Turkey:
Expanding Opportunities for the Next Generation

Human Development Dialogue at METU

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Outline

1. Motivation
2. Inequality of Opportunity
3. Child Development Today
4. Early Childhood Development Policies
5. Reflections
Social outcomes have improved markedly in Turkey over the last few decades.

Under Five Mortality Rate Over Time (1960-2006)

Source data: World Development Indicators. (The data for 1965 is extrapolated from existing data.)
But Turkey’s income inequality remains high by European standards, and “middling” by international standards.

Inequality in access to basic services

Improved Sanitation by Urban and Rural Area (2006)

% of total population with access
Inequality in labor force participation, by gender

Labor participation rate by gender (2007)
Still, Turks appear to be unusually inequality-averse.

The share of the population that strongly agrees that "the gap between rich and poor should be reduced in the country"

Source data: Life in Transition Survey, 2006
"Should the state be involved in reducing the gap between the rich and the poor?"

Source data: Life in Transition Survey, 2006
What is the main reason why there are some people in need in Turkey today?

- Injustice, 65%
- Laziness, 25%
- Unluckiness, 8%
- Inevitable part of life, 3%

Source data: Life in Transition Survey, 2006
Inequality of Opportunity: A definition

• Does inequality aversion in Turkey arise from the difference between inequality due to personal efforts and inequality due to pre-determined circumstances?

• Increasing attention is paid to inequality of opportunity in theories of justice, applied economics and development discourse.
  
  – Roemer (1998): opportunities are equal when advantages are independent of pre-determined circumstances.
  
  – This would imply that between-group inequality should be zero if society was partitioned into types with identical circumstances.
  
  – Equality of opportunity concept used here places emphasis on opportunities rather than on outcomes.
Inequality of Opportunity for Wealth

Decomposition of wealth inequality in Turkey

- Efforts, luck and circumstances not measured: 68%
- Circumstances: Lower-bound estimation for inequality in wealth asset index attributable to opportunities: 32%
Circumstances and Wealth Outcomes

**by Birth Place**
- Urban
- Rural

**by Birth Region**
- East
- Central
- West

**by Mother's Education**
- No diploma
- Primary
- Secondary
- Higher

**by Father's Education**
- No diploma
- Primary
- Secondary
- Higher

**by Mother Tongue**
- Turkish
- Non-Turkish

**by Number of Siblings**
- Less than 5
- More than 5
Opportunity profile for least and most advantaged population groups, 2004 (percent)
Inequality of Opportunity for Education Outcomes: Achievement

- Using PISA results (2006), between a quarter and a third of overall educational achievement variation can be traced to underlying inequality of opportunities.

- Spatial variables, both area and region, contribute about one fifth to that inequality of opportunity. For reading and science, urban/rural divide more important than regional divide.

- Schools located in the East or in rural areas are associated with lower test scores.

- While gender emerges as a key correlate of enrollment, as we will report later on, it is not a significant determinant of achievement.
The intergenerational transmission of opportunity continues to shape children’s life chances today.

**Intergenerational Opportunity Groups**

<table>
<thead>
<tr>
<th></th>
<th>Birth place of Mother</th>
<th>Education of maternal grandparents</th>
</tr>
</thead>
<tbody>
<tr>
<td>Low Intergenerational</td>
<td>Rural East</td>
<td>Less than primary completed</td>
</tr>
<tr>
<td>Opportunity Group</td>
<td></td>
<td></td>
</tr>
<tr>
<td>High Intergenerational</td>
<td>Urban West/Center</td>
<td>At least primary completed</td>
</tr>
<tr>
<td>Opportunity Group</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Children's mothers' circumstances and current child outcomes

Height for Age Measures for LINOG and HINOG

Note: Stunting is defined as height for age less than two SDs below the mean.
Inequality of opportunity in terms of Enrollment Rates in School

Enrollment Age Profiles by Opportunity Group and Gender, (2004)
Relative risk of poverty is highest among children in Turkey, and has increased for this group in recent years.

Relative risk of poverty by age group (2003 and 2006)
Children's Cognitive Development Inputs at home Vary by socio-economic group already at age 3

Source: Data from The Study of Early Childhood Developmental Ecologies (TECGE) in Turkey, Koc University 2008
In turn, their cognitive development is also impaired very early on in life.

**Cognitive Development Scores of 36-47 month old children in Turkey**

<table>
<thead>
<tr>
<th>Score</th>
<th>Tifaldi test - receptive language score</th>
<th>Corsi test - short term memory score</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mean for low SES</td>
<td>-0.4</td>
<td>-0.8</td>
</tr>
<tr>
<td>Mean for middle SES</td>
<td>0.1</td>
<td>-0.6</td>
</tr>
<tr>
<td>Mean for high SES</td>
<td>1.3</td>
<td></td>
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</tbody>
</table>

How can Early Childhood Development be a policy tool for reducing inequality of opportunities?

