Why Student Loans Make Our Colleges Vulnerable

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Key findings:

- On average student loan proceeds account for 38% of our private college tuition income and more than 56% of our public school tuition income, with a bias toward underestimation.
- Student loan performance is much worse than commonly understood as **approximately 61% of student borrowers are not making their repayment on time**

The controversy surrounding student loans centers on the burden these loans place on students. Ignored is the impact of student loans on post secondary institutions. Yet these institutions are the sole beneficiaries of these loans without any responsibility for collection. Like anything too good to be true, there are unintended consequences: tuition budgets have become dependent on student loans. Were the government to place any kind of restrictions on student loans out of pique over rising tuitions or budgetary concerns in Washington the impact on college finances would be considerable.

This is a significant issue for Massachusetts, the home of more than two hundred colleges which are the Commonwealth's second largest employer after healthcare. Any student loan restrictions that reduced tuition revenue would be felt by workers whose costs consume most college budgets. In 2009, Harvard laid off more than 750 employees and forced another 1,600 staff members to voluntary early retirement program due to an unexpected financial loss (not related to student loans).

What is Dependency?

The budgets of universities and colleges are the mirror image of student debts as they show a rise in revenues equal to the rise in the liabilities of students. The degree to which a college's tuition and fee revenues are sourced from student loans creates dependency. This dependency is shown for some local colleges below.

Table 1: Percentage of Net Tuition and fees paid by loans (Federal, State and Private)

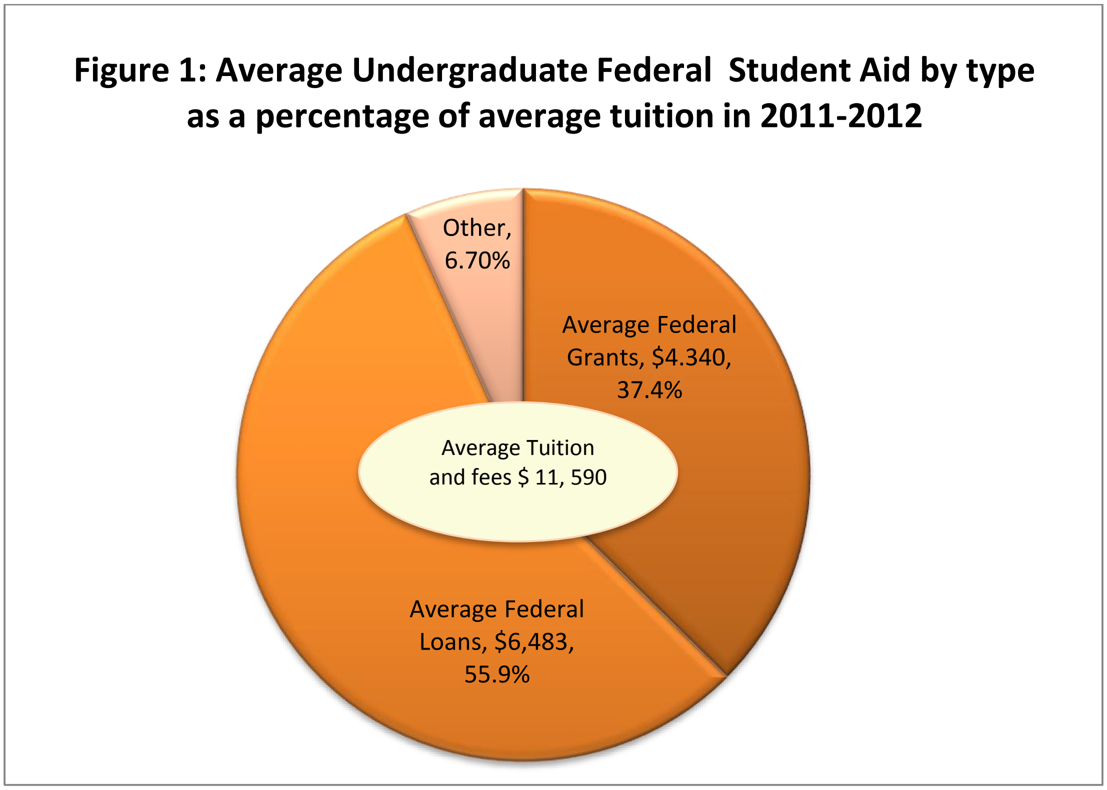
Babson College	41%
Bentley University	40%
Boston College	37%
Boston University	39%
Brandeis University	39%
Emerson College	35%
Northeastern University	36%
Suffolk University	32%
Tufts University	44%
UMass Amherst	36%
UMass Boston	54%
UMass Dartmouth	70%
UMass Lowell	63%
University of Phoenix	76%

