

Transparency in College Costs

Phillip B. Levine, Wellesley College and National Bureau of Economic Research

Executive Summary

This paper addresses the lack of transparency in the college pricing system, past attempts to address the problem, and proposals to do more in the future, with a particular focus on selective, private higher educational institutions. Despite recent federal legislation, students still have limited ability to anticipate the costs of college. Survey evidence indicates that the majority of students know no price other than the stated college tuition, despite the fact that many students would be expected to pay considerably less. For many young Americans, this information deficit reduces the likelihood that they will attend college—and it reduces the quality of the institutions for those that do attend.

The federal government has attempted to clarify college costs by requiring higher educational institutions to post “net price calculators,” designed to provide students and families with estimates of their expected cost, incorporating financial aid, based on their own finances. It also mandated institutions that receive federal aid to report their average net price of attendance among all students who receive financial aid, as well as the average net price disaggregated by income level. Both sets of statistics are reported on the *College Navigator* federal website. The White House also reports average net prices on its *College Scorecard* website.

Although these policies are well-intended, they have had limited success and may even make matters worse. Net price calculators are too difficult to use to have much impact. Differences in average net prices across schools capture variation in the socioeconomic circumstances of the student body rather than price differences that an individual student would face. Average net prices by income category are substantially influenced by outliers, a statistical problem typically associated with the use of averages rather than medians. In the end, tools designed to improve the transparency of college costs need to be simple, accurate, and individualized. None of the currently mandated tools satisfy all of those goals.

In September of 2013, Wellesley College introduced a new tool, called *My inTuition*, to improve the transparency of its pricing system. *My inTuition* is like a vastly simplified net price calculator; it provides students with estimates of what it would cost them to attend Wellesley College after factoring in financial aid based on their answers to six basic financial questions. These questions ask about total family income, home value and mortgage balance, cash holdings, and retirement and non-retirement investments. In the first year, demand for estimates is high, most users who start the calculator complete it, and average time to completion is just three minutes. Survey evidence indicates that the vast majority of users find *My inTuition* helpful and easy to use. Although it is too soon to tell what impact it will have on applications, the College has seen a 20 percent increase in the number of prospective applicants following implementation.

This analysis provides lessons for existing proposals and offers new ones to improve transparency in college costs. Existing proposals generally do not satisfy the fundamental objective of enabling an individual student and his or her family to anticipate what college is likely to cost them. One simple new proposal is to replace reported values of the average net price by income level with the median net price. More broadly, I argue for greater availability and use of simplified financial aid calculators.

I. Introduction

With stated levels of tuition plus room and board rising to \$60,000 or more at many selective private colleges and universities, it is no surprise that prospective students and their families worry about the high costs of college.¹ The median annual income of families with college-age children is \$68,000 and their median net worth is \$55,000; half of that is home equity (Levine, 2013). For families with those financial resources, and certainly for those with fewer, the cost of college is clearly unaffordable.

Yet the stated cost of attendance misrepresents the true cost for many, and perhaps even the majority, of students due to the availability of generous financial aid at these institutions.² That message is not often heard. The majority of students who are applying to college only know the stated level of tuition, or “sticker price.”³ This informational deficit faced by prospective students has real implications for their educational outcomes. As I briefly review below, when students are educated regarding what it would truly cost them to attend college, they are more likely to attend. When lower income, higher ability students are provided with information regarding the types of colleges they could feasibly attend along with an estimate of what they could expect to pay, they are more likely to attend more highly selective, private colleges and universities. Information clearly matters.

To help students and their families better understand what a college education will actually cost them, the federal government has implemented three different tools over the past several years. The Higher Education Opportunity Act of 2008 imposed additional requirements for institutions that receive federal financial aid funds (like Pell Grants, Stafford Loans, and Federal Work-Study). One provision required each institution to post by 2011 a “net price calculator” on their web sites designed to provide students/families with estimates of their expected cost

Despite the good intentions behind the tools that the federal government has implemented, each of them fails to satisfy at least one the goals of being simple, accurate, and individualized.

based on their own finances. The “net price” includes direct payments from the student and his/her family plus expected loans and the proceeds from a work-study job. The law also required institutions to report to the Department of Education the average net price of attendance for all students attending the institution as well as the average net price for those in different income categories. The Obama Administration has been active in promoting the average net price (along with other information) on its College Scorecard, introduced in 2013 and available on the White House web page.⁴ Average net price by income category is available on the College Navigator, a federal website hosted by the U.S. Department of Education.⁵

To be useful these tools need to be simple, accurate, and individualized. They cannot be useful if they are so difficult that students and their families do not use them. If they provide data that is not accurate, they are counterproductive. The more a tool can provide information specific to an individual student’s own financial circumstances, the better able he or she will be to incorporate that information. Survey evidence, detailed below, indicates that individualized estimates are what students want. Despite the good intentions behind the tools that the federal government has implemented, each of them fails to satisfy at least one the goals of being simple, accurate, and individualized.

Net price calculators are individualized and accurate, but they can be hard to use, often asking dozens of questions that may require information that individuals do not have handy.⁶ Average net price data are simple, but they are not individualized. They give information on what current students pay on average, but they do not tell a prospective student what he or she would pay. Perhaps more importantly, differences across schools in average net price are often driven by differences in the socioeconomic status of enrolled students, not reflecting the differences in the price that a student would pay if he or she attended those institutions. Average net price data by income category move closer to individualization, but they also possess data limitations and an important statistical flaw that hinder their accuracy. Briefly, extreme values tend to influence the calculation of the average, generating misleading results. All of these issues are detailed below. Simply put, all of these approaches are inadequate.

1. For examples of the many articles in popular news outlets discussing the high cost of college, see: <http://www.cnn.com/2011/12/02/opinion/vedder-college-costs/> and <http://money.cnn.com/2013/12/04/pf/college/student-loan-debt/>.

2. Higher educational institutions are quick to point this out. For instance, see: <http://president.williams.edu/letters-from-the-president/affordability/> and <http://amherststudent.amherst.edu/?q=article/2014/03/26/tuition-and-fees-exceed-60000>.

3. According to a 2009 College Board voluntary survey of students who registered for the SAT, 59 percent only looked at the sticker price in evaluating the cost of attending a school, without taking into account financial aid (Hesell and Williams 2010).

4. This tool is available at: <http://www.whitehouse.gov/issues/education/higher-education/college-score-card>.

5. This tool is available at: <http://nces.ed.gov/collegenavigator/>.

6. One notable exception is Harvard’s net price calculator (available at <https://college.harvard.edu/financial-aid/net-price-calculator>), which is among the easier ones to use.

In the fall of 2013 Wellesley College introduced a simplified college cost calculator in an attempt to help prospective students better anticipate their potential cost. The tool, called *My inTuition* (available at www.wellesley.edu/costestimator), satisfies all three goals. It is designed to provide an individualized estimate of what it would cost to attend, factoring in financial aid, based on six basic financial characteristics. It is like a simplified net price calculator. The results provided by *My inTuition* not only provide a best estimate of the anticipated costs, but also an upper and lower bound, such that around 90 percent of current Wellesley College students with similar basic financial circumstances would pay within that range. The

Making simplified calculators, like the one that Wellesley College has introduced, more widely available would be an important advance in the financial aid world to clarify the cost of attending college.

tool went “live” on September 18, 2013.⁷ The evidence available so far suggests that the calculator has been successful: demand for estimates is high, most users

who start the calculator complete it, and average time to completion is just three minutes. Although it is too soon to tell what impact it has had on applications, the College saw a 20 percent increase in the number of prospective applicants following implementation.

The purpose of this paper is to examine the financial aid system with a focus on the issue of transparency, particularly at selective, private colleges. I first review the present system highlighting the lack of clarity in college pricing and reviewing the evidence regarding its effect on college attendance. I then detail the federal government’s attempts to provide greater clarity, critique their implementation, and describe other efforts and proposals designed to accomplish this goal. After that, I review Wellesley College’s experience with *My inTuition* one year after it was introduced and describe the lessons learned that can be applied to the question of transparency in college costs more broadly. I conclude by discussing the implications of this analysis for public policy.

The results of this study provide a number of useful lessons. First, individualized information about what college would cost is very important to the goal of increasing the rate at which students from low- and moderate-income families apply to college and attend selective, private colleges. Second, past efforts by the federal government to clarify

7. The original version only provided data on the expected family contribution. In response to suggestions for improvement, the College updated *My inTuition* to include data on expected loan burden and work-study commitments as well as expected family contribution. That version went live on October 14th, 2014.

college costs are insufficient. They have had limited success and, in some instances, they may even provide misleading information. Third, one simple change that can improve the quality of the data available on the federal government’s College Navigator is to report median net prices by income category rather than average net prices. That change would be a significant improvement. Fourth, making simplified calculators, like the one that Wellesley College has introduced, more widely available would be an important advance in the financial aid world to clarify the cost of attending college.

II. Transparency in the Current Financial Aid Environment

A. College Pricing and the Financial Aid Landscape

The purpose of financial aid is to help fill the gap between a school’s sticker price and what a family can “afford” in order to enable students without extensive financial resources to attend college. The issue is more pertinent at selective, private institutions because the sticker price is so high. Determining how much a family can afford is an incredibly difficult task. The process begins when applicants provide their financial data to either the federal government or the College Board, which uses these data to arrive at an initial estimate of an “expected family contribution” (EFC). Individual institutions may modify the initial EFC estimate for specific families depending on the details of their financial circumstances. They may also require aided students to take work-study jobs and expect them to take out loans to supplement their cash payments. Again, the stated “net price” is the sum of the EFC, the loan amount, and the work-study commitment. This captures the entire financial obligation for which the student is responsible.⁸

The approaches used by the federal government and the College Board to determine what families can afford are somewhat different. The “Federal Methodology” (or FM) is typically used by public institutions and the “Institutional Methodology” (or IM), created by the College Board, is typically used by selective, private colleges and universities.⁹ Institutions that only require FAFSA (Free Application for Federal Student Aid) use FM and institutions

8. At institutions that also offer merit aid in addition to financial aid, the net price would be less than this amount. The merit aid would need to be subtracted. This form of aid is beyond the scope of the present analysis.

