



Research

“Accounting for the Rise in College Tuition”: Applying the Model to State Tuition Data

CHAD MILLER | APRIL 12, 2016

Summary

For over a century policymakers have aided students interested in attending college in an effort to achieve a level playing field. These efforts, however, have required ever-higher levels of assistance, as taxpayers find themselves paying ever-higher tuition. Recent research by Gordon and Hedlund indicates that financial assistance itself may be the problem – more expansive loan programs and more generous grants combine to explain over 70 percent of recent tuition inflation.

In this paper, I apply their findings to state-by-state changes in average tuition since 1987. Summary Table 1 shows a flavor of the results, with expansions in federal student loan programs pushing tuition up from \$973 in New Mexico to above \$7,200 in Vermont. Similarly, expansions of grant aid have tuition impacts that range from \$382 to \$2,843. (Full results are in Table 1, below).

Summary of Table 1. TUITION CHANGES OVER TIME AND FACTORS DRIVING INCREASES						
State		Tuition Change Since 1987	Cost of Changes in Federal Student Loan Program	Cost of Changes in Grant Aid	Cost of Changes in College Earnings Premium	
Top 3	VT	\$ 13,538	\$ 7,245	\$ 2,843	\$ 2,708	
	DC	\$ 13,501	\$ 7,225	\$ 2,835	\$ 2,700	
	MA	\$ 10,624	\$ 5,686	\$ 2,231	\$ 2,125	
US Average		\$ 6,269	\$ 3,355	\$ 1,316	\$ 1,254	
Bottom 3	NV	\$ 2,405	\$ 1,287	\$ 505	\$ 481	
	WY	\$ 1,966	\$ 1,052	\$ 413	\$ 393	
	NM	\$ 1,817	\$ 973	\$ 382	\$ 363	

These results suggest several policy implications:

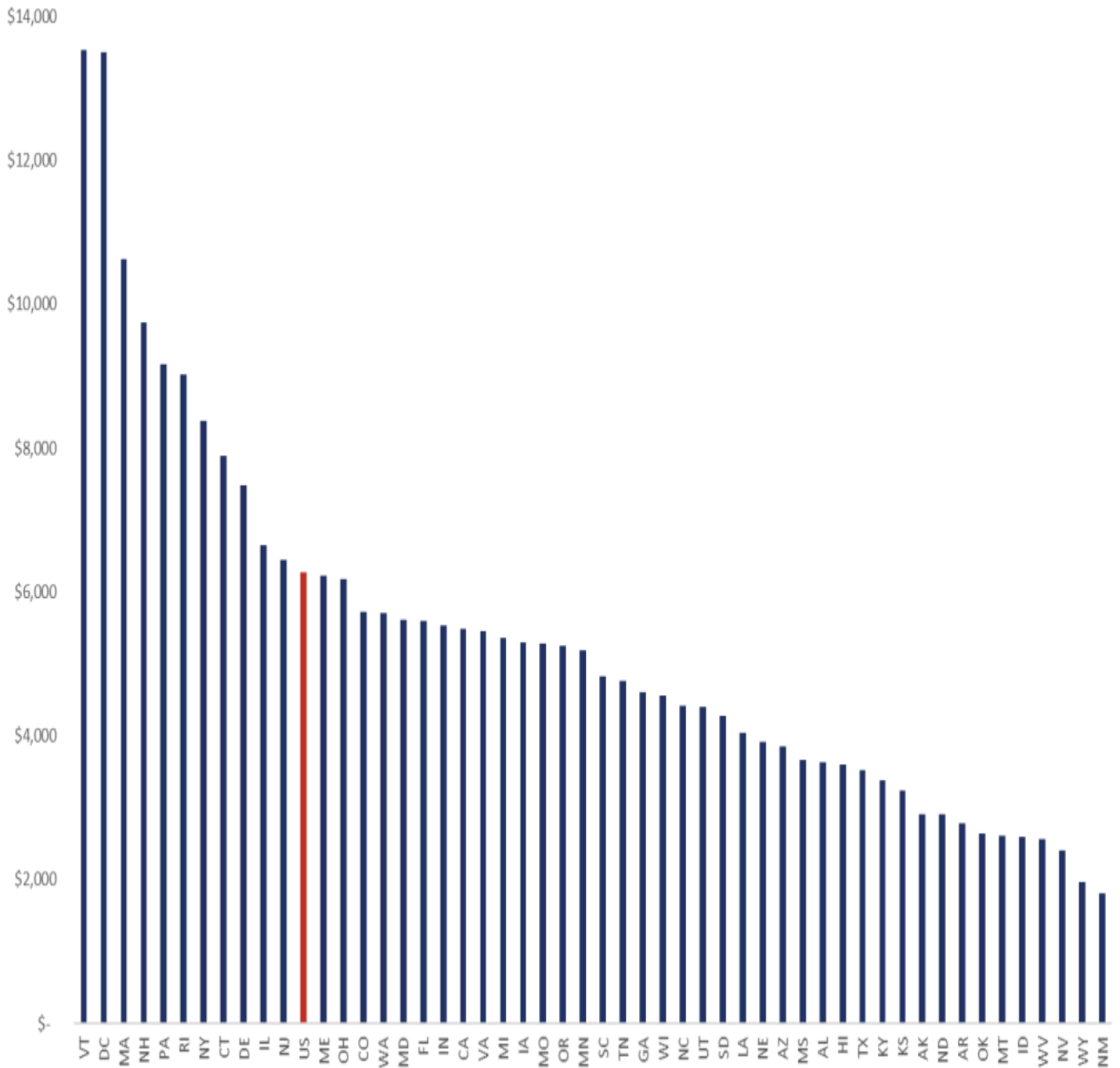
- There is room for improving federal aid programs and limiting the growth of federal dollars,
- However, simply restricting access to the programs is not likely to be successful, and
- Policy makers should look to slow tuition hikes, perhaps through growing dual enrollment programs or enacting policies that increase the availability of advanced placement and international baccalaureate credits.

