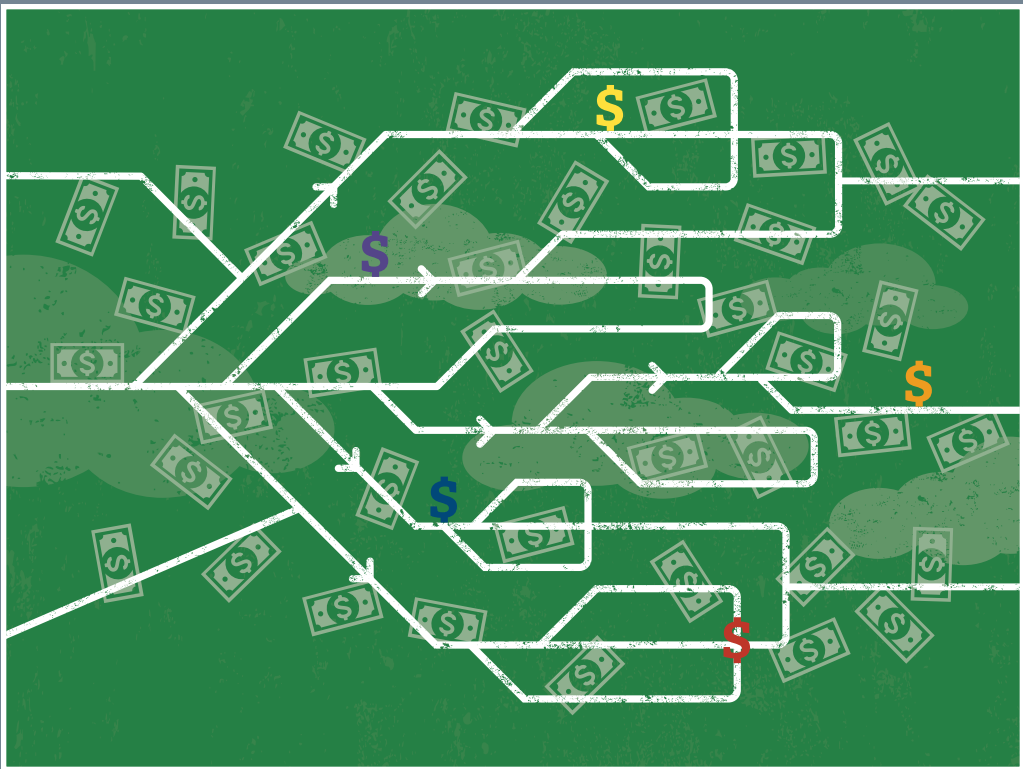


Undergraduate Financial Aid in the United States



Judith Scott-Clayton

AMERICAN ACADEMY OF ARTS & SCIENCES

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Section 1

Introduction: The New Centrality of Financial Aid

Over half a century ago, President Lyndon Johnson signed the Higher Education Act of 1965 into law, describing its goal as ensuring that “the path of knowledge is open to all that have the determination to walk it. It means that a high school senior anywhere in this great land of ours can apply to any college or any university in any of the 50 states and not be turned away because his family is poor.”¹ The act solidified the federal role in student financial aid, including the provision of federal grants, loans, and work-study assistance, which today remain the foundation of undergraduate aid for college.

Much has changed since then. On the positive side, college-going rates have increased for students across the income spectrum. Overall, the percentage of twenty-four to thirty-year-olds with at least some college experience rose from just 33 percent in the late 1960s to 61 percent in 2009, including many who enrolled for the first time well after high school.² And the earnings premium for a college degree remains near historically high levels.³ At the same time, college tuition has risen dramatically in real terms, in part due to the failure of state and local operating subsidies to keep pace with rising enrollments. Examinations of annual tuition increases may even understate the increasing cost of a college degree, as students are taking more years to finish. Finally, the *gaps* in college attainment rates between high- and low-income families are greater for recent cohorts than for those born in the early 1960s.⁴

Put these facts together—rising college enrollment rates and high returns to college, rising tuition costs, lengthening time to degree, and persistent inequality in attainment—and the centrality of financial aid policy to the future

1. Lyndon Baines Johnson, “Remarks at Southwest Texas State College Upon Signing the Higher Education Act of 1965,” November 8, 1965, archived online by Gerhard Peters and John T. Woolley, The American Presidency Project, www.presidency.ucsb.edu/ws/?pid=27356.

2. Author’s calculations using October Current Population Survey data. While Johnson’s remarks in 1965 focused on promoting access for high school students, many aid recipients today are older.

3. Sandy Baum, Jennifer Ma, and Kathleen Payea, *Education Pays 2013* (New York: The College Board, 2013).

4. Martha Bailey and Susan Dynarski, “Inequality in Postsecondary Education,” in Greg J. Duncan and Richard J. Murnane, eds., *Whither Opportunity? Rising Inequality, Schools, and Children’s Life Chances* (New York: Russell Sage Foundation, 2011), 117–132.

of undergraduate education in the United States becomes clear. Both the scale and the scope of financial aid policy have grown since 1965: more students are receiving more aid, and more types of aid, than ever before. Two-thirds of undergraduates will receive some kind of grant or scholarship, with over a third receiving a Pell Grant.⁵ In 2013–2014, full-time undergraduates received an average of over \$14,000 in total aid—a 50 percent increase (after adjusting for inflation) over just a decade ago—including over \$8,000 in grants, nearly \$5,000 in federal loans, and \$1,260 in other assistance, including education tax credits and work study.⁶ The stakes have never been higher to ensure the effectiveness of financial aid—not just for the sake of the stakeholders who provide it but for the sake of students themselves, who make the biggest investments of all.

To inform discussions of the future of undergraduate education in the United States, and the role of financial aid within it, this paper provides an overview of undergraduate financial aid—its motivations, its moving parts, and its controversies. Section 2 summarizes the fundamental motivations for providing financial aid. While the social value of financial aid may be taken for granted among those working within higher education, it is not always obvious to policy-makers who are trying to balance budgets in an era of fiscal constraint. Thus, a succinct review of the rationale for student aid can be helpful to have on hand. The heart of the paper, Section 3, provides an overview of undergraduate financial aid: who provides what, how, and to whom. Section 4 discusses several hot-button issues in contemporary financial aid policy, highlighting key sources of debate and incorporating research evidence where available. Section 5 concludes.

5. College Board, *Trends in Student Aid 2014* (New York: The College Board, 2014).

6. *Ibid.*

Section 2

Background: Fundamental Justifications for Financial Aid

PRIMARY JUSTIFICATIONS FOR PUBLIC PROVISION OF FINANCIAL AID

Public involvement in higher education finance can be justified in terms of both economic efficiency and social equity. Without intervention, higher education markets are inherently vulnerable to at least three fundamental problems that lead students to underinvest in college.⁷ The first and most basic is that students face significant costs up front, while all of the benefits come in the future. For some students, family resources can solve this problem, if families have had sufficient income over time, have saved up for their children’s (or their own) college attendance, and are willing to provide support. Indeed, family resources are the single largest source of funds for college, covering 38 percent of tuition, fees, room, and board charges for full-time undergraduates in 2012–2013.⁸ But not all students can count upon family resources to fully fund their studies. Because this financial constraint is most binding for families with low incomes and/or limited wealth, it can lead not only to underinvestment in college but to unequal access to college by family income and race.

Private lenders may be willing to lend to parents with established sources of income and assets (among home-owning families with college-age children, nearly a quarter hold home equity loans, which are often used to help pay for college).⁹ But private lenders are unlikely to lend to students, on their own, as much as they need to pay for college, because students typically have no assets with which to secure such loans, and a bank cannot repossess someone’s education as they could a car or a house. Thus, some students who would benefit greatly from college—enough to eventually pay for all the costs of their edu-

7. Nicholas Barr, “Higher Education Funding,” *Oxford Review of Economic Policy* 20 (2) (2004): 264–283.

8. Kathleen Payea, Sandy Baum, and Charles Kurose, *How Students and Families Pay for College*, College Board Advocacy and Policy Center Analysis Brief (New York: The College Board, March 2013).

9. Harold Stolper, “Home Equity Credit and College Access: Evidence from Texas Home Lending Laws,” unpublished working paper, Columbia University, 2015, http://b.3cdn.net/nycss/e721264380141003d6_0pm6btwhk.pdf.

cation and then some—may not go because of a temporary credit crunch, and both individual and society suffer as a result.

This credit crunch provides justification for the public provision of student loans. Two other problems can motivate subsidies to reduce outright the price families pay. First is that individuals may not consider positive social spillovers when they make their college choices. But a college education may generate benefits to society above and beyond the benefits reaped by individuals, including improved infant health, reduced reliance on social welfare programs, and increased civic participation.¹⁰ Second is the reality of imperfect information and limited rationality: students might not make decisions even in their own long-term interest because they underestimate benefits or overestimate the costs of college or, like other human beings, they procrastinate, avoid complex choices, and exhibit inertia in planning and executing their decisions.¹¹ Loans alone do not address these latter two problems (loans could even make information problems worse, due to their complexity).

Taken together, these underlying problems in the market for higher education can justify not only student loans but also broad-based policies to reduce the price students and families pay across the board (such as directly funding public institutions so that they can charge less than the cost of provision). Targeting financial aid to specific groups (such as need-based aid for low-income students) may enhance both equity and efficiency, if the problems outlined above are particularly acute for the targeted group or the aim of policy-makers is to reduce educational inequality. Other policy responses can be tailored to the specific problem they seek to solve. For example, performance-based aid may address informational and behavioral constraints by establishing performance expectations and providing students with needed motivation.

INSTITUTIONAL AND PRIVATE ORGANIZATIONAL JUSTIFICATIONS FOR AID

Concerns about efficiency and equity motivate private providers of financial aid as well. Some employers provide aid out of a desire to promote a skilled workforce. Colleges and foundations provide financial aid targeted to low-income, racial/ethnic minority, and other underrepresented groups out of both a sense of social purpose and a belief that diversity along multiple dimensions enhances the undergraduate learning experience for all students. Diversity objectives

10. Philip Oreopoulos and Uros Petronijevic, “Making College Worth It: A Review of the Returns to Higher Education,” *The Future of Children* 23 (1) (2013): 41–65; Thomas S. Dee, “Are There Civic Returns to Education?” *Journal of Public Economics* 88 (9) (2004): 1697–1720.

11. Judith Scott-Clayton, “Information Constraints and Financial Aid Policy,” in Donald Heller and Claire Callender, eds., *Student Financing of Higher Education: A Comparative Perspective* (London: Routledge, 2013); Adam M. Lavecchia, Heidi Liu, and Philip Oreopoulos, “Behavioral Economics of Education: Progress and Possibilities,” Working Paper 20609 (Cambridge, Mass.: National Bureau of Economic Research, 2014).

more broadly can motivate aid targeted to students with unusual backgrounds or exceptional talents.

