
CBO's March 2016 Baseline Projections for the Student Loan Program.

These seven tables detail the costs, loan volumes, and subsidy rates for the direct student loan program for CBO's March 2016 baseline.

Table 1 includes the cost projection for each budget account associated with the student loan programs using credit reform estimating procedures.

Table 2 includes the projections of loan volume and subsidy rates for the direct student loans using credit reform estimating procedures.

Table 3 includes expenditures for student aid administration.

Table 4 includes the projection of the borrower interest rates.

Table 5 includes the cost projection 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 difference between federal credit reform and fair value estimating procedures are as follows:

The costs of the federal student loan programs are measured by procedures established in the Federal Credit Reform Act of 1990 (FCRA). Those procedures require 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.

CBO projects the costs of the student loan program for its March baseline using *credit reform estimating procedures*. 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 takes on. The fair-value approach accounts for the cost of market risk, which FCRA procedures 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. But all loans are seldom made—only about 90 percent. This is because prospective borrowers either do not show up for school or decide not to take all or part of the loan.

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 loan dollar disbursements. Because of the multiple disbursement requirements and the timing of the academic school year calendars 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 dollars are disbursed in the following year.

Table 1.
Student Loan Program Budget Account Totals, Federal Credit Reform—CBO's March 2016 Baseline

(Millions of dollars, by fiscal year)

		2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2016-2026
Guaranteed Loans													
Guaranteed Loan Program Account (Subsidy) ¹	Budget Authority	-1,075	0	0	0	0	0	0	0	0	0	0	-1,075
	Outlays	-1,075	0	0	0	0	0	0	0	0	0	0	-1,075
Guaranteed Loan Program Liquidating Account	Budget Authority	0	0	0	0	0	0	0	0	0	0	0	0
	Outlays	-291	-260	-221	-189	-162	-138	-119	-100	-85	-72	-62	-1,699
Federal Student Loan Reserve Fund	Budget Authority	-89	-98	-91	-85	-82	-82	-76	-65	-54	-45	-36	-803
	Outlays	-89	-98	-91	-85	-82	-82	-76	-65	-54	-45	-36	-803
Subtotal, Guaranteed Loans	Budget Authority	-1,164	-98	-91	-85	-82	-82	-76	-65	-54	-45	-36	-1,878
	Outlays	-1,455	-358	-312	-274	-244	-220	-195	-165	-139	-117	-98	-3,577
Direct Loans													
Direct Loan Program Account (Subsidy) ¹	Budget Authority	-3,975	-10,400	-8,495	-7,657	-7,161	-7,192	-7,328	-7,561	-7,850	-8,112	-8,467	-84,198
	Outlays	-3,274	-10,490	-8,148	-7,111	-6,581	-6,463	-6,556	-6,737	-6,978	-7,221	-7,512	-77,069
Student Aid Administration													
Student Aid Administration (Discretionary)	Budget Authority	1,552	1,584	1,619	1,655	1,693	1,732	1,771	1,812	1,853	1,897	1,942	19,110
	Outlays	1,442	1,539	1,592	1,632	1,669	1,707	1,746	1,786	1,827	1,869	1,914	18,723
Student Aid Administration (Mandatory)	Budget Authority	1,674	1,863	1,957	2,040	2,113	2,173	2,216	2,242	2,266	2,288	2,312	23,144
	Outlays	1,669	1,827	1,933	2,019	2,095	2,159	2,205	2,236	2,260	2,282	2,305	22,990
Subtotal, Student Aid Administration	Budget Authority	3,226	3,447	3,576	3,695	3,806	3,905	3,987	4,054	4,119	4,185	4,254	42,254
	Outlays	3,111	3,365	3,525	3,651	3,764	3,866	3,951	4,022	4,087	4,152	4,219	41,713
Total Student Loans	Budget Authority	-1,913	-7,051	-5,010	-4,047	-3,437	-3,369	-3,417	-3,572	-3,785	-3,972	-4,249	-43,822
	Outlays	-1,618	-7,483	-4,935	-3,734	-3,061	-2,817	-2,800	-2,880	-3,030	-3,187	-3,391	-38,935

Components may not add up to totals because of rounding.

