

Declining Budgetary Allocation to Higher Education in The United States: Causes and Consequences for Economic Development

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Abstract

In recent times, there has been a consistent decrease in the amount of state budgets for higher education in the United States of America. This calls for great concern as higher education must compete with several other state budget items for funding. Also, more individuals need to possess workforce credentials and college degrees for the country to remain competitive in today's economy. In the light of the critical role of education in socio-economic development, this paper elaborates on the importance of prioritizing education and increasing state funding for higher education. The study revealed in the literature that higher education is a foundation for productivity improvement and economic growth, and that countries that invest heavily in education and skills, benefit economically and socially from that choice. As a result, the study calls on lawmakers and policy formulators to make provisions for high-quality, affordable and accessible higher education by increasing the funding to pursue college education. As the world continues to change and becomes increasingly interdependent, the United States of America cannot afford to rest on its historic record as the world's leader in educational attainment.

Keywords: Higher Education, Budget, State, Funding, Expenditure, Economics, Development

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1.0 INTRODUCTION

According to an Independent Review of Higher Education Funding and Student Finance Report (2010) titled, "Securing a Sustainable Future for Higher Education", the expansion of higher education is often presented as an attractive government policy because of its potential impact on economic growth. But it has been observed in the education literature that the support for higher education has been gradually declining (Kane, Orszag & Gunter, 2003). State support for higher education has waned; the share of higher education expenditures is subsidized by state appropriations. Coleman (2016) explained that states that ought to be significant players in keeping college affordable have been entangled in the rise of tuition and student loan debt. Higher education is often one of the first state budget categories that is screened out for investment (Delaney & Doyle, 2011). The states have allowed higher education to get squeezed out of state budgets and to compete for funding with several other state budget items. During budget session each year, the challenge for state and local officials has been the allocation of their resources to projects with the highest return on investment for the society (Webber, 2018). Alexander (2001) underscored in his study that the decline in state support for higher education over the past several decades has manifested itself in several common measures in local and state level development. Some other studies (see Tandberg, 2009; Finney, 2014; National Association of State Budget Officers, 2018; Webber, 2018) reported that increased spending on Medicaid which accounts for the largest spending from federal funds is causing decline in expenditure for higher education.

If states are to remain economically competitive, policymakers must identify what works and how to implement it (Hanushek et al., 2008). As a result, government officials, policymakers, researchers and academia have sought for answers (or solution) to the following critical questions to better inform policy on (a) "How does higher education contribute to building a prosperous economy?" and (b) "Does decline in higher education funding have damaging consequences for families, students and communities?". The importance of higher education to socio-economic development has been documented in extant literature (see Meotti, 2016; O'Brien, 2019). The theoretical growth models (such as the neoclassical growth model and endogenous growth model) identify three mechanisms through which education may affect growth. First, neoclassical growth model suggests that education can increase the human capital fundamental to the labor force. This increases productivity and thus transitional growth towards a higher equilibrium level of output (Mankiw, Romer & Weil, 1992). Second, the endogenous growth model argues that education can increase the innovative capacity of the economy, the knowledge on new technologies and products, and the processes that promotes growth (Romer, 1990; Aghion & Howitt, 1998). Third, education can expedite the flow of knowledge needed to process information and to successfully implement new technologies devised by others, which again promotes economic growth (Benhabib & Spiegel, 1994).

In the light of the critical role of education in socio-economic development, this paper elaborates on the

importance of prioritizing education and increasing state funding for higher education. The objectives of this study are to: (i) critically examine the demand side of educated labor in the United States, emphasizing its role in improving the business environment and thus, building the nation's economy; (ii) evaluate the role of higher education in the development of an individual for multiple roles in the society. As observed by Stephen (2010), there is a relationship between higher education institutions, job creation and economic growth, consequently there is the need for both academics and public officials to start prioritizing higher education by giving it the maximum attention. This report contributes to existing literature by calling students, institutional leaders and policymakers on the need to understand the volatility in state budgets for higher education and its future economic implications.

