

Investing in Kids: Early Childhood Programs and Local Economic Development

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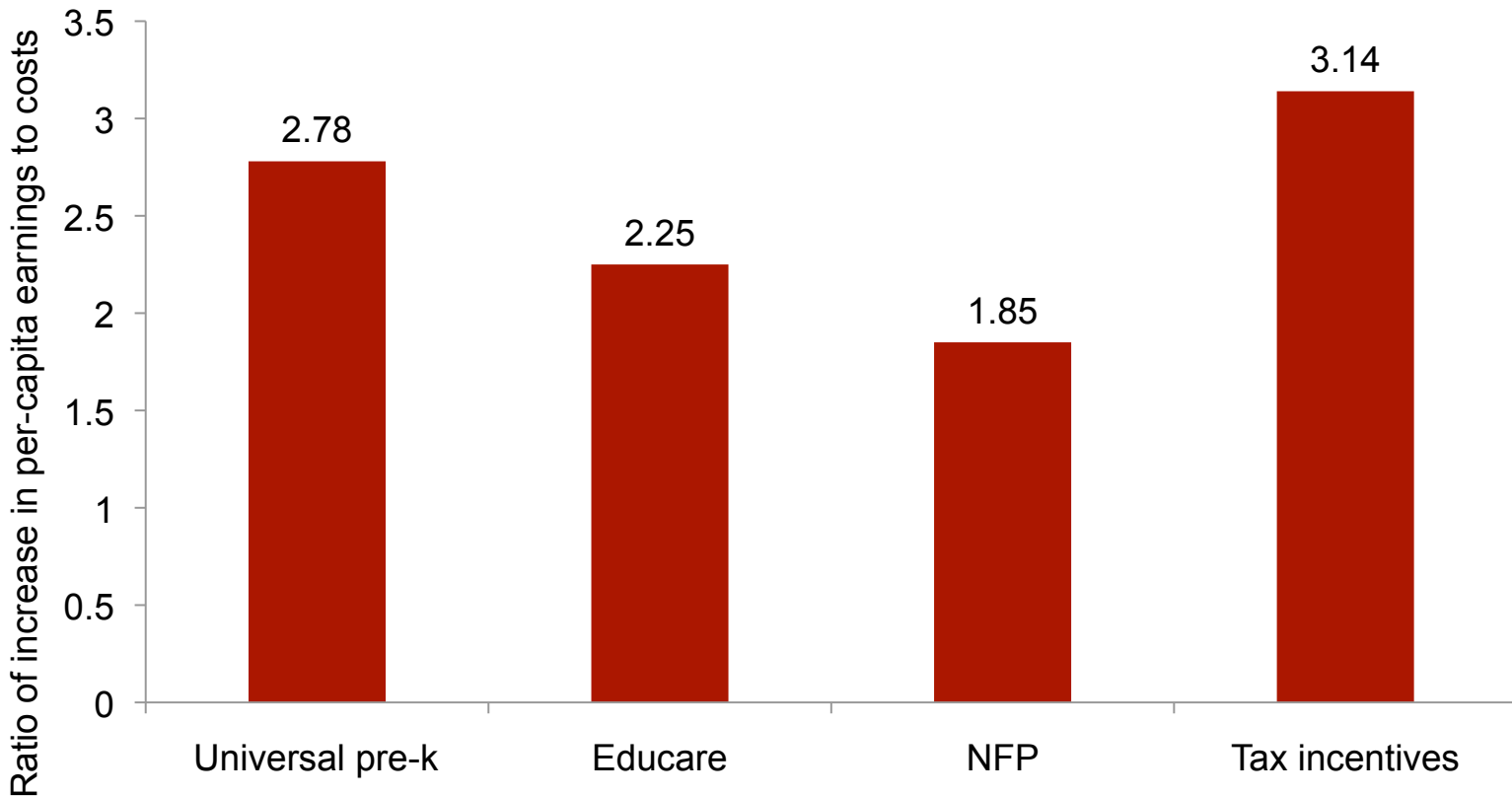
May 9, 2011

Presentation to Youth Human Capital and Economic Development Working Group,
Human Capital and Economic Opportunity Working Group,
Milton Friedman Institute and Institute for New Economic Thinking

Main point of *Investing in Kids* book:

- U.S. state government investments in high-quality early childhood programs can be a cost-effective way of providing the same real economic benefits as are claimed for traditional state economic development programs of business tax incentives.
- The real benefit of traditional state economic development programs is NOT job growth, but growth that increases state earnings per capita by increasing wage rates and employment rates.
- Improvements in state labor market outcomes can be achieved by either working on demand-side or supply-side of labor market, and improving quantity or quality of either labor demand or supply.

