The Effects of Personal Income Taxes on Organization Performance: Evidence from Name, Image, and Likeness Compensation Rules

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Abstract:

We examine whether personal income taxes affect organization performance. We use the 2021 introduction of Name, Image, and Likeness (NIL) compensation rules in U.S. college sports, which removed the ban for athletes to earn income for their sports performance while maintaining their eligibility, as a natural experiment. Exploiting novel performance data, we find that teams in low-tax rate states have approximately three more wins per season than schools in high-tax states post-NIL. The effects of personal income taxes on wins are more pronounced among elite conference schools and schools that can attract top recruits. We also find that if elite conference schools are located in low-tax-rate states, they are more likely to advance to the final stages of the championship tournament. Finally, we provide evidence for the mechanism behind improved organizational outcomes: We show that top-ranked recruits are significantly more likely to choose schools in low-tax-rate states after the implementation of NIL. Collectively, our findings show that individual taxation is linked to talent mobility and thus to organizational success.

Keywords: Personal income tax, performance, attracting talents, organizational success

JEL Classifications: H24, J24, J44, J61, M51, L25

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1. Introduction

Whether and to what extent taxes affect the performance of an organization are central research questions in the accounting and economics literatures. In this paper, we focus on the personal income tax, which is not only the most important tax revenue source in the United States and many other countries, but also the tax faced by all employees. In theory, income taxes paid by employees are relevant for organizations' performance because the personal income tax burden determines the ability of an organization to attract talent. Tiebout (1956) suggests that individuals should be sorted across jurisdictions, and the tax liability that these individuals face should be a significant contributor to this sorting. Many other studies have followed, suggesting that individual income taxes can impact a jurisdiction's ability to attract talent (see, e.g., Kleven, Landais, and Saez 2013, Akcigit, Baslandze, and Stantcheva 2016, Moretti and Wilson 2017). However, the literature primarily focuses on whether taxes influence talent acquisition, with little consideration given to whether this talent acquisition leads to better organizational performance.

In this study, we use a novel setting—the onset of Name, Image, and Likeness (NIL) rules for collegiate athletics, which removed the ban on athletes to earn income related to their sports performance—to examine the impact of the variation in employees' personal income taxes on the organization's performance. While the link between personal income taxes and performance outcomes may appear straightforward, the prediction is not without tension for several reasons. First, despite the evidence that income taxes affect location decisions, the review by Kleven, Landais, Munoz, and Stantcheva (2020) argues that there remains significant tension with the notion that taxes will impact individuals' location decisions. Second, personal income taxes only matter for talents' location decisions to the extent the income tax burden falls on them. If organizations pay higher gross salaries to attract talents to compensate for higher taxes, personal

income taxes do not matter for location decisions. Third, even if the tax burden partly falls on employees and if low taxes can attract talents, prior literature on location decisions (e.g., Akcigit et al. 2016, Moretti and Wilson 2017) does not show that attracting talents leads to better organizational performance. That is, even if a college team attracts better recruits, it may not automatically win more games.

In addition to this tension in the theory, there are at least two key empirical challenges when testing the effect of personal income taxes on performance. First, there is a lack of suitable data on organizations' success (and also on the migration of individuals, which is needed to establish the mechanism). In the corporate setting, using data on net income or other financial accounting outcomes in common databases to measure success is likely blurred by many confounding factors. To isolate the impact of income taxes on the success of an organization, one requires panel data, e.g., on individual teams', divisions', or departments' performance across many firms. Second, there is a lack of credible tax variation to identify causal effects. Exploiting changes in income tax rates faces the issue that such changes are endogenous to unobserved economic conditions or, even worse, that the need for migration drives these income tax changes.

With the 2021 onset of NIL rules in college sports, we can overcome these two challenges. First, we can measure the success of an organization, for example, by the number of wins in a season, how far the team advanced in the final tournament, or points scored. These are relatively clean measures of organizational success compared to corporate outcomes. Furthermore, high school graduates in basketball face the decision of where to study and which school to attend. Because data on collegiate basketball recruits starting from the time these athletes enter high school are available, we observe individuals' migration decisions to validate the mechanism. Second, our identification strategy to examine the effects of taxes on the success of organizations does not rely

on tax rate changes, but rather on an exogenous shock to athletes' compensation—the NIL rules—that makes the differences in personal income taxes across states suddenly important. As suggested by the state of Arkansas passing legislation in 2025 exempting taxation on NIL income (Goldman 2025), schools and governmental entities credibly believe that taxes matter to athletes.

Before 2021, college athletes were amateur players who were not allowed to earn money from playing in college outside of the benefits derived from attending school on a scholarship and associated perks (i.e., not having to pay for room, textbooks, fees, and educational support). Following a landmark U.S. Federal District Court decision in *O'Bannon vs. NCAA,* the NCAA began the process of allowing its athletes to receive compensation for their NIL. While these athletes could still not be paid directly by their institutions, they could earn money through various means, such as serving as a spokesperson for a company, signing autographs, selling memorabilia, and more. According to *The New York Times*, the aggregate value of NIL deals now exceeds $1.7 billion (Drape and McCann 2024). For a college to recruit a title-contending team, it can cost as much as $18 million per year (Schultz 2025). These values can also be material for many athletes. For example, *On3* estimates NIL valuation to be as high as $6.8 million for a single player. Hence, the onset of the NIL rules in 2021 increases athletes' taxable income, shifting from very little or no taxable income prior to 2021 to potentially millions of dollars of taxable income as of 2021.

Given the material nature of these earnings, taxes can be a significant factor when choosing a school and thus for the school's performance. While athletes pay taxes at the federal level, there is substantial variation in the state-level tax that an athlete will face, depending on the school they play for. An athlete who chooses to play for a school in a state that does not tax individual income (nine states in total) will pay substantially less than an athlete who chooses a school in a high tax rate state (i.e., California with a top rate of 13.3%). Such differences result in substantial variation

in the tax liability for an athlete throughout their collegiate career. All else being equal, we expect an athlete to choose a school in a lower tax rate jurisdiction over a school in a higher tax rate jurisdiction after the onset of the NIL rules in 2021. Prior to 2021, taxes should not play a role. This potential tax-induced location decision of talents can subsequently affect the success of an organization. We expect that institutions that benefit from attracting high-quality talent through low-income taxes will be more successful than those in high-tax states. Put differently, we expect that in the post-NIL period, schools in low-tax rate states are more successful on the court than schools in high-tax states. While we expect taxes to play a role in these outcomes, there is tension in this prediction, as discussed above. For example, if donors in a high-tax state compensate players for the difference in personal taxes, then the personal income tax may be less important for the location decision and thus the organizational success. Furthermore, even if taxes affect the location decision, there is no guarantee that bringing in highly rated recruits results in better team outcomes.

To test our prediction, we use a difference-in-differences (DiD) design in which we exploit differences in state income tax rates around the introduction of NIL in 2021. Our data cover the period 2016–2024. We omit 2020 since it was a transitional year and since it was affected by COVID-19. To assess organizational performance, we collect data on each Men's Division 1 Basketball team's win total and other performance measures from Sports Reference College Basketball. Our main proxy for performance is win total because it captures the team's overall performance across the regular season and postseason. To examine whether taxes influence organization performance, we consider two different tax-related variables: whether the recruit plays in a low-tax rate jurisdiction and the specific tax rate the recruit faces. The resulting DiD design compares the number of wins by a team in low-tax versus high-tax rate states (first difference) around the post-NIL years versus the pre-NIL years (second difference).

Consistent with our expectations, we find that teams in states with lower state-level income tax rates had better performance outcomes after 2021. In particular, relative to the pre-period, teams with a low state-level income tax (i.e., a top marginal state income tax rate below 4%) had 3.2 more wins per season than teams in states with higher tax rates. This is a sizable effect relative to the maximum total number of 40 games per season for the champion. Moreover, we find that for every one percentage point increase in the state's top statutory tax rate, teams had 0.29 fewer wins than in the pre-period. For a tax rate difference of 13.3% between the top tax rate state (California) and the no-tax states, this suggests that teams in California have almost four fewer wins per season. Importantly, we find a parallel trend and no difference in teams' success between low-tax and high-tax rate states before the onset of NIL. The collective results from our tests are consistent with higher-quality recruits passing on playing in these high-tax states, diminishing their team's talent, and leading to fewer wins, relative to teams in low-tax states. Moreover, we find similar results when using the margin of victory (i.e., average points scored versus conceded) or when using performance ratings and rankings as measures of organizational performance.

An implicit assumption is that the stronger team performance is driven by teams in low-tax states being able to attract better talent in the post-NIL era. This assumption follows numerous studies that suggest that talent shifts towards lower income taxes (e.g., Kleven et al. 2020 and recently Badger, Chyz, and Gaertner 2025). To test this assumption, we collect recruiting data from 247Sports composite rankings. These rankings aggregate recruiting data across all major rankings and provide an annual composite ranking for college recruits. For the location decision, we focus on the top 200 ranked players, as these athletes command significant NIL deals and have a high likelihood of making a substantial impact on their team's performance from the outset. Similar to our main test, we employ a DiD design, where we estimate whether the likelihood of

choosing a school with a low tax rate differs across the top athletes vis-à-vis lower-ranked athletes (first difference), comparing the post-NIL years to the pre-NIL years (second difference). The first difference captures the expected monetary benefits because higher-rated recruits demand more NIL money. When athletes make their college choices, in part, based on taxes, we would expect tax-induced migration to be more prevalent among athletes who earn higher incomes. Consistent with our expectations, we find that recruits are significantly more likely to choose a school in a jurisdiction with a low tax rate starting in 2021, compared to the years before 2021. We estimate that the increase in the likelihood that a top recruit chooses a school in a low-tax-rate state increases by 4.1 to 6.9 percentage points starting in 2021. These are sizable effects relative to the average likelihood of going to a low-tax rate state of 18.6 percent before NIL. These results are robust to different definitions of the player's quality (e.g., athletes' recruiting ranking as well as their "star" ranking) or using continuous or indicator variables to sort athletes. Our findings support our assertion that the increase in organizational performance in the NIL era is driven, in part, by more talent being captured by teams in low-tax-rate jurisdiction states.

Next, we explore the heterogeneity in the effect of taxes on performance. A possible amplifier to the tax effects is a school's prestige. Schools in more prestigious conferences tend to have more fan and community support as well as greater national recognition, often leading to fans and businesses spending more money on NIL. We define prestigious college basketball conferences as the ACC, Big 10, Big 12, and SEC (i.e., the Power Conferences). We test whether the success of these teams benefits more from the onset of NIL in a triple difference setting. We find evidence consistent with this notion. Teams in the Power Conferences and in low-tax rate states have 3.1 wins more than Power Conference teams in high-tax states and 5.6 more wins than the non-Power Conference teams in high-tax states. We find a similar response for teams that were

able to attract the top 200 recruits before 2021. That is, teams that were successful in the past in terms of recruiting talent benefit more from the NIL rules than teams with fewer top recruits. This result implies that the NIL rules, combined with the differences in individual income tax rates across states, led to a consolidation in college basketball. Top schools from low-tax-rate states become disproportionately more successful than their competitors from high-tax-rate states.

Next, we consider the success in the NCAA tournament as a proxy for success. We show that teams in low-tax rate states, in particular, those from the Power Conferences, have more tournament success in terms of their likelihood of making the Sweet 16, the Elite 8, or the Final Four after the onset of NIL. However, this benefit for their success diminishes when defining success as making it to the final or winning the championship. This shows that while personal income taxes on athletes do not appear to result in championships, they at least appear to facilitate Power Conferences teams from low-tax states to be more likely to advance to later stages of the NCAA tournament, such as the Sweet 16, Elite 8, and the Final Four during the NIL era.

Finally, we also explore organizational performance in the college football setting. Following our main approach, we find corroborating evidence that lower state-level income taxes also increase the success of college football teams. We find that teams in states with lower state-level income taxes have a higher ranking at the end of the season, higher scores and ratings on offense, and higher net ratings and scores when incorporating the defense performance post-NIL.

Our study makes several contributions to the literature. We are among the first studies to examine how taxes impact organizational success, which is remarkably scarce and provides mixed evidence. For example, Hembre (2022) finds some evidence of a relation between taxes and performance in professional sports. However, his evidence is subject to several concerns.[1]

[1] Specifcially, Hembre (2022) cannot provide causal evidence for at least four reasons. First, professional athletes

Importantly, there are many situations in an individual's work life when one faces the decision to relocate, whether for a job or to attend college (see, e.g., the reviews by Molloy et al. 2011 and Jia et al. 2023 on migration within the U.S.). As most employees are entirely subject to a single state tax jurisdiction, relative to the prior study, our findings may speak more to the vast majority of situations outside the sports setting. Our results suggest that taxes play a role in locational decisions that cascade to organizational success. However, future research needs to test this relation.

Second, our findings contribute to the tax accounting research examining the impacts of variation in state-level taxation as well as of personal income taxes. In particular, recent studies use variation in state income taxation to help understand the effects of taxes on income shifting (De Simone, Klassen, and Seidman 2017), insider trading profits (Goldman and Ozel 2023), public health responses (Goldman, Lusch, and Watson 2025), corporate risk taking (Ljungqvist, Zhang, and Zuo 2017), or corporate innovation (Goldman, Lusch, and Stenzel 2025). Moreover, our paper relates to the effect of personal income taxes on corporate decisions (e.g., Yost 2018, Armstrong et al. 2019, Hanlon, Verdi, and Yost 2021, Kubick, Lockhart, and Mauer 2025, Underwood and Yost 2025), executive compensation (e.g., Goolsbee 2000, Hall and Liebman 2000, Frydman and Molloy 2011, Goldman, Henley, and Lewellen 2025), profit shifting (De Vito et al. 2025), or investments (Jacob and Vossebürger 2022). We extend these two streams of the literature by showing that state income tax rates can have a large impact on the location of key employees—in our case, the basketball players of a school—that affects organizational performance. Hence, our

must pay state income taxes on their salary based on the state location of each game and not just based on the team's location. This so-called jock tax blurs the tax incentives in location choices in U.S. professional sports. Second, his study exploits variation in tax rates, which can be endogenous, whereas our setting considers variation in compensation. This concern also carries over to team location, which is endogenous and changes over time in Hembre (2022). Third, his study's evidence is limited to the NFL. The study also finds evidence for the NHL, but the relation was in the opposite direction before the shock and the combined coefficient is insignificant. Thus, the evidence provided by his study is, at best, limited. Lastly, he provides no evidence of parallel trends. In contrast, we demonstrate parallel trends in the pre-period, the mechanism for the effect, and show robust effects across multiple sports.

results directly address the call for research by Dyreng, Hoopes, and Maydew (2025) to consider how different taxes affect public policy issues beyond the scope of corporate taxation.