9. The institutions that use IM can be found at: <https://profileonline.collegeboard.org/prf/PXRemotePartInstitutionServlet/PXRemotePartInstitutionServlet.srv>.

that also require the CSS/Financial Aid PROFILE use IM.¹⁰ Much of this analysis focuses on financial aid at IM schools. The two systems do not always arrive at the same, or even similar, estimates of ability to pay; treatment of assets and what counts as income are particularly important differences between the two methodologies.¹¹ In general, estimates are similar, but large differences may result for families with unusual financial circumstances. I will return to the impact of these exceptions below.

Students who receive financial aid are charged according to their ability to pay, as determined by either the IM or FM formulae. Therefore, their tuition bills are unaffected by changes in the sticker price. This can be seen in Figure 1, which displays the trend over the past decade at private, not-for-profit four year higher educational institutions in sticker price and average net price, which averages net prices paid across all students, including those paying sticker price and those who receive financial aid. The common portrayal of rising college costs is evident in the sticker price; it rose around 25 percent, from around \$33,000 to \$41,000 (in inflation adjusted dollars) over the past 10 years.¹² Yet average net price across all students

has changed very little, averaging roughly \$23,000 throughout the period.¹³ For the sticker price to rise and average net price to remain roughly constant, it must be the case that students receiving aid are actually paying less over time. This is consistent with national income trends. Between 2003 and 2013, the median income of households headed by those between the ages of 45 and 54 (approximating the age of parents of college students) fell from \$76,000 to \$67,000 in constant 2013 dollars.¹⁴ As ability to pay has fallen, the amount paid by students receiving financial aid has also fallen.¹⁵

To provide more detail on pricing patterns for students whose financial status differs, I use data from Wellesley College as a case study. Wellesley College is a highly selective private institution whose sticker price is comparable to its peers in the vicinity of \$60,000. Its sticker price rose around 20 percent over the past decade, from just under \$50,000 at the beginning of the period (again, in inflation adjusted dollars) to just under \$60,000 currently. These values are higher than those for the average private, not-for-profit four-year college, but

10. Schools that use IM also require students to fill out FAFSA in case students are eligible for federal aid, like a Pell Grant, along with institutional aid.

11. These differences are detailed at: <https://professionals.collegeboard.com/profdownload/FM%20&%20IM%20Differences.pdf>.

12. Over this period, increases in sticker prices at state-supported institutions have increased by a greater amount, fueling some of the

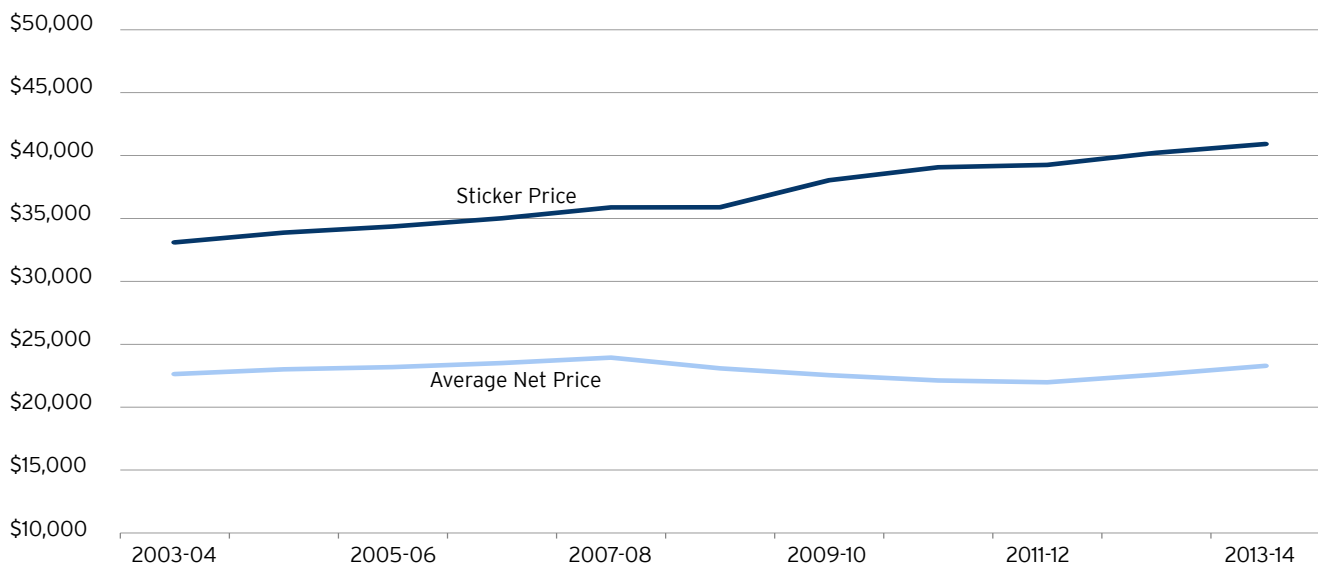
public discussion, but the increases at private colleges and universities are still substantial.

13. Schwartz (2007) provides evidence of similar patterns in sticker price and average net price for the 1990s.

14. These data are available at: <https://www.census.gov/hhes/www/income/data/historical/household/>, accessed 10/31/2014.

15. Increases in the value of Pell Grants in 2009-10 also was a contributing factor.

Fig. 1
Trends in Sticker Price and Average Net Price at Private, Non-Profit Four-Year Institutions



Source: College Board.
Note: Price is in 2013\$

similar to the cost of other highly selective institutions with which Wellesley College competes. At Wellesley College, 58 percent of students received financial aid in 2013-14, rising from 53 percent a decade earlier. This increase occurs naturally as the rate of growth of the sticker price outpaces that of family incomes and those families previously just over the aid threshold begin to fall below it. More generally, the increase in sticker price is only borne by those who receive no aid. Although the complexities of the financial aid system make it difficult to characterize their incomes, as a rough approximation these students come from families with annual incomes over roughly \$200,000 (Levine, 2013).

Figure 2 reports the EFC for students receiving financial aid by the level of their total family income (adjusted for inflation). I focus on the EFC because I have access to these data over a longer period of time.¹⁶ This figure distinguishes students by their total family income, where income groups have been created to match published government reports that I will describe later. The lowest income group, with family income below \$30,000, can expect to pay out-of-pocket

16. The average net price incorporates a work study commitment and loan expectation along with EFC. The work study commitment is around \$2,000 and the expected loan amount is up to \$3,500 for financial aid recipients in their first year at Wellesley. Since 2008, the loan component is waived either partially or fully for students with family incomes under \$100,000. A student with a zero value for EFC would face a net price of around \$2,000, representing the work study commitment.

Research suggests that providing more information to prospective students regarding what it would actually cost to attend will have a substantive impact on their higher-education decision-making.

around \$3,500 per year, on average. This includes around a \$2,000 student “contribution” that the College expects the student to earn in a summer job.¹⁷ This expected payment has fallen over time.¹⁸ Students from higher income families receiving financial aid are expected to pay more. Those earning in the vicinity of \$100,000, for instance, can expect to pay around \$15,000, on average. Again, even students from higher incomes families among those receiving aid (and well above the national median), have an average EFC is considerably below the sticker price and that has changed very little over the past decade.

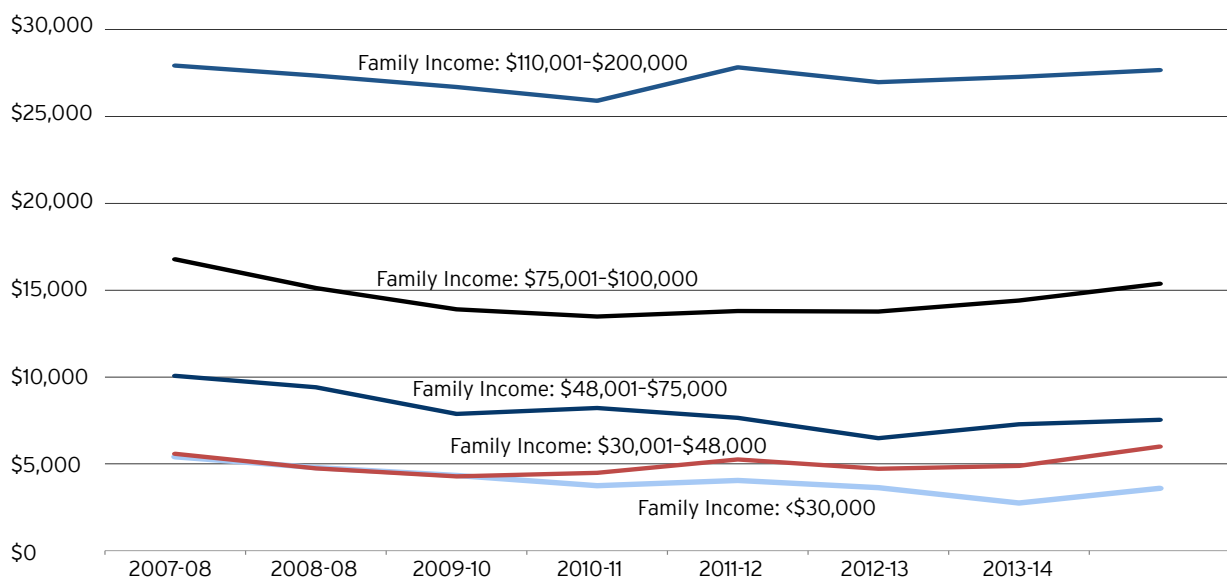
As I indicated earlier, the majority of students planning to attend college only know the sticker price at these institutions. Hence, communicating the fact that the cost of a college education is

considerably below the sticker price for lower and middle income families, and that the cost is not rising for these families, is a difficult challenge at Wellesley College and at other selective, private institutions. Although I am using

17. Even the remaining \$1,500 seems like a lot of money for these families. The reason that this value is not zero is because it represents an average; many indeed owe nothing more, but some others do. This latter group may include low income families (retirees?) who may have assets substantial enough that the financial aid system generates a positive expected contribution. I will return to this discussion later regarding the value of reporting medians rather than averages.

