

Pensions and the Labor Market

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- The primary objective of pensions is economic security in old age, achieved through consumption smoothing, insurance, poverty relief, and redistribution within and across generations.
- The primary objective of pension *design* is to optimize old-age security for a diverse population, including the costs of providing it.
- 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.

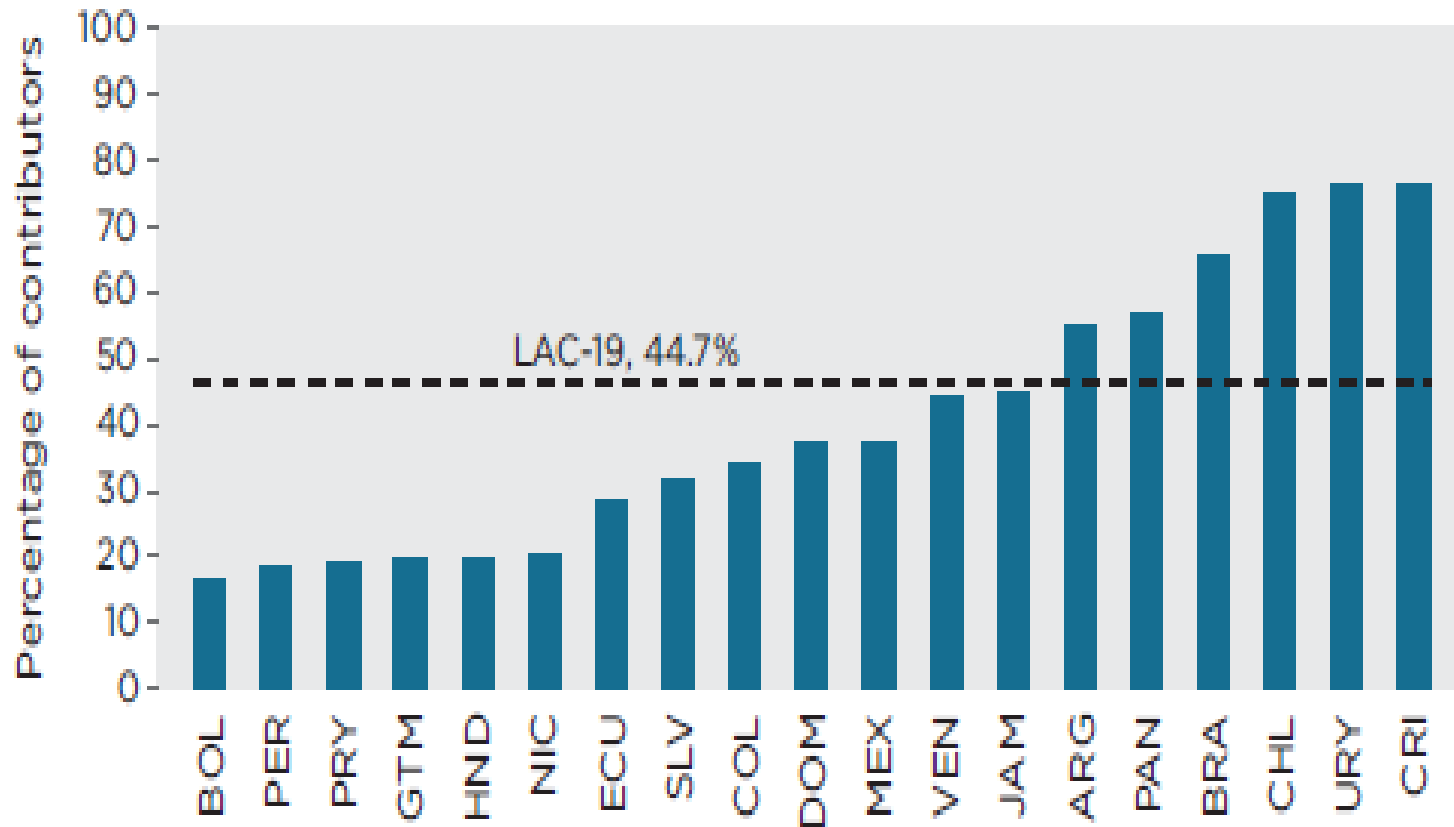
The main cause of the pensions 'crisis' is a failure to adapt to long-term trends

- Pension systems in many countries face a series of trends:
 - a long-term and continuing trend increase in life expectancy,
 - a long-term and continuing trend decline in fertility
 - a long-term trend to earlier retirement.
- Superimposed are two more recent phenomena:
 - the baby boom
 - the increase in the scale of pension systems since World War II
- The more recent trends are aggravating factors, but the problems arise even in their absence

