

Reflections on Targeted Poverty Programs in Latin America

Santiago Levy
Inter-American Development Bank

International Food Policy Research Institute
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Outline

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2. Diagnosis and objectives
3. Key policy questions
4. Results
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7. Conclusions

1.Motivation

Background on Progresa-Oportunidades

- **In mid 1990s, 30% of Mexico's population in extreme poverty; problem more acute in rural areas.**
- **At that time, Mexico ran 15 food and nutrition programs.**
Observations:
 - Targeting problems: rural-urban imbalances against rural. Imbalance between targeted and generalized subsidies in favor of the latter (which are regressive);
 - high budget share for administrative expenses;
 - little coordination between ministries and agencies;
 - not focused on the most vulnerable members of the household;
 - no evaluation and discretionary operation with and little accountability;
 - absence of clear objectives.

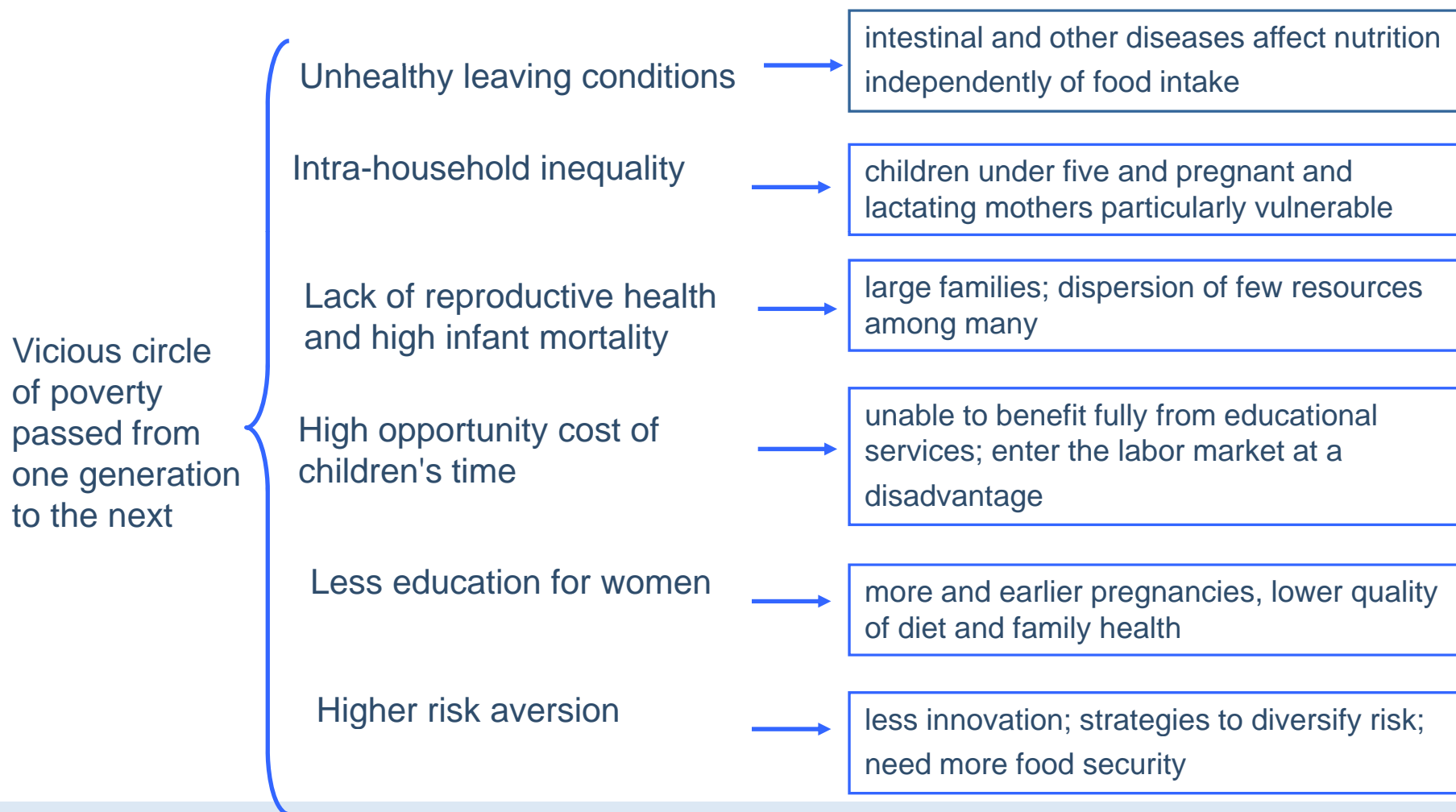
Two motivations for change

1. **Shock:** in 1994-95 Mexico's economy suffered a substantial setback that led to 6% drop in GDP.
Something had to be done. (There was limited agreement on how to respond to the crisis, however.)
2. **Analytical advances in the understanding of poverty during 1980s and 1990s:** (i) complementarities among food, nutrition, health, and education; (ii) clarified role of food subsidies as income transfers; (iii) highlighted the importance of incentives in the design of social programs.

These analytical insights played a key role informing policy.

2. Diagnosis and objectives

Diagnosis



Objectives

- Replace targeted and generalized isolated food, health and nutrition programs with an integrated program that would be more effective and efficient in transferring income to the poor.
- Exploit the complementarities between basic health and hygiene, food intake and basic education.
- Use this program as focal point for targeted investments in the human capital of the poor (both on the demand and the supply side).
- Consider carefully incentives to households incorporating an inter-temporal approach.
- Break the intergenerational transmission of poverty.

3. Key policy questions

In 1997 Progresa was arguably a novel initiative as it:

- substituted food subsidies and in-kind transfers mostly with cash;
- delivered cash to mothers;
- delivered a nutritional supplement to pregnant and lactating mothers, and to children between 4 months and 4 years of age;
