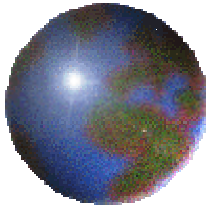
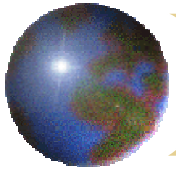


# *Financial Market Implications of Pension Reforms*



Helene K. Poirson, Asia-Pacific Dept, IMF  
hpoirson@imf.org  
Wharton, April 19, 2007

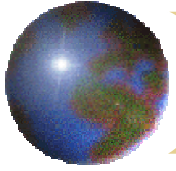


## *Overview of the presentation*

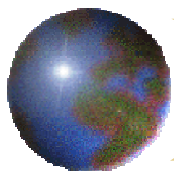
- International perspectives on India's pension plan
- Regulatory issues : role of investment in riskier assets and foreign diversification
- Pension funds and capital market development

### ***Message:***

***The shift to a funded privately-managed system has the potential to transform India's capital markets, but achieving a critical mass, overcoming regulatory challenges, and ensuring availability of suitable investment products are key challenges***



- ✚ International perspectives on India's pension plan
- ✚ Regulatory issues : role of investment in riskier assets and foreign diversification
- ✚ Pension funds and capital market development



# How does India's reform blueprint compare ?

Table I.1. Selected Countries: Main Features of Privately-Managed Pension Systems

	Argentina	Chile	Mexico	Peru	Hungary	Poland	India
Year of implementation of individual account reforms	1994	1981	1992	1993	1998	1999	2005
Mandatory (M) or voluntary (V) for new entrants to workforce?	M	M	M	M	M	M	M
Number of participants							
Million	4.9	3.8	36.2	3.9	2.4	13.1	0.3
Percent of the potential contributor base	...	58.0	...	...	...	70.0	...
Contribution rate (percent of gross wage) 1/	7.0	12.3	6.5	10.9	8.0	7.3	10.0
Of which: PFM's fee	1.12	0.99	1.47	1.99	0.97	1.6	...
Investment performance							
Average real rate of return on assets (2001–05) 2/	-7.1	7.0	6.3	15.1	...	9.8	...
Average annual real rate of return (net of fees) 3/	...	5.0	...	...	3.9	...	...
Projected replacement ratio by 2030–40 (percent)							
Men	60	50–60	45	45	...	...	43–95
Women (where different)	...	...	30	30	...	...	...

Sources: Faulkner-MacDonagh (2005); Impavido and Rocha (2006); Federacion Internacional de Administradoras de Pensiones; CONSAR; OECD; IMF and GAO.

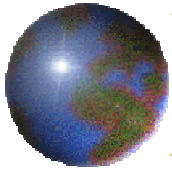
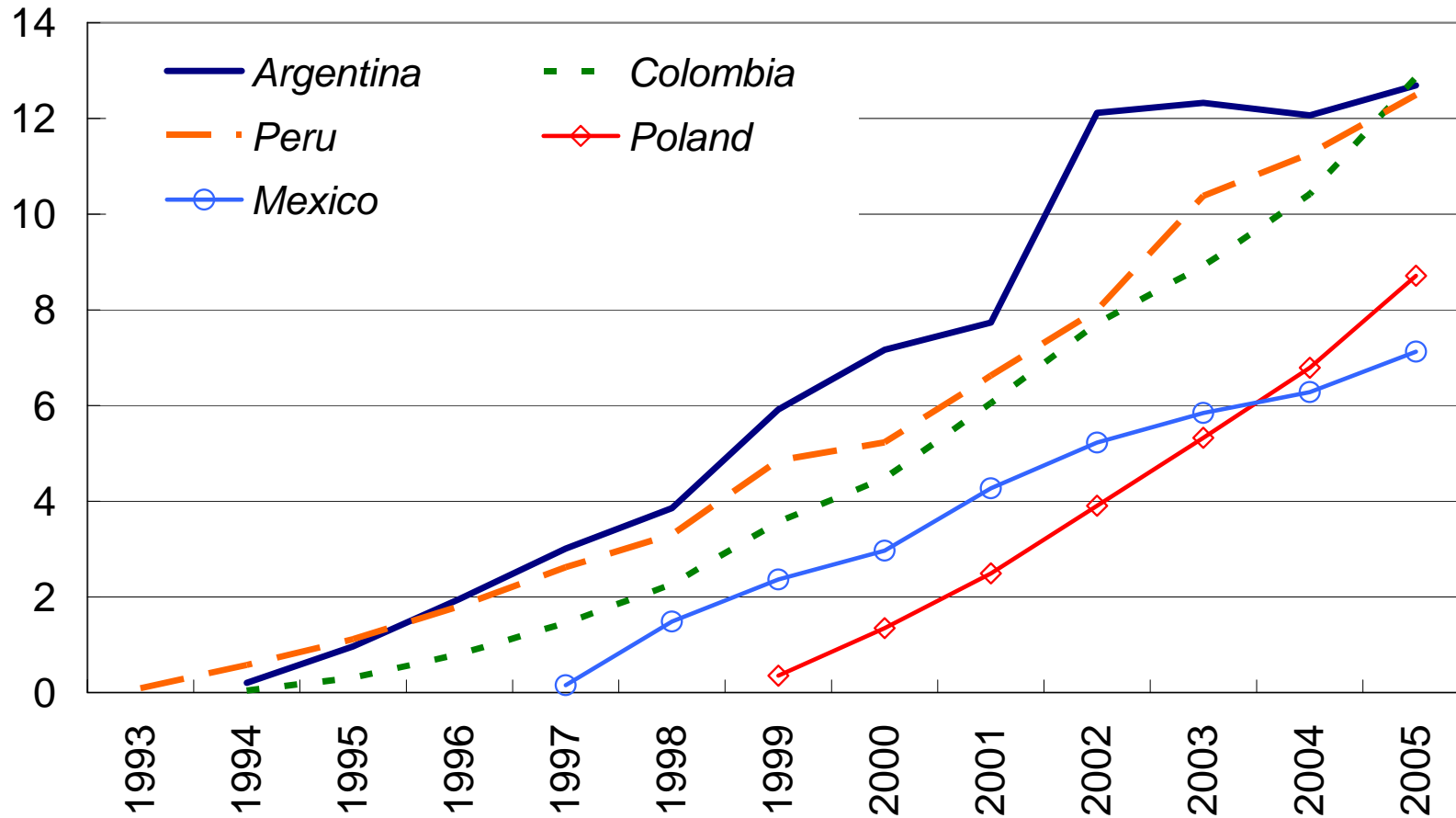
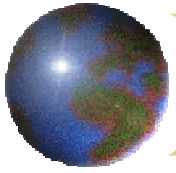


