How I Learned to Stop Worrying and Love Merit Awards:
The Tuition Driven Schools’ Dilemma
Step 1

A little context...
Step 1

A little context...

The view from the median
Ivory Tower and the Crippling Cost of Higher Education (VIDEO)

In Andrew Rossi's new documentary, Ivory Tower, Rossi (Page One: Inside The New York Times) explores the rising cost of a college education in America and asks the unfortunate question, Is it worth it?
Student tuition is skyrocketing...

Well, if all you look at is the sticker price, this is true, but since 97% of our students get some form of grant award, this is nearly an irrelevant number.
“Let me start with a poorly understood fact. The cost of a Beloit College education since the 2001-02 academic year has risen by $335. Surprised? If you get nothing more out of this magazine than an appreciation of this statistic, you will have spent your time well. The cost of a Beloit education since 2001-02 has risen by $335.”
The Student Debt Trap

As I watch my 17-year-old daughter Samantha thumb through university catalogs, study for her SATs and chatter with her friends about going off to college, my heart fills with pride.

But I also shiver with fear when I think about skyrocketing tuition, climbing interest rates for student loans, and the crushing debt she and her friends will face after finishing school, especially in the current job market.
Student debt is spiraling out of control...

Well, if you don’t adjust for inflation, or if you confound us with the for-profit sector, maybe, otherwise mostly student debt is pretty flat in real terms for our sector.
Student debt has been about equal to the cost of a Chevy Malibu since the mid 80’s.
'No Point in Applying': Why Poor Students Are Missing at Top Colleges

High-achieving low-income students too often don't know that they have a good chance of getting in and affording—an elite school.

ALEXANDRIA WALTON RADFORD | SEP 4, 2014 3:20 PM
Only a small number of students with modest means come to your college...

Well, it is a lot more than it was a few years ago and has been steadily rising. We are well over 20% in Pell eligible students (up from 12%) and have 26% domestic minority in this year’s entering class. And average family income is far less than UW.
Expected family contribution (EFC) at Beloit College
PUBLIC VS. PRIVATE COLLEGE: Which Is Better For Your Wallet?

Mandi Woodruff

At a time when college costs more than ever and we're facing a $1 trillion student debt bubble, it's no surprise that the whole "Is College Even Worth It?" debate is still going strong.

Take it from us — you won't get far without a college degree and those who have managed to do so are the exceptions,
In dollar terms we are still widening the gap with public institutions...

Well, only for the very few richest students.

Even more, for a good student we are often cheaper than public alternatives up to incomes approaching $200,000.
Senate Looking at Endowments as Tuition Rises

The Senate Finance Committee, increasingly concerned about the rising cost of higher education, demanded detailed information on Thursday from the nation’s 136 wealthiest colleges and universities on how they raised tuition over the last decade, gave out financial aid and managed and spent their endowments.
We are not spending enough from our endowments...

I wish.
Fact: Grinnell is not the median.
Step 1
A little context...

Step 2
A little more context ...
How do you know if you are tuition driven?

If between May 1 and August 15 every important question your president is asked is

“HAVE YOU MADE YOUR CLASS?”
How do you know if you are tuition driven?

\[ a = \text{total number of “applications”} \]
\[ b = \text{total number of “applications” from students who will really never keep up academically} \]
\[ c = \text{total number of “applications” from students who are likely to burn down a building or worse} \]
\[ d = \text{total number of “applications” from students who actually never really complete the application} \]

\[ x = a - b - c - d = \text{Number of “effective applications”} \]

\[ y = \text{Number of acceptances} \]
How do you know if you are tuition driven?

If $x = y$

(or pretty close),

you are tuition driven.
One question that has never been asked...

Adam Falk...

Did you make your class?
A different model...

Beloit
Cornell
Knox
Lawrence
St. Olaf

Did you make your class?
The Dilemma of the Tuition-Driven College
The Dilemma of the Tuition-Driven College

The game is student recruitment, not admissions. If your institution struggles to reach enrollment goals ... then your college or university is in the student-recruitment business.
What do you need to know about the economics of tuition-driven colleges?
Not to mention...
U.S. Private Colleges Face Enrollment Decline
Schools Respond With Cutbacks, Mergers and New Recruitment Strategies

By DOUGLAS BELKIN

Updated Nov. 11, 2013 1:35 p.m. ET
Small U.S. Colleges Battle Death Spiral as Enrollment Drops

By Michael McDonald • Apr 14, 2014 11:44 AM CT

At a Dowling College campus on Long Island’s south shore, a fleet of unused shuttle buses sits in an otherwise empty parking lot. A dormitory is shuttered, as are a cafeteria, bookstore and some classrooms in the main academic building.

“There’s a lot of fear here,” said Steven Fournier, a senior who lived in the now-closed dorm for his first three years. “It’s not the same college I arrived at.”