The goals of individual institutions and organizations, however, may also differ in important ways from the public purpose of financial aid. For example, some institutions—both public and private—may provide merit-based and athletic scholarships primarily to enhance institutional prestige. And one key goal of institutional aid is particularly distinct: colleges may use financial aid simply as a revenue-maximizing pricing strategy. Charging different prices to different students enables the institution to capture more revenue from more students than would be possible if all students paid the same price.¹² This is the same discounting strategy used by airlines and other sectors to maximize profits. Postsecondary institutions' pricing strategies can be even more sophisticated than in other industries, because colleges typically have much more detailed information on students' financial circumstances that can be used to target precisely these discounts. Students also may be more responsive to price discounts when they are called “scholarships,” a labeling option that most other industries do not have.¹³

There is no reason why different providers of financial aid should necessarily have the same goals, and the motivations underlying a given aid program may be of little relevance to the students who benefit. Still, recognizing the distinct goals of public versus private aid is useful background to discussions of how these programs work and how they affect students' decisions and outcomes.

12. In economics this is referred to as price discrimination. If the institution is constrained to charge everyone the same amount, the most enthusiastic enrollees pay only as much as the least enthusiastic enrollee.

13. Christopher Avery and Caroline M. Hoxby, “Do and Should Financial Aid Packages Affect Students' College Choices?” in Caroline M. Hoxby, ed., *College Choices: The Economics of Where to Go, When to Go, and How to Pay for It* (Chicago: University of Chicago Press, 2004), 355–394.

Section 3

Overview of Undergraduate Financial Aid

WHO PROVIDES AID?

What form should subsidies for higher education take? Governments subsidize college via two primary channels: 1) by directly funding public institutions, which then charge students reduced or even free tuition; and 2) by providing financial aid to individual students, which they then use at any eligible institution. The focus of this paper is financial aid. But these two channels are not mutually exclusive, generating a spectrum of alternative models of higher education finance. Significant variation exists across the United States, though from an international perspective the United States is an example of a high-tuition, high-aid system, while many European countries use a low-tuition, low-aid model.

To students and families, direct government subsidies to institutions are often invisible, and they are not always included alongside discussions of financial aid policy. Yet even in the United States, direct appropriations from state and local governments are one of the largest sources of support for undergraduates. And because of the potential for interactions between financial aid and direct appropriations—decreasing support via one channel, for example, may necessitate increases in the other—it is important to consider these two channels together.

Table 1 provides an overview of the current landscape of support for undergraduates, as well as trends over the past twenty-five years. The federal government is currently the largest source of student support by far, providing \$122.7 billion in grants, loans, work-study, and tax benefits in 2014–2015. State and local governments provide the next largest source of total support, primarily through institutional appropriations (\$75.3 billion in 2013–2014) but also through direct grants to students (\$10 billion). Institutions themselves provide another \$39.8 billion in grants, and private organizations and employers provide \$11.3 billion in grant aid. (Not shown in this table is an additional \$8.6 billion in nonfederal loans, primarily private loans. Since these loans confer no special advantages relative to other types of consumer credit, they are not considered here as a form of student aid.)

The table illustrates how the division of labor in higher education finance has shifted over time. The federal government has always been the largest provider of direct aid to students, but this investment has nearly quintupled over

Table 1. Support for Undergraduates (in Billions, 2014 Dollars) by Source, over Time

Aid Source	1990–1991	2000–2001	2010–2011	2014–2015 (Prelim.)
STATE & LOCAL APPROPRIATIONS*	\$70.7	\$84.7	\$79.7	\$75.3
TOTAL FEDERAL, STATE, INSTITUTIONAL & OTHER AID**	\$42.4	\$81.5	\$200.6	\$183.8
ALL FEDERAL AID	\$26.9	\$53.0	\$148.3	\$122.7
All Federal Grants	\$11.7	\$14.2	\$51.8	\$44.6
Pell Grants	\$9.0	\$11.0	\$39.0	\$30.3
FSEOG	\$0.8	\$0.9	\$0.8	\$0.7
LEAP	\$0.1	\$0.1	\$0.1	\$0.0
Academic Competitiveness Grants	\$0.0	\$0.0	\$0.6	\$0.0
SMART Grants	\$0.0	\$0.0	\$0.5	\$0.0
Veterans and Military	\$1.8	\$2.3	\$10.9	\$13.6
Federal Work-Study	\$1.1	\$1.1	\$0.9	\$0.9
All Federal Loans	\$14.1	\$32.7	\$77.5	\$62.1
Perkins Loans	\$1.4	\$1.3	\$0.7	\$1.0
Subsidized Stafford	\$11.2	\$15.7	\$31.6	\$24.7
Unsubsidized Stafford	\$0.0	\$10.6	\$33.5	\$25.9
ParentPLUS	\$1.5	\$5.1	\$11.6	\$10.6
Education Tax Benefits	\$0.0	\$5.0	\$18.0	\$15.2
STATE GRANTS	\$3.7	\$6.3	\$10.0	\$10.0
INSTITUTIONAL GRANTS	\$8.9	\$16.7	\$32.8	\$39.8
PRIVATE & EMPLOYER GRANTS	\$2.9	\$5.5	\$9.6	\$11.3
TOTAL FALL FTE ENROLLMENT	8,624,253	9,667,063	13,660,597	12,942,183

Source: State and local appropriations from National Center for Education Statistics (2015). Aid amounts and undergraduate FTE counts from The College Board, *Trends in Student Aid 2015* (New York: The College Board, 2015), Table 1A and Table 3 (online data). *Appropriations may include graduate education; 2014–2015 number is not yet available so is estimated at 2013–2014 amount. **Total aid excludes nonfederal loans, which total \$8.6 billion in 2014–2015.

the past twenty-five years (even after adjusting for inflation, and regardless of whether student loans are included or excluded from consideration). Meanwhile, state and local appropriations have barely budged in real terms—increasing by just 6 percent since 1990, even as undergraduate enrollment rose by 50 percent (if state grants are included, total state and local funding still has

increased by only 15 percent). Not surprisingly, in periods when state/local funding (per student) at public institutions declines, tuition and fees at public institutions tend to rise in response.¹⁴ This in turn increases the policy pressure for expanding financial aid, especially in core programs such as Pell Grants and federal tax benefits, to soften the blow.

WHAT ARE THE MAIN TYPES OF AID AND THEIR KEY FEATURES?

Financial aid for college students takes a multitude of forms. This section provides an overview of the largest federal programs, as well as illustrative examples of other types of programs. Table 2 provides average and maximum award amounts and numbers of students served through each type of program.

The federal programs established in Title IV of the Higher Education Act of 1965 are known collectively as “Title IV aid” and include the precursors to Pell Grants, Stafford Loans, and Federal Work-Study. Title IV aid also includes a variety of smaller programs: Perkins Loans; Federal Supplemental Educational Opportunity Grants (SEOG); the Leveraging Educational Assistance Partnership (LEAP) program; Academic Competitiveness Grants (ACG); and National Science and Mathematics Access to Retain Talent (SMART) grants. Students must file a Free Application for Federal Student Aid (FAFSA) to apply for any Title IV aid. Veterans’ benefits and tax benefits for college are two sources of federal aid that exist outside the Title IV system—and have grown rapidly in recent years. Embedded within the state, institutional, and private/employer grant categories are hundreds of separate programs with distinct characteristics.

Policy-makers and students should recognize that one dollar of one type of aid is not always directly comparable to one dollar of another type of aid. The most valuable (and most costly) types of aid are grants and tax benefits, because they are nonrepayable and generally require no work obligation, though some grants may include academic performance requirements or may be conditioned on prior work (like veterans’ benefits). Student loans, because they eventually require repayment, are not as valuable to students (or as costly for the government) per dollar of aid. Similarly, since work-study programs require students to work, one dollar of work-study support is not the same as one dollar of aid that comes with no strings attached. Finally, different types of aid require different types of applications and often have different rules for maintaining eligibility, both of which can affect their value to students. The aid application process is discussed in more detail below.

14. College Board, *Trends in College Pricing 2015* (New York: The College Board, 2015); Sandy Baum, “Declining State Expenditures on Public Universities Are in Fact Driving Tuition Increases,” *Urban Wire* (April 5, 2015), <http://www.urban.org/urban-wire/declining-state-expenditures-public-universities-are-fact-driving-tuition-increases>.

Table 2. Students Served, Average and Maximum Award Amounts by Type, 2014–2015

	Students Receiving		Annual Award Amounts	
	Number (Millions)	Percent of Undergrads	Maximum	Average among Recipients
Federal Title IV Aid				
Pell Grants	8.248	35%	\$5,775	\$3,670
Stafford - Subsidized*	6.556	27%	\$5,500	\$3,750
Stafford - Unsubsidized*	6.230	26%	\$7,500	\$6,660
Campus-Based Title IV Programs				
FSEOG	1.470	6%	\$4,000	\$500
Federal Work-Study**	0.638	3%	n/a	\$1,500
Perkins Loan	0.550	2%	\$4,000	\$2,210
Other Federal Aid				
Education Tax Benefits	13.956	59%	\$2,500	\$1,310
Veterans' Benefits**	0.890	4%	n/a	\$14,110
State Grants	3.433	14%	varies	\$2,644
Institutional Grants	4.633	19%	varies	\$6,418
Total Undergraduate Enrollment (12-month headcount)		23,856,278		

Source: Unless otherwise noted, numbers of recipients and average amounts from The College Board, *Trends in Student Aid 2015* (New York: The College Board, 2015), Figure 7. For state and institutional grants, numbers of recipients and average amounts are estimated using NPSAS: 2012 data via NCES QuickStats. Numbers of recipients for Stafford Loans are for undergraduates only and are taken from U.S. Department of Education, Student Aid Data Center (2016). Total undergraduate enrollment from the Integrated Postsecondary Education Data System (IPEDS). *Loan limits listed are for dependent third-year students and higher; the unsubsidized loan maximum is reduced by students' subsidized loan eligibility. Independent students are eligible for an additional \$4,000-\$5,000 in unsubsidized loans per year. **These programs do not have statutory maxima. Veterans' Benefits include tuition/fee reimbursement up to in-state public institution levels, plus monthly housing allowances. Perkins Loans, FSEOG, and Federal Work-Study are determined by individual institutions but cannot exceed students' unmet need.

Pell Grants

The federal Pell Grant program is the single largest source of grant aid, providing \$30.3 billion in grants of up to \$5,775 per year to over 9 million students annually in 2014–2015. Students can use their grant at any eligible institution and receive the same amount regardless of where they go. Although the eligibility formula is complex, family income is the main component: those with family income below \$30,000 typically receive the maximum award, while only about

5 percent of those with family incomes above \$70,000 receive any award.¹⁵ If the award exceeds tuition and fees, students can use the extra amount for books, food, or other living expenses.