Figure II.5. Selected Emerging Countries: Pension Assets  
(In percent of GDP)

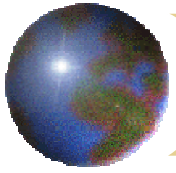


Sources: FIAP; IFS; WEO; and staff calculations.



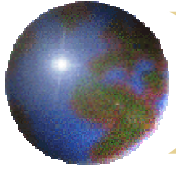
## *Earlier reformers in Lat Am and East Europe achieved fast coverage*

- ✚ They extended the mandatory part of the reform to all new labor force entrants
- ✚ ...provided an option to switch for workers covered by existing system
- ✚ ...provided tax incentives
- ✚ ...and kept the existing DB system less generous.



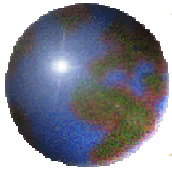
## *Benefits of broader coverage*

- ⊕ Market size grows, attracting private players
- ⊕ ...enables economies of scale in fund management & cost competition
- ⊕ ... and kick-starts financial market development



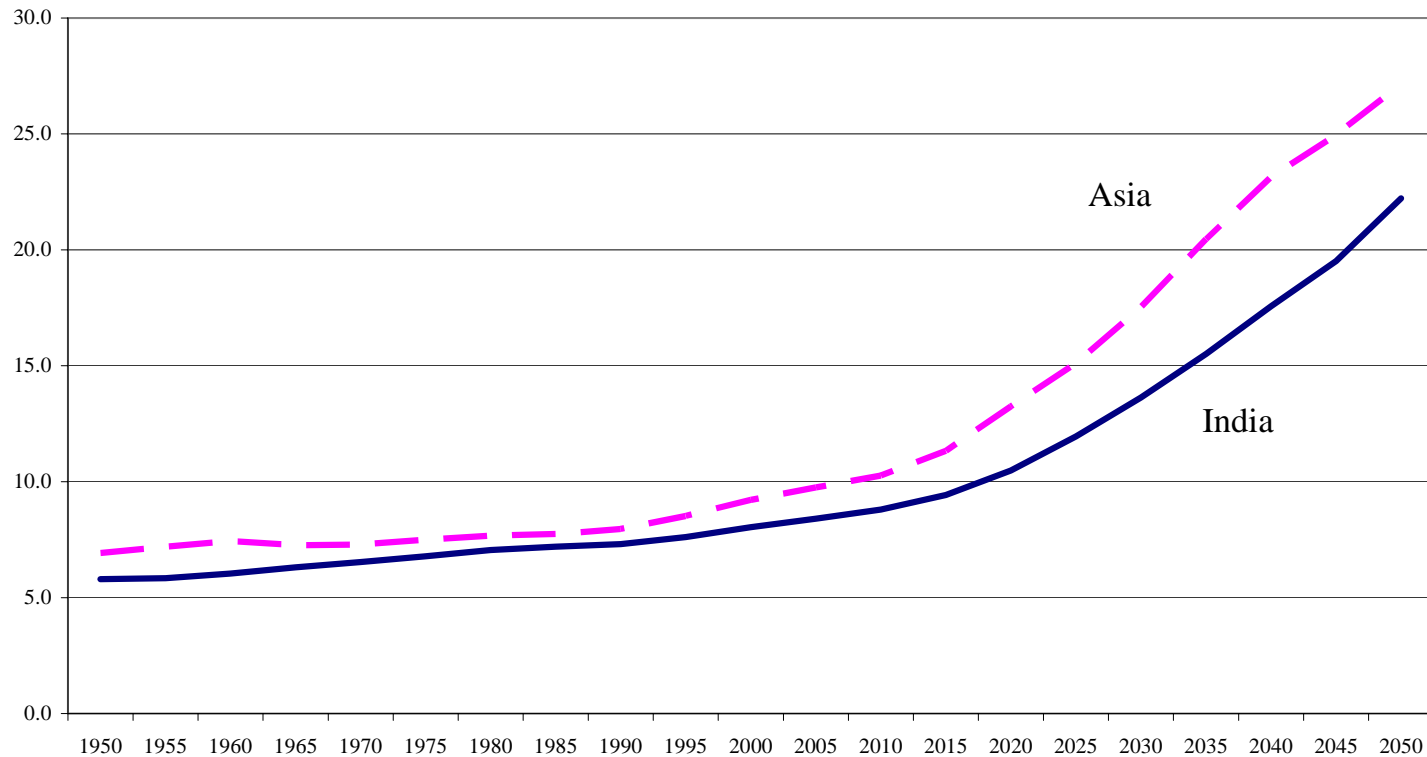
## *Potential Indian market: 65 million (almost double Mexico!)*

- ✿ Only 11 percent of market covered by formal schemes (45 million)
  - Government (30 million)
  - EPF (39 million – of which 15 million active)
- ✿ 89 percent of the labor force remain uncovered
  - Unorganized sector workers (370 million)
  - ...of which 40 million have taxable income
  - .... 20 million of these could be potential contributors to the NPS (survey data)



# *...and India is on the verge of a dramatic transformation*

Elderly Dependency Ratio 1/



Source: United Nations.

1/ Population aged 65 and over as a percentage of population aged 15-64.

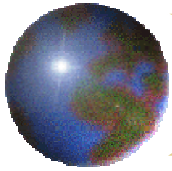
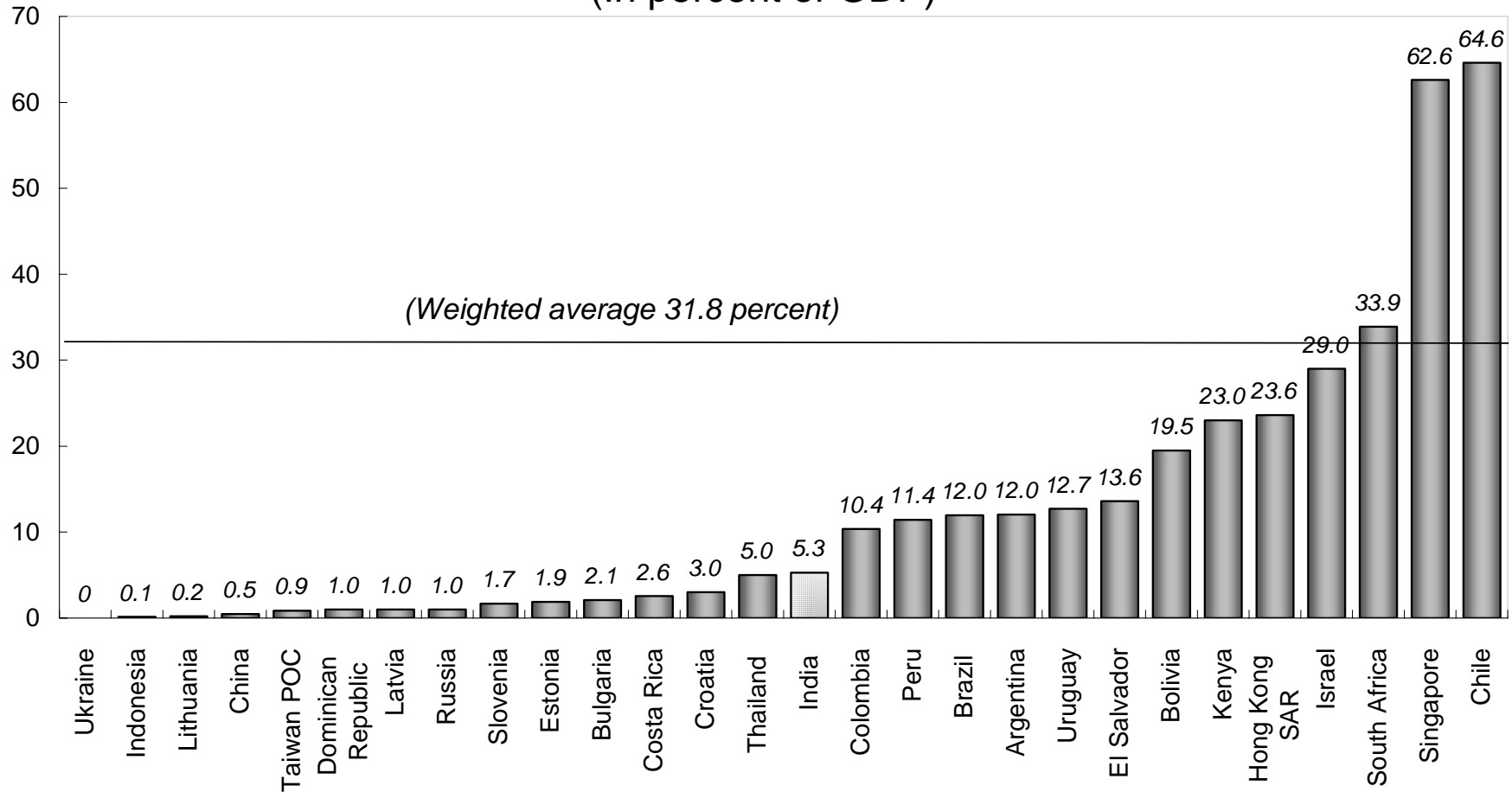
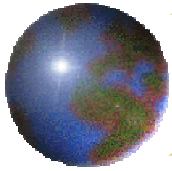