- conditioned part of the transfers on compliance with an age and gender specific health protocol by household members, including information on food preparation and nutritional content;
- conditioned another part of the transfers on the gender and grade level educational performance of children and youth;
- included evaluations of program operations and impacts as part of program design;
- applied strict guidelines for selecting beneficiaries;
- delivered benefits directly to beneficiaries by the Federal Government, with no intermediaries; and,
- introduced all these innovations at the same time.

Special focus on nutritional support

Nutrient	Children (4 months to 4 years)	Pregnant and Lactating Mothers
Protein	5.8 g	12.0 g
Energy	194 kcal	250 kcal
Fat	6.6 g	11.2 g
Carbohydrates	27.9 g	25.3 g
Sodium	24.5 mg	81.2 mg
Iron*	10 mg	15 mg
Zinc	10 mg	15 mg
Iodine	-	100 mg
Vitamin A	400 mg	-
Vitamin B	6 mg	10 mg
Vitamin C	40 mg	70 mg
Vitamin B-12	0.7 mg	2.6 mg
Folic acid	50 mg	100 mg

* Initially as iron fumarate and currently as iron gluconate.

Many questions were raised:

1. Could the program be made operational in rural areas?
2. Could ministries and agencies work together?
3. Could generalized subsidies be phased-out?
4. Would giving cash to mothers lead to alcoholism and family violence?
5. Would families consume the nutritional supplement?
6. Would communities accept targeting?
7. Would families reject conditions?
8. Would food consumption decrease as in-kind and generalized subsidies were removed?
9. Would consumption of health and educational services increase?
10. Would cash injections create inflation in remote rural areas?

Evaluation was therefore essential

- A pilot program was started in Campeche in 1995/96 and evaluated in 1997. This served to answer some simple questions;
- A more careful approach based on a randomized control-treatment type experiment was designed in 1997 to answer more difficult questions.

4. Results

Nature of evaluations

- Evaluations are done by independent entities to insure the credibility of results; key role of IFPRI.
- Databases available to many researchers, so results can be replicated.
- **The program has been lucky in attracting the attention of excellent people, some of whom have been involved with the program since its beginning.**
- There are short term or first 1-3 years impacts; there are medium term evaluations conducted 4-6 years after the implementation; and now some evaluations of ten year impacts.
- Many aspects have been researched; next, I focus on seven of them.

