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The Good, the Bad, and the Ugly:
A look at the best and worst deals in Higher Education

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Choosing a university is one of the most important, and stressful decisions that young Americans go through. Weighing the options can often seem overwhelming, and many students end up applying to and attending schools for arbitrary reasons. Fortunately, the US Department of Education has just given high-schoolers a modern analytical tool in the recently launched College Scorecard[1], a web-based database of over 7,500 institutions of higher learning in the US. The site is powered by a dataset that includes information about schools and students dating from 1996. With a quick search, prospective students can see a snapshot of their target school, with information about academics, admissions, cost, and outcomes. In addition to the website, the Department also released their entire dataset. Here's a look at some of the best and worst deals in higher education.

Figure 1 shows the median debt of graduating students plotted against the median earnings of students ten years after enrollment at each institution in the US[2].
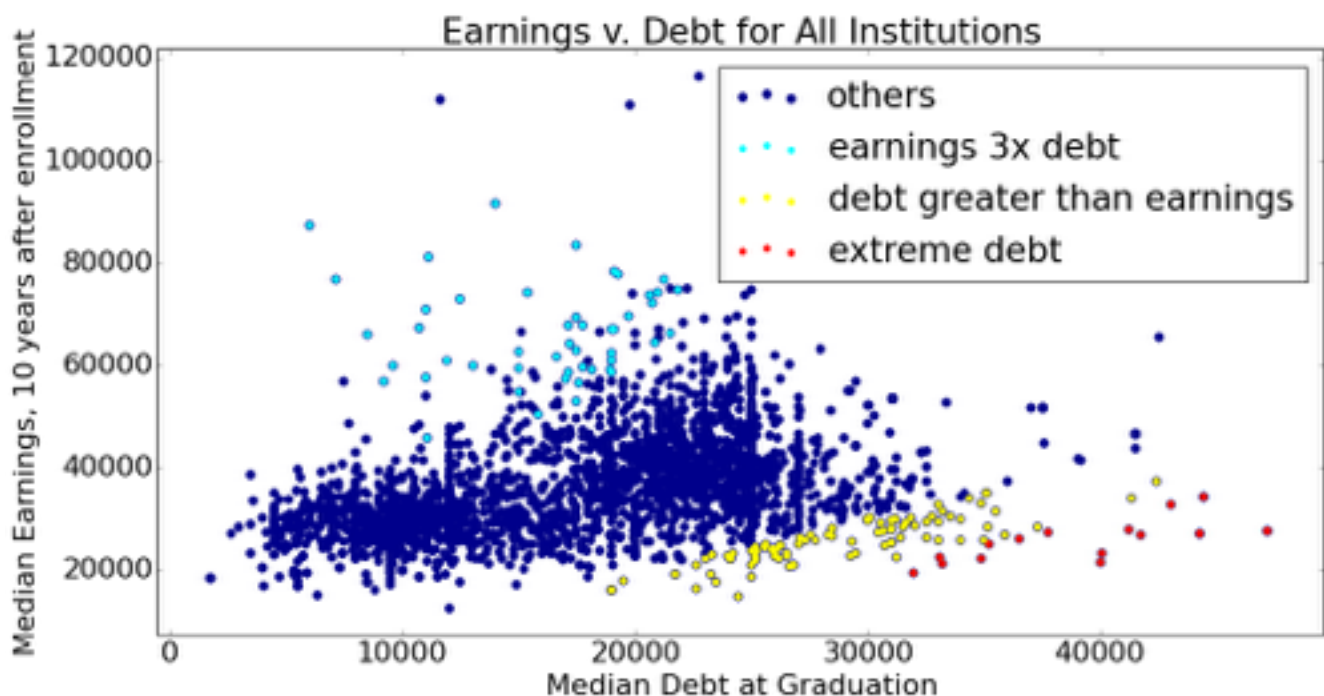
The scatterplot shows four categories of schools: the good, the bad, the extremely bad, and all the rest. The yellow and red schools have a median debt at graduation that is higher than the median earnings of their graduates ten years after enrollment. These schools drop their students onto a mountain of debt without the means to pay it off. The schools in cyan are the
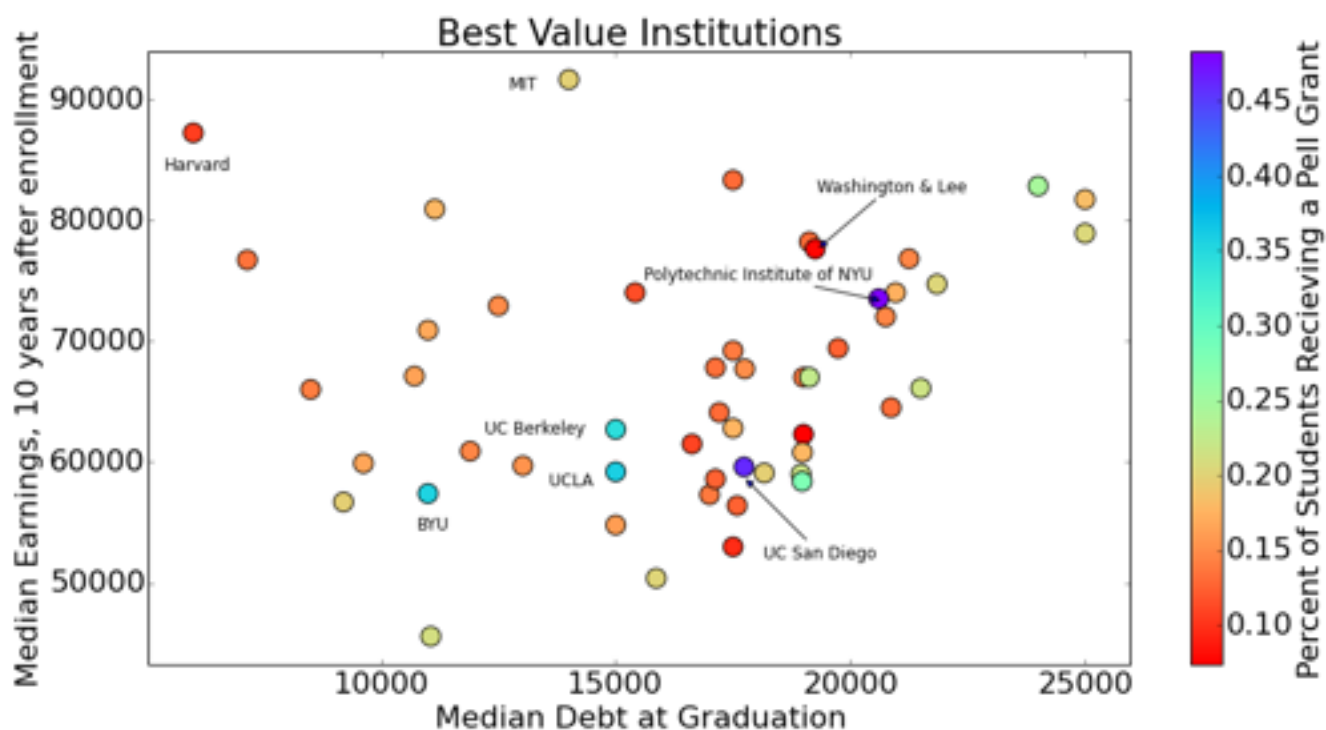
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[1]   https://collegescorecard.ed.gov/

[2]   All data from the 2011 merged scorecard dataset.

best deals in education, with median 10 year earnings more than three times[3] debt at graduation. This cohort has also been limited to schools with an average SAT score[4] of over 1250.

