Pensions and Elderly Assistance in Mexico: Using Micro-Data to Assess Development Impacts

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

• Gross Domestic Product, GDP (2018): US$1.2 Trillions
• GDP per cápita (PPP, 2018): US$18,102
• Total population (2019): 126.6 millions
• Population aged 65+ (2019): 9.4 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 (2018): 16.8%
  • Elderly: 19.1%
  • Non-elderly: 16.6%
• Informality rate > 50%
I. Background on Mexico

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

![Graphs showing extreme poverty rate, disability rate, and health issues by age groups](image)
I. Background on Mexico

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

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Elderly Dependency Ratio, 1950-2030

Demographic Transition, 1950-2030

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Gross mortality rate  Gross birth rate  Population (millions)
II. Contributory Pensions
Concepts: balancing sustainability, coverage and adequacy

Coverage
Benefit
Adequacy

Fiscal Sustainability
II. Contributory Pensions

Major reforms in 1997 and 2007 to improve the fiscal sustainability of the pension system:

Pay as-you-go defined benefit → Defined contribution

Lower generosity

Higher requirements to qualify:
Lower coverage

Panel A. Old private-sector DB system for various contribution periods, %

Panel B. Gross replacement rates in the new private-sector DC system for a full-career worker depending on financial returns, %

Source: OECD, 2015.
II. Contributory Pensions

- Historically low coverage rate of contributory pensions

The majority of the elderly (65+) do **not** qualify for a contributory pension.

Coverage of contributory pensions is growing… but very slowly.

Note: For 2018 we consider the results from Mexico’s National Income and Expenditure Survey (ENIGH), National Institute of Statistics and Geography (INEGI).
II. Contributory Pensions

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

Source: Mexico's National Income and Expenditure Survey (ENIGH), National Institute of Statistics and Geography (INEGI).
II. Contributory Pensions

• Contributory pension coverage is different for certain groups

In 2018, 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).
III. Non-Contributory Pension Programs in Mexico
III. 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?
III. Non-Contributory Pension Programs

2001: Nutritional Pension Program for the Elderly by the Government of Mexico City (Subnational social pension program)
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2019: Expansion of the Pension program for the elderly: Universal coverage to people with 68 years of age or older
III. Pension program for the elderly (PAM)


- PAM Beneficiaries
- PAM Budget

Expansion of the program
IV. Evaluating impacts of non-contributory pension program
IV. 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 Pfutze. 2015.
Juarez and Amuedo-Dorantes. 2015.
IV. 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?
IV. 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

- 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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<thead>
<tr>
<th></th>
<th>Eligible</th>
<th>Newly Eligible (Treatment)</th>
<th>Ineligible (Control)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age</td>
<td>70 +</td>
<td>65 - 69</td>
<td>61 - 64</td>
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- Impact evaluation method: difference-in-differences
IV. Empirical strategy

PPAM effect on extreme poverty
IV. 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)
V. Conclusions and Considerations
V. Tradeoffs and considerations for social pension programs

- Coverage, benefit adequacy and fiscal sustainability

- Many different options:
  - Universal vs targeted?
    - Targeted: Geographic area? Means-tested? Pension-tested? Other characteristics?
  - Eligible age?
  - As an existing social assistance program? As part of the social security program?
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

• The decision to implement a program should be based on a diagnosis and on the policy objective

• National surveys are a powerful input that when exploited can inform policy choices

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


https://www.journals.uchicago.edu/doi/10.1086/681668
Thank you!