

William C Dudley: The monetary policy outlook and the importance of higher education for economic mobility

Remarks by Mr William C Dudley, President and Chief Executive Officer of the Federal Reserve Bank of New York, at the Council for Economic Education's 56th Annual Financial Literacy & Economic Education Conference, New York City, 6 October 2017.

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Good afternoon. It is a pleasure to have the opportunity to speak at this Council for Economic Education (CEE) event, marking the CEE's 56th Annual Financial Literacy and Economic Education Conference. Given the hard lessons of the financial crisis—and the economic challenges still facing many Americans—there are few goals more worthy than promoting greater financial and economic literacy. As always, what I have to say reflects my own views and not necessarily those of the Federal Open Market Committee (FOMC) or the Federal Reserve System.¹

Personal educational experience

Before discussing the economic outlook and the role of education in income mobility, I will offer a few remarks on my own educational experience. While it may not be surprising that I have a Ph.D. in economics, the path that led me to the University of California, Berkeley, is a bit unusual.

I started college in the 1970s at Columbia University. On the positive side, the professors were engaging, and I had the opportunity to read the great books of the university's core contemporary civilization curriculum. But, I was troubled by the emphasis on grades and test taking. I wanted something that was more free-form. The idea was to find an environment that fostered learning for learning's sake. So, in a small act of rebellion—after all, it was the early 1970s and I was a teenager—I decided to transfer to New College in Sarasota, Florida. New College provided a strong liberal arts, cross-disciplinary, and flexible education program that relied—as it does today—on an unstructured format of evaluations, study programs with individual professors, and contracts rather than grades. I like to call it “graduate school for undergraduates,” because it really is a place that encourages students to engage intellectually, read and think critically, and communicate effectively.

This experience made me a strong advocate of a liberal arts education, which I believe is now more valuable than ever, given the greater importance of synthesizing and evaluating the vast array of information we have at our fingertips. The cross-disciplinary approach of a liberal arts program is also vital to understanding and solving complex problems. I believe that training—combined with the excellent education in economics I got at Berkeley—helped me to better diagnose what was going wrong in 2007 and 2008, and how the Federal Reserve could be most effective in our response to the crisis.

Economic and monetary policy outlook

Turning to the economic outlook, the damage wrought by Hurricanes Harvey, Irma, and Maria has imposed immeasurable hardship on many. And, the damage will undoubtedly disrupt commerce for some time. However, these effects are likely to be relatively modest in the context of the national economy. Natural disasters tend to depress economic activity initially, but once the recovery and reconstruction efforts get underway in earnest, such disasters actually serve to lift economic activity.

Looking beyond the storm effects—which will make interpreting near-term economic data releases more difficult—the economy remains on a trajectory of slightly above-trend growth at

about 2 percent, and the fundamentals supporting continued expansion are generally quite favorable. Low unemployment, sturdy job gains (recognizing the near-term negative impact of the storms), and rising wages (even at a pace below previous expansions) are lifting personal income. Household wealth has been boosted by rising home and equity prices, and household debt has been growing relatively slowly, contributing to a healthy household balance sheet. Thus, consumer spending should continue to advance in coming quarters.

Business fixed investment outlays are also likely to continue to rise. With the supply of labor tightening, there are greater incentives for businesses to invest in labor-saving technologies. Investment spending should also benefit from a better international outlook and the improvement in U.S. trade competitiveness caused by the dollar's recent weakness. The softer dollar and solid growth abroad also suggest that the trade sector will no longer be a significant drag on economic growth.

Turning to the outlook for inflation, I have been surprised by the persistence of the shortfall from the FOMC's 2 percent long-run objective. While some of this year's shortfall can be explained by one-off factors—such as the sharp fall in prices for cellular phone service—its persistence suggests that more fundamental structural changes may also be playing a role. These include the increased ability of prospective buyers to compare prices across different sellers quickly and easily, the shift in retail sales to online channels of distribution from traditional brick-and-mortar stores, and the consequences of these changes on brand loyalty and business pricing power.

