Linking Early Care and Education and Economic Development: Four Challenges

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What is child care’s economic development impact?

- Localities - Growth in jobs and income
- Children - Human development (literacy, health)
- Parents - Choice, enable them to work
- Society - Social infrastructure, sustainability
The Economic Importance of Child Care
Short Term vs Long Term

- Only short term economic impacts are measured by input-output models.
- Long term impacts are important too. Other studies measure these:
  - Perry PreSchool,
  - Abecedarian,
  - Rolnick and Grunewald of Minn Federal Reserve.
- Economic development policy is primarily short term.
Child Care as Economic Development: Four Challenges

- Measuring the Sector: What to Include? Which data to use?
- Measuring the Parent Productivity Effect
- Modeling the Sector: Conceptions of the economy and which multiplier to use
- Promoting Policy Change
Counting the Economic Impact of Child Care

Direct Effects
(gross receipts, employment)

Linkage Effects
(economic multipliers)

Impact of Parents’ Earnings:

Total Value of Local Economic Linkages
(output, employment, linkage)
Measuring Direct Effects

What to include?

- Private and non-profit child care
- Publicly funded programs – Head Start, Early Head Start
- Universal Pre Kindergarten
- Family, Friend and Neighbor Care

Include both child care and early education
Count all you can count – but no more
Data Sources

• State licensing data –
  » establishments,
  » capacity,
  » staffing ratios (to estimate employment)
  » Government funding (direct subsidies to providers, and overall funding. Subsidy data (kids, parents, informal providers)

• State market rate survey data – for prices

• Tax Data
  » To estimate parents using paid care (Dependent Care Tax Credit)
Data Sources

Census Data
• establishments – undercount small establishments
• employment - undercount by a factor of 2 or 3
• wages
• working parents with children – doesn’t count use of paid care,
• comparison industries

National Survey Data: NSAF, PUMS,
  » Parent use of paid and unpaid care, subsidy utilization
Data Sources

• CCR&R survey data –
  » for establishments (may capture more family providers and license-exempt programs),
  » Capacity vs enrollment (vacancy rates),
  » prices (usually lower than market rate data)

• Importance of triangulation between data sources
Who Should be on Your Technical Advisory Committee?

- People with expertise on
  - CCR&R data
  - state licensing data
  - government finance data, including tax
  - economic data – of the broader economy (comparisons to other sectors)
  - demographic data (comparison to national or state averages)
Discussion Questions

• How much time did it take to gather the data for direct effects?
• Who was key on your data collection committee? Why?
• Have your direct effect numbers held up to challenge?
• Has this process made a difference in the way your state or CCR&R sees its data collection role?
Counting the Economic Impact of Child Care in Kansas

Direct Effects
14,000 jobs
$500 million
100,000 children

Impact of Parents’ Earnings:

Linkage Effects
(economic multipliers)

Total Value of Local Economic Linkages
(output, employment, linkage)
II. The Parent Productivity Effect

- No established method to measure this
- Simply count the number of parents and their average wage and STOP
- Share any studies you find on
  - labor force participation due to child care and
  - improved worker productivity as a result of quality child care
- We hope to run simulations of productivity effects derived from other studies
II. The Parent Productivity Effect

How to count the number of parents

• Parents who claim the Dependent Care Tax Credit (times 2 for married parents filing jointly)

• Census ratios of working parents with children. Problem is only half of these use paid care.
II. The Parent Productivity Effect

Count *all* working parents with children in care.

- Child care supports both men and women, single parents and dual parent households
- To count only the marginal parent (wife) in a two parent household inappropriately genders the analysis and undercounts parents served

- Use median wage or average wage.
  - Do not use women’s wage—undercounts full parent earnings
- Do not run a multiplier on parent wages. The industries where parents work should should get the credit for their productivity – not child care.
Child Care Enables Parents to Work

Number of Parents using Paid Child Care: 67,440
Median Income in Kansas: $29,356
Total Impact of Parents’ Earnings: $1.98 billion

How much can child care count as its contribution to the parent wage impact?
Discussion Questions

• How did you calculate the parent effect?
• What were the challenges and opportunities?
• Did anyone question your approach?
• Does your business community have data on parent productivity effects of child care?
Counting the Economic Impact of Child Care in Kansas

**Linkage Effects**
- Type I: Output 1.98, Jobs 1.32
- Type II: Output 1.56, Jobs 1.55

**Direct Effects**
- 14,000 jobs
- $500 million
- 100,000 children

**Total Value of Local Economic Linkages**

**Parent Earnings**
- 67,000 working parents
- $2 billion in wages
II. Modeling the Sector

Input-Output analysis calculates the ripple effects of an industry’s spending in the local economy.

Direct Effects: Child care centers take in revenue.

Indirect Effects: Centers make purchases.

