America’s higher education landscape is a unique mix of publicly funded, nonprofit, and for-profit institutions. Understanding their different revenue and expenditure patterns is crucial to understanding higher education policy. Researchers have long relied on the Integrated Postsecondary Education Data System (IPEDS) finance survey, but the Urban Institute’s Education Data Portal has recently supplemented these data with additional data, from a variety of sources, that can shed light on various aspects of higher education finance and regulation.

This brief will introduce readers to some of these data sources, show how they can be linked with other data in the Data Portal, describe patterns in these data, and pose questions for further research. All the datasets described in this brief can be accessed through the Education Data Portal application programming interface, Stata and R packages, and point-and-click Explorer tool. These data are meant to supplement the harmonized version of the IPEDS finance survey that is also available in the Portal (Blom et al. 2020).

Data from the Office of Federal Student Aid

The Office of Federal Student Aid (FSA), part of the US Department of Education, manages federal student aid programs. Most of these are Title IV programs (i.e., they fall under Title IV of the Higher Education Act of 1965, as amended), including federal student loans, Pell grants, and work-study programs. Eligibility for these programs is limited to institutions that meet certain requirements related to loan default, financial stability, and revenue sources. The FSA provides annual (or quarterly) institution-level data not only on the loan and grant volumes associated with these programs but on the metrics used for determining eligibility.
90/10 Ratios

One of the metrics used to determine Title IV eligibility for for-profit institutions is the “90/10 ratio,” which captures the share of revenues from Title IV sources relative to total revenues. For-profit institutions have long been required to get at least 10 percent of their revenues from sources other than Title IV programs to participate in federal student aid programs. (The COVID-19 relief bill passed in March 2021 tightened the rule so federal education aid to veterans will soon be considered part of federal aid instead of helping schools meet the 10 percent requirement.)

FIGURE 1
Many For-Profit Institutions Receive a Majority of Their Revenues from Federal Sources
2017–18 academic year

Source: Office of Federal Student Aid data, via Education Data Portal v. 0.12.0, Urban Institute, under ODC Attribution License.
Note: Includes both degree-granting and non-degree-granting institutions.

FSA data reveal that in 2017–18, few for-profit institutions exceeded the threshold of 90 percent of revenues from federal student aid, but 25 percent of institutions received at least 80 percent of revenues from these sources. Only about 18 percent received less than half their revenues from federal student aid.

For-profit institutions are responding to federal regulation. Many would not survive if their students were not eligible for the federal student aid that constitutes such a large share of their revenues. Looney and Lee (2019) found that default rates and loan repayment rates are worse at for-
profit institutions with higher 90/10 ratios, but there is limited evidence about how much these revenue shares correspond to meaningful outcomes, such as student graduation rates or earnings. Furthermore, the rule can have unintended consequences: colleges struggling to meet the threshold may encourage students to take out private loans (which offer fewer protections than federal loans) or raise tuition beyond the level students can cover with federal student aid.

Financial Responsibility Composite Scores

The FSA also attempts to gauge the financial stability of private institutions, both nonprofit and for-profit. It calculates a financial responsibility composite score comprising a primary reserve ratio, an equity ratio, and a net income ratio. These scores range from -1 to 3, with scores below 1 deemed “not financially responsible” and those above 1.5 “responsible.”

Institutions with poor financial responsibility scores are most likely to close (figure 2). But only about 5 percent of “not responsible” institutions closed in 2008–09. That share rose to 12 percent in 2010–11 and to 17 percent in 2015–16. Although these scores are correlated with outcomes, they are not perfect predictors of outcomes (GAO 2017). The ability to anticipate closures can help prevent a situation where many students are suddenly caught without a path to completion (Kelchen 2020).

FIGURE 2
Colleges with Low Financial Responsibility Scores Are More Likely to Close

![Bar chart showing the share of private colleges closing by financial responsibility score from 2008–09 to 2015–16.](https://example.com/figure2.png)

Source: Office of Federal Student Aid data, via Education Data Portal v. 0.12.0, Urban Institute, under ODC Attribution License.

