INTELLECTUAL CURRENCY: REINFORCING WHY HIGHER EDUCATION MATTERS

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The Higher Education Apocalypse
- U.S. News, Lauren Camera

Higher Education is headed for a supply and demand crisis
- Washington Post, Jeffrey Selingo

Is College Worth It?
- Forbes, Zack Friedman
Is College a Good Investment?

52% Best Investment for Success

46% Questionable Investment

Source: Public Agenda, 2016.
Skepticism about higher education is high, with some political differences in who doubts the direction of higher education.

73%

52%

There are several reasons for doubts about the direction of higher education.

- Tuition too high: 77% of Republicans, 92% of Democrats

- Unprepared for workforce: 56% of Republicans, 73% of Democrats

- Political correctness: 31% of Republicans, 75% of Democrats

- Professor’s ideological slant: 17% with ideological slant, 79% without ideological slant

Today I will discuss:

• Changes in the cost of attendance, especially from the perspective of a student;

• Changes in student debt and the relationship between completion and repayment;

• The economic benefit of attending college to the individual, including the risk inherent in doing so;

• The economic benefit of post-secondary education for society.

Putting it all together, is it worth it?

Who’s right? The skeptics or us?
Sticker prices are up …
Actual prices much less so

Not-for-Profit 4-year universities

Source: College Board. Data is for Full-Time Undergraduate Students. 2018 dollars.
... the difference is even greater at public 2-year institutions.
Tuition hikes are not solely driven by increases in administrative costs.

Total Revenue from Tuition and Fees and Expenditures per Student (1987-2015)

Tuition is a greater share of median family income compared to nearly 20 years ago.

Public 4-Year

PUBLISHED TUITION AND FEES
NET TUITION AND FEES

8.2%  3.0%  2000

16.0%  6.5%  2017

Not-for-Profit 4-Year

PUBLISHED TUITION AND FEES
NET TUITION AND FEES

38.0%  21.8%  2000

55.6%  22.6%  2017

Tuition as a share of median family income
Who is borrowing?

- First-Professional Degree (100%*)
- Doctoral Degree (40%*)
- Master’s Degree (42%*)
- Undergraduate (40%*)

(* Represents percent change between 1996 and 2016)

Those who graduate are more likely to begin repayment of loans within 7 years.

- Public Institutions: 81% completed, 55% uncompleted
- Not-For-Profit Institutions: 81% completed, 59% uncompleted
- For-Profit Institutions: 52% completed, 34% uncompleted

Those with more schooling have greater average yearly earnings...
... they are also less likely to be unemployed.

<table>
<thead>
<tr>
<th>Education Level</th>
<th>Unemployment Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Overall</td>
<td>2.9%</td>
</tr>
<tr>
<td>Less than HS Diploma</td>
<td>5.4%</td>
</tr>
<tr>
<td>HS Graduates, No College</td>
<td>3.6%</td>
</tr>
<tr>
<td>Some College or Associates Degree</td>
<td>3.1%</td>
</tr>
<tr>
<td>Bachelor's Degree or Higher</td>
<td>2.1%</td>
</tr>
</tbody>
</table>

The percentage of college graduates who are “underemployed” has remained roughly constant for nearly 30 years.
However, those who are underemployed are now earning less.
Median earnings for “all” majors are greater than those of high school graduates.

Median Earnings for High School Graduates

- Agriculture, Environmental, and Natural Resources: $53,811
- Architecture and Engineering: $91,065
- Biology, Life Sciences, and Medical: $63,124
- Business: $66,229
- Computer Science, Math, Statistics: $82,786
- Humanities and Liberal Arts: $49,672
- Social Science: $56,915
- Education: $46,567

And, while the future pay associated with some majors is less risky than others, all are a good “bet.”

<table>
<thead>
<tr>
<th>Major</th>
<th>Median Earnings</th>
<th>25th Percentile Earnings</th>
<th>75th Percentile Earnings</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agriculture, Environmental, and Natural Resources</td>
<td>$34,728</td>
<td>$20,000</td>
<td>$60,000</td>
</tr>
<tr>
<td>Architecture and Engineering</td>
<td>$80,000</td>
<td>$40,000</td>
<td>$100,000</td>
</tr>
<tr>
<td>Biology, Life Sciences, and Medical</td>
<td>$60,000</td>
<td>$30,000</td>
<td>$90,000</td>
</tr>
<tr>
<td>Business</td>
<td>$140,000</td>
<td>$70,000</td>
<td>$170,000</td>
</tr>
<tr>
<td>Computer Science, Math, Statistics</td>
<td>$120,000</td>
<td>$50,000</td>
<td>$150,000</td>
</tr>
<tr>
<td>Humanities and Liberal Arts</td>
<td>$100,000</td>
<td>$40,000</td>
<td>$130,000</td>
</tr>
<tr>
<td>Social Science</td>
<td>$80,000</td>
<td>$30,000</td>
<td>$110,000</td>
</tr>
<tr>
<td>Education</td>
<td>$60,000</td>
<td>$20,000</td>
<td>$90,000</td>
</tr>
</tbody>
</table>

“The typical college graduate will earn roughly $900,000 more than the typical high school graduate over their working life.”

More schooling increases the likelihood of higher lifetime earnings.

High School Graduates 7% chance

$2 MILLION +

College Graduates 60% chance

Highly educated workers pay more in taxes.

Average taxes paid by education level:

- Less than a HS Diploma: $5,473
- HS Diploma: $8,000
- Some College, No Degree: $9,368
- Associate's Degree: $10,631
- Bachelor's Degree: $15,262
- Master's Degree: $19,367
- Doctoral Degree: $26,946
- Professional Degree: $30,419

Source: College Board, 2016. 2018 dollars.
Research done at colleges and universities results in innovations from which we all benefit.

First Internet Communication: University of California, Los Angeles to Stanford University

Immunotherapy: Penn Medicine trained healthy cells to eradicate cancer cells

Gatorade: Developed at the University of Florida in a collaboration between the college of medicine and the football team.

Ultrasound: Pioneered at University of Glasgow allowed internal medical imaging.
Thank you.