Moreover, our results also contribute to the literature on success in team sports. Several studies examine how sports affect financial and managerial accounting outcomes (e.g., Drake, Gee, and Thornock 2016; Black and Vance 2021; Margolin, Reimer, and Schaupp 2025). We are among the first to examine the tax implications of the NIL rules (see also Badger, Chyz, and Gaertner 2025). Our findings underscore the importance that taxes play in athletes' decisions on where to attend school and, thus, how taxes affect organizations' success. This notion has broader implications. Prior literature suggests that when college athletic teams perform better, academic reputation improves (Anderson 2017), alumni giving increases (Meer and Rosen 2009), and quantity and quality of applications for admission to the school rise (Pope and Pope 2009). Hence, if individual taxes in the NIL era impact organizations' outcomes, the effect goes beyond the wins and losses for the team, but transfers to the university as a whole.

Finally, our findings have important policy considerations. Several powerhouse schools are located in states that do not levy a state income tax, including the 2025 Men's Basketball National Champions, the University of Florida. Schools in states with high income taxes are recruiting against these low or no income-tax-rate schools. As we show, they become less successful. This notion prompted numerous states to consider legislation exempting income taxes for NIL, notably, Alabama, Georgia, Louisiana, and North Carolina. Meanwhile, Arkansas has jumped right in and become the first state to pass a law doing so formally (Goldman 2025). Given the ability to enhance organizational performance by levying low personal income taxes, and considering the potential implications that successful athletic teams have for the university, more states may wish to follow Arkansas's lead to ensure that their schools' teams are not left behind.

2. Institutional Background

2.1 State Income Taxes

Section 61 of the Internal Revenue Code requires individuals' earnings to be taxed from whatever source derived. The vast majority of states adopt the exact same definition, meaning that when an individual earns income in that state, they will be subject to the tax rules and regulations in that state. The state tax rates vary across states, with the top statutory tax rate ranging from 13.3% in California to 0% in nine states, such as Florida or Texas. Furthermore, states vary substantially in their income tax rate progression. Some states have a very progressive tax rate structure, while others impose a flat tax rate. For a typical taxpayer who works solely in one state, that taxpayer's entire income will be apportioned to that state, and the taxpayer will pay taxes to that state based on the state's tax rate. However, for taxpayers who travel for work and earn money in multiple states, their income will be apportioned based on where the work was performed.

For athletes, the so-called "Jock Tax" brought state income taxation apportionment into the fold. While athletes have been subject to some form of state income tax apportionment since the 1960s, it was not until the Chicago Bulls defeated the Los Angeles Lakers in the 1991 NBA Finals that California imposed state income taxes on Michael Jordan and his teammates (Lake 2022). The state of Illinois responded with a retaliatory tax on Los Angeles Lakers players, which triggered a domino effect that led to other states levying income taxes on players who play in their jurisdictions. Currently, athletes must pay taxes on their salary and some bonuses, formulaically based on the state location of each game. Meanwhile, the athlete will pay state income taxes for income earned from endorsements and appearances based on the location of that event.

For college athletes earning income from NIL, the rules governing the jock tax are essentially not present, as the athletes are not receiving a salary or bonus. In fact, as indicated in

the name of NIL, the athlete is being compensated for their personal brand. As such, the athlete is less likely to pay taxes in other jurisdictions since the work related to their brand (i.e., appearances, endorsements, autograph sessions, and income from selling personalized merchandise) will take place in their school's state.[2] However, if the athlete were to travel to a different state to earn income for these services or events, then the athlete would be subject to tax in that jurisdiction. For example, if a basketball player for the University of Arizona earns $100,000 for appearing in a commercial for a local car dealership, that income will be subject to state income tax in Arizona. If the same athlete appears in a commercial for Gatorade and it shoots in Los Angeles, then the income will be subject to state income tax in California instead. However, none of these taxes will be based on where the athlete plays their games during the season. For our paper, we assume that the NIL-related taxable income of an athlete will be taxed in the state where the school is located.

2.2 NIL

For the majority of the existence of NCAA collegiate athletics, players maintained an amateur status and were not allowed to profit from their performance. This notion means that they were not allowed to earn money from playing in college outside of the benefits derived from attending school on scholarship and associated perks (i.e., not having to pay for room and board, textbooks, fees, and educational support). This concept was rattled by the U.S. Federal District Court case of *O'Bannon vs. NCAA*. Originally filed in 2009, former UCLA All-American Forward and national champion Ed O'Bannon filed suit against the NCAA for profiting off of his name, image, and likeness for video games and merchandising. In 2014, the judge ruled in favor of

[2] If a college athlete chooses to maintain residency in their home state (rather than their school state), they will continue to file taxes in their home state. However, their income earned while on campus will be subject to taxation in their school's state. The result is that the athlete will pay the taxes in their school's state, claim the income in their home state, and then receive a tax credit in their home state for any taxes paid in their school's state. For simplicity, we assume that all income is earned in their school state. To the extent that some of their income is earned outside of their school's state, we would only expect it to bias us against finding results.

O'Bannon, saying that the NCAA rules regarding NIL represent unreasonable restraints on trade in relevant markets. The primary components of the decision were upheld by the U.S. Court of Appeals for the Ninth Circuit. While the NCAA petitioned for the decision to be heard by the U.S. Supreme Court, the court declined to hear the case.

While the O'Bannon case was settled in 2016, many other steps needed to be taken before players could receive NIL compensation while maintaining their amateur status. For instance, another lawsuit (*NCAA vs. Alston*) resulted in a decision suggesting that the NCAA's limits on athlete compensation could be illegal. Meanwhile, many states have begun to pass laws allowing athletes in their state to profit from NIL, such as California (Senate Bill 206). The result of these actions was the NCAA formally adopting a policy on NIL effective July 1, 2021.

Starting in 2021, athletes can receive cash payments and benefits derived from their NIL. Some examples of NIL are that athletes can be paid for appearing in commercials, signing autographs, and making public appearances. According to *The New York Times*, the aggregate value of NIL deals now exceeds $1.7 billion (Drape and McCann 2024). Recent estimates suggest that it may cost over $18 million in NIL funding for a team to compete for a football national championship (Schultz 2025). Even for a basketball team, which has far fewer players on the roster, in 2024, coaches were quoted as saying that they are seeing NIL spending for an individual team of more than $7 million (Parrish 2024).

While it can be difficult to know exactly how much an individual player receives from NIL since these contracts are private and the exact income flows from NIL are not always tangible (i.e., some parts of the NIL valuation could be for appearing in a commercial on a fixed fee, while other parts of the NIL valuation could be for selling products and receiving a cut of those profits), many players may now become millionaires from the new rules in place. For instance, according to *On3*,

the highest NIL valuation in 2025 is Arch Manning ($6.8 million), followed by Carson Beck ($4.3 million) and Jeremiah Smith ($4.2 million).[3] While football tends to have the highest overall values, many basketball players are expected to receive significant NIL funds this year, as suggested by their *On3* NIL valuations, including AJ Dybantsa ($4.1 million), JT Toppin ($2.8 million), and Boogie Fland ($2.1 million). According to the NCAA Data Dashboard, the average men's college basketball player's NIL value in the Power Conferences is over $100,000, and these values are likely to be understated since they rely on voluntary disclosure of existing NIL deals.[4]

While the inflow of significant funds to these college athletes is welcomed news to many, what can be lost on the athletes' side is that these funds are now income and subject to taxation. All players' NIL earnings, regardless of which school they choose, will be subject to U.S. Federal income tax. In 2025, this rate ranges from 10% at low income levels to 37% for income exceeding $626,350. However, there is substantial variation in the taxes these athletes will pay at the state level, with some states not taxing income and others taxing it at double-digit rates. As an example, the University of Florida's star point guard, Boogie Fland, has an NIL valuation of $2.1 million in 2025. Assuming no deductions and business expenses, he will pay $729,784 in Federal income taxes, resulting in his take-home pay being more than $1.3 million. However, if Fland had chosen to play for a team in California, he would have additionally owed $238,995 in state income taxes, lowering his take-home income to just over $1 million.[5] Over a 4-year period, this adds up to almost $1 million in additional tax burden when playing in California instead of Florida.

Furthermore, the taxes owed result from all income received. Some college athletes are now receiving NIL from TV commercials (Holt 2025), which are almost certainly a function of a

[3] *On3* NIL valuations as of 9/1/2025.
[4] See their website for a tool that comprises the deals' voluntary disclosure: https://nilassist.ncaa.org/data-dashboard/.
[5] Calculations provided by SmartAsset.com: https://smartasset.com/taxes/income-taxes.

fixed payment based on a contractually agreed-upon amount. However, athletes are also receiving payment in-kind. For example, in 2023, 85 University of Utah players received free leases for Dodge Ram pickup trucks (Hooks 2023). While these players were not given any cash payments, the free lease itself is a form of compensation that they will need to pay taxes on. Put differently, if these trucks typically lease for $1,000 per month, each player receiving the free lease will have an increase in their annual income of $12,000, and that income will be subject to taxation.

3. Hypothesis Development

We expect that personal income taxes can impact the success of an organization for several reasons. First, building on prior and concurrent literature (e.g., the review by Kleven et al. 2020 and Badger, Chyz, and Gaertner 2025 on taxes, NIL, and recruiting classes in American Football), taxes likely induce athletes to play for schools in low-tax jurisdictions. This decision impacts the success of an organization for several reasons. If an organization can hire better and more highly skilled employees due to tax incentives, it is also plausible that the organization will be more successful. Evidence for the link between more skilled employees and better outcomes is presented in several contexts, for example, of CEOs and firm performance (e.g., Bertrand and Schoar 2003, Kaplan, Klebanov, and Sorensen 2012) or the skill of tax department employees in the success of tax planning outcomes (e.g., Koester, Shevlin, and Wangerin 2017).

Second, if personal income taxes reduce the cost of hiring employees (e.g., Jacob and Vossebürger 2022), organizations can hire more talented individuals and expand their operations or invest in higher-quality resources. Third, in the case of college basketball, an individual player can have a significant impact on the team's success because, relative to college football, basketball only features five players on the court at any given time, and because the top players of a team receive considerable playing time. Put differently, like other top employees, such as corporate

executives, a basketball player's individual skills have a significant impact on the team's success.

For these reasons, we argue that after the onset of NIL, schools in states with lower tax rates are more successful than their higher-taxed counterparts. We thus formulate our hypothesis as follows:

H1: Schools in states with low personal income tax rates are more successful after NIL.

However, there are also reasons to believe that attracting high-quality talent via lower income tax rates may not lead to better organizational success. First, Kleven et al. (2020) state in their review that "empirical evidence on the responsiveness of individual location decisions to taxes has been remarkably scant". While we test this mechanism, it is thus ex-ante not clear that individuals will react to the incentives by altering their location. However, even if taxes affect the location choice, a positive impact on performance is not automatic. For instance, prior literature demonstrates that employees who join a new firm may not lead to success, as shown by analysts leaving their firm (Groysberg, Lee, and Nanda 2008), groups of star employees (Call et al. 2021), and elite employees succumbing to perceived inclusion (van Zelderen, Dries, and Marescaux 2025). In fact, in a meta-analysis, Crook et al. (2011) suggest that human capital takes time to develop, which can offset the benefits of elite talents.

One can extend this argument to our sports setting. Even if athletes respond to changes in taxes by altering their location, there are two key reasons why the lower taxes might not result in stronger performance. First, the extent to which the personal income tax burden is important for this decision also depends on the tax incidence of the player falling on the player versus the donors. For instance, if a player expecting to receive $1 million in NIL is choosing between playing for a school in California or Texas, the NIL donors can simply provide the player with additional pay to cover their tax burden. If sponsors in a high-tax state can compensate a player for the difference

in the personal income tax burden relative to a low-tax rate school, then the tax burden may be of less importance for the location decision. Second, recruiting better players does not automatically lead to better team performance. For example, in the first year of NIL, the University of Memphis, which is located in a no-tax-rate jurisdiction, entered the 2021 season with the top-rated recruiting class, according to 247Sports. However, the team finished with just 22 wins and did not advance past the opening weekend of the final tournament. In fact, the teams with the number two and three-ranked recruiting classes that same year (University of Kentucky and University of Michigan) were eliminated in the first round of the tournament and only had 19 wins, respectively. A plausible explanation for these findings is that the agency costs of all-star players joining a team (i.e., maximizing personal utility ahead of the team's utility) may diminish the intended benefits.

While there are countless examples where talent attraction leads to organizational success, tension in our H1 lies in the fact that it is unclear whether talent will be impacted by taxes, the tax incidence might not be borne by the players, and that talent does not necessarily lead to better organizational performance. Collectively, it is not clear if taxes affect organizational performance.

4. Research Design, Data, and Descriptive Statistics

4.1 Data and Sample Selection

To measure organizational success, we collect data on the number of wins each team has from Sports Reference College Basketball. This website records detailed historical data on men's college basketball throughout our sample period and beyond. We use this website to generate reliable data on the team's win totals, which helps us assess operational performance. We additionally collect data from this website on the average margin of victory, the simplified rating, and the net rating of each team as alternative proxies of organizational success. Furthermore, as we examine the impacts of tax burdens on operational performance, we use the online archive of

individual income tax rates imposed by jurisdiction collected by the Tax Foundation. To help support our findings, we use data from 247Sports, which provides a composite ranking of these different websites, assigning each player a numerical ranking and a broad classification of the player's ranking (i.e., how many "stars" the recruit is, ranging from five stars to one star).

We focus our study on men's college basketball for several reasons. First, men's college basketball players receive significant NIL payments that are likely to be material enough to result in movement from one jurisdiction to another due to tax reasons. Second, basketball rosters are limited to 15 players, of whom five are on the court at a time, playing both offense and defense. In comparison to other sports (e.g., football and baseball), any individual player can have a more significant impact on team outcomes. Third, in sports like football, recruits often develop over several years, seeing little or no playing time at first and then becoming a starter in their later years. For example, the top NIL player in football is Arch Manning, who is in his third season playing for the University of Texas in 2025, but it is just his first season as the team's starting quarterback. Meanwhile, top basketball recruits start almost immediately, and even those top recruits who are not starters often have significant playing time right away.

Table 1 presents the sample selection. We begin with the 355 men's Division 1 team win outcomes from 2016 to 2024 (3,195 observations). We exclude the outcomes of the 2020 season for several reasons related to the COVID-19 pandemic, the fact that recruiting decisions are sometimes made a year in advance, and the potential influence that the expected onset of NIL may have had on the outcomes. We also only track observations when the team was in Division 1. As some teams moved to Division 1 during our sample period, we exclude their win totals from when they were in a lower division. These procedures leave us with a sample of 2,781 observations.

