

## United States General Accounting Office Washington, DC 20548

March 29, 2004

The Honorable Jim Nussle Chairman, Committee on the Budget House of Representatives

Subject: Department of Education's Federal Direct Loan Program: Status of Recommendations to Improve Cost Estimates and Presentation of Updated Cash Flow Information

Dear Mr. Chairman:

Under the Department of Education's Federal Direct Loan Program (FDLP), students or their parents borrow money directly from the federal government through the vocational, undergraduate, or graduate schools that students attend. FDLP offers four loan types, including consolidation loans, which allow borrowers to combine multiple loans, possibly from different federal student loan programs, into a single loan with one monthly payment and a fixed borrower interest rate. The other three FDLP loan types provide variable borrower interest rates. The reported outstanding gross balance of FDLP loans to borrowers was \$84.5 billion as of September 30, 2003, and the related allowance for subsidy¹—or the cost Education expected to incur on the outstanding loans—was \$657 million. The key driver of the FDLP cost to the government is the difference between the borrower interest rate and Education's financing cost or borrowing rate from Treasury.

Because of concerns about Education's reliance on estimates to project FDLP costs and a lack of historical information on which to base those estimates, the Committee previously asked us to review key aspects of Education's cost estimates for FDLP. Our January 2001 report<sup>2</sup> identified the need for Education to improve its cost estimation process to provide more meaningful information. Recently, at your request, we assessed Education's progress in addressing our January 2001 recommendations and we updated certain cash flow information related to FDLP. This letter summarizes the information provided during our briefing to your office on

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<sup>&</sup>lt;sup>1</sup> The allowance for subsidy is a financial statement reporting account used to recognize the costs of a loan program that are not expected to be recovered from borrowers, including default costs, subsidized interest payments, and financing costs.

<sup>&</sup>lt;sup>2</sup> U.S. General Accounting Office, *Department of Education: Key Aspects of the Federal Direct Loan Program's Cost Estimates*, GAO-01-197 (Washington, D.C.: January 2001).

February 18, 2004. The enclosed briefing slides highlight the results of our work and the information provided at the briefing.

#### **Results in Brief**

In January 2001, we reported on several key aspects of Education's cost estimates for FDLP, including its financing and cash flows. Our work identified the need for Education to make a number of improvements to provide Congress and program decision makers with more meaningful cost estimate information upon which to make timely and well-informed judgments concerning FDLP. As a result, we made five recommendations for Education to improve its subsidy cost estimate information.<sup>3</sup> Since our last report, we found that Education has taken actions that substantially addressed three of our five prior recommendations. To address our recommendation to develop a method to acquire actual FDLP cash flow data on the same basis as the cash flow model, Education implemented a data system to readily acquire such FDLP actual data that could be used to facilitate a detailed comparison of estimated and actual loan performance. To address our recommendation to develop an approach to directly factor consolidations into the cash flow model, Education conducted an analysis of loan payoff patterns resulting from consolidations and used this analysis to develop prepayment assumptions that directly factor consolidations into the cash flow model. To address our recommendation to prepare interest rate reestimates, <sup>5</sup> Education implemented procedures to prepare interest rate reestimates for its budget submissions and financial statements.

While Education made important improvements to its cost estimate information, it has not taken action to fully resolve our recommendations to (1) formalize sensitivity analysis of its cash flow model assumptions to ensure that the most significant assumptions are identified, or (2) develop and implement a method of comparing detailed estimated and actual cash flows to more thoroughly assess loan performance estimates over time. Education officials agreed that additional procedures related to sensitivity analysis and comparing estimated and actual loan performance would be beneficial and a recently formed working group will consider additional procedures related to these issues.

We updated FDLP cash flow information presented in our 2001 report related to (1) borrowing from Treasury, (2) appropriations received, (3) cash inflows and outflows, and (4) comparisons of estimated and actual key cash flows. Amounts borrowed from Treasury, which are expected to be repaid using borrower payments in future years, totalled \$137 billion from fiscal years 1995 through 2003, of which about \$92 billion

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<sup>&</sup>lt;sup>3</sup> As agreed with your office, our review did not include assessing Education's actions to address our January 2001 recommendation related to Education's administrative cost system.

<sup>&</sup>lt;sup>4</sup> The cash flow model uses assumptions, data, and calculations to estimate future loan performance and the estimated cost of the program.

<sup>&</sup>lt;sup>5</sup> Agencies are required to periodically update or "reestimate" loan program costs. An "interest rate reestimate" adjusts the cost for the effect of changes in interest rates <u>while</u> loans are disbursing. The "technical/default reestimate" adjusts the cost for the effect of changes in loan performance, as well as changes in interest rates, <u>after</u> loans are substantially disbursed (more than 90 percent).

<sup>&</sup>lt;sup>6</sup> Sensitivity analysis is a process used to identify the cash flow assumptions, which, when adjusted, have the greatest impact on the estimated subsidy cost.

was outstanding as of September 30, 2003. Appropriations received, which are meant to cover the estimated subsidy cost of the program, totalled about \$2.7 billion for loans approved during fiscal years 1995 through 2003. From fiscal years 1995 through 2003, total cash outflows exceeded total cash inflows by about \$10.7 billion, mainly because interest Education paid to Treasury was significantly greater than interest receipts from borrowers. This is primarily because Education is required to make interest payments to Treasury, even if borrowers are not making interest payments to Education, which could occur when borrowers are in school or in a grace or deferment period. Over this same period, FDLP's actual key cash flows (principal receipts, interest receipts, origination fees, and collections on defaults) were less than estimated by about \$4.2 billion, primarily because Education overestimated interest receipts by about \$6.1 billion. According to Education officials, interest receipts are a difficult cash flow to estimate because of complexities associated with periods during which students are not required to make interest payments. However, they told us that they would continue to analyze the interest calculations in the cash flow model in order to improve the estimates.