2.0 LITERATURE REVIEW

2.1 How did we get here?

State budgets and college affordability are intertwined with the economy's health. Public colleges and universities rely on state appropriations to provide broad access to high-quality and affordable college opportunities (Policy Matters, 2019). Previous studies on the politics of state funding for higher education focus on the degree to which higher education budgets are squeezed by increase in expenditures in other areas, such as health care, corrections, or K-12 education (Delaney & Doyle, 2011).

The United States Census Bureau (2001) projects that the population age of 65 and above is expected to increase from 35 million in 2000 to 70 million in 2030—thus, the number of low-income, elderly individuals that are eligible and hence, beneficiaries for Medicaid will rise rapidly in the future. In the study by Kane et al. (2003), they concluded that state budgets will likely come under increased pressure from Medicaid program costs associated with the relative cost of health care for the elderly. They added that two main components of healthcare for Medicaid program will come from long-term care and prescription drugs, and this poses a threat to the public education system. They further argued that tuition increase is expected to compensate for these cuts in appropriations—but without relative expansions in financial aid, the tuition increase would disproportionately affect low-income students and inflict them with more financial burden. Consequently, there would be more trade-offs for the states between the rising costs of Medicaid and demand for higher education in public institutions.

While report from the National Association of State Budget Officers (2018) showed that early revenue numbers for the fiscal year (FY) 2019 have been at or above forecast in most states, higher education must still contend with funding for state employee pension and healthcare obligations, K-12 education and aging infrastructure, among other budget items. As shown in Figure 1, Medicaid accounts for the largest portion of total state spending rising from 20.5 percent in the FY 2008 to approximately 29.7 percent in the FY 2018. This growth in Medicaid expenditure contends with the ability of states to invest in higher education. Other functional categories of state spending included in the budget are elementary and secondary education (19.6%), higher education (10.1%), public assistance (1.3%), corrections (3.1%), transportation (8.0%), and other miscellaneous areas (28.3%).

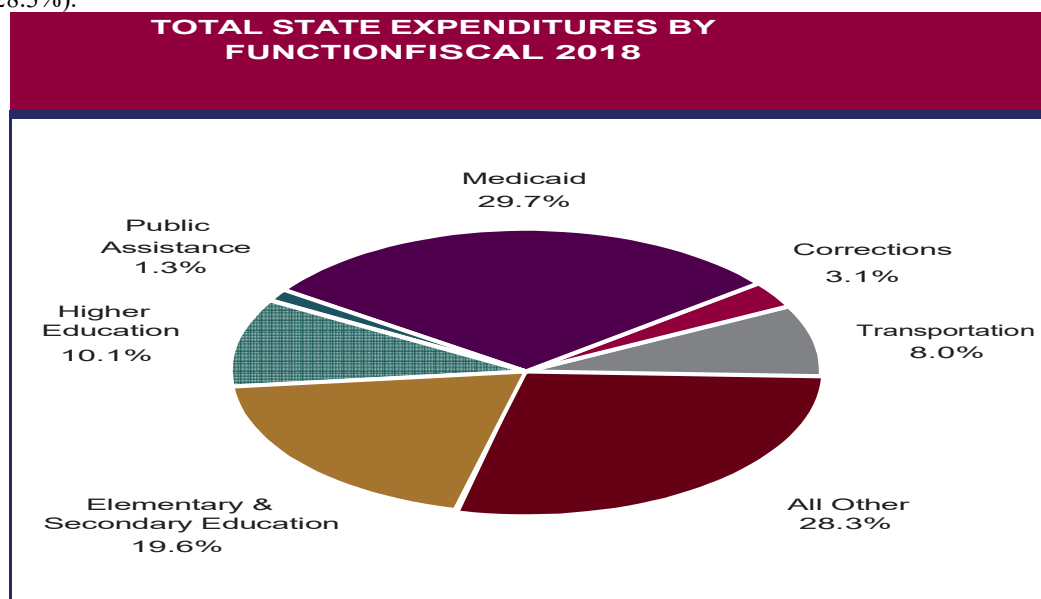


Figure 1: Total State Expenditures by Function Fiscal 2018

Source: State Expenditure Report. National Association of State Budget Officers (2018).