Figure 5. Pension Fund Assets in Selected Non-OECD Countries, 2004  
(In percent of GDP)

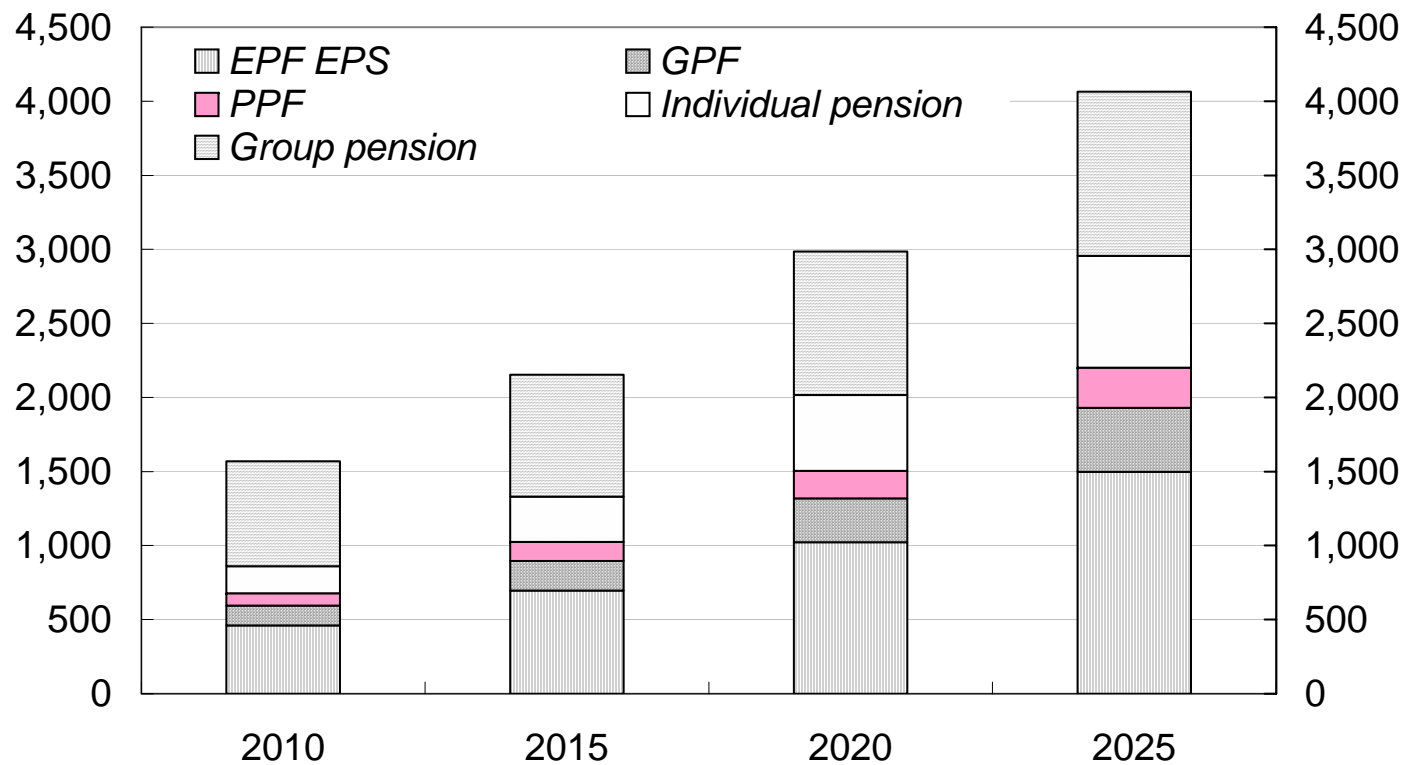


Source: OECD.

