



The Economics of Early Childhood Development

as Seen by Two Fed Economists¹

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In comments to business leaders in Omaha, Nebraska, regarding income inequality in the United States, Federal Reserve Chairman Ben Bernanke said, “Although education and the acquisition of skills is a lifelong process, starting early in life is crucial. Recent research—some sponsored by the Federal Reserve Bank of Minneapolis in collaboration with the University of Minnesota—has documented the high returns that early childhood programs can pay in terms of subsequent educational attainment and in lower rates of social problems, such as teenage pregnancy and welfare dependency.”²

The research cited by the chairman is contained in several papers we have written over the past four years on the economic benefits of investments in early childhood education. In addition, we have participated in numerous meetings on this topic hosted by other Fed public and community affairs departments as well as our own.

So, why are we interested in the economics of our youngest children? Chairman Bernanke’s comments hint at the answer. Much research at the Fed is focused on monetary policy and banking issues; however, economists at the Fed also study how economies grow and conditions that affect growth. A key ingredient of economic growth is the quality of the workforce, and public investments in human capital development can have a positive impact. Economists—including those at the Fed—have been making this case for years.

We have gone on to argue that investments in human capital prior to kindergarten provide a high public return. Such investments—especially for at-risk children—can make a substantial impact on the success of children’s futures as students, workers and citizens in democratic society. That is, the most efficient means to boost the productivity of the workforce 15 to 20 years down the road is to invest in today’s youngest children. According to James Heckman, Nobel laureate economist at the University of Chicago, “Enriching the early years will promote the productivity of schools by giving teachers better-quality students. Improving the schools will

in turn improve the quality of the workforce.”³ Moreover, we contend that investing in early childhood development yields a much higher return than most government-funded economic development initiatives.

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For well over 20 years, government leaders at the state and local levels have invested in economic development schemes with public dollars that are at best a zero-sum game. In the name of economic development and creating new jobs, virtually every state in the union has tried to lure companies with public subsidies. Previous studies have shown that the case for these so-called bidding wars is shortsighted and fundamentally flawed. From a national perspective, jobs are not created—they are only relocated. The public return is at most zero. And the economic gains that seem apparent at state and local levels are also suspect because they would likely have been realized without the subsidies. In other words, what often passes for economic development and sound public investment is neither.

We don’t pretend to have all the answers to economic development, but we’re quite certain that investing in early childhood education is more likely to create a vibrant economy than using public funds to lure a sports team by building a new stadium or attracting an automaker by providing tax breaks. Several longitudinal evaluations all reach essentially the same conclusion: The return on early childhood development programs that focus on at-risk families far exceeds the return on other projects that are funded as

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economic development. Cost-benefit analyses of the Perry Preschool Program, the Abecedarian Project, the Chicago Child-Parent Centers, and the Elmira Prenatal/Early Infancy Project showed annual rates of return, adjusted for inflation, ranging between 7 percent and 18 percent.


These findings, promising though they are, pose a challenge: Small-scale early childhood development programs for at-risk children have been shown to work, but can their success be reproduced on a much larger scale? There are reasons to be skeptical; some recent attempts at scaling up early childhood development programs have been disappointing. However, it's our view that those new programs failed in large part because they were based on old models that were ill-suited to get results. It's time to seriously reconsider how to effectively help our at-risk children and their families. Based on a careful review of past and current programs, we believe that large-scale efforts can succeed if they are market based and incorporate four key features: focus on at-risk children, encourage parental involvement, produce measurable outcomes, and establish a long-term commitment.

Achieving these characteristics in large-scale programs requires the flexibility, innovation, and incentives that are inherent in markets. For some, this is a radical idea, but many middle- and upper-class families have long benefited from the power of markets for early childhood education, by choosing the early learning centers that their children attend, and by demanding results from those providers. This demand and supply system works. Why not give the same purchasing power to those of lesser means? Our idea is to use the strength of the market by empowering at-risk parents with resources to access high-quality early education. Qualified early education providers would then have to compete for the scholarship children; parents would make the decision about which providers to enroll their children. This market-based approach is in contrast to the more conventional approach of either increasing the funding of existing programs or adding early childhood programs to the public school curriculum.

To establish a successful, long-term commitment to early childhood development, we have proposed a permanent scholarship fund for all families with at-risk children.⁴ Similar to endowments in higher education, earnings from an endowment for early childhood development would be used to provide scholarships for children in low-income families who aren't able to afford a quality early childhood program. The scholarships would cover child tuition to qualified programs plus the cost of parent mentoring to ensure parental involvement. Scholarships would be outcomes-based, meaning that they would include incentives for achieving measurable progress toward the life and learning skills needed to succeed in school.