With 9.5% higher (i.e. 19.6% - 10.1%), elementary and secondary education appear to have a favored position over higher education in the political struggle for available state dollars (Meotti, 2016). In the preferred analysis by Webber (2018), public welfare spending makes about half (53%) of the decline in higher education appropriations. Correctional expenses have also risen rapidly, and prison population has expanded with increased incarceration of drug dealers and increased sentence lengths as key factors contributing to the rise in prison population (Tonry & Petersilia, 1999). The limited changes in federal transportation resources coupled with states' actions to raise revenue has also caused transportation spending in states to rise (NASBO, 2018).

2.2 Where are we now?

Americans remain largely convinced that postsecondary education is essential for both life and career goals, but the critical service is increasingly out of their financial reach (Meotti, 2016). Today, just 30% of children born to families in the bottom income quartile are expected to enroll in college compared to 80% from the top income quartile (Goldrick-Rab, 2016). The competitive edge of America's higher education system is gradually slipping. The U.S. is ranked 10th among industrialized countries of the world in the proportion of the population age 25 to 34 with an associate degree or higher (Organization for Economic Co-operation and Development, OECD, 2008) but the figures are nosediving. The current population is aging; halfway through the 21st century, close to 82 million Americans will be age 65 or older (Bell, 2019). According to Bell (2019), states will find it increasingly difficult to compete in the global economy without appreciably improving the number of college degrees and certificates earned. In the words of Professor Andrea Nolan, cited in Johnson (2019), any further decline would result in "buckets underneath our leaky roofs", outdated technology and fewer lecturers per student.

The United States (U.S.) higher education system is being challenged by improvements in higher education across the world. Though the U.S. is generally regarded as having the best universities, and its citizens are still among the best educated globally, other countries are doing a better job of improving the educational attainment of their younger generations. Hanson and Slaughter (2015) found that 55 per cent of Ph.D. holders working in the U.S. in Science, Technology, Engineering and Mathematics (STEM) fields were foreign born. The U.S. brings in highly skilled individuals, who frequently get Ph.Ds. at U.S. universities and then remain to work in the U.S. (Hanushek, 2016). Therefore, if the U.S. is to remain economically competitive in world markets, there is need to solve the puzzle of higher education for the benefits of all (Hanushek et al., 2008).

2.3 What does the future hold?

Higher education is a public good in high demand and quality higher education matters everywhere (Coleman, 2016). As cities and regions foster economic growth and businesses in different spheres of human endeavor, the availability of highly skilled graduates will be critical to the economic success of those cities and the country at large (Stephens, 2010). Stephens (2010) recommended that lawmakers should think more and more about how higher education can be used to generate the brain power needed to fuel the jobs and the businesses of the 21st century.

As suggested by the theoretical growth model, education can increase the human capital fundamental to the labor force. Knowledge creation has been identified by economists as a key driver of economic growth with proven influence on the economy (Hughes, 2019). Higher education drives growth performance, prosperity, and competitiveness in national and global economies. In the modern globalized world, there is even stronger competition to obtain highly qualified workforce and create economically potent intellectual capital (Kotosz et al., 2016). The higher education system itself promotes human capital development, which determines the efficiency and the competitiveness of the national economy (Hanushek, 2013).

A close examination of Figure 2 reveals that Median weekly earnings rank the highest for individuals with doctoral degrees and the least for individuals with less than high school diploma. Unemployment rates also decline with increasing educational attainment. Unemployment rates are lower for adults with higher levels of education, but, undereducated citizens and nonworkers cost the state more in terms of public services, lost wages, and lost revenue - in other words, lost economic productivity (OECD, 2008).

