CHAPTER 5

INVESTING IN HIGHER EDUCATION

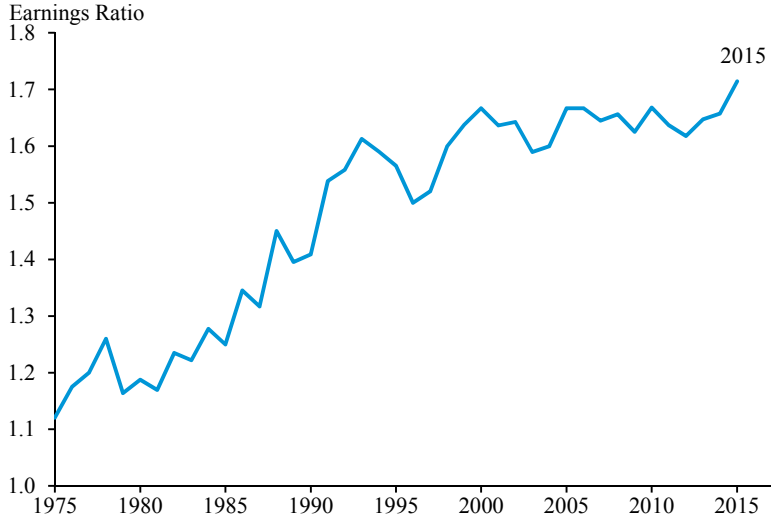
Introduction

The Obama Administration has been committed to ensuring that all students, regardless of their background, have access to a college education that prepares them for success in the workplace and in life. A high-quality education is often more than just the first step in one's career; it can be one of the most important investments young people can make in their futures. College graduates enjoy an earnings premium that is at a historical high, reflecting a trend over several decades of increasing demand for skilled workers (Figure 5-1). In 2015, the median full-time, full-year worker over age 25 with a bachelor's degree (but no higher degree) earned roughly 70 percent more than a worker with just a high school degree (CPS ASEC, CEA calculations). Moreover, people with a college degree are more likely to be employed—benefitting from both lower unemployment rates and higher rates of labor force participation.

But despite the high average returns to a college degree, Federal policy in higher education has had to confront several longer-term challenges. Research shows that college enrollments have not kept up with the rising demand for college-related skills in the workplace (Goldin and Katz 2008). This suggests that, on the whole, Americans are investing too little in higher education. At the same time, some students who attend college do not reap the high returns, especially when they attend low-quality programs or fail to complete a degree. The challenges of investing in higher education are particularly acute for students from disadvantaged backgrounds, who are less likely both to enroll in college and to complete a high-quality program. And as a growing number of students borrow to finance their education, too many struggle to manage their debt.

Figure 5-1

College Earnings Premium Over Time



Note: The earnings ratio compares the median full-time, full-year worker over age 25 with a bachelor's degree only to the same type of worker with just a high school degree. Prior to 1992, bachelor's degree is defined as four years of college.
Source: CPS ASEC

As President Obama took office, the challenges to ensuring broad access to a quality college education were intensified by the Great Recession. Rising unemployment lowered the implicit cost of forgoing earnings to attend college, and many sought to invest in higher education to improve their skills and job prospects. But at the same time, State budgets declined, exacerbating the trend of rising tuitions at public institutions and stretching funding capacity at low-cost community colleges. The changing market also fostered further expansion of the for-profit college sector, where many colleges offer low-quality programs.

Over the past eight years, the Obama Administration has met these challenges with a complementary set of evidence-based policies and reforms. These policies have been instrumental in helping students from all backgrounds finance investments in higher education and in helping to improve the quality of those investments. To help expand college opportunity, the President doubled investments in grant and scholarship aid through Pell Grants and tax credits. To help more students choose a college that provides a worthwhile investment, the Administration provided more comprehensive and accessible information about college costs and outcomes through the College Scorecard, simplified the Free Application for Federal Student Aid (FAFSA), and protected students from low-quality schools through a package of important consumer protection regulations including the landmark

Gainful Employment regulations. To help borrowers manage debt after college, income-driven repayment options like the President's Pay As You Earn (PAYE) plan have capped monthly student loan payments at as little as 10 percent of discretionary income to better align the timing of loan payments with the timing of earnings benefits.

The benefits of some of these policies are already evident today, while many more will be realized over the coming decades. For example, Council of Economic Advisers' (CEA) analysis finds that the Pell Grant expansions since 2008–09 enabled at least 250,000 students to access or complete a college degree during the 2014–15 award year, leading to an additional $20 billion in aggregate earnings (CEA 2016c). This represents a nearly 2:1 return on the investment. In addition, millions more will benefit from lower college costs and improved college quality in the future.

This chapter begins by surveying the evidence on the individual and societal returns to higher education, as well as the challenges to ensuring that all students have an opportunity to benefit from attending college regardless of their background. It then describes the many ways in which the Administration's policies have addressed these challenges, concluding with a discussion of next steps to build on this progress.

The Economic Rationale for Federal Policies and Reforms to Support Higher Education

A large body of evidence shows that, on average, college attendance yields high returns to individuals and, importantly, benefits society as well. Typically, the individual returns far exceed the costs of a degree, offering individuals a strong incentive to invest in higher education. Even in good economic times, however, individuals face many barriers that deter investment, and the potential benefits of higher education would often go unrealized in the absence of Federal policies. The barriers to finding, financing, and accessing high-quality education options are especially high for those from low-income families, first-generation college families, and other disadvantaged groups. As President Obama took office in 2009, the Great Recession intensified these challenges. Although more Americans than ever wished to enroll in college, they were stymied by financial hardship, rising tuitions, variation in program quality, lack of information to help them make good choices, and a Federal student aid system that had become so complex that many eligible students did not apply (Page and Scott-Clayton 2015). This setting called for a new set of policies and reforms to the existing system of Federal student aid.

Individual Returns to Higher Education

While research suggests that college graduates experience a wide range of non-monetary benefits such as greater health and happiness (Oreopoulos and Salvanes 2011), a primary benefit that motivates most students is the expected gain in future earnings (Eagan et al. 2014; Fishman 2015). Over a career, the median full-time, full-year worker over age 25 with a bachelor's degree earns nearly $1 million more than the same type of worker with just a high school diploma (CPS ASEC, CEA calculations). That worker with an associate degree earns about $330,000 more. The present values of these earnings premiums are also high, amounting to roughly $510,000 and $160,000 for bachelor's and associate degrees, respectively.[1] As shown in Figure 5-2 below, the present value of the additional lifetime earnings far exceeds the cost of tuition. Although tuition does not capture all of the costs of a college education—in particular, it does not capture the opportunity cost of forgone earnings while in school—even when those costs are included, the present value of added earnings typically exceeds the cumulative total cost of college by an order of magnitude (Avery and Turner 2012).

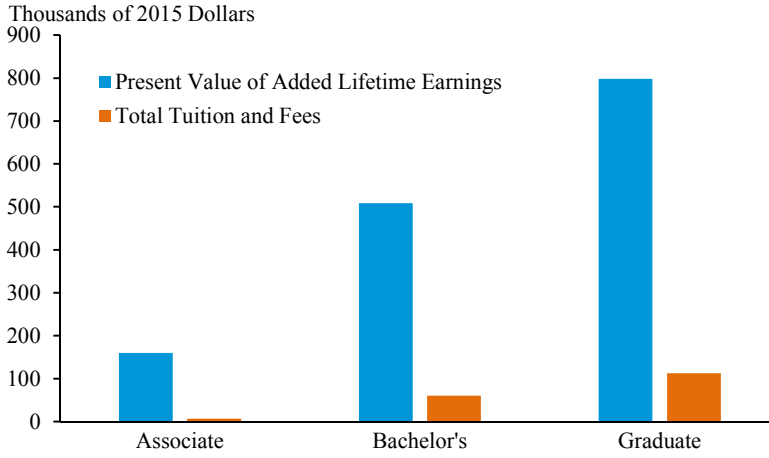
The earnings differentials shown in Figure 5-2 are caused, at least in part, by factors other than educational attainment. For example, students who attend college may have been more skilled or have better networks and, thus, would earn more regardless of their education. But a body of rigorous economic research supports the conclusion that higher education does indeed cause large increases in future earnings. Using a range of sophisticated techniques to compare individuals who differ in their educational achievement but who are otherwise similar in their earnings potential, researchers have estimated that individuals who attend college earn between 5 to 15 percent more on average per year of college than they would if they had not gone to college.[2]

Importantly, some research also suggests that the returns to college have been just as high, if not higher, for "marginal students"—that is, students who are on the border of either attending or completing college versus not doing so. These students often come from low-income families and their decisions hinge on the perceived cost or accessibility of college. Early studies used variation in college proximity to identify the returns to college and found especially large returns to students for whom proximity was a decisive factor (Kane and Rouse 1993; Card 1995). A more recent study by

[1] The net present value calculation here and elsewhere in the chapter uses a discount rate of 3.76 percent, corresponding with the current interest rate on undergraduate loans.

[2] See, for example, Kane and Rouse 1993; Card 1995; Zimmerman 2014; Ost, Pan, and Webber 2016; Turner 2015; Bahr et al. 2015; Belfield, Liu and Trimble 2014; Dadgar and Trimble 2014; Jacobson, LaLonde, and Sullivan 2005; Jepsen, Troske and Coomes 2012; Stevens, Kurlaender, and Grosz 2015; Gill and Leigh 1997; Grubb 2002; Marcotte et al. 2005; Marcotte 2016.

Figure 5-2
Present Value of Added Lifetime Earnings vs. Total Tuition

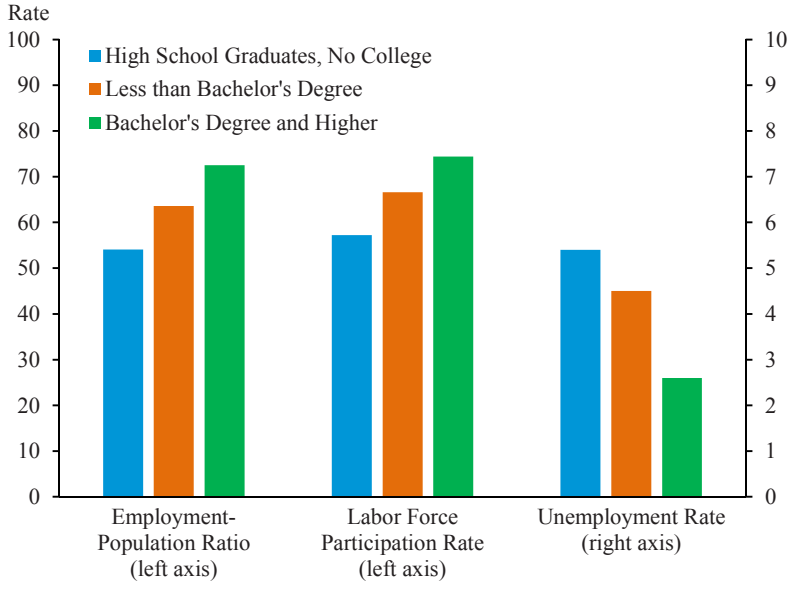


Note: Lifetime earnings are calculated by summing median annual earnings for full-time, full-year workers at every age between 25 and 64 by educational attainment, subtracting earnings for the same type of worker with only a high school degree, and converting to present value using a 3.76% discount rate. Tuition for associate (bachelor's) is the full-time tuition for two- (four-) year schools multiplied by two (four), and for graduate, it is the average graduate tuition multipled by three added to bachelor's tuition.
Source: CPS ASEC 2015 and 2016; NPSAS 2012; NCES 2015

Zimmerman (2014) compares students whose GPAs are either just above or just below the threshold for admission to Florida International University, a four-year school with the lowest admissions standards in the Florida State University System. This study finds that "marginal students" who are admitted to the school experience sizable earnings gains over those who just miss the cutoff and are thus unlikely to attend any four-year college, translating into meaningful returns net of costs and especially high returns for low-income students. Using a similar methodology, Ost, Pan, and Webber (2016) study the benefit of completing college among low-performing students whose GPAs are close to the cutoff for dismissal at 13 public universities in Ohio. They find substantial earnings benefits for those who just pass the cutoff and complete their degree. Turner (2015) similarly finds that women who attend college after receiving welfare benefits experience large and significant earnings gains if they complete credentials.

In addition to higher earnings, college graduates are also more likely to work than high school graduates. Data from the Bureau of Labor Statistics, summarized in Figure 5-3, show that college graduates with at least a bachelor's degree participate in the labor force at a higher rate than high school

Figure 5-3
Likelihood of Working by Educational Attainment, 2015



Note: Data are for the civilian population 25 years and over.
Source: Bureau of Labor Statistics

graduates (74 vs. 57 percent in 2015)[3] and also face a lower unemployment rate among those who participate (2.6 vs. 5.4 percent in 2015). As a result, people over the age of 25 with a bachelor's degree or higher are 30 percent more likely to be working than those with only a high school degree. A somewhat smaller but still sizeable employment premium is seen for those with some college but without a bachelor's degree.[4] Consistent with college premiums in both earnings and employment, Haskins, Isaacs, and Sawhill (2008) find that individuals with college degrees have increased odds of moving up the economic ladder to achieve a higher level of income compared with their parents.

Overall, higher education helps Americans become more productive in the labor market, building the skills our economy demands and establishing a stronger foundation for the economic prosperity and security of our families and communities. Although the large individual returns to college imply that individuals have strong incentives to invest in higher education, much of the potential benefit of higher education would go unrealized in the absence of Federal policies to support these investments due to positive

[3] See CEA's 2014 and 2016 reports on labor force participation for a more detailed discussion about educational attainment and labor force participation (CEA 2014, 2016e).
[4] This category includes both individuals who attended college but received no degree and those who received an associate degree.

externalities, credit constraints, and information failures and procedural complexities.

Positive Externalities

An individual's postsecondary education level has spillover benefits to others in society that the individual does not capture; that is, positive "externalities." Since individuals usually do not consider the societal benefits when deciding whether to attend college, such externalities are an important motive for Federal student aid.

These societal benefits, while hard to quantify, are numerous and potentially very large (Baum, Ma, and Payea 2013; Hill, Hoffman, and Rex 2005; OECD 2013). Higher individual earnings yield higher tax revenue and lower government expenditure on transfer programs. Further, research shows that increased educational attainment can lead to higher levels of volunteering and voting (Dee 2004), lower levels of criminal behavior (Lochner and Moretti 2004), and improved health (Cutler and Lleras-Muney 2006; McCrary and Royer 2011). Individual investments in education can benefit other members of society through reduced victimization, and lower health care and law enforcement costs. Other social contributions associated with higher education—such as teaching, inventions, or public service—also are not fully captured by the individual's wages. Finally, research shows that when individuals invest in their own college education, they can actually make *other* workers more productive. A study by Moretti (2004) finds that increasing the share of college graduates in a labor market leads to significant increases in the productivity and wages of others where those college graduates live and work. Indeed, research using international comparisons suggest that the cognitive skills or "knowledge capital" of a nation are essential to long-run prosperity and growth (Hanushek and Woessmann 2015).