¹ Fiscal Year 2016 Credit Reestimates and Loan Modifications (Included above):

Budget Authority	6,619
Outlays	6,619

Table 2.
Total Direct Loan Program (New Loans Only), Federal Credit Reform—CBO's March 2016 Baseline

(By fiscal year)	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026
Total All New Loans^a											
Net Annual Loan Volume (Millions of dollars)	94,090	95,590	98,587	101,867	105,060	108,149	111,248	114,753	118,630	122,750	127,130
Net Number of Loans (Thousands)	17,248	17,398	17,694	18,060	18,430	18,783	19,112	19,483	19,893	20,335	20,809
Average Loan Amount	\$5,455	\$5,494	\$5,572	\$5,640	\$5,701	\$5,758	\$5,821	\$5,890	\$5,963	\$6,036	\$6,109
Subsidy Rate ^{b, c, d}	-13.87%	-9.72%	-7.73%	-6.76%	-6.14%	-5.99%	-5.94%	-5.94%	-5.96%	-5.95%	-6.00%
Subsidized Student Loans											
Net Annual Loan Volume (Millions of dollars)	22,468	22,952	23,572	24,352	25,170	25,986	26,768	27,601	28,488	29,432	30,437
Net Number of Loans (Thousands)	6,871	6,949	7,067	7,228	7,397	7,561	7,712	7,873	8,045	8,230	8,426
Average Loan Amount	\$3,270	\$3,303	\$3,336	\$3,369	\$3,403	\$3,437	\$3,471	\$3,506	\$3,541	\$3,576	\$3,612
Subsidy Rate ^{b, c, d}	0.40%	4.72%	6.88%	7.88%	8.44%	8.55%	8.55%	8.53%	8.50%	8.49%	8.46%
Unsubsidized Student Loans: Undergraduate											
Net Annual Loan Volume (Millions of dollars)	24,460	24,986	25,649	26,420	27,241	28,069	28,871	29,741	30,681	31,697	32,796
Net Number of Loans (Thousands)	7,062	7,142	7,259	7,403	7,557	7,710	7,852	8,008	8,180	8,367	8,571
Average Loan Amount	\$3,464	\$3,498	\$3,533	\$3,569	\$3,604	\$3,641	\$3,677	\$3,714	\$3,751	\$3,788	\$3,826
Subsidy Rate ^{b, c, d}	-9.33%	-5.98%	-4.60%	-3.89%	-3.45%	-3.37%	-3.37%	-3.41%	-3.46%	-3.48%	-3.55%
Unsubsidized Student Loans: Graduate											
Net Annual Loan Volume (Millions of dollars)	26,577	26,397	27,311	28,282	29,118	29,892	30,633	31,631	32,694	33,826	35,031
Net Number of Loans (Thousands)	1,892	1,870	1,911	1,956	1,990	2,018	2,044	2,086	2,130	2,178	2,229
Average Loan Amount	\$14,049	\$14,119	\$14,289	\$14,460	\$14,634	\$14,809	\$14,987	\$15,167	\$15,349	\$15,533	\$15,719
Subsidy Rate ^{b, c, d}	-19.18%	-14.00%	-11.44%	-10.28%	-9.54%	-9.42%	-9.39%	-9.45%	-9.48%	-9.48%	-9.54%
GradPLUS Student Loans											
Net Annual Loan Volume (Millions of dollars)	8,980	9,437	9,997	10,518	11,022	11,518	12,116	12,744	13,404	14,098	14,826
Net Number of Loans (Thousands)	532	543	559	571	581	589	602	614	627	641	654
Average Loan Amount	\$16,865	\$17,371	\$17,892	\$18,429	\$18,982	\$19,552	\$20,138	\$20,742	\$21,365	\$22,005	\$22,666
Subsidy Rate ^{b, c, d}	-18.90%	-13.48%	-10.77%	-9.65%	-8.92%	-8.80%	-8.79%	-8.83%	-8.86%	-8.86%	-8.91%
Parent Loans											
Net Annual Loan Volume (Millions of dollars)	11,604	11,818	12,058	12,295	12,509	12,684	12,860	13,036	13,363	13,698	14,041
Net Number of Loans (Thousands)	891	894	898	903	905	904	903	902	911	920	929
Average Loan Amount	\$13,028	\$13,223	\$13,422	\$13,623	\$13,827	\$14,035	\$14,245	\$14,459	\$14,676	\$14,896	\$15,119
Subsidy Rate ^{b, c, d}	-35.06%	-33.14%	-32.00%	-31.35%	-30.96%	-30.94%	-30.91%	-30.99%	-31.03%	-31.03%	-31.13%