Coverage and Informality

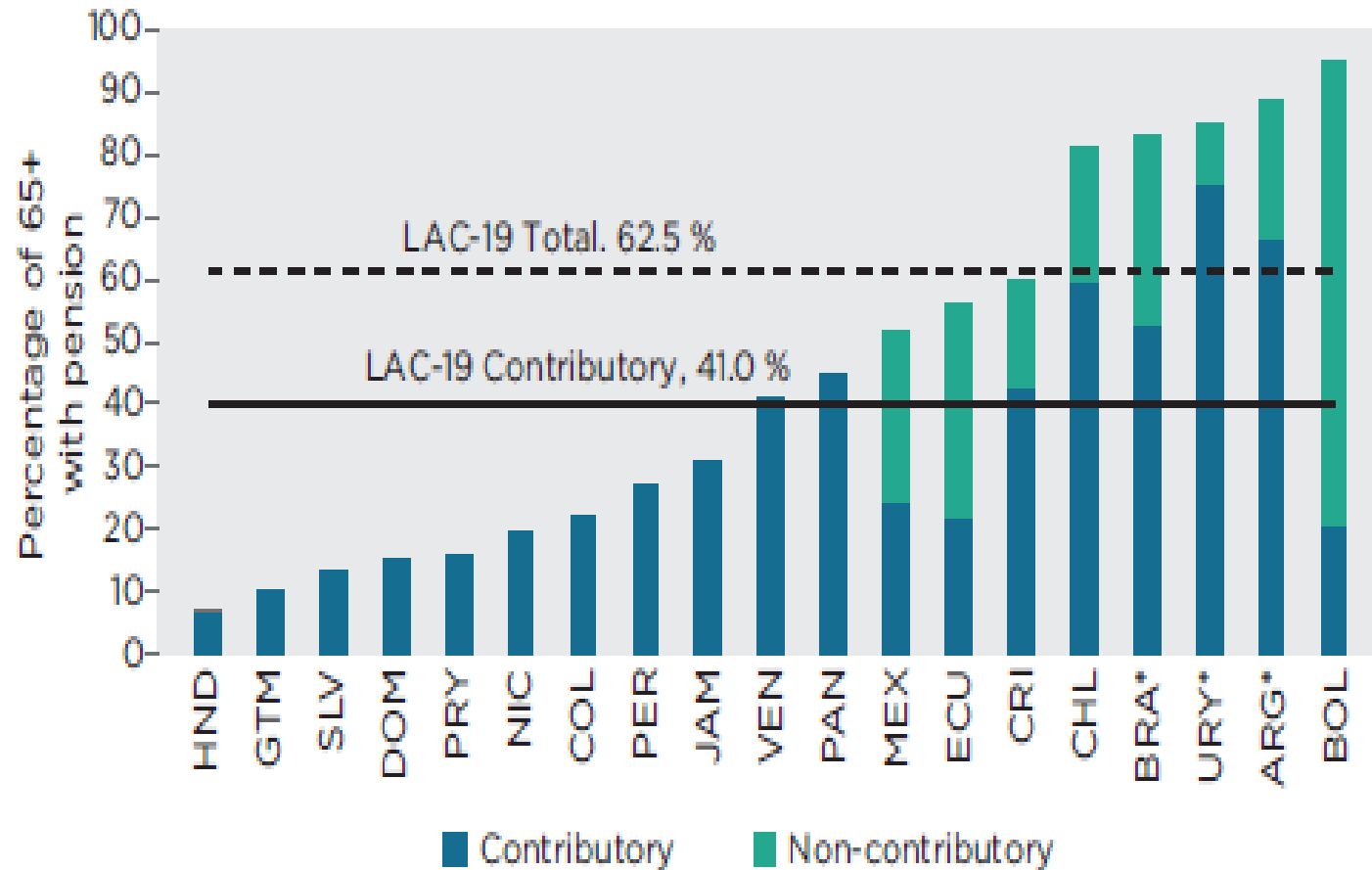
- Tax avoidance
- Tax evasion
- Benefit availability and adjustment rules
- “The world needs more good regulations and fewer bad regulations.”

