The High Cost of Higher Education: Financing Models from Japan, Norway, England and the United States

Carolyn W. Deady | January 2015

**Bottom Line:** Unlike some of their global competitors, American graduates receive little government support to pay their student debt.

An American college education is among the least affordable in the world. Over the past two decades, higher education costs in the United States have increased much faster than incomes. The price of college tuition has increased faster than inflation for 33 consecutive years. Tuition costs have also increased faster than health care costs and the price of food. The American model of paying for a college education has lead to staggering student loan debt, the effects of which reach far beyond individual borrowers. Evidence suggests that student loan debt may be dragging down the overall economy.  

The high cost of college and the debt that accompanies it is certainly not unique to the United States. In other industrialized countries, student loan debt ranges anywhere from a total of $6 billion in Japan to $85.5 billion in England. The amount of student loan debt in the U.S., at about $1.2 trillion, far surpasses the amount of student loan debt of any other country. Only mortgage debt accounts for more consumer debt. College students in other modern industrial societies graduate with far less debt and even no debt at all. These countries have different approaches toward the financing of a college education.

**How Americans Pay for College**

The average cost of tuition and fees at American colleges and universities for the 2014–2015 school year was $31,231 at private colleges, $9,139 for state residents at public colleges. Add in room and board costs and the average cost was $42,419 for private schools and $18,943 for public. In the United States, the published price of attending a college or university for a year may not be the actual price. Many colleges and universities, particularly private, give discounts in the form of grants and scholarships. The net cost is much lower than the published price after factoring in total grant aid and tax benefits. For instance, the average

2. This amount includes both undergraduate and graduate student debt from both federal and bank loans. It does not include debt from other forms of borrowing to finance higher education such as home equity loans, credit cards, and loans from retirement accounts.
4. Ibid.

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net price for the 2014-2015 school year for private colleges and universities was $23,549 (compared with $42,419 in published costs). The average net price for public (in-state) tuition was $12,833 (compared with $18,943 published).  

Table 1. Cost of U.S. Higher Education, 2014-2015*

<table>
<thead>
<tr>
<th></th>
<th>Private</th>
<th>Public (in-state)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tuition and fees (published)</td>
<td>$31,231</td>
<td>$ 9,139</td>
</tr>
<tr>
<td>Room &amp; board (published)</td>
<td>$11,188</td>
<td>$ 9,804</td>
</tr>
<tr>
<td>Total published†</td>
<td>$42,419</td>
<td>$18,943</td>
</tr>
<tr>
<td>Net tuition &amp; fees§</td>
<td>$12,361</td>
<td>$ 3,029</td>
</tr>
<tr>
<td>Average net price¶</td>
<td>$23,549</td>
<td>$12,833</td>
</tr>
</tbody>
</table>

*All amounts are national averages.
†Amounts do not include expenses such as books & materials, transportation, etc.
§After factoring in grant aid and tax benefit.
¶Includes tuition, fees, room & board.

Whether paying the sticker price or net price, the majority of American undergraduates cannot cover the costs of a college education out-of-pocket. About one-third of full-time undergraduates pay full tuition, while two-thirds of full-time students receive some type of aid.  

The annual costs at a four-year university or college is equal to, on average, 40% of family income. Most American students and their families have to look to other sources in order to finance a college education.

There are four types of financial aid available in the American system:

Grants
Colleges and universities, particularly private ones, often award grant aid based on merit or financial need. The federal government offers five different grants, with the Pell Grant (a maximum of $5,730) being the most common. Grants do not have to be repaid.

Scholarships
This form of aid is often available through schools, community organizations, states, and other public and private sources. Scholarships do not need to be repaid.

Work Study
Through the federal work-study program, students can earn money by working at the college or university that they attend. The money earned does not have to be repaid.

5. Ibid.
6. Ibid.
Loans
The federal government has two student loan programs: the Perkins loan program and the direct loan program. Perkins loans are based on financial need and the college or university is the lender. The direct loan program offers four types of loans: subsidized, unsubsidized, PLUS, and consolidation. Students could also take out private loans. Loans must be repaid and there are different terms and requirements associated with repayment.