Background

Over the past 30 plus years college tuition has more than doubled, outpacing inflation by 2 to 4 percent, while

pushing the volume of student debt to over \$1.3 trillion. In response to the rising tuition (and related debt levels), colleges have argued that reduced state funding combined with continued enrollment growth has increased pressure on tuition rates. What's unclear is if these arguments alone can account for more than three decades of tuition hikes. In particular, budget cuts to higher education are a relatively recent development, as state and federal funding showed steady growth prior to the 2009 recession. What is clear, however, as Chart 1 shows, is that all states have succumbed to pressures to increase state tuition rates. And while the difference between the cost increases in the states vary by 150 percent, on average the U.S. has seen the net price for college soar more than \$6,000. Meanwhile, the colleges and universities have been able to enjoy the best of both worlds: continued growth in public assistance and increased tuition – a seemingly never ending revenue stream as long as enrollment continues to grow.

Chart 1. State Tuition Change Since 1987



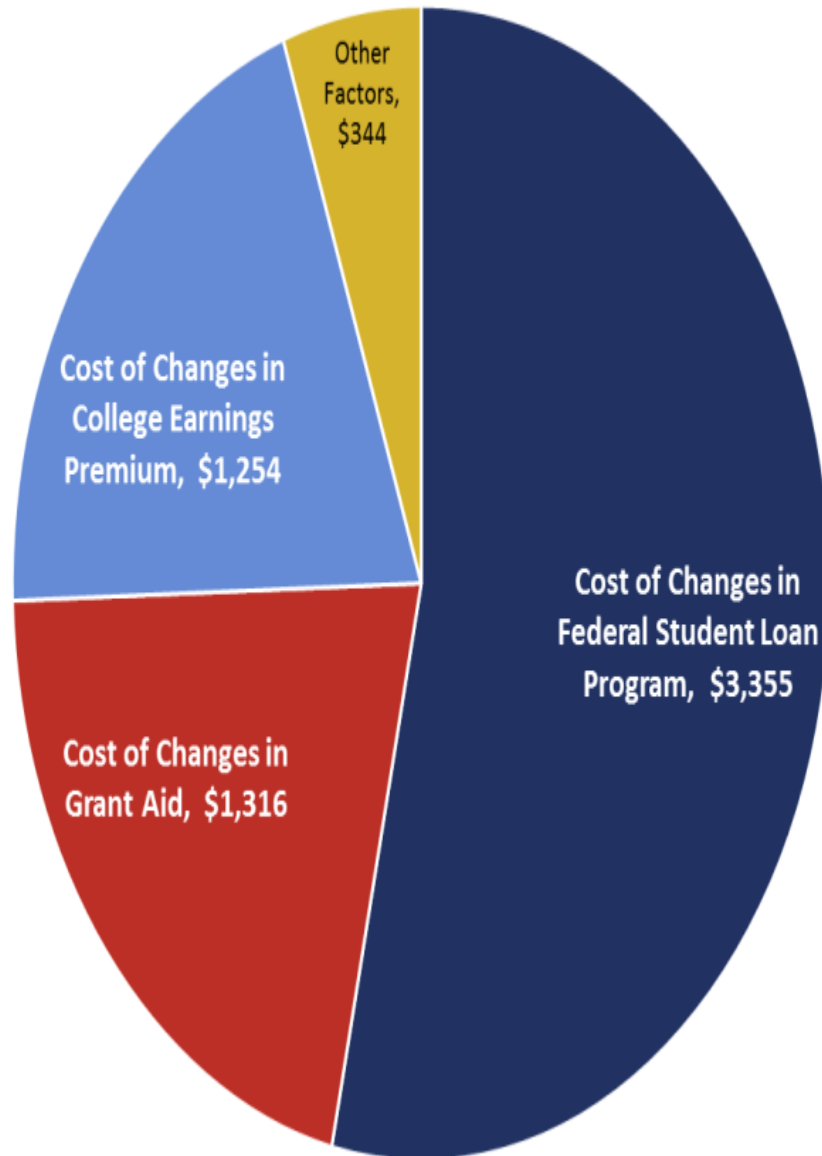
What's Driving Up Tuition?