Ratio of increase in state earnings per capita to program costs for early childhood programs and business tax incentives



Note: Universal pre-k is half-day school-year program at age 4.; Educare is full-time, high-quality child care/preschool, birth to 5; NFP is Nurse Family Partnership

Long-term effects of early childhood interventions probably due to self-reinforcing effects of early investment in “soft skills”

- Initial effects of early childhood programs on “hard skills” fade during K-12, in studies of Perry Preschool, Head Start, many state pre-k programs, and kindergarten quality (Chetty)
- Effects re-emerge on high school graduation, involvement in criminal activity, teen pregnancy, employment rates
- Most plausible explanation is Heckman theory that early investments in soft skills increase both hard skills and soft skills, and lead to further investments in and augmentation of both types of skills.

Most Americans spend most of their working career in their childhood home state



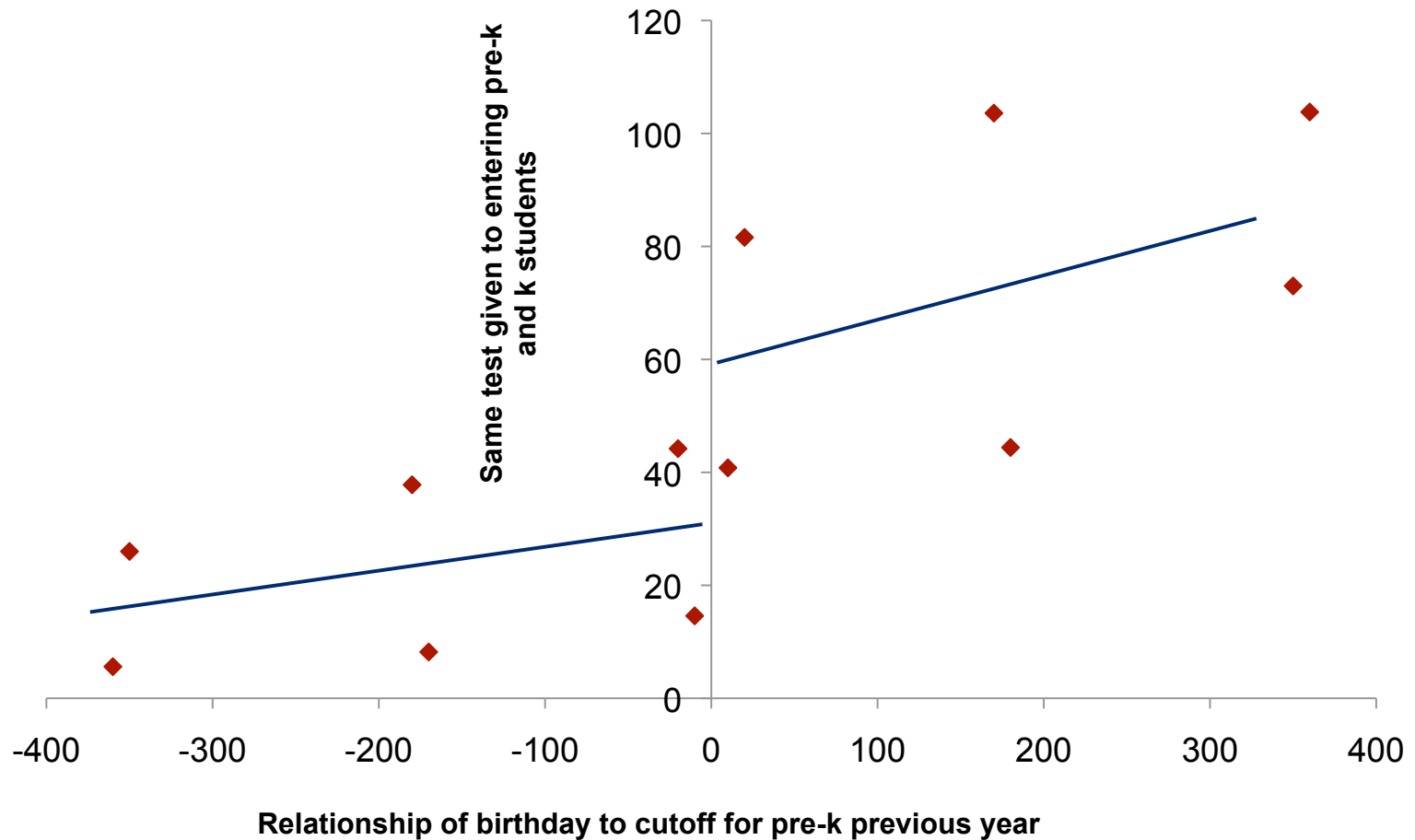
Note: Data on percentages living in birth state are calculated by the author from the Public Use Microdata Samples (PUMS), 2000 census. Note that these figures are biased downwards, probably about 6 percent, because of households listing location of hospital as state of birth, not residential location of mother at time of birth. Data on percentages living in same state as at age 4 are calculated by the author from the Panel Survey of Income Dynamics (PSID), Geocode version.

