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Bankers in the Ivory Tower:
The Financialization of Governance at the University of California

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Abstract:

This paper examines the recent changes in the relationships between public research universities and financial markets, using the University of California as a case study. Between 2003 and 2011, UC's outstanding bond debt to investors more than doubled. Funds raised through borrowing were invested into medical centers, dormitories, and athletic facilities at the same time as core university functions were scaled back due to cuts in state appropriations. We argue that these divergent trends are best understood as the financialization of university governance. We first trace the precipitous growth of UC debt beginning in the early 2000s. We then show how the university has partnered with Wall Street firms to expand its borrowing activities through the use of a broad array of financial instruments. These changes occurred as UC's administration empowered financial managers and recruited Wall Street veterans to positions as senior university executives and members of UC's Board of Regents. Finally, we discuss the consequences for university governance of this reorientation towards financial strategies and financial markets.

Introduction

It is by now a commonplace observation that public and non-profit universities in the U.S. have been pulled towards the market in all sorts of ways. Whether couched in terms of commercialization or privatization, universities have increasingly aligned their strategies and practices with the logic of profit-maximizing enterprise and the dictates of market competition.

One important but little-discussed aspect of this market transformation concerns the relationship between universities and financial markets. Although universities have long operated as financial investors through their endowments, over the last decade they have also expanded the scale and scope of their borrowing activities. Average financial liability levels per FTE student among public research universities increased by over 39% from 2002-2010. Average debt service payments increased by over 80%.¹ This turn to aggressive debt financing began before the 2008 financial crisis, but has only accelerated since as investment banks peddle ever-more elaborate debt structuring strategies as a means to “do more with less” in a period of declining state support. Like states, corporations, and households, universities increasingly answer to the judgments of financial markets.² Using the University of California (UC) as a case study, we explain the increasing power of financial markets over universities as a spread of financialization from the for-profit sector to the U.S. higher education system.

Financialization denotes the increasing importance of financial markets, actors, motives, and strategies in the economy. Financialization entails both increases in the size, power, and wealth of the financial industry, as well as the spread of financial activities and logics throughout

¹ This paper’s revenue and spending data for America’s 103 private research universities and 155 public research universities are from Lenihan, C. (2012). IPEDS Analytics: Delta Cost Project Database 1987-2010 (NCES 2012-823). U.S. Department of Education. Washington, DC: National Center for Education Statistics. Retrieved 15 July 2013 from <http://nces.ed.gov/pubsearch>.

² For recent media coverage, see Andrew Martin, “College Debt Falls on Students after Construction Binges” *New York Times*. December 13, 2012.

the rest of the economy and into new organizational fields.³ The rapidly expanding size and role of financial markets has reshaped most arenas of economic life in the United States since the 1980s.⁴ Universities have been no exception. While much discussed, there have been few studies that examine the dynamics of financialization within concrete institutional settings, and even fewer that examine how it has reshaped public sector organizations.⁵ Meanwhile, economists, sociologists, and historians have written extensively about the commercialization of the university and other organizations that once stood apart from the market, but there has been remarkably little study of the specifics of their financial management.⁶

We begin by placing specific changes in UC financial management in the context of national trends among research universities. Mirroring the national trends, UC's outstanding debt levels began growing sharply during the 2000s. Between 2005 and 2011, UC's debt burden more than doubled from \$6.7 billion to \$14.3 billion.

Second, we show how UC turned to increasingly exotic bond financing practices in order to expand debt and investments. At the same time that UC's capital borrowing ballooned in quantitative terms, its debt composition also shifted qualitatively away from traditional limited project bond structures to the increasing use of general revenue bonds, which treat the university as a bundle of assets and revenue streams (i.e. future tuition payments) that can be collateralized in order to maximize the university's total debt capacity. Several of these bond offerings were

³ For the former, see Donald Tomaskovic-Devey and Ken-Hou Lin, "Income Dynamics, Economic Rents, and the Financialization of the U.S. Economy," *American Sociological Review* 76 (2011): 538-559 and Robin Greenwood and David Scharfstein, "The Growth of Modern Finance," Working Paper, Harvard Business School (2012); For the latter, see Greta Krippner, "The Financialization of the American Economy," *Socio-Economic Review* 3(2005): 173-208, and Gerald Davis, *Managed by Markets: How Finance Reshaped America* (New York: Oxford University Press, 2009).

⁴ Gerald Davis, *Managed by Markets: How Finance Reshaped America* (New York: Oxford University Press, 2009).

⁵ But for a notable recent example of such work, see Josh Pacewicz, "Tax Increment Financing, Economic Development Professionals and the Financialization of Urban Politics," *Socio-Economic Review* 11(2012): 1028.

⁶ For example, see Sheila Slaughter and Gary Rhoades, *Academic Capitalism and the New Economy: Markets, State, and Higher Education* (Baltimore: Johns Hopkins University Press, 2004).

coupled with interest swap derivative deals between the university and investment bank counterparties.

Third, we show how the reorientation of UC's strategic priorities towards financial markets rests in part on ever-closer ties between UC management personnel and the financial industry. A foundational tenet of economic sociology is that economic actions are embedded in social relationships and shaped by the social backgrounds of those who occupy positions of organizational power.⁷ Over the last 25 years, Wall Street has increased its foothold within UC. Between 2006 and 2009, the University of California Office of the President (UCOP) underwent an internal reorganization that heightened the power and prominence of financial managers tied to industry.

Finally, we discuss the consequences of these shifts for university governance. Internally, the adoption of esoteric financial technologies empowers financial managers within organizations.⁸ The new technologies shift the balance of power within the university by transforming matters of budgeting and governance into purely technical concerns falling under the expertise of financial managers. Externally, resource dependence on financial markets increases. The imperative to maintain low borrowing costs means that organizational decisions must be weighed against the concerns and criteria of market evaluators (namely credit rating agencies). We illustrate these dynamics through an analysis of the University's recent handling of contestation over interest rate swap contracts.

⁷ Mark Granovetter, "Economic Action and Social Structure: The Problem of Embeddedness," *American Journal of Sociology* 91 (1985): 481-510. Neil Fligstein, *The Transformation of Corporate Control*.

⁸ The classic treatment of intra-organizational power is Jeffrey Pfeffer and Gerald Salancik, *The External Control of Organizations: A Resource Dependency Perspective* (Stanford: Stanford University Press, 1978). The role of financial professionals and financial technologies in these processes has been addressed by Pacewicz, "Financialization of Urban Politics."

In developing this analysis, we offer a model of economic sociology in practice. An earlier policy report on UC's interest rate swaps, *Swapping Our Future*, garnered substantial national political and media attention of otherwise unseen financial decision making.⁹ Five months after the report, UC filed suit against 20 Wall Street institutions to recoup millions of dollars in losses associated with the swaps.¹⁰ In this paper, we offer a sociological explanation of UC's financial governance and how it is influenced by scholarly research or a lack thereof.

Increasing Debt: UC and the America's Research Universities

A recently improved national database of college financial data shows the extent and forms of financialization in higher education vary substantially by sectors of the industry.¹¹ For example, top private universities have grown their endowments and portfolio management strategies far more than their public counterparts. However, this paper focuses on just one form of financialization – leveraging debt for investment in profitable university activities.

