

Federal Student Aid

FY 2020 Statistically Valid and Rigorous Improper Payment Estimation Methodology

Introduction

Federal Student Aid (FSA) is committed to improper payment prevention, mitigation, and reduction. FSA continues to strengthen improper payment controls, refine estimation methodologies, and enhance analytics to monitor FSA programs. Accurate improper payment estimation is essential to achieving these objectives and will continue to inform root cause analysis and corrective actions.

FSA Programs Susceptible to Significant Improper Payment Risk

In FY 2020, the Pell Grant (Pell) and Direct Loan (DL) programs are the only FSA programs identified as susceptible to significant improper payment risk. In FY 2020, as required by statute, a risk assessment was performed on all FSA-managed programs, with the exception of the Pell and DL programs. FSA confirmed there were no new FSA-managed programs, significant changes in legislation, or significant changes in funding requiring additional risk assessments be performed. Therefore, this estimation methodology covers the Pell and DL programs only.

Statistically Valid and Rigorous Estimation Methodology

FY 2019, FSA implemented a new statistically valid and rigorous estimation methodology. This new methodology improves the accuracy of the improper payment estimates. The methodology is based on a random sample of schools. In FY 2020, FSA further refined the estimation methodology by clarifying sample selection and approach details, and using sustained questioned costs and an improved proxy of improper payments due to misreported income. The methodology continues to involve unbiased random sampling of schools and use of compliance audit data.

FSA estimates the annual amount of improper payments for the Pell and DL programs by reviewing the sustained results of annual compliance audits. Most schools that participate in an FSA program must have an independent auditor conduct an annual audit of the school's compliance with the laws and regulations that are applicable to the Title IV programs in which the school participates (a compliance audit). Section 487(c) of the Higher Education Act of 1965 (HEA) requires each Title IV participating institution to submit to the Department a compliance audit and a financial audit "on at least an annual basis." This statutory provision provides that the audit requirements can be met by submission of either an audit conducted under the *Guide for Audits of Proprietary Schools and For Compliance Attestation Engagements of Third-Party Servicers Administering Title IV Programs* issued by the Department's Office of the Inspector General (OIG) (i.e., the "OIG Audit Guide") or by submission of the results of an audit of the institution conducted under the Single Audit Act of 1984 (Single Audit Act), as amended in 1996. Compliance audits must be conducted in accordance with the standards contained in the U.S. Government Accountability Office (GAO) Government Auditing Standards. The type of compliance audit a school must undergo depends on the type of entity it is: for-profit, public, or nonprofit.

For both types of audits, a complete population of students who received Title IV program funds during the engagement period (fiscal year) is sampled by the auditor according to the guidelines set forth in the audit guidance. For proprietary schools, the OIG Audit Guide requires that auditors

perform random sampling. For non-proprietary schools, auditors are required to follow AICPA standards (i.e., AU-C section 530, Audit Sampling) per the Compliance Supplement to 2 CFR part 200, subpart F. The standard requires auditors to follow AICPA sampling guidance and use audit techniques and sample sizes that are sufficient to reduce sampling risk to an acceptably low level. Additionally, 2 CFR Part 200 provides the following regarding the scope of the audit in §200.514: (a) *The audit must be conducted in accordance with GAGAS.* (d) (4) *The compliance testing must include tests of transactions and such other auditing procedures necessary to provide the auditor sufficient appropriate audit evidence to support an opinion on compliance.* The second stage sampling (i.e., sampling of students) for non-proprietary schools is based on the requirements in 2 CFR §200.514 and the OMB Compliance Supplement and, therefore, it is assumed that any non-random student sample selection is performed in a manner consistent with those requirements, namely, in a manner that would avoid intentional under-representation of improper payment risk factors. The statutory and OMB requirements follow accepted audit standards and practices.

Auditors select samples to test for reporting, student eligibility, disbursements, verification and, if appropriate, withdrawal calculations. Instances of noncompliance identified as part of the compliance audits are reported as findings, even when corrective action has already been taken by the school. For compliance audits prepared in accordance with the OIG Audit Guide, the audit reports include all identified instances of noncompliance with the provisions of federal statutes, regulations, or the terms and conditions of the federal awards, regardless of materiality. For compliance audits prepared in accordance with the Uniform Guidance, per 2 CFR 200.516, the audit reports include findings of material noncompliance. However, instances of immaterial noncompliance should be included in the auditors' workpapers, and for audits prepared in accordance with the 2019 OMB Compliance Supplement and forward, auditors are required to report this information directly to FSA as part of the "Required Reporting for the Pell Grant and Direct Loan Programs."

