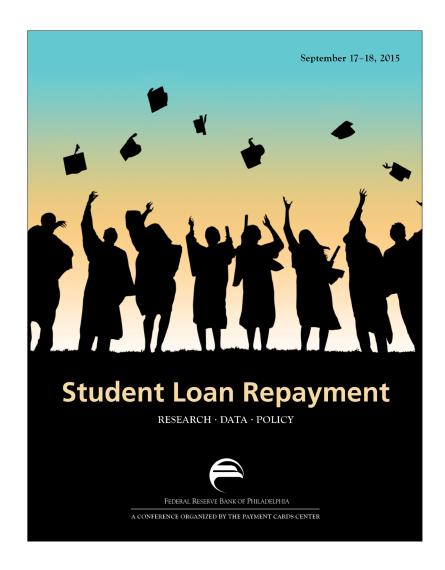
# **CONFERENCE SUMMARY**



Student Loan Repayment: Research, Data, and Policy

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#### I. Background and Introduction

The Payment Cards Center (PCC) of the Federal Reserve Bank of Philadelphia hosted the Student Loan Repayment: Research, Data, and Policy conference on September 17–18, 2015, focusing on policy-relevant research questions pertaining to student loan repayment. Student loan policy has become a prominent issue in recent years as students are increasingly having difficulty meeting repayment obligations. Student loan delinguency rates have nearly doubled over the past decade nationwide, and default rates on federally supported loan programs reached their highest levels in more than 15 years just a few years ago. Compared with other types of credit such as mortgages, however, existing research on student loans is less conclusive in establishing the determinants of delinquency and default. The goal of the 2015 PCC conference on student loan repayment was threefold: to revisit the existing research on student loan repayment, to outline the policy-relevant research questions remaining to be answered, and to examine our capacity to answer these questions given available and emerging data sources.

In his welcome remarks, Patrick T. Harker, president and chief executive officer of the Federal Reserve Bank of Philadelphia, highlighted the role that research plays in helping policymakers balance several competing goals: encouraging students to attend and graduate from college, helping students and lenders make prudent financial decisions, and ensuring an efficient, safe, and sound loan program for taxpavers, to name just a few. In his welcome remarks, Robert M. Hunt, senior vice president at the Federal Reserve Bank of Philadelphia and director of the PCC, emphasized the importance of measurement in supporting the optimal design of an education finance system that relies on student loans. He underscored the crucial role of data to support such measurement efforts and our pursuit of a deeper understanding of the interdependencies between the different components and functions of the education finance ecosystem.

The event's speakers and audience represented the varied views of researchers on education policy and consumer credit, policymakers and regu-

lators, student lenders and servicers, and financial educators. Over the course of two keynote speeches and four panels, each comprising distinguished representatives from the various stakeholders previously described, we considered different stages of a student loan — that is, origination, servicing, and default management. The speakers focused on the factors from each of those stages that affect student loan repayment and the ways in which rigorous research based on innovative data sources can help us to understand student and lender decisionmaking. Susan Dynarski of the University of Michigan and Caroline Hoxby of Stanford University delivered opening and closing keynote speeches, respectively. The discussion at the conference, as in this synopsis, was organized around the life cycle of students' interactions with the various components of the student loan process.

This synopsis summarizes the conference discussion by outlining the key insights presented by participants and by reviewing the most important themes of the event. Participants outlined some of the benefits and limitations of existing data sources in supporting research efforts and some ways in which researchers have and could produce more rigorous and policy-relevant applied research through innovative partnerships with loan program managers, lenders, servicers, and educational institutions. The conference was successful in facilitating a stimulating, robust, and extremely candid discussion; this summary highlights the areas of agreement and disagreement from this discussion, without taking a position on the views expressed by our presenters. It also provides an inventory of what we have learned so far, contemplates how we can produce better and more relevant research that supports both policy and practice, and outlines some ideas for future research on student loan repayment.

Over the course of the two conference days, speakers and audience members agreed that:
1) determinants and effects of student loan default are becoming better understood; 2) financial counseling for student loan borrowers is challenging; 3) we need to understand better the linkages between student debt and other outcomes, such as employment, family structure, and continued education;

4) data merges are key to providing a comprehensive analysis of the outcomes for student loan borrowers; and 5) vulnerable borrowers are particularly at risk of student loan repayment difficulties (an issue explored further in our 2016 Symposium on Student Loans and Socioeconomic Mobility).

#### II. Five Myths about Student Loans in the U.S.

Prior to a more detailed discussion of issues inherent in studying student loan repayment at different stages of the loan life cycle, Susan Dynarski, a prominent researcher in education finance from the University of Michigan, dispelled five common myths about the 40-million borrower, \$1.2-trillion student loan market in the United States.<sup>1</sup>

#### Myth #1: \$100,000 Debts Are the Norm

Although large student debts are increasingly common, debts of more than \$50,000 still represent only about 10 percent to 12 percent of all borrowers (depending on the data source). Average student loan debt is about \$20,000, and 40 percent of borrowers have balances of less than \$10,000. The important consideration, of course, is the distribution of earnings and student loan balances. Unfortunately, while that information exists, it is not commonly available to researchers.

Based on some limited sources, borrower income and student loan balances exhibit a near-linear relationship, so large balances may not represent as much of a concern as often presented in the popular press. In addition, compared with many other kinds of installment loans, monthly payments on student loans are relatively low, even on large balances. For example, at present interest rates, a payment on \$20,000 in federal student loans is less than half of the average payment on a new car loan of the same amount.

Myth #2: Defaults Are Driven Primarily by Large Debts

In reality, borrowers with smaller student loan balances are much more likely to default than borrowers with larger balances. For the cohort of borrowers entering repayment in 2009, about 61 percent of those who had defaulted by 2014 have student loan balances less than \$10,000, and only 18 percent of borrowers in that cohort of defaulters have student loan balances in excess of \$100,000.<sup>2</sup>

Myth #3: Graduates of Elite, Expensive Colleges Are Struggling with Debt

Graduates of selective four-year institutions are the group of borrowers least likely to be in default, even though the group is most likely to have the largest student loan balances (Looney and Yannelis, 2015). In terms of default, borrowers who attended community colleges and for-profit institutions of higher education are the hardest hit. This finding is highly relevant because enrollment in forprofit institutions rose to 12 percent of all students at its peak, up from only 2 percent 10 years earlier.<sup>3</sup> Enrollment might increase more as state funding for public institutions of higher education remains far below prerecession levels for most states and as federal government grants and loans that can be used to fund a wider range of educational opportunities become more generous.

