



Pension Indicators for Latin America and the Caribbean

Spanish pension system indicators

- Coverage: close to 100%
- 70-80% replacement rate for the average worker
- Pension expenditure around 10% GDP (40% of Government spending)
- Fiscal Rule to index pension below inflation

Pensions in Spain



Background

- Need of data to have a meaningful debate about pensions in the region.
- Current pension indicators are dispersed, usually not comparable due to methodological differences and/or different sources of data.

The project

Need	To fill the data gap by constructing a comparable and comprehensive set of pension indicators
Objectives	<ol style="list-style-type: none">1. Create a conceptual framework to guide what type of data is needed and how to structure it2. Identify what information is missing and create a platform to share and update the data
Sources	<ul style="list-style-type: none">• Social Protection Longitudinal Surveys (SPLS or ELPS)• IDB's Labor Markets and Social Security Information System (SIMS)• Ministries of Finance, regulators and official data

The IDB has been part of the region's efforts



Red**PLAC**
RED DE PENSIONES EN
AMÉRICA LATINA Y EL CARIBE



Structure of the project

IDB Team: Led originally by Solange Bernstein and then by Mariano Bosch; with Waldo Tapia, Carolina Felix, Manuel Garcia and Alvaro Altamirano

Advisory Board: Nicholas Barr, Richard Jackson and Tapen Sinha

Country Participants: 15 countries of the PLAC Network

Partners: AIOS — CAPS — CISS — FIAP — OISS

Consultants: Rodrigo Cerda and Ramon Delpiano

Executing Agency: CISS (Laura Gutiérrez)

Comprehensive indicators covering DB and DC pension systems of 15 countries of the region.

Main takeaways

- This is not the end. This is the end of the beginning.
- Positive:
 - ✓ Manage to provide a **conceptual framework**
 - ✓ Gather probably the **largest pension dataset** in the region with new proved novel indicators.
 - ✓ Get **countries and institutions involved**
- Still a lot of work to be done
 - ✗ We were **unable to collect all data** (particularly difficult fiscal/actuarial data)
 - ✗ We need to think who to **project** key indicators

Scope: Five Dimensions

Environment

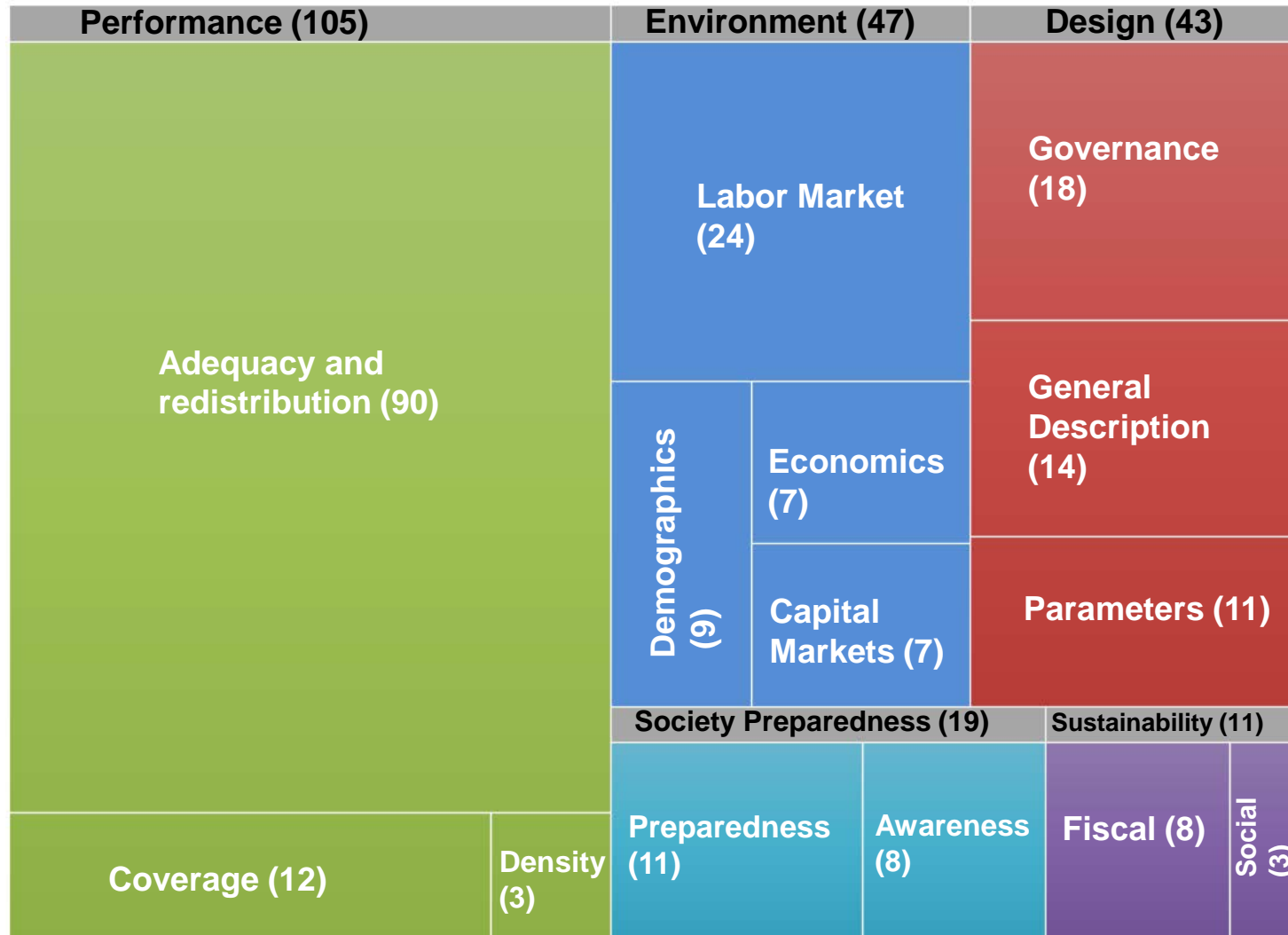
Design

Performance

Sustainability

Society Preparedness for Aging and Reform

Content: 225 Indicators



Environment

Information on the **context** and the main trends affecting the pension system; such as macroeconomic performance, demographics as well as labor and capital markets

Demographics:

- Fertility rate
- Life expectancy at birth
- Life expectancy at 60
- Life expectancy at 80
- Dependency ratio

Economics:

- GDP per capita
- GDP growth
- Inflation rate
- National savings rate

Labor Market:

- Labor force participation
- Youth labor participation
- Prime-age labor participation
- Old-age labor participation
- Informal labor

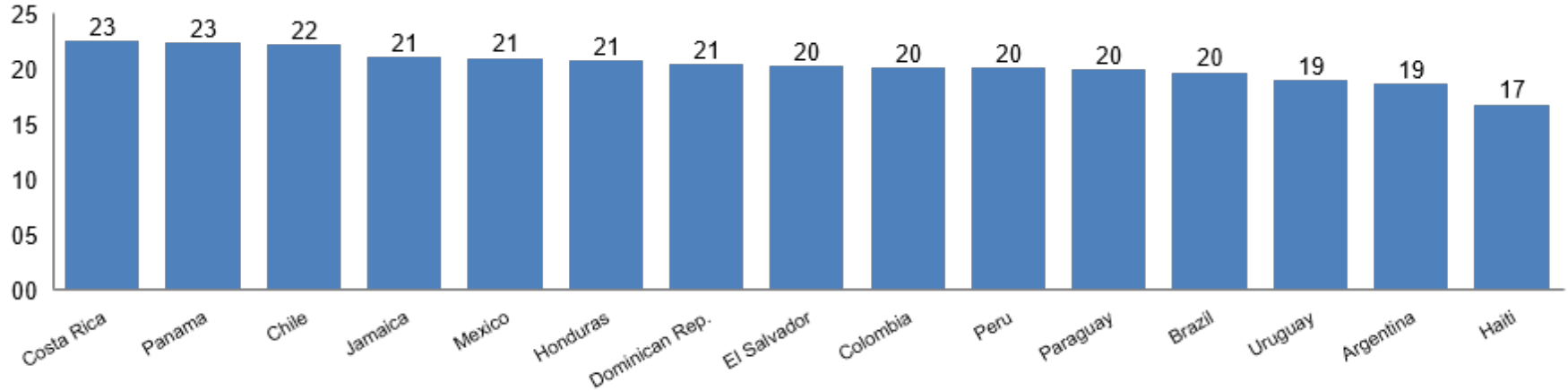
Capital Markets:

- Domestic credit by banks
- Deposits to GDP ratio
- Insurance assets to GDP
- Stock market capitalization
- Pension fund assets to GDP