Percentage of contributors out of total employed: 2010



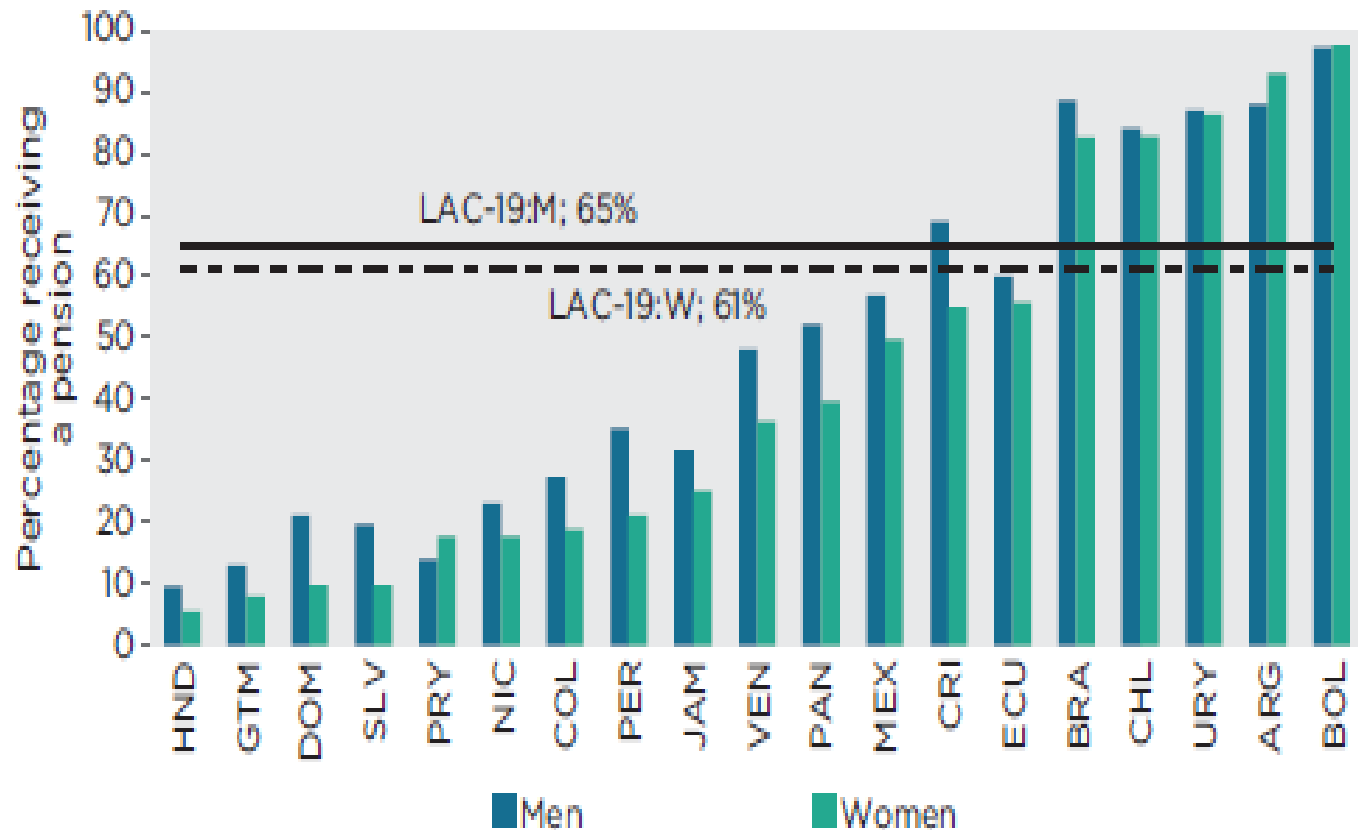
Source: BETTER PENSIONS BETTER JOBS, TOWARDS UNIVERSAL COVERAGE IN LATIN AMERICA AND THE CARRIBBEAN
By Mariano Bosch, Angel Melguizo, and Carmen Pages, Inter-American Development Bank, September 2013.
Figure 1.1 pg 6.

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.

Percentage of elderly adults (65+) receiving a contributory or non-contributory pension, disaggregated by gender



Source: BETTER PENSIONS BETTER JOBS, TOWARDS UNIVERSAL COVERAGE IN LATIN AMERICA AND THE CARRIBBEAN
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 Figure 2.7 pg 41.

Labor markets are dynamic

Where formal workers are one year later
(as a percentage)