4.2 Empirical Research Design H1

Our test of H1 uses the following differences-in-differences (DiD) approach:

$$Wins_{i,t} = \alpha_0 + \beta_1 \times Post_t \times TaxVar_i + \beta_4 \times PowerConf_{i,t} + \alpha_i + \alpha_t + \mathcal{E}_{i,t} \quad (1)$$

where we define our dependent variable, *Wins,* as the number of wins during the regular season and postseason a team achieves in each year.[6] To address concerns that our OLS model is not well-suited for this count measure, we show in Table OA.1 of the Online Appendix that our results are similar when i) using the natural logarithm of *Wins* or ii) when using a Poisson or a negative binomial model for count variables. Because these findings are very similar to our OLS results, we use the OLS model in our baseline tests. Our independent variable of interest is the interaction between *Post*, which is an indicator equal to one for 2021 and thereafter, and *TaxVar*, which takes one of two values. First, we use *Low Tax,* which is an indicator variable for states with low or no state taxes. We define low or no-state-tax states as those states that do not levy state income taxes, as well as several states that have particularly low state income taxes, which we define as tax rates below 4%. The choice of 4% as the cutoff is arguably arbitrary. Hence, as our second measure, we use $State\ Tax\ Rate_{2019}$, which is the state income tax rate for the state the school resides in. The key variable of interest is the DiD coefficient on *Post* × *TaxVar*. For *Low Tax* ($State\ Tax\ Rate_{2019}$) as our *TaxVar*, we expect a positive (negative) DiD coefficient as lower (higher) taxes are expected to lead to more (fewer) wins, i.e., $\beta_1 > 0$ ($\beta_1 < 0$).

The choice of using the 2019 tax rates when using the continuous tax variable as well as when defining the *Low Tax* indicator variable requires justification because, arguably, in the post-

[6] The number of wins also covers the postseason, which means that teams advancing to the later stages of the postseason may have mechanically more wins. An alternative measure would thus be the win percentage. We prefer the number of wins for two reasons. First, being able to play more games, i.e., advancing in the post season, captures being more successful. Second, the number of wins and the win percentages are very highly correlated (correlation coefficient is above 0.95). Moreover, we show below that our results are robust to using other dependent variables.

NIL period, the state tax rate in the respective year is decisive for athletes. However, using post-reform tax rates could induce an endogeneity bias and would undermine one of the main advantages of our setting, namely that we do not exploit potentially endogenous changes in tax rates, but an exogenous shock to the income. Put differently, using the tax rate from 2019 to define *Low Tax* (as well as *State Tax Rate*$_{2019}$) ensures that one of the main identifying assumptions of our DiD approach—the sorting into treated (*Low Tax* = 1) and control groups (*Low Tax* = 0) is exogenous to the event—is satisfied. Importantly, we note that we obtain very similar results when using a *No Tax* indicator instead of *Low Tax* (see Table OA.2 of the Online Appendix) or when using the current tax rate to define *State Tax Rate* (untabulated).

As a control variable, we only include *PowerConf*, which is an indicator variable equal to 1 if the school is part of the top four athletic conferences (ACC, Big Ten, Big 12, or SEC).[7] We note that one could consider many other control variables, such as endowment size or sales taxes. As we show below in our robustness tests using the Oster bound test, it appears to be very unlikely that omitted control variables drive our findings. Hence, we keep control variables to a limited set, also to avoid the issue of "overcontrolling" (see Whited, Swanquist, Shipman, and Moon 2022). Moreover, we include school fixed effects α_i to capture any time-invariant school characteristics and year fixed effects α_t. These two sets of fixed effects absorb the main coefficients on *Post* and *TaxVar*. In our case, years refer to the academic year and season. For example, the year 2018 is the academic year 2018-2019. We cluster our standard errors by school because this results in larger standard errors than, for example, clustering by state (see Table OA.3 of the Online Appendix). Put differently, clustering by school appears to be the more conservative approach.

[7] We use the top four athletic conferences to be consistent with the NCAA's definition for analyzing NIL deals via their NIL Assist Data Dashboard. Men's college basketball has a fifth conference that often performs well, the Big East. Our inferences remain consistent when we include teams in the Big East in our definition for *PowerConf*.

4.3 Descriptive Statistics

Table 2 presents our descriptive statistics for our H1 tests. The mean value of *Wins* is 17.1179, meaning that teams have approximately 17 wins per season. The mean value of *Post* is 0.5063. Since more teams enter Division 1 than leave, and since we only focus on the years when the teams are in Division 1, we obtain a value of *Post* that is slightly greater than 0.5000. The mean value of *Low Tax* is 0.1711, suggesting that approximately 17% of schools are in a low-tax rate jurisdiction. The mean value of $State\ Tax\ Rate_{2019}$ is 5.4805, aligning with the school's athletes facing a top statutory tax rate of an average of 5.48 percent. Finally, the mean value for *PowerConf* is 0.1931, suggesting that approximately 19% of teams belong to a power conference.

5. Results

5.1 Taxes and Organization Success

Our primary analysis examines whether and to what extent the onset of NIL influences organizational performance. Before presenting the results of the regression analysis from equation (1), we first assess the assumption of parallel trends and the dynamics in wins around the onset of NIL. To this end, we regress *Wins* on year indicator variables and their interactions with *Low Tax*. We use 2019 as the baseline year. Figure 1 presents the coefficient estimates along with the 95% confidence bounds. We find that there is no difference in the number of wins before the onset of NIL. The trend is flat between 2016 and 2019. As of 2021, schools in low-tax-rate states have about 3 wins more per year than schools in high-tax states. This difference in wins is statistically significant and persistent.

To corroborate these graphical results, Figure 2 plots the number of wins for schools in high versus low-tax-rate states in the pre-NIL and the post-NIL periods. We find that, relative to the pre-NIL period, schools in higher tax states have, on average, 0.8 wins *less* post-NIL, whereas

schools in low-tax rate states have about 2.4 wins *more* post-NIL. The resulting DiD estimate without any controls or fixed effects is 3.2, suggesting that schools in low-tax-rate states have about 3.2 more wins post-NIL relative to their competitors from high-tax rate schools. The corresponding t-tests, which indicate statistical significance of these differences, are shown in Online Appendix Table OA.4.

In Table 3, we present the regression results for our DiD approach. In column 1, we use a simple approach without any controls or fixed effects. In column 2, we add year fixed effects. In column 3, we additionally include school fixed effects. In column 4, we include control variables. Across the four columns, we find a consistent picture: The positive and significant *Post* × *Low Tax* coefficients suggest that relative to schools in states with higher tax rates, schools in low-tax rate states have about 3.17 more wins post-NIL. This is a large effect given that teams have, on average, 17 wins per season and a maximum of 40 games per season. Moreover, the coefficients are very similar across the columns. This suggests that our estimates are unlikely to be driven by other characteristics correlated with taxes and with the number of wins. In columns 5 to 8, we replicate the approach from columns 1 to 4, but we use the continuous tax rate measure $State\ Tax\ Rate_{2019}$ instead of the *Low Tax* indicator. Consistent with our results using *Low Tax* and consistent with H1, we find negative and significant $Post \times State\ Tax\ Rate_{2019}$ coefficients. This suggests that a higher tax rate (as measured in 2019) leads to a smaller number of wins. In economic terms, the coefficient estimate suggests that relative to a state without any state-level personal income tax rate (e.g., Texas, Florida, or Tennessee), a school in New York would have 3.19 (= 0.2932 × 10.9%) fewer wins. Again, this is sizable given the number of games per season.

To corroborate the notion that our results are not driven by unobservable factors or other control variables that might be missing from equation (1), we run the test suggested by Oster

(2019). For example, there could be other state-level factors (climate, political factors, income levels, or state level sales taxes) or school-level characteristics (quality of the head coach, ability to develop certain positions better than others, the quality of the academic environment, or endowment size) that we do not control in our main analysis or that are unobservable to us. The idea of her test is to assess the importance of all factors that are not included in a regression model that would overturn our findings. We find that the delta estimates—i.e., the importance of all these factors to overturn our results—are above 289 in our case. This is well above the threshold of one as suggested by Oster (2019). Importantly, we also use her approach to calculate the coefficients adjusted for the bias by any unobservable characteristic. We obtain bias-adjusted coefficient estimates of 3.195 for *Post* × *Low Tax* and -0.298 for *Post* × *State Tax Rate*$_{2019}$. These estimates are very close to our main DiD estimates in Table 3. Collectively, the results of the Oster (2019) tests indicate that it is highly unlikely that unobservable or omitted characteristics can explain our estimate of the effect of state-level taxes on the success of college basketball teams. One reason why such factors do not affect our estimates is that we exploit NIL as an exogenous shock to the importance of taxes, which affect players' net income. Other key people in the organization, such as the head coach, were already subject to state-level taxes prior to NIL, making the athletes the key factor in our setting.

5.2 Robustness and Placebo Tests

Before turning to our analysis of the key underlying mechanism—personal income taxes affecting the location decision of talents—we present a series of robustness tests. We start by showing that our results are robust to using other outcome variables. Specifically, we use i) the *Margin of Victory* (i.e., the average difference between own versus the opponent points per game), ii) the *Simple Rating System*, which incorporates the average point differential and the strength of

the schedule, and iii) the *Net Rating*, which is the estimated point differential per 100 possessions. As with *Wins*, we expect taxes to affect these performance outcomes as well. The results are shown in Table 4 and are consistent with our previous findings. The economic magnitudes suggest that schools in low-tax states have about a 2.4-point higher margin of victory, a 2.9 higher simple rating, and about 4.2 more points per 100 possessions than teams located in higher-tax jurisdictions. These results are robust to using the continuous tax rate measure $State\ Tax\ Rate_{2019}$. Moreover, as we show in the Online Appendix, Figure OA.1, there are no pre-trends in any of these variables. Importantly, there is better performance in low-tax states relative to high-tax states in the post-NIL period. Collectively, these results suggest that taxes impact organizational performance along different dimensions of measuring success.

Next, we use a placebo test to address any remaining concerns that our results are driven by factors other than tax. To this end, we repeat our main analysis and rerun the regressions from Table 3 using the number of wins by the respective women's basketball team (*Wins Women*). The women's team offers a plausible falsification test because there is very little NIL money for female athletes in basketball.[8] The results of rerunning equation (1) using *Wins Women* as the dependent variable are reported in Table 5, where we use the same layout as for Table 3. Consistent with the idea that our results are driven by tax incentives created by the NIL rules and not by other unobservable factors, we do not find any evidence of increased success for the women's basketball teams in low-tax states. All coefficient estimates are insignificant and close to zero.

In the final step, we further address concerns about potentially omitted correlated variables and the potential impact of single schools. To address the latter issue, we rerun our main tests from

[8] According to the NCAA NIL Data Dashboard, the average (median) women's college basketball player for the 2024 calendar year received $14,681 ($1,375) in NIL. While these are self-reported numbers, they underscore the assumption in our test that women's college basketball players are less likely to be sensitive to taxes from NIL earnings.

columns 4 and 8 of Table 3, but exclude any school at a time. This results in 354 coefficient estimates, which we plot in Online Appendix Figure A.2. Panel A (Panel B) plots the distribution of *Post* × *Low Tax* (*Post* × *State Tax Rate*$_{2019}$) coefficients. We find that the resulting coefficients are closely distributed around the baseline coefficients and that there is no influential observation. Moreover, we rerun our main test at the state level instead of the college/university level. If our findings are indeed driven by taxes, the better recruits into a low-tax state should lead to better outcomes for all universities in a state. To this end, we use the average number of wins in a state as the dependent variable and rerun equation (1) at the state-year level. We continue to find that the average number of wins in a state increases when the state has a low tax rate (see Online Appendix Table OA.6). In this state-level test, we find that teams in low tax states have about 3.5 wins more post-NIL compared to teams in states with higher tax rates. Collectively, these robustness tests corroborate our interpretation of our main results consistent with H1.

5.3 Testing the Mechanism: Taxes and Location of Talents

A key assumption of these primary findings is that taxes tilt athletes' location choice toward low-tax-rate jurisdiction schools so that these athletes can earn higher after-tax NIL earnings. To test this assertion, we use recruiting data from 247Sports. We begin with a simple descriptive analysis that compares the likelihood of choosing a low-tax rate state before and after the onset of the NIL rules. To this end, we examine a simple regression as follows:

$$TaxVar_{s,t} = \alpha_0 + \beta_1 \times Post_t + \beta_2 \times Center_i + \beta_3 \times PointGuard_i + \beta_4 \times SameState_{i,t} + \mathcal{E}_{i,t} \quad (2)$$

where *TaxVar* is one of two variables that capture tax-related outcomes. The first is *Low Tax*, which is an indicator variable equal to 1 if the state the player chooses to play in is in a low-tax rate jurisdiction (as defined above), and 0 otherwise. *Tax Rate Difference* is the difference between the recruit's school's tax rate and home tax rate, where more positive (negative) values

suggest that the home tax rate is higher (lower) than their school's tax rate. *Post* is an indicator variable equal to 1 for the year 2021 and beyond, and 0 otherwise. We control for the player's position as some players tend to be in higher demand than others based on their positions (*Center* for players who primarily play in the center position, and *PointGuard* for players who primarily play at the point guard position), as well as whether the player chooses to play for a school in their home state since some players derive more benefits from staying close to home and these benefits can be incremental to the benefits derived from paying low taxes (*SameState*).

While not representing a causal effect, the *Post* indicator informs us whether recruits are more likely to move to a low-tax-rate state in the post-NIL period. The results in Table 6 indicate that the likelihood of a recruit moving to a low-tax-rate state is approximately 3.4 percentage points higher after 2021 compared to before. The coefficient estimate is very similar irrespective of whether we include no controls (column 1), state-fixed effects (column 2), or control variables (column 3). We also use the tax rate difference between the recruit's home state and the school's state as a dependent variable. We find that this difference increases post-NIL by about 0.82 percentage points. This estimate is again very similar, irrespective of whether we include school fixed effects and controls or not.[9] This indicates that taxes may play a role in the location of talent.

To help establish a more causal relation on the location decision, we turn to the analysis that considers recruits' incentives as follows:

$$TaxVar_{s,t} = \alpha_0 + \beta_1 \times Post_t + \beta_2 \times Ranking\ (Star)_{i,t} + \beta_3 \times Post_t \times Ranking\ (Star)_{i,t} \quad (3)$$
$$+ \beta_4 \times Center_i + \beta_5 \times PointGuard_i + \beta_6 \times SameState_{i,t} + \mathcal{E}_{i,t}$$

All variables are defined as above. However, we now include *Ranking* and *Star. Ranking*

[9] To further document that our results are not driven by unobservable factors, we run the test suggested by Oster (2019). We find that the delta estimates are above 20, i.e., well above the threshold of one, and that the bias-adjusted coefficients of 0.033 and 0.832, respectively are very close our estimates in Table 6. Hence, it is unlikely that unobservable characteristics can explain our coefficient estimates in Table 6.

is 200 minus the recruit's ranking. We adjust the ranking so that the highest (lowest) values correspond with the best (the 200th) ranked recruit in the 247Sports composite top 200 rankings. *Star* is the recruit's broad classification ranking, where five-star recruits are the best, followed by four-star and three-star recruits. As we focus on the top 200-ranked recruits, we only have three, four, and five-star recruits in our sample. Our coefficients of interest are the interaction between *Post* and *Ranking* or between *Post* and *Star*. We use several different measures of *Ranking* and *Star.* For ranking, we use the standardized ranking (with a mean of 0 and a standard deviation of 1) and indicator variables for whether the player is in the *Top 25* and *Top 50* recruits, respectively, in that year. For *Star*, we use the continuous star variable, as well as indicator variables for whether the player is a four or five star (*Four & Five Star*) and a five star (*Five Star*), respectively.

