

2012

Local Economic Benefits of Early Childhood Programs: Investing in Kids

Timothy J. Bartik

W.E. Upjohn Institute, bartik@upjohn.org

Citation

Bartik, Timothy J. 2012. "Local Economic Benefits of Early Childhood Programs: Investing in Kids." presented at the Grand Haven Chamber of Commerce and Newaygo County Rotary Clubs Tuesday Forums, Grand Haven, MI, March 6.

<http://research.upjohn.org/presentations/28>

This title is brought to you by the Upjohn Institute. For more information, please contact ir@upjohn.org.

Local Economic Development Benefits of Early Childhood Programs: Investing in Kids

March 6, 2012. Talk to Grand Haven Chamber of Commerce and Newaygo County Rotary Clubs

My presentation today will 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. These LOCAL economic development benefits provide strong incentives for state and local governments to invest in early childhood programs.

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 policymakers 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 from many states and cities showing short-run benefits from LARGE-SCALE programs run by typical state and local governments.

These recent studies also exploit the limited access to high-quality preschool programs to get good comparison groups. For example, there 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.

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 this self-augmenting feature of skills development is 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.

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, even for middle class parents.

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, strong local economies, such as Silicon Valley, frequently have clusters of businesses in related industries that 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. Furthermore, business clusters 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.

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.

One 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.

Another short term benefit is the savings in the costs of special education and other remedial education. 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.

A fifth objection from skeptics is concern that preschool and other early childhood programs may somehow undermine the role of parents. If parenting is really the key, perhaps instead of focusing on preschool, we should focus on efforts to improve parenting.

I first note that there is no evidence that preschool and other early childhood programs have any negative effects on the quality of parenting. Furthermore, the sizable positive effects of preschool programs on improved adult earnings and other outcomes for former preschool participants is net of negative effects on parenting, even if these effects occur.

In addition, it is interesting to note that preschool is most intensively used by upper-income parents. Apparently upper income parents, who have the financial means to have choices, do not feel that preschool undermines parenting or child development.

The real gap in preschool enrollment in the U.S. is for working class and middle class parents who find it difficult to afford high-quality preschool, which can cost around \$5,000 per year for a half-day school year program, and yet are ineligible for government programs such as Head Start.

Another important point is that there is no evidence that there is some cheap way to improve parenting. It would be nice if a relatively one-time group seminar for parents in low-income families would dramatically and permanently improve parenting. But this does not seem to be the case. The parenting program with the most rigorous evidence for success is the Nurse Family Partnership program. This program is expensive because it involves numerous one-on-one home visits from registered nurses to disadvantaged first-time moms over a 2 and a half-year period, from pregnancy until the child turns 2. The cost of this program is about \$10,000 per family, which is actually about twice as expensive per child as one year of half-day preschool.

A final objection by skeptics is why should the government take on preschool when we haven't solved our many challenges with K-12 education. Won't anything we do in preschool be undermined by problems in K-12?

First, it should be noted that preschool seems to improve adult outcomes even when the K-12 system has challenges. For example, as I mentioned, one of the preschool programs with the best evidence of success is the Chicago Child-Parent Center program. CPC participants almost all subsequently attend Chicago Public Schools. With all due respect to Chicago Public Schools, obviously this is a K-12 system that faces tremendous challenges. Yet despite the many issues with Chicago Public Schools, CPC significantly reduces its participants' future involvement with crime, and improves educational attainment and earnings.

Second, there is growing evidence that there are synergies between investment in early childhood programs and investments in K-12. It is probably true that if the K-12 system is stronger, that investments in preschool will pay off more. But it is also true that if we have a larger and higher quality preschool system, the K-12 system works better. For example, teachers can up the level at which they teach if more students come to kindergarten better prepared to learn.

So, early childhood programs can pay off for local areas in increasing per capita earnings by raising the skills as adults of former child participants. What is going on around the U.S. with these programs? These programs were expanded considerably from 2000 on, up until the Great Recession hit. Since then, the picture is more mixed, with some states making large cutbacks, and other states maintaining and even expanding programs.

