

## **Three Reasons for Those Hefty College Tuition Bills**

By N. Gregory Mankiw

What should we do about the high cost of higher education? As we pick the next president, that question should feature prominently in the public debate. The economic prosperity of our children and grandchildren hinges on finding the right answer.

Today's economy leaves little doubt about the value of college. According to the Bureau of Labor Statistics, in 2014 the median worker with a bachelor's degree (and no advanced degree) earned \$69,260, compared with \$34,540 for the median worker with only a high school diploma. Over a lifetime, that difference accumulates to about \$1.5 million.

Increasing educational attainment is also the best way to combat growing income inequality. Over the last 40 years, the wages of skilled workers have increased substantially compared with the wages of the unskilled. Most economists agree that a leading cause is skill-biased technological change — the tendency of new technologies to increase the relative demand for skilled workers. College is the main institution that can offset this trend by turning unskilled individuals into skilled ones

Even those who do not attend college benefit when more of their fellow citizens do so. A person who becomes educated leaves the pool of the unskilled. Those left behind face fewer competitors. With fewer unskilled workers vying for the available jobs, wages at the bottom of the economic ladder are bid up.

Although increasing college attendance makes a lot of sense, both for individuals and for the nation, the financial hurdle to doing so is higher than ever. The College Board reports that published tuition and fees at a typical private, nonprofit college, adjusted for overall inflation, have increased by 70 percent over the last 20 years. What gives?

Three forces are at work.

The first is called Baumol's cost disease. Many years ago, the economist William Baumol noted that for many services — haircuts as well as string quartet performances — productivity barely advances over time. Yet as overall productivity rises in the economy, wages increase, so the cost of producing these services increases as well.

Education is a case in point. How we teach and learn has benefited from some technological advances, such as PowerPoint presentations, online courses and the innovations of outfits like Khan Academy. But after 30 years as an educator, I am convinced that the ideal experience for a student is a small class that fosters personal interaction with a dedicated instructor. In other words, best practice remains the approach that Socrates used to teach Plato 2,500 years ago. But because society over all is now richer, today's Socrates expects a reasonably high standard of living, and that implies hefty tuition.

The second force increasing the cost of education is the rise in inequality. Educational institutions hire a lot of skilled workers: It takes educated people to produce the next generation of educated people. Thus, rising inequality has increased not only the benefit of education but also the cost of it.

The third force at work is what economists call price discrimination. Businesses of all sorts have an incentive to charge different prices to different consumers based on their willingness and ability to pay. Movie theaters, for example, charge children less than adults for a ticket.

Colleges have increasingly followed this practice by raising published prices and offering more financial aid based on a family's resources. I often joke that Harvard should complete the process by setting tuition at \$1 billion a year. But that sticker price applies only to the children of Bill Gates. Everyone else gets a special price, just for you.

The impact of increasing price discrimination is clear in the data. That 70 percent figure for the 20-year increase in published tuition and fees shrinks to 32 percent for the average net price. The expansion of financial aid explains the

difference. Yes, the 32 percent increase in cost is still sizable, but for those who qualify for aid, it is a lot smaller than is sometimes suggested.

So what should we do about the cost of education?

One approach is to make higher education a right. Senator Bernie Sanders, who is seeking the Democratic presidential nomination, advocates free tuition at public colleges and universities.

Apart from favoring government-run over private colleges, the main problem with this idea is that there is no way to really make education free. The Sanders plan just shifts the cost from the student to the taxpayer. In light of the looming unfunded liabilities already on the government's books from existing entitlement programs, mainly for older adults, creating a new one for the young seems problematic.

Another approach is to find better private mechanisms to finance higher education. Senator Marco Rubio, who is seeking the Republican nomination, wants to establish a legal framework in which private investors help pay for a student's education in exchange for a share of the student's earnings after college. In essence, the student would finance college less with debt and more with equity. The Rubio plan does not let the student get away without paying, but it does help spread the risk from the educational investment.

Whether private money would show up for this is an open question. Investors may worry about adverse selection. Future poets might be willing to pledge a fraction of their incomes, while future bankers might pass on the opportunity.

Unfortunately, there are no easy answers here. We can hope that future technologies will significantly reduce the cost of college. If they do not, as is likely, we will need to find better ways than we have now to pay for a system that is increasingly valuable but also increasingly expensive.