Results... *what has worked so far*

1 Consumption

- **In rural areas:** average consumption expenditure increased by 15%; 72% of the increase went to food.
- By the end of 1999, the calorie intake of program households had risen almost 8% compared to that of non-program families; Hoddinott, Skoufias and Washburn (2000)
- **In urban areas:** Total consumption by beneficiary households increased by 6%, with food consumption rising by 10%; Attanasio & Shaw (2004)
- Almost no evidence of increasing price effects.

2 Saving and Investment

- **In rural areas:** Positive effects on savings, MPC out of the transfer equal to 75%.
- Annual returns on investment of 4.8%
- Permanent increases in consumption of 22% after 5.5 years in the program Gertler, et al.(2005).

3 Protection against shocks

- The program has served to protect the poor against recent food price increases as the transfers have been adjusted to compensate households.

Results... *what has worked so far*

4 Education

- **Increases in secondary and high school enrollment:**
 - 24% average increase between pre-program levels in 1996-97 and those in 2002-03. Parker (2005)
 - Increase in enrollment in high school of 85% between 2000-01 and 2002-03 in rural areas and 10% in urban areas.
- **Positive effects on school progression in short and medium run:**
 - A 6 year difference in exposure translated into a difference of almost one grade level of schooling (1.14 years for boys and 0.94 years for girls, aged 9 to 12) in rural areas. Parker, Behrman, Todd (2005).
 - Larger impact on schooling for those with longer exposure to the program.
- **Positive effects on reducing failure and drop-out rates, especially in the transition between primary and secondary school:**
 - In urban areas, 24% decrease in the drop-out rate of children after only 1 year in the program.
 - In rural areas, the proportion of boys who advanced regularly (completed five years of school in a 6 year period) was 64% vs. 38% for those not in the program; Parker et al (2005) and Todd et al (2005).

Results... *what has worked so far*

5 Health & Nutrition

- **Increased utilization of preventive services:**
- **In rural areas:** Preventive care visits grew five-fold between 1997-2002 in Mexico (Bautista et al 2009)
- Increases in monitoring of nutritional status of children under 2 between 30 to 50%; Increases in prenatal care of 8% with respect to control in Mexico (Skoufias 2000)
- Increases in vaccination rates among the poorest (Barham et al 2008)
- Drop in visits for severely malnourished children. Drop of 58% in hospital visits for 0-2 year olds in Mexico (Gertler et al 2001)
- **In urban areas:** One year effects: 20% increase in use of preventive services (INSP 2003). 6% increase in pre-natal care (Prado et al 2004). Also reduction in demand for hospital services.

- **Reductions in morbidity:**
- 25% lower rates compared to non program for children of 6 months (Gertler and Boyce 2001); 39% reduction in days sick for children between 0-3 years in rural areas in Mexico (Gutierrez et al 2004)

- **Reductions in mortality:**
- In rural areas: average reduction of 11% in infant mortality (Barham 2005)

- **Improvements in nutritional status for young children:**
- impact on growth for children under 2 -- ~1cm increase in height per year more than non-program children in Oportunidades, with more pronounced effects among the poorest (Gertler 2004; Rivera et al 2004; Behrman and Hodinott 2005); significant reduction in proportion stunted
- Improvement in motor tests of 15% for boys and 10% for girls for children exposed 4 years or more in rural areas (Gertler and Fernald 2004)
- Little impact recorded on anemia prevalence except Gertler and Fernald 2004 in Mexico

Results... *what has worked so far*

6 Women's status in household

- Evidence of gradual improvements with more participation of women in deciding the pattern of spending of the program's transfer.
- Women reported increasing empowerment in not having to ask their husband's for money. Adato et al (2000).

7 Labor

- Reductions in child labor participation both in urban and rural areas coupled with increases in school attendance; Parker and Skoufias (2000,2001)
- **In rural areas:** Reduced probabilities of working for children after 5.5 years in the program. 35% (boys aged 10) and 29% (boys aged 14). Parker, Behrman, Todd (2005).
- **In urban areas:** After one year in the program, there were reductions of 24% in male youth aged 19-20 and of 5% in girls aged 15-18.
- No evidence of negative effects on work incentives among adult men and women Skoufias and Di Maro (2006).

