Reducing Barriers to Enrollment in Federal Student Loan Repayment Plans: Evidence from the Navient Field Experiment*

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Abstract

To reduce student loan delinquencies and defaults, the federal government provides income-driven repayment (IDR) plans in which monthly student loan payments depend on the borrower's income. This study reports evidence from a randomized field experiment conducted by a major student loan servicer, Navient, in which treated borrowers received pre-populated IDR applications for electronic signature. As a result, IDR enrollment increased by 34 percentage points relative to borrowers in the control group. Using the treatment assignment as an instrument for IDR enrollment, we furthermore present LATE estimates of the effect of IDR enrollment on new delinquencies, monthly payments, and consumer spending. Our estimates imply a drop in monthly payments of $355 and a reduction in new delinquencies of seven percent. At the same time, credit card balances increase by $343, suggesting that the freed-up liquidity is almost entirely used for consumer spending. Our results provide the first field-experimental evaluation of a U.S. government program designed to address the soaring debt burdens of U.S. households.

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1 Introduction

Under the 10-year standard repayment plan, student loan borrowers make fixed monthly payments over a 10-year repayment period. To help borrowers avoid delinquency and default, the federal government provides various *income-driven repayment* (IDR) plans. Under these plans, monthly payments depend on the borrower's discretionary income—the difference between annual income and (typically) 150 percent of the federal poverty guideline.[1] If the borrower's discretionary income is low, monthly payments are low or even zero. Furthermore, the repayment period is extended up to 25 years. At the end of the extended repayment period, any remaining loan balance is forgiven. According to the U.S. Department of Education, the value of the subsidy provided by the federal government for federally issued student loans in IDR plans in FY2017 is estimated to be $74 billion. This amounts to a 21 percent subsidy rate, or an average cost to the government of $21 for every $100 in student loans disbursed.[2]

Despite outreach efforts by the Education Department and student loan servicers, enrollment in IDR plans remains incomplete. Estimates by the U.S. Department of the Treasury indicate that only about 20 percent of borrowers who are eligible for income-driven repayment are enrolled in the program.[3] Take-up is low even if borrowers are

[1] Eligibility depends on a means test, which stipulates that monthly payments under the IDR plan must be less than what the borrower would pay under the 10-year standard repayment plan. According to a survey of 12,500 student loan borrowers enrolled in IDR plans, 38 percent of all borrowers—and 47 percent of new enrollees (first year in IDR plan)—make zero monthly payments. Nearly half of all borrowers (48 percent) making reduced monthly payments in IDR plans pay less than 25 percent of what they would pay under the standard plan, 31 percent pay between 25 and 49 percent, 14 percent pay between 50 and 74 percent, and seven percent make reduced monthly payments within 75 percent of their standard payment (Navient, 2015a).

[2] U.S. Government Accountability Office (2016). Gary-Bobo and Trannoy (2015) and Stantcheva (2017) provide theoretical foundations of IDR plans. Shireman (2017) offers a historial perspective. Di and Edmiston (2017) simulate how IDR plans affect borrowers and the federal budget under alternative income-debt scenarios. Avery and Turner (2012) present a cost-benefit analysis of student loan borrowing, and Looney and Yannelis (2015) provide a general overview of the student loan market.

[3] U.S. Government Accountability Office (2015). Estimating how many borrowers are eligible for income-driven repayment is difficult, because monthly payments—which are an essential part of the means test to determine whether a borrower is eligible—depend on the borrower's discretionary income. However, only borrowers who actually apply for income-driven repayment are required to provide income information to the Education Department. In this one-time analysis, the Treasury Department matched September 2012 administrative student loan data from the Education Department's National Student Loan Data System (NSLDS) to IRS tax return data for a random sample of student loan borrowers.

pre-qualified and hence fully aware of their program eligibility. According to Navient, a major student loan servicer, "only 27% of pre-qualified borrowers were returning their applications. We studied the process and secured customer feedback, and determined that the complexity and effort required to print, sign and return the IDR application was negatively impacting the application return rate."[4]

In many government support programs, applications are often lenghty and complex, creating substantial barriers to take-up. For example, a report by America's Second Harvest (now: Feeding America) complains: "the [California] food stamp application was 13 pages long, with a complexity that would put the Internal Revenue Service to shame."[5] As Bertrand, Mullainathan, and Shafir (2004, 2006) point out, while many economists would probably view such hassle factors as too minor to be taken seriously, these are exactly the kinds of hassles that dissuade many people from taking up social programs. Similarly, in the context of college financial aid, Dynarski and Scott-Clayton (2006) observe that the Free Application for Federal Student Aid (FAFSA), at five pages, is considerably longer than both IRS Form 1040EZ (one page) and Form 1040A (two pages), which are filed by the majority of low-income households. By comparison, the 2017 IDR application form is twelve pages long. Based on data from its own servicing records, Navient concludes that "more than half of borrowers enrolling in IDR for the first time could not navigate the options on their own."[6]

This conclusion is shared by the U.S. government. In an official White House memo, President Barack Obama expressed frustration over the difficulty in applying for the Income-Based Repayment (IBR) plan—a type of IDR plan introduced in 2009:[7]

> "*[T]oo many borrowers have had difficulties navigating and completing the IBR application process once they have started it [...] Although the Department of Education has recently removed some of the hurdles to completing the process,*

[4]Navient (2017, p. 8).

[5]Cited in Bertrand, Mullainathan, and Shafir (2006, p. 16).

[6]Navient (2016, p. 5). The 2017 IDR application is included in the Appendix.

[7]The White House, Presidential Memorandum—Improving Repayment Options for Federal Student Loan Borrowers, June 7, 2012.

too many borrowers are still struggling to access this important repayment option due to difficulty in applying."

Student loan servicers, such as Navient, review the various IDR plan options with borrowers, inform them about their eligibility, and pre-qualify them for the program. However, in order to enroll in an IDR plan, borrowers must then go to the Education Department's centralized application portal and either apply online or print out, sign, and return a completed paper application.[8] In an effort to improve the IDR application process, Navient conducted a randomized field experiment between April 12 and July 31, 2017 in which treated borrowers received pre-populated IDR applications by email that could be signed and returned electronically. Borrowers in the control group had to apply in the (usual) way described above. The pre-filling of applications is a simple intervention that can be potentially applied in many other federal programs. It had been previously suggested by behavioral economists as a means to encourage the take-up of social programs (e.g., Bertrand, Mullainathan, and Shafir, 2004, 2006) as well as by Navient in correspondences with federal agencies (e.g., Navient, 2015b).

This article reports findings from the Navient field experiment. The field experiment involved over 7,300 borrowers who—by virtue of Navient's automated Interactive Voice Response (IVR) system—were randomly assigned to call center agents ("repayment plan specialists"). Control and treatment borrowers are well balanced with regard to both (pre-randomization) characteristics and outcome variables. Both groups of borrowers exhibit IDR enrollment rates of about 24 percent and parallel trends prior to the field experiment. During the field experiment, however, their IDR enrollment rates diverge. While the IDR enrollment rate of control borrowers remains practically unchanged, that of treated borrowers increases sharply. In August 2017, after the field experiment, their IDR enrollment rate is 60.5 percent, which is 2.5 times their enrollment rate in March and 2.3 times their counterfactual enrollment rate in August.

Using the random treatment assignment as an instrument for IDR enrollment, we

[8] About 40 percent of all IDR applications are submitted online, half are submitted using paper only by printing out the application from the Education Department's website, and the remainder uses the website but submits hardcopy income documentation (Navient, 2015b).

furthermore provide estimates of the impact of IDR enrollment on monthly payments, new delinquencies, and consumer spending (using credit card balances as proxies). We find large LATE estimates of IDR enrollment on monthly payments, suggesting that compliers—borrowers who enroll because of the treatment intervention, and who would have not enrolled otherwise—have high initial monthly payments and low incomes, so that they qualify for low or zero monthly payments under income-driven repayment. (Kernel density estimates imply massive shifts toward low and zero monthly payments among treatment borrowers.) While it is not possible to identify individual compliers in the data, we follow Angrist and Pischke (2009) and estimate our first-stage equation separately for different sub-populations of borrowers stratified by (pre-randomization) monthly payments. As conjectured, we find that compliers are indeed more likely to come from sub-populations with high initial monthly payments.

One of the primary objectives of income-driven repayment is to reduce delinquency and default by making monthly payments affordable. Consistent with the large decline in monthly payments among borrowers in the treatment group, we find that their new delinquency rate in August, after the field experiment, is close to zero. Likewise, our LATE estimates—which measure the impact of IDR enrollment on the sub-population of compliers—imply a reduction in the likelihood of becoming newly delinquent of about seven percent. Altogether, our estimates suggest that income-driven repayment is highly effective at reducing student loan delinquency.

Our LATE estimates indicate that borrowers enrolling in income-driven repayment experience substantial drops in monthly payments. In the final part of the paper, we ask what the borrowers do with the freed-up liquidity. In principle, they could save the funds or pay down other forms of debt. However, we find that credit card balances increase almost one-for-one with the reduction in monthly payments, suggesting that the freed-up liquidity is almost entirely used for consumer spending. Thus, marginal borrowers (i.e., compliers) seem to be seriously liquidity constrained. These results are in line with prior literature, which typically finds large increases in consumer spending in response to liquidity shocks (e.g., Johnson, Parker, and Souleles, 2006; Parker et al., 2013; Baker, 2018). In some instances, the increase in consumer spending is even larger than the

underlying boost in liquidity.[9]

This article is part of a broader literature in economics using field experiments to study the take-up of public and private programs, as well as their impact on program participants. Currie (2006) reviews the earlier literature on program take-up. Recent articles study, e.g., the take-up of Medicaid (Finkelstein et al., 2012), earned income tax credits (EITC) (Chetty and Saez, 2013; Bhargava and Manoli, 2015), food stamps (SNAP) (Finkelstein and Notowidigo, 2018), retirement savings plans (Duflo et al., 2006), college financial aid (Bettinger et al., 2012), and weatherization assistance programs (Fowlie, Greenstone, and Wolfram, 2015). Interventions commonly include information about program eligbility, behavioral nudges, and assistance with the application process, as in our case. Results vary across field experiments, which is not surprising given that each program is different in terms of target audience, complexity of the application process, and public awareness of program eligibility and benefits. Our study is the first field-experimental evaluation of a U.S. government program designed to address the soaring debt burdens of U.S. households.[10] In 2018Q4, U.S. household debt stood at $13.54 trillion—$869 billion higher than the previous peak in 2008Q3. With over 44 million borrowers and $1.46 trillion in outstanding balances, student loan debt is the second largest consumer debt category behind only mortgages ($9.12 trillion) and before auto loan debt ($1.27 trillion) and credit card debt ($0.87 trillion). Notably, student loans exhibit the highest delinqency and default rates among any type of household debt: 11.4 percent of total student loan debt is either seriously (90 days or more) delinquent or in default, compared to 1.2 percent of mortgage debt, 4.5 percent of auto loan debt, and 7.8 percent of credit card debt.[11] According to some estimates, 40 percent of borrowers are

[9] Parker et al. (2013) find that low-income households ($32,000 or less) spend 128 percent of the tax rebate from the Economic Stimulus Act of 2008 on consumption, consistent with the purchase of large durable goods.

[10] Various field experiments study loan repayment, delinquency, and default outside of government programs: Karlan and Zinman (2012) randomly assign interest rates to microloan borrowers in South Africa, Field et al. (2013) randomly assign microloan repayment start dates to borrowers in India, Bursztyn et al. (2018) randomize "moral appeal" text messages to overdue credit card customers of a large Islamic bank in Indonesia, and Karlan, Morten and Zinman (2016) randomly assign text message reminders for loan repayments to microloan borrowers in the Philippines.

[11] Federal Reserve Bank of New York, Quarterly Report on Household Debt and Credit, 2018:Q4

expected to default on their student loans by 2023 (Scott-Clayton, 2018), underscoring the (continuing) importance of federal programs aimed at helping borrowers to manage student loan payments and debt burdens.

Various studies provide quasi-experimental evidence on the impacts of government programs designed to help U.S. households with their debt burdens. Many of those debt relief programs were introduced in the aftermath of the Great Recession. Perhaps most prominently, the Home Affordable Modification Program (HAMP) provides mortgage lenders and servicers with incentives to modify the mortgage terms of borrowers who are at risk of default (interest rate and principal reduction, forbearance, term extension). Mortgage payments are capped at a fraction of monthly income—which is similar to the income dependence of monthly student loan payments in IDR plans. Using a range of different identification strategies, Agarwal et al. (2017) and Ganong and Noel (2018) study the impact of HAMP on monthly payments, foreclosure, delinquency, default, as well as consumer spending.[12] Our paper studies the impacts of IDR plans on monthly payments, delinquency, and consumer spending by exploiting random variation in IDR enrollment using treatment assignment as an instrument.

