Costing and Financing Early Childhood Programs

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Session Outline

1. Identifying ECD interventions
2. Costing ECD programs
3. Financing options
4. Reviewing international financing benchmarks for ECD
5. Exciting developments from the field
6. Cost-benefit analysis to allocate ECD resources
1. Identifying ECD Interventions

**Child**
- Prenatal (0-2)
- 3-4
- 5-6

**Mother (prenatal)**

**Nutrition**
- Food micronutrients
- Growth monitoring and promotion

**Healthcare and hygiene**
- Immunization
- Management childhood illnesses
- Maternal/prenatal health, including mental health
- Healthcare prevention

**Social Protection**
- CCT/Income transfer
- Parental leave
- Female labor participation
- Home infrastructure

**Education, parent and care services**
- Early childhood education & care (0-3)
- Preschool (4-6)
- Parenting education
- Community based care

**Mexico: Compensatory Education Project**

**Moldova Education For All (FTI Project)**

**Colombia: Familias en Accion**
1. **Identifying ECD Interventions | Comparing ECD and PE**

- ECD programs do not follow a universal model, or minimum package of services

<table>
<thead>
<tr>
<th>Domain</th>
<th>ECE Programs</th>
<th>Primary Education (PE)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Target</td>
<td>Programs are usually in expansion mode, targeting vulnerable and disadvantaged children.</td>
<td>All primary school-age population attending school.</td>
</tr>
<tr>
<td>Delivery</td>
<td>A range of modalities from sparely supported home-based to formal preschool programs.</td>
<td>Predominately formal.</td>
</tr>
<tr>
<td>Staff required</td>
<td>Professionals, paraprofessionals, parents, relatives, etc.</td>
<td>Professionals</td>
</tr>
<tr>
<td>Focus of intervention</td>
<td>Children, parents, caregivers</td>
<td>Children</td>
</tr>
<tr>
<td>Entry age</td>
<td>Conception to entry into basic education</td>
<td>Usually around age 7</td>
</tr>
<tr>
<td>Frequency and duration</td>
<td>Very diverse, from a few hours to five days a week</td>
<td>Usually 5 days a week</td>
</tr>
<tr>
<td>Number of children served</td>
<td>Depends on the program, data availability can make it difficult to estimate</td>
<td>Fairly well agreed upon program definition; full-time, with a range of hours of instruction</td>
</tr>
<tr>
<td>Unit costs</td>
<td>Estimates are scarce</td>
<td>Rough estimates are available from a broad body of research</td>
</tr>
</tbody>
</table>

Source: Adapted from van Ravens and Aggio (2008)
2. Costing ECD Programs

✓ Costs vary widely, depending on scope, intervention, and service provision model

The 5-step “ingredients” method:

Step i ➤ Identify programs and descriptions

Step ii ➤ Specify resource “ingredients”

Step iii ➤ Establish cost for each ingredient

Step iv ➤ Calculate total cost of program and cost per student

Step v ➤ Analyze which constituencies bear costs

Step i ➤ Identify programs and descriptions

- Conduct needs assessment
- Determine the project objectives (i.e. PDO)
- Identify the target population
- Develop service delivery model
- Map the project operations
- Determine the quantities and qualities for a given number of students
Step ii ► Specify resource “ingredients”

Ingredients are all of the resources and inputs to operate the intervention, such as:

- Personnel
- Materials
- Facilities
- Equipment
- Transportation
## Financial and Economic Costs of ECD Programs

### Financial Costs

#### Investment (Startup)
- Project development: creating/testing the approach, infrastructure and materials
- Facilities: constructing and upgrading
- Equipment: transportation, office, instructional (tables and chairs), storage
- Materials: reusable guides, books, and toys
- Training: initial training at all levels (trainers, transport, supplies)
- Micro-enterprise: loans for project-financing schemes

#### Operational (Recurrent)
- Staffing salaries and benefits: ECD administrators, supervisors, directors, ECD workers, health personnel, cooks, support personnel
- Food (nutrition components)
- Health care: supplies, facilities
- General administration costs (overhead)
- Training: in-service training
- Communication, other supplies
- Maintenance: facility costs, electricity, telephone, and insurance
- Evaluation: periodic monitoring and evaluation activities
- Contingency: fund for unexpected costs

### Economic Costs
- In-kind contributions
- Donated physical space
- Volunteer contributions from parents, caregivers, or community members

Source: Evans, Myers, and Ilfeld (2000)
Step iv ► Calculate total cost and cost per student: Example of Kyrgyz Republic

<table>
<thead>
<tr>
<th>Domain</th>
<th>Full-day Kindergarten (Scenario 1)</th>
<th>Half-day Kindergarten (Scenario 2)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Target</strong></td>
<td>Children ages 1-6 years</td>
<td>Children ages 1-6 years</td>
</tr>
<tr>
<td><strong>Delivery</strong></td>
<td>State education facilities, 20 students per room, plus additional sleeping room (20 cots with supplies), dining facilities and kitchen</td>
<td>State education facilities, 20 students per classroom.</td>
</tr>
<tr>
<td><strong>Staff required</strong></td>
<td>1 preprimary teacher and 1 assistant (full-day), cooks, administrative and maintenance staff</td>
<td>1 preprimary teacher and 1 assistant (half-day), administrative staff and maintenance staff</td>
</tr>
<tr>
<td><strong>Focus of intervention</strong></td>
<td>Early childhood care and education, health and nutrition</td>
<td>Early childhood care and education</td>
</tr>
<tr>
<td><strong>Frequency and duration</strong></td>
<td>5 days a week throughout school year, 8 hours per day (4 hours ECCE, 4 hours rest)</td>
<td>5 days a week throughout school year, 4 hours per day (no nutrition component)</td>
</tr>
<tr>
<td><strong># of children served</strong></td>
<td>14,000 (14% of eligible population)</td>
<td>Costs estimated at full enrollment.</td>
</tr>
<tr>
<td><strong>Unit costs (cost per child)</strong></td>
<td>6,000 soms per year (USD 130)</td>
<td>1,500 soms per year (USD 32)</td>
</tr>
</tbody>
</table>