Results... *and what has not*

1. Impact on cognitive and language ability are weak.

- Very low performance on cognitive and language tests when compared with international norms.
- No impact of program on achievement tests in reading comprehension. Behrman and Parker (2008)
- Reduced per capita school resources given larger demand for education may in turn cancel out cognitive achievement gains. Behrman, Segupta and Todd (2000).

2. Long run impact on anemia and stunting are weak.

- Children exposed to early stage of the program that showed better nutritional status in the short run, do not maintain these better status 9 years later in 2007.
- Prevalence of anemia in school-aged children is still high (10%) and limits the abilities of the children to learn. Behrman et al (2009).
- Persistently high prevalence of stunting for school-age children, particularly in remote, indigenous areas. Behrman et al (2009).

3. Mixed evidence on impact on overweight and obesity among children.

Gertler and Fernald 2004; Neufeld and Lozada 2008

4. Increased demand for health care has resulted in saturation of health units, particularly in urban areas.

Escobar and Gonzalez (2004); IDB (2009 forthcoming)

Results... *and what has not*

4. The program did not fully replace other food subsidy programs.
5. Program proliferation was not abated, as particularly as of 2001 new programs have been created while others that should have been phased-out are still maintained.
6. Coordination between ministries and agencies has been erratic and at times difficult, implying that many problems arise from program operation rather than program design.

5. Some lessons

On the positive side

- Clear gains from an integrated approach, as opposed to a series of isolated programs
- Clear gains from introducing incentives to invest in human capital, and clear lessons that households respond to incentives
- Importance of incorporating political economy considerations to ensure scale-up, continuity and sustainability of the program.
- Importance of impact evaluation and large amount of learning that has occurred. We can now ask and (tentatively) answer many more questions than before. We can also have a positive feedback loop from evaluation to program re-design. (Example: Iron in nutritional supplements and anemia).

On the negative side

- Underestimated incentive problems in agency coordination. Bureaucratic issues and turf battles have limited the effectiveness of the program. Future programs need to incorporate this issue as an essential element of program design. This is an area where more research is necessary and would be extremely valuable;
- Underestimated problem of quality of health and educational services;
- Underestimated importance of early child development (ECD);
- Underestimated problem of political and bureaucratic incentives for program proliferation.

If Progresa were started today, the core design would be almost the same (adding more on ECD) but many operational aspects should be done differently, particularly those associated with agency issues.

Progresas-type programs have proliferated

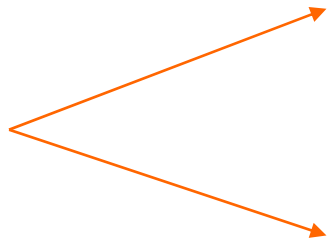
- In Latin America there are similar programs: in Brazil (Bolsa Familia), Colombia (Familias en Acción), Peru (Juntos), Honduras (Programa de Asignación Familiar) and Argentina (Familias por la Inclusión Social).

In the world as a whole there are currently over 25 such programs.

- Evaluation results are less abundant, but as in Mexico, there is a clear positive impact on reducing income-poverty, and some positive impacts on human capital.
- However, as in Mexico, the full medium term impact on the accumulation of human capital is yet to be fully determined, although results so far are positive.

6. What next

Will CCTs break the intergenerational transmission of poverty ?

- Two conditions: 
 - increase human capital
 - better income opportunities, especially more productive jobs with higher real wages
- These two conditions are related, but they are separate.
- It is critical to highlight that CCTs are not “job-creating programs”
- Unless the poor earn higher wages with their own efforts, CCTs run the risk of being a **permanent** scheme to transfer income to the poor, rather than a **temporary** investment in their human capital.

Countries operate many social programs that affect incentives in the labor market

- Progres-Oportunidades costs about 0.5% of GDP;
- However, Mexico channels fiscal subsidies worth 2% of GDP for other social protection programs for informal workers (separate from Progres-Oportunidades).

