



WORLD BANK GROUP

Social Protection & Jobs

SOCIAL PROTECTION AND JOBS

**2019 CORE
COURSES**

OCT. 28–NOV. 8 | WASHINGTON DC



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

Clemente Avila

Social Protection Economist

Content

I. Background

II. Contributory Pensions

III. Non-Contributory Pension Programs

IV. Effects of Mexico's Social Pension Program

V. Conclusions



WORLD BANK GROUP

Social Protection & Jobs

I. Background on Mexico

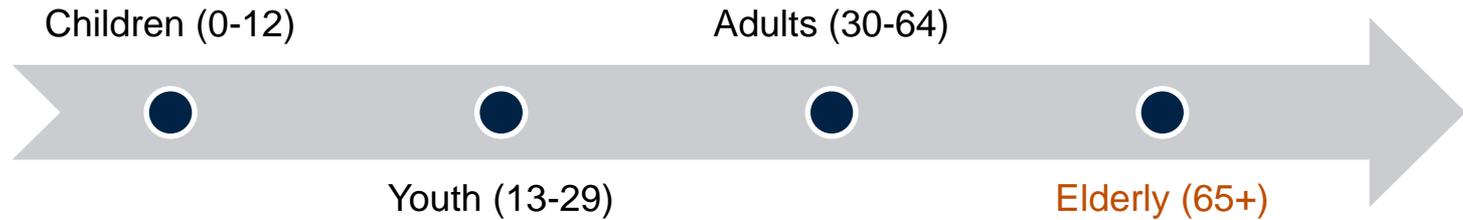
I. Background on Mexico

1 US dollar = ~20 pesos

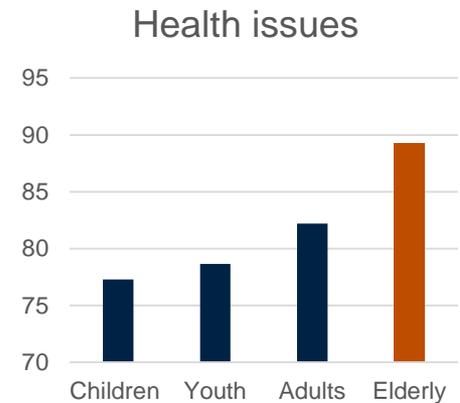
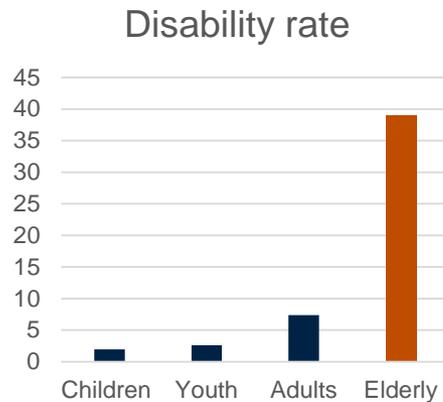
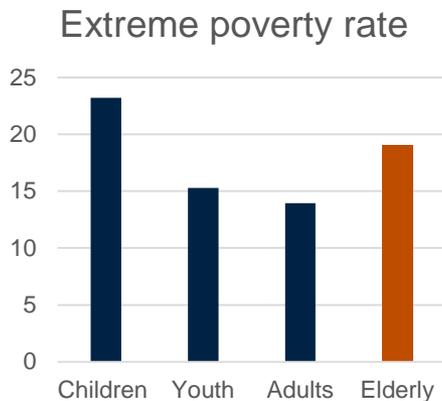
- Gross Domestic Product, GDP (2018): US\$1.2 Trillions
- GDP per cápita (PPP, 2018): US\$18,102
- Total population (2019): 126.6 millions
- Population aged 65+ (2019): 9.4 millions
- 7.4% of the population is 65 years old or older
- Population 65+ (1990): 3.7 m
Population 65+ (2030): 14 m
- Extreme poverty rate (2018): 16.8%
 - Elderly: 19.1%
 - Non-elderly: 16.6%
- Informality rate > 50%