In [“Accounting for the Rise in College Tuition,”](#) Gordon and Hedlund develop a sophisticated economic model to assess the degree to which federal financial aid policies, labor market trends, and other changes to college funding sources explain the rise in college tuition. Using this analytic approach to identify the drivers of average tuition growth in the United States, the authors found that:

- The combined effect of all policies and non-policy factors they studied generated a \$6,300 increase in net tuition;
 - Of this, increased student borrowing facilitated by expansions in the federal student loan program explains nearly \$3,400, or over 50 percent, of the rise in tuition;
 - More generous grant aid contributes just over \$1,300 (over 20 percent) to the rise in tuition; and
 - Pressure on enrollment from the increased value of a college education is responsible for \$1,250, or nearly 20 percent, of the increase in tuition.

As demonstrated in Chart 2 these three changes nearly account for the total change in tuition that has occurred since 1987.

Chart 2. Cost of Factors Driving the Rise in College Tuition; US Average



Applying the Model to State Level Tuition Changes

AAF applied these findings to state level data in order to understand the tuition change over time, as well as the factors driving up costs. In doing so, we found that 11 states outpaced the national average for tuition change, with Vermont seeing the greatest change of more than \$13,500. New Mexico showed the smallest tuition change of \$1,817, a full 110 percent difference from the national average. Table 1 details the change in tuition and cost drivers for all states.