We chose the University of California as our case because it is financially the largest research university in the U.S., but also because it is a leading case of financialization among public research universities, a sector one might expect to be more resistant to financialization.¹²

⁹ Charlie Eaton, Jacob Habinek, Mukul Kumar, Tamera Lee Stover, and Alex Roehrkasse, "Swapping Our Future: How Students and Taxpayers are Funding Risky UC Borrowing and Wall Street Profits," available at <http://publicsociology.berkeley.edu/publications/swapping/swapping.pdf>. Major press coverage includes Goldstein, Adam and Jacob Habinek. "Prop 30 funds for UC will go to Wall Street." *San Francisco Chronicle*. Nov. 13, 2012: <http://www.sfgate.com/default/article/Prop-30-funds-for-UC-will-go-to-Wall-Street-4031472.php>; Sankin, Aaron. "University Of California Deals With Wall Street Banks Could Wipe Out Prop 30 Gains, Report Says." *The Huffington Post*. Nov. 15, 2012: http://www.huffingtonpost.com/2012/11/15/university-of-california-interest-rate-swap_n_2139858.html; Woodhouse, Leighton. "Prop 30 Tax Revenues to Be Diverted from Higher Ed to Wall Street, Thanks to UC Board of Regents." *The Nation*. Nov. 18, 2012.

¹⁰ See Charlie Eaton, "Napolitano's test - UC's shaky finances," *San Francisco Chronicle*, Page A14, July 18th, 2013 and <http://www.reuters.com/article/2013/06/26/us-libor-lawsuit-idUSBRE95P02Z20130626>.

¹¹ Lenihan. IPEDS Analytics.

¹² We use the Delta Cost Project's system for analyzing college finance which breaks universities into six sectors based on their public-private status and their Carnegie classification: 1) public research, 2) public master's, 3) public community, 4) private research, 5) private master's, 6) private bachelor's. Research universities here meet the

Over the last decade, UC's levels of borrowing, spending on profitable hospital and auxiliary services, and management growth have begun to look like those of the more financialized private research universities. UC's revenue from tuition – after return-to-aid – has also broken away from average levels for public research universities.

UC debt has expanded rapidly since 2005 as part of a nation-wide trend. Figure 1 shows that growth in liabilities per full time equivalent (FTE) student have grown quickly private and public universities since 2002. Since the previous recession came to a close in the 2002 academic year, private research universities increased their liabilities per FTE from \$69,764 to \$92,248 or 32% by the 2010 academic year.¹³ But, as we will show in more detail later, UC debt has increased so rapidly – nearly doubling since 2005 – that it was on track to surpass average private research university liabilities by 2010. While beginning at lower levels, public research university liabilities increased quickly as well – by 39% from \$15,894 to \$24,285 per FTE student. While the public research university increase in liabilities has been smaller, it is also likely to be more driven by liabilities from pensions which are more common in public universities. Benefit costs per full-time employee are already increasing much faster in public universities than private ones. Public research universities' faculty benefit costs increased 5.2% annually between 2002 and 2008 while faculty benefit costs increased just 1.6% annually in private research universities¹⁴. Our case study of UC will explain how debt and financialization – not pension liabilities – are behind the overall increase in UC liabilities.

<< Figure 1 [GROWTH IN LIABILITIES CHART] about here >>

Carnegie thresholds for awarding PhDs and conducting research. Master's institutions may conduct research but award few PhDs.

¹³ Lenihan. IPEDS Analytics.

¹⁴ Page Delta Cost Project. *Trends in College Spending 1999-2009*.

To cope with increased debt service costs from growing liabilities, organizations spend more on activities that return higher profit margins. Hospital services and auxiliary services such as dorms, dining halls, and recreational centers stand out as high profit margin activities in national university financial data.¹⁵ As we would expect, private universities – with their fast increasing liabilities – have increased per FTE student spending on such profit centers the most. Public research universities have begun to close the gap with privates on auxiliary service spending, increasing such expenditures by 23% since 2002 to \$4,070 per FTE student in 2010, the last year data is available. During that period, instructional expenses increased just 6% to \$10,075 per FTE student. UC, however, has nearly overtaken its private university counterparts since 2002, increasing auxiliary service spending by over 30% to \$4,949 per FTE student in 2009, the last year that reliable comparison data is available. Many colleges invest in auxiliary services to increase their appeal to students and parents. Increased demand for admissions then allows for increasing tuition rates and enrollment of out-of-state students that pay higher tuition rates. UC and its Berkeley and LA flagships have led a public research university trend of increasing revenue from tuition (see Figure 2). UCLA, for example increased the revenue it retains from tuition – after using tuition to fund financial aid – from \$6,099 per FTE student in 2002 to \$11,758 in 2010, a 93% increase.

<< Figure 2 [GROWTH IN TUITION REVENUE CHART] about here>>

UC investment and profits on its hospitals are even more exceptional, especially for a public university but also among private universities. At \$72,444 per FTE student, UC had comparable hospital expenditures to private universities with hospitals in 2002. UC hospital spending, however, had increased more than 77% to \$128,304 per FTE student by 2010. Private university hospital expenditures increased just 29% in that period to \$79,371 per FTE student.

¹⁵ Lenihan. IPEDS Analytics.

Public research university hospital spending increased only 22% to \$25,624 per FTE student. UC hospital profits per FTE student have topped \$12,000 during the period, far above the average profits for the 17 U.S. private research universities with hospitals (see Figure 3). Average profits for the 28 U.S. public research universities with hospitals declined during the period.

<< Figure 3 [HOSPITAL PROFITS CHART] about here>>

Organizational theory and theories of financialization expect that firms will employ increasing numbers of expert financial managers to carry out complex reorganizations of debt leveraging and investment. Available datasets do not track the specialization of management and executive university employees. Spending on central administration and executive employment, however, has expanded dramatically in private research universities and central administration spending has begun to increase in the publics. UC, on the other hand, has broken away from any past resemblance to the norms of public research universities and is quickly catching up to private universities. UC executives per 100 FTE students have increased to 3.5 since 1994 when the number had been reduced to 1.5 with retiree buyout in response to state funding cuts (see Figure 4). UC has increased spending on central administration steadily since the early 90s state funding cuts, from \$4,000 to nearly \$7,000 per FTE student. The spending increases have accelerated in tandem with debt increases, however, since 2002.

<< Figure 4 [EXECUTIVE EMPLOYMENT CHART] about here>>

Our case study will look below these quantitative trends at the concrete decisions made by UC's governing Regents which created new offices for financial management and employed increasing numbers of financial experts. This management reorganization – and the debt leveraging it spurred – will show the relationship between resource-based power struggles,

professional closure of financial governance, expanding debt, and new investments in profit centers beyond the university's core mission. The development of these relationships is financialization.