I. Background on Mexico



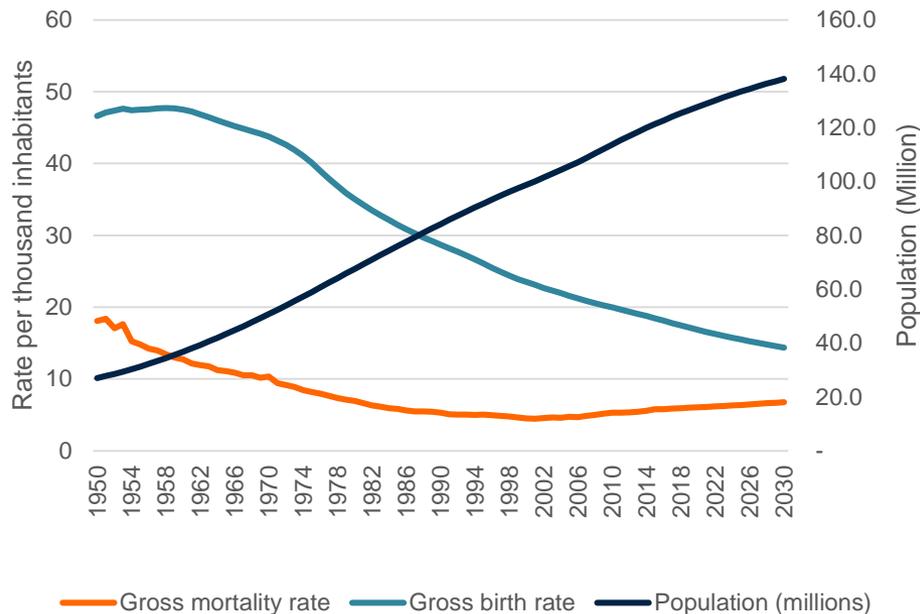
- **Elderly population is more vulnerable** than the rest of the population (higher poverty, disability, and morbidity rates)



