

The Potential Market for Income Share Agreements
Among Low-Income Undergraduates

AN ISSUE BRIEF FOR POLICYMAKERS AND ADVOCATES

SEPTEMBER 2015

How ISAs Work

In an ISA, a beneficiary receives up-front funding for educational expenses from an investor. In exchange for that funding, the beneficiary agrees to share a portion of his or her income with the investor for a set period of time. In some regard, the terms of an ISA mirror those of existing federal student loan programs: Anecdotally, the typical length of an income-sharing agreement is 10 years, and the percentage of income shared rarely exceeds 10 percent of a student's adjusted gross income. The beneficiary-funder relationship is typically brokered by a third party, which may be either a for-profit or a nonprofit organization. Often, the third party also fills the role of servicer, verifying a student's income using tax or payroll statements and handling monthly payments.

This is the first of a series of Issue Briefs dealing with ISAs.

Introduction

With the price of college rising unabatedly and concerns mounting over education debt, each new policy or practice that holds the promise of containing prices or helping graduates better manage their borrowing is met with anticipation. Income share agreements (ISAs)—in which students pledge a portion of their future income to an investor who provides money today to help meet college expenses in exchange—are one such innovation (see "How ISAs Work").

Proponents of ISAs argue that they offer several advantages over student loans. Foremost to those interested in ISAs as a mechanism for improving college access is their potential to skirt aversion to debt that might unnecessarily constrain a well-qualified student's decision about where to attend college, drive her to prioritize work to the detriment of her education, or not enroll at all (Boatman, Evans & Soliz, 2014; Caetano, Palacios, & Patrinos, 2011; Palacios, DeSorrento, & Kelly, 2014). This potential is of special interest to those committed to improving outcomes for students who have been traditionally underrepresented in postsecondary education because aversion to loans for education have been noted among dependent students who come from lower income families, students who identify as Hispanic or Asian, and students whose parents have lower levels of educational attainment (Burdman, 2005; Choi, 2011; Cunningham & Santiago, 2008).

ISAs also may represent a valuable tool in reducing rates of dropout. More than one fourth of students who leave college in their first year report financial concerns as motivating their decision, whether in whole or in part. As such, ISAs have the potential to serve as a support for students who would otherwise be forced to discontinue their studies.¹

Millions of students starting their college career each year stand to benefit. In its most recent study of first-time, beginning students, the National Center for Education Statistics tracked a cohort of new enrollees from among the 3.7 million students who started college in academic year

Students starting college (2003-04)

3.7 million

Students who received a Pell grant



Students who received federal loans



A History of ISAs

ISAs have existed informally for hundreds of years—usually between associates, friends, or family members. By the middle of the 20th century, Milton Friedman identified the formal economic rationale for ISAs in his publications on "human capital contracts." ISAs based on fully enforceable contracts and initiated among investors and beneficiaries in a commercial market are a comparatively new development, emerging in the last decade.

The most recent ISA activity has been in the sphere of higher education finance, coinciding with the collapse of the bankbased private student loan market in 2008. The first to enter the market was Lumni, founded in Chile in 2002 and beginning operations in the United States in 2009. Shortly thereafter, it was joined by firms such as 13th Avenue (in 2009), Cumulus Funding (2011), Upstart (2012), and Pave (2012). During this same period, firms such as Social Finance, Inc. (SoFi; 2011) and CommonBond (2012) began offering student-loan products that reflected, in part, the traditionally personal relationship between investors and beneficiaries. For example, SoFi's initial foray into the marketplace funded graduate-student loans for Stanford business students by soliciting investments from Stanford alums. Similarly, CommonBond began its work with students at the University of Pennsylvania's Wharton School of Business.

2003–04. The researchers found that nearly half, around 1.7 million, received a Pell grant at some point during their college career, a rough proxy for being lower income (Wine, Janson, & Wheeless, 2011). An even greater number, about 2 million, relied on federal loans to help finance some portion of their postsecondary education.² Given the depth of students' financial need, it is easy to imagine that ISAs might grow over time to help a sizable share of the 18 million students enrolled in all levels of undergraduate study today (Ginder, Kelly-Reid, & Mann, 2014).

