# 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	Со	Cost of Changes in Grant Aid		Cost of Changes in College Earnings Premium	
Тор 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 Av	erage .	\$	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:

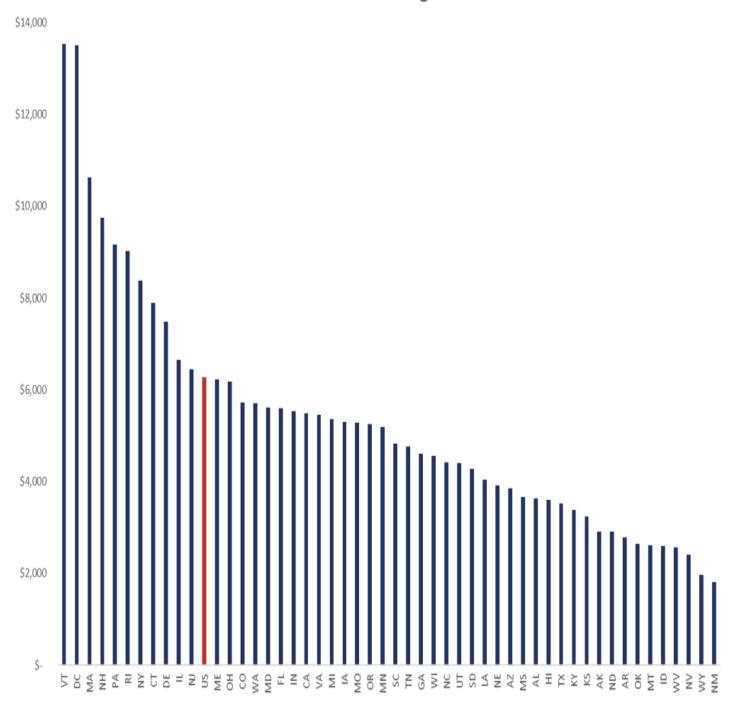
- There is room for improving federal aid programs and limiting the growth of federal dollars,
- However, simply restricting access to the programs is not likely to be successful, and
- Policy makers should look to slow tuition hikes, perhaps through growing dual enrollment programs or enacting policies 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. StateTuition Change Since 1987



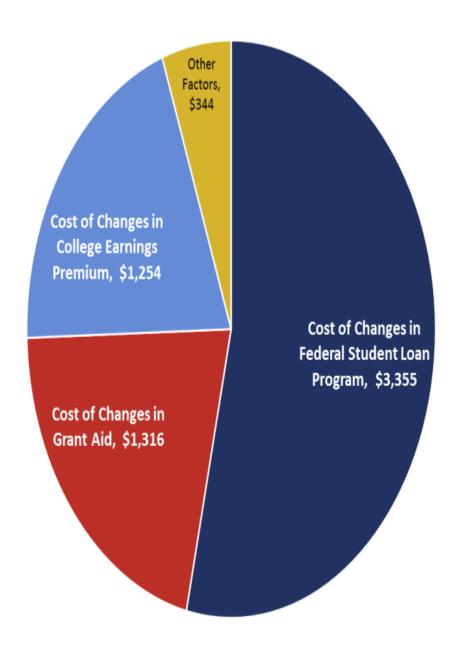
# What's Driving Up Tuition?

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 e?ect 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;
  - o 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 o	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	Table 1. TUITION CHANGES OVER TIME AND FACTORS DRIVING INCREASES						
	T2-	ion Change	Cost of Changes in	Cost of Changes in	Cost of Changes in		
State	1	ince 1987	Federal Student Loan	Grant Aid	College Earnings		
	3	HKC 1367	Program	Grant Alu	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		
ст	\$	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		
ОН	\$	6,183	\$ 3,309	\$ 1,298	\$ 1,237		
co	Ś	5,727	\$ 3,065	\$ 1,203	\$ 1,145		
WA	Ś	5,705	\$ 3,053	\$ 1,198	\$ 1,141		
MD	\$	5,616	\$ 3,006	\$ 1,179	\$ 1,123		
RL	\$	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	Ś	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		
НІ	\$	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		
ОК	\$	2,651	\$ 1,419	\$ 557	\$ 530		
МТ	\$	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	Ś	1,817	\$ 973	\$ 382	\$ 363		
Data Source		-	3.0				

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.