Finally, our study examines the take-up of IDR plans in the *current* environment, where the default option is the 10-year standard repayment plan. Cox, Kreisman, and Dynarski (2018) run an incentivized laboratory experiment where the default option is either the standard repayment plan or an income-driven repayment plan. Consistent with prior studies, which have looked at default options in other settings, the authors find that the default option plays a crucial role: changing the default option from standard repayment to income-driven repayment results in a 27 percentage point increase in the

(released February 2019). Relative to other types of household debt, student loans are unique in that they are granted—as a matter of federal policy—to individuals without regard to prior credit history or income. Bachas (2018) analyzes the implied subsidy to high-risk borrowers from uniform pricing of federal student loans. Zinman (2015) reviews the literature on household debt.

[12]The Home Affordable Refinancing Program (HARP) is another prominent debt relief program introduced in the aftermath of the Great Recession. Agarwal et al. (2015) analyze the effects of HARP on monthly mortgage payments, foreclosures, and consumer spending. Relatedly, Di Maggio et al. (2017) exploit quasi-experimental variation in the timing of interest rate resets of adjustable-rate mortgages (ARMs) to study the impacts of lower mortgage payments on durable spending and voluntary debt repayments.

share of subjects selecting income-driven repayment.

The rest of this paper is organized as follows. Section 2 provides an overview of IDR plans. Section 3 offers background information on Navient and the field experiment, introduces the data, and shows descriptive statistics. Section 4 lays out the empirical framework and discusses the validity of the experimental design. Section 5 shows how assisting borrowers with completing IDR applications affects take-up of IDR plans, and how IDR enrollment, in turn, affects monthly student loan payments, new delinquencies, and consumer spending. Section 6 concludes.

2 Income-Driven Repayment Plans

Under the 10-year standard repayment plan, a student loan borrower's total balance is divided evenly into monthly payments over a 10-year repayment period. A borrower who has trouble making his monthly payments may be eligible to temporarily reduce or suspend payments through a deferment or forbearance. If he misses a payment, the loan becomes delinquent. If the loan is delinquent for 271 days, it goes into default. The consequences of student loan delinquency and default can be severe. After 90 days of delinquency, the loan servicer reports the delinquency to major national credit bureaus. A lower credit score may impair the borrower's access to credit, ability to rent or buy a home, or prospects of finding a job. When a federal student loan defaults, the borrower may be charged collection fees, wages may be garnished, and tax refunds and federal benefit payments (up to a certain percentage) may be withheld. Importantly, unlike other types of loans, student loans are typically not dischargable in bankruptcy.

To provide student loan borrowers with alternative repayment options, the federal government introduced a series of *income-driven repayment* (IDR) plans under which monthly payments depend on borrowers' discretionary income—the difference between annual income and (typically) 150 percent of the federal poverty guideline, which in turn depends on family size. Furthermore, the repayment period is extended up to 25 years. At the end of the extended repayment period, any remaining loan balance is forgiven. In most cases, monthly payments cannot exceed what the borrower would

pay under the 10-year standard repayment plan. There are four main types of IDR plans: Income-Contingent Repayment (ICR) plan (introduced in 1994), Income-Based Repayment (IBR) plan (2009), Pay As You Earn (PAYE) plan (2012), and Revised Pay As You Earn (REPAYE) plan (2015). While these four plans differ in their eligibility criteria and generosity, the common objective is to help student loan borrowers avoid delinquency and default by making monthly payments affordable. Indeed, the Education Department emphasizes on its website that "[d]epending on your income and family size, you may have no monthly payment at all."

While attractive for some student loan borrowers, IDR plans are not optimal for everyone. In particular, due to the extended repayment period, the total interest paid is generally higher than under the standard repayment plan. Additionally, borrowers may have to pay income tax on any amount forgiven at the end of the repayment period. In the first quarter of 2017—immediately prior to the Navient experiment—27.4 percent of federal student loan borrowers are enrolled in one of the four IDR plans.[13] And yet, delinquency and default rates are still high, underscoring the desirability to enroll (even) more borrowers in IDR plans.

One possible reason for why not more student loan borrowers are enrolled in IDR plans could be lack of awareness. In view of this fact, student loan servicers make it a priority to educate borrowers about alternative repayment options, including IDR plans, via phone, email, and paper communications. But even if a student loan servicer makes direct contact with a borrower, enrollment rates remain low. In a survey of delinquent borrowers that discussed enrolling in IDR plans with a Navient call center agent—and that were pre-qualified for enrollment during the call—only about 27 percent took the necessary steps to enroll. The other 73 percent did not complete enrollment despite being pre-qualified and receiving follow-up calls and written reminders (Navient, 2016).

[13]Source: Federal Student Aid Data Center.

3 The Navient Field Experiment

3.1 Navient

Navient owns and services a portfolio of federally guaranteed loans originated under the Federal Family Education Loan (FFEL) Program, which was discontinued in 2010. In addition, Navient has a contract to service Direct Loans for the Education Department. Besides, Navient services a smaller portfolio of private education loans, which are not federally guaranteed. In 2017—the year of the field experiment—Navient serviced over $300 billion in student loans for approximately 12 million Direct Loan, FFEL, and private student loan customers. The field experiment dealt with (federally guaranteed) FFEL program loans owned and serviced by Navient.

Besides handling billing and payments, the role of student loan servicers is to educate borrowers about alternative repayment options, such as income-driven repayment. In the past, Navient repeatedly called for simplifying the process of enrolling borrowers in IDR plans. A few months prior to the field experiment, Navient president and CEO Jack Remondi stated in an interview:[14]

> *"In the IDR application process, once we review the program with the borrower and pre-qualify them for the program, we have to send them away from Navient to studentloans.gov where they have to complete a 12-page application. They do it on the government's website, either online or by printing it and filling it out. There are no edit checks in that process, so if a customer makes a mistake or selects the wrong program, it gets sent to us by the Department of Education. We then have to return it, tell the borrower they've made a mistake, fix it. All of those things are very time-consuming and complex. [...] We've asked the department to be able to co-browse with borrowers on the website to assist them in completing the application to make sure they complete it correctly. We've asked for the right to do verbal enrollment. We've argued extensively for simplification and received zero response or action."*

[14] Washington Post, January 23, 2017.

The field experiment focused precisely on the issue raised in the interview. While Navient is not allowed to co-browse with student loan borrowers on the government's website to help them apply online—or enroll them verbally during the call—it can pre-populate the IDR application and email it to the borrower for electronic signature.

3.2 Field Experiment

At Navient, calls are routed through an automated Interactive Voice Response (IVR) system, as is common in most call centers, that interacts with the customers, gathers basic information, and then routes them to the appropriate call center agent. Customers are routed to a Navient repayment plan specialist if they have general questions about alternative repayment options, indicate having trouble making repayments, or simply request to speak to a repayment plan specialist.

Repayment plan specialists must follow a set routine when talking to customers. If a customer is delinquent or indicates he cannot afford his monthly payment amount, the repayment plan specialist is instructed to present and model alternative repayment options, such as income-driven repayment. The specific nature of the alternative option depends on whether the customer needs short- or long-term payment relief. In fact, Navient provides its repayment plan specialists with "suggested speaks" of how to ask questions about family size and income so as to model income-driven repayment even when the customer is actively requesting a forbearance.

Between April 12 and July 31, 2017, Navient conducted a field experiment in which FFEL borrowers were randomly assigned to two groups of repayment plan specialists. One group ("control agents") handled applications for income-driven repayment in the usual manner. Precisely, the repayment plan specialist modeled and reviewed the various repayment options with the borrower and, if the borrower is eligible, pre-qualified him for the program. The borrower then completed the application on his own, either by applying online through the Education Department's centralized application portal, or by printing, signing, and returning a completed paper application. The other group ("treatment agents") also modeled and reviewed the various repayment options together

with the borrower and pre-qualified him for the program. However, during the phone call, the repayment plan specialist pre-populated the IDR application using information Navient already had, as well as additional information provided by the borrower, such as income and family size, and then emailed the pre-populated application to the borrower for electronic signature.[15]

During the experiment, borrowers were randomly assigned to control and treatment agents. Navient's automated IVR system places borrowers in a holding queue until their call is answered by the next available agent. Call center agents, in turn, do not know the identity of a caller before answering the call. Accordingly, borrowers do not get to pick which repayment plan specialist they talk to, and vice versa. Altogether, 7,319 unique FFEL borrowers were routed to a call center agent during the field experiment.[16] Of those, 4,163 borrowers were routed to a control agent ("control borrowers"), and 3,156 borrowers were routed to a treatment agent ("treatment borrowers").

At Navient, the field experiment was viewed as a big success. Shortly after, Navient began offering the treatment to all of its FFEL delinquent borrowers it had spoken to and pre-qualified for income-driven repayment. The broad rollout occurred in phases and began on August 28 and was completed on November 30.

3.3 Data

We have monthly data at the individual borrower level for all 7,319 borrowers that were part of the field experiment. For each borrower, we know the date of the call and whether the borrower was routed to a control or treatment agent. Our data include the borrower's age, citizenship, location, principal amount disbursed, and monthly payments, whether the borrower is enrolled in an IDR plan, and whether the loan is subsidized, in deferment, in forbearance, or delinquent (60 or more days past due). As we know the date when a loan becomes delinquent, we can construct a flow measure indicating whether a loan

[15] In addition to the pre-filled IDR application, borrowers who did not certify zero income also received the pre-filled IRS Form 4506-T allowing Navient to obtain income information directly from the IRS.

[16] If a borrower had multiple interactions with Navient during the course of the field experiment, treatment status is assigned based on the first call made.

becomes delinquent for the first time. For borrowers enrolled in IDR plans, we have information on their annual income. Borrowers are required to provide this information when they enroll for the first time and also when they recertify their income annually. Finally, for 7,115 of the borrowers in our sample, we have monthly credit card balances from TransUnion. The data represent annual snapshots taken in August and allow us to examine whether IDR enrollment affects credit card spending.

Table 1 provides summary statistics. The table reports means and standard deviations for the group of control borrowers. All data are from March 2017, except for credit card balances, which are from August 2016. The typical student loan borrower in our sample is 42 years old. This is older than the typical student loan borrower in administrative student loan data, because loans in our sample are made under the FFEL program, which ended in 2010 when Congress passed the Health Care and Education Reconciliation Act. By comparison, the average age of student loan borrowers in repayment in Mueller and Yannelis (2019), based on NSLDS data, is 37 years. Virtually all borrowers are U.S. citizens. Moreover, they come from all four U.S. Census regions: 16.5 percent are from the West, 22.6 percent are from the Midwest, 47.7 percent are from the South, and 13.3 percent are from the Northeast.

The average principal amount disbursed is $11,078. By comparison, the amount of student loan debt when entering into repayment in administrative student loan data—which includes principal amount disbursed *plus* accrued interest—for the 2007 repayment year cohort is $13,171 (Looney and Yannelis (2015), based on NSLDS data).[17] About 95.1 percent of borrowers in our sample have at least one subsidized loan. About 7.9 percent are in deferment, 9.6 percent are in forbearance, and 23.6 percent are enrolled in an IDR plan. By comparison, 26.2 percent of *all* of Navient's Direct Loan or ED-owned FFEL borrowers are enrolled in an IDR plan during the first quarter of 2017.[18] The new delinquency rate—the fraction of borrowers that become 60 or more days delinquent for the first time—is 1.9 percent. Lastly, the typical borrower in our sample makes monthly

[17] The average repayment year cohort in our sample is 2007.

[18] Source: Federal Student Aid Data Center. In percent of dollars, 41.4 percent of Navient's Direct Loan and ED-owned FFEL program loans are enrolled in income-driven repayment in the first quarter of 2017.

payments of $256 on FFEL loans and has a total credit card balance of $1,761.

4 Empirical Framework

4.1 Intent-to-Treat Effect

We estimate the intent-to-treat (ITT) effect of assisting student loan borrowers with completing applications for enrollment in IDR plans. In the field experiment, treatment borrowers received a pre-populated IDR application, which was filled out by a Navient repayment plan specialist during the phone call and could be signed and returned by the borrower electronically. By contrast, control borrowers, after talking to the Navient repayment plan specialist, had to complete the IDR application on their own, either by applying online through the Education Department's centralized website or by printing, signing, and returning a completed paper application. We estimate the ITT effect of this intervention—that is, the difference in mean outcomes between control and treatment groups—by estimating the following equation using ordinary least squares (OLS):

$$y_{it} = \beta_0 + \beta_1 \text{Treatment}_i + \beta_2 X_i + \varepsilon_{it}, \tag{1}$$

where y_{it} is an outcome variable for borrower i, Treatment_i is an indicator variable for whether borrower i received assistance with completing the IDR application, X_i is a set of pre-randomization covariates, and ε_{it} is the error term. While the covariates are not strictly necessary for obtaining an unbiased estimate of the effect of assisting student loan borrowers with completing IDR applications, they can potentially improve power by accounting for chance differences in borrower characteristics between treatment and control groups. The set of covariates includes the full set of pre-randomization borrower characteristics from Table 1: borrower age, citizenship, indicators for the four Census regions (West, Midwest, South, Northeast), principal amount disbursed, and indicators for whether the borrower is in deferment, in forbearance, or has subsidized loans.