Source: Figure 2.1, *Investing in Kids*

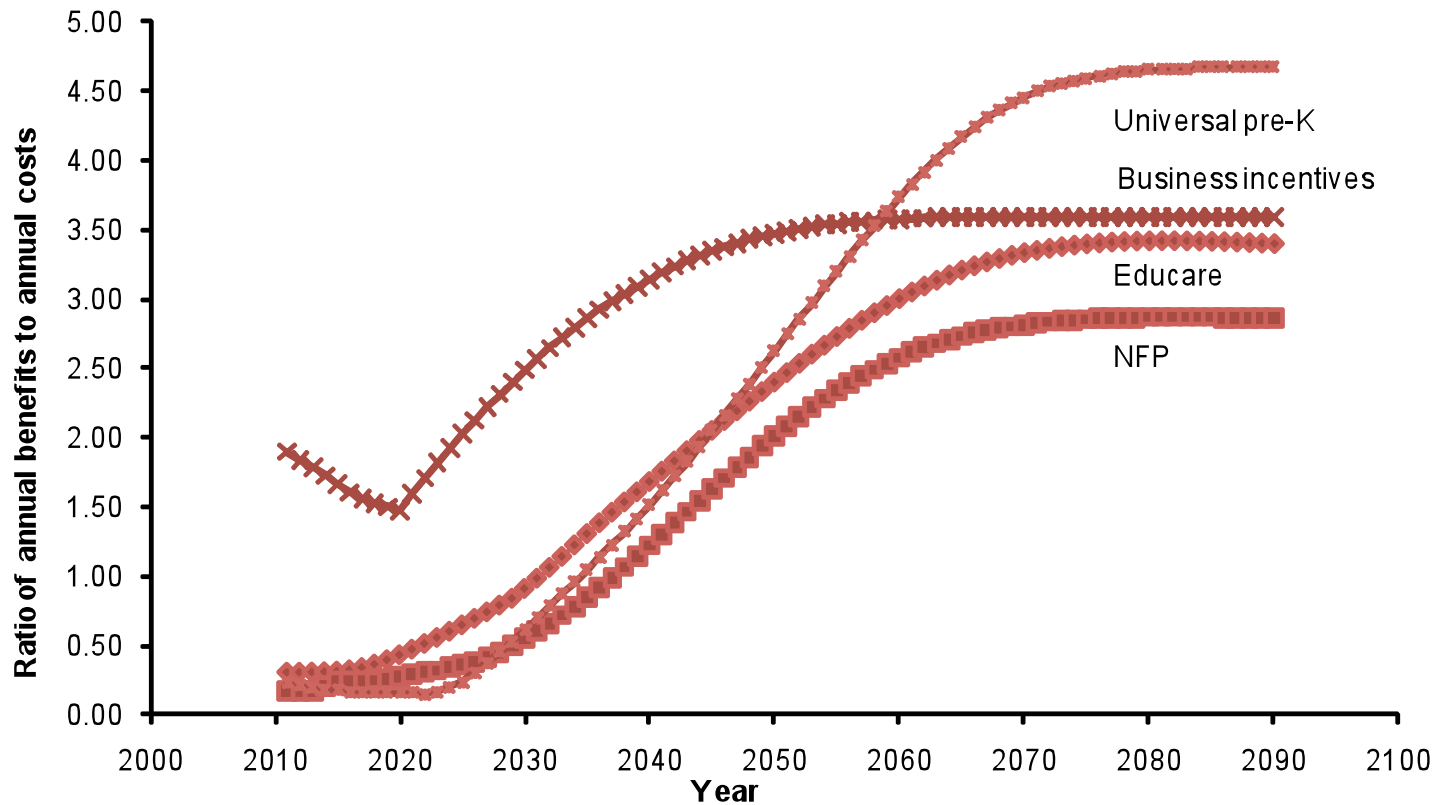
What is quality in early childhood programs? There is some knowledge, but it is imperfect

- Smaller class sizes help, but not lower child/staff ratios
- Better teachers help, but relationship of credentials to quality teaching is contested
- Even slight improvements to quality of teacher/child relationships can significantly increase test scores, and slight early improvements in test scores can significantly raise adult earnings: quality matters a lot
- Huge variation in quality across different sites or different programs
- While federal Head Start has many effective centers, some of the most cost-effective preschool programs are run by state and local governments

