Can New Presidents Improve Colleges' Financial Health?

Robert Kelchen

Professor and Department Head

Department of Educational Leadership and Policy Studies

University of Tennessee, Knoxville

rkelchen@utk.edu

June 2025

This version of the article has been accepted for publication, after peer review, and is subject to Springer Nature's <u>AM terms of use</u>, but is not the Version of Record and does not reflect post-acceptance improvements, or any corrections. The Version of Record is available online at https://doi.org/10.1007/s10755-025-09814-z.

Abstract: As many colleges are facing substantial financial challenges, institutional presidents are under increasing pressure to deliver results immediately after assuming the position. In this paper, I examine whether new college presidents are able to increase revenues, decrease expenditures, and improve the overall financial margin. I find little evidence that new leadership at public universities improved the financial position of their institutions in any meaningful way. However, new leaders at private institutions—especially at non-research universities—cut expenses to match declining revenues and right the financial ship.

Keywords: College presidents; finance; governance; higher education policy

The job of a university president is an increasingly challenging one. They are asked to juggle multiple constituents with competing priorities, lead large and sophisticated enterprises, and be the public face of the institution (Soares et al., 2018). The average length of a college presidency has fallen from 8.5 years in 2006 to 5.9 years in 2022, with the median being just 4.5 years (Melidona et al., 2023). New leaders know that their tenure at that institution is likely to be short unless they can immediately demonstrate success in key areas.

One of the main challenges facing presidents is the precarious financial health of much of the industry outside of a small number of flagship public universities and wealthy private institutions. And even this group of traditionally healthy colleges has been shaken by the Trump administration's actions to cut research funding, meaning that essentially all of American higher education is facing financial challenges. Declining enrollment combined with increases in operating costs has led to downgrades of the higher education sector as a whole by credit ratings agencies (Unglesbee, 2024) and is likely to result in additional college closures in the coming years (Kelchen et al., 2024).

College presidents frequently identify finances as the most pressing—and challenging items—in their portfolio, and this is particularly common among newer leaders (Selingo et al., 2017). A larger share of presidents responding to *Inside Higher Ed*'s annual survey of institutional leaders report spending more time on financial issues than any other challenges, and a plurality of presidents state that managing financial constraints is the most difficult of their job (Custer & Flaherty, 2025). Given that a majority of college presidents still come to the position through the traditional faculty route and often do not have training in finance before entering administrative positions (Melidona et al., 2023), getting up to speed on finances is a concern for many leaders. Research has also found that a sizable share of college presidents who are fired

before their terms end lose their jobs due to financial challenges (Harris & Ellis, 2018; Nickel, 2022).

The pressure to immediately produce financial results holds across both public and private institutions. Even though public universities are largely insulated against closures due to the presence of state appropriations, their presidents tend to have shorter terms than their private counterparts as they navigate interactions with politicians, boards, and state higher education agencies (Monks, 2012). States have increased accountability on public universities by tying a small but growing share of funds to student outcomes (Rosinger et al., 2022), which places pressure on leaders to immediately generate results. Policymakers in states such as Florida, North Carolina, and Wisconsin have increasingly used governing board appointments to push their preferred policies and to demand immediate changes (Ellis et al., 2020).

Institutional leaders have historically sought to improve their financial position by increasing enrollment through launching new academic programs, broadening student recruitment activities, and investing in new facilities and personnel to attract student and research dollars (Jaquette, 2013; McClure & Titus, 2018). This is much more challenging today than in the past due to reduced demand for higher education, fierce competition for students, and tuition rates increasing at below the rate of inflation since before the pandemic (Ma & Pender, 2024). The number of enrolled students has fallen by more than ten percent since its post-Great Recession peak due to declining participation rates among younger and older adults (National Center for Education Statistics, 2024), and the projected number of high school graduates is projected to decline by 13% through 2041 (Lane et al., 2024).

Another key initiative, especially at research universities, has been the growth of responsibility center management (RCM) budget models that are introduced in an effort to

encourage individual academic units to be entrepreneurial and to improve the institution's bottom line (Curry et al., 2013). Research suggests that RCM budget models can increase tuition revenue and the number of students who earn credentials (Jaquette et al., 2018; Rutherford & Rabovsky, 2018). However, there are also concerns that RCM models shift financial risks from academic units to the central administration (Strauss & Curry, 2002), negatively affecting institutional budgets.

Although colleges are still seeking to generate additional revenue, institutional presidents are frequently shifting toward cost-cutting strategies as a way to improve financial health. Some leaders, such as Mitch Daniels at Purdue and interim president Denis O'Brien at Drexel, prioritized cost cutting upon taking office (Belkin, 2014; Keating, 2024). As the largest expense for most colleges is related to personnel (author's calculations using Integrated Postsecondary Education Data System (IPEDS) data), leaders may consider short-term strategies such as not filling vacant positions and longer-term strategies such as hiring fewer tenure-track faculty members and providing early retirement incentives in order to preserve financial flexibility. A growing number of colleges are now considering the elimination of academic programs or even declaring financial exigency in order to reduce labor costs (Ambrose & Nietzel, 2023).

While overall spending levels across higher education are under scrutiny, colleges are under pressure to reduce apparent spending on administrative functions (such as academic support and institutional support) and increase apparent spending on instruction. The concept of so-called "administrative bloat" has been a longtime favorite of political conservatives and faculty alike (e.g., American Council of Trustees and Alumni, 2021; Bergmann, 1991; Ginsberg, 2011; Greene et al., 2010). The idea of pushing more spending away from marketing and administrative support to instruction has also gained favor among liberals as a way to ensure the

appropriate use of federal higher education dollars (Whistle & Erickson, 2019). Lessons learned from other accountability efforts (Kelchen, 2018) suggest that college leaders looking for fast results can shift apparent spending from administration to instruction without actually changing their distribution of resources while working on longer-term cost reduction efforts.

In this study, I examine the extent to which new presidents of public and private nonprofit universities are able to make changes to institutional finances in a way that improves their overall bottom lines.

My research questions are the following:

- (1) Relative to institutions led by established presidents, do institutions led by new presidents see changes in their revenue and expenditure patterns?
- (2) Relative to institutions led by established presidents, do institutions led by new presidents see changes to their overall financial position?

Theoretical Framework and Literature Review

This study is rooted in institutional theories to examine the extent to which new leaders attempt to generate changes to their institutions' financial positions. Historically, new leaders have received a honeymoon period in which they have time to learn about their institution before being expected to make major changes (Birnbaum, 1992). That allows for a period of institutional sensemaking for leaders to get acclimated to their new environment and even conduct listening tours with various constituents before they begin making high-stakes decisions (Rappeport & Wolvin, 2020; Smerek, 2013). Governing boards and state policymakers have now changed this mold by hiring presidents with the frequent expectation that changes will be made rapidly, putting leaders in a difficult situation that can lead to failure (Trachtenberg et al., 2016).

Colleges are frequently in competition with each other to obtain resources, which can be monetary or prestige. Status competition theory in higher education (Brankovic, 2017) states that institutions are constantly competing against each other to maintain or improve their place in the prestige hierarchy. A clear example of this is institutional striving, in which institutions seek to join a more renowned set of peers (O'Meara, 2007). Striving is particularly prominent for institutions seeking to attain Carnegie doctoral/research university or Research I university statuses. Developing this research infrastructure has resulted in increases in administrative spending (McClure & Titus, 2018; Morphew & Baker, 2004) as institutional missions have changed. But it also has the potential to create a more national audience for the university, increasing research and tuition revenue. *I hypothesize that new presidents generate additional revenue compared to longstanding presidents*.

It is also important to consider status competition from the institutional leader's perspective in addition to that of the institution as a whole. College presidents are trying to keep their current job at the very least, especially as involuntary turnover of presidents has increased since the Great Recession (Harris & Ellis, 2018). Even though there is at most a weak relationship between presidential salaries and institutional performance metrics (Cheng, 2014; Hunt et al., 2019), leaders view a successful presidency as a way to land another position if needed. Fully one-fourth of college presidents anticipate moving to another presidency after their current position (Melidona et al., 2023), and more may be preparing for other positions in the case of involuntary turnover.

