2018

"But For" Percentages for Economic Development Incentives: What percentage estimates are plausible based on the research literature?

Timothy J. Bartik
W.E. Upjohn Institute, bartik@upjohn.org

Upjohn Institute working paper ; 18-289

W.E. UPJOHN INSTITUTE
FOR EMPLOYMENT RESEARCH
Researching the causes and consequences of unemployment

"But For" Percentages for Economic Development Incentives: What percentage estimates are plausible based on the research literature?

Upjohn Institute Working Paper 18-289

Timothy J. Bartik
W.E. Upjohn Institute for Employment Research
email: bartik@upjohn.org

July 2018

ABSTRACT

This paper reviews the research literature in the United States on effects of state and local "economic development incentives." Such incentives are tax breaks or grants, provided by state or local governments to individual firms, that are intended to affect firms' decisions about business location, expansion, or job retention. Incentives' benefits versus costs depend greatly on what percentage of incented firms would not have made a particular location/expansion/retention decision "but for" the incentive. Based on a review of 34 estimates of "but for" percentages, from 30 different studies, this paper concludes that typical incentives probably tip somewhere between 2 percent and 25 percent of incented firms toward making a decision favoring the location providing the incentive. In other words, for at least 75 percent of incented firms, the firm would have made a similar decision location/expansion/retention decision without the incentive. Many of the current incentive studies are positively biased toward overestimating the "but for" percentage. Better estimates of "but for" percentages depend on developing data that quantitatively measure diverse changes in incentive policies across comparable areas.

JEL Classification Codes: R30, R12, H71

Key Words: Tax incentives, business location decisions, local economic development

Acknowledgments:
I thank Evan Mast, Ellen Harpel, Ken Poole, and Jim Robey for helpful discussions. I thank Nathan Sotherland for research assistance and Claire Black for general assistance. This research was in part funded by the Michigan Economic Development Corporation (MEDC); however, neither the design of this research review nor the findings had any involvement by MEDC. The findings of this research review are those of the author and should not be construed as reflecting views of MEDC or the Upjohn Institute.

This paper reviews the empirical research literature in the United States on the effects of economic development incentives.[1] Such incentives are provided by state and local governments to business firms, to influence these firms' location decisions, expansion decisions, or job retention decisions. Incentives are mostly business tax breaks, but sometimes are grants.

The paper focuses on the following question: what does empirical research suggest about these incentives' effects on the probability of firms making a location, expansion, or retention decision in favor of a particular state or local area?[2] If incentives are provided by a state or local government to a firm, and the firm ends up choosing that state or local area, in what percentage of those cases would that decision not have been made "but for" the incentive?

This review of the research literature can derive 34 estimates of "but for" percentages from 30 studies. The most common type of study compares incented firms and unincented firms within a single state. Other studies compare counties that differ in incentive usage within a single state. Still other studies are based on surveys that ask firms or economic development experts to estimate "but for" percentages. A final group of studies uses data from multiple states and compares the economic performance of states with different incentives.

The paper discusses various studies' likely biases. As explored further below, many incentive studies are likely to be positively biased: they probably overstate incentives' "but for" effect. Other studies are negatively biased. Even these biased studies help bound the plausible

[1] This review focuses on incentives that are not strongly targeted on economically distressed areas. Thus, I exclude most enterprise zone studies. (Some supposed enterprise zone programs, such as JobZ in Minnesota, really are more general incentives.) Such enterprise zone studies have found little if any effect of enterprise zone incentives (Bartik 2010). This might be attributable to the incentive not outweighing these distressed areas' problems, and so does not yield generalizable conclusions for all incentives. In addition, enterprise zones are often too small to be local economies. Effects for such small geographic areas may not be generalizable to larger areas such as states.

[2] Buss's (2001) prior incentive review mainly focused on the tax literature.

range of incentive effects. However, a minority of studies are less likely to be biased and provide more plausible estimates of incentive effects.

I conclude that a plausible range for incentives' "but for" percentage is 2 percent to 25 percent. For a typical state and local incentive package, in only 2 percent to 25 percent of the incented projects is the incentive decisive in tipping a location, expansion, or job retention decision towards that state or local area. In the other 75 percent to 98 percent of the time, the same decision would have been made without the incentive.

Based on prior studies of incentives' benefits and costs, this range of "but for" percentages will often lead to benefits and costs that are closely balanced (Bartik 2018). Whether incentives have benefits greater than costs will depend on many details about the incented project, the state economy, and the incentive package's design. For example, with a "but for" percentage of 12 percent, a job multiplier of 6 for the incented jobs may imply a ratio of local incentive benefits to costs of 4.0, but a multiplier of 1.5 may imply a benefit-cost ratio of 0.4 (Bartik 2018, Table 8, p. 58).

The plan of the paper is as follows: I first review the biases in incentive studies from different methodologies. I then present a summary of what these 30 studies show about incentive effects. I highlight the results from a few of the better studies, while more details on other studies are in an appendix. I discuss how these results compare with likely incentive effects based on other research, such as research on how state and local business taxes affect state and local economic development. Finally, I discuss why estimated effects of incentives are so modest. Why do incentives tip far less than half of all decisions about location/expansion/retention?