2011

Presentation on Early Childhood Programs and Economic Development to American Chamber of Commerce Executives Convention

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

Citation

This title is brought to you by the Upjohn Institute. For more information, please contact ir@upjohn.org.
My goal today is to summarize the main argument of my January 2011 book, “Investing in Kids: Early Childhood Programs and Local Economic Development”. My book’s main argument is that high-quality early childhood programs can provide sizable LOCAL economic development benefits. By “early childhood programs”, I mean more than preschool or pre-k programs. I also include high-quality child care, and high-quality home visitation programs that improve parenting skills, such as the Nurse Family Partnership program. By “economic development benefits”, I mean increases in local per capita earnings.

Why do I define “economic development benefits” as the increase in local per capita earnings? Because the increase in local per capita earnings is really the main public benefit from more conventional economic development programs, such as tax incentives. Why should the public be willing to pay for business tax incentives? Because if these programs work, they can create more and better jobs in the local economy, which will raise local employment rates and wage rates.

Early childhood programs accomplish the same goal as business tax incentives, but in a more indirect way. The main avenue by which early childhood programs increase local per capita earnings is by increasing the job skills as adults of former child participants in these programs. Many of these former child participants will stay in the same state or local economy as adults. The result is a local economy with higher quality labor supply. This higher-quality local labor supply will attract more jobs and better jobs to a local economy. The leads to higher local per capita earnings.

Based on rigorous research, I conclude that for each $1 invested in high-quality early childhood programs, a state or local economy will get a $2 to $3 increase in the present value of local per capita earnings. Such benefits are similar in magnitude to what local areas get from investing in well-designed business incentives.

To explore this case for early childhood programs further, I will now consider some arguments of skeptics.

One reason why some state legislators are skeptical about early childhood programs is a general skepticism of ANY claims from ANY program’s advocates. Why should legislators and other policymakers believe advocates for early childhood programs more than advocates for all these other programs?

For early childhood programs, we have far more rigorous evidence for success than is the case for most government programs. The evidence for early childhood programs is more rigorous because early childhood programs have studies with better comparison groups. We have better comparison groups because early childhood programs currently have limited access.

For early childhood programs, we have good evidence from studies with randomly assigned treatment and control groups. We actually have more rigorous evidence for the benefits of preschool than we do for the benefits of 3rd grade. The reason is simple. We can do random assignment experiments that
exclude some children from preschool, whereas we can’t randomly assign some students to not attend 3rd grade.

But skeptics might object, these results are for small-scale programs run a long time ago by researchers. Surely results should be weaker when programs are run at a large scale by the average state or local government. However, we also have good recent studies showing short-run benefits from large-scale programs run by typical state and local governments. From studies of Oklahoma, West Virginia, South Carolina, New Mexico, New Jersey, and Michigan, we have evidence that one year of half-day preschool can raise student learning during that year by over 50%. These studies use good comparison groups, comparing students at kindergarten entry who just made the age cutoff for participating in the state pre-k program, with students at preschool entry who just missed the age cutoff.

There also is a very good study showing that the Chicago Child-Parent Center program, run by Chicago Public Schools, produces large long-run benefits. This study has a good comparison group, comparing students in similar neighborhood schools that either offered or did not offer the preschool program.

Finally, there is a good recent Duke University study showing that as North Carolina’s well-regarded early childhood programs were phased in at different rates in different North Carolina counties, this led to jumps the appropriate number of years later in these counties’ 3rd grade test scores.

But, some skeptic might object, won’t these test score effects fade over time unless we improve the K-12 system? Data suggests some fading of test score effects of early childhood programs. But then the effects re-emerge in adulthood.

What is going on here? Perhaps the best explanation is provided by Nobel prize-winning economist James Heckman. Perhaps the key to preschool’s long-term effects is its effectiveness in raising not only hard skills, but also soft skills. Hard skills are whatever is measured by math and literacy tests. Soft skills are character skills and social skills, including how someone gets along with peers and authority figures, self-confidence, and the ability to plan. Early development of soft skills and hard skills in preschool leads to greater success in kindergarten, which further develops both soft skills and hard skills. And so on, into first grade, later grades, and eventually into adulthood. As Heckman says, skills beget skills. But these self-augmenting feature of skills development are particularly strong for soft skills. Even when IQ effects decrease a bit, preschool graduates do much better in later life decisions.

This is particularly important for businesses because soft skills are at least as important as hard skills in determining worker productivity. Numerous business surveys show the importance of having workers who can get along with co-workers, customers and supervisors, and who show up at work on time.

Another question about early childhood programs is whether these programs are really needed except for the most disadvantaged kids. This is mostly an issue for preschool. Most other early childhood programs are designed to be targeted on the disadvantaged.
The evidence for preschool programs suggests that the benefits of preschool are almost as strong for children from working class and middle class families as they are for children from low income families. Oklahoma runs a near universal preschool program, with 70% of all four year olds enrolled in the state program. A recent research study of mine, along with Bill Gormley and Shirley Adelstein at Georgetown, shows that the effects of Oklahoma’s program on kindergarten readiness are almost as large for children from middle-income families as for children from low-income families.

It is noteworthy that preschool enrollment rates are the highest for children from families with over $100,000 in family income. Obviously upper-income families feel preschool benefits their children.

Why might preschool be beneficial for children from all types of families? One possible explanation is that some social skills are hard to teach outside of a preschool setting.

Studies suggest that high-quality half-day school-year preschool costs around $4,500 per year, which is difficult for many working class and middle class families to afford without some assistance.