One of the appealing features of the Pell Grant program relative to other types of grants is the wide variety of students it supports to attend a wide range of programs. The only academic qualification to initially receive a Pell Grant is to be a high school graduate who has not already earned a bachelor's degree. The program is not limited to full-time enrollees (as some state grants are), nor does it require students to attend a particular institution. Finally, students need not enroll in a traditional academic program. Vocational degrees and certificates are also covered if they are credit-bearing programs at accredited institutions.¹⁶ Pell Grants thus provide more funds for vocational training (or retraining) than does the Department of Labor. More than half of all Pell recipients are classified as independent, meaning they are either age twenty-four or older, married, veterans, or have dependents of their own. Nearly one-quarter of Pell recipients are over age thirty.¹⁷

Subsidized and Unsubsidized Stafford Loans

The Stafford Loan program provides two types of loans for undergraduates: subsidized loans, which do not accrue interest while students are enrolled and are available only for those with financial need; and unsubsidized loans, which accrue interest but are available regardless of financial need. Both types offer interest rates, forbearance protections, and flexible repayment options that make them substantially more appealing than private sources of credit. Loan amounts are capped annually at levels that vary depending on students' class level and whether they are dependent or independent students.¹⁸ Cumulatively, dependent students cannot borrow more than \$31,000 for undergraduate study through the Stafford program. Independent students may borrow up to \$57,500 in total Stafford loans.

The Stafford Loan program has undergone important changes over the years. Originally, the federal government did not provide loans directly but rather guaranteed the loans provided under the program by private lenders. In 2010, the guaranteed student loan program was eliminated, and since then

15. Author's calculations using 2014–2015 Federal Pell Grant Program End of Year Report, Table 070.

16. Noncredit trade and certificate programs are not currently eligible for Title IV financial aid, including Pell Grants. Some community colleges offer both credit/credential-bearing (eligible) and noncredit (ineligible) programs in vocational fields.

17. College Board, *Trends in Student Aid 2015* (New York: The College Board, 2015), 35.

18. For 2015–2016, the maximum subsidized Stafford Loan was \$3,500 for dependent first-year undergraduates and \$5,500 for third-years and beyond. Students can also take out additional unsubsidized loans. The maximum combined amount of subsidized and unsubsidized Stafford Loans is \$5,500 for dependent first-years and \$7,500 for third-years and up. Independent students have the same subsidized annual limits but higher combined annual limits, from \$9,500 for first-years to \$12,500 for third-years and higher.

all Stafford Loans have been issued directly by the federal government under the Direct Stafford Loan program.¹⁹ Students' options for repaying Stafford Loans have also expanded. Although the default, mortgage-style ten-year repayment schedule remains the most common (used by 52 percent of borrowers in repayment), students can now opt into one of several income-based repayment programs that allow payments to vary with income and offer loan forgiveness to students with debt remaining after the end of a set repayment period (e.g., twenty or twenty-five years). Designing an effective and appealing income-based repayment option has proved challenging, as evidenced by the fact that five such options currently exist, implemented in succession.²⁰ Nonetheless, the number of borrowers in these income-based plans has more than doubled since 2013, from under 2 million to over 5 million in 2016 (growing from 12 percent to 24 percent of borrowers).²¹

“Campus-Based” Title IV Aid Programs

Perkins Loans (to be discontinued as of September 2017), Federal Supplemental Educational Opportunity Grants (FSEOG), and Federal Work-Study (FWS) are collectively referred to as the “campus-based” Title IV aid programs, because the federal government allocates funds for these programs directly to institutions, which provide some matching funds but have wide discretion on how the funds are distributed and managed at the campus level.²² Of the three programs, only FSEOG awards must be directed toward undergraduates with exceptional financial need.²³ FWS awards may be distributed according to any prioritization strategy, as long as recipients have documented financial need. Since need is simply the difference between the full cost of attendance (including books, transportation, and living expenses) and other aid received, even

19. Direct lending was piloted in 1992, and the two methods of providing Stafford Loans coexisted over time until the financial crisis of 2008, after which many private lenders struggled to generate the liquidity required to continue offering student loans.

20. Income-based plans include an “income-sensitive” repayment plan, an “income-contingent” repayment plan, an “income-based” repayment plan, a “pay as you earn” repayment plan, and, most recently, the “revised pay as you earn” (REPAYE) plan. Not all borrowers are eligible for all plans. The REPAYE plan is both the most generous in terms of how payments are calculated (10 percent of discretionary income for up to twenty or twenty-five years), and in terms of which students may opt into the program (any Direct Loan borrower may opt into it).

21. Author’s calculations using direct loan portfolio data from U.S. Department of Education, <https://studentaid.ed.gov/sa/about/data-center/student/portfolio>. These figures include only direct loans in repayment, deferment, or forbearance, representing \$696 billion of the \$1.2 trillion federal student loan portfolio.

22. When the Higher Education Act of 1965 was implemented, most federal aid flowed to institutions rather than directly to students (in the early years, aid flowed first to regional boards, and institutions had to apply for funds). The campus-based programs are vestiges of that early framework.

23. Perkins Loans, which offer a fixed interest rate of 5 percent on loans up to \$4,000 per year (with interest subsidized during enrollment), may be directed toward graduate or undergraduate students with exceptional need.

relatively high-income undergraduates can qualify for FWS if they attend sufficiently expensive institutions.

Unlike other Title IV aid, whether a given student is awarded aid under one of these programs can vary dramatically by institution, because awards of this type depend both on the amount of available funding at each institution as well as the targeting strategy in place at the institution. The amount of funding available, in turn, depends upon an archaic institutional allocation formula of which the main component is essentially to provide institutions with whatever they got last year.²⁴ The formula thus advantages high-cost institutions that began participating in these programs early in their history. Public institutions receive less per student than private institutions, and many community colleges receive no funds under these programs. The inequitable distribution of campus-based allocations has been a policy concern for several decades, but efforts to modify the allocation formula have had limited effect.²⁵ Unease around the allocation formula may be one reason funding for these programs has withered while other aid programs have grown. The Perkins Loan program is scheduled to end in September 2017, while FSEOG and FWS have both shrunk by about 20 percent since 2000–2001.

Education Tax Benefits

The delivery of aid for undergraduates through the tax system has increased over time, from nothing in 1990 to \$15.2 billion in 2014–2015. More undergraduates now receive tax benefits for college than receive Pell Grants, though the value of the tax benefits is smaller on average. The American Opportunity Tax Credit (AOTC) is the largest tax benefit, providing a credit of up to \$2,500 for education expenses (including course materials in addition to tuition and required fees).²⁶ The AOTC is available for up to four years of undergraduate education for students enrolled at least half-time. The Lifelong Learning Tax Credit (LLTC) enables part-time students in any type of program to receive a credit equal to 20 percent of tuition and required fees, up to \$2,000.²⁷

While only one LLTC may be claimed per household, the AOTC can be claimed per student enrolled. Moreover, up to \$1,000 of the AOTC is refundable. The refundability of the credit and the allowance of expenses for course materials greatly enhances the value of the AOTC for low-income students who may have limited tax liability and tuition and fees covered by other sources of aid. Because filers can claim only one benefit per student and the AOTC is both more generous and has a higher phase-out range, the LLTC is currently mainly

24. This is called the “base guarantee.” For more details, see David P. Smole, *Campus-Based Student Financial Aid Programs under the Higher Education Act*, Congressional Research Service RL31618 (Washington, D.C.: Government Printing Office, 2006).

25. Robert Kelchen, “Campus-Based Financial Aid Programs Trends and Alternative Allocation Strategies,” *Educational Policy* (September 22, 2015), doi:10.1177/0895904815604213.

26. The AOTC covers 100 percent of the first \$2,000 in expenses and 25 percent of the next \$2,000.

27. See IRS Publication 970 for details: <https://www.irs.gov/publications/p970/ch03.html>.

relevant for postgraduate education or for undergraduates enrolled less than half-time. While the AOTC and the LLTC are the largest tax benefits for undergraduates, other tax benefits for college include the tuition and fees deduction and the deduction for student loan interest payments.²⁸

Veterans' Benefits

GI Bills have played an important role in promoting college attainment among military veterans throughout the twentieth century. From 1985 to 2009, the main source of education aid for veterans was the Montgomery GI Bill (MGIB).²⁹ Although the MGIB is still available, many service members now benefit from a substantially more generous program implemented under the Veterans Educational Assistance Act of 2008 (often called the Post 9/11 GI Bill). This program provides eligible service members a tuition benefit equal to the maximum tuition and fees charged by any public institution in the individual's state of residence, plus a generous housing allowance.³⁰ Although just 4 percent of undergraduates receive these benefits, the average benefit is so high among those who qualify that total federal expenditures on veterans' education benefits in 2015 were larger than Pell Grants were before 9/11 (in inflation-adjusted dollars; see Table 1). Veterans' benefits can be used for an even wider range of educational programs than is supported by the Title IV aid programs (including on-the-job training and apprenticeships), and the programs it supports are not necessarily bound by Title IV regulations.

State Grants

The main source of state support for higher education is through direct appropriations to public institutions, which keep tuition lower than it would be otherwise. But over time, states have shifted toward providing support directly to students via need- and merit-based financial aid. State grants have nearly tripled since 1990–1991 (see Table 1). Most state grant programs are relatively small-scale and provide an average of just \$771 per full-time-equivalent (FTE) student. But dozens of states now offer broad-based merit aid programs that award up to full tuition and fees at state public universities to students who meet modest academic criteria, such as a high school grade point average (GPA) of 3.0 and an above-average ACT or SAT score. These programs have grown faster than exclusively need-based state grants, and as of 2013–2014 slightly

28. Other tax benefits for education (not included in the totals in Tables 1 and 2) include the parental personal exemption for students aged nineteen to twenty-three and the exclusion of scholarship and fellowship income. For more information on tax benefits for college, see Susan Dynarski and Judith Scott-Clayton, "Tax Benefits for College Attendance," Working Paper 22127 (Cambridge, Mass.: National Bureau of Economic Research, 2015).

29. Andrew Barr, "Fighting for Education: The Effect of the Post-9/11 GI Bill on Degree Attainment," working paper prepared for Society of Labor Economics annual meeting, April 2016, <http://www.sole-jole.org/16512.pdf>.

