Reforming Repayment: Using Income-Related Loans to Reduce Default

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Introduction

More than half of all undergraduates in the U.S. take out federal student loans to help finance their college educations. This trend is due in large part to the rising price tag of attending college in conjunction with shrinking median family income levels, making it increasingly difficult for individuals to pay for college without accumulating debt. While access to credit may help expand college opportunities, a growing share of borrowers are having a difficult time repaying their student loans. Today, one in six borrowers are at least 90 days delinquent on their debts; another one in five defaults on their loan at some point in their lifetime. Over the past decade, the number of student loan defaults has doubled, despite federal policy efforts designed to help students make on-time loan payments. These are not the intended policy goals of the federal student loan system, nor are they sustainable outcomes for students and taxpayers alike.

As a result, federal policymakers are exploring alternative ways to make student loan debts more manageable for borrowers and more cost-effective for taxpayers. One possible way to work toward these goals is by indexing all federal student loan payments according to the borrower’s earnings. Under an “income-related repayment” model, borrowers’ monthly student loan bills would not exceed a certain percent of their personal income and their payments can automatically be deferred during periods of unemployment or economic hardship. In theory, this repayment model should reduce (and possibly eliminate) student loan default and delinquency which, in turn, should also reduce the federal government’s administrative costs associated with collecting student loan debts. In practice, however, there are several concerns and unknown questions regarding the expansion of income-related repayment plans.

Drawing from historical policy contexts, international examples, and existing research on income-related repayment schemes, this paper weighs the merits of linking all federal student loans to students’ future earnings. It begins with an overview of the goals of income-related
repayment, followed by a discussion of the need for reforming loan repayment options. The latter half of the paper examines the impacts of income-repayment repayment models in other countries and discusses the feasibility of implementing this reform in America.

**Goals of Income-Related Repayment**

The idea of tying college financial assistance to students’ future earnings is not new; in fact, the general concept has been proposed for several decades and has yet to take hold in America. In 1967, President Johnson’s taskforce on higher education proposed a federal Educational Opportunity Bank that would have required college graduates to repay a share of their future earnings into the bank. This graduate tax was never adopted, though it was again proposed at the state level in Ohio during the early 1970s. In 1968, the Carnegie Commission on the Future of Higher Education also recommended linking student loans with students’ income levels, where “a federal contingent loan program [should] be created for which all students regardless of need would be eligible.” Although federal loans would eventually be expanded to students regardless of financial need, repayments were not contingent upon students’ future earnings.

At the institution-level, Yale University experimented with the nation’s first (and short-lived) campus-based income-related loan model in 1971, and the 1986 Higher Education Act authorized a 10-campus pilot program to scale up income-related loans (more on the Yale experiment in Section IV, below). The slow evolution towards income-related repayment was punctuated in 1993 when the federal government introduced the nation’s first income-related repayment plan that was eventually expanded in 2007 and 2012.

This brief history illustrates the discontinuity and slow evolution of income-related loan repayment in the U.S. Despite decades of interest in connecting student loans to future incomes, this funding model has never fully taken root in America. Today, the federal government
operates four small income-related repayment plans, serving approximately 1.5 million of the nation’s 38 million federal student loan borrowers. While the adoption and expansion of income-related repayment has been inconsistent, the literature provides a relatively consistent message regarding the potential goals behind income-related repayment. Many of these lessons are drawn from international examples, as Australia (1989), New Zealand (1992), and Great Britain (1998) adopted income-related loans when they first began charging college tuition in the late 1980s and early 1990s.

For individual borrowers, income-related repayments should reduce if not eliminate student loan default. Borrowers below a certain income threshold (e.g., 150 percent of federal poverty guidelines) would not be required to make payments on their loans, resulting in lower default rates. Considering that one in ten borrowers now defaults within three years of entering repayment, income-related loans provide a potential pathway for helping students make on-time payments. In addition to default protection, income-related loans provide consumption smoothing that is unavailable with traditional fixed repayment models. Consumption smoothing allows loan payments to rise and fall according to the borrower’s income levels, thus insuring them against risks associated with unemployment or other labor market shocks. These two criteria (default protection and consumption smoothing) are the hallmarks of proposals that link student loan repayments to incomes. It is also plausible, although not often discussed in the literature, that income-related repayment schemes improve consumer information about the costs of college. Considering ongoing efforts to simplify the student aid process, it is feasible that students who are preparing for college could easily understand that their loans would be repaid according to a share of their future earnings. This back-end reform may dovetail nicely with
front-end reforms associated with raising awareness and helping prospective students prepare for financing a college education.

