

# Assessing the Impact of State Funding on Higher Education in the United States: Trends, Allocation, and Implications

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## Abstract

The crucial role of state funding in nurturing a skilled workforce and driving economic growth through higher education necessitates a thorough examination of its adequacy amid economic downturns. This study delves into the evolving landscape of state and federal support for higher education, analyzing funding trends for institutions and students. Despite escalating enrollments and inflation, state funding has dwindled, particularly impacting public research institutions and undergraduate education. While states predominantly allocate funds to community colleges and non-research public institutions, addressing the pressing needs of higher education necessitates a recalibration of funding distribution. This research underscores the urgency for states to reallocate resources to meet institutional demands and alleviate financial strains on students and families, thereby fostering equitable access and sustainable development in higher education.

Keywords: state funding; federal funding; higher education; funding trends; financial burden

## 1. Introduction

According to the Fiscal Federalism Initiative report in 2015, the existing federal and state funding for higher education are analyzed from various perspectives. Historically, the state funding was the main contributor in the assistance to postsecondary institutions and students, 65 percent more than the federal funding from 1987 to 2012. According to State higher education finance fiscal year report (State Higher Education Executive, 2013), during the past twenty-five years, the state and local government financial support to higher education has always been in the growth from \$33.3 billion in 1987 to \$88.8 by 2008. A downturn appeared in 2008 because of the recession, which largely reduced state support for education. The American and Reinvestment Act (ARRA), approved February 17, 2009, provided funding to stabilize state support for education in response to the decrease in 2009, 2010, and 2011. State and local support in 2011 including ARRA funds reached \$87.4 billion in the whole. However, due to the expiration of ARRA funds, the decline in 2012 was widely and accurately projected, which fell more than 7 percent to \$81.2 billion.

## 2. The Trends of State funding for Higher Education

After the Great Recession and Pell Grant program, the federal funding increased sharply and surpassed the state funding by 2010 for the first time in two decades. Woodhouse (2015) pointed out the phenomenon that federal spending had surpassed state spending as the most important origin of public funding in higher education. State and federal funding have diverse tasks: the state funding is to give support to specific public universities, while federal funding is usually used to provide student aid and research grants.

The overall public funding for every student for higher education fell 12% in the 12 years. At the same time, federal funding increased twice from \$43 billion to \$83 billion when state funding was dropping from \$78 billion to \$ 71 billion. In the meantime, enrollment was improving by 45%.

From 1987 to 2012, states consumed 65% more than the federal government on the development of higher education. However, the situation changed quickly during the past ten years. From 2008 to 2013, Pell Grants funding improved by 72%, and funding for veterans tripled. In 2013 the federal government spent about \$76 billion on higher education, aiding \$25 billion in research funding necessities, while states spent about \$3 billion less.

In such a pretty short time, the shift is surprising in federal and state higher education funding. Although the federal government transmits more money to higher education overall, states provide a greater portion of funding to public universities. In 2003, the public universities received about 21% of their funding from state funds and 16% from the federal government. However, in public universities, community colleges and non-research public institutions tend to get much larger segments of their budgets from state funds (Choitz, 2010). Besides, research grants have a powerful influence on college projects and graduate education, but don't naturally pay for undergraduate education.

Even though the state and federal funding for higher education is equivalent in their size, they have different target in supporting for instance the federal government give financial assistances to students and research projects, while state funds support the ordinary duties of public universities.

Higher education funding took up 2% in the total \$3.5 trillion federal budget in 2013. At the same year, the higher education consuming situation in state funding is \$65 billion, which ranked the third largest spending in state general fund.

Although the federal and state investments in higher education are similar in quantity, they are different in combination. The federal investment is mainly divided into \$31.3 federal Pell Grants, \$24.6 federal research grants and \$12.2 federal veterans' educational benefits. The state investment is mainly divided into \$53.0 general-purpose appropriations and \$10.1 state research, agricultural and medical education appropriations, as well as \$9.6 state financial aid grants.

### *2.1 The Impacts of Decreasing Funding on Higher Education*

Some researchers contend that despite the government annually allocating billions of dollars to higher education, it has refrained from cutting funding to struggling colleges and universities, partly due to reluctance in penalizing enrolled students and the lack of consensus on defining acceptable performance standards. Anderson (2014) proposed detailed solutions and standards for colleges to effectively navigate reduced funding operations, suggesting that financial sanctions imposed by the federal government—such as the loss of tax breaks and grants or eligibility for federal student aid programs—could incentivize institutional improvements.

However, educators largely oppose this approach, arguing that devising a system fair to thousands of vastly different institutions is implausible and expressing skepticism regarding the quality of federal data on colleges (Yan & Howard, 2019; Zheng et al., 2018a). Moreover, many higher education leaders believe that the current authority is sufficient for the federal government to address failing colleges without necessitating a new operational framework (Yan et al., 2022; Zheng et al., 2019; Yan et al., 2018a).

