

## Pension systems in Latam: DC schemes

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Workshop on Pension System of  
China and Latin America

CNCB

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## The introduction of social policies in Latin America

In Latin America, “pay as you go” pension systems were introduced in different periods during the last century.

### **Pioneering countries:**

Uruguay, Argentina, Chile and Brazil  
Pension systems were introduced between 1910-1930

### **Intermediate countries:**

Mexico, Peru, Colombia, Bolivia, Ecuador,  
Paraguay, Costa Rica y Venezuela  
Pension systems were introduced between 1940-1950

### **Late countries:**

El Salvador, Nicaragua, Dominican Republic,  
Guatemala, Honduras.  
Pension systems were introduced between 1960-1970

## The introduction of social policies in Latin America

### **But pension systems were not effectively managed:**

- They offered many benefits with generous payments
- No relation between contributions and pensions
- Unpaid contributions by private and government employers
- Pensions were given in generous amounts without taking into account fiscal sustainability
- Pension parameters such as retirement age, years of contribution, contribution rate and others were not adjusted on time for economic and demographic changes
- Low and negative returns
- Pension funds were used for other activities such as infrastructure, health programs and current government expenses.
- High administrative costs
- Fiscal and political pressure
- Actuarial and financial imbalance

## Unsustainable pension systems forced to pursue very realistic parametric changes but mainly new structural changes:

### PARAMETRIC CHANGES

Important changes in terms of delaying retirement, increasing contributions, limiting anticipated retirement, incorporating more realistic benefits.

### STRUCTURAL CHANGES

The introduction of a mandatory individual savings account systems as an important pillar of the pension systems

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## Defined Contribution schemes in Latin America

Pension reform models	Pension Plan	Management	Country	Government at the moment of creation
<b>Substitute model</b>	Individual savings account	Private	Chile: 1981 Bolivia: 1997 Mexico: 1997 El Salvador: 1998	Autocratic Democratic Democratic Democratic
<b>Parallel model</b>	Pay as you go Individual savings account	Public Private	Peru: 1992 Colombia: 1993	Autocratic Democratic
<b>Integrated model "Mixed Model"</b>	Pay as you go component Individual savings account component	Public Public and Private	Uruguay: 1996 Argentina: 1994 (Until 2008)	Democratic Democratic

**Social component: varies from nothing to effectively universal (the case of Chile)**

## Defined Contribution schemes in Latin America

**Individual capitalization:**  
Each worker keeps an individual savings account with his contributions

**Private management:**  
Private firms (AFPs) take part by managing funds and retirement benefits.

**Insurance policy for death and labor disability:**  
The reform established an insurance policy that covers affiliated workers (all paying a similar fee).

The Government maintains responsibility for the system by assuming its subsidiary and regulatory role

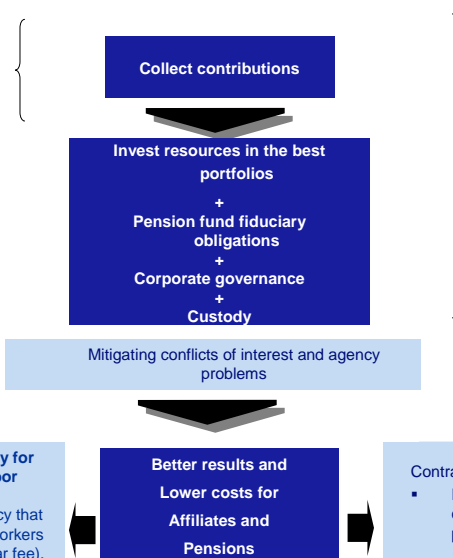
## Defined Contribution schemes in Latin America

	Social component	Mandatory DB	Mandatory DC	Voluntary DC
Objectives	Social	Redistribution + insurance	Saving + insurance	Saving + insurance
Administration	Government	Government	Private sector	Private sector
Financing regime	National Budget	PAYG or other	Individual capitalization	Individual capitalization
Benefit	Basic pension	Minimum pension	Pension as a function of saving	Pension as a function of saving
Financing	Government	Contributions + Government	Fully-funded	Fully-funded