To move forward with large-scale implementation of pre-k, accompanied by program evaluation, use regression discontinuity evaluation (figure is hypothetical)

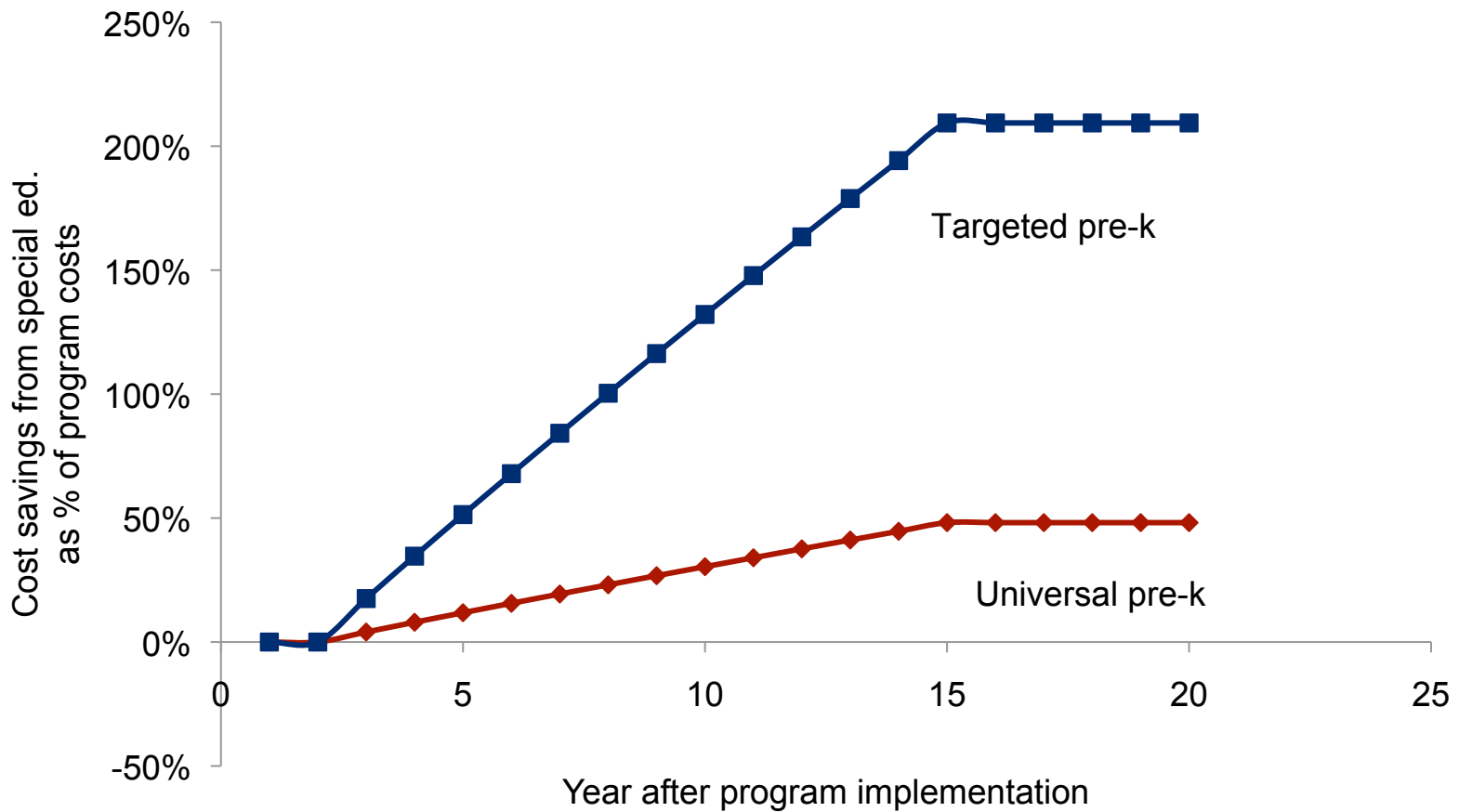


State economic development benefits of early childhood programs are far more delayed than the benefits of business incentives



Source: Figure 7.1, *Investing in Kids*. Figure shows ratio of earnings benefit for state residents to program costs, for permanent program implemented in 2011.