Over the course of our work, we noted that Education did not disclose in its fiscal year 2003 financial statements an explanation of significant factors affecting a reestimate of about \$5.1 billion, as required by Statement of Federal Financial Accounting Standards No. 18, *Amendments to Accounting Standards for Direct Loans and Loan Guarantees*. While this information was available, agency officials told us that it was not included in the financial statement disclosures because the disclosures were already very lengthy. Financial statement disclosures that explain significant factors contributing to reestimates, including changes in borrower rates, would provide Congress and other program decision makers with more meaningful cost estimation information about FDLP.

#### Recommendation

To provide more meaningful cost estimate information that can be effectively used by Congress and program decision makers to make timely and well-informed judgments about FDLP, we are making one new recommendation. We recommend that the Department of Education's Chief Financial Officer take the following action:

• Provide additional financial statement disclosures that explain the significant factors, including the effect of changes in borrower interest rates, contributing to reestimates of FDLP, as required by established accounting guidance.

#### **Agency Comments**

In oral comments the director of Education's Cost Estimation and Analysis Division agreed with the findings, conclusions, and recommendation in our briefing slides.

<sup>&</sup>lt;sup>7</sup> The estimated FDLP subsidy cost could fluctuate (increase or decrease) significantly in the future depending on actual loan performance and changes in interest rates.

<sup>&</sup>lt;sup>8</sup> Our January 2001 report defined cash inflows for FDLP as loan origination fees and interest receipts from borrowers and defined cash outflows as net interest payments on Treasury borrowing. The same definitions were used for our briefing.

To determine what steps Education has taken to address our prior recommendations, we

- interviewed knowledgeable Education officials to obtain an understanding of the actions they had taken since our prior report,
- obtained and evaluated supporting documentation provided by Education to determine if Education's actions resolved the previously identified weaknesses, and
- used guidance issued by the Office of Management and Budget to determine if Education's actions comply with applicable budget guidance.

To update cash flow information from our prior report, we

- reviewed Education's audited financial statements for fiscal years 2000 to 2003 and Appendices to the President's Budget for fiscal years 2002 to 2005, and
- obtained schedules of original FDLP subsidy estimates and reestimates for fiscal years 2000 to 2004 and schedules of estimated and actual FDLP cash flows (principal receipts, interest receipts, loan origination fees, and collections on defaults) for fiscal years 2000 to 2003 from Education.

We verified the updated cash flow information to Education's financial statements, budget documents, or other available source documents. We did not test the reliability of data included in Education's new data system or data used by Education to develop new assumptions.

We conducted our work from October 2003 through February 2004 in accordance with generally accepted government auditing standards. We requested and received oral comments on a draft of our briefing slides from cognizant Education officials.

We are sending copies of this report to the Secretary of Education, the Chief Financial Officer, and other interested parties.

This report is available at no charge on our home page at http://www.gao.gov. If you have any questions about this report, please contact me at (202) 512-8341 or Phil McIntyre, Assistant Director, at (202) 512-4373. You may also reach us by e-mail at calboml@gao.gov or mcintyrep@gao.gov. Key contributors to this assignment were Marcia Carlsen and Brooke Whittaker.

Sincerely yours,

Linda M. Calbom

Director, Financial Management

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**Enclosure** 



# Department of Education's Federal Direct Loan Program

# Status of Recommendations to Improve Cost Estimates and Presentation of Updated Cash Flow Information

**Briefing to the Staff of the House Committee on the Budget** 

February 18, 2004



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### Introduction

- Because of concerns about the Department of Education's reliance on estimates to project the Federal Direct Loan Program's (FDLP) costs and a lack of historical information on which to base those estimates, we were asked to review key aspects of Education's cost estimates for FDLP.
  - Our January 2001 report<sup>1</sup> identified the need for Education to improve its cost estimation process to provide more meaningful information.

<sup>&</sup>lt;sup>1</sup>U.S. General Accounting Office, *Department of Education: Key Aspects of the Federal Direct Loan Program's Cost Estimates*, GAO-01-197 (Washington, D.C.: January 2001).



### Introduction

- This briefing provides the results of our follow-up review based on your request that we assess Education's progress in improving its cost estimate information for FDLP.
   Specifically, our objectives were to
  - determine what steps Education has taken to address our prior recommendations<sup>2</sup> and whether these actions fully resolved the identified weakness, and
  - update certain cash flow information related to FDLP, using the latest information available.

<sup>&</sup>lt;sup>2</sup>As agreed with your staff, our review did not include assessing Education's actions to address our recommendation related to Education's administrative cost system.



• In January 2001, we reported on several key aspects of FDLP's cost estimates. We found that the reliability of Education's subsidy cost estimates (the cost of extending or guaranteeing credit over the life of the loans) were negatively affected by limitations in the department's ability to monitor and adjust key factors in its subsidy cost estimation process. As a result, we made several recommendations for Education to improve its process. Since our last report, we found that Education has taken actions to improve its subsidy cost estimate information, including the implementation of a new data system to readily acquire detailed FDLP cash flow information, the development of new assumptions to directly factor consolidations into its cost estimates, and the preparation of interest rate reestimates.