## Defined Contribution schemes in Latin America

## DC contribution Scheme in Latin America

**Pension Funds** companies must collect contributions of its affiliates

**Very strict regulation on:**

- Risk and return (central risk agency)
- Multifunds regime
- Authorized assets that depend on legal framework given by regulatory institutions
- Capital markets
- Prudent investment decisions
- Investment based on expertise

## Defined Contribution schemes in Latin America

### Advantages

- One stop shopping arrangement that reduces transaction costs.
- A sense of property rights by establishing individual savings accounts.
- Better expertise and prudent management, considering the historical bad performance of Latin American governments.
- Fiscal consolidation
- Efficient use of resources.
- Increase in national savings and potential GDP.
- Spur capital market development

However, it is important to deepen structural reforms in macroeconomics (labor market reform, capital markets reform, very focused social programs, institutional reforms, etc.) in order to get the best outcomes: coverage, replacement rate and sustainability

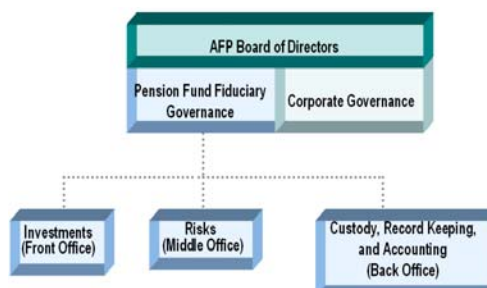
## Defined Contribution schemes in Latin America

**Pension Funds companies have fiduciary obligations with the funds and must follow best practices in corporate governance and mitigate conflicts of interest**

### Regulatory mandates

- ➔ Mitigate conflicts of interest and agency problems.
- ➔ Aligns interests with those of the affiliates
- ➔ Responsibilities defined at governing, managerial and operational levels.
- ➔ Fiduciary obligation with the fund
  - ➔ Prudent
  - ➔ Investor
  - ➔ Investment and decision
  - ➔ Specialists professionals

### Pension Funds companies implement corporate governance rules according to regulatory requirements



## Defined Contribution schemes in Latin America

### Asset management: the case of "multifunds" in Chile

#### Basic characteristics

Type of Fund	US\$ Millions*	% of the Fund
Fund A	25375,8	21,33%
Fund B	24608,6	20,69%
Fund C	50055,9	42,08%
Fund D	14534,7	12,22%
Fund E	4377,1	3,68%

#### % of Equity

% Maximum	Current	% Minimum
80%	78%	40%
60%	60%	25%
40%	40%	15%
20%	19%	5%
5%	0,5%	-

\*dic 2009

#### The default option

Type of Fund	Women < 35 years and Men < 35 years	Women between 36 and 50 years Men between 36 and 55 years	Women > 51 years and Men > 56 years	Retired workers
A			(-)	(-)
B	default			(-)
C		default		
D			default	default
E				

- Voluntary selection. Fund A is forbidden for people older than 50/55 as well as Funds A and B for retired workers.
- Default option is applied if the worker do not take an option.
- Default and prohibitions are only for the obligatory component.
- People can chose to have two kind of different funds.
- The age- mobility from one fund to another is progressive (20% annually).

