
CBO's January 2017 Baseline Projections for the Student Loan Program.

On January 25, 2017, CBO corrected the borrower interest rates in Table 4.

These six tables detail the costs, loan volumes, and subsidy rates for the direct student loan program for CBO's January 2017 baseline.

Table 1 includes the cost projections for each budget account associated with the student loan programs using estimating procedures established in the Federal Credit Reform Act (FCRA).

Table 2 includes the projections of loan volume and subsidy rates for the direct student loans using FCRA.

Table 3 includes expenditures for student aid administration.

Table 4 includes the projection of the borrower interest rates.

Table 5 includes the cost projections for the student loan programs using fair-value estimating procedures.

Table 6 includes the federal subsidy rates for student loans using fair-value estimating procedures.

The differences between federal credit reform and fair value estimating procedures are as follows:

FCRA requires that the lifetime costs of student loans be recorded up front on an accrual basis (that is, they are recognized in the year in which the loan is made). The lifetime cost of a federal loan—called its subsidy cost—is measured by discounting all of the expected future cash flows associated with the loan to a present value at the date the loan is disbursed. Those cash flows include the amounts disbursed, principal repaid, interest received, fees charged, and net losses that accrue from defaults.

Under the rules specified in FCRA, the present value of expected future cash flows is calculated by discounting those cash flows using the rates on U.S. Treasury securities with similar terms to maturity. For instance, the yield on a Treasury security maturing in one year is used to discount cash flows one year from disbursement, a two-year rate is used for cash flows two years from disbursement, and so on.

In contrast, under the fair-value estimating procedures, estimates are based on market values—market prices or approximations of market prices when directly comparable figures are unavailable—which more fully account for the cost of the risk the government incurs. The fair-value approach accounts for the cost of market risk, which FCRA procedures using Treasury rates, do not.

The definitions of budget authority, program obligations, and outlays as they apply to the student loan program subsidy or "program" accounts are as follows:

Subsidy budget authority figures express what total subsidy costs would be if all the loans for which an eligible application was received during a year were made. In reality, not all loans are disbursed because prospective borrowers either do not show up for school or decide not to take all or part of the loan for which they applied.

Subsidy obligations are the costs associated with all loans for which there will be at least one cash disbursement (shown on the attached tables as Net Annual Loan Volume). Typically, the subsidy obligation estimates are not included in budget tables.

Subsidy outlays reflect the subsidy obligations adjusted for the timing of the cash disbursements. Because of the multiple disbursement requirements and the timing of the academic school years compared to the federal fiscal year, only about two-thirds of the dollars are disbursed to the borrowers during the first fiscal year. The remaining are disbursed in the following year.

Table 1.
Student Loan Program Budget Account Totals, Federal Credit Reform—CBO's January 2017 Baseline

(Millions of dollars, by fiscal year)

		2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2017-2027
Guaranteed Loans													
Program Account (Subsidy) ¹	Budget Authority	0	0	0	0	0	0	0	0	0	0	0	0
	Outlays	0	0	0	0	0	0	0	0	0	0	0	0
Program Liquidating Account	Budget Authority	0	0	0	0	0	0	0	0	0	0	0	0
	Outlays	-260	-221	-189	-162	-138	-119	-100	-85	-72	-62	-52	-1,460
Federal Student Loan Reserve Fund	Budget Authority	-98	-91	-85	-82	-82	-76	-65	-54	-45	-36	-28	-742
	Outlays	-98	-91	-85	-82	-82	-76	-65	-54	-45	-36	-28	-742
Subtotal, Guaranteed Loans	Budget Authority	-98	-91	-85	-82	-82	-76	-65	-54	-45	-36	-28	-742
	Outlays	-358	-312	-274	-244	-220	-195	-165	-139	-117	-98	-80	-2,202
Direct Loans													
Program Account (Subsidy) ¹	Budget Authority	-14,494	-13,944	-12,834	-11,753	-10,319	-9,890	-9,921	-10,051	-10,370	-10,822	-11,240	-125,636
	Outlays	-13,894	-12,594	-11,782	-10,827	-9,667	-8,996	-8,896	-8,987	-9,218	-9,585	-9,969	-114,415
Student Aid Administration													
Student Aid Administration (Discretionary) ²	Budget Authority	1,552	1,587	1,621	1,655	1,692	1,731	1,770	1,810	1,852	1,895	1,938	19,102
	Outlays	1,521	1,564	1,600	1,633	1,669	1,707	1,745	1,784	1,825	1,868	1,911	18,827
Student Aid Administration (Mandatory) ³	Budget Authority	1,863	1,937	2,009	2,079	2,154	2,234	2,320	2,405	2,475	2,528	2,581	24,585
	Outlays	1,827	1,918	1,991	2,062	2,135	2,214	2,299	2,384	2,457	2,515	2,568	24,369
Subtotal, Student Aid Administration	Budget Authority	3,415	3,523	3,629	3,734	3,846	3,965	4,090	4,215	4,327	4,423	4,519	43,688
	Outlays	3,348	3,483	3,591	3,695	3,804	3,921	4,044	4,168	4,283	4,383	4,478	43,196
Total Student Loans	Budget Authority	-11,177	-10,511	-9,290	-8,100	-6,555	-6,000	-5,895	-5,890	-6,088	-6,434	-6,749	-82,691
	Outlays	-10,904	-9,423	-8,465	-7,376	-6,083	-5,270	-5,017	-4,958	-5,053	-5,300	-5,571	-73,421