Note: An institution was determined to be closed if it did not appear in the data the following year.
Loans

The FSA also reports data on federal loan and grant programs, including subsidized and unsubsidized loans, Parent PLUS and Grad PLUS loans, and Pell grants, as well as smaller campus-based programs, including federal work-study (FWS).

The loan volume data illustrate interesting borrowing patterns over the past few decades. Annual disbursements for both subsidized and unsubsidized loans (both undergraduate and graduate) have declined in recent years (figure 3). But Grad PLUS and Parent PLUS loans have posted increases over much of this period.

Understanding patterns in education debt is fundamental to addressing the increased debt burden many students and their families face. A recent Urban Institute report lays out proposals for reforming the Parent PLUS loan system (Baum, Blagg, and Fishman 2019). Problems with the Grad PLUS programs, which have no borrowing limit, are also well documented.¹

FIGURE 3
Growth in Graduate Loans as Undergraduate Loans Decline

Source: Office of Federal Student Aid data, via Education Data Portal v. 0.12.0, Urban Institute, under ODC Attribution License.

Note: Reported in 2018 dollars.

Campus-Based Awards

The Federal Work-Study Program funds many fewer students than the Federal Pell Grant Program does. In 2019–20, when 6.7 million undergraduate students received Pell grants, 613,000 undergraduate and graduate students received FWS. The federal government allocates Pell grants to
individual students based on their financial circumstances, but FWS is a campus-based program. The institution receives funds and distributes them to students with financial need. In 2017–18, private nonprofit four-year institutions awarded about $200 in FWS per full-time equivalent (FTE) student. Because of the way funds are distributed to institutions, public two-year institutions awarded only about $35 per student (figure 4).

FIGURE 4
Federal Work-Study Is Disproportionately Available at Four-Year Nonprofit Colleges

![Federal work-study dollars per full-time equivalent student](chart)

Source: Office of Federal Student Aid and Integrated Postsecondary Education Data System data, via Education Data Portal v. 0.12.0, Urban Institute, under ODC Attribution License.

IPEDS Data

IPEDS collects annual data on admissions, enrollment, completion, offerings, and more for Title IV–eligible institutions. Aside from its well-known finance survey, IPEDS provides data on expenditures on salaries for full-time instructional and noninstructional staff. These data are not comprehensive, in that they do not include part-time or medical staff and do not necessarily reflect total compensation (which includes benefits such as health insurance and retirement contributions), but they can shed light on institutional practices and priorities both within and across sectors.
Noninstructional Staff Salaries

Noninstructional staff salaries include salary expenditures for full-time nonmedical staff working in such areas as management, business and financial operations, service, sales and related, and office and administrative support. This category also includes staff in research; public service; education services (e.g., librarians, curators, archivists, academic affairs); computer, engineering, and science; community, social service, legal, arts, design, entertainment, sports, and media; health care practitioners and technical; natural resources, construction, and maintenance; and production, transportation, and material moving. IPEDS has collected these data since 2012–13.

Average noninstructional salary expenditures vary tremendously by institutional sector. Nonprofit four-year institutions spend the most, at roughly $9,200 per FTE student in 2018–19. For-profit institutions spend the least: $2,400 per FTE student at two-year institutions and $2,600 at four-year institutions. Four-year public institutions spend far more than two-year public institutions: $7,000 versus $2,800 per FTE student. (The relatively small two-year nonprofit sector spends about $4,700 per FTE student.)

Noninstructional staff engage in a wide range of activities, and the distribution of these activities differs substantially across sectors. Management and, especially, sales account for larger shares of these full-time staff expenditures in the for-profit sector than in the public and private nonprofit sectors (figure 5).
FIGURE 5
For-Profit Colleges Spend Proportionately More on Sales and Management

Breakdown of salary expenditures for full-time noninstructional staff

- Office and administrative support
- Sales and related
- Business and financial operations
- Management
- Education services (e.g., librarians, curators, archivists, academic affairs)
- Other

Source: Integrated Postsecondary Education Data System data, via Education Data Portal v. 0.12.0, Urban Institute, under ODC Attribution License.