Parent mentoring would include parent education; information about available financial, health, and human-services resources; and guidance on selecting an early-childhood-development program. Research shows that reaching children with multiple risk factors as early as possible is essential; even age 3 may be too late. So we suggest that while scholarships would pay tuition for a child to attend an early-childhood-development program beginning at age 3, the parent-mentoring program could start as early as prenatal.

What would such a permanent scholarship fund cost? In Minnesota, we estimate that a one-time outlay of about \$1.5 billion—about the cost of two professional sports stadiums—would create an endowment that could provide scholarships on an annual basis to the families of children in Minnesota living below poverty. With the endowment's funds invested in corporate AAA bonds, earning about 6 percent to 7 percent per year, we estimate that \$90 million in annual earnings would cover the costs of scholarships, pay for program monitoring and assessments, and supplement existing revenue sources as needed for early childhood screening and teacher-training reimbursement programs.

Compared with the billions of dollars spent each year on high-risk economic development schemes, this type of an investment in early childhood programs is a far better and far more secure economic-development tool. We are confident that early childhood development investments driven by a market-based approach which focuses on at-risk children, encourages parental involvement, produces measurable outcomes, and secures a long-term commitment will achieve a high public return. However, the full return on investment will not happen tomorrow, but 10, 20, or more years down the road. In conducting monetary policy, Fed officials have a long-term view to keep prices stable and confidence strong in the value of U.S. money. Perhaps it's not so surprising to read that the chairman of the Fed, economists and other Fed staff are interested in the impact of a long-term investment in our youngest children. 

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1. This commentary is partially based on an article previously published in *Education Week*: A. Rolnick and R. Grunewald, "Early Intervention on a Large Scale," *Education Week* 26, no. 17, (January 4, 2007): 32, 34-36.
2. Chairman Ben S. Bernanke, "The Level and Distribution of Economic Well-Being," Remarks before the Greater Omaha Chamber of Commerce, Omaha, Neb., February 6, 2007. Online at <http://federalreserve.gov/BoardDocs/Speeches/2007/20070206/default.htm>
3. J. Heckman and D. Masterov, "The Productivity Argument for Investing in Young Children," Early Childhood Research Collaborative, Discussion Paper 104, August 2006, 43. Online at <http://www.earlychildhoodrc.org/papers/DP104.pdf>
4. For a detailed description of the scholarship fund, see A. Rolnick and R. Grunewald, "A Proposal for Achieving High Returns on Early Childhood Development," Working Paper, Federal Reserve Bank of Minneapolis, March 2006. Online at <http://www.minneapolisfed.org/research/studies/earlychild/highreturn.pdf>

Linking Community Development and School Improvement

1. Mark Warren is the author of *Dry Bones Rattling: Community Building to Revitalize American Democracy*, which studies the Texas/Southwest Industrial Areas Foundation, the nation's most prominent faith-based community organizing network.
2. For more details, see M. Warren (2004), "Linking Community Development and School Improvement," A Report prepared for the Ford Foundation, online at <http://www.isna.net/display.aspx?pointer=2515>.

Youth Engagement in Planning Nationwide

1. Ariel Bierbaum is the Program Manager at the Center for Cities & Schools, UC Berkeley. She manages the Y-PLAN program, as well as the broader Youth, Schools, and Planning Initiative, which includes professional development, capacity-building, and research around youth engagement in planning practice. Alissa Kronovet is a candidate in the Master of City Planning program at UC Berkeley and a research fellow with the Center for Cities & Schools. In addition to coordinating the New Orleans trip, Alissa is heading up the national organizing efforts around the Young Planners Network.

The Glow Foundation

1. L. Muraskin and J. Lee (2004) "Raising the Graduation Rates of Low-Income College Students" (Washington: The Pell Institute for the Study of Opportunity In Higher Education).
2. Advisory Committee on Student Financial Assistance (2006). *Mortgaging Our Future: How Financial Barriers to College Undercut America's Global Competitiveness*. (Washington, D.C.: Advisory Committee on Student Financial Assistance).
3. "In their Words", College Summit, 15 April, 2007, <<http://www.collegesummit.org/school-districts/>>
4. Bedsworth, W., S. Colby and J. Doctor (2006). *Reclaiming the American Dream* (Boston: Bridgespan).
5. Advisory Committee on Student Financial Assistance (2002). *The Empty Promises: The Myth of College Access in America* (Washington, D.C.: Advisory Committee on Student Financial Assistance).