Myth #4: Interest Rate Cuts Help Students and Struggling Borrowers

One proposal debated in policy circles in recent years has focused on reducing the amount of interest paid by student loan borrowers. Yet, decreases in interest rates help those borrowers who have been in repayment the longest and those with

<sup>&</sup>lt;sup>1</sup> Market figures in Dynarski's and other presentations were applicable at the time the conference took place. As of 2017, the total outstanding student debt surpassed \$1.4 trillion, per the Federal Reserve's G19 Consumer Credit Outstanding data set.

<sup>&</sup>lt;sup>2</sup> These statistics are based on data from the Federal Reserve Bank of New York/Equifax Consumer Credit Panel (Consumer Credit Panel).
<sup>3</sup> The share of students attending for-profit colleges has decreased somewhat in recent years because of improvements in economic conditions and other factors but remains considerably elevated relative to historical patterns.

the largest debts. Those borrowers are actually the least likely to be in default, indicating that interest rate adjustments are not an effective tool for combating student loan delinquency and default because interest rate cuts don't help borrowers who are struggling now. Interest rate cuts might help borrowers in income-driven repayment plans pay off their balances faster (for example, by age 40 instead of age 42), and they might help these borrowers have a larger proportion of their debts forgiven. However, rate cuts have zero effect on current monthly payments for borrowers in income-driven repayment plans. For students taking on new educational loans, there is no liquidity relief with lower interest rates (except, perhaps, minor reductions in the interest accrued while enrolled in an eligible program for certain loans); in other words, availability of funds for investment in education today would not increase.

Generally speaking, grants may be a more effective education subsidy than interest rate cuts if an increase in college attendance is the goal, and income-driven repayment plans may be more effective than interest rate cuts as a default prevention measure. On the other hand, interest rate reductions may help borrowers with higher-interest, unsubsidized federal student loans who are paying high interest rates and who do not expect to require access to income-driven repayment and other protections available to borrowers with federal student loans.

Myth #5: The Loan Market Was Once Competitive but Has Been Taken Over by the Federal Government

Prior to 2010, under the Federal Family Education Loan Program (FFELP), federal student loans were processed and funded by private lenders but guaranteed by the federal government, which also set the loan limits and other terms for the loans. Under the FFELP, 97 percent of the initial

balance plus interest was guaranteed by the federal government, so risk exposure was relatively minor for the private lenders who processed and funded the loans. Post-2010, applications for all federally guaranteed loans — now referred to as Direct Loans — are accepted directly by the U.S. Department of Education and funded by federal resources. So, relative to the FFELP era, loans, loan acceptance, and fund disbursement are the only parts of the system that have changed fundamentally. The tensions in this public-private partnership of originating and servicing federally guaranteed loans have simply changed, but challenges existed before 2010, and they continue to exist today.

Dynarski pointed out that some politicians have focused on interest rates and on free community college initiatives in their policymaking efforts. But making college free only increases the demand for education, while increasing capacity in higher education institutions is considerably more challenging. Responsive policies might include tighter regulation of for-profit colleges (both in terms of accreditation and fraud detection/prevention) and an expansion in income-driven repayment plans. In Dynarski's opinion, income-driven repayment plans should be made the default option, income and debt requirements (often referred to as means testing) for such programs should be eliminated, the administrative process should be simplified through payroll withholding, and payments should be adjusted automatically (similarly to income tax and Social Security contributions).

### III. Information Asymmetry in Loan Access and Origination

The first panel focused on information asymmetries at the point of student loan origination and on the various parties involved at this initial stage of the student loan life cycle.

Jeff Appel from the U.S. Department of Education reviewed the legal and regulatory framework for government financial aid. He emphasized that Pell grants and federal student loans are statutory entitlements. Congressional action would be required to alter this aspect of federal financial aid. The governance structure over institutions of high-

<sup>&</sup>lt;sup>4</sup>Income-driven (or income-based or income-contingent) repayment plans are designed to alleviate the student debt burden for low-income borrowers. These programs typically require borrowers to pay a set percentage of their income to service their student debt and forgive any balance that remains unpaid at the end of the repayment period.

er education that participate in the loan system currently involves the federal government, state governments, and various accrediting agencies. The latter are responsible for "quality control," in the sense that the Department of Education is statutorily prohibited from exercising any direction, supervision, or control over the curriculum, programs, or administration of institutions, or restricting access to federally guaranteed loans based on the characteristics of the borrower, the borrower's family, the borrower's institution, or field of study.<sup>5</sup>

Appel also announced a number of new data collection (and potentially sharing) initiatives. The Department of Education is set to modify data collected on the Free Application for Federal Student Aid (FAFSA) form. FAFSA fields include items such as parents' income and education, the presence of other dependents in the household, and applicant's incomes. Beginning with the 2017–2018 school year, the FAFSA will be modified to collect income data that is one year older than what is currently collected, an initiative many refer to as moving to "prior-prior" year. (This will simplify the process for applicants because it addresses a major issue with the timing of the FAFSA application cycle with that of the Income Tax filing cycle.) Appel also highlighted the release of the College Scorecard, launched days before the PCC conference. The Scorecard contains information on the median debt, employment, and incomes for students of individual institutions of higher education — those who accessed federal student financial aid while at school — and thus enables some degree of "comparison shopping" for parents and students. Appel emphasized that collecting, managing, and releasing large volumes of new data has required the Department of Education to develop an extensive infrastructure, and the department is committed to collecting and using data in innovative ways to help families make the best possible choices for funding higher education.

Eileen O'Leary from Stonehill College and the National Association of Student Financial Aid Administrators discussed the ways in which students interact with student financial services officers and the information exchange that happens during this process. She noted that going to college is an emotional decision for an 18-year-old, and the student's ability to process information is rather limited at that age. In her experience, parents have applied more discipline on this decision since the recession.

Once enrolled, most college students do not know how much they have borrowed or what their loan balance or monthly payments will be upon graduation. Colleges can offer, but cannot mandate, financial counseling for student borrowers with federal loans because a mandate can be viewed as restricting access to the loans. For those who borrow from private lenders, annual financial literacy training is often required. But Stonehill College has experimented with including and excluding different types of counseling without much apparent effect on default rates.