See appendix for methodology used in calculating these percentages and the various sources used to gather the data.

These colleges are alike in being tuition dependent with endowments too small to withstand shocks to tuition. Relating dependency to endowments reveals that were the government to stop issuing loans, these colleges would quickly exhaust their endowments should they use them to fill the gap. If this were to happen, it would, within four years, deplete half of an average post-secondary institutions' endowment[1].

[1] The average total debt held by one cohort represents about 13.5% of an average post-secondary institution's endowment (see Appendix Table A-2 for more information).

A broader view of college dependency can be gleaned from data on Federal financial aid. Almost half of all undergraduate students receive aid. Colleges pay for more than half their seats with Federal loans (see figure 1). Private loans are in excess of this figure.



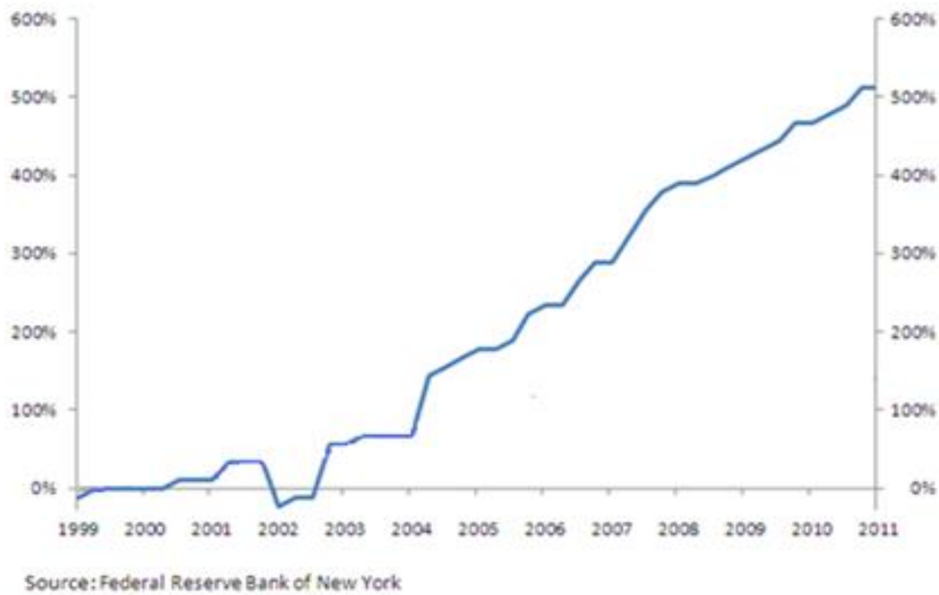
Source: http://trends.collegeboard.org/student-aid

How reliable are student loans as a source of income for colleges?

Key factors to predict whether a type of debt is under stress is its absolute size and growth. The total outstanding student loan debt is between $902 billion and $1 trillion. The number of borrowers has increased from about 22 million to 39 million and their average balances have steadily grown from $15,000 to S25,000. A recent study from Fidelity Investment found that 70% of 2013 graduates have college-related debt that averages to $35,200 when federal, state, private loans and debt accumulated through credit cards are tallied.