The American model for affording a college degree is based on financing through debt. Around 70% of college graduates left school in 2014 with student debt. The average amount of debt was $33,000. Nearly 40 million Americans have outstanding student loan debt. These young people put off making major purchases like cars, furniture, and, especially, homes—with a negative effect on the economy. Borrowers are struggling to make payments on their outstanding student loans. About 50% of federal direct loans are in default, forbearance or deferment. When borrowers default, it can hurt their credit and that can affect them for years, making it more difficult to get mortgages and other loans needed for major purchases in the future.

How Students in other Countries Pay for College

England
In England, the universities are all public and an undergraduate degree can be earned in three years. The cost of tuition varies but most universities charge £9,000 ($14,490), the maximum amount allowed by law. This amount applies not just to residents of England and the United Kingdom but also to students from any European Union country. Tuition had been free in England until 1998 when a £1,000 fee was introduced. In 2004, tuition fees increased from £1,000 to a maximum fee of £3,000. In 2012, tuition was raised from around £3,300 to £9,000. Similar to the United States, universities may offer bursaries (scholarships) to help offset costs. Unlike the United States, however, this form of aid is almost exclusively given based on need rather than merit. Most first-year university students live on campus. They can pay anywhere from £3,000 ($4,830) to £8,000 ($12,880) depending on the university and the type of housing.

9. Ibid.
11. With the exception of three private institutions of higher education.
14. Ibid.
In addition to university bursaries, other possible means of support through individual universities are college awards and scholarships, college grants and loans, sports grants and bursaries, and music awards. Students can also apply for need-based scholarships from the National Scholarship Program.

The majority of undergraduate students in England finance their university education through subsidized government loans of which there are three types:¹⁶

- **Tuition fee loans** cover the full cost of tuition fees and are paid directly to the university.

- **Maintenance loans** cover living costs for students living away from home. Students living at home are eligible but receive a lower amount. Students going to university in London are entitled to a larger amount due to the high cost of living there.

- **Maintenance grants** are for low-income students and do not have to be repaid.

The amount of outstanding student loan debt in England is about £55 billion ($88.5 billion). Nearly 85% of eligible students took out loans for the academic year 2011/2012.¹⁷ It is estimated that the average amount of student loan debt upon graduation is now around £44,000 ($71,720).¹⁸ Fortunately for university graduates, repayment on their loans doesn't start until they make at least £21,000 ($33,810) at which point payments are made via payroll withholdings and can make up no more than 9%, maximum, of the borrowers income.

<table>
<thead>
<tr>
<th>Table 2. Country comparisons – higher education</th>
<th>Denmark</th>
<th>England</th>
<th>Japan</th>
<th>United States</th>
</tr>
</thead>
<tbody>
<tr>
<td>Average tuition cost (annual)</td>
<td>0</td>
<td>$14,490</td>
<td>public = $5,100</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>private = $8,170</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>public = $8,893</td>
<td></td>
</tr>
<tr>
<td>Student debt – average amount</td>
<td>0</td>
<td>$72,450*</td>
<td>N/A</td>
<td>$33,000</td>
</tr>
<tr>
<td>Student debt – number of borrowers</td>
<td>0</td>
<td>2.5 million</td>
<td>1.3 million</td>
<td>40 million</td>
</tr>
<tr>
<td>Student debt (total)</td>
<td>0</td>
<td>$54 billion</td>
<td>$6 billion</td>
<td>$1.2 trillion</td>
</tr>
</tbody>
</table>

*Upon graduation after 3 years

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If an individual loses her job or her income is reduced, so are her payments. If a borrower doesn’t earn enough to repay the loans in full within 30 years, the remaining balance is written off.\textsuperscript{19}

According to a parliamentary report, the impetus behind the 2012 increase in tuition fees in England was to enable “an immediate cut in public spending and help reduce the deficit.” It was acknowledged that the reform would “increase the national debt in the short to medium term” and that “the scale of the actual savings has been questioned by some commentators who believe the government’s repayment model is too optimistic.”\textsuperscript{20}