Note: “Other” includes service; research; public service; computer, engineering, and science; community, social service, legal, arts, design, entertainment, sports, and media; health care practitioners and technical; natural resources, construction, and maintenance; and production, transportation, and material moving.
Instructional Staff Salaries

IPEDS collects data on salaries for full-time nonmedical instructional staff, broken down by academic rank, contract length, and sex. These data date back to 1980–81.

At public and private nonprofit colleges and universities, 25 to 30 percent of full-time instructional staff are full professors, 20 to 25 percent are associate professors, and a similar or slightly larger share are assistant professors. About two-thirds of the faculty in the public sector and three-quarters of those in the private nonprofit sector are in the professorial ranks, which are generally the only positions that are tenured or are on the tenure track. In contrast, only about 29 percent of for-profit faculty are in these ranks.

More than half the full-time instructional staff at for-profit institutions hold the rank of instructor. (At these institutions, 22 percent of faculty members are full time, as compared with 55 percent at public and private nonprofit institutions.) But full professors are the only group where full-time salaries within faculty categories are substantially lower at for-profit institutions than in other sectors.

To provide a richer picture of salary expenditures and priorities, IPEDS might consider collecting salary data for part-time faculty.

FIGURE 6
For-Profit Colleges Hire Proportionally More Instructors Than Tenure-Track Faculty
Four-year institutions, 2018–19

Source: Integrated Postsecondary Education Data System data, via Education Data Portal v. 0.12.0, Urban Institute, under ODC Attribution License.
Gender pay gaps among instructional staff have declined, but average salaries for full-time male faculty members are still higher at every rank than those for full-time female faculty members. The gap is largest for full professors, among whom the earnings gap declined from a median of 11 percent in 1980 to 9 percent in 1990 and to 6 percent in 2010 but has not declined since then. There is also a large gap for lecturers, who are frequently high-status academics not on the tenure track. The gender gaps are smallest for faculty members of lower status (no academic rank and instructors).

**FIGURE 7**
Pay Gaps Have Decreased, but Progress Has Stalled

*Full-time nonmedical instructional staff*

Median male-female salary difference

Several factors contribute to the gender pay gap. These include field of study, with fields dominated by men, such as computer science and engineering, better paid than those such as English and the arts, where there are more women; number of years in rank; professional stature; and gender discrimination. Salary data by department, which are not reported in IPEDS, could help illuminate these gaps.
In addition, much of the difference in salaries between male and female faculty members is related to the institutions at which they are employed. Pay gaps differ substantially between four-year and two-year institutions, for example; one might wish to explore differences by institutional prestige, size, research focus, or other characteristics.

Conclusion

This review of selected higher education finance data provides a flavor of the wide range of the data available. I encourage readers to explore the data in the Portal and to link these data to each other and to other datasets in the Portal, such as other IPEDS surveys or the College Scorecard.

Notes


References


About the Author

Erica Blom is a senior research associate in the Center on Education Data and Policy at the Urban Institute, where she studies higher education policy. Blom received a bachelor’s degree in mathematics and political science from Queen’s University and a master’s degree in economics from Western University. She also earned a doctoral degree in economics from Yale University, where her research focused on students’ choices in college major.
Acknowledgments

This brief was funded by Arnold Ventures. We are grateful to them and to all our funders, who make it possible for Urban to advance its mission.

The views expressed are those of the author and should not be attributed to the Urban Institute, its trustees, or its funders. Funders do not determine research findings or the insights and recommendations of Urban experts. Further information on the Urban Institute’s funding principles is available at urban.org/fundingprinciples.

The author would like to thank Sandy Baum and Matthew Chingos for guidance and David Hinson for copyediting.