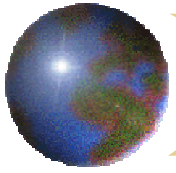


*...projected to grow over time.*

Figure 3. India: Retirement Market  
(In billions of Indian rupees)



Source: OECD (2006).

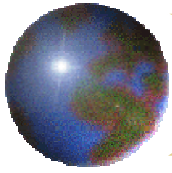


## *Roadblocks in reaching critical mass: the scope of India's reform too limited*

- Mandatory part of the reform extends only to new civil servants
- Fast growth in participation since Jan. 2004: 0.1 million p.a., as against 0.06 expected. Coverage now : 0.5 million
- But cumulated assets still small: Rs. 17 billion (1 percent of total pension sector assets in India or 0.04 percent of GDP)

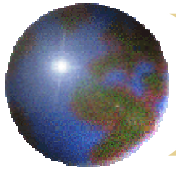
### SOME OPTIONS TO BUILD CRITICAL MASS:

- Provide an option to switch to NPS for existing employees of government and covered under EPF/EPF
- Incentives to switch: both schemes provide low benefit; EPF contribution relatively high
- But benefits are guaranteed; and civil service scheme is non-contributory
- To strengthen incentives: keep benefits less generous!



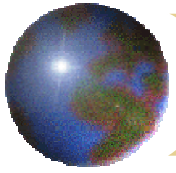
## *Other options India can consider to step-up demand for pension assets:*

- Extend pension reforms to non-government provident funds :
  - ✓ Pension Bill will set up a proper regulatory framework: consider bringing all PFs under the new legislation, once passed
  - ✓ Enhance accountability and performance of the non-government provident funds through transparency and governance reforms (e.g., UK, Canada, operate well-run, defined benefit plans)
  - ✓ PFs could outsource more fund management to new PFMs; Ultimately, India could consider privatizing a portion of the provident funds (HK)
- Coverage of self-employed has been a problem in other countries (e.g., Lat America): There are already avenues for long-term savings
  - Public provident fund (3.5 million)
  - Pension schemes provided by LICs and mutual funds (1.6 million)
  - Small savings
- ...but most participants see them as tax-benefit rather than investment vehicles
- Need to level the playing field (tax breaks, guaranteed returns)

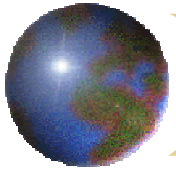


## *India may be heading toward the Mexico experience, not the Chilean one!*

- ❖ Demographic trends: elderly dependency ratio to jump to 20 percent in 2050 in both countries (from 5 percent today in Mexico and 8 percent in India)
- ❖ 65 million (16% of labor force) should be covered once NPS fully deployed in India (Mexico achieved 20% coverage in 10 years)
- ❖ This will leave more than 80% of Indians not covered by any formal pension scheme (similar to current problem in Mexico)

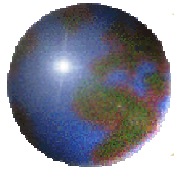


- ✚ International perspectives on India's pension plan
- ✚ Regulatory issues : role of investment in riskier assets and foreign diversification
- ✚ Pension funds and capital market development



## *International experience with regulation of private pensions*

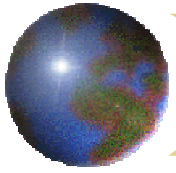
- ✚ Advanced countries : Self-regulatory framework (PPR), accompanied by prudential standards of diligence and expertise
- ✚ Emerging countries: rules-based guidelines
- ✚ Most countries have gradually loosened quantitative investment limits over time, as prudential standards are put in place and PFM's expertise improves.



# *Restrictions on investments in equities and foreign securities*

	Maximum Limits	
	Equity	Foreign securities
(In percent of the fund size)		
Mature market		
Germany 1/	30	20
Japan 2/	30	30
Canada	No limit	30
Italy	PPR 4/	20
Emerging market		
Argentina	50	20
Brazil	50	0
Chile	39	30
Colombia	30	20
Mexico	15	20
Peru	35	10.5
Hungary	50	30
Poland	40	5

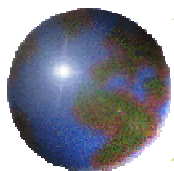
Sources: Chan-Lau (2004); Soueid (2005); and Roldos (2006).



