

Student Debt: The FAQs on the Pay As You Earn (PAYE) Repayment Option

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In August 2013, President Obama announced a major drive to increase enrollment in “Pay As You Earn” (PAYE), a federal student loan repayment option based on income and family size.¹ PAYE was introduced by the administration in 2011 as a temporary relief for struggling borrowers.

With the planned expansion, however, the program is fast turning into a permanent part of higher education funding. PAYE is particularly being targeted to young college graduates, who have been among the worst affected by the Great Recession and slow recovery.²

Given PAYE’s increasing role as a policy tool, it’s important we get our FAQs straight on what PAYE is and the potential implications for borrowers, colleges and universities, and taxpayers. This fact-sheet addresses some common questions about PAYE, to help inform the discussion surrounding the future of higher education funding.

1. What is “Pay As You Earn” (PAYE)?

Pay As You Earn (PAYE), which took effect in December 2012, is a type of federal student loan repayment plan where monthly payments are based on annual income and family size. PAYE allows eligible borrowers with direct federal loans to pay a maximum 10% of their monthly discretionary income toward student loans. Monthly payments are adjusted each year to reflect the borrower’s annual income as filed in their tax returns, although the borrower may request additional adjustments at any time in the event of changes in income.³

Eligible borrowers can stay on PAYE indefinitely. However, if the monthly payment under PAYE becomes greater than the monthly payment amount owed under the current standard repayment plan for federal student loans, it is adjusted downward to the lower amount. The standard repayment option has a 10-year term compared to 20-years for PAYE.

PAYE is by far the most generous income-based repayment (IBR) option to date for student loans. As a result, it is commonly accepted that going forward PAYE will be the version of IBR borrowers enroll in.

2. How is PAYE more generous than the previous IBR option?

First, maximum monthly payments for eligible borrowers are capped at 10% of discretionary monthly income, compared to 15% for the previous IBR option. That means, all else equal, the government is providing a bigger subsidy over time than before. Second, all remaining debt, interest and principal, is forgiven after 20 years instead of 25 as with the previous IBR option (and 10 years for those with careers in public service).⁴ The five year reduction in term can result in significant cost savings for the borrower, even making enrollment in PAYE financially worthwhile in cases when IBR was not. (See Question 11 for more.)

Also, as with the previous IBR option, if the monthly payment doesn't cover the accrued interest amount, the government will forgive any unpaid interest for up to three consecutive years from the beginning of repayment.

3. Which loans are eligible for PAYE?

Almost all direct federal student loans that include at least one disbursement after October 1, 2011, and no outstanding balance before October 1, 2007, are eligible. PLUS loans made to parents, consolidated loans that include PLUS loans made to parents, and federally guaranteed loans are ineligible. Private student loans not guaranteed by the government are also ineligible.⁵ To note, the federal guaranteed loan program was discontinued in 2010, so all new federal loans are direct loans.⁶

Borrowers with federal student loans that are not eligible for PAYE may still be eligible for another, less generous, income-based repayment option.

4. Which borrowers benefit from PAYE?

PAYE greatly benefits student loan borrowers struggling to make their monthly payments under the standard repayment plan. For eligible borrowers, the lower monthly payments will help avoid default and provide additional financial security to the borrower, since legally student loans cannot be discharged in bankruptcy.

The biggest beneficiaries of PAYE are high-debt borrowers with low-to-middle incomes. Currently, average debt per borrower is over \$26,000⁷, and as of the end of 2012, 30% of borrowers had an outstanding balance of \$25,000 or more⁸.

While average student debt per borrower has increased 30% since 2000, PPI research shows the real earnings of young college graduates have fallen by 15% over the same period.⁹ Simply put, as the cost of college keeps rising, fewer graduates are able to pay it off.¹⁰

5. How much can a borrower save with PAYE?

The potential savings to eligible borrowers may be quite significant, on a monthly basis and over time. Consider a borrower with the average \$26,000 in eligible student debt upon graduation, with a 6.8% interest rate. Under the standard repayment plan, currently the default plan for federal loans, monthly payments would be \$299.21 regardless of income. Under PAYE, monthly payments for a single borrower with no dependents range from \$0 for an annual income of \$15,000 or less, to \$277 for an annual income of \$50,000 (once the PAYE amount is greater than \$299.21, the borrower pays the standard amount).

In other words, borrowers could pay substantially less with PAYE each month. For example, data taken from the Census Bureau shows recent college graduates with a degree in Psychology earned an average annual income of \$30,000.¹¹ Under PAYE, for the scenario above, this translates into a monthly payment of \$110, 63 percent less than under the standard repayment plan.