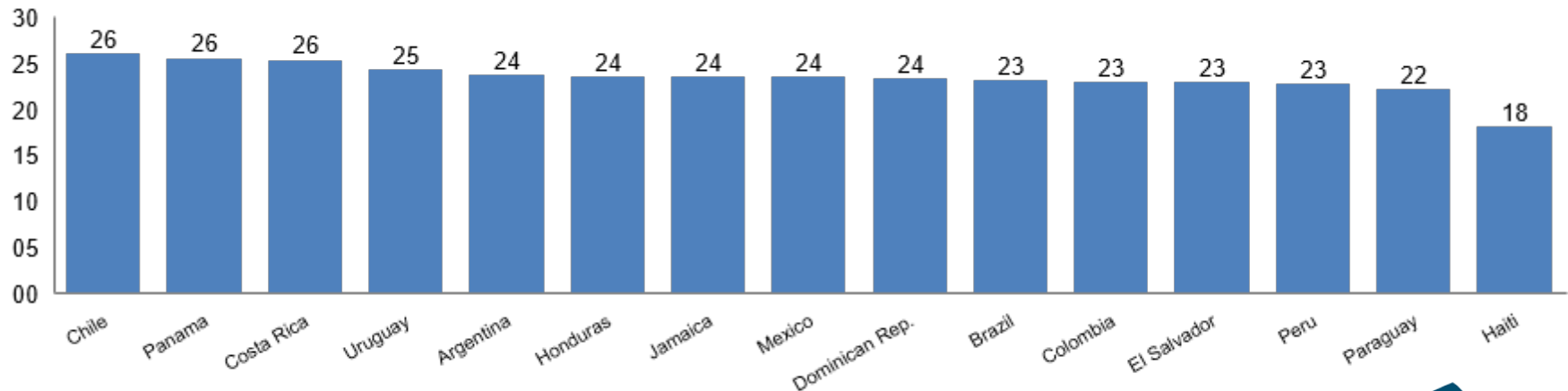
Environment

Life expectancy at 60 (in years)

Men

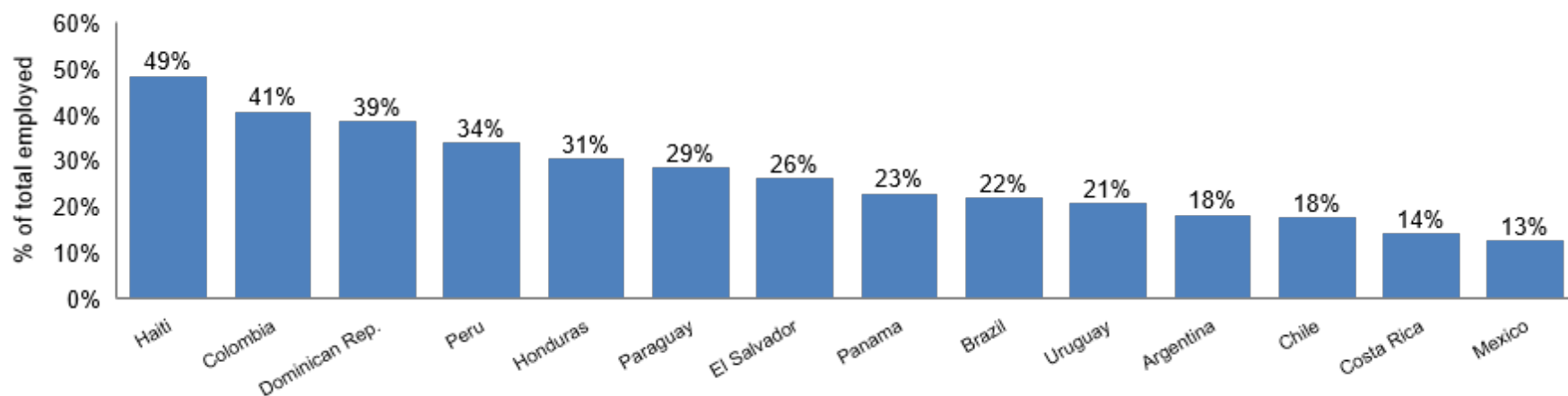


Women

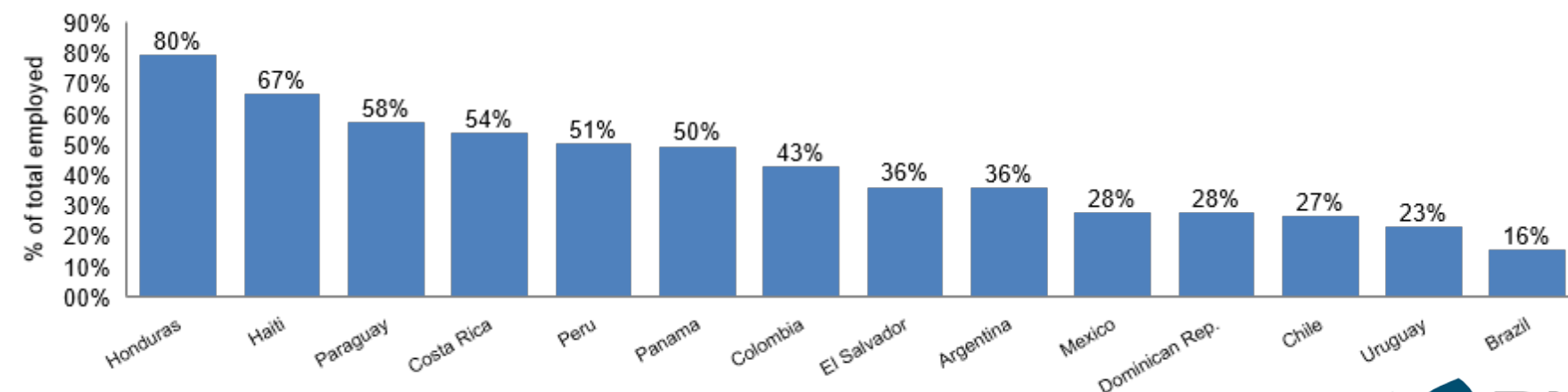


Environment

Self-employed, total



Workers at or under minimum wage



Design

Indicators describing **general characteristics** of the system, as well as information on relevant parameters, such as contribution rates, legal retirement age and vesting periods

General description:

- PAYG and Fully-Funded systems
- Voluntary savings
- Special pensions
- Tax incentives for savings

Parameters:

- Contribution rates
- Retirement age
- Wage ceilings
- Indexation rules
- Contribution requirements

Governance:

- Multi-Funds
- Equity
- Investments abroad
- Foreign investments
- Fees for fund management

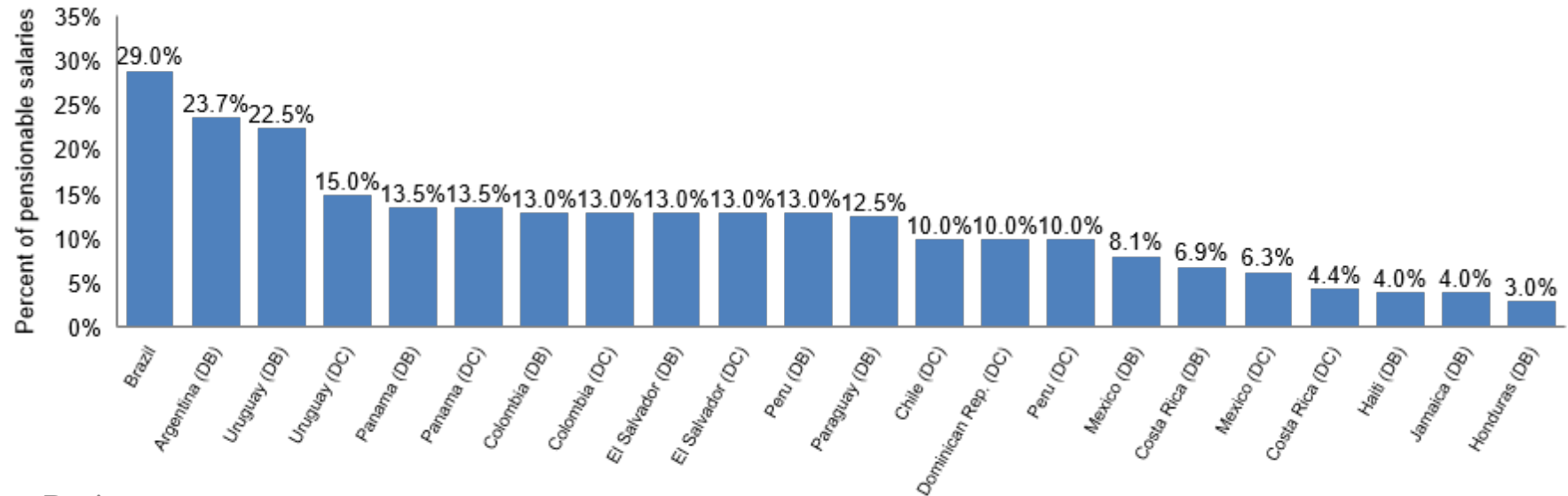
Design

Countries	Provision		Scheme type		
	Public	Private	Single	Mix integrated	Mix competitive
Antigua and Barbuda	DB		x		
Argentina	DB		x		
Bahamas	DB		x		
Barbados	DB		x		
Belize	DB		x		
Bolivia		DC	x		
Brazil	DB		x		
Chile		DC	x		
Colombia	DB	DC			x
Costa Rica	DB	DC		x	
Ecuador	DB		x		
El Salvador	DB (closed)	DC	x		
Guatemala	DB		x		
Guyana	DB		x		
Haiti	DB		x		
Honduras	DB		x		
Jamaica	DB		x		
Mexico	DB (closed)	DC	x		
Nicaragua	DB		x		
Panama	DB	DC		x	
Paraguay	DB		x		
Peru	DB	DC			x
Dominican Republic		DC	x		
Surinam	DB		x		
Trinidad and Tobago	DB		x		
Uruguay	DB	DC		x	
Venezuela	DB				

Source: own, using official information.