18. In fact, the average net price would have dropped even more noticeably. Prior to 2008, families at this income level would still have been expected to take out a loan, but now they would not.

Fig. 2
Average Expected Family Contribution to Wellesley College, by Total Family Income



Note: Cost is in 2014\$. Sample restricted to domestic, full-time students.

Wellesley College as a case study, all of the conclusions drawn here would hold at other private colleges, particularly those that are highly selective like Wellesley.

B. Past Research on the Impact of Improving Information

This information gap matters.¹⁹ Research suggests that providing more information to prospective students regarding what it would actually cost to attend will have a substantive impact on their higher-education decision-making. For instance, Bettinger, et al. (2012) introduced an experimental design, offering treatment group students the estimated costs at nearby colleges after incorporating financial aid and assistance completing the FAFSA form. These students were 29 percent more likely to subsequently complete two years of college. Avery and Hoxby (2013) document that a large number of high-achieving, low-income students do not even apply to selective colleges and universities. This occurs perhaps in part because of misperceptions regarding what it would cost to attend. Furthermore, Hoxby and Turner (2013) report the results of a randomized controlled trial testing a program, Expanding College Opportunities (ECO), which included application assistance, guidance on the actual cost of college, and application fee waivers for high-achieving, low-income high school seniors. They found that the program led these students to apply to colleges where four-year graduation rates, instructional spending, and median SAT scores were 17 percent, 51 percent, and 86 points higher, respectively.

In another intervention designed to attract more lower-income students, Harvard University introduced a major change to their pricing system in 2004. Their Financial Aid Initiative eliminated all costs for students with family incomes below \$40,000 and reduced costs to an average of \$1,250 for students with family incomes between \$40,000 and \$60,000. Part of this intervention was about lowering the price and part was about simplifying the system to make it more understandable. Along with the revised pricing system, the initiative also increased the intensity of recruitment of lower-income students, among other things. It was widely publicized at the time and similar efforts were subsequently adopted by other very highly endowed private institutions like Princeton, Yale, and Stanford. Avery, et al. (2006) review the results of the policy change. The attention it garnered led to a large

19. This discussion focuses on the role that information plays on college attendance and the quality of institutions attended. Past research also shows that both of these outcomes have important effects on subsequent labor market outcomes of students. The returns to additional education are large and well-known; see Card, (1999) for a review. See Dale and Krueger (forthcoming) for a recent example of the research examining the impact of college selectivity.

increase in overall applications that was somewhat tilted towards lower income students; the share of applicants with incomes below \$60,000 rose 2.2 percentage points as a result of the intervention.

C. Past Attempts to Improve Transparency by the Federal Government

Because of the lack of clarity regarding actual costs of attending college, the federal government mandated in the 2008 Higher Education Opportunity Act that colleges and universities must introduce a net-price calculator to provide prospective students with an estimate of the cost of attending that institution. The idea of net price calculators is a good one. They allow students and their families to enter their own financial information, preferably well in advance of the college application process, providing them with an estimate of their expected cost for different colleges. Without them, students would have little idea what a school might cost until after they applied, were accepted, and were notified of their financial aid award. Net price calculators are designed to overcome this information deficit. If successful in communicating accurate pricing information, they would encourage more students from lower income families to apply to institutions that have a sticker price well in excess of what they can afford.

Upon implementation, however, net price calculators are flawed. On some schools' websites they are difficult to find. If found, they are often difficult to use, requiring answers to a large number of questions and access to detailed financial records (The Institute for College Access and Success, 2012).²⁰ Some of the information required is taken directly from tax forms, like "adjustments to income," which users are not likely to know without doing some work. Evidence indicates that many students start using a school's net price calculator, but never complete it, presumably because of its complexity (Pérez-Peña, 2013). At Wellesley College, only around 30 percent of those who started to use our formal net price calculator (the one required by federal law, not the simplified calculator described here) actually complete it. A 2011-12 College Board survey found that the majority of students (and around 60 percent of students from low- and middle-income families) ruled out schools because of the sticker price, not the net price, even after the introduction of these net-price calculators (Hesell and Meade 2012).

20. The U.S. Department of Education has made an attempt to overcome this information deficit by creating the FAFSA4Caster, which provides an estimate of the EFC based on very few financial inputs. Although considerably easier than completing FAFSA, it still asks for information like "adjusted gross income," which students may not easily know. Besides, this tool is useful for FM schools, but it may not be appropriate for IM schools due to differences in the underlying formulas.

Another requirement of the 2008 Higher Education Opportunity Act mandates colleges and universities that receive any form of federal financial aid report their average net price of attendance among all students who receive financial aid and the average net price disaggregated by income level. The federal government posts these data on its College Navigator website. The Obama Administration has also promoted its College Scorecard, which provides the average net price (for all students receiving aid, not by income category) for every institution.

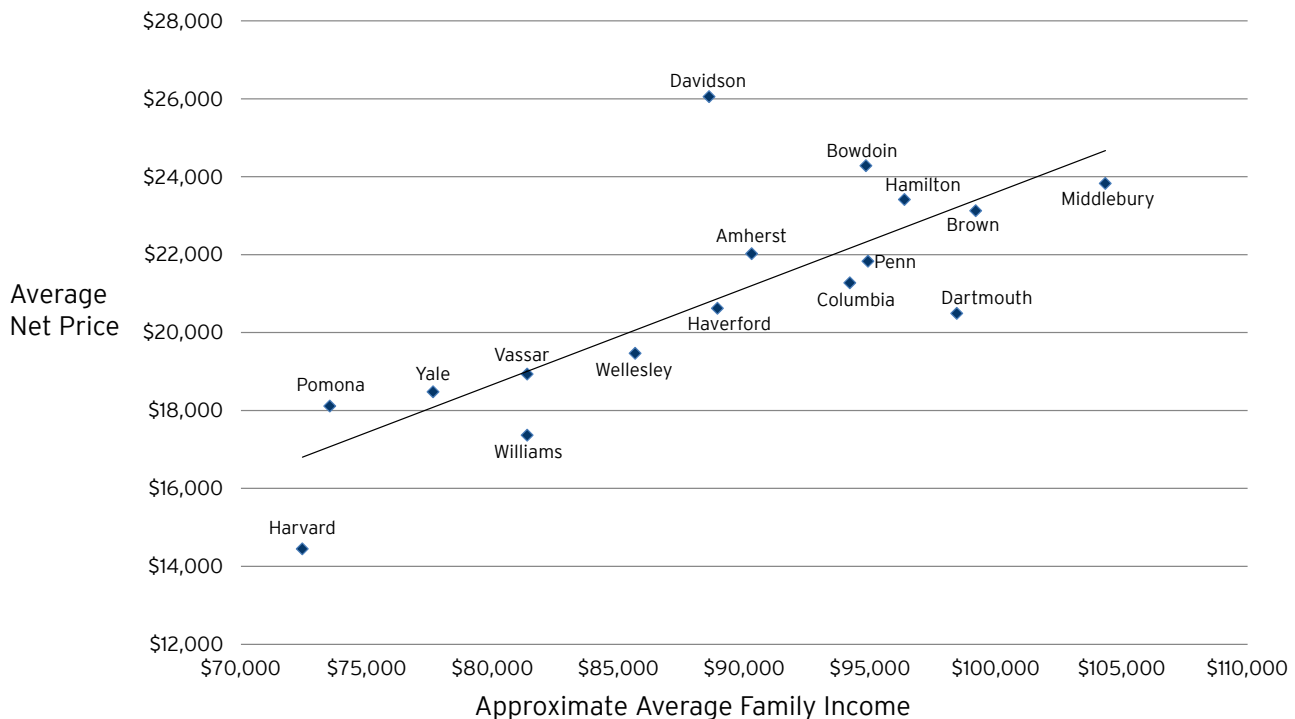
Again, the motivation behind these information efforts is sound. They are certainly simple. A student goes to one of the websites, clicks on a relevant category of schools or specific institution, and he or she is then provided with its average net price. Data from the College Navigator that is broken down by income category enables students to place themselves inside one of those bins and get some idea of what that college might cost them. It also enables them to get an idea of which schools are more affordable than others so that they can incorporate that information into the college search process. The College Scorecard is less useful for providing students with a sense of their own costs based on their finances. Its goal, however, is to provide students with average price information

that, in principle, enables them to compare costs across institutions to see which are more affordable.²¹

In practice, these tools may not be quite so helpful and, in fact, may even provide some misleading information. Consider the average net price data provided by the College Scorecard. It is computed as the average of the net price paid by every student who is receiving some form of federal financial aid at a specific school. As such, it is affected by the differing composition of students and their families' financial resources at different institutions. Consider two schools with identical financial aid systems, such that if a lower income student applied to both schools, they would pay exactly the same price. But suppose that one school has a student body whose aided students have higher family incomes than the other school. That school's average net price will be higher because there is a greater number of students with less need who will pay a higher net price and, thus, will raise the average. In this scenario, a student from a lower-income family who visited the

21. In his 2013 State of the Union address, President Obama stated that "parents and students can use (the *College Scorecard*) to compare schools based on a simple criteria: where you can get the most bang for your educational buck."

