

The contribution of private pension systems to long-term savings and economic growth

**“Contribution of insurance and pensions to growth”
Special OECD anniversary roundtable**

Mexico City, June 9th, 2011

Outline

- I. Background to pension reforms**
- II. Impact on economic growth**
- III. Main challenges**

I. Background to pension reforms

I.1 Cases of DB to DC reforms since 1981

Country	year	Type of system		
		Unique	integrated	in competition
Latin America				
Chile	1981	•		
Peru	1993			•
Colombia	1994			•
Argentina ⁺	1994			•
Uruguay	1996		•	
Bolivia	1997	•		
Mexico	1997	•		
El Salvador	1998	•		
Costa Rica	2000		•	
Panama	2002			
Dominican Republic	2003	•		
Central & Eastern Europe				
Hungary ⁺	1998		•	
Poland	1999		•	
Sweden	1999		•	
Latvia	2001		•	
Bulgaria	2002		•	
Croatia	2002		•	
Estonia	2002		•	
Kosovo	2002	•		
Russian federation	2003		•	
Lithuania	2004		•	
Slovakia	2005		•	
Macedonian	2006		•	
Czech Republic	*			
Rumania	2008		•	
Ukraine	**			
Asia				
Kazajstan	1998	•		
Brunei	2010		•	
Armenia	*			
Africa				
Nigeria	2005	•		
Ghana	2010		•	
Egypt	2012	•		

Source: FIAP

+ Reversed

* not yet approved

** not yet implemented

I. Background to pension reforms

I.2 Main common features

- Replacement of traditional, collective, “pay as you go”, DB schemes
- Mandatory, individual accounts
- Fully funded
- Defined contribution
- Close link between contributions and benefits
- Private management by specialized firms
- Transitional measures (recognition of acquired rights)
- Guarantees (minimum pension and/or rate of return)
- Government regulation and supervision

I. Background to pension reforms

I.3 Objectives

- Accomplish financial feasibility and full funding
- Reduce fiscal burden
- Effectively tackle the demographic challenges of population aging and longevity
- Maximize the return of funds to plan members
- Optimize the quality of pension benefits, as reflected in adequate replacement rates
- Grant plan members both freedom of choice and incentives to improve pension benefits through own effort and individual decision

II. Impact of pension reforms on economic growth

II.1 Theory and empirical evidence

- In addition to these explicit objectives, it has been claimed that pension reforms contribute to improve economic performance through several effects:
 - ✓ Increase of domestic savings and investment
 - ✓ Development of capital markets
 - ✓ Efficiency gains from labor markets and taxation
 - ✓ Improvement of corporate governance practices
- A diversity of empirical work has been undertaken in the last years to quantify the macroeconomic and specific effects of such reforms

II. Impact of pension reforms on economic growth

II.2 Effects on domestic savings and investment

- Following Corbo & Schmidt-Hebbel, there are four main channels:
 - i) On individual new mandatory savings
 - ii) On public savings, which depends on the way transitional deficit is financed
 - iii) On individual voluntary savings, as a response to i)
 - iv) On individual savings, as a response to ii)
- Empirical evidence shows mixed results, due to:
 - ✓ Scarcity of long range data (with the exception of Chile)
 - ✓ Simultaneous effects of other structural reforms
 - ✓ Difficulty in determining how the transition cost is financed

II. Impact of pension reforms on economic growth

II.2 Effects on domestic savings and investment

- Some empirical evidence

43 countries*

“1 dollar of additional mandatory pension savings increases domestic savings by more than 50 cents”

Lopez-Murphy and Musalem (2004)

Chile (1981-2001)

	Max	Min
Domestic Saving	4.6%	0.7%
Investment	2.8%	0.3%

% of GDP per year

Corbo and Schmidt-Hebbel (2003)

Mexico (1997-2008)

	Max	Min
Domestic Saving	2.3%	0.1%

% of GDP per year

Villagómez and Hernández (2009)

*Countries with mandatory funded pension systems represent more than 50% of pension assets used in the regression model

II. Impact of pension reforms on economic growth

II.3 Development of capital markets

- Quantitative effects

- ✓ Increase in the volume of intermediated funds

- ✓ Increase in the level of trading

- ✓ Deepening of the market

- ✓ Expansion of supply of long-term funds

- ✓ Reduction in the cost of capital

- ✓ Growth of specific industries: insurance, mortgages, infrastructure

AUM as percentage of GDP (April 2011)

