Inquiring Minds topic – 5 May 2017

Moderator: Adair Heath

Inequality and Social Mobility Issues

There is a growing awareness that over the last 20 or more years of increasing economic inequality in the US and worldwide. There are many possible results from this growing inequality.

Today I would like us to discuss how income inequality leads to higher educational inequality thereby affecting social mobility. I hope we will discuss our own observations, thoughts and concerns about this inequality here in Paradise and in our nation. The reading for today has been excerpted by me from a longer paper which can be found on the Brookings Institute website (https://www.brookings.edu/research/thirteen-economic-facts-about-social-mobility-and-the-role-of-education/).

I trust that this reading will prompt some thought and discussion:

1. Do you believe that income inequality in America has grown in your lifetime?

2. If so, what do you see as the consequences?

3. While there has always been inequality, do you feel we have reached a tipping point where equality of overall opportunity is imperiled by growing income and higher educational inequality?

4. Do you think that the opportunity for social mobility can be increased by diminishing higher educational inequality?

5. What educational and other solutions do you think would level the playing field for all Americans?

THE HAMILTON PROJECT

Advancing Opportunity, Prosperity, and Growth

Thirteen Economic Facts about Social Mobility and the Role of Education

Michael Greenstone, Adam Looney, Jeremy Patashnik, and Muxin Yu

This Hamilton Project policy memo provides thirteen economic facts on the growth of income inequality and its relationship to social mobility in America; on the growing divide in educational opportunities and outcomes for high- and low-income students; and on the pivotal role education can play in increasing the ability of low-income Americans to move up the income ladder.

Inequality Is Rising against a Background of Low Social Mobility

Central to the American ethos is the notion that it is possible to start out poor and become more prosperous: that hard work—not simply the circumstances you were born into—offers real prospects for success. But there is a growing gap between families at the top and bottom of the income distribution, raising concerns about the ability of today's disadvantaged to work their way up the economic ladder.

Chapter 1: Inequality Is Rising against a Background of Low Social Mobility

1. Family incomes have declined for a third of American children over the past few decades.

Although family income has increased by an average of 37 percent between 1975 and 2011, family incomes have actually declined for the poorest third of children.

Figure 1 illustrates the diverging fortunes of children based on their family's income, as measured by the U.S. Census Bureau. Children in families at the top of the income distribution have experienced sizable gains in their families' incomes and resources since 1975. Children living in the top 5 percent of families, for instance, have seen a doubling of their families' incomes. But such gains have been more modest for children in the middle of the distribution, and children living in lower-income families have experienced outright declines in incomes. In fact, in 2011 the bottom 35 percent of children lived in families with lower reported incomes than comparable children thirty-six years earlier.

Because of widening disparities in the earnings of their parents and changes in family structure—particularly the increase in single-parent families—the family resources available to less-well-off children are falling behind those available to their higher-income peers.

2. Countries with high income inequality have low social mobility.

Around the world, high income inequality is associated with low social mobility.

Source: Corak (2013); World Bank (2013).

Note: Reproduction of figure 2 from Corak (2013). Data points for Italy and the United Kingdom overlap. The x-axis shows Gini coefficients as reported by the World Bank. The y-axis is a measure of social mobility and is equal to 1 minus the intergenerational earnings elasticity for each country.

3. Upward social mobility is limited in the United States.

While social mobility and economic opportunity are important aspects of the American ethos, the data suggest they are more myth than reality. In fact, a child's family income plays a dominant role in determining his or her future income, and those who start out poor are likely to remain poor.