The schools in the debt-ridden sector follow some recognizable patterns. Among these schools are many for-profit universities, some even with '.inc' in their names. Some of the names, like Westwood College, are familiar, having been in the news over shady practices[5]. Many of these institutions are distance-learning only, and their credits may not be transferable to other institutions. The worst of the worst in this group are shown in red in Figure 1. These are schools where graduates earn $10,000 less per year than their debt at graduation. The Southwest University of Visual Arts saddles it's students with a median debt of $47,000, and grads earn a mere $27500 per year, ten years *after* graduating. These schools disproportionally victimize minority students. Among all college students, about 17% are black, but in the worst performing universities 54% of students are black.

Among the best value schools, many of the elites are found. MIT and Harvard boast some of the lowest graduation debt and highest earnings for their graduates, but is this the whole story? Maybe these students have so little debt because their families can afford the astronomical price tags that these schools some with. Stanford grads make great money[6], but it costs $224,000 to complete four years there. How are student's leaving with only $11,000 in debt? Figure 2 shows the best value schools, color coded by the percentage of their students that received Pell Grants. Because Pell Grants are awarded to all students who can show

3 And above $40,000 per year.

4 Math and Verbal sections only

5 http://www.nytimes.com/2012/07/30/education/harkin-report-condemns-for-profit-colleges.html

6 $80,900/yr after 10 years

financial need, it is a good indicator of how many students come from families of means and do not need to go into debt to pay for university.

Now it's clear where more of the real value is among top universities. Some of the schools with high-earning potential are so expensive that it might not be worth it for a student from a middle-income family. Schools like Harvard, CalTech, Georgetown, Duke, and Washington and Lee charge huge sums. Though they report very little debt among their graduating students, their students are also the type that don't qualify for Pell Grants. At Washington and Lee, just 8% of students received Pell Grants. At Harvard, the number was just 11%. Schools that offer students of middling means the best return include Case Western, USC, Emory, and BYU. The UC system is also a highlight, with a hight percentage of students at UCLA, UC Berkeley, and UC San Diego receiving Pell Grants and leaving school with little debt.

Another way of looking for a bargain is looking at potential earnings versus the cost of attendance. Some students will come from families that can afford to pay for their child's university, and that's a great reason to look for reasonably priced schools that offer great outcomes. The public universities excel in this regard. Some of the best schools with the lowest costs are Brigham Young, Georgia Tech, UVA, and UNC Chapel Hill. Georgia Tech stands out here, costing around $19,000 per year, with expected earnings of 74,000 per year.
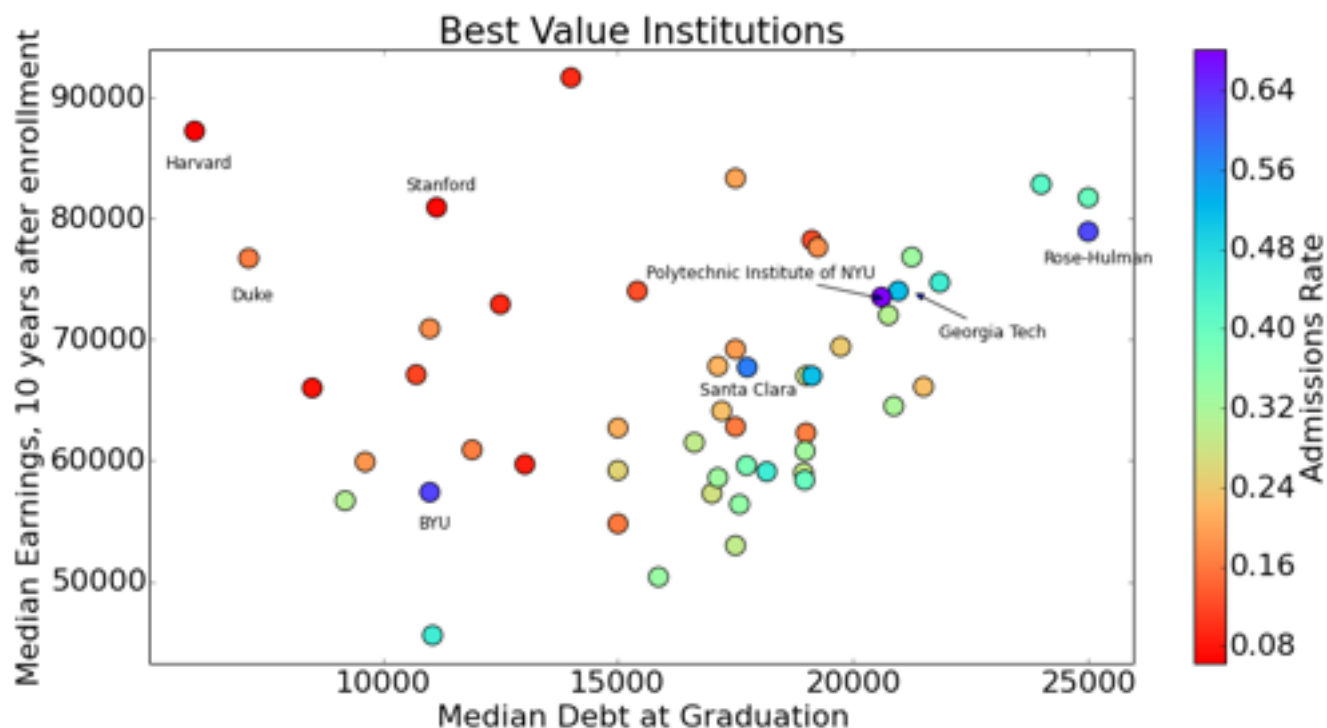
Let's say that a student has good, but not great, grades and scores. What elite institutions does he or she have the best chance of being accepted to? Figure 3 shows the same top schools, this time coded by admission rate.

