The Economics of Equitable Education: How Today's Loans, Access, and Training Affect Tomorrow's Economy

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Good morning and welcome. It's a pleasure to be at Saint Joseph's University.

Today I'd like to discuss every college senior's favorite subject: student loans. Not just as they pertain to the individual, but the impact they, and other facets of the education landscape, have on the U.S. economy overall, and why the subject is one for every American to consider.

Before I get to that, I want to take care of two housekeeping issues. The first is an introduction to Fed protocol, and that is the issuance of a standard disclaimer: The views I express today are mine alone and do not necessarily reflect those of anyone else in the Federal Reserve System. The second is an introduction to the Fed itself.

I promise it will be short, and no, it won't be on the test.

Fed Overview

The Federal Reserve stands out among the world's central banks for its decentralized structure. How do you decentralize a central bank? You establish 12 regional Banks across the country that are independent of, but work alongside, the Fed's Board of Governors, located in Washington, D.C.

That structure was established 100-plus years ago to ensure that the realities on the ground in a vast and varied economy would be recognized when national policy is made. It was a prescient decision, as the landscape of the country has become ever more diverse and eclectic in the intervening century. The concerns of the residents of the Philadelphia Fedôs District are often different than, for instance, the Dallas Fedôs. So when we all meet to decide policy, which we do every six weeks or so, each of us walks into that discussion with a unique perspective. Weôre the voice for our regions.

While the Fed was created by and is answerable to Congress, it is an independent entity, which shields it from political pressure. This is a crucial element to safeguarding the countryôs economy. You obviously donôt want people making cosmetic decisions in the short term for the sake of political expediency. You want people who look at the medium and long-term implications of their actions and make determinations based on data. You want policy wonks. You might not want to hang out with us at a party, but youôre probably pretty happy with us relentlessly analyzing the data on your behalf.

The Fed has a host of responsibilities, from providing currency to banks to undertaking research to working with local communities to encourage economic growth, mobility, and stability. But the most well-known and primary function of the Fed is conducting monetary policy in pursuit of our dual mandate, which is price stability and maximum employment. Or, inflation and jobs.

We want inflation to be slow and steady ð our current target rate is 2 percent ð to keep pace with growth without devaluing the money in your bank account. By maximum employment, we mean, in an overly simplified nutshell, that if youôre looking for a job you can find one relatively easily. We make no guarantees that itôll be your dream job, but in a strong labor market, a paycheck shouldnôt be hard to come by.

Because people move in and out of the workforce all the time, unemployment will never be zero. When you graduate, for instance, and start looking for jobs, youôre considered unemployed from the time you start looking to the time you find one. A certain level of churn is healthy.

As for whatôs ideal, thereôs a sort of magic number for unemployment called the ñnatural rate.ò It changes depending on the makeup of the economy, and we never really know what the exact

number is until itôs in the rearview mirror, though we do have estimates. The current unemployment rate, 4.1 percent, is at or below the natural rate in my own view.

There are a host of other factors we look at, including the labor force participation rate, how frequently people quit jobs, how long jobs stay open, and how many net new jobs are created, just to name a few.

The Changing Labor Force

So, what does this all have to do with student loans?

A fairly tight labor market means that jobs are relatively abundant, which in turn, means fewer excess workers. Thatôs great if youôre looking for a job, but less so if youôre a business that wants to expand. Additionally, if most of the potential workforce is already off the sidelines, it means the labor force itself is unlikely to grow significantly. One of the more straightforward rules of the dismal science is that economic growth is basically growth in the labor force plus growth in productivity. Productivity growth is currently quite low, so if the labor market canôt keep pace, economic growth will suffer.

Ultimately, the strength of our workforce, and its trajectory, depends on a couple of factors, and one of those is how ð and how well ð itôs educated.

So I want to talk today about the ways the education system, particularly post-secondary education, affect the U.S. labor market.

Like all things, the current state of the American workforce has to be taken in context, and there are some important facets to consider in todayôs market.

First is the effect of technological advancement on the landscape. To be sure, this has been a factor since humanity first set out a rudimentary economy based on barter and trade millennia ago. The transition from Stone Age to Bronze Age to Iron Age reflects an evolution of the technology of those times. Fast forwarding to more recent events, the introduction of the steam engine, the assembly line, and refrigerated transport were all their own game-changing technologies that fundamentally altered the worldôs business and economic composition.