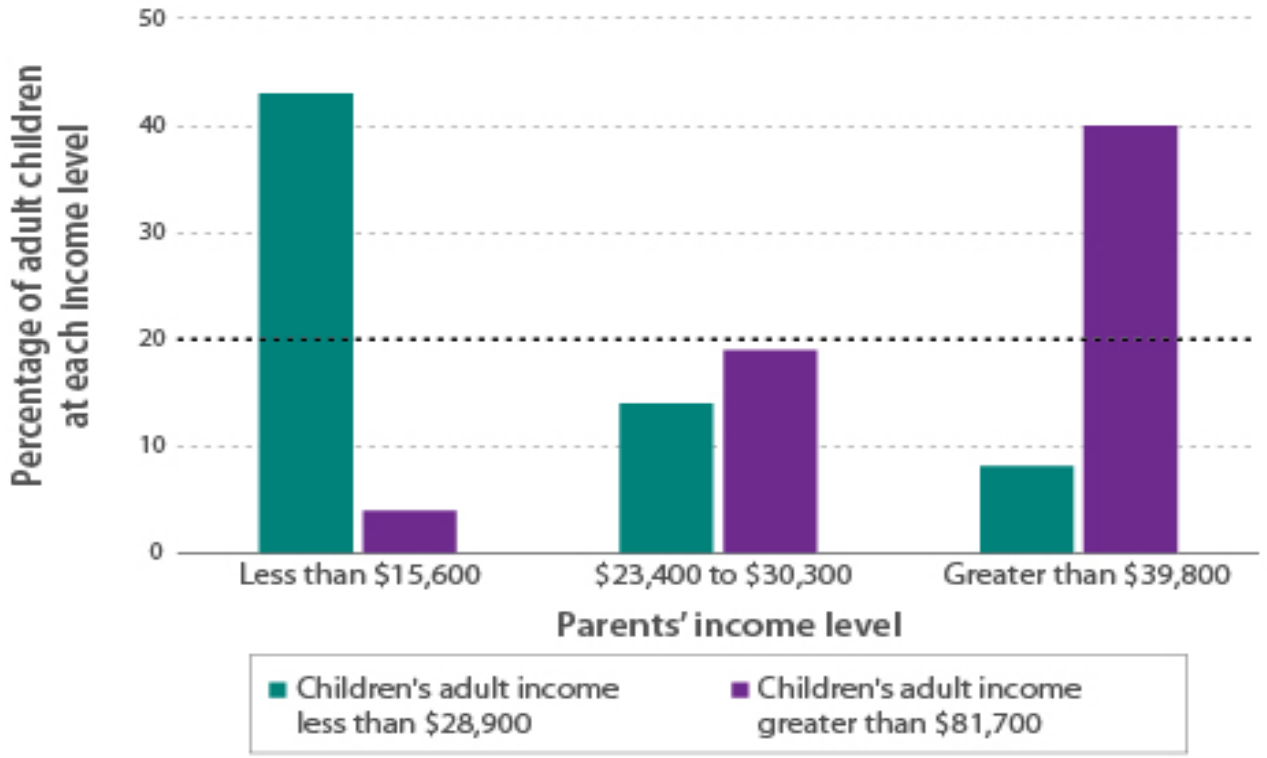
Figure 3 shows the chances that a child's future earnings will place him in the lowest quintile (that is, the bottom 20 percent of the earnings distribution, shown by the green bars) or the highest quintile (that is, the top 20 percent of the distribution, purple bars) depending on where his parents fell in the distribution (from left to right on the figure, the lowest, middle, and highest quintiles). In a completely mobile society, all children would have the same likelihood of ending up in any part of the income distribution; in this case, all bars on figure 3 would be at 20 percent, denoted by the bold line.

The figure demonstrates that children of well-off families are disproportionately likely to stay well off and children of poor families are very likely to remain poor. For example, a child born to parents with income in the lowest quintile is more than ten times more likely to end up in the lowest quintile than the highest as an adult (43 percent versus 4 percent). And, a child born to parents in the highest quintile is five times more likely to end up in the highest quintile than the lowest (40 percent versus 8 percent). These results run counter to the historic vision of the United States as a land of equal opportunity.

FIGURE 3.

Probability of Children's Income Level, Given Parents' Income Level

Children born into low-income families are likely to remain at the low end of the income distribution as adults.



Source: Pew Charitable Trust, Economic Mobility Project (2012).

Note: Income estimates are in constant 2008 dollars and are adjusted for inflation using CPI-U-RS. Income categories along the x-axis correspond to the lowest, middle, and highest income quintiles in the Panel Study of Income Dynamics (PSID) as of 1968. Income categories in the legend correspond to the lowest and highest quintiles in the PSID as of 2008.