Unemployment rates and earnings by educational attainment, 2017

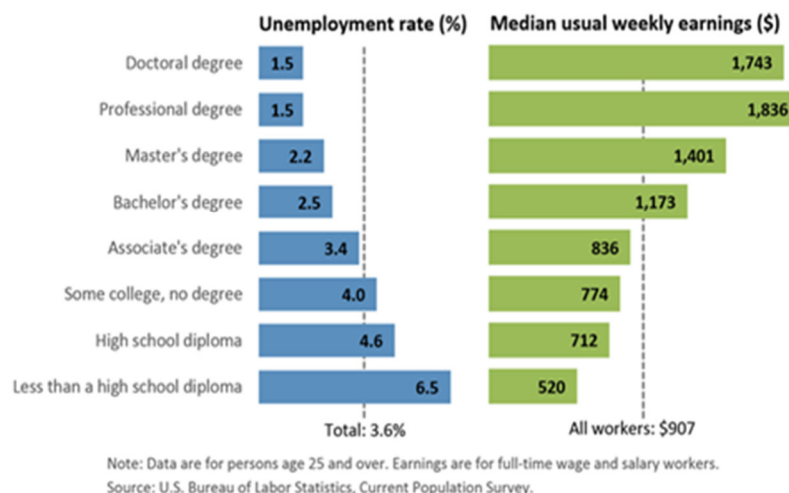


Figure 2: Unemployment rates by educational attainment in the US , 2017

Source: U.S. Bureau of Labor Statistics, Current Population Survey

Education can increase the innovative capacity of the economy, and economists have begun to single out technical progress as the key factor for economic growth (Blomstrom et al., 2002). With this, universities, colleges and training providers will nurture future creative, innovative and forward-thinking individuals that go on to achieve great things for wider society. Hughes (2019) stated that the higher education sector is a natural partner to the knowledge-based economy. He also emphasized that a key role of higher education institutions is to drive innovation, with the aim of finding solutions to global challenges in areas such as healthcare, environmental protection, resource security, international development, and population trends. Thus, higher education will drive productivity improvements and economic growth.

The private returns and the social returns of higher education institutions to Research and Development (R&D) are strongly positive (Hall, 2009). Education can accelerate knowledge flow and understanding such that new technologies can be successfully created and completed. Therefore, funding of these educational institutions is crucial for the institutions to continuously produce quality research outcomes and skilled graduates so that the state can achieve its determined goals.

Better education attainment translates into increased tax revenue for the state. There is less spending of between \$800 and \$2700 by the government for a 30-year-old college graduate than for a high school graduate of the same age, gender, and race (College Board, 2007). Estimates from a RAND study suggest that, overall, every dollar spent on equalizing college entrance rates across racial/ethnic groups would yield between \$2 and \$3 in public savings, with a third to a half of the benefits coming from savings on social programs and the rest from increased tax revenues (Verney et al., 1999). Over a lifetime, a college-educated individual earns about \$1 million more than a person without a college degree (Carnevale et al., 2015). Further, people with higher education also experience improved health, are more involved in voluntary organizations, and give more to charity than less-educated persons (OECD, 2008).

3.0 CONCLUSION

To this end, it is very important to underscore that higher education is a foundation for productivity improvement and economic growth. Evidence has shown consistently, and over time that countries and continents that invest heavily in education and skills, benefit economically and socially from that choice (Inglesi-Lotz & Pouris, 2017). Decline in state spending on higher education and higher tuition costs, combined with unstable or stagnant incomes has damaging consequences for students, families and communities. Higher education contributes significantly to building a prosperous economy without prejudice to race or class. Highly educated citizens improve the state's economy, meet future workforce needs and enhance the quality of life of the state.

The study strongly recommends that higher education should take priority. It has been projected that by 2020, 65 percent of the population will require some form of post-secondary education (in form of workforce certificate or degree) to remain competitive in the new economy. Policies on how the federal and state should finance the future of its higher education is long overdue. American states need to develop alternatives to balance their state budget and to stop cutting higher education funding. State policies should prioritize University funding especially to low income students and to Universities that efficiently serve them with high quality training and research. This will similarly make them respond to labor market signals, and bring prestige, innovation and a better-trained

workforce, not only to the state but to the success of America's future.