Country	AUM	GDP	AUM as % of GDP
Chile	157	204	77.1%
Mexico	124	1,179	10.5%
Colombia	55	286	19.4%
Peru	29	142	20.5%
Total	366	1,810	20.2%

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Annual growth of pension funds equity holdings and stock markets operations volume (2003-2010)

year	Chile		Mexico	
	Capital market operations volume annual growth	PF equity holdings annual growth	Capital market operations volume annual growth	PF equity holdings annual growth
2003	86.4%	99.2%	-6.6%	0%
2004	58.7%	30.4%	69.3%	0%
2005	48.2%	15.7%	11.4%	100%
2006	41.9%	39.1%	51.1%	382%
2007	82.1%	16.6%	55.3%	10%
2008	-28.9%	-42.3%	-0.8%	8%
2009	8.0%	57.9%	3.7%	95%
2010	30.5%	44.4%	58.0%	19%
Correlation coefficient	0.8		0.7	

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Annual growth of pension funds and corporate bonds issuing (2002-2010)

Year	Chile		Colombia		México	
	PF annual growth	Corporate bonds issuing annual growth	PF annual growth	Corporate bonds issuing annual growth	PF annual growth	Corporate bonds issuing annual growth
2002	9%	8%	38%	125%	30%	173%
2003	18%	17%	30%	38%	25%	109%
2004	14%	21%	30%	1%	19%	72%
2005	13%	34%	38%	29%	23%	1%
2006	23%	16%	18%	81%	23%	1%
2007	16%	40%	18%	22%	15%	16%
2008	-15%	5%	14%	-34%	13%	1%
2009	28%	32%	37%	187%	23%	1%
2010	16%	34%	24%	-28%	20%	49%
Correlation coefficient	0.6		0.6		0.6	

Pension funds holdings of local corporate bonds and equity, as a % of AUM and GDP

Country	<u>Holdings as % of AUM</u>			Total holdings (% of GDP)
	Corporate bonds	Local equity	Total	
Chile	17.4%	17.5%	34.9%	26.9%
Colombia	7.6%	31.0%	38.5%	7.5%
Mexico	7.0%	8.0%	15.0%	1.6%
Peru	20.3%	28.0%	48.3%	9.9%
Total*	12.6%	17.1%	29.8%	6.0%