The benefits of income-related loans are not limited to the individual borrowers, as the reduction in default rates should result in significant savings in terms of student loan collection costs. This is one of the primary goals of income-related loans, and countries have reported collecting more debts at lower administrative costs as a result of adopting this repayment scheme. Additionally, public policymakers believe this new repayment model could encourage individuals to not under-invest in human capital, as is currently the case with many talented students who undermatch or opt out of college altogether because of financial barriers. By tying debts to incomes, students from lower socioeconomic groups are expected to participate at greater rates, though this assumption has yet to be tested in America. Evidence from Australia’s program suggests their repayment model has not substantially impacted (negatively or positively) low-income students, though further research is necessary.

Considering the potential positive benefits of adopting income-related loans, yet the reluctance to embrace this model in America, many questions remain. These questions will be revisited at the end of the paper, though they provide a guiding framework for considering the implications associated with this funding model. First, if one of the primary goals is to reduce student loan default rates, is income-related repayment the only (or most preferred) option for achieving this goal? Second, despite the claims that income-related repayment can achieve the aforementioned goals, what empirical evidence supports (or is missing from) these policy discussions? And third, despite how fragmented America’s current student loan system is, how might income-related repayment exacerbate or ameliorate existing repayment challenges? There are no easy answers to these questions, yet they play a role in the ongoing conversations about
student aid reform—particularly as they relate to using income-related loans as a solution to the student loan default problem.

**The Need for Reform**

Today, approximately 13.5 percent of federal student loan borrowers default on their loans within three years of entering repayment. It is widely noted that the majority of default occurs within the proprietary sector, which tends to enroll traditionally underrepresented students (e.g., low-income, adults, military veterans, ethnic minorities) who accumulate higher debt burdens than students attending public or nonprofit institutions. Additionally, research has consistently found that unemployment is one of the strongest predictors of student loan default, yet students attending proprietary institutions have the poorest employment outcomes when compared against students participating in other sectors. Of course, default is not isolated to the proprietary sector, but as displayed in Table 1, they represent the largest share (46.9 percent) of the nation’s total number of defaulters.

**Table 1:** National three-year cohort default rates (2009-2012), by sector

<table>
<thead>
<tr>
<th>Sector</th>
<th>Number of borrowers in default</th>
<th>Cohort default rate</th>
<th>Share of total defaults</th>
</tr>
</thead>
<tbody>
<tr>
<td>Public four-year</td>
<td>99,885</td>
<td>8.0%</td>
<td>20.4%</td>
</tr>
<tr>
<td>Public two-year</td>
<td>94,945</td>
<td>18.3%</td>
<td>19.4%</td>
</tr>
<tr>
<td>Private four-year</td>
<td>59,740</td>
<td>7.3%</td>
<td>12.2%</td>
</tr>
<tr>
<td>Proprietary</td>
<td>229,315</td>
<td>22.8%</td>
<td>46.9%</td>
</tr>
<tr>
<td>Other sectors</td>
<td>5,155</td>
<td>14.1%</td>
<td>1.1%</td>
</tr>
<tr>
<td>Total</td>
<td>489,040</td>
<td>13.5%</td>
<td>100.0%</td>
</tr>
</tbody>
</table>

In addition to these default trends, borrowers are having a difficult time staying on top of their monthly student loan bills. As displayed in Table 2, only 39 percent of federal student loan borrowers make on-time payments; the remaining 61 percent of borrowers are either deferring their loans, in forbearance, or have not made payments for at least 90 days.
Despite trends that clearly indicate students are struggling with debt, the standard option more borrowers are placed into is the 10-year conventional repayment plan. Under this plan, borrowers make fixed payments for 120 months that cover the principal and interest of their loan. This standard repayment schedule can be extended to anywhere from 12 to 30 years for borrowers with higher debt levels and for those who consolidate loans into graduated repayment plans. Due to the time value of money and accrued interest, the longer a borrower takes to repay his/her loan the more expensive the loan becomes over the long-run. Standard repayment plans also allow students the opportunity to defer their loan payments while enrolled in college. After leaving (i.e. graduating or enrolling less than half-time), they have a six-month grace period before making their first payment. For subsidized Stafford Loans, which account for the majority of federal loans, the federal government covers the loan’s interest while students are enrolled; unsubsidized Stafford Loans accumulate interest while students are still enrolled.