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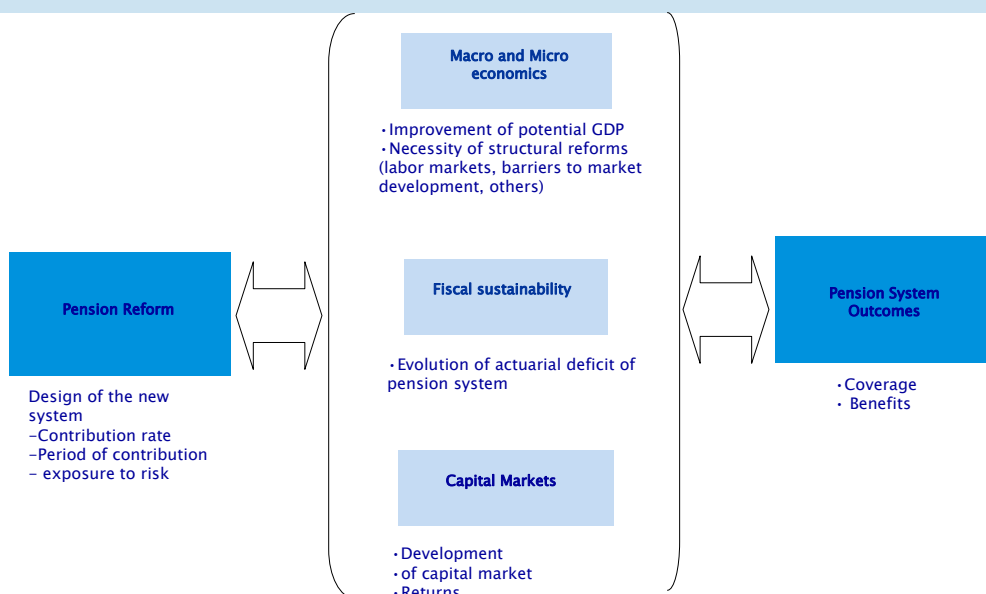
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## Goals and outcomes: a new pension system and the interaction with other factors



## Goals and outcomes: a new pension system and the interaction with other factors

Design of the reform: a pension according to how much you save

Country	Contribution rate		
	The first 10 years	From the beginning of the system	2009
Chile (1986)	10,0	10,0	10,0
Colombia (1994)	9,7	10,2	11,5
México (1997)	8,0	8,0	8,0
Peru (1993)	10,0	8,4	10,0

## Macro and microeconomics

Country	Average GDP %		
	The first 10 years	From the beginning of the system	2008
Chile (1986)	7,9	4,6	3,2
Colombia (1994)	2,6	3,5	2,5
Mexico (1997)	3,2	2,7	1,4
Peru (1993)	4,4	5,4	9,8

A

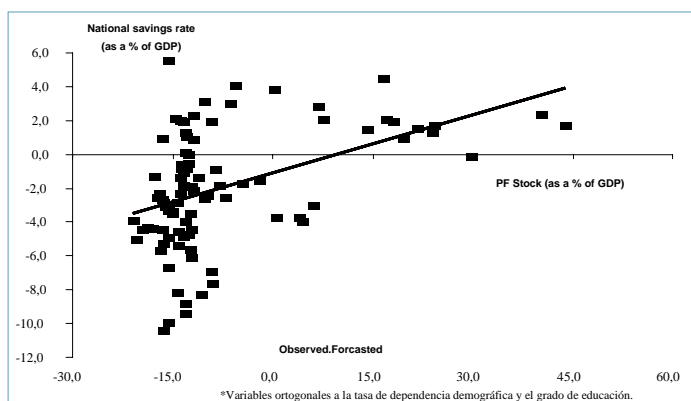
During the first 10 years Chile experienced a better performance than its peers in the region

B

Growth in Latam has been improving, especially in Peru

Growth is a fundamental factor behind savings and financial market development

## Macro and microeconomics



A 10 percent increase in the size of the pension funds has an impact of one tenth in aggregated savings.

Corbo y Schmidt-Hebbel (2003) found that a one percent point increase in pension funds, relative to GDP, has an impact between 1 and 5 points of GDP in savings.