4.2 Validity of Experimental Design

Navient's automated IVR system ensured that the treatment was randomly assigned among student loan borrowers. As described above, borrowers are placed in a holding queue until their call is answered by the next available agent. Call center agents, in turn, do not know the identity of a caller before answering the call.

Table 2 examines the balance between control and treatment groups for a number of pre-randomization variables. Panel (A) considers the full set of borrower characteristics included in the set of covariates, X_i: age, citizenship, Census region, principal amount disbursed, and indicators for whether the borrower is in deferment, in forbearance, or has subsidized loans. Panel (B) considers various outcome variables: indicators for whether the borrower is enrolled in an IDR plan or 60 or more days delinquent for the first time, monthly student loan payments (on FFEL loans), and monthly credit card balances. All pre-randomization variables are measured in March 2017, except for credit card balances, which are measured in August 2016. In each case, we estimate equation (1) without controls using as the dependent variable the respective pre-randomization variable. We report both the regression constant, β_0, and the main coefficient of interest, β_1. Under the null hypothesis of treatment-control balance, β_1 should be statistically insignificant, while β_0 should be equal to the control mean reported in Table 1.

As can be seen, the coefficient β_1 is marginally significant (at the 10 percent level) in only one out of fourteen regressions, which is consistent with what one would expect by chance if the assignment is random. In all other cases, β_1 is statistically insignificant. Overall, our failure to reject the null of treatment-control balance affirms the random nature of the treatment assignment during the field experiment.

4.3 Local Average Treatment Effect

While equation (1) provides an estimate of the total impact of assisting student loan borrowers with completing applications for IDR enrollment, we are also interested in the effect of IDR enrollment on borrower outcomes. To this end, we model the relationship

between borrower outcomes and IDR enrollment as follows:

$$y_{it} = \gamma_0 + \gamma_1 \text{IDR}_{it} + \gamma_2 X_i + \zeta_{it}, \tag{2}$$

where y_{it} is an outcome variable for borrower i, IDR_{it} represents whether borrower i is enrolled in an IDR plan, X_i is a set of pre-randomization covariates, and ζ_{it} is the error term. Outcome variables are monthly payments, new delinquencies, and credit card balances. The set X_i of covariates is the same as in equation (1).

We estimate equation (2) by two-stage least squares (2SLS). The first-stage equation is given by the ITT equation (1) with IDR_{it} as the dependent variable. For Treatment_i to be a valid instrument, the exclusion restriction requires that assisting borrowers with completing applications for IDR enrollment affects borrower outcomes in equation (2) only through its impact on IDR enrollment. In other words, receiving pre-populated IDR applications has *no direct* effect on monthly payments, new delinquencies, or credit card spending other than through its effect on IDR enrollment. Given this identifying assumption, we interpret the coefficient on IDR enrollment from instrumental variable estimation of equation (2) as a local average treatment effect (LATE). It provides an estimate of the impact of IDR enrollment on the set of compliers who enrolled because of the treatment intervention, and who would have not enrolled otherwise (Imbens and Angrist, 1994).

5 Main Results

We first study the impact of assisting borrowers with completing applications for IDR enrollment on IDR enrollment rates. We subsequently study its impact on borrower outcomes: monthly payments, new delinquencies, and consumer spending (using credit card balances as proxies). In each case, we present ITT effects from estimating equation (1), OLS estimates, and LATEs from instrumental variable estimation of equation (2) using the random treatment assignment as an instrument for IDR enrollment.

5.1 IDR Take-Up

Figure 1 shows the fraction of control and treatment borrowers enrolled in IDR plans in any given month. As can be seen, control and treatment borrowers exhibit parallel trends prior to the field experiment. In fact, their IDR enrollment rates are statistically indistinguishable from one another. Enrollment rates in January, February, and March are about 24 percent, consistent with our pre-randomization estimates from Panel (B) of Table 2. During the field experiment, the IDR enrollment rate of control borrowers remains virtually unchanged. In August, after the field experiment, it is 26.6 percent. By contrast, the IDR enrollment rate of treatment borrowers increases gradually. This gradual increase is due to the fact that some borrowers called earlier during the field experiment, while others called later. Hence, different borrowers are treated at different points in time. In August, after the field experiment, 60.5 percent of treatment borrowers are enrolled in IDR plans. This is about 2.5 times their enrollment rate in March and about 2.3 times their counterfactual enrollment rate in August.

Table 3 confirms this visual impression. We estimate equation (1) both without and with controls using IDR enrollment in August as the dependent variable. At the borrower level, IDR enrollment is an indicator variable that equals one if the borrower is enrolled in an IDR plan during a given month. Accordingly, the coefficient β_1 on the Treatment dummy shows the difference in mean enrollment rates between control and treatment borrowers. In column (1) (without controls), the regression constant is 0.2663, which is equal to the August enrollment rate of control borrowers in Figure 1. Importantly, the coefficient on the Treatment dummy is 0.3391 and highly significant. Adding up the two coefficients yields 0.6054, which corresponds to the August IDR enrollment rate of treatment borrowers in Figure 1.

5.2 Monthly Payments

Under the income-based repayment (IBR) plan—the specific IDR plan that is relevant for FFEL borrowers—monthly payments are computed as the lesser of 15 percent of the borrower's discretionary income (divided by 12 months) and his monthly payment

under the 10-year standard repayment plan. Discretionary income is computed as the difference between the borrower's annual gross income and 150 percent of the federal poverty guideline. In 2017, the federal poverty guideline was $12,060 for a one-person household, $16,240 for a two-person household, $20,420 for a three-person household, and $24,600 for a four-person household. If discretionary income is zero, monthly payments are zero. Accordingly, a married borrower with two children earning less than $36,900 annually qualifies for a zero monthly payment.

Figure 2 shows monthly payments for control and treatment borrowers during any given month. In the months before the field experiment, monthly payments are trending slightly upward. Importantly, control and treatment borrowers exhibit parallel trends—in fact, their monthly payments are statistically indistinguishable from each another. Monthly payments of control borrowers continue on this upward trend during the field experiment, closing at $273 in August. By contrast, monthly payments of treatment borrowers drop sharply, closing at $152 in August, a decline of 40 percent relative to their March value and 44 percent relative to their counterfactual August value of $273.

Figure 3 shows kernel density estimates of monthly payments in March and August separately for control and treatment borrowers. In March, the two distributions line up almost perfectly. By contrast, in August, the distribution associated with treatment borrowers exhibits a massive shift toward low and zero monthly payments. Indeed, in our data, treatment borrowers that switch from non-IDR enrollment in March to IDR enrollment in August have a mean annual income of $27,176, which is near or below 150 percent of the federal poverty guideline, depending on family size.[19] Consequently, many of the treatment borrowers that enrolled in income-driven repayment during the field experiment qualified for low or zero monthly payments.

Table 4 confirms this visual impression. Columns (1) and (2) show ITT effects from estimating equation (1) using monthly payments in August as the dependent variable, without and with controls. In column (1) (without controls), all estimates line up with

[19]This lines up well with survey data. In a survey of 12,500 student loan borrowers enrolled in IDR plans, 18 percent of new enrollees (first year in IDR plan) report annual household incomes below $15,000, while 57 percent report annual household incomes below $35,000 (Navient, 2015a).

the sample means in Figure 2: the regression constant is 272.70, which is equal to the control mean in August, and the coefficient on the Treatment dummy is −120.52, which is equal to the difference in means between control and treatment groups. Accordingly, the ITT effect of assisting student loan borrowers with applications for IDR enrollment is associated with a drop in monthly payments of about $120.

Columns (3) to (6) examine the impact of IDR enrollment on monthly payments in August. Columns (3) and (4) present OLS estimates, while columns (5) and (6) present LATE estimates from instrumental variable estimation of equation (2) using Treatment as an instrument for IDR enrollment. (The first-stage regressions are in columns (1) and (2) of Table 3, respectively.) As is shown in column (3) (without controls), IDR enrollment is associated with a reduction in monthly payments of about $90. As this simple comparison of IDR and non-IDR borrowers does not account for the endogeneity of IDR enrollment, OLS estimates are likely biased. Indeed, as is shown in column (5) (without controls), the LATE estimate associated with IDR enrollment—which measures the impact of enrollment on the set of compliers who enrolled because of the treatment intervention, and who would have not enrolled otherwise—implies a substantially larger reduction in monthly payments of about $355. We note that this LATE estimate only captures the immediate, or short-run, effect of IDR enrollment—monthly payments may increase over time as the borrower's income increases.[20]

Lastly, we note that the LATE estimate in column (5) lines up with the ITT estimate in column (1). Accordingly, the coefficient of −355.37 in column (5) can be obtained from the Wald estimator:

$$\hat{\gamma}_1^{IV} = \frac{\hat{\beta}_1^{MP}}{\hat{\beta}_1^{IDR}} = \frac{-120.52}{0.3391} = -355.41,$$

where $\hat{\beta}_1^{MP}$ and $\hat{\beta}_1^{IDR}$ are the coefficients from estimating equation (1) using monthly

[20] Borrowers enrolled in IDR plans need to recertify their income annually. Thus, at a minimum, the reduction in monthly payments applies to the next twelve months.

payments and IDR enrollment as the dependent variable, respectively.[21]

Given that the LATE estimate measures the impact of IDR enrollment on the set of compliers, one would like to know more about this group of borrowers. In view of the large drop in monthly payments associated with our LATE estimate, we conjecture that compliers are borrowers with high (initial) monthly payments and low incomes, so that they qualify for low or zero monthly payments under an IDR plan. While it is not possible to identify individual compliers in the data, one can learn something about their characteristics relative to the overall sample population. To this end, we follow Angrist and Pischke (2009, p. 171) and estimate our first-stage equation separately for different borrower sub-populations stratified by (pre-randomization) monthly payments in March. For a given sub-population, the ratio of the sub-population first-stage coefficient to the overall first-stage coefficient (0.3391) indicates the relative likelihood that compliers are associated with that particular sub-population.[22]

Table 5 presents the results. We divide borrowers into quartiles based on monthly payments in March. For each quartile, we estimate equation (1) with IDR enrollment in August as the dependent variable.[23] As is shown, compliers are much less likely to be drawn from the first quartile ($75 or less), while they are fairly evenly distributed across the other three quartiles. Unfortunately, we cannot perform the same exercise using annual income, as we only have income data for borrowers who are enrolled in an IDR plan. That being said, we already mentioned that treatment borrowers switching

[21] Simple algebra shows that the regression constant of 367.37 in column (5) can be obtained from:

$$\hat{\gamma}_0^{IV} = \overline{y} - \hat{\beta}_1^{MP}\left(\frac{\hat{\beta}_0^{IDR}}{\hat{\beta}_1^{IDR}} + \overline{\text{Treatment}}\right) = 220.82 - (-120.52)\left(\frac{0.2663}{0.3391} + 0.4312\right) = 367.43,$$

where $\overline{y}$ is the mean value of monthly payments in August, $\overline{\text{Treatment}}$ is the mean of the Treatment dummy, and $\hat{\beta}_0^{IDR}$ is the regression constant from estimating equation (1) using IDR enrollment as the dependent variable.

[22] See also Finkelstein et. al (2012, p. 1078).

[23] The number of observations is not exactly identical across bins due to multiple borrowers having the same monthly payments. Precisely, the first group includes 1,809 borrowers (24.7 percent), the second group includes 1,857 borrowers (25.4 percent), the third group includes 1,827 borrowers (25.0 percent), and the fourth group includes 1,826 borrowers (24.9 percent). It makes virtually no difference if we assign borrowers with the same monthly payments to the left or right of a given quartile cutoff.

from non-IDR enrollment in March to IDR enrollment in August—which includes the set of compliers—have a mean annual income of $27,176, which qualifies many, if not most, for low or zero monthly payments under an IDR plan.