Three scenarios providing detailed repayment comparisons between PAYE, the previous version of IBR, and the standard repayment options can be found in the Appendix.

6. What are some downsides of PAYE for borrowers?

With PAYE, students don't pay the true price for college. In economic terms, all subsidies distort decision-making. This raises the possibility that students will be less likely to make decisions – about which school to attend, which field to study or how long to attend – that maximize return on investment. That could potentially hurt their long-term earnings potential, and, with the 20-year forgiveness provision, taxpayers may be forced to pay the difference.

Moreover, living with student debt long-term may negatively impact future ability to borrow and invest. According to the Federal Reserve, credit scores for borrowers age 30 with student debt already are lower than those age 25 without student loans.¹² Since those with higher education and incomes are more likely to invest – say, by buying a home – extending the term could also hurt their long-term asset-building potential.

7. What will PAYE expansion do to control rising tuition?

Nothing. One major drawback of PAYE is that it re-allocates the crisis of college affordability from students to taxpayers. It provides no incentive for colleges and universities to control costs, nor does it structurally address the poor employment prospects facing young college graduates.

In fact, there are already reported cases of abuse by schools using PAYE, for example using it as a marketing tactic for prospective students.¹³

8. If the concept of IBR has been around for a while, why is it now getting increased attention?

For several reasons. First, PAYE is the most generous form of IBR yet. Second, PAYE has become the main policy tool used by the Obama administration to address the crisis of college affordability and to address the \$1.3 trillion and rising student debt burden. In a major August 2013 higher education policy speech, President Obama announced the launch of a massive campaign to increase enrollment in IBR, which up to now has been relatively low.¹⁴ Third, there is increased conversation about making PAYE the automatic repayment plan for all federal student loans.

The increasing prominence of PAYE's role in higher education funding makes it important to understand the budgetary, economic, and societal implications of IBR on students, post-secondary institutions, and government.

9. Isn't one purpose of PAYE to help close the gap between earnings by major in early years?

This is only possible to a certain extent. The reality is, some majors will never catch up to others. The gap in lifetime earnings potential by major is documented by the Census Bureau¹⁵ and by recent studies from organizations such as Georgetown University¹⁶. Of course, it's important to note that those with a college degree still earn on average \$1 million more over their lifetime than those without a college degree.¹⁷

Regardless of student loan repayment plan, borrowers should go into their loans with fair expectations of the return on investment to avoid over-borrowing.

10. Does it matter for borrowers if student loans have a 10-year or 20-year repayment?

It depends. One way to think about the benefit to students from PAYE is to look at the net present value (NPV) of payments under PAYE compared to those under the standard repayment plan. The plan with a lower NPV is a better deal because it costs less when discounted to present day terms.

For example, consider again the borrower making loan payments of \$110 per month under PAYE instead of \$299.21 under the standard repayment plan. Using a discount rate of 4.22% (the latest national average rate on 30-year fixed mortgages*), and assuming income remains constant, the estimated net present value (NPV) would be \$17,900 under PAYE and \$29,330 under the standard plan. That means in present day terms PAYE costs the borrower 40 percent less.

Conversely, it's also possible to envision a scenario where the longer repayment terms under PAYE do not provide a better deal for borrowers. In cases where a borrower's income rises relatively quickly, the net present value of PAYE could actually be higher than under the standard plan (see scenario 3 in the Appendix).

*We choose the 30-year mortgage rate as the discount rate because increasing homeownership is one of the main alternatives given to paying off student debt. That is, the common argument states that homeownership among young Americans is not recovering because this segment of the population is burdened by student loans. In this example, therefore, borrowers are paying off student loans at a higher rate than what they could be paying on this alternative investment.

11. How much more generous is PAYE than the previous version of IBR?

The example in question 10 can also be used to show just how much more generous PAYE is to students than the previous version of IBR. Remember, the previous version of IBR caps monthly payments at 15% of discretionary income and has a 25-year repayment term.

For this same borrower, the net present value (NPV) under the previous version of IBR is not only *higher* than the NPV for PAYE, but also *higher* than under the standard plan. Since monthly repayments are larger than PAYE, in this case \$160 per month instead of \$110, and repayment lasts an additional five years, the NPV comes out to be \$29,806. For this borrower, the additional five years of repayment at a higher monthly rate made the cost too high to make enrollment in IBR financially worthwhile.