We begin by presenting simple univariate statistics for the average ranking and stars of recruits in low versus higher tax states around the NIL rule introduction. Online Appendix Table OA.4, Panel B shows that the average rank of a recruit in low-tax-rate states improves by almost 14 spots, whereas schools in higher tax rate jurisdictions experience a drop in the rank of about five positions. This drop is, however, not statistically significant. Importantly, relative to schools in high-tax-rate states and relative to the pre-NIL period, schools in states with a low tax rate can attract players post-NIL that rank about 20 positions higher in ranking. Panel C shows that low tax rate schools are also able to attract players who have a 0.2 higher star rating. Put differently, one in five players in a low-tax-rate state will have a higher star rating post-NIL relative to schools in high-tax-rate states and relative to the pre-NIL period.

Table 7 presents our multivariate evidence of this assertion. In Panel A, we identify top players using their ranking, whereas Panel B uses the star rating to identify top players. The odd (even) numbered columns use the indicator variable if the school is located in a low-tax-state (the

tax rate difference between the home and the school state) as the dependent variable. Across columns, we vary the definition of what is a top player. In Panel A, we use the ranking in the recruit's 247Sports Composite Ranking. Columns 1 and 2 use a *Top 25* indicator for recruits who are in the top 25 of this ranking. Columns 3 and 4 use a *Top 50* indicator, and columns 5 and 6 use the inverted rank so that higher values indicate a better rank. We standardize the rank to have a mean of 0 and a standard deviation of 1 to ease the interpretation. In Panel B, we use *Star,* the recruit's star rating according to the 247Sports Composite Ranking. Columns 1 and 2 use an indicator for *Four & Five Star* recruits, columns 3 and 4 use an indicator for *Five Star* recruits, and columns 5 and 6 use the continuous *Star* rating.

In all cases, we include control variables and school fixed effects. Across the board, we find evidence consistent with H1. That is, top recruits are more likely to locate in low-tax-rate states after the onset of NIL relative to before 2021. In economic terms, we find that the likelihood a top recruit chooses a school in a low-tax-rate state increases by 4.1 to 6.9 percentage points after 2021 relative to before 2021. This is a sizable effect relative to the unconditional likelihood of 18.6% prior to NIL. Furthermore, we find that with their college choice, top recruits lower their tax rate relative to their home state by 1.3 to 2.0 percentage points from before to after the onset of the NIL rules. Again, this is a sizable reduction in the tax rate, considering that the sample average home state tax rate is 5.3% before the onset of NIL. These findings thus suggest that taxes play an economically important role in the location decision of top basketball recruits.

Because the validity of this approach hinges on the parallel trends assumption, we interact the *Top 25* indicator and the *Five & Four Star* indicator, respectively, with year indicator variables. The dependent variable is the tax rate difference between the home state and the school's state. We then plot the resulting coefficients with 2019 as the baseline year in Figure 3 (using the *Five*

& Four Star indicator) and Figure 4 (using the *Top 25* indicator). We include year fixed effects in both regressions. In both figures, we observe a flat trend prior to the onset of NIL. All pre-NIL coefficients are statistically indistinguishable from zero and indicate that taxes did not play a role in the location decision of top recruits. Importantly, as of 2021, we find an increase in the tax rate difference between the home and the school's state. This is consistent with the top recruits choosing locations that have a lower tax rate than their home state. This difference persists over time and is strongest in 2024. Collectively, these results are consistent with the notion that taxes are one decisive locational factor for the top high school sports graduates when choosing a college. This supports one key mechanism through which taxes can affect organizational performance.

5.4 Taxes and Organizational Success, Heterogeneity Analyses

In the next step, we explore the heterogeneity in the effect of taxes on the number of wins per team. Specifically, we argue that taxes have an incrementally stronger effect for the more prestigious schools and the best conferences. These are the schools in which athletes are more likely to have higher NIL-related earnings, making taxes a potentially more decisive factor. To test this notion, we use two indicator variables. First, we define an indicator *Any Top 200,* which equals 1 if the school has recruited a top 200-ranked talent in at least two of the four pre-NIL years, and 0 otherwise. Second, we use the indicator *PowerConf*, which equals 1 for the "Power 4" conferences, i.e., the ACC, Big 10, Big 12, and SEC. We then use these two indicators in triple difference settings, building on equation (1). Specifically, we interact with either *Any Top 200* or *PowerConf* with *Post*, *Low Tax*, and *Post* × *Low Tax*. We also use the specification where we use $State\ Tax\ Rate_{2019}$ as our tax measure.

We report the results in Table 8 and show that the effect of state taxes on the number of

wins is significantly stronger among the Power Conference schools.[10] We find that teams' success in these conferences benefits more from low state income taxes after the onset of NIL relative to teams not in these conferences. Our results suggest that teams in the "Power 4" that are also in low tax states have about 5.6 (3.1) wins more than other non-Power 4 teams (other "Power 4") teams in high tax states. Importantly, as we show in Online Appendix Table OA.5, these results are robust to expanding the Power Conferences definition to include also the Big East conference. Moreover, we find a similar response for teams that were able to attract top-200 recruits before 2021. Teams in low-tax-rate states that attracted top talent have 5.4 (3.1) wins more in the post-NIL period than a team that did not attract any (that attracts) top 200-ranked talents and that is located in a higher-tax state. These findings are robust to using the continuous state-level tax rate measure. Collectively, these findings indicate that top teams in low-tax rate states benefit most from the NIL rules in terms of their basketball team's success, contributing to a greater concentration of wins among certain teams, namely those in the top conferences and in low-tax rate states.

5.5 Taxes and Tournament Success

Can lower taxes help teams to win the NCAA men's basketball championship? To answer this question, we run our analysis from equation (1), but we use different dependent variables capturing how far a team advances in the NCAA tournament. We use *Sweet16* (an indicator equal to one for all teams making it to the round of the last 16), *Elite8* (an indicator equal to one for all teams making it to the round of the last 8), *Final Four* (an indicator equal to one for all teams making it to the round of the last 4 teams), *Final* (an indicator equal to one for the two schools making it to the final), and *NCAA Champion* (an indicator equal to one for the winner). The results

[10] Note that we report all interactions that are identified. All main effects and other interactions are absorbed by the school fixed effects and year fixed effects, respectively.

are reported in Table 9. While we do not find any statistically significant coefficients for the interaction of *Post* and *Low Tax*, we find that lower taxes have a positive impact on the likelihood that teams from the power conferences advance to the round of the last 16, 8, and 4 teams. This is indicated by the positive and significant coefficient on *Post* × *Low Tax* × *PowerConf* in columns 2, 4, and 6. This finding can be interpreted as follows: Schools from the top conferences that are located in low tax states (e.g., University of Miami, Houston University, Texas Tech) are now more likely to advance to the Sweet 16, the Elite 8, or the Final Four relative to top conference schools from high tax states (e.g., the University of Kansas, the University of Kentucky, the University of Virginia). There is, however, no tax effect on making it to the final or becoming the champion. Still, these results indicate that it becomes harder for non-"Power 4" conference schools from high-tax states to advance to later rounds of the tournament, thereby reducing the chances of highly popular Cinderella stories of low-ranked teams making it to the Elite 8 or final four.

6. Supplemental Analysis: Evidence from College Football

6.1 Data and Empirical Approach

In the final step, we explore whether our results generalize to the College Football setting. There are several key differences in the basketball setting. First, the teams are much larger, suggesting that an individual player might not have the greatest impact. Exceptions might be a star quarterback or running back, who can boost the offense's performance. Second, teams have fewer games, which makes the number of wins a less informative performance measure. Third, it might require more time than in basketball until a top high school recruit becomes a starter. However, building on the empirical results in Badger, Chyz, and Gaertner (2025) that lower state income taxes lead to better recruiting classes, we still expect that low state income taxes improve the success of a team.

To test this, we collect data on different outcome variables for 127 schools over the period 2016–2024 from www.sports-reference.com. We then build on our DiD model in the basketball setting and run the following regression for our sample of 127 college football teams:

$$Outcome_{i,t} = \alpha_0 + \beta_1 \times Post_t \times TaxVar_i + \alpha_i + \alpha_t + \mathcal{E}_{i,t} \quad (4)$$

where outcome is one of six different outcome variables. First, we use the number of wins (*Wins*). Second, we use the team's rank at the end of the season (*Rank*). We invert *Rank* so that higher values indicate a better rank. Third, we use the *Offense Rating*, which is the offense component of the simplified rating system (also called OSRS). This measure incorporates the points scored, while accounting for the strength of the schedule. Fourth, we use the *Total Rating*, which is the overall simplified rating system. Fifth, we use the *Offense Score*, which is the average number of points scored on offense. Finally, we use the *Net Score*, which is the average number of points scored minus the average number of points by the opposing team.

As in our basketball analysis, we use two different tax variables, namely, *Low Tax* and *State Tax Rate*$_{2019}$. When using Low Tax as our independent variable, we expect a positive coefficient ($\beta_1 > 0$) if lower taxes lead to better outcomes. In the case of *State Tax Rate*$_{2019}$, we expect β_1 to be negative because higher tax rates are expected to lead to worse outcomes. *Post* is defined as before. Our analysis includes school fixed effects (α_i) and year fixed effects (α_t).

6.2 Empirical Findings

Table 10 presents the empirical findings of the college football setting. In Panel A, we present the results using the interaction of *Post* and *Low Tax*. In Panel B, we use *State Tax Rate*$_{2019}$ as our tax measure. With the exception of *Wins*, where only one DiD coefficient is significant at the 10% level, we find that lower taxes also lead to better outcomes in the college football setting. Specifically, we find that lower taxes i) increase a team's rank at the end of the season, ii) lead to

better scoring on offense, and iii) lead to better net scoring, i.e., when incorporating the defense's performance. In economic terms, a team in a low-tax state is ranked about 11 positions higher at the end of a season, scores about 2.7 points more per game, and outscores the opponents by about 3.6 points per game. Moreover, in Figure OA.3 of the Online Appendix, we also provide support for the parallel trends assumption underlying these findings. Collectively, these results support the notion that lower personal income taxes can lead to better organizational performance.

7. Conclusion

This paper provides evidence on the role of personal income taxation in organizations' success. Exploiting the 2021 introduction of the Name, Image, and Likeness (NIL) rules as an exogenous shock to athletes' taxable income and variation in personal income tax rates across states, we show that schools in low-tax-rate states have better performance outcomes. Specifically, teams in low-tax rate states have, on average, three additional wins per season with up to 40 games after the onset of the NIL rules relative to peers in high-tax jurisdictions. The effects are especially pronounced for programs in the "Power 4" conferences and for historically strong recruiting schools, implying that taxation interacts with NIL to reinforce competitive advantages. We also provide empirical evidence of one potential empirical mechanism of this finding: schools in low-tax-rate states are able to attract higher-quality talent after NIL relative to high-tax-rate states.

These results are likely to be important for colleges and universities beyond the individual team. This is because when college athletic teams perform better, there is evidence that academic reputation improves (Anderson 2017), increased donations by alumni (Meer and Rosen 2009), as well as greater quantity and higher quality of applications for admission to the school (Pope and Pope 2009). Hence, if personal income taxes can impact a sport team's success in the NIL era, this effect potentially has positive spillover effects to the university as a whole. For this reason, it is

not surprising that Arkansas passed legislation in 2025 exempting taxation on NIL income (Goldman 2025).

At a broader level, our findings contribute to the literature on taxation and migration by documenting that state-level tax differentials in the United States affect the mobility of highly skilled individuals, and that tax-induced mobility leads to more organizational success, a dimension that prior work has largely overlooked. One inherent limitation of our setting is that we only explore high school graduates and college basketball, as well as college football, in a supplemental test. Whether our findings generalize beyond collegiate athletics to the corporate setting is an interesting and important avenue for future research. While there are reasons to believe that the results generalize also to corporate settings, for example, because i) there is substantial migration of talent not only across borders but also within the U.S. (see, e.g., Molloy, Smith, and Wozniak 2011, Jia et al. 2023) and ii) there is prior literature showing that individual talents matter for corporate outcomes (e.g., Bertrand and Schoar 2003, Kaplan, Klebanov, and Sorensen 2012, Koester, Shevlin, and Wangerin 2017), testing the effect on corporate outcomes faces empirical challenges. Specifically, one requires panel data on teams', divisions', or departments' success across many firms as well as compelling variation in taxes. Hopefully, future research can overcome these empirical challenges and explore the effect of personal income taxes on organizational performance outside the college sports setting.

References

Akcigit, U., Baslandze, S., & Stantcheva, S. (2016). Taxation and the international mobility of inventors. *American Economic Review*, *106*(10), 2930-2981.

Anderson, M. L. (2017). The benefits of college athletic success: An application of the propensity score design. *Review of Economics and Statistics*, *99*(1), 119-134.

Armstrong, C.S., Glaeser, S., Huang, S., & Taylor, D.J. (2019). The Economics of Managerial Taxes and Corporate Risk-Taking. *The Accounting Review*, *94*(1), 1–2.

Badger, J., Chyz, J., & Gaertner, F. B. (2025). The Impact of State Income Tax Rates on Recruiting in the NIL Era of Collegiate Athletics. University of Tennessee Working Paper.

Bertrand, M., & Schoar, A. (2003). Managing with Style: The Effect of Managers on Firm Policies. *Quarterly Journal of Economics*, *118*(4), 1169-1208.

Black, D. E., & Vance, M. D. (2021). Do first impressions last? The impact of initial assessments and subsequent performance on promotion decisions. *Management Science*, *67*(7), 4556-4576.

Call, M. L., Campbell, E. M., Dunford, B. B., Boswell, W. R., & Boss, R. W. (2021). Shining with the Stars? Unearthing how group star proportion shapes non-star performance. *Personnel Psychology*, *74*(3), 543-572.

Crook, T. R., Todd, S. Y., Combs, J. G., Woehr, D. J., & Ketchen Jr, D. J. (2011). Does human capital matter? A meta-analysis of the relationship between human capital and firm performance. *Journal of Applied Psychology*, *96*(3), 443-456.

De Simone, L., Klassen, K. J., & Seidman, J. K. (2017). Unprofitable affiliates and income shifting behavior. *The Accounting Review*, *92*(3), 113-136.

De Vito, A., Hillmann, Jacob, M., and Vossebürger (2025). Do personal income taxes affect corporate tax-motivated profit shifting? *Journal of Accounting and Economics*, *79*(2-3), 101758.

Drake, M. S., Gee, K. H., & Thornock, J. R. (2016). March market madness: The impact of value-irrelevant events on the market pricing of earnings news. *Contemporary Accounting Research*, *33*(1), 172-203.

Drape, J. & McCann, A. (2024). In College Sports' Big Money Era, Here's Where the Dollars Go. *New York Times*, Aug. 31, 2024.

Dyreng, S., Hoopes, J. L., & Maydew, E. L. (2025): The Scope of Tax Accounting Research. *Journal of the American Taxation Association,* Forthcoming.

Frydman, C., & Molloy, R. S. (2011). Does tax policy affect executive compensation? Evidence from postwar tax reforms. *Journal of Public Economics*, *95*(11-12), 1425-1437.