A third skeptical objection is to say, “I don’t see how this helps the local economy. I see how it might help former program participants. But these participants will just move somewhere else. Even if they stay, I see why they might get better jobs, but how will the entire local economy benefit?”

On the first point, Americans are not as mobile as is sometimes imagined. Over three-fifths of all Americans remain in their childhood state for most of their working life. Over half of all Americans remain in their childhood metropolitan area for most of their working life. These percentages do not decline much for smaller or more economically distressed metropolitan areas. Yes, more economically distressed states or metropolitan areas will have fewer in-migrants, but the outmigration rate of those growing up there does not go up that much.

So, a large number of former childhood participants will stay. And maybe they will do better. But how does that help the local economy create more and better jobs for everyone?

Another more selfish way to put it is “why should I invest in other people’s children?” How does that benefit me and my family?

What this perspective overlooks is that there are huge spillover benefits for the entire local economy of increasing average local skills. At my business, my productivity depends in part on the productivity of other workers at the business. Even if I am more skilled, if other workers are not skilled, it is harder for my employer to introduce new technologies. Furthermore, businesses steal ideas and workers from other businesses in the local economy. If the workers in these other businesses are more skilled, there are better ideas and better workers to steal. Businesses share suppliers, and the competitiveness of my business will depend on the productivity of those suppliers.
This is why research finds that when a local economy has a higher percentage of college-educated workers, the wages of everyone in the local economy goes up. Obviously the workers who acquire a college degree benefit a great deal. But more college educated workers actually increases the wages of high-school dropouts in the local economy, high school graduates in the local economy, and Yes, even other college graduates. Despite the increased supply of college graduates, labor demand in the local economy for college graduates increases by enough to even increase college graduate wages.

In other words, when the number of skilled workers in a local economy increases, a local economy will attract more jobs, and will also attract better jobs. To modify a line from the movie “Field of Dreams”, “If you supply the labor skills, the good jobs will come.”

In a global economy, local labor skills are probably more important than ever. What does globalization really mean? It means that transportation and communication costs have dropped so that businesses are more footloose. With lower transportation and communication costs, businesses no longer need to be right next to their suppliers, or right next to their final markets. But they do need to be close to the labor supply they need. People are perhaps the least mobile resource in today’s global economy, and therefore where skilled people live is what drives economic development. Adam Smith said in the Wealth of Nations over 200 years ago, that “A man is of all sorts of luggage the most difficult to be transported”. That statement is probably truer today than when Adam Smith said it.

A fourth objection from skeptics is that the benefits of early childhood programs for local per capita earnings are long-term. We obviously are not sending former preschoolers into the labor force at age 5. Therefore, the big increase in local labor force quality from these programs will not occur for 15 to 20 years, when these former child participants enter the local labor force.

However, early childhood programs do provide some short-term benefits. The most important short-term benefit from early childhood programs is that such programs will help attract parents and raise local property values. Even in the unlikely event that parents put no direct value on early childhood programs, they will value some of these programs’ short-term educational effects. For example, we know from numerous studies that parents and homebuyers are willing to pay higher prices for homes that are assigned to schools with higher elementary test scores.

In my book, “Investing in Kids”, I calculate the potential effect of high-quality preschool on property values from preschool’s known effects on 3rd-grade test scores. Based on these calculations, for each $1 in annual spending on high-quality preschool, local property values will go up by $13. These property value effects reflect parents being attracted to an area with better preschools even if they don’t directly value better preschools.

Property value effects would be even greater, at $80 per $1 invested, if parents fully understood how much preschool increased their child’s future earnings. Preschool’s effects on adult skills and earnings are significantly greater than is measured by effects on test scores, because of preschool’s effects on
soft skills. As parents become more aware of the importance of preschool, the availability of quality early childhood programs will become more important in attracting skilled adult workers to a local area.

In addition to short-term benefits for property values and recruitment of adult workers, early childhood programs can save money by saving money on the costs of special education and other remedial education costs. Special education can cost $10,000 per year, for up to 13 years during K-12. From the estimated effects of high-quality early childhood programs on reducing special education assignments, we can project that early childhood programs may after 10 years cover between 50% and 150% of their annual costs through reduced special education costs alone.

In sum: a state or local area’s investment in high-quality early childhood programs can pay off for local areas in significant economic development benefits in increasing per capita earnings. This payoff can occur even in the short-run, due to the value that parents place on such programs, which will attract in-migrants and raise property values. The evidence for these short-run and long-run effects is stronger than for most other government programs, because we have research with good comparison groups. These payoffs in a stronger economy pay off for a wide variety of income groups participating in the programs, and in fact benefit even non-participants by enlarging the entire economic pie.

These early childhood investments have reasonable costs. Moving to high-quality universal preschool for all four year olds has a cost of about $40 per capita in most state or local areas. This cost is about 3% of what we currently spend on K-12 education. And the rate of return to this early childhood spending is higher than that of most investments we can make in education at later ages.

Despite the modest costs and great benefits of expanding early childhood investments, that is not what is currently occurring at the state and local level. Many states are cutting back on early childhood programs. It seems likely that overall, the national total real funding for early childhood programs will decline over the next year or two.

What can make expanded investments in early childhood programs politically viable? Both at the state and local level, in my opinion the key to political viability is the business community. Early childhood advocates by themselves are simply not a powerful political coalition.

Why should the business community make this a priority? Because the quality of the labor force is key to the future of the state or local areas in which businesses make investments. And of all the things that can be done to increase the quality of the local labor force, investing in early childhood programs is one of the most cost-effective way of doing so. If we care about local economic development, investing in early childhood programs is one of the ways of achieving economic development goals that has the highest bang for the buck.