

Student Loan Programs—CBO's April 2018 Baseline

Under the William D. Ford Direct Loan Program, the federal government provides education loans to undergraduate and graduate students and to the parents of undergraduate students. In the direct loan program, the federal government serves as the lender for all borrowers but contracts with private entities to service those loans. Before July 1, 2010, the federal government also provided loan guarantees to financial institutions to provide federal student loans through the Federal Family Education Loan Program. The current program offers four types of loans:

- **Subsidized loans** are need-based loans for undergraduate students. No interest accrues while the borrower is enrolled or during other deferment periods, and borrowing is limited by a student's class level and dependency status.
- **Unsubsidized loans** are non-need-based loans for undergraduate and graduate students. Interest accrues from origination, and borrowing is limited by a student's class level and dependency status.
- **PLUS parent loans** are non-need-based loans for parents of dependent undergraduates. Interest accrues from origination, and borrowing is limited only by the cost of attendance.
- **GradPLUS loans** are non-need-based loans for graduate students. Interest accrues from origination, and borrowing is limited only by the cost of attendance.

CBO's April 2018 Baseline Projections for the Student Loan Program.

These six tables detail the costs, loan volumes, and subsidy rates for the student loan programs for CBO's April 2018 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 FCRA 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 April 2018 Baseline

(Millions of dollars, by fiscal year)

		2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2018-2028
Direct Student Loans													
Program Account ¹	Budget Authority	-2,711	-4,601	-1,634	-327	-1,229	-3,058	-4,227	-4,104	-4,085	-4,112	-4,042	-34,130
	Outlays	-3,285	-5,441	-2,464	-826	-984	-2,334	-3,564	-3,835	-3,793	-3,809	-3,781	-34,115
Credit reestimates and modifications ²	Budget Authority	-11,477	0	0	0	0	0	0	0	0	0	0	-11,477
	Outlays	-11,477	0	0	0	0	0	0	0	0	0	0	-11,477
Subtotal, Direct Loans	Budget Authority	-14,188	-4,601	-1,634	-327	-1,229	-3,058	-4,227	-4,104	-4,085	-4,112	-4,042	-45,607
	Outlays	-14,762	-5,441	-2,464	-826	-984	-2,334	-3,564	-3,835	-3,793	-3,809	-3,781	-45,592
Guaranteed Student Loans													
Program Liquidating Account and Federal Student Loan Reserve Fund	Budget Authority	-425	-391	-351	-315	-279	-240	-195	-157	-129	-105	-87	-2,674
	Outlays	-637	-578	-513	-452	-392	-333	-270	-218	-178	-145	-119	-3,835
Credit reestimates and modifications ²	Budget Authority	2,309	0	0	0	0	0	0	0	0	0	0	2,309
	Outlays	2,309	0	0	0	0	0	0	0	0	0	0	2,309
Subtotal, Guaranteed Loans	Budget Authority	1,884	-391	-351	-315	-279	-240	-195	-157	-129	-105	-87	-365
	Outlays	1,672	-578	-513	-452	-392	-333	-270	-218	-178	-145	-119	-1,526
Student Aid Administration													
Student Aid Administration (Discretionary) ³	Budget Authority	1,679	1,718	1,759	1,804	1,848	1,892	1,939	1,998	2,032	2,080	2,129	20,879
	Outlays	1,622	1,685	1,731	1,776	1,820	1,864	1,910	1,963	2,006	2,051	2,099	20,525
Student Aid Administration (Mandatory) ⁴	Budget Authority	1,372	1,438	1,486	1,537	1,593	1,654	1,713	1,762	1,799	1,836	1,874	18,064
	Outlays	1,309	1,422	1,474	1,524	1,579	1,639	1,698	1,749	1,790	1,826	1,864	17,875
Subtotal, Student Aid Administration	Budget Authority	3,051	3,157	3,245	3,341	3,441	3,546	3,653	3,759	3,831	3,916	4,004	38,944
	Outlays	2,930	3,106	3,205	3,300	3,399	3,503	3,608	3,712	3,796	3,878	3,963	38,400
Total Spending, Student Loans													
Total Student Loans	Budget Authority	-9,253	-1,835	1,260	2,699	1,933	248	-769	-501	-383	-301	-126	-7,028
	Outlays	-10,159	-2,913	228	2,022	2,023	836	-225	-341	-175	-76	63	-8,718

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

Table incorporates the effects of the Consolidated Appropriations Act of 2018 (P.L. 115-141), as signed by the President on March 23, 2018.