Over the coming months, I hope that we will be better able to differentiate between these competing explanations. If it turns out that structural changes have played a significant role, I would generally view this as a positive, rather than negative, development. It would imply that the U.S. economy could operate at a higher level of labor resource utilization without generating a troublesome large rise in inflation. More people could be put to work on a sustainable basis, enabling them to gain opportunities not just to earn greater income, but also to develop their skills and grow their human capital.

Slightly above-trend growth is gradually tightening the U.S. labor market, which should support a rise in wage growth over time. When combined with a firmer import price trend—partly reflecting recent depreciation of the dollar—and the fading of effects from a number of temporary, idiosyncratic factors, I expect inflation will rise and stabilize around the FOMC's 2 percent objective over the medium term. Thus, even though inflation is currently somewhat below our longer-run objective, I judge that it is still appropriate to continue to remove monetary policy accommodation gradually. This judgment is supported by the fact that financial conditions have eased, rather than tightened, even as the FOMC has raised its short-term interest rate target range by 75 basis points since last December.

But, the upward trajectory of the policy rate path should continue to be shallow, in part because the level of short-term interest rates consistent with keeping the economy on a sustainable long-run growth path is likely to be considerably lower than it was in prior business cycles.

The FOMC recently launched the process of balance sheet normalization—in which an increasing proportion of maturing Treasuries and agency mortgage-backed securities (MBS) repayments are allowed to run off the Federal Reserve's balance sheet. While this process also should exert some monetary policy restraint over time, I believe the impact will be quite modest. Not only was this shift in policy widely anticipated, but we also have seen that the impact on the level of long-term interest rates has been small as expectations have adjusted.

The economy has made great strides in recovering from the Great Recession, as the unemployment rate has fallen from 10 percent to 4.2 percent, aided by accommodative monetary policy. Measures of underemployment have also improved considerably and are near pre-crisis levels. Stronger labor market conditions are perhaps the best means to improve the economic well-being of most Americans, particularly those who have been struggling and are most

vulnerable to economic downturns.

And, as discussed in the Federal Reserve's July Monetary Policy Report and in Chair Yellen's accompanying testimony before Congress, it is encouraging that unemployment rates continue to fall for most demographic groups, including African-Americans and Hispanics.² At the same time, we should remain concerned that the jobless rates for those groups remain above the unemployment rate for the nation.

Recent U.S. Census Bureau estimates of household income growth also provide some reason for optimism. Median real household income rose 3.2 percent in 2016, after strong gains the prior year. Gains were particularly notable among African-American and Hispanic households, and the poverty rate fell to near pre-crisis levels. While this is good news, I think we can all agree that we have a long way to go to improve income inequality and mobility in the United States. As I see it, these are among the most important issues we face as a nation.

Income mobility and education

Now, it is clearly the case that, given differences in individuals' abilities, a free-market society will generate some level of inequality. However, there are persistent trends toward growing inequality and diminished economic mobility—and in my view, these are problematic.³ First, income inequality has widened notably since about 1980.⁴ Second, and more distressing, is a relatively low rate of economic mobility, or the degree to which individuals or families can move up or down in the income distribution over time. For example, the fraction of children who earn more than their parents has fallen from 90 percent to 50 percent over the past half century, and only 37 percent of parents believe that their children will be better off financially than they are, according to a recent Pew Research Center survey.⁵

High inequality combined with a low rate of mobility is particularly problematic in a democratic society. In short, it means that being born into a low-income family is likely to severely limit an individual's opportunities and well-being over his or her lifetime. The United States fares notably weaker on both dimensions relative to its OECD peers.⁶ That is concerning, and something we should be working to address.

One significant initiative we have taken within the Federal Reserve System is the establishment of the Opportunity and Inclusive Growth Institute at the Minneapolis Fed, which conducts research and makes recommendations on the structural barriers to economic advancement in the nation. The New York Fed has been, and will continue to be, an active participant and supporter of this initiative.