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The United States Is Experiencing a Growing Divide in Educational Investments and Outcomes Based on Family Income

Although children of high- and low-income families are born with similar abilities, high-income parents are increasingly investing more in their children. As a result, the gap between high- and low-income students in K–12 test scores, college attendance and completion, and graduation rates is growing.

4. The children of high- and low-income families are born with similar abilities but different opportunities.

In examining the opportunity gap between high- and low-income children, it is important to begin at the beginning—birth. The evidence suggests that children of high- and low-income families start out with similar abilities but rapidly diverge in outcomes.

At the earliest ages, there is almost no difference in cognitive ability between high- and low-income individuals. Figure 4 shows the impact of a family's socioeconomic status—a combination of income, education, and occupation—on the cognitive ability of infants between eight and twelve months of age, as measured in the Early Childhood Longitudinal Survey. Although it is obviously difficult to measure the cognitive ability of infants, this ECLS metric has been shown to be modestly predictive of IQ at age five (Fryer and Levitt 2013).

Controlling for age, number of siblings, race, and other environmental factors, the effects of socioeconomic status are small and statistically insignificant. A child born into a family in the highest socioeconomic quintile, for example, can expect to score only 0.02 standard deviations higher on a test of cognitive ability than an average child, while one born into a family in the lowest socioeconomic quintile can expect to score about 0.03 standard deviations lower—hardly a measurable difference and statistically insignificant. By contrast, other factors, such as age, gender, and birth order, have a greater impact on abilities at the earliest stages of life.

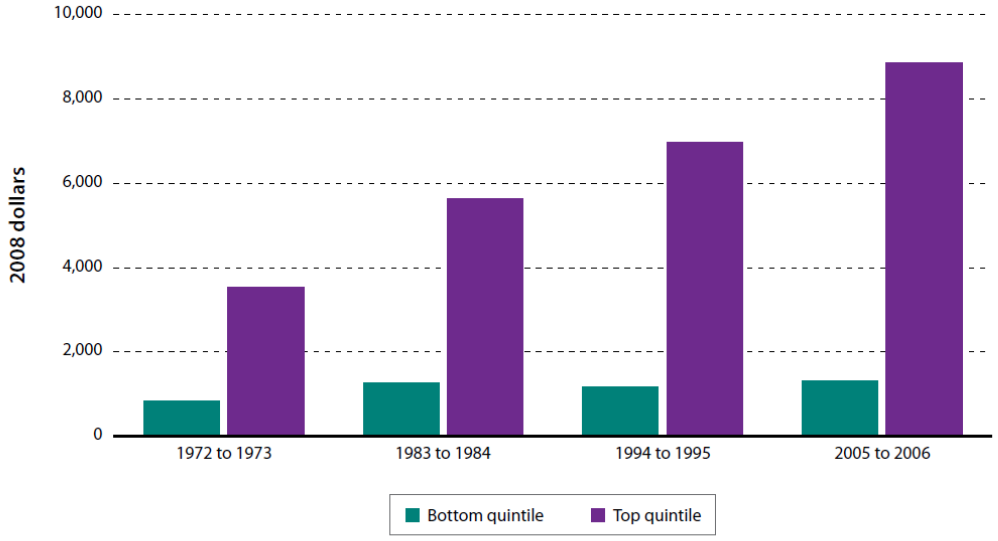
Despite similar starting points, by age four, children in the highest income quintile score, on average, in the 69th percentile on tests of literacy and mathematics, while children in the lowest income quintile score in the 34th and 32nd percentile, respectively (Waldfogel and Washbrook 2011). Research suggests that these differences arise largely due to factors related to a child's home environment and family's socioeconomic status (Fryer and Levitt 2004).

5. There is a widening gap between the investments that high- and low-income families make in their children.

FIGURE 5.

Enrichment Expenditures on Children

High-income families spend about seven times more on their children than low-income families.



Source: Duncan and Murnane (2011).
Note: For a full description of enrichment expenditures, see the technical appendix.

6. The achievement gap between high- and low-income students has increased.

Disparities in what parents can invest in their children—whether time or money—appear to have important consequences for children's success in school. While many factors play a role in shaping scholastic achievement, family income is one of the most persistent and significant. In fact, the income achievement gap—the role that wealth plays in educational attainment—has been increasing over the past five decades. By comparing test results of children from families at the 90th income percentile to those of children from families at the 10th percentile, researchers have found that the gap has grown by about 40 percent over the past thirty years (Reardon 2011).