30. Ranging from \$800 per month in rural areas to \$2,700 per month in New York City. See *ibid.* for additional details.

more than half of all state aid had at least some merit criteria, while 47 percent was exclusively need-based.³¹ South Carolina—the state with the highest level of state grant aid per FTE undergraduate (\$1,890)—allocates 83 percent of its funds via merit-based scholarships.³²

Institutional Grants

As shown in Table 1, institutional grants are the second largest single source of financial aid for undergraduates (second only to federal student loans), providing an average of \$3,077 per FTE undergraduate. Just under one-quarter of all aid to undergraduates, or about one-third of all aid other than federal loans, comes in the form of institutional aid. Institutional grants can serve a variety of purposes, from supporting low-income students to simply optimizing enrollments. Just under half (46 percent) of all institutional grant aid is distributed purely based on merit, with the rest having at least some need-based component.³³

Institutional grants are most common and largest at private not-for-profit four-year colleges: average institutional grants are almost ten times higher at these schools than at public four-year institutions (\$7,601 per enrollee versus \$865) and 57 times higher than the average at public two-year colleges (\$133 per enrollee).³⁴ The role of institutional aid has also grown over time, more than quadrupling in size between 1990–1991 and 2014–2015. In recent years, this has helped blunt the impact of rising tuition, particularly at private four-year colleges. While published prices have risen steadily, increases in institutional aid as well as Pell Grants meant that net tuition and fees at these institutions in 2015–2016 were still slightly below their peak from 2007–2008.³⁵

Place-Based Local “Promise” Programs

Locally based “promise” programs have sprouted around the country with a mix of public and private funding. This new model for financial aid provision combines the simplicity, personal responsibility, and locally based features of state merit aid programs with more forgiving academic criteria. In some cases, the only merit requirement for eligibility is to graduate from a public high

31. National Association of State Student Grant and Aid Programs, *45th Annual Survey Report on State-Sponsored Student Financial Aid 2013–2014 Academic Year* (Washington, D.C.: National Association of State Student Grant and Aid Programs, 2015).

32. College Board, *Trends in Student Aid 2015*. South Carolina has three merit scholarships—the Palmetto, LIFE, and HOPE—for different tiers of high school performance.

33. Author’s calculations using National Postsecondary Student Aid Survey (NPSAS): 2012 data on undergraduates, tabulated using NCES QuickStats. Students at private four-year institutions are much more likely than those at public four-year institutions to receive a merit-based grant (37 percent versus 9 percent), even though the percentage of dollars distributed based on merit is similar at both institution types.

34. Author’s calculations using NPSAS: 2012.

35. College Board, *Trends in College Pricing 2015*.

school within a certain area. One of the first such programs was the Kalamazoo Promise, which in 2005 began offering full in-state college tuition to graduates of the Kalamazoo Public Schools in Michigan who had been enrolled in the district for at least four years.³⁶ Similarly, in 2008, local business and civic leaders provided funding to establish the “Knox Achieves” program in Knox County, Tennessee, which guarantees free community college tuition and fees to high school seniors who sign up, apply for financial aid, and meet with a mentor.³⁷ The program expanded to twenty-two counties in 2011 and became the model for a statewide “Tennessee Promise” program that rolled out in September 2015. Since the launch of the Kalamazoo Promise, thirty-one communities have implemented promise programs across the country, though with varying benefits, eligibility criteria, and funding sources.³⁸ These programs have also been cited as models for the Obama administration’s College Promise proposal to make the first two years of community college free (this proposal is discussed in more detail in Section 4).

AID APPLICATION, ELIGIBILITY, AND ACCOUNTABILITY

Aid that flows to individual students typically requires an application to determine whether students meet the specified income and/or merit-based eligibility requirements. Another set of eligibility requirements applies to institutions and is used to determine where students may use their aid. For both students and institutions, certain financial and performance criteria must be maintained over time in order to continue receiving federal aid.

Student Eligibility and the FAFSA Process

The Title IV aid programs—Pell Grants, Stafford Loans, and the campus-based aid programs—all require students to file a FAFSA. This form, which can be completed online several months prior to college entry, is also required for many

36. See Timothy J. Bartik and Marta Lachowska, “The Short-Term Effects of the Kalamazoo Promise Scholarship on Student Outcomes,” *Research in Labor Economics* 38 (2013): 37–76; Timothy J. Bartik, Brad Hershbein, and Marta Lachowska, “Longer-Term Effects of the Kalamazoo Promise Scholarship on College Enrollment, Persistence, and Completion,” paper presented at American Education Finance and Policy Annual Conference, Washington, D.C., February 2015.

37. See Celeste K. Carruthers and William F. Fox, “Aid for All: College Coaching, Financial Aid, and Postsecondary Persistence in Tennessee,” *Economics of Education Review* 51 (2016): 97–112.

38. Lindsay Page and Judith Scott-Clayton, “Improving College Access in the United States: Barriers and Policy Responses,” *Economics of Education Review* 51 (2016): 4–22.

state and institutional aid programs.³⁹ The FAFSA collects detailed information about the student's (and parents', where applicable) household structure, income, assets, and various other benefits and expenditures (such as education tax credits claimed, child support paid or received, and other money received or paid on the student's behalf). From this information, the U.S. Department of Education computes an expected family contribution (EFC), an estimate of how much the family can pay out of pocket for college. The formula itself is incredibly complex, but the main determinants of the EFC are dependent/independent status, family income, family size, and number of students currently enrolled in college.⁴⁰

Once the EFC is computed, "need" is defined as the difference between the cost of attendance (such as tuition, fees, books, living expenses) and the family contribution. The EFC is provided to both students and the schools to which they have applied. Financial aid offices at each institution then use the EFC to "package" each student's financial aid awards, including aid from all sources.⁴¹ Students then receive a letter from each institution informing them of their annual aid package. Although online FAFSA applicants immediately receive estimates of their EFC and Pell eligibility, until they receive their institutional aid letters they do not have complete information on what college will cost for them.

The complexity of the FAFSA application process is well documented. Despite attempts to simplify the form in recent years, it still contains more than a hundred questions about income, assets, and expenses. Moreover, the FAFSA may not be the only aid application students need to fill out. While most states and public institutions rely on FAFSA elements for their own need-based aid programs, many private not-for-profit institutions also require the College Board's CSS/Financial Aid PROFILE®.⁴² This longer, more detailed application includes additional questions about family circumstance, income, assets, and liabilities that have little consequence for determining federal and state aid eligibility but help institutions more precisely target their own aid to families throughout the income distribution.

39. Until recently, students could not file a FAFSA before January 1 of the year of enrollment, since the form relied upon information from the prior tax year (for instance, 2014 for a 2015–2016 enrollee). Beginning with the 2016–2017 cycle, the FAFSA will collect information from the prior-prior tax year (2014 for a 2016–2017 enrollee). The goal of this recent change is to enable students to apply for and learn their aid eligibility several months earlier than was possible in the past (October instead of January).

40. Six formulae are used, depending upon whether the applicant is dependent or independent, with or without dependents of their own, and whether income is low enough to qualify students for a simplified formula.

41. While calculating eligibility for various programs can require intricate formulas, Pell awards are generally equal to the Pell maximum minus the EFC, while subsidized loans are equal to the cost of attendance minus the EFC and other aid received, up to the relevant loan maximum. Pell awards are prorated for less-than-full-time enrollment. Stafford Loans are not prorated though less-than-full-time enrollment may affect eligibility by reducing the cost of attendance.

42. CSS originally stood for College Scholarship Service.

Students must file a FAFSA annually, so aid eligibility may fluctuate from year to year. Some students lose aid simply because they fail to reapply.⁴³ Students also may lose aid due to academic performance—and not just in “merit-based” programs: even need-based programs have minimum performance standards. For example, all Title IV federal student aid recipients must maintain “Satisfactory Academic Progress” (SAP). While SAP standards can vary by institution, they commonly require that students maintain at least a 2.0 cumulative GPA and complete at least two-thirds of the credits they attempt. More than one in five first-year Pell recipients fails to meet the GPA criterion alone, with higher rates at public institutions. Estimates suggest perhaps 40 percent of first-year aid recipients at community colleges may be at risk of losing eligibility due to performance.⁴⁴

Institutional-Level Eligibility

To ensure that students use federal student aid at legitimate postsecondary institutions, institutions must also apply to become Title IV eligible. Students cannot receive Pell Grants, Stafford Loans, or campus-based federal aid if they attend an ineligible institution. To become eligible, institutions must be authorized in their home state, have existed for at least two years, and be accredited by an approved accrediting agency.⁴⁵ They also must agree to report annually on an extensive set of topics, including institutional characteristics, enrollment, tuition and fee charges, financial aid disbursements, student persistence and completion, and institutional revenues and expenditures. No more than 90 percent of an institution’s revenue can come from Title IV aid—a limitation approached by some for-profit institutions.⁴⁶ Revenue from other federal sources, such as veterans’ benefits, does not count toward this limit.

Federal mechanisms for monitoring quality and enforcing minimum standards have been an active area of policy-making in recent years. For example, for institutions to maintain eligibility, the default rate among students who take out federal student loans cannot exceed a set threshold in three consecutive years. The loan default rate used to be measured just two years after students entered

43. Kelli Bird and Benjamin L. Castleman, “Here Today, Gone Tomorrow? Investigating Rates and Patterns of Financial Aid Renewal among College Freshmen,” *Research in Higher Education* 57 (4) (2016): 395–422; Benjamin L. Castleman, Benjamin L. Page, and Lindsay C. Page, “Freshman Year Financial Aid Nudges: An Experiment to Increase FAFSA Renewal and College Persistence,” *Journal of Human Resources* 51 (2) (2016): 389–415.

44. Lauren Schudde and Judith Scott-Clayton, “Pell Grants as Performance-Based Aid? An Examination of Satisfactory Academic Progress Requirements in the Nation’s Largest Need-Based Aid Program,” CAPSEE Working Paper (New York: Center for the Analysis of Postsecondary Education and Employment, 2014), forthcoming in *Research in Higher Education*.

45. For a summary of Title IV requirements, see Stephanie Riegg Cellini and Claudia Goldin, “Does Federal Student Aid Raise Tuition? New Evidence on For-Profit Colleges,” *American Economic Journal: Economic Policy* 6 (4) (2014): 174–206.

46. The average is 70 percent at for-profit institutions. TICAS, “Q&A on the For-Profit College ‘90–10 Rule,” January 25, 2016, http://ticas.org/sites/default/files/pub_files/90-10_qa_0.pdf.

repayment, but in 2009 this window was extended to three years.⁴⁷ In addition, the Department of Education established a new “gainful employment” requirement that went into effect in 2015. Under the new rule, which applies to nearly all programs at for-profit institutions and vocational certificate programs at community colleges, programs can lose Title IV eligibility if its graduates have annual loan payments exceeding a certain percentage of their income.⁴⁸

Policy-makers have also raised questions in recent years about both the rigor and objectivity of the accreditation process. Accreditors rarely decline to accredit institutions that they evaluate—even those with poor student outcomes, shaky finances, and accusations of fraud and abuse. The federal panel that oversees accreditors made news in June 2016—because the action was so rare—when they voted to no longer recognize the Accrediting Council for Independent Colleges and Schools, which accredits many for-profit colleges.⁴⁹

47. Prior to 2009, the cohort default rate was based on a two-year window and a 25 percent threshold, meaning that no more than 25 percent of borrowers who entered repayment in one year had defaulted by the end of the next year. In 2009, the window was extended to three years—which more than doubled estimated default rates at for-profit institutions—and the threshold raised to 30 percent. See FinAid.org, “Cohort Default Rates,” <http://www.finaid.org/loans/cohortdefault rates.phtml> (accessed August 19, 2016), for a history of relevant regulations.