There is a substantial body of literature examining factors associated with rising expenditures in higher education. The theoretical motivation comes from Baumol's (1967) cost disease, in which labor-intensive industries such as higher education are unable to realize the

same levels of efficiency gains seen by capital-intensive industries. Archibald and Feldman (2008) provide additional support for this hypothesis by noting that labor-intensive industries with highly educated workforces (such as higher education and healthcare) are particularly susceptible to cost disease pressures due to the strong demand for these workers.

Another explanation for rising expenditures is Bowen's (1980) revenue theory of costs, which posits that colleges will strive to continuously increase resources and to then spend that money to enhance quality. While Archibald and Feldman (2008) found more support for Baumol's cost disease than Bowen's revenue theory, Bowen's revenue theory meshes with additional administrative and overall spending among striving institutions. It also aligns with research by Ehrenberg et al. (2003), who showed that undergraduate tuition dollars are likely subsidizing increased research efforts at private universities. Regardless of which theory is most responsible for rising expenses, institutional leaders face strong upward cost pressures that are difficult to control given broader economic conditions and pressures within institutions to enhance operations.

Given the pressures that college presidents face to reduce costs (particularly in administrative areas), it is important to recognize a small body of research that examines the frequency of sizable changes in reported institutional expenditures that punctuate spending equilibria. Epp (2015) found that a relatively modest share of public and private nonprofit institutions exhibited large changes in total expenditures, in line with other industries. Ecton and Dziesnski (2022) found that public institutions had higher levels of stability in instructional expenditures than private institutions and that institutions with a higher amount of administrative spending had less stability in instructional spending. Additionally, large increases in instructional spending were observed much more frequently than large decreases. However, they did not

attempt to determine whether these punctuated equilibria existed after controlling for other factors in a regression framework, and there is no research examining the potential role of institutional leadership in observed changes in expenditures. I hypothesize that new presidents are more likely to reduce spending—particularly in administrative categories—compared to longstanding presidents as there is the opportunity for a punctuated equilibrium.

A final financial aspect to consider is the increasing adoption of RCM budget models that are implemented with the goal of encouraging units to be entrepreneurial and efficient (Curry et al., 2013). Nearly 70 public universities had implemented RCM in Fiscal Year 2024, four times the number of adopters before the Great Recession (author's data collection from institutional websites). Research on a limited number of early adoptions shows increases in net tuition revenue and STEM degrees awarded (Jaquette et al., 2018; Rutherford & Rabovsky, 2018). However, this model comes with a hazard for institutional leaders that individual academic units will take risks that will not work out and that shift the costs onto central administration (Deering & Lang, 2017). Given the increasing focus on financial acumen in the hiring of new presidents, I hypothesize that new presidents are more likely to adopt RCM than longstanding presidents.

Sample, Data, and Methods

To examine the relationship between changes in institutional leadership and colleges' finances, I created a panel dataset of presidential transitions and financial metrics spanning the 2001-02 through 2021-22 academic years. This period spans considerable changes to the landscape of American higher education, including the reversal of a longstanding trend of enrollment increases in the 2010s, declines in state funding and investment revenues during the Great Recession, and rising accountability pressures on nearly all institutions throughout the panel. Finally, the coronavirus pandemic occurred during the end of the panel, although the

financial repercussions to colleges were not as stark as initially expected due to federal relief funds. Details on my sample, data, and methods are in the following section.

Sample

I began by restricting the sample to public and private nonprofit four-year institutions (based on 2005 Carnegie basic classifications 15-22) in the 50 states, excluding special-focus, primarily associate degree granting, and special focus institutions as well as the federal service academies due to their unique governance structure. I then removed a small number of institutions that were in operation for only part of the panel or had the same listed president as another institution during part of the panel. For example, Rutgers University, Antioch University, and the University of Washington's Tacoma and Bothell campuses had the same leader listed as in charge of multiple campuses due to system heads being listed as institutional leaders even though the individual campuses had their own leaders. This resulted in an analytic sample of 482 public and 799 private nonprofit institutions.

Data

This research covers the 2001-02 through 2021-22 academic years, which is based on the availability of data on outcomes and covariates. My key variable was whether a presidential transition had taken place, which I coded using data on institutional leaders' names that colleges provided to the U.S. Department of Education's Integrated Postsecondary Education Data System (IPEDS). If the names provided in two consecutive years were exact matches, that institution was coded as not having a transition. I then checked the cases that had names that did not exactly match to see if colleges reported the same person's name in a slightly different way. For example, Paul Quinn College reported Mr. Michael Sorrell as their president through 2016-

17 and then Dr. Michael Sorrell after that. Those cases were recoded as not being a transition. I also coded up two different measures of presidential stability: whether the same person had been leading the institution for at least three years or at least five years. These periods give leaders sufficient time to adopt changes to institutional policies and practices. As the results were generally similar across both thresholds, I focus on the five-year threshold in the remainder of this paper. Because the dataset begins in 2001-02, the first year of analysis was 2006-07 when examining transitions after five years of stability.

Table 1 provides data on the share of transitions for each year between 2001-02 and 2021-22 by institutional control and Carnegie classification. The share of institutions with new leaders ebbed and flowed during the panel at public universities, with turnover ranging between 13 and 21 percent during most years of the panel. Turnover was highest in 2008-09 and from 2012-13 through 2016-17 before falling slightly by 2021-22. In general, private universities had less turnover than public universities. This was particularly true for research universities, where turnover dipped to just 3.2 percent in 2008-09 and 2012-13. Master's and baccalaureate universities had higher turnover rates than research universities, but they were still lower than their public university counterparts.

[INSERT TABLE 1 HERE]

IPEDS, which consists of data provided by institutions and not formally audited by the federal government, is the primary data source for information on spending categories (Blom et al., 2020). IPEDS does include definitions for each category of expenditures, but they are broad enough that scholars have noted inconsistencies in how expenditures are reported across categories (e.g., Leslie et al., 2012; Morphew & Baker, 2004; Toutkoushian, 2001) and the presence of large sudden changes in expenditure amounts (Ecton & Dziesnski, 2022). For

example, certain information technology expenditures can be placed in the instruction or academic support expense categories. As a result, there is substantial interest in how colleges classify expenditures.

Expenditure categories include total expenditures and spending on instruction and institutional support (covering general operational expenses such as central administration, human resources, budgeting and legal operations, and logistics). I also created a broader measure of administrative spending that included institutional support, academic support (such as academic administration, curriculum development, and libraries) and student services (such as admissions, athletics at some colleges, financial aid, and counseling). While colleges have discretion in where certain expenses are placed, definitions in IPEDS have remained consistent across accounting standards (GASB for most public institutions and FASB for all private institutions and a small number of public universities) and over time. The revenue metrics are total revenue and tuition revenue (net of institutional grant aid), with all financial values adjusted for inflation into 2022 dollars using the Consumer Price Index.

The overall financial metrics include net margin (total revenues minus total expenses), the share of institutions with a positive net margin, and the share of public universities that implemented an RCM budget model. The RCM metric was collected by the author and a research assistant by vising public university budget and governing board websites, examining policy documents, and conducting Internet searches for terms such as "budget model" and "responsibility center management," using the data protocol outlined in Kelchen et al. (2019) as a template. If there was a clear model that allocated a portion of revenues to academic units based on the actions of that unit, it was coded as RCM. Institutions without RCM typically operate under a more centralized budget model, although RCM models vary substantially in their

level of decentralization. Due to limited information being available on private university websites because of governance documents often not being published, I was unable to include this measure for private institutions. Approximately 75 public institutions had adopted RCM by the end of the panel, with most of the adoptions taking place in the 2010s.