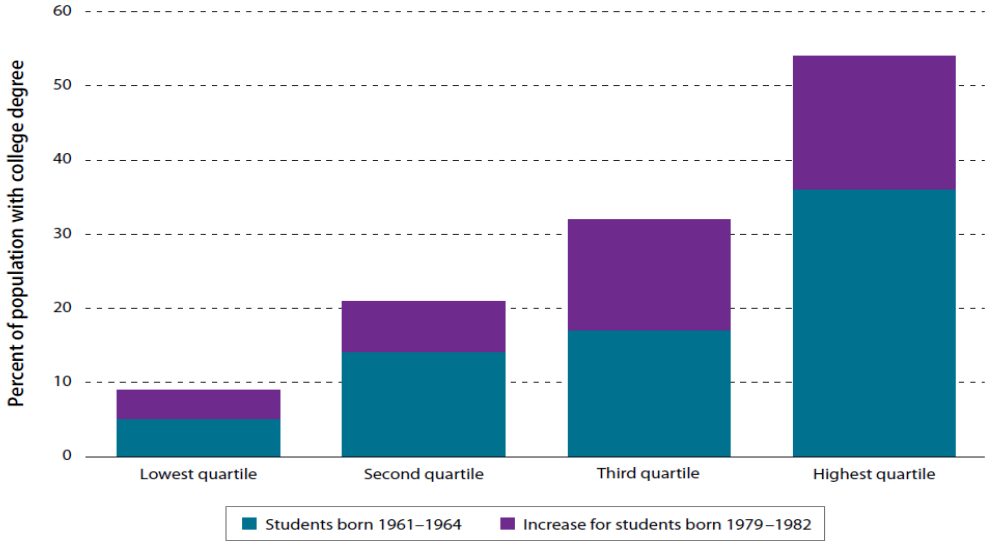
Figure 6 shows that the income achievement gap as estimated for students born in 2001 is over 1.2 standard deviations. To put this in perspective, according to the National Assessment of Educational Progress, an average student advances between 1.2 and 1.5 standard deviations between fourth and eighth grade. The achievement gap between high- and low-income students, then, is on par with the gap between eighth graders and fourth graders.

This growing test-score gap mirrors the diverging parental investments of high- and low-income families (figure 5). As with parental investment, the test scores of low-income students have shown modest gains over the past few decades, while those of high-income students have shown large increases. The gap between high- and low-income students, therefore, is not an instance of the poor doing worse while the wealthy are doing better; rather, it is that students from wealthier families are pulling away from their lower-income peers.

FIGURE 7.

Share of Population with College Degree, by Income Level and Birth Year

The graduation rate for low-income individuals has not increased very much over the past few decades.



7. College graduation rates have increased sharply for wealthy students but stagnated for low-income students.

College graduation rates have increased dramatically over the past few decades, but most of these increases have been achieved by high-income Americans. Figure 7 shows the change in graduation rates for individuals born between 1961 and 1964 and those born between 1979 and 1982. The graduation rates are reported separately for children in each quartile of the income distribution.

In every income quartile, the proportion graduating from college increased, but the size of that increase varied considerably. While the highest income quartile saw an 18 percentage-point increase in the graduation rate between these birth cohorts, the lowest income quartile saw only a 4 percentage-point increase.