48. Loan payments are considered excessive if they exceed 12 percent of total earnings and are greater than 30 percent of discretionary earnings. See *Federal Register* 79 (211) (October 31, 2014), <https://ifap.ed.gov/fregisters/attachments/FR103114Final.pdf>.

49. Paul Fain, “Accreditor on Life Support,” *Inside Higher Ed* (June 24, 2016), <https://www.insidehighered.com/news/2016/06/24/federal-panel-votes-terminate-acics-and-tightens-screws-other-accreditors>.

Section 4

Financial Aid Policy: Questions and Concerns

This section discusses some of the questions and concerns that are frequently raised regarding financial aid policy. Key points of contention are explained and, where possible, research evidence is summarized.

WHAT IS THE EVIDENCE THAT FINANCIAL AID IMPROVES COLLEGE ACCESS AND COMPLETION OUTCOMES?

Distinguishing the true causal effect of financial aid from preexisting differences is conceptually challenging, because aid programs often systematically target recipients based on characteristics (such as need, merit, or motivation to enroll) that may independently influence outcomes of interest. Rigorous research, however, convincingly shows that net prices do influence college enrollment, persistence, and completion decisions. As early as 1988, research reviews indicated that a \$1,000 decrease in net price was generally associated with a 3- to 5-percentage-point increase in college attendance.⁵⁰ Subsequent research using more rigorous experimental and quasi-experimental methods found positive effects of a similar magnitude, across a range of contexts.⁵¹

Research has found positive effects of aid receipt not just on enrollment overall but on college choice, persistence, degree completion, and beyond. For example, one recent randomized evaluation of the Buffet Scholarship program in Nebraska (which considers both need and merit) finds that scholarship winners were significantly more likely to switch from two-year to four-year institutions and were more likely to persist there as well.⁵² Other studies have found that both need-based and merit-based state aid programs can improve bachelor's

50. Larry L. Leslie and Paul T. Brinkman, *The Economic Value of Higher Education*, American Council on Education/Macmillan Series on Higher Education (New York: Macmillan Publishing, 1988).

51. See Page and Scott-Clayton, "Improving College Access in the United States: Barriers and Policy Responses," for a recent review.

52. Joshua Angrist, Sally Hudson, and Amanda Pallais, "Evaluating Econometric Evaluations of Post-Secondary Aid," *The American Economic Review* 105 (5) (2015): 502–507.

degree completion rates.⁵³ Preliminary evidence on relatively new place-based “promise” programs such as those in Kalamazoo and Tennessee suggests they may have particularly large impacts on enrollment and graduation per dollar of aid.⁵⁴ New evidence on post-college outcomes suggests that students who receive grants as undergraduates also have higher graduate school enrollment, higher earnings, and higher homeownership rates than similar students who do not get the same grants.⁵⁵

Despite the preponderance of positive results in the literature, some notable null findings demonstrate that program design matters and positive impacts are never a guarantee. For example, two examinations of broad-based state merit aid programs using national data found no effects on degree completion in general, and a study of the Adams Scholarship in Massachusetts found that the merit-based program *reduced* degree attainment by inducing students to switch to under-resourced in-state institutions.⁵⁶ And two recent studies found that none of the higher education tax benefits—credits and deductions valued at over \$15 billion in 2013–2014—influence college enrollment, perhaps because they are not realized until months after the enrollment decision is made.⁵⁷

Also unclear is whether loans or work-study necessarily have the same effects as grants. While evidence from outside the United States suggests student loans can have a big impact on college access, a 2008 review of the U.S. literature concluded that students are not as sensitive to loans as to grants (though the review could not conclude whether loans are still cost-effective, since the vast

53. Benjamin L. Castleman and Bridget Terry Long, “Looking beyond Enrollment: The Causal Effect of Need-Based Grants on College Access, Persistence, and Graduation,” Working Paper 19306 (Cambridge, Mass.: National Bureau of Economic Research, 2013); Susan Dynarski, “Building the Stock of College-Educated Labor,” *Journal of Human Resources* 43 (3) (2008): 576–610; Judith Scott-Clayton, “On Money and Motivation: A Quasi-Experimental Analysis of Financial Incentives for College Achievement,” *Journal of Human Resources* 46 (3) (2011): 614–646.

54. Bartik and Lachowska, “The Short-Term Effects of the Kalamazoo Promise Scholarship on Student Outcomes”; Bartik, Hershbein, and Lachowska, “Longer-Term Effects of the Kalamazoo Promise Scholarship on College Enrollment, Persistence, and Completion”; Carruthers and Fox, “Aid for All: College Coaching, Financial Aid, and Postsecondary Persistence in Tennessee.”

55. Eric Bettinger, Oded Gurantz, Laura Kawano, and Bruce Sacerdote, “The Long Run Impacts of Merit Aid: Evidence from California’s Cal Grant,” Working Paper 22347 (Cambridge, Mass.: National Bureau of Economic Research, 2016); Judith Scott-Clayton and Basit Zafar, “Financial Aid, Debt Management, and Socioeconomic Outcomes: Post-College Effects of Merit-Based Aid,” Working Paper 22574 (Cambridge, Mass.: National Bureau of Economic Research, 2016).

56. Maria D. Fitzpatrick and Damon Jones, “Higher Education, Merit-Based Scholarships and Post-Baccalaureate Migration,” Working Paper 18530 (Cambridge, Mass.: National Bureau of Economic Research, 2012); David L. Sjoquist and John V. Winters, “Building the Stock of College-Educated Labor Revisited,” *Journal of Human Resources* 47 (1) (2012): 270–285; Sarah R. Cohodes and Joshua S. Goodman, “Merit Aid, College Quality, and College Completion: Massachusetts’ Adams Scholarship as an In-Kind Subsidy,” *American Economic Journal: Applied Economics* 6 (4) (2014): 251–285.

57. George B. Bulman and Caroline M. Hoxby, “The Returns to the Federal Tax Credits for Higher Education,” Working Paper 20833 (Cambridge, Mass.: National Bureau of Economic Research, 2015); Caroline M. Hoxby and George B. Bulman, “The Effects of the Tax Deduction for Postsecondary Tuition: Implications for Structuring Tax-Based Aid,” *Economics of Education Review* 51 (2016): 23–60.

majority of loans provided are ultimately repaid to the government).⁵⁸ Evidence on work-study has been mixed, perhaps because the effects of the program genuinely vary from context to context.⁵⁹ One study found that effects were most positive for low-income students at public institutions, in part because these students are more likely to work anyway—in less-desirable off-campus jobs—in the absence of FWS.⁶⁰

WHICH DESIGN FEATURES ARE MOST IMPORTANT IN FINANCIAL AID PROGRAMS?

Practitioners and scholars increasingly acknowledge two critical features of financial aid program design: complexity and timing. While the increasing availability of financial aid is a good thing for students and families, it also means that figuring out the net price they will personally pay—early enough to do anything about it—is more complicated than ever. Sticker prices may be relatively easy to locate online, but getting good estimates of likely aid eligibility at different institutions can be much more challenging. Just because the information exists somewhere online does not mean students and their families ever see it. This lack of transparency can undermine the effectiveness of financial aid, making it harder to reach students who need aid most. Misperceptions about college costs are widespread and are most prevalent among students from the lowest-income backgrounds, likely contributing to persistent gaps in postsecondary attain-

58. Alex Solis, “Credit Access and College Enrollment,” paper presented at the 2015 meeting of the American Economic Association, Boston, Mass., January 2015, <https://www.aeaweb.org/aea/2015conference/program/retrieve.php?pdfid=862>; Marc Gurgand, Adrien J. S. Lorraineau, and Thomas Mélonio, “Student Loans: Liquidity Constraint and Higher Education in South Africa,” Working Paper 117 (Paris: Agence Française de Développement, 2011); Donald E. Heller, “The Impact of Loans on Student Access,” in Sandy Baum, Michael McPherson, and Patricia Steele, eds., *The Effectiveness of Student Aid Policies: What the Research Tells Us* (New York: The College Board, 2008), 39–68. Also see Erin Dunlop, “What Do Stafford Loans Actually Buy You? The Effect of Stafford Loan Access on Community College Students,” CALDER Working Paper No. 94 (Washington, D.C.: National Center for Analysis of Longitudinal Data in Education Research, 2013); Mark Wiederspan, “Denying Loan Access: The Student-Level Consequences When Community Colleges Opt Out of the Stafford Loan Program,” *Economics of Education Review* 51 (2016): 79–96.

59. Adela Soliz and Bridget Terry Long, “The Causal Effect of Federal Work-Study on Student Outcomes in the Ohio Public University System,” CAPSEE Working Paper (New York: Center for Analysis of Postsecondary Education and Employment Conference at Columbia University, 2014); Judith Scott-Clayton, “The Causal Effect of Federal Work-Study Participation: Quasi-Experimental Evidence from West Virginia,” *Educational Evaluation and Policy Analysis* 33 (4) (2011): 506–527; Judith Scott-Clayton and Veronica Minaya, “Should Student Employment Be Subsidized? Conditional Counterfactuals and the Outcomes of Work-Study Participation,” *Economics of Education Review* 52 (2016): 1–18.

60. Scott-Clayton and Minaya, “Should Student Employment Be Subsidized? Conditional Counterfactuals and the Outcomes of Work-Study Participation.”

ment.⁶¹ High-achieving low-income students often do not even apply to highly selective schools (a phenomenon known as “undermatch”), in part because they are unaware of the substantial aid available at such institutions.

As a result of this complexity and confusion, many students fail to access aid for which they would qualify. While FAFSA application rates have risen over time—from 50 percent of undergraduates in 1999–2000 to 70 percent in 2011–2012—substantial numbers of eligible students still fail to apply. Of the 30 percent of students who failed to file a FAFSA, one-third would have qualified for a Pell Grant.⁶² In addition, many FAFSA filers apply after important deadlines, in turn decreasing the likelihood of receiving state and institutional aid for which they would otherwise be eligible.⁶³ Similar problems may explain the lack of impact of education tax benefits: the value of the benefit is not known in many cases until several months after enrollment, and many households fail to optimize which of the available benefits they claim.⁶⁴

Two influential studies provide dramatic evidence regarding the consequences of complexity. In one, researchers randomly selected a subset of low-income families who visited tax-preparation centers and were offered personal assistance with completing and submitting the FAFSA. The intervention took less than ten minutes and cost less than \$100 per participant but increased immediate college entry rates by 8 percentage points (24 percent) for high school seniors and 1.5 percentage points (16 percent) for independent participants with no prior college experience.⁶⁵ After three years, participants in the full treatment group had accumulated significantly more time in college than the control group. In the other study, researchers randomly selected high-achieving, low-income students from a College Board database and mailed them packets of information on net costs and application procedures at different types of institutions, along with vouchers for automatic application fee waivers.⁶⁶ The intervention cost only \$6 per student but significantly increased enrollment rates at highly selective colleges and universities. Whether this intervention would be similarly effective among less high-achieving groups is not obvious, but these

61. See review by Page and Scott-Clayton, “Improving College Access in the United States: Barriers and Policy Responses.”