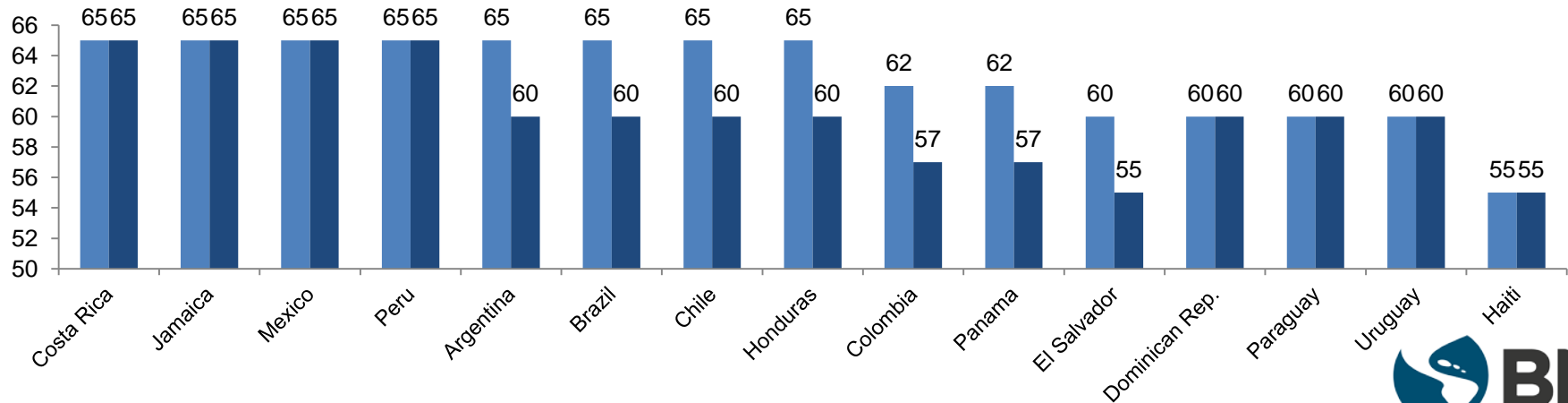
Design

Average total contribution rates (Employer + Employee)



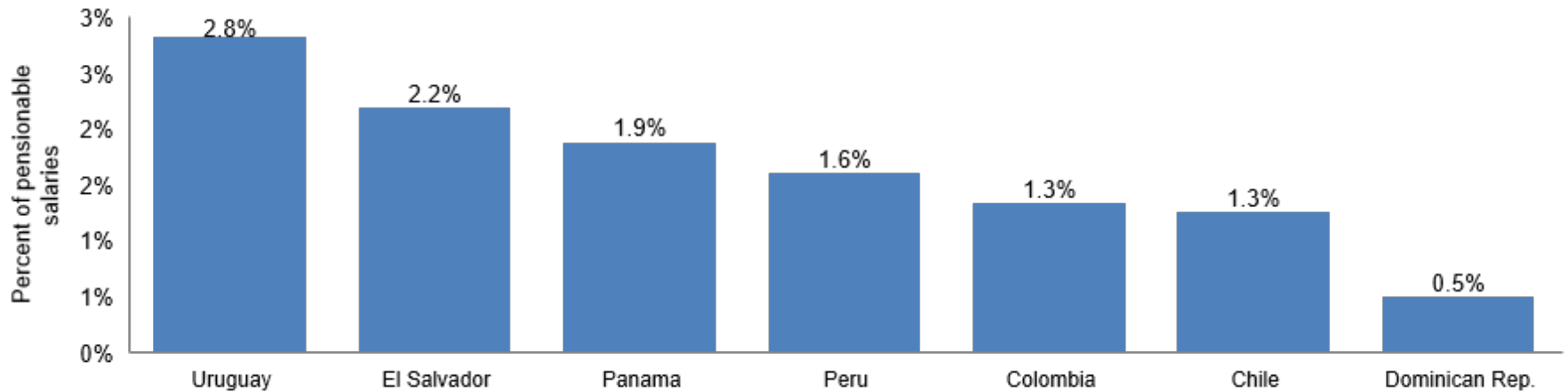
Retirement age

■ Men ■ Women

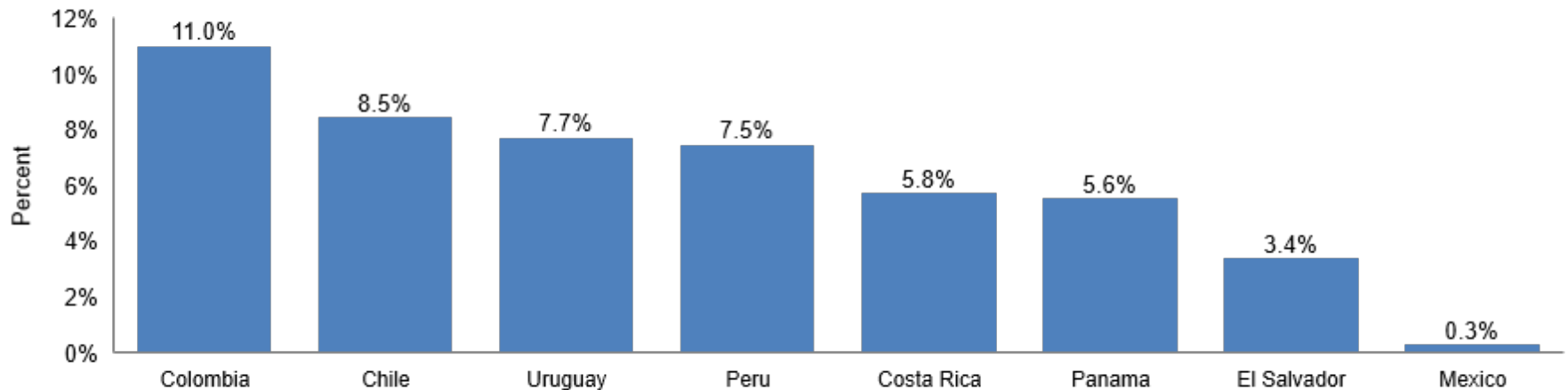


Design

Fees for management of pension funds



Returns*



Performance

Information on the effective **results of the pension system**, including active and passive coverage, contributions density, and new indicators about adequacy and redistribution

Coverage:

- Pension contributors
- Contributory pension recipients
- Non-contributory pension recipients

Contribution density:

- Total rate of contribution density
- Women's contribution density
- Men's contribution density

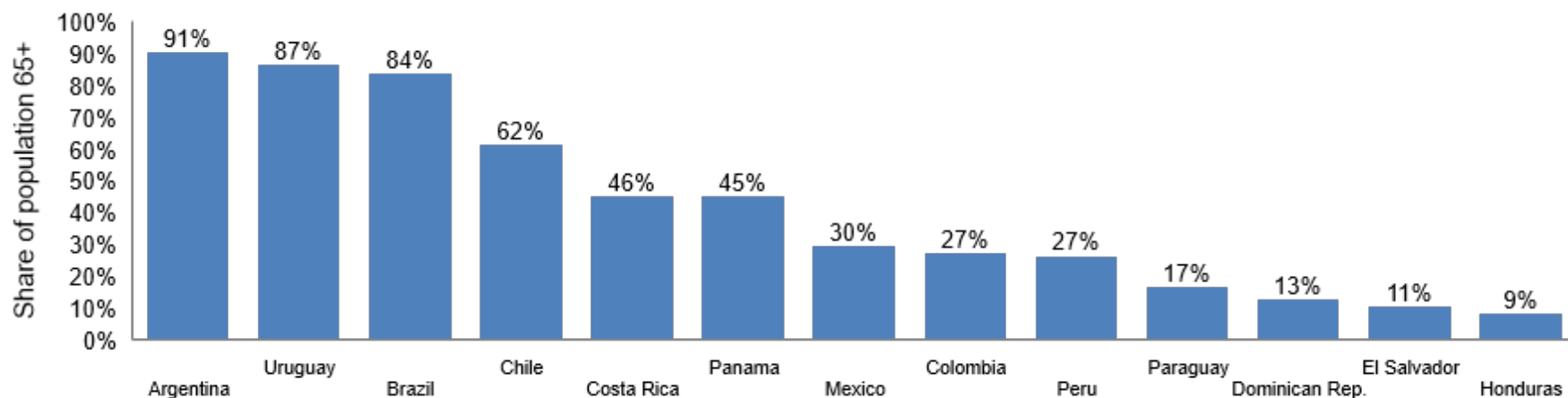
Adequacy and redistribution:

- Replacement rates*
- Implicit rates of return*
- Implicit subsidies/taxes*

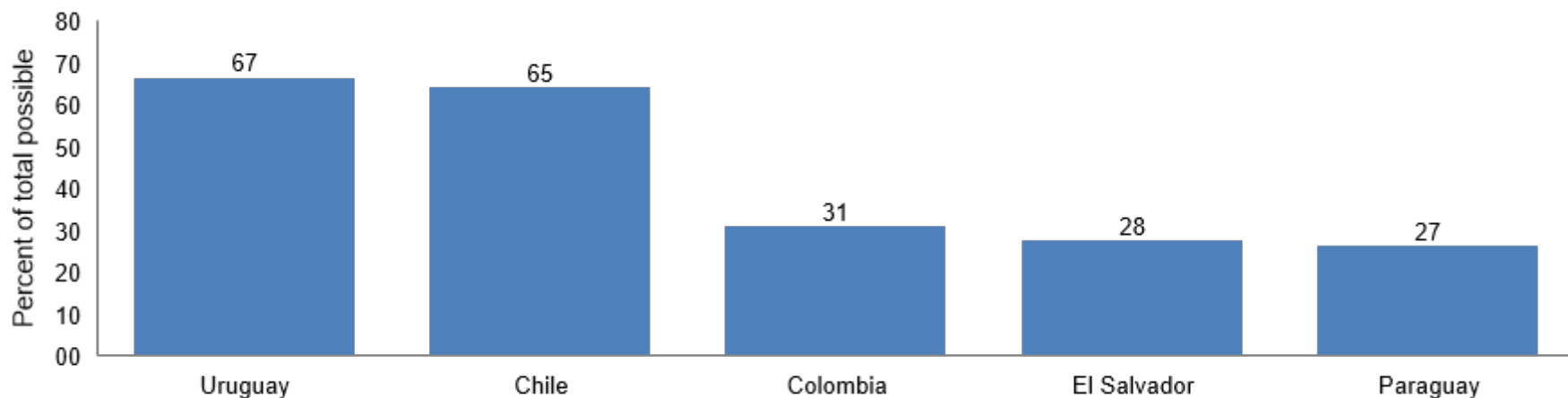
*Density and income dependant

Performance

Contributory pension recipient rate *



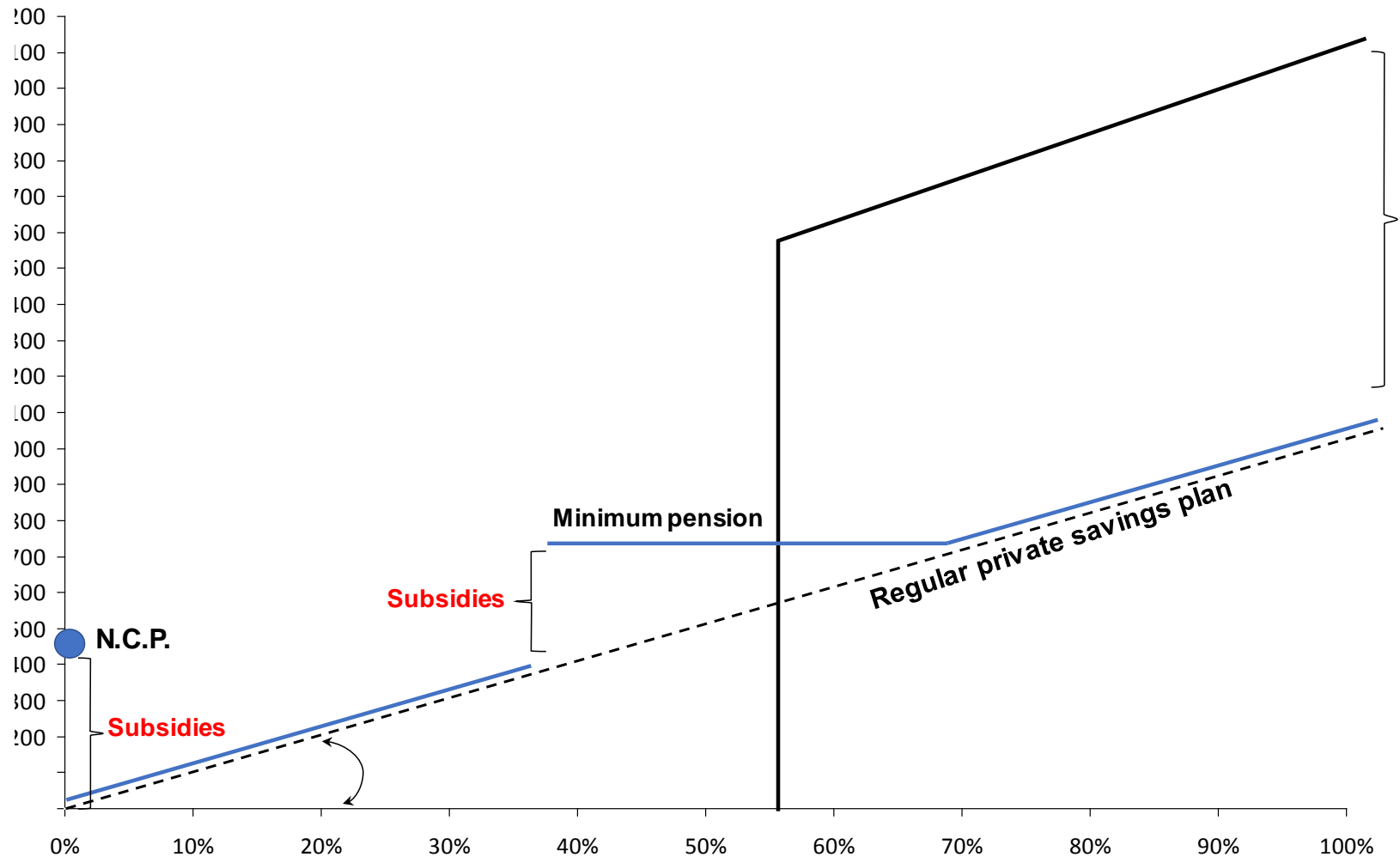
Empirical density of contributions**



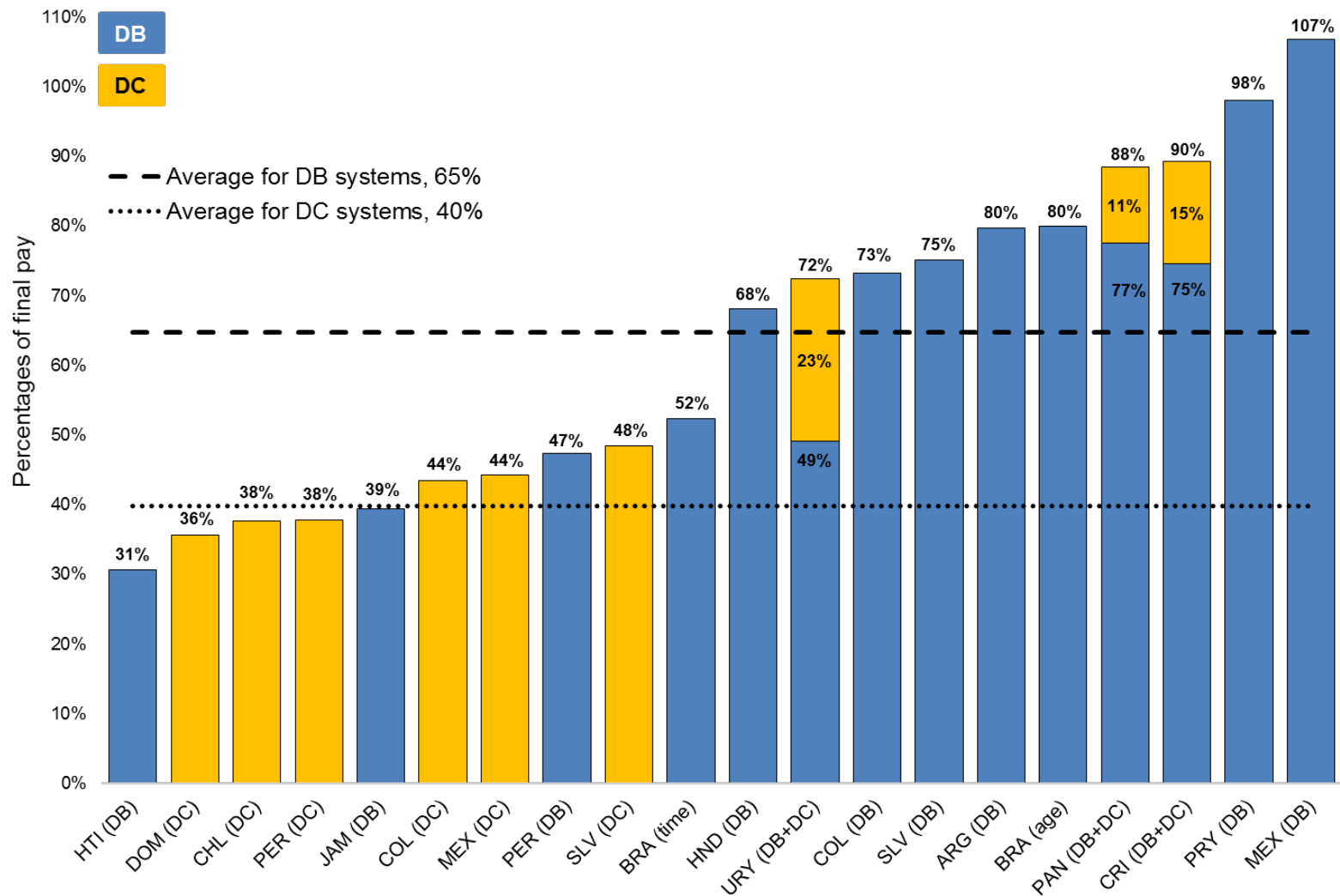
Source: SIMS database, IDB

**Ratio of total months contributed during an individual's working life over the total number of potential months of contributions.