Credit Constraints

While the social benefits of education provide a strong justification for Federal support, equally important is the fact that, even when the private returns to a college education are high, the private market is often unwilling to supply educational loans—especially to students from low-income families. A key reason for this market failure is that the knowledge, skills, and enhanced earnings potential that a student obtains from going to college cannot be offered as collateral to secure the loan. The lack of a physical asset makes educational loans very different from mortgages or automobile loans, which provide lenders with recourse in the form of foreclosure or repossession if the borrower is unable to repay. For this reason, the private market

alone would supply an inefficiently low amount of credit for the purpose of financing education.

From an individual's perspective, attending college makes financial sense whenever the present value of the benefits outweighs the present value of the costs, when both are discounted based on preferences for current outcomes versus future outcomes. But while the benefits of attending college are spread out over a long future, most of the costs—including both the direct cost of tuition and fees and the foregone earnings while in school—must be paid up front. While some students are able to finance their college educations through savings or help from their families, many need to borrow to make the investment.

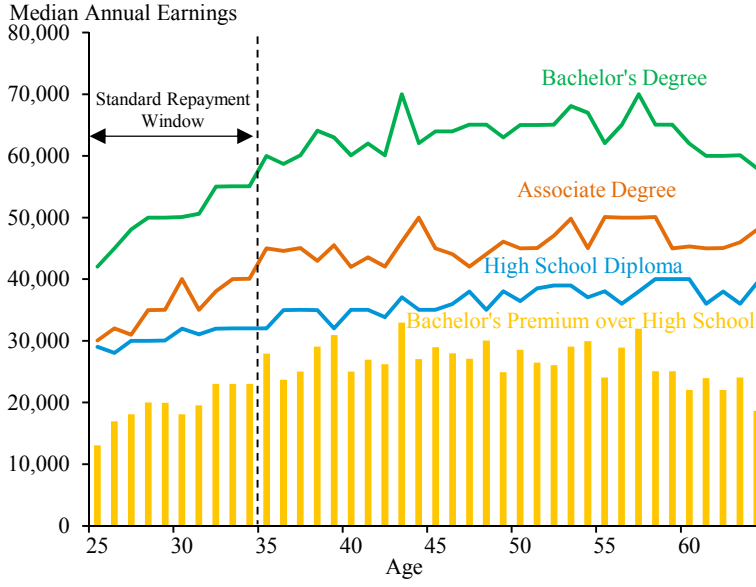
A major function of the Federal student loan system is to ease the credit constraints caused by imperfections in the private loan market, thereby ensuring broad access to affordable college loans and a means to invest in one's future earnings potential.[5] However, while the student loan system has helped to alleviate credit constraints at the time of college enrollment, the traditional standard repayment plan's 10-year repayment period, with equal payments due each month, does not account for income volatility or dynamics once the student has left school. As a result, this standard plan—in which students are enrolled by default—may adversely affect some students' investment decisions and hinder others from successfully managing their debt.

The constraint imposed by the 10-year repayment plan is illustrated in Figure 5-4, which shows the lifetime earnings trajectory of a typical bachelor's degree recipient working full-time and year-round from age 25 to retirement. As the Figure shows, there is a strong positive relationship between age and earnings. This relationship is especially strong for those with a bachelor's degree and it persists for at least 15 to 20 years after many students graduate from college. In short, a college investment pays off over several decades, and a 10-year repayment window forces borrowers to pay the costs at a time when only a small share of the benefits have been realized. Indeed, the discounted values for the earnings levels used in Figure 5-4 suggest that less than a third of the earnings gains over a 40-year career are realized during the standard repayment window.

[5] Although a private loan market exists, the loans typically require a co-signer and often do not come with the consumer protections that Federal loans have, including discharge in instances of death or permanent disability. Today the private market constitutes only a small share of student loans—in 2012, 6 percent of undergraduates used private loans to finance their education (NPSAS 2012, CEA tabulations). In the 2000s, private student loans accounted for a larger share of student loans; see CFPB (2012) for a detailed analysis about how and why the private market for student loans has changed over the last decade.

Figure 5-4

Earnings by Age and Educational Attainment



Note: Earnings are median annual earnings for full-time, full-year workers of the noted age.
Source: CPS ASEC 2015 and 2016

While many borrowers who work when they leave school earn enough to pay their student debt on the standard 10-year plan,[6] there is significant variation both in the size of student loans and in the returns to college. Further, because borrowers may face temporary unemployment or low earnings—especially at the start of their career (Abel and Deitz 2016)—some borrowers are needlessly constrained if they remain on the standard plan. Such considerations are especially pertinent to recent cohorts of students who graduated during or shortly after the Great Recession. Research shows that college graduates entering the labor market during a recession tend to experience sizeable negative income shocks, and that it can take years to recover (Kahn 2010; Oreopoulos, von Wachter, and Heisz 2012; Wozniak 2010). Young workers are often the ones affected more severely by recessions (Hoynes, Miller, and Schaller 2012; Forsythe 2016; Kroeger, Cooke, and Gould 2016). A short repayment window could therefore lead to poor loan outcomes for these students despite a longer-term ability to repay.

[6] CEA calculations using the CPS ASEC and NPSAS 2012 show that at age 25, the earnings premium seen by a typical bachelor's degree recipient working full-time and year-round is $16,000 a year, well above the $3,500 annual payment corresponding to a typical debt amount of about $27,000. Similarly, for an associate degree, the annual earnings premium of roughly $3,000 is above the annual payment of $1,500 associated with the typical amount of about $11,000 that students borrow for this type of degree.

The economics literature provides some evidence that credit constraints faced by students upon graduation can affect career choices. In particular, Rothstein and Rouse (2011) find that having more debt to repay reduces the probability that graduates choose lower-paid public interest jobs, especially jobs in education. Similarly, Luo and Mongey (2016) estimate that larger student debt burdens cause individuals to take higher-wage jobs at the expense of job satisfaction, likely due to credit constraints after graduating, and that this reduces their well-being.

Information Failures and Procedural Complexities

Yet another obstacle that prevents some individuals from making high-return investments in college is limited information about the associated benefits and costs, which leads to poor decisions and to underinvestment. Survey-based research yields mixed findings on whether students underestimate or overestimate the returns to college (Betts 1996; Wiswall and Zafar 2013; Baker et al. 2016) but suggests that students generally view their future earnings as uncertain (Dominitz and Manski 1996). Consistent with this view, one study estimates that only 60 percent of the variability in returns to schooling can be forecasted (Cunha, Heckman, and Navarro 2005).

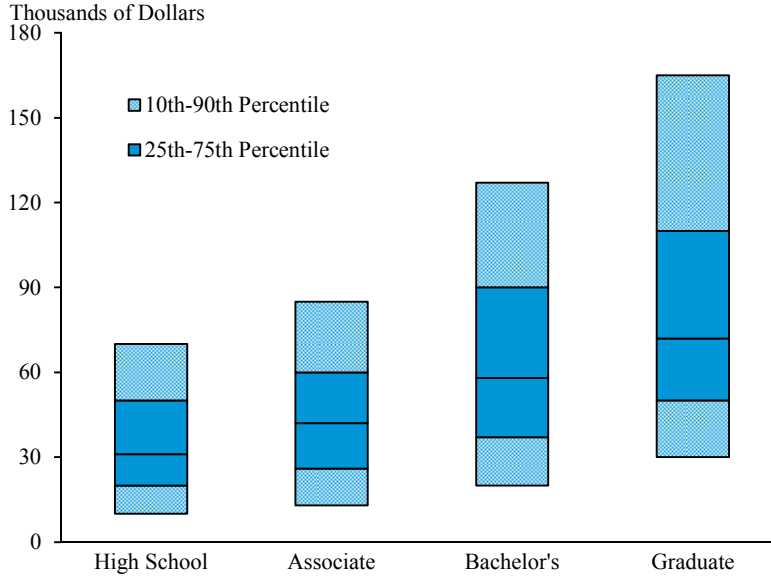
Underlying this uncertainty about the return to college is the fact that, while this return is high on average, it is also quite variable. This variation is illustrated in Figure 5-5, which shows the distribution of earnings by educational attainment. For example, while workers with a bachelor's degree are far more likely to have greater earnings than those with only a high school diploma, there is a fraction whose earnings are similar to the earnings of those with only a high school diploma. Ten percent of workers age 35 to 44 with a bachelor's degree had earnings under $20,000, compared with 25 percent of workers with only a high school diploma (CPS ASEC, CEA Calculations).

The variation in the returns to college is driven by a number of factors; however, one important determinant of both the variability and student uncertainty about these returns is the large variation in the quality of schools and programs of study—which can be hard for potential students to assess. A growing body of literature shows that college quality matters both for completion and for earnings,[7] with some pointing to relatively poor returns at for-profit institutions (Cellini and Turner 2016). Studies have also estimated highly variable returns by college major for bachelor's degree recipients (for example, Altonji, Blom, and Meghir 2012), and others have

[7] For example, see Bound, Lovenheim, and Turner (2010); Cohodes and Goodman (2014); Goodman, Hurwitz, and Smith (2015); Hoekstra (2009).

Figure 5-5

Variation in Earnings by Educational Attainment



Note: Data are for workers ages 35-44 with positive wage and salary income.
Source: CPS ASEC 2016, CEA calculations

found that students' forecast errors regarding earnings differences across majors can affect their major choice (Arcidiacono, Hotz, and Kang 2012).

The effects of poor information and large, difficult-to-forecast variation in earnings can be particularly detrimental since students cannot diversify their college enrollment selections. That is, students generally attend only one school at a time and focus on one or two programs. If they make a poor selection of college or major, it is costly to switch, as it can be difficult to transfer credits. This can potentially lock students into a low-quality program. For some students, the uncertainty of returns itself may prevent them from enrolling in the first place if they are sufficiently risk-averse (Heckman, Lochner, and Todd 2006). The combination of high variability and uncertainty with limited ability to diversify means that some students will realize small, or even negative returns, from college even if the expected return is high. The associated uncertainty may also cause risk-averse students to invest less than they otherwise would in their education.

Prospective students also lack good information about costs. Students often overestimate college costs—with low-income and first-generation prospective students overestimating the cost by as much as two or three times the actual amount (Avery and Kane 2004)—and parents overestimate costs as well (Grodsky and Jones 2007). Moreover, Hastings et al. (2015) find that

students who overestimate costs are less likely to enroll in, and complete, a degree program, confirming that misinformation about costs can be a barrier to investing in college.

When attempting to assess the costs of college, an important obstacle for many students is the complexity of the financial-aid system (Lavecchia, Liu, and Oreopoulos 2015). Behavioral economics show that onerous processes can impact choices, especially when the individuals making decisions are young (Thaler and Mullainathan 2008; Casey, Jones, and Somerville 2011), and can therefore prevent some students who would benefit from investing in college from doing so. In a study of Boston public school students, Avery and Kane (2004) find evidence that low-income students are discouraged by the procedural complexity of applying both financial aid and admission into college, even if they are qualified and enthusiastic about going to college. These findings are consistent with those of Dynarski and Scott-Clayton (2006), who use lessons from tax theory and behavioral economics to show that the complexity of the FAFSA is a serious obstacle to both the efficiency and equity in the distribution of student aid. Page and Scott-Clayton (2015) calculate that 30 percent of college students who would qualify for a Pell Grant fail to file the FAFSA, which is required to receive a Pell Grant.

The Role of Family Income

Overall, the evidence points to a number of factors—including social externalities, credit constraints, poor information, and complexity—that cause some individuals to invest too little in their educations or to otherwise make poor education investment choices. Importantly, these factors do not affect all students equally; they are all more likely to affect disadvantaged individuals. First, students from low-income families, with lower levels of savings, are more likely to be credit constrained and, thus, in need of student loans. Further, the costs of financial-aid complexity also fall most heavily on disadvantaged students, who may have fewer resources available to help them navigate the system (Dynarski and Scott-Clayton 2006). Similarly, research shows that low-income students are less likely to accurately estimate the costs and returns to college (Avery and Kane 2004; Grodsky and Jones 2007; Horn, Chen, and Chapman 2003; Hoxby and Turner 2015). In part, this may reflect the lack of detailed information in popular sources like *U.S. News and World Report* on many colleges disproportionately attended by low-income students. In addition to the barriers they face specific to higher education, low-income students are less likely to receive a PreK-12 education that prepares them for college, making college access and success an even greater challenge for these individuals. New research shows that,

Box 5-1: Anti-Poverty Efforts and Educational Attainment

Research suggests that this Administration's anti-poverty efforts will help expand college access and success, either directly through improving college outcomes or indirectly through improved childhood health and academic performance. Clear evidence supports the expansions of Medicaid and the Children's Health Insurance Program (CHIP), the Earned Income Tax Credit (EITC), and the Supplemental Nutrition Assistance Program (SNAP).

Medicaid/CHIP improves early childhood health and protects families facing health problems from financial hardship (Currie 2000; Kaestner 2009; Kaestner, Racine, and Joyce 2000; Dave et al. 2015; Finkelstein et al. 2012), both of which are positively associated with higher educational attainment (Case, Fertig, and Paxson 2005). Cohodes et al. (2016) find that a 10 percentage-point increase in Medicaid/CHIP eligibility for children increase college enrollment by 0.5 percent and increases the four-year college attainment rate by about 2.5 percent. Brown, Kowalski, and Lurie (2015) also find that female children with more years of Medicaid/CHIP eligibility are significantly more likely to attend college. In his first month in office, President Obama signed the Children's Health Insurance Program Reauthorization Act, which provided additional tools and enhanced financial support to help states cover more children through Medicaid and CHIP, and subsequent legislation has extended funding for CHIP through fiscal year (FY) 2017. In parallel, the Affordable Care Act's comprehensive coverage expansions through Medicaid and the Health Insurance Marketplaces are helping to ensure all children and their families have access to affordable, high-quality health insurance coverage.