The higher relative cost of the previous version of IBR, in that it was not actually a better deal for borrowers in the long-run, may help to explain why take-up of the program has been historically low. Under the previous version of IBR, there was less of a subsidy transferred to borrowers.

12. Does it matter for taxpayers if student loans have a 10-year or 20-year repayment?

Again, it depends, on the borrowing costs for the government and how much of a loss is ultimately taken on the loan. Inherently, education loans are uncollateralized service loans. That means the further removed from the completion of the education, the less motivation or incentive borrowers may have to pay. This is especially true if the borrower must choose between spending on older education loans and a more time-sensitive purchase.

The increased risk of non-payment would normally make student loans more expensive over time, yet because the interest rate on student loans remains constant it is possible this additional cost could be borne by the taxpayer.

13. Isn't student debt profitable for government, even with PAYE expansion?

It's all in the accounting method. According to the Congressional Budget Office, federal student loans will turn a \$184 billion profit over the next decade.¹⁸ But this commonly cited figure uses a method of cost accounting based on the Federal Credit Reform Act, which does not include the risk to taxpayers from economic volatility.

Fair value accounting, the alternative measure CBO estimates, does. It turns out that under fair value accounting, the CBO estimates the government will incur a \$95 billion loss over the next 10 years. Moreover, the more generous the subsidy - as with PAYE - the higher the potential cost to government. However, there is little data available on the magnitude of these additional costs.

14. How does PAYE affect the private student loan market?

Given the economic and social benefits of investing in higher education, it stands to reason that private capital could be used as a risk-sharing tool in higher education funding. However, the private market will have a hard time competing with the generous terms offered through PAYE.¹⁹ Before private lenders are further squeezed out of the student loan market, it would be wise to ask whether we want a higher education funding system that is essentially all government funded.

Of course, the government plays a critical role in originating higher education loans, given the ongoing crisis of college affordability. Moreover, as recent events demonstrated, the government plays an essential counter-cyclical role in keeping higher education funding steady when private capital is not available. This funding infrastructure cannot be created overnight and must be up and running when a crisis hits. Therefore the key will be to strike the right balance between federal funding and engaging private capital in the funding of higher education.

It is worth noting that over the last year, new and innovative student loan funding platforms have emerged, particularly crowd-sourcing from alumni.²⁰ Right now, they are focused on low-risk, high-earning MBA loans but if successful, it's possible these private funding structures could be expanded. For example, PPI has proposed the creation of a "Student Debt Investment Fund" (SDIF), a secondary market fund for public and private student debt.²¹

15. Is PAYE a good one-size-fits-all approach to higher education funding?

To really answer this question we need better data. Overall, the best option is one that optimizes the borrower's standard of living while minimizing the total amount paid on the loan. That might mean something different for different majors, for different post-secondary institutions, or for undergraduate versus graduate student, and it might also be different depending on an individual's life circumstances.

Default rates by cohort show where you go to school matters. Higher rates of default are concentrated at for-profit and two-year public institutions.²² Yet without more disaggregated data about the performance of student loans, it is hard to know whether PAYE is the best approach.

16. What does housing reform have to do with PAYE expansion?

What's going on with housing finance reform could have very interesting spillover effects for student loans when it comes to policy. That's because both housing and education raise the same type of question about the appropriate role for government. Both investing in a home and in education have undeniable societal benefits, in addition to economic benefits for the individual.

At the same time, there is a negative cycle of affordability that results from large-scale government support. Without it, many first-time entrants are shut-out. Yet public subsidies also become embedded in what gets subsidized, which makes education and homeownership increasingly expensive for the next crop of new entrants. And that means the only way to keep the market growing is through continued, if not more, government support.

Conclusion

America's college graduates have been hit by a double whammy: a rising burden of student debt on the one hand, and falling real earnings on the other. As they dig out from under a mountain of debt, they defer purchases of other things, including homes, thus slowing economic recovery. The case for public action to relieve the growing student debt burden is compelling.

That is why the Obama administration created PAYE – the most generous income-based repayment option to date. PAYE is the government's way of relieving student debt, by providing a larger subsidy to borrowers through lowering monthly payments and increasing the likelihood of some debt being forgiven entirely.

Indeed, PAYE is an important policy tool that provides relief for millions of young Americans. In addition to enhancing college affordability in a time of excessively rising tuition, it also softens the effect of poor job prospects for young college graduates, more than half of which are underemployed or unemployed.²³

Yet as generous as PAYE is, it does not solve the underlying problems of rising tuition and a weak labor market for young college graduates. In fact, as a larger subsidy it could contribute to tuition inflation. The reality is we don't know enough about the program's overall effects to conclude whether, on net, it is the best approach to manage the rising student debt burden.