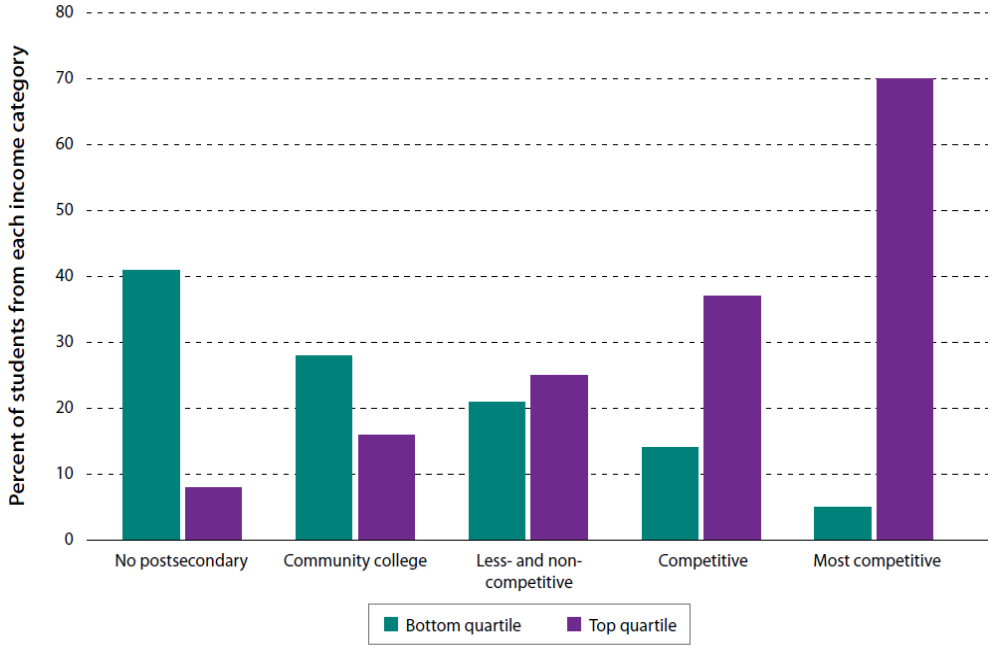
This graduation-rate gap may have important implications for social mobility and inequality. Given the importance of a college degree in today's labor market, rising disparities in college completion portend rising disparities in outcomes in the future.

8. High-income families dominate enrollment at America's selective colleges.

FIGURE 8.

Socioeconomic Distribution at Colleges by Selectivity

A student at one of America's most-selective universities is fourteen times more likely to be from a high-income family than from a low-income family.



Chapter 3: Education Can Play a Pivotal Role in Improving Social Mobility

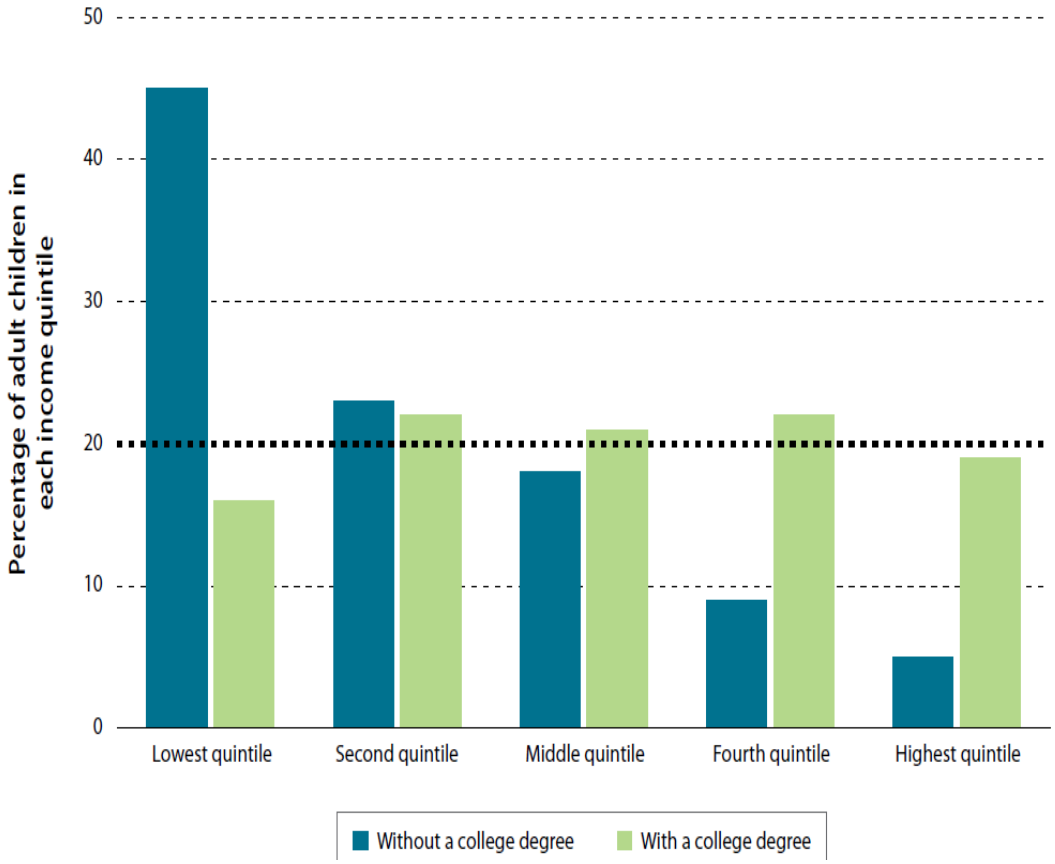
Promoting increased social mobility requires reexamining a wide range of economic, health, social, and education policies. Higher education has always been a key way for poor Americans to find opportunities to transform their economic circumstances. In a time of rising inequality and low social mobility, improving the quality of and access to education has the potential to increase equality of opportunity for all Americans.

