

Pension Reform

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The primary objective of pensions is economic security in old age for a diverse population, achieved through consumption smoothing, insurance, poverty relief, and risk sharing and redistribution within and across generations.

Analysis should consider pension systems as a whole.

The Basic Economics of Pensions

- Output matters.
- Imperfect consumer information and decision making are widespread.
- Pension systems face large risks that are hard to predict.
- Costs of administration can significantly affect pensions.

Pensions in four countries

- Sweden
- Netherlands
- Canada
- Chile

Sweden

Name	Type of pension
Inkomstpension	Notional defined contribution
Premium pension	Funded defined contribution
Guaranteed pension	Minimum pension guarantee

Sweden: Premium pension

Government collects contributions and does record-keeping.

Over 700 private mutual funds do asset management.

A government fund competes and is the default.

Share of first-time choosers investing in the Swedish default fund (Premiesparfonden)

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
Percent Investing in Default Fund	33	82	86	91.6	90.6	92	92.6	98.4	98.4	98.4	98.4	98.5

Source: Sweden Ministry of Finance (2009, p. 47), updated.

Sweden: Guaranteed pension

The guaranteed pension is based on years of residence in Sweden, with an offset based only on the inkomstpension.

Netherlands

Name	Type of Pension
Occupational Pension Schemes	Fully funded defined benefit Collective defined contribution
General Old Age Pensions Act (AOW)	Citizen's pension

Netherlands: Collective defined contribution pensions

- A single pooled fund for investment purposes (normally at the industry level).
- Benefits are price-indexed lifetime payments beginning at retirement, based on a “career average” benefit formula.
- Benefits in payment and future benefits are both adjusted based on asset returns and mortality experience.

Netherlands: OAS pension

- The OAS pension is based on years of residence in the Netherlands.
- It is subject to income taxation, not subject to an offset.
- It is financed by dedicated revenue – a supplement to the income tax paid by those below pension age.

Canada

Name	Type of pension
Canada Pension Plan (CPP)	Partially funded defined benefit
Old Age Security (OAS).	Citizen's pension
Guaranteed Income Supplement	Minimum income guarantee

Canada: Investment Board

- The CPPIB is governed independently from the CPP, operating at arm's length from governments with an objective to maximize returns without undue risk.
- Employer and employee contributions are projected to cover 75–80% of future CPP benefits, with investment returns covering 20–25%.

CPP Actuarial Report

- Every three years, the Chief Actuary of Canada reviews the contribution rate required to sustain the CPP over the next 75 years.
- If the system is not financially sustainable there is a semi-automatic adjustment that freezes benefits and increases the contribution rate until the next triennial evaluation.

Earliest age for starting Non-Contributory Pensions

Country	Men	Women
Canada	65, rising to 67 between 2023 and 2029	65, rising to 67 between 2023 and 2029
Netherlands	Was 65, will be 67 in 2021. Then linked to life expectancy.	Was 65, will be 67 in 2021. Then linked to life expectancy.
Sweden	65	65
Chile	65	65

Earliest Age for starting Contributory Pensions

Country	Men	Women
Canada	60	60
Netherlands	Varies, typically 60 or 62	Same as for men
Sweden	61	61
Chile	65	60

Caregiver credits

- Sweden: general revenue financed contributions to both Inkomstpension and Premium Pension.
- Canada: dropout years when calculating career average earnings.
- Netherlands does not provide

Caregiver credits (date of initiation)

France (1945)

Sweden (1970s), UK (1978)

Germany (1986), Norway (1992), and
Switzerland (1998), among others.