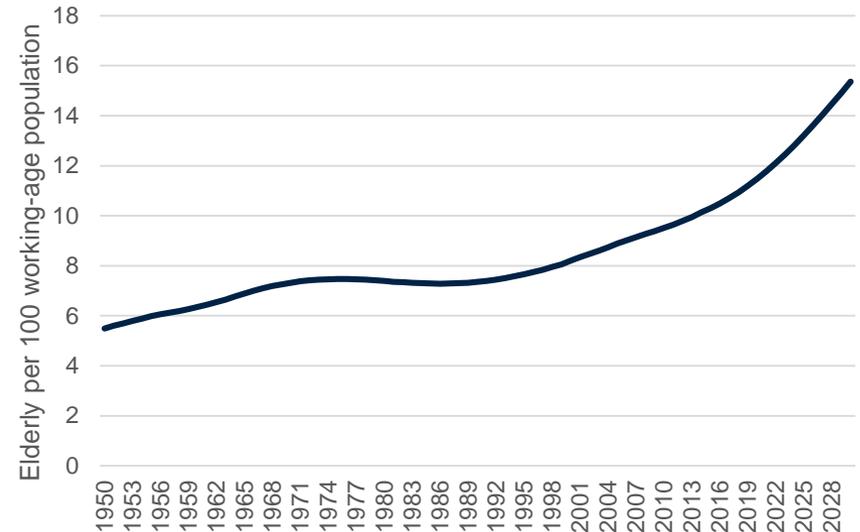
I. Background on Mexico

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

Demographic Transition, 1950-2030



Elderly Dependency Ratio, 1950-2030



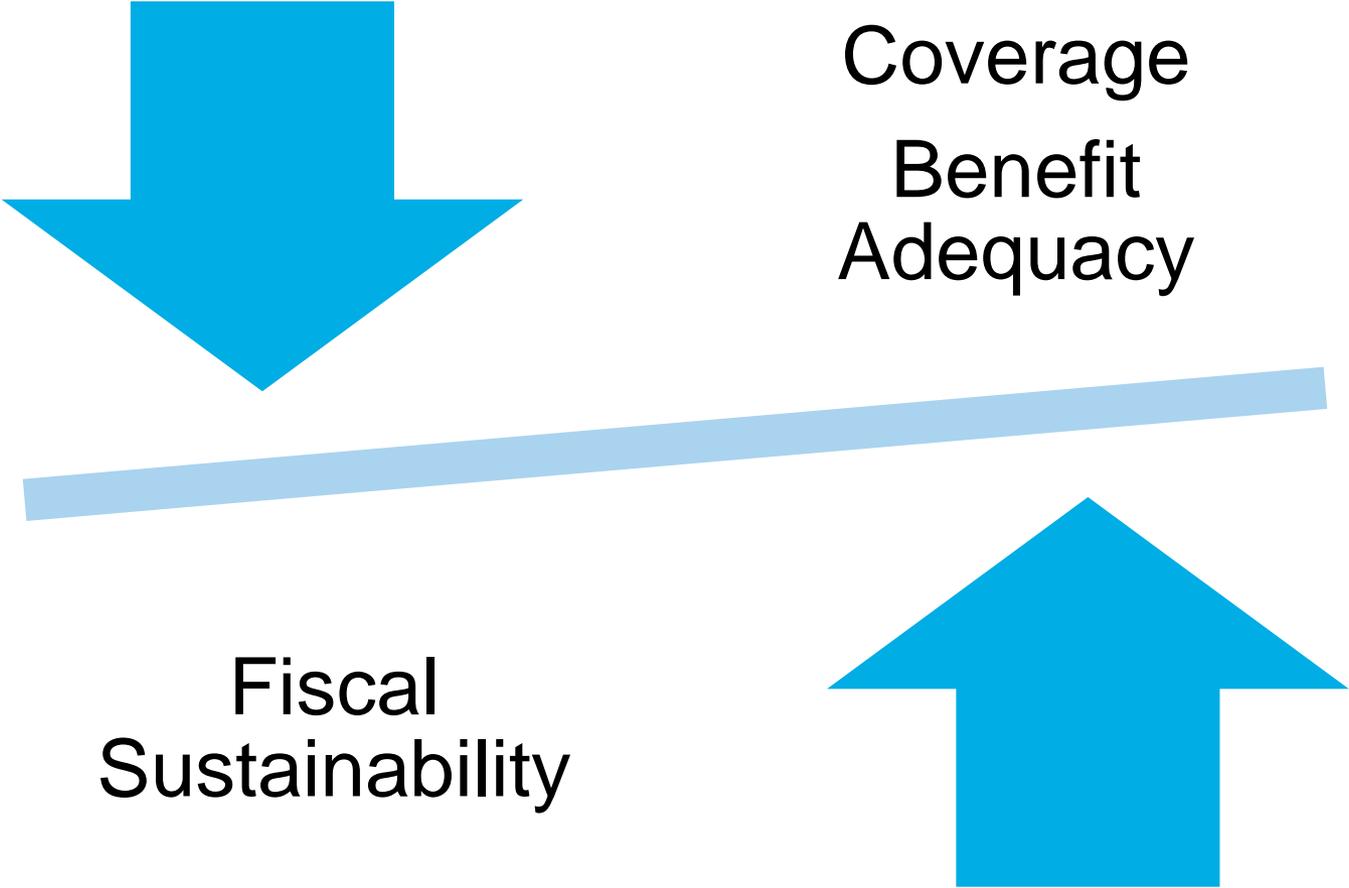


WORLD BANK GROUP

Social Protection & Jobs

II. Contributory Pensions

Concepts: balancing sustainability, coverage and adequacy



II. Contributory Pensions

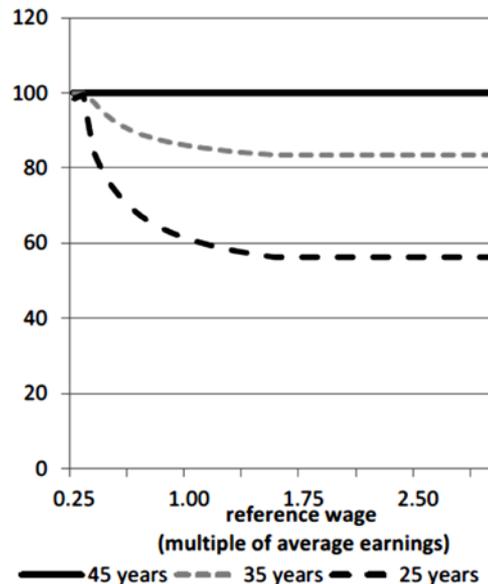
Major reforms in 1997 and 2007 to improve the **fiscal sustainability** of the pension system:

Pay as-you-go defined benefit → Defined contribution

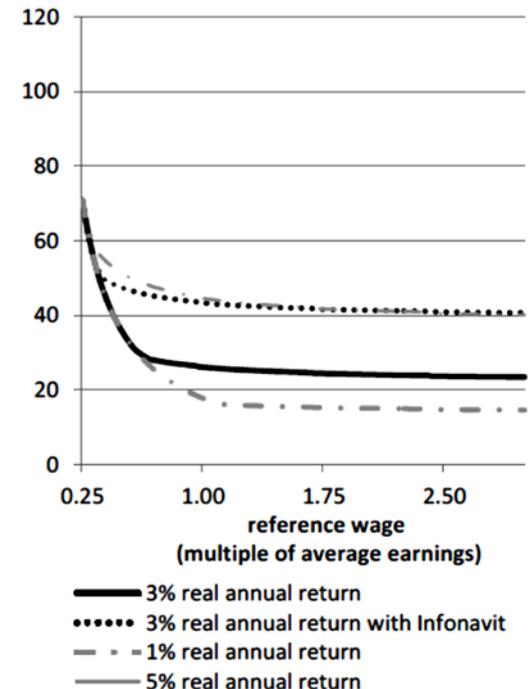
Lower generosity

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. %

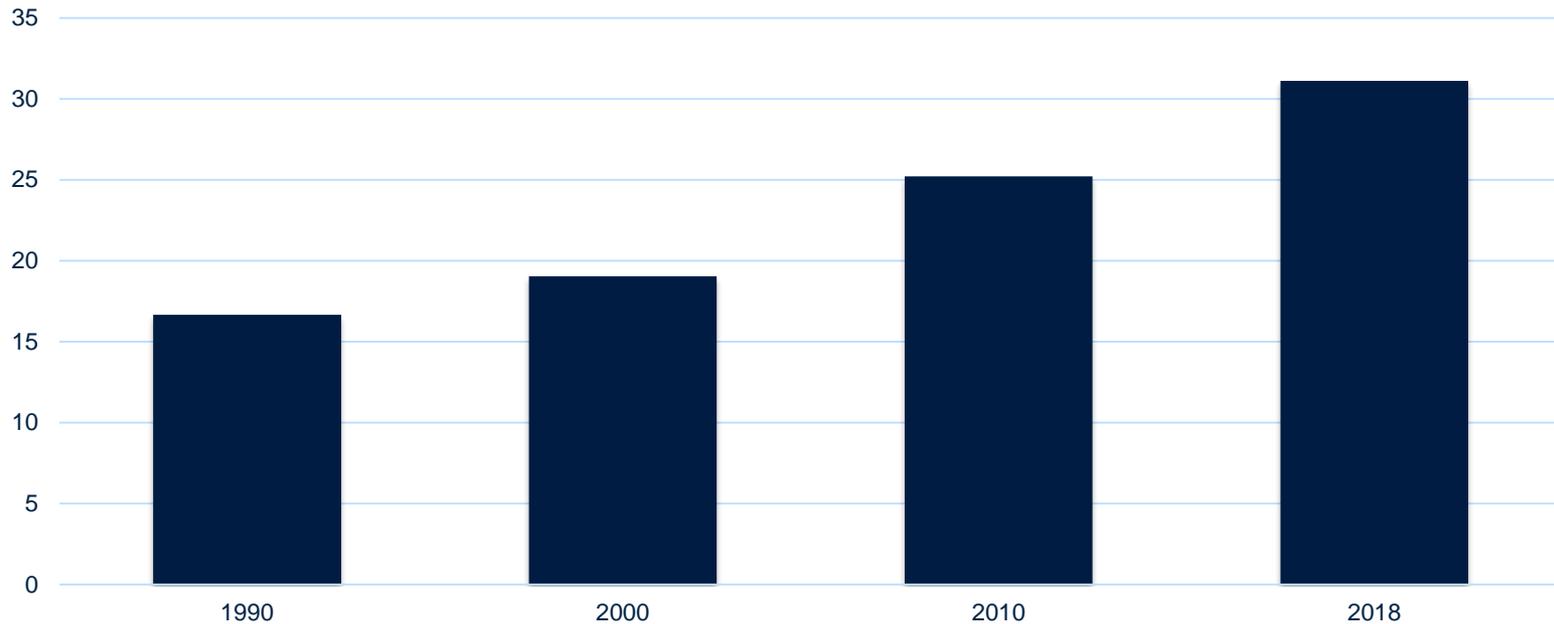


Source: OECD, 2015.