*Alternative Repayment Options*
Due to misinformation about eligibility criteria and complexity in the application processes, very few borrowers take advantage of the existing income-related repayment plans. Instead, borrowers find themselves in one of the four alternative repayment outcomes that do little by way of helping make student loan debt more manageable: standard repayment, emergency protection, delinquency, or default.
Emergency Protections. Once a borrower enters repayment, they may find it difficult to cover monthly loan bills, which is why emergency protections are available to individuals who face such economic hardships as unemployment or certain medical conditions. There are two types of emergency protections—deferment and forbearance—and both are designed as short-term relief plans for borrowers, where their payments are temporarily suspended to help them avoid default. Under deferment, borrowers can stop their repayments for no more than three years while the federal government pays the interest on their subsidized loans. Under forbearance, borrowers can have their loans suspended for up to three years, but the federal government does not subsidize the accrued interest during this period. To illustrate, a borrower with $18,000 in debt who enters into forbearance would repay approximately $5,000 extra over the life of their loan. Under both emergency protection plans, the borrower still owes the principal and while the short-term protections may offer some relief for borrowers, they are not designed as long-term debt management strategies.

Delinquency. Even with these protections, many borrowers get behind on their payments. In 2012, approximately one in six borrowers were at least 90 days delinquent on their loans, up by nearly 10 percent since 2004. Delinquency is often the “untold story” of student loan reform, as the number of delinquencies is on the rise yet we know relatively little about the characteristics of those borrowers who get behind on their payments. Interestingly, most delinquent borrowers enter into emergency protections to help get back on track with their loan payments. Although emergency protections are designed to prevent delinquency, it is clear these protections also respond to delinquency.

Default. After 270 days of delinquency, borrowers enter into default. Once a borrower defaults on their student loan, the federal government implements a variety of collection
mechanisms for ensuring the students repay their debts. For example, the federal government can garnish the borrower’s wages, seize tax refunds, impose additional collection costs, enter litigation, or restrict the borrower from receiving additional federal aid. As a result, borrowers’ credit scores will drop, making it even more difficult to secure other lines of credit, which are necessary for purchasing homes and cars. Since there is no statute of limitations on student loan debt, these risks follow borrowers for the lifetime of their loans. Historically, student loans have had some of the highest default rates among all federal credit programs. But because the federal government has such strong collection mechanisms for student loans, they have some of the highest recovery rates of all federal credit programs.\\footnote{25}

\textit{Income-Related Payment Plans.} Currently, the federal government operates four programs designed to adjust loan repayments according to borrowers’ incomes: Income-Based Repayment; Pay As You Earn; Income-Contingent Repayment; and Income-Sensitive Repayment. Income-Based Repayment (IBR) is designed to cap monthly student loan payments according to the borrower’s family income level—in most cases payments end up being less than 10 percent of family income.\\footnote{26} If a borrower took out a federal loan after September 30, 2007 and at least one more after September 30, 2011, then they could qualify for the new Pay As You Earn (PAYE) program, which is similar to IBR but with lower payment caps and targeted to Direct Loan borrowers.\\footnote{27} For borrowers who do not qualify for IBR or PAYE, they may be eligible for Income-Contingent Repayment (ICR) or its alternative, Income-Sensitive Repayment (ISR).\\footnote{28}

There are numerous problems with this complex approach. From the taxpayer’s perspective, it may be inefficient to continue operating four separate income-related repayment plans. Additionally, some observers warn that the current IBR model benefits the wealthiest
borrowers and does not fully address the needs of those who are most financially burdened by their loan debts.\textsuperscript{29} Still others argue the inflexibilities in the existing loan repayment system (in conjunction with rising loan volume) are slowing down our nation’s economic recovery.\textsuperscript{30} For example, the average borrower has a debt-to-income ratio that is often too high to qualify for typical home mortgages, so today’s college-educated youth are less likely to own homes and are delaying other socially desirable investments.\textsuperscript{31}

From the borrower’s perspective, the current repayment models introduce additional confusion around how to financially plan and prepare for college. Recent federal reforms have focused on ways to help more students get into college via simplifying financial aid information (e.g., FAFSA simplification, net price calculators), where the underlying assumption is that greater information about college costs will help prospective students decide which college is right for them. While federal reforms often aim at improving information about college costs on the front-end of the college experience, it is possible that back-end reforms (i.e., income-related repayment plans) may also help students financially prepare for college. If, prior to attending college, students knew that a certain percent of their future earnings would go towards repaying student loan debt, then it is possible that they would make educational choices based on academics rather than finances. Too often, high-achieving students from low-income families “undermatch” to poorly resourced colleges simply due to financial barriers and debt aversion.\textsuperscript{32} This underinvestment in human capital is not a desirable public policy goal, nor does it help reverse educational inequalities that persist within postsecondary education.