O'Leary also discussed educational institutions' data collection challenges, particularly when working with servicers. She pointed out that Stonehill College's involvement when the student becomes delinquent or defaults is limited and that the incentives are firmly stacked in favor of forbearance and deferral options because those can be done online in minutes, while the process of enrolling in income-driven repayment plan is considerably more complicated.<sup>7</sup>

<sup>&</sup>lt;sup>5</sup>There are two exceptions to this statement. The first is that Parent PLUS loans are not available to individuals with severe derogatory items in their recent credit history (bankruptcy, collections, etc.). The second is that the Department of Education does withdraw student loan funding from institutions with very high cohort default rates, but this restriction affects very few institutions of higher education.

<sup>&</sup>lt;sup>6</sup>The Department of Education requires entrance counseling before the first Direct Loans are disbursed by the institution as well as exit counseling when a student graduates, leaves school, or drops below half-time enrollment. But any additional financial literacy requirements related to student loans may not be made a condition to loan disbursement; hence, students are unlikely to attend. See, for example, https://www.insidehighered.com/news/2016/07/14/us-plans-let-some-colleges-experiment-required-counseling-borrowers.

<sup>7</sup>Navient, the largest servicer of student loans in the United States, was sued by the Consumer Financial Protection Bureau in 2017 for allegedly failing to assist borrowers in obtaining lower payments on their student loans and instead steering them into forbearance. See https://www.consumerfinance.gov/about-us/newsroom/cfpb-sues-nations-largest-student-loan-company-navient-failing-borrowers-every-stage-repayment/.

Jennifer Astle from College Ave Student Loans highlighted a study undertaken by Google Research on how students seek information about student loans, illustrating the diversity of information sources that students and parents access. Parents search for a considerable portion of information, but students' share of searches is on the rise. Astle also shared insights from a proprietary College Ave report on financing higher education. Based on that study, the cost of attendance affects where students choose to apply and attend college, and many students understand the steps needed to access financial aid. Most students do take financial responsibility during college; they understand their cash flow, maintain budgets, and are interested in ways to save. But financing and repayment are areas of uncertainty for students. Students crave better financial information, they are confused by interest rates and loan terms, and debt is very scary for them. Astle argued that this research highlights additional areas of potential focus for financial education for student loan borrowers going forward.

Finally, Benjamin Castleman from the University of Virginia offered a behavioral researcher's perspective on the student loan process. He highlighted that the road to and through college is filled with complexity. Behavioral responses to complexity can involve sticking with the status quo, delaying a decision, or using a simplifying strategy. Some behavioral interventions to promote active and informed decision-making aim to simplify and proactively deliver information, to reduce hassles and ease program entry, and to prompt action on the side of the borrower.

Castleman also discussed ways to "nudge" students to make good decisions about student loans, based on recent research in behavioral economics. One option may be text messaging, which he likened to a "behavioral multivitamin." Text messaging can reduce barriers to one-on-one counseling, prompt active choice, simplify information, and make connections between present borrowing and future expenses, which can often be challenging for 18-year-olds. Castleman suggested that the Department of Education can, with student permission, leverage contact information from FAFSA

and text messaging to provide simplified information about borrowing and real-time, one-on-one loan counseling because these strategies have been shown to be effective in experimental settings.<sup>8</sup>

# IV. Student Loan Servicing and Repayment: Practices and Data Challenges

The second panel reviewed the data collected by lenders, servicers, and credit reporting agencies in the course of loan servicing, highlighting some ways in which this information has been used thus far in publicly available research on student loans.

Amy Crews Cutts from Equifax, a national credit bureau, provided an overview of the more than \$1.2 trillion (at panel time; now more than \$1.4 trillion) student loan market, which currently represents the largest component of nonmortgage consumer debt. Approximately 60 percent to 65 percent of outstanding student loan balances held by the approximately 42 million student loan borrowers in the Equifax database are in repayment status (i.e., the loans are not deferred). The 60+ days past due (DPD) delinquency rate on these outstanding balances — although still high relative to historical averages — has fallen considerably since the end of the financial crisis from approximately 16 percent at its peak in 2010–2012 to about 11 percent by late 2015.9

Considering recent student loan originations, Crews Cutts showed that the majority of loans originated in July 2015 were taken out by individuals with relatively low risk scores. Approximately 12 percent of new student loans in July 2015 were taken out by unscorable (thin file) consumers, and about half of all new student loans were originated to subprime or borderline subprime (risk score < 660) borrowers. <sup>10</sup> It turns out that

<sup>&</sup>lt;sup>8</sup> Conference attendees debated the legal complexity of pursuing text messaging as an avenue of financial counseling. That discussion is outside the scope of this summary.

<sup>&</sup>lt;sup>9</sup>The statistics provided here are for the share of outstanding balances. The share of delinquent accounts in loan repayment status fell from a peak of about 23 percent in 2010 to about 14 percent in 2015.

<sup>&</sup>lt;sup>10</sup> Young adults frequently have thin or missing credit bureau files, so this observation is not surprising.

for student loan borrowers, having no risk score need not imply poor future loan performance, even for federal student loans, which do not tend to be cosigned: The delinquency rate (60+ DPD, in this case) for student loans of those borrowers who were unscorable at origination is less than half the delinquency rate of borrowers with subprime risk scores. The performance of student loans improves linearly with credit scores at origination, and loans originated to unscorable borrowers perform on par with loans originated to an average borrower with student loans. Crews Cutts noted that risk scores at origination therefore may serve as useful proxies for future loan performance when borrowers have scores available at origination.

Wilbert van der Klaauw, senior vice president at the Federal Reserve Bank of New York, provided an example of economic research (Van der Klaauw, Lee, Haughwout, Brown, and Scally, 2014) on student loan delinquency and default using an anonymized sample of credit bureau records: the Federal Reserve Bank of New York/ Equifax Consumer Credit Panel (Consumer Credit Panel). He shared that, based on a snapshot of borrowers in Q4:2014, about 17 percent of student loan borrowers were delinquent or in default, 20 percent were current with a previous blemish, 34 percent were current with a stagnant or increasing balance (likely due to insufficient payments, income-driven repayment, deferral, forbearance, or enrollment in a course of study), and only 29 percent were current and paying down their balances.