- While Education made several important improvements to its cost estimate information, it has not taken actions to fully resolve our recommendations to formalize and document the sensitivity analysis³ of assumptions in the cash flow model and to develop and implement a method of comparing detailed estimated to actual cash flows. However, Education officials indicated that a new working group will consider these issues. Table 1 summarizes our prior report's recommendations and Education's progress in implementing them.
- In addition, because Education is not providing required financial statement disclosures that explain significant factors contributing to subsidy cost reestimates, we are making a new recommendation to enhance financial statement disclosures to provide more meaningful cost estimation information for Congress and other program decision makers.

<sup>&</sup>lt;sup>3</sup>Sensitivity analysis is a process used to identify which cash flow assumptions, when adjusted, have the greatest impact on the estimated subsidy cost.



Table 1 – Status of our January 2001 Recommendations

Recommendations	Substantial progress made	Additional action needed
Develop and implement a method to acquire actual cash flow data on the same basis as the cash flow model to facilitate a detailed comparison of estimated to actual cash flows.	*	
Formalize and document the sensitivity analysis of assumptions included in the FDLP cash flow model to determine the sensitivity of FDLP subsidy costs to changes in the assumptions.		*
Develop and implement a method of routinely comparing FDLP's estimated and actual cash flows in order to determine if, over time, projected loan performance is reasonably predictive of actual performance.		*
Perform an analysis of the effects of consolidation on FDLP subsidy costs and develop an approach to directly factor consolidations into the cash flow model.	*	
Develop and implement a plan to prepare interest rate reestimates to isolate the effects of changes in interest rates on subsidy costs	*	

Source: GAO.



- We updated information related to FDLP's financing, estimated cost, and cash flows based on the latest data available.
  - As of September 30, 2003, Education had borrowed about \$137 billion from Treasury to finance FDLP lending, of which \$92 billion was outstanding.
  - The fiscal year 1995 through 2003 cohorts<sup>4</sup> have received appropriations of about \$2.7 billion to cover the estimated subsidy cost. The estimated subsidy cost of the program could fluctuate significantly in the future (increases or decreases), depending on actual loan performance and changes in interest rates.

<sup>&</sup>lt;sup>4</sup> A cohort includes those direct loans or loan guarantees of a program for which a subsidy appropriation is provided for in a given fiscal year even if the loans are not disbursed until subsequent years.



- From fiscal years 1995 through 2003, total cash outflows exceeded total cash inflows by about \$10.7 billion because interest receipts from and origination fees paid by borrowers were less than the amount of interest Education paid to Treasury.<sup>5</sup> This is primarily due to a difference between when Education pays interest to Treasury and when borrowers make interest payments to Education.
- Over the same period, FDLP's actual cash flows (principal receipts, interest receipts, origination fees, and collections on defaults) were \$4.2 billion less than estimated, primarily because Education overestimated interest receipts.
- We obtained oral comments on a draft of our briefing slides from cognizant Education officials, who agreed with our findings, conclusions, and recommendation.

<sup>5</sup>Our January 2001 report defined cash inflows for FDLP as loan origination fees and interest receipts from borrowers and defined cash outflows as net interest payments on Treasury borrowing.



- To determine what steps Education has taken to implement our recommendations, we
  - Interviewed knowledgeable personnel from Education's Budget Service and Federal Student Aid (FSA) offices to obtain an understanding of the actions taken to address our recommendations.
  - Obtained and evaluated supporting documentation provided by Education officials to determine if Education's actions resolved the previously identified weaknesses.
  - Used the Office of Management and Budget (OMB) Circular A-11, Preparation, Submission, and Execution of the Budget, to determine if Education's actions comply with applicable budget guidance.
  - We did not test the reliability of data included in Education's new database or data used by Education to develop new prepayment assumptions.<sup>6</sup>

<sup>6</sup>We did not evaluate the reasonableness of Education's new assumptions because we believe more historical experience is needed before the actual quality of the assumptions can be determined.



- To update cash flow information from our January 2001 report, we reviewed and verified data as follows
  - borrowing from Treasury and repayments to Treasury for fiscal years 2000 through 2003 were obtained from Education's audited financial statements;
  - schedules of original subsidy estimates and reestimates for fiscal years 2000 to 2004 were obtained from Education and verified to source documentation or information from OMB;
  - interest paid to Treasury for fiscal years 2000 through 2003 was obtained from the Appendices to the President's Budget; and
  - schedules of estimated<sup>7</sup> and actual principal receipts, interest receipts, loan origination fees, and collections on defaults for fiscal years 2000 through 2003 were obtained from Education. We verified actual amounts to the Appendices in the President's Budget.

<sup>7</sup>Because these are estimates, no source verification could be made.



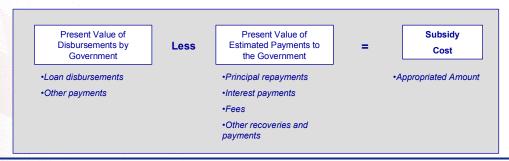
 Our audit work was conducted in Washington, D.C. from October 2003 through February 2004 in accordance with generally accepted government auditing standards. On February 17, 2004, we obtained oral comments on a draft of our briefing slides from cognizant Education officials, which are summarized on page 61.