In addition to these economic and information challenges, current laws do little to help prevent student loan default. With one in ten borrowers defaulting within three years of entering repayment and the federal government spending more than $1 billion annually collecting
defaulted student loans, it is possible that reforms could help reverse these trends. However, under current federal laws, defaulted student loans cannot be discharged in bankruptcy and once a borrower defaults, the federal government implements a variety of collection mechanisms to ensure repayment. They can garnish the borrower’s wages, seize tax refunds, impose additional collection costs, enter litigation, or restrict the borrower from receiving additional federal aid (i.e., Social Security benefits, Pell grants, etc.). Since there is no statute of limitations on student loan debt, these risks follow borrowers for the lifetime of their loans. It is possible for the federal government to change this policy and allow default to be discharged in bankruptcy, but it is also possible that an income-related loan model could reduce the incidence of default since unemployment and income are strong predictors of default.

Possible Reform Options
When considering ways students can finance their educations, income-related reform efforts might take one of three general strategies: Human Capital Contracts, Graduate Tax, or Income-Based Loans. None of these approaches are new ideas; in fact, versions of these ideas have been proposed, piloted, and implemented with varying degrees of success over the past several decades. This section briefly explores these three different income-related repayment plans available to federal policymakers with an emphasis on the latter, income-based loans.

**Human Capital Contracts.** In 1955, Milton Friedman proposed human capital contracts as an economically efficient way to finance postsecondary education. Under this model, private investors would identify promising students who, in exchange for a free college education, would pay the investor a negotiated share of their future earnings for a predetermined period of time. He argued that private contracts “are economically equivalent to the purchase of a share in an individuals’ earning capacity,” and could be highly profitable to both lenders and borrowers.
For example, take a student who needs $25,000 for financing her education. She could enter into a human capital contract with her investor (or investor group); the investor provides the money in exchange for a fixed percentage of her wages for a set period of time. In theory, this could be a very profitable business model for investors who are able to recruit applicants who are expected to earn high wages directly out of college. It could also reduce uncertainties for the student because she would know how much was expected of her in the future and she would have the incentive to borrow as little as possible in order to minimize her repayment rate. However, this strategy would benefit too narrow a profile of students and would likely result in underinvesting in human capital. Only those who have sponsors will attend college, and some sponsors may be unwilling to take a risk on students who have high financial need or those who pursue lower-paying professions.

Graduate Tax. The Graduate Tax model is similar to human capital contracts, but with a more universal scope that would include all students regardless of their wealth or selection by private investors. This is a conceptually straight-forward financing model where all borrowers who attend college would be charged a tax for the amount of time they were enrolled. Although “graduate” is in the title, the tax could be applied to all students regardless of degree attainment. Again, this approach would likely improve consumer information and enhance the ability for students to repay debts on the back-end of their educational experiences. Since students would know how much of their earnings would go to tax, they may be more aware and careful about accumulating large amounts of debt. However, it is possible that this would become a regressive tax that ends up hurting poor individuals who have credit constraints. Since lower-income students are more reliant on aid, they would accumulate the most debt and in turn would pay higher tax rates after leaving college. In 1967, President Johnson’s taskforce on higher education
finance proposed this financing scheme, which would have created the Educational Opportunity Bank to oversee the tax collections. Under this plan, students would pay 1 percent of their gross annual income (for 30 years) for each $3,000 of student loan debt into the Bank. The United Kingdom is actively pursuing this financing model, although to date no country has implemented the graduate tax approach.\(^{37}\)

*Income-Based Loans (IBL).* Income-based loans insure against the risks of default by scaling payments according to borrowers’ income levels. In 1971, Yale University implemented a “risk pooling” IBL scheme where the college loaned money to students, who in turn were mutually responsible for covering the debt of their entire borrowing cohort. To make good on the payments, borrowers paid a fixed share of their future earnings up to 150 percent of what they borrowed, plus interest.