II. Contributory Pensions

- Historically low coverage rate of contributory pensions

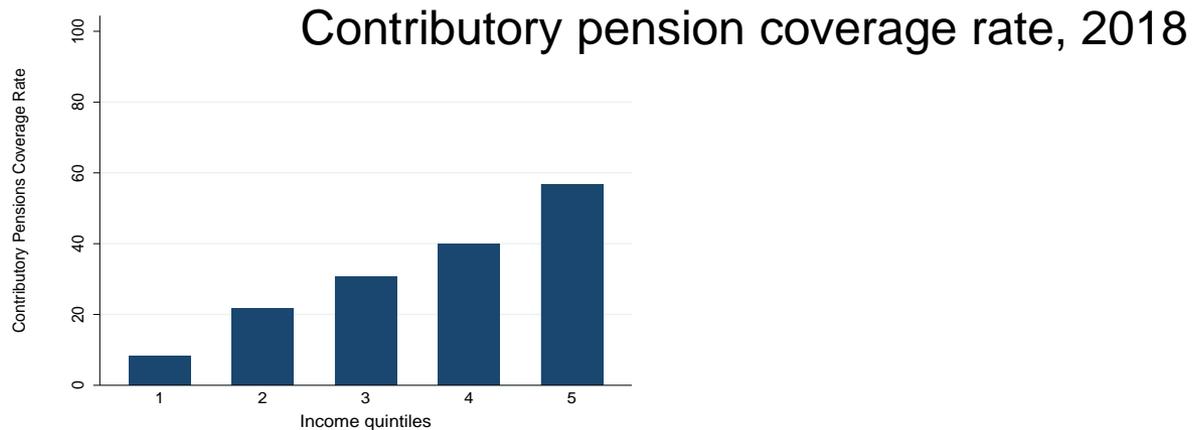
Coverage of Contributory Pensions, Mexico 1990-2018



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

II. Contributory Pensions

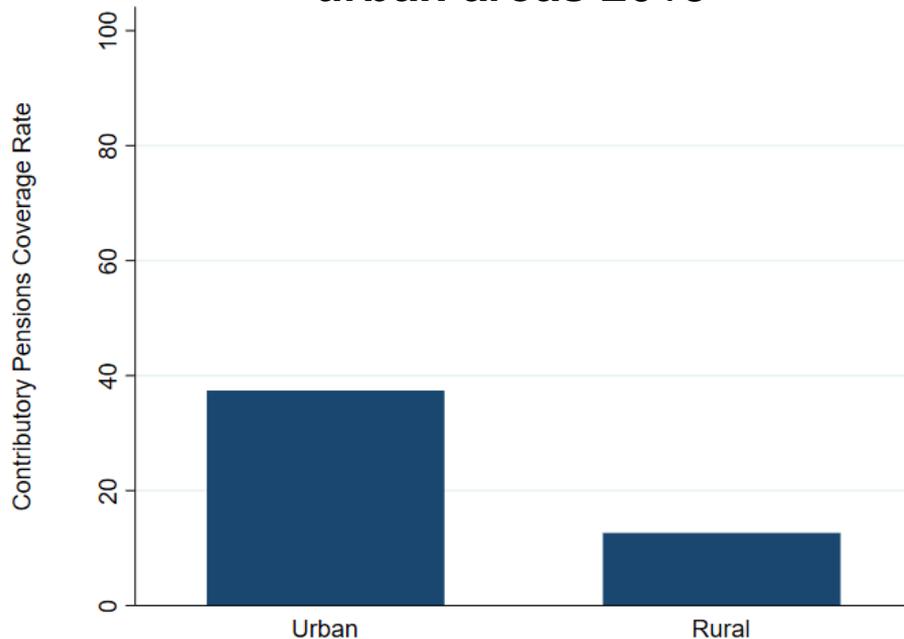
- Contributory pension coverage is biased towards high-income old-age population