I also controlled for a number of institutional and state-level characteristics that could affect institutional finances, basing these selections on theory and prior research (e.g., Darnley et al., 2019; Li, 2017; Rutherford, 2016). Institutional characteristics included full-time equivalent enrollment, the share of undergraduate enrollment, racial/ethnic and gender compositions of the student body, tuition as a share of total revenue, and endowment values; all of these characteristics came from IPEDS. State-level characteristics included the presence of a tuition freeze (public universities only, from Kelchen and Pingel (2024)) the presence of a funded performance funding system (public universities only, from Rosinger et al. (2022)), per-capita income and poverty rates (from the Census Bureau), and indicators for unified Republican or Democratic control of state government (from the National Conference of State Legislatures). ¹

Table 2 contains summary statistics of the dataset between the 2004-05 and 2021-22 academic years, presented separately for public and private universities. Notably, private nonprofit institutions tend to have more stable leadership during the panel than public institutions, matching other survey data (e.g., Melidona et al., 2023). Public institutions are larger, slightly more diverse, and are slightly more likely to run a budget surplus than their private counterparts.

12

¹ Following guidance from Masket and Shor (2015), I coded Nebraska as having unified Republican control in spite of its ostensibly nonpartisan legislature.

[INSERT TABLE 2 HERE]

Methods

I used two different analytic techniques to examine the relationship between changes in institutional leadership and the financial outcomes of interest. The goal of both models is to compare the outcomes of institutions that saw new leadership versus institutions that continued to have the same leader after a period of stability in advance. My preferred technique is event study analyses, which are designed to study policies that were adopted at different times across different observations and thus have different availabilities of pre-treatment data (e.g., de Chaisemartin & D'Haultfoeuille, 2023; Goodman-Bacon, 2021). While there are multiple event study models used in policy analyses that all use slightly different assumptions regarding pre-treatment observations, the field has yet to agree on a consensus best estimator. I used the event study model of Borusyak et al. (2024) that imputes observations to estimate treatment effects and uses the average of pre-treatment observations as the reference year instead of setting the year prior to treatment adoption as the reference year. It is one of the most frequently used estimators and is relatively conservative in its estimates due to the use of pre-treatment averages instead of a single base year.

I limited the analysis to data within five years before or after the installation of a new president (the treatment in this study) to both examine pre-treatment trends and to allow for outcomes that may take for a while to develop, such as implementing a new budget model or making longer-term changes to the financial model, to show up. I controlled for the institution-level and state-level characteristics found in Table 2 and also clustered standard errors at the state level (Cameron & Miller, 2015). I also ran some of the key outcomes of interest (total revenues, total expenses, percent margin, and share with a positive operating margin) separately

for research and non-research universities, as leaders of these groups of institutions face different incentives and financial challenges.

The second model is the traditional difference-in-differences model with two-way (year and institution) fixed effects. This has long been the standard estimation technique in the quantitative social sciences, although event study models have supplanted them as preferred estimates. The two-way fixed effects models allow institutions to have multiple periods of treatment, while I used the first instance of transition following stability for the event study models because they cannot yet include multiple treatment spells into their estimates. I used the same control variables and clustered standard errors as in the event study models, using the same outcomes as the event study models with the exception of analyses by Carnegie classifications.

A particular concern in both difference-in-differences and event study models is the potential presence of pre-treatment trends. While Roth (2022) notes this concern in the event study context, there is also emphasis placed on placing any pretrends into context. This is especially important in the context of this study, as longtime presidents may have stepped down for reasons unrelated to their performance (a planned retirement) or reasons directly related to their performance. Some presidents may have been forced out of their positions for poor performance on the very metrics examined in this research, while other presidents may have left their position for a more lucrative opportunity due to a history of unusually strong performance. As a result, pre-treatment trends are quite possible, although the direction of the trend could be either positive or negative. This means that the post-transition trendline is important regardless of any observed pre-treatment trend.

Limitations

While this is the first study examining whether changes in institutional leadership are associated with changes in institutional finance metrics, there some important limitations to this analysis. One key limitation is that all data reported to IPEDS, including the names of institutional leaders and finance metrics, are self-reported by institutions and not audited for quality or consistency in applying definitions (e.g., Kolbe & Kelchen, 2017). While institutions do receive warning notices if submitted IPEDS data appear to be implausible, that does not apply to the variables of interest in IPEDS.

Errors in reporting IPEDS data (such as typos or not understanding definitions) should in theory be independent of whether a presidential transition has recently taken place. However, there may be a higher likelihood of errors if a change in institutional leadership results in a change in IPEDS data reporters for a college. That is possible if a new president completely restructures administrative processes, but the more likely outcome is transferring the data reporter (a highly technical position within institutional research or a budget office) to a new reporter. While I do not expect a large increase in the share of new data reporters following a presidential transition, any increase in true data errors as a result should on average have no bearing on the results. This means that reported changes in IPEDS data are either due to an increase in strategic reporting or true changes in metrics, and both are plausible occurrences.

Another important limitation is that the definition of stability following a presidential transition is highly subjective. I examined changes following a three-year period of stability and a five-year period of stability, both of which are still less than the mean time in office for an American college president (Melidona et al., 2023). But these metrics focus on the stability of a single president, which may have different meaning if there is a history of stable versus unstable leadership at an institution. If there is a tradition of presidents having shorter terms in office, then

one successful term may not change the perception of college employees and thus they may not respond to actions taken by the new president. On the other hand, a history of stability may result in employees responding to actions designed to improve actual or reported efficiency.

Results

I begin by presenting the results of the event study models examining changes in total revenue and tuition revenue following a presidential transition, with the two panels of Figure 1 presenting the results separately by institutional sector. To interpret these figures, years before the transition are negative (on the left side of the figure) and years following the transition are positive (on the right side of the figure). There is a slight downward trend in revenue in the first two years following a transition at public universities that quickly faded away. At private universities, there was a more pronounced trend of declining revenue (particularly tuition revenue) beginning 1-2 years prior to a presidential transition that continued in the following years. This suggests that new presidents of private colleges were unable to turn around negative trends in revenue that accelerated somewhat in the following years.

[Insert Figure 1 here]

Turning to expenditures (Figure 2), there were immediate decreases in reported spending on institutional support and broader administration at public universities without any movement in overall spending or instructional spending. This raises the possibility that spending was shifted from institutional support in part to other categories to provide the appearance of new leaders taking action without making any major operational changes. For private colleges, however, there was an immediate decrease in instructional spending that reached nearly four percent five years following a presidential transition. The immediate decrease suggests that new leaders

started implementing changes as soon as possible, opting for making changes during a brief honeymoon period instead of going through the sensemaking process that is commonly described in the literature (e.g., Smerek, 2013). This decrease matched the decline in overall spending, while smaller decreases were observed for institutional support spending or broader administrative expenses.

[Insert Figure 2 here]

The two panels of Figure 3 show the changes in financial metrics by sector (percent margin and the share of institutions with a positive margin for both public and private institutions, and the share of public universities adopting RCM budget models). There was no significant trend in the overall financial positions of public universities based on whether there was a presidential transition, although a slightly higher share of institutions that had new leadership adopted RCM in both the pre-treatment and post-treatment periods.

[Insert Figure 3 here]

The changes in financial metrics at private universities show substantial decreases in the share of institutions with positive financial margins in the two years prior to a new leader replacing a longtime leader. This raises the possibility that many of the leaders who left office were asked to do so because of poor performance, as the coefficients rebounded to near zero in the following years. New leaders of public institutions appear to have made few changes compared to their incumbent peers, while new leaders of private institutions saw both reduced revenue and reduced expenses.

The next set of figures (Figure 4) show changes in revenues and expenditures following presidential transitions separately by research and non-research university status. Among public

universities, the estimated changes in revenue and expenditures closely tracked each other and there was not a clear post-treatment difference. But the coefficients for research universities were generally positive (indicating growth), compared to negative coefficients for non-research universities (indicating cuts). There was no clear trend over time in revenues or expenditures for private research universities. At private non-research universities, there was a notable decline in revenues and expenditures alike that reached about five percent five years following the presidential transition.