A few facts on Mexico's labor market...

- Minimum wages are not binding.
- There is large mobility of workers between the formal and the informal sector.
- Low wage workers move in and out of the formal sector more often than high wage workers.
- Wages of unskilled workers with similar characteristics and abilities are the same between the formal and the informal sector.

Distortions in labor costs

Total Costs and Benefits of Salaried and Non-Salaried Labor

	Salaried labor	Non-salaried labor
Costs to firms	$w_f + T_f$	w_i
Benefits to workers	$w_f + \beta_f T_f$	$w_i + \beta_i T_i$

There are two wedges:

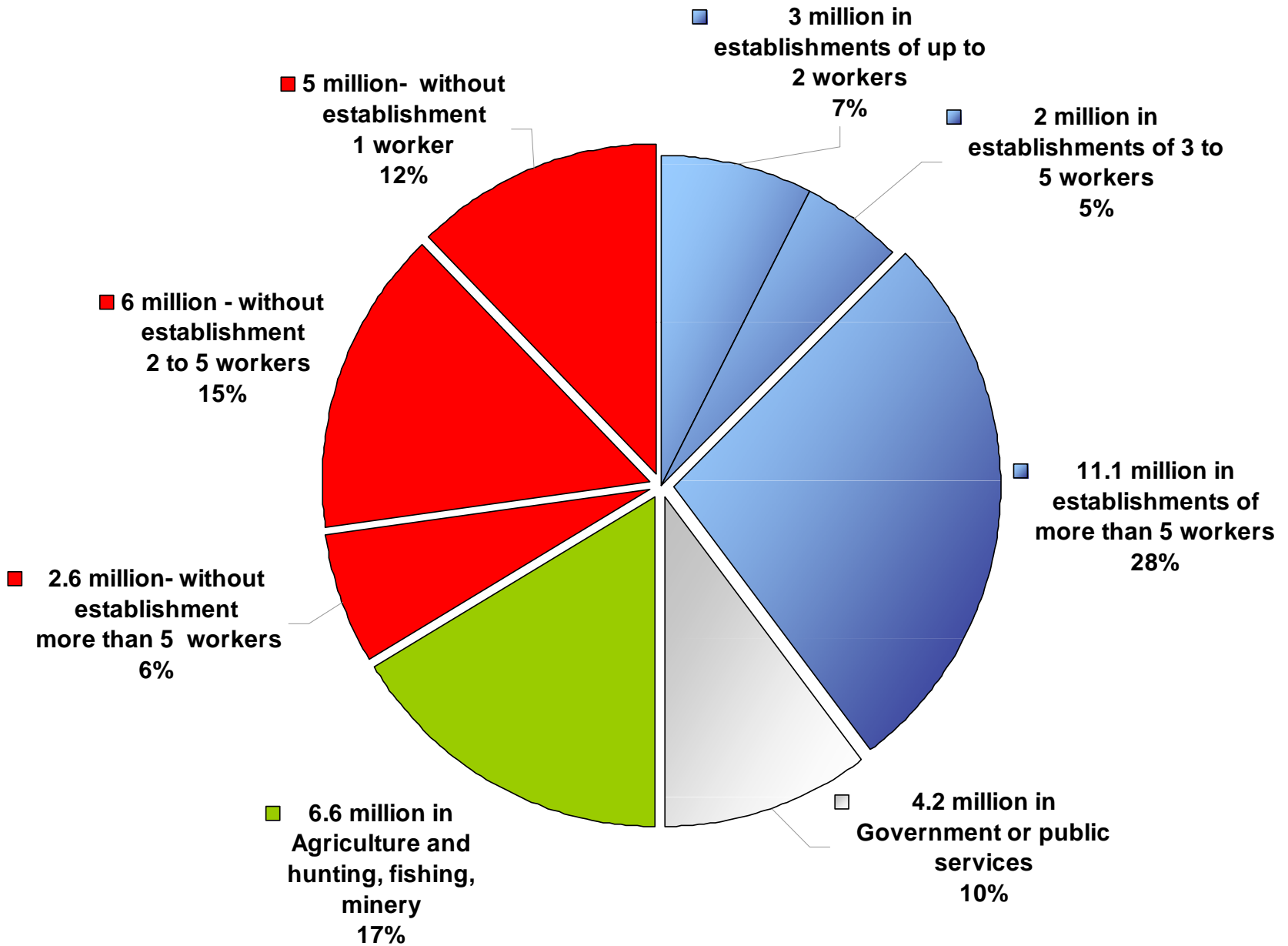
- one between the costs to firms and the benefits to workers in salaried labor; and
- one between the costs to firms and the benefits to workers in non-salaried labor.