Luxembourg (2002), Austria (2005),
Finland (2005)

Chile

Name	Type of pension
Individual account (AFP)	Funded defined contribution
Solidarity Pension Contribution (APS)	Non-contributory pension complements contributory pensions
Basic Solidarity Pension (PBS)	Non-contributory pension for people without a pension

AFP system

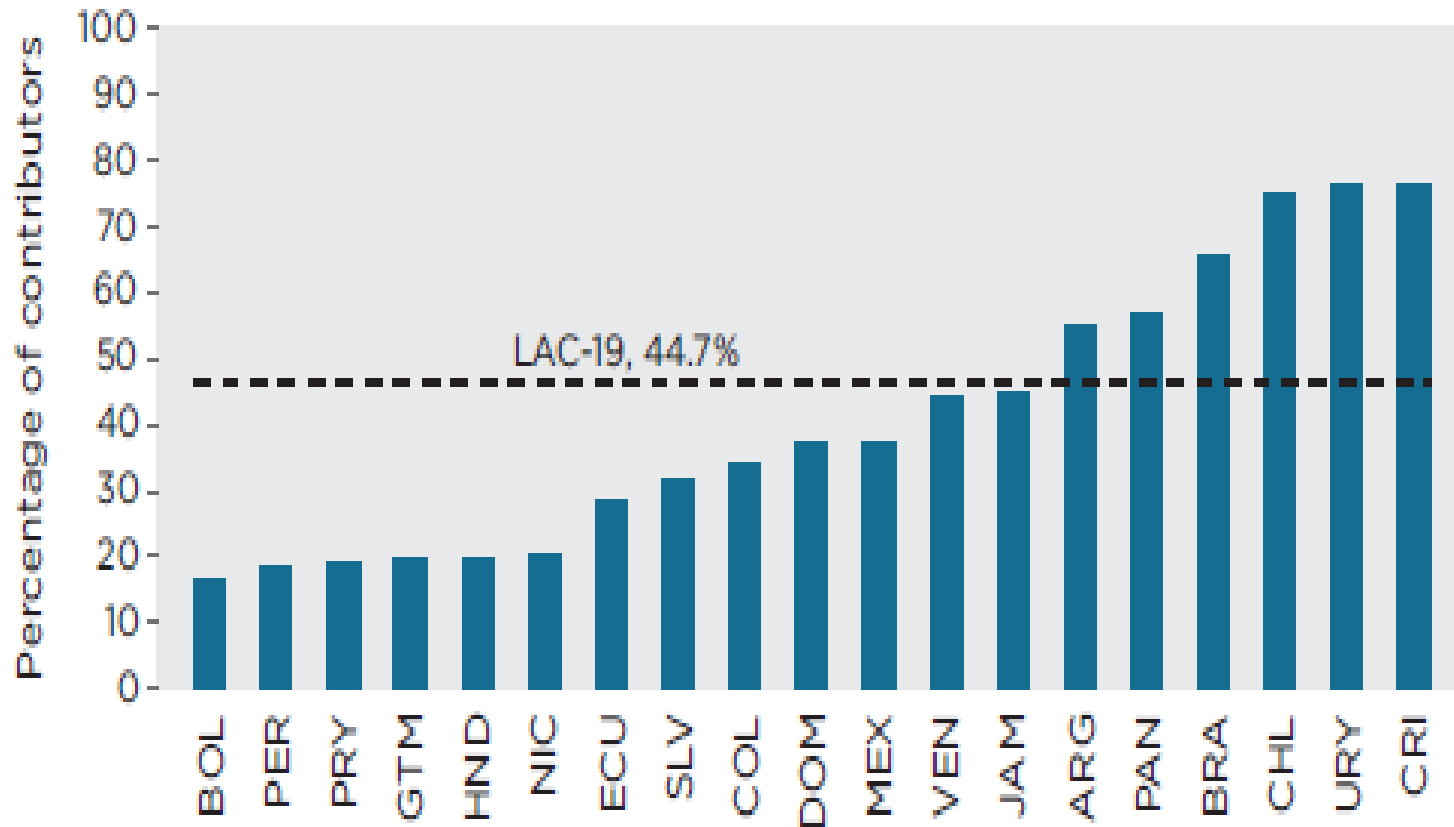
- Relatively low replacement rates for most contributors
 - Incomplete contribution densities, connected with informality and incomplete working lives
 - Early retirement of women
 - 10% contribution rate
- Net rates of return on contributions are reduced by significant administrative charges
- Unsatisfactory treatment of women

Contributions

The contribution density among members is 41.7%, while the average contribution density among both members and non-members falls to 35.4%. Lower for women than for men.