REFERENCES

- Aghion, P. & Howitt P. (1998). *Endogenous Growth Theory*. Cambridge, MA: MIT Press.
- Alexander, F. K. (2001). *Disparities in State Tax Effort for Financing Higher Education*. Paper presented at the Cornell Higher Education Research Institute conference on Financing Higher Education in the 21st Century.
- Benhabib, J. & Spiegel M. M. (1994). The role of human capital in economic development: Evidence from aggregate cross-country data. *Journal of Monetary Economics* 34(2), 143–174
- Bell, J.D. (2019) Getting what you pay for. Higher Education and Economic Development. *National Conference of State Legislatures*
- Blomstrom M., Kokko A. & Sjöholm F. (2002). Growth and Innovation Policies for a Knowledge Economy: Experiences from Finland, Sweden and Singapore. *Paper 156*. Retrieved from <https://core.ac.uk/download/pdf/6756951.pdf>
- Bureau of the Census projections as reported in *Statistical Abstract of the United States 2001*, Tables 11 and 13
- Carnevale, A. P., Cheah B. & Hanson A. R. (2015). The Economic value of college majors. Washington DC: Georgetown University Center on Education and the Workforce. 4
- Carnevale, A. P. Smith N. & Strohl J. (2012). Help Wanted: Projections of Jobs and Education Requirements through 2018. Washington, DC: Georgetown University Center on Education and the Workforce. 121-122.
- Carnevale, A. P., Smith N. & Strohl, J. (2013). Recovery: Job Growth and Education Requirements Through 2020. Washington, DC: Georgetown University Center on Education and the Workforce. 15
- Coleman, M.S. (2016). Saving Public Higher Education. Times Higher Education World Academic Summit. *Vital Speeches of the Day*, 82(12), 362–365. Retrieved from <http://search.ebscohost.com/login.aspx?direct=true&AuthType=ip,cpid&custid=s9098656&db=khh&AN=120133944&site=eds-live>
- College Board (2007). *Education Pays*. Washington DC: The College Board.
- Finney, J. E. (2014). Why the Finance Model for Public Higher Education is Broken and Must be Fixed. Penn Wharton Public Policy Initiative, 27. Available at <http://repository.upenn.edu/pennwhartonppi/27>
- Delaney, J.A. & Doyle W.R. (2011). State Spending on Higher Education: Testing the Balance Wheel over Time. *Journal of Education Finance* 36(4), 343-368. <https://www.muse.jhu.edu/article/431700>
- Goldrick-Rab, S., Kelchen R., Harris D. N., & Benson J. (2016). Reducing Income Inequality in Educational Attainment: Experimental Evidence on the Impact of Financial Aid on College Completion. *American Journal of Sociology*, 121(6), 1762–1817. <https://doi.org/10.1086/685442>
- Hall, H. B., Mairesse J. & Mohnen P. (2009). Measuring returns to R&D. NBER Working Papers Series 15622. Cambridge, MA: National Bureau of Economic Research; 2009
- Hanson, G. H. & Slaughter M. J. (2015). High-skilled Immigration and the Rise of STEM Occupations in US Employment. Paper presented at NBER Conference on Research in Income and Wealth, 16–17 October, at Bethesda, MD
- Hanushek, E. A., Jamison D. T., Jamison E. A. & Woessmann L. (2008). Education and Economic Growth. *Education Next. A Journal of Opinion and Research*, 8(2)
- Hanushek, E. A. (2013). Economic growth in developing countries: The role of human capital. *Economics of Education Review*, 37, 204-212. <https://doi.org/10.1016/j.econedurev.2013.04.005>
- Hanushek E.A (2016). Will Higher Education Improve Economic Growth? *Oxford Review of Economic Policy*, 32 (4), 538–552
- Hanushek, E. A. & Wößmann L. (2010). Education and Economic Growth. In: Penelope Peterson, Eva Baker, Barry McGaw, (Editors). *International Encyclopedia of Education*, 2 (1), 245-252. Oxford: Elsevier
- Hughes, D. (2019). What's the Role of Higher Education in a Digital Society? *Digital Marketing Institute*
- Inglesi-Lotz, R. & Pouris A. (2017). The contribution of higher education institutions to the South African economy. *South African Journal of Science*, (3/4), 1. <https://doi.org/10.1590/sajs.2014/a0059>
- Schleicher, A. (2006). The Economic of Knowledge: Why Education is key for Europe's success. The Lisbon Council Policy Brief. J-06-3350 Policy Brief-FIN.
- Johnson, S. (2019). Scotland's universities, staff and students issue joint warning to SNP to stop funding cuts or risk "significant" decline. *The Telegraph Online*. Retrieved from <http://search.ebscohost.com/login.aspx?direct=true&AuthType=ip,cpid&custid=s9098656&db=edsgbc&AN=edsgcl.600073800&site=eds-live>
- Kane, T.J., Orszag P.R. & Gunter D.L (2003). State Fiscal Constraints and Higher Education Spending: The Role of Medicaid and the Business Cycle. Discussion Paper No 2. The Urban Institute
- Kotosz B., Lukovics M., Molnar G. & Zuti B (2016). How to Measure the Local Economic Impact of Universities? Methodological Overview. Retrieved from