New Technologies: General Revenue Bonds and Interest Rate Swaps

The increase in UC's debt load has involved a qualitative shift in the University of California's engagement with financial markets. Since 2003, the university has partnered with Wall Street firms to expand its borrowing activities by entering into a complex array of financial arrangements that pledge the widest possible range of future university revenues as collateral for loans now. These changes received little attention when they first began, but in the wake of the 2008 financial crisis it has become increasingly clear that these financial relationships have not only increased the university's debt burden, but have also exposed the university to new sources of financial risk. The new financial risks in turn make financial management ever more central to strategic planning. In this section of the paper, we describe these changes, the circumstances in which they occurred, and some of some of their consequences for the finances and governance of the university.

UC's massive increase in borrowing coincided with public disinvestment from the University, as annual state funding for UC declined over the same years from \$3.8 billion to \$2.2 billion. One might expect that public universities like UC took on increased debt loads simply to offset declining state funding. Yet neither funds from borrowing nor the returns on debt-financed investments have served to prevent drastic tuition increases (approximately 100% increase from 2007-2012), or curb significant cuts to core sectors at UC.

Indeed, the effect of UC's massive borrowing has been more transformative than compensatory. Capital was invested in new enterprises for tapping into lucrative markets for healthcare and services to attract out-of-state students, who pay higher tuition. Ironically, student tuition provides the collateral for much of this borrowing.¹⁶ The credit rating agency Moody's wrote in September 2012 that UC has a very strong rating as a bond issuer precisely because of it can leverage its "powerful student market position" to "compensate for state funding cuts by raising tuition dramatically" and by "growing non-resident tuition, differentiating tuition by campus or degree, and increasing online course offerings."¹⁷

Since as early as the 1940s, the State of California has mediated UC's relationship with financial markets. The university's primary tools for borrowing capital during these years were higher education bonds approved directly by the voters and lease revenue bonds issued through the California State Public Works Board (SPWB). These bonds financed campus expansion and other infrastructure projects. Both classes of bonds are paid through state appropriations and their interest rates are determined according to the ratings assigned by credit rating companies to the State of California. SPWB bonds are also secured by university assets associated with the funded projects. The uses of bond revenues in either case is strictly limited, in accordance with either the direct mandate of the voting public or project-by-project approvals granted by the SPWB. In return, the state acts as intermediary between the university and financial markets as well as the ultimate guarantor of the university's bond debt.

In 2003 the Regents of the University of California introduced the first pieces of a new system of debt financing that would grant the university greater freedom to take on additional

¹⁶ "What Do We Pledge to Bondholders?" *Capital Markets Finance Newsletter* 1(2): 2.
<http://www.ucop.edu/capmarketsfin/documents/cmf-june2011.pdf>

¹⁷ New Issue: Moody's assigns Aa2 rating to University of California's approximately \$96 million Lease Revenue Refunding Bonds, 2012 Series F issued by the State Public Works Board of the State of California; outlook is stable." *Global Credit Research*. September 6th, 2012.

debt without state approval. A key element was the establishment of new procedures for the issuance of a new class of revenue bonds by the UC Regents. Bonds issued through the resulting indenture agreements would not be subject to state approval. They would be rated according to perceived creditworthiness of the university rather than the state. Unlike the higher education and SPWB lease revenue bonds, their costs would be borne by the university without recourse to state appropriations, and they would therefore be secured by pledges of projected revenues from university activities.¹⁸ The resulting system allowed the university to expand its borrowing without securing external approval for particular capital projects. Although revenue bonds have not replaced higher education or SPWB bonds, university revenue bond debt has come to dwarf SPWB bond debt.¹⁹ Figure 5 shows that although SPWB debt outstanding remained fairly constant at around two billion dollars between 2005 and 2012, revenue bond debt soared to nearly 12 billion dollars. UC, however, consolidated this shift in 2013 when the California state budget shifted all SPWB and state held bond debt onto UC's books, allowing UC to refinance the previously state held debt with tuition other revenue as additional collateral.

<< Figure 5 [UC OUTSTANDING DEBT CHART] about here >>

Another element of the university's reorientation towards financial markets was its entry into the financial derivatives trade. In 2003 the Regents also authorized the use of interest rate swaps, financial agreements designed to convert a variable interest rate on a bond or other loan into a fixed payment to another party, usually an investment bank (and sometimes the same investment bank that is the original bond issuer).²⁰ Figure 6 details the financial relationships

¹⁸ The Regents of the University of California, Committee on Finance. Minutes, July 16th, 2003.

<http://regents.universityofcalifornia.edu/minutes/2003/fin703.pdf>

¹⁹ "Annual Debt Capital Update to the Regents"

http://www.universityofcalifornia.edu/finreports/index.php?file=debtcapital/debtcapital_2007.pdf ; "Annual Report on Debt Capital and External Finance Approvals"

http://www.universityofcalifornia.edu/finreports/index.php?file=debtcapital/debtcapital_2011.pdf

²⁰ Ibid.

between the borrower, the lender, and the swap counterparty under such an arrangement. Swaps complement the use of revenue bonds because they enable the issuance of bonds with variable interest rates without the apparent risks by allowing the borrower to hedge against changes in variable rate payments. The swap nevertheless is a separate financial agreement – essentially an ongoing bet on interest rates – between the borrower and the swap counterparty, one largely unregulated before the passage of the Dodd-Frank Act in 2010.

<<Figure 6 [SWAP RELATIONSHIPS DIAGRAM] about here>>

UC began increasing use of revenue bonds and interest swaps after a meeting of the UC Regents in July of 2003. At this meeting, the Regents Committee on Finance and the full Board of Regents approved a far-reaching proposal that authorized the university to establish a new indenture for the issuance of “general revenue bonds” backed by the widest possible range of university revenues and granted the Office of the President authority to enter into interest rate swap agreements.²¹ The revenue bond expansion and interest rate swap proposal was supported by a report based on an analysis by a team from Lehman Brothers brought in to examine the university’s debt management practices. The report describes the advantages of general revenue financing over other forms of private university financing. It concludes with the claim that “this expansion is critical to enabling the issuance of additional debt for capital projects to support the enrollment expansion, the development of academic programs, and the repair and replacement of critical campus infrastructure.”²²

The reasons for the revenue bond expansion and interest rate swap proposal are not clear from the written record. The proposal was not included in a detailed budget plan presented at the

²¹ Ibid, p. 15

²² Ibid, p. 19

beginning of the meeting.²³ Charles Mullinix, the university's Senior Vice President for Business and Finance, cited the "opportunity for significant savings through refinancing" created by low interest rates when he introduced the proposal to the Committee, although the revenue bond expansion and interest rate swap proposal did not directly address the matter of refinancing.²⁴ The Lehman Brothers report cited existing precedents for the debt expansion and interest rate swaps. UC had established a smaller scale "multiple purpose projects" revenue bond indenture in 1991, it noted, and indicated that UC's more conservative position was "a stance that is being abandoned by major public research universities around the country," although it did not cite examples.²⁵

It is also not clear how much careful attention the revenue bond expansion and interest rate swap proposal received from the Regents and the public. The general revenue bond proposal was heard amidst far more contentious proposals concerning the growing state budget deficit, tuition and student fee increases and a proposal by Regent Connerly to prohibit the funding student organizations targeting racial, ethnic, or sexual orientation minorities.²⁶ In contrast, to the revenue bond expansion and interest rate swap proposal, each of these subjects produced heated discussions. In the end, the proposal was adopted with no serious objections and little scrutiny from the committee. Further powers to issue debt through additional types of revenue bond indenture agreements were granted without comment for other forms of project revenues in 2004 and hospital revenues in 2007, and Lehman Brothers was retained again in 2006 to continue the work of tailoring the university's overall debt strategy.²⁷

²³ Ibid, p. 6

²⁴ The Regents of the University of California, Committee on Finance. Minutes, July 16th, 2003, p. 16

²⁵ Ibid, p. 19.