When the tuition fee hike to £9,000 was proposed, the government estimated a return of 72% of the costs paid out in loans. Repayment is, in part, based on the economy and as the salaries of new graduates have not increased over the past few years, estimates on the returns have changed. The government now expects to regain only 55% of its costs.\textsuperscript{21}

**Japan**

Japan, like the United States and England, is one of the most highly educated countries in the world. Tuition costs in that country are high relative to many developed countries but much lower compared with the United States and England. The average cost of tuition at private universities in Japan is around $8,100 for private and about $5,400 for public universities.\textsuperscript{22} An undergraduate degree is typically earned in 4 years.

Private spending accounts for the majority of all spending on higher education in Japan, similar to the United States and England. Students in Japan finance their college education with either personal wealth or loans, or a combination of both. About one-third of university students take out public loans, which are administered by the Japan Student Services Organization (JASSO).\textsuperscript{23} These loans are either interest-free or low-interest. The screening process for applicants is based on more than academic ability and personal finances, but also on a student’s “character” and “health.”\textsuperscript{24} About 1.5 million students have outstanding student loan debt totaling $6 billion.


More and more university students in Japan have defaulted on their loans in the past few years. The recent financial crisis and the aftermath of the 2011 Great East Japan Earthquake (as it is referred to in Japan) most likely had an impact on students’ ability to repay loans. In response to the defaults, the government and private banks started cracking down and began denying loans to current student borrowers who were performing poorly academically.25

**Denmark**

Pursuing a university degree in Denmark is far less stressful financially for the individual student and their families than in most other countries. Tuition is free and the government provides a monthly stipend of about $1,100 for each university student. Students from any European Union country also do not pay tuition in Denmark.26

Although tuition is free in Denmark and students receive a stipend, a college education for Danes isn’t exactly free. The country has one of the highest tax rates in the world (56% for top earners). In addition to such services as health care, childcare and unemployment, tax dollars are also used to cover the costs of higher education. Denmark spends more proportionally on education than any other country in the Organization for Economic Cooperation and Development (OECD).27

A bachelor’s degree can be earned in three years in Denmark, five years for a master’s degree. University students are entitled to six years of stipends to complete a five-year degree. Many of them take even longer to complete their studies. The median age of a Danish student who graduates with a master’s degree is 28.28 However, as the Danish population ages, leaving fewer people in the work force, the government has begun to make changes to the system of grants for higher education in the hopes that it will encourage young people to enter the workforce sooner, thereby paying taxes sooner, which would create revenue to support free higher education, health care and care for the elderly.29

**How the United States Compares to other Countries**

The United States will never have the same model for funding higher education as Denmark, or any other Nordic country for that matter. A large portion of Danes’ income is taken in taxes that, in turn, fund higher education, among other social services. Americans would not embrace the concept of paying up to 56% of their incomes in taxes for a system of entirely public higher education. The Danish system of paying for college is not perfect. There is concern that covering


29. Ibid.
the costs of tertiary education with tax money may contribute to the weakening of the economy in Denmark, now and in the future. But the outlook toward higher education in Denmark makes sense. It is seen as an investment, not just for the individual, but also for Danish society. The Danes understand that the accessibility and affordability of higher education reduces social inequality.

In some ways, the Japanese system of higher education and how to pay for it is appealing, though in some ways it’s not. Japan has one of the highest tertiary education attainment rates of any country with 46.6% of the population holding a degree. Tuition costs are much lower in Japan than in the United States. Despite this, about one-third of university students depend on public loans to pay for their education. The total amount of student loan debt in arrears has tripled in recent years, mainly due to more borrowers unable to make payments due to a drop in incomes during Japan’s economic slump. The system of loans and repayment is, in some ways, more rigid than in the United States. If a student is four months behind in loan payments, JASSO (the organization that administers loans) retains a collection agency to pursue the borrower. After nine months without a payment, JASSO gets the courts involved.