Van der Klaauw then presented an analysis of cohorts of borrowers tracked over time. Borrowers were assigned to cohorts using loan origination information for the academic year in which the student stopped taking on new loans. This information allows Van der Klaauw and coauthors to assign each borrower to an "origination completion cohort" for each academic year. Their data do not provide information on graduation or dropout dates, but to the extent that student borrowers take out new loans in the last year of their education, this approach will be close to the concept of the school-leaving cohort of each student borrower. Consistent with other data sources, cohort default

rates have increased significantly for recent school-leaving cohorts in Van der Klaauw's data; the share of borrowers who ever defaulted five years after entering repayment was 26 percent for the 2009 cohort (29 percent for the 2011 cohort but improved substantially for more recent cohorts).<sup>11</sup>

Considering differences in default and delinquency rates based on the average family income of the borrower's zip code at first appearance in the Consumer Credit Panel (as a proxy for family background, since the panel does not contain information on individual borrower's income), borrowers from lowest income zip codes face the most difficulties in repaying their loans. For the 2009 repayment cohort, nearly 60 percent of borrowers from lowest income zip codes were 120+ DPD or in default, while only 20 percent of borrowers in highest income zip codes faced similar outcomes. Additionally, repayment rates (the proportion of balance remaining to be repaid) for the 2009 cohort were considerably lower for borrowers from lowest income zip codes: Less than 5 percent of the student debt held by these borrowers was repaid five years after entering repayment. Van der Klaauw's analysis provides some nuance to the average reported default rates and demonstrates the importance of considering detailed loan- and borrower-level data in assessing the prevalence of repayment difficulties for U.S. borrowers.

Van der Klaauw also discussed the drop in the share of borrowers with mortgages and the increase in coresidence with parents for young borrowers in the Consumer Credit Panel (based on Van der Klaauw, Bleemer, Brown, and Lee, 2014). He noted that the decrease in the share of borrowers with mortgages between 2007 and 2014 appears to have been more substantial among borrowers with student loans (approximately 10 percentage points) compared with borrowers with no student loans (approximately 5 percentage points). His results suggest that higher levels of student debt substantially

<sup>&</sup>lt;sup>11</sup> Because the borrower's cohort in Van der Klaauw's study is determined by the date borrowers entered repayment and not educational records, these statistics track trends from other sources well but may not match exactly with cohort-based statistics from these sources.

lower the rates of moving out and increase the rates of moving home with parents for young borrowers, even after accounting for local house prices and unemployment. Conference participants pointed out that the self-selection of individuals into education and student debt may play a significant role in explaining the relative decline in mortgage prevalence and the relative increase in coresidence with parents for young borrowers with student loans. Compared with earlier cohorts, students were more likely to drop out of their programs and default on their debt obligations during and after the financial crisis, and these same students were very likely to take out federal student loans. These same borrowers were not very likely to be homeowners (and therefore hold mortgages) even without the student debt they took on, so the disparate trends in the shares of borrowers with mortgages might be driven in part by this composition effect.

Van der Klaauw's 2017 research (Chakrabarti, Gorton, and Van der Klaauw, 2017) considered the age profile of mortgage-holding by student debt holding using a data set that combines the information in the Consumer Credit Panel with data from the National Student Clearinghouse data on educational attainment.<sup>12</sup> The New York Fed researchers were able to observe not only whether an individual attended college but also her graduation status and level of degree obtained; they found that consumers holding student debt are less likely to also hold a mortgage at any age, even after accounting for their educational outcomes. The researchers noted that their analysis "is descriptive and, while suggestive, the statistical associations shown do not necessarily imply causation; at least part of what [they] uncover could result from differences in the kinds of people who choose to attend college." Van der Klaauw's most recent study (Bleemer et al., 2017), however, finds the causal effect of tuition and student debt increases on the homeownership rates of young Americans, explaining between one-tenth and one-third of the 7.7 percentage drop in the rate of

# Federal Student Loan Repayment Plans (as of April 2017)

- Direct Loan Standard Pre-Higher Education Reauthorization Act (HERA)
- · FFELP/Direct Loan Standard Post-HERA
- · Direct Loan Graduated Pre-HERA
- · FFELP/Direct Loan Graduated Post-HERA
- Direct Loan Extended Pre-HERA
- · FFELP/Direct Loan Extended Post-HERA
- Income-Sensitive Repayment
- Income-Contingent Repayment V1
- Income-Contingent Repayment V2
- Income-Contingent Repayment V3
- · Forced Income-Driven Repayment
- Income-Based Repayment
- Pay As You Earn (PAYE)
- 2014 Income-Based Repayment
- Alternative Repayment
- Revised Pay As You Earn (REPAYE)

homeownership at 28 to 30 years of age from 2007 to 2015.

Building on an analysis of the relationship between repayment trends and borrower incomes, Naser Hamdi from Equifax presented an analysis based on supplemental Equifax data contained in its Workforce Solutions database. Hamdi showed that student loan delinquency risk is directly correlated with current borrower income, with the highest delinquency rates among those earning less than \$30,000 per year. In addition, student loan delinquency risk drops by about 20 percent after just one year on the job for borrowers of any age, demonstrating a relationship between job tenure and delinquency risk.

Hamdi also showed detailed income statistics by institution sector (graduates of for-profit and community colleges tend to earn less), undergraduate major (as expected, engineering majors earn more, on average, than business majors), under-

 $<sup>^{12}\,</sup> See\ http://libertystreeteconomics.newyorkfed.org/2017/04/diplomas-to-doorsteps-education-student-debt-and-homeownership. html.$ 

<sup>&</sup>lt;sup>13</sup> Equifax Workforce Solutions provides human resource, payroll, and tax management solutions, including but not limited to employment verification services, unemployment cost management, workforce analytics, compliance services, employment tax services, reemployment services, and data breach solutions.

graduate GPA (borrowers with higher GPAs earn about 15 percent more 10 years post-graduation), industry of employment, and program of study. Based on Hamdi's analysis, colleges and universities could, using former student servicing data they can access and in partnership with a credit bureau, track the earnings potential and loan credit histories of their graduates for very specific groups and use the analysis to help their students identify more suitable financial aid packages based on their employment prospects, among other uses.

Sarah Ducich from Navient, the largest servicer of student loans in the United States, outlined the role of student loan servicers in helping borrowers successfully repay their loans, the tools Navient employs to target borrowers for assistance, and some of the challenges borrowers face when repaying. Ducich emphasized that servicers are the last step in the student loan life cycle; servicers do not set tuition prices, loan amounts, or interest rates, and cannot advise students before they borrow. As for most account management operations, default prevention is one of the servicers' largest roles and Navient spends a disproportionate amount of its time on the approximately 10 percent of its borrowers who are in repayment and seriously delinquent on their loan obligations.