The EITC reduces the amount of taxes that qualified working people with low to moderate income owe and provides refunds to many of these individuals. It has been shown to raise student test scores (Dahl and Lochner 2012) and future educational attainment. Research finds that raising the maximum EITC by $1,000 increases the probability of completing one or more years of college by age 19 by 1.4 percentage points (Maxfield 2013) and of completing a bachelor's degree among 18–23 year olds by 0.3 percentage point (Michelmore 2013). For families whose household income lies near the EITC eligibility cutoff, another study provides evidence that a $1,000 increase in credits received during the spring of their senior year of high school increases college enrollment the following fall by 0.5 percentage point (Manoli and Turner 2014). Through the American Recovery and Reinvestment Act (the Recovery Act), President Obama expanded the EITC for families with more than two children and for working couples, and he made these expansions

permanent in 2015; the refundable portion of the Child Tax Credit (CTC) was also expanded in parallel with these changes. Together, the EITC and CTC improvements reduce the extent or severity of poverty for about 8 million children each year.

Research has found that lower family food budgets are associated with greater discipline problems and lower test scores among school-age children (CEA 2015b). SNAP provides nutrition assistance to millions of eligible, low-income individuals and families and helps to combat these problems. A study by Almond, Hoynes, and Schanzenbach (2016) finds that early childhood access to the Food Stamp Program (as SNAP was previously known) led to higher rates of high school completion among children who grew up in disadvantaged households. By expanding SNAP benefits in the Recovery Act, President Obama prevented hundreds of thousands of families from experiencing food insecurity (Nord and Prell 2011), enabling more children to be well-nourished and prepared for school.

among individuals with similar ability, those from low socioeconomic backgrounds are less likely to complete college than their higher socioeconomic peers and, as a result, they tend not to realize their full potential in the labor market (Papageorge and Thom 2016).

In light of the evidence, many of the Administration's policies have been targeted at removing barriers to education for those who face the greatest challenges, and so represent the largest opportunities for improved efficiency and equity. The remainder of this chapter describes the set of evidence-based policies enacted and proposed by the Obama Administration to help correct market failures and to improve the investment decisions and outcomes of all students who wish to invest in higher education.

Key Accomplishments

Over the last eight years, the Obama Administration has made great strides to help students make more effective investments in higher education. These efforts have been guided by the available evidence and have addressed the challenges identified above by helping to offset the cost of college, reducing credit constraints and improving student debt outcomes, providing better information about the costs and benefits of colleges, simplifying the financial aid application process, and holding the most poorly performing colleges accountable. In addition, Administration efforts to improve PreK-12 outcomes have aimed to better prepare students for college and their

careers. Some of the effects of these policies are already evident today, while many more will be realized over the coming decades. Despite these important steps, more work remains to ensure that all interested students have the opportunity to pursue higher education, and that they can do so affordably.

Helping Students Pay for College

At the onset of the Great Recession, the college earnings premium was near a historical high and the number of Americans who wished to attend college was rising. But at the same time, falling tax revenues and State budget shortfalls led to sharp declines in State funding for public institutions, which in turn contributed to rising tuitions and fees (Figure 5-6; Mitchell, Palacios, and Leachman 2014). While the costs of college were increasingly shifted to students through higher tuition, rising unemployment and financial hardship also meant more families faced credit constraints and uncertainty as to whether a college investment was feasible. With large returns at stake, reducing the cost of college became an urgent priority and an early cornerstone of this Administration's higher education policy.

Investments in Grant and Tax Aid

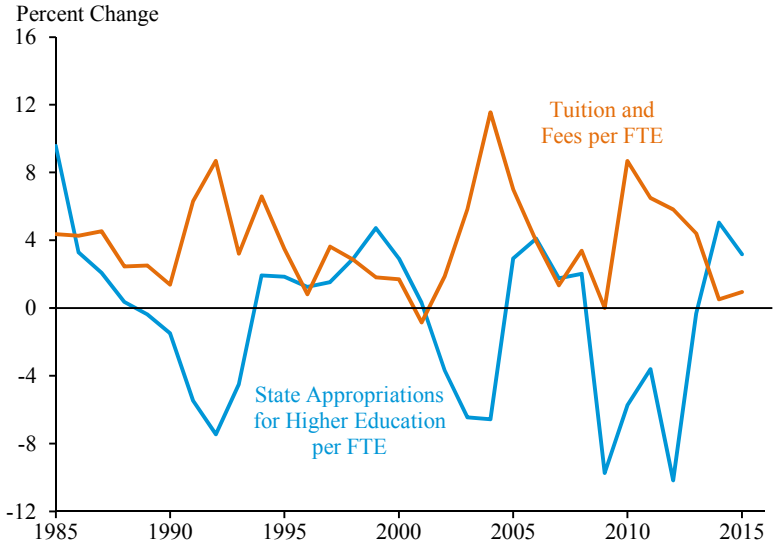
Since coming into office, President Obama has worked aggressively with Congress to increase the maximum Pell Grant award, the primary form of financial aid for many students. On average, Pell Grants reduced the cost of college by $3,700 for over 8 million students last year. Pell Grant funding increased by more than $12 billion from award year 2008–09 to 2014–15, a 67 percent increase, and the maximum Pell Grant award has increased by roughly $1,000 (Figure 5-7). Moreover, for the first time, Pell Grant funding has been tied to inflation to ensure the value of the aid does not fall over time.

A growing body of research confirms the potential for need-based grants to improve college access and success.[8] For example, Dynarski (2003) examines the elimination of the Social Security Student Benefit Program in 1982, and her estimates suggest that an offer of $1,000 in grant aid increases the probability of attending college by about 3.6 percentage points and appears to increase school completion. Abraham and Clark (2006) find similar impacts on college attendance in their study of the District of Columbia Tuition Assistance Grant Program instituted in 1999. A more recent study that examines the effects of a need-based program in Florida with a strict

[8] A few early studies focusing on the initial implementation of the Pell Grant find mixed results (Hansen 1983; Kane 1996; Seftor and Turner 2002; Bettinger 2004); however, the initial benefits of the program may have been limited by the newness of the program and the complexity of the eligibility rules and application process. These complexities have been reduced in recent years.

Figure 5-6

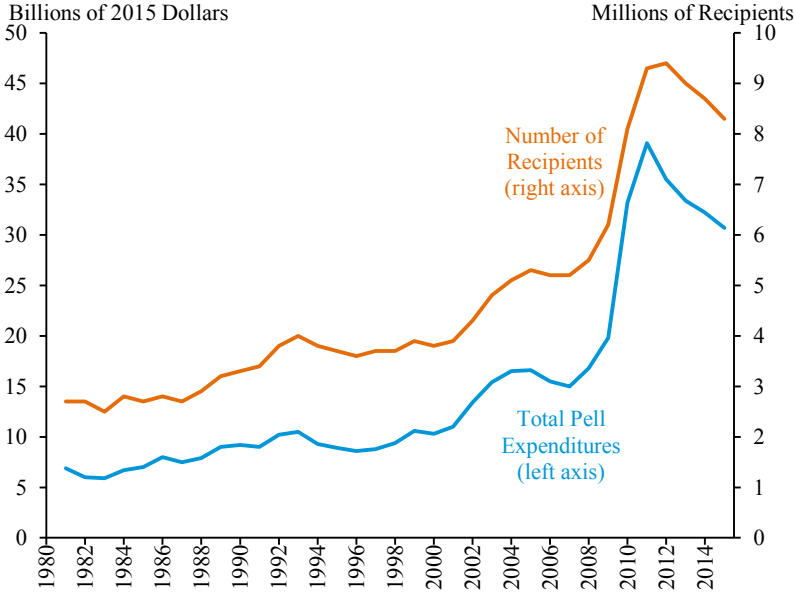
Annual Percent Change in State Funding for Higher Education and Public Tuition and Fees Over Time



Note: Figures are inflation adjusted.
Source: College Board (2015)

Figure 5-7

Pell Expenditures Over Time



Source: College Board (2016b)

eligibility cutoff likewise finds significant increases in four-year college enrollment and completion (Castleman and Long 2013).

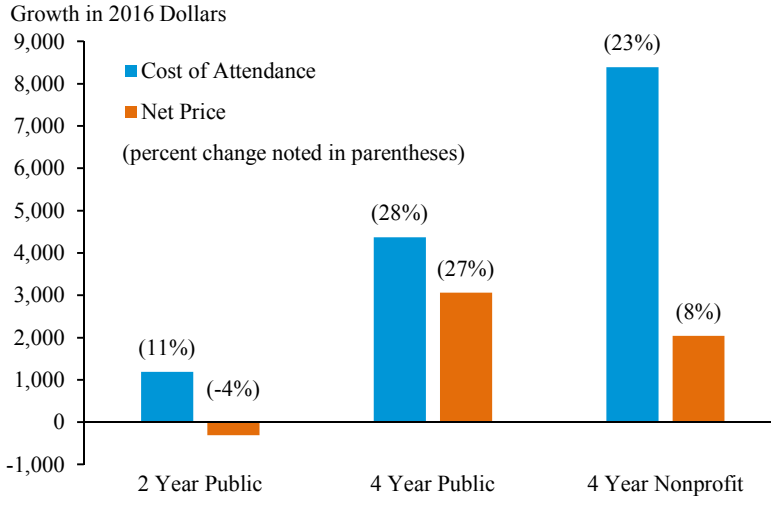
Using these studies to estimate the effects of this Administration's expansions of Pell Grants, CEA analysis finds that the Pell Grant expansions since the 2008–09 award year led at least 250,000 students to attend college or complete a college degree in 2014–15 who would have not otherwise done so. The increase in educational attainment among these students translates to an additional $20 billion in aggregate earnings, representing a nearly 2:1 return on the investment. However, the actual returns on the Administration's Pell Grant investments are likely even larger, as this estimate does not account for social externalities from increased educational attainment nor for other benefits to those receiving larger Pell Grants, including the opportunity to select from a broader range of options, spend more time on school instead of work, and finish sooner (see the Appendix of CEA 2016c for more details on this calculation).

The Administration has also reduced taxes for low- and middle-income families that attend college. Under the 2009 Recovery Act, the Administration established the American Opportunity Tax Credit (AOTC), which provides a maximum credit of $2,500 a year—or up to $10,000 over four years—to expand and replace the Hope higher education credit. Along with providing a more generous credit, the AOTC also is partially refundable and thus provides more benefits for low-income households that do not owe any income taxes. Before the AOTC, only 5 percent of credit and tuition deduction dollars went to filers with incomes under $25,000; by 2014, that share had risen to 23 percent (Dynarski and Scott-Clayton 2016; College Board 2016b). Although research shows that the AOTC has little impact on college enrollment (Hoxby and Bulman 2015; Bulman and Hoxby 2015), the credit lowers the costs of college for millions of students and their families; in 2016, the AOTC cut taxes by over $1,800 on average for nearly 10 million families. The bipartisan tax agreement that President Obama signed into law in 2015 made the AOTC permanent as part of a package that collectively provided about 24 million working and middle-class families a year each with a tax cut of about $1,000.

Due in part to the Administration's historic investments in grant and tax aid, the net price of college that students are responsible for paying grew far more slowly than the published cost of attendance between award years 2008–09 and 2016–17 (Figure 5-8). Although more work remains to make college more affordable, the impact of the Administration's Pell Grant and tax credit expansions have helped lower the cost of college for millions of students and their families.

Figure 5-8

Growth in the Cost of Attendance and Net Price between 2009 and 2017



Note: Years are academic years, and prices are for undergraduate students. Public costs are for in-state students. Cost of attendance includes tuition, fees, room, and board. Net price subtracts grant and tax aid from cost of attendance.
Source: College Board (2016a)

America's College Promise

Although investments in grant and tax aid have helped make college more affordable for many students, too many families still feel as if college is out of reach. To ensure that all responsible students are able to attend college, President Obama unveiled his America's College Promise (ACP) plan in January 2015 to make two years of community college free for hard-working students. Over 1,300 American community colleges provide over 40 percent of undergraduates with educations that deepen their knowledge, make them more informed citizens, and lead to a quality, affordable degree or credential that improves their opportunities in the labor market. If all states participate in the President's ACP plan, an estimated 9 million students could benefit from such an education, and a full-time community college student could save an average of $3,800 in tuition each year.

In fewer than two years since the President challenged more states and communities to make America's College Promise a reality for their students, at least 38 Promise programs—or free community college programs—have launched in states, cities, and community colleges in all corners of the United States (Figure 5-9), increasing the total estimated number of Promise programs to more than 150 across the country. Altogether these new programs are raising more than $150 million in new public and private investments

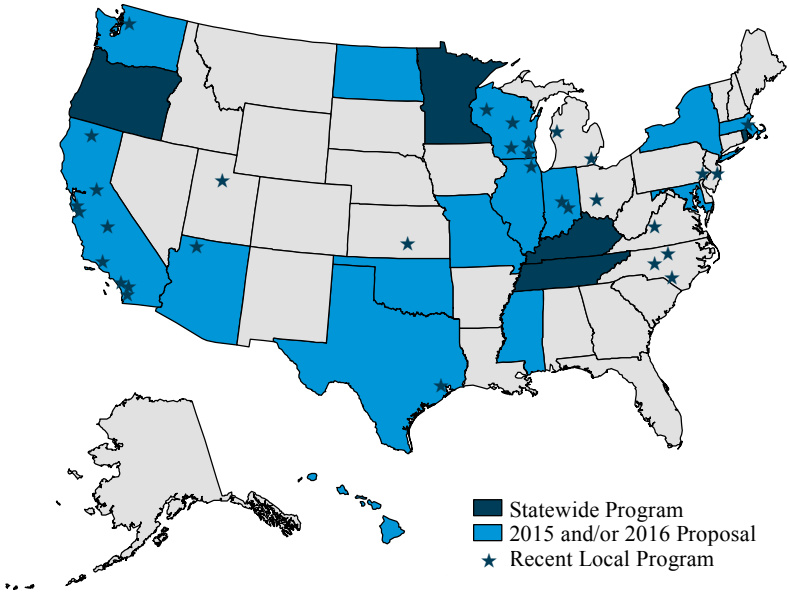
Box 5-2: Federal Investments in K-12 Education during the Recession

As the effects of the Great Recession set in, public universities were not alone in suffering the consequences of declining State revenues; almost all states found that their projected revenues were insufficient to achieve their education plans. As a result, since State and local governments provide about 90 percent of school funding, officials were preparing for significant funding cuts for K-12 teachers, principals, and support staff, in addition to higher education personnel. Such cuts would have severely disrupted educational services for many of America's students (EOP 2009).