Components may not add up to totals because of rounding.

¹ Totals do not include credit reestimates or loan modifications because the Office of Management and Budget has not announced those totals for fiscal year 2017.

² Projections of discretionary spending for administering student aid are based on an inflation of the budget authority provided in the most recent appropriations act rather than on an estimate of the future costs of administering the program. This total does not reflect any potential reductions in spending stemming from the across-the-board cut (0.1901 percent) that is part of the continuing resolution that expires on April 28, 2017.

³ Projections of mandatory spending for administering student aid are based on estimated future costs of administering federal loan programs.

Table 2.
Total Direct Loan Program (New Loans Only), Federal Credit Reform—CBO's January 2017 Baseline

(By fiscal year)	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027
Total All New Loans^a											
Net Annual Loan Volume (Millions of dollars)	97,182	100,716	104,143	107,359	110,827	114,816	119,131	123,407	127,969	132,818	137,974
Net Number of Loans (Thousands)	17,033	17,420	17,813	18,153	18,484	18,900	19,363	19,856	20,327	20,832	21,373
Average Loan Amount	\$5,705	\$5,782	\$5,846	\$5,914	\$5,996	\$6,075	\$6,152	\$6,215	\$6,295	\$6,376	\$6,456
Subsidy Rate ^{b, c, d}	-13.30%	-12.36%	-11.01%	-9.80%	-8.35%	-7.74%	-7.48%	-7.32%	-7.29%	-7.33%	-7.32%
Subsidized Student Loans											
Net Annual Loan Volume (Millions of dollars)	22,223	22,963	23,789	24,547	25,268	26,121	27,059	28,092	29,059	30,089	31,185
Net Number of Loans (Thousands)	6,729	6,884	7,061	7,214	7,352	7,525	7,718	7,934	8,126	8,330	8,548
Average Loan Amount	\$3,303	\$3,336	\$3,369	\$3,403	\$3,437	\$3,471	\$3,506	\$3,541	\$3,576	\$3,612	\$3,648
Subsidy Rate ^{b, c, d}	1.77%	2.97%	4.30%	5.39%	6.73%	7.42%	7.68%	7.81%	7.87%	7.84%	7.83%
Unsubsidized Student Loans: Undergraduate											
Net Annual Loan Volume (Millions of dollars)	23,358	24,124	24,918	25,650	26,351	27,201	28,150	29,211	30,216	31,302	32,474
Net Number of Loans (Thousands)	6,744	6,896	7,052	7,188	7,311	7,472	7,656	7,866	8,056	8,263	8,488
Average Loan Amount	\$3,464	\$3,498	\$3,533	\$3,569	\$3,604	\$3,640	\$3,677	\$3,714	\$3,751	\$3,788	\$3,826
Subsidy Rate ^{b, c, d}	-6.58%	-6.23%	-5.41%	-4.78%	-3.92%	-3.50%	-3.36%	-3.28%	-3.27%	-3.34%	-3.36%
Unsubsidized Student Loans: Graduate											
Net Annual Loan Volume (Millions of dollars)	28,259	29,338	30,296	31,221	32,337	33,603	34,950	36,067	37,463	38,950	40,537
Net Number of Loans (Thousands)	1,982	2,033	2,074	2,112	2,162	2,220	2,282	2,327	2,388	2,453	2,523
Average Loan Amount	\$14,260	\$14,431	\$14,604	\$14,780	\$14,957	\$15,137	\$15,318	\$15,502	\$15,688	\$15,876	\$16,067
Subsidy Rate ^{b, c, d}	-18.61%	-17.30%	-15.56%	-13.68%	-11.73%	-10.98%	-10.68%	-10.51%	-10.47%	-10.52%	-10.53%
GradPLUS Student Loans											
Net Annual Loan Volume (Millions of dollars)	10,041	10,653	11,231	11,804	12,456	13,174	13,932	14,602	15,389	16,218	17,091
Net Number of Loans (Thousands)	578	595	609	622	637	654	672	683	699	716	732
Average Loan Amount	\$17,371	\$17,892	\$18,429	\$18,982	\$19,552	\$20,138	\$20,742	\$21,365	\$22,005	\$22,666	\$23,346
Subsidy Rate ^{b, c, d}	-20.80%	-19.03%	-16.99%	-15.23%	-13.00%	-12.15%	-11.80%	-11.61%	-11.54%	-11.59%	-11.60%
Parent Loans											
Net Annual Loan Volume (Millions of dollars)	13,302	13,637	13,910	14,138	14,417	14,716	15,039	15,435	15,842	16,259	16,687
Net Number of Loans (Thousands)	1,001	1,011	1,016	1,017	1,022	1,028	1,035	1,047	1,058	1,070	1,082
Average Loan Amount	\$13,288	\$13,487	\$13,690	\$13,895	\$14,103	\$14,315	\$14,530	\$14,748	\$14,969	\$15,193	\$15,421
Subsidy Rate ^{b, c, d}	-33.33%	-33.15%	-32.53%	-32.18%	-31.30%	-31.12%	-31.07%	-31.02%	-31.08%	-31.17%	-31.19%