Short-term benefits of early childhood programs: savings in special education costs



Short-term benefits of early childhood programs: Increases in property values

Effects of Preschool on Property Values

	Based on effects on elementary test scores	Based on assumed full capitalization of earnings effects, 4.7% discount rate
% effect on property values	0.8%	5.1%
Ratio of property value increase to annual program costs	13	81

Source: Table 7.3, *Investing in Kids*

Distributional effects of business tax incentives vs. universal pre-k

Ratio of Earnings Benefits to Tax Costs, by Quintile						
	Quintile					Overall
	1	2	3	4	5	
Incentives	6.15	3.67	3.66	3.95	1.82	3.14
Universal pre-k	25.08	9.38	2.91	0.59	0.32	2.78

Note: Quintile 1 is lowest income, quintile 5 is highest income. As tax costs are approximately proportional to income, variation across quintiles is roughly same as earnings benefits as % of income by quintile.

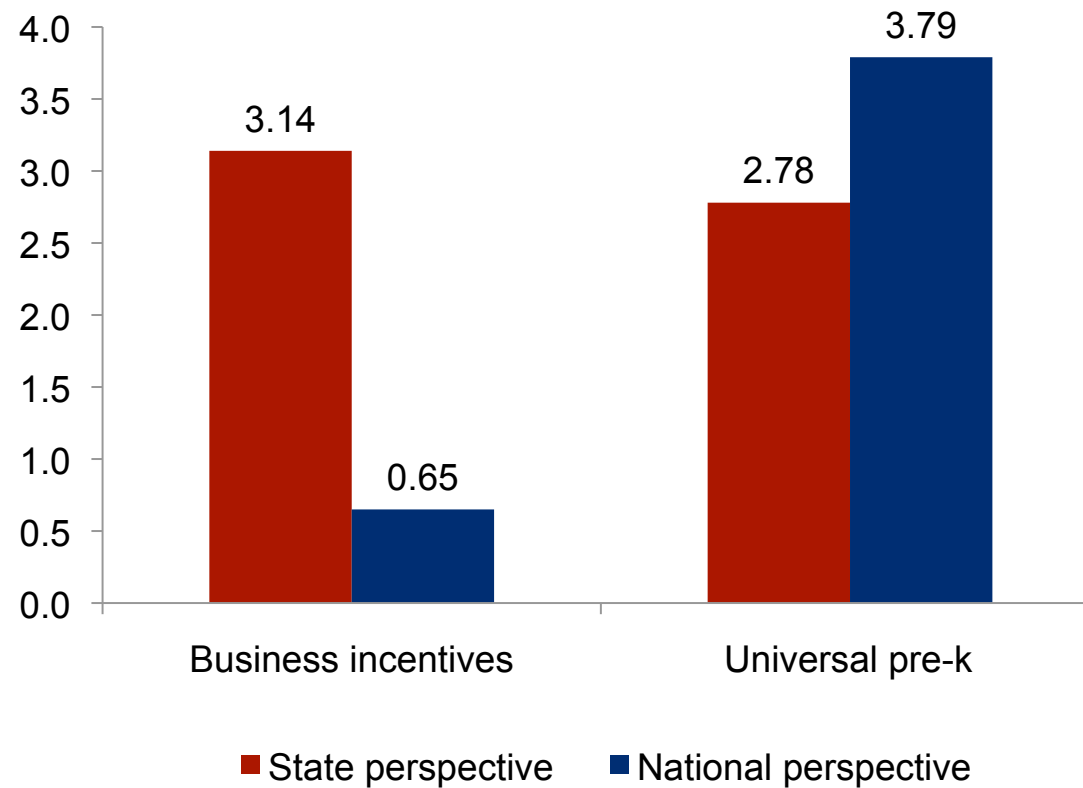
Source: Table 8.2, *Investing in Kids*

Universal vs. targeted pre-k: Higher benefits for middle class vs. higher rate of return

Ratio of Earnings Benefits to Tax Costs, by Quintile						
	Quintile					Overall
	1	2	3	4	5	
Universal pre-k	25.08	9.38	2.91	0.59	0.32	2.78
Targeted pre-k	96.15	29.91	0.05	0.05	0.03	7.16

Note: Source is Table 8.5, *Investing in Kids*, which details distributional assumptions.

National vs. state benefits of pre-k and business incentives



Source: Figure 10.1, *Investing in Kids*

Summary

- High-quality early childhood programs should be part of state economic development strategies
- Compared to traditional business incentives, provide much larger benefits to low and moderate income groups
- Early childhood programs can provide short-term benefits such as special ed savings and increased property values
- To increase early childhood program quality, need to encourage local flexibility and innovation, while rigorously evaluating outcomes
- Federal role should be to discourage economic development strategies that over-emphasize tax incentives, while encouraging states to be innovative and rigorous in evaluation.