But whereas we once saw those technologies advance at centuriesô or decadesô paces, we are now in the throes of advancement that appears to upend industries on an almost constant basis.

In that sense, thereôs more change within jobs and industries, and more need for continual retraining and upskilling. As the labor market has steadily improved, one of the problems thatôs arisen is a mismatch of skills. That creates an issue when employers want to expand their businesses but canôt fill the jobs they already have.

And the faster an industry changes, the more that can affect the skills gap. Auto mechanics, for instance, now need a level of computer knowledge thatôs a world away from what wouldôve been required 20, or even 10 years ago. Think about how much of the dashboard is digitized and compare that with a car that was manufactured in the ô90s. Or have one of your professors describe it. Ask them to tell you about something called a ñCD player.ò

As the labor market continues to get tighter and tighter, workers with specific skills will likely be harder and harder to find. And if businesses canôt fill the jobs they have now, theyôre not going to be able to expand.

The second dynamic is demographics, which, again, has been a factor throughout history, but is different now than at any point before. As a parent of three millennial children, I am acutely aware that the younger generation feels unfairly maligned. But for this particular phenomenon ð one that will put distinct pressure on the economy and the workforce ð you can direct blame firmly at ñthe olds.ò

The baby boomers will be the largest generation to date to head into retirement. They are also living longer, which, as a boomer myself, I am very much in favor of. But it does mean an unprecedented number of people living out their post-working lives for longer than weôre used to. That means more people benefiting from Medicare, more people drawing Social Security, and more people needing assistance with everything from day-to-day care to transportation. Those programs are funded in large part by the American workforce, and that assistance will require more workers at a time when there are fewer and fewer left to come off the sidelines and in fields that require special education and skills.

Finally, there is the price of education. Iôm sure youôve heard, from time to time, that things are much easier now than they were in our day. We had to pore through textbooks, while you have Wikipedia. We took pictures with film and couldnôt make them look better after. We walked to school in knee-deep snow. Up a hill. Both ways.

But on this count, the times are decidedly working against your favor.

Millennials are much more likely than older generations to have taken out a student loan.[1] And both the sticker price of tuition and the discounted rate have risen faster than incomes over the past 20 years. At the same time, state funding for higher education has been steadily diminishing. That was both a factor in the rise of tuition ð though certainly not its entire cause ð and will likely continue to get worse as those demographic trends I mentioned continue to play out. Local, state, and federal budgets will be even more pressed as funds increasingly go toward retirement benefits, pensions, and health care.

As tuitions have risen, and more people have started going to college, both the share of students who take out loans and the average amount of debt borrowed have grown substantially. It is now a larger proportion of consumer debt than auto loans or credit cards; in fact, itôs second only to mortgages.

The Impact of Student Debt

That reality doesnôt just affect the people holding the debt ð though itôs obviously a significant issue for them ð it affects the wider economy in a variety of ways.

First, the burden is starting to spread across generations within families. Second, it is affecting peopleôs life decisions after school. And third, it can exacerbate income disparity. All of these play a role in the countryôs economic future.

Taking those in turn: first, the multigenerational effects. Research shows that in the decade leading up to 2015, the number of adults over the age of 60 who took on student debt fully

[1] The Pew Charitable Trusts, *The Complex Story of American Debt: Liabilities in Family Balance Sheets* (2015), pewtrusts.org/~/media/assets/2015/07/reach-of-debt-report_artfinal.pdf.

quadrupled. Roughly three-quarters of those people assumed that debt on behalf of children or grandchildren.[2] That means a substantial number of people are holding debt who are either living on — or headed toward — fixed incomes in their retirement. Since those golden years are likely to last longer than their parentsô did, theyôre also more likely to encounter increased care costs, which creates added pressure. Not only is this a financial issue for families to contend with, it increases the likelihood of default.

Second, the looming specter of debt appears to be affecting areas of the economy that are fundamental to growth. Research by the Philadelphia Fedôs Consumer Finance Institute, as well as others in the Federal Reserve System, shows that student debt is affecting both small business formation and homeownership rates.[3, 4] Thereôs a narrative out there that millennials donôt want to buy houses. But what if they donôt feel that buying is an option?