9. A college degree can be a ticket out of poverty.

FIGURE 9.

Income Quintile of Adults Born into Lowest-Quintile Families, by College Attainment

Without a college degree, a child born into a poor family has little chance of breaking into the upper end of the income distribution.



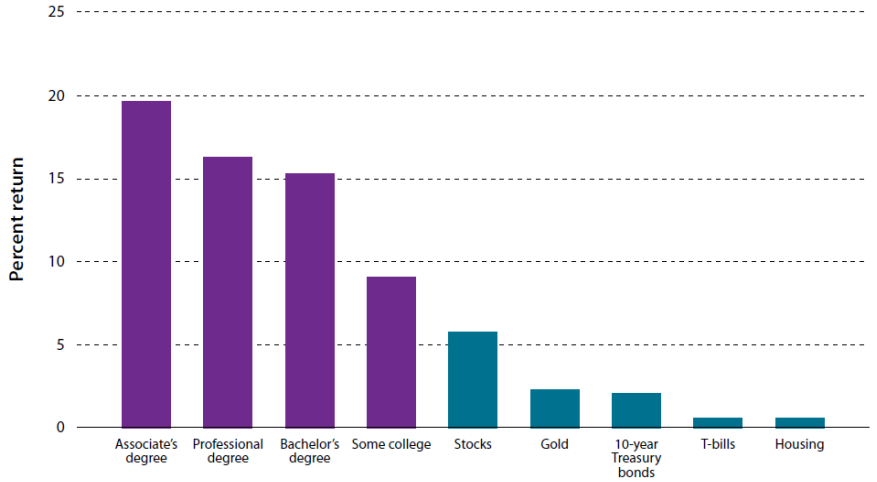
10. The sticker price of college has increased significantly in the past decade, but the actual price for many lower- and middle-income students has not.

11. Few investments yield as high a return as a college degree.

FIGURE 11.

Returns to Education Compared to Other Investments

The average returns to earning a degree are high, and even the returns to starting college and not finishing are still higher than the returns to any other traditional investment.



Source: CPS (2009, 2010–12); Damodaran (2013); Federal Reserve Economic Data (2013); National Center for Education Statistics ([NCES] 2012, 2013); National Mining Association (2012); Shiller (2013); authors' calculations.

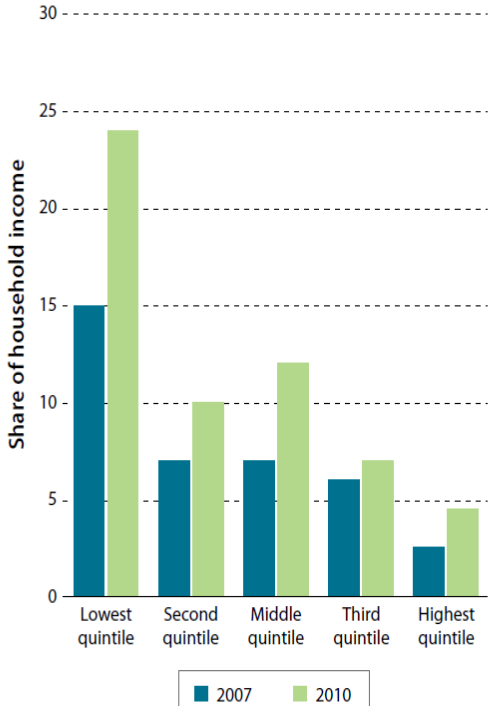
Note: Sample is civilian, natural-born U.S. citizens. Earnings data come from the CPS (2010–12) and tuition data come from NCES (2012, 2013). Data for other assets reflect real returns between 1928 and 2012. See the technical appendix for a full description of the calculations.