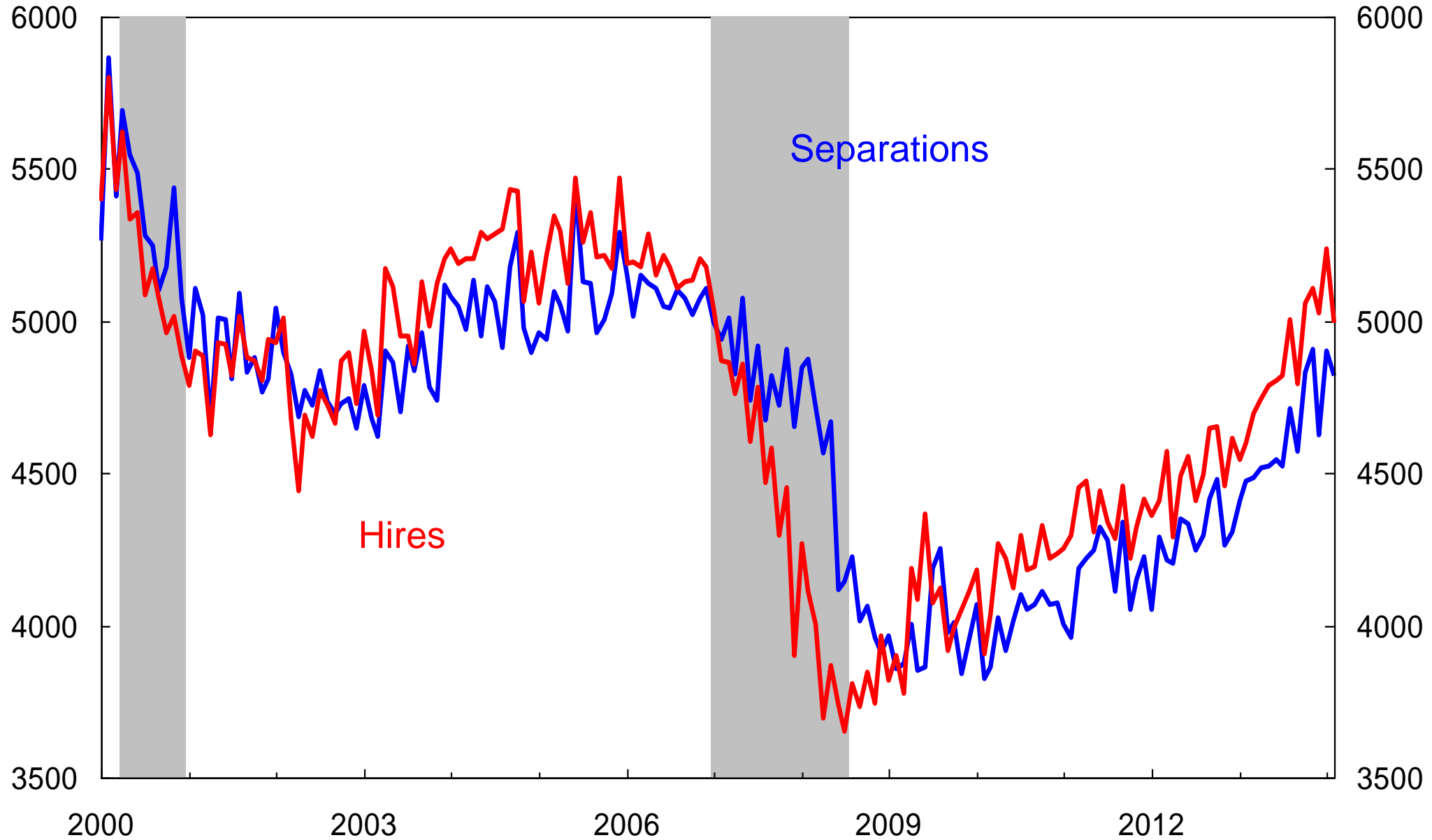
Country	Inactive	Unemployed	Self-employed	Salaried informal	Formal
ARG	5	3	2	7	83
COL	6	7	4	9	75
ECU	3	1	4	7	85
MEX	7	2	3	13	75
PER	3	3	7	8	79
VEN	5	3	7	7	77
Average	5	3	5	9	79

Source: BETTER PENSIONS BETTER JOBS, TOWARDS UNIVERSAL COVERAGE IN LATIN AMERICA AND THE CARRIBBEAN
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Table 2.3 pg 45.

Hires and Separations (US)

