

Federal Student Aid
FY2013 Improper Payment Estimation Methodologies

Introduction

Simplifying and speeding access to student aid dollars while minimizing errors and the potential for fraud remains a Department priority. To this end, Federal Student Aid (FSA) management is committed to improper payment prevention, mitigation, and reduction and continues working to strengthen improper payment analytics and estimation methodologies for FSA programs. Accurate improper payment estimation is essential to achieve these objectives and will continue to inform root cause analysis and corrective actions, some of which are described in the [FY 2013 Annual Financial Report \(AFR\)](#).

FSA has a long established, OMB-approved methodology for estimating improper payments within the Pell Grant Program that evaluates the primary historical risk associated with Pell disbursements: payment to ineligible recipients or payments to eligible recipients in an amount other than the eligible amount. This methodology, the IRS Statistical Study, compares a sample of recipient's Free Application for Federal Student Aid (FAFSA) data to IRS tax return data. This study was originally developed for and continues to inform process, system, and program improvements, to include new eligibility and other FAFSA edits to the Central Processing System (CPS), FAFSA analysis, and tightened school verification requirements. It also supports the impact assessment of on-going corrective actions such as the IRS Data Retrieval Tool (DRT) developed to directly mitigate the risk measured by the study. OMB has approved the use of this statistical study for improper payment estimation and reporting purposes; however, we acknowledge certain limitations for this use, as described below and in the [FY 2012 AFR](#).

As described in the FY2012 AFR, FSA proposed new estimation methodologies, including for Pell, to correct for prior limitations. These methodologies have been further refined in FY2013. In developing proposed new estimation methodologies FSA looked to leverage the substantial investment in its existing internal control framework (to include compliance and assessment functions, such as program reviews). Leveraging existing investments in the program review process avoids significant costs that would otherwise be required for separate testing at schools and institutions. This approach provides for a more efficient allocation of resources and may result in improvements to these core underlying processes over time as well as integrating the program into core functions. This increases the likelihood of a sustainable program despite limited out-year budget funding.

FY2013 OMB Approval Status

FSA continues to work with OMB to evaluate, refine, and obtain approval on long-term estimation methodologies for all risk-susceptible programs (i.e., the Pell Grant Program, Direct Loan (DL) Program, and Federal Family Education Loan (FFEL) Program). As of the publication date of the FY 2013 AFR, OMB has approved for FY2013 AFR reporting the publication of an estimate for Pell using the Internal Revenue Service (IRS) statistical study described below, and estimates for DL and FFEL using the proposed new methodologies described below.

Federal Student Aid
FY2013 Improper Payment Estimation Methodologies

Estimation Methodologies

Pell Grant Program

In FY 2011, OMB designated Pell a “high-priority” program per Executive Order 13520 and OMB Circular A-123, Appendix C (as updated by OMB Memo M-10-13), because estimated FY 2010 Pell improper payments of \$1,005 million exceeded the OMB FY 2010 program threshold of \$750 million. The Department coordinated with OMB to establish and execute a plan to implement applicable high-priority program requirements including the designation of accountable officials and the establishment of improper payment measurements to be reported on PaymentAccuracy.gov for the Pell Grant program.

As in previous years, the Department conducted a statistical study with the IRS using FAFSA data to calculate an improper payment rate for the Pell Grant program. This study evaluates one payment type: disbursements to students by recalculating student awards where income figures were mismatched between tax returns and FAFSA applications. In this most recent completed study, which compared 2012–13 FAFSA data with 2011 IRS data (the tax year that was used to calculate 2012-13 Pell Grant eligibility), a sample was drawn from the Title IV Central Processing System that included 1,375,256 applicants to be used in various studies. A match with the SSNs of the parents and students was sought from the IRS database. Two files were provided to the IRS. The first contained the social security numbers (SSNs) of the sample records along with a sampling program designed to select the desired analysis sample for the baseline analysis from the larger population file. This was done to preserve IRS confidentiality requirements. The file with SSNs of the parent and students was used to match against the main IRS database and select the matching records. IRS data for these records was then used with the second file provided by the Department which contained other applicant data specific to the filer that could be used, along with the relevant IRS data, to calculate an Expected Family Contribution (EFC) and Federal Pell Grant award amount for each applicant in the sample, to explain discrepancies, and to identify the types of applicants who over- and under-reported their income information on the FAFSA.