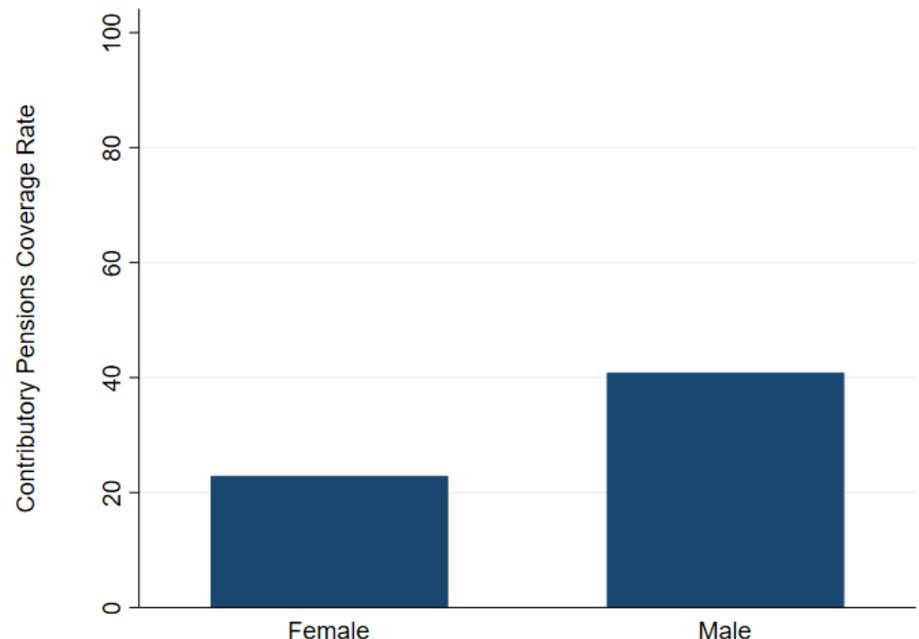
II. Contributory Pensions

- Contributory pension coverage is different for certain groups

Contributory pension coverage rate, **rural and urban areas** 2018



Contributory pension coverage rate, **by sex** 2018



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

- In 2018, **less than 5%** of the **indigenous population** living in rural areas had a contributory pension





WORLD BANK GROUP

Social Protection & Jobs

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)

III. Non-Contributory Pension Programs

2001: Nutritional Pension Program for the Elderly by the Government of Mexico City (Subnational social pension program)

2003: Care for the Elderly in Rural Areas (National accord to support development of rural areas)

III. Non-Contributory Pension Programs

2001: Nutritional Pension Program for the Elderly by the Government of Mexico City (Subnational social pension program)

2003: Care for the Elderly in Rural Areas (National accord to support development of rural areas)

2006: Elderly component (70+) in the Conditional Cash Transfer Program

III. Non-Contributory Pension Programs

2001: Nutritional Pension Program for the Elderly by the Government of Mexico City (Subnational social pension program)

2003: Care for the Elderly in Rural Areas (National accord to support development of rural areas)

2006: Elderly component (70+) in the Conditional Cash Transfer Program

2007: Pension program for the elderly in rural areas (PAM, previously *70 y mas*)

III. Non-Contributory Pension Programs

2001: Nutritional Pension Program for the Elderly by the Government of Mexico City (Subnational social pension program)

2003: Care for the Elderly in Rural Areas (National accord to support development of rural areas)

2006: Elderly component (70+) in the Conditional Cash Transfer Program

2007: Pension program for the elderly in rural areas (PAM, previously *70 y mas*)

2013: Expansion - Pension program for the elderly: National coverage, expanded to people with 65+, pensions-tested

III. Non-Contributory Pension Programs

2001: Nutritional Pension Program for the Elderly by the Government of Mexico City (Subnational social pension program)

2003: Care for the Elderly in Rural Areas (National accord to support development of rural areas)