## *Restrictions on investment in corporate bonds*

<i>Corporate bond investment limits:</i>	<b>Mexico</b>
	"A" (local scale) or above
By credit rating (in percent of AUM):	
Public and private corporate bonds	
AA bonds	35
A bonds	5
By issuer (in percent of AUM):	
AAA firm	5
AA firm	3
A firm	1
By issue (in percent of AUM):	20

Source: Soueid (2005).



# *Pension fund portfolio allocation, 2004*

Selected Countries	Cash and Deposits	Bills and Bonds Issued by Public Administration	Corporate Bonds 4/	Shares	Mutual Funds (CIS) 5/
Czech Republic	9.6	51.9	31.1	5.5	0.3
Bulgaria	19.9	55.2	18.6	3.3	n.a.
Estonia	4.4	33.9	23.3	35.1	6.2
Slovenia	13.3	46.3	32.4	7.7	0.3
Hungary	1.3	74.9	2.0	5.2	7.5
Poland	5.8	58.9	1.4	33.4	0.0
Indonesia 2/	70.9	0.1	11.9	4.1	1.3
Korea	7.4	24.3	56.4	0.2	0.5
Thailand	41.4	23.9	18.2	13.7	1.8
Singapore 2/	2.7	96.4	0.0	0.0	0.0
Colombia	0.8	48.5	30.1	6.2	2.2
Mexico	0.0	85.2	11.7	n.a.	n.a.
Brazil 1/	44.2	14.9	2.2	15.9	11.6
Turkey	0.0	72.6	0.0	13.2	0.0
United Kingdom 3/	2.5	14.7	6.8	43.4	15.4
United States	8.3	6.4	5.0	35.5	30.7

Source: OECD, *Global Pension Statistics*.

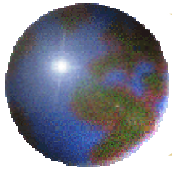
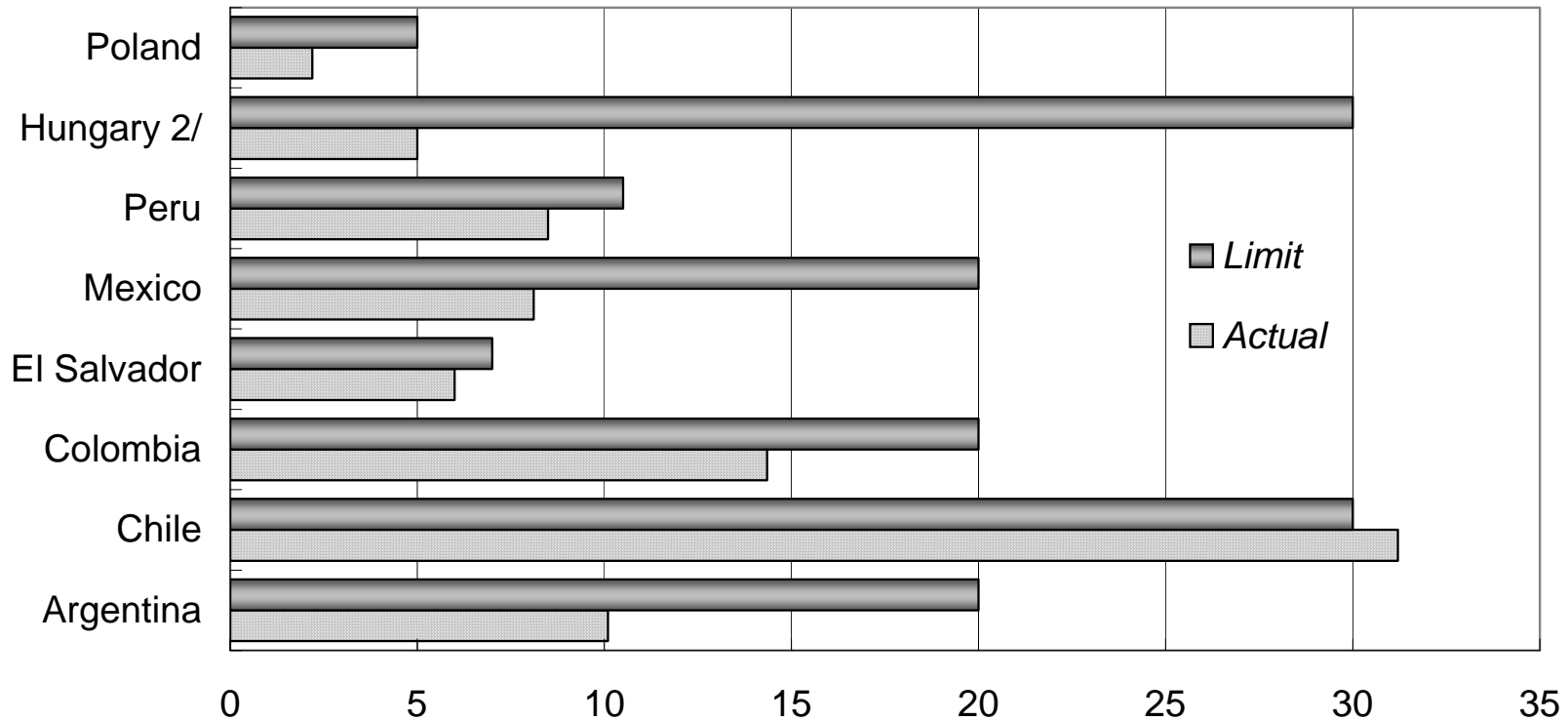


