Financing SSN Programs

Ruslan Yemtsov
Outline

1. The macro decisions: how much to spend on safety nets?
2. How much the countries are spending?
3. Setting the benefit level at the program level: how much to pay?

Phillippe:
1. Setting the target number of beneficiaries
2. Defining the cost of starting running the program
3. Cases of program expansion
Recap from Harold’s lecture: Financing of Safety Net Programs

Basic economic theory argues that financing is separate from expenditure decisions. While all taxation involves economic distortions – ‘deadweight’ costs to the economy – revenue collection should seek to minimize these costs as a share of revenue.

But from a political perspective, a dedicated revenue source may provide ring-fencing of a program as well as make the taxation more politically acceptable.

Ex: The Indian state of Maharashtra financed public works from an earmarked tax of payrolls.

Similar protection of a program may come from declaring an “entitlement” in which the government commits to providing a benefit to any individual or household that qualifies. Such entitlements have first claim to revenues.
How much to spend on safety nets?

- Start with a strategy that actually prioritizes among different objectives
  - Is it “all citizens have a right to…” type of thing?
  - Is it about addressing the basic needs of chronic poor?
  - Is it about assisting the transitory poor deal with shocks?
  - Is it about increasing social mobility through investing in next generation’s schooling and health?
How much to spend on safety nets?

- Considerations for the overall budget envelope include:
  - Other social protection schemes (Social insurance!)
  - Level and structure of poverty
  - Tax base (informal sector…)
  - Underlying distribution of productive ability (exiting poverty…)
  - Institutions for private provision
  - Quality of public service delivery
  - The nature of shocks affecting the country
  - Politics
### SPL coverage map: case of Thailand

<table>
<thead>
<tr>
<th>POPULATION GROUPS</th>
<th>Proportion of workforce (%)</th>
<th>Health care</th>
<th>Work injury</th>
<th>Disability</th>
<th>Death</th>
<th>Old age</th>
<th>Maternity</th>
<th>General family needs</th>
<th>Unemployment</th>
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<tbody>
<tr>
<td>Civil servants</td>
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<td>Government regular &amp; temporary employees</td>
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<tr>
<td>Small enterprises &lt;10 employees (including informal sector)</td>
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<td>Self-employed outside agriculture</td>
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<tr>
<td>Self-employed in agriculture</td>
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<tr>
<td>Unemployed persons (including the poor)</td>
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<td>Persons incapable to work</td>
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<tr>
<td>Elderly (non-pensioners)</td>
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</tbody>
</table>

**Legend:**
- HIGH SOCIAL INSURANCE COVERAGE
- LOW SOCIAL INSURANCE COVERAGE
- SOCIAL WELFARE ASSISTANCE COVERAGE
- NO SYSTEMIC FORMAL TRANSFER COVERAGE
- COVERAGE BY 30-BAHT HEALTH CARE SCHEME
Basic Framework

\[
\text{Total expenditure ratio} = \frac{\text{Number of beneficiaries in the year}}{\text{Number of workers}} \times \frac{\text{Amount of benefit in the year}}{\text{Average product per worker}}
\]

Demographic environment

Economic environment

Governance
Strategies for financing expanding coverage

- Pensions (or social security) is self-financing (contributory) part of the Social protection system

- Affordability and incentives
  - Affordable contribution levels
  - Link with health/disability insurance where feasible
  - Voluntary pensions in rich countries exist due to tax treatment, but irrelevant for informal sector workers – a substantial matching contribution or subsidy form the government is needed to overcome high discount rate and liquidity preference
Steps in setting key parameters for contributory scheme with government subsidy

- **MCT** - minimum consumption target
- **TBL** - target benefit level
- **CR** - contribution rate
- **PL** - premium level
- **AP** - ability to pay
- **SR** - subsidy rate
- **CT** - coverage target
- **BR** - budget requirement

1. \( \text{TBL} = x \% \text{ of MCL} \)
2. \( \text{CR/PL} = \$ \)
3. \( \text{AP} = \% \text{ of PL} \)
4. \( \text{SR} = 1 - \text{AP} \)
5. \( \text{CT} - \# \text{ workers} \)
6. \( \text{BR} - \$ \)
Indications of willingness to take up

Perú: % contributing by amount of subsidy & income quintile

Source: Pages (2011)
Self-financed, self expanding social security system is an illusion….

Duflo et. al. (2005) tested the take up elasticity for US low income workers, but similar studies have not been done for developing countries.