(Source: D.Bravo (2015) using Encuesta de Protección Social)

Percentage of contributors out of total employed: 2010



Source: BETTER PENSIONS BETTER JOBS, TOWARDS UNIVERSAL COVERAGE IN LATIN AMERICA AND THE CARRIBBEAN
By Mariano Bosch, Angel Melguizo, and Carmen Pages, Inter-American Development Bank, September 2013.
Figure 1.1 pg 6.

Projected distribution of years of zero earnings between age 22 and retirement by gender, US

Years of zero earnings	Total	Men	Women
Baby-boom cohort, born 1946-1960			
Number of observations, total	25,853	11,183	14,670
Projected years			
Mean	3.3	2.8	3.7
Median	0	0	0
Percentage distribution, total	100.0	100.0	100.0
0	33.3	42.9	25.4
1-5	27.0	27.7	26.4
6-10	13.2	9.1	16.5
11-15	8.6	5.3	11.4
16-20	6.6	3.8	8.8
21-25	4.1	2.9	5.1
More than 25	7.3	8.3	6.5

Source: “Distribution of Zero-Earnings Years by Gender, Birth Cohort, and Level of Lifetime Earnings” by Chad Newcomb, Office of Research, Evaluation, and Statistics. Research and Statistics Note No. 2000-02, November 2000, Table 2.²³

Gender Setting

- 71% of men aged 15 years or more and 48% of women are part of the work force.

(Source: Instituto Nacional de Estadísticas)

- Men retire from the labor market at an average age of 68.1 years, women at an average age of 62.4 years

(Source: Análisis del Mercado Laboral para la Población de 55 años y más y sus implicancias para el ahorro previsional. U. Católica de Chile, 2013)

Gender Setting

- The use of mortality tables that are differentiated by gender gives lower pension amounts for women.
- Earlier retirement age for women limits accumulations.

Gender Setting

On week days, women participate to a greater extent than men in caring for senior citizens, children, sick people (35.9% of women, 9.2% of men), and in household chores (76.1% of women, 34.9% of men).

(Source: Encuesta Uso del Tiempo, 2007, Instituto Nacional de Estadísticas)