62. Author’s calculations based on data from the 2011–2012 National Postsecondary Student Aid Study (NPSAS).

63. Jacqueline E. King, *Missed Opportunities: Students Who Do Not Apply for Financial Aid* (Washington, D.C.: American Council on Education, 2004).

64. Nicholas Turner, “Why Don’t Taxpayers Maximize Their Tax-Based Student Aid? Salience and Inertia in Program Selection,” *The B.E. Journal of Economic Analysis & Policy: Contributions* 11 (1) (2011): 1–24.

65. Eric P. Bettinger, Bridget Terry Long, Philip Oreopoulos, and Lisa Sanbonmatsu, “The Role of Application Assistance and Information in College Decisions: Results from the H&R Block FAFSA Experiment,” *The Quarterly Journal of Economics* 127 (3) (2012): 1205–1242.

66. Caroline Hoxby and Sarah Turner, “Expanding College Opportunities for High-Achieving, Low Income Students,” Stanford Institute for Economic Policy Research (SIEPR) Discussion Paper 12-014 (Stanford, Calif.: SIEPR, 2013).

two experiments taken together suggest that simplifying the aid information and application process may be a highly cost-effective strategy for reducing inequality in college attainment.

While the U.S. Department of Education has made progress in recent years in reducing the number of questions on the FAFSA and enabling some students to automatically import tax information from the Internal Revenue Service (IRS), these incremental improvements have had a limited impact on the application experience overall. In particular, they have not enabled students to easily discern their eligibility well in advance of application or substantially reduced the hassle factors.⁶⁷ Since the main determinants of Title IV aid eligibility are already collected via the IRS Form 1040, some have proposed eliminating the FAFSA completely and instead determining eligibility using income and other data from tax forms, much as the education tax benefits already do.⁶⁸ Similarly, some scholars have recommended streamlining the education tax benefits to make them easier to understand and enable families to claim them earlier, closer to when costs are actually incurred.⁶⁹

SHOULD FINANCIAL AID HAVE PERFORMANCE REQUIREMENTS?

Evidence suggests that aid programs that incorporate achievement incentives are particularly effective, especially when the goal is to improve college performance and completion (rather than college entry alone). For example, randomized evaluations of performance-based scholarships run by the social policy research

67. The Department of Education recently implemented a new “data-retrieval” tool that enables applicants to automatically prefill their FAFSA with tax elements from the IRS. A major limitation of this tool, however, has been timing: states and institutions may have FAFSA deadlines well before income tax data are available from the IRS. Some state deadlines fall in February or simply tell students to file “as early as possible after January 1.” Basing eligibility only on prior-year income tax data (for instance, 2014 tax year information for students enrolling in 2016) is an important new change just going into effect for 2016–2017 that aims not only to enable students to file the FAFSA sooner but to allow more students to benefit from the data-retrieval tool. Time will tell whether this has a more appreciable impact than previous attempts at incremental reform.

68. See Susan M. Dynarski and Judith E. Scott-Clayton, “The Cost of Complexity in Federal Student Aid: Lessons from Optimal Tax Theory and Behavioral Economics,” *National Tax Journal* (2006): 319–356, which documents that most of the information on the FAFSA is unnecessary. Students’ Pell eligibility can be determined with a high level of precision using just a handful of elements from the form, primarily income and family size. Simplification proposals include the Financial Aid Simplicity and Transparency (FAST) Act introduced by Senators Lamar Alexander and Michael Bennet in January 2015, as well as earlier proposals by the Institute for College Access and Success in 2007. Susan M. Dynarski and Judith Scott-Clayton, “College Grants on a Postcard: A Proposal for Simple and Predictable Federal Student Aid,” Hamilton Project Discussion Paper (Washington, D.C.: Brookings Institution, 2007); Sandy Baum and Judith Scott-Clayton, “Redesigning the Pell Grant Program for the Twenty-First Century,” Hamilton Project Discussion Paper (Washington, D.C.: Brookings Institution, 2013).

69. Hoxby and Bulman, “The Effects of the Tax Deduction for Postsecondary Tuition.”

firm MDRC found significant positive effects on persistence and graduation.⁷⁰ A quasi-experimental study of West Virginia’s PROMISE scholarship, which required a minimum GPA and successful completion of 30 credits per year to renew, found that the program increased GPAs and credits completed in the first three years of college. In the fourth and final year of the scholarship—while students were still receiving the money but no longer faced the achievement incentives—the program’s effects disappeared, suggesting that the performance requirements and not just the money itself were driving effectiveness (the impacts in the first three years were enough to improve on-time degree completion by 7 percentage points).⁷¹

Academic incentives may improve not only performance after college entry but college preparation and initial enrollment as well. For example, a study of the introduction of Tennessee’s state merit aid program, which provided large college scholarships to students with minimum high school GPA and SAT/ACT test scores, found that the scholarship significantly improved high school achievement as measured by ACT test scores (the increases in test scores were too large to be explained simply by increases in retesting).⁷² A similar study of a program in Texas that paid eleventh- and twelfth-grade students and teachers for earning passing scores on Advanced Placement (AP) exams found that the policy not only improved AP exam scores but increased college enrollment rates as well as college academic performance even for those students who would have gone to college anyway.⁷³

An important caveat is that performance incentives must be salient to students in order to be effective. If students first learn of academic standards when they learn they have not met them, it may be too late to recover. A recent study of federal Satisfactory Academic Progress standards finds that the policy functions primarily as a cost control—by cutting off low-performing students from receiving additional aid—rather than as an incentive that increases attainment over the long term.⁷⁴

70. Reshma Patel and Ireri Valenzuela (with Drew McDermott), *Moving Forward: Early Findings from the Performance-Based Scholarship Demonstration in Arizona* (New York: MDRC, 2013); Lashawn Richburg-Hayes, Thomas Brock, Allen LeBlanc, Christina H. Paxson, Cecilia E. Rouse, and Lisa Barrow, *Rewarding Persistence: Effects of a Performance-Based Scholarship Program for Low-Income Parents* (New York: MDRC, 2009).

71. Scott-Clayton, “On Money and Motivation.”

72. Amanda Pallais, “Taking a Chance on College: Is the Tennessee Education Lottery Scholarship a Winner?” *Journal of Human Resources* 44 (1) (2009): 199–222.

73. C. Kirabo Jackson, “A Little Now for a Lot Later: An Evaluation of a Texas Advanced Placement Incentive Program,” *Journal of Human Resources* 45 (3) (2010): 591–639.

74. Judith Scott-Clayton and Lauren Schudde, “Performance Standards in Need-Based Student Aid,” paper presented at the NBER Education Meeting, May 2015.

UNINTENDED CONSEQUENCES: THE “BENNETT HYPOTHESIS” AND FISCAL FEDERALISM

As the volume of available aid for college grows, one concern often raised is whether this simply encourages institutions to increase tuition even faster. This is referred to as the “Bennett Hypothesis” after former U.S. Secretary of Education William Bennett, who raised the concern. Some evidence supports it, but primarily among private sector institutions. For example, proprietary schools that are eligible to receive federal Title IV aid charge significantly more than similar institutions that are not eligible for federal aid.⁷⁵ And one study found that at selective nonprofit institutions, up to two-thirds of Pell Grant awards were clawed back from students through reductions in institutional grant aid.⁷⁶ However, at the public institutions most Pell recipients attend, the same study found no evidence of such claw-backs.

A broader concern raised recently is how federal and state investments in higher education interact. As federal investments have increased, has this served to buffer reductions in state and local appropriations, or might it serve to accelerate them? Limited research is available to answer this question. But some evidence suggests state governments take federal support into account when setting their higher education budgets. For example, when “maintenance of effort” provisions were inserted into the American Reinvestment and Recovery Act of 2009, requiring states to commit at least as much postsecondary funding as they had in 2006 if they wanted to receive the maximum in higher-education-related federal stimulus dollars, many states opted to reduce their expenditures to almost exactly the required minimum.⁷⁷ U.S. senators on both sides of the aisle have also noted the perverse incentives of making federal support for K-12 education, health, and transportation contingent upon state maintenance-of-effort provisions while support for higher education generally is not.⁷⁸

75. Cellini and Goldin, “Does Federal Student Aid Raise Tuition? New Evidence on For-Profit Colleges.”

76. Lesley J. Turner, “The Road to Pell is Paved with Good Intentions: The Economic Incidence of Federal Student Grant Aid,” unpublished manuscript, University of Maryland, 2013, http://econweb.umd.edu/~turner/Turner_FedAidIncidence.pdf.

77. F. King Alexander, “Make ‘Maintenance of Effort’ Permanent,” *Inside Higher Ed* (January 28, 2010), archived at <https://www.insidehighered.com/views/2010/01/28/make-maintenance-effort-permanent>.

78. See transcript from U.S. Senate, Committee on Health, Education, Labor, and Pensions (HELP) hearing, June 3, 2015, <http://www.help.senate.gov/hearings/reauthorizing-the-higher-education-act-ensuring-college-affordability>.

ARE STUDENTS OVERBURDENED WITH DEBT?

Without question, debt loads have increased substantially over time. Students today borrow nearly three times more per year on average than students who enrolled twenty-five years ago (though slightly less than students of a decade ago).⁷⁹ Borrowing is higher for students at four-year institutions than at two-year institutions and higher for those at private institutions than at public ones. Among students who complete a bachelor's degree, 61 percent have student loan debt. The average amount among those with any debt is \$26,900.⁸⁰ Less than 0.3 percent of bachelor's degree recipients leave college with more than \$100,000 in undergraduate debt, despite the seeming prevalence of these unusual cases in media accounts.⁸¹ Most individuals with student debt in excess of \$100,000 have graduate debt.