Fig. 3
Relationship between Approximate Average Family Income of Students Receiving Aid and Average Net Price from *College Scorecard*, 2011-12



Note: All institutions are need blind and guarantee that they will meet full need. Average net price data was obtained from the *College Scorecard* and the percentage of students receiving aid was calculated based on data obtained from IPEDS. Institutions represented include all Ivy League Schools and Top 15 liberal arts colleges (according to US News and World Report) that have these financial aid policies.

College Scorecard would think that one school is less expensive than another, but for him or her that would not be true.

Figure 3 demonstrates this problem using data from the College Scorecard for an elite set of schools that have “need-blind, meet full need” financial aid policies for domestic applicants. They do not incorporate financial need in the application process and, if accepted, they will charge an amount that is considered “affordable.” That amount can vary somewhat between schools, but those differences are generally small. With financial aid policies like this, the price of attending any of these institutions for an individual student should be quite comparable. The schools considered are those with these financial aid policies in the Ivy League and among liberal arts colleges that are ranked in the top 15 in US News and World Report’s 2015 college rankings.²²

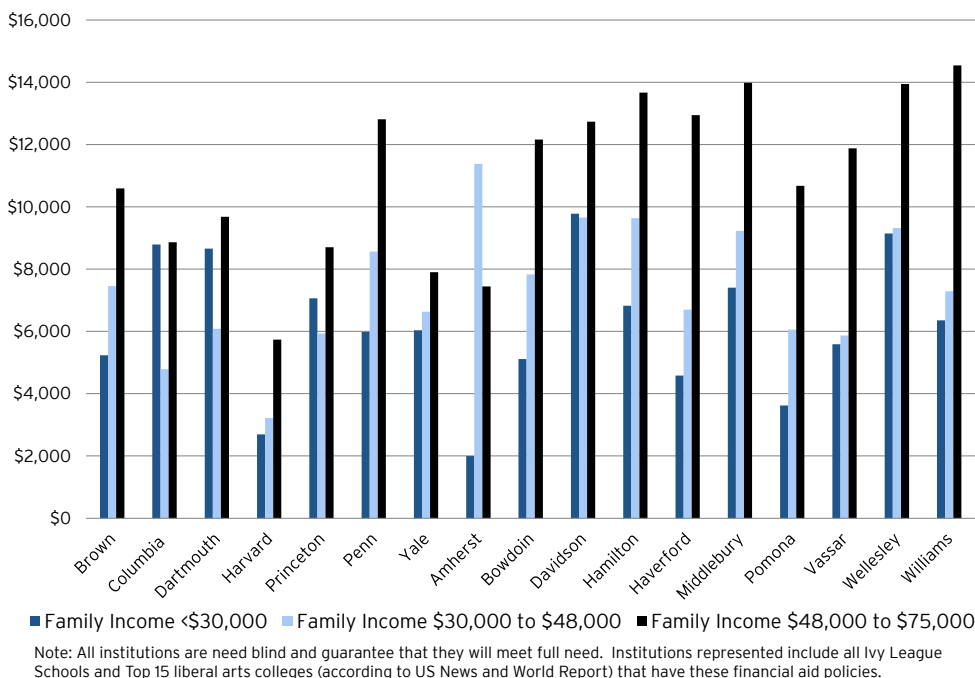
Yet the evidence provided in Figure 3 indicates that the average net price is not close to uniform across these institutions, with a range from around \$14,000 to \$24,000 (Davidson is an outlier at about \$26,000). How can

average net price differ by \$10,000 for students at schools whose policies all require them to meet a family’s ability to pay? The main determinant of those differentials is the socioeconomic status of the students at the institution, not their pricing policies. The schools with students from higher income families (although low enough that they still qualify for aid) report a higher average net price. Yet, if a student whose family income was at a particular level applied to any of them, that student would likely pay a similar amount at any of these institutions. This example illustrates that the average net price data in the College Scorecard may even complicate comparisons of prices across institutions.

In principle, this is an issue that should be solved by breaking up families into income categories and then calculating average net prices within those categories. Composition of income levels within the category still may be a bit of a problem, but it would be a considerably smaller one. In reality, this change, while solving one problem, generates others. Figure 4 presents data from the College Navigator website supporting this conclusion. It shows the same Ivy League and elite liberal arts colleges used in Figure 3, all of which have a need-blind, meet full need financial aid strategy. These schools’ aid packages cannot be vastly different and still support this philosophy. Yet the patterns present in Figure 4 strongly contradict this. The data represent the reported average net price for household incomes that are very low (\$30,000 and under),

22. Two Ivy League schools are not included on this chart. Cornell does not meet full need and the income data available for Princeton from IPEDS seemed unrealistic (five times more students with family incomes under \$30,000 relative to those with family incomes above \$110,000, for instance). Liberal arts college rankings are available at: <http://colleges.usnews.rankingsandreviews.com/best-colleges/rankings/national-liberal-arts-colleges> (accessed 9/26, 2014).

Fig. 4
Average Net Price for Lower Income Families at Leading Private Colleges and Universities, *College Navigator*, Average Data for 2010-2013



low (\$30,000 to \$48,000), and moderate (\$48,000 to \$75,000; containing the national median).²³

To be sensible, it must be true that higher income students pay no less than lower income students, yet this principle is not satisfied in a number of instances. Both Columbia and Dartmouth, for instance, reportedly charge an average net price of almost \$9,000 for students with very low family incomes, around \$5,000 to \$6,000 for families with low incomes, and then around \$9,000 to \$10,000 again for students with moderate incomes. The reported prices that these institutions charge to low-income students based on data from the College Navigator cannot be accurate. How are students whose families make less than \$30,000 paying \$9,000, on average, to attend Columbia or Dartmouth, both of which are “no-loan” schools for low-income students? In addition, it should be the case that when one moves up the income distribution from very low- to low-income families, the additional cost should not be that large. Amherst allegedly charges an average of about \$2,000 to very low-income families, but over \$11,000 to low-income families. Williams and Pomona also allegedly charge an additional \$7,000 to \$8,000 between very low- and moderate-income families. All of these comparisons fail the “sniff test.”

To illustrate how misleading these data can be, let us consider administrative data from Wellesley College. Figure 2 showed that the expected family contribution for a Wellesley student with family income under \$30,000 averages around \$4,000.²⁴ This student would also be expected to find a work-study job on campus and pay an additional \$2,000. No loan would be expected for this student with family income at that level. This would generate an average net price of \$6,000 for students in this group. The College Navigator reports an average net price of \$9,000. Each college provides its own data to the Department of Education to be used by the College Navigator, so it is unlikely to be a reporting problem. Why is there a discrepancy?

One possible explanation is that there are differences between IM, which selective, private institutions use, and FM, which is the basis for federal financial aid. One difference between the two systems is that IM uses a more

23. One concern that I attempted to address in reporting these data is that the number of families at a particular institution, some with total enrollments under 2,000 students, is that they may be variable purely from low sample size. I averaged three years of data to counteract this problem.

24. The \$4,000 would be broken down into an expected student contribution of \$2,000, which we anticipate would come from something like a summer job, plus a \$2,000 parent contribution. Even \$2,000 still seems like a lot for parents with such low income. I will return to this shortly.

comprehensive measure of income than FM. Supiano and Oh (2014) provide evidence from Notre Dame indicating that some “very low-income” families according to the FM formula may actually have sources of income (like self-employment) that increase a more comprehensive measure of income. Another difference is treatment of assets: using FM, individuals with an adjusted gross income (AGI) under \$50,000 are not required to report their assets, whereas IM requires that they be reported by everyone. High asset families with low income, therefore, can have a high EFC in IM, but a very low EFC in FM.

My own investigation of data from Wellesley College supports these conclusions. For most students, EFC from IM and FM are similar, so their net prices would be similar as well. But a handful of students with unusual financial situations, generally associated with self-employment or with the value of their assets, represent outliers that have undue influence on the computation of average net price. This is a problem that is not uncommon in statistics and one that is easily solved. Reporting median net price by income level rather than average net price would eliminate the excessive influence of these outliers. This is a very simple change that needs to be made in order for the net price by income information to be useful. Until then, the data reported in Figure 4 make it clear that the reported values should not be used for making comparisons across institutions regarding their affordability.

More generally, reporting median values of net price statistics rather than average values makes more sense. This is clarified in Figure 5, which again relies on data from Wellesley College to make the point. It displays average net price data as reported in the College Navigator along with average net price and median net price based on its own internal data, all for those students with very low family income (under \$30,000).²⁵ According to the College Navigator, Wellesley College has almost tripled its price (in inflation adjusted dollars) for these very low-income students from \$3,800 in 2008-09 to \$10,600 in 2012-13. As I discussed earlier, this “increase” is attributable to a handful of students whose incomes are measured as very low by FM, but are considerably higher under the more comprehensive income definitions used by IM. Average net price for these students using IM income consistently throughout the period was generally much lower and more stable. Nevertheless, those data also show a considerable drop in average net price between 2007-2008 and 2013-14, from \$7,400 to \$4,800. Since no policy change took place, this drop can be explained by falling incomes that students’ families experienced over the recession.

25. Comparable data from earlier years from tuitiontracker.org are appended to the reported values from the *College Navigator* to extend the series.