- https://www.researchgate.net/publication/301435566_How_to_Measure_the_Local_Economic_Impact_of_Universities_Methodological_Overviewhttps://www.researchgate.net/publication/301435566_How_to_Measure_the_Local_Economic_Impact_of_Universities_Methodological_Overview
- Mankiw, N. G., Romer D. & Weil D. (1992). A contribution to the empirics of economic growth. *Quarterly Journal of Economics*, 107 (2), 407–437
- Meotti, M. P. (2016). The States and Higher Education: An Evolving Relationship at a Pivotal moment. *Change*, 48(1), 39–45. <https://doi.org/10.1080/00091383.2016.1121085>
- Mitchell, M., Leachman M., Masterson K. & Waxman S. (2018). Unkept Promises: State Cuts to Higher Education Threaten Access and Equity. *Center on Budget and Policy Priorities*. Retrieved from <https://www.cbpp.org/sites/default/files/atoms/files/10-4-18sfp.pdf>
- National Association of State Budget Officers (2018). Summary: Fall 2018 Fiscal Survey of the States. https://higherlogicdownload.s3.amazonaws.com/NASBO/9d2d2db1-c943-4f1b-b750-0fca152d64c2/UploadedImages/Issue%20Briefs%20Summary_-_Fall_2018_Fiscal_Survey.pdf
- O'Brien, C. (2019). What's the Importance of Higher Education on the Economy? *The Digital Marketing Institute*
- Organization for Economic Co-operation and Development, OECD. (2008). Education at a Glance 2008. *OECD Indicators*. Paris: OECD.
- Policy Matters (2019). Top 10 Higher Education State Policy Issues for 2019. A Higher Education Policy Brief. American Association of State Colleges and Universities Government Relations and Policy Analysis Division
- Report, B. (2010). Securing a Sustainable Future for Higher Education. *An Independent Review of Higher Education Funding & Student Finance*
- Romer, P. (1990). Endogenous technological change. *Journal of Political Economy*, 99(5), 71–102.
- Stephens E. (2010). Higher Education and America's Economic Growth. Huffpost. Part of MultiCultural/HPMG News. Available at https://www.huffpost.com/entry/higher-education-and-amer_b_542906
- Tandberg, D. A. (2009). Interest groups and governmental institutions: The politics of state funding of public higher education. *Educational Policy*. doi:10.1177/0895904809339163.
- Tonry, M. & Joan P. J. (1999). Prisons Research at the Beginning of the 21st Century, in Prisons. Edited by Michael Tonry and Joan Petersilia, (Chicago: University of Chicago Press, 1999).
- Verney, G., Krop R. A. & Rydell C.P. (1999). Closing the Education Gap (Santa Monica, CA: RAND Corporation, 1999).
- Webber, D. (2018). Higher Ed, Lower Spending: As States Cut Back, Where Has the Money Gone? *Education Next*, (3), 51. Retrieved from <http://search.ebscohost.com/login.aspx?direct=true&AuthType=ip,cpid&custid=s9098656&db=edsgao&AN=edsgcl.544779961&site=eds-live>