In the end, the program was short-lived and failed to produce the results originally expected. First, some students chose not to participate in the plan because they expected to earn high wages in the future and did not want to subsidize the education of lower earners. This is referred to as “adverse selection,” where the plan provided an incentive for individuals to not participate based on their expectations of high future earnings. The second shortcoming of risk-pooling is that it transfers the default risk (and costs) to borrowers who make on-time payments. When a borrower in the pool defaults, costs rise for all members of the pool. As a result, those who are making on-time payments end up paying even more money when cohort members default. Because of these challenges, Yale University eventually cancelled the entire cohort’s debt in 2001—approximately 20 years after the cohort made its first loan payment.\(^{38}\)

An alternative to risk-pooling is “risk-sharing.” Risk-sharing is the more common form of income-based loans since it eliminates the perverse incentive of adverse selection. Here,
borrowers’ repayments are scaled according to the amount of debt they accumulate relative to their income levels. But unlike risk-pooling, borrowers are not penalized (or rewarded) when other borrowers make smaller (or larger) payments on their loans. Research consistently finds that risk-sharing models are more efficient than fixed payment schemes (i.e., the current U.S. model) and they introduce greater consumer protections by reducing risk aversion and uncertainty in educational investments.\(^{39}\)

For example, Australia and New Zealand operate two of the longest-standing risk-sharing income-based loan schemes, where borrowers repay a share of their income according to how much debt they accumulated. There is a minimum income threshold, where borrowers earning less than a certain income level are automatically entered into emergency protection where they are not required to make payments. This risk-sharing mechanism reduces the costs of delinquency and default since the government spends less on collection costs, but this mechanism also increases the possibility of repaying student loans in full since payments are tied directly to incomes. Research on the Australian experience finds that the risk-sharing model is inexpensive to administer (2 percent of total revenue) and has consistently generated enough revenue to cover annual recurrent costs.\(^{40}\) The United Kingdom also operates a risk-sharing IBL model, where 98 percent of borrowers were meeting their obligations in 2010-11 and only 2 percent of borrowers were unaccounted for (presumably in default).\(^{41}\) Hungary’s model (adopted in 2001) yields similar results, where default rates range between 1 and 2 percent and administrative costs are approximately 1 percent of outstanding debt.\(^{42}\) Table 3 displays the maximum percent of income that borrowers are expected to pay in existing income-related loan schemes abroad.
Table 3. Maximum share of income paid to student loans in various countries

<table>
<thead>
<tr>
<th>Country</th>
<th>Maximum Share of Income</th>
</tr>
</thead>
<tbody>
<tr>
<td>Australia</td>
<td>4 – 8 percent</td>
</tr>
<tr>
<td>Chile</td>
<td>2 – 5 percent</td>
</tr>
<tr>
<td>Hungary</td>
<td>6 – 8 percent</td>
</tr>
<tr>
<td>New Zealand</td>
<td>10 percent</td>
</tr>
<tr>
<td>Sweden</td>
<td>4 percent</td>
</tr>
<tr>
<td>South Africa</td>
<td>3 – 8 percent</td>
</tr>
<tr>
<td>United Kingdom</td>
<td>6 – 9 percent</td>
</tr>
</tbody>
</table>

It is important to note that these countries operate fundamentally different higher education systems from the U.S. The U.S. system of higher education is quite large comparatively: the total enrollment of 21 million students in U.S. postsecondary institutions is larger than the total population of both Sweden and New Zealand, for example. Similarly, these countries have different higher education markets, governance structures, and financial arrangements that make it difficult to make clear comparisons to the U.S. context. For example, in the United Kingdom and Australia, income-related loans were introduced around the exact same time the countries first began charging tuition fees. These countries did not have to consolidate or eliminate legacy systems like the U.S. would need to do if it were to introduce income-related loans as the standard repayment plan for all borrowers.

Other implementation challenges rest with the degree of centralization each country has over its higher education system, where some are able to align administrative records between education and income tax offices to make the income-related repayments plan operate more seamlessly (at least at face value) than would likely be the case in the U.S. These complications make it difficult to make direct comparisons to other countries, though the lessons learned from abroad can certainly inform policy deliberations and policy design strategies in the U.S.
Existing Income-Related Repayment Efforts in the U.S.
In the U.S., the first national income-related repayment plan dates back to the early 1990s when Congress and the Clinton Administration implemented an optional “Income-Contingent Repayment” (ICR) plan linking borrowers’ loans with incomes. In addition to scaling repayments by income, the plan promised to forgive remaining debt after 25 years of repayment. From the beginning, the program was not widely marketed and, by 1999, fewer than 10 percent of eligible borrowers participated in ICR.46 In the program’s current design, borrowers’ loans are reduced to the lesser of (a) 20 percent of their discretionary income, or (b) the amount owed under a 12-year repayment plan, multiplied by a complicated formula that accounts for income, family size, and cumulative debt.47 Likely because of the confusing eligibility requirements, along with the limited knowledge and awareness of the program, many borrowers who are eligible for ICR do not participate in the program.