New indicators on adequacy and redistribution: A simple approach



New indicators: Replacement rates

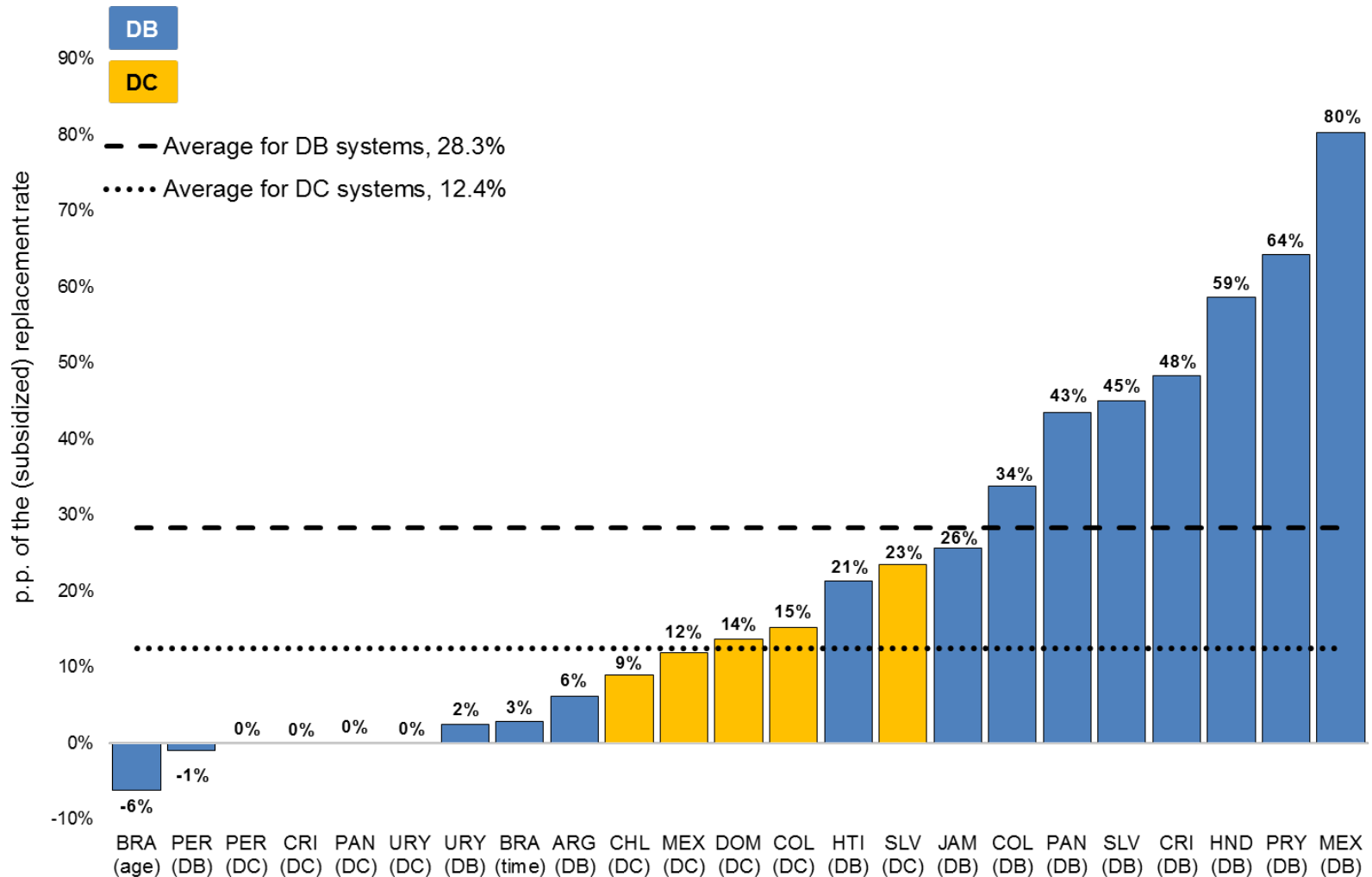


Source: IDB Flagship



The ISO 3166-1 alpha-3 nomenclature was used for the denomination of countries.

New indicators: Subsidies/Taxes as % of replacement rates

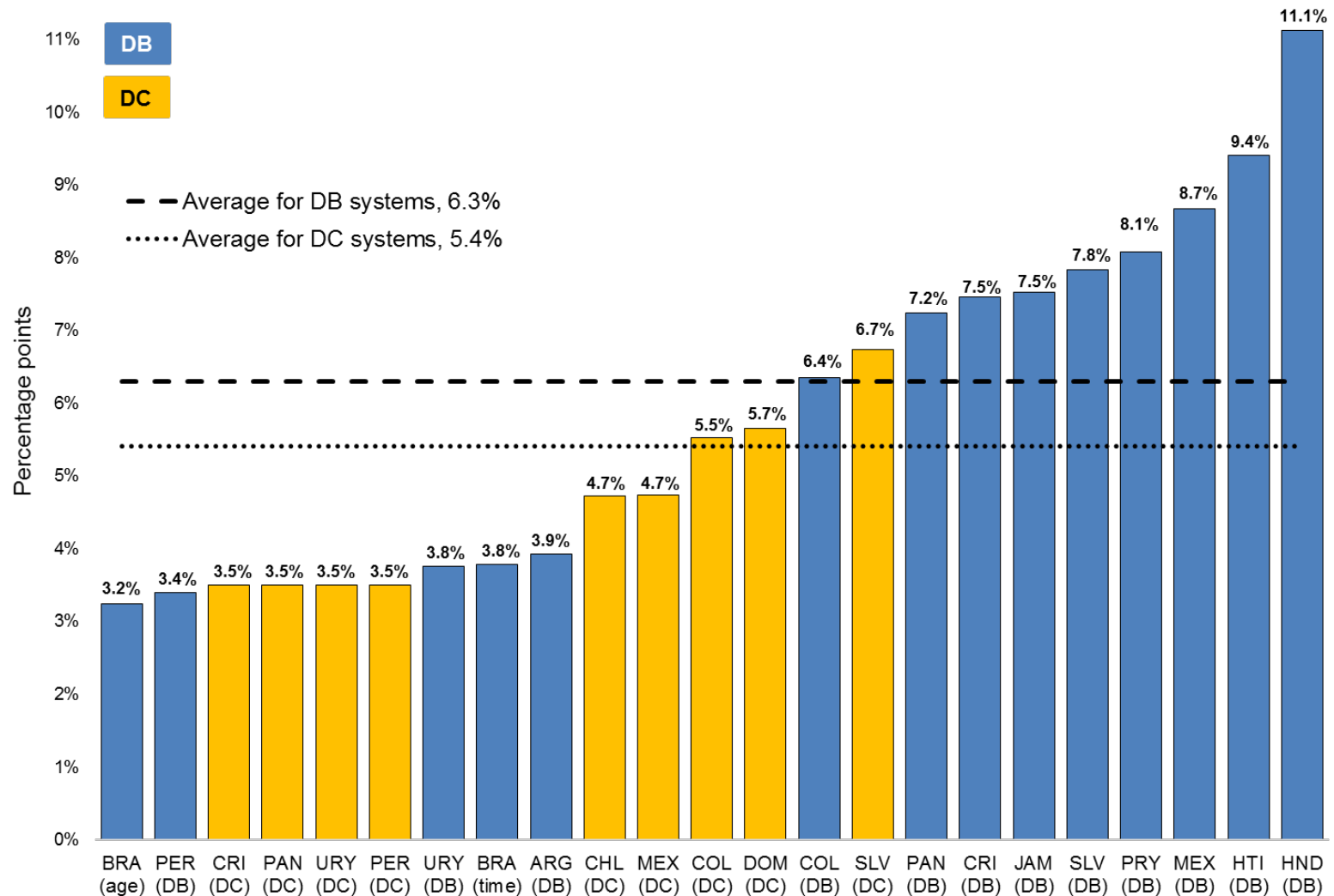


Source: IDB Flagship



The ISO 3166-1 alpha-3 nomenclature was used for the denomination of countries.

