participants begin training.

#### COMPARISON OF ESTIMATES

CBO's budget estimates for these new GI Bill provisions differ from DoD estimates largely because of estimates of future use. This section describes those use estimates and, to help the reader judge between the estimates, compares them with use under the Vietnam Era GI Bill (available to people whose military service began on or before December 31, 1976) and under the Veterans Educational Assistance Program and Army College Fund (available to people who began military service between January 1, 1977 and June 30, 1985). The differences among CBO, DoD, and VA are summarized in Table 2.

## Usage Rates

"Usage" rates reflect both the fraction of eligibles who participate in the program and the portion of available benefits that each participant uses. Thus, if 50 percent participate and each participant uses, on average, half of his or her benefits, the usage rate is 25 percent  $(.5 \times .5 = .25)$ .

CBO estimates that usage rates under the new GI Bill will range from 10 percent to 30 percent according to the amount of benefits available. Usage rates will be:

o 10 percent under the basic-only program (14 percent participation times 75 percent utilization);

TABLE 2. COMPARISON OF CBO AND ADMINISTRATION USAGE RATE ASSUMPTIONS FOR THE NEW GI BILL FOR NEW ACTIVE-DUTY ACCESSIONS (In percents)

	Participation Rate	X	Utilizatio Rate	n =	Usag Rate	
	Ba	asic-Only	y Benefit			<del></del>
СВО	14		75 a	<u>a</u> /	10	
DoD	61		40	<del></del> '	24	
VA	75		40		30	<u>b</u> /
	Basic-Plus-Dis	cretiona	ry Enlistment	t Benefit		
СВО	45		66 ;	<u>a</u> /	30	
DoD	100		<i>5</i> 0 <sup>-</sup>	<del></del> '	50	
٧A	75		40		30	<u>b</u> /

NOTE: Under the Vietnam Era GI Bill, the cohort separating in fiscal year 1973 had 64 percent of all eligibles using an average of 40 percent of their entitlement, yielding a usage rate of 26 percent.

- a. CBO's utilization rates are higher than the Administration's and the historical average because CBO's numbers are adjusted to reflect non-participation by individuals with schooling plans that are shorter than average in duration. For these individuals, the present discounted value (PDV) of participant contributions outweighs the PDV of expected benefits.
- b. The VA assumed that overall utilization rates would be similar to those under the Vietnam Era GI Bill. For comparison, CBO used utilization data from fiscal year 1973 separations to derive the VA's usage rate.
  - o 30 percent under the basic-plus-discretionary program (45 percent participation times 66 percent utilization);
  - o 24 percent under the special program for Vietnam Era eligibles; and
  - o 13 percent under the Reserve program.

These estimates seem consistent with history. For those people who left service in 1973, and so have apparently completed schooling under the Vietnam Era GI Bill, usage rates amounted to about 26 percent. CBO estimates that future use under the basic-only program of the new GI Bill will be less (10 percent) than under the Vietnam Era Bill because the basic-only program offers lower real benefits than did the Vietnam Era Bill and requires a pay reduction. Usage rates under the basic-plus-discretionary program (30 percent)—which offers larger real benefits than the Vietnam Era Bill but requires a pay reduction—are expected to be quite similar to those under the Vietnam Era Bill.

On the other hand, DoD based its budget estimates on higher usage rates. It assumed that those eligible for the basic-plus discretionary benefits would use 50 percent of their benefits, while those eligible for basic-only benefits would use 24 percent. 1/ The estimate for the basic-plus-discretionary program--which is most similar to the old Vietnam Era GI Bill--is considerably higher than the usage rate of the old bill (26 percent).

The usage estimates of the Veterans Administration, which dictates the VA's funding requirements, stem from its experience under the Vietnam Era GI Bill, when the average utilization rate of benefits was 40 percent. In light of the differences between the Vietnam Era GI Bill and the new program, however, VA's historical experience may not be a good guide. In particular, the contributory feature of the new program would appear to increase the likelihood that participants will actually use their benefits. And at the low benefit level of the basic-only program, those members who use benefits would seem likely to use a larger percentage of their eligibility than those who trained under the more generous Vietnam Era program.

The reason that the Administration's usage estimates are higher than those of CBO is because the Administration projects much higher participation rates (the portion of eligibles who will join the program) than does CBO.