Components may not add up to totals because of rounding.

a. Totals exclude consolidation loans stemming from loans issued prior to 2017.

b. The subsidy rate is the net present value of the future federal cash flows divided by the loan dollars disbursed to borrowers each year. For example, the 2018 federal cost associated with the \$100,716 thousand in new loan volume would be -\$12,448 million or -12.36% of the new loan volume [$\$100,716 \times -.1236 = -\$12,449$]. In other words, the federal government will save on average about 12 cents for each new dollar loaned in 2018.

c. Subsidy rates do not include federal administrative costs associated with disbursing and servicing loans. Those administrative costs are included in the budget on a cash basis (see Table 3).

d. Subsidy rates were calculated using CBO's January 2017 interest rate forecast.

Table 3.
Student Aid Administration—CBO's January 2017 Baseline

(Millions of dollars, by fiscal year)

		2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2017-2027
Mandatory Administrative Costs													
Outstanding Guaranteed Loans													
Administrative Account	Budget Authority	577	581	583	583	581	576	569	559	546	533	518	6,206
	Outlays	575	580	582	583	582	577	571	561	549	536	522	6,219
Default Prevention ^a	Budget Authority	83	80	78	75	73	71	69	67	65	63	61	784
	Outlays	83	80	78	75	73	71	69	67	65	63	61	784
Loan Collection Costs ^a	Budget Authority	0	0	0	0	0	0	0	0	0	0	0	0
	Outlays	14	12	10	8	7	6	5	4	4	3	3	77
Subtotal, Mandatory	Budget Authority	660	661	661	658	654	647	638	625	610	596	579	6,990
	Outlays	672	672	670	667	662	655	645	632	617	602	586	7,080
Direct Loans													
Administrative Account	Budget Authority	1,286	1,356	1,426	1,496	1,573	1,658	1,751	1,846	1,929	1,995	2,063	18,379
	Outlays	1,251	1,338	1,408	1,479	1,553	1,637	1,728	1,823	1,908	1,979	2,046	18,150
Subtotal, Mandatory	Budget Authority	1,286	1,356	1,426	1,496	1,573	1,658	1,751	1,846	1,929	1,995	2,063	18,379
	Outlays	1,251	1,338	1,408	1,479	1,553	1,637	1,728	1,823	1,908	1,979	2,046	18,150
Total Mandatory	Budget Authority	1,946	2,017	2,087	2,155	2,227	2,305	2,389	2,472	2,539	2,591	2,642	25,369
	Outlays	1,923	2,010	2,078	2,145	2,215	2,291	2,373	2,455	2,526	2,581	2,632	25,230
Discretionary Administrative Costs^b													
	Budget Authority	1,552	1,587	1,621	1,655	1,692	1,731	1,770	1,810	1,852	1,895	1,938	19,102
	Outlays	1,521	1,564	1,600	1,633	1,669	1,707	1,745	1,784	1,825	1,868	1,911	18,827
Total Administrative Costs^a													
	Budget Authority	3,498	3,604	3,707	3,810	3,919	4,036	4,159	4,281	4,391	4,486	4,580	44,471
	Outlays	3,444	3,574	3,679	3,779	3,884	3,998	4,118	4,239	4,351	4,449	4,543	44,057

Note: Components may not add up to totals because of rounding.

a. In the budget, funds for default prevention are included in the Student Loan Reserve Fund Account and funds for administering pre-1992 loans are included in the Liquidating Account. For purposes of this table, both are included in the total for administration.

b. Some of the funds for discretionary administrative costs are used for other student aid programs such as Pell grants.