However, both act in the same direction:

Taxing salaried employment and subsidizing non-salaried employment.
In Mexico these taxes and subsidies are higher for the poor than the non-poor.

Distribution of Mexico's Occupied Population, 2003

Total: 40.6 million.



Most poor workers should be formal, but the opposite is true; most are informal

	Formal	Informal	Total occupied
Poor	636,788	9,417,817	10,054,605
Non- poor	16,432,230	16,359,306	32,791,536
Total occupied	17,069,018	25,777,123	42,846,141
% of total	40%	60%	100%

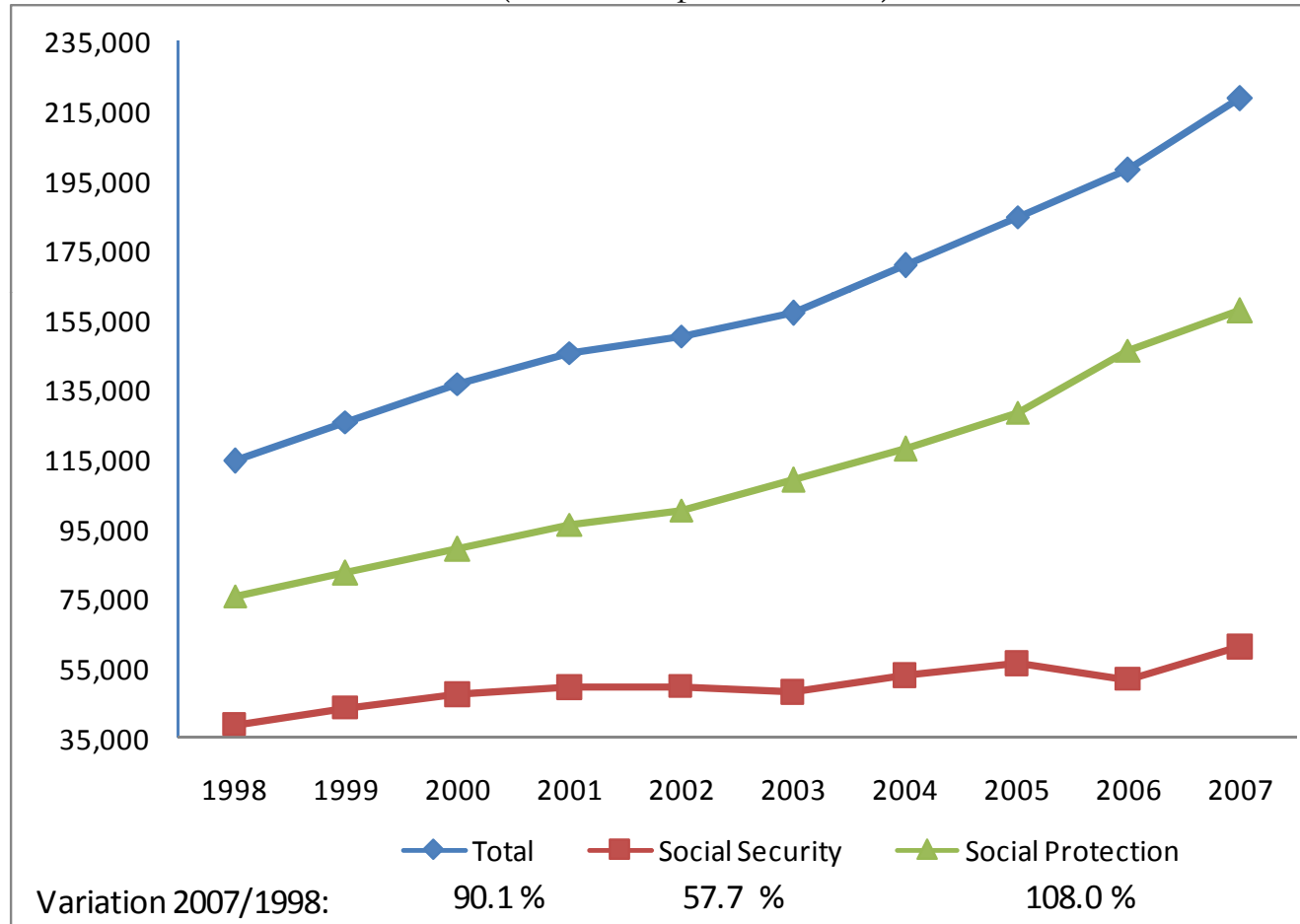
Based on ENOE, 2006 and IMSS registries.