Groysberg, B., Lee, L. E., & Nanda, A. (2008). Can they take it with them? The portability of star knowledge workers' performance. *Management Science*, *54*(7), 1213-1230.

Goldman, N. (2025). Arkansas Makes NIL Income Tax-Exempt. Will Other States Follow? *Forbes*, May 1, 2025.

Goldman, N. C., Henley, J. & Lewellen, C. (2025). Executive Compensation and Income Tax Rate Progression. North Carolina State University Working Paper.

Goldman, N. C., Lusch, S. J., & Stenzel, A. (2025). Having Your Cake and Eating It Too: Do Innovation Tax Incentives Increase Both the Quantity and Efficiency of Innovation? North Carolina State University Working Paper.

Goldman, N. C., Lusch, S. J., & Watson, L. (2025). Did State Tax Policy Influence State-Level COVID-19 Restrictions? *Contemporary Accounting Research,* Forthcoming.

Goldman, N. C., & Ozel, N. B. (2023). Executive compensation, individual-level tax rates, and insider trading profits. *Journal of Accounting and Economics*, *76*(1), 101574.

Goolsbee, A. (2000). What happens when you tax the rich? Evidence from executive compensation. *Journal of Political Economy*, *108*(2), 352-378.

Hanlon, M., Verdi, R., & Yost, B. (2021). CEO Tax Effects on Acquisition Structure and Value. *The Accounting Review*, *96*(2), 333-363.

Hall, B. J., & Liebman, J. B. (2000). The taxation of executive compensation. *Tax Policy and the Economy*, *14*, 1-44.

Hembre, E. (2022). State income taxes and team performance. *International Tax and Public Finance*, *29*(3), 704-725.

Holt, A. (2025). Arch Manning and Garrett Nussmeier call on their NFL family tree to help create hilarious commercial for Raising Cane's. *Yahoo!Sports*. July 7, 2025.

Hooks, K (2023). Utah football players receive trucks from NIL partnership. *ESPN.* October 5, 2023.

Jacob, M., & Vossebürger, R. (2022). The Role of Personal Income Taxes in Corporate Investment Decisions. *Journal of Corporate Finance*, *77*, 102275.

Jia, N., Molloy, R., Smith, C., & Wozniak, A. (2023). The Economics of Internal Migration: Advances and Policy Questions. *Journal of Economic Literature*, 61(1), 144-180.

Kaplan, S., Klebanov, M., & Sorensen, M. (2012). Which CEO Characteristics and Abilities Matter? *Journal of Finance*, *67*(3), 973-1007.

Kleven, H., Landais, C., Muñoz, M., & Stantcheva, S. (2020). Taxation and migration: Evidence and policy implications. *Journal of Economic Perspectives*, *34*(2), 119-142.

Kleven, H. J., Landais, C., & Saez, E. (2013). Taxation and international migration of superstars: Evidence from the European football market. *American Economic Review*, *103*(5), 1892-1924.

Koester, A, Shevlin, T., & Wangerin, D. (2017). The Role of Managerial Ability in Corporate Tax Avoidance. *Management Science*, 63, 10, 3285-3310.

Kubick, T. R., Lockhart, G. B., & Mauer, D.C. (2025). CEO tax burden and debt contracting. *Review of Accounting Studies*, *30*, 738-775.

Lake, R. (2022). What Is the Jock Tax? *SmartAsset*. November 8, 2022.

Ljungqvist, A., Zhang, L., & Zuo, L. (2017). Sharing risk with the government: How taxes affect corporate risk taking. *Journal of Accounting Research*, *55*(3), 669-707.

Margolin, M., Reimer, M., & Schaupp, D. (2025). The effects of real-time feedback on effort and performance: Evidence from a natural quasi-experiment. *Management Science*, *71*(4), 3558-3582.

Meer, J., & Rosen, H. S. (2009). The impact of athletic performance on alumni giving: An analysis of microdata. *Economics of Education Review*, *28*(3), 287-294.

Molloy, R., Smith, C., & Wozniak, A. (2011). Internal Migration in the United States. *Journal of Economic Perspectives*, 25(3), 173-196.

Moretti, E., & Wilson, D. J. (2017). The effect of state taxes on the geographical location of top earners: Evidence from star scientists. *American Economic Review*, *107*(7), 1858-1903.

Oster, E. (2019). Unobservable Selection and Coefficient Stability: Theory and Evidence. *Journal of Business & Economic Statistics*, *37*, 187–204

Parrish, G. (2024). Candid Coaches: What is the most amount of NIL money someone has asked you or your staff to pay for a player? *CBS Sports*. August 20, 2024.

Pope, D. G., & Pope, J. C. (2009). The impact of college sports success on the quantity and quality of student applications. *Southern Economic Journal*, *75*(3), 750-780.

Schultz, N. (2025). Brian Kelly sets LSU roster cost at 'just about $18 million'. *On3*. August 21, 2025.

Tiebout, C. M. (1956). A pure theory of local expenditures. *Journal of Political Economy*, *64*(5), 416-424.

Underwood, J. & Yost, B. (2025). CEO Taxes and Share Pledging. SSRN Working Paper.

van Zelderen, A. P., Dries, N., & Marescaux, E. (2025). The paradox of inclusion in elite workforce differentiation practices: Harnessing the genius effect. *Journal of Management Studies*, *62*(4), 1410-1449.

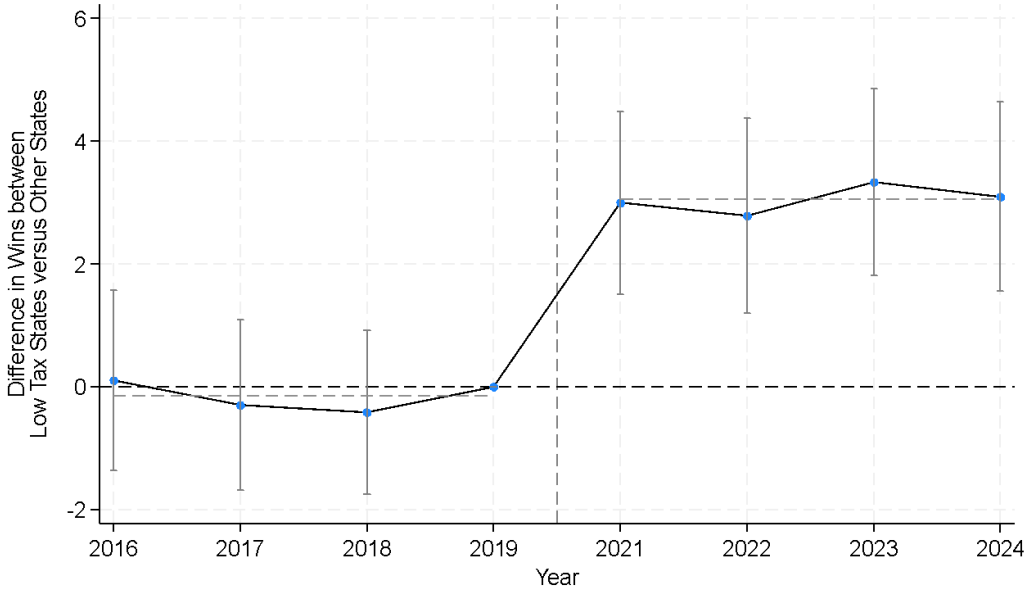
Whited, R. L., Swanquist, Q. T., Shipman, J. E., & Moon Jr, J. R. (2022). Out of control: The (over) use of controls in accounting research. *The Accounting Review*, *97*(3), 395-413.

Yost, B. (2018). Locked-In: The Effect of CEOs' Capital Gains Taxes on Corporate Risk-Taking. *The Accounting Review*, *93*(5), 325-358.

Appendix A: Variable definitions

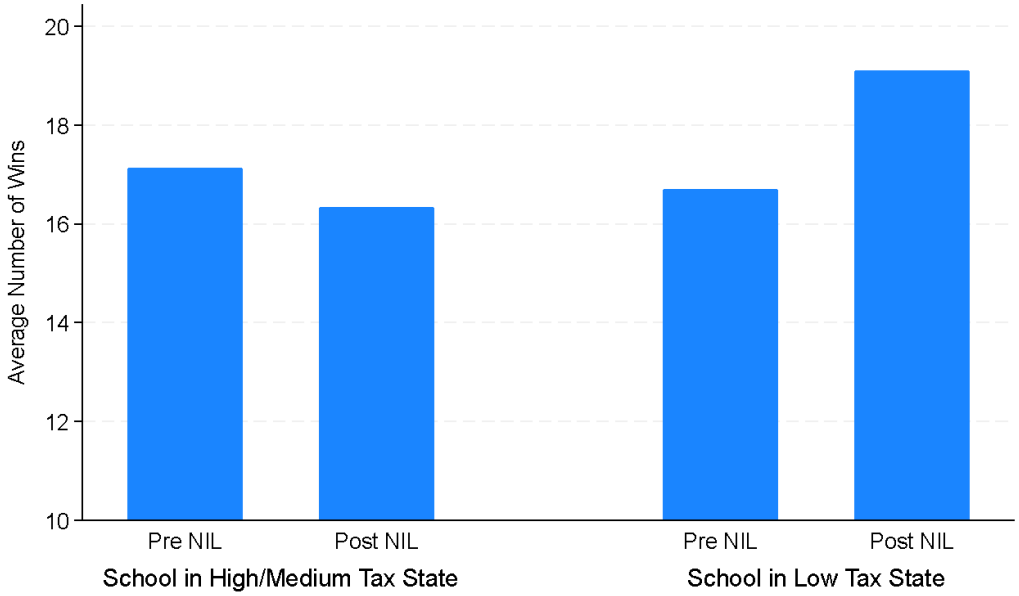
Variable Name	Description
H1 Variables	
Wins	The number of wins the team has in a given season. We obtain this data from the College Basketball Sports Reference website.
Margin of Victory	The average difference between own versus the opponent points per game
Simple Rating System	Average point differential, adjusted for the the strength of the schedule
Net Rating	Estimated point differential per 100 possessions
Sweet16	Indicator equal to one if the team made it to the round of the last 16, and 0 otherwise.
Elite8	Indicator equal to one if the team made it to the round of the last 8 teams, and 0 otherwise.
Final Four	indicator equal to one for the final four participants, and 0 otherwise.
Final	Indicator equal to one for the two final's participants, and 0 otherwise.
NCAA Champion	Indicator equal to one for the winner of the NCAA tournament, and 0 otherwise.
Post	Indicator variable equal to 1 for 2021 and afterwards, and 0 otherwise.
Low Tax	Indicator variable equal to 1 of the recruit commits to a school with a low-tax-rate, and 0 otherwise.
State Tax Rate$_{2019}$	The state's top statutory tax rate for individuals that the school resides in as of 2019.
AvgStar	The average star rating for recruits for the observation.
AvgRanking	The average ranking for recruits for the observation.
Any Top 200	Indicator variable equal to 1 if the school has at least one top 200 recruit in at least two years in our sample, and 0 otherwise.
PowerConf	Indicator variable equal to 1 if the school belongs to the ACC, Big Ten, Big 12, or SEC conferences, and 0 otherwise.
Mechanism Test	
Tax Rate Difference	Difference between the recruit's school's tax rate and home tax rate.
Ranking	The recruit's numerical ranking in the Top 200 for that year according to the 247Sports composite website. We subtract the ranking from 200 so that the top recruit has a value of 199 and the 200th rated recruit has a value of 0.
Star	The recruit's numerical star ranking, ranging from 3-star (lowest among those in the top 200) to 5-star (highest). We recalibrate this variable to be 2, 1, and 0 for 5, 4, and 3-star recruits, respectively. We obtain this data from the 247Sports composite website.
Center	Indicator variable equal to 1 if the recruit plays the center position, and 0 otherwise. We obtain this data from the 247Sports composite website.
PointGuard	Indicator variable equal to 1 if the recruit plays the point guard position, and 0 otherwise. We obtain this data from the 247Sports composite website.
SameState	Indicator variable equal to 1 if the recruit commits to a school in the same state for which he is from, and 0 otherwise. We obtain this data from the 247Sports composite website.
Additional Football Vars	
Offense Rating	The offensive component of the simplified rating system (OSRS)
Total Rating	The overall rating from the simplified rating system (OSRS)
Offense Score	The average number of points scored on offense
Net Score	The average number of points scored minus the average number of points by the opposing team.

Figure 1: Taxes and Wins, Parallel Trend Analysis



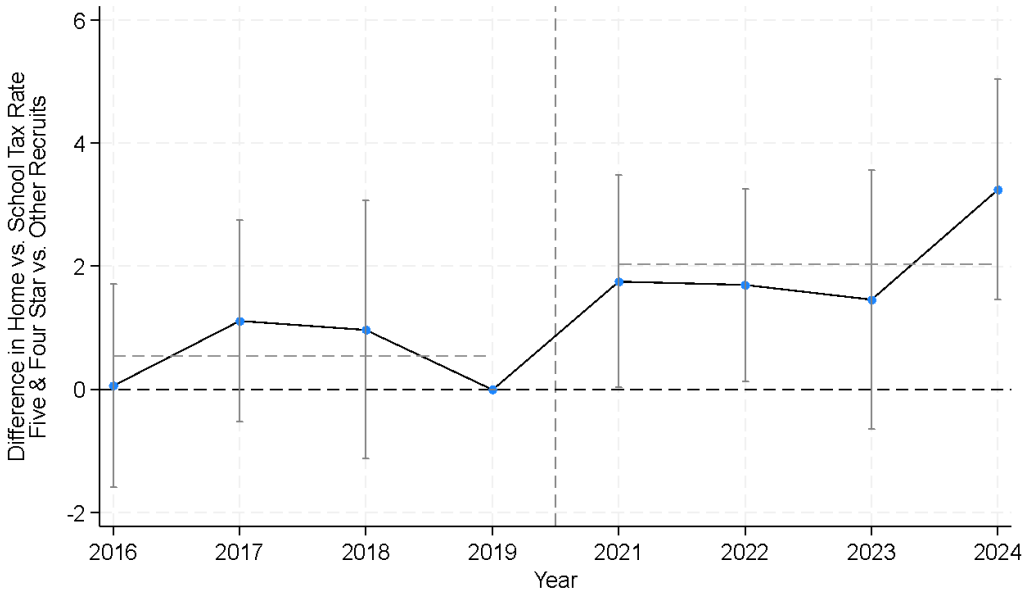
Notes: This figure presents the trends in the number of wins (*Wins*) around the onset of the NIL rules. We interact the indicator variable *Low Tax* with indicator variables for the respective years around the reform, with 2019 as the base year. All regressions include year fixed effects. We report 95% confidence intervals based on robust standard errors clustered at the school level.