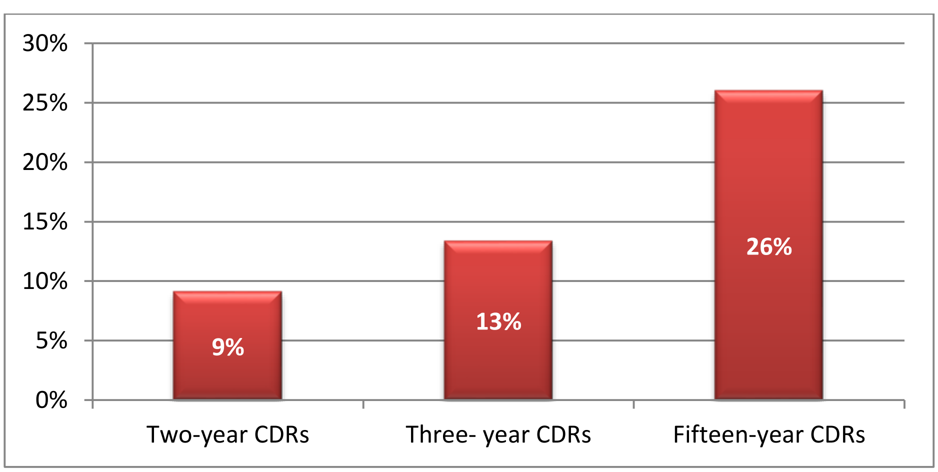
The growth of the student loan stock since 2002 was 500% (see Graph 2), [faster than any other major debt category]

Graph 2: Cumulative Growth of Student loan debt since 1999



Student repayment performance is faltering. The official two-year Cohort Default Rates (CDRs) doubled to 9.1% during the five years preceding 2010. Worse, the three year CDR shows a 13.4% default rate for 2009. And if a fifteen year span is considered, about 26% borrowers are estimated to have defaulted on their student loans (see graph 3)

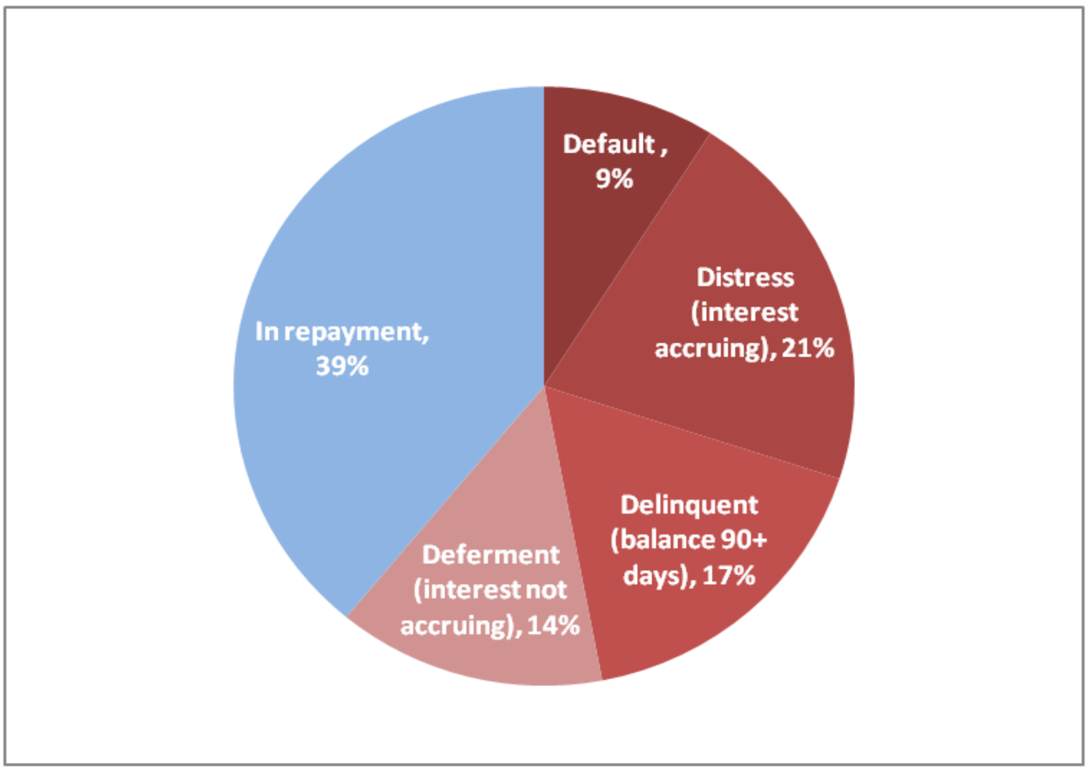
Graph 3: The Cohort Default Rates (CDRs) for many years beyond the two-year window reflected in the government's official measure