²⁶ Ibid, pp. 1-14; 21-23

²⁷ UC press release. 9/25/2006. <<http://www.universityofcalifornia.edu/news/article/20485>>

The revenue bond expansion and interest rate swap proposal was never intended to make borrowing cheaper, or as a direct response to fiscal shortfalls. It was intended to make borrowing easier. The decision to adopt a debt financing strategy based on general revenues occurred in the context of a state budget crisis and unprecedentedly low interest rates, but it did not address either of these conditions. To account for immediate budget shortfalls, the university had already put into place a commercial paper program for short-term borrowing. In response to questions about the new indenture's effect on the costs of borrowing, a representative from Lehman Brothers testified that general revenue bond and interest rate swap expansion was neither a necessary step for refinancing existing debt to take advantage of low interest rates, nor was likely to lower the cost of borrowing.²⁸ Instead, he indicated that its chief advantages were that it would expand the revenues that may be pledged to debt service so that additional debt may be issued, and would provide greater flexibility by moving the university "away from thinking about the source of credit and the source of payment in the same terms."²⁹ In short, it meant more money now in exchange for a promise to increase university revenues later.

No consideration was given to the ramifications of deepening UC's relationship with financial markets and private financial intermediaries. In the Lehman Brothers report and the Committee's discussion of general revenue financing, an AA credit rating award to UC received much praise, but no mention was made of what the university's obligations might be to maintain it. Moody's rating criteria for US colleges and universities explicitly reward high tuition rates, the proven ability to increase tuition further, and high revenues from research and hospitals.³⁰

²⁸ The Regents of the University of California, Committee on Finance. Minutes, July 16th, 2003, p. 19

²⁹ Ibid.

³⁰ Roger Goodman, "Credit Ratings in Higher Education," presented at IPED conference on Higher Education and Real Estate, June 28-19th, 2007. http://www.ipedinc.net/Conferences/Higher_Education_and_Real_Estate_New_Strategies_for_the_Development_and_Financing_of_College_and_University_Facilities.aspx. For a more detailed overview see Moody's Investors Service, "Rating Methodology: U.S. Not-for-Profit Private and Public Higher Education." *U.S. Public Finance*,

Moody's also expects universities to retain board members and university officers with experience and expertise in finance, and a president who demonstrates understanding of financial matters.³¹ High rates of faculty tenure and staff unionization, however, are punished in the rating process.³² UC's reliance on its AA rating for borrowing – rather than the state's rating – submits the university to the ratings industry's enforcement of these financial market standards.

The university's employment of interest rate swap derivatives also exposed it to new dangers associated with financial markets. Between 2003 and 2007, UC entered into three separate agreements involving interest rate swaps with five different investment banks. These swaps, described in Table 1 were associated with bonds totaling \$606 million, all funding development at medical centers on three UC campuses. Ironically, these swaps have increased UC's debt servicing burden despite the fact that interest rates remain at record lows.

Termination fees associated with some of these swap agreements have caused the university to miss out on refinancing opportunities and continue to pay high fixed rates to investment banks. Losses on the swaps associated with the UC Davis medical center were so significant that UC paid \$6.8 million in termination fees when it refinanced the underlying bonds. The swaps associated with medical centers at UCSF and UCLA are projected to create combined annual losses of \$9 million. The projected total loss from UC's engagement in interest rate swaps is more than \$200 million.³³

<<Table 1 about here>>

August 26th, 2011.

http://www.nebhe.org/info/pdf/tdbank_breakfast/093011/KimTuby_MoodysRatingMethodology_USHigherEducation_2011.pdf

³¹ Moody's Investors Service, "Rating Methodology: U.S. Not-for-Profit Private and Public Higher Education." *U.S. Public Finance*, August 26th, 2011.

³² Ibid.

³³ Details on these calculations can be found in Charlie Eaton, Jacob Habinek, Mukul Kumar, Tamera Lee Stover, and Alex Roehrkasse, "Swapping Our Future: How Students and Taxpayers are Funding Risky UC Borrowing and Wall Street Profits." Forthcoming, *Berkeley Journal of Sociology*.
<http://publicsociology.berkeley.edu/publications/swapping/swapping.pdf>.

Unprecedented legal and potentially illegal financial market manipulations aided banks issuing interest rate swaps, but caused heavy losses for UC and others borrowers on their swap agreements. First, in the face of the looming financial crisis, the Federal Reserve implemented a series of rate cuts between September 2007 and December 2008. The rate cuts were intended to stabilize large banks exposed to potential losses from variable-rate debt. The Fed's actions reduced the effective federal funds rate from 5.25% to 0-0.25% and pushed interest rates to record lows. The interest rate swaps, however, required UC to make fixed payments to the swap issuers that were far above the market rate for variable-rate bonds (see Figure 7). The second factor that increased UC's repayment costs was the potentially illegal efforts by major banks to manipulate London Interbank Offered Rate (LIBOR), which indexes interest rates on most of UC's variable-rate bonds and swaps. These manipulations exacerbated UC's losses, and each of UC's swap counterparties is under investigation for LIBOR manipulation.

<<Figure 7 [SWAP RATES DIAGRAM] about here>>

Embedded Relationships: UC Governance and the Financial Industry

UC's expansion of risky bond and derivative debt followed an increase in university board members and senior officers with experience in the financial industry. In 1990 none of the UC Regents or its top administrators had worked for or served on the board of a major Wall Street bank, but in 2000 two of 16 appointed Regents had explicit ties to the financial industry. By 2012, this number has increased to at least six appointed Regents. Current and former financial executives now play a prominent role on both the Board of Regents and in top administrative positions.³⁴

³⁴ Charles Schwartz. "A Look at the Regents of the University of California." <http://socrates.berkeley.edu/~schwartz/LOOKatREGENTS.pdf>

UC's leadership has also restructured executive leadership positions to elevate financial managers and recruit Wall Street veterans. Empowering financial managers increases organizational dependence on financial markets and experts who can speak the language of finance, creating a financial conception of governance.³⁵ Zorn has tracked how the rise of the Chief Financial Officer (CFO) position in US firms proceeded hand in hand with corporations' reorientation toward Wall Street and shareholder interests.³⁶

UC's new financial executives have established a financial conception of governance since their elevation began in 2006. That year, the Regents began a reorganization of the leadership structure of the UC's Office of the President (UCOP). Presented as a response to compensation scandals, the board formed a Special Committee to propose structural reforms. The Regents retained consultants from McKinsey to evaluate options. At a meeting of the Board of Regents in May of 2006, McKinsey identified two goals the university should pursue: "to integrate and coordinate all finance activities," and "to separate the administrative and service activities from finance activities in order to get clear lines of accountability and responsibility."³⁷ They presented four structural reform options, which included the creation of positions for a Chief Operating Officer and a Chief Financial Officer.