2006: Elderly component (70+) in the Conditional Cash Transfer Program

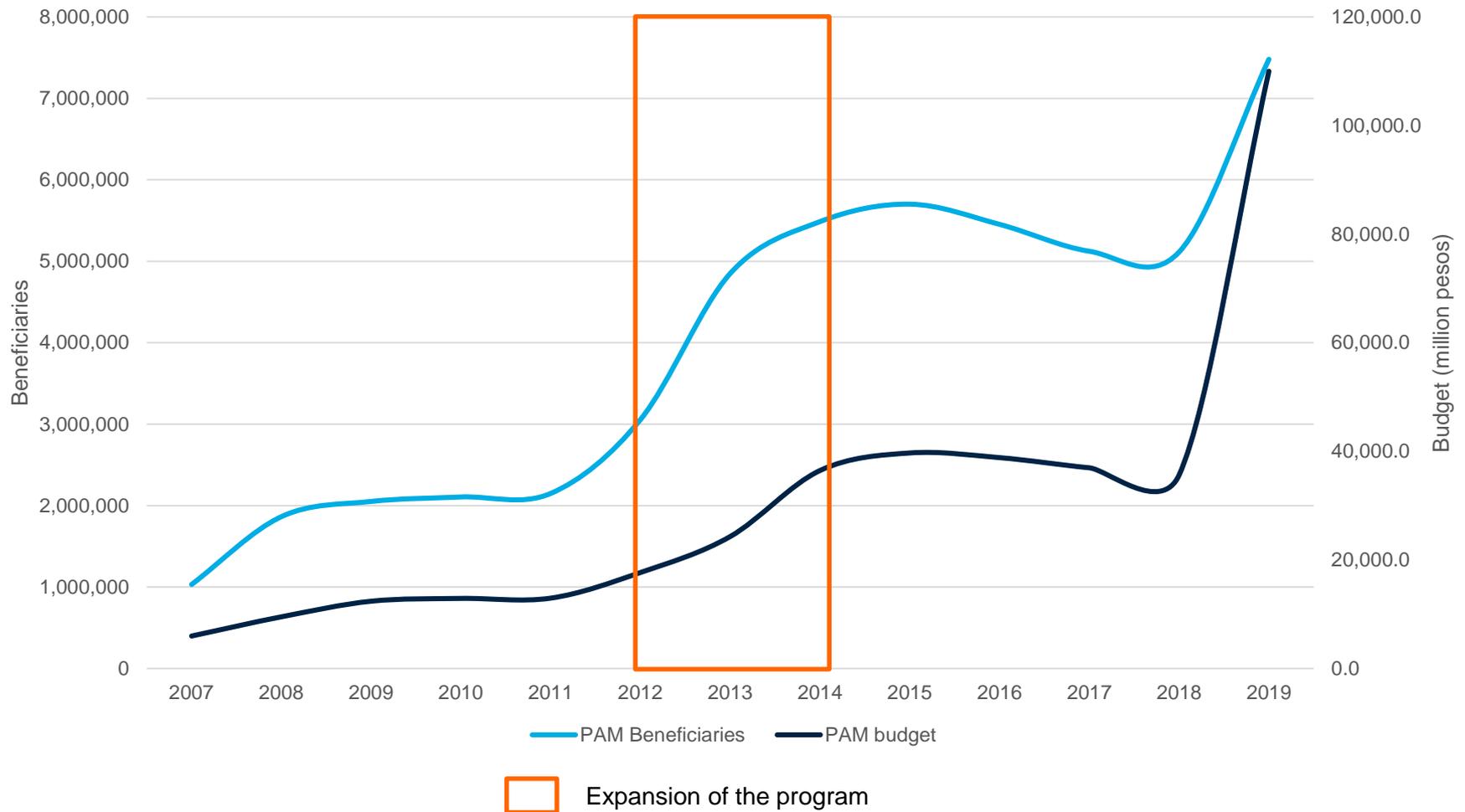
2007: Pension program for the elderly in rural areas (PAM, previously *70 y mas*)

2013: Expansion - Pension program for the elderly: National coverage, expanded to people with 65+, pensions-tested

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)

Budget and Coverage of Social Pensions, 2007-2019





WORLD BANK GROUP

Social Protection & Jobs

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?

