Evaluating outcomes of a social pension program: Evidence from Mexico

Potential uses of ADePT to inform policy decisions

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Content: Mexico’s social pensions

I. Background

II. Non-contributory Pension Programs

III. Effects of Mexico’s social pension program

IV. Potential uses of ADcPT to inform policy decisions

V. Conclusions
I. Background on Mexico
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1 US dollar = ~20 pesos

• Gross Domestic Product, GDP (2016): US$1.1 Trillions
• GDP per capita (PPP, 2016): US$17,250
• Total population (2016): 123 millions
• Population aged 65+ (2016): 9.1 millions
• 7.4% of the population is 65 years old or older
• Population 65+ (1990): 3.7 m
  Population 65+ (2030): 14 m
• Extreme poverty rate (2014): 20.6%
  • Elderly: 21.2%
  • Non-elderly: 20.5%
• Informality rate > 50%
I. Background on Mexico

• **Demographic transition**: large increase in the elderly population → pressure on public expenditure

  *Major reforms of contributory pension systems: 1997 & 2007*

• **Elderly population is more vulnerable** than the rest of the population (higher poverty, disability, and morbidity rates)

• **Low coverage of contributory pensions**, particularly for the poor and for certain groups (rural, female, and indigenous population)
I. Background on Mexico

- Historically low coverage rate of contributory pensions

**Coverage of Contributory Pensions, Mexico 1990-2010**

- The majority of the elderly (65+) do **not** qualify for a contributory pension
- Coverage of contributory pensions is growing… but very slowly
I. Background on Mexico

- Contributory pension coverage is biased towards high-income old-age population

Contributory pension coverage rate, 2014

Source: Mexico’s National Income and Expenditure Survey (ENIGH), National Institute of Statistics and Geography (INEGI).
I. Background on Mexico

- Contributory pension coverage is different for certain groups

In 2014, less than 5% of the indigenous population living in rural areas had a contributory pension.

Source: Mexico’s National Income and Expenditure Survey (ENIGH), National Institute of Statistics and Geography (INEGI).
II. Non-contributory Pension Programs in Mexico
II. A few reasons to consider social pensions

• To close the coverage gap of the contributory pension system

• To address old age poverty

• To provide social protection for a population who may face higher vulnerability to sickness and disability

• To comply with the Universal Declaration of Human Rights

• Political motivation?
II. Brief history of Social Pensions in Mexico

2001: Nutritional Pension Program for the Elderly by the Government of Mexico City (Subnational social pension program)
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2019: ?
II. PAM’s design and its expansion

• **Monthly benefit of $30 dollars** paid every two months
  • 15% of average monthly current per capita income

• One-time payment of $60 dollars to a representative when the elderly beneficiary passes away

• Social inclusion and community participation benefits

• Started in 2007 restricted to people 70 years old or older in villages with less than 2,500 inhabitants
  • Eligibility rules and other characteristics of the program have changed over time

• In 2013, the program’s eligibility rules were drastically changed to include people 65 years old or older that did not have a monthly contributory pension of at least $55 dollars
II. Pension program for the elderly (PAM)


- PAM Beneficiaries
- PAM Budget

Expansion of the program
III. Evaluating impacts of non-contributory pensions programs
III. Previous evidence of impacts of PAM

Evidence of PAM for the 70+ living in rural or semi-rural villages

- **Consumption**: 22% increase in household consumption

- **Health**: Mental health of the elderly significantly improved (score on the Geriatric Depression Scale decreased 12%)

- **Labor force participation/work**:
  - Individuals changed from doing paid work to work in family business (~20%)
  - Reduction in labor force participation of male beneficiaries (allowing retirement)
  - No effect on labor force participation of prime-age individuals
  - No indirect impacts on earnings or savings of future program participants

- **Private transfers**: crowding out effect on private transfers from other households

  Gertler, Galiani and Bando. 2014.
  Juarez and Pfitze. 2015.
  Juarez and Amuedo-Dorantes. 2015.
III. Evaluation questions

PAM for the 65+ (national level)

• What are the effects of the expansion of PAM in extreme poverty and labor supply of the elderly?

• What are the potential transmission channels for the impacts?
III. Data and methodology (overview)

- Mexico’s National Survey of Income and Expenditure (ENIGH) 2010, 2012 and 2014
  - Did not spend resources on specific evaluation surveys
  - Exploited national household survey that can be used in ADePT

- The assignment mechanism to PAM was *not* random

- Exogenous variation in the eligibility criteria (minimum eligibility age from 70 to 65 years old)

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<tr>
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<th>Eligible</th>
<th>Newly Eligible <em>(Treatment)</em></th>
<th>Ineligible <em>(Control)</em></th>
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<tbody>
<tr>
<td>Age</td>
<td>70 +</td>
<td>65 - 69</td>
<td>61 - 64</td>
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- Combined impact evaluation methods: difference-in-differences & regression discontinuity design
III. Answers to the evaluation questions

PAM for the 65+ (national level)

• PAM reduced extreme poverty of the elderly in Mexico:
  • Reduced official multi-dimensional poverty incidence by 13.5 pp
  • Reduced extreme monetary poverty by 11.5 pp
  • Reduced the extreme poverty gap and poverty severity indexes
  • The poverty reducing effects are generalizable to all members of the PAM beneficiary household

• No negative impacts on labor supply (labor force participation or hours worked) or earnings of the elderly

• No effects on private transfers (domestic or international)
IV. Potential uses of ADePT to inform policy decisions
IV. Potential uses of ADePT to inform policy choices

• Poverty diagnosis

• Who is effectively receiving benefits from PAM and other social protection and labor programs?
  • Disaggregation by different characteristics (e.g. profiling)

• Cost-effectiveness for poverty reduction

• What are the redistributive effects of PAM and other social protection and labor programs?

→ Data from ASPIRE generated using ADePT is comparable across countries
V. Conclusions
V. Conclusions

• Social pensions have demonstrated in Mexico (and in other countries) to be effective interventions to improve the wellbeing of the elderly and other members of their household.

• Adjustments to the design of Mexico’s social pension program may be needed to take into consideration the incentives and interactions of contributory and non-contributory systems.

• Policy choices are complex and are often constrained by many different factors, including budget and political considerations.

• National surveys are a powerful input that when exploited can inform policy choices (ADePT can simplify data exploitation).
References


Gracias!