In the end, PAYE simply transfers the crisis of college affordability – compounded by a weak labor market for recent college graduates – from borrowers to taxpayers. It does nothing to make colleges and universities more accountable for holding down education costs.

The increasing higher education policy significance of PAYE means policymakers would be wise to fully understand the potential implications for borrowers, higher education institutions, and taxpayers, before it becomes the dominant tool for assuring college affordability.

Appendix: Detailed Comparison of Student Loan Repayment Options

Let's consider three scenarios, each with several assumptions. These scenarios will show that PAYE shifts more of the burden of student debt from the borrower to the taxpayer, especially compared to the previous version of IBR, and how longer repayment terms may or may not be in the best interest for the borrower. Lower net present values indicate a better deal for the borrower, because the total cost of the debt is cheaper in present day terms.

Scenario 1: Psychology Major

Assumptions: (1) Average Debt is \$26,000¹
(2) Average annual earnings is \$30,000², remains constant
(3) Files separate tax returns with no increase in family size
(4) Interest rate = 6.8%³

	Repayment term	Monthly Payment	Estimated total repaid	Net Present Value
PAYE	20 years	\$110.00	\$26,400	\$17,900
IBR	25 years	\$160.00	\$48,000	\$29,806
Standard ⁴	10 years	\$299.21	\$35,905	\$29,330
¹ Using latest College Board estimate of average debt per borrower				
² Using data from the American Community Survey				
³ In line with recent CBO projections				
⁴ Standard option is the default option, requiring fixed principal and interest payments over 10 years				

Scenario 2: Psychology Major

Assumptions: (1) Average Debt is \$26,000¹

(2) Average annual earnings is \$30,000², increasing \$5,000 every 4 years

(3) Borrower has one child in year 9 and second child in year 13,

(4) Files separate tax returns with children as dependents

(5) Interest rate = 6.8%³

	Repayment term	Year	Annual Income	Estimated Monthly Payment	Estimated total repaid	Net Present Value
PAYE	20 years	Year 1-4	\$30,000	\$110	\$5,280	
		Year 5-8	\$35,000	\$152	\$7,296	
		Year 9-12	\$40,000	\$144	\$6,912	
		Year 13-16	\$45,000	\$136	\$6,528	
		Year 17-20	\$50,000	\$178	\$8,544	
					\$34,560	\$22,788
IBR	25 years	Year 1-4	\$30,000	\$160	\$7,680	
		Year 5-8	\$35,000	\$222	\$10,656	
		Year 9-12	\$40,000	\$209	\$10,032	
		Year 13-16	\$45,000	\$196	\$9,408	
		Year 17-20	\$50,000	\$259	\$12,432	
		Year 21	\$55,000	\$299	\$3,591	
					\$53,799	\$34,648
Standard ⁴	10 years			\$299.21	\$35,905	\$29,330
¹ Using latest College Board estimate of average debt per borrower						
² Using data taken from the American Community Survey						
³ Interest rate is in line with recent CBO projections; assume monthly interest payment remains constant over 4 years						
⁴ Standard option is the default option, requiring fixed principal and interest payments over 10 years						

Scenario 3: Accounting Major

Assumptions: (1) Average Debt is \$26,000¹

(2) Average annual earnings is \$43,000² increasing \$5000 every 2 years

(3) Borrower has one child in year 5 and second child in year 9

(4) Files separate tax returns with children as dependents

(5) Interest rate = 6.8%³

	Repayment term	Year	Annual Income	Estimated Monthly Payment	Estimated total repaid	Net Present Value
PAYE	20 Years	Year 1-2	\$43,000	\$215	\$5,160	
		Year 3-4	\$48,000	\$256	\$6,144	
		Year 5-6	\$53,000	\$248	\$5,952	
		Year 7-8	\$58,000	\$289	\$6,936	
		Year 9-10	\$63,000	\$281	\$6,744	
		Year 11-12	\$68,000	\$299	\$7,181	
		Year 13 (11 months)	\$73,000	\$299	\$3,291	
					\$41,408	\$31,494
IBR	25 Years	Not eligible				
Standard ⁴	10 years			\$299.21	\$35,905	\$29,330
¹ Using latest College Board estimate of average debt per borrower						
² Using data taken from the American Community Survey						
³ Interest rate is in line with recent CBO projections; assume monthly interest payment remains constant over each 2 years						
⁴ Standard option is the default option, requiring fixed principal and interest payments over 10 years						

Endnotes

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