Unfortunately, the widespread use of ISAs to support the educational aspirations of low-income undergraduates in particular may run headlong into the priorities of those offering this type of financing. Returns-minded investors stand a better chance of recouping their investment if they support students who secure the most lucrative careers. A brief history of ISAs in the United States (see "A History of ISAs") suggests that, in the main, recipients of ISAs have been high-ability students attending prestigious institutions in lucrative fields of study. Unfortunately, stratification within postsecondary education concentrates a sizable proportion of lower income students in open-access institutions, pursuing sub-baccalaureate credentials.³ At least on face, this seems at odds with the notion that ISAs could play a significant role in improving college access.

Advocates have suggested that this need not be the case (Palacios et al., 2014). While they acknowledge that the most common pathway to investor return is funding high-cost educations that lead to even higher wage occupations, they argue that supporting students who select lower paying fields of study at low-cost institutions also can be economically viable. This may particularly be the case if the funder of ISAs is philanthropically motivated. As discussed elsewhere in this brief, at least some current participants in the ISA market appear to operate in a manner consistent with this model.

A foundational question emerges: Given what is known about the ISA market today—and what might be possible—how many low-income students might we reasonably expect ISAs to serve?

This Brief

In this brief, we explore the potential of ISAs to serve low-income students. We focus on students who are seeking an undergraduate degree. Our primary goal is to estimate the number of such students who might plausibly be offered an ISA in today's market, with its current regulatory structure and funding providers, given what is known about how these financing instruments, and those like them, have been offered.

Our estimates are based on publicly available data created by the U.S. Department of Education's National Center for Education Statistics (NCES) and can be replicated using links to NCES's PowerStats tool (see notes for Exhibits 2 and 3). Estimates of a "plausible market" require us to make assumptions about the way in which funders in the ISA market are likely to behave. We attempt to make these assumptions clear. Importantly, some

assumptions are based on interviews conducted with industry experts who have chosen to remain anonymous. Readers should use caution when interpreting related findings.

We explore three primary questions:

- 1. Criteria used to select ISA recipients. What characteristics are ISA providers likely using to evaluate a beneficiary's potential eligibility for funding?
- 2. Size of the market in the status quo. How many undergraduates do we estimate are likely to be served by ISAs in the status quo? Of those, how many would be expected to come from lower income families?
- 3. Impact of more inclusive markets. How many undergraduates do we estimate are likely to be served by ISAs if funders adopted more inclusive criteria for ISA eligibility? Of those, how many would be expected to come from lower income families?



Key Findings

- Only a handful of firms are actively offering students ISAs in support of their educational pursuits.
- If ISAs were to become widely available to support undergraduate study, under current underwriting criteria, we estimate that no more than
 7 percent of each year's entering, first-time student cohort would likely be eligible to receive this type of funding (about 272,500 students).
- Given past and current practice, the potential of ISAs for lower income students appears even smaller, with **no more than 5 percent** of first-time, lower income students likely being eligible for an ISA (about 82,000 students).
- If there were changes to the supply side of the ISA market (that is, if firms were willing and able to follow "low-margin, high-volume" investing algorithms), then students who are likely to earn modest incomes but who have relatively lower funding needs might be targeted for ISAs. Under this generous "upper-bound" assumption, we estimate that ISAs could support up to 14 percent of each year's entering, first-time cohort (about 535,080 students) and up to 18 percent (about 321,450 students) of the cohort of first-time, beginning students who are lower income.
- Industry experts suggest that the number of firms poised to offer ISAs either directly to students or indirectly through other types of organizations (e.g., alumni associations) may grow through 2016, further expanding the usefulness of this innovation in financial aid.

What Beneficiary Characteristics Are Potential Funders Evaluating?

To estimate the potential number of students ISAs might serve if they were to become widely available, we must infer the criteria that providers appear to use when evaluating potential beneficiaries. To do so, we turn to two sources: history and the information that firms make available via the Web about their present practice.