One of the roles a servicer plays is to guide borrowers through the repayment process and to assist borrowers with identifying the optimal repayment strategy. This has been considerably complicated by the explosion in the number of repayment plans (16, as of April 2017), forbearance, and forgiveness options for students with federal loans.

Navient has been enrolling many more federal Direct Loan borrowers into income-driven repayment plans: 14 percent in Q2:2014 and nearly 18 percent in Q2:2015. Nine out of 10 borrowers who are struggling with federal student loans and respond to Navient's repeat outreach efforts avoid default, but reaching borrowers can be extremely challenging.<sup>14</sup>

Ducich shared some of the strategies Navient uses when leveraging data analytics to identify borrowers at risk of default and to assist them with improving their loan performance. Navient has identified several factors that affect the risk of default for its student loan borrowers: degree completion (dropouts are at a much higher risk of default than graduates), earnings potential, major, school type, borrower income, credit score, credit history, total amount borrowed, forbearance time used, loan type, year in school, and the validity of the borrower phone and address information. Ducich argued that everything said during the panel, including Navient's own experience, indicates that data analytics can be used at all stages of the student loan life cycle to improve borrower success with student loans.

#### V. Remedies and Default Management for Borrowers with Student Loans

Once a student loan borrower is delinquent on loan obligations or prepares to file for bankruptcy, a number of possibilities with respect to changes in loan terms, loan modifications, and debt workouts becomes available. Speakers on the third panel discussed the availability, take-up, and repercussions of default management actions for students and debt holders, all of which are crucial to our understanding of the determinants of default and successful repayment.

Joanna Darcus is an attorney for Community Legal Services of Philadelphia, a nonprofit that provides free legal assistance to low-income Philadelphians. <sup>15</sup> In that role, Darcus encounters many borrowers who struggle to repay their student loan obligations. She deals with borrowers who hold either federal or private student loans (or a mix of both) and who typically are severely delinquent on their debt obligations or are already in default. This might be because they were ineligible for or unin-

<sup>&</sup>lt;sup>14</sup>Navient uses predictive analytics, skip tracing, and customer outreach to ensure that struggling borrowers learn about their options and repay their loans. It is unclear how much positive selection (in terms of willingness to work with a servicer) contributes to servicers' track record with borrowers who respond to outreach efforts.

<sup>&</sup>lt;sup>15</sup> Clients must meet certain eligibility requirements to receive free legal assistance. Income eligibility is determined by comparing the household income with a percentage of the Federal Poverty Guidelines. For 2015, a family of four qualified for student loan help with an annual income of up to about \$45,000.

formed about the various default prevention measures available to borrowers, or they were simply unaware that they were financially responsible for a loan borrowed to support the education of a family member. Her clients tend to turn to Community Legal Services when they are desperate. Typically, the clients are dealing with a third-party debt collection firm rather than the lender or servicer at that point. Since student loans are generally excepted from discharge in bankruptcy, borrowers with student loans who file for bankruptcy protection do not automatically receive the benefits of a "fresh start." 16 Instead, Darcus seeks to identify a basis to eliminate the debt, to put off payments or set up an affordable repayment plan, or to minimize the harmful aspects of debt collection for her clients.

Darcus shared that the definition of default for federal loans refers to those that are more than 270 DPD, which matters because loans that are already in default are only eligible for a very limited number of workout options (e.g., consolidation). For private student loans, there is no standardized definition of default: It varies from lender to lender or loan to loan. The number and the complexity of options available to borrowers are frequently difficult to navigate without legal counsel, which may present a barrier to assistance for many low-income and less sophisticated borrowers. For some of Darcus's clients, continued education hinges on the ability to resolve federal loans in default, as default bars them from accessing new federal student aid (both loans and grants). Yet, rehabilitation (i.e., reinstatement of defaulted loans by making a number of on-time monthly payments) and consolidation for federal loans can only be done once, so caution is necessary when navigat-

#### Overview of Selected Data Sources on Student Debt

- National Longitudinal Survey of Youth (NLSY), Survey of Consumer Finances (SCF), Panel Survey of Income Dynamics (PSID)
  - Rich on individual background characteristics, but debt measures are generally self-reported; data are also subject to further limitations:
  - NLSY: covers a specific cohort of the population
  - SCF: collected only at household level
  - PSID: information on student loan debt starting with the 2011 wave
- National Center for Education Statistics data sets: National Postsecondary Student Aid Study, Beginning Postsecondary Students Longitudinal Study, Baccalaureate and Beyond
  - A series of surveys of college students and graduates by the U.S. Department of Education
  - ° Rich on individual background characteristics but available only for specific cohorts
  - Limited information on items such as student loan delinquencies or household balance sheets
- Credit Bureau Data (e.g., Consumer Credit Panel)
  - Relatively new and promising; available in a more timely manner than survey data
  - Limited information on individual background characteristics: typically combined with additional data sets to draw more conclusive summaries

ing these default management options. Darcus argued for considerably simpler options and more straightforward enrollment processes for borrowers for the loan servicing system to be more helpful to borrowers like her clients.

Alvaro Mezza, senior economist at the Board of Governors of the Federal Reserve System, discussed some issues inherent in analyzing data on student loans, overviewed the strengths and shortfalls of currently available data sources on education finance, and demonstrated how combining information from several sources can improve our understanding of student loan markets.

<sup>&</sup>lt;sup>16</sup> In very limited cases, student loans may be discharged in bankruptcy proceedings. The U.S. Bankruptcy Code requires borrowers to demonstrate that the restriction on discharge would cause an undue hardship to the borrower and his or her dependents. Courts generally use the standard discussed in *Brunner v. New York State Higher Education Services Corp.* to determine whether a borrower has an undue hardship. 831 F.2d 395 (2d Cir. 1987). Very few borrowers seek this discharge, and even fewer ultimately obtain it in the United States.

Mezza pointed out that data sets tracking groups of individuals over time (panel data sets) typically contain rich information on the background characteristics of individuals, but they are limited to self-reported debt measures, in addition to often cumbersome sample restrictions. Surveys of college students and graduates by the Department of Education also have rich individual background characteristics. Unfortunately, the data are only available for specific cohorts and contain limited information on items such as student loan delinquencies or the household balance sheet. Finally, credit bureau data such as the Consumer Credit Panel discussed by Van der Klaauw are available in a timely fashion, but they contain very limited information on individual background characteristics.