¹ Estimated spending for fiscal year 2018 includes additional adjustments based on current spending patterns projected by the Office of Management and Budget.

² Costs for credit reestimates and modifications are changes to the estimated costs of outstanding loans originated in years prior to 2018. Those totals are based on the amounts that the Office of Management and Budget expects to record in fiscal year 2018.

³ 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.

⁴ 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 April 2018 Baseline

(By fiscal year)	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028
Total All New Loans^a											
Net Annual Loan Volume (Millions of dollars)	95,829	99,319	102,621	106,168	110,213	114,569	118,723	123,131	127,798	132,740	137,976
Net Number of Loans (Thousands)	16,225	16,594	16,913	17,223	17,611	18,042	18,489	18,913	19,366	19,852	20,370
Average Loan Amount	\$5,906	\$5,985	\$6,068	\$6,164	\$6,258	\$6,350	\$6,421	\$6,510	\$6,599	\$6,687	\$6,774
Subsidy Rate ^{b, c, d}	-8.20%	-4.15%	-1.56%	-0.43%	-1.14%	-2.51%	-3.30%	-3.10%	-2.97%	-2.89%	-2.74%
Subsidized Student Loans											
Net Annual Loan Volume (Millions of dollars)	21,744	22,460	23,108	23,716	24,446	25,249	26,137	26,957	27,830	28,760	29,750
Net Number of Loans (Thousands)	6,423	6,569	6,692	6,800	6,940	7,097	7,273	7,427	7,592	7,768	7,956
Average Loan Amount	\$3,385	\$3,419	\$3,453	\$3,488	\$3,523	\$3,558	\$3,593	\$3,629	\$3,666	\$3,702	\$3,739
Subsidy Rate ^{b, c, d}	8.26%	12.13%	14.44%	15.45%	14.79%	13.49%	12.70%	12.83%	12.92%	13.01%	13.13%
Unsubsidized Student Loans: Undergraduate											
Net Annual Loan Volume (Millions of dollars)	22,773	23,523	24,213	24,875	25,678	26,574	27,575	28,524	29,549	30,655	31,849
Net Number of Loans (Thousands)	6,322	6,465	6,589	6,702	6,850	7,019	7,211	7,386	7,575	7,781	8,004
Average Loan Amount	\$3,602	\$3,638	\$3,675	\$3,711	\$3,748	\$3,786	\$3,824	\$3,862	\$3,901	\$3,940	\$3,979
Subsidy Rate ^{b, c, d}	-1.58%	1.73%	3.61%	4.50%	3.85%	2.65%	1.96%	2.16%	2.25%	2.31%	2.41%
Unsubsidized Student Loans: Graduate											
Net Annual Loan Volume (Millions of dollars)	27,759	28,833	29,888	31,122	32,498	33,948	35,152	36,601	38,128	39,738	41,436
Net Number of Loans (Thousands)	1,927	1,980	2,030	2,091	2,160	2,232	2,286	2,354	2,425	2,500	2,579
Average Loan Amount	\$14,403	\$14,561	\$14,721	\$14,883	\$15,047	\$15,213	\$15,380	\$15,549	\$15,720	\$15,893	\$16,068
Subsidy Rate ^{b, c, d}	-11.66%	-6.57%	-3.18%	-1.72%	-2.53%	-4.13%	-5.10%	-4.89%	-4.77%	-4.68%	-4.53%
GradPLUS Student Loans											
Net Annual Loan Volume (Millions of dollars)	10,653	11,231	11,804	12,456	13,174	13,932	14,602	15,389	16,218	17,091	18,011
Net Number of Loans (Thousands)	595	609	622	637	654	672	683	699	716	732	749
Average Loan Amount	\$17,892	\$18,429	\$18,982	\$19,552	\$20,138	\$20,742	\$21,365	\$22,005	\$22,666	\$23,346	\$24,046
Subsidy Rate ^{b, c, d}	-13.05%	-7.42%	-3.81%	-2.31%	-3.22%	-4.95%	-5.94%	-5.71%	-5.57%	-5.47%	-5.30%
Parent Loans											
Net Annual Loan Volume (Millions of dollars)	12,900	13,272	13,608	13,999	14,418	14,867	15,258	15,660	16,072	16,496	16,930
Net Number of Loans (Thousands)	957	970	980	993	1,007	1,023	1,035	1,046	1,058	1,070	1,082
Average Loan Amount	\$13,484	\$13,686	\$13,892	\$14,100	\$14,312	\$14,526	\$14,744	\$14,965	\$15,190	\$15,418	\$15,649
Subsidy Rate ^{b, c, d}	-36.17%	-34.08%	-32.45%	-31.54%	-32.01%	-32.94%	-33.53%	-33.30%	-33.23%	-33.24%	-33.19%