5.3 New Delinquencies

One of the main objectives of income-driven repayment is to reduce delinquency and default by making monthly payments affordable. Figure 4 shows new delinquency rates (fraction of borrowers becoming 60 or more days past due for the first time) for control and treatment borrowers during any given month. While the basic pattern is similar to that for monthly payments, new delinquency rates are noisier. In a given month, only a few percent of borrowers become delinquent for the first time. Accordingly, relatively small changes in the number of newly delinquent borrowers can induce relatively large swings in new delinquency rates. As can be seen, control and treatment borrowers are on similar trends prior to the field experiment. During the field experiment, however, new delinquency rates diverge. While the new delinquency rate of control borrowers trends upward—consistent with the upward trend in monthly payments in Figure 2—that of treatment borrowers declines. After the field experiment, in August, the new delinquency rate of treatment borrowers is 0.4 percent, while that of control borrowers is 2.8 percent—the difference between the two is highly significant.

Table 6 is similar to Table 4, except that it considers new delinquencies. At the individual borrower level, delinquency is an indicator variable that is one if a borrower becomes delinquent for the first time in a given month. Columns (1) and (2) show ITT effects. In column (1) (without controls), all estimates line up with the sample means from Figure 4. The regression constant is 0.0283, which is equal to the control mean in August, and the coefficient on the Treatment dummy is -0.0239, which corresponds to the difference in means between control and treatment groups in August. Columns (3) and (4), which show OLS estimates, suggest a relatively small effect of IDR enrollment on the likelihood of becoming newly delinquent. Accordingly, the difference between IDR and non-IDR borrowers is only about 1.27 percent. By contrast, columns (5) and (6),

which show LATE estimates, suggest a much larger effect: compliers—borrowers who enroll because of the treatment intervention—experience a reduction in the likelihood of becoming newly delinquent of about 7.05 percent.

Finally, similar to Section 5.2, we note that the LATE estimate in column (5) lines up with the ITT estimate in column (1). Accordingly, we can obtain the coefficient of -0.0705 in column (5) from the Wald estimator:

$$\hat{\gamma}_1^{IV} = \frac{\hat{\beta}_1^{Del}}{\hat{\beta}_1^{IDR}} = \frac{-0.0239}{0.3391} = -0.0705,$$

where $\hat{\beta}_1^{Del}$ and $\hat{\beta}_1^{IDR}$ are the coefficients from estimating equation (1) using delinquency and IDR enrollment as the dependent variable, respectively.

5.4 Credit Card Spending

Our LATE estimates indicate that compliers experience a drop in monthly student loan payments of about $355. To seee what the borrowers do with the freed-up liquidity, we analyze their credit card balances. In principle, they could save the funds or pay down other forms of debt. However, as is shown below, credit card balances increase almost one-for-one with the drop in monthly payments, suggesting that the freed-up liquidity is almost entirely used for consumer spending.

We have monthly credit card balances for 7,115 of the borrowers based on annual snapshots taken in August. Before the field experiment, in August 2016, control and treatment borrowers have similar monthly balances (see Panel (B) of Table 2). After the field experiment, in August 2017, treatment borrowers have a monthly balance of $1,926, while control borrowers have a monthly balance of $1,810—a difference of $116. This is confirmed in Table 7, which is similar to Tables 4 and 6, except that it considers monthly credit card balances. Columns (1) and (2) show ITT effects. In column (1) (without controls), all estimates line up with the sample means. The regression constant is $1,810.33$, which is equal to the control mean, and the coefficient on the Treatment dummy is 116.20, which corresponds to the difference in means between control and

treatment groups. Note that the $116 increase in credit card spending matches almost perfectly the $120 drop in monthly payments in column (1) of Table 4.

Columns (3) and (4) show OLS estimates. In contrast to the ITT estimates shown above, the OLS estimates *do not* match the corresponding OLS estimates for monthly payments. Columns (5) and (6) present LATE estimates from instrumental variable estimation of equation (2) using Treatment as an instrument for IDR enrollment. In column (5) (without controls), the LATE estimate implies an increase in credit card spending of about $343, which is almost identical to the drop in monthly payments of $355 in column (5) of Table 5. Hence, it seems that marginal borrowers (i.e., compliers) are seriously liquidity constrained.

As we did before, we note that the LATE estimate in column (5) lines up with the ITT estimate in column (1). Accordingly, the coefficient of 343.16 in column (5) can be obtained from the Wald estimator:

$$\hat{\gamma}_1^{IV} = \frac{\hat{\beta}_1^{CCB}}{\hat{\beta}_1^{IDR}} = \frac{116.20}{0.3386} = 343.18,$$

where $\hat{\beta}_1^{CCB}$ and $\hat{\beta}_1^{IDR}$ are the coefficients from estimating equation (1) using credit card balances and IDR enrollment as the dependent variable, respectively.[24]

6 Conclusion

Despite massive federal subsidies and outreach efforts by student loan servicers and the Education Department, take-up of IDR plans remains incomplete. Take-up is low even if borrowers are pre-qualified for the program and hence aware of their eligibility. Indeed, survey evidence suggests that borrowers are overwhelmed by the complexity and effort required to fill out, sign, and return the IDR application. Between April and July 2017, Navient, a major student loan servicer, conducted a field experiment in which treated

[24]The first-stage regression for the sample of 7,115 borrowers with available credit card balances is almost idential to the first-stage regression in Table 3. The coefficient on the Treatment dummy is 0.3386 with standard error 0.0112, and the regression constant is 0.2659 with standard error 0.0070.

borrowers received pre-populated IDR applications that could be signed and returned electronically. By contrast, borrowers in the control group had to go to the Education Department's centralized application portal and either apply online or print out, sign, and return a completed paper application.[25]

Our analysis shows that the experiment was successful at improving take-up: IDR enrollment rates among treated borrowers increased by 34 percentage points relative to borrowers in the control group. Using the treatment assignment as an instrument for IDR enrollment, we further analyze the effect of IDR enrollment on monthly student loan payments, new delinquencies, and credit card balances. Our LATE estimates imply that compliers—borrowers who enrolled because of the treatment intervention, and who would have not enrolled otherwise—experience a drop in monthly payments of $355 and a significant reduction in the likelihood of becoming newly delinquent. At the same time, their credit card balances increase by $343, suggesting that the freed-up liquidity is almost entirely used for consumer spending.

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[25] Both groups of borrowers received help over the phone to pre-qualify for the program and an estimate of new lower monthly payments under the IDR plan.

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Figure 1
IDR Take-Up

This figure shows monthly enrollment rates in income-driven repayment (IDR) plans for control and treatment borrowers. Control and treatment borrowers are described in Section 3.2. The field experiment took place from April 12 to July 31, 2017. Dashed lines represent 95% confidence intervals.

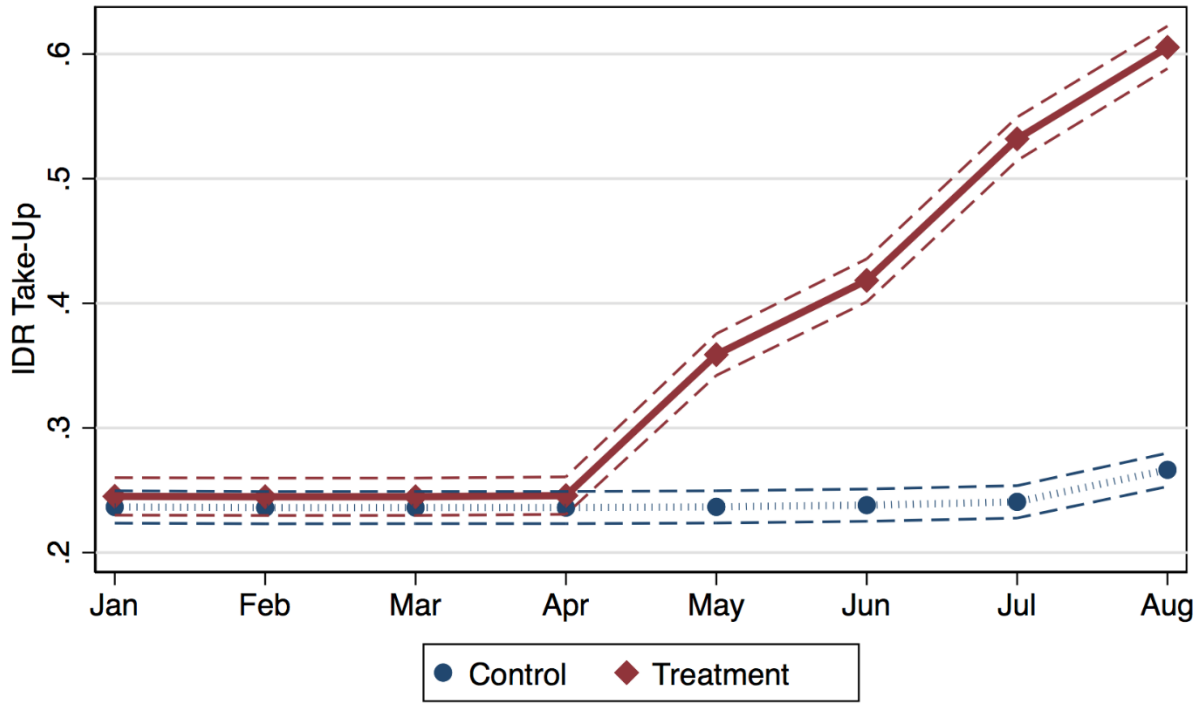


Figure 2
Monthly Student Loan Payments

This figure shows average monthly student loan payments for control and treatment borrowers. Control and treatment borrowers are described in Section 3.2. The field experiment took place from April 12 to July 31, 2017. Dashed lines represent 95% confidence intervals.

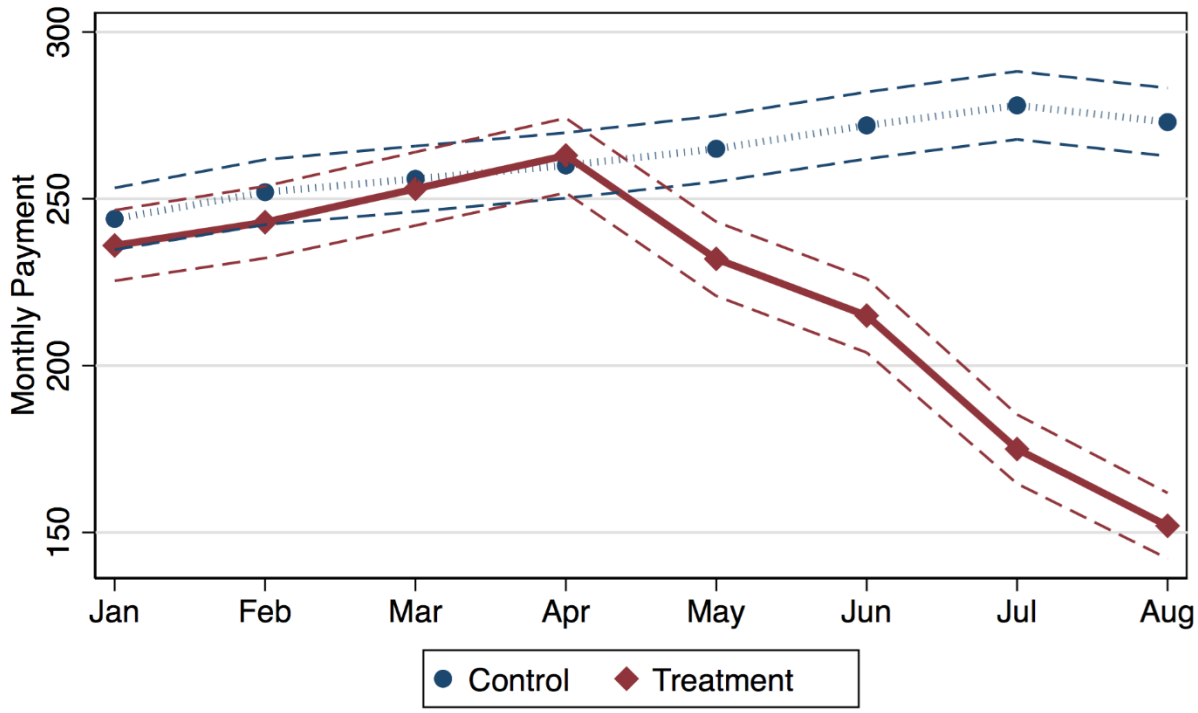
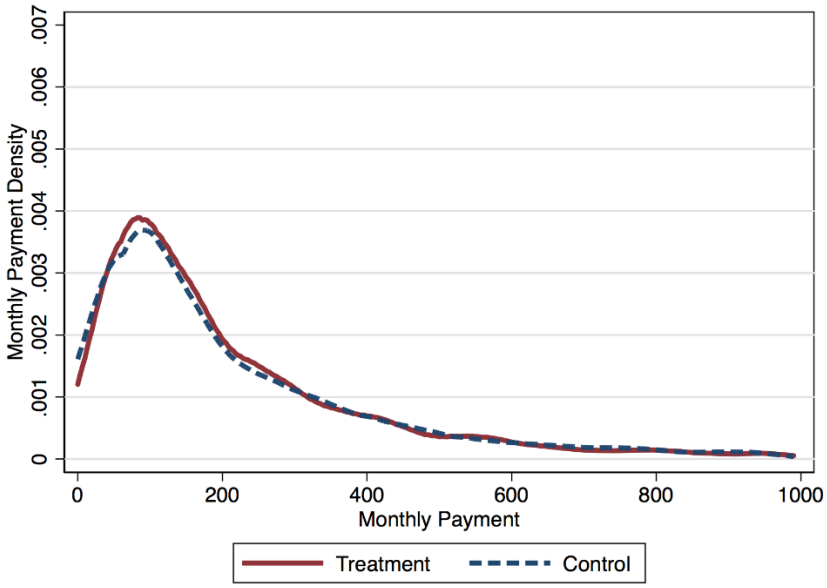


Figure 3
Distribution of Monthly Student Loan Payments

This figure shows kernel density estimates of monthly student loan payments in March and August 2017 for control and treatment borrowers. Control and treatment borrowers are described in Section 3.2. The field experiment took place from April 12 to July 31, 2017. Dashed lines represent 95% confidence intervals.