Default rates do not include the many borrowers who become delinquent, or who are under a deferment and/or forbearance status. In reality, **only about 39% of the borrowers** are actually in repayment, while 61% are not making their payment on time. An additional 17% are also counted as 'in repayment' but their balance is in 90+ days delinquent.

The Department of Education reports that the total loans in default equal $85 billion. In the first three months of 2013, the credit-rating firm Equifax, found that, $3.5 billion of loans have already gone bad, the most since the company began recording. They also claim that the Department's systems for collecting bad loans are struggling to keep up.

Figure 2: Percentages of Different Loan Repayment Status



Source: FRBNY Consumer Credit Panel / Equifax - http://www.newyorkfed.org/newsevents/mediaadvisory/2013/Lee022813.pdf

How is the Government and market responding?

Student debt has a substantial effect on government finances now that it has become the direct lender. Financial aid is already one of the largest items of non-entitlement, non-military expenditures in the budget. In reaction to student loan stress the government has decreased interest payments, elongated principal payments, renewed education tax credits, and penalized colleges with high student default rates. The government knows that stakes are very high as low income enrollment and diversity depend on student loan access. The market is also speaking. Recently Sallie Mae, the largest non-government student lender, had to cancel a $225 million bond offering after two weeks on the market. According to The Wall Street Journal, *"the* rising (student loan) defaults could have crimped the cash flow of the federally backed loans supporting the new securities".

	Babson College	Bentley University	Boston College	Boston University	Brandeis University	Emerson College	Northeastern University
UNDERGRADUATE							
Average loan amount for undergrad cohort 2011 per year	$8,528.5	$8,267	$5,150	$9,122	$7,133	$4,873	$6,795
Percent of undergraduate students borrowing	49%	64%	55%	57%	59%	62%	65%
2011 headcount with debt	958	2627	5273	9842	1958	2102	10871
Total Amount of undergraduate loans FY 2010-11	$8,174,056	$21,712,458	$27,155,373	$89,775,258	$13,967,422	$10,244,567	$73,868,445
GRADUATE							
Graduate Loan amount per year	$20,149	$20,149	$20,149	$20,149	$20,149	$20,149	$20,149
Percent of graduate students borrowing	56%	56%	56%	56%	56%	56%	56%
Graduate student headcount with debt	774	790	2636	4663	1025	503	2,370
Total Amount of Graduates Loans FY 2010-11	$15,602,434	$15,920,619	$53,102,822	$93,944,154	$20,659,305	$10,136,469	$47,750,494
Total Amount of debt held by undergrad and graduate FY 2010-11	$23,776,490	$37,633,078	$80,258,196	$183,719,412	$34,626,727	$20,381,036	$121,618,939
Net revenue from tuition and fee FY 2010-11	$95,789,418	$157,416,000	$356,979,000	$789,503,000	$146,000,000	$96,205,520	$564,807,000
Percentage of Tuition paid by loans	24.82	23.91	22.48	23.27	23.72	21.18	21.53
Adjustment factor (see methodology for full explanation)	41.20	39.69	37.32	38.63	39.37	35.17	35.74