<sup>1.</sup> These rates were derived by CBO from DoD data. Combining DoD's participation rates (61 percent for basic-only benefits and 100 percent for basic-plus-discretionary benefits) with its assumption that the fraction of entitlement used by participants will be 40 percent for those receiving basic benefits only and 50 percent for those receiving basic-plus-discretionary benefits, DoD's usage rates are 24 percent for the basic-only group and 50 percent for the basic-plus-discretionary group. While separate data (by benefit category) were not available from the VA, they assumed that overall usage rates (for the 75 percent who would elect benefits) would be similar to those experienced under the Vietnam Era GI Bill.

The Veterans Administration assumes that 75 percent of all eligible entrants (with or without discretionary benefits) will elect to participate. DoD estimates that 61 percent of those eligible for the basic-only program--and 100 percent of those eligible for the basic-plus-discretionary program--will participate. CBO estimates that 14 percent and 45 percent, respectively, will participate.

Again, CBO's estimates seem closer to history. About two-thirds of all service personnel used some benefits under the Vietnam Era Bill. CBO's lower participation estimates under the new GI Bill (14 percent to 45 percent) reflect both the benefit levels and the pay reduction required under the new bill; there was no such reduction under the Vietnam Era Bill (see Table 3). Under the two educational programs most recently in effect (the Veterans Educational Assistance Program and Army College Fund), CBO estimates effective participation at 10 percent and 40 percent respectively. (Effective participation equals total participation less those who choose to quit the program and receive refunds of their contributions.) These rates are similar to CBO's estimates for the new GI Bill. This seems appropriate since the bills offer offsetting advantages and disadvantages: the new GI Bill offers larger benefits than the two programs recently in effect but also requires earlier pay reductions and offers no chance to quit (see Table 3).

## Basis for Estimates

CBO's estimates are similar to historical rates because they are based on an econometric model that relates past usage rates under the Vietnam Era GI Bill to factors correlated with use of GI Bill benefits. The factors include:

- o Pay reductions;
- o Inflation-adjusted benefit levels;
- o Unemployment rates; and
- o Time since discharge from service.

## BUDGETARY IMPLICATIONS OF CBO VS. ADMINISTRATION PROJECTIONS

This section discusses the effects that differing participation and usage rates have on each section of the budget.

TABLE 3. COMPARISON OF PROVISIONS OF THE VIETNAM ERA GI BILL, THE VETERANS EDUCATIONAL ASSISTANCE PROGRAM (VEAP), AND THE ARMY COLLEGE FUND (ACF) WITH THE NEW GI BILL PROGRAM

Provision	GI Bill	VEAP/ACF	New GI Bill
Election Decision	N/A	Any time prior to separation	Time of entry
Termination of Participation	N/A	Permitted	Not permitted
Size of Monthly Contribution	0	Variable from \$25 to \$100 per month	Fixed at \$100 per month
Lump-Sum Contribution	N/A	Permitted	Not permitted
Total Required Contribution	0	Variable from \$0 to \$2,700	Fixed at \$1,200
Refund of Contribution	N/A	Permitted	Not permitted
Total Basic Benefit	\$16,920 <u>a</u> /	\$8,100 VEAP <u>b/</u> \$20,100 ACF <u>b/</u> <u>c/</u>	\$10,800 basic only \$25,200 basic-plus- discretionary <u>d</u> /

NOTE: N/A = Not Applicable.

- a. Using a monthly stipend of \$376 for full-time study by a veteran with no dependents in 1985. This amount reflects periodic adjustments that have been made to offset the effects of inflation. The Vietnam Era GI Bill was available for up to 45 months. For 36 months, the maximum value would be \$13,536.
- b. Assumes participant makes maximum contribution.
- c. For a four-year enlistment, up to \$26,400 is available.
- d. Assumes that recruits will receive the additional \$400 per month that the Secretary of Defense may offer qualified enlistees for entering skills experiencing critical shortages.

TABLE 4. COMPARISON OF ADMINISTRATION AND CBO BUDGET PROJECTIONS OF THE NEW GI BILL IN FUNCTION 050 (By fiscal year, in millions of current year dollars)

		1986	1987	1988	1989	1990	Total 1986- 1990		
Accrual Payments to T	Accrual Payments to Trust Fund								
Administration	BA O	216 216	220 220	185 185	0	0	621 621		
СВО	BA O	167 167	156 156	112 112	0	0	435 435		
Total Impact in Functi	on 050	l							
Administration	BA O	216 216	220 220	185 185	0 0	0	621 621		
СВО	BA O	167 167	156 156	112 112	0	0 0	435 435		
Difference in 050 $\underline{a}$ /	BA O	49 49	64 64	73 73	0	0	186 186		

## Accrual Charges (Functions 050, 700, and 950)

Because DoD's share of the costs is to be funded on an accrual basis, expected future liabilities must be paid into a trust fund as new service members enter either the active or reserve force. Because DoD's estimates of usage rates are substantially higher than those projected by CBO, the Administration has budgeted for larger trust fund payments. Using CBO's assumptions, budget authority and outlays in function 050 could be reduced by \$186 million between fiscal years 1986 and 1990 without underfunding for future liabilities (see Table 4). The amount of money available as offsetting

a. Administration projections less CBO projections.