Ultimately, the President recommended to the Special Committee that the position of Senior Vice President for Business and Finance should be split into two positions: an Executive Vice President for Business Operations (EVPBO), and a Chief Financial Officer (CFO). The

³⁵ For contrasting perspectives on this point, see Harland Prechel, *Big Business and the State: Historical Transitions and Corporate Transformations, 1880s-1990s* (New York: SUNY Press, 2000) and Neil Fligstein, *The Architecture of Markets: An Economic Sociology of Twenty-First-Century Capitalist Societies* (Princeton: Princeton University Press, 2001).

³⁶ Dirk Zorn, "Here a Chief, There a Chief: The Rise of the CFO in the American Firm," *American Sociological Review* 69 (2004): 345-364.

³⁷ <http://regents.universityofcalifornia.edu/minutes/2006/board517a.pdf>, p. 3

proposal was approved in July and implemented in September of 2006.³⁸ Despite concerns from the Academic Senate that these positions “would be recruited as extremely well-compensated business professionals,”³⁹ the President recommended to the Regents a starting salary of between \$316,000 and \$501,000 for both positions.⁴⁰ Representatives of the Office of the President noted that it would pay for these positions with funds from eliminated positions and budget cuts.⁴¹ These new executive positions elevated debt financing and financial management to a level within the UCOP answering only to the President, and offered a salary for the CFO exceeding that of the President.

Several Wall Street veterans oversaw this reorganization. Wells Fargo Senior Vice President Russell Gould, who chaired the Regents’ Finance Committee at the time.⁴² Gould had been Executive Vice-President of Wachovia Bank’s Corporate and Institutional Trust department until the Federal Deposit Insurance Commission (FDIC) brokered Wachovia’s bailout and acquisition by Wells Fargo.⁴³ To fill the new CFO position, the Regents hired Peter Taylor in 2009, who had just ceased to be Managing Director of Public Finance for Lehman Brothers/Barclays Capital after Lehman Brothers collapsed.⁴⁴ Taylor’s position at Lehman gave him authority for the bank’s sales of financial services to UC. During that period, Taylor also served on multiple governing bodies of the university, including as a Regent, as vice chair of the Regents’ finance committee, and as President, Chair, and member of the UCLA Foundation

³⁸ <http://regents.universityofcalifornia.edu/minutes/2006/comp706.pdf>;

<http://regents.universityofcalifornia.edu/minutes/2006/board606.pdf>

³⁹ <http://senate.universityofcalifornia.edu/committees/council/ac.july.06.minutes.pdf>, p. 5.

⁴⁰ <http://regents.universityofcalifornia.edu/minutes/2006/comp906.pdf>

⁴¹ <http://senate.universityofcalifornia.edu/committees/council/ac.july.06.minutes.pdf>, p. 5

⁴² “Russell Gould elected Board of Regents’ chairman.” *UC Newsroom*. May 7th, 2009.

<http://www.universityofcalifornia.edu/news/article/21127>

⁴³ Eric Dash and Ben White. “Wells Fargo Swoops In.” *The New York Times*. October 4th, 2008.

<http://www.nytimes.com/2008/10/04/business/04bank.html>

⁴⁴ Sam Mamudi. “Lehman folds with record \$613 billion debt.” *Marketwatch*. September 15th, 2008.

<http://www.marketwatch.com/story/lehman-folds-with-record-613-billion-debt?siteid=rss>

board of directors.⁴⁵ In the same year, another Wall Street veteran, Nathan Brostrom, took over the EVPBO position⁴⁶ Brostrom had worked for two years in a similar position at UC Berkeley, but before that had spent nearly two decades working on Wall Street, including ten years at JP Morgan Chase. Prior to leaving JP Morgan in 2006, Brostrom became the company's top executive for its Western Region Public Finance Group. Like Taylor's position at Lehman, this position gave Brostrom authority over sales of financial products to UC.

UC's new financial leadership also have industry-side ties to sale of interest rate swaps to UC. The UCLA medical center swap – which has already cost UC \$23 million – was sold to UC in 2007 by Lehman Brothers/Barclays. Lehman served both as the broker for the bond and the counterparty for the swap. At the time Lehman sold the swap, current UC CFO Peter Taylor was a Managing Director in the Public Finance Division at Lehman. At that time, Taylor also served on the board of the UCLA Foundation and had previously served on the board of Regents finance committee. The UCSF medical center swap was sold to UC in 2007 by Merrill Lynch,⁴⁷ which has since been acquired by Bank of America. Bank of America stands to make as much as \$28 million from the UCSF swap if UC retains it through its maturity.⁴⁸ The current vice-chair of the Regents finance committee board Regent Monica Lozano serves on the Board of Bank of America. The terminated swap for UC Davis was sold to UC by JP Morgan when Executive Vice President Brostrom managed JP Morgan's Western Region Public Finance Group.⁴⁹ Just as Lehman did with the UCLA medical center swap, JP Morgan profited both on the sale of the original bond and on the sale of the related swap agreement to UC – a practice not allowed in

⁴⁵ "Board of Directors." <https://www.uclafoundation.org/aboutus.aspx?content=directors>

⁴⁶ "Nathan E. Brostrom appointed UC executive VP for business operations." *UC Newsroom*. January 21st, 2010. <http://www.universityofcalifornia.edu/news/article/22707>

⁴⁷ University of California Medical Center Pooled Revenue Bonds, 2007 Series A and B, Official Statement.

⁴⁸ P. 36 of UCSFMC's 2011 CAFR shows future net swap payments through 2036 of \$31,597,000. Taking out the 7/11-9/12 net payments already accounted for, the result is \$28,435,049.

⁴⁹ University of California-Davis Medical Center Refunding Hospital Revenue Bonds, 2003 Series A-E, Official Statement, p. 3.

other areas of derivative financing. Both Vice President Brostrom and CFO Taylor have declined to discuss their past involvement in interest rate swap sales to UC.

Conclusion: The Financialization of UC Governance

We provide a model for putting economic sociology into practice with our research program on UC debt leveraging and financialization. Financialization of a public institution like UC closes off participation in governance to the broader public and even persons who have formal authority but lack financial expertise. Financial experts use accredited knowledge to claim a monopoly on financial decision-making⁵⁰ and expand their domain through the adoption of financial technologies that make decision making ever more arcane and technical.⁵¹ Our research has shown that economic sociology can reopen debate and even governance by making closed governance visible and technologies intelligible both to scholars and the broader public.

After widespread media coverage of the November 2012 *Swapping Our Future* report on interest rate swaps UC executives chose to first respond with op-eds and a special Regents meeting discussion. UC executives publicly rejected any renegotiation of swap agreements or litigation against the swap issuers involved in potentially illegal LIBOR interest rate manipulation. CFO Taylor led the response and said little about why UC would not renegotiate or litigate. Instead, Taylor and others questioned the expertise of the report's authors as outsiders to the finance industry.⁵² This claim to a monopoly on expert knowledge came on top

⁵⁰ See Andrew Abbott, *The System of Professions: An Essay on the Division of Expert Labor* (Chicago: University of Chicago Press, 1988).