In response to the fiscal crisis, the Recovery Act appropriated more than $60 million to State education agencies. In doing so, it shielded schools from the worst effects of their States' budgetary shortfalls (Evans, Schwab, and Wagner 2014). While funding alone is not a panacea for solving problems in K-12 education, research suggests it is a necessary component. If invested in the most productive inputs, it can contribute to improved educational outcomes, especially for students living in poverty (Jackson, Johnson, and Persico 2016; LaFortune, Rothstein, and Schanzenbach 2016). A key way in which increased Recovery Act funding helped improve outcomes was by keeping experienced teachers in the classroom and staving off increases in class sizes. It enabled states to save or create more than 400,000 jobs, most of which were for teachers, principals, and other school staff. Research finds that students in smaller classrooms in the early grades perform higher on standardized tests, earn higher wages, and are more likely to attend college than peers in larger classrooms (Chetty et al. 2011), and that the effects may be larger for minorities and low-income students (Krueger 1999). Due to the swift action of the Obama Administration, states were provided the resources to keep teachers in the classroom and ensure that students had the educational services necessary to succeed.

In addition, the Recovery Act was able to catalyze a wave of reform through targeted investments. The Race to the Top initiative, which offered incentives to states willing to spur systemic reform to improve teaching and learning in their schools, led nearly every state to raise the bar on expectations for student learning, and an independent analysis found that Race to the Top led to significant changes in education policy across the United States (Howell 2015). Other Administration programs, such as the Investing in Innovation Fund (i3), focused funding on evidence-based interventions that could be validated by high-quality evaluations and, if proven successful, could be scaled up.

Figure 5-9
Promise Programs Across the Country



Note: Map is as of October 2016.

in community colleges to serve at least 180,000 students; and the number of free community college programs continues to grow. Additionally, at the Federal level, both the House and the Senate have proposed legislation to expand Promise programs nationwide.

Free community college promotes college access not only by reducing financial barriers,[9] but also by eliminating barriers related to misinformation about college costs (Baum and Scott-Clayton 2015). By clearly messaging that a post-secondary education is within reach, Promise programs help students cross the first hurdle to applying and enrolling in college. Removing such barriers at community colleges is especially important, as community college students tend to be poorer than students attending four-year schools—over half of community college students have family incomes below 185 percent of the Federal poverty line—and are less likely to have parents who attended college to help them navigate the student aid application process (NPSAS 2012, CEA tabulations). Indeed, research shows that Promise programs have been highly effective, which is why the President proposed his vision for free community college in America's College Promise.

[9] Researchers have found that students facing lower community college prices are more likely to enroll in college (Denning 2016b; Martorell, McCall, and McFarlin 2014).

Evaluations of early local Promise programs show that these programs can significantly improve high school graduation, college enrollment, and college graduation rates. A number of research studies have examined the effects of Kalamazoo Promise, the first place-based Promise program. Initiated in 2005, Kalamazoo Promise offers full in-state college tuition to graduates of the Kalamazoo Public Schools in Michigan who have enrolled in the district for at least four years. Using variation in high school eligibility, length of enrollment in the school district, and/or the timing of the program's announcement and implementation, researchers have found that the program reduced suspensions in high school, improved high school credit completion, led to students sending their test scores to more selective in-state institutions, and substantially increased college enrollment and graduation (Andrews, DesJardins and Ranchhod 2010; Bartik and Lachowska 2013; Bartik, Hershbein, and Lachowska 2015; Miller-Adams 2009). Research suggests that the program has had a high rate of return, particularly for African American students (Bartik, Hershbein, and Lachowska 2016).

Carruthers and Fox (2016) likewise find large positive effects of another Promise program. Knox Achieves covered the gap between tuition and fees and grant aid from Federal, State, and institutional sources to first-year community college students making an immediate transition between high school and one of Tennessee's public community colleges or technology centers. Comparing outcomes before and after the program began between students in eligible districts and students in non-eligible districts, Carruthers and Fox find large impacts on high school graduation and college enrollment, with some shift from the four-year to two-year sector. The positive effects of high school graduation and college enrollment were strongest for lower-achieving and lower-income students. Given the success of Knox Achieves, 27 counties adopted the program to expand eligibility to nearly half of Tennessee's population in 2014, and the program became the model for the state-wide Tennessee Promise program rolled out in 2015, which guarantees free community college tuition and fees to high school seniors who sign up, apply for financial aid, and meet with a mentor. Analyses of Promise programs in New York, Pittsburgh, El Dorado, and New Haven also show sizeable effects on educational outcomes (Scrivener et al. 2015; Page and Iritri 2016; Ritter and Ash 2016; Gonzalez et al. 2014; Daugherty and Gonzelez 2016).

The economics literature suggests that program design matters, and some Promise initiatives may see less success. For example, LeGower and Walsh (2014) suggest that merit-based Promise programs may have more limited effects on college access as they disproportionately benefit wealthier and white households. An analysis of one program, which provides free

Box 5-3: Expansions of Early Education Programs

The Administration has been committed to helping students access a high-quality education at all levels of schooling, and the President's calls for universal preschool and a child care guarantee for working families with young children serve as critical complements to his other proposals. Gaps in educational achievement occur early in life and grow over time, so it is critical to ensure that all children receive the educational foundation to succeed in school and life. On nearly every measure of school readiness, from health to early human capital, children born into low-income households enter kindergarten at a substantial disadvantage relative to their higher-income peers. Indeed, disparities in physical and mental health, cognition, and socio-emotional and behavioral skills develop in children as young as 9 months (Halle et al. 2009). By the time children enter school around age 5, those in poor households are nearly four times more likely to score "very low" on assessments of math skills and over four times more likely to score "very low"' on reading skills than their peers in more well-off households (Isaacs 2012). This gap remains relatively constant through the beginning of high school, suggesting that achievement gaps in later years are established in the earliest years of childhood (CEA 2016a).

Research shows that enrollment in high-quality early childhood education accelerates cognitive and non-cognitive development during primary school years (see CEA 2016a for a review), and can lead to significantly better outcomes later in life—such as greater educational attainment and earnings and less involvement with the criminal justice system (for example, Heckman et al. 2010; Reynolds et al. 2011; Campbell et al. 2012). That is why, in addition to calling for preschool for all and high-quality care for all infants and toddlers, the Obama Administration has worked with Congress to increase investments in early childhood programs by over $6 billion from FY 2009 to FY 2016, including high-quality preschool, Head Start, early Head Start, child care subsidies, evidence-based home visiting, and programs for infants and toddlers with disabilities. Since 2009, 38 States and the District of Columbia have increased investments in preschool programs by more than $1.5 billion.

community college only to students with at least a 3.0 high school GPA who test out of remediation, found that these conditions limited eligibility to only about 15 percent of the city's high school graduates (Page and Scott-Clayton 2015; Fain 2014). Additionally, research finds that reducing the cost of lower-quality options can worsen outcomes for students, so attention to college quality in the context of lowering prices to students is essential (Peltzman 1973). A recent Department of Education report (2016a), the

America's College Promise Playbook, outlines the best evidence available to inform design features that localities creating Promise programs should consider. The report exemplifies the Administration's commitment to expanding quality free community college through Promise programs at the local, State, and National level.

Reducing Credit Constraints and Improving Student Debt Outcomes

While the Administration has worked aggressively to lower the cost of college, it has also taken important steps to ensure that students can access credit to finance their college educations. For a growing number of Americans, Federal student loans are an essential means to realizing the benefits of higher education. In fall 2013, over 20 million students enrolled in an institution eligible for Federal aid, and roughly half of these students used Federal student loans to help finance their education. Both economic theory and empirical evidence suggests that without access to Federal student loans, financially constrained students are less likely to attend college, more likely to work while in school, and less likely to complete a degree (Denning 2016a; Wiederspan 2015; Dunlop 2013; Sun and Yannelis 2016).

Key policies signed into law by the President have maintained the accessibility and affordability of student loans for borrowers. In 2010, President Obama signed student loan reform into law, which ended student loan subsidies for private financial institutions and banks and shifted over $60 billion in savings back to students. Before the reform, banks and other private financial institutions provided Federally guaranteed loans, meaning that these institutions provided the underlying loan principal and earned a profit when students paid back their loans but were compensated by the government when the students failed to repay. To remove this subsidy to financial institutions, the 2010 reform required that all new loans be financed directly by the Federal Government as Direct Loans, eliminating the middleman and saving money for taxpayers and students. In 2013, President Obama signed into law further reforms that lowered interest rates on student loans for nearly 11 million borrowers, saving them on average $1,000 over the life of their loan. To date, interest rates have remained low and currently stand at 3.76 percent for undergraduate borrowers.

As an increasing number of students have been borrowing to finance a college education, the volume of outstanding Federal debt has risen, standing at a high of $1.3 trillion dollars today. This rise in debt has made it especially important to ensure that loans serve students well and do not present a burden to borrowers once they leave college.

The evidence suggests that, on average, student loans continue to facilitate very high returns for college graduates, and most borrowers are able to make progress paying back their loans (CEA 2016d). In addition, though there has been an increase in the typical amount of debt that borrowers accumulate, most students accumulate only modest amounts of debt. Fifty-nine percent of borrowers owed less than $20,000 in debt in 2015, with undergraduate borrowers holding an average debt of $17,900. Large-volume debt remains more prevalent among graduate loans, for which loan limits are much higher, and among borrowers who completed their undergraduate degrees. Consistent with their greater educational attainment, borrowers with greater debt tend to have larger earnings and therefore tend to be well-equipped to pay back that debt (Figure 5-10; Looney and Yannelis 2015).

However, borrowers who attend low-quality schools or fail to complete their degrees face real challenges with repayment. In fact, the highest rates of student loan default occur among students with the smallest amounts of debt because these students are much less likely to have completed, having left school before paying for the full cost of a degree, as shown in Figure 5-11.[10]

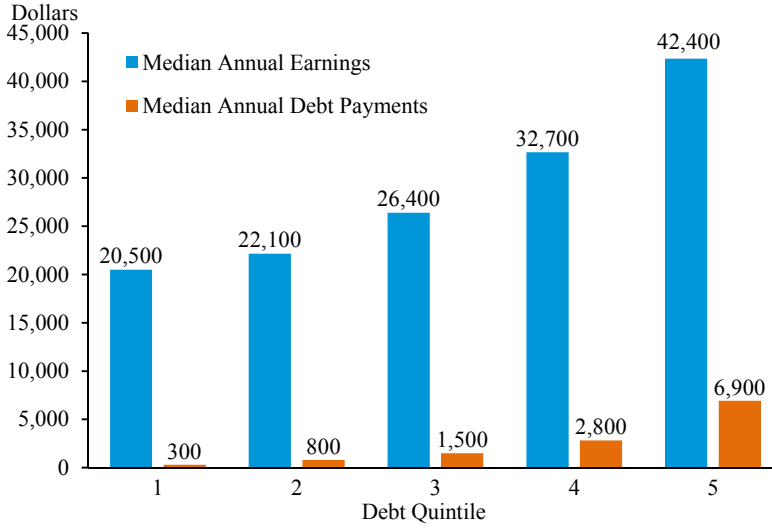
The Great Recession also created some acute challenges for student loan borrowers. During the recession, many borrowers went back to school to shelter from the collapsing labor market, but a disproportionate number of these students attended schools that had relatively low graduation rates and did not provide affordable pathways to good jobs. Along with this change in the quality of schools they attended, changes in the demographics of borrowers entering repayment and the challenges they faced when entering the labor market during a deep recession contributed to rising default rates during the recession and in the period that followed. Over the last few years, the number of students attending low-quality schools has declined, labor market conditions have improved, and default rates, as measured by the official three-year Cohort Default Rate, have gone down (Figure 5-12).

In response to rising default rates, the Administration has worked to ensure that students attend high-quality schools and that borrowers who have left school and entered repayment have affordable loan payments. The following section focuses on this Administration's efforts to expand flexible repayment plans, while later sections describe efforts to improve the quality of schools that borrowers attend. In addition, the Administration has focused on strengthening loan servicing to support Americans struggling with student loan debt. In 2015, the Administration released a Student Aid

[10] Loans of less than $10,000 accounted for nearly two-thirds of all defaults for the 2011 cohort three years after entering repayment. Loans of less than $5,000 accounted for 35 percent of all defaults.

Figure 5-10

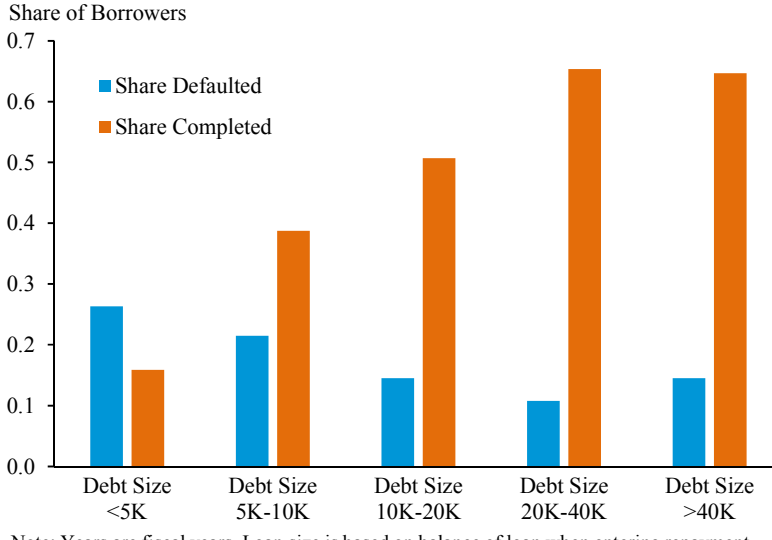
Median Annual Earnings by Debt Quintile



Note: Data are for the 2013 cohort, using the NSLDS 4 percent sample matched to de-identified tax records. Data are for both undergraduate and graduate borrowers. Debt-service figures assume a 10-year standard repayment plan and 3.76% interest.
Source: Looney and Yannelis (2015)

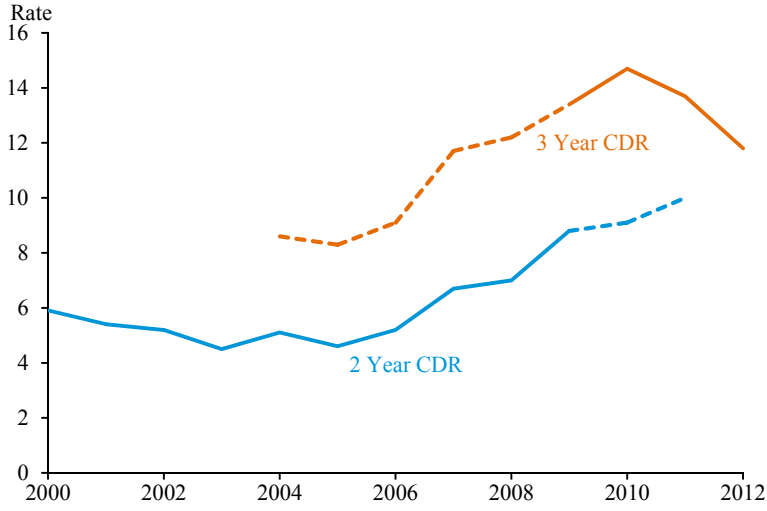
Figure 5-11

Share of Undergraduate Borrowers Who Default by Year 3 by Loan Size, 2011 Repayment Cohort



Note: Years are fiscal years. Loan size is based on balance of loan when entering repayment. Share completed refers to those who completed a credential.
Source: Department of Education

Figure 5-12
Cohort Default Rates Over Time



Note: Solid lines represent official rates while dashed lines are estimates by the Department of Education. Through the fiscal year 2008, official cohort default rates were measured after two years, after which they were measured after three years; during the transition period, estimates for both time periods were provided.
Source: Department of Education

Bill of Rights reflecting the President's vision that every borrower has the right to quality customer service, reliable information, and fair treatment, even if they struggle to repay their loans. And, in 2016, the White House announced new actions to help Americans with student loan debt understand their repayment options and to ensure they have access to high-quality customer service, strong consumer protections, and targeted support to repay their student debt successfully.