SA, Thousands

SA, Thousands

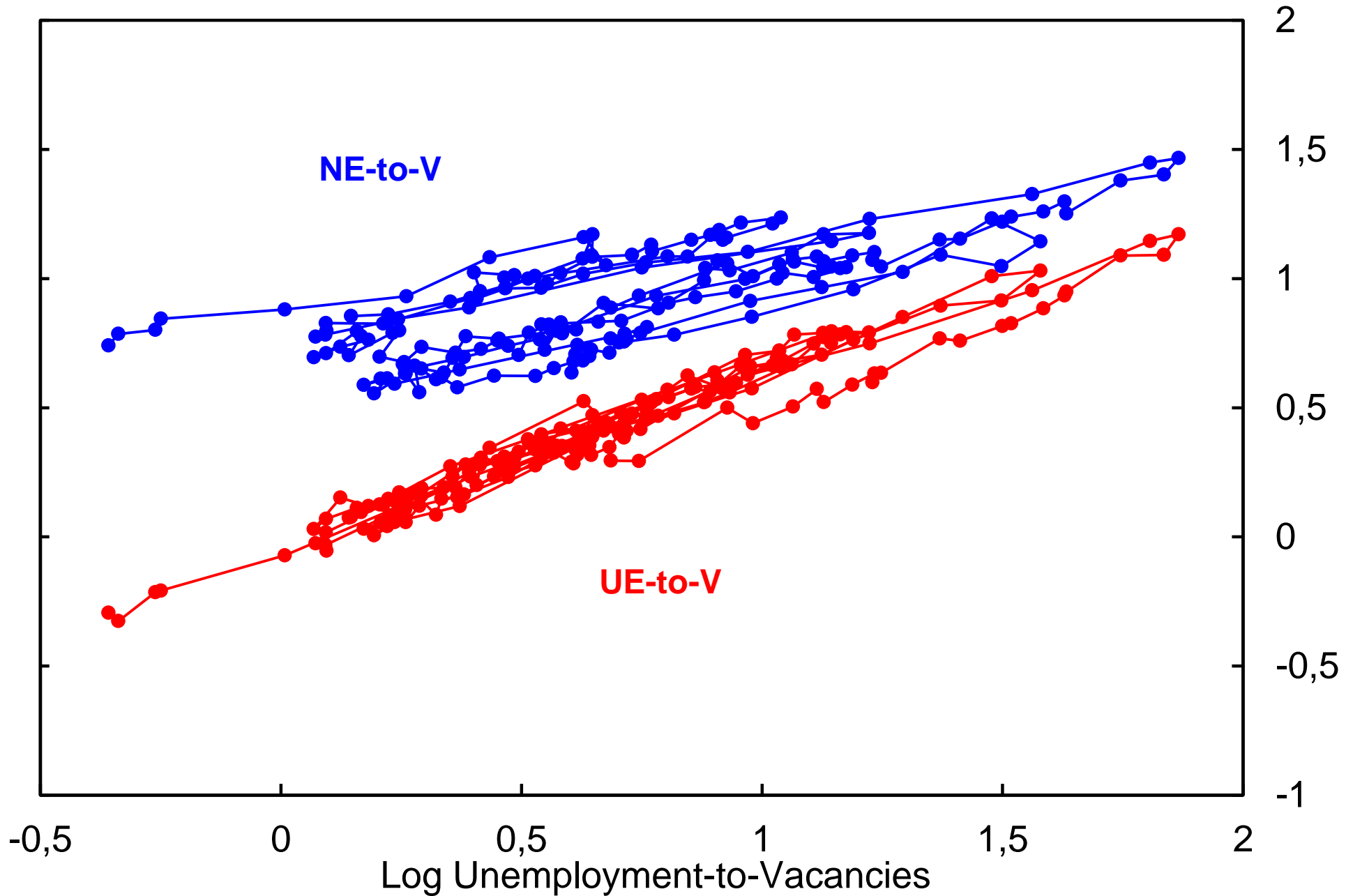


Source: BLS, JOLTS
Latest Data Point: 1/2015

Note: Gray shading represents NBER recession dates

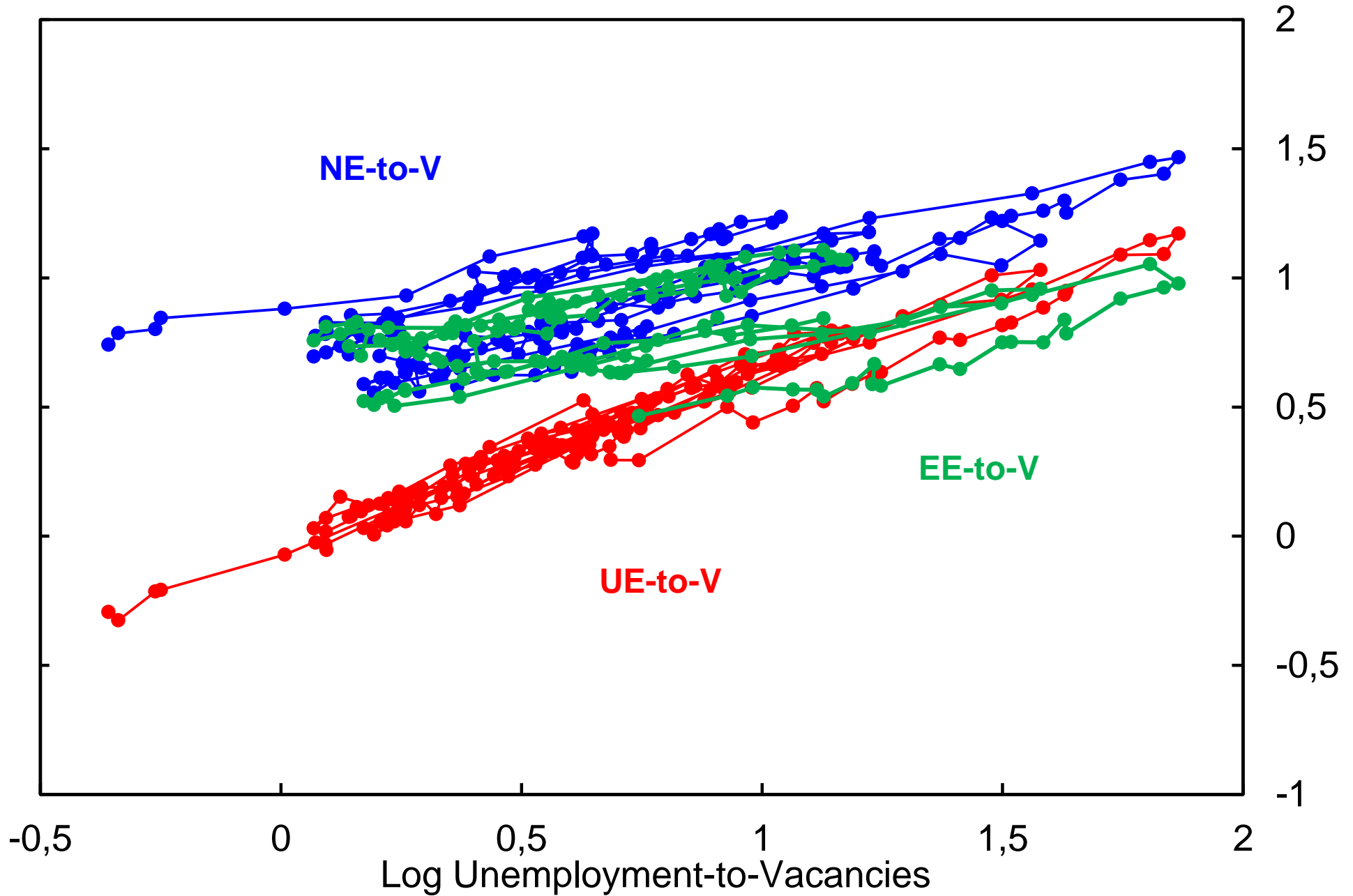
Log (UE and NE)/Vacancies and Unemployment/Vacancies