Recent history suggests firms that offer ISAs, or have offered ISAs in the past but now offer only loans, have largely focused on students who are high-ability, who attend prestigious universities, and who pursue lucrative fields of study. This is most certainly the case for CommonBond and SoFi, both of which were founded to serve graduate students at elite institutions. To be sure, there are counterexamples, including 13th Avenue's current work with community colleges (13th Avenue Funding, 2013) and Cumulus Funding's mission to be a "better financial partner for the American worker" (Cumulus Funding, 2015). But selectivity seems important for at least some potential providers.

Firm websites also inform our analysis. We explored public information for eight firms, documenting the questions each provider asked potential ISA or loan applicants. These firms included: (1) App Academy (www.appacademy.io), (2) CommonBond (www.commonbond.co), (3) Cumulus Funding (cumulusfunding.com) (4) Lumni (www.lumniusa.net), (5) Pave (www.pave.com), (6) SoFi (www.sofi.com), (7) 13th Avenue Funding (13thavenuefunding.org/), and (8) Upstart Network (www.upstart.com).



A robust undergraduate market for ISAs does not exist today. Only two firms, App Academy and Cumulus Funding, appear to be actively offering income share agreements for educational purposes: The former offers nondegree coding training in exchange for participation in an ISA, and the latter offers ISAs for "continuing education." No data are publicly available from either firm about the number of students they have served. As of July 2015, Lumni, the progenitor of ISAs in the United States, was not offering ISAs to U.S.-based students. 13th Avenue Funding was operating only pilot programs in select

communities. The remaining four firms commonly associated with the ISA model, including CommonBond, Pave, Upstart, and SoFi, were offering only loans, often for graduate study or loan refinancing. As a result, we must infer how these firms' criteria for loans might be applied to ISAs, and how they might be applied to an undergraduate population.

Our review of applicant questionnaires does not allow us to say with certainty which of the criteria are used for selection and which are used to create the terms of a potential ISA or loan offer (see Exhibit 1). However, each firm appears sensitive to risk. Most review credit scores. Some explicitly limit their funding to students in specific graduate programs at specific institutions (e.g., CommonBond, which emphasizes MBA programs at a set of selective institutions), and others' histories are informed by focusing only on a highly select group of students (e.g., SoFi). And each collects at least one additional

characteristic that is a likely proxy for beneficiaries' likelihood of securing a lucrative career, or at least being sufficiently successful to be able to fulfill the notional amount of their ISA.

Criteria	App Academy (ISA)	Common Bond (Ioans only)	Cumulus (ISA)	Pave (loans only)	Upstart (loans only)	SoFi (loans only)
Level of study	Nondegree	Graduate only	Continuing education	No known restriction	No known restriction	No known restriction
Credit score	?	✓	✓	?	✓	✓
Field of study	✓	✓	?	✓	✓	✓
Institution	X	✓	?	✓	✓	✓
Academic achievement	X	?	?	✓	✓	?
Education plans	X	✓	✓	✓	✓	✓
Employment history	X	?	✓	✓	/	✓

Groups We Considered

Our work considered three groups of students. Students in the selective group attended the nation's most selective universities, had SAT scores higher than 1300 and high school GPAs of 3.5 or greater, had transcripts that showed they earned a bachelor's degree in a science, technology, engineering, and mathematics (STEM) field of study, and were under 30 years of age. Students in the graduate school group were enrolled in graduate school⁴ in 2009 (regardless of work status), after having completed a bachelor's degree. Finally, students in the early high-wage job group were employed in 2009, were earning at least \$75,000 per year from work, and were not enrolled in graduate school after having earned any certificate or degree.

How Many Undergraduates Are Likely to Be Served by ISAs?

We attempt to identify which students might be of current interest to potential funders based on historical precedent and our review of publicly available websites. We explicitly exclude one group of students—graduates who are seeking to have existing loans refinanced—because although this is likely to be an important part of the ISA market, it is not of interest in the current study.