Components may not add up to totals because of rounding.

a. Totals exclude consolidation loans.

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 2017 federal cost associated with the \$95,590 million in new loan volume would be -\$9,294 million or -9.72% of the new loan volume [\$95,590 * -.972 = -\$9,294]. In other words, the federal government will save on average about 9 cents for each new dollar loaned in 2017.

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 4).

d. Subsidy rates were calculated using CBO's March 2016 interest rate forecast.

Table 3.
Student Aid Administration—CBO's March 2016 Baseline

(Millions of dollars, by fiscal year)

		2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2016-2026
Mandatory Administrative Costs													
Outstanding Guaranteed Loans													
Administrative Account	Budget Authority	571	577	581	583	583	581	576	569	559	546	533	6,258
	Outlays	572	575	580	582	583	582	577	571	561	549	536	6,269
Default Prevention ^a (included in the Federal Student Loan Reserve Account)	Budget Authority	85	83	80	78	75	73	71	69	67	65	63	808
	Outlays	85	83	80	78	75	73	71	69	67	65	63	808
Loan Collection Costs ^a (included in the Liquidating Account)	Budget Authority	0	0	0	0	0	0	0	0	0	0	0	0
	Outlays	<u>17</u>	<u>14</u>	<u>12</u>	<u>10</u>	<u>8</u>	<u>7</u>	<u>6</u>	<u>5</u>	<u>4</u>	<u>4</u>	<u>3</u>	91
Subtotal, Mandatory	Budget Authority	656	660	661	661	658	654	647	638	625	610	596	7,066
	Outlays	674	672	672	670	667	662	655	645	632	617	602	7,167
Direct Loans													
Administrative Account	Budget Authority	1,103	1,286	1,376	1,457	1,530	1,592	1,640	1,673	1,707	1,742	1,779	16,885
	Outlays	1,097	1,251	1,353	1,437	1,512	1,577	1,628	1,665	1,699	1,733	1,769	16,722
Subtotal, Mandatory	Budget Authority	1,103	1,286	1,376	1,457	1,530	1,592	1,640	1,673	1,707	1,742	1,779	16,885
	Outlays	1,097	1,251	1,353	1,437	1,512	1,577	1,628	1,665	1,699	1,733	1,769	16,722
Total Mandatory	Budget Authority	1,759	1,946	2,037	2,118	2,189	2,246	2,287	2,311	2,332	2,352	2,375	23,952
	Outlays	1,771	1,923	2,025	2,107	2,179	2,238	2,282	2,310	2,331	2,351	2,372	23,889
Discretionary Administrative Costs^b													
	Budget Authority	1,552	1,584	1,619	1,655	1,693	1,732	1,771	1,812	1,853	1,897	1,942	19,110
	Outlays	1,442	1,539	1,592	1,632	1,669	1,707	1,746	1,786	1,827	1,869	1,914	18,723
Total Administrative Costs^a													
	Budget Authority	3,311	3,530	3,656	3,773	3,882	3,978	4,058	4,123	4,185	4,249	4,317	43,062
	Outlays	3,213	3,462	3,617	3,739	3,848	3,946	4,028	4,096	4,158	4,220	4,285	42,612