- Prior to the Federal Credit Reform Act (FCRA) of 1990, credit programs—like most other federal programs—were reported in the budget on a cash basis.
  - Loan guarantees appeared to be free in the budget year while direct loans appeared to be as expensive as grants.
  - This cash basis distorted costs and, thus, the comparison of credit program costs with other programs and each other.
- FCRA was, among other reasons, enacted to more accurately measure the cost of federal loan programs and to permit better comparisons both among credit programs and between credit and noncredit programs.



- Under FCRA, agencies are required to estimate the cost of extending or guaranteeing credit over the life of the loan, called the subsidy cost.
  - As indicated in figure 1, subsidy cost is equal to the present value<sup>8</sup> of disbursements minus estimated payments to the government, over the life of the loan, excluding administrative costs.
  - Figure 1: Calculation of Direct Loan Subsidy Cost



<sup>8</sup>Present value is the worth of a future stream of returns or costs in terms of money paid immediately. In calculating present value, prevailing interest rates provide the basis for converting future amounts into their "money now" equivalents.



- Agencies are required by FCRA to periodically update or "reestimate" loan program costs for differences between (1) estimated loan performance and related cost and (2) the actual program costs recorded in the accounting records as well as expected changes in future economic performance.
- OMB Circular A-11 requires agencies to prepare two types of reestimates.
  - An "interest rate reestimate" must be done when a cohort is substantially disbursed, generally 90 percent. This reestimate adjusts for the effect of changes in interest rates while the loans are disbursing.
  - A "technical/default reestimate" generally must be done annually, as long as the loans are outstanding. This reestimate adjusts for the effect of changes in loan performance, such as defaults, recoveries, prepayments, and fees, as well as changes in interest rates after the loans are substantially disbursed.
- Accounting guidance for credit programs generally mirrors the budget guidance.



- Agencies finance the disbursement of direct loans through a combination of borrowing from Treasury and appropriations as required by FCRA.
  - The portion borrowed from Treasury represents amounts that an agency expects to be repaid by borrowers in future years and is not considered a cost to the government.
  - The portion covered by appropriations represents the subsidy cost, which generally includes the amount not expected to be repaid by borrowers, any interest payments subsidized for borrowers, and the cost associated with financing the lending to borrowers.



- Under FDLP, students or their parents borrow money directly from the federal government through the schools the students attend, which include vocational, undergraduate, and graduate schools.
- The first FDLP loans were made in fiscal year 1994.
- FDLP is a mandatory lending program, or entitlement program. The
  amount of funding needed depends on the number of borrowers satisfying
  eligibility and benefits rules. FDLP has a permanent indefinite appropriation
  for whatever amount of subsidy cost is needed to meet borrower demands.
- As of September 30, 2003, Education reported that the outstanding gross balance of FDLP was \$84.5 billion and the related allowance for subsidy the amount Education expects to lose on the outstanding loans—was \$657 million.



- FDLP offers four different loan types:
  - Federal Direct Stafford Subsidized/Ford Loan Program provides variable rate loans to undergraduate and graduate students with demonstrated financial need,
  - Federal Direct Unsubsidized Stafford/Ford Loan Program provides variable rate loans to undergraduate and graduate students regardless of financial need,
  - Federal Direct PLUS Program provides variable rate loans to parents of dependent undergraduate students, and
  - Federal Direct Consolidation Loan Program (Consolidation loans) allows borrowers to combine multiple loans possibly from different federal student loan programs into a single loan with one monthly payment and a fixed borrower rate.<sup>9</sup>

<sup>9</sup>GAO has ongoing work analyzing differences between Education's direct loan and loan guarantee consolidation borrowers and how Education accounts for these differences in developing its cost estimates.



- The key driver of FDLP subsidy costs is the difference, or spread, between the borrower rate (the rate Education earns interest from borrowers) and the discount rate (generally the borrowing rate from Treasury).
  - When the borrower rate is greater than the discount rate, Education will receive more interest from borrowers than it will pay in interest to Treasury to finance its lending, resulting in a positive interest rate spread and a <u>lower</u> subsidy cost.
  - When the discount rate is greater than the borrower rate, Education will pay
    more interest to Treasury to finance its lending than it will receive from
    borrowers, resulting in a negative interest rate spread and a <u>higher</u> subsidy
    cost.
- Because most FDLP loans offer a variable borrower interest rate, and these rates cannot be readily predicted from year to year, estimating the subsidy cost of FDLP is very difficult. Therefore, wide fluctuations in subsidy costs can be expected, depending on the extent of interest rate changes.<sup>10</sup>

<sup>10</sup>Under Pub. L. No. 107-139, 116 Stat. 8 (2002), new FDLP loans for which the first disbursement is made on or after July 1, 2006, shall have a fixed borrower rate.



## **Status of Recommendations**

The Following Are Actions Education Has Taken to Address Recommendations in Our January 2001 Report Department of Education: Key Aspects of the Federal Direct Loan Program's Cost Estimates (GAO-01-197)



## **Status of Recommendations**

- We assessed Education's progress in improving its cost estimation process in the following areas:
  - Data availability
  - Sensitivity analysis
  - Comparing estimated and actual cash flows
  - Effect of consolidations on FDLP subsidy costs
  - Interest rate reestimates



# Status of Recommendation - Data Availability

#### 2001 Recommendations

To provide more meaningful FDLP cost estimation information, we recommended that the Secretary of the Department of Education charge the Budget Director responsible for preparing FDLP cost estimates to:

 Develop and implement a method to acquire actual cash flow data on the same basis as the cash flow model—by loan profile,<sup>11</sup> cohort, and key assumption—to facilitate a detailed comparison of estimated to actual cash flows.