Components may not add up to totals because of rounding.

a. Totals exclude consolidation loans stemming from loans issued prior to 2018.

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 2019 federal cost associated with the \$99,319 million in new loan volume would be -\$4,119 million or -4.15% of the new loan volume [\$99,319 * -.0415 = -\$4,119]. In other words, the federal government will save on average about 4 cents for each new dollar loaned in 2019.

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 April 2018 interest rate forecast.

Table 3.
Student Aid Administration—CBO's April 2018 Baseline

(Millions of dollars, by fiscal year)

		2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2018-2028
Mandatory Administrative Costs													
Outstanding Guaranteed Loans													
Administrative Account	Budget Authority	426	422	417	412	405	397	388	377	367	355	343	4,309
	Outlays	440	423	418	413	407	399	390	380	370	358	346	4,344
Default Prevention Fee Paid to Guaranty Agencies ^a	Budget Authority	198	182	163	147	131	112	90	74	59	50	41	1,247
	Outlays	198	182	163	147	131	112	90	74	59	50	41	1,247
Loan Collection Costs on Pre-1992 loans ^a	Budget Authority	0	0	0	0	0	0	0	0	0	0	0	0
	Outlays	6	5	5	4	3	3	2	2	2	1	1	34
Subtotal, Mandatory	Budget Authority	624	604	580	559	536	509	478	451	426	405	384	5,556
	Outlays	644	610	586	564	541	514	483	456	430	410	388	5,625
Direct Loans													
Administrative Account	Budget Authority	946	1,017	1,069	1,125	1,188	1,257	1,325	1,385	1,432	1,480	1,532	13,755
	Outlays	869	999	1,056	1,111	1,172	1,240	1,308	1,370	1,420	1,468	1,519	13,531
Subtotal, Mandatory	Budget Authority	946	1,017	1,069	1,125	1,188	1,257	1,325	1,385	1,432	1,480	1,532	13,755
	Outlays	869	999	1,056	1,111	1,172	1,240	1,308	1,370	1,420	1,468	1,519	13,531
Total Mandatory	Budget Authority	1,570	1,620	1,649	1,684	1,724	1,766	1,803	1,836	1,858	1,886	1,915	19,311
	Outlays	1,513	1,609	1,642	1,675	1,714	1,754	1,791	1,825	1,850	1,878	1,906	19,156
Discretionary Administrative Costs^b													
	Budget Authority	1,679	1,718	1,759	1,804	1,848	1,892	1,939	1,998	2,032	2,080	2,129	20,879
	Outlays	1,622	1,685	1,731	1,776	1,820	1,864	1,910	1,963	2,006	2,051	2,099	20,525
Total Administrative Costs^a													
	Budget Authority	3,249	3,339	3,408	3,488	3,572	3,658	3,743	3,833	3,890	3,966	4,045	40,191
	Outlays	3,134	3,293	3,372	3,451	3,533	3,618	3,701	3,788	3,856	3,929	4,005	39,681

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

Table incorporates the effects of the Consolidated Appropriations Act of 2018 (P.L. 115-141), as signed by the President on March 23, 2018.

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 April 2018 Baseline

Award Year	Actual											
	2017-18	2018-19	2019-20	2020-21	2021-22	2022-23	2023-24	2024-25	2025-26	2026-27	2027-28	2028-29
Subsidized and Unsubsidized Loans to Undergraduate Students												
10-year Treasury + 2.05% Capped 8.25%	4.45%	4.99%	5.65%	6.12%	6.30%	6.13%	5.86%	5.72%	5.72%	5.74%	5.76%	5.79%
Unsubsidized Loans to Graduate Students												
10-year Treasury + 3.60% Capped 9.50%	6.00%	6.54%	7.20%	7.67%	7.85%	7.68%	7.41%	7.27%	7.27%	7.29%	7.31%	7.34%
PLUS Loans to Graduate Students and Parents												
10-year Treasury + 4.60% Capped 10.50%	7.00%	7.54%	8.20%	8.67%	8.85%	8.68%	8.41%	8.27%	8.27%	8.29%	8.31%	8.34%