The IRS matched student SSN, and parent SSN (if the student was a dependent), in this file against SSNs in the IRS master file. If a match occurred, the IRS extracted adjusted gross income (AGI), taxes paid, type of return filed, earned income credit, exemptions, and itemized deductions for the tax filer and compared this information to FAFSA-reported data. Using a program supplied by the Department, the IRS calculated the EFC and Pell awards for matching records by substituting the IRS income information for the FAFSA income information. The IRS provided aggregated statistical tables to the Department that showed the results of these comparisons. Data provided by the IRS as a result of the match were analyzed and used to model projections for income, EFC, and Pell award discrepancies.

The IRS statistical study used application and disbursement level data to recalculate student awards where income figures were mismatched between tax returns and aid applications. The IRS study was based on interim data where not all of the applications expected to be processed for the cycle had been processed and moreover, additional corrections were still to be made by applicants to their original data. Therefore, the IRS data did not reflect subsequent corrections that were made nor did it reflect applicants for summer school of the second year who applied late. Finally, the study is limited to awards disbursed at the time of application, so other criteria, such as student eligibility based on academic performance is not considered. These limitations

Federal Student Aid
FY2013 Improper Payment Estimation Methodologies

in the study resulted in changes to the Pell methodology for FY 2012, which was refined in FY 2013 and, for the Pell Grants Program, is pending OMB approval. For FY 2013, the preliminary rate from the IRS study is 2.26 percent which results in estimated improper payments of \$731 million, at a 90 percent confidence level and 0.11 percent precision.

FSA also reported a new proposed estimation methodology for the Pell Grant program in the Department's FY 2012 AFR. Under this proposed methodology, which was further refined in FY 2013 to allow for improper payments identified to receive a weight based on the dollar amount disbursement for each school as well as allowing for a better distribution of the school population by dividing by program review type. The ratio of the errors identified to the total payments reviewed for all sampled students was extrapolated using a 90 percent confidence interval to estimate the improper payment rate for the Pell Grant Program. Based on this analysis, the error rate for FY 2013 was 2.22 percent, or \$718 million, at a 90 percent confidence level and 0.08 percent precision.

Direct Loan Program

The improper payment rate for the Direct Loan program is composed of estimates of improper payments from the following activities: loan disbursements from institutions to students, loan consolidations, and refunds. In FY 2012, FSA reported a rate for the Direct Loan program under the new methodology noting that the methodology was pending OMB approval. For FY 2013, a refined estimated improper payment rate calculation was completed for the Direct Loan program to quantify precision of the estimate and to consider additional root causes and corrective actions. Similar to refinements noted above for the new proposed Pell Grant program methodology, the refinements for the Direct Loan methodology include allowing for improper payments identified to receive a weight based on the dollar amount disbursement for each school as well as allowing for a better distribution of the school population by dividing by program review type.

OMB has approved reporting under this methodology only in the FY 2013 AFR. The Department and OMB continue to seek agreement on an estimation methodology for the Direct Loan Program for subsequent years. The FY 2013 estimate was based on tests of the three components of the Direct Loan program: 1) program reviews conducted at a sample of schools for disbursements to students, 2) tests of loan consolidation overpayment and underpayment activity, and 3) tests of loan refund activity.

The first component was based on program reviews conducted by Program Compliance – School Eligibility Service Group (SESG) at a sample of schools. FSA conducts program reviews at schools to assess a variety of compliance requirements of the Direct Loan program. FSA identified individual transaction points of the Direct Loan program that were deemed to pose the highest risk of improper payments. The program review schedule of schools is focused on high-risk institutions as determined by an annual risk assessment performed by SESG, for which a General Assessment or Focused Review is performed. Schools deemed as low or medium risk, or those that have not been reviewed in ten years, are also subject to a Compliance Assurance Review.

The ratio of the high-risk improper payment errors identified to the total payments reviewed for all sampled students was computed to estimate the overall error rate for Direct Loan disbursement of funds from the school to students. The estimate of improper payments made by schools to the students uses the error rates of Direct Loan payments for 738 students sampled

**Federal Student Aid
FY2013 Improper Payment Estimation Methodologies**

at 55 institutions with program reviews conducted between October 2012, and June 30, 2013, were used to estimate a statistical confidence interval range of rates. Based on this analysis, the overall extrapolated loan disbursement error rate was 1.10 percent at a 90 percent confidence level and 0.04 percent precision.