Growth is a fundamental factor behind savings and financial market development

## Goals and outcomes: a new pension system and the interaction with other factors

### Macro and microeconomics

	Chile	Colombia	Mexico	Peru
Per capita GDP (constant US\$)	10,197	2,954	6,668	2,317
Labor informality (% population not covered by social security)	24%	52%	61%	71%
Labor legislation Protectionism (index)	18	27	41	61
Population of 65 years old and over				
2005	8%	5%	6%	6%
2050	22%	18%	21%	16%

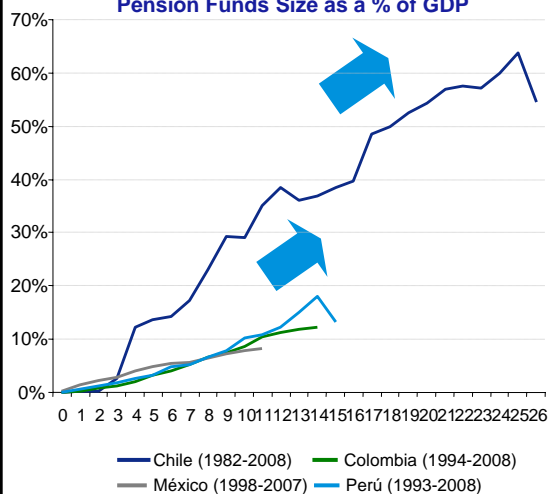
Source: BBVA ERD

Demographics and economic structural variables are the main determinants of the current and future performance of pension schemes

## Goals and outcomes: a new pension system and the interaction with other factors

### Capital Markets

Pension Funds Size as a % of GDP

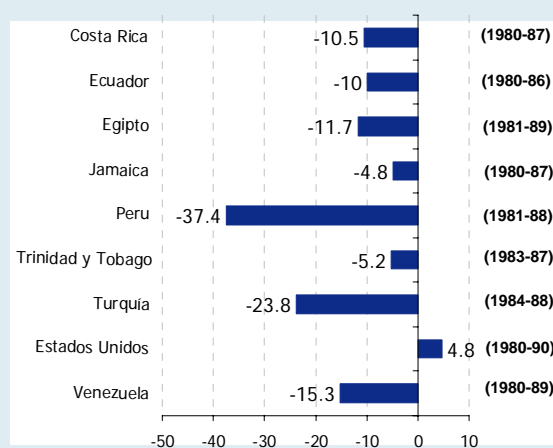


Country	Average return %		
	The first 10 years	From the beginning of the system	2009
Chile (1986)	10,4	9,1	13,4
Colombia (1994)	11,5	10,1	9,3
México (1998)	7,2	7,2	2,5
Perú (1993)	7,2	9,0	12,7

## Social policies in Latin America: the introduction of PAYG schemes

## Capital Markets

Real return of public pension funds in 1980s

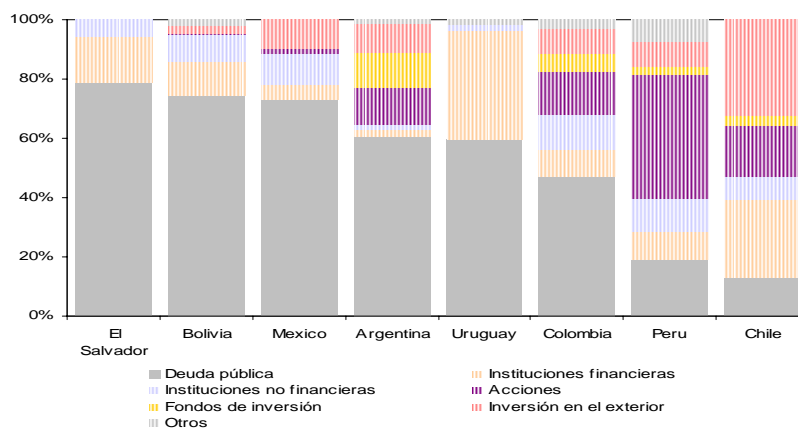


Source: World Bank, 1994: "Envejecimiento sin Crisis"