Let me now turn to the primary routes of economic mobility and the impediments that too often block them. The primary avenue to higher incomes for most people is investment in their human capital, namely through education. Indeed, the income returns on education are very high, and they continue to rise in spite of very significant increases in the supply of highly educated workers during much of the 20th century. Since the 1980s, however, increases in the supply of well-educated workers in the United States have slowed, while demand for these workers has accelerated due to technological change. These forces have been a major contributor to the increase in the college wage premium.⁷ While college graduation rates in the U.S. have stagnated, those in many other OECD countries have continued to rise. As a result, only one-quarter of those in the 25-to-34 age bracket in the United States have more education than their parents, compared with an OECD average of one-third.⁸ This represents a dramatic decline in college education's influence as an engine of upward mobility. So, part of a solution to the increase in inequality and the reduction in social mobility is to increase the level of educational attainment in the population.

There are many barriers to expanding post-secondary education, however. From the potential

student's perspective, a lack of information, low college preparedness, and high costs are all substantial barriers to college attendance and completion, and these barriers restrict social mobility. Let me discuss each of these in turn.

By lack of information, I mean the recognition that in spite of its high price tag, a college degree typically offers an even larger payoff in terms of future earnings. Many aspects of the college attendance decision are complex and hard to predict, especially for students from families without much experience with higher education. For example, research indicates that decisions about college attendance are highly correlated with an understanding of the future payoffs from attendance and particular majors.⁹ New York Fed research shows evidence of systematic underestimation of the average benefits—and overestimation of the costs—of a college education, with larger biases among lower-income and non-college households.¹⁰ Families may not realize that listed tuition prices may not be what a particular student actually pays. Moreover, misperceptions about the net return from a college degree can be consequential, influencing parents' expectations and intentions for their children's college attendance.

Importantly, however, these expectations are not hardwired. Evidence from an information experiment indicates that students do respond to new information by revising their expectations and their education choices.¹¹ This suggests that making information about higher education decisions more available to families—particularly those with less experience with higher education—is a promising way to expand economic mobility. I was fortunate as a child that I didn't face this problem. Both my parents went to college and there was no doubt among us about the payoff from higher education.

Another concern is the lack of college preparedness among new college entrants. Nearly seven out of 10 students entering public two-year institutions and four out of 10 students entering four-year public institutions take remedial courses in college.¹² Generally, these are courses they should have taken in high school. The costs of taking these courses in college are high, especially because they do not count for college credit. Low readiness contributes to persistently low college completion rates, with only 55 percent of first-time undergraduates completing a degree within six years.¹³ College dropout rates are especially high among lower-income, part-time, and nontraditional students, with high costs, low perceived ability to pay, and a lack of information about the returns to degree completion also contributing to the high dropout rate.

The importance of college readiness underscores the value of high-quality K-12 schooling. But, research indicates that fewer than half of five-year-olds from low-income families possess the math and reading skills, behaviors, and overall health required for learning success, compared to 75 percent of children from middle- and high-income families.¹⁴ These differences are important because they have long-lasting effects on academic achievement and future careers. A substantial body of evidence, including research by economists at the Minneapolis Fed, points to very large economic returns to high-quality preschool and early-childhood development programs.¹⁵ Clearly, such programs can play an important role in improving economic mobility.

I benefited from nursery school and kindergarten and a mother who taught me to read before I entered elementary school. And, when my junior high school tried to move me out of an accelerated math program, my mom intervened and got me back in.

Paying for college is another major impediment to college attendance and completion. While college is generally a good investment, it has become increasingly expensive over the last several decades to attend a four-year program, as costs have risen considerably faster than wages—especially wages for all but the very top of the income distribution. This means that college has become increasingly unaffordable for those families who need it most, if we are to increase social and economic mobility. Of course, one result of the increasing unaffordability of college education is that fewer people get a college degree, which could help account for the

slowdown in the growth rate of the college-educated workforce that I discussed earlier. However, recent research by my colleagues at the New York Fed shows that young Americans have mostly adjusted to rising tuition and fees not by foregoing college education, but rather by amassing more debt.