Providing More Flexible Repayment Plans

As described above, the constraint imposed by the standard 10-year student loan repayment plan (in which students are enrolled by default) can hinder debt management since it requires the same monthly payment at the beginning of a borrower's career, when earnings are lowest, as it does mid-career when earnings are higher. This can create repayment difficulties and dissuade students from investing in their education even when the investment has large net benefits over a lifetime. In response, the Administration has made payment plans more flexible and loan payments more manageable through the expansion of income-driven repayment plans. These plans increase flexibility in several ways. First, by expanding the period of repayment, they allow borrowers to spread their student loan payments over a longer period of time, while retaining the option of paying sooner with no

pre-payment penalty. Second, by tying payments to borrowers' incomes, income-driven repayment plans link the timing of repayment more closely to the time path of earnings gains from higher education, and they remove needless credit constraints in times when income is temporarily low. Finally, income-driven repayment plans can serve as a form of insurance against uncertain returns to college, helping to address some barriers associated with risk.

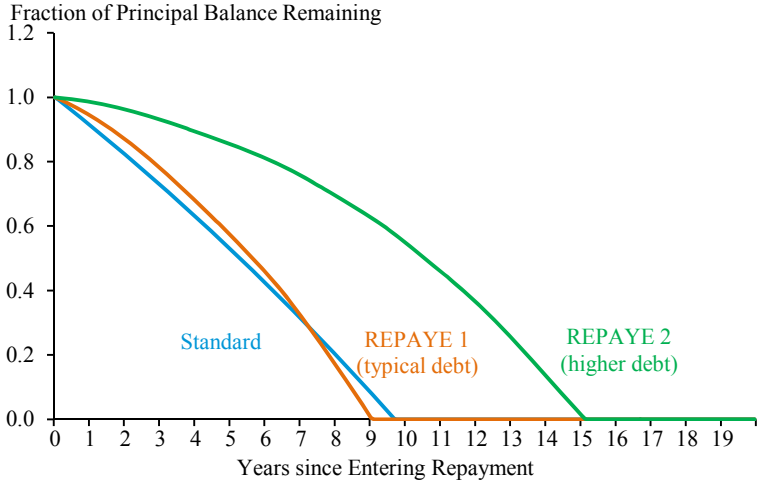
With the new repayment plans, borrowers will never have to pay more than 10 percent of their discretionary income to repay debt. The Administration initially expanded income-driven repayment by passing into law the Pay As You Earn (PAYE) plan in 2012, which reduced monthly payments to 10 percent of borrowers' discretionary income—lower than the 15 percent required under the original Income Based Repayment plan. Under PAYE, borrowers could also have their remaining loan balances forgiven after 20 years of qualifying payments, 5 years earlier than the original Income Based Repayment plan. PAYE extended more affordable loans to 1.6 million borrowers; however, many borrowers remained ineligible. That is why, in 2015, the Administration expanded PAYE with regulation creating the Revised Pay As You Earn (REPAYE) repayment plan that provides eligibility to all Direct Loan student borrowers, including any student with a consolidated loan (excluding PLUS loans to parents). With REPAYE, these borrowers can cap their monthly payments at 10 percent of their discretionary income, regardless of when they borrowed and, after making the appropriate number of qualifying payments, will have any outstanding balance forgiven. Under REPAYE, borrowers with only undergraduate loans can have their remaining loan balances forgiven after 20 years of qualifying payments; borrowers with any graduate school loans can have their remaining balances forgiven after 25 years of qualifying payments.

Figure 5-13 below illustrates how the theoretical repayment curve for the standard 10-year plan differs from REPAYE for a typical borrower graduating with a four-year degree.[11] Data from the Baccalaureate and Beyond study show that seniors graduating college in 2008 held a median debt of $17,125 and earned a median income of $31,000 upon leaving school. The Figure assumes an interest rate of 3.76 percent consistent with the 2016 student loan rate, real earnings growth consistent with trends in Figure 5-4, 2-percent inflation, and a single-person family (for ease of REPAYE calculations). The "Standard" line corresponds to the standard 10-year repayment plan with an initial income of $31,000 and an initial debt of $17,125, consistent with the Baccalaureate and Beyond data for all students who borrowed.

[11] It should be noted that a number of alternative repayment plans also exist, some of which have longer payment schedules.

Figure 5-13

Repayment Distribution by Repayment Plan



Note: Calculations assume a real interest rate of 3.76%, 2% inflation, income growth corresponding with Figure 5-4 describing earnings by age for full-time full-year workers, that borrowers are in single person families, and assumptions about income and debt from the 2008 Baccalaureate and Beyond Study. REPAYE 1 and 2 differ in their original principal debt amounts, with REPAYE 2 corresponding with a higher debt amount.
Source: CEA Calculations

The line labeled "REPAYE 1" uses the REPAYE formula with the same initial income and debt, while "REPAYE 2" uses the same initial income but an initial debt of $31,000 to show how repayment patterns differ by debt amounts. The Standard plan line is relatively flat, reflecting the constant rate at which the principal balance is paid off under this plan. In contrast, both REPAYE lines show that principal repayment is initially slow and accelerates over time. In some cases, such as in "REPAYE 1," borrowers may pay off their debt faster under REPAYE than the Standard plan if their wages are sufficiently high. Further, a comparison of the two REPAYE lines shows that the larger the debt is in comparison to income (or the smaller income is in comparison to debt), the less the REPAYE repayment curve will look like the Standard curve.

Continuing to expand enrollment in income-driven repayment plans for students who would benefit remained a key priority for this Administration. As of the third quarter of FY 2016, about 5.5 million (more than 1 in 5) borrowers with Federally managed debt were enrolled in income-driven repayment plans. The share of borrowers with Federally managed debt who are enrolled in income-driven repayment has more than quadrupled from 5 percent in the first quarter of FY 2012 to 23 percent in the third quarter of FY 2016 (Figure 5-14). To help borrowers access this debt management tool, the Administration has improved loan servicer contract

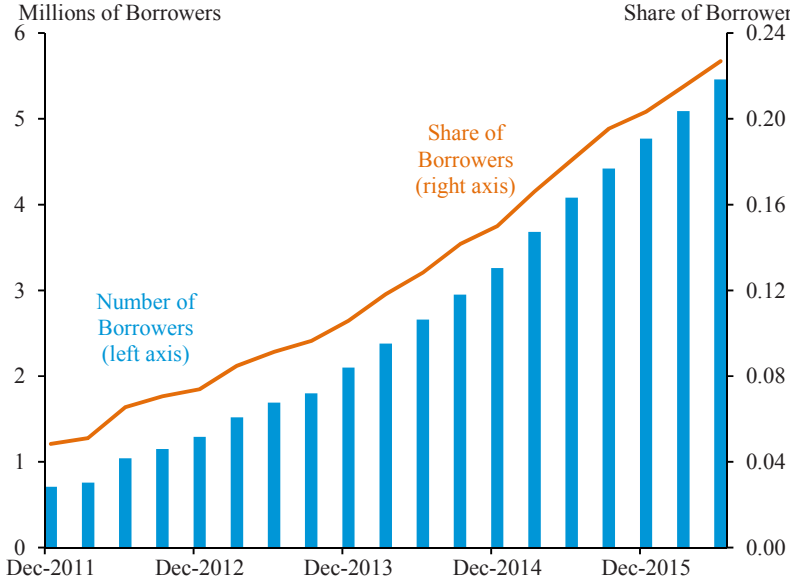
requirements, pushed efforts associated with the President's Student Aid Bill of Rights, put forward a student debt challenge to gather commitments from external stakeholders, and increased and improved targeted outreach to key borrower segments who would benefit from PAYE or REPAYE. Although barriers related to recertifying income and interfacing with the income-driven repayment enrollment tools online persist, the Administration continued to explore options for how to address these remaining shortcomings.

Recent data suggest that income-driven repayment plans appear to be drawing in many of those borrowers who may most benefit (Figure 5-15). In general, the data show that income-driven repayment borrowers tend to have lower reported family incomes than borrowers on the standard repayment plan. Among borrowers with undergraduate loans who were enrolled in income-driven repayment as of the third quarter of FY 2015, the average family income (in real 2014 dollars) based on the first FAFSA filed was $45,000, compared with $57,000 for those on the standard repayment plan. For borrowers with graduate loans, the average income among those enrolled in income-driven repayment was $60,000, compared with $74,000 for borrowers on the standard plan. Even within sectors of educational institutions, borrowers enrolled in income-driven repayment tended to come from lower income backgrounds than those enrolled in the standard plan, suggesting that these plans are reaching the students who may need them the most. One factor contributing to lower incomes among undergraduate income-driven repayment enrollees was that these borrowers were more likely to be classified as independent, and independent borrowers tend to have lower reported incomes since their parents' incomes are not counted as part of their family's income. Overall, 52 percent of borrowers in income-driven repayment were classified as independent, as opposed to 42 percent of borrowers under the standard repayment plan.

Given that income-driven repayment plans tend to change repayment schedules more dramatically for borrowers whose debt is high relative to their incomes, it is perhaps unsurprising that borrowers in income-driven repayment tend to have larger loan balances outstanding (Figure 5-16). As of the third quarter of FY 2015, the median debt for these borrowers was $34,000, while the median was just $10,000 for borrowers in the standard plan. This difference partly reflects a larger share of graduate borrowers; 30 percent of income-driven repayment borrowers had graduate loans, compared with 10 percent of borrowers under the standard plan. However, substantial differences remain even among graduate and undergraduate borrowers. Differences in outstanding balances also remained when looking within sector, and data for the 2011 repayment cohort suggest they were partly driven by the fact that borrowers entering income-driven repayment

Figure 5-14

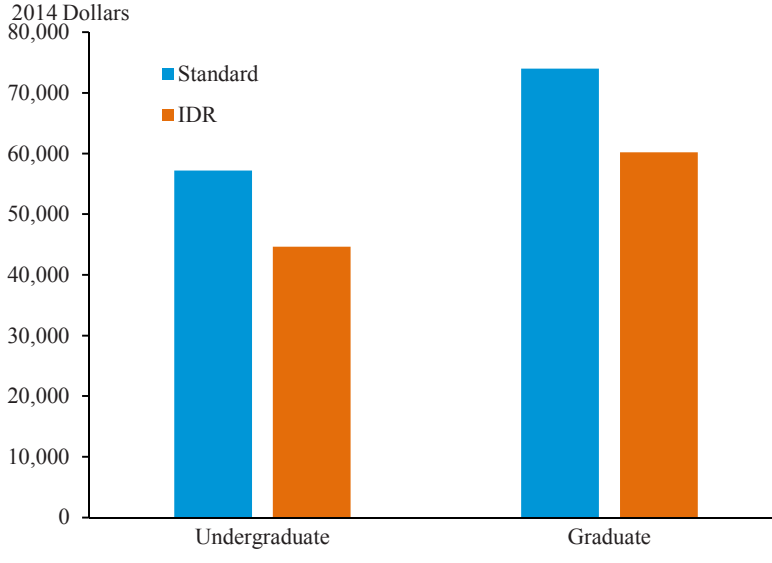
Borrowers in Income Driven Repayment Over Time



Note: Data are restricted to Federally-managed debt.
Source: Department of Education

Figure 5-15

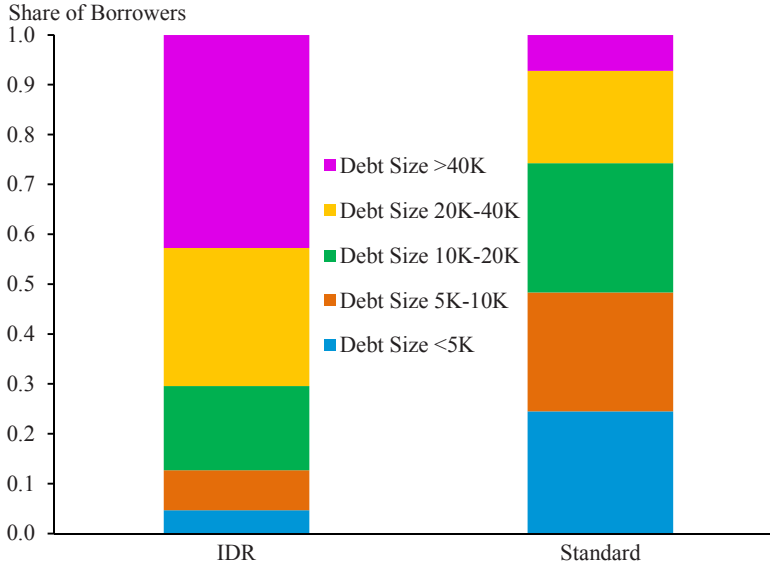
Average Family Income by Repayment Plan



Note: Data are as of the third quarter of fiscal year 2015. Income based on first FAFSA filed, converted to 2014 dollars. Undergraduate and graduate are broken apart at the loan level.
Source: Department of Education

Figure 5-16

Size of Outstanding Loan Balance by Repayment Plan



Note: Data are as of the third quarter of fiscal year 2015. Debt size is based on outstanding loan balance.
Source: Department of Education

typically have larger principal loan balances than borrowers in the standard repayment plan.

