

Washington State Institute for Public Policy Meta-Analytic Results

Tuition sticker price increase at 2-year college (for high school students and graduates)

Higher Education

Literature review updated August 2017.

As part of WSIPP's research approach to identifying evidence-based programs and policies, WSIPP determines "what works" (and what does not work) to improve outcomes using an approach called meta-analysis. For detail on our methods, see our Technical Documentation. At this time, WSIPP has not yet calculated benefits and costs for this topic.

Program Description: Studies included in this meta-analysis estimate the effects of a change in the price of tuition at 2-year colleges on students' college outcomes, including the likelihood that a student will enroll in college. Results are presented as "elasticities" and are interpreted as the percent change in an outcome we expect from a 1% increase in tuition price.

This meta-analysis includes only studies that examine tuition price without subtracting federal Pell grants from full price values. In addition, this meta-analysis includes only studies that use individuallevel data in their analyses. Results of group-level analyses can differ from the results of analyses of the individuals within the same groups. The studies in this meta-analysis evaluate the effects of a tuition price increase for students who are still attending high school or have recently graduated high school and have not yet enrolled in college.

| Meta-Analysis of Program Effects | | | | | | | |
|----------------------------------|---------------------|-------------|---|-------|-----|---|---------|
| Outcomes measured | No. of effect sizes | Treatment N | Adjusted effect size and standard error | | | Unadjusted effect size (random effects model) | |
| | | | ES | SE | Age | ES | p-value |
| Graduate with 4-year degree** | 2 | 379267 | 0.200 | 0.249 | 23 | 0.200 | 0.422 |
| Enroll in 4-year college** | 4 | 593969 | 0.021 | 0.021 | 18 | 0.021 | 0.320 |
| Enroll in 2-year college** | 5 | 597044 | -0.144 | 0.042 | 18 | -0.144 | 0.001 |
| Enroll in any college** | 15 | 3220756 | -0.199 | 0.043 | 18 | -0.199 | 0.001 |
| Graduate with any degree** | 3 | 16594 | -0.413 | 0.457 | 23 | -0.413 | 0.367 |
| Graduate with 2-year degree** | 1 | 294089 | -0.280 | 0.127 | 21 | -0.280 | 0.027 |
| Apply to 4-year college** | 1 | 1424316 | -0.037 | 0.001 | 18 | -0.037 | 0.001 |

^{**}The effect size for this outcome represents an elasticity, not a standardized mean difference effect size.

Meta-analysis is a statistical method to combine the results from separate studies on a program, policy, or topic in order to estimate its effect on an outcome. WSIPP systematically evaluates all credible evaluations we can locate on each topic. The outcomes measured are the types of program impacts that were measured in the research literature (for example, crime or educational attainment). Treatment N represents the total number of individuals or units in the treatment group across the included studies.

An effect size (ES) is a standard metric that summarizes the degree to which a program or policy affects a measured outcome. If the effect size is positive, the outcome increases. If the effect size is negative, the outcome decreases.

Adjusted effect sizes are used to calculate the benefits from our benefit cost model. WSIPP may adjust effect sizes based on methodological characteristics of the study. For example, we may adjust effect sizes when a study has a weak research design or when the program developer is involved in the research. The magnitude of these adjustments varies depending on the topic area.

WSIPP may also adjust the second ES measurement. Research shows the magnitude of some effect sizes decrease over time. For those effect sizes, we estimate outcome-based adjustments which we apply between the first time ES is estimated and the second time ES is estimated. We also report the unadjusted effect size to show the effect sizes before any adjustments have been made. More details about these adjustments can be found in our Technical Documentation

Citations Used in the Meta-Analysis

- Baschnagel, C.N. (2015). The price sensitivity of demand for higher education among non-traditional students. (Doctoral dissertation). College Park, MD: University of Maryland.
- Benson, J. (2010). State policies and community college students: Do high school and finance policy reforms promote postsecondary attainment? (Unpublished doctoral dissertation). Madison, WI: University of Wisconsin-Madison
- Cardiff-Hicks, B. (2013). The effect of tuition subsidies on student college choices (Unpublished manuscript). Palo Alto, CA: Stanford University.
- Chin, A., & Juhn, C. (2010). Does reducing college costs improve educational outcomes for undocumented immigrants?: Evidence from state laws permitting undocumented immigrants to pay in-state tuition at state colleges and universities. Cambridge, Mass: National Bureau of Economic Research.
- Darolia, R., & Potochnick, S. (2015). Educational "when," "where," and "how": implications of in-state resident tuition policies for Latino undocumented immigrants. *The Review of Higher Education, 38*(4), 507-535.
- Denning, J.T. (2017). College on the cheap: Consequences of community college tuition reductions. *American Economic Journal: Economic Policy, 9*(2), 155-188.
- Flores, S.M. (2010). State dream acts: The effect of in-state resident tuition policies and undocumented Latino students. *Review of Higher Education*, 33(2), 239-283.
- Flores, S.M. (2010). The first state dream act: In-state resident tuition and immigration in Texas. Educational Evaluation and Policy Analysis, 32(4), 435-455.
- Hilmer, M.J. (1998). Post-secondary fees and the decision to attend a university or a community college. Journal of Public Economics, 67(3), 329-348.
- Kane, T.J. (1995). Rising public college tuition and college entry: How well do public subsidies promote access to college?. Cambridge, MA: National Bureau of Economic Research.
- Kaushal, N. (2008). In-state tuition for the undocumented: education effects on Mexican young adults. *Journal of Policy Analysis and Management, 27*(4), 771-792.
- Kennan, J. (2015). Spatial variation in higher education financing and the supply of college graduates. Cambridge, MA: National Bureau of Economic Research.
- Kim, J.Y. (2011). An analysis of the effects of state financial aid policy on the timing of postsecondary enrollment: A focus on income and race differences (Doctoral dissertation). ProQuest LLC, Ann Arbor, MI.
- McFarlin, I. (2007). Do public subsidies promote college access and completion? Evidence from community college districts. Ann Arbor, MI: University of Michigan, Ann Arbor.
- McFarlin, Jr. I., Martorell, P., McCall, B.P. (2017). Do public subsidies improve college attainment and labor market outcomes? Evidence from community college taxing district expansions. Working Paper.
- Rouse, C.E. (1994). What to do after high school: The two-year versus four-year college enrollment decision. Choices and Consequences: *Contemporary Policy Issues in Education*, 59–88.
- St. John, E. (1990). Price response in enrollment decisions: An analysis of the High School and Beyond sophomore cohort. *Research in Higher Education*, 31(2), 161-176.

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Washington State Institute for Public Policy

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