Carrying a student loan burden in itself can both affect early career choices[5] and dissuade people from making another investment. But it also affects the ability to do so. Buying a house means having a down payment, and itôs difficult to accumulate a down payment when youôre paying off loans. It also means getting a mortgage, which requires good credit, and that credit is affected by the debt you carry. The ratio of your outstanding loans to your current income is one factor lenders assess, and meeting an acceptable bar can be especially difficult for people in their first few jobs out of college, when salaries arenôt as high as later in your career. It can also prove difficult for people in careers that pay less overall but are incredibly valuable, like teaching or social work.

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[2] Consumer Financial Protection Bureau, *CFPB Warns Student Loan Servicing Problems Can Jeopardize Long-Term Financial Security for Older Borrowers* (2017), https://www.consumerfinance.gov/about-us/newsroom/cfpb-warns-student-loan-servicing-problems-can-jeopardize-long-term-financial-security-older-borrowers/.

[3] Brent W. Ambrose, Larry Cordell, and Shuwei Ma, "The Impact of Student Loan Debt on Small Business Formation," Federal Reserve Bank of Philadelphia Working Paper 15-26 (2015).

[4] Zachary Bleemer, Meta Brown, Donghoon Lee, Katherine Strair, and Wilbert van der Klaauw, "Echoes of Rising Tuition in Students' Borrowing, Educational Attainment, and Homeownership in Post-Recession America," Federal Reserve Bank of New York Staff Report 820 (2017).

[5] Jesse Rothstein and Cecilia Elena Rouse, "Constrained After College: Student Loans and Early-Career Occupational Choices," *Journal of Public Economics* 95:1–2 (2011), pp. 149–163.

Student debt is also a different animal than say, auto loans or mortgages, because itôs non-dischargeable. That is, even if you file bankruptcy, you canôt get rid of it. This is rooted in a concern that people will look to unfairly dismiss their debt, even if they have sufficient incomes. I should note that research by my staff and others does not find evidence to support that theory.[6]

All in all, research by the Fedôs Board of Governors finds that in the first five years after school, a personôs chance of owning a home drops by 1 to 2 percentage points for every 10 percent of student debt a person holds.[7]

Ultimately, if the ability of our younger generations to participate in the economy is adversely affected, so, overall, is our economy.

Finally, thereôs the issue of parity and access to higher education. This question of access is important because the data show that the investment is absolutely worth it. Research from a number of sources, including our colleagues at the San Francisco and New York Feds, shows that overall, the investment in college still delivers a good return.[8] We have a visiting scholar at the Philadelphia Fed whose research delves even deeper, showing life-cycle returns on varying degree majors ð business and STEM pay off the most, in terms of financial return, followed by social sciences, then the arts and humanities.[9] His name is Doug Webber, heôs a professor at Temple, and he actually has a list of expected lifetime earnings broken down by major if you want to see whatôs in store.[10]

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[6] Rajeev Darolia and Dubravka Ritter, "Strategic Default Among Private Student Loan Debtors: Evidence from Bankruptcy Reform," Federal Reserve Bank of Philadelphia Working Paper 17-38 (2017).

[7] Alvaro A. Mezza, Daniel R. Ringo, Shane M. Sherlund, and Kamila Sommer, "On the Effect of Student Loans on Access to Homeownership," Finance and Economics Discussion Series 2016-010, Washington: Board of Governors of the Federal Reserve System, http://dx.doi.org/10.17016/FEDS.2016.010.

[8] See, for example, Jaison R. Abel and Richard Deitz, "Do the Benefits of College Still Outweigh the Costs," *Current Issues in Economics and Finance*, Federal Reserve Bank of New York, 20:3 (2014), and Mary C. Daly and Leila Bengali, "Is It Still Worth Going to College?" FRBSF Economic Letter (2014).

[9] Douglas A. Webber, "Are College Costs Worth It: How Ability, Major, and Debt Affect the Returns to Schooling," *Economics of Education Review* 53 (2016).

[10] Douglas A. Webber, "Projected Lifetime Earnings Broken Down by Major," http://www.doug-webber.com/expected_all.pdf.

The one caveat from all the research is that to reap the rewards of college, you have to finish. The returns to attending, but not graduating, are not as significant, and those who don't finish struggle much more with their debt burden.