Mezza provided an example from Mezza and Sommer (2016) in which merging data from different sources considerably improves our ability to draw conclusions on the outcomes of student loan borrowers, an insight echoed by Van der Klaauw's 2017 analysis described previously. Mezza considered the relationship between educational attainment, student debt, and homeownership from 2004 to 2010.<sup>17</sup> By focusing on homeownership rates over time for individuals with and without student debt identified from a representative cohort of individuals between 23 and 31 in 2004 (i.e., born in 1973 through 1980) with credit records, it appears that individuals with student debt are less likely to be homeowners than individuals without student debt, just as in Van der Klaauw's analysis. But an examination of credit bureau data alone obscures the fact that consumers without student loan debt include individuals with and without college degrees.

After adding information about degree attainment, it appears that individuals without a college degree have considerably lower homeownership rates than individuals with college degrees, whether or not they incurred student debt for their education — an insight confirmed in Van der Klaauw's 2017 studies. Further, Mezza showed that individuals with college degrees have similar homeowner-

ship rates whether or not they carry student debt, lending support to arguments from earlier panels that degree completion may be a stronger driver of financial outcomes than the presence or magnitude of student debt, at least pre-recession. On the other hand, Van der Klaauw's 2017 analysis, which examines age profiles of homeownership and educational attainment for somewhat younger individuals born between 1980 and 1986, finds lower mortgage-holding rates for individuals with student debt whether or not they completed their degrees. These insights indicate that a) how the analysis sample is constructed (e.g., cross-section or panel, time period considered) is important for the interpretation of results, and b) the recent decline in the homeownership shares of individuals with student debt might, at least in part, be driven by a composition effect during the recession (i.e., the influx of individuals attending college — primarily community colleges and for-profit institutions — who were not likely to be homeowners whether or not they attended college or acquired student debt).

Mezza's subsequent work, in Mezza et al. (2016), merges a unique set of data — student educational history, credit bureau history, and additional variables — to consider the effect of changes in student loan debt on the homeownership rate for individuals between the ages of 22 and 32. The study finds that a \$1,000 increase in early life student loan debt lowers the homeownership rate by about 1.5 percentage points for public fouryear college-goers during their mid-20s, equivalent to an average delay of 2.5 months in attaining homeownership, with the effect showing signs of attenuation as borrowers enter their 30s. Similarly, the study by Bleemer et al. (2017) finds that borrowers with higher-than-median levels of student debt delay homeownership at a similar prevalence as borrowers in Mezza et al. (2016) but eventually catch up with peers with lower levels of debt. Importantly, both studies address the question of what homeownership rates would have been had student debt not risen during the period of study, not what would have happened in the absence of federal loans altogether. In other words, both studies focus on the changes in the level of debt (intensive margin) and not on the role of student debt in enabling

 $<sup>^{17}</sup>$  The analysis concludes in 2010 owing to data limitations.

consumers to obtain an education.

While it appears that additional student debt may place a burden on the borrower in more ways than delaying homeownership, it is still likely that borrowing to obtain a degree and the associated returns on investment in education are beneficial for most borrowers relative to not attending college at all (Webber, 2016). In addition, the selection concerns with respect to the pool of student loan borrowers and their homeownership decisions discussed earlier in this section may continue to be relevant, though the magnitude of this (primarily recession-related) effect is likely neither considerable nor persistent and will hopefully be addressed by future research.

Mezza discussed another example of insights gleaned from merged data sets that reiterated earlier discussions about the importance of completing a degree. He demonstrated empirically the increase in explanatory power for cumulative delinquencies of 120+ DPD once data from the National Student Loan Data System (NSLDS) are combined with existing credit bureau data. <sup>18</sup> In the combined data set, student loan delinquencies appear to be affected more by degree completion, attendance at a for-profit institution, and credit score (even if measured before borrowers enter repayment) than the magnitude of the student debt. Addition of data on actual borrower income — for example, from databases such as the Equifax Workforce Solutions — and other relevant variables might improve explanatory power even further. Mezza pointed out that the models used in his analysis could be used to explore the effect of different explanatory variables on repayment outcomes at the time a borrower exits higher education or enters repayment. Insights gleaned from such an exploration could, among other applications, be used to help target at-risk populations for enrollment in income-driven repayment plans or other programs aimed at alleviating repayment difficulties.

Felicia Ionescu, a macroeconomist at the Federal Reserve Board, contemplated the aggre-

gate implications of student loans, discussed some available tools and findings from macroeconomic analysis of student loan markets, and provided an overview of open questions in the literature. Ionescu noted that a macroeconomist's approach focuses on interactions between student loan policies and other types of policies, on the interaction between the decision to attend college and to take out student loans, and on the relationship between the decision to borrow for higher education and other household choices. 19 She emphasized the importance of macroeconomic models with respect to their complementarity with microeconomic models and applications (e.g., natural experiments, event studies) and their uniqueness of their tools. Macroeconomic models provide a unified view of household decisions and related markets, a route to understanding the effect of policies by considering counterfactuals, and a welfare analysis for equilibrium allocations along with consequences on the distribution of consumption, income, and wealth.

Ionescu summarized some of her own work modeling human capital investment, default, and repayment-related policies using models with contractual frictions (i.e., informational imperfections that complicate decisions) and incentive problems. Some of Ionescu's studies find that human capital accumulation depends crucially on credit arrangements, that the default risk in the economy varies with policies that affect the pool of borrowers in all credit markets, that student loan policies affect household decisions beyond college and student loan markets, and that the degree to which contingencies (such as loan discharge) can be incorporated into the student loan repayment systems has important effects on schooling and welfare. The applicability of these insights to the design of our student loan repayment systems is clear; the tools and insights of macroeconomists present a fruitful complement to data and analytical advances discussed by other panelists from a microeconomic perspective.

<sup>&</sup>lt;sup>18</sup> The NSLDS is Department of Education's central database for student aid.

<sup>&</sup>lt;sup>19</sup> For readers who are well versed in economic theory and applications, the distinguishing features of Ionescu's training and practice of macroeconomics are general equilibrium considerations on the use of calibration and other numerical techniques.

# VI. A Policy Proposal — Risk-Based Underwriting

Caroline Hoxby, a prominent researcher in the economics of education at Stanford University, reviewed the various issues that preclude purely private funding for higher education and rationalize the government's involvement. She reviewed problems associated with asymmetric information, including adverse selection (people who anticipate default tend to borrow more) and moral hazard (borrowers with large debts tend to seek ways to repay less). She also noted that educational investments are not diversifiable and that education can earn greater social returns than private returns, both of which would induce suboptimal levels of investment in education barring government involvement. The government has enforcement powers to garnish certain forms of income (Social Security, income tax refunds, and others), which can mitigate some of these issues by effectively collateralizing lifetime future earnings since education is not a "good" such as a house or a car. Forbearance and forgiveness provide some remedy for idiosyncratic risk that borrowers face, and subsidized repayment can help with aligning social and private returns to education.