	Suffolk University	Tufts University	UMass Amherst	UMass Boston	UMass Dartmouth	UMass Lowell
UNDERGRADUATE						
Average loan amount for undergrad cohort 2011 per year	$7,841	$6,117	$6,723	$6,051	$5,800	$6,905
Percent of undergraduate students borrowing	74%	41%	24%	68%	80%	75%
2011 headcount with debt	3875	2112	4757	5422	5470	6100
Total Amount of undergraduate loans FY 2010-11	FALSE	$12,916,046	$31,982,769	$32,804,988	$31,728,320	$42,118,774
GRADUATE						
Graduate Loan amount per year	$20,149	$20,149	$20,149	$20,149	$20,149	$20,149
Percent of graduate students borrowing	56%	56%	56%	56%	56%	56%
Graduate student headcount with debt	1879	3149	2694	1464	687	1215
Total Amount of Graduates Loans FY 2010-11	$37,864,028	$63,443,839	$54,273,289	$29,500,305	$13,841,052	$24,477,526
Total Amount of debt held by undergrad and graduate FY 2010-11	$37,864,028	$76,359,884	$86,256,058	$62,305,294	$45,569,372	$66,596,300
Net revenue from tuition and fee FY 2010-11	$199,343,414	$288,531,000	$239,639,000	$115,520,000	$65,540,000	$105,934,000
Percentage of Tuition paid by loans	18.99	26.47	35.99	53.93	69.53	62.87
Adjustment factor (see methodology for full explanation)	31.53	43.93	N/A	N/A	N/A	N/A

Methodology:

Post-secondary institutions do not calculate their student loan dependency. Thus, certain assumptions had to be made while using available national or school specific numbers, averages and percentages. After gathering the data, we calculated our estimated dependency percentage with this formula:

$$\boldsymbol{Dependency} = \frac{\boldsymbol{Net\ Revenues}}{\boldsymbol{Total\ Student\ Debt}}$$

Where: ***Net Revenues*** = Net revenue from tuition and fees from freshmen cohort 2011 and one year of graduate cohort 2011

Total Student Debt = Student debt held by freshmen undergraduate cohort 2011 and one year of graduate cohort 2011

The total Amount of debt held by undergraduate and graduate was found by adding:

Total Amount of debt held by 2011 Undergraduate cohort = Percent of Borrowers * Freshman Headcount * Average Debt

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Total Amount of debt held by 2011 graduate cohort = Percent of Borrowers * graduate Headcount / 2 * Average Debt / 2

We decided to divide the total graduate headcount and average cumulative debt by two to get a per year value, as graduate programs' length vary from one to four years, thus we assumed that an average of two would be appropriate.

Explanation for the Adjustment factor:

We were able to obtain actual (but confidential) data from some non-for profit private institutions. These numbers show that our estimated percentages are consistently underestimating the dependence on loan by a factor of 1.66. We identified the main reason for our underestimation as follow: the average graduate program loan amount we used in our calculation is skewing our estimations. It is the national average covering a wide range of diverse graduate programs; masters, professional degrees, veterinarian and medical schools, which all have very different loan averages. Although we have access to these averages, we cannot use them as we do not have the breakdown of Net Revenue from Tuition and Fee among undergraduate, graduate, professional and medical schools for each institution. Thus the national graduate loan averages is leading to a systematic underestimation, as the weight that some programs have on the dependence is obscured by the lack of data. We only applied the adjustment factors to non-profit private institutions as they are more comparable to the real data we could obtain than public institutions.

For Undergraduate level data, we obtain school specific information from the Student Loan project for:

- Average debt for cohort 2011 per year,
- Proportion of cohort 2011 with debt, and
- 2011 cohort headcount with debt from the Student Loan project,

(For Suffolk University: the school specific average debt for cohort 2011 and Proportion of cohort 2011 with debt were missing, thus we used Massachusetts's average and proportion also found on the Student loan project link).