Based on our review, we identify three student groups (see "Groups We Considered"). The first group includes high-aptitude undergraduate students who completed a bachelor's degree at prestigious institutions in potentially lucrative fields. The second includes undergraduate students who are likely to pursue graduate study. The third includes undergraduate students who earn a postsecondary credential and enter a well-paying job.

We estimate the number of students who begin their postsecondary careers each year belonging to each of these groups, using the U.S. Department of Education's 2004/09 Beginning Postsecondary Students Longitudinal Study (BPS). BPS followed a nationally representative cohort of students entering postsecondary education in the 2003–04 academic year for a period of six years. In Exhibit 2, we present our estimate of the size of each group and provide a brief sketch of the students who compose each group.

Exhibit 2. Count and Distribution of Characteristics of Students Within Each Group **Graduate School Early High-Wage Job Characteristic Selective Count of students** 28,100 272,500 29,100 **High school GPA** 29% 3.5-4.0 3.0 - 3.4100% Below 3.0 Unknown SAT score, or equivalent 40% 24% 1301-1600 1001-1300 100% 701-1000 400-700 - Estimate is unstable Unknown **College selectivity** 60% Very selective Moderately selective All others 19% 44% Field of study 18% STEM fields **Business** Education Social sciences Humanities - Estimate is unstable All other fields **Highest degree expected** 11% 51% Post-baccalaureate Baccalaureate Sub-baccalaureate - Estimate is unstable **Ever received Pell Grant** Never received Pell Ever received Pell

Notes: Estimates on which authors' calculations are based can be recreated using NCES PowerStats. Estimates in Selective column are from http://nces.ed.gov/datalab/index.aspx?ps_x=bagbfg80. Estimates in Graduate School column are from http://nces.ed.gov/datalab/index.aspx?ps_x=bagbfg20. Estimates in Early High-Wage Job column are from http://nces.ed.gov/datalab/index.aspx?ps_x=bagbfkec.

Source: Wine, Janson, & Wheeless. (2011). 2004/09 Beginning Postsecondary Students Longitudinal Study (NCES 2012-246). Washington, DC: U.S. Department of Education, National Center for Education Statistics.

As shown in Exhibit 2, we estimate that between 28,000 and 272,500 students who began their postsecondary education in the 2003–04 academic year had, by 2008–09, attained an outcome that ISA funders might find desirable. As noted earlier, an estimated 3.7 million students began college for the first time in 2003–04, meaning these students represent, at most, 7 percent of that cohort.

When we consider lower income students, operationalized here as students who ever received a Pell grant, our estimates are similarly sobering. We estimate that between 3,400 and 82,000 lower income students who began their postsecondary education in the 2003–04 academic year might be seen as appropriate for an ISA. A total of 1.7 million first-time students in 2003–04 ever received a Pell grant during their college careers. We estimate that no more than 5 percent of entering, lower income students would be viewed as desirable by an ISA funder.

The Potential for More Extensive and Inclusive ISA Markets

Using even our most liberal profile of students likely to be served by ISAs in the status quo, we assume funders will select students on the basis of characteristics that reflect a preference for at least some level of selectivity. This is based on our assessment of the industry's historic practices and how current providers have positioned themselves in today's marketplace.

But what if ISA funders adopted an approach that relied less on identifying a small number of students who were likely to generate large returns, but instead on selecting a larger number who would generate returns that were more modest? To estimate the size of this more inclusive ISA market, we again turn to the 2004/09 Beginning Postsecondary Students Longitudinal Study. Our strategy is to identify the subset of students who, in their sixth year after entering postsecondary education (1) are employed, and (2) whose monthly student loan payment (which we take as a proxy for potential interest in an ISA) did not exceed 10 percent of their monthly income in 2009. We summarize our findings in Exhibit 3.