• All basic brain development takes place in early years – on which later growth and learning ability depends.

• ECD can bridge the inequality of opportunities gap between advantaged and disadvantaged children. Bring them to an equal footing by increasing ‘school readiness’ for disadvantaged children.

• An impressive body of literature exists internationally that shows the positive returns to investing in the early years.
Turkey has many different types of public and private ECD programs, usually with low levels of coverage.

### Coverage of ECD programs in Turkey by Age Category

<table>
<thead>
<tr>
<th>Child Development Phase</th>
<th>Intervention</th>
<th>Coverage of Age Group</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pre-natal</td>
<td>Pregnancy Monitoring, MOH (2004)</td>
<td>~80%</td>
</tr>
<tr>
<td>Infancy (0-18 months)</td>
<td>Immunizations - DPT, MoH (2004)</td>
<td>~90%</td>
</tr>
<tr>
<td></td>
<td>Growth and Psycho-Social Monitoring - Family Doctors, MoH (2008)</td>
<td>&lt;10%</td>
</tr>
<tr>
<td></td>
<td>Parent training, MONE (2008)</td>
<td>~3%</td>
</tr>
<tr>
<td>Toddler and post-toddler (18-36 months)</td>
<td>Private day-care centers, nurseries and community driven models (2008)</td>
<td>&lt;1%</td>
</tr>
<tr>
<td></td>
<td>Parent training, MONE (2008)</td>
<td>~3%</td>
</tr>
<tr>
<td></td>
<td>Growth and Psycho-Social Monitoring - Family Doctors, MoH (2008)</td>
<td>&lt;10%</td>
</tr>
<tr>
<td>Pre-school (Months 36-72)</td>
<td>SHÇEK Community Centers (2008)</td>
<td>&lt;2%</td>
</tr>
<tr>
<td></td>
<td>Home-based MOCEP - for 6 year group only, MONE (2008)</td>
<td>~6%</td>
</tr>
<tr>
<td></td>
<td>Private preschools (2008)</td>
<td>~1%</td>
</tr>
<tr>
<td></td>
<td>Public preschools &amp; kindergartens - for 48-72 month group, MONE (2008)</td>
<td>~30%</td>
</tr>
</tbody>
</table>

Source: Pregnancy monitoring and antenatal care data comes from TDHS 2003. Immunization (DPT) data comes from WDI 2009. Growth monitoring and psychosocial development tracking data comes from the Ministry of Health Primary Health Care DG (Mental Health Unit) database as of December 2008. Coverage of parent training programs comes from the Ministry of Education Apprenticeship and Non-formal Education DG (with the assumption that each parent trained reaches 2 children in the 0-6 age group, on average). Preschool coverage rate for 4-6 year old group comes from MONE Preprimary education coverage data for 2008-2009 academic year (it is taken as the sum of public nursery classes and public kindergartens). Primary school enrollment rates come from MONE 2008-2009 primary school enrollment data.
Pre-primary enrollment rates in center based education is much lower than predicted by GDP per capita

Pre-primary Gross Enrollment for 36-72 month group (%)

Household level data also confirms the regressive distribution of pre-primary services in Turkey.

Note: Socio-economic status is defined as an index that combines income, household assets and the educational level of adults in the household.

Government Funding for Programs for pre-primary age group is very limited

Per Capita Social Expenditures by Age Group in Turkey
(Central Government Spending, Excluding Social Security Contributions, 2008)
Benefit Simulations of ECD policies: Pre-School Education

- Expanding education of the 20-39 year olds today by one year (equal to measured impact of pre-school education)
- Two channels: increased education on earnings occupational distribution
- Impacts: 8 percent increase of mean earnings of all individuals 20-39 years of age 14 percent increase in female labor force participation rate 5 percent reduction of poverty
Aggregate Income and Poverty Reduction Effects of Increased Female Labor Force Participation

Poverty Reduction

-15.0

Income Growth

6.9

3.4

% points

-20.0

-15.0

-10.0

-5.0

0.0

5.0

10.0

Full-time

Part-time

-8.0
A. inequality of opportunity shown for determining education and wealth outcomes. Region less important than area;

B. inequity travels across generations: children’s life chances are significantly impacted by their grandparents socio-economic profile

C. child development diverges strongly across opportunity groups and poverty at very early ages, especially for girls. Traditional solidarity system does not compensate for disadvantage
D. Pro-equity policies would aim to weaken the link between circumstances and outcomes in early ages—early childhood development policies

E. Today, social expenditures are not reaching children below school age and coverage of disadvantaged children is low

F. Quo vadis, social policy?