[Insert Figure 4 here]

The overall changes in revenues and expenditures by Carnegie research classification (as seen in Figure 5) indicate that generally null findings should be expected for overall measures of financial position, and that is the case for public universities (although the estimates for public research universities are a bit noisy). Private non-research universities that made changes in leadership had clear declines in their overall financial position before making those changes, and new leaders were able to wrangle their institutions back to a similar position as institutions that did not make changes.

[Insert Figure 5 here]

Finally, the results of difference-in-differences regressions with two-way fixed effects can be found in Appendix 1 (public universities) and Appendix 2 (private universities). In general, the regressions show null findings across both public and private institutions. The coefficients for private institutions are insignificant, but nearly all negative for revenue and expenditure categories; this directionally matches the findings from the event study models.

Discussion

The job of a college or university president is arguably harder today than at any point in recent memory. Governing boards and politicians are placing pressure on presidents to improve efficiency and productivity, and this is likely a contributing factor in the declining tenure of American college presidents (Melidona et al., 2023). As a result, presidents are increasingly expected to show short-term results in order to stay in office and then follow them up with continued gains in the longer term.

In this research, I examined whether new college presidents were able to move the needle on key revenue, expenditure, and overall financial outcomes. Using the preferred event study models, I found relatively little evidence that new presidents of public universities affected their institutions' overall financial pictures. This could be due to state funding acting as a partial backstop and the role of the state government in budgeting decisions. The only exception was that institutional support spending—the category of spending most closely associated with administrative expenses and one that is under close scrutiny from policymakers—declined under new leadership. However, I am unable to answer whether spending on key administrative categories was actually reduced or whether this was due to strategically placing expenditures in categories when reporting to the federal government. On the revenue side, public university presidents can theoretically improve state funding through lobbying efforts or influencing the small portion of funding that is allocated through outcomes-based funding models, but those are both challenging propositions in a fierce competition for limited funding among institutions.

New presidents at private universities, particularly outside of research institutions, saw decreases in revenues and expenditures as they tried to address budgets that were often out of balance before their arrival. This is notable because much of the sector has been struggling financially during the period of this panel, making financial changes a priority. Interestingly, new

leaders of private nonprofit colleges primarily reduced spending in the area of instruction—the single largest expenditure category at most institutions. This effect developed gradually over time in a category where higher spending is typically encouraged in order to improve student outcomes. This makes it more likely that the coefficients represent real changes in institutional operations instead of short-term fixes to balance budgets.

The differences in the financial effectiveness of private versus public university leaders are notable. Presidents of public universities have shorter terms in office and face more operational constraints (such as faculty unions/shared government and state requirements) than do presidents of private universities, potentially limiting their ability to make major financial changes. Financial stability is obviously a key goal of public universities, but financial acumen may be somewhat less important in that sector given the reduced ability of public university presidents to control actions. At private universities, however, financial skills are even more important because of their ability to make changes and heavy reliance on tuition revenue without the backstop of state funding.

These findings raise a number of interesting questions for policy and practice as well as topics for future research. One key area is whether universities have made changes in staffing in order to try to reallocate resources or cut costs, and this can help address the lingering debate in the research regarding the extent to which Baumol's (1967) cost disease or Bowen's (1980) rule is responsible for cost increases. This question can be explored using IPEDS data on staff numbers by area of employment, which can be a useful check on the results of this analysis on institutional support and instructional expenses.

Additionally, the number of tenure-line faculty is of particular interest due to the longterm financial commitment that tenure represents and a general erosion of the share of tenured faculty in American higher education over time (Colby, 2023). Institutional debt is also a future metric to consider given that many institutions are highly leveraged and the higher education sector as a whole is viewed in a negative light by credit ratings agencies (Hudson, 2025). Institutional responses likely vary by their existing financial health, with financially stronger institutions seeking to make cuts in order to reinvest in other areas, while weaker institutions try to cut faculty and reduce debt in order to survive.

As concerns about future enrollment levels mount, colleges are moving from a mindset of continued growth to ending some programs with few students in an effort to free up resources to start higher-demand programs. This trend is important to consider in future research, as documenting the types of programs that are eliminated and started by new leaders will provide useful insights on where the higher education industry is moving. One notable thing to consider is whether the cost mix of programs offered changes, as many of the faster-growing programs in STEM and health fields cost more to operate than many programs in the humanities and social sciences (Hemelt et al., 2021).

Another important area to explore further is the sensemaking process for new college presidents (e.g., Smerek, 2013). Many new presidents do not receive formal training in finance and budgeting before assuming the position, and about one-third of presidents feel like they did not receive sufficient information about their institution's finances before starting the job (Melidona et al., 2023). Given that the first year or two of a president's tenure is a combination of learning about the institution and beginning to make decisions, interviews of presidents about how they began to make decisions related to finance would be particularly fascinating. This is especially true at public universities, where leaders have to navigate unpredictable state funding and limited or no control over tuition-setting policies. It would also be interesting to examine

these processes based on individuals' prior experience, which can range from a traditional academic to someone from the business or political worlds and include different levels of experience leading higher education institutions.

The questions in this paper are particularly relevant for two groups of colleges. The first is institutions that are in financial distress, as leaders are often brought in with balancing budgets as their top priority. As a result, new leaders may make drastically different financial decisions than existing leaders who are continuing the status quo. The second group consists of institutions that have seen constant changes in leadership over the years, as yet another new leader may be less effective in making change than if there was a period of stability prior to a presidential transition.

Finally, it is crucial for the National Center for Education Statistics (NCES) to provide clear, consistent, and updated definitions of expenditures in the IPEDS finance survey. My results suggest the possibility of some strategic reporting, and prior research finds evidence of implausibly large changes in reported expenditures from year to year (e.g., Ecton & Dziesinski, 2022; Leslie et al., 2012). More guidance about where specific expenditures should be reported would provide the higher education community with more confidence that reported data reflect real expenditures in those areas. However, since all but three of the 100 employees within NCES were fired in early 2025 (Barshay, 2025), this is unlikely to happen in the near future.

References

- Ambrose, C.M., & Nietzel, M. T. (2023). *Colleges on the brink: The case for financial exigency*.

 Rowman & Littlefield.
- American Council of Trustees and Alumni (2021). *The cost of excess: Why colleges and universities must control runaway spending*. https://www.goacta.org/wp-content/uploads/2021/08/The-Cost-of-Excess-FINAL-Full-Report.pdf.
- Archibald, R. B., & Feldman, D. H. (2008). Explaining increases in higher education costs. *The Journal of Higher Education*, 79(3), 268-295.

 https://doi.org/10.1080/00221546.2008.11772099.
- Barshay, J. (2025, March 14). Chaos and confusion as the statistics are of the Education Department is reduced to a skeletal staff of 3. *The Hechinger Report*. https://hechingerreport.org/proof-points-chaos-confusion-statistics-education/.
- Baumol, W. J. (1967). Macroeconomics of unbalanced growth: The anatomy of urban crisis. *The American Economic Review*, *57*(3), 415-426. https://www.jstor.org/stable/1812111.
- Belkin, D. (2014, July 25). At Purdue, a case study in cost cuts. *The Wall Street Journal*. https://www.wsj.com/articles/at-purdue-a-case-study-in-cost-cuts-1406326502.
- Bergmann, B. R. (1991). Bloated administration, blighted campuses. Academe, 77(6), 12-16.
- Birnbaum, R. (1992). Will you love me in December as you do in May? Why experienced college presidents lose faculty support. *The Journal of Higher Education*, *63*(1), 1-25. https://doi.org/10.1080/00221546.1992.11778337.

guide finalized 0.pdf.