Even if you have a perfect application, schools like Harvard and Stanford are no sure

thing, accepting just 6 and 7% of applicants each year, respectively. If a student is looking for a top education, he or she might have the best chances of getting it by applying to schools with higher admissions rates. BYU, Georgia Tech, Case Western, and Maryland-College Park all have top students, top earnings, minimal debt, and high admissions rates. Prospective university students would do well to forgo any pretentious desires for an Ivy League diploma, and instead opt for a cheaper alternative that can lead to the same, if not better results.

It's difficult to judge exactly what college is the best value in America, so a short-list will have to do. Case Western gets a mention for it's high percentage of students receiving Pell Grants and high admissions rate. Georgia Tech and Maryland-College Park are next, offering a high quality education at a low cost, and giving many students a chance with their high admissions rates. Finally, two lesser thought of schools round off the list: BYU and The Polytechnic Institute of New York University. Both have high admissions rates and a high number of students receiving Pell Grants.

Appendix A. The Zone of Debt

Name	Median Earnings After 10yrs	Cost: Academic Year	Median Debt at Graduation
Allen University	19400	19831	31980
Arkansas Baptist College	21100	20015	33179
Benedict College	21400	27620	40000
Beulah Heights University	26800	11105	41750
Central State University	24900	16288	35218.5
College of Court Reporting Inc	23300	14518	40050
Florida Memorial University	27700	23611	41213
Livingstone College	26100	24000	36500
Martin University	22300	21250	34860
Platt College-Aurora	32600	41487	43000
Shaw University	27400	24269	37737
South College	22400	31676	33110
Southwest University of Visual Arts-Albuquerque	27500	46544	47186.5
Southwest University of Visual Arts-Tucson	27500	46183	47186.5
Stenotype Institute of Jacksonville Inc-Jacksonville	27100	30122	44260
Stenotype Institute of Jacksonville Inc-Orlando	27100	29393	44260
Westwood College-Annandale	34200	29306	44404.5
Westwood College-Arlington Ballston	34200	29361	44404.5
Westwood College-South Bay	34200	29329	44404.5