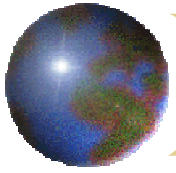
Figure 2. Selected Countries: Pension Fund Foreign Asset Allocation,  
As of June 2006  
(In percent of total assets) 1/



Source: FIAP; Chan-Lau (2004); Soueid (2005); Szekely (2005); and Samuel (2006).

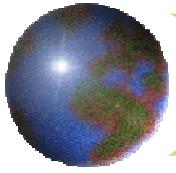
1/ Actual allocation may exceed the limit in some cases due to investments in local foreign-currency denominated instruments being counted as foreign assets but not counted toward the limit.

2/ As of 2004.

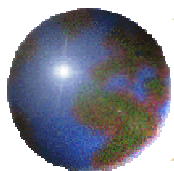


## *What are some of the factors that constrain asset diversification in EMs?*

- ✚ Benchmark returns based on industry average.
- ✚ Inadequate fee structures
- ✚ Undeveloped and illiquid markets for private securities
- ✚ Limited choice of options to invest abroad.
- ✚ Low effectiveness and efficiency of PFM

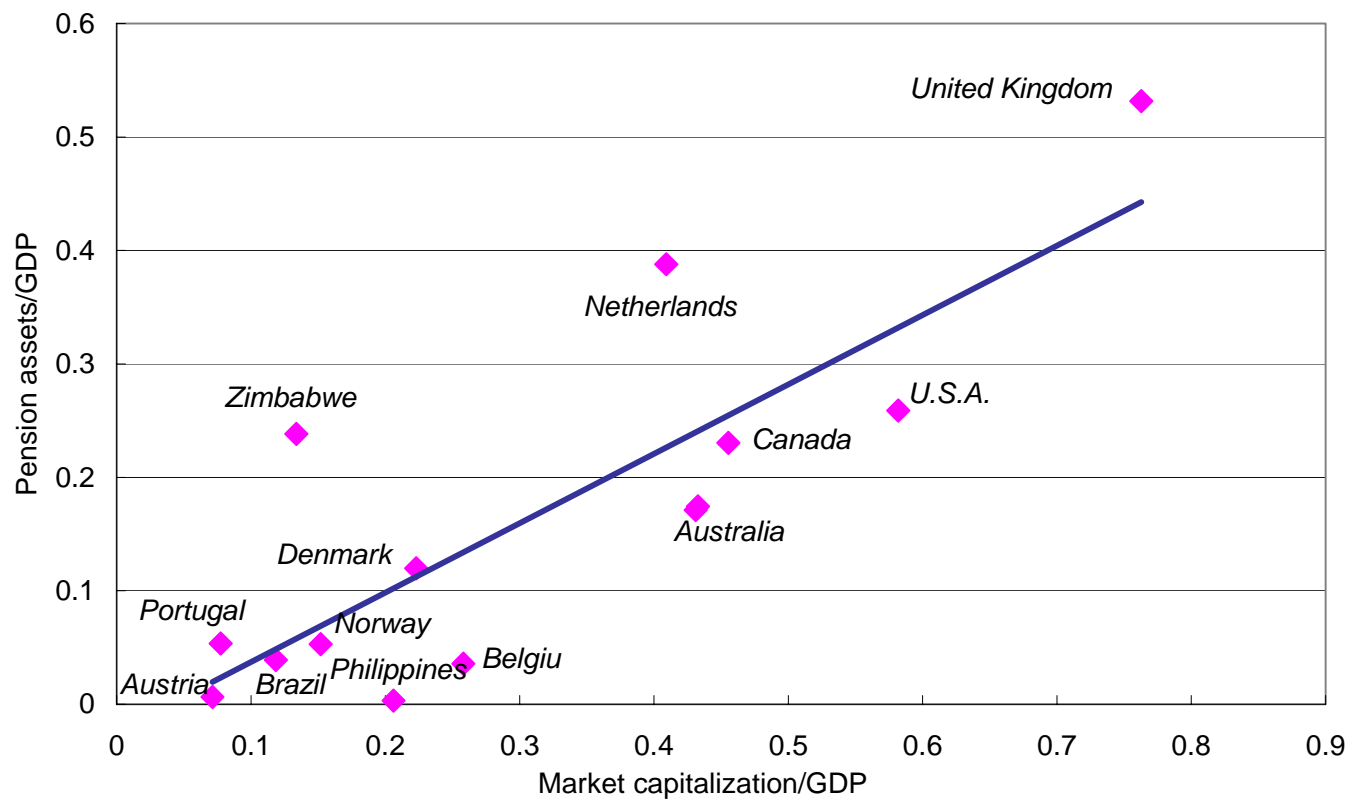


- ✚ International perspectives on India's pension plan