The picture is also mixed in Michigan. On the one hand, there have been some very modest expansions of state support for preschool programs. In addition, responsibility for many early childhood programs has been consolidated in the state's education department, which probably will improve coordination of these programs and increase their focus on educational outcomes.

But these improvements for Michigan are starting from a baseline where we are significantly behind many states in our commitment to early childhood education. Michigan's per child funding of \$3400 for preschool has not been increased in some years, and is significantly below what high-quality preschool costs. And Michigan has a considerably lower percentage of 4-year olds in state-financed preschool than is true for the average state. And we are way behind the leading states. At the extreme, Oklahoma has about 4 times the percentage in preschool that Michigan does. In Oklahoma's case, they really do have universal preschool, when you combine state-funded preschool with Head Start and with private preschool, and of course with parents who choose not to enroll their child in preschool.

What are the policy options for Michigan? We could consider expanding access to our state-funded preschool program. Our current program is targeted at at-risk families with modest incomes, but is inadequately funded to serve all children in the eligible groups. If we wanted to fund all eligible groups, we would need to increase state funding from \$100 million annually to \$200 million. Going to universal access to voluntary preschool for 4-year-olds would require increasing funding to about \$400 million. We could also consider some increase in the state payment per child, which would help support quality.

In addition, the state could consider providing more intensive services for a wide variety of early childhood programs for children under five. The program would be modeled after the Smart Start program in North Carolina, which has good evidence supporting its effectiveness. A program similar to Smart Start would cost about \$200 million per year in Michigan, or about \$20 per Michigan resident. As with Smart Start, county level agencies would be empowered to fund a wide variety of child care, parenting assistance, and other activities to improve early childhood development in each county. These services would not be evenly divided among all children in the county, but rather targeted at families and children that are at highest risk of problems without assistance.

A recent Duke University study suggests that Smart Start by itself raises a county's average 3rd grade test scores by the equivalent of what students learn in 2 months. In addition, the program reduces the probability of a special education placement at 3rd grade for all county children by 10 percent. These results are remarkable because only a fraction of a county's children typically have intense involvement with Smart Start programs.

How can all of this be financed? In the long-run, these programs probably are self-financing. The programs will significantly reduce criminal justice system costs by reducing crime, and also will significantly reduce the costs of special education and other remedial education programs. High-quality early childhood programs will also reduce usage of welfare programs. Finally, the increased per-capita earnings in the state and local economy will raise tax revenue at the same tax rates. However, in the

short-run, these positive effects are insufficient to cover costs. In the short-run, to get sufficient investment in these programs to have large effects on the future workforce, we will have to make significant investments out of tax dollars.

It is critical that any early childhood investment be high-quality. To ensure that programs are high-quality, I think it is important for any expanded investment in early childhood programs to be accompanied by rigorous evaluation to hold programs accountable. For example, expanded preschool programs should be accompanied by an adequate testing program to ensure that preschool participants are gaining significantly in both hard skills and soft skills.

Finally, the politics of early childhood programs is that these programs will NOT be expanded unless there is support from a broad coalition. Support from preschool and child care providers, the K-12 system, or the social services community, will not be sufficient to get the needed political support. For improved programs to be enacted, there is a need for significant political support from the business community.

And why should the business community support early childhood programs? To come back to the main point of my book, the business community should support early childhood programs as part of a broad strategy to promote economic development of the state and local economy. If we want economic development strategies that will really promote higher per capita earnings in the local economy, we do need business incentives and other policies to interact with businesses, labor demanders, to directly encourage businesses to expand. But we also need policies that work on the labor supply to improve the quality of the local labor supply. A truly comprehensive state and local economic development strategy works on both labor demand and labor supply. And among all the policies that might be considered to improve the quality of local labor supply, high-quality early childhood programs have the most rigorous evidence of a large effect on labor supply quality per dollar invested.