Log NE, UE-to-V



Log (UE, NE, EE)/Vacancies and Unemployment/Vacancies

Log NE/UE/EE-to-V



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.

Public Pension Systems (Sweden)

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

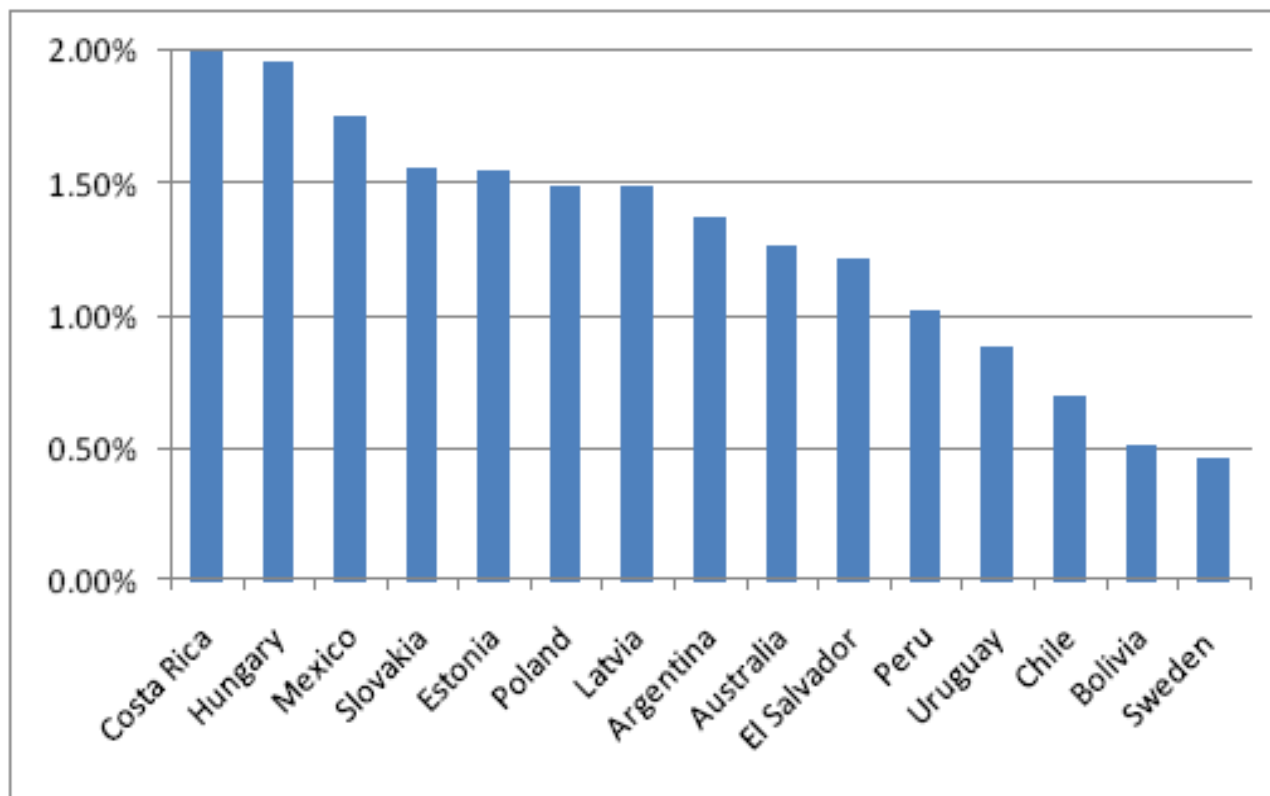
Defined Benefit

How NDC pensions work

- Mimic individual funded accounts, but only partially funded, with fund centrally managed
- The government keeps a record of individual contributions, each year attributing a notional interest rate to each worker's accumulation
- When the worker retires, his/her notional accumulation is converted into an annuity

Individual Accounts

Administrative Charges as Percentage of Total Assets, 2007



Sources: Latin American countries: AIOS, 2007; Poland: Insurance and Pensions Supervisory Authority, 2007 and authors' calculations; Hungary: HFSA, 2007 and authors' calculations; Sweden: Premium Pension Authority, 2007.