A small population of public and nonprofit schools may apply for and receive an exemption from the compliance audit requirement. For-profit schools may likewise apply for a waiver from submitting a compliance audit or financial statements for a period of up to three years. Schools that receive waivers and exemptions comprise a small fraction of the total disbursement amount across both programs. FSA accounts for these disbursements by including them in the statistically valid sampling.

Pell Grant Program

For both the Pell and DL improper payment estimates, FSA selects a statistically valid sample of schools as a first-stage sample. Randomized sampling of schools is used to produce valid and unbiased point estimates and confidence intervals around those estimates. Sampling at the second-stage is performed by the independent auditor as part of the compliance audit in accordance with the standards summarized above. The most recently completed corresponding compliance audit for which the Student Financial Assistance (SFA) Cluster is a major program is selected in the sample and reviewed for improper payments. If the audit is deemed deficient, the audit must also have a Final Audit Determination (FAD) letter issued for it to be included in the sample. Otherwise, FSA will default to the most recently completed compliance audit that meets the aforementioned criteria.

The Pell estimate is based in part on all improper payments identified by the auditor for each sampled school. Additionally, the Pell estimate incorporates improper payment rates reported in the Free Application for Federal Student Aid (FAFSA) / Internal Revenue Service (IRS) Data Statistical Study ("Study") to account for improper payments associated with misreported income. For FY 2020, a new

Study error rate was developed that removes unaided applicants from the baseline error rate calculation. This new error rate is a better proxy of improper payments due to misreported income than the Study baseline error rate and therefore is used in place of the baseline error rate for FY 2020. Improper payments identified in the compliance audits that relate to misreported income are excluded from the estimate as they should be accounted for by applying the Study rates to the sample disbursements. Also, to avoid double counting improper payments in one disbursement, the Study overpayment error rate is not applied to those students whose entire Pell value was deemed improper through another procedure identified in the compliance audit. The improper payments for each sampled school are extrapolated to the population of Pell disbursing schools to produce a Pell improper payment estimate.

Based on this analysis, the Pell error rate for FY 2020 was 2.19 percent or \$601.52 million.

**FY 2020 Pell Grant Estimate
Two-Stage Estimator**

Point Estimate of Improper Payment (in millions)	Over-Payment Improper Payment Estimate (in millions)	Under-Payment Improper Payment Estimate (in millions)	Unknown Improper Payment Estimate (in millions)	Point Estimate (as % of Population Total)	Precision Rate (as a % of Population Total) based on 95% Confidence Interval
\$601.52	\$330.58	\$163.48	\$107.46	2.19%	+/- 1.24%

Direct Loan Program

The DL improper payment estimate includes three components:

- The DL compliance audit estimate, which is calculated in a manner similar to the Pell compliance audit estimate;
- An estimate derived from the sampling of loan consolidations; and,
- An estimate derived from the sampling of refund payments.

To estimate overall DL improper payments, these three independent statistical sample estimates are combined.

The loan consolidation component of the DL improper payment estimate is 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 2019 through June 2020 for a total sample size of 120. An independent sample of Federal Family Education Loan (FFEL) Program loan to DL consolidation overpayment and underpayment activity is selected using a Probability Proportional to Size (PPS) technique based on dollar amount to draw the sample to reduce the probability that small DL consolidations are selected. After selecting the monthly samples, each overpayment and underpayment is reviewed to determine which of these transactions are considered improper payments. Any improper payments found in the sample are extrapolated to create a 95 percent statistical confidence interval range of the overall improper payment rate for loan consolidation activity. The absolute value of improper payments divided by the aggregate absolute value of the samples comprises the baseline rate for DL consolidation.

The third component of the DL improper payment estimate is DL 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. If the credit balance is less than \$5, the account is closed 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. An independent sample of DL refund activity is selected using a PPS technique to reduce the probability of selecting transactions that are deemed not material. The PPS sample of DL refunds is based on samples of 10 refunds for each month from July 2019 to June 2020 for a total of 120 sample items. Once monthly samples are selected, each refund is tested to determine whether the samples are improper payments. The value of improper payments divided by the aggregate value of the samples comprises the baseline rate for DL refunds.

The DL compliance audit, consolidation, and refund rates are then applied to their representative FY 2020 disbursements. The aggregate estimated improper payment amount for all three components is then applied to the total disbursement activity for the Direct Loan program to determine the overall Direct Loan improper payment rate of 0.84 percent or \$742.94 million.

**FY 2020 Direct Loan Estimate
Two-Stage Estimator**

Point Estimate of Improper Payment (in millions)	Over-Payment Improper Payment Estimate (in millions)	Under-Payment Improper Payment Estimate (in millions)	Unknown Improper Payment Estimate (in millions)	Point Estimate (as % of Population Total)	Precision Rate (as a % of Population Total) based on 95% Confidence Interval
\$742.94	\$577.26	\$31.15	\$134.53	0.84%	+/- 0.87%