Gender Setting

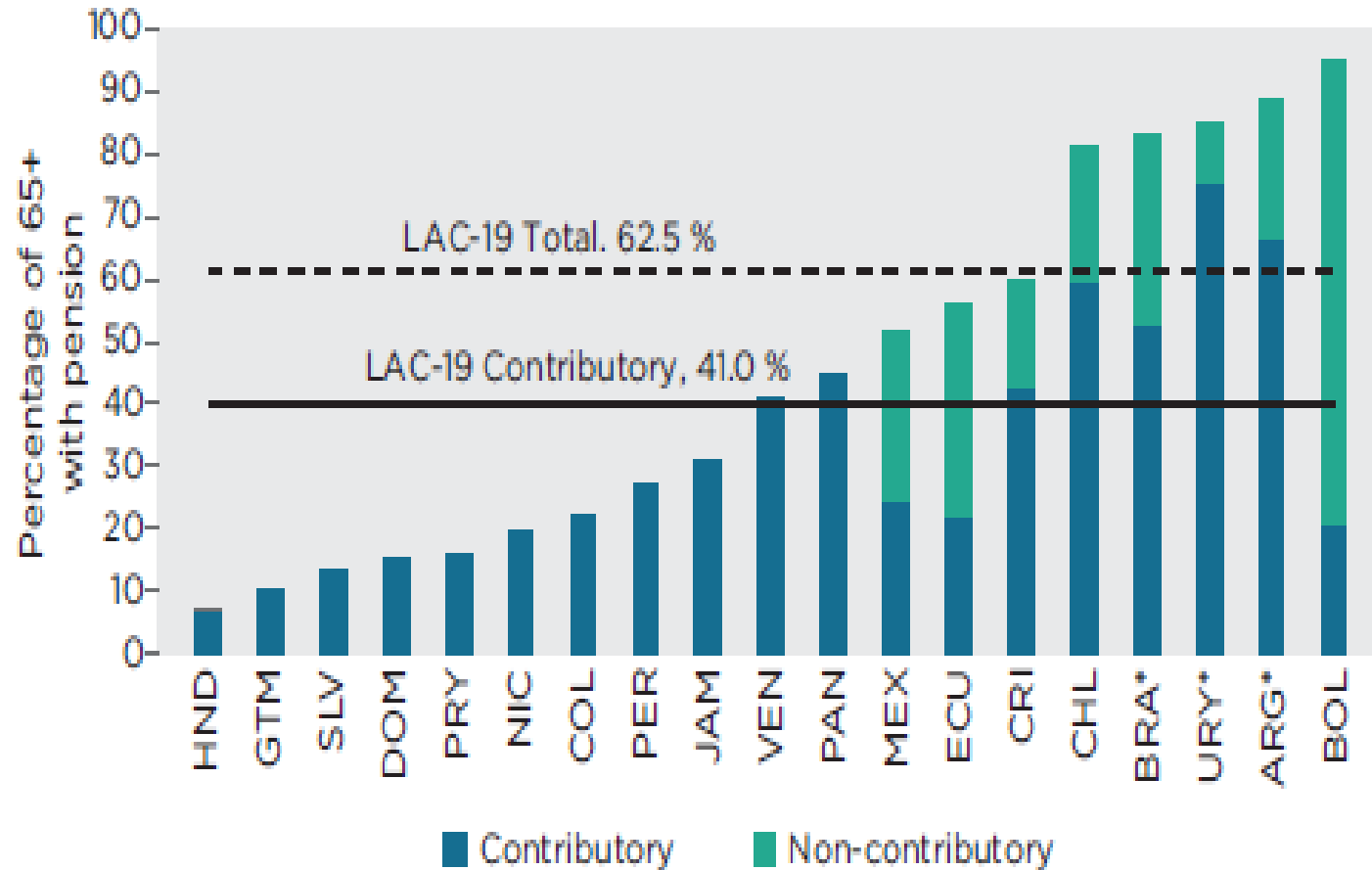
- On average, on week days, women dedicate a greater number of hours per day to household activities and care compared to men (4 and 1.3 respectively).
- On average, on week days, men dedicate 5.9 hours per day to income generating activities and women 2.9 hours.

Solidarity Pension System

- 1.2 million benefits at the end of 2013.
- Expenditure equal to 0.7% of GDP In 2013, with 61.2% for the PBS, 38.8% for the APS.
- Expenditure financed from general funds.

(Source: Consejo Consultivo Previsional, 2015)

Percentage of elderly adults (65+) receiving pensions, contributory and non-contributory, 2010