Panel (A): March 2017



Panel (B): August 2017

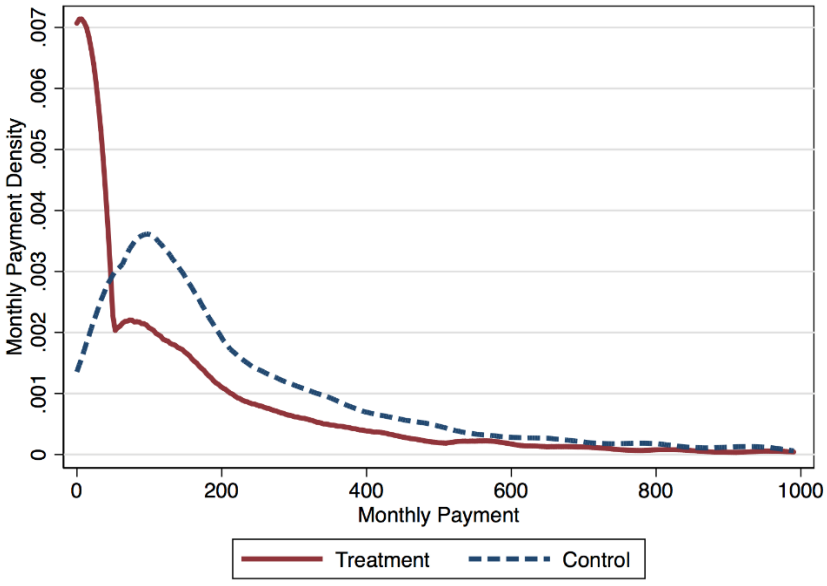


Figure 4
New Delinquencies

This figure shows monthly new delinquency rates for control and treatment borrowers. Control and treatment borrowers are described in Section 3.2. The field experiment took place from April 12 to July 31, 2017. Dashed lines represent 95% confidence intervals.

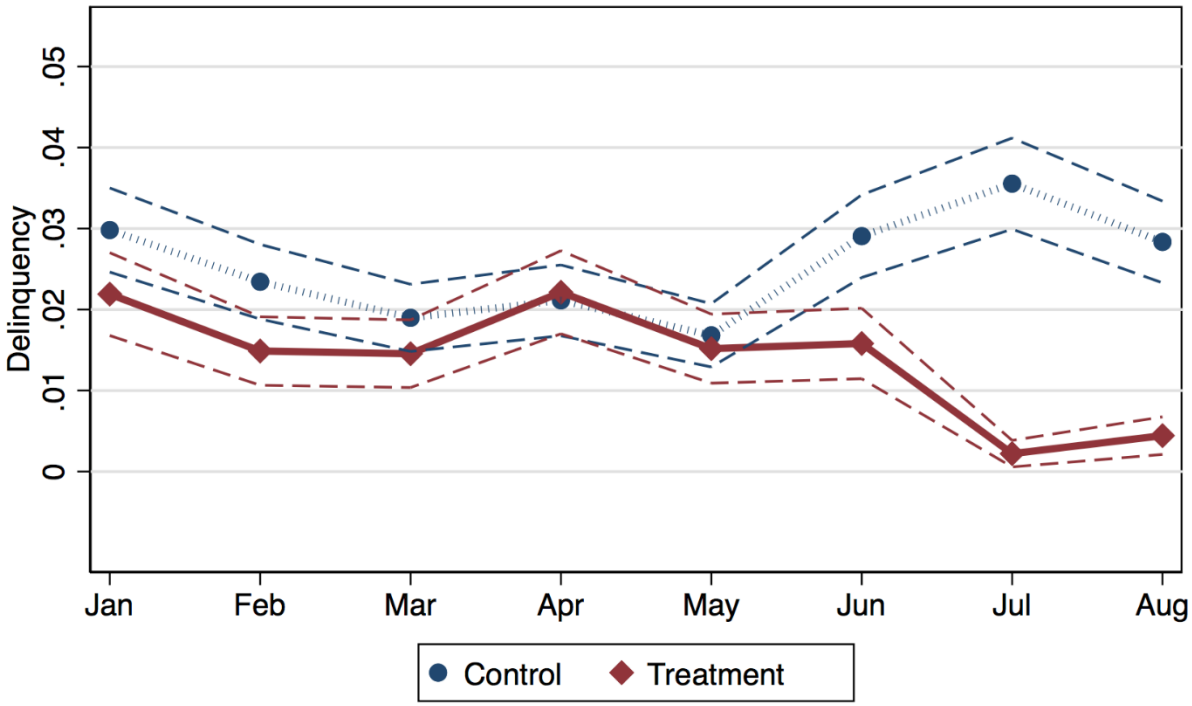


Table 1
Descriptive Statistics

The table reports means and standard deviations for the subsample of control borrowers. Control borrowers are described in Section 3.2. Age is the age of the borrower. West, Midwest, South, and Northeast are indicators of the Census region in which the borrower lives. Principal is the principal amount disbursed on the borrower's FFEL loans. Subsidized is an indicator of whether the borrower has at least one subsidized FFEL loan. Deferment and forbearance are indicators of whether the borrower is in deferment and forbearance, respectively. IDR is an indicator of whether the borrower is enrolled in an income-driven repayment plan. Monthly payment is the monthly payment made by the borrower on her FFEL loans. Delinquent is an indicator of whether the borrower becomes 60 or more days delinquent for the first time. Credit card balance is the total balance on all of the borrower's credit cards. All descriptive statistics are from March 2017 based on 4,163 control borrowers, except for credit card balances, which are from August 2016 based on 4,064 control borrowers. The field experiment took place from April 12 to July 31, 2017.

	Control Mean	Standard Deviation
Age	42	10
Citizen	0.9918	0.0900
West	0.1645	0.3708
Midwest	0.2263	0.4185
South	0.4766	0.4995
Northeast	0.1326	0.3391
Principal	11,078	14,405
Subsidized	0.9508	0.2164
Deferment	0.0788	0.2694
Forbearance	0.0961	0.2947
IDR	0.2359	0.4246
Monthly Payment	256	323
Delinquent	0.0190	0.1365
Credit Card Balance	1,761	4,441

Table 2
Treatment-Control Balance

This table reports results from estimating equation (1) without controls using one of the variables from Table 1 as the dependent variable. All dependent variables are measured in March 2017, except for credit card balances, which are measured in August 2016. The field experiment took place from April 12 to July 31, 2017. Treatment is an indicator of whether the borrower is a treatment borrower. Treatment borrowers are described in Section 3.2. Standard errors are Huber-White robust standard errors. *, **, and *** denotes significance at the 10%, 5%, and 1% level, respectively.

Panel (A): Pre-randomization covariates

	Age	Citizen	West	Midwest	South
Treatment	-0.2330	0.0015	-0.0004	-0.0082	0.0008
	(0.2276)	(0.0020)	(0.0087)	(0.0098)	(0.0118)
Constant	41.94***	0.9918***	0.1645***	0.2263***	0.4766***
	(0.1496)	(0.0014)	(0.0057)	(0.0065)	(0.0008)
	Northeast	Principal	Subsidized	Deferment	Forbearance
Treatment	0.0078	-648.61*	-0.0056	0.0052	-0.0010
	(0.0081)	(339.21)	(0.0053)	(0.0065)	(0.0069)
Constant	0.1326***	11077.55***	0.9508***	0.0788***	0.0961***
	(0.0053)	(223.27)	(0.0034)	(0.0042)	(0.0046)
N	7,319	7,319	7,319	7,319	7,319

Panel (B): Pre-randomization outcome variables

	IDR	Monthly Payment	Delinquent	Credit Card Balance
Treatment	0.0085	-2.66	-0.0044	38.52
	(0.0100)	(7.54)	(0.0030)	(107.48)
Constant	0.2359***	256.11***	0.0190***	1760.86***
	(0.0066)	(5.00)	(0.0021)	(70.74)
N	7,319	7,319	7,319	7,115

Table 3
IDR Take-Up

This table reports results from estimating equation (1) using IDR enrollment in August 2017 as the dependent variable. The field experiment took place from April 12 to July 31, 2017. Treatment is described in Table 2. Column (1) is without controls. Column (2) includes the full set of pre-randomization covariates from Table 2 as controls. Standard errors are Huber-White robust standard errors. *, **, and *** denotes significance at the 10%, 5%, and 1% level, respectively.

	(1)	(2)
Treatment	0.3391***	0.3407***
	(0.0111)	(0.0111)
Constant	0.2663***	0.2230***
	(0.0068)	(0.0767)
Controls	N	Y
N	7,319	7,319

Table 4
Monthly Student Loan Payments

This table reports results from estimating equations (1) and (2) using monthly payments in August 2017 as the dependent variable. The field experiment took place from April 12 to July 31, 2017. Treatment is described in Table 2. IDR is an indicator of whether the borrower is enrolled in an income-driven repayment plan in August 2017. Columns (1) and (2) present ITT effects from estimating equation (1), columns (3) and (4) present OLS results from estimating equation (2), and columns (5) and (6) presents LATEs from instrumental variable estimation of equation (2) using Treatment as an instrument for IDR enrollment. Odd-numbered columns are without controls. Even-numbered columns include the full set of pre-randomization covariates from Table 2 as controls. Standard errors are Huber-White robust standard errors. *, **, and *** denotes significance at the 10%, 5%, and 1% level, respectively.

	ITT		OLS		LATE	
	(1)	(2)	(3)	(4)	(5)	(6)
IDR			-90.68***	-102.53***	-355.37***	-329.69***
			(7.82)	(6.30)	(23.82)	(19.80)
Treatment	-120.52***	-111.78***				
	(7.24)	(6.10)				
Constant	272.70***	-9.09	258.15***	-18.72	367.37***	78.72*
	(5.20)	(43.15)	(4.32)	(44.10)	(10.61)	(46.41)
Controls	N	Y	N	Y	N	Y
N	7,319	7,319	7,319	7,319	7,319	7,319

Table 5
Characterizing Compliers

This table presents variants of columns (1) and (2) of Table 3, respectively, in which equation (1) is estimated for sub-populations of borrowers stratified by pre-randomization monthly payments in March 2017. The field experiment took place from April 12 to July 31, 2017. In columns (1) and (2), monthly payments are between $0 and $75; in columns (3) and (4), monthly payments are between $76 and $150; in columns (5) and (6), monthly payments are between $151 and $308; and in columns (7) and (8), monthly payments are above $308. Odd-numbered columns are without controls. Even-numbered columns include the full set of pre-randomization covariates from Table 2 as controls. Standard errors are Huber-White robust standard errors. *, **, and *** denotes significance at the 10%, 5%, and 1% level, respectively.

	First Quartile		Second Quartile		Third Quartile		Fourth Quartile	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Treatment	0.1760***	0.2277***	0.3484***	0.3574***	0.3427***	0.3588***	0.3100***	0.3164***
	(0.0235)	(0.0225)	(0.0207)	(0.0205)	(0.0209)	(0.0206)	(0.0223)	(0.0219)
Constant	0.4002***	0.4359***	0.1448***	0.0046	0.1661***	0.3217**	0.2451***	0.1363
	(0.0150)	(0.1375)	(0.0109)	(0.1431)	(0.0118)	(0.1314)	(0.0132)	(0.1253)
Controls	N	Y	N	Y	N	Y	N	Y
N	1,810	1,810	1,850	1,850	1,838	1,838	1,827	1,827

Table 6
New Delinquencies

This table reports results from estimating equations (1) and (2) using new delinquencies in August 2017 as the dependent variable. The field experiment took place from April 12 to July 31, 2017. New delinquency is an indicator of whether the borrower becomes 60 or more days past due for the first time. Treatment and IDR are described in Tables 2 and 4, respectively. Columns (1) and (2) present ITT effects from estimating equation (1), columns (3) and (4) present OLS results from estimating equation (2), and columns (5) and (6) presents LATEs from instrumental variable estimation of equation (2) using Treatment as an instrument for IDR enrollment. Odd-numbered columns are without controls. Even-numbered columns include the full set of pre-randomization covariates from Table 2 as controls. Standard errors are Huber-White robust standard errors. *, **, and *** denotes significance at the 10%, 5%, and 1% level, respectively.