Over the past few decades, funding for higher education has shifted from state and local sources to students and their families. While the federal student loan program has helped ease that transition, the result has been that more students are leaving college with significantly higher amounts of debt. In fact, student loan debt has grown 170 percent over the last decade and now totals over \$1.3 trillion.¹⁶

To be clear, I don't want to downplay the importance of student loans. When accompanied by college completion, they allow students to make what generally turns out to be a very worthwhile investment. I personally benefited from student loans while at Berkeley. But, compared to alternative ways of financing higher education—such as greater government support for public universities and increased federal education grants—student loans can have adverse consequences. This is especially true when loans are taken on by those who don't complete their education. For borrowers with large student loan balances, such consequences include slow or late repayment, serious delinquency, and default.¹⁷ New York Fed researchers have shown that such unfavorable outcomes are related to family background. Thus, at times, student loans can have the perverse effect of limiting social mobility.

In addition, our research indicates that, for any given level of educational attainment, workers who have student debts are less likely to own homes than those who got their education without incurring debts. Certainly, for those who have difficulty repaying their student loans, the resulting damage to credit scores will make obtaining a mortgage very difficult, especially under today's lending standards. A student loan default, which is unhappily common, means that borrowing to buy a home is essentially impossible. And, we know that these factors—slow repayment, delinquency, and default—are most prevalent among those from modest family circumstances.

This connection between rising college costs, increased student borrowing, and reduced homeownership is important for inequality and social mobility because, for the great majority of American families, increasing home equity is the major form of wealth accumulation.¹⁸ Thus, changes over the last few decades in the way that college is financed mean higher education is less able to lift people from poverty into the middle class.

I should note here that economic education has an important role to play in mitigating these challenges, which increasingly arise as debt becomes a more common part of the college experience. For example, financial literacy and the skills taught by educators have been demonstrated to better prepare young people for the management of their finances, enhancing their well-being. Financial literacy allows people to better understand the terms of student loans and the consequences of missed payments, and how to accumulate wealth.¹⁹ I strongly support the CEE's efforts to bring economic knowledge to young people, as I believe that it is increasingly vital for everyone, and has an especially important role in fostering social and economic mobility.

Other factors that can foster or inhibit social mobility are the practices of universities themselves. In some very recent work, Raj Chetty and his co-authors have documented the role that different universities play in fostering economic mobility.²⁰ From my perspective, the most important findings are that access to the best universities is very closely related to parent income—children from wealthier families are more likely to go to Ivy League schools, for example. Yet, those students from poorer families who actually are admitted to the best universities do just as well in their future earnings as those from more advantaged backgrounds.

Part of the problem, aside from cost, is the legacy admission policies of elite schools—where children of alumni receive preferential access. This is patently unfair, and scrapping such

policies would help increase economic mobility.²¹ I really don't see how our best universities can continue to justify this practice. Yes, fund-raising might suffer slightly over time—but I suspect the impact would be very small. More importantly, do we really want to encourage what is essentially a “donate to admit” policy at our major universities? Such an approach only preserves the status quo and constrains economic mobility.

The research shows that upward mobility differs substantially across colleges. Ivy League schools are good at producing top earners, but, as I noted, they accept very few lower-income students, so their impact on income mobility is small. Meanwhile, other schools with economically diverse student bodies produce few high earners, and their impact is likewise small. Then there are certain schools—some of which can be found in the CUNY and California state systems—that manage to produce a large number of high earners from economically diverse student bodies. Learning exactly how they do it and how it can be replicated strikes me as a first-order question for further study.

While I am distressed by the high and increasing levels of inequality and diminished mobility that our economy has delivered over the last several decades, I remain optimistic about the future.

There is more attention now to inequality and low intergenerational mobility than I can recall at any time during my professional life. Organizations like the CEE and the National Association of Economic Educators exist to improve awareness of economic concepts. This enhances the ability of young people to make better financial decisions and helps to close the gaps in knowledge that contribute to inequality. Top-tier researchers in both academia and the Federal Reserve System are focusing their attention on the causes, consequences, and solutions of this social problem, using better data, methods, and means of communicating their results. Even more importantly, policymakers are also paying close attention. Ultimately, I believe we will identify and implement policies that can make the dream of a better life a reality for more of our fellow citizens.

Thank you again for your kind attention. I would be happy to take your questions.

¹ Gerard Dages, Jack Gutt, Andrew Haughwout, Anand Marri, and Wilbert van der Klaauw assisted in preparing these remarks.