Median net prices, however, are virtually unchanged over the period, only falling slightly as inflation erodes the levels of expected student contributions that are fixed in nominal terms. The median net price of \$4,000 includes an expected student contribution of \$2,000 from a summer job and a work-study commitment of \$2,000. Parents of students whose incomes are this low are not expected to make any contribution of their own and this has not changed over time. Figure 5 shows that the median net price is the best indicator for an individual low-income family to forecast the cost of attending Wellesley College. The impact of outliers, which drive the values reported by the College Navigator, are minimized and it is less sensitive to compositional changes in the student body. Wherever possible, median values of net prices should be made available rather than averages.

D. Proposals and Recent Attempts to Provide Greater Transparency

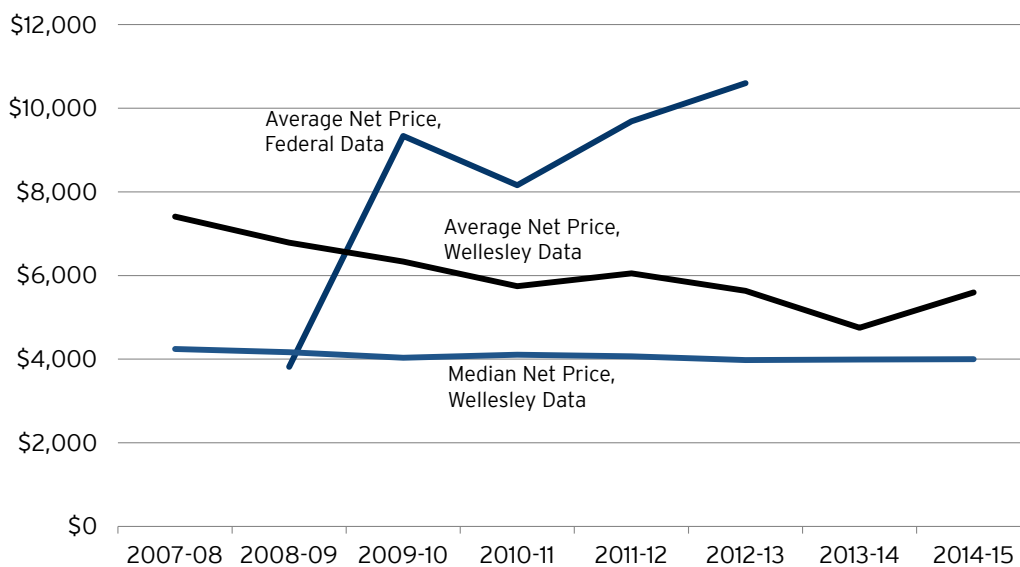
Both before and after the Higher Education Opportunity Act of 2008, economists and other policy analysts have been calling for and working to help provide greater transparency to the financial aid system. Dynarski and Clayton (2007) began a push to vastly simplify the federal system of financial aid that relies on FM and FAFSA in determining awards. They called for an application on a postcard that would eliminate the vast majority of questions that currently are included in the FAFSA. They argued that all of the relevant information necessary could

be transferred from a family's tax return, because the vast majority of variability in financial aid awards derives from financial information that can be garnered from existing tax forms. Of course, an important caveat in using this approach is that it does not take into consideration asset differences that exist across families. They argue that the number of low-income, high asset families is small and it does not make sense to design the entire system around a relative handful of exceptions. They also recognize that ignoring assets is potentially an important political barrier to implementing their proposal.²⁶

Dynarski and Wiederspan (2012) details the public reception to the proposal to replace the current financial aid application system with one that uses existing tax information. They indicate that it received considerable attention in the political arena, even landing on the platform of the Democratic Party in the 2008 election. No specific legislation has yet been adopted to implement it, but this idea appears in some current proposals, as described below. Its influence in raising attention to the issue of lack of transparency in financial aid certainly contributed to the provisions included in the Higher Education Opportunity Act of 2008. It also led to administrative action that changed the FAFSA, although no major overhaul took place.

26. One potential reason for these political barriers is that families may alter their financial profile to fit into the low-income high asset category. Parents who are self-employed represent one group who may be able to make these sorts of adjustments.

Fig. 5
Comparison of Net Prices at Wellesley College Among Very Low Income Households Using Alternative Methods



Note: Net Price in 2014\$. Very low income households are those below \$30,000. Federal data reflects values obtained from the College Navigator and tuitiontracker.org. Wellesley net price data is simulated based on actual data on expected family contributions and assumed work study values. Over this time period, Wellesley students with incomes this low were not expected to take out loans.

Another initiative that has gained more traction is the ECO program that Hoxby and Avery (2013) and Hoxby and Turner (2013) describe.²⁷ The ECO program provided college-relevant information to a sample of low-income, high-achieving (based on test scores) students who would be eligible for substantial financial aid and who would be plausible candidates for admission at a number of selective private institutions. The intervention was tested using an experimental design. Treatment group members received

Although the impact of programs like ECO is hard to overlook, it is also important to recognize that these programs affect a relatively small slice of the population who could benefit from a more transparent financial aid system.

college counseling that included information about the relevant institutions where they should apply along with financial aid information

regarding the costs of attending their own state school as well as alternatives among private institutions. They also were able to submit applications without paying fees. As described earlier, the experiment strongly affected enrollment decisions of high ability, low-income students. Based on the success of the ECO program, subsequent interventions have been implemented. For instance, the College Board recently launched the program, Realize Your College Potential, which parallels the ECO intervention (information packets, guidance in selecting appropriate colleges, assistance in determining actual costs of attendance, etc. for low-income, high achieving students). Delaware has also implemented an intervention like this in coordination with the College Board, called Getting to Zero.

Although the impact of programs like ECO is hard to overlook, it is also important to recognize that these programs affect a relatively small slice of the population who could benefit from a more transparent financial aid system. ECO-type interventions are restricted to high achieving, low-income students. “High-achieving” is defined to be those whose test scores were in the top 10 percent of the distribution of test scores (SAT or ACT). “Low-income” is defined to be those whose predicted income is in the bottom third of families with a high school senior. These definitions amount to a combined SAT (math and verbal) score of 1300 or more, an ACT score of 28 or more, and family income of roughly \$45,000 or below. A large fraction of the college-bound population whose family financial characteristics would enable them to qualify for financial aid is not in this subpopulation. Finding ways to better communicate the availability of

financial aid and the true cost of college attendance is important to them as well.

III. *My inTuition*: Analysis Of First Year Experience

A. *What is My inTuition?*

Improving transparency in the financial aid system is not only important as a public policy goal. It may also be a goal of individual institutions that seek to enroll the strongest possible students; eliminating some portion of students because they are unaware of their true cost of attending college does not support that institutional goal.²⁸ Adding those students to the top of the “admissions funnel” requires finding effective methods of communicating what a student would actually have to pay to attend.

For these reasons, Wellesley College has been working to improve the transparency of its financial aid system so that it can better attract high quality applicants who otherwise may not be interested in the school because of the high sticker price. In September of 2013, it introduced a new tool, called *My inTuition*. *My inTuition* is like a vastly simplified net price calculator; it provides students with estimates of what it would cost them to attend Wellesley College after factoring in financial aid based on their answers to just six basic financial questions. These questions ask about total family income, home value and mortgage balance, cash holdings, and retirement and non-retirement investments.²⁹ The calculator takes the answers to these questions, along with some basic demographics, and generates an estimate of the EFC.³⁰ The results are presented as an estimate and it is made clear that the ultimate financial aid determination will require the student/family to go through the standard

28. Alternatively, transparency in costs may not be the goal of some financial institutions that are seeking to gain greater revenue. If so, public policy requiring them to implement techniques to increase transparency would be appropriate.

29. We arrived at the specific asset components included based on a statistical analysis of the types of assets that matter most and based on focus groups that provided us with information regarding the best way to illicit the required information. For instance, we really only care about home equity, but we learned that asking about home value and mortgage balance separately made it easier for families to respond appropriately. Similarly, asking about the value of retirement assets, which are not included in the financial aid formula or our calculations, made it easier to obtain the information that really mattered, the value of non-retirement assets.

30. *My inTuition* is not well-suited for students with a noncustodial parent, families with considerable self-employment income, and international students because of the greater difficulty in forecasting financial aid for them.

27. A concise overview of the intervention and its impact is available at: <http://educationnext.org/expanding-college-opportunities/>.

process, which will require providing financial information in greater detail. To solidify that point, the calculator also provides a range of estimates such that around 90 percent of current Wellesley College students with comparable basic financial characteristics would have an EFC within that range. The College also maintains its formal Net Price Calculator, as required by federal law. That tool can still be used to obtain a more precise estimate of the cost, albeit with the tradeoff of considerably greater difficulty.

The value of *My inTuition* is that it provides individualized estimates of what it would cost to attend Wellesley College that are simple to obtain and individualized to each student. Formal net price calculators that require more extensive financial data will certainly provide more precise estimates. Students seeking that greater level of precision should certainly move on to that step. At the early stages of the college search process, though, it may not be the precision of the estimate that matters as much as the fact that the estimate may be considerably less than the sticker price. That is what opens the door for further exploration; this is the purpose of introducing a simplified calculator.