	ITT		OLS		LATE	
	(1)	(2)	(3)	(4)	(5)	(6)
IDR			-0.0127***	-0.0127***	-0.0705***	-0.0710***
			(0.0030)	(0.0029)	(0.0095)	(0.0095)
Treatment	-0.0239***	-0.0241***				
	(0.0028)	(0.0029)				
Constant	0.0283***	0.0252**	0.0234***	0.0197*	0.0471***	0.0441**
	(0.0026)	(0.0111)	(0.0023)	(0.0110)	(0.0042)	(0.0222)
Controls	N	Y	N	Y	N	Y
N	7,319	7,319	7,319	7,319	7,319	7,319

Table 7
Credit Card Spending

This table reports results from estimating equations (1) and (2) using credit card balances in August 2017 as the dependent variable. The field experiment took place from April 12 to July 31, 2017. Credit card balance is the total balance on all of the borrower's credit cards. Treatment and IDR are described in Tables 2 and 4, respectively. Columns (1) and (2) present ITT effects from estimating equation (1), columns (3) and (4) present OLS results from estimating equation (2), and columns (5) and (6) presents LATEs from instrumental variable estimation of equation (2) using Treatment as an instrument for IDR enrollment. Odd-numbered columns are without controls. Even-numbered columns include the full set of pre-randomization covariates from Table 2 as controls. The sample is restricted to 7,115 borrowers with available credit card balances. Standard errors are Huber-White robust standard errors. *, **, and *** denotes significance at the 10%, 5%, and 1% level, respectively.

	ITT		OLS		LATE	
	(1)	(2)	(3)	(4)	(5)	(6)
IDR			233.94***	247.91***	343.16*	395.70**
			(61.86)	(63.25)	(180.91)	(183.41)
Treatment	116.20*	133.99**				
	(62.34)	(63.78)				
Constant	1810.33***	986.78***	1719.07***	925.90***	1718.07***	881.55***
	(38.06)	(354.42)	(39.25)	(358.19)	(80.48)	(392.79)
Controls	N	Y	N	Y	N	Y
N	7,115	7,115	7,115	7,115	7,115	7,115

Appendix:
IDR Application

INCOME-DRIVEN REPAYMENT PLAN REQUEST:

For the Revised Pay As You Earn (REPAYE), Pay As You Earn (PAYE), Income-Based (IBR), and Income-Contingent (ICR) repayment plans under the William D. Ford Federal Direct Loan (Direct Loan) and Federal Family Education Loan (FFEL) Programs

IDR

OMB No. 1845-0102
Form Approved
Exp. Date 10/31/2018

WARNING: Any person who knowingly makes a false statement or misrepresentation on this form or on any accompanying document is subject to penalties that may include fines, imprisonment, or both, under the U.S. Criminal Code and 20 U.S.C. 1097.

SECTION 1: BORROWER IDENTIFICATION

Please enter or correct the following information.

☐ **Check this box if any of your information has changed.**

SSN _____ - ____ - _____

Name _____

Address _____

City, State, Zip Code _____

Telephone - Primary (_____)_____ - _____

Telephone - Alternate (_____)_____ - _____

Email (Optional) _____

SECTION 2: REPAYMENT PLAN OR RECERTIFICATION REQUEST

READ BEFORE COMPLETING THIS FORM:

- You can apply online at StudentLoans.gov. It is faster and easier to complete this form online.
- Income-driven repayment plans offer many benefits, but may not be right for everyone.
- You can learn more about these plans at StudentAid.gov/IDR and by reading Sections 9 and 10.
- It's simple to explore all of your repayment options at StudentAid.gov/repayment-estimator.
- You can find out which types of loans you have and who your loan holder or servicer is at nslds.ed.gov.
- If you need help completing this request, contact your loan holder or servicer for free assistance.
- You may have to pay income tax on any loan amount forgiven under an income-driven plan.

1. Select the reason you are submitting this form (Check only one):

☐ I am not in an income-driven repayment plan, but want to enter one - Continue to Item 2.

☐ I am already in an income-driven repayment plan and am submitting documentation for the annual recalculation of my payment - Skip to Item 5.

☐ I am already in an income-driven repayment plan and am submitting documentation early because I want my loan holder to recalculate my payment immediately - Skip to Item 5.

☐ I am already in an income-driven repayment plan, but want to change to a different income-driven repayment plan - Continue to Item 2.

2. Choose a plan and then continue to Item 3.

☐ (Recommended) I want my loan holder to place me on the plan with the lowest monthly payment.

☐ REPAYE ☐ IBR

☐ PAYE ☐ ICR

3. Do you have multiple loan holders or servicers?

☐ Yes - Submit a separate request to each loan holder or servicer. Continue to Item 4.

☐ No - Continue to Item 4.

4. Are you currently in a deferment or forbearance?

☐ No - Continue to Item 5.

☐ Yes, but I want to start making payments under my plan immediately - Continue to Item 5.

☐ Yes, but I do not want to start repaying my loans until the deferment or forbearance ends - Continue to Item 5.

If you have FFEL Program loans, they may only be repaid under IBR. If you request a different plan, your loan holder will consider you for IBR on your FFEL Program loans. You may be able to consolidate your FFEL Program loans into a Direct Consolidation Loan to take advantage of other income-driven plans by visiting **StudentLoans.gov**.

Borrower Name: _____ **Borrower SSN:** ____-____-____

SECTION 3: FAMILY SIZE INFORMATION

5. How many children, including unborn children, are in your family and receive more than half of their support from you?

____ . Continue to Item 6.

A definition of "family size" is available in Section 9. Do not enter a value for you or your spouse. Those values are automatically included, if appropriate.

6. How many people, excluding your spouse and children, live with you, and receive more than half of their support from you?

____ . Continue to Item 7.

7. What is your marital status?

☐ Single - Continue to Item 8.

☐ Married - Skip to Item 11.

SECTION 4A: INCOME INFORMATION FOR SINGLE BORROWERS

8. Did you file a federal income tax return for either of the past two tax years?

☐ Yes - Continue to Item 9.

☐ No - Skip to Item 10.

9. Has your income significantly changed since you filed your last federal income tax return? For example, have you lost your job, gotten divorced, or experienced a drop in income?

☐ Yes - Continue to Item 10.

☐ No - Provide your most recent federal income tax return or transcript. Skip to Section 6.

10. Do you currently have taxable income? Check "No" if you do not have any income or receive only untaxed income.

☐ Yes - Skip to Section 5.

☐ No - Skip to Section 6.

Remember, any person who makes a knowingly false statement or misrepresentation on this form may be subject to fines, imprisonment, or both.

SECTION 4B: LOAN AND INCOME INFORMATION FOR MARRIED BORROWERS

11. Does your spouse have federal student loans?

☐ Yes - Continue to Item 12.

☐ No - Skip to Item 14.

12. Provide the following information about your spouse and then continue to Item 13:

a. Spouse's SSN:

____ -____- _____

b. Spouse's Name

_____

c. Spouse's Date of Birth

_____

13. If you are placed on the ICR plan, do you want to repay your Direct Loans jointly with your spouse?

☐ Yes - Continue to Item 14.

☐ No - Continue to Item 14.

14. When you filed your last federal income tax return, did you file jointly with your spouse?

☐ Yes - Continue to Item 15.

☐ No - Skip to Item 20.

15. Did you and your spouse file a federal income tax return for either of the past two tax years?

☐ Yes - Continue to Item 16.

☐ No - Skip to Item 18.

16. Has your income significantly changed since you filed your last federal income tax return? For example, have you lost your job or experienced a drop in income?

☐ Yes - Skip to Item 18.

☐ No - Continue to Item 17.

17. Has your spouse's income significantly changed since your spouse filed his or her last federal income tax return? For example, has your spouse lost his or her job or experienced a drop in income?

☐ Yes - Continue to Item 18.

☐ No - Provide your and your spouse's most recent federal income tax return or transcript. Skip to Section 6.

18. Do you currently have taxable income? Check "No" if you do not have any income or receive only untaxed income.

☐ Yes - Provide documentation of your income as instructed in Section 5. Continue to Item 19.

☐ No - Continue to Item 19.

Remember, any person who makes a knowingly false statement or misrepresentation on this form may be subject to fines, imprisonment, or both.

Borrower Name: _____ **Borrower SSN:** ___-___-____

SECTION 4B: LOAN AND INCOME INFORMATION FOR MARRIED BORROWERS (CONTINUED)

19. Does your spouse currently have taxable income? Check "No" if your spouse has no taxable income or receives only untaxed income.

- ☐ Yes - Provide documentation of your spouse's income as instructed in Section 5.
- ☐ No - Skip to Section 6.

20. Did you file a federal income tax return for either of the past two years?

- ☐ Yes - Continue to Item 21.
- ☐ No - Skip to Item 22.

21. Has your income significantly changed since you filed your last federal income tax return? For example, have you lost your job or experienced a drop in income?

- ☐ Yes - Continue to Item 22.
- ☐ No - Provide your most recent federal income tax return or transcript. Skip to Item 23.

22. Do you currently have taxable income? Check "No" if you have no taxable income or receive only untaxed income.

- ☐ Yes - Provide documentation of your income as instructed in Section 5. Continue to Item 23.
- ☐ No - Continue to Item 23.

23. Are you separated from your spouse?

- ☐ Yes - Provide documentation of only your income as instructed in Item 21 or 22 and then skip to Section 6.
- ☐ No - Continue to Item 24.

24. Are you reasonably able to access information about your spouse's income and able to have your spouse sign this application?

- ☐ Yes - Continue to Item 25.
- ☐ No - Provide documentation of only your income as instructed in Item 21 or 22 and then skip to Section 6.

25. Did your spouse file a federal income tax return for either of the past two tax years?

- ☐ Yes - Continue to Item 26.
- ☐ No - Skip to Item 27.

26. Has your spouse's income significantly changed since your spouse filed his or her last federal income tax return? For example, has your spouse lost a job or experienced a drop in income?

- ☐ Yes - Continue to Item 27.
- ☐ No - Provide your spouse's most recent federal income tax return or transcript. This information will only be used for the REPAYE Plan. Skip to Section 6.

27. Does your spouse currently have taxable income? Check "No" if your spouse has no taxable income or received only untaxed income.

- ☐ Yes - Provide documentation of your spouse's income as instructed in Section 5. This information will only be used for the REPAYE Plan.
- ☐ No - Skip to Section 6.

Remember, any person who makes a knowingly false statement or misrepresentation on this form may be subject to fines, imprisonment, or both.

SECTION 5: INSTRUCTIONS FOR DOCUMENTING CURRENT INCOME

You only need to follow these instructions if, based on your answers in Section 4, you and your spouse (if applicable) are required to provide documentation of your current income instead of a tax return or tax transcript. After gathering the appropriate documentation, continue to Section 6.

- You must provide documentation of **all taxable income** you and your spouse currently receive.
- **Documentation will usually include** a pay stub or letter from your employer listing your gross pay.
- You must provide at least **one piece** of documentation for each source of taxable income.
- **Taxable income includes,** for example, income from employment, unemployment income, dividend income, dividend income, interest income, tips, and alimony.
- Do not provide documentation of **untaxed income** such as Supplemental Security Income, child support, or federal or state public assistance.
- **If documentation is not available or you want to explain your income,** attach a signed statement explaining each source of income and giving the name and the address of each source of income.
- Write on your documentation **how often you receive the income,** for example, "twice per month" or "every other week."
- The **date** on any supporting documentation you provide must be **no older than 90 days** from the date you sign this form.
- Copies of documentation are acceptable.

Borrower Name: _____ **Borrower SSN:** ____-____-____

SECTION 6: BORROWER REQUESTS, UNDERSTANDINGS, AUTHORIZATION, AND CERTIFICATION

If I am requesting an income-driven repayment plan or seeking to change between income-driven repayment plans, **I request:**

- That my loan holder place me on the plan I selected in Section 2 to repay my eligible Direct Loan or FFEL Program loans held by the holder to which I submit this form.
- If I do not qualify for the plan or plans I requested, that my loan holder place me on the plan with the lowest monthly payment amount.
- If I selected more than one plan, that my loan holder place me on the plan with the lowest monthly payment amount from the plans that I requested.
- If more than one of the plans that I selected provides the same initial payment amount, or if my loan holder is determining which income-driven plans I qualify for and I qualify for more than one of those plans, my loan holder will use the following order in choosing my plan: REPAYE (if my repayment period is 20 years), PAYE, REPAYE (if my repayment period is 25 years), IBR and then ICR.