Consistent with both the larger debt and the prevalence of graduate student debt among borrowers in income-driven repayment, these borrowers are more likely to have completed their undergraduate degrees than borrowers in the standard repayment plan. Among those in the 2011 repayment cohort, 64 percent of borrowers in income-driven repayment had completed, compared with only 48 percent of borrowers in the standard plan. Many of those who completed their undergraduate degree accumulated more debt because they subsequently enrolled in graduate school. But even among borrowers with no graduate school debt, those enrolled in an income-driven repayment plan were still slightly more likely to have completed a degree.

The positive relationship between completion and income-driven repayment enrollment suggests that students who enroll in income-driven repayment are more likely to have large long-run returns to their college investments and to be able to eventually pay off their loans. However, data on prior repayment behavior also show that individuals with short-run repayment difficulties are using income-driven repayment. Among borrowers entering repayment in FY 2011, a sizeable fraction that enrolled in income-driven repayment had experienced difficulty in repaying their loans

before entering income-driven repayment, with slightly higher signs of distress compared with borrowers under the standard plan. Over 40 percent of these borrowers had defaulted, had an unemployment or economic hardship deferment, or had a single forbearance of more than 2 months in length before entering their first income-driven repayment plan. A much smaller fraction of these borrowers, roughly 10 percent, experienced difficulty in repayment after entering income-driven repayment.

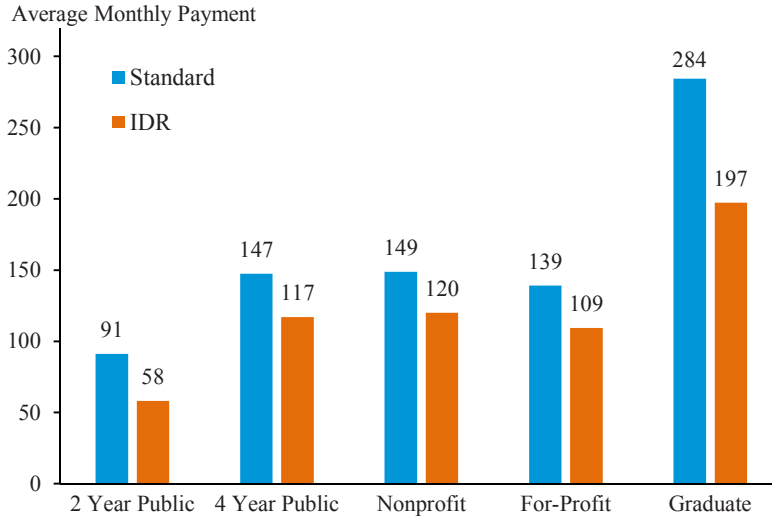
A key way that income-driven repayment helps to improve outcomes for borrowers is by reducing monthly payments, since payment amounts are spread over a longer time period and are tied to earnings. For the 2011 repayment cohort, Figure 5-17 shows that borrowers in income-driven repayment had lower monthly payments across all sectors, despite serving borrowers who accumulated larger amounts of debt.

Some borrowers in income-driven repayment plans may have zero-dollar monthly payments. These plans allow borrowers who attended low-quality schools and subsequently experienced low earnings to stay out of default, and give borrowers who experience temporary periods of economic difficulty time to get back on their feet. Data show that the same types of borrowers who have more difficulty repaying their loans in terms of college sector, debt size, and borrower characteristics are also more likely to have zero-dollar scheduled payments, highlighting the importance of income-driven repayment in helping these borrowers manage their debt. It is important to note, however, that another factor driving the group of income-driven repayment borrowers with zero-dollar scheduled payments is that, on average, borrowers in income-driven repayment entered repayment relatively recently. As of the end of FY 2015, income-driven repayment borrowers had been in repayment for an average of about three years. As Figure 5-4 above shows, earnings increase over a career, so as borrowers progress through their careers, their scheduled payments are also likely to increase.

To further expand income-driven repayment to borrowers who could benefit from more manageable monthly payments, the Administration has announced a series of new actions to enroll 2 million more borrowers into income-driven repayment plans. Data about the characteristics of borrowers enrolled in income-driven repayment highlight the importance of these initiatives. For example, though low-balance borrowers and borrowers who did not complete school are more likely to default on their loans, they represent a relatively smaller share of borrowers in income-driven repayment. Enrolling more of these types of borrowers in flexible repayment plans like income-driven repayment will help make their debt more manageable and help them to avoid costly and unnecessary defaults.

Figure 5-17

Average Monthly Payment by Sector and Repayment Plan, 2011 Repayment Cohort



Note: Data are for the fiscal year 2011 cohort as of fiscal year 2014. Some small sectors are excluded from this chart. Data contain some duplication across and within categories.
Source: Department of Education

At the same time, as research has shown, college choice is a crucial factor. It is critical to help borrowers avoid investing in colleges that are unlikely to increase their lifetime earnings and might leave them with high debt and low earnings. This Administration's policies have focused on strengthening the information available to students and ensuring college accountability to help students make good decisions.

Improving Information and Reducing Procedural Complexities

When students have better information, they can make better choices about their education. When choosing a college, students need information on college quality and cost to know whether their investment in higher education will pay off. Research shows that, for high-achieving low-income students, providing information about college cost and quality, like semi-customized net price and graduation rates, enables students to attend and progress at schools that better match their qualifications (Hoxby and Turner 2013). Further research shows that clear and detailed information about earnings can lead students to revise their employment expectations (Ruder and Van Noy 2014; Wiswall and Zafar 2013; Oreopoulos and Dunn 2012) and change their major choice (Ruder and Van Noy 2014; Baker et al. 2016). Accessible information about costs and economic outcomes thus plays a

crucial role in encouraging students to make informed decisions about enrolling in higher education and choosing the best college for their needs.

At the same time, evidence suggests that, while prospective students can benefit from improved information, procedural complexities may prevent some individuals from using the information and other resources available to them. In particular, as described above, the complexity of the FAFSA has created barriers to efficiency and equity in the distribution of student financial aid, deterring many students who would benefit from aid from applying. It follows that reducing this complexity should help students access Federal student aid to better invest in their education, and the research supports this conclusion. In an experiment that provided low-income families with personalized aid eligibility information and, in some cases, assistance completing the FAFSA, only families who got both assistance and information were more likely to see the benefits of greater financial aid and college enrollment (Bettinger et al. 2012). This section details key Administration initiatives to improve information and reduce procedural complexities for students.

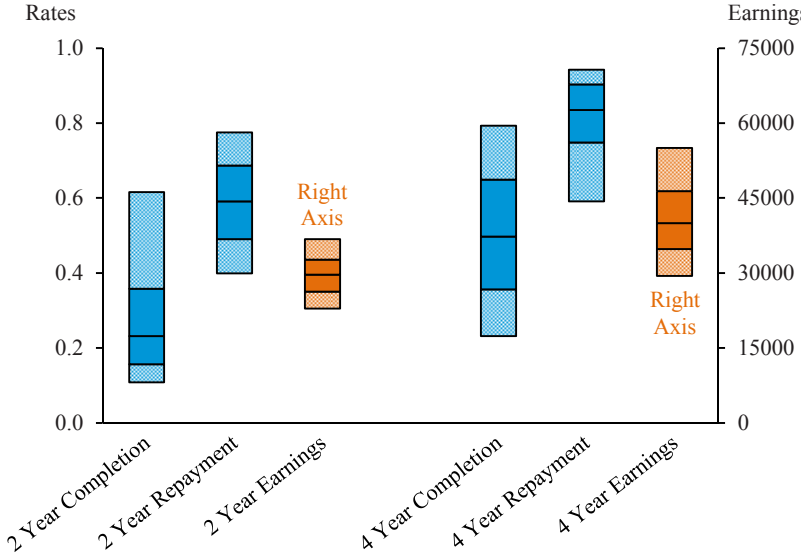
College Scorecard

In 2015, the Department of Education launched the redesigned College Scorecard to help empower Americans to select colleges based on what matters most to them. The online Scorecard provides reliable, unbiased, comprehensive, and nationally comparable data on college outcomes for all institutions. These outcomes include former students' earnings, student debt for graduates, and debt repayment rates; the data are also broken down by demographic group, which allow students to assess how well colleges are serving similar students to themselves before deciding where to apply and attend. Figure 5-18 highlights the importance of these data, showing the large variation in outcomes at two- and four-year colleges. CEA's technical report on using Federal data to measure and improve the performance of U.S. institutions of higher education provides more information about the Scorecard, including a guide to the available measures, methods for assessing college quality, and data-driven lessons for performance management (CEA 2015c).

Within its first year, the College Scorecard has reached students and families across the country (Figure 5-19), and students now have multiple opportunities to use Scorecard to make better decisions. For example, the College Scorecard data will be clearly featured in the hundreds of millions of Google searches related to colleges and universities taking place in the United States each year, and other companies like College Board are integrating the data into their college application products and programs.

Figure 5-18

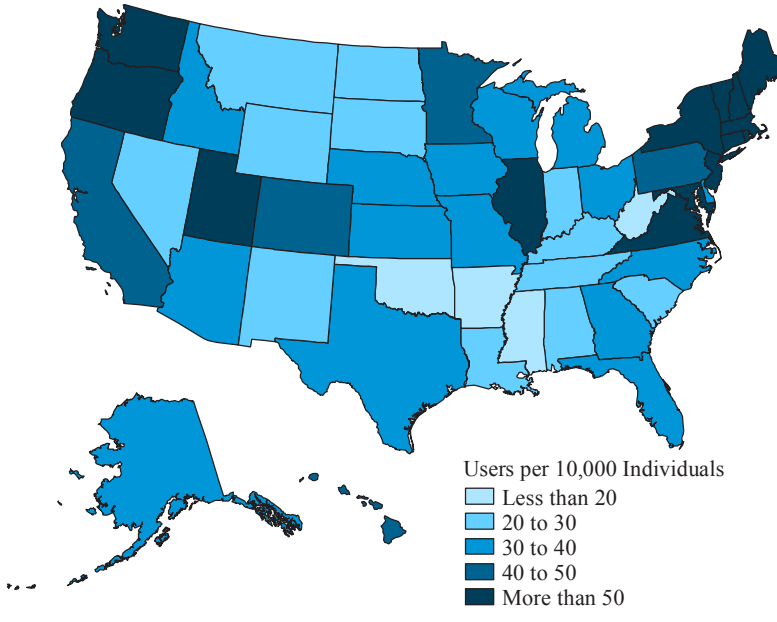
Distribution of Key Outcome Measures at 2 and 4 Year Schools



Note: Data are for the most recent cohorts using 150% completion rates from IPEDS, 3-year repayment rates, and 10-year median earnings.
Source: College Scorecard

Figure 5-19

Scorecard Usage by State



Note: Usage data are as of September 12, 2016. They only represent unique visitors to the Scorecard tool itself and exclude calls for the data through the API. The data are for individuals of all ages and are normalized with 2015 Census data.

College rankings like *Forbes*, *Money*, Brookings Institution, *Economist*, *Wall Street Journal*, and *Washington Monthly* are also using new outcomes data included in the Scorecard. Since the College Scorecard initially launched, the data have been accessed nearly 13 million times by API users and through the website. Additionally, more than 700 developers have accessed College Scorecard's Application Programming Interface (API), which allows users to create tools and insights that will help prospective college students make important decisions.

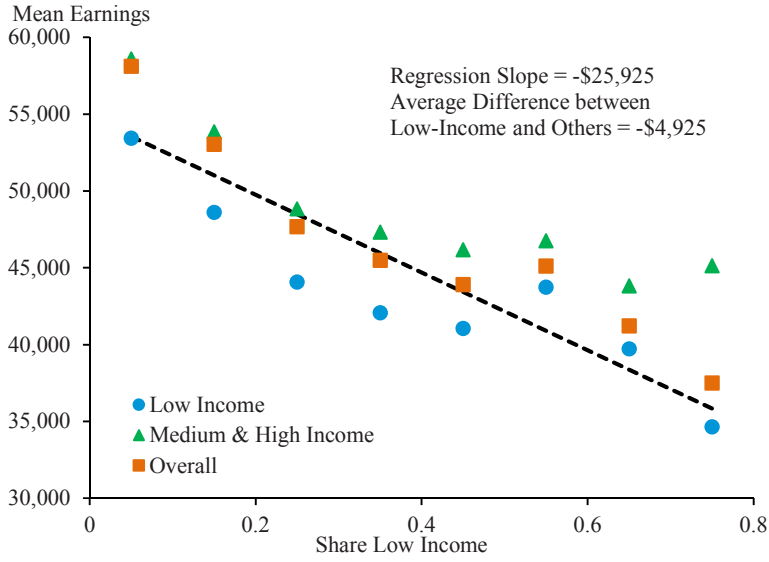
The revised College Scorecard contains a variety of information that is useful for students, parents, and administrators when considering the right college for a particular student. For example, though earnings and employment are primary motivations for students to attend college, students also care about cost, completion rates, and debt repayment outcomes, as well as broader goals like becoming a better person (Eagan et al. 2014; Fishman 2015). Based on academic literature and consumer testing, the Administration developed a series of measurable outcomes that students had identified as important. Because students value each factor differently depending on their own circumstances and preferences, the Scorecard presents each indicator independently so that students can emphasize and compare the attributes most important to them.

Additionally, because students come from a variety of backgrounds, it is helpful to provide information about how prospective institutions serve students like them. Ideally, a single measure of college quality would isolate the effect that attending an institution has on its students' outcomes from other inputs such as the types of students it enrolls. However, it is very difficult to disentangle these effects since they tend to be closely related, as demonstrated in Figure 5-20. This Figure shows that low-income students tend to have lower outcomes both because they disproportionately attend schools with poorer outcomes for all students and because of other, unobservable characteristics, such as academic preparation. In light of these challenges, the College Scorecard presents information on both student outcomes as well as characteristics of the students attending a university to help users assess quality. Moreover, the Scorecard includes data disaggregated by student subgroup to help researchers and policymakers assess institutions' successes and failures in serving disadvantaged students.

The Scorecard includes a combination of short-term measures, which are more responsive to changes in school practices, and long-term measures, which may better represent the more permanent outcomes associated with attending a particular institution. It also notes the program mix of the institution and other factors that may relate to wide variation in outcomes, and makes efforts to ensure the reliability of performance measures

Figure 5-20

Earnings by Family Income at 4 Year Schools



Note: Data for 10 year earnings for the 2002 cohort. Low income defined as family income of less than $30,000, and medium/high income defined as greater than $30,000.
Source: College Scorecard

and information for smaller schools where small changes could lead to substantially different results. Overall, the College Scorecard—released in September 2015 and updated September 2016—represents a significant step forward in providing transparent and comprehensive data on college costs and outcomes and has encouraged the research community to focus on developing a Federal and State data agenda for postsecondary education.