## Goals and outcomes: a new pension system and the interaction with other factors

## Capital Markets

Diversificación del portafolio de Fondos de Pensiones

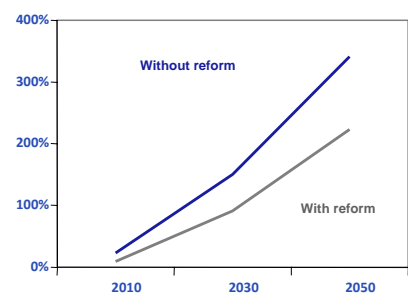


## Goals and outcomes: a new pension system and the interaction with other factors

### Fiscal sustainability

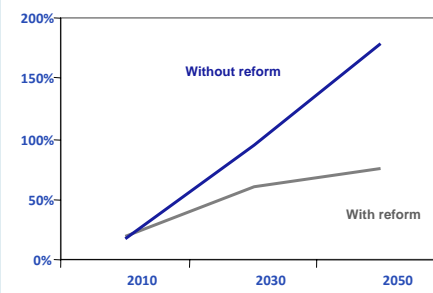
#### Estimated pension deficit with and without reform, as a % of GDP

##### Colombia



Source: Zvinienie &amp; Packard 2004

##### Chile



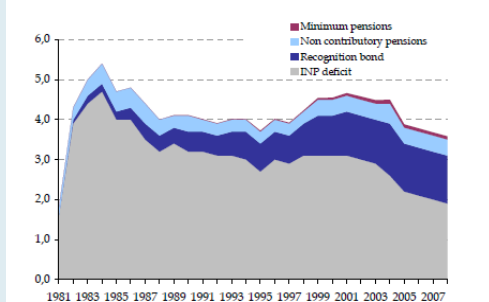
Source: Zvinienie &amp; Packard 2004

The reforms significantly reduced the pension deficit in several countries. The amount depends on the models used and on other reforms.

## Goals and outcomes: a new pension system and the interaction with other factors

### Fiscal sustainability

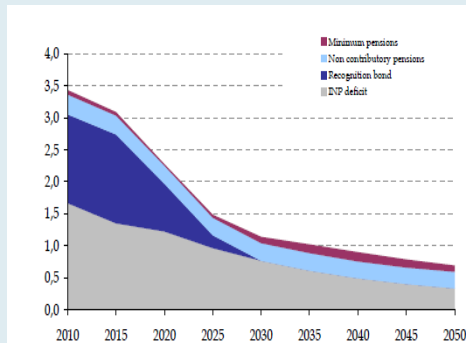
#### Transition deficit of the Civil Pension System in Chile 1981-2007 (% of GDP)



Note: Military system would add 1.5 p.p. of GDP on average

Source: Chilean Budget Office, Arenas and Gana (2005), and own elaboration

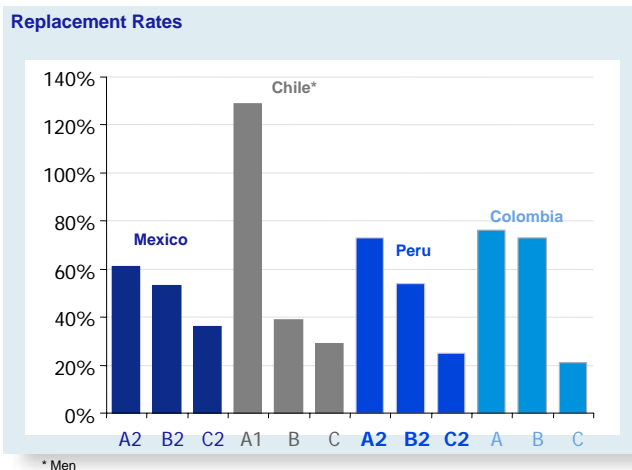
#### Transition deficit of the Civil Pension System in Chile 2010-2050 (% of GDP)



Source: Favre et al. (2006)

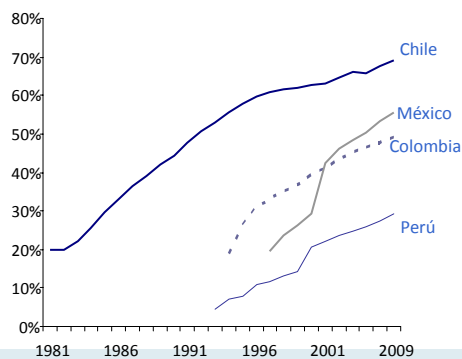
Fiscal sustainability is an important step before pursuing a universal pension scheme as in the case of Chile

