

# **Early Childhood Programs for State Economic Development**

---

**Timothy J. Bartik**

**Senior Economist**

**W.E. Upjohn Institute for Employment Research**

**February 13, 2013**

**Presentation at 31<sup>st</sup> Wisconsin Family Impact Seminar,  
“Preparing Wisconsin’s Youth for Success in the Workforce”**

# Outline

---

- How early childhood programs boost local economic development
- How effects vary with program features
- Wisconsin policy issues

# How Early Childhood Programs Affect Economic Development

---

## Mechanism 1: Effects on former child participants

- High quality pre-K, child care, and home-visiting all improve adult labor supply of child participants
- More than 60% of former child participants will stay in state
- Improved labor supply will attract more and better jobs

# How Early Childhood Programs Affect Economic Development

---

## Mechanism 2: Effects on parents

- Child care programs will increase labor force participation of parents, increasing skills and wages
- Home-visiting/parenting programs improve life course of parents
- Improved labor supply of parents attracts more and better jobs

# Focus on 3 Programs

---

## 1. Half-day universal pre-K for all 4-year-olds

(\$5K per child, \$14 billion national cost at full-scale)

## 2. Full-time child care/pre-K birth to age 5 for disadvantaged families

(\$60K cost per child, \$40 billion national cost at full-scale)

## 3. Nurse-Family Partnership

(home visiting for first-time, disadvantaged moms, prenatal to age 2; \$10K per child, \$4 billion national cost at full-scale)

Why these 3? Most rigorous research

# Per-Capita Earnings Effects

---

- **Per dollar** invested, present value of per-capita state earnings increased by:
  - **\$2.78** for **half-day universal pre-K**
  - **\$2.25** for **birth to 5 care/pre-K**
  - **\$1.85** for **Nurse-Family Partnership**
- Pre-K due to children; other 2 programs half due to parents
- Adding crime effects and out-migrants could get us to 16-to-1
- Comparable to best business tax incentives (\$3.14-to-1)
- Bang for buck highest for pre-K, but total effect highest for child care

# How Are Such Large Effects on Kids Possible?

---

- Learning begets learning
- Effects on “soft” (social) skills: effects on “hard” (academic) skills often fade
- Soft skills raises issues for accountability
- Synergy between these programs and K-12? (but works with Chicago Public Schools!)

# What Program Quality Features Matter?

---

- **Lower class size** in pre-K from 20-to-2 to 15-to-2 pays off
- **Teacher early childhood training** matters for pre-K/child care. Credentials? Controversy, but all exemplar programs use certified teachers.
- Nurses better than paraprofessionals in Nurse-Family Partnership
- Quality and frequency of **teacher-student interactions** matters.

# How Do Benefits Vary Across Different Income Groups?

---

- For **pre-K, DOLLAR** effects on future earnings are similar for middle class and poor. % effects greater for poor. (Due to social skills?)
- For **Nurse-Family Partnership**: Program much more effective for disadvantaged
- For **child care**: Unknown.

# How Do Benefits Vary With “Time Intensity” of Services?

---

- Diminishing returns:
  - **Full-day** pre-K adds 60% to **half-day** effects (costs up 160%)
  - **Two-year** pre-K (adding age 3 to age 4) adds 50% to **one-year** (age 4) pre-K effects (costs double)
  - Going from **half-day age 4 pre-K** to **birth-to-5 care/pre-K** increases benefits 6 times, costs 12 times
- But all these expansions have net benefits

# Difficult Tradeoffs

---

- **Universal half-day pre-K** benefits middle-class while providing 6% boost to earnings of lowest-income quintile; moderate costs at full-scale (\$14 billion)
- **Birth-to-5 child care** has 36% earnings boost for lowest-income quintile, but no direct benefits for middle class & high cost at full-scale (\$40 billion)
- **Nurse-Family Partnership** is cheaper (\$4 billion at full-scale), but has modest benefits because so targeted (3% earnings boost for lowest quintile)

# Observations on Wisconsin Pre-K

---

- 4K participation high (55% of 4-year-olds, 6<sup>th</sup> in U.S.) but not at Oklahoma levels (74%)
- Reliance on subsidized child care for poor for full-day and for 3-year-olds
  - Oklahoma moving to full-day pre-K, other states have 3-year-old pre-K (Illinois leading state—20% of 3-year-olds)
- Kindergarten literacy screening. What about soft skills?
- What about pre- and post-test for evaluation—could that be part of new longitudinal data system?

# Observations on Wisconsin Subsidized Child Care for Low-Income Families

---

- **Low participation** among eligible low-income families: 22% birth to age 3, 38% birth to age 5
- 46% of kids in subsidized child care are in **low-quality**. State is trying to improve with financial incentives for high-quality centers
- How do we increase participation and quality?  
More funding needed?

# Observations on Wisconsin Home-Visiting

---

- **Low participation** of eligibles: less than one third of first-time low-income moms.
- How can scope be expanded? Are there ways to do this cheaper than with nurses (e.g., social workers)? Can home visiting work beyond first-time moms?

# Observations on Wisconsin Governance in Early Childhood

---

- Statewide system vs. Locals: pre-K and home-visiting decentralized, child care centralized
- Could North Carolina's **Smart Start** program be a model? Block grants to locals for early childhood—equivalent in Wisconsin would cost \$100 million. Used for variety of child care/pre-K/parenting programs birth to age 5
- Duke Study: Smart Start raised 3<sup>rd</sup> grade average test scores by 2 months.