Exhibit 3. Student Debt. Annual Earnings, and Lower-Income Status, by Debt to Income Ratio				
	Evhibit 2 Ctudont	+ Dob+ Annual Fornings	and Lawar Income Status	o by Dobt to Income Datio

Monthly student loan payment as percent of monthly income, 2009	All Students (N)	Median Federal Loan Debt (\$)	Median Annual Income (\$)	Lower Income Proxy (ever received Pell) (%)	Lower Income Proxy (ever received Pell) (N)
1 to 3 percent	239,640	5,850	33,600	62	148,290
4 to 6 percent	178,200	10,130	30,000	61	107,860
7 to 10 percent	117,240	14,130	26,000	56	65,300
11 percent or more	155,430	16,250	22,000	49	76,780

Note: Estimates from http://nces.ed.gov/datalab/index.aspx?ps_x=ckgbfhaaf and http://nces.ed.gov/datalab/index.aspx?ps_x=ckgbfhaaf

Source: Wine, Janson, & Wheeless. (2011). 2004/09 Beginning Postsecondary Students Longitudinal Study (NCES 2012-246). Washington, DC: U.S. Department of Education, National Center for Education Statistics.

We see from Exhibit 3 that an estimated 535,080 students who began their postsecondary education in the 2003–04 academic year had, by 2008–09, found employment sufficient to keep their monthly student loan payment to 10 percent or less of their monthly income. This represents approximately 14 percent of all first-time undergraduates in 2003–04.

The 321,450 students we identify as lower income represent 18 percent of those undergraduates who ever received a Pell grant. Each of these students presents a potential opportunity to ISA funders who are interested in supporting students who may pursue less lucrative careers (at least initially) than peers at elite institutions but who also have less financial need.

Conclusion

Proponents of ISAs point to several benefits of this type of financing arrangement, including reduced default risk for borrowers; signals about

the perceived value of a varied course of study; and, particularly for lower income students, the ability to surmount aversion to taking out student loans. To date, ISAs have not flourished in the United States. Only a handful of firms currently offer (or have ever offered) ISAs for educational purposes. Even these firms often limit their scope to supporting graduate study or refinancing existing educational debt.

In this brief, we explore who might be served by ISAs, should they become more widely available to undergraduate students. Inferring the eligibility requirements funders might use to select ISA beneficiaries

from both historical and current practice, we find a small student marketplace for this innovation: around 7 percent of each year's entering, first-time student cohort (about 272,500 students) and no more than 5 percent of each year's first-time, lower income student cohort (about 82,000 students). As beneficial as this innovation **might** be for today's college students, their potential is unlikely to be realized in the absence of a fundamental "rethink" of whom these instruments **could** serve moving forward.

We believe this is possible. When more inclusive eligibility criteria are employed, we see a substantial increase in the number of students ISAs might be expected to support, particularly lower income students. We anticipate the total number of entering, first-time students who might benefit each year could nearly double, reaching 535,080 students (14 percent of the total entering cohort). The share of lower income students who might be supported increases fourfold, to about 321,450 students (about 18 percent of the total entering cohort).

This finding has implications for both advocates of ISAs and of innovations generally that are designed to incent lower income students to access postsecondary education. Both should work to cultivate ISA funders who are willing to explore the equity implications of how they determine who is, and who is not, a potential candidate for receiving an ISA.



Furthermore, we are encouraged by anecdotal evidence from industry experts about another potential route to expanding the ISA market: the creation of partnerships between universities, their alumni associations, and financial firms to offer ISAs to current students. Although these collaborations are nascent and nearly impossible to quantify, they could provide the opportunity to reach an even larger swath of students. In so doing, they could introduce students to a potentially useful financing instrument that could reduce or replace student loans, or minimize students' need to work to offset educational costs.

ISAs have the potential to be a useful innovation in student financial aid, with hundreds of thousands of first-time, beginning students poised to benefit each year. Their broader adoption will depend, at least in part, on the creativity of individual lenders and intermediary firms to identify and open new markets. We advocate that, as they do so, they consider expanding the opportunity ISAs represent to an ever-larger population of students, including those seeking lower cost but high-value credentials.