⁵¹ Collins, *The Credential Society*, and Pacewicz, "The Financialization of Urban Politics."

⁵² See Taylor's oped in the San Francisco Chronicle at <http://www.sfgate.com/opinion/openforum/article/UC-debt-swaps-avoid-risk-save-money-4038641.php>

of technical codifying of governance closure for UC's swap agreements.⁵³ UC executives also worried aloud that renegotiation or litigation could damage their credibility with rating agencies and lenders. A UC spokesperson claimed that renegotiating would hurt the UC system's credit rating.⁵⁴

On June 25th, 2013, however, UC filed suit to recoup millions in losses from LIBOR interest rate manipulation by 20 Wall Street institutions, including the counterparties for UC's interest rate swaps. The filing of the lawsuit shows both the persistence of governance closure and the power of economic sociology to open governance. The initial filing referred to losses on interest rate swaps 93 times and carried out an explicit recommendation from the November 2012 *Swapping Our Future* report. The decision to file the lawsuit, however, was made entirely behind closed doors.

Scholarship can help to demystify financial instruments and embedded relationships between firms and financial markets. Demistification is a key step to reopening the governance of firms, universities, and the broader economy in the era financialization. The monopoly of professional financial managers over financial decision may tighten if no one makes financial technologies and the levers of financial decision makers intelligible and compelling to scholars and the broader public. Left alone, UC's financial managers have made decisions to please financial markets rather than students, employees, or citizens.

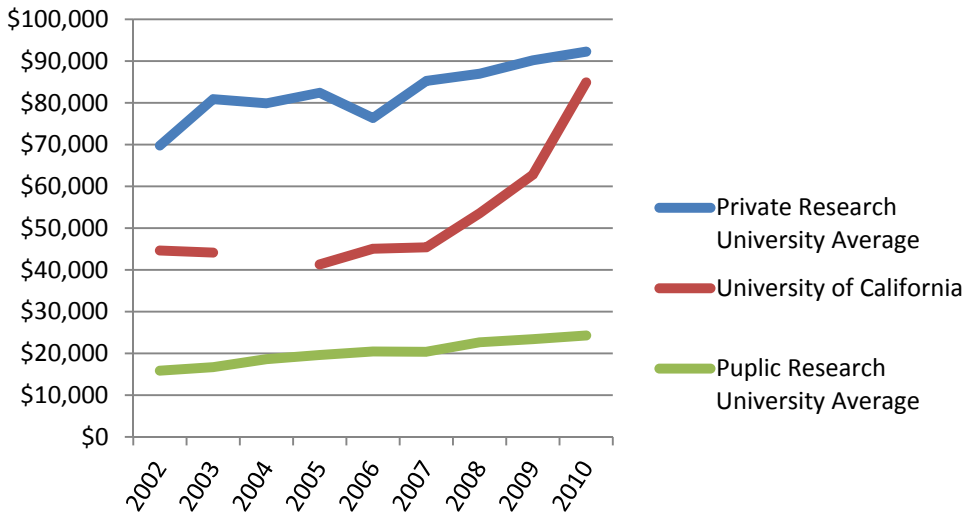
Many important empirical questions remain for demystifying financial governance at UC and throughout American higher education. For example, to what extent has financialization

⁵³ In 2011, UC's Board of Regents issued a new protocol that gave official authority over purchasing, modifying, and terminating swap agreements to financial experts in the office of its CFO and gives significant discretion to UC's CFO Peter Taylor. This protocol acknowledges that swaps "are derivative transactions and are not without risks" but lodges the authority to shoulder those risks squarely in the office of the CFO. See, UC Regents Committee on Finance. "AUTHORIZATION TO APPROVE INTEREST RATE SWAP GUIDELINES." July 13, 2011. <http://regents.universityofcalifornia.edu/regmeet/jul11/f3b.pdf>

⁵⁴ http://www.huffingtonpost.com/2012/11/15/university-of-california-interest-rate-swap_n_2139858.htmlConflicts of Interest?

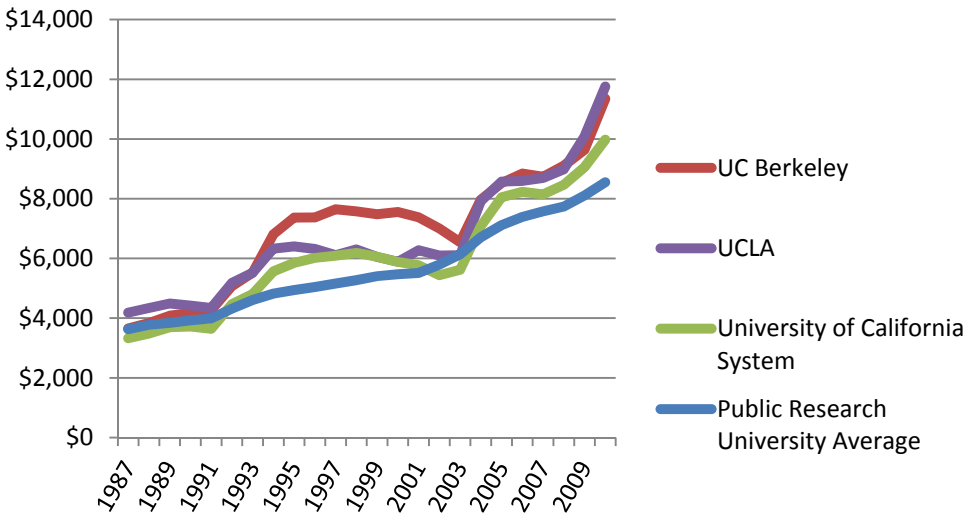
caused a realignment of what areas receive funding in higher education institutions? Have some programs within institutions received more investment while others have suffered? Are some colleges able to capitalize more investment while others cannot? If so, what causes the divergences in financialization and capitalization? Economic sociology – as a project that explains the role of social relations in economic institutions – is uniquely suited to answer such questions. Economic sociology influences economic practices and their social consequences when it debates the answers to such questions broadly in the academy and beyond.