The second component was the loan consolidation improper payment estimate computed by sampling five overpayments and five underpayments, from the universe of all underpayment and overpayment activities for each of the 12 months from July 2012 through June 2013 for a total sample size of 120. Any improper payments found in the sample were extrapolated to create a 90 percent statistical confidence interval range of the overall improper payment rate for loan consolidation activity. Note that the sample selection methodology for loan consolidations was representative versus risk-based. Based on this analysis, the program review extrapolated loan consolidation component error rate was 0.11 percent at a 90 percent confidence level and 0.09 percent precision.

The third component test was the test of loan refund activity. A refund on a borrower's account can occur when a payment is received for more than the amount due, resulting in a credit balance. In the case that the credit balance is less than \$5, the account is closed out and written up to zero, unless the borrower requests a refund. A refund can also occur when a payment resides in an unapplied state in suspense and cannot be matched to a borrower's account. The calculation of the loan refunds improper payment estimate was computed by sampling 10 refunds, from the universe of all refund activity for each of the 12 months from July 2012 through June 2013 for a total sample size of 120. Any improper payments found in the sample were extrapolated to create a 90 percent statistical confidence interval range of the overall improper payment rate for refunds activity. The sample selection was not risk-based, but rather representative-based. Based on this analysis, the refunds extrapolated component error rate was 0.83 percent at a 90 percent confidence level and a 1.38 percent precision.

| Direct Loan Sampling | | | |
|-----------------------------|----------------------------------|---|-------------------------------|
| Payment Type | Extrapolation Methodology | Number of Loans/ Grants Recipients | Number of Institutions |
| Originations | Two Stage | 11,335,429 | 6,245 |
| Refunds | PPS | 306,521 | N/A |
| Consolidation | PPS | 417,210 | N/A |

The loan disbursement, consolidation, and refund rates were then applied to their representative FY 2013 balances. The aggregate estimated improper payment amount for all three components was then applied to the total disbursement activity for the Direct Loan program to come up with the overall Direct Loan improper payment rate of 1.03 percent, or \$1,056 million, at a 90 percent confidence level and 0.04 percent precision.

**Federal Student Aid
FY2013 Improper Payment Estimation Methodologies**

| FY 2013 Direct Loan Estimate Two-Stage Estimator | | | | | | | | |
|---|---|------------------------------|-------------------------|---|--------------------------------------|--|--------------------------------------|--|
| Point Estimate of Improper Payment (in millions) (a) | Point Estimate (as % of Population Total) | Standard Error (in millions) | Precision (in millions) | Precision Rate (as % of Population Total) | Lower Confidence Limit (in millions) | Lower Limit (as % of Population Total) | Upper Confidence Limit (in millions) | Upper Limit (as % of Population Total) |
| \$1,191.6 | 1.03% | \$28.4 | \$46.7 | 0.04% | \$ 1,144.9 | 0.986% | \$1,238.3 | 1.067% |

(a) The FY 2013 DL overaward improper payment rate estimate is \$974MM or 0.95% and the underaward improper payment rate estimate is \$82MM or 0.08%.

FSA also reviewed compliance audits as a supplemental estimate of improper payments. Public and private schools that receive more than \$500,000 of Title IV funds must submit compliance audits in accordance with OMB Circular A-133, *Audits of States, Local Governments and Non-Profit Organizations*. Proprietary institutions must submit compliance audits in accordance with the Department of Education's Office of Inspector General Audit Guide, *Audits of Federal Student Financial Assistance Programs at Participating Institution Servicers (2000)*. Thus, both A-133 audits and annual compliance audits of proprietary schools were used as the basis for the supplemental estimates. The Department randomly sampled 60 A-133 compliance audits of the total population of schools participating in the Direct Loan program. Since the sampling methodology is rarely reported in A-133 compliance audits, it was assumed that 15 students were sampled in each compliance audit with a disbursement value that is equal to the average disbursement amount for the Direct Loan program. The assumption of 15 students was made to compare to the sample methodology used in the general assessment program reviews conducted by FSA. Findings related to improper payments were logged from a sample of 60 compliance audits and divided by an estimated sample value computed based on the assumed sample size and disbursement values. The resulting estimate was 0.40 percent.

