

RESEARCH BRIEF

The Distributional Effects of Student Loan Forgiveness

Based on BFI Working Paper No. 2020-169, "[The Distributional Effects of Student Loan Forgiveness](#)" by Sylvain Catherine, Assistant Professor, University of Pennsylvania; and Constantine Yannelis, Assistant Professor, Chicago Booth

KEY TAKEAWAYS

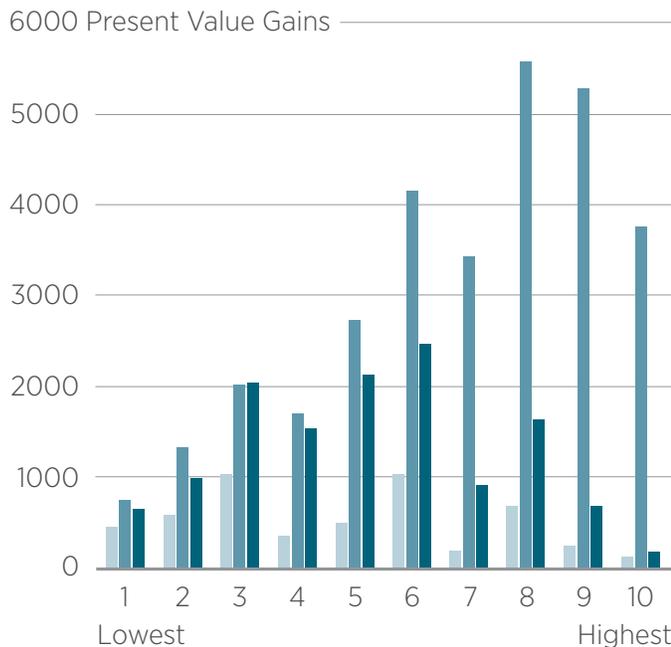
- ✓ US student loan debt reached \$1.6 trillion in 2020.
- ✓ Many politicians and policymakers are calling for student debt loan forgiveness.
- ✓ While most advocates demand universal debt forgiveness, such plans disproportionately favor those with higher incomes.
- ✓ In contrast, plans that forgive loans based on income accrue more to middle income earners.

Throughout the 2020 US presidential campaign, increasing attention was paid to the staggering amount of student loan debt carried by current and former students, which reached \$1.6 trillion. That number continues to rise, along with calls for the new administration to deliver some form of student loan forgiveness. At a time when many individuals, especially those with low to moderate incomes, are struggling during a pandemic-induced recession, student debt forgiveness is viewed as both fair to individuals and important for economic growth.

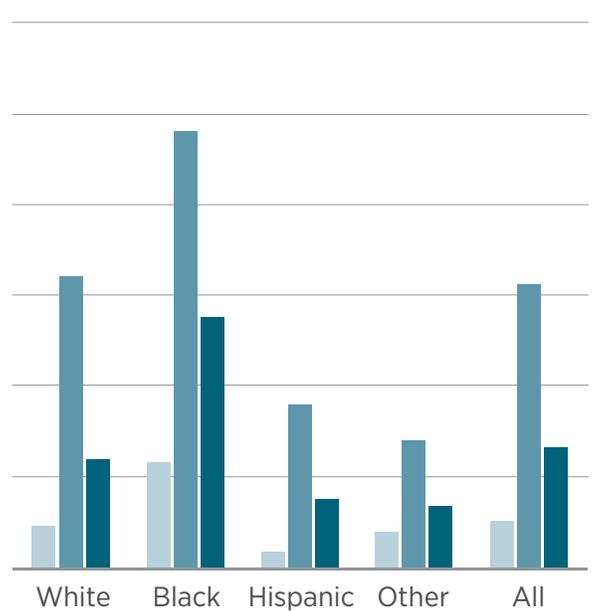
However, not all debt forgiveness plans are created equal. Is universal forgiveness the answer? On the one hand, it may seem obvious that someone earning, say, \$30,000 with \$60,000 in student debt will have a hard time affording a home or otherwise improving her quality of life. In this case, universal debt forgiveness may make sense. But how about the individual who earns \$150,000 a year with \$75,000 in debt? Clearly, this person is not as desperate as our low-income earner. Likewise, plans that cap debt forgiveness at a certain amount also tend to favor those with higher incomes.

Figure 1 • Targeted Enrollment in IDR

By Earning Decile



By Ethnicity



- 10% above 1.5x poverty line
- 10% above 1.5x poverty line, 10-year forgiveness
- 10% above 3x poverty line

Notes: This figure displays the average present value gains from targeted policies of automatic enrollment in income-driven repayment, by within-cohort earnings decile and ethnic group, including households without student loans. First, we consider the case in which households would pay 10% of their discretionary earnings, in line with current IDR rules. We also consider (i) a variation of this policy in which loans are forgiven 10 years after the first repayment and (ii) a variation in which households pay 10% of their earnings only above three times the poverty line. In all cases, payments are capped by the default fixed payment. We assume that these policies are targeted towards households for which they generate present value gains.

What’s a policymaker to do? In “The Distributional Effects of Student Loan Forgiveness,” Sylvain Catherine and Constantine Yannelis offer findings that suggest a policy path that improves upon an existing loan forgiveness plan, known as Income-Driven Repayment (IDR), which links payments to income and which forgives remaining debt after, say, 20 or 25 years, depending on the plan. This means that low-income earners can receive substantial loan forgiveness over time, and the amount of forgiveness can be adjusted to achieve desired goals.

How much forgiveness is enough?