For the Graduate level data, we could not find school specific information for amount borrowed and the percentage of graduate with loans, therefore we used national averages obtained by [finaid.org.](finaid.org)
Graduate students headcount was found using these sources:
Babson - http://www.collegedata.com/cs/data/college/college_pg06_tmpl.jhtml?schoolId=32
Bentley - http://www.bentley.edu/about/facts-about-bentley
Boston College - http://www.bc.edu/content/bc/offices/stserv/enroll.html
Boston University - http://www.bu.edu/oir/files/2011/07/D3c-2011-Enrollment-Notebook.pdf
Brandeis - http://www.brandeis.edu/about/facts/schools.html
Northeastern - http://www.northeastern.edu/ataglance/student_enrollment.html
Suffolk -http://collegeapps.about.com/od/collegeprofiles/p/suffolk-university.htm
Tufts - http://collegeapps.about.com/od/collegeprofiles/p/tufts.htm
UMass - http://media.umassp.edu/massedu/budgetoffice/UMass%20FY2012%20Operating%20Budget%20-%20Approved.pdf

Data on Net Revenue from tuition and fees was obtained using these sources:
Babson - http://www.babson.edu/offices-services/business-financial-services/Documents/babson-college-audited-financial-statements-2010.pdf
Bentley - http://www.bentley.edu/files/EQUIS2010.pdf
Boston College - http://www.bc.edu/content/dam/files/offices/controller/pdf/BC%20FY11%20Financial%20Statements.pdf
Boston University - http://www.bu.edu/cfo/files/2011/10/Boston-University-Financial-Statement-for-2011.pdf
Brandeis University - http://www.brandeis.edu/financialaffairs/financialstatements/FY11-Financial-Statements-Final.pdf
Emerson College - http://www.emerson.edu/sites/default/files/Files/AboutEmerson/finance-office-financial-statement-fiscal%20year-2011.PDF
Northeastern University - http://www.northeastern.edu/neuhome/pdfs/financials-FY2011.pdf
Suffolk University - http://www2.suffolk.edu/files/news/Financial_Statements_June_twothousandtwelve.pdf
Tufts University - http://finance.tufts.edu/budgetacc/files/AnnualFinancialReport2011.pdf
UMass - http://media.umassp.edu/massedu/budgetoffice/UMass%20FY2012%20Operating%20Budget%20-%20Approved.pdf

No data could be found for University of Phoenix. But the percentage was obtained from Apollo Inc. 2011 financial report, which owns and operates University: http://investors.apollo.edu/phoenix.zhtml?c=79624&p=irol-IRHom

Table A-2: Data used to estimate cohort cumulative debt as a percentage of endowment

Institution Name	2011 Endowment	Total cumulative debt held by graduate and undergrad cohort 2011	2011 cohort debt as a Percentage of the endowment
Babson College	$239,500,000	$23,776,490	9.9%
Bentley University	$207,842,000	$37,633,078	18.1%
Boston College	$1,756,291,629	$80,258,196	4.6%
Boston University	$1,159,583,000	$183,719,412	15.8%
Brandeis University	$703,665,919	$34,626,727	4.9%
Emerson College	$118,988,122	$20,381,036	17.1%
Northeastern University	$601,026,045	$121,618,939	20.2%
Suffolk University	$128,044,000	$37,864,028	29.6%
Tufts University	$1,404,000,000	$76,359,884	5.4%
UMass Amherst	$529,262,000	$86,256,058	16.3%
UMass Boston	$529,262,000	$62,305,294	11.8%
UMass Dartmouth	$529,262,000	$45,569,372	8.6%
UMass Lowell	$529,262,000	$66,596,300	12.6%
Average	**$648,922,208.8**	**$67,458,831.8**	**13.5%**

Source for Endowment information:

Babson - http://www.babson.edu/offices-services/business-financial-services/Pages/home.aspx
Boston College - http://colleges.usnews.rankingsandreviews.com/best-colleges/boston-college-2128
Boston University - chronicle.com/article/What-Theyre-Worth/136933/http://www.statisticbrain.com/college-endowment-rankings/
Brandeis - http://colleges.usnews.rankingsandreviews.com/best-colleges/brandeis-university-2133
Emerson - http://colleges.usnews.rankingsandreviews.com/best-colleges/emerson-college-2146
Northeastern - http://colleges.usnews.rankingsandreviews.com/best-colleges/northeastern-university-2199
Suffolk - chronicle.com/article/What-Theyre-Worth/136933/http://www.statisticbrain.com/college-endowment-rankings/
University of Mass Foundation - http://chronicle.com/article/What-Theyre-Worth/136933/