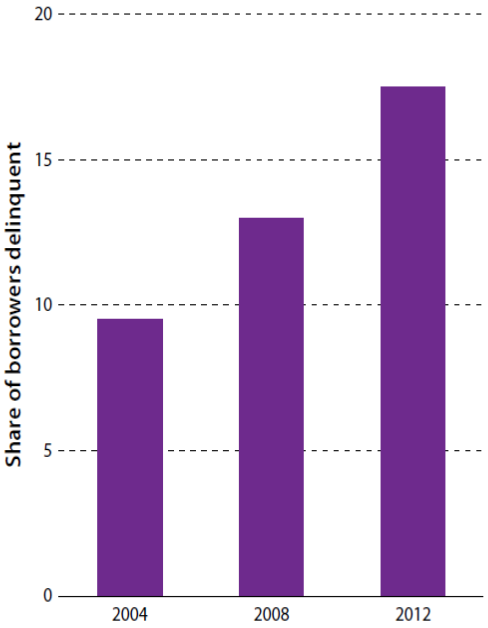
12. Students are borrowing more to attend college—and defaulting more frequently on their loans.

Outstanding Student Loan Debt Owed as a Share of Household Income

Share of Borrowers 90 or More Days Delinquent

As students borrow more to finance their college educations, the default rate on student loans has increased.





13. New low-cost interventions can encourage more low-income students to attend, remain enrolled in, and increase economic diversity at even top colleges.

To promote social mobility, enabling more low- and middle-income students to pay for college with federal grants is one of the most important goals that policymakers can pursue. For the past several decades, the main tools for achieving this goal have been Pell grants, Stafford loans, or merit-based aid such as the state of Georgia's HOPE Scholarship. Researchers estimate that, depending on the exact program, the effect of $1,000 of college aid is an increase of 3 to 6 percentage points in college enrollment (Deming and Dynarski 2009). As figure 13 shows, this translates into a total cost of between $20,000 and $30,000 to send one additional student to college through these aid programs. To put this in context, the average difference in earnings between a college graduate and a high school graduate is almost $30,000 per year, so these programs are likely to be beneficial on net.

Figure 13 also reports on new, low-cost interventions that can complement federal and state aid programs to send more kids to college and to better schools, and to convince them to stay in college once they get there. One study finds that simplifying and assisting low-income students in the financial aid application process increases college enrollment by about 8 percentage points, and costs less than $100 per student (Bettinger et al. 2009). And, on a per student basis, employing mentors to coach students on the value of staying in college beyond their freshman years is $10,000 less expensive than need- or merit-based scholarships (Bettinger and Baker 2011).

Another study found that mailing high-achieving, low-income students personalized information on their college options nudged those students to apply to better schools. At a cost of only $6 per student contacted, this intervention increased low-income students' applications to selective schools by more than 30 percentage points (Hoxby and Turner 2013).

FIGURE 13.

Approximate Cost of Achieving Given Outcome, by Policy or Intervention

New educational interventions can achieve positive results for a relatively low cost.

Source: Bettinger and Baker (2011); Bettinger et al. (2009); Carrell and Sacerdote (2013); Dynarski (2000, 2003, 2005); Hoxby and Turner (2013); Kane (1995, 2003, 2004).

Note: Bars are in current dollars at the time of the studies. See technical appendix for a description of how bars were calculated.