Endnotes

- ^{1.} Author's calculation from the National Center for Education Statistics' 2004/09 *Beginning Postsecondary Students Longitudinal Study.*
- ² Author's calculation from the 2004/09 Beginning Postsecondary Students Longitudinal Study. Estimates can be retrieved using National Center for Education Statistics PowerStats, at http://nces.ed.gov/datalab/index.aspx?ps_x=chgbfm15.
- 3. More than 40 percent of dependent undergraduates from families earning less than \$40,000 attended a two-year or less-than-two-year institution (see Skomsvold, 2014, Table 1.1), and among dependent undergraduates in the lowest three quartiles of family income, fewer than half were pursuing a bachelor's degree (see Skomsvold, 2014, Table 2.1).
- Due to the increasing number of elementary and secondary education teachers who are required to earn a master's degree early in their teaching careers, we would seek to eliminate students who entered graduate programs in Education from our analysis. Unfortunately, the BPS dataset does not record graduate students' field of study. As a proxy, we exclude from this outcome all students whose undergraduate field of study was Education. We estimate this excludes approximately 23 percent of the graduate-student population (see Woo & Skomsvold, 2014, Table 1.1).

References

- Boatman, A., Evans, B., & Soliz, A. (2014). Applying the lessons of behavioral economics to improve the federal student loan programs: Six policy recommendations. Indianapolis, IN: Lumina Foundation for Education.
- Burdman, P. (2005). The student debt dilemma: Debt aversion as a barrier to college access. Berkeley CA: Institute for College Access and Success.
- Caetano, G., Palacios, M., & Patrinos, H. A. (2011). *Measuring aversion to debt: An experiment among student loan candidates.* Washington, DC: World Bank Group.

- Choi, L. (2011). Student debt and default in the 12th district. San Francisco: Federal Reserve Bank of San Francisco.
- Cumulus Funding. (2015). *Cumulus Funding's mission*. Retrieved from http://cumulusfunding.com/our-mission/
- Cunningham, A., & Santiago, D. (2008). *Student aversion to borrowing: Who borrows and who doesn't*. Washington, DC: Institute for Higher Education Policy.
- Ginder, S. A., Kelly-Reid, J. E., & Mann, F. B. (2014). Enrollment in postsecondary institutions, fall 2013; financial statistics, fiscal year 2013; and employees in postsecondary institutions, fall 2013. Washington, DC: National Center for Education Statistics, U.S. Department of Education.
- Palacios, M., DeSorrento, T., & Kelly, A. P. (2014). *Investing in value, sharing in risk:*Financing higher education through income share agreements. Washington, DC:

 American Enterprise Institute.
- Skomsvold, P. (2014). *Profile of undergraduate students: 2011–12* (Web tables). Washington, DC: National Center for Education Statistics, U.S. Department of Education.
- 13th Avenue Funding. (2013). *Our pilot program.* Retrieved from http://13th avenuefunding.org/styled/index.html
- Wine, J., Janson, N., & Wheeless, S. (2011). 2004/09 beginning postsecondary students longitudinal study (BPS:04/09): Full-scale methodology report (NCES 2012-246). Washington, DC: National Center for Education Statistics, Institute of Education Sciences, U.S. Department of Education. Retrieved from http://nces.ed.gov/pubs2012/2012246_1.pdf
- Woo, J., & Skomsvold, P. (2014). *Profile and financial aid estimates of graduate students: 2011–12.* (NCES 2015-168). Washington, DC: National Center for Education Statistics, U.S. Department of Education.

This Issue Brief is part of an ongoing series of products supported financially by the Bill & Melinda Gates Foundation. The views, findings, conclusions, and recommendations expressed herein are those of the authors and do not express the viewpoint of the foundation. Direct inquiries to Matthew Soldner at 1000 Thomas Jefferson Street, NW, Washington, DC 20007, or msoldner@air.org.



1000 Thomas Jefferson Street NW Washington, DC 20007-3835 202.403.5000

www.air.org

About American Institutes for Research

Established in 1946, American Institutes for Research (AIR) is an independent, nonpartisan, not-for-profit organization that conducts behavioral and social science research on important social issues and delivers technical assistance, both domestically and internationally, in the areas of education, health, and workforce productivity.