Note: Australia, Hungary, and Poland are 2006 Figures.

Source: Tapia, W. and J. Yermo (2008) "Fees in Individual Account Pension Systems: A Cross-Country Comparison", *OECD Working Papers on Insurance and Private Pensions*, No. 27, page 11, OECD Publishing, ©OECD. Doi: 10.1787/236114516708

Decline in Value of Accounts Due to Fees After a 40-Year Work Career ^a

Type and Level of Fees	Percentage Decline in Account Value Due to Fees
Front-load fees (% of new contributions) of:	
1 percent	1 %
10 percent	10 %
20 percent	20 %
Annual management fees (% of account balance) of:	
0.1 percent	2.2 %
0.5 percent	10.5 %
1.0 percent	19.6 %

a. Assuming real wage growth of 2.1 percent and a real annual return on investments of 4 percent. With a larger difference between the rate of return and the wage growth rate, the charge ratio with annual management fees is slightly larger, and conversely.

Examples of Funded Individual Accounts

Country	Mandatory	Organization	Default	Benefit type
Australia	Yes	Multiple: public sector, corporate, industry, retail	Tightly regulated MySuper product	No restrictions
Chile	Yes	Private mutual fund firms. 5 funds per firm plus life-cycle. Tightly regulated	Lifecycle.	Annuity or phased withdrawal
New Zealand	No Auto-enrolment with opt-out	Private mutual fund firms	Set by government, managed by firms	No restrictions
Sweden	Yes	Government organized. Wholesale investment in nearly 800 private funds, price regulated	Government-provided default	Government-provided annuity
United States IRA, 401(k) Traditional or Roth	No	Private financial firms for individuals, Employer organized	If 401(k), set by employer	No restrictions other than minimal required withdrawal for tax deferred accounts
United States Thrift Savings Plan for federal employees	No	Government organized Wholesale investment in 5 funds, plus life-cycle	Government bonds	No restrictions other than minimal required withdrawal for tax deferred accounts

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.

Non-contributory Pensions

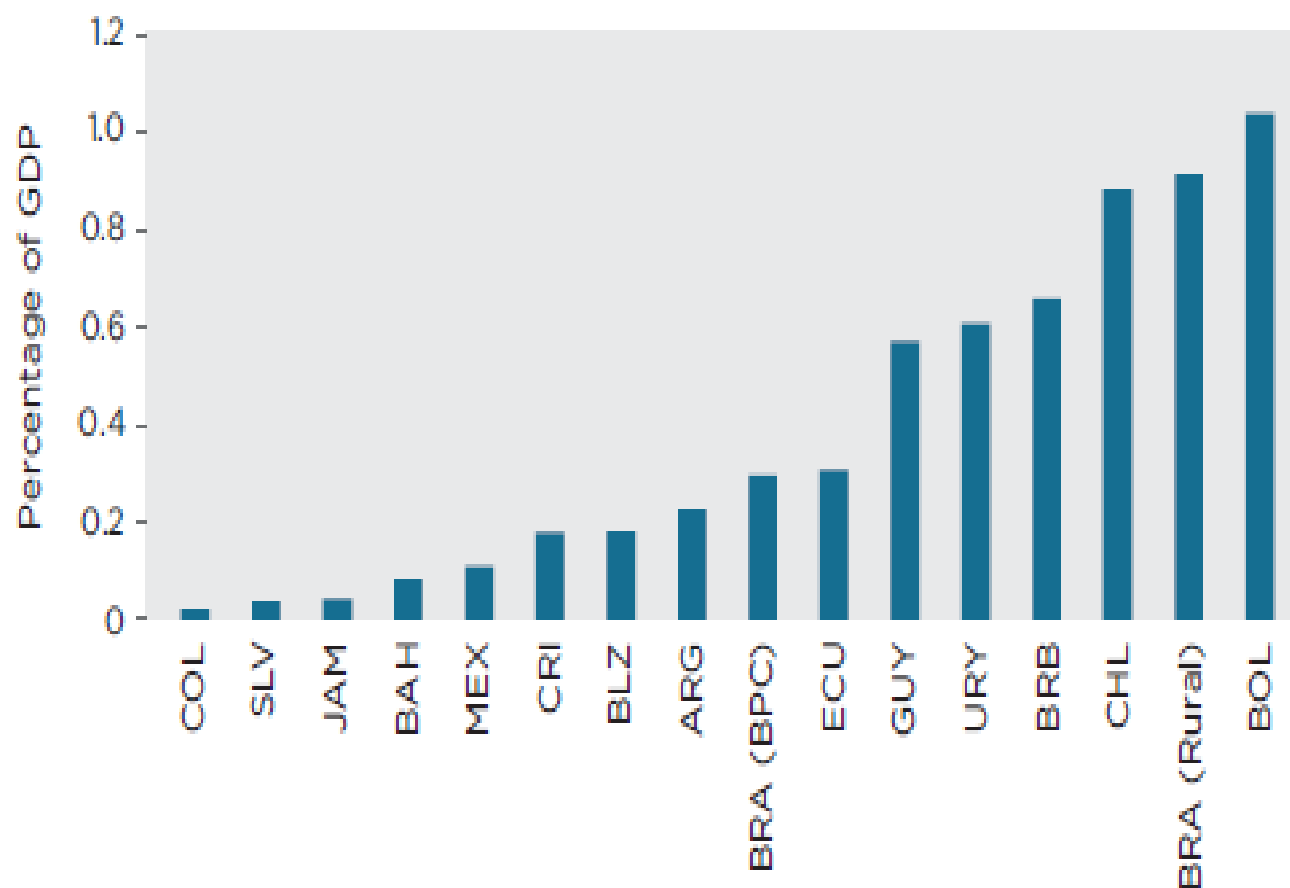
The guaranteed pension is based on years of residence in Sweden, with an offset based only on the inkomstpension.