Table 4.
Projection of Borrower Interest Rates—CBO's January 2017 Baseline

Award Year	Actual											
	2016-17	2017-18	2018-19	2019-20	2020-21	2021-22	2022-23	2023-24	2024-25	2025-26	2026-27	2027-28
10-year Treasury + 2.05% Capped 8.25%	3.76%	4.29%	4.54%	4.82%	5.13%	5.45%	5.56%	5.61%	5.63%	5.65%	5.65%	5.65%
10-year Treasury + 3.60% Capped 9.50%	5.31%	5.84%	6.09%	6.37%	6.68%	7.00%	7.11%	7.16%	7.18%	7.20%	7.20%	7.20%
10-year Treasury + 4.60% Capped 10.50%	6.31%	6.84%	7.09%	7.37%	7.68%	8.00%	8.11%	8.16%	8.18%	8.20%	8.20%	8.20%

Notes:
 Borrower interest rates are fixed for the life of the loan. The borrower interest rate is adjusted based on the last auction in May for the 10-year Treasury rate. That rate is in effect for all newly issued loans from July 1 through the following June 30.

The borrower interest rates used for estimating the cost of the student loan program are different from the rates shown above. The rates used for cost estimating purposes are projected using a Monte Carlo method to capture the effect of having a cap on interest rates under current law.

Table 5.
Student Loan Program Budget Account Totals, Fair Value Estimating Procedures—CBO's January 2017 Baseline

(Millions of dollars, by fiscal year)

		2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2017-2027
Guaranteed Loans ¹	Budget Authority	-98	-91	-85	-82	-82	-76	-65	-54	-45	-36	-28	-742
	Outlays	-358	-312	-274	-244	-220	-195	-165	-139	-117	-98	-80	-2,202
Direct Loan Program Account (Subsidy) ¹	Budget Authority	11,521	11,365	11,520	11,982	12,952	13,985	14,760	15,465	16,073	16,640	17,301	153,564
	Outlays	9,889	9,924	9,969	10,302	10,997	11,905	12,660	13,300	13,858	14,366	14,918	132,088
Student Aid Administration	Budget Authority	3,415	3,523	3,629	3,734	3,846	3,965	4,090	4,215	4,327	4,423	4,519	43,688
	Outlays	3,348	3,483	3,591	3,695	3,804	3,921	4,044	4,168	4,283	4,383	4,478	43,196
Total Student Loans	Budget Authority	14,839	14,798	15,064	15,635	16,716	17,874	18,785	19,625	20,354	21,027	21,792	196,509
	Outlays	12,879	13,095	13,286	13,752	14,581	15,631	16,538	17,329	18,024	18,651	19,316	173,083

Components may not add up to totals because of rounding.

¹ Totals do not include credit reestimates or loan modifications because the Office of Management and Budget has not announced those totals for fiscal year 2017.

Table 6.
Federal Subsidy Rates, Fair Value Estimating Procedures—CBO's January 2017 Baseline

	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027
All Loans	10.32%	9.82%	9.63%	9.71%	10.18%	10.62%	10.80%	10.93%	10.96%	10.93%	10.94%
Subsidized Loans	25.30%	24.60%	23.96%	24.06%	24.23%	24.72%	24.90%	24.99%	25.03%	25.01%	25.00%
Unsubsidized Loans: Undergraduate	19.24%	17.64%	16.36%	16.01%	15.64%	15.90%	15.98%	16.03%	16.02%	15.97%	15.95%
Unsubsidized Loans: Graduate	4.81%	5.06%	5.67%	6.16%	7.30%	7.83%	8.04%	8.16%	8.18%	8.14%	8.12%
GradPLUS Loans for Students	4.26%	4.75%	5.44%	5.78%	7.03%	7.62%	7.86%	8.00%	8.04%	8.00%	7.99%
Parent Loans	-14.10%	-14.69%	-14.95%	-15.50%	-15.20%	-15.11%	-15.10%	-15.07%	-15.13%	-15.21%	-15.23%

The subsidy rate is the net present value of the future federal cash flows divided by the loan dollars disbursed to borrowers each year. For example, the 2018 federal cost associated with the \$100,716 thousand in new loan volume would be \$9,889 million or 9.82% of the new loan volume [$\$100,716 \times .982 = \$9,889$]. In other words, the federal government will spend on average about 10 cents for each new dollar loaned in 2018.

Subsidy rates do not include federal administrative costs associated with disbursing and servicing loans. Those administrative costs are included in the budget on a cash basis (see Table 5).