

## Executive Summary

Following the publication of a Bloomberg article about the heavy use of debt at many major universities' athletic departments and potential for negative repercussions on the academic sides at these institutions, the Administration and Communications subcommittee of the Athletic Council was charged with analyzing the trend in Athletic debt levels and the potential ramifications for the University as a whole.

The main findings include:

- The risk of cross-subsidization is limited at Clemson as each type of debt (General Obligation Bonds, Revenue Bonds, and Athletic Facilities Bonds) are supported by distinct and separate revenue sources. While student tuition payments may be used for General Obligation Bonds, these funds may not be used to make either interest or principle payments for other types of debt.
- Athletic Facilities Bonds increased from \$30M in 2011 to \$138M in 2018. At the same time, the total allocated debt for the University increased from \$171.8M in 2011 to \$632.3M in 2018. However, the proportion of the University's total debt allocated to Athletics only increased from 17.5% in 2011 to 21.8% in 2018.
- The State of South Carolina has a statutory cap of \$200M for Athletic Facilities Bonds for Clemson.
- While debt coverage ratios for Athletic Facilities Bonds have decreased to 2.4 in 2018 (from the peak of 5.2 in 2013), Moody's notes that the ratios are still above its target threshold of 1.5.
- As of the latest ratings reports received by the subcommittee, the debt for the University as a whole was rated Aa as was the debt specific to Athletic Facilities Bonds. Aaa represents the highest quality bonds followed by Aa, A, and Baa as "investment-grade" while Ba, B and lower ratings are all considered to be "junk grade". Therefore, even if the debt ratings were to drop two grades to Baa, the University's debt would maintain its investment grade status. However, the Outlook for the ratings was Stable.
- All capital projects are reviewed by the President's Executive Leadership Team with support from the Chief Financial Officer's staff. Often, proposals are funded with a mix of both cash and debt rather than solely with debt. Beyond the University, there are several additional regulatory approval steps that are required.

The State of South Carolina and Clemson University have put into place regulations, policies, and procedures that require that both the Revenue Bonds and Athletic Facilities Bonds be serviced solely with their own revenues. Without the cross-subsidization, each project to be funded must show that it will be able to generate the revenues needed to service its own debt. With multiple levels of review, projects with higher levels of risk and uncertainty are less likely to be funded with as much debt financing.

## Introduction

In January 2017, in his Bloomberg article, "College Football's Top Teams Are Built on Crippling Debt", Mr. Novy-Williams discusses the extremely high levels of debt at some well-known universities, including Texas A&M, Washington, Illinois, Georgia Tech, Alabama, Texas, Oregon, and Michigan, all of which bore athletic debt loads of \$200M or more.<sup>1</sup>

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<sup>1</sup> The article cites data from the Knight Commission. This data is publicly available at <http://spendingdatabase.knightcommission.org>.

However, all of these are dwarfed by the \$445M in athletic debt for the University of California at Berkeley. According to the article, the athletic department at Berkeley had a \$22M deficit in the year prior to the article. \$18M in annual debt service (principal and interest) was a big factor. That amount will increase over time until it reaches its highest point, \$37M in annual debt service, in 2039. Meanwhile, the original debt maturity stretches out to 2112, although administrators at Berkeley are hopeful that the debt will be fully repaid by 2053. However, those hopes rely on continued revenues streams from tickets and media rights, sources that may not be reliable in the turbulent world of college athletics.

The link to why Clemson faculty might care comes towards the end of the article, where Mr. Novy-Williams quotes a Berkeley faculty member:

“Not only does athletics have a problem on account of the debt service, but it’s also taking up a huge chunk of our available borrowing,” said physics professor Bob Jacobsen, a faculty representative for athletics. Meanwhile, he added, professors are losing research opportunities due to funding concerns.

## Debt Analysis

Financial analysts working within a company or contemplating an equity investment in a business typically evaluate the firm’s leverage by examining solvency ratios, such as the debt-to-equity ratio, that compares the mix of financing sources used by the firm. However, for a university, like most non-profit organizations, the concept of equity is not relevant so this approach is not appropriate.

Credit analysts, who are typically employed by lenders, look at how well a borrower generates revenues, income, or cash flow that can be used to make the required payments. Examples of these coverage ratios would include “cash and investments to debt” or “total debt to cash flow”. Different lenders or rating agencies may have their own preferred metric that they feel best measures the risk of the borrower.<sup>2</sup> In this report, we will use coverage ratios that compare the amount of pledged revenue that is available to service debt to the annual payments, including both principal and interest.

Typically, coverage ratios and other measures of financial leverage are just part of what the rating agencies look at when evaluating a borrower. For universities, leverage measures account for 20% of the Moody’s ratings. Standard and Poor’s bases 35% of an institution’s financial profile on leverage but then combines the financial profile with the enterprise profile so that the total weight is similar to Moody’s.

