Methodological Appendix

New America's Gainful Employment Blog Series

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This page provides more detail about the analysis shared in our blog series on gainful employment, particularly the introductory blog and the blog about outcomes at MSIs.

The proposed gainful employment metrics

Gainful employment regulations would stop subsidizing programs – specifically short-term credentials and all programs offered at for-profit schools — which lead to poor labor market outcomes. According to a draft released last year (more on this draft below), the Department of Education (Department) is considering using two metrics to evaluate programs subject to gainful employment regulations. Programs would fail the regulations if they fail either of two tests, and two failures in three years would make programs ineligible for federal student loans or Pell Grants.

An earnings threshold would require that graduates' median earnings three years out of school are higher than the median earnings of high school graduates (or GED holders) aged 25 to 34 in the state of the college. Programs with more than half of students outside the state would be compared to national instead of state-level median wages.

Two debt-to-earnings ratios would evaluate whether graduates' estimated median loan payments are an affordable percentage of median earnings. The annual debt-to-earnings ratio would evaluate whether a measure of annual loan payments, derived from amortizing median debt loads of graduates, is 8 percent or less of graduates' earnings. A discretionary test would evaluate if the loan payment is 20 percent or less of earnings minus 150 percent of the poverty guideline. Programs would pass the debt-to-earnings test by passing either of these ratios.

Calculation of institutional-level gainful employment outcomes

Our blogs report the percentage of degrees offered at each institution that would pass or fail the proposed gainful employment regulations. To calculate this, we counted how many programs would pass or fail gainful employment at each college using the Department's April 2022 estimates. Because some programs have only a handful of students and others have thousands of students, we weighted all statistics by the number of degrees granted by the program. We would prefer to weight by the number of enrolled students in each program, but these data are not available.

The April 2022 dataset from the Department of Education

During the negotiated rulemaking process in 2022, the Department of Education released a draft of proposed gainful employment regulations, along with a dataset designed to estimate the proposal's effect. The dataset has an observation for each higher education program in IPEDs, where opeid6, credlev, and cipcode define a program. It reports estimates of whether each certificate and for-profit program would have passed the proposed regulations if they were in place in 2019. All of our blog posts rely on this dataset.

The dataset is available under the “Institutional and Programmatic Eligibility Committee”, “Session 3: March 14 - 18, 2022,” and “Materials” sections of the linked page. More information about the data is available from help files posted on the negotiated rulemaking webpage, including a comprehensive description of data limitations and a data dictionary. To give a sense of these data limitations, we briefly discuss how well each variable in the April 2022 dataset matches the proposed metrics.

The variable for the median earnings of program graduates three years after leaving school closely matches the Department’s proposed metric. One difference is that the proposed regulations would use four-year cohorts for small programs, but the April 2022 file only has a two-year cohort. In the April 2022 dataset, median earnings are recorded in 2019 dollars for the cohort of students who completed their degrees in 2014-2015 and 2015-2016.

The measure of high schoolers’ median income also matches the proposed regulations well. The Department calculated this earnings threshold using the 5-year file of the 2019 American Community Survey. There is one difference from the regulatory proposal: data constraints mean the dataset matches all programs to a state-level median earnings measure, even programs that might have many out-of-state students.

The median debt variable used for the debt-to-earnings ratios diverges further from the proposed gainful employment metric. The gainful employment draft proposes a measure of median debt among program graduates who received federal financial aid. The median debt measure would include Parent Plus and private loan debt, capped by the amount of debt taken out for tuition, fees, and supplies. The April 2022 median debt variable is missing private student loans (biasing the variable lower than the proposed metric). It also does not subtract debt taken out for living expenses (biasing the variable higher than the proposed metric). The debt variable is recorded in 2016 dollars among a cohort that graduated in 2015-2016 and 2016-2017.

College Scorecard data merge

The April 2022 dataset has many, but not all, variables that are helpful for evaluating the effect of gainful employment. For example, it reports which colleges are HBCUs and tribally controlled colleges but does not flag other types of MSIs. The dataset also only reports earnings and debt data for programs subject to gainful employment regulations. To get extra information, we merged the April 2022 dataset with the most recent College Scorecard data at the program level (matching on the 6-digit opeid, the cip code, and the credential level).

Calculation of gainful employment outcomes for all programs

In our MSI blog, we used earnings data from College Scorecard to calculate how many programs across all schools and credential levels would pass the proposed earnings thresholds. To determine if all programs would pass an earnings threshold, we compared College Scorecard median earnings (deflated back to 2019 dollars) to the 2019 median high school wage variable in the April 2022 data.

Unfortunately, we could not estimate the effect of debt-to-earnings ratios on all programs. The median debt variable in the April 2022 dataset is different from the median debt reported in College Scorecard. College Scorecard reports median debt only among borrowers, but the proposed gainful employment metric would factor in zero-dollar debt loads of non-borrowers. College Scorecard also does not report median debt for Parent Plus and Stafford loans together.

Among the gainful employment programs with median debt data in College Scorecard and the April 2022 dataset, the College Scorecard debt figure is around $1,800 higher, but the difference varies widely. The different debt measurement changes gainful employment projections for each program and could skew sector passing rates.

Treatment of missing earnings data

An important limitation of the April 2022 data is that median earnings are missing for some small programs that will eventually be matched with earnings data. To protect student privacy, the IRS employs protocols to reduce disclosure risk, including suppression of earnings data when there are few observations. Additionally, the proposed rules would only report earnings for programs with 30 IRS-matched observations.

The April 2022 data shared by the Department reports earnings for a two-year cohort. But the regulations propose using four-year cohorts for small programs. This means that more small programs will eventually be matched with median earnings data under the rules than in the dataset. The estimates in the blogs count these small programs as passing the gainful employment regulations because the draft regulations would automatically pass programs with missing data. But these estimates slightly overstate the number of programs that automatically pass gainful employment due to missing data.

Here, we also share alternative estimates to give MSIs a sense of the absolute highest amount of failures they could expect. For this upper-bound estimate, we assumed the programs with missing data would have the same passing rate as other programs at the same school. If the school had no programs with data, we assumed the programs with missing data would have the same passing rate as programs at other schools with the same control (public, for-profit, or nonprofit) and the same highest degree offering.

These alternative estimates assume that no programs will have missing data, meaning they almost certainly overestimate the number of failures. Once gainful employment and four-year cohorts are implemented, some small programs will continue to have missing data. In 2014, the Department estimated that four-year cohorts would reduce the portion of students in programs with missing data to 30 percent (compared to 40 percent using two two-year cohorts).

If all of the small certificate programs with missing data had enough data to be evaluated under gainful employment thresholds, 5 percent of community colleges, 8 percent of MSIs, and 4 percent of HBCUs would have more than 10 percent of degrees granted in failing programs. No HBCUs (and 1 percent or fewer of MSIs and community colleges) would have more than half of credentials awarded in failing programs. In contrast, 86 percent of for-profit colleges would have more than 10 percent of degrees granted in failing programs. And, using these upper-bound estimates, 75 percent of for-profits would have more than 50 percent of degrees in failing programs.