Figure 2: Taxes and Wins, Univariate Tests



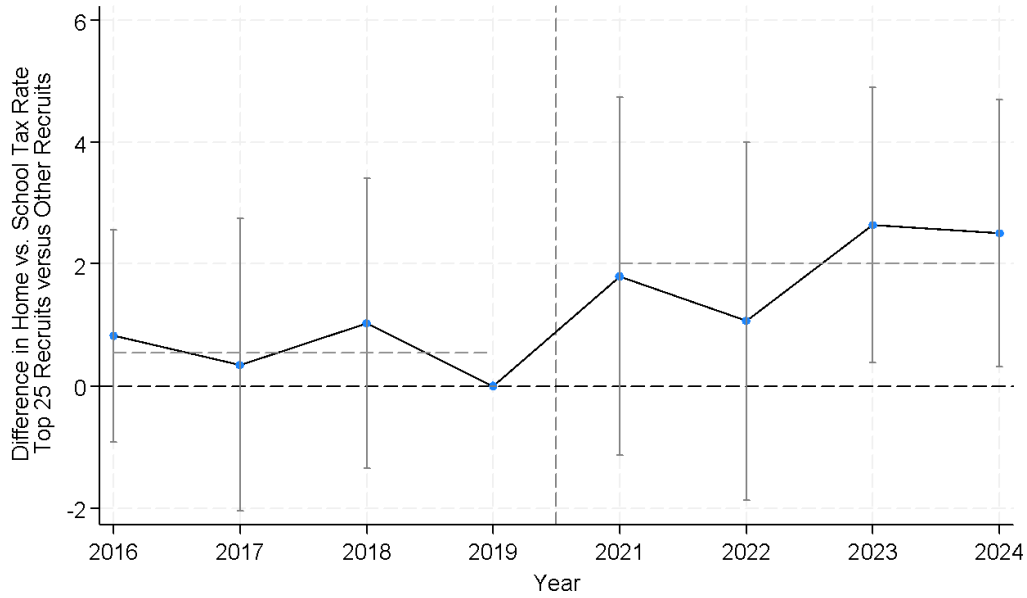
Notes: This figure presents the average number of wins (*Wins*) for the pre-NIL (2016–2019) and the post-NIL (2021–2024) periods for schools in high/medium tax states (*Low Tax* = 0) and for schools in low tax states (*Low Tax* = 1).

Figure 3: Taxes and Attracting 4 & 5 Star Recruits, Parallel Trend Analysis



Notes: This figure presents the trends in the difference between the school and the home state tax rate (*Tax Rate Difference*) around the onset of the NIL rules. We interact the indicator variable *Five & Four Star* with indicator variables for the respective years around the reform, with 2019 as the base year. All regressions include year fixed effects. We report 95% confidence intervals based on robust standard errors clustered at the school level.

Figure 4: Taxes and Attracting Top 25 Recruits, Parallel Trend Analysis



Notes: This figure presents the trends in the difference between the school and the home state tax rate (*Tax Rate Difference*) around the onset of the NIL rules. We interact the indicator variable *Top 25* with indicator variables for the respective years around the reform, with 2019 as the base year. All regressions include year fixed effects. We report 95% confidence intervals based on robust standard errors clustered at the school level.

Table 1: Sample Selection

355 Men's Basketball D1 Teams From 2016 to 2024	3,195
Less: Teams Observations During Transition Year	(355)
Less: Observations When Team Was Not D1	(59)
Total Observations	**2,781**

Note: Table 1 presents our sample selection procedures. Panel A presents the selection procedures for the talent attraction tests. Panel B presents the selection procedures for the organization performance tests.

Table 2: Descriptive Statistics

Variable	N	Mean	Std Dev	P25	Median	P75
Wins	2,781	17.1179	6.2191	13	17	21
Margin of Victory	2,736	1.2283	6.2375	-2.8400	1.5000	5.4350
Simple Rating System	2,736	-0.4578	10.2472	-8.0050	-1.4450	7.1150
Net Rating	2,736	0.1501	14.4702	-10.5550	-1.2950	10.6050
Sweet16	2,781	0.0460	0.2096	0	0	0
Elite8	2,781	0.0230	0.1500	0	0	0
Final Four	2,781	0.0115	0.1068	0	0	0
Final	2,781	0.0057	0.0756	0	0	0
NCAA Champion	2,781	0.0029	0.0536	0	0	0
Post	2,781	0.5063	0.5001	0	1	1
Low Tax	2,781	0.1711	0.3767	0	0	0
State Tax Rate$_{2019}$	2,781	5.4805	3.5247	3.75	5	6.99
AvgStar	2,781	0.1739	0.3970	0	0	0
AvgRanking	2,781	22.2036	45.2964	0	0	3
Any Top 200	2,781	0.2528	0.4347	0	0	1
PowerConf	2,781	0.1931	0.3948	0	0	0

Notes: Table 2 presents descriptive statistics for testing sample. See the Appendix for a full description of all variables.

Table 3: Onset of NIL Rules, Taxes, and Organization Performance

Dependent variable	(1) *Wins*	(2) *Wins*	(3) *Wins*	(4) *Wins*	(5) *Wins*	(6) *Wins*	(7) *Wins*	(8) *Wins*
Post	-0.7983***	–	–	–	1.9055***	–	–	–
	(0.3013)				(0.4871)			
Low Tax	-0.4342	-0.4343	–	–				
	(0.5448)	(0.5453)						
Post* × *Low Tax	**3.2014*** **	**3.2033*** **	**3.1948*** **	**3.1965*** **				
	(0.5347)	**(0.5352)**	**(0.5386)**	**(0.5389)**				
State Tax Rate$_{2019}$					-0.0118	-0.0116	–	–
					(0.0747)	(0.0748)		
***Post* × *State Tax Rate*$_{2019}$**					**-0.2925*** **	**-0.2927*** **	**-0.2953*** **	**-0.2964*** **
					(0.0685)	**(0.0685)**	**(0.0686)**	**(0.0688)**
PowerConf				1.5657***				2.3004***
				(0.3165)				(0.4027)
School FE	No	No	Yes	Yes	No	No	Yes	Yes
Year FE	No	Yes	Yes	Yes	No	Yes	Yes	Yes
Observations	2,781	2,781	2,781	2,781	2,751	2,751	2,751	2,751
R-squared	0.023	0.025	0.483	0.483	0.015	0.017	0.476	0.476

Notes: Table 3 presents our tests of H1. Our dependent variable is *Wins*, the number of wins for the team-year observation as collected by Sports Reference College Basketball. The variables of interest are *Post*, an indicator variable equal to 1 if the year of the observation is 2021 or later, and 0 otherwise, *Low Tax,* an indicator variable equal to 1 if the state in which the school resides is in a low-tax rate jurisdiction, and 0 otherwise. We use the tax status pre-NIL. *State Tax Rate*$_{2019}$ is the top statutory tax rate for the state in which the school is located in the year 2019. We include the control variable *PowerConf*, which is an indicator variable equal to 1 if the school is a member of a power conference (ACC, Big Ten, Big 12, or SEC), and 0 otherwise. ***, **, and * indicate statistical significance at the 1%, 5%, and 10% statistical levels using two-tailed p-values. See Appendix A for a full description of all variables.

Table 4: Onset of NIL Rules, Taxes, and Organization Performance, Alternative Outcomes

Dependent Variable	(1) *Margin of Victory*	(2) *Simple Rating System*	(3) *Net Rating*	(4) *Margin of Victory*	(5) *Simple Rating System*	(6) *Net Rating*
Post × Low Tax	2.3804***	2.8501***	4.2042***			
	(0.4921)	(0.5264)	(0.7542)			
Post × State Tax Rate$_{2019}$				-0.1511**	-0.1740**	-0.2555**
				(0.0649)	(0.0751)	(0.1076)
Controls	Yes	Yes	Yes	Yes	Yes	Yes
School FE	Yes	Yes	Yes	Yes	Yes	Yes
Year FE	Yes	Yes	Yes	Yes	Yes	Yes
Observations	2,735	2,735	2,735	2,714	2,714	2,714
R-squared	0.508	0.814	0.811	0.502	0.811	0.807

Notes: Table 4 presents our tests of H1 using alternative outcome variables. Our dependent variables are the *Margin of Victory*, the *Simple Rating System*, and the *Net Rating*. The variables of interest are *Post*, an indicator variable equal to 1 if the year of the observation is 2021 or later, and 0 otherwise, *Low Tax,* an indicator variable equal to 1 if the state in which the school resides is in a low-tax rate jurisdiction, and 0 otherwise. We use the tax status pre-NIL. *State Tax Rate$_{2019}$* is the top statutory tax rate for the state in which the school is located in the year 2019. We include the control variable *PowerConf*, which is an indicator variable equal to 1 if the school is a member of a power conference (ACC, Big Ten, Big 12, or SEC), and 0 otherwise. ***, **, and * indicate statistical significance at the 1%, 5%, and 10% statistical levels using two-tailed p-values. See Appendix A for a full description of all variables.

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Table 5: Onset of NIL Rules, Taxes, and Organization Performance, Placebo Test

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Dependent variable	*Wins Women*	*Wins Women*	*Wins Women*	*Wins Women*	*Wins Women*	*Wins Women*	*Wins Women*	*Wins Women*
Post	0.1205	–	–	–	0.0994	–	–	–
	(0.3931)				(0.5666)			
Low Tax	0.5421	0.5419	–	–				
	(0.6454)	(0.6461)						
Post × Low Tax	**0.3290**	**0.3315**	**0.2964**	**0.2974**				
	(0.6336)	**(0.6344)**	**(0.6377)**	**(0.6379)**				
State Tax Rate$_{2019}$					-0.1153	-0.1152	–	–
					(0.0881)	(0.0882)		
Post × State Tax Rate$_{2019}$					**0.0345**	**0.0344**	**0.0291**	**0.0287**
					(0.0882)	**(0.0882)**	**(0.0880)**	**(0.0882)**
PowerConf				0.9262***				0.6580
				(0.3282)				(0.4944)
School FE	No	No	Yes	Yes	No	No	Yes	Yes
Year FE	No	Yes	Yes	Yes	No	Yes	Yes	Yes
Observations	2,762	2,762	2,762	2,762	2,735	2,735	2,735	2,735
R-squared	0.003	0.006	0.513	0.513	0.003	0.006	0.514	0.514

Notes: Table 3 presents our tests of H1. Our dependent variable is *Wins Women*, the number of wins for the Women's basketball team-year observation as collected by Sports Reference College Basketball. The variables of interest are *Post*, an indicator variable equal to 1 if the year of the observation is 2021 or later, and 0 otherwise, *Low Tax,* an indicator variable equal to 1 if the state in which the school resides is in a low-tax rate jurisdiction, and 0 otherwise. We use the tax status pre-NIL. *State Tax Rate$_{2019}$* is the top statutory tax rate for the state in which the school is located in the year 2019. We include the control variable *PowerConf*, which is an indicator variable equal to 1 if the school is a member of a power conference (ACC, Big Ten, Big 12, or SEC), and 0 otherwise. ***, **, and * indicate statistical significance at the 1%, 5%, and 10% statistical levels using two-tailed p-values. See Appendix A for a full description of all variables.

Table 6: Onset of NIL Rules and Talent Attraction to Low Tax States

	(1)	(2)	(3)	(4)	(5)	(6)
DV =	*Low Tax*	*Low Tax*	*Low Tax*	*Tax Rate Difference*	*Tax Rate Difference*	*Tax Rate Difference*
Post	**0.0422***	**0.0358*****	**0.0339*****	**0.7691*****	**0.8168*****	**0.8151*****
	(0.0221)	**(0.0091)**	**(0.0086)**	**(0.2793)**	**(0.2504)**	**(0.2510)**
Ranking			0.0072			0.0088
			(0.0086)			(0.2126)
Star			-0.0007			0.0734
			(0.0134)			(0.3366)
Center			0.0060			-0.2736
			(0.0101)			(0.3292)
PointGuard			-0.0048			0.2375
			(0.0088)			(0.2795)
SameState			-0.0190**			-0.1122
			(0.0076)			(0.4211)
School FE	No	Yes	Yes	No	Yes	Yes
N	1,554	1,518	1,518	1,554	1,518	1,518
Adj. R-Square	0.003	0.893	0.893	0.008	0.299	0.301

Notes: Table 5 presents time trends of locating in low-tax-rate states testing equation (2). Columns (1) to (3) use the dependent variable is *Low Tax,* an indicator variable equal to 1 if the state in which the school resides is in a low-tax rate jurisdiction, and 0 otherwise. Columns (4) to (6) present our analysis where the dependent variable is *Tax Rate Difference,* the difference between the state income tax rate of their school's state and the recruit's state income tax rate of their home state. The variable of interest is *Post*, an indicator variable equal to 1 if the year of the observation is 2021 or later, and 0 otherwise. We include several control variables. *Ranking* is the recruit's 247Sports Composite Ranking for that year. Ranking is specifically 200 minus the recruit's ranking. *Star* is the recruits' star rating according to 247Sports Composite Ranking. As all recruits in our sample have a 5, 4, or 3-star rating, we reorganize *Star* as 2, 1, or 0, respectively. *Center* is an indicator variable equal to 1 if the observation plays the center position, and 0 otherwise. *PointGuard* is an indicator variable equal to 1 if the observation plays the point guard position, and 0 otherwise. *SameState* is an indicator variable equal to 1 if the observation's home state and school state are the same, and 0 otherwise. Columns (1) and (4) include no fixed effects. Columns (2), (3), (5), and (6) include school fixed effects. Robust standard errors clustered at the school level are reported in parentheses. ***, **, and * indicate statistical significance at the 1%, 5%, and 10% statistical levels using two-tailed p-values. See Appendix A for a full description of all variables.

Table 7: Onset of NIL Rules and Talent Attraction of Top Talents to Low Tax States

Panel A: Using Recruiting Ranks						
	(1)	(2)	(3)	(4)	(5)	(6)
Dependent Variable	*Low Tax*	*Tax Rate Difference*	*Low Tax*	*Tax Rate Difference*	*Low Tax*	*Tax Rate Difference*
Split Variable	Top 25 Recruits		Top 50 Recruits		Continuous Rank (Standardized)	
Post × Top Recruits	0.0686*	1.7543***	0.0407**	1.2944***	0.0279***	0.5746***
	(0.0353)	(0.6449)	(0.0192)	(0.4325)	(0.0081)	(0.1989)
Controls	Yes	Yes	Yes	Yes	Yes	Yes
School FE	Yes	Yes	Yes	Yes	Yes	Yes
Year FE	Yes	Yes	Yes	Yes	Yes	Yes
Observations	1,518	1,518	1,518	1,518	1,518	1,518
R-squared	0.895	0.314	0.894	0.314	0.895	0.313
Panel B: Using Star Ratings to Proxy for Top Recruits						
	(1)	(2)	(3)	(4)	(5)	(6)
Dependent Variable	*Low Tax*	*Tax Rate Difference*	*Low Tax*	*Tax Rate Difference*	*Low Tax*	*Tax Rate Difference*
Split Variable	Four and Five Star		Five Star		Continuous Star Rating	
Post × Top Recruits	0.0387***	0.7830*	0.0632*	2.0081***	0.0388***	0.9863***
	(0.0118)	(0.4606)	(0.0335)	(0.6664)	(0.0133)	(0.3277)
Controls	Yes	Yes	Yes	Yes	Yes	Yes
School FE	Yes	Yes	Yes	Yes	Yes	Yes
Year FE	Yes	Yes	Yes	Yes	Yes	Yes
Observations	1,518	1,518	1,518	1,518	1,518	1,518
R-squared	0.895	0.314	0.894	0.314	0.895	0.313

Notes: Table 6 presents our tests for equation (3). Odd numbered columns present our analysis when the dependent variable is *Low Tax,* an indicator variable equal to 1 if the state in which the school resides is in a low-tax rate jurisdiction, and 0 otherwise. Even numbered columns present our analysis when the dependent variable is *Tax Rate Difference,* the difference between the state income tax rate of their school's state and the recruit's state income tax rate of their home state. The variable of interest is *Post*, an indicator variable equal to 1 if the year of the observation is 2021 or later, and 0 otherwise, interacted with a split variable. In Panel A, we define the split variable based on the ranking in the recruit's 247Sports Composite Ranking. Columns 1 and 2 use a top 25 indicator, columns 3 and 4 a top 50 indicator, and columns 5 and 6 the inverted rank (so that higher values indicate a better rank), which we standardize to have a mean of 0 and a standard deviation of 1. In Panel B, we use *Star,* the recruits star rating according to 247Sports Composite Ranking. Columns 1 and 2 use an indicator for 4 and 5 star recruits, columns 3 and 4 an indicator for five star recruits, and columns 5 and 6 the continuous star rating. We include control variables from equation (1) in all regressions. Robust standard errors clustered at the school level are reported in parentheses. ***, **, and * indicate statistical significance at the 1%, 5%, and 10% statistical levels using two-tailed p-values. See Appendix A for a full description of all variables.