## Replacement Rates

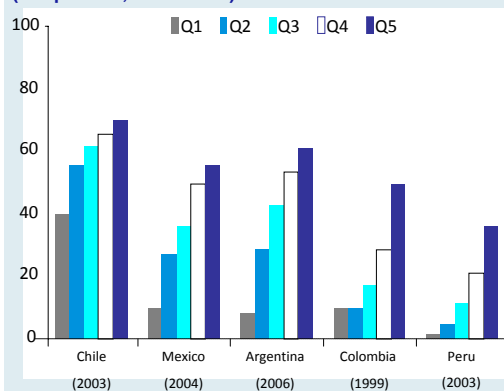


## Pension Coverage

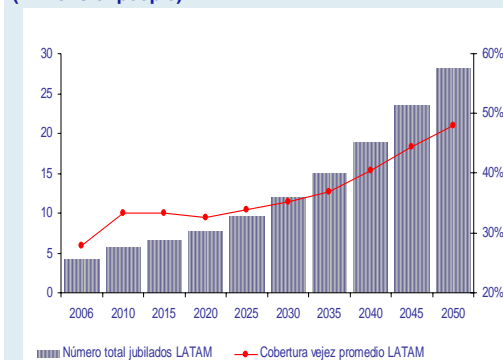
**EPA coverage evolution**  
(participants/ pop.14-64)



**EPA coverage by quintiles**  
(Q1=poorest, Q5=richest)



## Pension Coverage

Latam Average  
(millions of people)

## Pension Coverage

## Chilean pension system: diagnosis and reform in 2008

## Diagnostic

Poverty risk at old-age (coverage)

Low density of contribution among self-employed

Low projected replacement rates for women

Low competition



## Law 20.255 (March 2008)

New redistributive pillar (SPS)

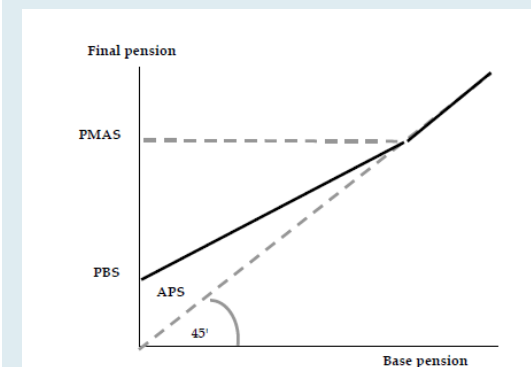
Gradual compulsory contribution / Fiscal advantages (same as dependent)

Public contributions in case of maternity

Auctioning for new affiliates (base on fees) / Join bidding for survivors and disability insurance

## Pension Coverage

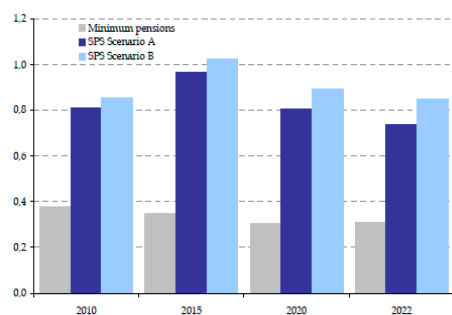
Reformed old age pension system in Chile



Fiscal sustainability is a pre requisite for success

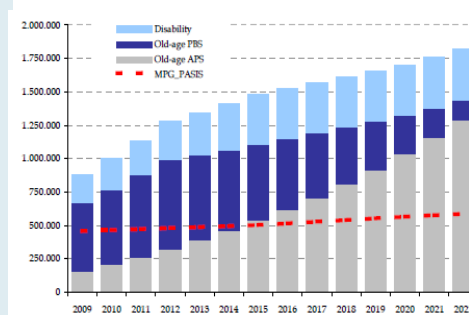
## Pension Coverage

Projection of the expenditure of the solidarity pension in Chile (% of GDP)