New indicators: Implicit rates of return

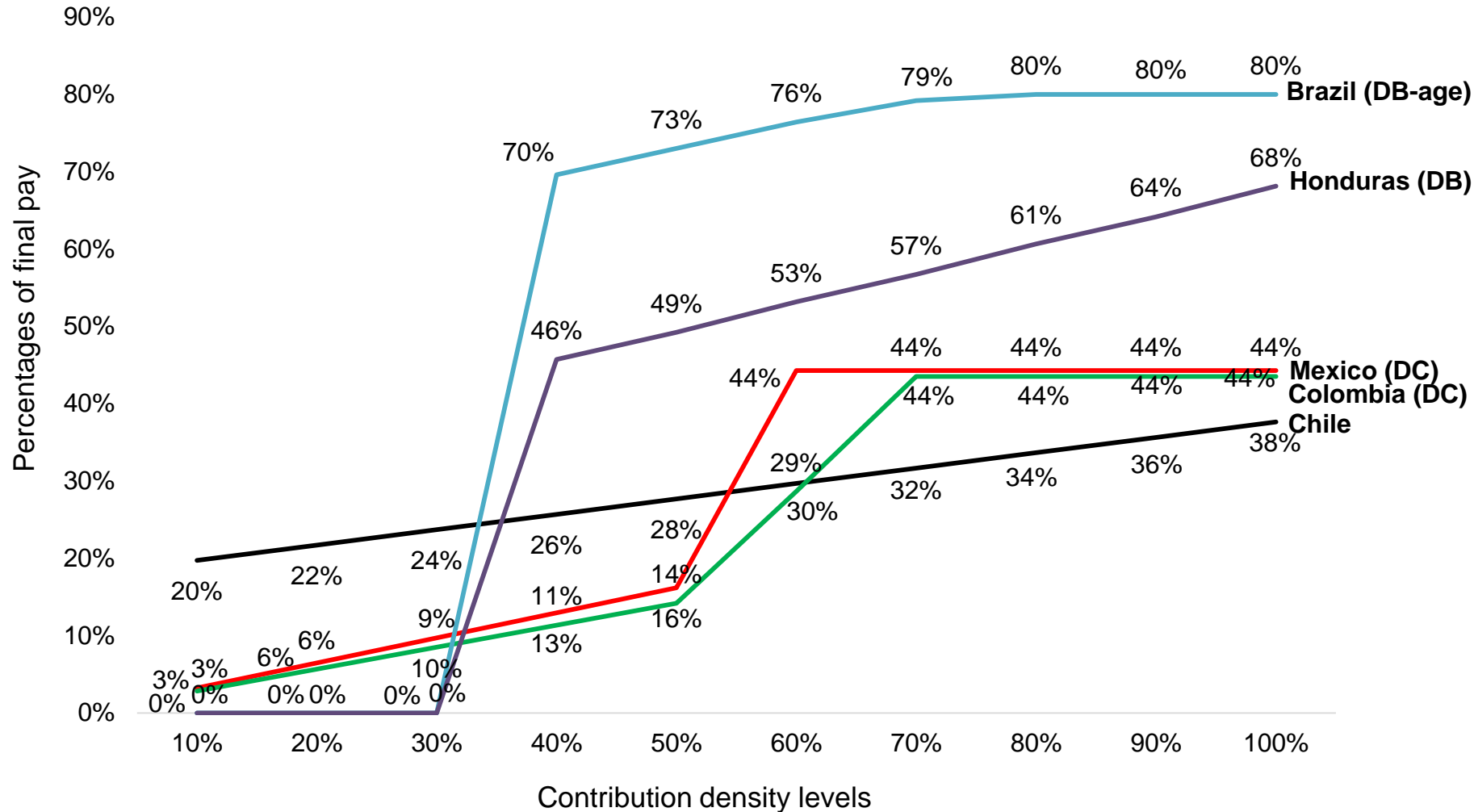


Source: IDB Flagship



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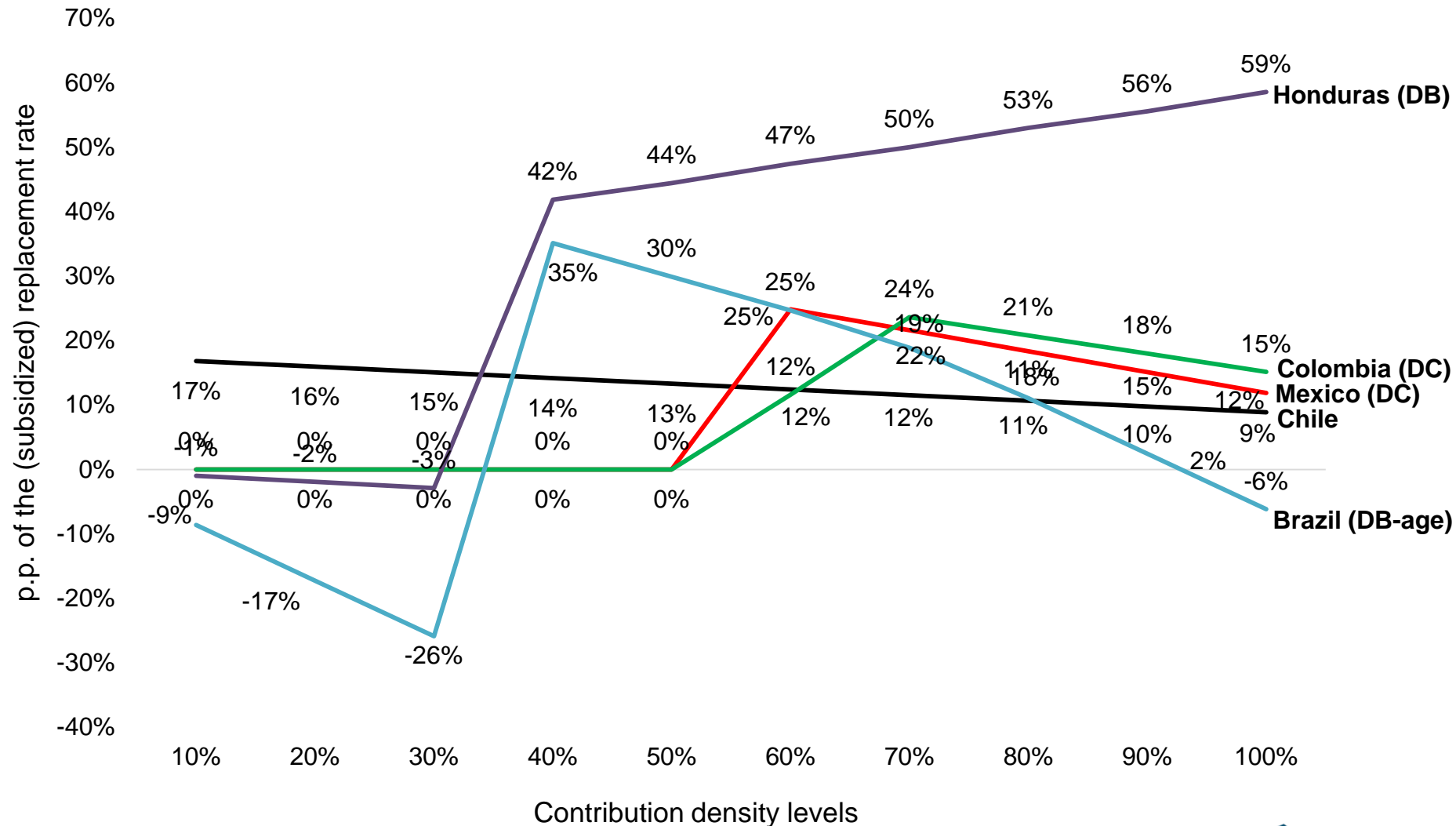
New indicators: Replacement rates by density of contributions*



Source: IDB Flagship

* For workers earning 1 average formal wage.

New indicators: Subsidies/Taxes as % of replacement rates by density of contributions*



Source: IDB Flagship

* For workers earning 1 average formal wage.

Sustainability

Indicators on the fiscal and social viability of the pension system under the current situation, given the current demographics and the current legal parameters of the pension scheme (or future parameters if already legislated)

Fiscal:

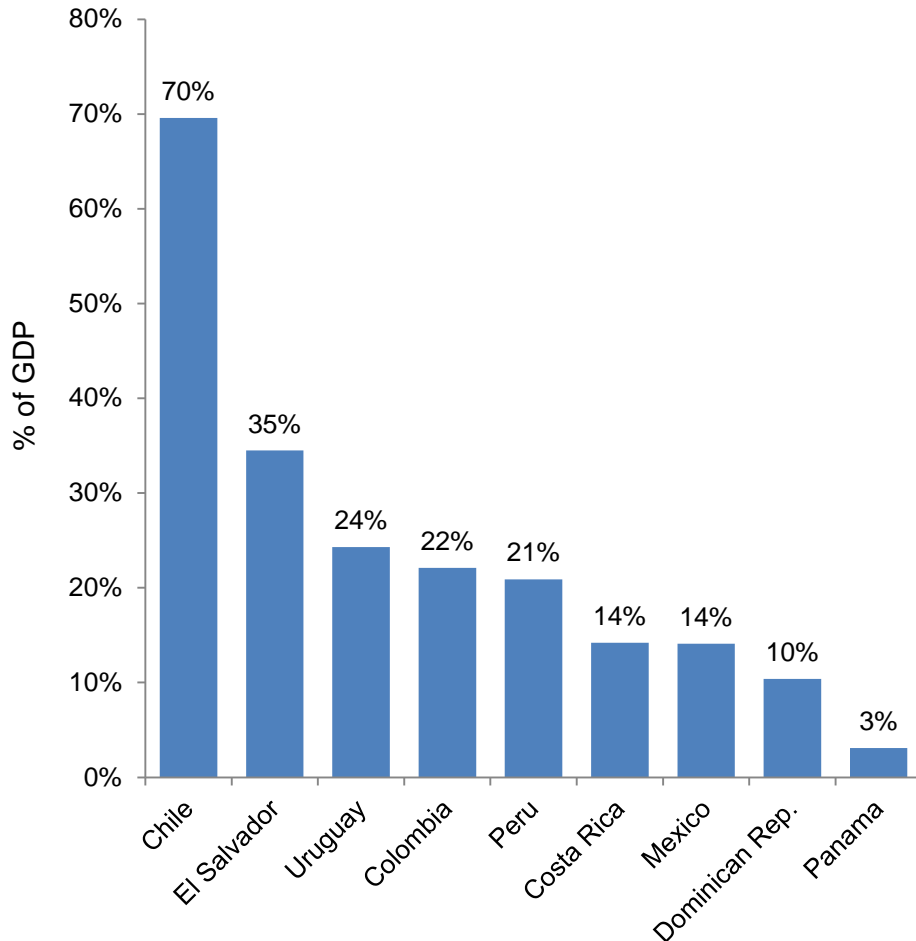
- Pension spending projections
- Contribution projections
- Pension Superavit (Deficit)
- Pension Fund Assets, % GDP