Appendix B. The Zone of Good Return

Name	Earnings	Cost	Debt	% Pell	Adm. Rate
Boston College	67000	54595	19000	0.1385	0.2798
Bowdoin College	54800	54950	15000	0.1612	0.1611
Brigham Young University-Provo	57400	16050	11000	0.356	0.6278
Brown University	59700	54370	13022	0.1548	0.0891
California Institute of Technology	74000	52389	15414	0.1138	0.1277
Carnegie Mellon University	72000	55286	20750	0.1458	0.3044
Case Western Reserve University	67000	52073	19125	0.2255	0.5126
Colby College	53000	53590	17500	0.097	0.2944
Colgate University	61500	54030	16625	0.1102	0.2942
College of William and Mary	56400	23722	17586	0.1265	0.3464
Colorado School of Mines	74700	25121	21844	0.204	0.4455
Columbia University in the City of New York	72900	56681	12500	0.1497	0.0954
Cornell University	70900	54667	11000	0.1695	0.1797
Dartmouth College	67100	55386	10712	0.1641	0.1168
Duke University	76700	55150	7150	0.1353	0.1648

Name	Earnings	Cost	Debt	% Pell	Adm. Rate
Emory University	59000	53556	18947.5	0.2178	0.2887
George Washington University	64500	55625	20867.5	0.1327	0.3169
Georgetown University	83300	56485	17500	0.1313	0.2015
Georgia Institute of Technology-Main Campus	74000	19793	20963	0.174	0.5169
Grinnell College	45600	49062	11060	0.2115	0.448
Hamilton College	57300	53560	17000	0.1392	0.2737
Harvard University	87200	53950	6000	0.1065	0.0626
Johns Hopkins University	69200	55390	17500	0.1397	0.194
Lehigh University	76800	52454	21250	0.147	0.3337
Massachusetts Institute of Technology	91600	53210	14003	0.1991	0.0973
Northwestern University	64100	56406	17207.5	0.1308	0.2313
Polytechnic Institute of New York University	73500	45230	20604	0.483	0.6814
Rensselaer Polytechnic Institute	81700	54035	25000	0.184	0.3963
Rice University	59900	47871	9625.5	0.1661	0.1882
Rose-Hulman Institute of Technology	78900	51427	25000	0.2059	0.6224
SUNY at Binghamton	58400	19988	18972	0.2789	0.4007
Santa Clara University	67700	53122	17749	0.1519	0.5795

Name	Earnings	Cost	Debt	% Pell	Adm. Rate
Stanford University	80900	55918	11145.5	0.1787	0.071
Stevens Institute of Technology	82800	53661	24000	0.2461	0.4167
Tufts University	67800	55000	17125	0.1332	0.2186
University of California-Berkeley	62700	30800	15000	0.3445	0.2143
University of California-Los Angeles	59200	29240	15000	0.3599	0.2554
University of California-San Diego	59600	27700	17734	0.4611	0.3788
University of Chicago	62800	57590	17500	0.1767	0.1626
University of Maryland-College Park	59100	21785	18165	0.1969	0.448
University of North Carolina at Chapel Hill	50400	20208	15863	0.2032	0.3388
University of Notre Dame	69400	53239	19737	0.1258	0.2429
University of Pennsylvania	78200	55250	19125	0.1309	0.1243
University of Richmond	60800	52413	18980	0.1788	0.3271
University of Southern California	66100	55493	21500	0.2169	0.2302
University of Virginia-Main Campus	58600	22535	17125	0.1254	0.3327
Vanderbilt University	60900	56634	11900	0.1465	0.1642
Washington University in St Louis	62300	56930	19000	0.0738	0.1652

Name	Earnings	Cost	Debt	% Pell	Adm. Rate
Washington and Lee University	77600	53082	19250	0.0785	0.1822
Wellesley College	56700	54000	9200	0.1979	0.3068
Yale University	66000	55300	8500	0.1418	0.0788