

Binfare and Zimmerschied have written a very useful paper that presents new data on the use of debt by colleges and universities in the United States. American colleges and universities do a great deal of borrowing in debt markets, and understanding the nature, purposes, and consequences of this debt issuance is an important part of understanding higher education.

Taking a step back from a narrow focus on debt issuance, the financial and business landscape for American higher education has been and is likely to remain challenging. College and university enrollment peaked at 21 million in 2010 and has been in decline since then. Government funding for higher education has not kept pace with inflation since the global financial crisis of 2007-2009. Although colleges and universities have been closing for almost as long as they have been opening, these economic pressures are real and predictions of an increasing pace of school closures are not difficult to find.

Turning to the authors' work on higher education debt, they point out that American institutions had more than \$265 billion in debt outstanding in 2020, and that they issued more than \$50 billion in debt during 2019. To give these numbers context, degree-granting postsecondary institutions spent a total of \$702 billion during the 2020-2021 year. Public institutions spent \$450 billion of that total, private nonprofit institutions spent \$239 billion, and for-profit institutions spent \$14 billion.¹ The aggregate amount of debt is smaller than the total size of university endowments, which at the end of 2021 was about \$927 billion.² These endowments are often encumbered, however; a dollar in an endowment is frequently matched by a specific obligation to endowment income for a particular purpose. Borrowing by higher education institutions is also smaller in aggregate than student borrowing, which now amounts in total to about \$1.6 trillion.³

The authors document some useful facts about the higher education debt market, in particular the pace and composition of issuance over recent decades. Higher education institutions can often borrow in the tax-exempt market, a market of bonds issued by a very diverse collection of issuers that includes states, cities, counties, hospitals, transportation systems, hospitals, and other entities responsible for different types of infrastructure investment. Colleges and universities have recently been issuing large quantities

¹ <https://nces.ed.gov/fastfacts/display.asp?id=75>

² <https://nces.ed.gov/fastfacts/display.asp?id=73>

³ <https://www.newyorkfed.org/microeconomics/hhdc>

of taxable bonds as well; the taxable issuance gives issuers flexibility to structure bonds and use bond proceeds in ways that fall outside of the boundaries required by the IRS for tax exemption. Documenting the increasing pace of taxable bond issuance is a useful contribution.

The authors also show that a large amount of this issuance activity has been the issuance of bonds that are used to refinance existing debt. This development follows naturally from the overall downward trend in interest rates during most of this period, which the authors document. Higher education debt, like other municipal debt, frequently is “callable” by issuers, meaning that issuers have the right to repurchase the debt from investors at a pre-specified price. This callability and certain market-specific nuances have been a focus of recent academic work on the municipal bond market. This literature has often found evidence that issuers frequently appear to behave suboptimally when it comes to structuring and exercising the various options that can be embedded in the debt that they issue.

The main contributions of the authors in this paper include showing that public universities borrow at lower yields than private universities. Perhaps unsurprisingly, they also show that more heavily indebted universities appear to borrow at higher yields. (Table 4). The authors also show that borrowing is lower at universities that receive more government revenue. (Table 5). Increases in debt appear to precede expansions in dormitory capacity and expansions in the enrollment of out-of-state students (Table 6).

Although the paper’s approach is primarily descriptive, presenting correlations that might be open to a variety of causal interpretations, these results seem quite consistent with the authors’ overall narrative: higher education institutions are using debt to finance the purchase and construction of facilities such as dormitories. The authors refer to this type of infrastructure as “amenities”, making a distinction between these types of facilities and expenses that are directly linked to educational efforts. This is consistent with previous work (see Jacob et al) that has showed that these types of amenities can have a significant influence on student’s decisions about which college to attend.

I think that using debt to finance the acquisition of infrastructure like dormitories makes a great deal of sense. As anyone with a home mortgage knows, debt is an extremely useful tool – it helps institutions and households use assets without needing to save up in advance the cash to purchase them. Using debt to finance dorm construction makes sense for the same reason that households may access the home mortgage market while avoiding unsecured borrowing: it is easier to borrow if that borrowing is collateralized by assets that can be seized by a creditor and redeployed elsewhere in the event that the borrower defaults. Some of the trends that we have seen in higher education infrastructure investment,

for example the trend toward high-amenity and apartment-style housing, make sense because of the greater ease that creditors would have seizing and reallocating toward other uses higher-amenity collateral. Given the demographic trends and the challenging picture for higher education, building flexible infrastructure – dormitories that could convert to old-folks’ homes – makes a great deal of sense.

One wrinkle in analyzing debt is that arrangements with the economic substance of debt comes in various forms. Borrowing can be explicitly memorialized with a bond. This institutional arrangement makes debt tradeable from investor to investor, and bond market debt is the focus of this paper. Borrowing can come in other forms, though. Both nonprofits and for-profits borrow from their employees in the form of pension and retirement health care arrangements. These arrangements are promises to deliver value to employees later, and they can have much of the same economic substance of debt, with the wrinkle that the borrowing is from employees. Understanding the aggregate debt burden of the higher education sector requires understanding both bond market debt and also pension and other retirement promises, a fact that is apparent in Figure 2 of the authors’ paper.

Institutions can also write contracts with third-party providers of infrastructure, committing to make payments in exchange for the future availability of infrastructure such as dorms, parking lots, or classroom or office space. These contracts, of which “public-private partnerships” or “P3s” are an example that is becoming more common in higher education and among other traditional municipal bond market issuers, can have much of the same economic substance as debt. They commit institutions to future payments, as debt does, but these arrangements have different labeling and often have different contractual and organizational implications. Uncertainty about future developments in higher education and other pressures may accelerate the use of these types of arrangements, which can allow more flexibility than the traditional “borrow money in the bond market and use the proceeds to build a dormitory” model. But supervising the negotiation and renegotiation of these arrangements may pose new challenges, in particular given their complexity and given that the arrangements can commit institutions to payments or other obligations that stretch beyond administrators’ career horizons.

Institutions, regardless of their form, have “operating leverage” as well as financial leverage. An example of operating leverage would be the salary of a tenured faculty member. This faculty member’s salary and benefits are something like interest payments, because unless the institution defaults or declares a state of financial exigency, these payments must be made. Understanding the interaction between operating leverage and financial leverage, and understanding the interaction between the higher education labor market and higher education borrowing, will be important. In the for-profit bond market, scholars (for

example Matsa JF 2010) have argued that high leverage can be a strategic choice for issuers in the context of difficult negotiations with employees. If employees are well-organized and enjoy bargaining advantages, committing to high debt service payments can be a way for debt issuers to “tie their hands” in future bargaining with employees.

Overall this paper is a useful and timely contribution to our understanding of ongoing trends in higher education. The authors’ narrative, backed up by the evidence that they present, is that the race to recruit students in a challenging environment is driving debt-financed infrastructure investment. Our ongoing challenging and very uncertain times may also spur financial and organizational innovations that make it very important to pay careful attention to the wide range of arrangements and commitments that can have the economic substance of traditional bond-market debt.