Table 8: Onset of NIL Rules, Taxes and Organization Performance, Heterogeneity Tests

DV =	(1) *Wins*	(2) *Wins*	(3) *Wins*	(4) *Wins*
Post × Low Tax	2.3517***		2.5300***	
	(0.6430)		(0.6239)	
Post × SchoolStateTaxRate$_{2019}$		-0.2139***		-0.2153***
		(0.0817)		(0.0771)
Post × Low Tax × Any Top 200	**3.1305*** **			
	(1.1349)			
Post × State Tax Rate$_{2019}$ × Any Top 200		**-0.3342** **		
		(0.1452)		
Post × Low Tax × PowerConf			**3.1761*** **	
			(1.1531)	
Post × State Tax Rate$_{2019}$ × PowerConf				**-0.4718*** **
				(0.1581)
Post × Any Top 200	-1.6235**	1.0384		
	(0.6436)	(1.0406)		
Post × PowerConf			-1.2553*	2.3113**
			(0.6619)	(1.0399)
Controls	Yes	Yes	Yes	Yes
School FE	Yes	Yes	Yes	Yes
Year FE	Yes	Yes	Yes	Yes
N	2,751	2,751	2,781	2,751
Adj. R-Squared	0.488	0.479	0.486	0.479

Notes: Table 7 presents our cross-sectional tests. Our dependent variable is *Wins*, the number of wins for the team-year observation as collected by Sports Reference College Basketball. The variables of interest are *Post*, an indicator variable equal to 1 if the year of the observation is 2021 or later, and 0 otherwise, *Low Tax,* an indicator variable equal to 1 if the state in which the school resides is in a low-tax rate jurisdiction, and 0 otherwise. We use the tax status pre-NIL. *State Tax Rate$_{2019}$* is the top statutory tax rate for the state in which the school is located in the year 2019. We also consider cross-sectional variation based on prior recruiting. To this end, we define an indicator *Any Top 200,* which equals 1 if the school had at least two years with a top 200 recruit over the period 2016–2019. We also include interactions with *PowerConf* in columns (3) and (4), which is an indicator variable equal to 1 if the school is a member of a power conference (ACC, Big Ten, Big 12, or SEC), and 0 otherwise. We include all two-way and three-way interactions; all untabulated two-way interactions and main effects are absorbed by the fixed effects. Our coefficients of interest are the three-way interaction terms. We include controls as in equation (1). Standard errors are clustered at the school level (reported in parentheses). ***, **, and * indicate statistical significance at the 1%, 5%, and 10% statistical levels using two-tailed p-values. See the Appendix for a full description of all variables.

Table 9: Onset of NIL Rules, Taxes, and Tournament Success

Dependent Variable	(1) *Sweet16*	(2) *Sweet16*	(3) *Elite8*	(4) *Elite8*	(5) *Final Four*	(6) *Final Four*	(7) *Final*	(8) *Final*	(9) *NCAA Champion*	(10) *NCAA Champion*
Post × Low Tax	0.0197	-0.0173**	0.0197	-0.0026	0.0132	0.0016	-0.0000	0.0016	-0.0000	-0.0000
	(0.0175)	(0.0077)	(0.0130)	(0.0054)	(0.0082)	(0.0045)	(0.0060)	(0.0049)	(0.0047)	(0.0037)
Post × Low Tax × PowerConf		0.1909***		0.1116**		0.0578*		-0.0051		0.0000
		(0.0728)		(0.0555)		(0.0338)		(0.0220)		(0.0166)
School FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Year FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Observations	2,781	2,781	2,781	2,781	2,781	2,781	2,781	2,781	2,781	2,781
R-squared	0.394	0.405	0.254	0.260	0.194	0.197	0.207	0.207	0.188	0.188

Notes: Table 8 presents results on success in the NCAA tournament. Our dependent variables are *Sweet16*, an indicator if the team made it to the round of the last 16, *Elite8*, an indicator equal to one if the team made it to the round of the last eight teams, *Final Four*, an indicator equal to one for the final four participants, *Final*, which is an indicator for the final's participants, and *NCAA Champion* for the winner of the NCAA tournament. We include all two-way and main effects of the triple difference variables (all untabulated). We include controls as in equation (1). Standard errors are clustered at the school level (reported in parentheses). ***, **, and * indicate statistical significance at the 1%, 5%, and 10% statistical levels using two-tailed p-values. See the Appendix for a full description of all variables.

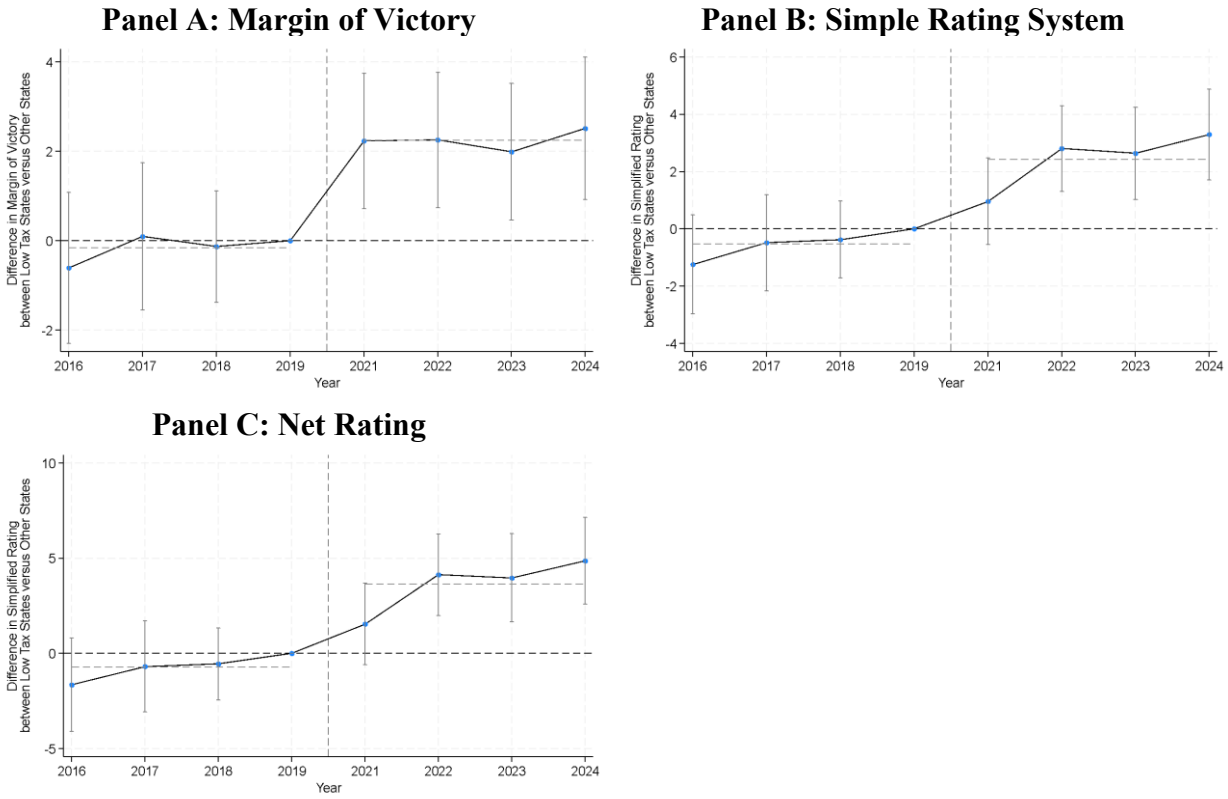
Table 10: Onset of NIL Rules, Taxes, and Success in College Football

Panel A: Indicator variable as tax measure						
Dependent Variable	(1) *Wins*	(2) *Rank*	(3) *Offense Rating*	(4) *Total Rating*	(5) *Offense Score*	(6) *Net Score*
Post × *Low Tax*	0.3472	10.8458**	2.0490***	2.4176**	2.6791***	3.3586**
	(0.4041)	(4.3147)	(0.7364)	(1.0964)	(0.9104)	(1.4569)
School FE	Yes	Yes	Yes	Yes	Yes	Yes
Year FE	Yes	Yes	Yes	Yes	Yes	Yes
Observations	1,019	1,019	1,019	1,019	1,019	1,019
R-squared	0.427	0.621	0.463	0.646	0.572	0.688
Panel B: Continuous variable as tax measure						
Dependent Variable	(1) *Wins*	(2) *Rank*	(3) *Offense Rating*	(4) *Total Rating*	(5) *Offense Score*	(6) *Net Score*
Post × *State Tax Rate*$_{2019}$	-0.1128*	-1.6409**	-0.2884**	-0.4171**	-0.3764***	-0.5006**
	(0.0626)	(0.7045)	(0.1138)	(0.1754)	(0.1345)	(0.2305)
School FE	Yes	Yes	Yes	Yes	Yes	Yes
Year FE	Yes	Yes	Yes	Yes	Yes	Yes
Observations	1,012	1,012	1,012	1,012	1,012	1,012
R-squared	0.430	0.620	0.460	0.647	0.569	0.687

Notes: Table 9 presents our tests of H1 using the college football setting. We use six different dependent variables. First, we use the number of wins (*Wins*). Second, we use the team's rank at the end of the season (*Rank*). We invert *Rank* so that higher values indicate a better rank. Third, we use the *Offense Rating*, which is the offense component of the simplified rating system (also called OSRS). This measure incorporates the points scored, while accounting for the strength of the schedule. Fourth, we use the *Total Rating*, which is the overall simplified rating system. Fifth, we use the *Offense Score*, which is the average number of points scored on offense. Finally, we use the *Net Score*, which is the average number of points scored minus the average number of points by the opposing team. The variables of interest are *Post*, an indicator variable equal to 1 if the year of the observation is 2021 or later, and 0 otherwise, *Low Tax,* an indicator variable equal to 1 if the state in which the school resides is in a low-tax rate jurisdiction, and 0 otherwise. We use the tax status pre-NIL. *State Tax Rate*$_{2019}$ is the top statutory tax rate for the state in which the school is located in the year 2019. All regressions include school fixed effects and year fixed effects. ***, **, and * indicate statistical significance at the 1%, 5%, and 10% statistical levels using two-tailed p-values. See Appendix A for a full description of all variables.

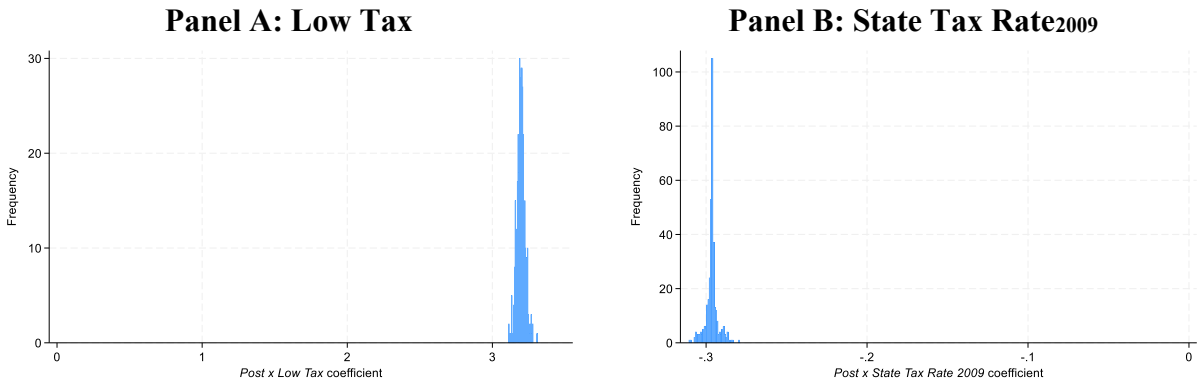
Online Appendix

Figure OA.1: Taxes and Organizational Performance, Parallel Trend Analysis of Alternative Dependent variables