- Blom, E., Washington, K., Rainer, M., Chien, C., & Kelchen, R. (2020). *IPEDS finance user guide*. Urban Institute.

 https://www.urban.org/sites/default/files/publication/102227/ipeds-finance-user-
- Borusyak, K., Jaravel, X., & Spiess, J. (2024). Revisiting event-study designs: Robust and efficient estimation. *The Review of Economic Studies*, *91*(6), 3253-3285. https://doi.org/10.1093/restud/rdae007.
- Bowen, H. R. (1980). The costs of higher education: How much do colleges and universities spend per student and how much should they spend? Jossey-Bass.
- Brankovic, J. (2017). The status games they play: Unpacking the dynamics of organisational status competition in higher education. *Higher Education*, *75*, 695-709. https://doi.org/10.1007/s10734-017-0169-2.
- Cameron, A. C., & Miller, D. L., (2015). A practitioner's guide to cluster-robust inference. *The Journal of Human Resources*, 50(2), 317-372. https://doi.org/10.3368/jhr.50.2.317.
- Cheng, S. (2014). Executive compensation in public higher education: Does performance matter? *Research in Higher Education*, *55*, 581-600. https://doi.org/0.1007/s11162-014-9328-9.
- Colby, G. (2023). *Data snapshot: Tenure and contingency in US higher education*. American Association of University Professors.

 $\underline{https://www.aaup.org/sites/default/files/AAUP\%20Data\%20Snapshot.pdf}.$

- Curry, J. R., Strauss, J. C., & Laws, A. L. (2013). Responsibility center management: A guide to balancing academic entrepreneurship with fiscal responsibility. National Association of College and University Budget Officers.
- Custer, S., & Flaherty, C. (2025). *Inside Higher Ed 2025 survey of college and university*presidents. Inside Higher Ed and Hanover Research.

 https://www.insidehighered.com/reports/2025/02/25/2025-survey-college-and-university-presidents.
- Darnley, M., Rutherford, A., & Rabovsky, T. (2019). Tipping the scales: The causes and consequences of administrative spending. *Public Administration*, 97(2), 467-482. https://doi.org/10.1111/padm.12579.
- de Chaisemartin, C., & D'Haultfoeuille, X. (2023). Two-way fixed effects and differences-in-differences with heterogeneous treatment effects: A survey. *The Econometrics Journal*, 26(3), C1-C30. https://doi.org/10.1093/ectj/utac017.
- Deering, D., & Lang, D. W. (2017). Responsibility center budgeting and management "lite" in university finance: Why is RCB/RCM never fully deployed? *Planning for Higher Education* 45(3), 94-109.
- Ecton, W. G., & Dziesinski, A. B. (2022). Using punctuated equilibrium to understand patterns of institutional budget change in higher education. *The Journal of Higher Education*, 93(3), 424-451. https://doi.org/10.1080/00221546.2021.1985884.
- Ehrenberg, R. G., Rizzo, M. J., & Jakubson, G. H. (2003). Who bears the growing cost of science at universities? National Bureau of Economic Research Working Paper 9627. https://www.nber.org/system/files/working_papers/w9627/w9627.pdf.

- Ellis, L., Stripling, J., & Bauman, D. (2020, September 25). The new order. *The Chronicle of Higher Education*. https://www.chronicle.com/article/the-new-order.
- Epp, D. A. (2015). Punctuated equilibria in the private sector and the stability of market systems. *Policy Studies Journal*, 43(4), 417-436. https://doi.org/10.1111/psj.12107.
- Ginsberg, B. (2011). The fall of the faculty: The rise of the all-administrative university and why it matters. Oxford University Press.
- Goodman-Bacon, A. (2021). Difference-in-differences with variation in treatment timing.

 Journal of Econometrics, 225(2), 254-277.

 https://doi.org/10.1016/j.jeconom.2021.03.014.
- Greene, J. P., Kisida, B., & Mills, J. (2010). Administrative bloat at American universities: The real reason for high costs in higher education. Goldwater Institute.

 https://www.goldwaterinstitute.org/wp-content/uploads/cms_page_media/2015/3/24/Administrative%20Bloat.pdf.
- Harris, M. S., & Ellis, M. K. (2018). Exploring involuntary presidential turnover in American higher education. *The Journal of Higher Education*, 89(3), 294-317. https://doi.org/10.1080/00221546.2017.1390969.
- Hemelt, S. W., Stange, K. M., Furquim, F., Simon, A., & Sawyer, J. E. (2021). Why is math cheaper than English? Understanding cost differences in higher education. *Journal of Labor Economics*, 39(2), 397-435. https://doi.org/10.1086/709535.
- Hudson, W. (2025, March 18). Moody's downgrades higher education outlook to negative as federal policy changes threaten sector. *Diverse: Issues in Higher Education*.

- https://www.diverseeducation.com/institutions/article/15740270/moodys-downgrades-higher-education-outlook-to-negative-as-federal-policy-changes-threaten-sector.
- Hunt, J. M., Tandberg, D. A., & Park, T. J. (2019). Presidential compensation and institutional revenues: Testing the return on investment for public university presidents. *The Review of Higher Education*, 42(2), 619-640. https://doi.org/10.1353/rhe.2019.0009.
- Jaquette, O. (2013). Why do colleges become universities? Mission drift and the enrollment economy. *Research in Higher Education*, *54*, 514-543. https://doi.org/10.1007/s11162-013-9283-x.
- Jaquette, O., Kramer II, D. A., & Curs, B. R. (2018). Growing the pie? The effect of responsibility center management on tuition revenue. *The Journal of Higher Education*, 89(5), 637-676. https://doi.org/10.1080/00221546.2018.1434276.
- Keating, R. (2024, October 18). Drexel budget cuts announced at town hall. *The Triangle*. https://www.thetriangle.org/news/budget-cuts-announced-at-town-hall/.
- Kelchen, R. (2018). Higher education accountability. Johns Hopkins University Press.
- Kelchen, R., & Pingel, S. (2024). Examining the effects of tuition controls on student enrollment. *Research in Higher Education*, 65, 70-91. https://doi.org/10.1007/s11162-023-09748-5.
- Kelchen, R., Ritter, D., & Webber, D. A. (2024). Predicting college closures and financial distress. National Bureau of Economic Research Working Paper 33216.
 https://www.nber.org/papers/w33216.
- Kelchen, R., Rosinger, K. O., & Ortagus, J. (2019). How to create and use state-level policy data sets in education research. *AERA Open*, *5*(3). https://doi.org/10.1177/2332858419873619.

- Kolbe, T., & Kelchen, R. (2017). *Identifying new metrics using IPEDS finance data*. National Postsecondary Education Cooperative.

 https://nces.ed.gov/ipeds/pdf/npec/data/NPEC_Paper_New IPEDS_Finance_Metrics_20

 17.pdf.
- Lane, P., Falkenstern, C., & Bransberger, P. (2024). Knocking at the college door: Projections of high school graduates. Western Interstate Commission for Higher Education.
 https://www.wiche.edu/resources/knocking-at-the-college-door-11th-edition/.
- Leslie, L. L., Slaughter, S., Taylor, B. J., & Zhang, L. (2012). How do revenue variations affect expenditures within U.S. research universities? *Research in Higher Education*, *53*, 614-639. https://doi.org/10.1007/s11162-011-9248.
- Li, A. Y. (2017). Dramatic declines in higher education appropriations: State conditions for budget punctuations. *Research in Higher Education*, 58, 395-429. https://doi.org/10.1007/s11162-016-9432-0.
- Ma, J., & Pender, M. (2024). *Trends in college pricing and student aid 2024*. The College Board. https://research.collegeboard.org/media/pdf/Trends-in-College-Pricing-and-Student-Aid-2024-ADA.pdf.
- Masket, S., & Shor, B. (2015). Polarization without parties: Term limits and legislative partisanship in Nebraska's unicameral legislature. *State Politics & Policy Quarterly*, 15(1), 67-90. https://doi.org/10.1177/1532440014564984.
- McClure, K. R., & Titus, M. A. (2018). Spending up the ranks? The relationship between striving for prestige and administrative expenditures at U.S. public research universities.

