

# The Chilean Pension Reform Turns 25: Lessons from the Social Protection Survey

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*Lessons from Pension Reform In the Americas*

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# Background

- Many countries' old-age systems face solvency problems
- Chile's 1980 plan seen as model for many LAC programs
- Yet recent presidential campaign raised concerns
  - Insufficient contributions
  - Accumulations/commissions
  - Lack of financial knowledge

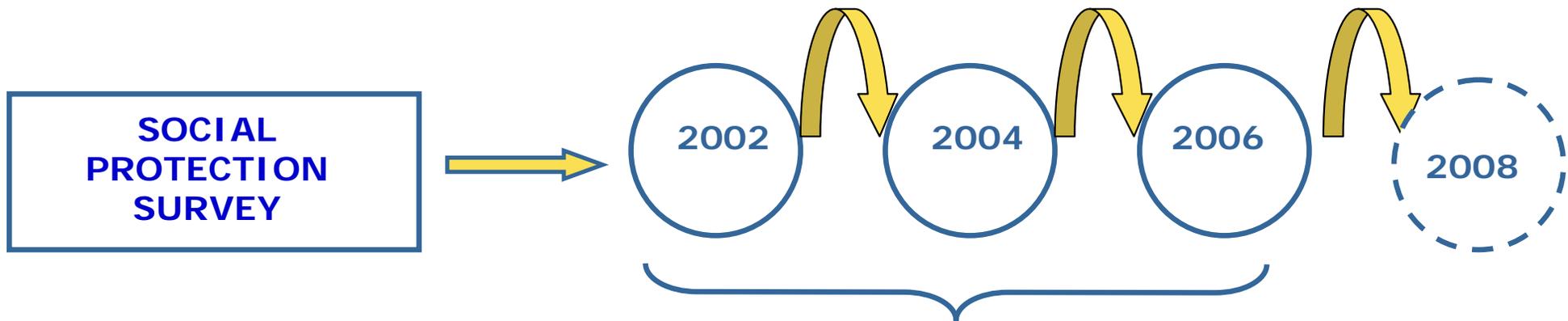
# The Chilean Reform

- Previous Chilean SS system relied on occupational schemes (mostly insolvent).
- 1980: Funded defined contribution individual accounts.
  - 10% mandatory contributions to individual accounts for wage workers, run by private fund managers (AFPs);
  - Standardized eligibility and retirement ages;
  - Closed old system to new entrants; recognition bonds for taxes paid to old system.
- Supplemented with safety net: minimum pension for 20 years of contributions (poverty benefit if not)

# Motivation and questions:

- Introduce *Encuesta de Protección Social* (EPS) 2004
- New Evidence
  - Who participates in Chilean system and what are lifetime contribution patterns?
  - What have people accumulated and what are expected benefits?
  - How financially knowledgeable are Chileans about their retirement system?

# Social Protection Survey (EPS)



**Longitudinal Survey**



**1980 to 2004**



Current and Retrospective Records:

- Pension Systems: AFP, INP
- Health: Isapres, FONASA
- Chile Solidario
- Other

# EPS Sample

## 2002 EPS

- Sample drawn from frame of 8 current and former affiliates of social security system
- 17,246 individuals affiliated with new retirement system for at least 1 month 1981-2001

## 2004 EPS

- Includes non-affiliated (incl. those never employed in the formal sector)
- New health and wealth questions

2006 EPS underway

Future surveys planned...

# EPS Content

- Detailed information on pensions and labor market history for respondent: current and retrospective
- Socio-demographic and current labor market data on household members
- Health and wealth
- Financial knowledge regarding contributions, investments, and payouts.

# Life Cycle Contribution Patterns

- Chile has DC system:  
Benefits=f(contributions, investment returns).
- Contributions to individual accounts and invested.
- Contributions mandatory for wage workers, voluntary for self-employed.

# Contribution Patterns: Self-Report vs. Admin

## Self-report exceed administrative counts by 20%

Number of Months Contributed by EPS 2002 Respondents			
	Mean Self-Report	Mean Admin	Ratio Self/Admin
Total	108	88	123%
By Sex:			
Men	124	103	121%
Women	90	72	125%
By Age:			
18-20	12	13	95%
21-25	32	28	111%
26-30	63	54	117%
31-38	104	85	123%
39-45	146	113	128%
45-50	157	126	124%
51-55	166	139	119%
56-60	163	138	118%
By Education:			
< Elem	110	82	135%
< HS	108	82	131%
HS	106	87	122%
>HS	110	100	111%

EPS respondents in 2002 age 18-60 with linked records; all results weighted.  
Months of AFP Contributions Only.

# Contribution Patterns by LF Status

- Contribution rates during work are very high.
- Periods of noncontribution correspond mainly to periods of nonworking

% of Months Contributing of Months while				
	Working	Unemployed	Not in LF	Wage Wkr
<b>By Sex:</b>				
Men	79	5	4	89
Women	82	4	3	91
<b>By Age:</b>				
18-20	81	2	4	82
21-25	82	3	2	86
26-30	81	2	1	87
31-38	78	3	2	88
39-45	79	5	3	90
45-50	80	11	6	92
51-55	82	8	5	93
56-60	83	5	7	94
<b>By Education:</b>				
< Elem	71	5	2	85
< HS	76	5	4	88
HS	84	4	3	91
>HS	86	4	3	92

EPS respondents in 2002 age 18-60 with linked records; all results weighted.

Months of Contributions since 1981.