Induced Effects: Centers pay workers who purchase goods and services.

Total Value of Local Economic Linkages
Which Multiplier to Use

- Type 1 multipliers count the direct and the indirect effect of industry purchases.
  » This would be the most conservative estimate of child care’s economic impact.
- Type II multipliers count direct, indirect and the induced effects.
  » Type II multipliers can only be used on demand (funding) originating from outside the local economy. (Most child care demand comes from households inside the local economy)
Which Multiplier to Use

- Use Type 1 Multipliers for state and local demand.
- Use Type II Multipliers for federal dollars. Federal funds are external demand. They increase local household demand for child care.
Are Exports all that Matter?

- What drives the regional economy?
  - External demand – exports
    - Exports comprise 9% of US Final Demand
  - What about the service sector, and child care in particular?
    - Services comprise 80% of employment nationally
  - What about consumer demand?
    - 63% of US Final Demand is consumer/household demand
Service Sector Employment Dominant

U.S. Labor Force by Sector, 1900 - 2000

- Primary
- Secondary
- Tertiary
Don’t Households Count?

- What about Households?
  - Child care demand is primarily local – demand from households.
  - Some economists think we should not count household effects – they would have spent their money on something else anyway.
  - Other economists recognize local (consumer) demand is important in economic development.
Recognizing Forward Linkages

- Input-Output models only measure backward linkages (purchases from suppliers)
- Child care may be most important for its forward linkages (freeing parent labor for other sectors)
- We are working on a methodology (key sector analysis) to capture both the forward and backward linkages.
When to use Multipliers

- Do not multiply the direct effects (gross receipts, jobs) by the multipliers to get a total effect. The total economy is the sum of each industry’s direct effects.

- Multipliers should only be used on net changes to the economy e.g. the impact of a reduction in eligibility levels or loss/increase in government funding.
Kansas proposed reducing eligibility level for subsidies from 185 % to 150 % of poverty.

That this would cause a direct loss of $4.8 million ($3.3 million Federal dollars) and 217 jobs.

Economic impact analysis showed a further loss to the state economy of $3.2 million and 77 jobs.

The total loss to the Kansas economy was $6.5 million and 217 jobs.
Impact of Changing Subsidy Eligibility

Economic Impact of Reduction in Subsidy Eligibility from 185 Percent to 150 Percent of Poverty, State of Kansas

Loss to Kansas Child Care Industry: $4.8 million, 208 jobs

Federal Portion of Subsidy Dollars: 68.7%

Potential Loss of Federal Subsidy Dollars: $3.3 million, 140 jobs

Indirect Effect from centers and suppliers making purchases:
- Loss of $1.8 million, 45 jobs

Induced Effect from child care workers spending wages:
- Loss of $1.4 million, 32 jobs

Economic Impact of Reduction in Child Care Subsidy Eligibility Level in Kansas:
- Loss of $6.5 million, 217 jobs
Discussion Questions

• Did you encounter challenges from economists about modeling child care in this way?

• Did you use this method to model changes in state policy?
IV. Public Policy Change

- Establish a policy advisory committee with economic development, government, child care, education and business representatives
- Think about uses of the report – before you start the analysis
- Think about your message – a positive image – child care is a the sector with economic potential
Government investment is positive
» Welfare expenditures are viewed as leakages (-)
» Economic development investments are positive

Economic analyses show child care investments – in subsidies, quality, etc – generate positive, short term economic returns.
Child Care is an Economic Investment

Kansas Investments in Child Care
$35.4 million

Federal Investments in Child Care
$106.5 million

Indirect Effect from centers and suppliers making purchases
$61.4 million

Induced Effect from child care workers spending wages
$46.1 million

Economic Impact of Federal Child Care Subsidies in Kansas
$216.9 Million

Every dollar Kansas invests in child care leverages $3 in federal funds. Each of these federal dollars generates $1.98 in the larger Kansas economy, resulting in a total leverage and linkage effect of nearly $6.00.

Source: Based on SRS data for 2001
IV. Public Policy Change

- Other industries get subsidies
  - Military industrial complex
  - Transportation
  - Agriculture
- Industrial Recruitment common for manufacturing and retail
- Child Care investment has a welfare mentality
In Kansas, Child Care has economic impacts (1.98) similar to:
- local interurban passenger transit (1.84),
- job training (1.83),
- elementary and secondary schools (1.90),
- colleges and universities (1.86).

*Kansas Type II output multipliers, Implan 2000*

Is child care getting a similar level of subsidy?
Uses of an Economic Development Approach

• Targeting industry investments – understand its economic challenges
• Improving quality – business management, economies of scale
• Improving Parent Access and Choice – affordability, subsidy utilization, tax credits
• Promoting business support – human resource partners, employee benefits, political support
• Expanding government investment – tax credits, business incentives, quality investments promote economic development and school readiness