The Journal of Higher Education, 89(6), 961-987. https://doi.org/10.1080/00221546.2018.1449079.

- Melidona, D., Cecil, B. G., Cassell, A., & Chessman, H. M. (2023). The American college president: 2023 edition. American Council on Education.
 https://www.acenet.edu/Documents/American-College-President-IX-2023.pdf.
- Monks, J. (2012). Job turnover among university presidents in the United States of America. *Journal of Higher Education Policy and Management, 34*(2), 139-152.

 https://doi.org/10.1080/1360080X.2012.662739.
- Morphew, C. C., & Baker, B. D. (2004). The cost of prestige: Do new research I universities incur higher administrative costs? *The Review of Higher Education*, 27(3), 365-384. https://doi.org/10.1353/rhe.2004.0005.
- National Center for Education Statistics (2024). *Digest of education statistics*. U.S. Department of Education. https://nces.ed.gov/programs/digest/.
- Nickel, D. L. (2022). Perceptions of causes of derailment of college and university administrators. *Journal of Higher Education Management*, 37(1), 120-132.
- O'Meara, K. (2007). Striving for what? Exploring the pursuit of prestige. In J. C. Smart (Ed.), Higher education: Handbook of theory and research (Vol. 22) (pp. 121-179). Springer.
- Rappeport, A., & Wolvin, A. (2020). Listening leadership: An academic perspective. *Journal of the Association for Communication Administration*, 39(2), 43-49.

- Rosinger, K. O., Ortagus, J., Kelchen, R., Cassell, A., & Brown, L. C. (2022). New evidence on the evolution and landscape of performance funding for higher education. *The Journal of Higher Education*, *93*(5), 735-768. https://doi.org/10.1080/00221546.2022.2066269.
- Roth, J. (2022). Pretest with caution: Event-study estimates after testing for parallel trends.

 *American Economic Review: Insights, 4(3), 305-322.

 https://doi.org/10.1257/aeri.20210236.
- Rutherford, A. (2016). Reexamining causes and consequences: Does administrative intensity matter for organizational performance? *International Public Management Journal*, *19*(3), 342-369. https://doi.org/10.1080/10967494.2015.1032459.
- Rutherford, A., & Rabovsky, T. (2018). Does the motivation for market-based reform matter?

 The case of responsibility-centered management. *Public Administration Review*, 78(4), 626-639. https://doi.org/10.1111/puar.12884.
- Selingo, J. J., Chheng, S., & Clark, C. (2017). *Pathways to the university presidency: The future of higher education leadership*. Deloitte.

 https://www2.deloitte.com/us/en/insights/industry/public-sector/college-presidency-higher-education-leadership.html.
- Smerek, R. E. (2013). Sensemaking and new college presidents: A conceptual study of the transition process. *The Review of Higher Education*, *36*(3), 371-403. https://doi.org/10.1353/rhe.2013.0028.
- Soares, L., Gagliardi, J. S., Wilkinson, P. J., & Hughes, S. L. (2018). *Innovative leadership:*Insights from the American college president study 2017. American Council on

- Education. https://www.acenet.edu/Documents/Innovative-Leadership-Insights-from-the-ACPS-2017.pdf.
- Strauss, J. C., & Curry, J. R. (2002). Responsibility center management: Lessons from 25 years of decentralized management. National Association of College and University Budget Officials.
- Toutkoushian, R. K. (2001). Trends in revenues and expenditures for public and private higher education. In M. B. Paulsen & J. C. Smart (Eds.), *The finance of higher education:*Theory, research, policy, and practice (pp. 11-38). Agathon.
- Trachtenberg, S. J., Kauvar, G. B., & Bogue, E. G. (2016). *Presidencies derailed: Why university leaders fail and how to prevent it.* Johns Hopkins University Press.
- Unglesbee, B. (2024, October 15). Financial pressure grows for colleges, Fitch's says. *Higher Ed Dive*. https://www.highereddive.com/news/financial-pressure-grows-colleges-fitch-enrollment-costs/729791/.
- Whistle, W., & Erickson, L. (2019, April 18). Using instructional spending to test for value in higher ed. *Third Way*. https://www.thirdway.org/memo/using-instructional-spending-to-test-for-value-in-higher-ed.

Table 1: Presidential transitions (pct) by year and institutional sector, 2001-02 to 2021-22.

	Public universities			Private nonprofit universities			
Year	Research	Master's	Baccalaureate	Research	Master's	Baccalaureate	
2001-02	14.9	13.1	11.7	9.6	10.4	11.1	
2002-03	17.4	12.7	19.5	10.6	8.7	14.2	
2003-04	17.4	10.7	16.9	11.7	9.0	13.2	
2004-05	18.6	15.2	14.3	10.6	9.0	12.0	
2005-06	13.0	14.8	16.9	11.7	10.7	13.0	
2006-07	14.3	14.3	11.7	9.6	12.8	12.3	
2007-08	16.8	14.3	11.7	9.6	10.4	12.3	
2008-09	21.7	14.8	20.8	3.2	10.4	10.8	
2009-10	13.7	9.0	13.0	9.6	12.5	13.0	
2010-11	14.3	14.3	11.7	9.6	11.4	12.3	
2011-12	13.0	15.2	11.7	8.5	12.5	12.0	
2012-13	18.6	16.8	20.8	3.2	9.3	10.8	
2013-14	18.0	13.5	13.0	14.9	12.5	17.4	
2014-15	16.8	20.5	19.5	11.7	9.3	11.5	
2015-16	17.4	21.3	20.8	11.7	16.3	15.6	
2016-17	17.4	17.2	20.8	13.8	16.3	14.9	
2017-18	19.3	16.8	14.3	12.8	13.1	16.1	
2018-19	19.9	17.6	18.2	8.5	12.1	11.8	
2019-20	20.5	13.9	18.2	12.8	11.4	15.1	
2020-21	15.5	15.6	20.8	8.5	13.1	15.9	
2021-22	16.1	15.6	18.2	11.7	18.0	12.5	
Number of							
colleges	161	244	77	94	289	416	

Source: Author's calculations using Integrated Postsecondary Education Data System (IPEDS) data.

Notes:

⁽¹⁾ Institutions are classified based on their 2005 Carnegie basic classification.

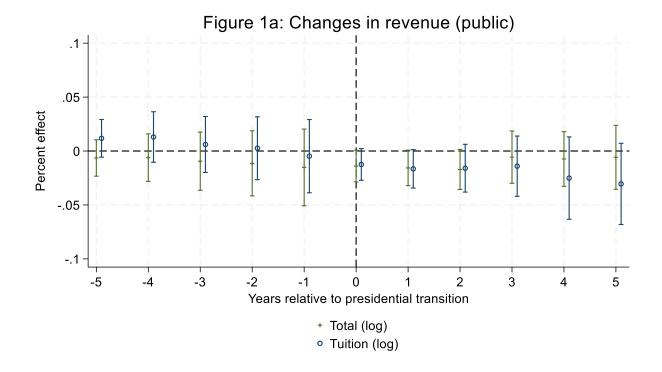
⁽²⁾ The sample includes institutions with data throughout the panel and presidents who were listed at the institution level in IPEDS.

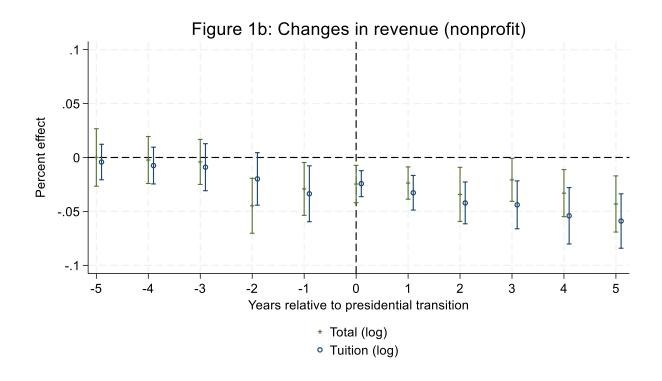
Table 2: Summary statistics of the dataset, 2004-05 to 2021-22.