B. Usage Statistics

My inTuition went live on September 18, 2013. Initially, it received considerable attention in the media (see, for instance, Leonhardt, 2013; and Supiano, 2013) that led to

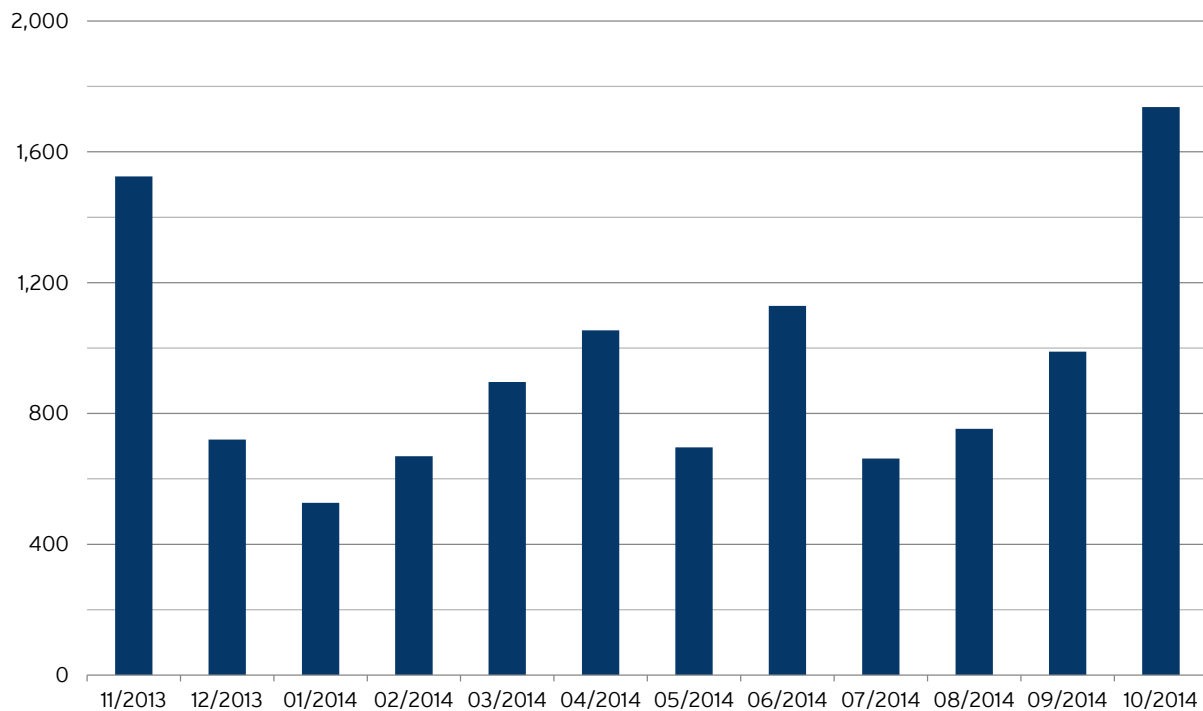
very heavy usage. By the end of October of 2013, over 17,000 estimates had been provided.³¹ It is not obvious that this initial investigation was driven by students necessarily interested in Wellesley College, but rather by those who were curious about the calculator itself. Perhaps a better indication of more substantive usage among students potentially interested in Wellesley College is the usage observed after this initial period.

Figure 6 provides the number of monthly estimates provided in the subsequent period. Over the next 12 months, over 11,000 additional estimates were provided. To place that number into context, we compare it to the 3,337 and 2,613 estimates provided by our pre-existing net price calculator in the 2012-13 and 2013-14 academic years, respectively.³² Usage of *My inTuition* was very high relative to the number of applications Wellesley College typically receives (around 4,500), the number of students typically accepted (around 1,000) and the number of students

31. Some users may have typed in more than one set of financial conditions to test the sensitivity of the cost to their entries. Visual inspection of the values entered (like repeat entries of some characteristics, but changes in others entered at about the same time) suggest that this definitely occurred, but was not widespread. This means that the 17,000 estimates came from fewer than 17,000 users, but probably not a lot less.

32. One potential explanation for the decline in NPC estimates provided in 2013-14 is that students received enough information from *My inTuition* that they did not feel the need to get more details from our NPC.

Fig. 6
Number of Monthly Estimates Provided in Use of *My inTuition*



Note: 12,529 and 4,982 estimates were provided in September and October of 2013, respectively, following the 9/18/2013 launch of *My inTuition*.

typically enrolled (around 600). The time pattern of usage also suggests that students are more likely to use *My inTuition* during obvious peaks in college searching (like June and September), but also in April, when accepted students are likely to be trying to better understand their actual financial aid awards.

Despite the strong usage, it still remains unclear whether the students who are using the tool are actually interested in learning more about Wellesley College or in learning more about the financial aid system more broadly. Since most of Wellesley's competitor schools have similar financial aid systems, the calculator provides insight into the anticipated cost at those schools as well. Even if it is not clear that all those who used the tool are interested in Wellesley, the large number of people who have used the calculator indicates that there is a strong demand for providing simplified, personalized estimates of the actual cost of attending an elite, private college.

Data available from Google Analytics provides more detailed information regarding usage. First, users who started providing financial information received an estimate of their expected family contribution within three minutes. This statistic highlights the simplicity of the tool. Among users who started providing financial information, 80 percent continued through to receive an estimate. This compares quite favorably to Wellesley College's formal net price calculator, where the corresponding figure has been more like 30 percent. In terms of geography, we know that the distribution of users is similar to that in the country as a whole; the states with the most users (California, Texas, and New York) are the states with the most people. Since Wellesley College is located in Massachusetts, it is not surprising that Massachusetts is overrepresented among users.

Maintaining confidentiality of students and their parents is an important goal in the design of this tool, so it does not ask for any personally identifying information. We do record the reported income and asset values, though, and I can use these data to determine the financial profiles of *My inTuition* users. Again, we restrict our attention to those who used it beginning in November of 2013 to focus on those students who we believe are more serious users.

It turns out that users of the tool are not representative of applicants; they are more heavily tilted towards higher income financial aid applicants, particularly those with total family incomes between \$80,000 and \$225,000 and away from those with incomes below \$50,000. The reason

for this could be attributable to better information flows regarding the availability of the calculator to upper middle class income families. Alternatively, it could be that these families have high demand for a tool like this because of their uncertainty regarding eligibility for any aid. Providing greater transparency for these families is consistent with institutional goals of attracting, admitting, and enrolling the most qualified students. Greater outreach informing lower income families of this simple calculator is an ongoing effort.

C. Impact on Prospects and Applicants

The heavy use of *My inTuition* satisfies the goal of providing greater information regarding college costs, but ultimately the potential benefit of improved transparency is to attract more students to Wellesley College who would otherwise fear the cost and stay away. I consider two potential outcomes to measure the number of students that the calculator attracted.

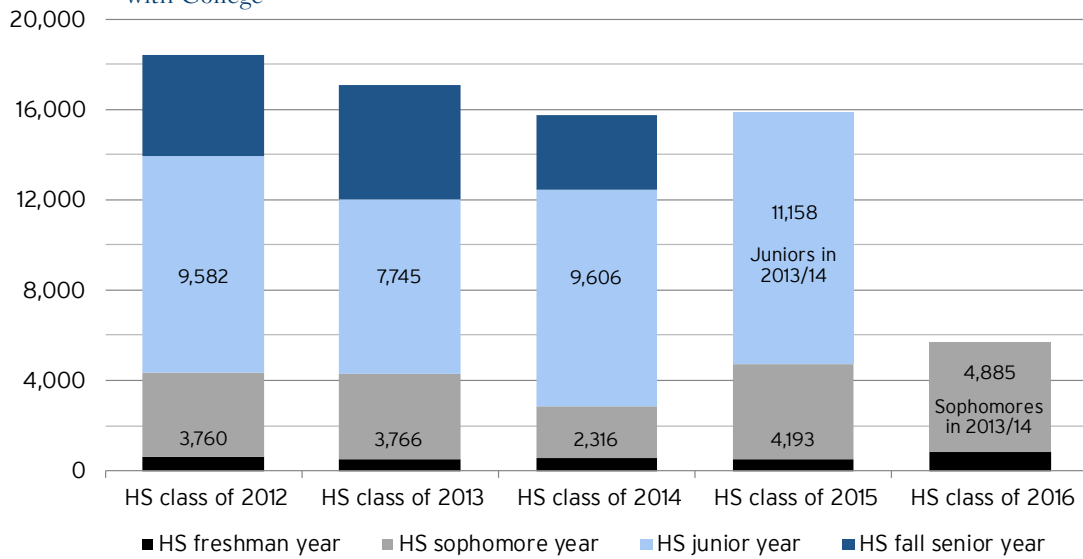
First, I consider the number of applications as an outcome that is routinely tracked to measure student interest. In the present context, though, one might not be terribly

surprised if applications were unaffected in the first year after the tool's introduction, particularly given the timing of its launch. *My inTuition* went live on September 18th, 2013. With early decision applications due on November 1st and regular decision applications due on January 1st, it is likely that prospective students had already chosen at least most of the schools to which they planned to apply.

Patterns and trends in applications support this interpretation; no substantive change in application behavior is evident in the data. The total number of applications for first year admission to start in the fall of 2012, 2013, and 2014 by U.S. citizens were 3,304, 3,551, and 3,459, respectively, providing no indication of an increase since the new tool was introduced. I also break down these totals by income category; higher income, unaided students can be thought of as a control group for this exercise. The results from this comparison also show no obvious increase in applications among lower- to upper-middle income students.³³

33. I also obtained data from the College Board on the number of financial aid reports sent to comparison institutions (liberal arts and research universities), determined by the institutions to which Wellesley applicants are most likely to apply, aggregated by institution type (not individual institutions) and family income category. I augmented these data with total application counts reported by those schools to determine a distribution of applications by family income status similar to that reported in figure 8. This exercise similarly was unable to detect an increase in applications among lower to upper middle income

Fig. 7
Number of Wellesley College Prospects, by Entering Class and Time of First Contact with College



Note: "Prospects" represent students who initiated contact with the college through a campus visit, filling out a request for information form online, or the like, or who we contacted first and they responded. *My inTuition* was launched in September of 2013.

Perhaps students earlier in the college-process are more likely to be affected by the information the calculator provides. I can roughly gauge the interest of those students using data on "prospective" students that Wellesley College collects. Two types of students fall into this category. The first are those students who provide the College with contact information through a campus visit, an online information form, attendance at a college fair, etc. A second group includes those students who the College specifically identifies and contacts based on things like PSAT information. Those students who respond to the College's inquiry are also included in the count of prospective students. If interest in Wellesley College increased among younger students, we should see an increase in the number of prospects after *My inTuition* was introduced.