Source: Favre et al. (2006) and own elaboration

Projection of beneficiaries of the solidarity pension in Chile



Source: Favre et al. (2006) and own elaboration

Fiscal sustainability is a pre requisite for success

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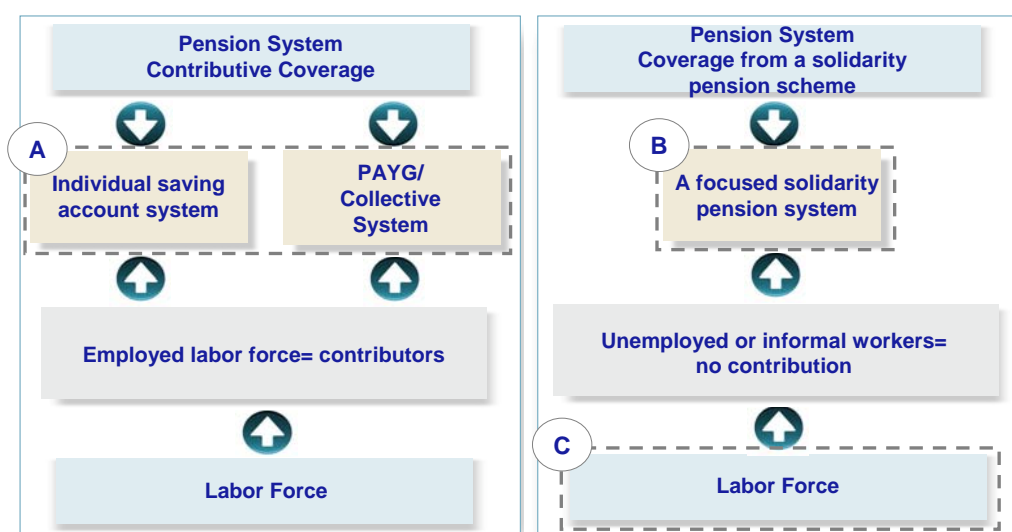
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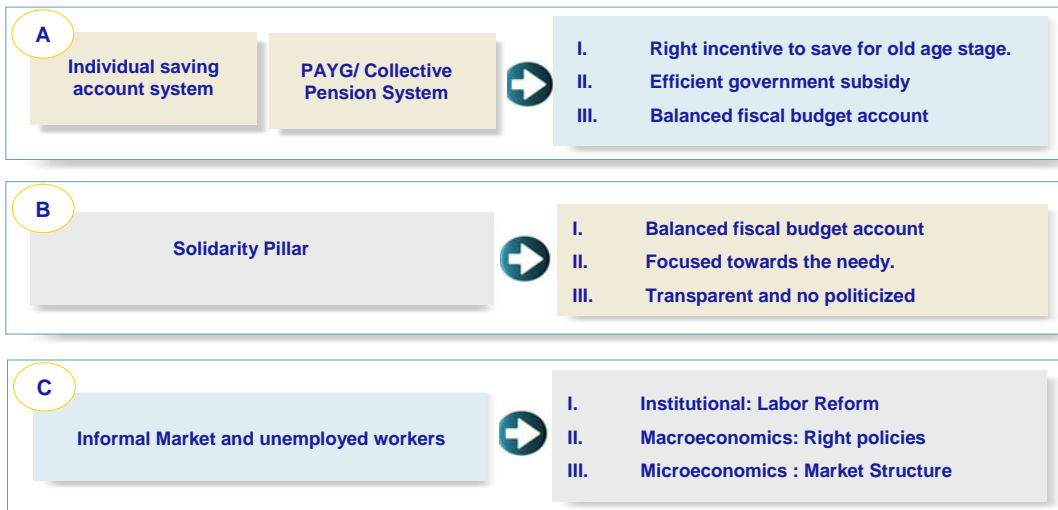
## Lessons from the Latin American experience

## An ideal system



## Lessons from the Latin American experience

### Important aspects to take into account



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