The poor are 23% of the occupied labor force, but represent 36% of informal employment; less than 1 out of every ten poor workers is formal, but 5 out of every ten non-poor workers are formal. This paradox is explained by the distortions in the labor market associated with labor and social policies.

Resources for social programs in Mexico based on labor status

Public Resources for Social Programs, 1998-2007

(millions of pesos of 2007)



Resources for social protection exclude Progresa-Oportunidades; they are resources for workers conditional on them not having a formal job.

$$(8.11a) \quad L^P_{\tau+1} = L^P_{\tau} - R^P_{\tau} + \Delta L^P - \boxed{L^{P,NP}_{\tau} + L^{NP,P}_{\tau}}$$

$$(8.11b) \quad L^{NP}_{\tau+1} = L^{NP}_{\tau} - R^{NP}_{\tau} + \Delta L^{NP} + \boxed{L^{P,NP}_{\tau} - L^{NP,P}_{\tau}}$$

Workers' future CAPABILITIES

Progresa-Oportunidades subsidizes the demand for health and education of poor children and youngsters through high school

Workers and firms INCENTIVES

Social security and social protection programs impact firms and poor workers' choices in the labor market:

$$\beta_f^P < \beta_f^{NP}; \beta_i^P > \beta_i^{NP}$$

$$T_i^P > T_i^{NP}; T_f^P = T_f^{NP}$$

Labor Market OUTCOMES

$$U_f^P = U_i^P$$

$$U_f^{NP} = U_i^{NP}$$

but

$$MPL_f > MPL_i$$

and

$$(L_f^P/L^P) < (L_f^{NP}/L^{NP})$$

$$(8.11c) \quad L_{f\tau+1} = L_{f\tau} - R_{f\tau} + \Delta L_f - \boxed{L^{f,i}_{\tau} + L^{i,f}_{\tau}}$$

$$(8.11d) \quad L_{i\tau+1} = L_{i\tau} - R_{i\tau} + \Delta L_i + \boxed{L^{f,i}_{\tau} - L^{i,f}_{\tau}}$$

Progresa cannot fix the incentive problems created by the formal-informal dichotomy.

7. Conclusions

In conclusion

- CCT's (despite their misleading name!) are an improvement over previous efforts to channel income to the poor and to increase their human capital.
- However, there is some room for improvement in terms of design and, probably more important, in operation (or in incorporating incentives for operation as part of design).
- On the other hand, it is unlikely that CCT's by themselves can break the intergenerational transmission of poverty.

- **A critical question is whether healthier and better educated workers are going to find more productive jobs.**
- This depends on many factors, but among them the issue of informality and the role played by other non-CCT social programs in contributing to informality.
- An integral view of social programs, and of their interactions is essential; aside from focusing attention on individual programs.
- Two challenges: (i) continue detailed microeconomic work on program design and evaluation (including operation), and (ii) analyze and evaluate social strategies (not programs).

THANK YOU