The call for student debt forgiveness comes at a time when many are also concerned about increasing wealth and income inequality. These concerns heighten the desire for a “fair” forgiveness plan, or one that does not benefit high-income earners more than low-income earners. Of course, on average, those who

graduate with a post-secondary degree earn more than those who do not, so student debt forgiveness plans, by definition, are geared toward higher-wage earners. Further, many holders of high loan balances completed graduate and professional degrees and thus earn even higher incomes. As illustrated above, universal debt forgiveness policies would disproportionately benefit high earners. In addition, high earners are likely to pay down debts earlier, and thus might have lower unpaid balances, making debt cancellation less attractive to them.

While student loan balances and income are positively correlated, student loan balances do not accurately represent the actual cost of forgiving student debt, nor do they capture the distribution of benefits between low and high-income households. Many low-income families struggle to make payments to significantly decrease their balance over time. However, to

On average, those who graduate with a post-secondary degree earn more than those who do not, so student debt forgiveness plans, by definition, are geared toward higher-wage earners. Further, many holders of high loan balances completed graduate and professional degrees and thus earn even higher incomes. Likewise, universal debt forgiveness policies would disproportionately benefit high earners.

the extent that, under current law, their debt will ultimately be forgiven, their balance can greatly overstate the value of actual future payments, and therefore how much debt cancellation would benefit these families financially and how much it would actually cost taxpayers.

To empirically analyze the efficacy of various loan forgiveness schemes, the authors use the 2019 Survey of Consumer Finances (SCF) to estimate the present value of every student loan. Specifically, they rely on detailed loan-level data to forecast future payments and the evolution of a loan's balance until it reaches zero or is forgiven. Their analysis includes the current balance and most recent payments, family size, earnings, and the number of years left before the loan is forgiven under current law. The authors define the present value as the sum of expected payments discounted at the risk-free rate, and they use those estimates to explore the distributional impacts of forgiveness policies.

Universal or capped forgiveness. These plans either discharge all debt or a limited amount. Under a universal loan forgiveness policy, in present value terms, the average individual in the top earnings decile would receive \$5,944 in forgiveness, while the average individual in the bottom earnings decile would receive \$1,070 in forgiveness. As expected, those who earn more have, on average, higher debts and would likewise benefit disproportionately. In the aggregate, this difference is stark. Households in the top

30 percent of the earnings distribution receive almost half of all dollars forgiven. These patterns hold under cap policies, with higher-income households benefiting from more loan forgiveness.

Income-Driven Repayment Plans. As noted above, these plans tie loan payments to income and forgive balances after a fixed time, often 20 or 25 years. Recall that IDR plans already exist, so to address the current call for increased debt forgiveness, the authors devise a scenario that incorporates the following three factors:

1. Enrolling all borrowers who would benefit from IDR.
2. Raising the threshold above which borrowers must pay a portion of their income.
3. And accelerating loan forgiveness.

In contrast to universal forgiveness, this more generous IDR plan leads to substantial forgiveness for those in the middle of the earnings distribution. For example, individuals in the bottom half of the earnings distribution would receive three-fifths of dollars forgiven, and borrowers in the top 30 percent of the earnings distribution would receive just one-fifth. Raising the threshold above which borrowers pay a portion of their income and earlier loan forgiveness both lead to a large increase in forgiveness; however, under accelerating loan forgiveness these benefits accrue to the top of the earnings distribution, while increasing the repayment threshold leads to large benefits for middle-income borrowers.

Conclusion

Calls for student loan debt forgiveness, however well intentioned, have distributional effects that may challenge some proponents' views of fairness. The authors show that these distributional effects depend on the present value of loans discharged to different individuals. By computing the present value of student loan forgiveness under different options, the authors find that universal and capped forgiveness policies are highly regressive, with the vast majority of benefits accruing to high-income individuals. This is likely not the outcome that most debt forgiveness advocates have in mind.

On the other hand, enrolling more borrowers in more generous IDR plans that link repayment to earnings, would favor borrowers in the middle of

the income-distribution. For policymakers, this marks a key consideration as they review plans that most efficiently, and effectively, apply limited resources to this pressing policy question.

Unfortunately for policymakers, the distributional effects described in this paper are not the only factor driving the debate. They must also consider such issues as how student loans impact career choices, whether credit constraints from student debt hinder entrepreneurship, how debt overhang may distort labor supply decisions, and whether debt relief may have macroeconomic consequences. However, this paper does provide a guide: future research on these and other issues should analyze tradeoffs between the distributional impacts of loan forgiveness and other potential benefits of borrower relief.

CLOSING TAKEAWAY

A more generous IDR plan leads to substantial forgiveness for those in the middle of the earnings distribution. For example, individuals in the bottom half of the earnings distribution would receive three-fifths of dollars forgiven, and borrowers in the top 30 percent of the earnings distribution would receive just one-fifth.

READ THE WORKING PAPER

NO. 2020-169 · NOVEMBER 2020

The Distributional Effects of Student Loan Forgiveness

bfi.uchicago.edu/working-paper/2020169

ABOUT OUR SCHOLAR



Constantine Yannelis

Associate Professor of Finance, Chicago Booth

chicagobooth.edu/faculty/directory/y/constantine-yannelis



Written by David Fettig, BFI Senior Writer and Editor



Research Brief: "The Distributional Effects of Student Loan Forgiveness"

Becker Friedman Institute at the University of Chicago · 5757 S. University Ave, Chicago, IL 60637 · Main: 773.702.5599 · bfi.uchicago.edu