The Administration has also focused on more directly getting information into the hands of students in key areas of high impact, such as when they are applying for student aid or in the form of disclosures related to accountability measures. These initiatives are discussed in further detail in the following sections.

FAFSA Simplification

In light of the evidence about the benefits of simplifying aid, the Administration has undertaken a number of administrative reforms to streamline the FAFSA process so that it can better serve students and their families. Many initiatives have focused on reducing the number of questions presented to students and families and by making it easier for applicants to directly transfer tax and income information from the Internal Revenue Service (IRS). The Administration has revamped the online form for all

Box 5-4: Improving Information to Drive Evidence-Based Policies

Building an evidence base to determine what works and what does not work has been a cornerstone of this Administration's education policy. Educational leaders, Federal and State policymakers, and researchers are increasingly interested in questions of institutional outcomes to better share and adopt best practices, steward taxpayer dollars, and determine how resources can be more efficiently allocated to benefit students. Efforts to improve data quality and facilitate research and innovation have also helped educators to learn both from their own experiences and from others and to ensure that resources are spent on the most effective practices.

In higher education, the Administration has encouraged greater innovation and a stronger evidence base around effective strategies to promote college access and success through 42 First in the World (FITW) grants. These grants support the development, replication, and dissemination of innovative and evidence-based interventions at institutions of higher learning across the Nation. Although the program has since been de-funded by Congress, the grants already made to institutions target adult learners, working students, part-time students, students from low-income backgrounds, students of color, students with disabilities, first-generation students, and other students at risk of not persisting in or completing college. In addition, through the Experimental Sites Initiative, the Administration has tested innovative practices in the delivery of Federal student aid dollars and has used the resulting evidence to inform higher education policies. Some of these experiments include, on a limited basis, making Pell Grants available to low-income high school students that dually enroll in college programs and to eligible incarcerated individuals.

Through investments in the Recovery Act, the Administration was also able to advance the use of data through three critical investments: Investing in Innovation Fund (i3); Race to the Top; and the Statewide Longitudinal Data Systems grant program. With similar goals as FITW but targeted at the K-12 level, the i3 program was designed to fund school districts and nonprofits developing and scaling innovative and evidence-based strategies that address challenges in K-12 classrooms, particularly those serving disadvantaged students. Since its establishment in 2009, more than $1.3 billion of grant money has been invested in 157 projects.

Additionally, the Administration's Race to the Top program provided support to states implementing data system improvements in four areas, including the use of data systems and technology to inform and enhance instruction. Recent research has shown that better integration of data in the classroom can help teachers tailor instruction according

to student needs and improve test scores (Dobbie and Fryer 2011; Fryer 2014). Furthermore, by relying on data to inform daily instruction, researchers can compare what is and is not effective across districts and provide teachers with new insights on how to address the academic needs of their students. In addition, under this Administration, the Statewide Longitudinal Data Systems program has expanded support for states to create and link data systems across early learning, K-12, postsecondary, and labor systems so that states have better information on what works. Several states, such as Florida, North Carolina, and Texas, have collected and maintained extensive PreK-12 population-level data on public school students that have been used to study the long-term impact of schooling over time on post-secondary education, the labor market, and even the criminal justice system (Figlio, Karbownik, and Salvanes 2015).

Finally, in an effort to better understand where educational inequities currently exist, through executive action in 2011–12, the Administration changed the Department of Education Civil Rights Data Collection (CRDC) from a sample to universe collection, requiring every U.S. public school and school district to participate. The CRDC provides data on leading civil rights indicators related to access and barriers to educational opportunity at the PreK-12 levels. Having access to a full set of data helps policymakers to make more informed decisions concerning how Federal resources should be expended and to what extent schools are making progress in closing achievement and opportunity gaps.

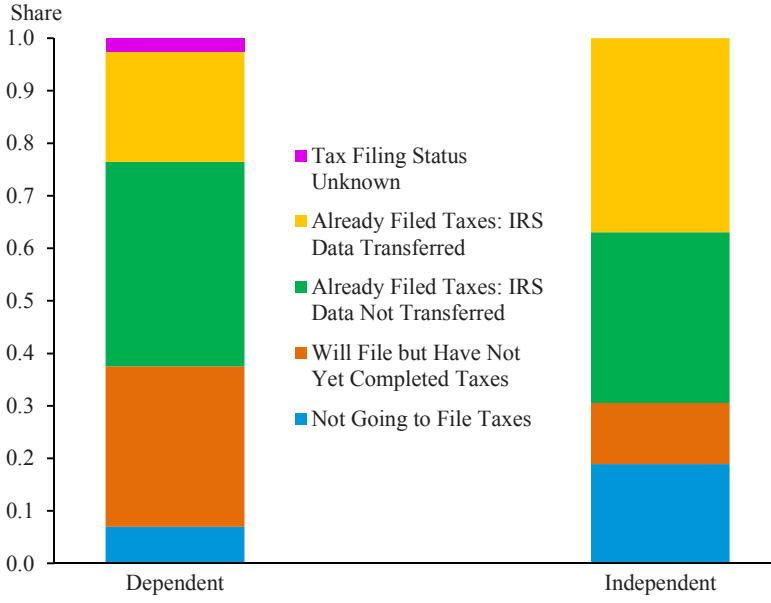
families so they can skip questions that are not relevant to them. In addition, over 6 million students and parents took advantage of the ability to electronically retrieve their income information from the IRS when completing their 2014–15 FAFSA, an innovation that improves both speed and accuracy. These efforts have translated to a meaningfully simpler FAFSA for students.

Additionally, in 2015, the Administration announced an earlier and easier process for applying for Federal financial aid, allowing students to apply to colleges and for financial aid in tandem. Beginning in 2016, FAFSA applicants have been able to complete the form on October 1 for the following academic year, three months earlier than the original January 1 start date, and use income information from two-years prior to fill out the form. This reform benefits students in two key ways:

First, students and their families can now have a reliable understanding of their Federal aid eligibility as early as the fall—the same time that many high school students are searching for, applying to, and even selecting colleges. An earlier FAFSA helps clear an important hurdle in reducing

Figure 5-21

FAFSA Tax Filing Status during Initial Application, 2014–2015



Source: Department of Education

information barriers related to cost. Importantly, the Administration is also working with states and colleges to provide financial aid award information on this earlier timeline. Moreover, the earlier FAFSA cycle presents an opportunity to provide students with more timely information about the schools where they are applying. Starting with the 2018–19 application year, the Department of Education will present Scorecard data through the FAFSA so that students can make more informed decisions about the schools at which they plan on applying for admission and student aid based on both cost and student outcomes.

Second, more students and families can complete their FAFSAs using information retrieved electronically directly from the IRS. In past years, a significant portion of FAFSA filers were unable to electronically retrieve their income and tax information from the IRS because they had not yet filed their tax returns before completing their FAFSA forms (Figure 5-21). For example, 34 percent of parents of dependent students had not yet filed their 2013 tax returns when they were initially completing their 2014-15 FAFSA. Such applicants had to manually input their estimated income and tax information into their FAFSA, or worse, did not submit a timely FAFSA because they erroneously believed that they were not allowed to do so unless then had filed their tax returns. By utilizing tax information from two years

Box 5-5: Making Sure Students Enter College Well-Prepared

Too many students enter college unprepared to tackle college-level courses and benefit from their higher education. A recent study found that half of all undergraduate students will take at least one remedial course before enrolling in a college-level course, averaging to an annual national cost of nearly $7 billion dollars (Scott-Clayton, Crosta, and Belfield 2014). This Administration has implemented a number of policies to help ensure that all Americans graduate from high school prepared for college and their careers, and over the past 7 years, students have seen important gains. Today, high school graduation rates are at an all-time high and dropout rates at an all-time low. This Administration has also seen National test scores in reading and math for fourth and eighth graders reach new highs (NCES 2016).

Encouraging Reform with Flexibility: When President Obama entered office, No Child Left Behind (NCLB) was two years overdue for reauthorization and in serious need of repair. In the absence of congressional action, the Department of Education offered states relief from the most onerous requirements in NCLB in exchange for a commitment to engage in needed reforms. Between 2011 and 2015, more than 40 states and the District of Columbia applied for and received this flexibility while working to improve their schools using many of the policy options detailed below. Many of these reforms were codified in the bipartisan Every Student Succeeds Act (ESSA), which the President signed in December 2015.

Higher Standards: The Administration encouraged all states to adopt high standards and aligned high-quality assessments based on college- and career-ready expectations through incentives in the Recovery Act funding provided to states through the Administration's Race to the Top program. In 2016, 49 states and the District of Columbia now have higher standards than before. In the future, every state will be required to hold students to standards that prepare them for college and career as a result of ESSA. Higher standards have been linked to higher test scores (Wong, Cook, and Steiner 2011) and can help identify whether students are well-equipped with the skills and content knowledge necessary for college-level coursework.

Excellent Teachers: This Administration has supported teacher development and excellence by encouraging the expansion of high-quality educator evaluation and support systems that help equip schools to use multiple measures, which are fair and reliable, to provide timely and meaningful feedback to educators. Economics research highlights that teacher quality can be measured as a predictor of student achievement (Chetty, Friedman, and Rockoff 2014a; Bacher-Hicks, Kane, and

Staiger 2014), and feedback from evaluations can help teachers substantially improve their methods and performance (Taylor and Tyler 2012; Kane et al. 2011). The long-term impacts of improving teacher quality on outcomes such as college attendance and earnings are large (Chetty, Friedman, and Rockoff 2014b).

STEM Initiatives: The Obama Administration has made Science, Technology, Engineering, and Math (STEM) education in K-12 schools a national priority. In 2011, the President pushed to recruit 100,000 excellent STEM teachers to work in public schools over the next 10 years, and by 2016, we have exceeded in reaching 30 percent of that goal and are on track to achieve it. The future of America's workforce will require a growing number of workers with an education in STEM fields (Sargent 2014; Rothwell 2014), and research shows that exposure to and training in advanced math and science courses during high school are linked with higher earnings and later labor market outcomes in STEM fields (Rose and Betts 2004; Black et al. 2015; Levine and Zimmerman 1995).

Closing Gaps: The racial and socioeconomic gaps in educational inputs and outcomes hold back too many American students from reaching their potential, and the Administration worked to close these gaps by targeting support among those who need it most.

- The Administration issued School Improvement Grants (SIG) to more than 1,800 of the Nation's persistently lowest-achieving public schools since the program's creation in the Recovery Act. A study of California schools by Dee (2012) found that SIG contributed to closing performance gaps between on-target schools and schools considered "lowest-achieving" by 23 percent.
- In 2014, President Obama established the My Brother's Keeper (MBK) Task Force to address academic, disciplinary, and economic disparities for disadvantaged youth, particularly young men of color. CEA's 2015 analysis finds that closing these gaps would potentially yield significant economic gains, with an estimated increase in U.S. GDP of at least 1.8 percent (CEA 2015a).
- The President has also focused on developing underserved communities via the Promise Neighborhood program that was created in 2010 appropriations, building on evidence that neighborhood quality plays an important role in children's outcomes (Chetty and Hendren 2015; Chetty, Hendren, and Katz 2016). Through this program, the Administration has partnered with local public and private organizations and invested nearly $270 million in low-income communities, producing significant gains in English and math test scores (Department of Education 2016b).

prior, the early FAFSA reform helps eliminate the barrier presented to individuals who have not yet filed their taxes. This not only simplifies the aid application process for students and their families and reduces the burden on institutions, it also improves the accuracy of the information used in the determination of students' aid eligibility.

With this change, about 4 million more students and families can use this IRS Data Retrieval Tool from the start, eliminating the need to send tax information to the government twice. This enhancement can ensure that hundreds of thousands more families receive the aid for which they are eligible, that students and families save well over half a million hours in paperwork, and that schools can transfer 3 million hours from verifying information to advising students and making financial aid awards.

Protecting Students from Low-Quality Programs and Encouraging Schools to Improve

As described in the previous section, better information can help students to choose higher-quality institutions, and Administration efforts have significantly improved the information available to students. However, some colleges fail to meet baseline levels of college quality, and this Administration has targeted its more rigorous accountability efforts on those schools in order to protect students and taxpayers. In particular, it has strengthened accountability efforts in higher education by setting standards for career training programs, including many programs offered in the for-profit sector where high costs and poor outcomes are more highly concentrated.

Descriptive analysis comparing students who attended for-profit colleges to those who attended community colleges or non-selective four-year schools shows that those who attend for-profits have lower earnings on average, and hold larger amounts of debt. These students are also more likely to be unemployed, to default on their loans, and to say that their education was not worth the cost (Deming, Goldin, and Katz 2012, 2013). Loan default data presented in Figure 5-22 also show similar patterns, especially when disaggregated by completion status.

Additionally, research that compares earnings of the same students before and after attending college—including a recent analysis using individual-level administrative and tax data for Federal student aid recipients enrolled in Gainful Employment programs (Cellini and Turner 2016)—finds that for-profit colleges offer lower returns than the returns that have been estimated for other sectors (Cellini and Chaudhary 2013; Liu and Belfield 2014).[12] These lower returns are especially concerning in light of evidence

[12] However, one study, which focuses on the returns to for-profit colleges in the State of Ohio, finds more positive results (Jepsen, Mueser, and Jeon 2016).

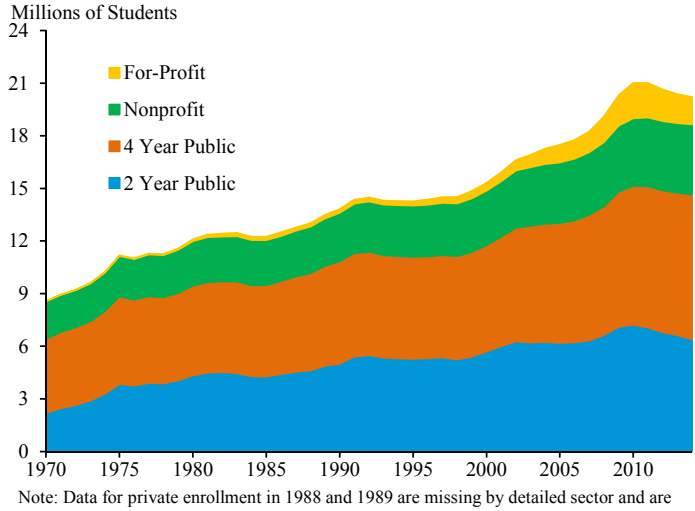
Box 5-6: The Rise of the For-Profit Sector

The for-profit sector represents a small share of college enrollment, but it has grown rapidly in recent years. At its peak in 2010, for-profit enrollment reached over 2 million students, up from only 240,000 in 1995 (Figure 5-i), in part driven by funding constraints at community colleges (Deming, Goldin, and Katz 2012, 2013). Since then, for-profit enrollment has ticked down, standing at 1.6 million in 2014 and representing 8 percent of total enrollment at degree-granting institutions. The total amount of student loan dollars disbursed at for-profit colleges has also declined, standing at $15.7 billion in award year 2014–15, down from the 2009–10 peak of $24.3 billion.