I should say here that I have been speaking about post-secondary education in its broadest sense, and the issues associated with loans – particularly that taking on debt and not finishing a course of study can have adverse financial effects – applies to all its forms. I believe firmly that not everyone wants or needs a traditional bachelor's degree, and the Philadelphia Fed has done extensive work on alternative paths, from apprenticeships to skills training. There are a host of jobs that my staff has deemed "opportunity occupations," which pay at or above the median income but don't require a bachelor's. Practical training and skills development in both conventional and nonconventional sectors fill much needed gaps for employers and offer careers for people who prefer that route. But the constant across all these options is that education and training are necessary. Apprenticeships and other "learn and earn" programs are excellent models that ease financial burdens. But for those who do want a four-year degree, and for anyone who takes out a loan for any type of education, I want their opportunities and access to be the same as their wealthier peers.

I am concerned that the looming shadow of student debt, coupled with increasing uncertainty about loan forgiveness programs and income-driven repayment, may dissuade some potential students – particularly those from low- and middle-income families – from going to college or pursuing jobs in public service. And I'm additionally concerned that schools' budgetary constraints may contribute to fewer of those students succeeding if they do attend.

The financial considerations for families are fundamental, but there are other, less tangible factors that either erect barriers to entering college or affect students' success once they've enrolled. There are more elements to the school experience than just tuition and books, and campuses around the country have done great work to address that fact. Whether it's navigating office hours or finding resources like free tutoring, programs that focus on underserved students have been important factors in their success. There's a good body of research to back that up,

both qualitative and quantitative.[11] In fact, one of the Philadelphia Fedôs research teams is currently working with Rutgers Universityï Camden to assess the outcomes in one of its financial aid programs ð in this case, one that offers financial relief to students well into the middle-class cohort. Part of their goal is to clarify those additional support needs.

When I was at the University of Delaware, we had a program for students who were the first in their families to attend college. We had them arrive in June so they could spend a few months familiarizing themselves with experiences their families just couldnôt give them firsthand advice on. Some of it was academic, but a lot of it was soft skills, and it worked. Those students had first-year GPAs equivalent to their classmates whose families had a history of college attendance.

Increased cost pressures on institutions may force them to cut or curtail those programs, which would be a great loss, and disproportionately affect lower- and middle-income students.

While on the one hand this is a simple matter of fairness and the crux of the argument that a level playing field will ensure success of the best, not the best funded, it is also a matter of importance to the economy. Weôre talking about our future workforce, and to misallocate those resources, or funnel exceptional minds away from areas where they could have the most impact, is shooting ourselves in the foot.

Financial uncertainty and cuts to programs that support underrepresented students could exacerbate the achievement gap and increase income inequality. This isnôt just a social issue; research shows that inequality exacts a financial cost to the country as a whole.[12] We are also missing out on vast opportunities on a national scale if weôre not tapping all our resources. A recent study investigates what the authors call our ñlost Einsteins.ò The researchers looked into the backgrounds of patent holders in the United States and found some common themes: People who scored well on math tests in elementary school made up the majority, which wasnôt a surprise. But they also came overwhelmingly from privileged backgrounds ð low-income

[11] James J. Heckman and Tim D. Kautz, "Hard Evidence on Soft Skills," National Bureau of Economic Research Working Paper 18121 (2012), www.nber.org/papers/w18121.pdf.

[12] Era Dabla-Norris, Kalpana Kochhar, Nujin Suphaphiphat, Frantisek Ricka, and Evridiki Tsounta, *Causes and Consequences of Income Inequality: A Global Perspective*, International Monetary Fund (2015).

students who scored the highest on the tests weren't any more likely to hold a patent than wealthy kids with below-average math scores. There were similar results for women, minorities, and people who lived in the southeast portion of the country.[13] Since women alone make up more than half the population, the simple math tells us we're missing out on a lot of potential and productivity in a majority of the population.

Conclusion

The bottom line is that education is a good investment for the country as a whole. An educated workforce is a driver of growth and is crucial for sustained prosperity, and that's important for all of us.

It's vital that we ensure people can access the education they want and need and that we find ways to ease the financial burden for everyone. It's a fundamental element of the U.S. economy, and we'll be better off for it.

[13] Alex Bell, Raj Chetty, Xavier Jaravel, Neviana Petkova, and John Van Reenen, "Who Becomes an Inventor in America? The Importance of Exposure to Innovation," Stanford Institute for Economic Policy Research Working Paper 17-041 (2017).