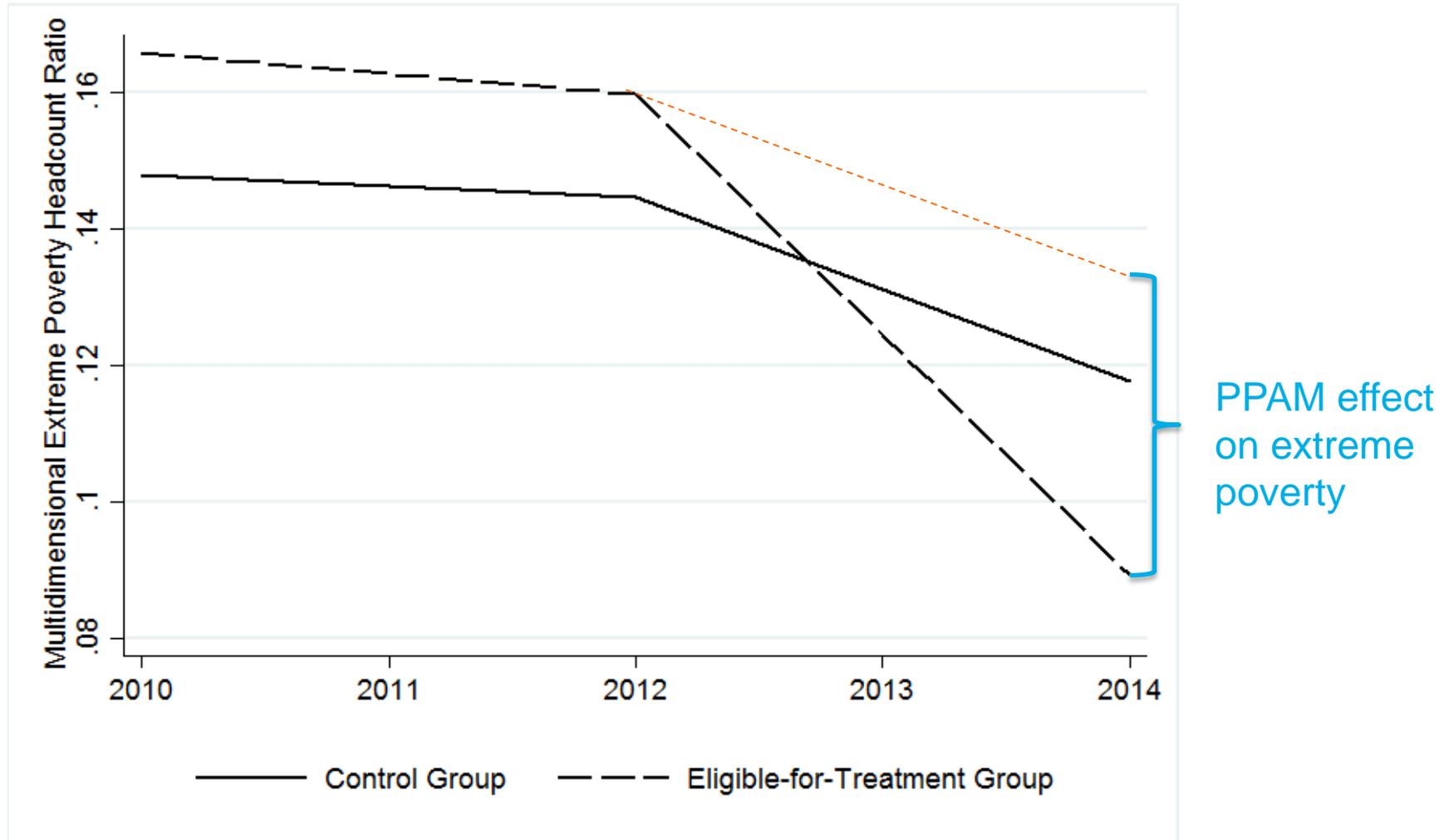
IV. Data and methodology (overview)

- 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)

	Eligible	Newly Eligible (Treatment)	Ineligible (Control)
Age	70 +	65 - 69	61 - 64

- 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)



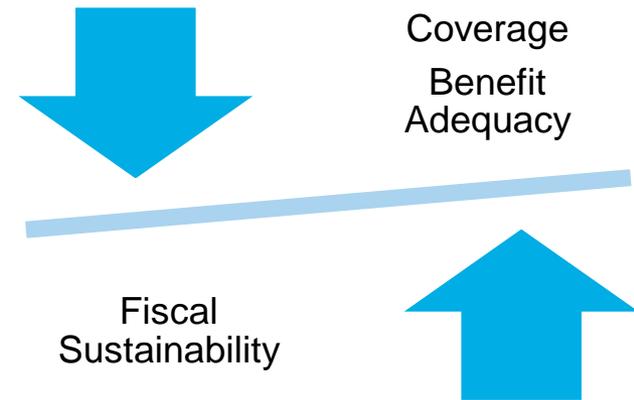
WORLD BANK GROUP

Social Protection & Jobs

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

Avila-Parra, Clemente; Escamilla-Guerrero, David. 2017. What Are the Effects of Expanding a Social Pension Program on Extreme Poverty and Labor Supply?: Evidence from Mexico's Pension Program for the Elderly. Policy Research Working Paper; No. 8229. World Bank, Washington, DC. <https://openknowledge.worldbank.org/handle/10986/28614>

Galiani, Sebastian; Gertler, Paul; Bando, Rosangela. 2016. Non-contributory pensions, Labour Economics. <https://www.sciencedirect.com/science/article/abs/pii/S0927537115001219>

Juarez, Laura; Amuedo-Dorantes, Catalina. 2018. Old-Age Government Transfers and the Crowding Out of Private Gifts: The 70 Plus Program for the Rural Elderly in Mexico.

Juarez, Laura; Pfutze, Tobias. 2015. The Effects of a Non-Contributory Pension Program on Labor Force Participation: The Case of 70 y Mas in Mexico. Economic Development and Cultural Change, Vol. 63, No. 4, pages 685-713

<https://www.journals.uchicago.edu/doi/10.1086/681668>



WORLD BANK GROUP

Social Protection & Jobs

Thank you!