Little evidence supports the idea that the debt burden of today's students, while still far higher than amounts borrowed in previous generations, is unmanageable *on average*. The vast majority of borrowers are able to repay thanks to strong earnings prospects for those with higher education.⁸² Some studies have found that people with student loan debt have lower rates of homeownership and lower psychological well-being, though other analysts caution that more rigorous evidence is needed to determine whether these relationships are truly causal.⁸³ While graduating with less debt may be preferable to graduating with more, evidence suggests that college attainment itself has a far stronger effect on future outcomes than students' level of debt per se.⁸⁴ For example,

79. College Board, *Trends in Student Aid 2015*, Table 3. Federal loans per FTE were \$4,795 in 2014–2015, compared with \$1,636 in 1990–1991 and \$5,103 in 2002–2003.

80. College Board, *Trends in Student Aid 2015*.

81. Judith Scott-Clayton, "Student Loan Debt: Who Are the 1%?" *Economix: Explaining the Science of Everyday Life* (December 2, 2011), <http://economix.blogs.nytimes.com/2011/12/02/student-loan-debt-who-are-the-1/>.

82. Beth Akers and Matthew M. Chingos, *Is a Student Loan Crisis on the Horizon?* (Washington, D.C.: Brookings Institution, 2014), <http://www.brookings.edu/research/reports/2014/06/24-student-loan-crisis-akers-chingos>.

83. For original research, see Meta Brown and Sydnee Caldwell, *Young Student Loan Borrowers Retreat from Housing and Auto Markets* (New York: Federal Reserve Bank of New York, 2013), <http://libertystreeteconomics.newyorkfed.org/2013/04/young-student-loan-borrowers-retreat-from-housing-and-auto-markets.html#.V7YLYfkrLct>; Katrina Walsemann, Gilbert C. Gee, and Danielle Gentile, "Sick of Our Loans: Student Borrowing and Mental Health of Young Adults in the United States," *Social Science and Medicine* 124 (2015): 85–93. For counterarguments, see Beth Akers, *Reconsidering the Conventional Wisdom on Student Loan Debt and Home Ownership* (Washington, D.C.: Brookings Institution, 2014), <https://www.brookings.edu/research/reconsidering-the-conventional-wisdom-on-student-loan-debt-and-home-ownership/>; Beth Akers, *Unanswered Questions on Student Debt and Emotional Well-Being* (Washington, D.C.: Brookings Institution, 2015), <https://www.brookings.edu/research/unanswered-questions-on-student-debt-and-emotional-well-being/>.

84. Susan M. Dynarski, *The Trouble with Student Loans? Low Earnings, Not High Debt* (Washington, D.C.: Brookings Institution, 2016), <https://www.brookings.edu/research/the-trouble-with-student-loans-low-earnings-not-high-debt/>.

one state grant program that significantly reduced undergraduate debt led to increases in graduate school enrollment—and thus increases in graduate school debt—such that recipients ended up with, if anything, slightly *more* debt than nonrecipients. But they also had higher earnings and higher rates of homeownership—effects that more likely are attributable to other program mechanisms (such as improved GPAs and reduced time to degree) rather than a reduction of undergraduate debt.⁸⁵

Of course, averages mask important heterogeneity and risk—particularly in the first few years after leaving school. Many students do not even know how much they have taken out in loans, let alone what their monthly repayment will be.⁸⁶ The default loan repayment plan asks students to pay back their student debt over a ten-year period right after college, when earnings are lowest and most variable, creating nontrivial risk around students’ ability to repay.⁸⁷ Four years after getting a bachelor’s degree, nearly one in five graduates is making payments that exceed 15 percent of their income.⁸⁸ Moreover, the current provisions intended to protect students against default (including loan deferment, forbearance, and various pay-as-you-earn, income-based, income-contingent, or extended loan repayment plans) are themselves so complex that many students at risk fail to take advantage of them before they get into repayment trouble. This loan repayment risk varies substantially by race. Black borrowers are three times as likely to default as white borrowers, and among black bachelor’s degree holders, 48 percent see their undergraduate loan debt grow in the first four years after graduation (due to interest accumulation), compared with just 17 percent of white graduates.⁸⁹ Borrowers are much less likely to fall behind on their loans in countries that automatically enroll them in income-contingent repayment plans (such as Australia and the United Kingdom) or that have a longer expected repayment timeframe (twenty and twenty-five years in Germany and Sweden, respectively).⁹⁰

85. Scott-Clayton and Zafar, “Financial Aid, Debt Management, and Socioeconomic Outcomes: Post-College Effects of Merit-Based Aid.”

86. Beth Akers and Matthew M. Chingos, *Are College Students Borrowing Blindly?* (Washington, D.C.: Brookings Institution, 2014), <http://www.brookings.edu/research/reports/2014/12/10-borrowing-blindly-akers-chingos>.

87. Susan Dynarski and Daniel Kreisman, “Loans for Educational Opportunity: Making Borrowing Work for Today’s Students,” Hamilton Project Discussion Paper (Washington, D.C.: Brookings Institution, 2013).

88. Judith Scott-Clayton, “Early Labor Market and Debt Outcomes for Bachelor’s Degree Recipients: Heterogeneity by Institution Type and Major, and Trends over Time,” CAPSEE Working Paper (New York: Center for Analysis of Postsecondary Education and Employment, 2016).

89. Judith Scott-Clayton and Jing Li, “Black-White Disparity in Student Loan Debt More than Triples after Graduation,” *Evidence Speaks Report* (Washington, D.C.: Brookings Institution, 2016), <https://www.brookings.edu/research/black-white-disparity-in-student-loan-debt-more-than-triples-after-graduation/>.

90. Susan Dynarski, “America Can Fix Its Student Loan Crisis: Ask Australia,” *The New York Times* (July 10, 2016).

Perhaps counterintuitively, the borrowers most likely to run into trouble are not the ones with particularly high levels of debt but students who leave college without earning a credential. Students with more debt tend to have higher levels of attainment and higher earnings.⁹¹ A recent analysis of borrowers found that those with less than \$5,000 in debt had a default rate almost twice as high as those with \$100,000 in debt (34 percent versus 18 percent).⁹² Even small debts can spiral out of control for students who leave college without a credential. Scholars have suggested reforming student loan repayment options to minimize students' repayment risks and better communicate both risks and protections upfront.⁹³

WHAT ARE THE ADVANTAGES AND CHALLENGES OF “MAKING COLLEGE FREE”?

President Barack Obama's proposal in 2015 to eliminate tuition for America's community college students could be a case study in the messaging power of “free”; it caught people's attention in a way that prior efforts to lower the price of college have not. Googling “Obama free community college” returns 18.7 million hits (down from a whopping 75 million results shortly after the proposal was announced), compared with just 141,000 for “Obama Pell Grant increase.” What many people do not realize is that about 40 percent of community college students *already* receive enough grant aid to fully cover their tuition (including 85 percent of Pell recipients at community college).⁹⁴ But the current system requires students to navigate the complex aid application process and take a leap of faith in the meantime. Free community college thus may improve access even for those who already qualify for substantial aid. Moreover, tuition and fees are not the only costs college students face. Transportation, books, and food alone can easily add up to more than the cost of tuition. If tuition were free,

91. Dynarski, *The Trouble with Student Loans?*; Adam Looney and Constantine Yannelis, “A Crisis in Student Loans? How Changes in the Characteristics of Borrowers and in the Institutions They Attended Contributed to Rising Loan Defaults,” *Brookings Papers on Economic Activity* 2015 (2) (2015): 1–89.

92. Meta Brown, Andrew Haughwout, Donghoon Lee, Joelle Scally, and Wilbert van der Klaauw, “Looking at Student Loan Defaults through a Larger Window,” in *Liberty Street Economics* (New York: Federal Reserve Bank of New York, 2015); Looney and Yannelis, “A Crisis in Student Loans?: How Changes in the Characteristics of Borrowers and in the Institutions They Attended Contributed to Rising Loan Defaults.”

93. For example, Dynarski and Kreisman, in “Loans for Educational Opportunity: Making Borrowing Work for Today's Students,” have proposed that students be automatically enrolled in an income-contingent repayment system that would collect repayments as a proportion of income automatically through the tax system. The repayment period would extend up to thirty years or until the loan is paid off, whichever comes first.

94. Author's calculations based on NPSAS: 2012 data, accessed via NCES QuickStats.

low-income students could instead use their other aid to pay for more of these additional costs of enrollment.

The success of local “promise” programs, which preceded the Obama administration’s own College Promise proposal, suggests that such programs could have substantial impacts on enrollment and completion. But the local programs that inspired President Obama, such as the Tennessee Promise, have often been part of broader reforms designed to improve student persistence and completion. These other reforms—such as improving student advising and making it easier for students to transfer courses—require resources, careful planning, and knowledge of local context. Whether a national program can replicate the early successes of state and local programs remains an open question of active debate.

Some have extended the Obama proposal to suggest that all public higher education should be free.⁹⁵ Lower sticker prices certainly simplify the marketing message, and many other countries do offer free postsecondary education. But complete reliance on public finance is not without risk. In many countries, free higher education comes at the cost of state-specified caps on enrollment and/or lower quality.⁹⁶ The advantage of a higher-tuition, higher-aid model is that it makes use of private resources from those students who can afford to pay, while enabling any given level of public subsidies to go further by better targeting students who need assistance most. A central challenge for policy-makers going forward is whether the problems of complexity and confusion that undermine the effectiveness of financial aid can be solved, without necessarily making college completely free.

95. See, for example, Sara Goldrick-Rab, “Public Higher Education Should Be Universal and Free,” *The New York Times* (January 20, 2016), <http://www.nytimes.com/roomfordebate/2016/01/20/should-college-be-free/public-higher-education-should-be-universal-and-free>.

96. As the British economist Nicholas Barr explains, “Countries typically pursue three efficiency goals in higher education: larger quantity, higher quality, and constant or falling public spending. Systems that rely on public finance can generally achieve any two, but only at the expense of the third: a system can be large and tax-financed, but with worries about quality (France, Germany, Greece, Italy); or high-quality and tax-financed, but small (the United Kingdom until 1990); or large and high-quality, but fiscally expensive (as in Scandinavia).” Nicholas Barr, *Paying for Higher Education: What Policies, in What Order?* (London: London School of Economics, 2010), 3–4.

ARE STAKEHOLDERS DOING ENOUGH TO ENSURE THAT STUDENTS USE THEIR FINANCIAL AID FOR INSTITUTIONS AND PROGRAMS THAT SERVE THEM WELL?

Postsecondary institutions are increasingly stratified in terms of both inputs and outputs, so students' choice of institution is more consequential than ever.⁹⁷ But students can have difficulty assessing institutional quality in advance. If college students are misinformed or uncertain about the value of different programs, this may lead to underinvestment or misallocated investments in education.⁹⁸ The concern that students may use federal and state financial support for programs that have little benefit—and, with student loans, could even leave them worse off—has led to new efforts at the state and federal levels to improve both information and accountability.