Figure 1: Research University Liabilities Per FTE Student



Source: Lenihan, C. (2012). IPEDS Analytics: Delta Cost Project Database 1987-2010

Figure 2: Revenue from Tuition After Funding Financial Aid



Source: Lenihan, C. (2012). IPEDS Analytics: Delta Cost Project Database 1987-2010

Figure 3: Hospital Profits Per FTE Student

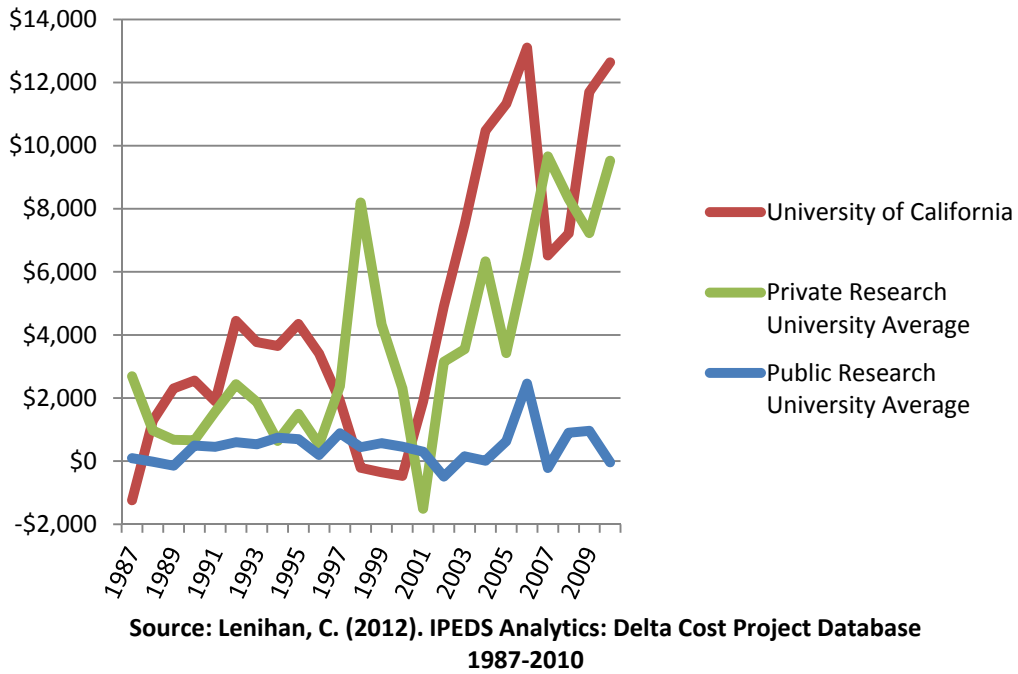


Figure 4: Executives Per 100 FTE Students

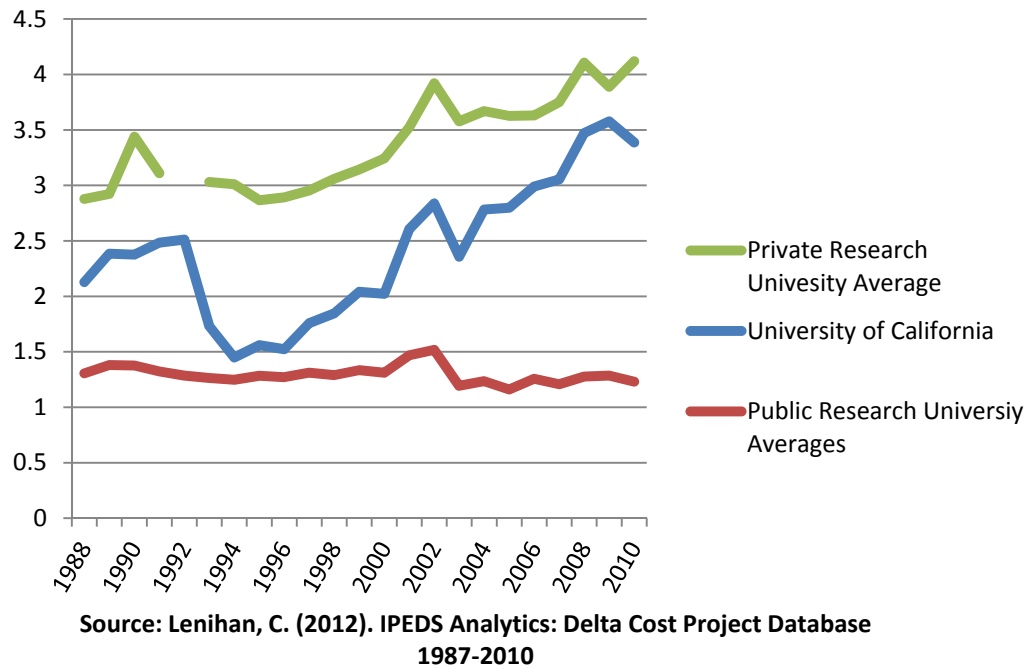
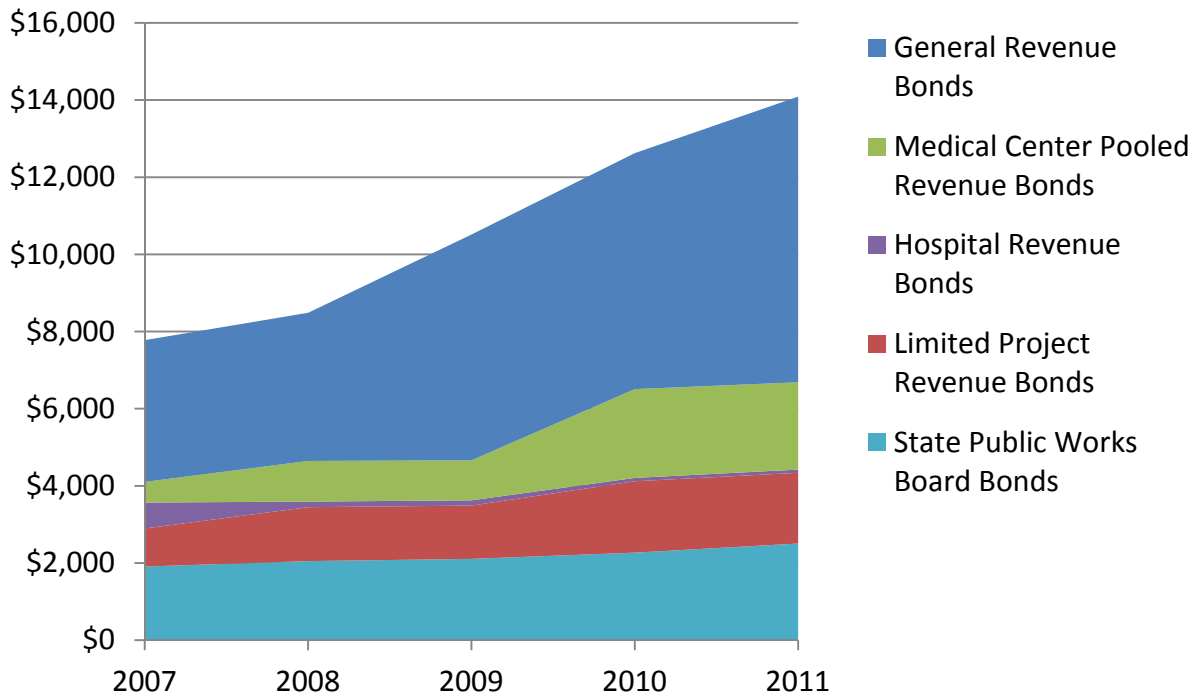
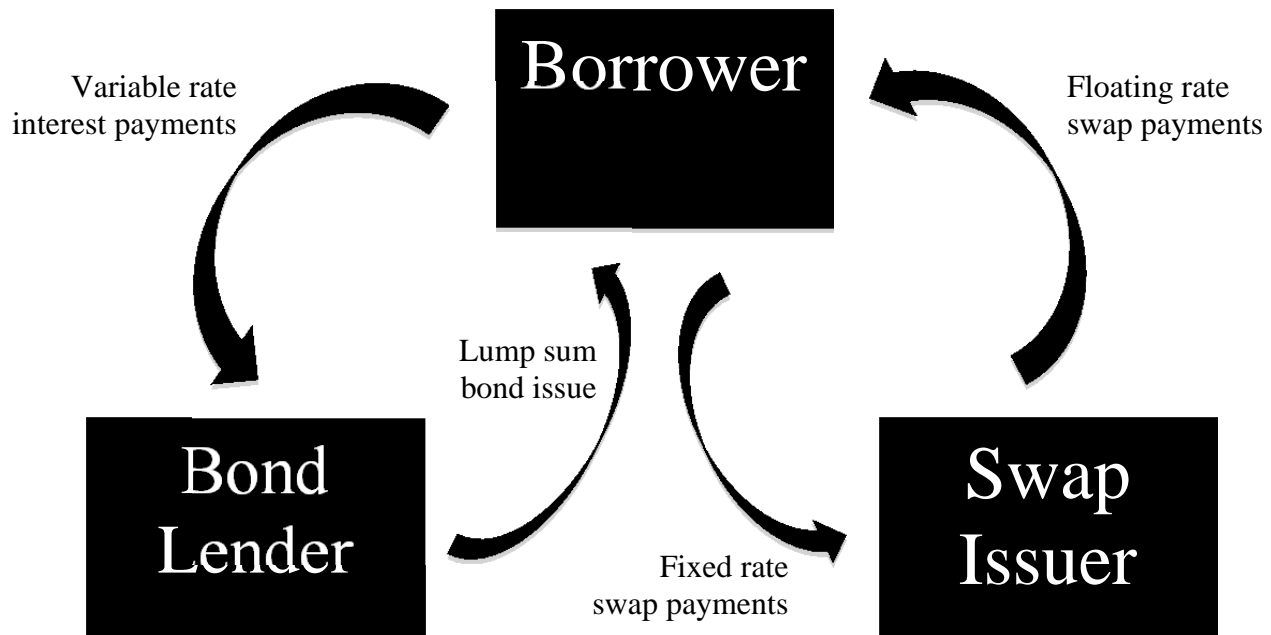