Dowling, which got a failing grade for

Photographer: Michael McDonald/Bloomberg
Moody’s Gives Colleges a Negative Grade

By ANDREW MARTIN
Published: January 16, 2013

The credit reporting agency Moody’s said on Wednesday that it had revised its financial outlook for colleges and universities, giving a negative grade to the entire sector.
Parent PLUS: Morehouse Cuts $2.5 Million and Cuts Staff as Enrollment Drops

This weekend Morehouse will play Howard University in the National Football Classic at RFK Stadium in Washington DC. But in late August, Morehouse was tackled by the reality of a $2.5 million cut to their operating budget, job eliminations, and close to 50 layoffs.
Harvard Business School professor Clayton Christensen has predicted that as many as half of the more than 4,000 universities and colleges in the U.S. may fail in the next 15 years, driven out of business in large part by the growing acceptance of online learning. “I’m not sure a lot of these institutions have the cushion to experiment with how to stay afloat,” says Michelle Weise, a senior research fellow at the Clayton Christensen Institute for Disruptive Innovation, a think tank the Harvard professor helped establish in San Mateo, Calif.
A Bid to Save Sweet Briar College
Step 1
A little context...

Step 2
A little more context...

Step 3
A little theory...
STRANGELOVE
OR: HOW I LEARNED TO STOP WORRYING AND LOVE THE BOMB

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Stylized Assumptions

No-need (very good) student without merit award pays tuition of ...$40,000
No-need (very good) student with merit award pays...$25,000
Average student with need pays...$16,000
Very good student is valued over average student by...$12,000
Stylized Assumptions

No-need (very good) student without merit award pays tuition of ...$40,000
No-need (very good) student with merit award pays...$25,000
Average student with need pays...$16,000
Very good student is valued over average student by...$12,000

If I offer a merit award and you do not, the probability of student choosing me is 1.0

If you offer a merit award and I do not, the probability of student choosing me is 0.0

If both of us offer the same merit award, the probability of student choosing me is 0.5

If both of us offer no merit award, the probability of student choosing me is 0.5
Along comes a no-need very good student...

No-need (very good) student without merit award pays tuition of ...$40,000
No-need (very good) student with merit award pays...$25,000
Average student with need pays...$16,000
Very good student is valued over average student by...$12,000

If I offer a merit award and you do not, the expected payoff to me is $25,000 + $12,000 = $37,000

If you offer a merit award and I do not, the expected payoff to me is $16,000

If both of us offer a merit award, the expected payoff to me is 
0.5*($25,000 + $12,000) +0.5*$16,000 = $26,500

If both of us offer no merit award, the expected payoff to me is 
0.5*($40,000 + $12,000) +0.5*$16,000 = $34,000
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### The Tuition Driven Schools’ Dilemma

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Amid limited budgets, colleges grapple with merit-based aid

...Georgia Nugent, the outgoing president of Kenyon College, a small, prestigious college in Ohio, acutely feels the tensions. She has led discussions among small college presidents about whether they can collectively decrease merit aid without reducing competitiveness.

Yet her own college, disappointed a few years ago with the crop of students who accepted admission, then boosted its merit aid budget. “How embarrassing is this for me?” she said, laughing. “That’s what’s happening, the system just keeps ratcheting up,”...
Beloit 2012 CIRP Survey Results

The offer of **financial assistance was the most important factor of those offered with 74.8% of respondents pointing to this as being “very important” when considering Beloit.**

CIRP is the Cooperative Institutional Research Program
Where does it all end?...
Where does it all end?...
Where does it all end?...

Price tends towards marginal cost
And, marginal cost is less than average cost.

Price tends towards marginal cost.
SPACE, THE FINAL FRONTIER
Scale of how much time is spent worrying about how to make your class (while keeping the financial ship afloat)

0
Williams

100
Beloit
Lawrence
Knox
St. Olaf
Cornell
Lots of others
Scale of how much time is spent worrying about how to make your class (while keeping the financial ship afloat)

0 100

Williams  Beloit  Lawrence
Knox  St. Olaf  Knox
Cornell  Lots of others

SPACE, THE FINAL FRONTIER

Beloit College
IMPORTANT EQUATIONS TO KNOW

\[ x = \frac{-b \pm \sqrt{b^2 - 4ac}}{2a} \]

\[ \int \frac{1}{x} \, dx = \ln |x| + C \]

\[ \frac{d}{dx} \int_a^x f(s) \, ds = f(x) \]

\[ \Pr[A|B] = \Pr[B|A] \cdot \frac{\Pr[A]}{\Pr[B]} \]

\[ e = \lim_{n \to \infty} \left( 1 + \frac{1}{n} \right)^n \]
A REALLY IMPORTANT EQUATION TO KNOW
A REALLY IMPORTANT EQUATION TO KNOW

\[ \text{Space} = $ \]
A REALLY IMPORTANT EQUATION TO KNOW

Space = $}

Williams
0

Beloit

100

Lawrence
Knox
St. Olaf
Cornell
Lots of others
But, this is just a stylized model. How valuable is this space thing anyway?
REALITY CHECK AHEAD
So, what is the point?

For a tuition driven school there is almost nothing in the budget that is not about...

People
Financial Aid
Buildings
We promise a heavily mentored very individual education. **This makes it hard to cut back on people.**

We promise we believe both in the principle of access and the importance of having a diverse community. **This makes it hard to cut back on need-based financial aid.**

We promise we believe in the residential learning experience **This makes it hard to cut back on physical plant.**

And the quality of the people, program, and place are all what make up the thing you need to enhance: your reputation.
What options do we have?