# Accumulations

- Pensions financed with resources accumulated in individual accounts.
- Balances represent sum of contributions, investment yield, Recognition Bond.
- Initially, all AFP monies in government bonds; now pension fund managers can offer broader array of investment choices

# Individual Account Balances: Self-Report vs. Admin

- Self-reported account balances for those who know their AFP accumulations are similar to administrative records
- Only 40% know their balances and they have higher balances (median ~ \$3 M Chilean pesos, US\$5,300)

	<i>For Those with a Self-Reported AFP Balance</i> (N=4,677)				<i>Doesn't Know</i> (N=7,686)	<i>Total</i> (N=12,363)
Percentile	Self-Report Amt	Admin. Amt	Diff	% Diff	Admin. Amt	Admin. Amt
p25	820,000	908,900	-88,900	-11	125,443	324,300
p50	3,000,000	2,939,800	60,200	2	738,300	1,531,100
p75	8,000,000	7,087,800	912,200	11	2,549,900	4,574,200

2004 Chilean Pesos, \$560=US\$1

# Individual Account Balances and Recognition Bonds

- Recognition bonds worth ~ AFP accruals;
- Median ~ \$4 M Chilean pesos (US\$7,100)

Individual Account Balances Plus Recognition Bonds (N=2,458)		
Percentile	AFP Balance	Bond
p25	90,700	748,857
p50	4,263,400	4,491,373
p75	10,700,000	13,000,000

2004 Chilean Pesos  
\$560=US\$1

Individual Account Balances for those with no Recognition Bonds (N=9,905)	
Percentile	AFP Balance
p25	341,700
p50	1,293,300
p75	3,559,600

2004 Chilean Pesos  
\$560=US\$1

# Knowledge of Pension System

- Many US studies show little financial literacy; may indicate failure to plan for retirement.
  - Mitchell (1988), Gustman and Steinmeier (1999), Lusardi and Mitchell (2006)
- Little known about whether workers similarly uninformed in Chilean defined contribution system.
- Investigate patterns of pension information.

# Knowledge about Contributions

- 40-51% report knowing what the payroll tax is; only 27-35% accurate.
- Fewer than 3% know either the fixed or variable AFP commission rate

	2002-04 Panel		2004 New Affiliates
	2002 Survey	2004 Survey	
<b>Contributions</b>			
Claims knows AFP amount contrib	51%	46%	40%
Gave correct amount contrib	27%	34%	35%
<b>Commissions</b>			
Claims knows fixed AFP commiss	1%	2%	2%
Claims knows var AFP commiss	3%	2%	2%
Claims knows both commiss	1%	0%	0%

# Knowledge about Accumulations

- 42-54% report knowing their AFP balances, but 2/3 off by more than 20%
- About half of workers know about multi-funds, but only 1/5 give correct number of funds

	2002-04 Panel		2004 New Affiliates
	2002 Survey	2004 Survey	
<b>Balances</b>			
Claims knows AFP accum	46%	54%	42%
Gave correct AFP amount (+ - 20%)		36%	
<b>Funds</b>			
Knows how pension funds are invested	10%		
Knows about multifunds		48%	47%
Knows how many multifunds		33%	30%
Knows correct number of multifunds		20%	20%
Knows his/her type of fund		33%	29%
Knows the riskier fund		27%	21%

Sample restricted to respondents 18-60 (age in 2002)

# Knowledge about Rules

- 73-86% know legal age for retirement for men and women
- Few people know how AFP benefits are calculated

	2002-04 Panel		2004 New Affiliates
	2002 Survey	2004 Survey	
<b>Rules</b>			
Knows female legal retirement age	83%	79%	73%
Knows male legal retirement age	86%	83%	77%
Knows how AFP calculates pensions	14%	11%	8%

# Knowledge about the Safety Net

- 3-5% know value of minimum pension, but none know requirements
- 7-12% know amount of welfare pension, but 1-4% know the rules

	2002-04 Panel		2004 New Affiliates
	2002 Survey	2004 Survey	
<b>Guaranteed Benefits</b>			
Claims knows reqs for min pen	23%	34%	20%
Knows reqs for min pen	0%	0%	0%
Knows there is minimum		49%	38%
Claims knows min pension amt	21%	36%	26%
Gives correct value min pension	5%	4%	3%
<b>Welfare (PASIS) Benefits</b>			
Claims knows reqs for welfare	20%	21%	12%
Gives correct reqs for welfare	3%	4%	1%
Claims knows welfare pension amt	18%	18%	10%
Gives correct amt welfare pension	12%	11%	7%

# Conclusions on Contributions

- Men have ~ 40% higher rates of contribution to the AFP system than women.
- Self-reports tend to overestimate the number of months contributed, relative to administrative records.
- Periods of noncontribution tend to correspond to periods of nonemployment or self-employment.

# Conclusions on Accumulations

- Only one third of those who say they know their balance report figures close to administrative records.
- Recognition Bonds an important source of retirement financing for current retirees.

# Conclusions on Knowledge re Pension System

- Respondents know retirement ages.
- However, most:
  - do not know their balances,
  - are uninformed about AFP costs, and
  - do not know how their pension amount will be calculated.

# Implications

- *Encuesta de Protección Social* a wonderful tool:
  - to assess retirement wellbeing for future cohorts; and
  - show how to boost system effectiveness and efficiency.
- Wage workers contribute most of the time:
  - Contribution shortfalls best met by more formal sector employment.
- Uniformed consumers unlikely to drive competition in AFP system.

# Thank you - questions?

*For more information:*

- Encuesta de Protección Social  
<http://www.proteccionsocial.cl/>
- The Pension Research Council:  
<http://prc.wharton.upenn.edu/prc/prc.html>