Social:

- Projected replacement rates
- Adjusted replacement rates

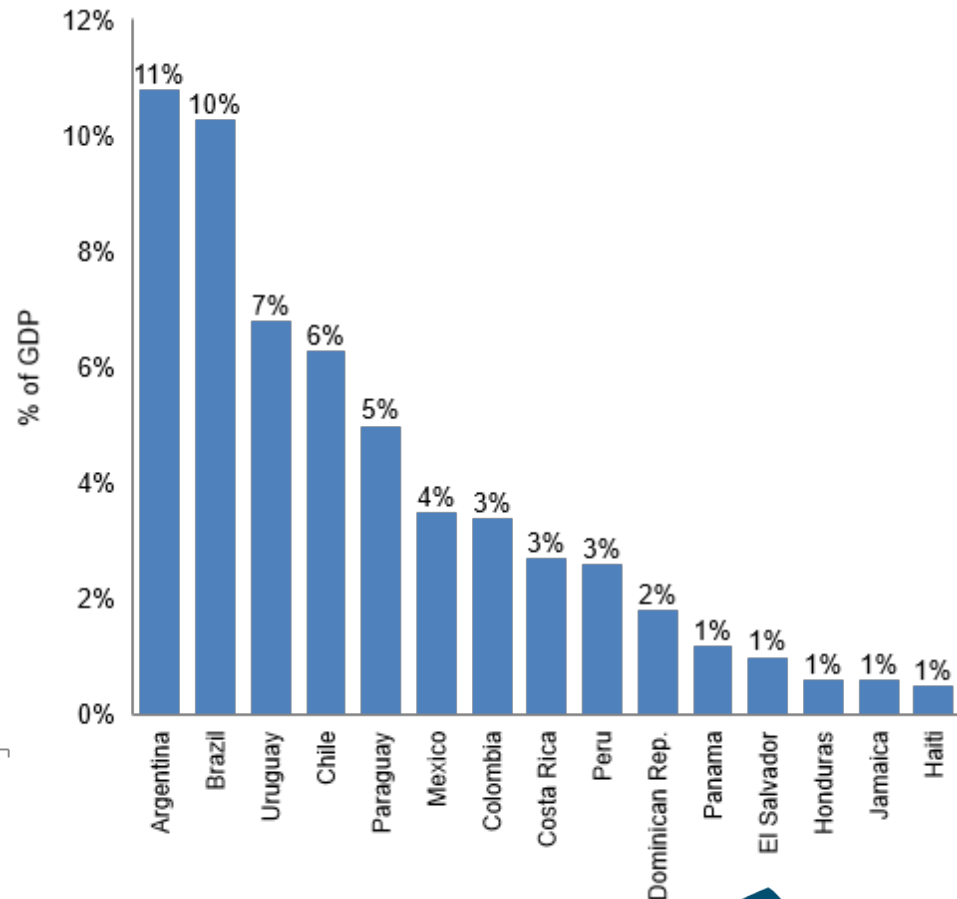
Sustainability

Pension Fund Assets



AIOS Statistical Bulletin

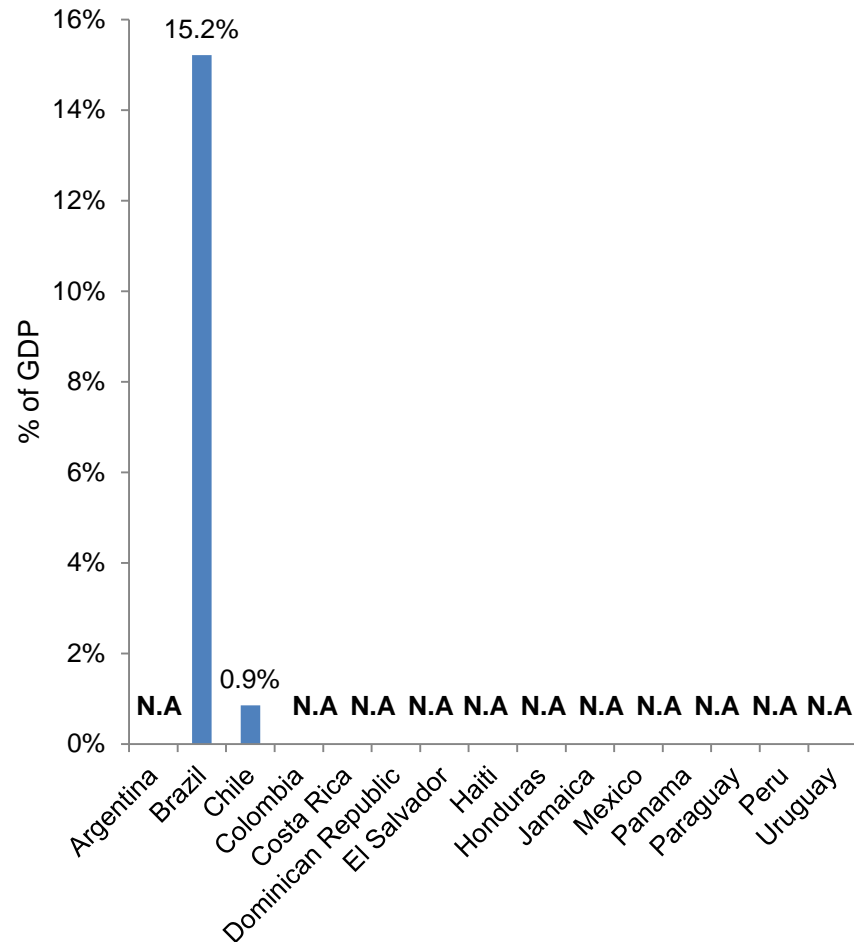
Social Protection Public Spending



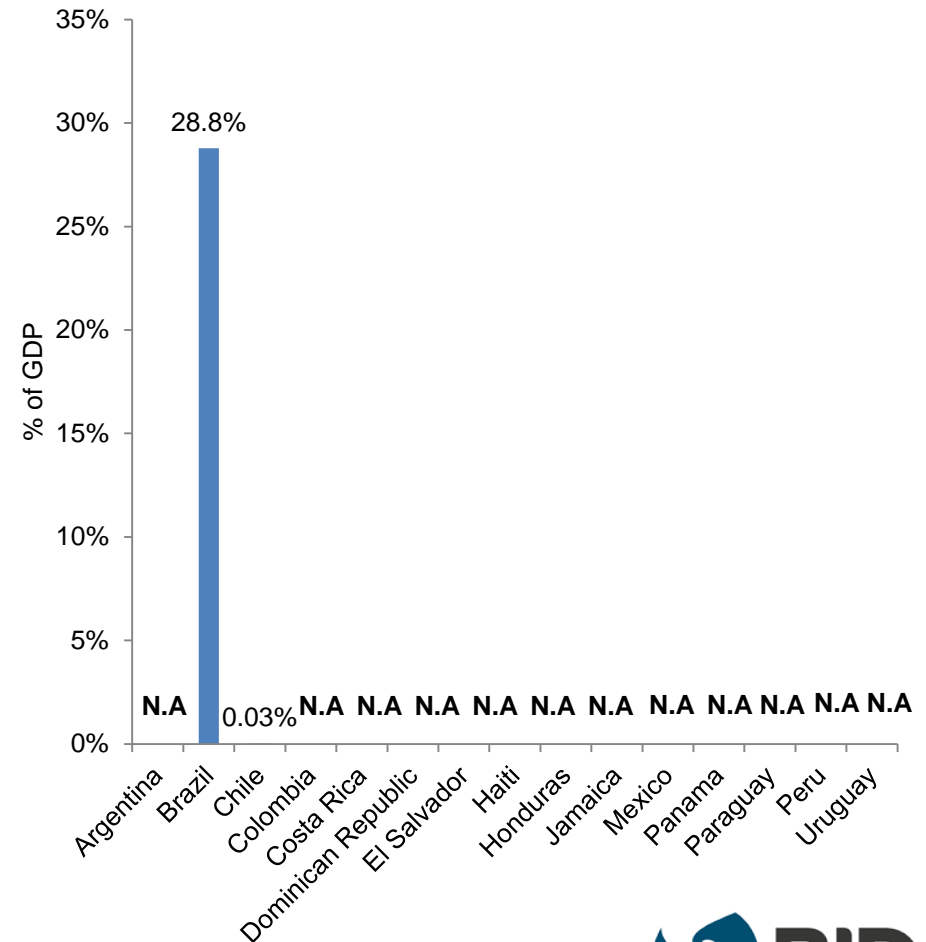
AIOS Statistical Bulletin

Sustainability

Present value of PAYGO pension spending projections, 2030



Present value of PAYGO pension spending projections, 2060



Source: Own computations.

Preparedness for Aging and Reform

Indicators about financial literacy and knowledge of retirement systems, as well as a set of some broader indicators of elderly welfare.