Hoxby challenged the notion that we must charge the same interest rates and impose the same borrowing limits regardless of the predictable probability of default and earnings potential. Current loan limits are also indifferent to the amount of money that universities give to students via financial aid, which is a strong predictor of student success because universities have skin in the game with students in which they invest their own funds.

Private lenders could be the main source of funds, in Hoxby's opinion; she considers the stifling of informed underwriting a key policy failure. In a single interest rate environment, highly qualified borrowers pay too much, while risky borrowers pay too little. Some think this type of an environment is protecting the most vulnerable borrowers by subsidizing attendance for students who cannot rely on their families for funding the cost of higher education. However, competitive underwriting gives students information about their likely success at different institutions be-

cause borrowers would face worse loan terms for bad institutional matches in an environment in which risk-based underwriting was the norm. Hoxby also argued that other types of tools, such as grants, might be more effective than student loans in ensuring access to higher education for the most vulnerable groups.

Days before the conference, a new study was published, citing findings that the many vulnerable borrowers are, in fact, being hurt by the current student loan system; Hoxby cited evidence from Looney and Yannelis (2015) based on a unique data set of student loan borrowers' educational histories, incomes, and loan repayment histories. Based on this study, loan repayment problems appear concentrated in certain categories of schools and students. In fact, two-thirds of the rise in default can be explained by two variables contained in the FAFSA form: the educational institution and educational program of the student. Hoxby echoed insights from earlier panels about the utility of information such as this for improving underwriting models.

Hoxby proposed a redirection of federal student loan guarantees into the competitive underwriting environment of private lenders, combined with the availability of comparable collection remedies available to the government. Under Hoxby's proposal, the federal government would effectively become the collection agency for private lenders. The government could continue to offer borrower protections in the face of negative events and shocks and provide ex-post subsidies to borrowers who use their education to social ends. In such a system, Hoxby argued, we should collect data for supervision and enforcement from the private lenders in this hypothetical market to ensure compliance with relevant laws and regulations and release aggregate institution/program level data to the public to inform school choice. Interest rates may be simpler and more effective tools of discipline for colleges than top-down regulation or supervision of educational institutions themselves.

In Hoxby's opinion, the private market today could drive out the government from student loans, but private lenders are disadvantaged in terms of creditor remedies, so they tend to offer loans at favorable terms only to the most qualified borrowers. For example, the loan terms for the Grad PLUS programs are worse than what private lenders offer; yet, private lenders struggle with competing in this submarket for the reasons listed previously and because borrowers value many of the borrower protections offered by the federal government. The preferred lender list (list of private lenders recommended by the educational institutions) that many colleges and universities maintain is also problematic because it restricts comparison shopping for borrowers.

According to Hoxby, student loans today may not be an effective mechanism for providing education subsidies because they incentivize highrisk borrowers who will not receive an education that would enable them to make a living. Hoxby argued that it is not benevolent to offer loans to those who have no reasonable likelihood of repayment and reiterated that grants can be a more powerful tool for increasing enrollment for the most vulnerable students, if that is our policy goal. Under the current system, students who wind up in garnishment or offset programs are likely to have lowincome parents, be first-generation college students, grow up in low-income areas, be minorities, and live in areas with high unemployment rates. Hoxby made the case that changing the system along the lines of her proposal is most likely to help those vulnerable students, rather than the best-off students.

### VII. Recurring Themes and Conclusions

A number of themes and topics for further research and analysis emerged over the course of the two-day discussion.

A. Determinants and Effects of Student Loan Default Are Becoming Better Understood

Speakers discussed many of the factors that influence delinquency and default in the case of student loan borrowers. Research discussed during the course of the conference showed that, among other factors, and often contrary to popular view: Students who default more frequently have lower balances, do not complete their degrees, come from

poorer areas, and are enrolled at less competitive institutions. And, just as importantly, speakers emphasized that loan balances are not particularly helpful in predicting which borrowers will struggle with loan repayment.

However, many unanswered questions remain, both with respect to factors that determine default, the usefulness (and, for that matter, legal standing) of such factors in screening student loan applicants, and with respect to the consequences of student debt burdens, delinquency, and default on the financial health of individuals and households. To start, our ability to account for the changing composition of students in higher education more broadly and between different types of institutions is greatly limited by data availability, yet this composition appears to play an important role in student loan delinquency and default. With the improvement of data sources for education finance research in recent years, we know considerably more about the characteristics of students who default and of their neighborhoods and families, but we do not know enough about which characteristics are merely correlated with their college choices (or lack thereof) and which actually drive default. Policy responses aimed at preventing and alleviating delinquency and default crucially depend on that distinction.

B. We Need More Work on Relationships Between Student Debt and Other Outcomes

Mezza's and Van der Klaauw's research and other studies make it clear that there is much that we still need to understand about potential negative effects of student debt. Delinquency and default and their accompanying maladies were the primary focus of our conference, but a growing body of research is devoted to understanding the ways in which debt — including student debt — may burden borrowers even when it is repaid as agreed and in full. Our panelists considered the effects of student debt on homeownership rates and coresidence with parents, and other researchers are exploring the nature and timing of marriage, wealth accumulation, intergenerational mobility, and many other topics in relation to stu-

dent debt. Other questions (e.g., the occupation selection, job tenure, and graduate/professional study) remain burdened primarily by the lack of data availability.

### C. Financial Counseling for Student Loan Borrowers Is Challenging

For all but the wealthiest institutions, one-on-one counseling, which tends to be most effective, is cost prohibitive. O'Leary and Castleman discussed some innovative attempts at delivery mechanisms, including text messaging and webbased chat, although both face potential logistical and regulatory difficulties. The evidence on the effectiveness of low-touch methods such as letters to students (even ones including personalized information presented in a clear and concise manner) is decidedly mixed, particularly considering that there is evidence of loan aversion among certain populations of students and parents.

