



Unintended Costs

The Hidden Consequences of Tuition Freezes and Caps

LOIS MILLER AND MINSEON PARK*

APRIL 2025

INTRODUCTION

In the face of concerns about college affordability, tuition freezes and caps are becoming an increasingly popular policy tool for state governments to regulate public colleges. They are one of a rare set of policies that often receive bipartisan support. Both parties frame freezes and caps as beneficial for state residents, who will be enabled to afford a college education. Similar policies are also gaining traction at the federal level: a proposed bipartisan House bill for short-term Pell Grants ([Bipartisan Workforce Pell Act](#)), for instance, would cap the total tuition and fees a college can charge grant recipients to a specific limit based on prior students' earnings.

A tuition freeze or cap occurs when a government regulator sets limits on the amount by which public colleges are allowed to raise sticker price tuition from year to year. Typically, a "freeze" occurs when colleges are banned from raising nominal tuition at all. However, states will frequently impose limits on the rate at which colleges are allowed to increase tuition (e.g., 3 percent/year), rather than fully freezing tuition. From 1990 to 2019, 22 states implemented a tuition freeze or cap at least once.

Under an effectively enforced tuition regulation (i.e., cap or freeze), colleges should not be able to increase sticker price tuition, either at all or by a large amount. However, sticker price is not the most relevant price for students. What students pay is their net price, which is the sticker price tuition minus any federal, state, private, and institutional financial aid they have received.

In our analysis, we find that when four-year colleges lose revenue during a tuition cap or freeze, they respond by lowering institutional financial aid (i.e., grants/tuition reduction awards given at the institution's discretion to students based on merit and/or financial need). That is, even when sticker price tuition is lowered, the price students pay may not be. As a result, for colleges that were awarding more institutional aid to needier students before the limit was put in place, tuition caps and freezes can have the unintended consequence of benefiting richer students (who do not normally receive institutional financial aid) while potentially harming poorer students.

This implies that when tuition is regulated but financial aid is not, the desired effect of a tuition cap or freeze on net price can be undone by cuts to aid, and students can be affected unequally. We also find that at two-year colleges, where the role of institutional financial aid is limited, colleges instead respond by rapidly increasing tuition once the cap/freeze has been lifted, suggesting that abrupt ends to tuition freezes/caps may undermine the benefits provided to students during the freeze.

* Lois Miller (lois.miller@moore.sc.edu) is Assistant Professor of Economics at the University of South Carolina, and Minseon Park (minseonp@umich.edu) is Assistant Professor of Economics at the University of Michigan. The views in this policy brief are solely those of the authors.

SCOPE OF ANALYSIS

In this policy brief, we summarize our main results from Miller and Park (2022) and refer readers to the full paper for additional details.¹ The setting for our study is higher education institutions in the United States. Our primary analysis will be from 1990 to 2013, although we do some analyses with more recent years (through 2019). We are interested in legislative tuition regulations and do not consider tuition freezes/caps initiated by colleges. These tuition regulations almost exclusively affect in-state undergraduate tuition. Student fees are often regulated together with tuition, but financial aid is rarely regulated.²

We combine state-level tuition caps and freezes from 1990 to 2019 with institution-level data from the Integrated Postsecondary Education Data System for our analysis.

DECELERATED GROWTH IN STICKER PRICE AND AID

First of all, we find that tuition regulations meaningfully slowed down sticker price increases in 2013 and earlier.³ More importantly, though, we find that they simultaneously induce universities to reduce institutional financial aid, sometimes by a greater degree.

Figure 1: Effect of Tuition Regulation on Tuition and Aid at Four-Year Colleges

Notes: -4+ means 4 or more years before the tuition regulation is introduced, and 4+ is 4 or more years after the tuition regulation is lifted. Dotted lines show the confidence interval at 95% level.