<sup>11</sup>The loan profile encompasses the loan type, the type of school the student attends, and in some cases the year of schooling for the student and the repayment option selected.



# Status of Recommendation - Data Availability

#### **Education Actions**

- FSA implemented a new system, the Credit Management Data Mart (CMDM), which has loan-level financial data and demographic information for FDLP borrowers.
  - CMDM data sources include the Financial Management System and the Direct Loan Servicing System.
  - Data from CMDM is available on the same basis as the cash flow model—by loan profile, cohort, and key assumption.
  - According to Education, CMDM allows it to obtain comprehensive reporting for direct loan data.



# **Status of Recommendation - Data Availability**

## **Progress Assessment**

• Substantial progress made. Recommendation closed.



# **Status of Recommendation - Sensitivity Analysis**

#### Recommendation

 Formalize and document the sensitivity analysis of assumptions included in the cash flow model to ensure that all key assumptions used in the cash flow model have been identified and to determine the sensitivity of FDLP subsidy costs to changes in these assumptions.

#### **Education Actions**

 Education's sensitivity analysis process is the same as prior to our recommendation.



# Status of Recommendation - Sensitivity Analysis

- Education continues to prepare sensitivity analysis for interest rate assumptions for its financial statement auditor.
- Informal sensitivity analysis continues to be used by Education to analyze and test cash flow model revisions.
- Education officials said that they know the key assumptions affecting FDLP costs and that the detailed sensitivity analysis performed for our January 2001 report confirmed this. However, they agreed that periodically preparing additional sensitivity analysis of significant cash flow assumptions would be beneficial.



# Status of Recommendation - Sensitivity Analysis

 Education officials indicated that a recently formed credit reform working group, which will focus on formalizing and documenting cash flow assumptions and making its credit subsidy estimates more transparent, will consider more formalized procedures related to performing and documenting sensitivity analysis.



# **Status of Recommendation - Sensitivity Analysis**

### **Progress Assessment**

- Additional action is needed. Recommendation remains open.
  - We will continue to monitor any changes that result from the credit reform working group's efforts.



#### Recommendation

- Develop and implement a method of routinely comparing FDLP's estimated and actual cash flows, including
  - identifying significant differences in total and by cohort,
  - researching significant differences to determine the specific cause,
  - determining any revisions needed in the cash flow model to ensure that it reasonably predicts future borrower behavior, and
  - determining whether, over time, projected loan performance is reasonably predictive of actual loan performance.



#### **Education Actions**

- Education's process for comparing estimated to actual cash flows is the same as prior to our recommendation—that is, Education continues to make comparisons of estimated and actual cash flows at the program level but not at the cohort level.
  - Education continues to annually prepare a comparison of estimates to actuals for borrower collections, fees, and recoveries, at the program level, for its financial statement auditor.
  - Education officials indicated that informal comparisons of estimates to actuals are used regularly as an analytical tool to improve the estimation process.



- Education officials said that they have not been comparing estimates to actuals at a
  cohort level because it would be too time consuming, but they believe their process
  has allowed them to research significant differences; identify the need for cash
  model revisions; and assess whether, over time, projected loan performance is
  reasonably predictive of actual loan performance.
- With the implementation of CMDM, data are now readily available for Education to
  periodically prepare a detailed comparison of estimates to actuals at the cohort level.
  This would provide a more meaningful analysis than comparing fiscal year totals
  because it would isolate differences among cohorts, which could indicate anomalies
  or trends that are not expected. Comparing fiscal year totals might not isolate these
  differences because of potential offsetting effects.
- Education officials agreed that a cohort level analysis would be beneficial and stated that the credit reform working group will consider additional procedures related to comparing estimated and actual cash flows.



#### **Progress Assessment**

- Additional action is needed. Recommendation remains open.
  - We will continue to monitor any changes that result from the credit reform working group's efforts.



#### Recommendation

 Perform an analysis of the effects of consolidations on FDLP subsidy costs and develop an approach to directly factor consolidations into the cash flow model.

#### **Education Actions**

 Education hired a contractor to develop a process to use data from the National Student Loan Data System (NSLDS) to link consolidated loans with the paid-off underlying loans.



- This linking allowed Education to analyze the payoff patterns of underlying loans due to consolidation and to develop prepayment assumptions that directly factor consolidations into the cash flow model.
- Education analyzed the prepayment assumptions and determined that consolidations can either increase or decrease the subsidy cost of the underlying loans,<sup>12</sup> depending on the interest rate environment.
  - For example, if the discount rate is lower than the borrower rate, prepayments result in an additional cost because the shorter repayment term reduces net interest receipts from the positive interest spread.
  - However, if the discount rate is greater than the borrower rate, prepayments result in a savings because the shorter repayment term reduces net interest payments from the negative interest spread.

<sup>12</sup>In order to determine whether or not consolidations increase or decrease the overall FDLP cost, both the effect of the consolidation on the underlying loans and the cost of the new consolidation loan need to be considered.



- In addition, although Education has already taken steps to consider the effect of consolidation on FDLP subsidy costs, the issue of consolidations will be further addressed as part of the credit reform working group.
- Education officials indicated that they are considering the development of a loan-level cash flow model to further address issues related to consolidations.