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, they 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 March 2016 Baseline

	Actual 2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026
10-year Treasury + 2.05% Capped 8.25%	4.29%	4.22%	4.72%	5.46%	5.87%	6.08%	6.18%	6.19%	6.19%	6.19%	6.19%	6.19%
10-year Treasury + 3.60% Capped 9.50%	5.84%	5.77%	6.27%	7.01%	7.42%	7.63%	7.73%	7.74%	7.74%	7.74%	7.74%	7.74%
10-year Treasury + 4.60% Capped 10.50%	6.84%	6.77%	7.27%	8.01%	8.42%	8.63%	8.73%	8.74%	8.74%	8.74%	8.74%	8.74%

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 March 2016 Baseline

(Millions of dollars, by fiscal year)

		2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2016-2026
Guaranteed Loans ¹	Budget Authority	-1,164	-98	-91	-85	-82	-82	-76	-65	-54	-45	-36	-1,878
	Outlays	-1,455	-358	-312	-274	-244	-220	-195	-165	-139	-117	-98	-3,577
Direct Loan Program Account (Subsidy) ¹	Budget Authority	19,871	13,959	14,668	14,658	14,837	14,712	15,205	15,695	16,202	16,780	17,330	173,917
	Outlays	18,932	11,674	12,588	12,785	12,911	12,873	13,142	13,573	14,013	14,500	14,990	151,982
Student Aid Administration	Budget Authority	3,226	3,447	3,576	3,695	3,806	3,905	3,987	4,054	4,119	4,185	4,254	42,254
	Outlays	3,111	3,365	3,525	3,651	3,764	3,866	3,951	4,022	4,087	4,152	4,219	41,713
Total Student Loans	Budget Authority	21,933	17,308	18,153	18,268	18,561	18,535	19,116	19,684	20,267	20,919	21,548	214,293
	Outlays	20,588	14,682	15,801	16,163	16,431	16,519	16,898	17,430	17,961	18,534	19,111	190,118

Components may not add up to totals because of rounding.

¹ Fiscal Year 2016 Credit Reestimates and Loan Modifications (Included above):

Budget Authority	6,619
Outlays	6,619

Table 6.
Federal Subsidy Rates, Fair Value Estimating Procedures—CBO's March 2016 Baseline

	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026
All Loans	11.28%	12.74%	12.99%	12.56%	12.33%	11.87%	11.93%	11.94%	11.92%	11.94%	11.90%
Subsidized Loans	25.64%	27.12%	27.09%	26.28%	26.10%	25.39%	25.39%	25.38%	25.36%	25.35%	25.32%
Unsubsidized Loans: Undergraduate	18.66%	19.16%	18.25%	16.94%	16.59%	15.71%	15.72%	15.69%	15.64%	15.63%	15.57%
Unsubsidized Loans: Graduate	5.55%	7.96%	9.18%	9.46%	9.19%	8.99%	9.01%	8.96%	8.94%	8.94%	8.88%
GradPLUS Loans for Students	5.83%	8.37%	9.68%	9.86%	9.60%	9.37%	9.38%	9.35%	9.32%	9.32%	9.27%
Parent Loans	-14.76%	-14.59%	-14.41%	-14.55%	-14.96%	-15.26%	-15.24%	-15.31%	-15.34%	-15.34%	-15.43%

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 2017 federal cost associated with the \$95,590 million in new loan volume would be \$12,178 million or 12.74% of the new loan volume [$\$95,590 \times 0.1274 = \$12,179$]. In other words, the federal government will spend on average about 13 cents for each new dollar loaned in 2017.

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).