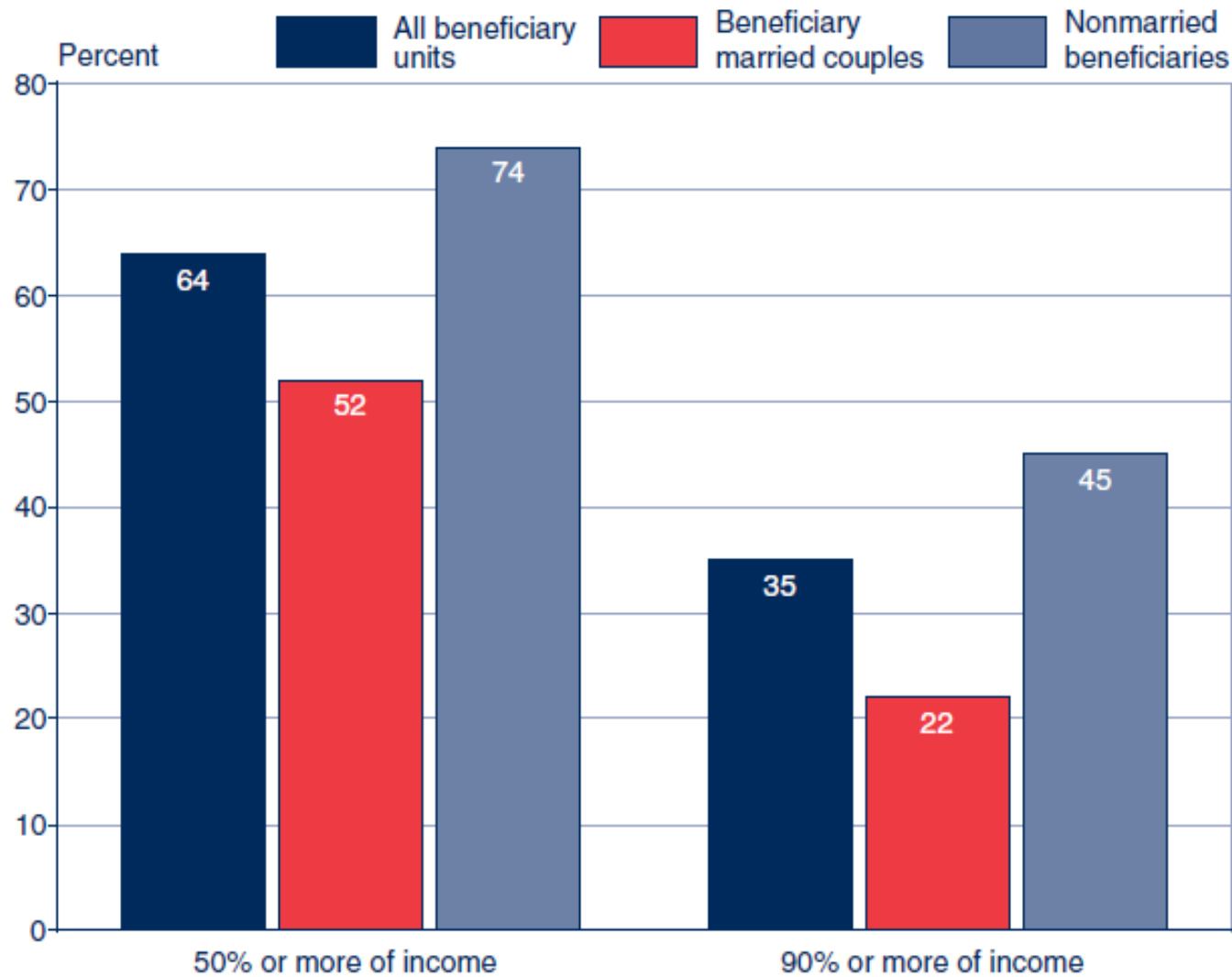
Source: BETTER PENSIONS BETTER JOBS, TOWARDS UNIVERSAL COVERAGE IN LATIN AMERICA AND THE CARRIBBEAN By Mariano Bosch, Angel Melguizo, and Carmen Pages, Inter-American Development Bank, September 2013. Figure 2.4 pg 34.

Solidarity Pension System

- Around 60% of beneficiaries belong to family groups with incomes that are below the poverty line.
- 28% of beneficiaries belong to a family group without any other source of income.

(Source: Data provided by the Presidential Advisory Commission)

Percentage of aged units receiving Social Security benefits, by relative importance of benefits to total income



SOURCE: Social Security Administration calculations from the March 2012 Annual Social and Economic Supplement to the Current Population Survey.

NOTE: An aged unit is a married couple living together or a nonmarried person, which also includes persons who are separated or married but not living together.

3 La reforma
necesaria
El futuro de
las pensiones

Nicholas Barr
y Peter Diamond



El Hombre del Tres

A key test of a decent society is the living standards of its older people, particularly the poorer among them.

Nicholas Stern

Pension Reform A Short Guide, Nicholas Barr and Peter Diamond, Oxford University Press, 2010, p. vii.