#### **Progress Assessment**

• Substantial progress made. Recommendation closed.



## Status of Recommendation - Interest Rate Reestimates

#### Recommendation

 Develop and implement a plan to prepare interest rate reestimates to isolate the effects on subsidy costs of changes in interest rates versus changes in other assumptions.

#### **Education Actions**

- In response to our recommendation, Education began preparing interest rate reestimates.
  - For budget purposes, Education has prepared interest rate reestimates since the submission of its fiscal year 2002 budget.
  - For financial statement purposes, Education first prepared interest rate reestimates for its fiscal year 2001 financial statements.<sup>13</sup>

<sup>13</sup>Because the fiscal year 2002 financial statements were prepared early, updated discount rates were not available. As a result, no interest rate reestimate was prepared. These discount rates were updated in the fiscal year 2003 financial statements. Going forward, Education plans to continue to use the most recent discount rates available.



# **Status of Recommendation - Interest Rate Reestimates**

#### **Progress Assessment**

• Substantial progress made. Recommendation closed.



# Disclosure of the Effect of Interest Rates on Subsidy Costs

- Although Education is now preparing interest rate reestimates in accordance with OMB Circular A-11,<sup>14</sup> we found that it did not disclose an explanation of significant factors, including changes in borrower interest rates, affecting reestimates in its financial statements, as required by established accounting guidance.
  - Statement of Federal Financial Accounting Standards (SFFAS)
     No. 18<sup>15</sup> requires agencies to disclose, discuss, and explain
     events and changes in economic conditions, among other
     factors, that have had a significant and measurable effect on
     subsidy rates, subsidy expense, and subsidy reestimates.

14Interest rate reestimates isolate the effect of changes in interest rates while loans are disbursing. Because FDLP offers a variable borrower rate, its interest rate reestimates do not isolate the effect of changes in the borrower rate after the loans are disbursed.

15SFFAS No. 18 became effective for fiscal year 2001 financial statements.



# Disclosure of the Effect of Interest Rates on Subsidy Costs

- Education's fiscal year 2003 financial statements disclose reestimates of about \$5.1 billion for FDLP. However, the disclosure does not explain the factors, such as the effect of variable borrower rates, contributing to the significant reestimate.
- While this information was available, Education officials indicated that it
  was not included in the financial statement disclosures because the
  disclosures were already very lengthy.
- Since the interest rate spread is the key driver of FDLP subsidy costs, changes in the variable borrower rate can have a significant impact on the reestimated cost of the program. Financial statement disclosures that explain significant factors contributing to reestimates, including changes in borrower interest rates, would provide Congress and other program decision makers with additional meaningful cost estimation information about FDLP.



#### **Updated Cash Flow Information**

- To address our second objective, we updated FDLP cash flow information from our January 2001 report in the following areas:
  - Borrowing from Treasury
  - Appropriations Received
  - Cash Inflows and Outflows<sup>16</sup>
  - Estimated and Actual Key Cash Flows (principal receipts, interest receipts, origination fees, and collections on defaults)
- As indicated in our scope and methodology section, all updated actual cash flow information were agreed to Education's financial statements, budget documents, or other available source documents.

<sup>16</sup>Our January 2001 report defined cash inflows for FDLP as loan origination fees and interest receipts from borrowers and defined cash outflows as net interest payments on Treasury borrowing. The same definitions were used for this briefing.



### Cash Flow Information – Borrowing from Treasury

- From fiscal years 1995 through 2003, Education borrowed \$136.7 billion from Treasury to finance FDLP. As of September 30, 2003, \$45.3 billion was repaid to Treasury. See table 2.
  - Repayments to Treasury are affected by beginning cash balances, collections, additional borrowing, interest revenue, disbursements, and interest expense.
  - According to Education officials, repayments to Treasury increased significantly in fiscal year 2003 because of increased payoffs of underlying loans due to new consolidation loans and the \$4.6 billion upward reestimate<sup>17</sup> in fiscal year 2003.

<sup>&</sup>lt;sup>17</sup>An upward reestimate indicates that the estimated cost increased. When the budget authority is received for the reestimate, borrowing from Treasury can be repaid.



# Cash Flow Information – Borrowing from Treasury

**Table 2: Amounts Borrowed From Treasury to Finance FDLP** (Dollars in millions)

Fiscal year	***	Opening balance	Borrowing from Treasury	Repayments to Treasury	Ending balance
1995	\$	433	\$ 4,868	\$ (235) \$	5,066
1996		5,066	7,957	(669)	12,354
1997		12,354	11,333	(975)	22,712
1998		22,712	13,669	(1,284)	35,097
1999		35,097	21,571	(4,599)	52,069
2000		52,069	16,347	(3,069)	65,347
2001		65,347	20,704	(8,862)	77,189
2002		77,189	20,605	(8,296)	89,498
2003		89,498	19,637	(17,348)	91,787
Total			\$ 136,691	\$ (45,337)	

Source: GAO analysis of data from the Department of Education.