Reporting and rewarding measures of institutional performance can, in theory, generate both better information and stronger financial incentives to improve the decision-making processes of prospective students, policy-makers, and institutions.⁹⁹ Students can benefit from improved information by identifying programs that better fit their goals, preparation, and budgets. State and federal policy-makers can use performance reporting to assess whether institutions are using their grant aid efficiently to improve student outcomes.¹⁰⁰ Even before formal stakes are attached to such measures, simply tracking and reporting them can help stimulate organizational learning.¹⁰¹

In his 2013 State of the Union address, President Obama gave voice to the accountability movement by calling for institutions to be “[held] accountable

97. William G. Bowen, Matthew M. Chingos, and Michael S. McPherson, *Crossing the Finish Line: Completing College at America's Public Universities* (Princeton, N.J.: Princeton University Press, 2009); John Bound, Michael F. Lovenheim, and Sarah Turner, “Why Have College Completion Rates Declined? An Analysis of Changing Student Preparation and Collegiate Resources,” *American Economic Journal: Applied Economics* 2 (3) (2010): 129–157.

98. Matthew Wiswall and Basit Zafar, “How Do College Students Respond to Public Information about Earnings?” *Journal of Human Capital* 9 (2) (2015): 117–169; Justine S. Hastings, Christopher A. Neilson, Anely Ramirez, and Seth D. Zimmerman, “(Un)informed College and Major Choice: Evidence from Linked Survey and Administrative Data,” *Economics of Education Review* 51 (2016): 136–151; Louis Jacobson and Robert J. LaLonde, “Using Data to Improve the Performance of Workforce Training,” Hamilton Project Discussion Paper (Washington, D.C.: Brookings Institution, 2013).

99. James J. Heckman, Carolyn Heinrich, and Jeffrey Smith, “The Performance of Performance Standards,” *Journal of Human Resources* 37 (4) (2002): 778–811; Alastair Muriel and Jeffrey Smith, “On Educational Performance Measures,” *Fiscal Studies* 32 (2) (2011): 187–206; Kevin J. Dougherty and Vikash Reddy, *Performance Funding for Higher Education: What Are the Mechanisms? What Are the Impacts?* ASHE Higher Education Report (San Francisco, Calif.: Jossey-Bass, 2013).

100. Executive Office of the President, *Using Federal Data to Measure and Improve the Performance of U.S. Institutions of Higher Education* (Washington, D.C.: Executive Office of the President, 2015), <https://collegescorecard.ed.gov/assets/UsingFederalDataToMeasureAndImprovePerformance.pdf>.

101. Dougherty and Reddy, *Performance Funding for Higher Education: What Are the Mechanisms? What Are the Impacts?*

for cost, value, and quality,” eventually by linking measures of institutional performance to federal aid.¹⁰² In September 2015, the Obama administration took a major step toward this goal by releasing an updated version of its College Scorecard, which for the first time provided information not just on college costs and graduation rates but on median post-college earnings at over four thousand institutions nationwide. The accountability agenda is even more advanced at the state level. As of 2015, thirty-two states were already utilizing performance or “outcomes-based” formulae to distribute funding for public institutions, with another five in the process of implementing such a plan.¹⁰³ While in most states the portion of state funding that is performance-based remains small—typically less than 10 percent—two states (Tennessee and Ohio) now base most of their institutional funding on performance metrics.¹⁰⁴

Prior research suggests that improving information on its own, without providing individualized outreach and guidance, may have limited impact.¹⁰⁵ The wrong type of information can also potentially distort students’ choices in adverse ways. For example, post-college average earnings data may discourage students from enrolling in programs that have stronger payoffs in the long term than in the short term, or programs that generate nonmonetary benefits that are not captured in average earnings.¹⁰⁶

Rigorous evidence regarding the effectiveness of state performance policies is also somewhat discouraging. Two recent quasi-experiments compared trends over time in states adopting new policies and in states that did not, finding evidence of unintended strategic responses. Some institutions appear to enroll fewer low-income students in reaction to performance incentives, while some community colleges appear to increase the production of short-term certificates, but not associate’s degrees, when completion rates are introduced as a

102. U.S. Department of Education, “Education Department Releases College Scorecard to Help Students Choose Best College for Them,” press release (Washington, D.C.: U.S. Department of Education, 2013), <http://www.ed.gov/news/press-releases/education-department-releases-college-scorecard-help-students-choose-best-college-them>.

103. National Conference of State Legislatures, *Performance-Based Funding for Higher Education* (Denver, Colo.: National Conference of State Legislatures, 2015), <http://www.ncsl.org/research/education/performance-funding.aspx>.

104. Martha Snyder, *Driving Better Outcomes: Typology and Principles to Inform Outcomes-Based Funding Models* (Washington, D.C.: HCM Strategists, 2015).

105. Bettinger, Long, Oreopoulos, and Sanbonmatsu, “The Role of Application Assistance and Information in College Decisions: Results from the H&R Block FAFSA Experiment”; Philip B. Levine, “Transparency in College Costs,” Economic Studies Working Paper (Washington, D.C.: Brookings Institution, 2014), <http://www.brookings.edu/research/papers/2014/11/12-transparency-in-college-costs-levine>.

106. Judith Scott-Clayton and Veronica Minaya, “Labor Market Outcomes and Postsecondary Accountability: Are Imperfect Metrics Better than None?” working paper prepared for NBER Productivity in Higher Education Conference, June 2016; summary online at http://conference.nber.org/confer//2016/PHEs16/Minaya_Scott-Clayton.pdf.

performance metric.¹⁰⁷ Thus, efforts to improve information and accountability must balance the value of strengthened incentives against the potential for unintended distortions and strategic behavior.

107. Robert Kelchen and Luke J. Stedrak, “Does Performance-Based Funding Affect Colleges’ Financial Priorities?” *Journal of Education Finance* 41 (3) (2016): 302–321; Nicholas W. Hillman, David A. Tandberg, and Alisa H. Fryar, “Evaluating the Impacts of ‘New’ Performance Funding in Higher Education,” *Educational Evaluation and Policy Analysis* 37 (4) (2015): 501–519. A broader review of the literature by Nicholas Hillman identifies twelve studies that find mostly null or even negative results of performance funding policies. See Nicholas Hillman, *Why Performance-Based College Funding Doesn’t Work* (New York: The Century Foundation, 2016).

Section 5

Concluding Remarks

The primary objective of financial aid is to ensure that college is accessible to qualified students regardless of income. As tuition and fees continue to rise, financial aid policy will become ever more central to the future of undergraduate education. But the centrality of financial aid is not limited to questions of affordability. Financial aid programs and regulations have implications for many other domains of higher education as well, from how students prepare for college, to where they choose to go; from the expectations institutions set for student enrollment and performance, to the expectations others set for institutional performance and accountability.

Financial aid aims to make college affordable, but affordability is about value—the quality of education students receive for their investment—as much as it is about cost. Across institutions, and even across programs within institutions, quality varies tremendously, and evidence suggests that this variation matters for students’ future outcomes.¹⁰⁸ The lower-cost option is not always better for either students or taxpayers: programs that appear more expensive in terms of costs per enrollee may actually be cheaper in terms of costs per graduate.¹⁰⁹ Thus, figuring out the cost side of the college cost-benefit equation gets students only halfway to making good decisions.

If students can afford college but do not have the academic and structural support they need to succeed, the impact of aid is substantially diminished. Thus, the effectiveness of financial aid policies is not just central to, but inherently intertwined with, the effectiveness of undergraduate education as a whole. Financial aid on its own cannot be the sole leverage point with which to address every challenge facing higher education. But if policy-makers can better address issues of cost, that might free up the time and energy that millions of students, families, and staff currently spend just figuring out how to pay for college and redirect it toward other essential questions: where to go, what to study, how to prepare, and how to succeed.

108. Bowen, Chingos, and McPherson, *Crossing the Finish Line: Completing College at America’s Public Universities*.

109. Henry M. Levin and Emma Garcia, *Benefit-Cost Analysis of Accelerated Study in Associate Programs (ASAP) of the City University of New York (CUNY)*, Center for the Benefit-Cost Studies in Education (New York: Teachers College, Columbia University, 2013).

Undergraduate Financial Aid in the United States: Key Takeaways

- **As tuition and fees continue to rise, financial aid policy will become ever more central to the future of undergraduate education.** More students are receiving more aid, and more types of aid, than ever before. The centrality of financial aid means that financial aid program design and regulation increasingly interact with other functions of institutions, including what counts as an eligible program, establishing minimum performance standards and tracking student outcomes.
- **While the primary goal of financial aid policy has traditionally been to ensure college access, this focus is shifting to promoting college success and completion.** Quality varies tremendously across institutions, and even across programs within institutions, and this variation matters for students' future outcomes. The specific design of financial aid programs can affect not only whether students enroll but where students enroll and whether they persist and complete credentials of value.
- **Both the composition of financial aid packages and the purpose of aid can vary substantially across institution types—as can the profile of a “typical” student.** For example, while institutional grants are a substantial source of aid overall, this aid is highly concentrated at private not-for-profit institutions and often has a merit-based component. At public institutions, the vast majority of aid is state or federal, and the student population includes many older, part-time students pursuing sub-baccalaureate credentials.

- **The financial aid system has become increasingly complex over time.** While the increasing availability of financial aid is a good thing, it also means that figuring out the net price a given student will pay—early enough to do anything about it—is more complicated than ever. Confusion, uncertainty, and unintended interactions among aid programs can undermine effectiveness and complicate efforts to reach the students that need aid most.
- **Over time, the main source of public support for undergraduates has shifted from state and local governments to the federal government.** From 1990 to 2014, student enrollments grew by 50 percent, while state and local appropriations grew by less than 7 percent. At the same time, federal student aid nearly quintupled. As a result, the federal government now provides substantially more support for undergraduates than do state/local governments. This changes incentives for accountability and raises the potential for unintended interactions between state/local and federal policy.

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The American Academy's Commission on the Future of Undergraduate Education

Undergraduate education is one of the most important avenues of opportunity in American society, though the landscape is changing rapidly: there are more options than ever before for how and when Americans receive some form of a college experience. New populations of students attend nonprofit public and private colleges and universities as well as for-profit institutions to earn bachelor's and associate's degrees and certificates through face-to-face, online, and hybrid courses. Students of all ages study part time or full time, often at multiple institutions according to schedules that fit their lives. At the same time, emerging opportunities outside of the traditional boundaries of colleges and universities are responding increasingly to learner's needs, blurring the lines across postsecondary educational providers and student learning opportunities.

To address these topics and provide ideas for ensuring that individual Americans receive the education they need to thrive in the twenty-first century, the American Academy of Arts and Sciences, with generous funding from Carnegie Corporation of New York, established the Commission on the Future of Undergraduate Education. The Commission, which includes national leaders in education, business, and government, is studying how well students are being served by today's higher education models and identifying the challenges and opportunities that higher education will encounter in the decades ahead.

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