Instead of making improvements to the existing ICR model, Congress created (in 2007) the “Income-Based Repayment” (IBR) plan as part of the College Cost Reduction and Act, though it did not become available to borrowers until 2009. Under IBR, borrowers’ monthly loan payments are capped according to income and family size; most participants end up paying less than 10 percent of their incomes towards their loans. Any borrower who takes out qualified federal loans (e.g., Direct, Stafford, or certain PLUS) is eligible to apply if they meet certain income thresholds. To qualify for IBR, borrowers must also have “partial financial hardship,” meaning that the monthly amount due under a standard 10-year repayment plan is higher than what is listed on the federal government’s IBR calculator.48 This calculator accounts for family size, federal student loan balance, adjusted gross income, federal income tax filing status, and state of residence. After 25 years of qualified repayments, the federal government forgives the remaining loan debt. Despite low participation rates in both ICR and IBR, the Obama
administration (in 2012) introduced the Pay As You Earn plan targeted for borrowers who entered repayment during (or after) the Great Recession. This plan effectively scales up the IBR model for borrowers with Direct Loans, where eligible borrowers pay up to 10 percent of their discretionary income on their student loans and the federal government will forgive the remaining balance after 20 years of payments.

In the U.S., the federal government has not fully adopted or scaled up any of these alternative repayment plans. Instead, it designed (in 1972) and expanded (in 1978) a conventional loan model based on fixed amortization schedules irrelevant of borrower’s income levels. In the earlier years, aid was targeted only to lower-income students, but aid eligibility was liberalized in the 1970s to support educational investments for middle and even upper-income families. Despite ongoing interest and effort in improving the way students repay their loan debts, these efforts are not reaching a broad cross-section of students and even when they do, many students experience administrative hurdles and complications that discourage them from benefitting from the plans.

**Making Income-Related Loans the Standard Repayment Plan**

With the ongoing conversation around reforming student aid, now is a propitious time to seriously consider income-related loans. The federal government’s transition from its current repayment model to an income-related model would have its fair share of challenges and critics. For example, critics may argue that income-related loans introduce moral hazards into the aid system by encouraging individuals to attend more expensive colleges since they know their loans will only be a fraction of their future earnings: a student who would have attended the local state college may enroll in the more expensive out-of-state college. This may not necessarily be an irrational investment, as many talented low-income students “undermatch” to less-selective
colleges simply due to financial constraints.\textsuperscript{51} Income-contingency could introduce a degree of financial security whereby students select colleges according to fit and academic merits, rather than price. Existing efforts to help students make well-informed decisions about their educational choices would still play an important role on the front-end of choosing colleges, and these back-end reforms might be a way to help in that process.

Taking the same issue in the opposite direction, critics may argue an income-related model encourages students to take low-paying jobs in order to pay as little debt as possible. But this seems unlikely given the literature on the returns to schooling and behavioral economics; that is, many college-educated individuals are unlikely to submit themselves to a life of poverty solely to avoid paying debts. A more likely moral hazard is its potential impact on the decision-making of wealthier graduates, who may find ways to shelter income in order to pay less into the system. Whichever direction one believes this moral hazard tilts toward, the key feature of an income-related model is that there will need to be some monitoring expenses to reduce fraud and abuse. The current aid system does a poor job of this, but a new model may actually improve these conditions if it is able to share data with Internal Revenue Services (IRS) records.

This leads us to the second key challenge, where the U.S. Department of Education (as the originator of all federal student loans) and IRS would become partners in the loan repayment process. The IRS may not view itself as an appropriate or viable principal in collecting student loans because their mission is to collect taxes and not serve as bill collectors.\textsuperscript{52} However, states are not in the position to link these records, and one of the main reasons the Yale Plan failed was due to the lack of administrative capacity (i.e., being the loan originator and servicer). It would be highly inefficient to have each individual college keep these records, and states’
administrative capacity varies considerably in terms of student aid and college enrollment data systems.