Palacios and Sane (2012) find 23% take up with a 1:1 match with early data from India. Number of sons and land ownership are negatively correlated. Women are much more likely to join.
Spending on non-contributory SSNs

% of GDP

1.6 %
In most countries, spending on safety nets is modest

Governments in low and middle income countries spend 1.6% of GNP on safety nets, with the share rising on average with income. It is 1.9% for middle income countries and 1.1% for poorer countries.

For 2/3 of countries this spending is about 1-2% of GDP.

2% of the GNP of a low income countries is, of course, far less than the same share of a middle income country and has to be allocated over a larger share of poor individuals, hence the need for selectivity.

In many low income countries the majority of this spending is by NGOs and donors although there is a trend to putting more of SN spending on budget.
... spending is growing

Is the 1.6% level appropriate? It depends...
Spending in Africa

Large External Financing

Source: Gentillini et al, 2014

Considerable volatility

Source: Monchuk, 2014
Grosh et al (2008) do highlight some correlates of safety nets spending, with no statistically significant linkages (}

<table>
<thead>
<tr>
<th>Factor</th>
<th>Safety Net Spending as % of GDP</th>
<th>Social protection spending as % of GDP</th>
<th>Social sector Spending as % of GDP</th>
</tr>
</thead>
<tbody>
<tr>
<td>Per capita GDP (PPP)</td>
<td>0.0768</td>
<td>0.5045**</td>
<td>0.5460**</td>
</tr>
<tr>
<td>Gini coefficient</td>
<td>-0.1104</td>
<td>-0.3410**</td>
<td>-0.2686*</td>
</tr>
<tr>
<td>Voice</td>
<td>0.0678</td>
<td>0.2294**</td>
<td>0.2607**</td>
</tr>
<tr>
<td>Ethnic fragmentation</td>
<td>0.1628</td>
<td>-0.0204</td>
<td>-0.0972</td>
</tr>
<tr>
<td>Democracy</td>
<td>0.1733</td>
<td>-0.0533</td>
<td>0.1907</td>
</tr>
<tr>
<td>Attitudes about inequality</td>
<td>0.1234</td>
<td>-0.1694</td>
<td>-0.1559</td>
</tr>
</tbody>
</table>

Macro side

Program Level Decisions

Paying too little?  Paying too much?
Such patterns, however, are a weak starting point

The data is often misleading since local government expenditure in decentralized systems is often excluded as are NGO programs. One study identified 123 cash transfer programs from 35 African countries. Only a third of these were solely funded by the government; half had no government support at all.

Moreover, the nature of the overall system is not conveyed by budgets. A well integrated systems may look rather different than an uncoordinated set of small programs even if the expenditure levels were the same.

What has been spent or what is being spent is not a strong argument for what should be spent.

In some cases a government may declare a floor or minimum – for example, India aims for at least 2% of GNP – but this is notional.
How much countries should spend on safety nets?

- No answer.
- Costing models (UNICEF-ILO, CEDLAC etc.) rely on highly hypothetical assumptions
- To develop
At the program level: How much to pay?

- Basic question
- No simple answer:
  - Result of an iterative process of program design
  - Benefit level: maximize desired program outcomes: smallest transfer needed to achieve the desired improvement in the targeted outcomes
- Function of
  - available budget,
  - administrative capacity
  - political constraints
- Hence setting the benefits will be program specific
## Cash transfers

<table>
<thead>
<tr>
<th>Type of program</th>
<th>Benefit level depends on:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Guaranteed minimum income</td>
<td>Eligibility threshold – income of beneficiary household</td>
</tr>
<tr>
<td>Last resort programs</td>
<td>Poverty gap/</td>
</tr>
<tr>
<td></td>
<td>Cost of an adequate food basket</td>
</tr>
<tr>
<td>Food stamps</td>
<td>Food poverty gap</td>
</tr>
<tr>
<td>Family allowances</td>
<td>The cost of raising a child</td>
</tr>
<tr>
<td>Heating allowances</td>
<td>Seasonal increase in the heating cost during cold season</td>
</tr>
<tr>
<td>Social pension</td>
<td>Poverty line</td>
</tr>
<tr>
<td></td>
<td>Minimum contributory pension</td>
</tr>
</tbody>
</table>