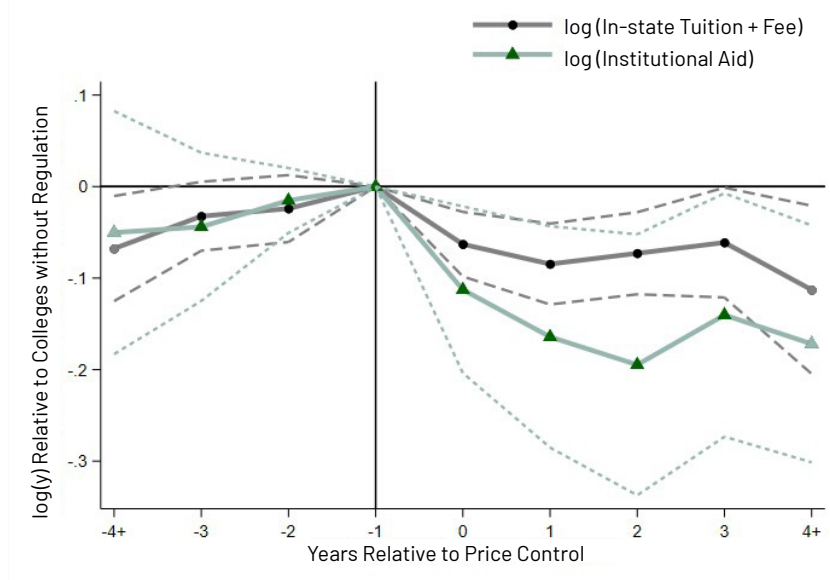


Figure 1 shows our main results for four-year public colleges. The x-axis gives the year relative to the tuition regulation (either cap or freeze), where period 0 refers to all years the tuition regulation was in place (e.g., if a state enacted a tuition cap from 2011 to 2013, -1 would refer to 2010, 1 would refer to 2014). On the y-axis, the lines plot the estimated effect of a public institution being under a state-mandated tuition cap or freeze, relative to if they never experienced the cap or freeze. The gray line with circles plots the effect on sticker price tuition, while the green line with triangles gives the corresponding effect on institutional financial aid.

As the figure shows, a tuition regulation reduces the growth in average sticker price tuition of four-year colleges by 6.3 percentage points per year during the regulation, and by 7.3 percentage points two years after the end of the cap/freeze.

However, this slowdown in sticker price is accompanied by a decrease in institutional aid that is approximately twice as large. During a tuition regulation, four-year colleges reduce the growth of financial aid by, on average, 11.3 percentage points. Two years post-regulation, aid growth is 19.5 percentage points lower than it would have been without the regulation.

At two-year institutions, where the role of institutional aid is limited, colleges instead respond by rapidly increasing tuition once the cap/freeze has been lifted. During the regulation, two-year schools slowed the growth of sticker prices by 9.3 percentage points, on average; three years after the cap/freeze is lifted, sticker price growth is only 4.8 percentage points lower and not statistically different from zero.

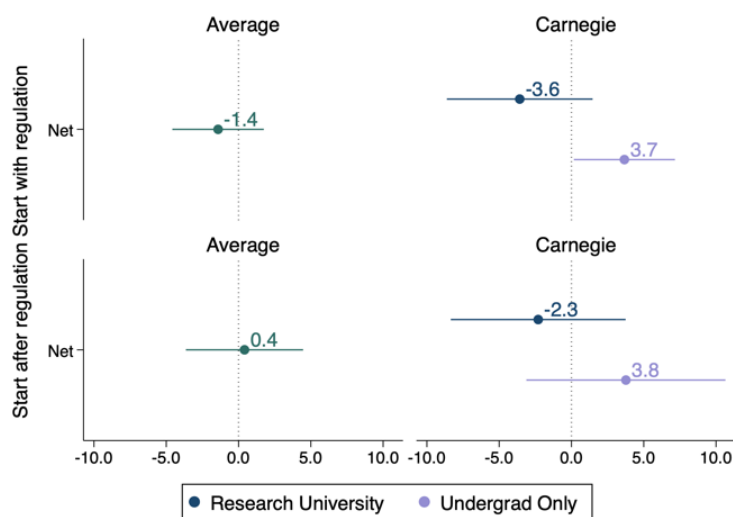
DIFFERENTIAL IMPACTS BY INSTITUTION TYPE

In the four-year sector, we find important differences in how different types of institutions and students experience the impact of tuition regulations. We find that four-year institutions without graduate programs adjust institutional aid more than high-research universities do. Similarly, we find that four-year institutions that are more dependent on tuition revenue lower financial aid by more, and more quickly increase sticker price tuition after the regulation has been lifted. These results imply that colleges with fewer monetary resources apart from tuition make larger adjustments to other margins in response to tuition regulations, while more highly resourced institutions absorb the tuition limit more easily.