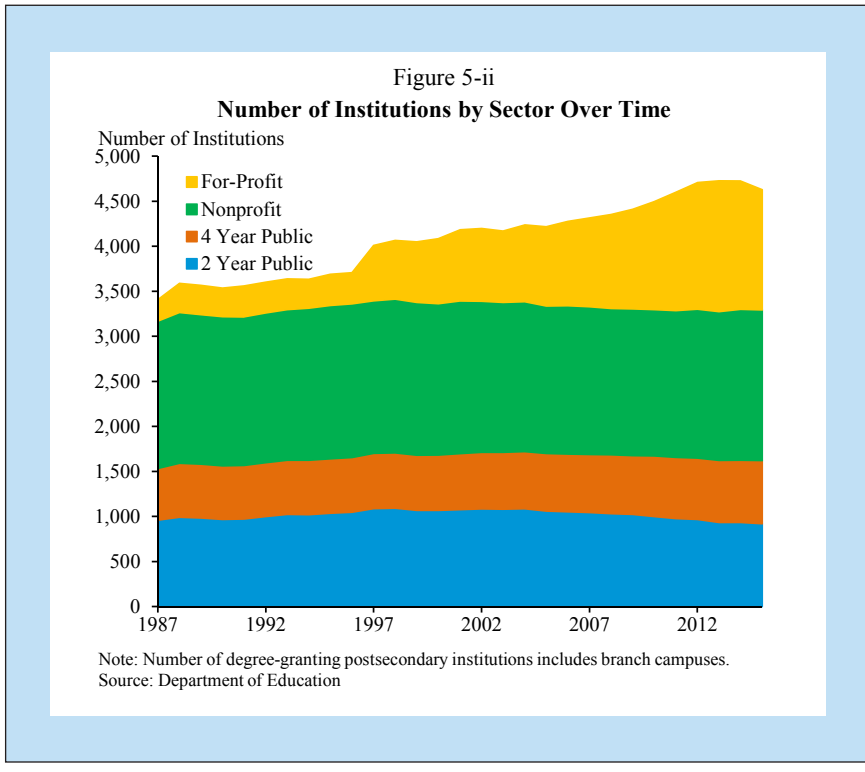
Coupled with the rise in for-profit enrollment has been an increase in the number of for-profit institutions. The number of for-profit institutions, including branch campuses, increased from 345 in 1995 to 1,451 at its peak in 2012–2013 (Figure 5-ii). As with for-profit enrollment, for-profit institution counts have declined in recent years. The growth of the for-profit sector has presented a challenge to ensuring that students receive a high-quality education. A growing body of research, described in the section above, has found that outcomes for students at for-profit colleges are on average worse than at similar institutions they might otherwise attend.

Figure 5-i

College Enrollment by Sector Over Time



Note: Data for private enrollment in 1988 and 1989 are missing by detailed sector and are linearly interpolated. Enrollment is total fall enrollment in degree granting post-secondary institutions.
Source: NCES (2015)



that for-profit colleges are more expensive than community colleges, even when adding in the value of the extra government support community colleges receive (Cellini 2012). Experimental evidence from resume-based audit studies further suggests that despite their relatively high cost, degrees from for-profit institutions are valued less by employers than degrees from nonselective public institutions (Deming et al. 2014; Darolia et al. 2015). Despite these poor outcomes, for-profit institutions have accounted for a large share of enrollment growth since the early 2000s.

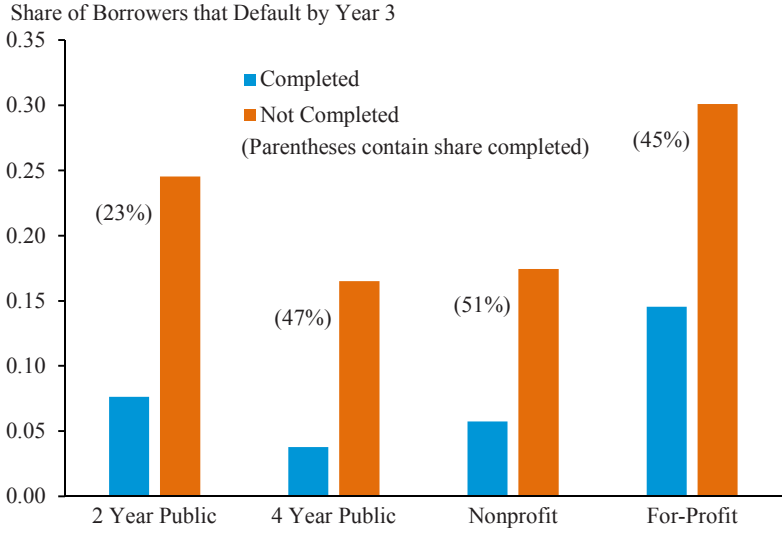
Gainful Employment Regulations

While some career college programs are helping to prepare America's workforce for the jobs of the future, far too many students at these schools are taking on unsustainable debt in exchange for degrees and certificates that carry limited value in the job market. With the landmark Gainful Employment regulations, the Administration will eliminate Federal aid to career college programs that consistently fail accountability standards.

Under the Gainful Employment regulations, programs whose graduates have annual loan payments of less than 8 percent of total annual earnings, or less than 20 percent of discretionary annual earnings, are considered to have passed the requirements. Programs whose graduates have annual

Figure 5-22

Relationship Between Undergraduate Default and Sector by Completion Status, 2011 Repayment Cohort



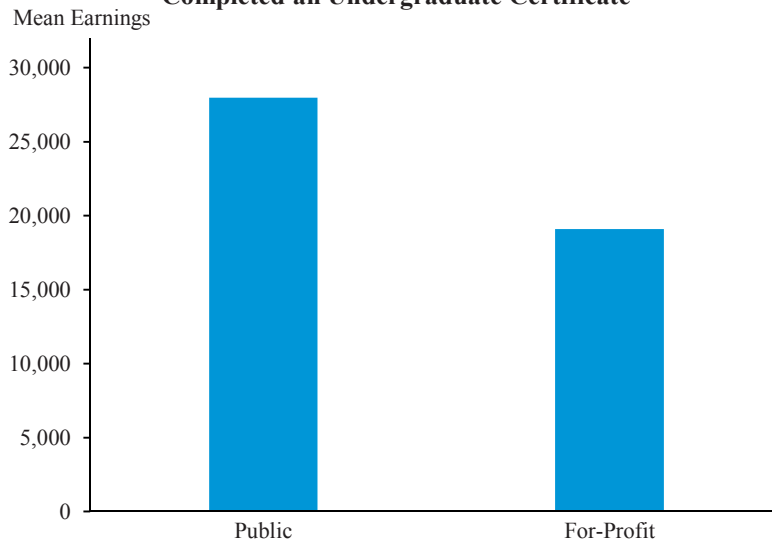
Note: Years are fiscal years. Some small sectors are excluded from this chart. Data contain some duplication across and within categories.
Source: Department of Education

loan payments between 8 and 12 percent of total earnings, or between 20 and 30 percent of discretionary earnings, are considered to be "in the warning zone" and at risk of failing the requirements. Programs are deemed to have failed the requirements if their graduates have annual loan payments greater than 12 percent of total earnings and greater than 30 percent of discretionary earnings. Programs that fail in two out of any three consecutive years, or are in the zone for four consecutive years, are no longer eligible for Federal student aid for a minimum of three years.

Based on data available at the time of rulemaking in 2014, the Department of Education estimated that about 1,400 programs serving 840,000 students—of which 99 percent are at for-profit institutions—would not pass the accountability standards. Initial data for students who completed during FY 2011 and 2012 confirm that students who completed certificate programs at for-profit colleges tend to earn less than those who completed programs at public colleges (Figure 23). The data suggest that for-profit colleges have higher proportions of graduates in less lucrative programs of study than public colleges and that graduates of for-profit colleges have lower earnings compared to those who graduated from similar programs of study at public colleges. All programs will have the opportunity to make immediate changes that could help them avoid sanctions; but if

Figure 5-23

Gainful Employment Earnings Outcomes for Individuals who Completed an Undergraduate Certificate



Note: Data are earnings in 2014 for students who completed an undergraduate certificate in FY 2011 or 2012 weighted by program size.
Source: Department of Education

these programs do not improve, they will ultimately become ineligible for Federal student aid—which often makes up nearly 90 percent of the revenue at for-profit institutions.

The Gainful Employment regulations also require institutions to provide disclosures to current and prospective students about their programs' performance on key metrics, like earnings of former students, graduation rates, and debt accumulation of student borrowers. This disclosure requirement complements the accountability measures in the regulation and provides additional program-level detail to the institution-level information provided in the College Scorecard.

Protecting Against Fraud and Deception

In addition to improving the information available to students, the Administration has worked to directly protect students and taxpayers from the subset of institutions of higher education who engage in fraud, deception, and other misconduct that harms students. A two-year investigation by the U.S. Senate Committee on Health, Education, Labor, and Pensions published in 2012 revealed such practices occurring in the for-profit sector. The investigation found that the 30 for-profit colleges examined spent about 30 percent more per student on marketing, advertising, recruiting, and admissions staffing than on instruction. The report also highlighted a number of

tactics (consistent with a 2010 Government Accountability Office report) that misled prospective students about program costs, the availability of aid, and information about student success rates and the school's accreditation status.

In 2010, the Obama Administration released a comprehensive set of rules—known as Program Integrity and Improvement rules—to strengthen the Department of Education's authority to protect students from aggressive recruiting practices fueled by incentive compensation; to take action against colleges engaging in deceptive advertising, marketing and sales practices; and to clarify minimum requirements for states to oversee postsecondary programs and handle student complaints. The Obama Administration is also proposing new Borrower Defense to Repayment regulations to protect borrowers and taxpayers against fraud, deception, and other misconduct by postsecondary institutions. The proposed regulations would create a clear, consistent, and transparent process for borrowers who have been harmed by their school's misconduct to seek debt relief. In addition, the proposed regulations include measures that would require new warnings to help students steer clear of poorly performing for-profit schools and financially risky schools. They would also end the use of both so-called "pre-dispute, mandatory arbitration agreements" and of class action bans that prevent students from having their day in court.

These regulations build upon a record of action by this Administration that has encouraged states to step up oversight in their role as authorizers, encouraged accreditors to focus on student outcomes, and created a new Student Aid Enforcement Unit to respond more quickly and efficiently to allegations of illegal actions by higher education institutions.

Next Steps

Despite the substantial progress made by the Obama Administration to expand a high-quality college education to all Americans, some challenges remain.

First, the costs of college remain too high for too many individuals, especially those from disadvantaged backgrounds. Expanding this Administration's work to provide free community college for responsible students will be a critical next step to make sure that all Americans can access a college education. However, at the same time, policymakers, community colleges, and other stakeholders will also have to work to improve student success at community colleges so that students who enroll receive the supports needed to complete a degree that raises their labor market prospects.

Additionally, Pell Grants can be better structured to put more low- and moderate-income students on the path to success, and the Administration's 2017 budget identifies various ways to improve the current program. To begin, the proposed budget further simplifies the FAFSA by eliminating burdensome and unnecessarily complex questions to make it easier for students and families to access Federal student aid and afford a postsecondary education. The Administration has also called upon Congress to indefinitely index Pell Grants to inflation in order to protect and sustain their value for future generations. Furthermore, it has included two key proposals to promote completion, creating incentives supported by academic research (MDRC 2016). The first would make additional Pell Grant funds available for an additional semester to full-time students, and the second would increase students' Pell Grants by $300 each year if they take at least 15 credit hours per semester, the amount typically needed to complete a two- or four-year degree on time. Finally, the Administration has requested that Pell Grants be expanded to incarcerated individuals eligible for release, with the goals of helping them complete college, get jobs, support their families, and strengthen their communities.[13]

There are also important changes to the education tax code that could reduce barriers to college access and success. In particular, the Administration has proposed streamlining and further expanding education tax benefits by: first, consolidating the Lifetime Learning Credit into an expanded AOTC, which would be available for five years and refundable up to $1,500 for students enrolled half-time or more; second, exempting Pell Grants from taxation and the AOTC calculation; and third, eliminating the tax on student loan debt forgiveness, while repealing the complicated student loan interest deduction for new borrowers.

Work is also needed to make sure that all borrowers can pay back their debt with an affordable repayment plan. Income-driven repayment plans are helping millions of borrowers stay on track with their payments, but too many borrowers do not take advantage of these plans, as described above. Complexities related to repayment plan selection, income verification, and recertification all present barriers to enrollment. In its 2017 budget, the Administration called upon Congress to improve and streamline PAYE and other income-driven repayment plans to create a single simple and better-targeted plan for borrowers. Academics have also proposed innovative ways to reduce the complexity of income-driven repayment plans (for example, Dynarski and Kreisman 2013). Such improvements will be critical to help borrowers manage their debt and stay out of default.

[13] See CEA's 2016 criminal justice report for a more detailed overview of the importance of this policy (CEA 2016b).

Better information and regulation of low-quality schools will also help students attend colleges that serve them well and enable them to pay back the debt they incur. The College Scorecard was a significant achievement, but additional efforts to improve the data's usage, the consumer tool, and the underlying data will help to expand the impact of the Scorecard. The Administration's efforts to protect students from low-quality schools have likewise been important accomplishments, and future policymakers must continue to be responsive to an ever-changing higher education landscape.

Lastly, work remains to continue strengthening outcomes at earlier levels of education to help ensure that students enter college well prepared to benefit from their investment in higher education. Despite this Administration's accomplishments, racial and socioeconomic gaps in PreK-12 educational inputs and outcomes remain, and these disparities must be addressed in tandem with the inequities in higher education access. ESSA has codified into law many initiatives created and championed by the Obama Administration to set the stage for this future policy, but further progress will require additional effort by policymakers.

Conclusion

The Obama Administration has enacted policies over its two terms to lower college costs, improve information, simplify student aid, and cap monthly student debt payments at a manageable portion of borrowers' incomes. The Administration has also promoted excellence and equity in PreK-12 education to better prepare students for college and their careers. Together, these policies represent a significant step forward in building an educational system that supports and encourages all Americans who wish to invest in an affordable, high quality college education to do so. Still, more work is needed to address the challenges that remain.