With roughly 17,000 prospects added, on average, from the high school classes of 2012-2014, these additional 3,500 or so prospects represent about a 20 percent increase in the size of the prospect pool.

Figure 7 provides evidence supporting that hypothesis. It shows the total number of students who enter Wellesley College's prospect list by their high school graduating class, represented by the top of each bar. It also shows the grade in high school in which they joined the list based on the colored segments of each bar. Since this analysis is conducted in the fall of 2014, note that the high school classes of 2015 and 2016 are incomplete. The first indication that the size of the prospect pool rose following the introduction of *My inTuition* is that the number of prospects in the high school class of 2015, who

students at Wellesley relative to these other institutions.

are just starting their senior year, have already surpassed prospects in the class of 2014. By the time the admissions process is completed, this class of 2015 is likely to generate the highest number of prospects in the past four years.

We can also see that prospects have increased by comparing the colored segments, which represent grades in high school, over time. Consider the green segments, for instance, representing additions to the prospect list during students' junior year. The number of juniors added to the prospect list in 2013/14 (members of the class of 2015) following the release of *My inTuition* was quite a bit larger than the number of juniors added in preceding years. A similar analysis of sophomores (red bars) suggests that more students in that grade were added in 2013/14 (members of the class of 2016) than in previous years. Comparing these two

"treated" groups of sophomores and juniors following release to the averages in the preceding years suggests that 1,376 additional sophomores and 2,180 additional juniors were added to the prospect list following the release of *My inTuition*.³⁴ With roughly 17,000 prospects

34. Distinguishing a true increase in the number of prospects from that attributable to random variation is a very difficult task, particularly with only one year of data following the launch. In an attempt to do so, I estimated a regression model where the dependent variable was the number of prospects in a graduating class added during each year in high school and the independent variables represent year in high school fixed effects along with interactions of sophomores added from the class of 2016 and juniors added from the class of 2015. The results of this analysis indicate that the increase in the number of juniors is

added, on average, from the high school classes of 2012-2014, these additional 3,500 or so prospects represent about a 20 percent increase in the size of the prospect pool.³⁵ Although the translation between prospects and applicants is a difficult one, these results suggest that applications may increase among the high school classes of 2015 and 2016.

D. Survey Evidence

To provide further insight regarding the response to *My inTuition*, Wellesley College contracted with a firm to survey students who applied to Wellesley for admission in 2014 along with prospects in the same class who did not apply and prospects who may apply in 2015. The final sample size was 1,200 students across the three groups.³⁶ Before asking them directly about the calculator itself, the survey first focused on these students' perceptions about the financial aid process more generally. Much of the information we obtained from this survey was similar

statistically significant at the 5 percent level, but the increase in the number of sophomores is not statistically significant.

35. The methodology used to arrive at this conclusion is insufficient to draw strong causal conclusions, but it is not clear what confounding factor would lead to bias. The admissions office did not substantively change any of its recruitment practices in 2013-14. The increase in prospects also reverses a recent downward trend generated by an increase in "stealth applicants," who apply to the College with no prior contact. That trend would be consistent with students' greater reliance on online resources to obtain information in determining where to apply.

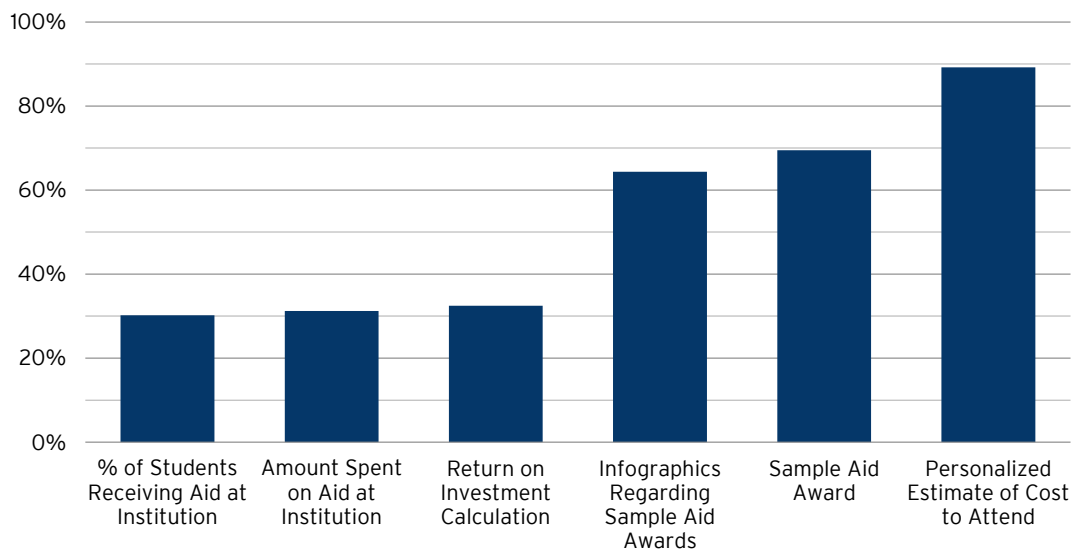
36. As is common in these sorts of surveys based on email contact information, the response rate was very low - in the single digits.

to broader surveys of high school students: they are very concerned about college costs and they find the financial aid system to be very complicated. One finding that we did not expect was the large fraction of students who said they were at least partially responsible for navigating the financial aid system, particularly among lower-income families. Among financial aid applicants with family incomes under \$60,000, almost 90 percent report that they were at least partially responsible. This clearly can contribute to confusion in the process, since the students' knowledge of the detailed financial information typically required by net price calculators is likely to be limited. The fraction of students who say they are at least partly responsible for financial aid application drops to less than half for families with incomes above \$150,000.

One survey question asked students what types of information they would like to have to help them navigate the financial aid process and aid their college application decision.³⁷ Responses to this question are provided in Figure 8. What we learn from this is that the more specific the guidance is to the student's own situation, the more useful they find it. Only a minority of students find general statistics about the financial aid system at an institution (number of recipients, amount of aid awarded, or average return on investment calculations) to be useful. Sample aid awards in text format or contained in infographics are useful because they move the student towards a better understanding of what he or she might expect to pay to

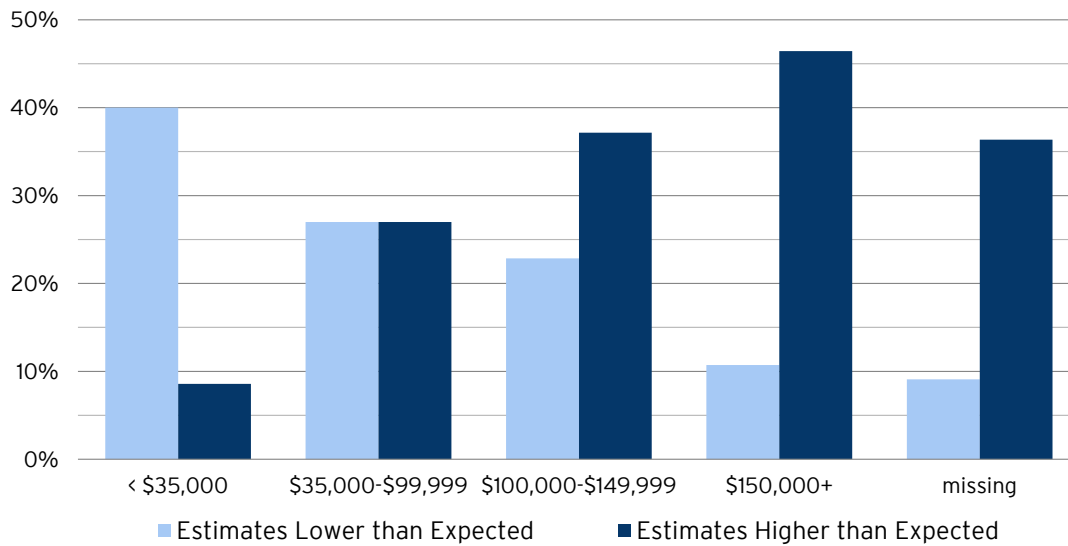
37. Specifically, they were asked: Thinking again about financial aid information, how useful would each of the following be to know when considering whether or not to apply to a college or university?

Fig. 8
Financial Aid Information Students Would Find Very Useful



Note: Sample reflects all respondents who applied or plan to apply for financial aid.

Fig. 9
Relationship Between *My inTuition* and Estimates and Expectations



attend the school. What they would find the most useful, though, is an estimate of what it would cost to attend an institution that is individualized to their family's financial circumstances. That is exactly the information provided by *My inTuition*.

Given that background, it is probably not surprising that those students who use *My inTuition* generally have a favorable assessment of it. Three quarters of all students who used the calculator said it was easy to use and two-thirds said it was helpful. Breaking up respondents by income category sheds additional light on those results. Among families whose incomes are below \$100,000, 85 percent and 75 percent said it was easy to use and helpful, respectively, compared to only about 50 percent for those with family incomes above \$150,000.

A follow-up question may help explain the disparity in findings by income group. Figure 9 reports the fraction of users who found the estimates provided to be higher or lower than expected by income category. Lower income families were far more likely to report that the estimated EFC was lower than expected and higher income families were far more likely to report the estimated EFC was higher than expected. This pattern coincides with the realities of financial aid and the presence of public higher education institutions; higher income students are the ones who actually are likely to benefit the most financially from attending state-supported institutions. Those institutions provide the greatest subsidy to them relative to the anticipated cost of attending a selective, private institution. Although providing simplified estimates of

Among families whose incomes are below \$100,000, 85 percent and 75 percent said *My inTuition* was easy to use and helpful, respectively.

college costs may not change the college attendance decisions of these students, it is still valuable to get this information early.