If I am currently repaying my Direct Loans under the IBR plan and am requesting to change to another income-driven plan, I must be placed on the Standard Repayment Plan, and cannot change to the plan that I requested until I make a payment under the Standard Repayment Plan or make a payment under a reduced-payment forbearance.

If I check the box below, **I request** that my loan holder grant me a reduced-payment forbearance for one month so that I can move from the IBR plan to my new income-driven repayment plan.

☐ I want a one-month reduced-payment forbearance in the amount of _____ (must be at least $5).

I understand that:

- If I do not provide my loan holder with this completed form and any other required documentation, I will not be placed on the plan that I requested.
- I may choose a different repayment plan for any student loans that are not eligible for income-driven repayment.
- If I requested a reduced-payment forbearance of less than $5 above, my loan holder will grant my forbearance request in the amount of $5.
- If I am requesting the ICR plan, my initial payment amount will be the amount of interest that accrues each month on my loan until my loan holder receives the income documentation needed to calculate my payment amount. If I cannot afford the initial payment amount, I may request a forbearance by contacting my loan holder.
- If I have FFEL Program loans, my spouse may be required to give my loan holder access to his or her loan information in the National Student Loan Data System (NSLDS). My loan holder will contact me with further instructions.
- My loan holder may grant me a forbearance while processing my application or to cover any period of delinquency that exists when I submit my application.

I authorize the loan holder to which I submit this request (and its agents or contractors) to contact me regarding my request or my loan(s), including repayment of my loan(s), at any number that I provide on this form or any future number that I provide for my cellular telephone or other wireless device using automated telephone dialing equipment or artificial or prerecorded voice or text messages.

I certify that all of the information I have provided on this form and in any accompanying documentation is true, complete, and correct to the best of my knowledge and belief.

Borrower's Signature _____ **Date:** _____

Spouse's Signature _____ **Date:** _____

If you are married, your spouse is required to sign this form unless you answered "yes" to Item 23 or "no" to Item 24.

SECTION 7: WHERE TO SEND THE COMPLETED AGREEMENT

Return the completed form and any documentation to:
(if no address is shown, return to your loan holder or servicer.)

If you need help completing this form, call:
(if no telephone number is shown, call your loan holder or servicer.)

SECTION 8: INSTRUCTIONS FOR COMPLETING THE FORM

Type or print using dark ink. Enter dates as month-day-year (mm-dd-yyyy). Use only numbers. Example: March 14, 2015 = 03-14-2015. Include your name and account number on any documentation that you are required to submit with this form. **Return the completed form and any required documentation to the address shown in Section 7.**

SECTION 9: DEFINITIONS

COMMON DEFINITIONS FOR ALL INCOME-DRIVEN REPAYMENT PLANS:

The **William D. Ford Federal Direct Loan (Direct Loan) Program** includes Direct Subsidized Loans, Direct Unsubsidized Loans, Direct PLUS Loans, and Direct Consolidation Loans.

The **Federal Family Education Loan (FFEL) Program** includes Federal Stafford Loans (both subsidized and unsubsidized), Federal PLUS Loans, Federal Consolidation Loans, and Federal Supplemental Loans for Students (SLS).

The **poverty guideline amount** is the figure for your state and family size from the poverty guidelines published annually by the U.S. Department of Health and Human Services (HHS). The HHS poverty guidelines are used for purposes such as determining eligibility for certain federal benefit programs. If you are not a resident of a state identified in the poverty guidelines, your poverty guideline amount is the amount used for the 48 contiguous states.

Family size always includes you and your children (including unborn children who will be born during the year for which you certify your family size), if the children will receive more than half their support from you.

For the PAYE, IBR, and ICR Plans, family size also always includes your spouse. For the REPAYE plan, family size includes your spouse unless your spouse's income is excluded from the calculation of your payment amount because you are **(1)** separated from your spouse or **(2)** unable to access your spouse's income information.

For all plans, family size also includes other people only if they live with you now, receive more than half their support from you now, and will continue to receive this support for the year that you certify your family size. Support includes money, gifts, loans, housing, food, clothes, car, medical and dental care, and payment of college costs.

For the purposes of these repayment plans, your family size may be different from the number of exemptions you claim on your federal income tax return.

Capitalization is the addition of unpaid interest to the principal balance of your loan. This will increase the principal balance and the total cost of your loan.

A **deferment** is a period during which you are entitled to postpone repayment of your loans. Interest is not generally charged to you during a deferment on your subsidized loans. Interest is always charged to you during a deferment on your unsubsidized loans.

A **forbearance** is a period during which you are permitted to postpone making payments temporarily, allowed an extension of time for making payments, or temporarily allowed to make smaller payments than scheduled.

The **holder** of your Direct Loans is the U.S. Department of Education (the Department). The holder of your FFEL Program loans may be a lender, secondary market, guaranty agency, or the Department. Your loan holder may use a servicer to handle billing, payment, repayment options, and other communications on your loans. References to "your loan holder" on this form mean either your loan holder or your servicer.

A **partial financial hardship** is an eligibility requirement for the IBR and PAYE plans. You have a partial financial hardship when the annual amount due on all of your eligible loans (or, if you are also required to provide documentation of your spouse's income, the annual amount due on all of your eligible loans and your spouse's eligible loans) exceeds 10% (for the PAYE plan and for new borrowers under the IBR plan) or 15% (for those who are not new borrowers under the IBR plan) of the amount by which your adjusted gross income (AGI) exceeds 150% of the annual poverty guideline amount for your family size and state of residence. The annual amount due is calculated based on the greater of **(1)** the total amount owed on eligible loans at the time those loans initially entered repayment, or **(2)** the total amount owed on eligible loans at the time you initially request the PAYE or IBR plan. The annual amount due is calculated using a standard repayment plan with a 10-year repayment period, regardless of loan type. When determining whether you have a partial financial hardship for the PAYE plan, the Department will include any FFEL Program loans that you have into account even though those loans are not eligible to be repaid under the PAYE plan, except for: (1) a FFEL Program loan that is in default, (2) a Federal PLUS Loan made to a parent borrower, or (3) a Federal Consolidation Loan that repaid a Federal or Direct PLUS Loan made to a parent borrower.

The **standard repayment plan** has a fixed monthly payment amount over a repayment period of up to 10 years for loans other than Direct or Federal Consolidation Loans, or up to 30 years for Direct and Federal Consolidation Loans.

DEFINITIONS FOR THE REPAYE PLAN:

The **Revised Pay As You Earn (REPAYE) plan** is a repayment plan with monthly payments that are generally equal to 10% of your discretionary income, divided by 12.

Discretionary income for the REPAYE plan is the amount by which your adjusted gross income exceeds 150% of the poverty guideline amount for your state of residence and family size. If you are married, your AGI generally includes your spouse's income regardless of how you file your federal income tax return.

Eligible loans for the REPAYE plan are Direct Loan Program loans other than: **(1)** a loan that is in default, **(2)** a Direct PLUS Loan made to a parent borrower, or **(3)** a Direct Consolidation Loan that repaid a Direct or Federal PLUS Loan made to a parent borrower. FFEL Program Loans, Federal Perkins Loans, HEAL loans or other health education loans, and private education loans are not eligible to be repaid under the REPAYE plan.

DEFINITIONS FOR THE PAYE PLAN:

The **Pay As You Earn (PAYE) plan** is a repayment plan with monthly payments that are generally equal to 10% of your discretionary income, divided by 12, but will never be more than what you would have paid under the standard repayment plan with a 10-year repayment period based on what you owed when you entered the PAYE plan.

Discretionary income for the PAYE plan is the amount by which your adjusted gross income exceeds 150% of the poverty guideline amount for your state of residence and family size. To initially qualify for PAYE and to continue making payments based on your income under this plan, you must have a partial financial hardship (see definition). If you are married and file a joint federal income tax return, your AGI includes your spouse's income.

Eligible loans for the PAYE plan are Direct Loan Program loans received by a new borrower other than: **(1)** a loan that is in default, **(2)** a Direct PLUS Loan made to a parent borrower, or **(3)** a Direct Consolidation Loan that repaid a Direct or Federal PLUS Loan made to a parent borrower. FFEL Program Loans, Federal Perkins Loans, HEAL loans or other health education loans, and private education loans are not eligible to be repaid under the PAYE plan.

You are a **new borrower for the PAYE plan** if: **(1)** you have no outstanding balance on a Direct Loan or FFEL Program loan as of October 1, 2007 or have no outstanding balance on a Direct Loan or FFEL Program loan when you obtain a new loan on or after October 1, 2007, and **(2)** you receive a disbursement of a Direct Subsidized Loan, Direct Unsubsidized Loan, or a Direct PLUS Loan made to a student borrower on or after October 1, 2011, or you receive a Direct Consolidation Loan based on an application received on or after October 1, 2011. However, you are **not** considered a new borrower if the Direct Consolidation Loan you receive repays loans that would make you ineligible under part **(1)** of this definition.

DEFINITIONS FOR THE IBR PLAN:

The **Income-Based Repayment (IBR) plan** is a repayment plan with monthly payments that are generally equal to 15% (10% if you are a new borrower) of your discretionary income, divided by 12, but will never be more than what you would have paid under the standard repayment plan with a 10-year repayment period based on what you owed when you entered the IBR plan.

Discretionary income for the IBR plan is the amount by which your adjusted gross income exceeds 150% of the poverty guideline amount for your state of residence and family size. To initially qualify for IBR and to continue making payments based on your income under this plan, you must have a partial financial hardship (see definition). If you are married and file a joint federal income tax return, your AGI includes your spouse's income.

Eligible loans for the IBR plan are Direct Loan and FFEL Program loans other than: **(1)** a loan that is in default, **(2)** a Direct or Federal PLUS Loan made to a parent borrower, or **(3)** a Direct or Federal Consolidation Loan that repaid a Direct or Federal PLUS Loan made to a parent borrower. Federal Perkins Loans, HEAL loans or other health education loans, and private education loans are not eligible to be repaid under the IBR plan.

You are a **new borrower for the IBR plan** if **(1)** you have no outstanding balance on a Direct Loan or FFEL Program loan as of July 1, 2014 or **(2)** have no outstanding balance on a Direct Loan or FFEL Program loan when you obtain a new loan on or after July 1, 2014.

DEFINITIONS FOR THE ICR PLAN:

The **Income-Contingent Repayment (ICR) plan** is a repayment plan with monthly payments that are the lesser of **(1)** what you would pay on a repayment plan with a fixed monthly payment over 12 years, adjusted based on your income or **(2)** 20% of your discretionary income divided by 12.

Discretionary income for the ICR plan is the amount by which your adjusted gross income exceeds the poverty guideline amount for your state of residence and family size. If you are married and file a joint federal income tax return or if you choose to repay your Direct Loans jointly with your spouse, your AGI includes your spouse's income.

Eligible loans for the ICR plan are Direct Loan Program loans other than: **(1)** a loan that is in default, **(2)** a Direct PLUS Loan made to a parent borrower, or **(3)** a Direct PLUS Consolidation Loan (these are Direct Consolidation Loans made based on an application received prior to July 1, 2006 that repaid Direct or Federal PLUS Loans made to a parent borrower). However, a Direct Consolidation Loan made based on an application received on or after July 1, 2006 that repaid a Direct or Federal PLUS Loan made to a parent borrower is eligible for the ICR plan. FFEL Program Loans, Federal Perkins Loans, HEAL loans or other health education loans, and private education loans are not eligible to be repaid under the ICR plan.

SECTION 10: INCOME-DRIVEN PLAN ELIGIBILITY REQUIREMENTS AND GENERAL INFORMATION

Table 1: Income-driven repayment plan eligibility requirements and general information.