To make this program work, a collaboration between IRS and ED is an essential ingredient to the sustainability of a new aid model. The IRS has the data infrastructure available to link students’ income records with Department of Education loan data to ensure borrowers debts are tied to current incomes. Without intragovernmental collaboration between these two agencies, it would be difficult to scale income-related loans up to the entire borrowing population. Existing income-related programs illustrate these administrative challenges, as borrowers must go through substantial hoops in order to participate (and continue) in income-related repayment plans. These hoops come at a cost, as Department of Education staff must monitor claims, consult students, and audit the program; alternatively, an automated process that links loan records with IRS data should introduce substantial economies of scale into the administrative process.

Assuming these two challenges can be overcome, borrowers’ monthly student loan payments would automatically adjust according to their personal income levels. As income rises or declines, so too does a borrower’s payment. This single system would require a standard interest rate for all loans, which some have advocated being set at 3 percent.\textsuperscript{53} After determining the interest rate, policymakers would need to agree on an appropriate share of income that borrowers would be subject to paying each month: Aid advocates have argued for capping monthly repayments at 8 percent of adjusted gross income.\textsuperscript{54} If a borrower’s family income drops below a certain income threshold (likely 150 percent poverty line), or if they face medical emergencies or unemployment, then their loans will automatically enter into emergency protection where the federal government temporarily suspends payments.
By implementing a new repayment model, consumers would have clearer information about the risks and rewards of their educational investments. Because all students would be automatically set into this plan, there would be no forms to fill out, no reapplication process to work through, and a streamlined process could ultimately reduce administrative costs. This also means there would no longer be billions of servicer transfers, while collection agencies (and the billions of dollars in subsidies paid to them) would become irrelevant. Plus, borrowers would have a degree of security on the back-end of their loans since they know their repayment will be scaled according to their resources. The political and administrative challenges discussed above do not appear to outweigh the potential benefits of modernizing the aid repayment system. In addition to eliminating the need for paying collection agencies, an income-related loan model could save the federal government up to $40 billion over the next 10 years.55

Beyond the economic and political considerations discussed above, this model could also encourage students to pursue their academic interests and ambitions. It is plausible that more students will make educational choices according to their academic interests, rather than according to their debt and finances. For example, a social worker currently pays 14 percent of his income on repaying debt since the career pays low and debt can often be quite high. Alternatively, a chemical engineer pays only 6 percent of his income on debt.56 Under the new model, these borrowers would pay the same rate, so it is possible that more individuals will pursue their passions without being discouraged by low pay and high debt. Occupations such as small business owners, teachers, and social workers would likely benefit from such an arrangement.

Loan Forgiveness Options. This new model could scale up other features of existing programs, should there be political will to follow these pursuits. For example, borrowers with
large debts often require more time to repay their loans. If a borrower makes on-time payments for 20 years, yet still has not repaid their balance, then the federal government could forgive this debt. Current income-related programs do this as an incentive to encourage borrowers to make on-time payments and to protect students from excessive interest payments that significantly add up the longer one takes to repay their loan. Some observers may see loan forgiveness as a windfall for high-debt borrowers, and (at worse) could introduce a perverse incentive for students to borrow large sums of debt that will eventually be forgiven. Meanwhile, lower-debt borrowers (who can repay their debts more quickly) are not rewarded from making on-time payments. Critics may argue on the grounds of fairness and moral hazard that loan forgiveness is not a desirable option under the income-related repayment model.

While this may be a fair concern, it should be taken with the following context in mind. The federal government currently spends over a billion dollars collecting defaulted loans—loans made to borrowers who failed to make good on their debt obligations. The irony of the current system is that it spends so much money on collecting defaulted loans, while doing very little to support borrowers who are making on-time payments. Borrowers who anticipate their debt will eventually be forgiven might have an incentive to make on-time payments in order to benefit from loan forgiveness.

If critics see loan forgiveness as a windfall to high-debt borrowers, then perhaps a more viable policy option is to cap the amount of interest that accrues on loans. For example, once a borrower pays interest that equates to 50 percent of their original loan balance, then federal subsidies could cover the remaining balance left for these borrowers. This strategy would serve a similar function as loan forgiveness since it offers relief for high-debt borrowers and it would likely be less costly since it does forgive the principal on student loans. In both cases, loan
forgiveness and interest caps serve the purpose of preventing students from a lifetime of debt. Borrowers who are able to repay their debts in relatively short time periods are clearly ineligible from receiving loan forgiveness of interest cap benefits; however, they benefit greatly by not having to continue to pay interest and by freeing up funds that no longer go towards student loan payments.