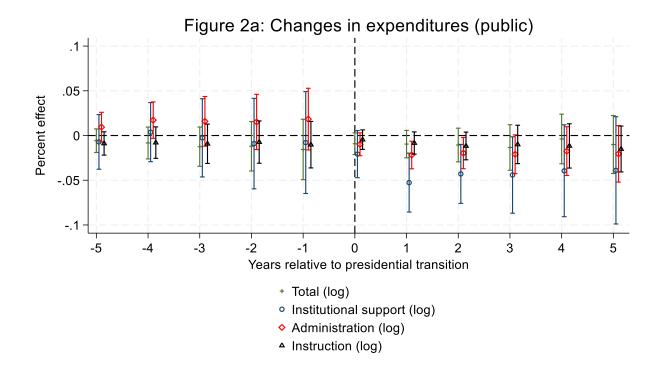
Table 2. Summary statistics of the dataset	Public		Private nonprofit		
Characteristic	Mean	(SD)	Mean	(SD)	
Presidential transitions					
Transition in last year (pct)	16.2	(36.8)	12.6	(33.1)	
Stable 3 years (pct)	60.5	(48.9)	68.3	(46.5)	
Stable 5 years (pct)	42.0	(49.4)	52.4	(49.9)	
Number of transitions in panel	3.2	(1.6)	2.5	(1.5)	
Revenue categories					
Total revenue (\$mil)	602.9	(1,079.5)	270.5	(1,010.9)	
Tuition revenue (\$mil)	135.0	(182.0)	83.2	(156.0)	
Expenditure categories					
Toal expenditures (\$mil)	565.8	(1,000.9)	227.4	(769.5)	
Institutional support (\$mil)	41.2	(49.8)	28.8	(69.8)	
Admin spending (\$mil)	115.2	(150.1)	67.5	(158.7)	
Instructional spending (\$mil)	163.1	(230.0)	74.3	(232.0)	
Budget summary					
Net margin (pct)	6.2	(13.1)	11.9	(36.5)	
Net margin (pct positive)	75.9	(42.8)	72.5	(44.6)	
RCM budget model (pct)	5.6	(22.9)			
Covariates					
FTE enrollment	12,051	(10,631)	3,403	(5,379)	
Undergraduate (pct)	87.0	(8.6)	83.4	(17.6)	
Female (pct)	55.7	(8.8)	58.9	(12.8)	
Asian (pct)	5.0	(7.6)	4.0	(5.3)	
Black (pct)	15.4	(22.5)	13.5	(19.6)	
Hispanic (pct)	10.4	(13.9)	8.7	(9.6)	
Tuition freeze (pct)	17.3	(37.8)			
Funded performance funding system (pct)	26.2	(43.9)			
Per-capita state income (\$)	57,608	(9,346)	58,708	(9,353)	
State poverty rate (pct)	13.1	(3.2)	12.7	(2.9)	
Unified Democratic control (pct)	23.1	(42.1)	23.7	(42.5)	
Unified Republican control (pct)	38.2	(48.6)	34.6	(47.6)	
Number of colleges	482		799		

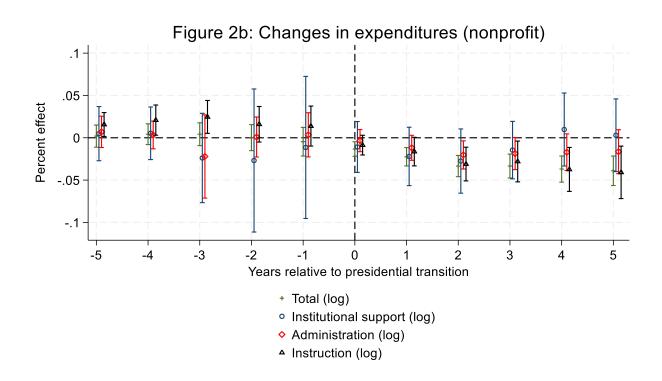
Sources: Census Bureau (per-capita state income and poverty rates), Kelchen & Pingel, 2023 (tuition freezes), Rosinger et al., 2022 (performance funding), National Conference of State Legislatures (partisan control), author's data collection (RCM), Integrated Postsecondary Education Data System (all others)

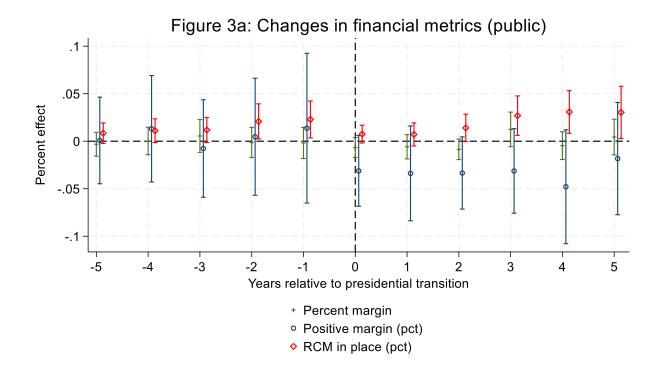
Note: All financial variables are adjusted into 2022 dollars using the Consumer Price Index.