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 April 2018 Baseline

(Millions of dollars, by fiscal year)

		2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2018-2028
Direct Student Loans													
Program Costs	Budget Authority	14,444	18,264	21,131	22,855	23,070	22,658	22,689	23,737	24,772	25,839	27,043	246,502
	Outlays	11,201	14,882	17,676	19,531	20,158	19,973	19,870	20,495	21,410	22,339	23,359	210,893
Credit reestimates and modifications ¹	Budget Authority	-11,477	0	0	0	0	0	0	0	0	0	0	-11,477
	Outlays	-11,477	0	0	0	0	0	0	0	0	0	0	-11,477
Subtotal, Direct Loans	Budget Authority	2,967	18,264	21,131	22,855	23,070	22,658	22,689	23,737	24,772	25,839	27,043	235,025
	Outlays	-276	14,882	17,676	19,531	20,158	19,973	19,870	20,495	21,410	22,339	23,359	199,416
Guaranteed Student Loans													
Program Costs	Budget Authority	-425	-391	-351	-315	-279	-240	-195	-157	-129	-105	-87	-2,674
	Outlays	-637	-578	-513	-452	-392	-333	-270	-218	-178	-145	-119	-3,835
Credit reestimates and modifications ¹	Budget Authority	2,309	0	0	0	0	0	0	0	0	0	0	2,309
	Outlays	2,309	0	0	0	0	0	0	0	0	0	0	2,309
Subtotal, Guaranteed Loans	Budget Authority	1,884	-391	-351	-315	-279	-240	-195	-157	-129	-105	-87	-365
	Outlays	1,672	-578	-513	-452	-392	-333	-270	-218	-178	-145	-119	-1,526
Student Aid Administration													
Student Aid Administration	Budget Authority	3,051	3,157	3,245	3,341	3,441	3,546	3,653	3,759	3,831	3,916	4,004	38,944
	Outlays	2,930	3,106	3,205	3,300	3,399	3,503	3,608	3,712	3,796	3,878	3,963	38,400
Total Spending, Student Loans													
Total Student Loans	Budget Authority	7,901	21,030	24,025	25,881	26,232	25,964	26,146	27,339	28,474	29,650	30,960	273,604
	Outlays	4,326	17,411	20,367	22,379	23,165	23,143	23,209	23,989	25,028	26,072	27,203	236,290

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

Table incorporates the effects of the Consolidated Appropriations Act of 2018 (P.L. 115-141), as signed by the President on March 23, 2018.

¹ Costs for credit reestimates and modifications are changes to the estimated costs of outstanding loans originated in years prior to 2018. Those totals are based on the amounts that the Office of Management and Budget expects to record in fiscal year 2018.

Table 6.
Federal Subsidy Rates, Fair Value Estimating Procedures—CBO's April 2018 Baseline

	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028
All Loans	13.27%	16.19%	18.03%	18.86%	18.34%	17.32%	16.73%	16.88%	16.98%	17.05%	17.17%
Subsidized Loans	27.60%	30.46%	32.10%	32.85%	32.35%	31.36%	30.75%	30.83%	30.90%	30.96%	31.06%
Unsubsidized Loans: Undergraduate	19.85%	22.25%	23.52%	24.18%	23.69%	22.78%	22.24%	22.37%	22.43%	22.48%	22.56%
Unsubsidized Loans: Graduate	10.83%	14.47%	16.93%	17.99%	17.40%	16.22%	15.50%	15.65%	15.75%	15.80%	15.91%
GradPLUS Loans for Students	10.13%	14.12%	16.74%	17.81%	17.15%	15.89%	15.17%	15.34%	15.44%	15.51%	15.63%
Parent Loans	-14.63%	-13.22%	-12.07%	-11.41%	-11.75%	-12.44%	-12.88%	-12.71%	-12.66%	-12.67%	-12.64%

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 2019 federal cost associated with the \$99,318 million in new loan volume would be \$16,079 million or 16.19% of the new loan volume [$\$99,318 \times .1619 = \$16,079$]. In other words, the federal government will spend on average about 16 cents for each new dollar loaned in 2019.

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).