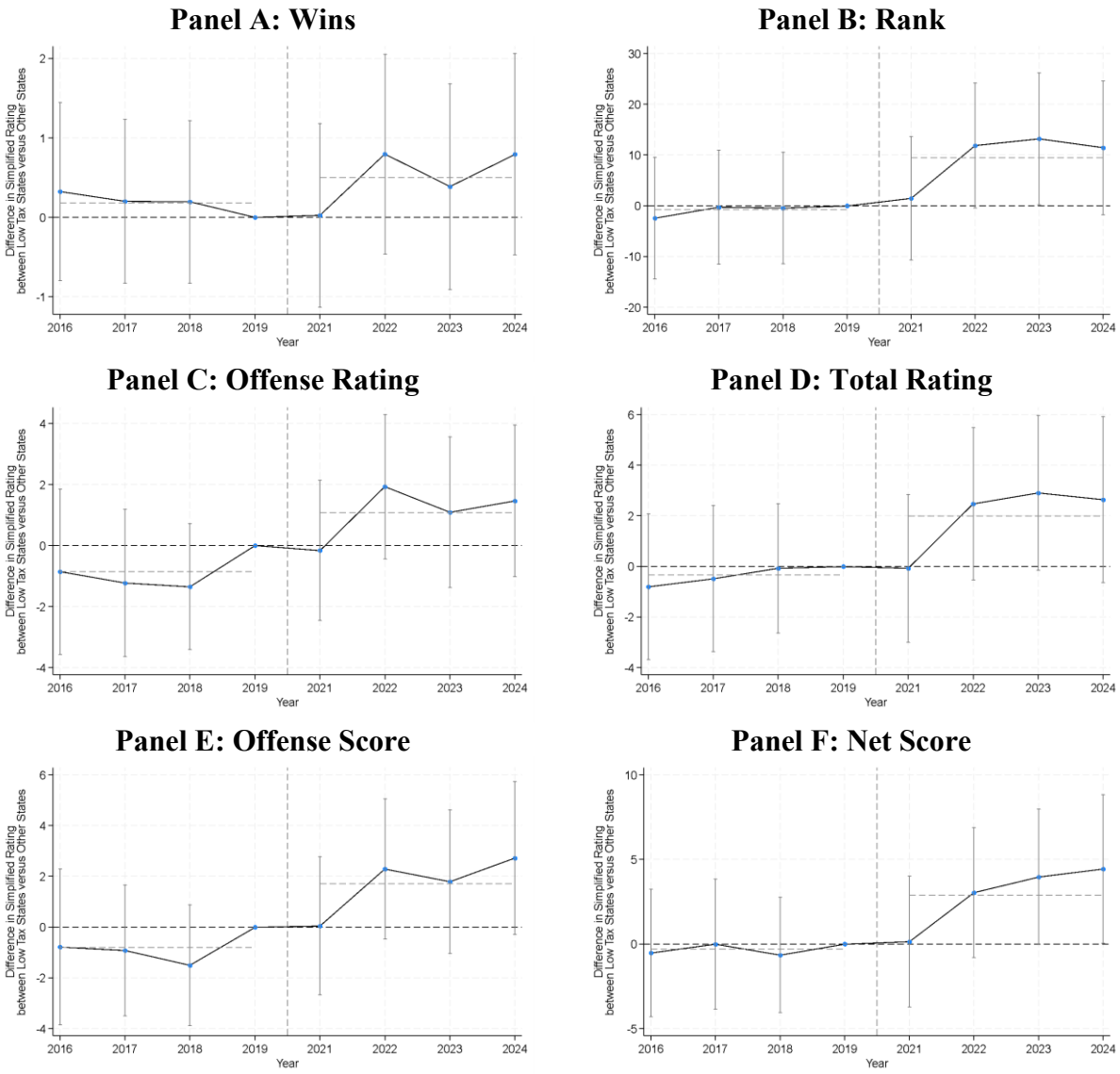
Notes: This figure presents the trends in the *Margin of Victory* (Panel A), the *Simple Rating System* (Panel B), and the *Net Rating* (Panel C) around the onset of the NIL rules. We interact the indicator variable *Low Tax* with indicator variables for the respective years around the reform, with 2019 as the base year. All regressions include year fixed effects. We report 95% confidence intervals based on robust standard errors clustered at the school level.

Figure OA.2: Taxes and Organizational Performance, Exclusion of Single Schools



Notes: This figure presents histograms of the distribution of 354 coefficients on *Post* ✕ *Low Tax* (Panel A) and the *Post* × *State Tax Rate*$_{2009}$ (Panel B). We obtain these coefficients from rerunning our main model from Equation (1) excluding one of the 354 schools at a time.

Figure OA.3 Taxes and Performance, Parallel Trend in the College Football Setting



Notes: This figure presents the trends in the *Wins* (Panel A), the *Rank* (Panel B), the *Offense Rating* (Panel C), the *Total Rating* (Panel D), the *Offense Score* (Panel E), and the *Net Score* (Panel F) around the onset of the NIL rules using the college football setting. We interact the indicator variable *Low Tax* with indicator variables for the respective years around the reform, with 2019 as the base year. All regressions include year fixed effects. We report 95% confidence intervals based on robust standard errors clustered at the school level.

Table OA.1. Robustness to Using Count Models

	(1)	(2)	(3)	(4)	(5)	(6)
Dependent variable	*ln(Wins)*	*ln(Wins)*	*Wins*	*Wins*	*Wins*	*Wins*
Post × Low Tax	0.2134***		0.1816***		0.1816***	
	(0.0363)		(0.0306)		(0.0308)	
Post × State Tax Rate$_{2019}$		-0.0191***		-0.0172***		-0.0173***
		(0.0047)		(0.0040)		(0.0040)
Controls	Yes	Yes	Yes	Yes	Yes	Yes
Model	OLS	OLS	Poisson	Poisson	Negative Binomial	Negative Binomial
School FE	Yes	Yes	Yes	Yes	Yes	Yes
Year FE	Yes	Yes	Yes	Yes	Yes	Yes
Observations	2,781	2,751	2,781	2,751	2,781	2,751
R-squared	0.447	0.440	n.a.	n.a.	n.a.	n.a.

Notes: This table replicates columns 4 and 8 of Table 3, but uses alternative approaches to deal with the issue of using OLS for a count variable. Columns 1 and 2 use the natural logarithm of *Wins* as the dependent variable. In columns 3 to 6, our dependent variable is *Wins*, the number of wins for the team-year observation as collected by Sports Reference College Basketball. We use a Poisson model in columns 3 and 4 and a negative binomial model in columns 5 and 6. The variables of interest are *Post*, an indicator variable equal to 1 if the year of the observation is 2021 or later, and 0 otherwise, *Low Tax,* an indicator variable equal to 1 if the state in which the school resides is in a low-tax rate jurisdiction, and 0 otherwise. We use the tax status pre-NIL. *State Tax Rate$_{2019}$* is the top statutory tax rate for the state in which the school is located in the year 2019. We include the control variables from equation (1). ***, **, and * indicate statistical significance at the 1%, 5%, and 10% statistical levels using two-tailed p-values. See Appendix A for a full description of all variables.

Table OA.2. Robustness to Using a *No Tax* Indicator

	(1)	(2)	(3)	(4)
Dependent variable	*Wins*	*Wins*	*Wins*	*Wins*
Post	-0.2165	–	–	–
	(0.2777)			
No Tax	0.0095	0.0083	–	–
	(0.6832)	(0.6840)		
Post × No Tax	**2.6789*** **	**2.6815*** **	**2.6744*** **	**2.6755*** **
	(0.7074)	**(0.7081)**	**(0.7134)**	**(0.7136)**
Controls	No	No	No	Yes
School FE	No	No	Yes	Yes
Year FE	No	Yes	Yes	Yes
Observations	2,781	2,781	2,781	2,781
R-squared	0.014	0.016	0.475	0.475

Notes: This table replicates columns 1, 4, 5, and 8 of Table 6, but uses standard errors clustered at the state-level. Our dependent variable is *Wins*, the number of wins for the team-year observation as collected by Sports Reference College Basketball. The variables of interest are *Post*, an indicator variable equal to 1 if the year of the observation is 2021 or later, and 0 otherwise, *Low Tax,* an indicator variable equal to 1 if the state in which the school resides is in a low-tax rate jurisdiction, and 0 otherwise. We use the tax status pre-NIL. *State Tax Rate$_{2019}$* is the top statutory tax rate for the state in which the school is located in the year 2019. We include the control variables from equation (1). ***, **, and * indicate statistical significance at the 1%, 5%, and 10% statistical levels using two-tailed p-values. See Appendix A for a full description of all variables.

Table OA.3. Robustness to Clustering at the State-Level

	(1)	(2)	(3)	(4)
Dependent variable	*Wins*	*Wins*	*Wins*	*Wins*
Post	-0.7983***	–	1.9055***	–
	(0.2619)		(0.4917)	
Low Tax	-0.4342	–		
	(0.5365)			
Post* × *Low Tax	**3.2014*** **	**3.1965*** **		
	(0.4626)	**(0.4712)**		
State Tax Rate$_{2019}$			-0.0118	–
			(0.0589)	
***Post* × *State Tax Rate*$_{2019}$**			**-0.2925*** **	**-0.2964*** **
			(0.0584)	**(0.0580)**
Controls	No	Yes	No	Yes
School FE	No	Yes	No	Yes
Year FE	No	Yes	No	Yes
Observations	2,781	2,781	2,751	2,751
R-squared	0.023	0.483	0.015	0.476

Notes: This table replicates columns 1, 4, 5, and 8 of Table 6, but uses standard errors clustered at the state-level. Our dependent variable is *Wins*, the number of wins for the team-year observation as collected by Sports Reference College Basketball. The variables of interest are *Post*, an indicator variable equal to 1 if the year of the observation is 2021 or later, and 0 otherwise, *Low Tax,* an indicator variable equal to 1 if the state in which the school resides is in a low-tax rate jurisdiction, and 0 otherwise. We use the tax status pre-NIL. *State Tax Rate*$_{2019}$ is the top statutory tax rate for the state in which the school is located in the year 2019. We include the control variables from equation (1). ***, **, and * indicate statistical significance at the 1%, 5%, and 10% statistical levels using two-tailed p-values. See Appendix A for a full description of all variables.

Table OA.4: Univariate Analyses

Panel A: Univariate Test of *Wins*				
	Post = 0	*Post* = 1	Diff	t-Stat
Low Tax Rate School	16.704	19.107	2.403 ***	*[5.83]*
Higher Tax Rate School	17.138	16.340	-0.798***	*[2.82]*
Diff	-0.434	2.767***	**3.201*** **	***[6.40]***
[t-stat]	*[1.23]*	*[7.78]*		
Panel B: Univariate Test of Ranking				
	Post = 0	*Post* = 1	Diff	t-Stat
Low Tax Rate School	108.368	93.545	-14.823**	*[2.36]*
Higher Tax Rate School	97.860	102.766	4.905	*[1.56]*
Diff	10.508**	-9.221*	**-19.729*** **	***[2.78]***
[t-stat]	*[1.98]*	*[1.95]*		
Panel C: Univariate Test of *Star* Rating				
	Post = 0	*Post* = 1	Diff	t-Stat
Low Tax Rate School	3.707	3.910	0.209***	*[2.94]*
Higher Tax Rate School	3.816	3.791	-0.017	*[0.46]*
Diff	-0.114*	0.111**	**0.226*** **	***[2.83]***
[t-stat]	*[1.92]*	*[2.10]*		

Notes: This table presents univariate tests of our hypothesis H1 and the mechanism. Panel A presents our univariate test of H1 (*Wins*). *Wins* is the number of wins for the team-year observation as collected by Sports Reference College Basketball. Panels B and C present our univariate tests of the mechanism behind H1 using *Ranking* and *Star*, respectively. *Ranking* is the recruit's 247Sports Composite Ranking for that year. *Ranking* is specifically 200 minus the recruit's ranking. *Star* is the recruits star rating according to 247Sports Composite Ranking. All recruits in our sample have a 5, 4, or 3 star rating. The tests are two-way sorted on *LowTax* and *Post*. *LowTax* is an indicator variable equal to 1 if the state in which the school resides is in a low-tax rate jurisdiction, and 0 otherwise. *Post* is an indicator variable equal to 1 if the year of the observation is 2021 or later, and 0 otherwise. ***, **, and * indicate statistical significance at the 1%, 5%, and 10% statistical levels using two-tailed p-values. See the Appendix for a full description of all variables.

Table OA.5. Robustness to Including the Big East Conference into the *PowerConf* Definition

	(1)	(2)	(3)	(4)	(5)	(6)	(7)
Dependent variable	*Wins*	*Wins*	*Sweet16*	*Elite8*	*Final Four*	*Final*	*NCAA Champion*
Post × *State Tax Rate*$_{2019}$	-0.2412***						
	(0.0771)						
Post × *State Tax Rate*$_{2019}$ × *Power5*	-0.2957*						
	(0.1629)						
Post × *Low Tax*		2.4847***	-0.0100*	-0.0015	0.0029	0.0015	-0.0000
		(0.6271)	(0.0059)	(0.0043)	(0.0035)	(0.0032)	(0.0000)
Post × *Low Tax* × *Power5*		3.1114***	0.1302*	0.0929*	0.0452	-0.0063	0.0000
		(1.1600)	(0.0728)	(0.0542)	(0.0337)	(0.0242)	(0.0205)
Controls	Yes	Yes	Yes	Yes	Yes	Yes	Yes
School FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Year FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Observations	2,751	2,781	2,781	2,781	2,781	2,781	2,781
R-squared	0.478	0.486	0.389	0.250	0.189	0.199	0.185

Notes: This table replicates the results on *PowerConf*, but uses a broader definition, *Power5*, to also include the Big East conference in the definition. Our dependent variable is *Wins*, the number of wins for the team-year observation as collected by Sports Reference College Basketball in columns 1 and 2. Our other dependent variables are *Sweet 16*, an indicator if the team made it to the round of the last 16, *Elite 8*, an indicator equal to 1 if the team made it to the round of the last 8 teams, *Final Four*, an indicator equal to one for the final four participants, *Final*, which is an indicator for the final's participants, and *NCAA Champion* for the winner of the NCAA tournament. The variables of interest are *Post*, an indicator variable equal to 1 if the year of the observation is 2021 or later, and 0 otherwise, *Low Tax,* an indicator variable equal to 1 if the state in which the school resides is in a low-tax rate jurisdiction, and 0 otherwise. We use the tax status pre-NIL. *State Tax Rate*$_{2019}$ is the top statutory tax rate for the state in which the school is located in the year 2019. We include the control variables from equation (1). ***, **, and * indicate statistical significance at the 1%, 5%, and 10% statistical levels using two-tailed p-values. See Appendix A for a full description of all variables.

Table OA.6: Onset of NIL Rules, Taxes, and Organization Performance, State-Level Tests

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Dependent variable	*AvgWins*	*AvgWins*	*AvgWins*	*AvgWins*	*AvgWins*	*AvgWins*	*AvgWins*	*AvgWins*
Post	-0.7453	–	–	–	2.1273***	–	–	–
	(0.4500)				(0.5944)			
Low Tax	-0.7241	-0.7241	–	–				
	(0.9205)	(0.9275)						
Post × Low Tax	**3.6254*** **	**3.6254*** **	**3.6254*** **	**3.5518*** **				
	(0.5876)	**(0.5921)**	**(0.5913)**	**(0.6030)**				
State Tax Rate$_{2019}$					0.0444	0.0444	–	–
					(0.1308)	(0.1318)		
Post × State Tax Rate$_{2019}$					**-0.3299*** **	**-0.3299*** **	**-0.3299*** **	**-0.3101*** **
					(0.0931)	**(0.0938)**	**(0.0937)**	**(0.0958)**
AvgPowerConf				4.5471***				4.4091***
				(1.1949)				(1.5588)
State FE	No	No	Yes	Yes	No	No	Yes	Yes
Year FE	No	Yes	Yes	Yes	No	Yes	Yes	Yes
Observations	400	400	400	400	400	400	400	400
R-squared	0.067	0.071	0.627	0.628	0.029	0.032	0.596	0.598

Notes: This table presents our tests of H1 at the state level. Our dependent variable is Avg*Wins*, the average number of wins (*Wins*) by the teams in a state. The variables of interest are *Post*, an indicator variable equal to 1 if the year of the observation is 2021 or later, and 0 otherwise, *Low Tax,* an indicator variable equal to 1 if the state in which the school resides is in a low-tax rate jurisdiction, and 0 otherwise. We use the tax status pre-NIL. *State Tax Rate*$_{2019}$ is the top statutory tax rate for the state in which the school is located in the year 2019. We include the control variable *AvgPowerConf*, which is average number of schools in a strate that are member of a power conference (ACC, Big Ten, Big 12, or SEC), and 0 otherwise. ***, **, and * indicate statistical significance at the 1%, 5%, and 10% statistical levels using two-tailed p-values. See Appendix A for a full description of all variables.