Another challenge relates to the timing of communication, which many attendees considered to be of utmost importance. One method is to "catch" students during orientation, which tends to be mandatory at most institutions because financial aid counselors face considerable obstacles to filling seats for any separate, optional sessions on financial aid. Student interest in this type of education generally is very low, in part because students have difficulty understanding the consequences of poor decision-making when it comes to student loans when they are attempting to adjust to an entirely new life in college.

Cross-training of faculty members and academic advisors, who tend to be first points of contact for students with questions or problems relating to the financing of higher education, is also likely to be key in addressing issues with student debt. Ultimately, conferees were in agreement on one insight in particular: No amount of financial counseling or education in college can substitute for a lack of guidance on the benefits and disadvantages of higher education generally, and student loans specifically, in the K–12 context.

# D. Data Linkages Are Key to Providing a Comprehensive Analysis

Conferees discussed ways in which improved data collection and sharing would be useful for creating a more comprehensive picture of the repayment dynamics borrowers and financial institutions face soon following and many years after students take on student loan debt. Van der Klaauw noted that the Consumer Credit Panel, for example, provides rich data on the credit histories of borrowers, but it contains no information on educational attainment, income, family background, or demographics of the borrowers beyond age and geographic location. On the other hand, databases containing detailed information about educational attainment rarely provide information about borrowing, particularly for nonstudent debt. Some researchers have begun the challenging process of linking different sources of data (e.g., Mezza's and Van der Klaauw's teams in the years since our conference). But barriers to implementation are considerable, and privacy concerns sometimes prevent fruitful collaboration between different data providers.

Yet, the need for such linked databases is strong and potential uses numerous. Ducich argued that data analytics could provide avenues for tailoring financial literacy outreach to borrowers considered most at risk. She suggested identifying borrowers whose income potential may be too low to support future loan payments because of the low likelihood of graduation and poor employment prospects. Further, servicing contracts could be designed to use risk-based performance measures to ensure that resources are targeted to borrowers most at risk of delinquency and default.<sup>20</sup> If family characteristics can be shown to correlate with loan repayment outcomes, as Hoxby argued, targeting remedial education, grant aid, and loan counseling could begin during K-12 education and prevent certain students and families from taking on risks that are unlikely to pay off in the future.

<sup>&</sup>lt;sup>20</sup> Ducich argued that servicers are paid relatively less for default mitigation; collection contracts are considerably more lucrative, which may pervert servicer incentives.

Dan Feshbach from MeasureOne, a consortium of the largest private student loan borrowers, stressed the importance of building data cooperatives to combat the data thin environment. But practical challenges abound. Building trust, particularly in the context of public-private partnerships, can take time. Lenders and other furnishers of data (including the federal government) are often risk averse and reluctant to share information, particularly in public-private partnerships. Rohit Chopra, the former student loan ombudsman at the Consumer Financial Protection Bureau (CFPB), pointed out that we already have an example of a database that worked well to inform regulators and the public about issues in the access to and the repayment of loans: the Home Mortgage Disclosure Act (HMDA) database.<sup>21</sup> A HMDA-style database would require legislation to include loan origination data for student loans originated by private lenders but might become a reality for federal student loans with administrative authority alone since the federal government already collects considerable amounts of data on student loans and borrowers.

Chopra further argued for four specific ideas for improving access to data that could be helpful in analyzing repayment trends for student loans: 1) the Securities and Exchange Commission (SEC) should require more information at the loan level for student loan asset-backed securities than it does for mortgage loans, credit cards, and auto loans; 2) the CFPB should collect representative student loan data across all servicers; 3) as discussed previously, we should produce an HMDA-style database on student loans, combining information already collected from the FAFSA, the National Student Loan Data System (NSLDS), and student loan servicers; and 4) the Department of Education should produce a regular data report on student loan performance (similar to MeasureOne's report for private student loans) and release a public use data set of

anonymized loan-level data (similar to current releases by Fannie Mae and Freddie Mac).<sup>22</sup> Many of the proposals put forth by the speakers, including Chopra, necessarily bump into a particularly polarized political, legislative, and regulatory environment, creating a discussion that is outside the scope of this summary.

E. Vulnerable Borrowers Are at Particular Risk of Student Loan Repayment Difficulties

Speaker after speaker pointed out that borrowers at the greatest risk of delinquency, default, and other negative outcomes associated with student debt come from the most vulnerable populations: low-income, minority, first-generation, or those attending for-profit or community colleges. Degree completion and income prospects are the primary determinants of successful loan repayment, and borrowers most likely to default on their debt obligations are precisely the disadvantaged students with weaker qualifications and lesser family and community support necessary for success in college.

Darcus shared that many borrowers who turn to Community Legal Services for assistance are helping to pay loans for family members who are unable to repay; many of her struggling clients are senior citizens who have taken out loans for their children or even grandchildren. Jonathan Glater of the University of California, Irvine, discussed the risk reallocation that is occurring via student loans from educational institutions to borrowers and their families and expressed concern for the effect of student debt on intergenerational mobility and social change. He also pointed out that merit aid tends to correlate with the wealth and income of the student's parents, such that merit-based grants represent a regressive subsidy and that the most vulnerable borrowers are left to cover the gap in funding with student loans. Since other countries have vastly different systems of financing higher education, we need to think carefully about our increased

<sup>&</sup>lt;sup>21</sup>The federal government collects loan-level information from lenders for the vast majority of residential mortgages originated in the United States to monitor discriminatory and predatory lending practices as well as to ensure government resources are allocated properly.

<sup>&</sup>lt;sup>22</sup> MeasureOne produces a semiannual report with a wide array of metrics for the private student loan market, including performance and portfolio metrics on repayment and delinquency trends.

dependence on student loans. Glater encouraged a debate about the extent to which our society should subsidize higher education while respecting personal autonomy and access to education.

The PCC's conference titled Student Loans and Socioeconomic Mobility in August 2016 further explored the effect of the availability and take-up of student debt on the most vulnerable populations. A conference summary is forthcoming.

For conference attendees, the student loan market could function much better if the available data on student loan borrowers and their subsequent education and employment trajectories were not so

fragmented. Extant research, such as Looney and Yannelis (2015) and the work presented at this conference by our distinguished panelists, has already demonstrated the winning combination of policy-relevant research questions and quality (although certainly imperfect, still) data. As much as the research community would like to advance our understanding of the consequences, the student loan market is constrained by rules and data limitations that contribute to inefficiencies and inequities in educational finance. Our conference contributed to the debate by outlining the many remaining research questions and data limitations that must be addressed to ensure that the student loan market serves families' educational pursuits in the optimal way.

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