TABLE 5. COMPARISON OF ADMINISTRATION AND CBO BUDGET PROJECTIONS OF THE NEW GI BILL IN FUNCTION 950 (By fiscal year, in millions of current year dollars)

		1986	1987	1988	1989	1990	Total 1986- 1990	
Accrual Payments to T	Accrual Payments to Trust Fund							
Administration	BA O	-216 -216	-220 -220	-185 -185	0	0	-621 -621	
СВО	BA O	-167 -167	-156 -156	-112 -112	. 0	0	-435 -435	
Total Impact in Functi	on 950	)						
Administration	BA O	-216 -216	-220 -220	-185 -185	0	0	-621 -621	
СВО	BA O	-167 -167		-112 -112	0	0	-435 -435	
Difference in 950 <u>a</u> /	BA O	-49 -49	-64 -64	-73 -73	0	0	-186 -186	

receipts, affecting both budget authority and outlays in function 950, would also be lower by the same amount (see Table 5). Budget authority for accrual charges in function 700, where the educational trust fund is located, could be reduced by \$186 million between fiscal years 1986 and 1990 (see Table 6).

## Pay Reductions (Function 700)

Pay reductions also affect budget function 700. Estimates of participation rates serve as the basis for estimating the deductions that will be taken

a. Administration projections less CBO projections.

TABLE 6. COMPARISON OF ADMINISTRATION AND CBO BUDGET PROJECTIONS OF THE NEW GI BILL IN FUNCTION 700 (By fiscal year, in millions of current year dollars)

		1986	1987	1988	1989	1990	Total 1986- 1990
Accrual Payments from	DoD				***************************************		
Administration	BA	216	220	185	0	0	621
	0	0	0	0	0	0	0
CBO	BA	167	156	112	0	0	435
	0	0	0	0	0	0	0
Interest Paid to Fund							
Administration	BA	10	22	32	. 34	30	128
	0	0	0	0	0	0	0
СВО	BA	7	15	22	23	22	89
	0	0	0	0	0	0	0
Deductions from Pay							
Administration	BA	-207	-285	-278	-73	0	-843
	0	-207	-285	-278	-73	0	-843
СВО	BA	-42	-56	-55	-20	0	-173
	0	-42	-56	-55	-20	0	-173
VA's Share of Training	Costs						
Administration	BA	0	0	20	56	175	251
	0	0	0	20	56	175	251
СВО	BA	0	0	8	32	106	146
	0	0	0	8	32	106	146
Training Costs Paid fro	m Tru	ust Fund	i				
Administration	BA	0.	0	0	0	0	0
	0	8	30	68	106	129	341
СВО	BA	0	0	0	0	0	0
	0	8	24	39	51	57	179
Total 700 Impact							
Administration	BA	19	-43	-41	17	205	157
	0	-199	-255	-190	89	304	-251
СВО	BA	132	115	87	35	128	497
	0	-34	-32	-8	63	163	152
Difference in 700 a/	BA	-113	-158	-128	-18	77	-340
		-165	-223	-182	26	141	-403

a. Administration projections less CBO projections.

from the pay of new entrants. These deductions are reflected as offsetting receipts in function 700. Because CBO expects that actual participation rates will be lower than those assumed by the Administration (17 percent overall for CBO versus 66 percent by the Administration), the amount of money available as offsetting receipts would be lower by \$670 million between fiscal years 1986 and 1990 (see Table 6, "Deductions from pay"). Using CBO's lower estimate for offsetting receipts would increase both budget authority and outlays in function 700 by \$670 million.

## Interest Payments (Function 700)

Because accrual payments would be lower using CBO's cost estimate, interest paid on the trust fund's balance would also be lower. This would reduce budget authority in function 700 by \$39 million between fiscal years 1986 and 1990 (see Table 6).

## Benefit Use (Function 700)

Using CBO's estimates of participation and usage rates, outlays for training from function 700 would be \$267 million lower (\$105 million for VA's share and \$162 million from the trust fund) than the Administration's projection for fiscal years 1986 through 1990 (see Table 6). Because VA's share of the costs is funded on a pay-as-you-go basis, budget authority in function 700 would be \$105 million lower between fiscal years 1986 and 1990 (see Table 6).

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