One other finding from this survey is that exposure to *My inTuition* is not that extensive. Among actual applicants, 55 percent had seen the calculator, but these students presumably were the most interested in learning about the College. Among prospects who graduated high school in 2014 but did not apply to Wellesley, only 15 percent had ever seen *My inTuition* and only 6 percent used it. This rate is very low considering these students had at one point expressed enough interest to add their names to our contact list. If this level of exposure is what we observe from prospective students, the rate is presumably even lower for the vast majority of other potential candidates.

This conclusion belies the statistics described earlier regarding the heavy use of *My inTuition*. These contradictory findings can be reconciled if many of the tool's users are not necessarily interested in attending Wellesley College. If it is

going to be successful in increasing applications of those seeking financial aid, exposure to the calculator will have to increase.

IV. Policy Implications

With discussions beginning about reauthorization of the Higher Education Act, this is a good time to incorporate the lessons from the analysis reported here. Before delving into a detailed discussion of those lessons, there

is one straightforward change to the current system of disseminating financial aid information that would be easy and extremely valuable. As I described earlier, the Higher Education Opportunity Act of 2008 required implementation of the College Navigator; among other things, it reports average net prices by income category for all higher educational institutions that receive federal funding. I provided evidence indicating that idiosyncrasies in the reporting system generate data that is erratic and often misleading. I also described a simple and feasible solution. If the federal government simply required higher educational institutions to report *median* net prices by income category rather than *average* net prices, this would reduce the problems in the published data. Although students would still prefer individualized estimates of their college costs, based on the results of Wellesley College's survey, they nonetheless would find these aggregated statistics more useful if they adequately conveyed accurate information regarding anticipated college costs and their differences across institutions.

If the federal government simply required higher educational institutions to report *median* net prices by income category rather than *average* net prices, this would reduce the problems in the published data.

In terms of specific legislative proposals currently being discussed, a few call for major overhauls of the federal financial aid system that, if enacted, would increase its transparency. Senators Alexander and Bennet have proposed the FAST (Financial Aid Simplification and Transparency) Act, which would largely incorporate Dynarski's proposal for replacing the current FAFSA with a postcard. Forecasting future college costs would presumably be considerably easier under such a system. Its main disadvantage is that it may enable individuals with greater financial resources in the form of assets to receive more aid as long as their reported income is low. This may be worth the trade-off. It also would not alter the system of financial aid used at selective, private institutions that rely on the College Board's IM formula.

Senator Harkin has proposed alternative legislation, the Higher Education Affordability (HEA) Act, which is a comprehensive proposal designed to be part of the reauthorization process to the Higher Education Act. Among its many provisions, it proposes notifying middle and high school students of their potential eligibility for financial aid and standardizing financial aid award letters, among other things. Although these policies may be a step in the right direction, they do not satisfy the fundamental objective of enabling an individual student and his or her family to anticipate what college is likely to cost them.

The White House and some members of the House of Representatives are pushing for more information to be published online enabling students to compare colleges

on a number of dimensions, including college costs. The Strengthening Transparency in Higher Education Act, proposed by Representatives Foxx and Messer, would replace the specific requirements included in the Higher Education Opportunity Act of 2008 with alternatives to be included on a web-based "College Dashboard." The White House continues to push its College Scorecard along with a voluntary "Financial Aid Shopping Sheet," that would provide uniform information on financial aid award offers made to admitted students. Average net price data are included in both policies. As reviewed

earlier, we need to be careful about reporting average statistics regarding college costs and interpreting them as differences in prices facing individual students. Even among schools with similar financial aid systems that treat an individual student similarly, differences in the socioeconomic composition of the student body at those schools may, inaccurately, indicate that one school is less expensive. This would be misleading and undermine the goal of enabling students to make more informed choices. These proposals also fall short of the goal of accomplishing what students want - individualized estimates of their anticipated costs of college attendance.

The one policy tool that does accomplish that goal, in theory, is the requirement for net price calculators. The information these calculations provide is likely to have the most impact on students' college applications if it is available at the very beginning of the process when students are building their application lists. In reality, most currently available calculators are cumbersome to use and require about the same amount of information as the actual financial aid application process, which most students and their families only go through after they have been admitted. A quick and easy tool that uses a small amount of information to allow students and their families to anticipate what college would cost them would be helpful. Without that functionality, these tools will have a limited impact on students' college-going behavior.

The broader policy discussion can benefit from the lessons learned through Wellesley College's experience with a simplified college cost calculator. First, there is strong demand among students and their families for a tool like this. We can see this from survey responses that students want individualized estimates, from the heavy use of *My inTuition* that provides these estimates, and from the favorable reviews given by users. Second, some preliminary evidence from our prospect list suggests that the availability of a tool like this can increase interest in attendance. Whether that translates into more

applications and higher yields still remains to be seen. Combining the strong preliminary results along with the fact that it satisfies the goals of being simple, accurate, and individualized suggests that tools like this should be more broadly supported. If adopted more broadly, simplified cost calculators have the potential to provide substantial benefits to students considering college.

A proposal to more broadly implement simplified net price calculators is perhaps most closely aligned with a recent proposal made by Senators Franken and Grassley in the Net Price Calculator Improvement Act. Their proposal has the goal of making net price calculators “more user-friendly and accessible.” Although they do not explicitly address the simplicity of the tool, simplifying the process of obtaining estimates like Wellesley College has done is completely consistent with their goal. One important provision they include requires

If adopted more broadly, simplified cost calculators have the potential to provide substantial benefits to students considering college.

a “universal calculator” so that students and their families can enter a single set of financial characteristics and receive estimates of what it would cost to attend different schools. There is no reason why a simplified calculator like Wellesley has introduced cannot be duplicated for use at other institutions as well. The ability to compare estimates like this across institutions would be a valuable addition to what Wellesley currently offers. It could also address the exposure problem that Wellesley College faces - if everyone provided estimates like this, presumably it would be considerably easier to generate awareness of its availability.³⁸

38. In previous work, I also supported the broader use of simplified calculators, but argued that market pressure would lead other institutions to implement them on their own. Regardless of the method by which these calculators become more widely available, the goal of broader access is the same.

References

- Avery, Christopher, Caroline Hoxby, Clement Jackson, Kaitlin Burek, Glenn Poppe, and Mridula Raman (2006). "Cost Should Be No Barrier: An Evaluation of the First Year of Harvard's Financial Aid Initiative." National Bureau of Economic Research working paper 12029.
- Bettinger, Eric, Bridget Terry Long, Philip Oreopoulos, and Lisa Sanbonmatsu. (2012). "The Role of Application Assistance and Information in College Decisions: Results from the H&R Block FAFSA Experiment." *Quarterly Journal of Economics* 127 (3): 1205-42.
- College Board (2013). *Trends in College Pricing, 2013*. New York: College Board.
- Dynarski, Susan M. and Mark Wiederspan (2012). "Student Aid Simplification: Looking Back and Looking Ahead." *National Tax Journal*, 65(1): 211-234.
- Dynarski, Susan M. and Judith Scott-Clayton (2007). "College Grants on a Postcard: A Proposal for Simple and Predictable Federal Student Aid." Hamilton Project Discussion Paper.
- Hesel, Richard A. and David C. Meade Jr. (2012). "A Majority of Students Rule Out Colleges Based on Sticker Price." *Student Poll* 9 (1).
- Hesel, Richard A. and Ryan C. Williams (2010). "Students and Parents Making Judgments about College Costs without Complete Information." *Student Poll* 8 (1).
- Hoxby, Caroline M., and Sarah Turner. (2013). "Expanding College Opportunities for High-Achieving, Low-Income Students." Discussion Paper 12-014, Stanford Institute for Economic Policy Research (SIEPR), Stanford, CA.
- Hoxby, Caroline and Sarah Turner (2013). *Informing Students about Their College Options: A Proposal for Broadening the Expanding College Opportunities Project*. Hamilton Project Discussion Paper.
- Hoxby, Caroline and Christopher Avery (2013). "The Missing 'One Offs': The Hidden Supply of High-Achieving, Low-income Students." *Brookings Papers on Economic Activity*. Spring.
- Leonhardt, David (2013). "Getting a Clearer Picture of College Costs." *New York Times* (September 18). Available at: <http://economix.blogs.nytimes.com/2013/09/18/getting-a-clearer-picture-of-college-costs> (accessed September 29, 2014).
- Levine, Phillip B. (2013). *Simplifying Estimates of College Costs*. Hamilton Project Policy Memo 2013-06.
- Pérez-Peña, Richard (2013). "Clarity and Confusion from Tuition Calculators." *New York Times* (January 15). Available at: <http://www.nytimes.com/2013/01/16/education/college-cost-calculators-offer-clarity-and-confusion.html> (accessed September 29, 2014).
- Schwartz, Amy Ellen (2007). "Costs and Implications," in Stacy Dickert-Conlin and Ross Rubenstein (eds.), *Economic Inequality and Higher Education*. New York: Russell Sage Foundation.
- Supiano, Beckie and Soo Oh (2014). "Are Poor Families Really Paying Half Their Income at Elite Colleges? The Problem with Government Affordability Data." *Chronicle of Higher Education*. Available at: <http://chronicle.com/article/Are-Poor-Families-Really/148001> (accessed September 29, 2014).
- Supiano, Beckie (2013). "Wellesley College Offers Easy Estimator of What Families Might Pay." *Chronicle of Higher Education*. Available at: <http://chronicle.com/blogs/headcount/wellesley-college-offers-easy-estimator-of-what-families-might-pay/36517> (accessed September 29, 2014).