Compared with England, the U.S. approach toward paying for higher education doesn’t look so bad. College tuition and fees are, overall, more expensive in the United States but tuition costs in England are a close second. The majority of students in both countries need to take out student loans in order to finance their education. Currently, students in England graduate, on average, with a higher amount of debt than in the United States—$72,000 in England compared with $33,000 in the United States.

That average amount of student debt in England may seem quite scary. However, the crucial difference is that the current fee and loan system in England was designed to reduce the number of students who have to pay for university up front. The system, according to a parliamentary report, was implemented with the expectation that graduates would indeed have larger average loans, but also have lower monthly payments, an increase in the average duration of the loan (with the largest increases coming from the highest earners) and an increase in the proportion of graduates who have some of their loan written off (around 60%). Despite the high rates of debt in England, the government does point to success of the 2012 fee hike. A spokeswoman for the Department for Business, Innovation and Skills said: “As a result of our reforms, a greater proportion of students from disadvantaged backgrounds are going to university than ever before. There are more loans, grants and bursaries (scholarships) than ever before.”

30. Billing, “Free Universities and No Student Loan Debt is Hurting Denmark’s Economy.”
33. Ibid.
34. Izzo, “Congratulations to Class of 2014: Most Indebted Ever.”
Table 3. Country comparative data

<table>
<thead>
<tr>
<th></th>
<th>Denmark</th>
<th>Japan</th>
<th>United Kingdom</th>
<th>United States</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total population*</td>
<td>5,614</td>
<td>127,339</td>
<td>64,097</td>
<td>316,129</td>
</tr>
<tr>
<td>in millions</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>GDP*</td>
<td>$331 billion</td>
<td>$5 trillion</td>
<td>$2.5 trillion</td>
<td>$16.8 trillion</td>
</tr>
<tr>
<td>(2013)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>income¶</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tertiary education</td>
<td>$21,254</td>
<td>$16,445</td>
<td>$14,222</td>
<td>$26,021</td>
</tr>
<tr>
<td>spending per student‡</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>


Conclusion

The American model of funding a college education through debt is simply not working. With $1.2 trillion in outstanding student loan debt, the negative effects on borrowers and society, such as the inability to make major purchases, hamper the economic growth of the country. There are also, positive, long-term economic benefits of college graduates not being saddled with debt. Fewer graduates burdened with student loan debt simply means fewer defaults from which taxpayers are left to foot the bill. There will be less drain on the public because those with tertiary degrees and good employment require fewer social services. Students who graduate with little- or no-debt will contribute more to the economy as a whole by making major purchases and investments.

The United States is a wealthier country compared with most, so it stands to reason that tuition fees and other costs associated with higher education would be higher here. Even with grants and scholarships, some students still struggle, particularly low-income students. Pell Grants only cover a third of the cost at a 4-year, public university and there have been calls for those to be cut even further in recent years. Further, if private colleges and universities continue to award grants and scholarships with the emphasis on merit, there will be less and less need-based aid available for low-income students. This practice, coupled with increasing tuition and fee costs, could price low-income students out of earning a degree altogether. If that were to happen, it would spell trouble for America’s colleges and universities. Over the next few decades, the Census Bureau projects a

15% increase in the black, non-Hispanic population between ages of 0 and 24, and a 137% increase in the Latino population for that same age group. The United States will experience a significant decline in the number of new college graduates entering the workforce if the number of low income and minority students does not increase.

In the United States, a college degree has been shown to still be a good investment. College graduates ages 25 to 32 working full-time earn about $17,500 more than high school graduates in the same age group. This pay gap is much wider than in previous generations. In 1965, college graduates earned $7,499 more than their counterparts with only a high school diploma. A college degree is a worthwhile pursuit not just with regard to earnings but also for other benefits like getting a job and job stability. More importantly, higher education is best understood as a benefit not just to the individual but to our society as a whole. If we want to remain competitive as a nation, then higher education has to be affordable for all who want to earn a college degree.

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