FFEL Program

The improper payment estimate for the FFEL program is composed of estimates of improper payments from the following activities: Special Allowance Payments (SAP) Interest Benefits (IB) conversions to repayments, deferments, and purchase sales and transfers to lenders; and reinsurance claims paid to Guaranty Agencies (GAs).

To encourage lenders to make student loans under the FFEL program, the federal government guaranteed lenders a loan subsidy, referred to as SAP. This loan subsidy, which is tied to a financial market index, ensures that lenders receive, at a minimum, a statutorily specified rate of return on student loan investments. Negative SAP occurs when the special allowance formula results in a negative rate on a loan and the lender must remit the excess interest to the Department. Historically, SAP has been among the largest categories of payments to lenders and guarantors. However, the College Cost Reduction Act of 2007 reduced SAP rates which, combined with a historically low interest rate environment, resulted in a decrease in SAP payments and an increase in related collections (or Negative SAP).

Federal Student Aid
FY2013 Improper Payment Estimation Methodologies

In FY 2012, FSA reported an improper payment rate for the FFEL program under the proposed methodology described in the [FY 2012 AFR](#). For FY 2013, FSA refined the FY 2012 methodology to estimate the improper payment rate for the FFEL program by changing the payment types tested by including reinsurance claims paid to GAs and excluding Negative SAP, and also allowing for improper payments identified to receive a weight based on the dollar amount disbursement for each financial institution. OMB has approved reporting under this methodology only in the FY 2013 AFR. The Department and OMB continue to seek agreement on an estimation methodology for the FFEL program for subsequent years.

In FY 2013, an estimated improper payment rate calculation was completed for the FFEL program based on program reviews conducted by Program Compliance – Financial Institution Oversight Service (FIOS) Group at a sample of financial institutions holding or servicing commercially held FFEL loans. FSA developed an improper payment measurement for the FFEL program in FY 2013 that estimated improper payments based on transaction points posing the highest risk of improper payments, to include SAP and IB payments to lenders and reinsurance claim payments to GAs. The results from program reviews at eight servicers and five GAs, where loan accounts were tested, were used to estimate improper payments for the FFEL program. Unserviced lenders were deemed not material to the overall population.

| FFEL Sampling | | | |
|-----------------------------------|----------------------------------|--|-------------------------------|
| Financial Institution Type | Extrapolation Methodology | Number of Loans/Grants Recipients | Number of Institutions |
| Lender/Servicers | Two-Stage | 13,542,378 | 24 |
| Guarantors | Two-Stage | 595,886 | 34 |

The sample represents 314 loan accounts where SAP and IB were tested, and 75 reinsurance claims were used to estimate the improper payment rate for the FFEL program. Any improper payments found in the sample were extrapolated to create a 90 percent statistical confidence interval range of the overall improper payment rate for refunds activity. Based on this analysis, the error rate was less than 0.01 percent, or \$0.15, at a 90 percent confidence level and 0.002 percent precision.

| FY 2013 FFEL Estimate Two-Stage Estimator | | | | | | | | |
|--|---|------------------------------|-------------------------|---|--------------------------------------|--|--------------------------------------|--|
| Point Estimate of Improper Payment (in millions) (c) | Point Estimate (as % of Population Total) | Standard Error (in millions) | Precision (in millions) | Precision Rate (as % of Population Total) | Lower Confidence Limit (in millions) | Lower Limit (as % of Population Total) | Upper Confidence Limit (in millions) | Upper Limit (as % of Population Total) |
| (a) | (b) | (a) | (a) | (b) | (a) | (b) | (a) | (b) |
| | | | | | | | | |

(a) Value is less than \$0.005

(b) Value is less than 0.0001%

(c) The FY 2013 FFEL overaward improper payment rate estimate is less than \$0.005MM, less than 0.0001%, and the underaward improper payment rate estimate is \$0.005MM, also less than 0.0001%.

Federal Student Aid
FY2013 Improper Payment Estimation Methodologies

Similar to the review of A-133 compliance audits used in the Direct Loan estimate, supplemental estimates were calculated based on A-133 compliance audits. Findings related to improper payments were recorded from a sample of 10 compliance audits from for-profit FFEL servicers and GAs divided by an estimated sample value computed based on the assumed sample size and disbursement values. The resulting estimate was less than 0.01 percent.