Awareness:

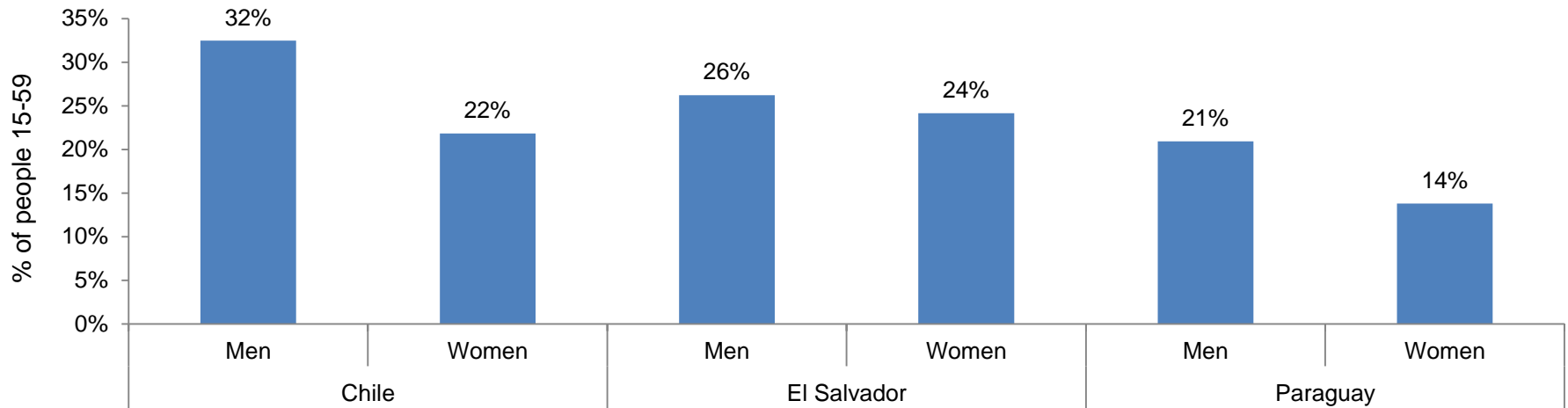
- Statutory retirement age awareness
- Contribution rate awareness
- Pension formulae awareness
- Fee charged awareness

Preparedness:

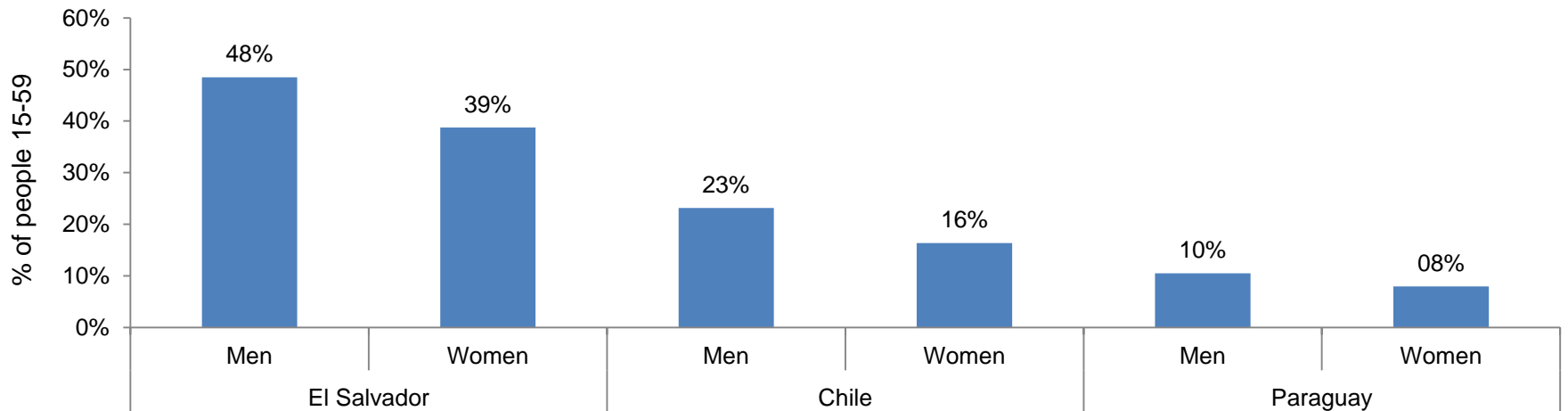
- Old-age poverty rates
- Educational attainment
- Co-residency
- Family size
- Financial wealth
- Homeownership

Preparedness

Contribution rate awareness



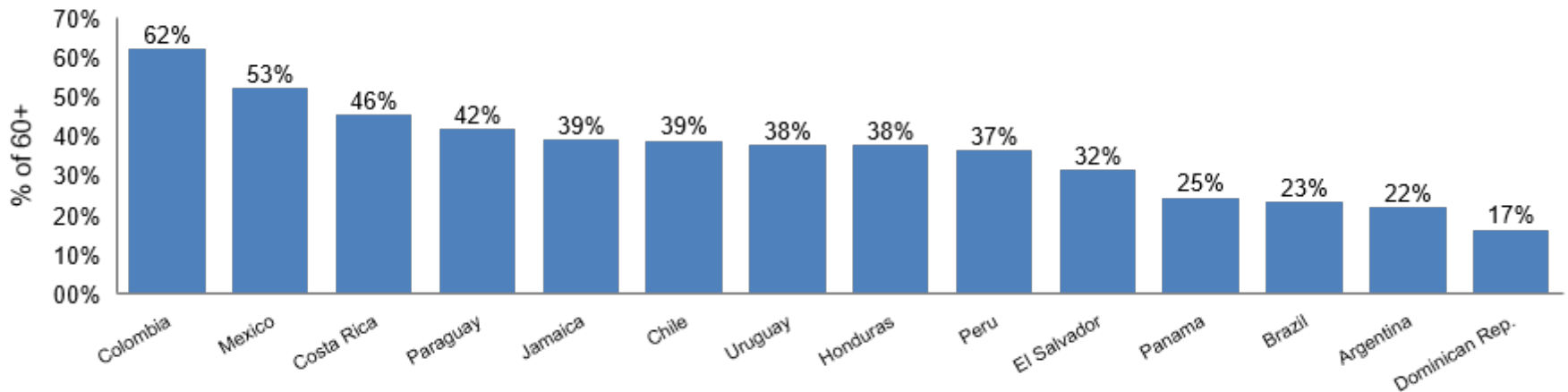
Pension formula awareness



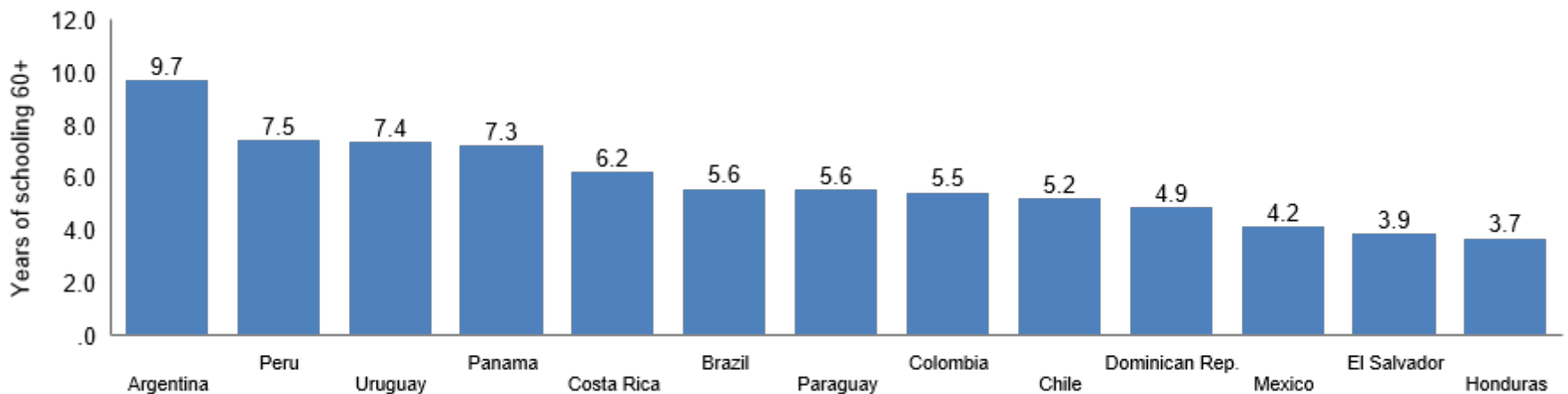
Source: Household survey or LSPS.

Preparedness

Old-age Poverty*



Old-age educational attainment (total)



Source: Household survey or LSPS.

*Fraction of the elderly with per capita income below the poverty line. The poverty line is set as half the median household income of the total population.

Next Steps

We cannot do this alone!

1. IDB Team will share with all participants the latest material, with most comments already included (not yet all!)
2. We ask you to **please help us complete missing data**
3. We would like to **update data once a year**: Request for data will likely reach you!
4. **Projections will be constructed using simple IDB models**

Our expectations for today

We would like to listen to all of you!

1. Comments about the work done so far: Strengths, weaknesses, ideas for improvement?
2. Are you aware of efforts in your country to improve pension data available?
3. Ideas and suggestions for next steps
4. Any other comments and suggestions you might have

Thank you!