



# 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

Linkage Effects
(economic
multipliers)

Direct Effects
(gross receipts,
employment)

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

# Linkage Effects (economic multipliers)

#### **Direct Effects**

14,000 jobs \$500 million 100,000 children

Impact of Parents' Earnings:

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 1 Type II

Output

1.56

1.98

Jobs 1.32 1.55

#### **Direct Effects**

14,000 jobs

\$500 million

100,000 children

### Parent Earnings

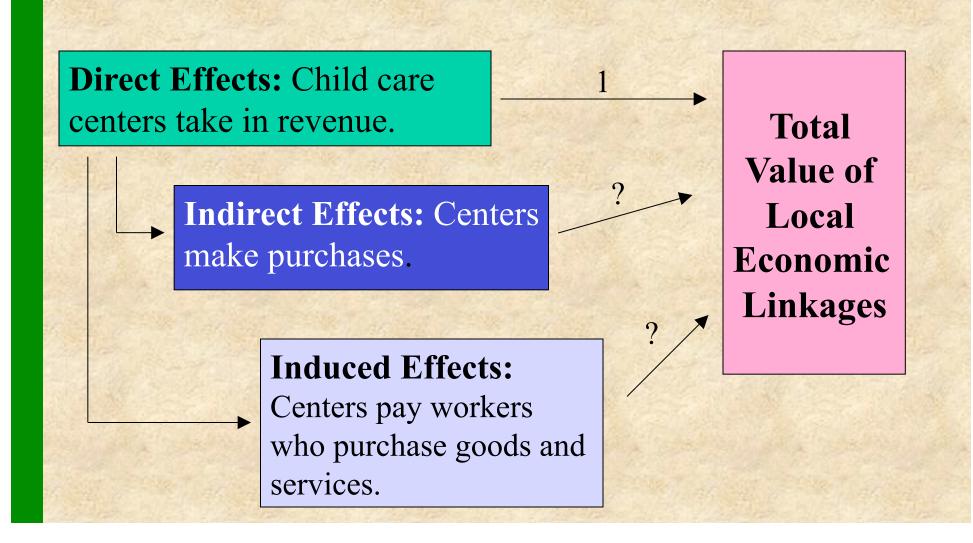
67,000 working parents \$2 billion in wages

**Total Value of Local Economic Linkages** 



#### II. Modeling the Sector

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





### 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 11 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.

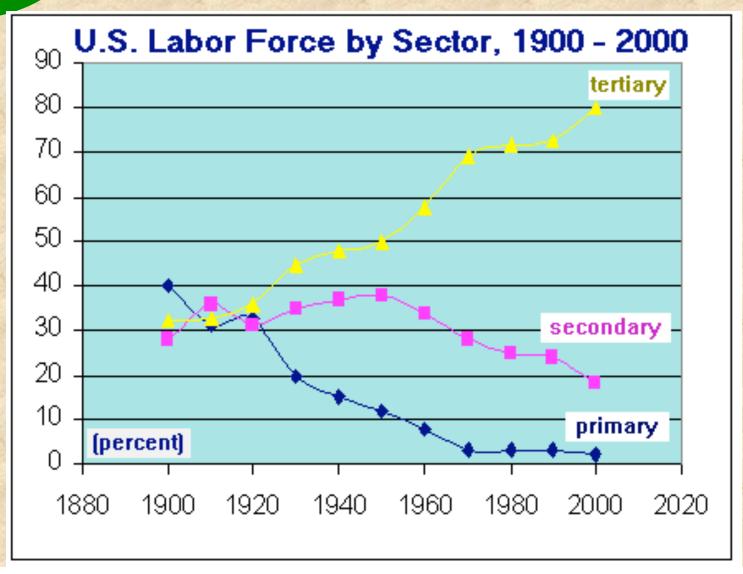


### Are Exports all that Matter?

- 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





#### 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.



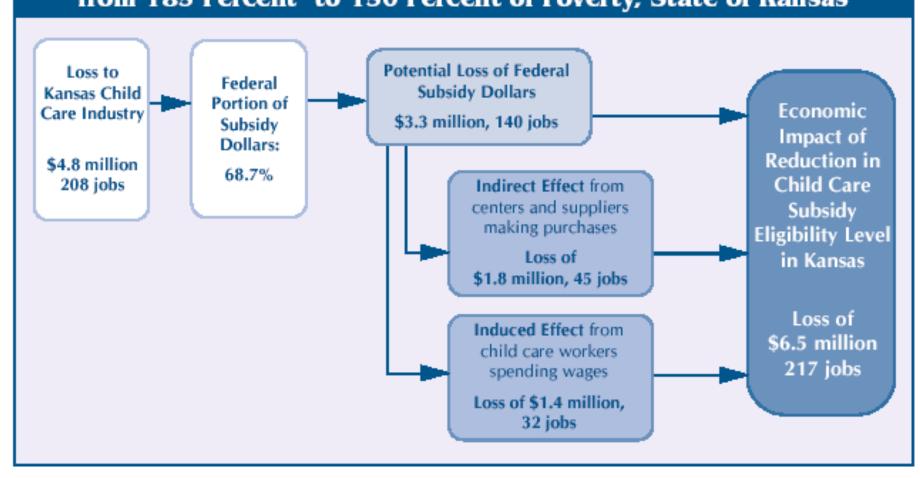
# Impact of Changing Subsidy Eligibility

- 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





#### **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



### IV. Public Policy Change

- 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 **Federal Investments** in Child Care in Child Care \$35.4 million \$106.5 million **Economic** Impact of **Federal Indirect Effect** from centers and suppliers **Child Care** making purchases **Subsidies in** Every dollar Kansas invests in \$61.4 million Kansas child care leverages \$3 in federal funds. Each of these federal dollars generates \$1.98 Induced Effect from \$216.9 Million in the larger Kansas economy, child care workers resulting in a total leverage and spending wages linkage effect of nearly \$6.00. \$46.1 million

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



## Impact Analysis - Comparison to Other Policy Sectors

- 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