² Board of Governors of the Federal Reserve System, [Monetary Policy Report – July 2017](#), July 7, 2017.

³ See William C. Dudley, [Remarks at the Economic Press Briefing on the Regional Economy](#), August 10, 2017.

⁴ See the New York Fed's [Economic Press Briefing on Wage Inequality in the Region](#), August 10, 2017.

⁵ Pew Research Center, [Global Publics More Upbeat About the Economy](#), June 5, 2017.

⁶ Corak, 2013. “Income Inequality, Equality of Opportunity, and Intergenerational Mobility.” *The Journal of Economic Perspectives*, vol. 27, no. 3 (Summer). 79–102.

⁷ Goldin and Katz, 2007. [Long-Run Changes in the U.S. Wage Structure: Narrowing, Widening, Polarizing](#). NBER Working Paper No. 13568 (November, revised December).

⁸ OECD, 2015. [Education at a Glance 2015: OECD Indicators](#), OECD Publishing. p. 78.

⁹ Wiswall and Zafar, 2011. [Determinants of College Major Choice: Identification using an Information Experiment](#). Federal Reserve Bank of New York Staff Reports, no. 500 (June; revised August 2014).

¹⁰ Bleemer and Zafar, 2015. [Intended College Attendance: Evidence from an Experiment on College Returns and Costs](#). Federal Reserve Bank of New York Staff Reports, no. 739 (September).

¹¹ Wiswall and Zafar, 2015. “How Do College Students Respond to Public Information about Earnings?” *Journal of Human Capital*, vol. 9, no. 2 (Summer). 117–169.

¹² Chen, 2016. [Remedial Coursetaking at U.S. Public 2- and 4-Year Institutions: Scope, Experiences, and](#)

[Outcomes](#) (NCES 2016–405). U.S. Department of Education. Washington, DC: National Center for Education Statistics.

- ¹³ Shapiro, Dunder, Khasiala, Yuan, Nathan, and Hwang, 2015. [Completing College: A National View of Student Attainment Rates – Fall 2009 Cohort](#) (Signature Report No. 10). Herndon, VA: National Student Clearinghouse Research Center (November).
- ¹⁴ Isaacs, 2012. [Starting School at a Disadvantage: The School Readiness of Poor Children](#). Brookings Institution Center on Children and Families (March).
- ¹⁵ Wat, 2010. [The Case for Pre-K in Education Reform. A Summary of Program Evaluation Findings](#). The Pew Center on the States (April). Grunewald and Rolnick, 2010. [An Early Childhood Investment with a High Public Return](#). The Regional Economist, Federal Reserve Bank of St. Louis (July).
- ¹⁶ See the New York Fed's [Economic Press Briefing on Household Borrowing, Student Debt Trends and Homeownership](#), April 3, 2017.
- ¹⁷ For example, the default rate for students from relatively modest backgrounds is around 35 percent, 2-3 times that of those from wealthier backgrounds. See [Press Briefing on Household Debt, with Focus on Student Debt](#), p.26.
- ¹⁸ Bleemer, Brown, Lee, Strair, and van der Klaauw, 2017. [Echoes of Rising Tuition in Students' Borrowing, Educational Attainment, and Homeownership in Post-Recession America](#). Federal Reserve Bank of New York Staff Reports, no. 820 (July). Tracy, Schneider, and Chan, 1999. [Are Stocks Overtaking Real Estate in Household Portfolios?](#) Current Issues in Economics and Finance, vol. 5, no. 5 (April).
- ¹⁹ Zafar, Bleemer, Brown, and van der Klaauw, 2014. [What Americans \(Don't\) Know about Student Loan Collections](#). Federal Reserve Bank of New York Liberty Street Economics (June 5).
- ²⁰ Chetty, Friedman, Saez, Turner, and Yagan, 2017. [Mobility Report Cards: The Role of Colleges in Intergenerational Mobility](#). NBER Working Paper No. 23618 (July).
- ²¹ See Richard Reeves, *Dream Hoarders* (Washington, D.C.: Brookings Institution Press, 2017).