Conclusion
Income-related student loans hold promise as an effective way to encourage more individuals to invest in human capital. If a potential college student knows that 8 percent of his future earnings will be set aside automatically to cover his student loan debt, then he may have an incentive to make educational choices according to academic—rather than financial—considerations. Of course, potential students should be well aware of the implications associated with borrowing money to pay for college, but having some certainty about “how much” money will be spent on repaying loans should introduce a degree of certainty and predictability that can help students make well-informed educational investments. Furthermore, by improving student loans on the back-end of repayment, it can reduce (if not eliminate) default and delinquency since borrowers will automatically have their payments adjusted according to their financial conditions.

The current repayment model is not sensitive to the awkward economics of higher education finance and human capital investment decisions. Since students have no collateral and many have no credit history, student loans are often viewed as a risky investment; this is especially true when compared to other forms of consumer credit (e.g., auto loans, mortgages, revolving credit). Additionally, recent college graduates are entering into very weak labor markets defined by constrained wages and persistently high unemployment. The current fixed payment model is not sensitive to these economic realities, so an income-related model could
help recent college graduates navigate the labor market and plan for their financial futures. It may also help prevent delinquency and default since payments would be automatically deducted from paychecks, and those who face economic hardships could automatically suspended payments for a temporary period of time.

Taken together, income-related loans have the potential to introduce simplicity and predictability into the aid system, which in turn may help improve consumer protections while also reducing administrative costs. However, income-related loans are no “silver bullet” for helping achieve these policy goals. College affordability and student loan debt present complex policy problems that cannot be resolved with any single reform, yet changing the way students repay their loans may be part of a broader policy agenda designed to simplify the aid process and streamline the way students finance their postsecondary educations.

This paper identified evidence that income-related loans has helped some countries reduce default rates, so it seems plausible that this solution could help the U.S. achieve similar outcomes. However, is income-related repayment the only (or most preferred) option for achieving this policy goal? Considering that the proprietary sector of higher education accounts for nearly half of the nation’s defaults, some advocates may argue that the best way to reduce default/delinquency is by introducing greater regulation into this sector to ensure students are able to find gainful employment that allows them to avoid defaulting on their loans. Since unemployment is so closely tied to defaults, some advocates may argue that borrowers who collect Unemployment Insurance should automatically be entered into existing emergency protection programs, which would likely reduce default/delinquency rates. Still others may believe income-related loans are the best approach for reducing default. Clearly, there is no
single policy solution to the default problem, but this paper outlines some of the primary ways income-related loans could help borrowers repay their student loan debts.

Much more evidence is needed to fully understand whether and to what extent income-related loans affect students before, during, and after enrolling in college. These issues are underexamined in the existing literature since most of the research either compares how different countries design their loan schemes or it develops theoretical arguments regarding the tradeoffs of linking repayments to students’ incomes. There is surprisingly little rigorous research on how income-related loans affect students’ borrowing, enrollment, and repayment behaviors. While countries can demonstrate that their default rates declined after introducing income-related loans, what other outcomes may have occurred after these policies were adopted? Designing rigorous studies that test some of the conventional wisdom and unanswered questions about income-related loan models would be very beneficial to ongoing policy debates in the U.S. This is a ripe area for further research, where policy-minded scholars could design experimental or quasi-experimental research studies to gain more information about how income-related repayment impacts students. Most importantly, a new repayment model should make students better off than they were without the new model, so careful consideration of the tradeoffs and unintended consequences will continue to play a central role in ongoing deliberations about income-related repayment schemes.
Endnotes

3 Ibid.
17 Ibid. Also, see Hillman (2012). College on credit: a multilevel analysis of student loan default. Forthcoming in Review of Higher Education.


Ibid.


26 See IBRInfo.org for more detail


28 Income-sensitive repayment is an obscure program that few people participate in or know exists, and is often not included as a standard repayment option.


Ibid.

Ibid.

40 Ibid.


According to the Digest of Education Statistics (Table 219), total fall enrollment at all Title IV institutions was over 21 million in 2010. The OECD Country Statistical Profile reports Sweden’s and New Zealand’s total populations are 9.4 and 4.4 million, respectively.


As explained in Dillon (2011) “Affordable at Last.”