**Program Level Decisions**

- Paying too little?
- Paying too much?
Conditional cash transfers

<table>
<thead>
<tr>
<th>Type of “grant”</th>
<th>Benefit level depends on:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Education grant or scholarship</td>
<td>Opportunity cost of the time spent by the child in school (child labor earnings)</td>
</tr>
<tr>
<td></td>
<td>Direct costs of schooling</td>
</tr>
<tr>
<td>Health and nutrition grant</td>
<td>Opportunity cost of the time spent by mothers on health checks / nutritional education</td>
</tr>
<tr>
<td>Supply incentive</td>
<td>Cost of improved service (wages, material costs)</td>
</tr>
</tbody>
</table>
## Workfare

<table>
<thead>
<tr>
<th>Wage level</th>
<th>depends on</th>
</tr>
</thead>
<tbody>
<tr>
<td>General case</td>
<td>Below wage level for unskilled workers</td>
</tr>
<tr>
<td></td>
<td>Often, the number of days provided by an individual worker are rationed</td>
</tr>
<tr>
<td></td>
<td>If higher than wage of unskilled labor, need add’l targeting mechanism to ration the demand</td>
</tr>
</tbody>
</table>

*Program Level Decisions* Paying too little? Paying too much?
# In-kind transfers

<table>
<thead>
<tr>
<th>Type of program</th>
<th>Benefit will depend on</th>
</tr>
</thead>
<tbody>
<tr>
<td>School feeding programs</td>
<td>Cost of the food bundle + Logistical costs</td>
</tr>
<tr>
<td>Food ration rationale: to reduce the food poverty gap of beneficiaries</td>
<td>Same rationale as for last-resort programs + logistical costs</td>
</tr>
</tbody>
</table>
Example: Education Grant estimation, Honduras PRAF

- **Direct cost of schooling.**
  - According to data from the Survey on Expenditures and Livelihoods (May-July 1999)
  - the direct costs of sending a child under 13 years to school are:
    - Matriculation fees, including fees for parent associations, 5.79 Lempiras per year.
    - Books, texts, uniforms and other school supplies, 240.56 Lempiras per year.
    - Lunch money, snacks, transportation and other costs, 25.55 Lempiras for 10 months.
  - This results in a total of **L.501.85 per year**

- **Opportunity cost of children’s time.**
  - Time spent working. The contribution of children aged 6-12 years old to the total number of hours worked by all household members is approximately **3.25%**.
  - The average household income in the area of intervention of the Project is 31,669 Lempiras per year. This implies that the contribution of children between the ages of 6 and 12 years is **522.53 Lempiras per year**.
  - In beneficiary households, there are an average of 1.66 eligible children, which indicates that the lost income per child that goes to school is approximately **326 Lempiras per year**.

- **Total cost is** **828 Lempiras per child per year.**

Source: IFPRI 2000
Benefit level in practice
Result of a trade-off

Given budget, determine benefit level and program coverage

Benefit level should be:

- neither too high to generate dependency,
- nor too low to lack impact

Their average consumption is 25% below the poverty line

To cover this consumption gap I need 4% of the GDP

16% of the population is poor

The SSN budget envelope is only 1% of GDP

Reconsider benefit level and coverage

Macro side

Program Level Decisions

Paying too little?  Paying too much?
Benefit levels in practice
Comparisons are difficult

- Comparative evidence is scarce
- Comparison across programs and countries is difficult. Such information is presented as:
  - Level of benefits expressed in local currency, when variable formulae presented at a table
  - Level of benefits in comparable purchasing power (USD PPP)
  - But generosity is a relative concept, differs from country to country
  - In relative terms: % of min wage, average wage, poverty line, unemployment benefit, social pension

- Our preferred measure:
  - Generosity = benefit / consumption of beneficiary household
From ASPIRE
Benefit levels may vary by:
- The poverty level of the family / household
- Family size, composition
- Age of the family members
- Gender
- Over time / Seasonal
  - Higher in the lean or hungry season
  - Higher in the cold season (heating costs)
- Region
- Time spent in the program
## Factors taken into account in the benefit formula, CCT programs

<table>
<thead>
<tr>
<th>Country/Program</th>
<th>HH income</th>
<th># of children</th>
<th>HH structure</th>
<th>other HH members</th>
<th>Age of children</th>
<th>Gender</th>
<th>Duration in program</th>
<th>Payee</th>
<th>Frequency of payments</th>
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</thead>
<tbody>
<tr>
<td>Kenya CT for OVC</td>
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<td>max=3</td>
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<td></td>
<td>parent/guardian</td>
<td>quarterly</td>
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<tr>
<td>Cambodia JFPR</td>
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<td>mothers</td>
<td>bimonthly</td>
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<td>family representative</td>
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Thank you!