## Issues at Berkeley

The main question which this study attempts to address is whether a situation similar to UC Berkeley’s, where financing arrangements made by the athletic department, could have a negative impact on the academic

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<sup>2</sup> These metrics may involve adjustments to the figures in the borrower’s financial statements. For example, Standard and Poor’s uses Total Adjusted Operating Revenue, which is defined as “unrestricted revenue less realized and unrealized gains/losses and financial aid.” Often, these definitions are not clear enough to allow an outsider to replicate the work since this would reduce the need for the agency to provide the work in the first place.

activities elsewhere at Clemson University. There are several aspects of the situation at Berkeley that played significant roles.

First, UC Berkeley is part of the UC system, overseen by its Regents. None of the individual schools within this system issue any debt on their own. All debt is issued by the UC system and, while an individual school may report an allocation of the system's debt in its own financial reports, the liability remains with the UC system as a whole.

Second, the UC system makes use of three types of debt: short-term, unsecured debt (called commercial paper); General Revenue Bonds; and Limited Project Revenue Bonds. The General Revenue Bonds are the predominant vehicle for funding new facilities and capital improvements including academic, athletic, administrative, and research facilities. The Limited Project Revenue Bonds are used for auxiliary enterprises.

Third, to support the General Revenue Bonds, the UC system has pledged certain revenues, including "gross student tuition and fees" and "other revenue including unrestricted investment income". Furthermore, the bond indentures require "UC to set rates, charges and fees each year sufficient for General Revenues to pay for the annual principal and interest on the bonds". Limited Project Revenue Bonds pledge the revenues of the specific project.

The combination of these factors has important ramifications. There is no delineation between debt issued to finance athletic facilities and debt issued for other purposes (other than the Limited Project Revenue Bonds). The funds to pay any and all of the debt of the UC system comes from the same sources. This means that tuition from other schools could be drawn upon to satisfy debt payments on athletic facilities at Berkeley. The risks of this arrangement were particularly relevant as UC Berkeley was dealing with university-wide operating deficits of as much as \$150M.<sup>3</sup>

## Use of Debt at Clemson

### *Types of debt*

There are three main types of debt issue used at Clemson: Revenue Bonds; General Obligation Bonds; Athletic Facility Revenue Bonds. Revenue Bonds are used to finance facilities that generate revenues separate from tuition, such as housing, dining, bookstore, and parking operations. Only the revenues from these ventures may be used to make the payments on these bonds.<sup>4</sup> General Obligation Bonds would be used to finance any other campus facilities, including new academic buildings and/or renovations. Student tuition and matriculation fees, up to 90% of the prior year's total, have been pledged for General Obligation Bonds, but these bonds are also backed by the full faith and credit of the State of South Carolina. Athletic Facilities Revenue Bonds are similar but may only be paid using the net revenues of the Athletic Department.<sup>5</sup> In addition to the limit placed on Athletic debt by the lender's requirement that there be sufficient revenues to service the debt, state law places a cap of \$200M on the total amount of Athletic Facilities Bonds.<sup>6</sup> Finally, investor demand for all of the types of

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<sup>3</sup> See <https://www.marketplace.org/2016/02/25/education/story-behind-uc-berkeleys-150-million-deficit>.

<sup>4</sup> Additional funds from the "University" fee set by the Trustees may also be used to service Revenue Bonds.

<sup>5</sup> Admission fees and special student fees established by the Trustees may also be used. Currently, Clemson does not impose a student athletic fee.

<sup>6</sup> See Section 59-119-940 of the South Carolina Code of Laws (<https://www.scstatehouse.gov/code/t59c119.php>)

debt used by the University is driven by the perceived risk of the investment. Typically, the debt rating agencies have only issued one rating for the University, regardless of debt type, so an increase in the risk of any type can have an impact on the rest of the University's debt as well.

### *Multi-level approval process helps safeguard debt levels*

All potential debt issues are initially reviewed by the President's Executive Leadership Team (ELT), which includes the Executive Vice President for Finance and Operations. This group examines potential capital projects based on the University's priorities. In addition to the overall investment decision, this group also considers the financing mix, such that other sources of finding, like cash from donations, may be used instead of financing a project solely with debt. After the ELT makes its decision to push forward with a project, additional required approvals include the Board of Trustees, Commission on Higher Education, Joint Bond Review Committee of the state legislature, and the State Fiscal Accountability Authority. Because Clemson University does not issue debt as often as other larger universities or university systems, new proposals are likely to be more carefully scrutinized to ensure that a project will not cause the University to become overextended.

### *Current debt levels at Clemson*

Table I shows the total debt issues by the University allocated to each of the three types of debt, based on information in the published Comprehensive Annual Financial Reports. The unamortized premium from issuing bonds at prices that differ from the face value is not allocated so, while it is part of the University's total debt, we disregard it. Between 2011 and 2018, the University's allocated debt has increased from \$171M to slightly more than \$632M, or approximately 3.7 times the 2011 balance. Clemson has been taking advantage of the historically low interest rate environment with several new issuances of debt in the last several years.