How Does the US Fund Tertiary Education Compared to Other OCD Nations

OECD Indicators in Education at a Glance

Table B3.2c. **Trends in relative proportion of public expenditure[1] on tertiary educational institutions**

Education-at-a-Glance-2014-2.pdf - Adobe Acrobat Reader DC

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	Share of public expenditure on educational institutions (%)					Index of change between 1995 and 2011 in expenditure on educational institutions (2005 = 100, constant prices)							
						Public sources				Private sources[2]			
	2000	2005	2008	2010	2011	2000	2008	2010	2011	2000	2008	2010	2011
	(2)	(3)	(4)	(6)	(7)	(9)	(10)	(12)	(13)	(15)	(16)	(18)	(19)
OECD Australia	49.9	45.4	44.9	46.5	45.6	92	110	129	130	77	112	124	129
Austria	96.3	92.9	84.7	87.8	86.9	77	101	119	117	39	240	215	231
Belgium	91.5	90.6	89.8	89.8	90.1	99	116	123	122	89	128	134	130
Canada[3, 4]	61.0	55.1	58.7	56.6	57.4	95	115	120	121	74	99	113	110
Chile[5]	19.5	15.9	14.6	22.1	24.2	103	118	237	279	81	130	158	166
Czech Republic	85.4	81.2	79.1	78.8	81.1	67	128	132	165	50	146	153	167
Denmark[3]	97.6	96.7	95.5	95.0	94.5	87	99	105	107	62	135	163	181
Estonia	m	69.9	78.8	75.4	80.4	92	137	136	164	m	86	103	93
Finland	97.2	96.1	95.4	95.9	95.9	87	107	116	120	62	127	122	128
France	84.4	83.6	81.7	81.9	80.8	94	110	115	114	89	125	129	137
Germany	88.2	85.3	85.4	84.4	84.7	98	115	124	130	76	114	134	137
Greece	99.7	96.7	m	m	m	44	m	m	m	3	m	m	m
Hungary	76.7	78.5	m	m	m	81	105	96	112	90	m	m	m
Iceland	91.8	90.5	92.2	91.2	90.6	70	116	101	98	60	94	94	97
Ireland	79.2	84.0	82.6	81.2	80.5	95	133	132	127	131	147	160	161
Israel	58.5	46.5	51.3	54.2	49.0	113	110	125	125	69	91	92	113
Italy	77.5	73.2	70.7	67.6	66.5	99	108	102	101	78	123	134	140
Japan[3]	38.5	33.7	33.3	34.4	34.5	107	108	112	117	87	110	109	113
Korea	23.3	24.3	22.3	27.3	27.0	76	117	154	160	80	131	132	139
Luxembourg	m	m	m	m	m	m	m	m	m	m	m	m	m
Mexico	79.4	69.0	70.1	69.9	67.1	84	115	128	118	49	109	123	129
Netherlands	75.0	73.0	71.5	71.8	70.8	88	107	118	119	80	116	125	133
New Zealand	m	59.7	70.4	66.3	64.5	84	133	126	121	m	83	95	98
Norway	96.3	m	96.9	96.0	95.9	83	102	105	107	m	m	m	m
Poland	66.6	74.0	69.6	70.6	75.5	52	105	111	111	74	130	132	102
Portugal	92.5	68.1	62.1	69.0	68.6	98	97	113	104	17	127	108	101
Slovak Republic[3]	91.2	77.3	73.1	70.2	76.9	79	114	116	140	26	143	168	144
Slovenia	m	76.5	83.8	84.7	85.2	0	114	120	121	m	72	71	69
Spain	74.4	77.9	78.9	78.2	77.5	84	120	127	123	102	114	125	126
Sweden	91.3	88.2	89.1	90.6	89.5	90	106	120	121	65	97	93	106
Switzerland	m	m	m	m	m	77	90	102	107	m	m	m	m
Turkey	95.4	m	m	m	m	m	m	m	m	m	m	m	m
United Kingdom	67.7	m	45.7	37.1	30.2	m	m	m	m	64	182	227	192
United States	37.4	39.7	39.1	36.3	34.8	74	110	108	105	81	113	125	130
OECD average	75.3	70.5	69.4	69.3	69.2	86	112	122	127	69	122	131	132
OECD average for 20 countries with data available for all reference years	73.7	69.1	68.1	68.6	68.3	91	112	125	129	70	126	134	139
EU21 average	85.1	82.3	78.7	78.3	78.6	80	112	118	123	66	131	139	138
Argentina	m	m	m	m	76.9	m	m	m	m	m	m	m	m