## Cash Flow Information – Appropriations Received

- For the fiscal years 1995 through 2003 cohorts, based on Education's original subsidy estimates and reestimates to date, the net reestimated cost of FDLP was about \$2.7 billion. This net reestimated cost, which could fluctuate significantly in the future (increases or decreases), depending on actual loan performance and changes in interest rates, is financed by appropriations. See table 3.
  - For example, to date, \$1,110 million in appropriations were needed to fund the net reestimated subsidy cost of the 2000 cohort, as shown in table 3. This group of loans was originally estimated to have a negative subsidy<sup>18</sup> (gain) of \$1,316 million. Since then, Education has reestimated the cost of the cohort three times, increasing its cost by \$1,065 million in fiscal year 2001, \$1,079 million in fiscal year 2003, and \$282 million in fiscal year 2004.

<sup>18</sup>Negative subsidy occurs when the present value of the estimated cash inflows to the government exceeds the present value of the estimated cash outflows by the government.



# Cash Flow Information – Appropriations Received

**Table 3: Appropriations to Finance FDLP** (Dollars in millions)

								С	ohort						
		1995		1996		1997	1998		1999	2000	2001		2002	2003	Total
Original Subsidy															
Estimate	\$	490	\$	237	\$	336	\$ 213	\$	(378)	\$ (1,316)	\$ (852)	\$	(781)	\$ (292)	\$ (2,343)
1996 Reestimate		(6)							. ,	,	, ,		, ,	, ,	(6)
1997 Reestimate		(157)		128											(29)
1998 Reestimate		(58)		153		80									175
1999 Reestimate		(81)		(71)		(69)	(129)								(350)
2000 Reestimate		(69)		(382)		(444)	(861)		(668)						(2,424)
2001 Reestimate		(87)		(190)		(229)	(160)		94	1,065					493
2002 Reestimate															
2003 Reestimate		162		397		607	1,026		792	1,079	237		270		4,570
2004 Reestimate	<u>.</u>	164		250		300	425		425	282	832		(70)	(33)	2,575
Net reestimated			_		_			_				_			
cost (gain)	\$	358	\$	522	\$	581	\$ 514	\$	265	\$ 1,110	\$ 217	\$	(581)	\$ (325)	\$ 2,661

Note: OMB did not execute the reestimates in fiscal year 2002.

Source: GAO analysis of data from the Department of Education.



### Cash Flow Information – Cash Inflows and Outflows

- The cash inflows (interest receipts and origination fees) and cash outflows (interest payments) of FDLP are greatly affected by differences in the interest cash flows because Education is required to make interest payments to Treasury, even if borrowers are not making interest payments to Education. For example,
  - unsubsidized borrowers in school, in a grace period, or in deferment<sup>19</sup> are not required to pay interest. If borrowers do not pay interest during these periods, it is accrued and capitalized when the borrowers enter repayment.
  - interest is not charged to subsidized borrowers while in school, in a grace period, or in deferment.

<sup>19</sup>A borrower could be eligible for a deferment period, among other reasons, if the borrower is seeking and unable to find full-time employment or experiences economic hardship.



### Cash Flow Information – Cash Inflows and Outflows

- Between fiscal years 1995 through 2003, total cash outflows exceeded total cash inflows by \$10.7 billion because origination fees and interest receipts from borrowers were less than the amount of interest Education paid on Treasury borrowing. See table 4.
  - As of September 30, 2003, accrued interest due from borrowers was \$2.8 billion.
  - According to Education officials, approximately, \$2 billion of interest was capitalized during fiscal years 2002 and 2003.



### **Cash Flow Information – Cash Inflows and Outflows**

Table 4: Cash Inflows and Outflows by Fiscal Year (Dollars in millions)

						Net interest	
			Interes	t receipts from		payments on	Net cash
Fiscal year	Loan origi	nation fees		borrowers	Treas	ury borrowing	inflows/(outflows)
1995	\$	85	\$	14	\$	(86)	\$ 13
1996		318		113		(348)	83
1997		352		300		(1,180)	(528)
1998		382		606		(1,686)	(698)
1999		387		1,067		(2,395)	(941)
2000		359		1,463		(3,211)	(1,389)
2001		283		1,868		(4,043)	(1,892)
2002		334		1,961		(4,744)	(2,449)
2003		366		1,720		(4,954)	(2,868)
Γotal	\$	2.866	\$	9.112	\$	(22.647)	\$ (10.669)

Source: GAO analysis of data from the Department of Education.



## Cash Flow Information – Estimated and Actual Key Cash Flows

- For fiscal years 1995 through 2003, three of the four key cash flows—interest receipts, origination fees, and default collections—included in this comparison had actual cash flows that were less than the amount Education estimated. See table 5.
  - Over this same period, actual principal receipts were greater than the amount Education estimated.
  - However, this was more than offset by the large variance between estimated and actual interest receipts.



## Cash Flow Information – Estimated and Actual Key Cash Flows

Table 5: Total Estimated and Actual Key Cash Flows, Fiscal Years 1995-2003 (Dollars in millions)

Key cash flows	Α	ctual cash.	Estimated cash flows	Difference in dollars	Percentage difference
Principal receipts	\$	38,991.7	\$ 36,259.4	\$ 2,732.3	7.0%
Interest receipts		9,113.0	15,237.0	(6,124.0)	(67.2)%
Origination fees		2,864.7	3,008.2	(143.5)	(5.0)%
Default collections		1,547.4	2,234.7	(687.3)	(44.4)%
Total	\$	52,516.8	\$ 56,739.3	\$ (4,222.5)	(8.0)%

Source: GAO analysis of data from the Department of Education.