Figure 5: Total Outstanding UC Debt by Type, 2007-2011



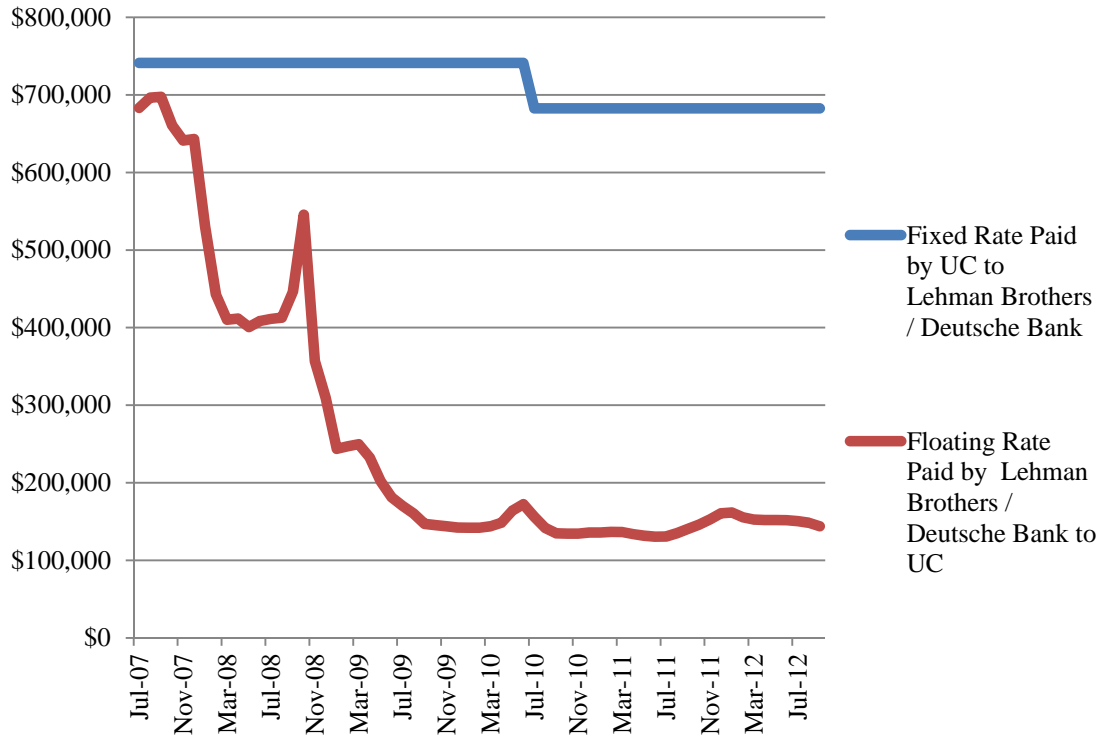
Source: Office of the Chief Financial Officer, Annual Reports on Debt Capital (2007-2011).

Figure 6: How Interest Rate Swaps Work



When an organization like UC issues a bond, as with any other loan the interest rates it pays on those bonds may be fixed or variable. Variable interest rates generally represent a cheaper but riskier borrowing option. In order to take advantage of lower variable interest rates while at the same time hedging against the risk of increased interest rates, the borrower may enter into an interest rate swap agreement.

Figure 7: Swap Rates for 2007 UCLA Medical Center bonds, July 2007-July 2012



Sources: University of California Medical Center Pooled Revenue Bonds, 2007 Series C, Official Statement, Libor three month floating rate.

Table 1: Interest Rate Swap Agreements Initiated by University of California, 2003-2008

Swap	Dates	Bond Broker	Swap Counterparty	Notional value	Fixed rate (UC to issuer)	Current rate (issuer to UC)	Projected annual loss	Loss to date
UCD Medical Center	2003-2008 (terminated)	Merrill Lynch	Merrill Lynch	\$174m	3.1385%	N/A	N/A	\$22.5m
		JPMorgan Chase	JPMorgan Chase	\$87m	3.1385%	N/A	N/A	
		Goldman Sachs	Goldman Sachs	\$87m	3.1385%	N/A	N/A	
UCSF Medical Center	2007-2032	Merrill Lynch	Merrill Lynch (until 2009), BofA (since 2009)	\$83m	3.5897%	2.982%	\$2.5m	\$11m
UCLA Medical Center	2007-2047	Lehman Brothers	Lehman Brothers (until 2008), Deutsche Bank (since 2008)	\$175m	4.6873%	3.723%	\$6.5m	\$23m

Sources: University of California Medical Center Pooled Revenue Bonds, 2007 Series A, B and C, Official Statements; University of California Annual Financial Report, 2010-2011; University of California-Davis Medical Center Refunding Hospital Revenue Bonds, 2003 Series A-E, Official Statements; University of California General Revenue Bonds, 2011 Series Y, Z and AA, Official Statement.