Plan Feature	REPAYE	PAYE	IBR	IBR for New Borrowers	ICR
Payment Amount	Generally, 10% of discretionary income.	Generally, 10% of discretionary income.	Generally, 15% of discretionary income.	Generally, 10% of discretionary income.	Lesser of 20% of discretionary income or what you would pay under a repayment plan with fixed payments over 12 years, adjusted based on your income.
Cap on Payment Amount	None. Your payment may exceed what you would have paid under the standard repayment plan with a 10-year repayment period.	What you would have paid under the standard repayment plan with a 10-year repayment period when you entered the plan.	What you would have paid under the standard repayment plan with a 10-year repayment period when you entered the plan.	What you would have paid under the standard repayment plan with a 10-year repayment period when you entered the plan.	None. Your payment may exceed what you would have paid under the standard repayment plan with a 10-year repayment period.
Married Borrowers	You must provide income documentation for yourself and your spouse regardless of whether you file a joint or separate Federal income tax return unless you and your spouse **(1)** are separated or **(2)** you are unable to reasonably access your spouse's income information.	You must provide income documentation for you and your spouse only if you file a joint Federal income tax return.	You must provide income documentation for you and your spouse only if you file a joint Federal income tax return.	You must provide income documentation for you and your spouse only if you file a joint Federal income tax return.	You must provide income documentation for you and your spouse only if you file a joint Federal income tax return or if you and your spouse choose to jointly repay under the plan.
Borrower Responsibility for Interest if Payment Does Not Cover All Interest that Accrues	• On subsidized loans, you do not have to pay the difference between your monthly payment amount and the remaining interest that accrues for your first 3 consecutive years of repayment under the plan. • On subsidized loans after the first consecutive 3 years and on unsubsidized loans during all periods, you are only responsible for paying half of the difference between your monthly payment amount and the remaining interest that accrues.	On subsidized loans, you do not have to pay the difference between your monthly payment amount and the remaining interest that accrues for your first 3 consecutive years of repayment under the plan.	On subsidized loans, you do not have to pay the difference between your monthly payment amount and the remaining interest that accrues for your first 3 consecutive years of repayment under the plan.	On subsidized loans, you do not have to pay the difference between your monthly payment amount and the remaining interest that accrues for your first 3 consecutive years of repayment under the plan.	You are responsible for paying all of the interest that accrues.

SECTION 10: INCOME-DRIVEN PLAN ELIGIBILITY REQUIREMENTS AND GENERAL INFORMATION (CONTINUED)

Plan Feature	REPAYE	PAYE	IBR	IBR for New Borrowers	ICR
Forgiveness Period	• If you only have eligible Direct Loans that you received for undergraduate study, any remaining balance is forgiven after 20 years of qualifying repayment on all of your loans. • If you have any eligible Direct Loans that you received for graduate or professional study, any remaining balance is forgiven after 25 years of qualifying repayment on all of your loans. Forgiveness may be taxable. Any months when you received an economic hardship deferment are considered the equivalent of qualifying payments, but not any months you received any other type of deferment or months you received any type of forbearance.	Any remaining balance is forgiven after 20 years of qualifying repayment, and may be taxable. Any months when you received an economic hardship deferment are considered the equivalent of qualifying payments, but not any months you received any other type of deferment or months you received any type of forbearance.	Any remaining balance is forgiven after 25 years of qualifying repayment, and may be taxable. Any months when you received an economic hardship deferment are considered the equivalent of qualifying payments, but not any months you received any other type of deferment or months you received any type of forbearance.	Any remaining balance is forgiven after 20 years of qualifying repayment, and may be taxable. Any months when you received an economic hardship deferment are considered the equivalent of qualifying payments, but not any months you received any other type of deferment or months you received any type of forbearance.	Any remaining balance is forgiven after 25 years of qualifying repayment, and may be taxable. Any months when you received an economic hardship deferment are considered the equivalent of qualifying payments, but not any months you received any other type of deferment or months you received any type of forbearance.
Income Requirement to Enter Plan	None.	You must have a "partial financial hardship".	You must have a "partial financial hardship".	You must have a "partial financial hardship".	None.
Borrower Eligibility Requirement	You must be a Direct Loan borrower with eligible loans.	You must be a "new borrower" with eligible Direct Loans.	You must be a Direct Loan or FFEL Program borrower with eligible loans.	You must be a "new borrower" with eligible Direct Loans.	You must be a Direct Loan borrower with eligible loans.
Requirement to Recertify Income and Family Size	Annually. Failure to submit documentation by the deadline will result in capitalization of interest and being placed on the alternative repayment plan with a payment that will ensure that your loan is paid in full over a period that is the lesser of 10 years or the remainder of 20 or 25 years.	Annually. Failure to submit documentation by the deadline may result in the capitalization of interest and will increase the payment amount to the 10-year standard payment amount.	Annually. Failure to submit documentation by the deadline will result in the capitalization of interest and increase in payment amount to the 10-year standard payment amount.	Annually. Failure to submit documentation by the deadline will result in the capitalization of interest and increase in payment amount to the 10-year standard payment amount.	Annually. Failure to submit documentation by the deadline will result in the recalculation of your payment amount to be the 10-year standard payment amount.

SECTION 10: INCOME-DRIVEN PLAN ELIGIBILITY REQUIREMENTS AND GENERAL INFORMATION (CONTINUED)

Plan Feature	REPAYE	PAYE	IBR	IBR for New Borrowers	ICR
Leaving the Plan	At any time, you may change to any other repayment plan for which you are eligible.	At any time, you may change to any other repayment plan for which you are eligible.	If you want to leave the plan, you will be placed on the standard repayment plan. You may not change to a different plan until you have made at least one payment under the standard repayment plan or a payment under a reduced-payment forbearance.	If you want to leave the plan, you will be placed on the standard repayment plan. You may not change to a different plan until you have made at least one payment under the standard repayment plan or a payment under a reduced-payment forbearance.	At any time, you may change to any other repayment plan for which you are eligible.
Interest Capitalization	Interest is capitalized when you are removed from the plan for failing to recertify your income by the deadline or when you voluntarily leave the plan. Otherwise, interest capitalizes at the expiration of a deferment or forbearance.	If you are determined to no longer have a "partial financial hardship" or if you fail to recertify your income by the deadline, interest is capitalized until the outstanding principal balance on your loans is 10% greater than it was when you entered the plan. Interest is also capitalized when you leave the plan.	If you are determined to no longer have a "partial financial hardship", fail to recertify your income by the deadline, or leave the plan, interest is capitalized.	If you are determined to no longer have a "partial financial hardship", fail to recertify your income by the deadline, or leave the plan, interest is capitalized.	Interest that accrues when your payment amount is less than accruing interest on your loans is capitalized annually until the outstanding principal balance on your loans is 10% greater than it was when your loans entered repayment.
Re-Entering the Plan	You must provide income documentation for the period when you were not on the REPAYE plan. Your loan holder will calculate the amount you would have been required to pay under the REPAYE plan during that period and compare that to the amount you were required to pay under a different plan over the same period. If the amount you would have been required to pay under the REPAYE plan is more than what you actually paid during this period, your new payment amount under the REPAYE plan will be increased. The increased amount is equal to the difference between what you were required to pay while not on the REPAYE plan and what you would have been required to pay if you had been on the REPAYE plan, divided by the number of months remaining in your 20- or 25-year forgiveness period.	You must again show that you have a "partial financial hardship".	You must again show that you have a "partial financial hardship".	You must again show that you have a "partial financial hardship".	No restrictions.

SECTION 11: SAMPLE PAYMENT AMOUNTS

The tables below provide repayment estimates under the traditional and income-driven repayment plans. These figures are estimates based on an interest rate of 6%, the average Direct Loan interest rate for undergraduate and graduate borrowers. The figures also assume a family size of 1, that you live in the continental U.S., and that your income increases 5% each year. Various factors, including your interest rate, your loan debt, your income, and if and how quickly your income rises, may cause your repayment to differ from the estimates shown in these tables. These figures use the 2015 Poverty Guidelines and Income Percentage Factors.

Table 2. Non-Consolidation, Undergraduate Loan Debt of $30,000 in Direct Unsubsidized Loans and Starting Income of $25,000

Repayment Plan	Initial Payment	Final Payment	Time in Repayment	Total Paid	Loan Forgiveness
Standard	$333	$333	10 years	$39,967	N/A
Graduated	$190	$571	10 years	$42,636	N/A
Extended-Fixed	Ineligible	-	-	-	-
Extended-Graduated	Ineligible	-	-	-	-
PAYE & IBR (new borrowers)	$61	$299	20 years	$38,714	$27,164
REPAYE	$61	$299	20 years	$38,714	$23,672
IBR	$92	$333	21 years, 6 months	$60,441	$0
ICR	$197	$255	19 years, 2 months	$51,838	$0

Table 3. Non-Consolidation, Undergraduate/Graduate Loan Debt of $60,000 in Direct Unsubsidized Loans and Starting Income of $40,000

Repayment Plan	Initial Payment	Final Payment	Time in Repayment	Total Paid	Loan Forgiveness
Standard	$666	$666	10 years	$79,935	N/A
Graduated	$381	$1,143	10 years	$85,272	N/A
Extended-Fixed	$387	$387	25 years	$115,974	N/A
Extended-Graduated	$300	$582	25 years	$126,173	N/A
PAYE & IBR (new borrowers)	$186	$615	20 years	$88,314	$41,008
REPAYE	$186	$819	24 years, 11 months	$131,061	$0
IBR	$279	$666	18 years, 1 month	$107,385	$0
ICR	$471	$586	13 years, 8 months	$89,152	$0

SECTION 12: IMPORTANT NOTICES

Privacy Act Notice. The Privacy Act of 1974 (5 U.S.C. 552a) requires that the following notice be provided to you:

The authorities for collecting the requested information from and about you are §421 et seq. and §451 et seq. of the Higher Education Act of 1965, as amended (20 U.S.C. 1071 et seq. and 20 U.S.C. 1087a et seq.), and the authorities for collecting and using your Social Security Number (SSN) are §§428B(f) and 484(a)(4) of the HEA (20 U.S.C. 1078-2(f) and 1091(a)(4)) and 31 U.S.C. 7701(b). Participating in the Federal Family Education Loan (FFEL) Program or the William D. Ford Federal Direct Loan (Direct Loan) Program and giving us your SSN are voluntary, but you must provide the requested information, including your SSN, to participate.

The principal purposes for collecting the information on this form, including your SSN, are to verify your identity, to determine your eligibility to receive a loan or a benefit on a loan (such as a deferment, forbearance, discharge, or forgiveness) under the FFEL and/or Direct Loan Programs, to permit the servicing of your loan(s), and, if it becomes necessary, to locate you and to collect and report on your loan(s) if your loan(s) becomes delinquent or defaults. We also use your SSN as an account identifier and to permit you to access your account information electronically.

The information in your file may be disclosed, on a case-by-case basis or under a computer matching program, to third parties as authorized under routine uses in the appropriate systems of records notices. The routine uses of this information include, but are not limited to, its disclosure to federal, state, or local agencies, to private parties such as relatives, present and former employers, business and personal associates, to consumer reporting agencies, to financial and educational institutions, and to guaranty agencies in order to verify your identity, to determine your eligibility to receive a loan or a benefit on a loan, to permit the servicing or collection of your loan(s), to enforce the terms of the loan(s), to investigate possible fraud and to verify compliance with federal student financial aid program regulations, or to locate you if you become delinquent in your loan payments or if you default. To provide default rate calculations, disclosures may be made to guaranty agencies, to financial and educational institutions, or to state agencies. To provide financial aid history information, disclosures may be made to educational institutions. To assist program administrators with tracking refunds and cancellations, disclosures may be made to guaranty agencies, to financial and educational institutions, or to federal or state agencies. To provide a standardized method for educational institutions to efficiently submit student enrollment status, disclosures, may be made to guaranty agencies or to financial and educational institutions. To counsel you in repayment efforts, disclosures may be made to guaranty agencies, to financial and educational institutions, or to federal, state, or local agencies.

In the event of litigation, we may send records to the Department of Justice, a court, adjudicative body, counsel, party, or witness if the disclosure is relevant and necessary to the litigation. If this information, either alone or with other information, indicates a potential violation of law, we may send it to the appropriate authority for action. We may send information to members of Congress if you ask them to help you with federal student aid questions. In circumstances involving employment complaints, grievances, or disciplinary actions, we may disclose relevant records to adjudicate or investigate the issues. If provided for by a collective bargaining agreement, we may disclose records to a labor organization recognized under 5 U.S.C. Chapter 71. Disclosures may be made to our contractors for the purpose of performing any programmatic function that requires disclosure of records. Before making any such disclosure, we will require the contractor to maintain Privacy Act safeguards. Disclosures may also be made to qualified researchers under Privacy Act safeguards.

Paperwork Reduction Notice. According to the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a currently valid OMB control number. The valid OMB control number for this information collection is 1845-0102. Public reporting burden for this collection of information is estimated to average 20 minutes (0.33 hours) per response, including the time for reviewing instructions, searching existing data resources, gathering and maintaining the data needed, and completing and reviewing the information collection. Individuals are obligated to respond to this collection to obtain a benefit in accordance with 34 CFR 682.215, 685.209, or 685.221.

If you have questions regarding the status of your individual submission of this form, contact your loan holder (see Section 7).