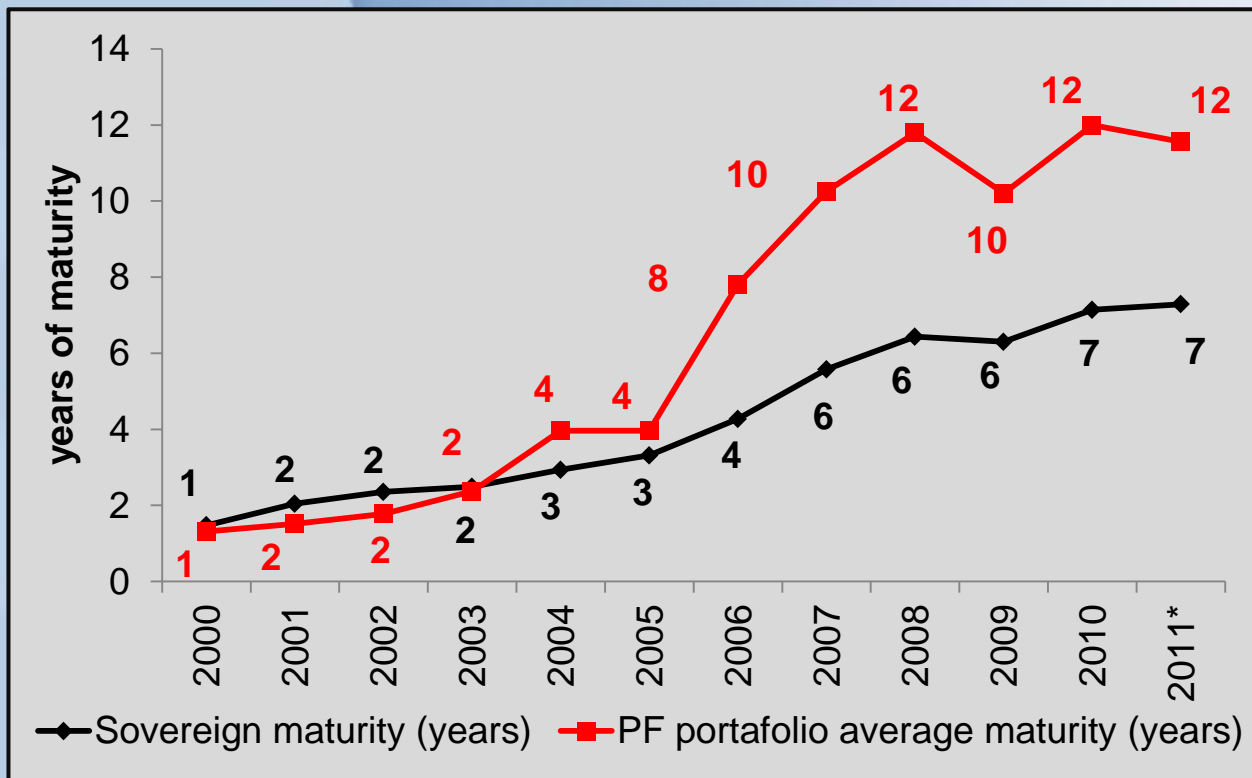
*As of April 2011
Source: FIAP

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Mexico: sovereign debt maturity and pension funds average maturity (2000-2011)



*Data as of April 2011.
Source: Banco de Mexico and Consar

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Pension funds holdings of MBS as a % of AUM and GDP

Country	MBS holdings (% of AUM)		MBS holdings (% of GDP)
	2011	average: 2002-2011	
Chile	7.9%	5.1%	5.6%
Colombia	3.6%	3.4%	0.7%
Mexico	3.3%	3.2%	0.4%
Peru	13.0%	13.9%	2.7%
Total*	6.1%	4.8%	1.2%

*As of April 2011
Source: FIAP

Pension funds investments in infrastructure

Country	Indirect (ABS) (USD billions/ % of total assets)	Direct investments (USD billions/ % of total assets)	Regulatory limit
Chile	10 / 9.2%	2 / 1.8%	No limit
Colombia	4.4 / 17.1%		No limit
Mexico	7.6 / 6.2%	3.5 / 2.7%	13% in direct investments
Peru	2.4 / 11.5%	0.7 / 3.3%	No limit

II. Impact of pension reforms on economic growth

II.3 Development of capital markets

- Qualitative effects

- ✓ Modernization of securities markets (improved clearing and settlement, etc)

- ✓ Development of new institutions: custodians, electronic trading systems, centralized clearing schemes

- ✓ Higher quality of regulation

- ✓ Enhancement of transparency: quality and timeliness of information

- ✓ Innovation and creation of new financial products

- ✓ Development of risk-rating systems and independent agencies

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Infrastructure bond & CKD (main characteristics)

Country	Instrument	Target	Issuer	Type of issuing	Guarantees
Chile	Infrastructure Bond	Infrastructure projects	Companies	Bond	100% insurance policy
Mexico	Development Capital Certificates (CKD)	Infrastructure Real Estate Private Equity	Companies or funds through an issuing trust	Listed private equity	Trust assets

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II. Impact of pension reforms on economic growth

II.4 Other relevant effects

- Labor market incentives

- ✓ Reduction of distortions (linkage between benefits and contributions)
- ✓ Increase in formal sector employment
- ✓ Job mobility
- ✓ Increased demand (contributions are not seen as payroll taxes)

- Better corporate governance practices

- ✓ Demand for more transparency and accountability
- ✓ Pressure to undertake more socially responsible investments

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World Bank investor protection index 2011

	Chile	Colombia	Mexico	Peru
World Bank disclosure grade for financial markets	8	8	8	8

III. Main challenges

- Further evolution of pension funds investment regulation towards diversification
- Enhancement of other relevant regulations regarding taxation, claiming rights of investors, transparency and legal certainty
- Foster reforms aimed at triggering long-term investment opportunities

III. Main challenges

- Ensure alignment of investment strategies with the long-term objectives of private pension funds
- Continue to implement and refine life-cycle models and coherent links between the investment strategies of the accumulation and decumulation stages

III. Main challenges

- Continue developing initiatives addressing financial literacy, customer commitment and involvement, property rights and voluntary contributions
- Strengthen advisory capabilities of providers, especially regarding: a clear understanding of the risk/return relationship; its impact on the quality of pensions; and the danger of overreacting to short-run volatility episodes

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