**Primary cost drivers in this example:**
- **Investment costs**: capital and infrastructure requirements, training expenses, etc.
- **Recurrent costs**: Administrative costs, lower administrative costs,
- **Physical space**: Half-day scenario increases enrollment by a multiple of 4
- **Outcome**: which approach produces better child development outcomes?
2. Costing ECD Programs | Annual Per-pupil Expenditure on preschool

Source: Education at a Glance 2009: OECD Indicators
Step v ➤ Analyze which constituencies bear costs
3. Financing mechanisms

✓ Sustainable, sufficient ECD financing is vital

☐ Sources of funds:
  • Where do resources come from?
  • Are the mechanisms sustainable?

☐ Allocation mechanisms:
  • How are resources allocated?
  • What are the entry points?
3. Financing mechanisms | Allocation of Funds

✓ There are many channels through which to fund ECD

**Direct**
- Budget line allocations
- Block grants
- Subsidies
- Matching/partial matching funds
- Vouchers
- CCTs

**Indirect**
- Need-based sliding scale subsidies
- Parental and maternity leave policies
- Tax credit and refunds

- Workplace-based care
- Payments to providers
- Matching funds

- Matching funds for capital investment initiatives to expand ECD services

- Funds of government approved programs (recipients can be public or private providers, or program participants)

Source: Adapted from Belfield (2006).
### 3. Financing mechanisms

<table>
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<tr>
<th>Country</th>
<th>Source of funds</th>
<th>Allocation mechanism</th>
<th>Coverage</th>
</tr>
</thead>
</table>
| **Colombia** | • Payroll tax of 3% on all public and private individuals and enterprises.  
• Central Government (MoE) and municipalities launched joint fund to extend coverage to children under 5 in vulnerable conditions. | 0-6 years  
• Taxes are deposited in a central bank account managed by a semi-autonomous institute (Instituto Colombiano de Bienestar Familiar)  
• Budget line provided directly to public providers of preschool services (age 5-6). | Integrated services 0-6  
21% of age group  
Daycare programs and preschool  
0-5 year-olds: 44%  
5-6 year-olds: 86% |
| **Denmark** | • Local authorities are responsible for funding  
  *Expenditure (3-6 years)*  
• 2.1% of GDP, parents cover 30-33% of the cost, with a sliding fee schedule based on need. | 0-6 years to kindergarten  
• Parental leave: 28 weeks at full pay, additional 26 weeks paid at 60% of unemployment rate  
• Local authorities finance providers.  
• Parents may also be provided with a grant to use the services of a free-choice child minder recognized by the municipality. | Family daycare  
• 0-1 years: 12%,  
• 1-2 years: 83%  
  *Kindergarten*  
• 3-5 years: 94% |
| **Indonesia** | • The government sponsors an ECD Forum and Consortium to develop policies and protocols  
• Households pay as much as 91% of the cost of child/daycare and preschool services. | 5-6 years  
• No parental or maternity leave policies in place. | Preschool  
• 5-6 year olds: 19% (mostly private) |

Source: OECD (2006); Vegas and Santibanez (2010); Belfield (2006); Pew Center on the States (2009).
3. Financing mechanisms | Key Principles

- Simplicity - administration and access
- Reliability and sustainability of funding streams
- Likely burden of specific types of taxes on different population segments
- Enforceability of regulations and standards to ensure a program’s quality
- Availability of parental choice and opportunities for direct financing across ECD providers, including home provision (particularly important in rural, isolated communities)
4. International finance benchmarks

- Evidence from OECD research studies suggests a public investment of 1% of GDP as the minimum required to ensure provision of quality ECD services.
  - At present, the average expenditure on preschool services for children aged 3-6 is 0.49% of GDP in OECD countries.
  - Outside OECD countries, public expenditures are highest in Central and Eastern Europe, followed by Latin America and the Caribbean Region. Sub-Saharan Africa has the lowest levels of public investment.
4. International finance benchmarks | Challenges

- Above all, it’s important to remember that comparison of ECD finance is difficult because:
  - ECD is a broad discipline, covering multiple sectors, stakeholders and an extended time period
  - Level of expenditure does not account for quality of investment
  - Differences in finance modalities and mechanisms
  - Cultural differences (i.e. maternity policy vs extended family care)
  - Measurement and data quality not comparable in different countries
5. Exciting developments in the field...

- Innovations in financing
  - Social Impact Financing
  - Conditional Cash Transfer Programs
  - GAVI (Vaccine bonds)
  - Others?

- Collaboration with donors

- Successful country examples
6. Budget Simulation: Cost-Benefit Analysis to Allocate ECD Resources

- **Instructions:**
  - The country has been awarded IDA funding worth USD 200 million.
  - Each member of the group is a Minister in Government (Education, Health & Nutrition, Social Protection and Finance) and one member is a World Bank TTL.
  - Discuss and evaluate different allocation options in order to maximize coverage and achieve improved child development outcomes.
  - Convince the Minister of Finance as to the “smartest” investment(s).
  - The Minister of Finance will be asked to report back to the group a few of the main themes.
Thank you!!

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