In Figure 2, we show how a student may feel the impacts differently based on 1) which type of institution they enroll in, and 2) when they first enroll with respect to the timing of the regulation. Our results imply that states that implement a uniform regulation on all colleges within the state may be creating inequities in the way the regulation is felt by various students. Depending on the type of student we consider, we estimate very different impacts on net tuition over four years of college. For instance, students at high-research universities who enter college in the first year of the regulation receive a 3.6 percent discount on their tuition, on average. On the other hand, students at an undergraduate-only college who start school right after the regulation ends (so without the benefit of the lower tuition, but with the cuts in aid) would pay, on average, 3.8 percent more than they would have without the regulation.

Figure 2: Change in Net Tuition Paid by Representative Students in Four-Year Institutions

Notes: The figure shows the overall percentage-point change in net tuition paid by a student who receives the average institutional aid. In the left column, we show an average student across all universities. In the right column, we show effects on an average student at a research university and an average student at an undergraduate-only university, according to the Carnegie classification, a framework for recognizing and describing institutional diversity in U.S. higher education. See Miller and Park (2022) for additional details.



CONCLUSION

Despite their intended effect of lowering the cost of education, our analysis shows that institutions' responses to tuition freezes and caps may undermine those effects, particularly by leading colleges to cut back on institutional aid, offsetting reductions in sticker price such that net price is not lowered.

Institutional aid is rarely regulated, allowing universities to adjust it freely to make up for lost revenue from a tuition cap or freeze. This leads to the effects of tuition regulations not being felt equally across all students; students who do not receive institutional financial aid will see greater benefits from tuition caps and freezes than students who rely on aid (and who are likely to see their aid dollars cut in response, offsetting the tuition limit). On average, students attending four-year public colleges are more likely to receive institutional aid – and thus to see that aid cut – if they are low-income. Twenty-seven percent of students from the bottom quartile (and 34 percent of Pell Grant recipients) get institutional aid, as opposed to 16 percent from the top income quartile (and 18 percent of non-Pell-eligible students).⁴

These are important impacts for policymakers to understand. While tuition freezes and caps do have the potential to lower sticker price tuition, policymakers need to consider—and perhaps regulate—*net* tuition to ensure that those regulations are not ineffective at best and harmful to needy students at worst. Specifically, policymakers should ensure institutions do not simply seek to make up for lost tuition revenue at the expense of students, including through later tuition growth or by redistributing or reducing institutional aid dollars.

ENDNOTES

- 1 Miller, L., and M. Park (2022): "Making college affordable? The impacts of tuition freezes and caps," *Economics of Education Review*, 89, 102265.
- 2 We found only one instance of tuition regulation packaged with institutional aid regulation (Rhode Island 2013-14 HB 7133, 2014-15 HB 5900).
- 3 We focus on the period before 2013 because sticker price tuition increases slowed significantly – even without regulation – after 2014. Non-regulated institutions raised tuition by 6.3% annually before 2013, but only by 3.1% post-2014. Thus, in 2014 and later, most caps were set high enough to not have any effect on sticker price tuition (since even colleges facing no regulation were not increasing sticker prices much). This implies tuition-regulated colleges only faced meaningful revenue losses before 2013, so we expect them to adjust things like institutional aid only in that earlier period. It also highlights the importance of aligning tuition freezes/caps with the broader higher education pricing context to ensure the relative prices are lower than they would otherwise have been.
- 4 National Postsecondary Student Aid Study (NPSAS).