Considering the broader impact, a decrease in federal and state funding for higher education could detrimentally affect states' economic and educational development, exacerbating disparities between institutions with varying support sources and compounding affordability issues for students from low-income families (Yan et al., 2018b; Yan et al., 2023; Ding & Yan, 2023; Yan et al., 2020). This reduction may impede the growth and quality of educational institutions, hindering overall progress in both educational attainment and economic prosperity (Yan & Sun, 2022; Zheng et al., 2018b).

### *2.2 The Impacts of Decreasing Funding on State Development*

The creativity and long-term development of higher education need good education in the state. The total revenue for higher education is quite different from state to state. The factors of whole revenue are federal funding, state funding, local revenue, net tuition, and fees etc.

The federal funding to higher education spans from \$3,465 to \$10,084, and the state funding changes from \$3,160 to \$19,575. Federal funding changes raised from students' different financial demands and various types of research in every state, along with other factors. The range in state funding is partly because of different policies for higher education. For instance, North Carolina's and Wyoming's constitutions state that public universities should be as better as free, and schools in these two states take large state revenue and low net tuition revenue.

### *2.3 The Impacts of Decreasing Funding on Institution Development*

To improve the performance of higher education institutions, policymakers have applied performance funding, which connects funding to performance on detailed indicators (Dougherty & Reddy, 2011). After reviewing lots of findings in many states, they found that tying funding to outputs has direct impacts on institutions in funding changes, becoming more aware of their performance, and having more competition among institutions. However, because of some obstacles to its effective functioning such as inappropriate performance funding measures, inadequate state funding in catching up with the enrollment growth and shortfalls in regular state funding, unintended impacts of performance funding were documented in the research such as narrowing of institutional missions, grade inflation and weakening of academic standards, restriction of student admission and lesser faculty voice in academic governance.

Many studies have estimated the effect of college price on attendance, but state support for higher education does not have a direct correlation with college price. Trostel (2009) estimated state financial support for higher education raised college attainment, which was the first study to estimate this relationship. State support for higher education can affect enrollment through college quality, not just price. Probing into 22 years of interstate data (1985-2006) and controlling for fixed state effects, this study revealed a state-support flexibility of college enrollment and college degree attainment. This research applied a two-stage instrumental-variables approach to explain the possibility that state funding for higher education may internally relate to college enrollment.

#### *2.4 The Impacts of Decreasing Funding on Students and Their Families*

All figures should be numbered with Arabic numerals (1,2,...n). All photographs, schemas, graphs and diagrams. Although state funding to higher education has significantly decreased nationwide, the phenomenon of state divestment in higher education happens at the same time as federal and state policies adapt into increasing degree completion rates. Johnson-Ahorlu et al. (2013) made an analysis of qualitative data collected at California higher education institutions, which focused how educational funding decreasing created academic barriers for students, such as decrease in support services and resources; furloughs resulting in less instruction time; decreased course availability prolonging degree progress; and fee increases and the high cost of education. This research provides insights into how students progress toward degree completion and undermines efforts to increase completion rates.

Decreasing in state funding for higher education means that more pressure would be put on the students and their families through increasing tuition and room and board costs (Jones, 2011). Incomes have not risen at the same rate as the rising costs, especially for those low-income and middle-income families. For example, the whole annual cost at the University of California for every student was increased by 18% in comparison with the cost needed three years ago. The situation at California State University was \$20,100, which had increased by 23% in the same period. Although there were grants and fee waivers, the yearly net cost at the two schools is one-third of a low-income family's annual income, as well as one-quarter of a middle-income family income.

Because of the decreasing and insufficiency in state funding, affordability of higher education became a problem (Syverud, 2015; Katsinas, et al. 2011). Students and their families must take high debt, and high costs would frighten students from attending college. If the situation keeps going on, the tendency of declining affordability will lower the state's ability to preserve the educated and original manpower needed for the state's future.

#### *3. Conclusion*

The state and local government financial support to higher education has always been in the growth and is the mainstream in assistance historically, however, federal funding in education surpassed the state funding in recent years. The overall tendency of the current state funding in the Higher Education has been in the dropping from the recent decades of data analysis, which can not meet the urgent needs of the development of institutions and leaves great pressure on the low-income students and families, along with the higher and higher tuition fees and the fast-increased enrollment rates.

Though States supply a greater part of funding to public universities, most of the state funds went to community colleges and non-research public institutions. Undergraduate education cannot receive state funding. What's important is that the public research institution and undergraduate education are important components in higher education, making the origin of energy in the rapid development of higher education.

The decrease in higher education funding will have a bad effect towards its development of each state, such as the pressure of students in those uncompetitive colleges, which would no longer get funding from the

government. The school may manage to survive under a less supporting funding, however their pressure would be passed to the ultimate customers in the school: the students and their families, making them difficult to sustain their study and force to drop out of school, which is the last thing the educators want to see in operating such punitive policies, as well as violating the start point of the state funding reform.

In comparison with the large share of contribution in the past if the inflation situation in current economic situation, the state funding should do more in helping the development of state institution and especially the research projects in the state. Therefore, the state should make some adjustments in distributing funding to keep up with the real urgent need of higher education and ease part of the pressure on the institutions, students, and their families.

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