Examples of Non-contributory Pensions

Country	Eligibility for full pension	Pro-rating	Size of full benefit ^[1]	Above poverty line	Testing	Taxable
Australia	10 years	No	Benchmarked to 25% of Male Total Average Weekly Earnings	No	Two tests: total income, assets	No
Canada	40 years after age 18	Yes	CPI indexed	No	Total income	Yes
Chile	20 years including 4 of the last 5 prior to applying	No		Yes	Two tests: Individual mandatory pension income, family total income.	Yes
Netherlands	50 years after age 15	Yes	70% of minimum wage	Yes	No	Yes
New Zealand	10 years after age 20 and at least 5 years after age 50	No		Yes	No	Yes
Sweden	40 years after age 25	Yes		No	Against mandatory pension benefit ^[2]	Yes

^[1] Except as noted, the column reports monthly benefits for a single person in 2011. Some countries have benefits that vary with marital status or living arrangement. ^[2] 18/16.5 times Inkomstpension.

Public spending on non-contributory pensions (as a % of GDP)



Source: BETTER PENSIONS BETTER JOBS, TOWARDS UNIVERSAL COVERAGE IN LATIN AMERICA AND THE CARIBBEAN. By Mariano Bosch, Angel Melguizo, and Carmen Pages, Inter-American Development Bank, September 2010. Figure 1.3 pg 13.

Poverty rate by age: country comparisons, 2010

Country/Region	Total Population	<15	15-24	25-59	60+	65+
ARG	11.0	19.2	11.6	8.0	4.9	3.7
BOL	35.0	44.5	28.4	30.7	26.6	25.3
BRA	18.2	31.8	18.3	13.8	4.2	3.5
CHL	5.2	8.6	5.5	4.2	2.5	2.3
COL	37.8	46.3	36.3	31.0	42.2	44.3
CRI	11.6	16.7	8.7	8.5	17.0	18.5
DOM	18.7	26.8	16.6	14.0	16.0	15.6
ECU	17.6	24.0	15.1	13.8	16.2	17.2
SLV	27.1	35.2	24.9	22.4	20.3	20.7
GTM	33.9	42.4	28.9	27.6	28.2	29.1
HND	36.9	45.7	30.1	31.3	35.6	37.1
MEX	13.9	18.2	11.8	10.2	19.9	21.9
NIC	42.7	53.2	38.5	36.6	32.5	32.5
PAN	22.3	32.4	21.8	16.6	17.0	18.2
PRY	21.4	29.7	18.1	16.5	16.9	17.2
PER	25.2	36.0	21.4	20.1	19.5	20.1
URY	6.7	14.6	7.2	4.8	1.1	0.9
VEN	19.8	27.3	17.5	15.5	18.2	19.4
LAC-18	22.5	30.7	20.0	18.1	18.8	19.3

Source: BETTER PENSIONS BETTER JOBS, TOWARDS UNIVERSAL COVERAGE IN LATIN AMERICA AND THE CAR
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 Table 1.1 pg 7.

Matching costs with resources

Three instruments

- The size of the monthly pension
- The age at which the pension is first paid
 - Benefit should provide significant poverty relief
 - That may be possible only from a high age
- Whether the pension is universal or tested

Universal or tested

- Benefits may be reduced in respect of
 - Earnings or income (income test)
 - Income and wealth (means test)
 - Pension income from the mandatory system (pensions test)
- Any of these tests can apply
 - At low levels, thus excluding all but the poor
 - At high levels, thus excluding only the best off (affluence test)
 - At an intermediate level (Chile)

Aging

- Adjust for longer life expectancy
- Adjust for a changing labor force
- Adjust for macroeconomic shock
- Adjust for changing social risks

Benefit adjustments

- Sweden
 - Quasi-actuarial adjustment of benefits
 - Notional interest rate adjusted for financial balance
- Germany
 - Point value adjusted for system dependency ratio
- US
 - Legislated increase in “age for full benefits” in response to 75-year measure of “actuarial balance”

3 La reforma
necesaria
El futuro de
las pensiones

Nicholas Barr
y Peter Diamond



El Hombre del Tres