The University has issued General Obligation Bonds to finance the construction of the Freeman Hall addition (2014), the upgrades to the campus energy infrastructure (2017), and a new building to house the College of Business (2018). The General Obligation Bond balance at the end of 2018 is slightly more than double the balance at the end of 2011.

Since 2011, there were only two issuances of Revenue Bonds but both were for substantial projects: Core Campus (2015) and Douthit Hills (2016). The Revenue Bonds balance as of 2018, \$281M, increased to slightly more than 6.5 times the 2011 balance, \$42M.

Athletic Facility Bonds were issued to finance a number of construction and renovation projects including at the football stadium (2015), baseball stadium (2015), basketball arena (2015), football operations center (2016), and tennis facility (2018). The total balance increased by \$108M to \$138M in 2018, which represents 69.0% of the statutory debt limit of \$200M

Table II reports that the proportion that Athletics debt makes of the University's total debt has only increased from 17.49% in 2011 to 21.81% in 2018. At the beginning of the time period shown in Table II, General Obligation bonds represented the most common source of debt financing. It reached its peak of 70.33% in 2014, primarily because it was the first debt issue in several years. Between 2014 and 2016, as new debt was issued for Core Campus and Douthit Hills, General Obligation Bonds fell to less than 20% of the University's total debt. Meanwhile, Revenue Bonds, the source of financing for the new housing/dining facilities, overtook General

Obligation Bonds as the main source of debt financing used by the University. Revenue Bonds accounted for 55.31% of total debt in 2016, its maximum value. Over the past two years, with the start of the new building for the College of Business, only the second academic building project in the last eight years, the proportion of these two sources are converging again.

Although these tables show that Athletics has not increased substantially as a proportionate user of the University's total debt capacity, it is also important to consider the ability to generate sufficient revenues and/or cash flow to make the required debt payments. Table III shows the coverage ratios, as reported in the Comprehensive Annual Financial Reports, for the University's three types of debt. The coverage ratios for the General Obligation bonds have remained within a narrow range close to 3.0x. Typically, the Revenue Bonds coverage has been similar, if a bit lower. However, in recent years, the coverage ratios for the Revenue Bonds has dropped close to 1.0x. However, this is expected as the debt includes the investment for the Douthit Hills project but without any corresponding revenues. Since Douthit Hills opened in Fall 2018, we should expect to see the Revenue Bonds coverage ratios rebound in 2019.

The coverage ratios for the Athletic Facilities Revenue Bonds jumped substantially in 2012 and 2013, after the football team won its first ACC Championship in 20 years in December 2011. The ratios remained high until the large debt issuance in 2015. Since then, the Athletics coverage ratio has generally been declining.

However, the rating agencies are rating Clemson University as a borrower rather than providing ratings for individual bond issues. Thus, even though there are separate revenue streams used to service each type of debt, each type of debt can still have an impact on the University-wide ratios used by the agencies and therefore the ratings themselves. The last row of Table III shows the weighted average of these coverage ratios, where the proportion of allocated debt from Table II is used as the weights. The weighted average should be expected to rebound in 2019, once revenues from the Douthit Hills project are included.

The most likely way that Athletic borrowing could have a negative impact on academic activities on campus is probably related to these coverage ratios. Starting in 2019, there is a strong possibility that the Athletic Facilities Bonds would have the lowest coverage ratios of the three types of debt. In other words, Athletics borrowing would be a drag on the University's overall coverage ratio. If the Athletics coverage ratio drops substantially, it could be enough to trigger a ratings cut, which would increase the cost of future borrowing, such as for new academic facilities.

However, holding all else constant, since the Athletic debt represents only about 20% of the University's total, a decrease in the Athletic coverage would have a much smaller impact on the overall coverage ratio for the University. When the rating agencies make adjustments that include other resources of the University, such as any unrestricted assets held by the University's endowment, the effect could be even smaller. Furthermore, since the leverage measures typically only account for about 20% of the total weight used to determine the rating, the potential Athletic coverage decline that would be needed to trigger a ratings cut by itself would have to be quite large. Any project with that much risk and uncertainty would not likely make through all of the approval levels, especially since several of these reviews are intended specifically to prevent this kind of outcome, without some sort of modification, such as a reduction in the amount of debt used to finance the project.



Table III: Coverage ratios for Outstanding Allocated Debt

Fiscal years ending June 30,	2011	2012	2013	2014	2015	2016	2017	2018
General Obligation Bonds	2.98	2.76	2.91	3.37	2.76	3.25	3.10	3.36
Revenue Bonds	2.59	2.58	3.16	3.17	2.90	1.64	1.46	1.32
Athletic Facility Bonds	1.31	4.03	5.22	4.40	3.40	2.81	2.05	2.40
Weighted average coverage	2.59	2.92	3.35	3.48	3.03	2.25	2.03	2.24

Source: Clemson University Comprehensive Annual Financial Reports