Table 1. TUITION CHANGES OVER TIME AND FACTORS DRIVING INCREASES				
State	Tuition Change Since 1987	Cost of Changes in Federal Student Loan Program	Cost of Changes in Grant Aid	Cost of Changes in College Earnings Premium
VT	\$ 13,538	\$ 7,245	\$ 2,843	\$ 2,708
DC	\$ 13,501	\$ 7,225	\$ 2,835	\$ 2,700
MA	\$ 10,624	\$ 5,686	\$ 2,231	\$ 2,125
NH	\$ 9,754	\$ 5,220	\$ 2,048	\$ 1,951
PA	\$ 9,163	\$ 4,904	\$ 1,924	\$ 1,833
RI	\$ 9,031	\$ 4,833	\$ 1,897	\$ 1,806
NY	\$ 8,375	\$ 4,482	\$ 1,759	\$ 1,675
CT	\$ 7,894	\$ 4,225	\$ 1,658	\$ 1,579
DE	\$ 7,486	\$ 4,006	\$ 1,572	\$ 1,497
IL	\$ 6,655	\$ 3,562	\$ 1,398	\$ 1,331
NJ	\$ 6,447	\$ 3,450	\$ 1,354	\$ 1,289
US	\$ 6,269	\$ 3,355	\$ 1,316	\$ 1,254
ME	\$ 6,221	\$ 3,329	\$ 1,306	\$ 1,244
OH	\$ 6,183	\$ 3,309	\$ 1,298	\$ 1,237
CO	\$ 5,727	\$ 3,065	\$ 1,203	\$ 1,145
WA	\$ 5,705	\$ 3,053	\$ 1,198	\$ 1,141
MD	\$ 5,616	\$ 3,006	\$ 1,179	\$ 1,123
FL	\$ 5,605	\$ 3,000	\$ 1,177	\$ 1,121
IN	\$ 5,531	\$ 2,960	\$ 1,162	\$ 1,106
CA	\$ 5,493	\$ 2,940	\$ 1,154	\$ 1,099
VA	\$ 5,455	\$ 2,919	\$ 1,146	\$ 1,091
MI	\$ 5,364	\$ 2,871	\$ 1,126	\$ 1,073
IA	\$ 5,297	\$ 2,835	\$ 1,112	\$ 1,059
MO	\$ 5,291	\$ 2,832	\$ 1,111	\$ 1,058
OR	\$ 5,251	\$ 2,810	\$ 1,103	\$ 1,050
MN	\$ 5,191	\$ 2,778	\$ 1,090	\$ 1,038
SC	\$ 4,828	\$ 2,584	\$ 1,014	\$ 966
TN	\$ 4,767	\$ 2,551	\$ 1,001	\$ 953
GA	\$ 4,614	\$ 2,469	\$ 969	\$ 923
WI	\$ 4,558	\$ 2,439	\$ 957	\$ 912
NC	\$ 4,416	\$ 2,363	\$ 927	\$ 883
UT	\$ 4,400	\$ 2,355	\$ 924	\$ 880
SD	\$ 4,277	\$ 2,289	\$ 898	\$ 855
LA	\$ 4,043	\$ 2,164	\$ 849	\$ 809
NE	\$ 3,910	\$ 2,093	\$ 821	\$ 782
AZ	\$ 3,860	\$ 2,066	\$ 811	\$ 772
MS	\$ 3,662	\$ 1,960	\$ 769	\$ 732
AL	\$ 3,636	\$ 1,946	\$ 764	\$ 727
HI	\$ 3,599	\$ 1,926	\$ 756	\$ 720
TX	\$ 3,528	\$ 1,888	\$ 741	\$ 706
KY	\$ 3,386	\$ 1,812	\$ 711	\$ 677
KS	\$ 3,235	\$ 1,731	\$ 679	\$ 647
AK	\$ 2,914	\$ 1,560	\$ 612	\$ 583
ND	\$ 2,911	\$ 1,558	\$ 611	\$ 582
AR	\$ 2,781	\$ 1,488	\$ 584	\$ 556
OK	\$ 2,651	\$ 1,419	\$ 557	\$ 530
MT	\$ 2,619	\$ 1,401	\$ 550	\$ 524
ID	\$ 2,602	\$ 1,392	\$ 546	\$ 520
WV	\$ 2,572	\$ 1,376	\$ 540	\$ 514
NV	\$ 2,405	\$ 1,287	\$ 505	\$ 481
WY	\$ 1,966	\$ 1,052	\$ 413	\$ 393
NM	\$ 1,817	\$ 973	\$ 382	\$ 363

Data Source: Delta Cost Project
 * Data Compiled and Configured by Authors

Conclusion

For over a century policymakers have sought to level the playing field by assisting students in attaining a college education. They have achieved this goal primarily through funding assistance in the form of loans or grants; however, 150 years after the federal government began higher education financial assistance, the taxpayers find themselves paying a high price for ever-higher tuition.

Couple the skyrocketing cost of college and the level of debt students incur along the way with evidence of federal financial aid acting as a key factor in driving up the net price, and it's easy to come to the logical conclusion that restrictions need to be placed on taxpayer funded financial aid. Unfortunately, effective policy solutions are not as simple as limiting aid to scholars.

While there is room for improving federal aid programs, simply reducing funding for the programs will not likely produce the results we are looking for. There are other solutions that policy makers should look toward when considering how to slow tuition hikes. Finding ways to assist states in growing dual enrollment programs or enacting policies that increase the availability of advanced placement and international baccalaureate credits are but two examples, but they are real solutions that shorten the time to completion and have proven to lower the cost of college for students.