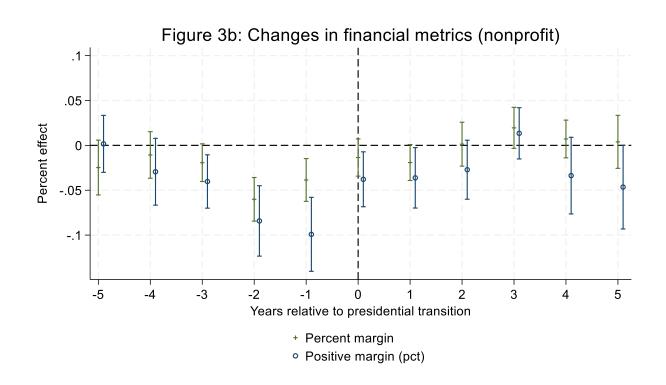


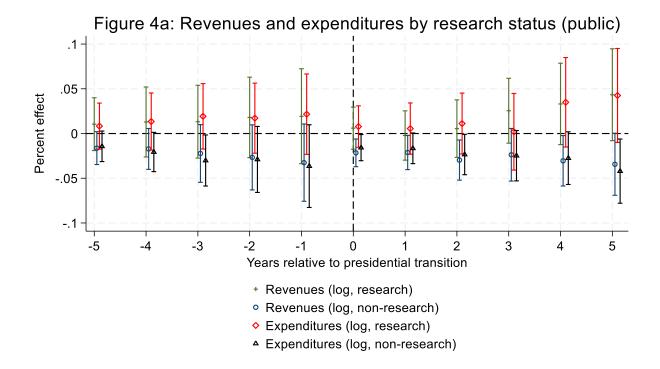


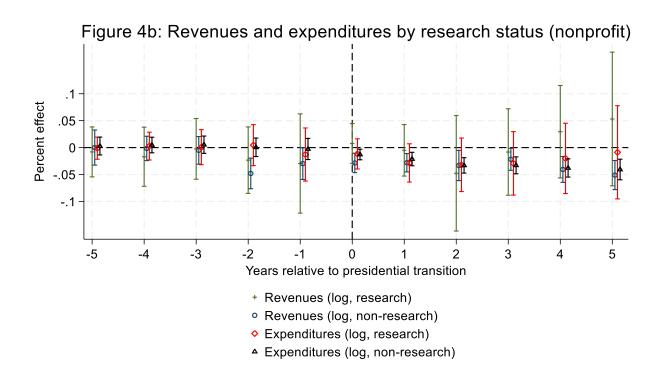


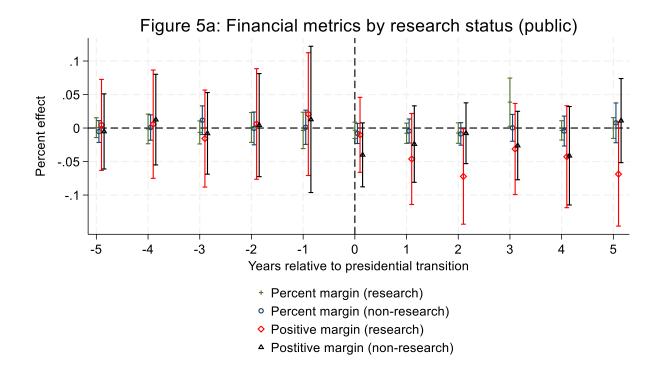


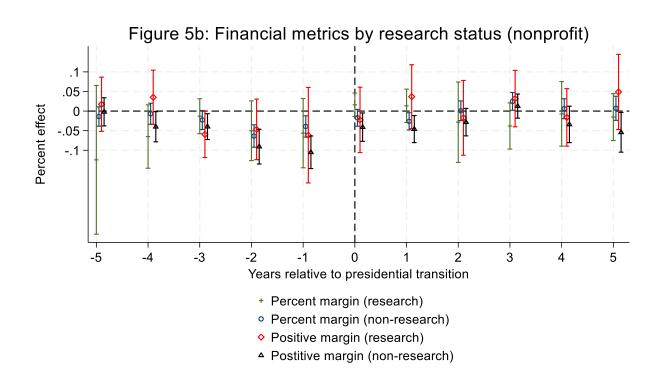












Appendix 1: Two-way fixed-effects regression results for relationships between presidential transitions and financial metrics (public universities).

Outcome of interest	t-2	t-1	t	t+1	t+2	t+3	t+4	t+5
Revenue								_
Total revenue (log)	0.033	0.045*	-0.005	0.007	0.009	-0.029	-0.025	-0.015
	(0.018)	(0.019)	(0.005)	(0.017)	(0.024)	(0.034)	(0.028)	(0.029)
Tuition revenue (log)	0.025	0.023	-0.018**	-0.008	-0.006	-0.031	-0.030	-0.019
	(0.017)	(0.017)	(0.006)	(0.015)	(0.022)	(0.027)	(0.027)	(0.030)
<u>Expenses</u>								
Total expenses (log)	0.042*	0.040*	-0.005	0.008	0.009	-0.038	-0.021	-0.015
	(0.018)	(0.018)	(0.004)	(0.017)	(0.024)	(0.030)	(0.029)	(0.029)
Institutional support	0.037*	0.041*	-0.008	-0.013	0.009	-0.033	-0.023	-0.011
expenses (log)								
Administrative	(0.018)	(0.017)	(0.008)	(0.016)	(0.019)	(0.024)	(0.022)	(0.024)
expenses (log)	0.042*	0.040*	-0.004	0.002	0.008	-0.034	-0.023	-0.017
	(0.016)	(0.016)	(0.060)	(0.015)	(0.020)	(0.024)	(0.025)	(0.025)
Instructional								
expenses (log)	0.039*	0.037*	-0.001	0.018	0.019	-0.022	0.020	0.021
	(0.016)	(0.016)	(0.004)	(0.019)	(0.026)	(0.032)	(0.054)	(0.051)
Budget summary								
Net margin (pct)	-0.016	0.000	-0.001	0.000	-0.002	0.013	-0.004	-0.001
N	(0.010)	(0.006)	(0.004)	(0.006)	(0.004)	(0.009)	(0.008)	(0.007)
Net margin (pct positive)	0.002	0.023	-0.011	-0.003	0.006	0.003	-0.013	0.017
positive)	(0.017)	(0.019)	(0.013)	(0.022)	(0.014)	(0.020)	(0.017)	(0.017)
RCM budget model	(0.017)	(0.01)	(0.013)	(0.022)	(0.014)	(0.020)	(0.017)	(0.017)
(pct)	0.010	0.007	-0.002	0.003	0.004	0.005	0.004	0.002
	(0.006)	(0.005)	(0.005)	(0.006)	(0.007)	(0.008)	(0.007)	(0.008)
Max number of	2 121	2 424	0.404	2 121	2 121	2 121	2 121	2 421
observations	3,431	3,431	3,431	3,431	3,431	3,431	3,431	3,431

Sources: See Table 2.

Notes:

⁽¹⁾ Each coefficient is the result of a separate regression and includes the control variables specified in Table 2 and institution and year fixed effects.

^{(2) &}quot;Administrative expenses" include the IPEDS categories of institutional support, academic support, and student services.

⁽³⁾ Colleges with a new president entering after five years of stable leadership are compared to colleges that retained their stable president.

^{(4) *} represents p<.05, ** represents p<.01, and *** represents p<.001.

Appendix 2: Two-way fixed-effects regression results for relationships between presidential transitions and financial metrics (private universities).

Outcome of		(<u>l</u> e==:::::		-,,-				
interest	t-2	t-1	t	t+1	t+2	t+3	t+4	t+5
Revenue								
Total revenue								
(log)	-0.024	-0.004	-0.018*	-0.022	0.010	-0.006	0.010	0.041
	(0.017)	(0.016)	(0.008)	(0.011)	(0.018)	(0.020)	(0.021)	(0.023)
Tuition revenue								
(log)	0.012	0.007	-0.008	-0.041**	-0.012	-0.019	-0.005	0.027
	(0.014)	(0.015)	(0.005)	(0.012)	(0.016)	(0.019)	(0.023)	(0.024)
<u>Expenses</u>								
Total expenses								
(log)	0.007	0.004	-0.002	-0.022	0.001	-0.014	0.010	0.039
	(0.014)	(0.014)	(0.004)	(0.012)	(0.015)	(0.019)	(0.019)	(0.024)
Institutional								
support expenses	0.014	0.002	0.017	0.022	0.014	0.010	0.022	0.042
(log)	-0.014	-0.003	-0.017	-0.033	-0.014	-0.018	0.023	0.042
A 1	(0.025)	(0.023)	(0.019)	(0.021)	(0.021)	(0.021)	(0.021)	(0.023)
Administrative	0.005	0.008	-0.003	-0.024	-0.006	-0.011	0.010	0.036
expenses (log)								
Instructional	(0.012)	(0.011)	(0.004)	(0.012)	(0.013)	(0.018)	(0.018)	(0.021)
expenses (log)	0.012	0.009	-0.001	-0.029*	-0.010	-0.020	-0.005	0.029
expenses (10g)	(0.015)	(0.015)	(0.006)	(0.012)	(0.015)	(0.020)	(0.020)	(0.024)
D. I	(0.013)	(0.013)	(0.000)	(0.012)	(0.013)	(0.020)	(0.020)	(0.024)
Budget summary								
Net margin (pct)	-0.040***	-0.015*	-0.016	-0.013	0.015	0.011	0.001	0.003
	(0.010)	(0.007)	(0.010)	(0.009)	(0.013)	(0.010)	(0.011)	(0.012)
Net margin (pct	0.022*	0.0245	0.04144	0.006	0.014	0.007**	0.003	0.006
positive)	-0.033*	-0.034*	-0.041**	-0.006	0.014	0.027**	-0.002	0.006
	(0.013)	(0.012)	(0.014)	(0.014)	(0.013)	(0.010)	(0.013)	(0.013)
Max number of	7.062	7.063	7.060	7.060	7.063	7.060	7.063	7.060
observations	7,062	7,062	7,062	7,062	7,062	7,062	7,062	7,062

Sources: See Table 2.

Notes:

⁽¹⁾ Each coefficient is the result of a separate regression and includes the control variables specified in Table 2 and institution and year fixed effects.

^{(2) &}quot;Administrative expenses" include the IPEDS categories of institutional support, academic support, and student services.

⁽³⁾ Colleges with a new president entering after five years of stable leadership are compared to colleges that retained their stable president.

^{(4) *} represents p<.05, ** represents p<.01, and *** represents p<.001.