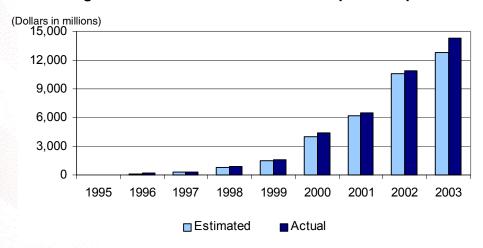
## **Cash Flow Information – Estimated and Actual Key Cash Flows**

- For fiscal years 1995 through 2003, actual principal receipts were greater than estimated by \$2.7 billion, or 7 percent.
   See figure 2.
  - In our January 2001 report, we reported that for fiscal years 1995 through 1999, actual principal receipts were greater than estimated by 12.8 percent.



# **Cash Flow Information – Estimated and Actual Key Cash Flows**

Figure 2: Estimated and Actual Principal Receipts



Source: GAO analysis of data from the Department of Education.



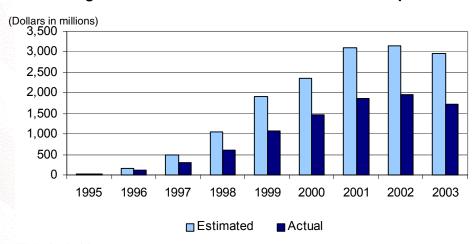
### Cash Flow Information – Estimated and Actual Key Cash Flows

- For fiscal years 1995 through 2003, actual interest receipts were less than estimated by \$6.1 billion, or about 67 percent. See figure 3.
  - In our January 2001 report, we reported that for fiscal years 1995 through 1999, actual interest receipts were less than estimated by 74.3 percent.
  - Education officials stated that interest receipts are a difficult cash flow to model because of the complexities associated with accruing and capitalizing interest. However, now that the cash flow model includes prepayment assumptions to directly consider the effects of consolidations, Education officials said that it will be easier to analyze the interest calculations in the model.



## **Cash Flow Information – Estimated and Actual Key Cash Flows**

Figure 3: Estimated and Actual Interest Receipts



Source: GAO analysis of data from the Department of Education.



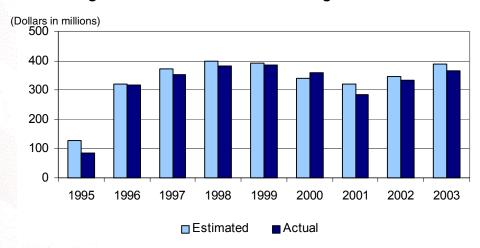
## **Cash Flow Information – Estimated and Actual Key Cash Flows**

- For fiscal years 1995 through 2003, actual origination fees were less than estimated by \$144 million, or 5 percent. See figure 4.
  - In our January 2001 report, we reported that for fiscal years 1995 through 1999, actual origination fees were less than estimated by 5.7 percent.



## Cash Flow Information – Estimated and Actual Key Cash Flows

Figure 4: Estimated and Actual Origination Fees



Source: GAO analysis of data from the Department of Education.



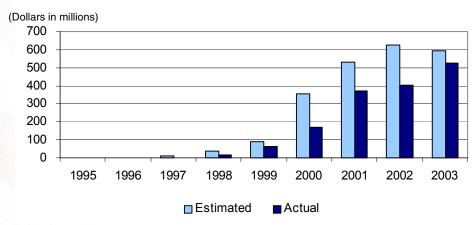
### Cash Flow Information – Estimated and Actual Key Cash Flows

- For fiscal years 1995 through 2003, actual collections on defaults were less than estimated by \$687 million, or about 44 percent. See figure 5.
  - In our January 2001 report, we reported that for fiscal years 1995 through 1999, actual collections on defaults were less than estimated by 67.9 percent.
  - According to Education officials, they believe that the large variance is due to the use of data from the guarantee loan program to estimate collections on defaults since FDLP does not have enough historical data.
  - It appears that the estimates are getting closer to the actuals. For fiscal year 2003, the difference was about 13 percent.



# **Cash Flow Information – Estimated and Actual Key Cash Flows**

Figure 5: Estimated and Actual Collections on Defaults



Source: GAO analysis of data from the Department of Education.



#### **Conclusions**

Education has made progress to improve its cost estimation process by implementing a new data system, developing new cash flow assumptions for consolidations, and preparing interest rate reestimates. These actions resolved three of our five prior recommendations. To address the remaining two prior recommendations, Education should enhance its analytical tools to evaluate and improve its subsidy cost estimates by periodically conducting more formal sensitivity analysis and comparing estimated and actual cash flows at the cohort level. By forming the credit reform working group that will consider these and other issues, it appears that Education officials recognize that there are opportunities to make the subsidy cost estimates more transparent, which would result in more meaningful information for Congress and program decision makers. In addition, because FDLP's subsidy costs are determined largely by interest rates, transparency would be further enhanced if Education included an explanation in its financial statement footnotes of how changes in borrower interest rates and other significant factors affect the reestimated cost.



#### Recommendation

- To provide more meaningful cost estimation information that can be effectively used by Congress and program decision makers to make timely and well-informed judgments about FDLP, we recommend that the Department of Education's Chief Financial Officer to take the following action:
  - Provide additional financial statement disclosures that explain the significant factors, including the effect of changes in borrower interest rates, contributing to reestimates of FDLP, as required by SFFAS No. 18.



### **Agency Comments**

• We obtained oral comments on a draft of our briefing slides from the director of Education's Cost Estimation and Analysis Division, who agreed with our findings, conclusions, and recommendation.

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