- ✚ Regulatory issues : role of investment in riskier assets and foreign diversification
- ✚ Pension funds and capital market development

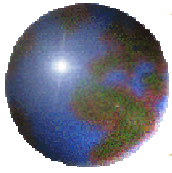


# *The build-up of pension assets induces financial deepening*

Figure 7. Market Capitalization and Pension Assets, 1980–95

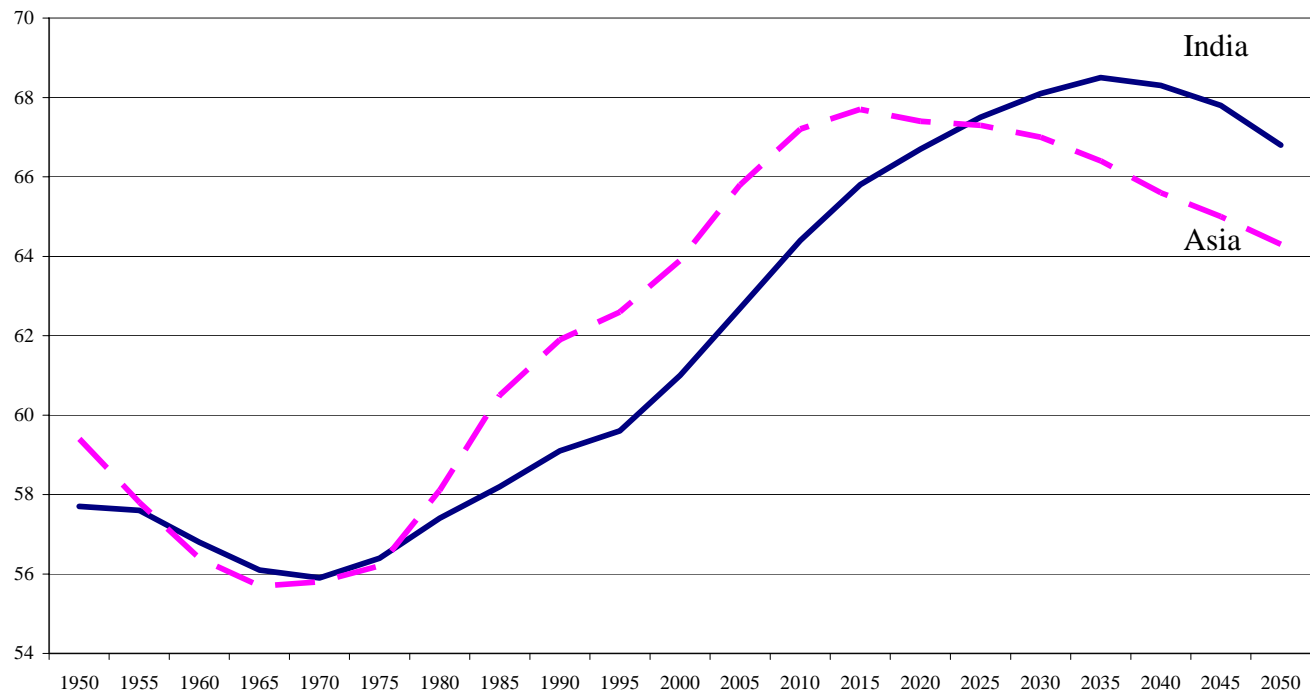


Source: Thorsten Beck, Asli Demirgüç-Kunt and Ross Levine, 2000.



# *Young and growing population in India implies shift to equities.*

Figure 10. Asia: Population Aged 15-64  
(percent of total population)



Source: United Nations.

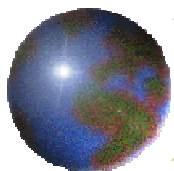


# *Pension funds also provide stable demand for fixed-income securities (bonds and ABS)*

	Mexico
Private debt securities (PDS) outstanding	12
Corporate bonds 1/ of which held by	
Pension funds	34%
Mutual funds	30%
Insurance companies	28%
Other investors	8%
<hr/>	
Nominal GDP	663
Total PDS outstanding (percent of GDP)	1.8%
<hr/>	

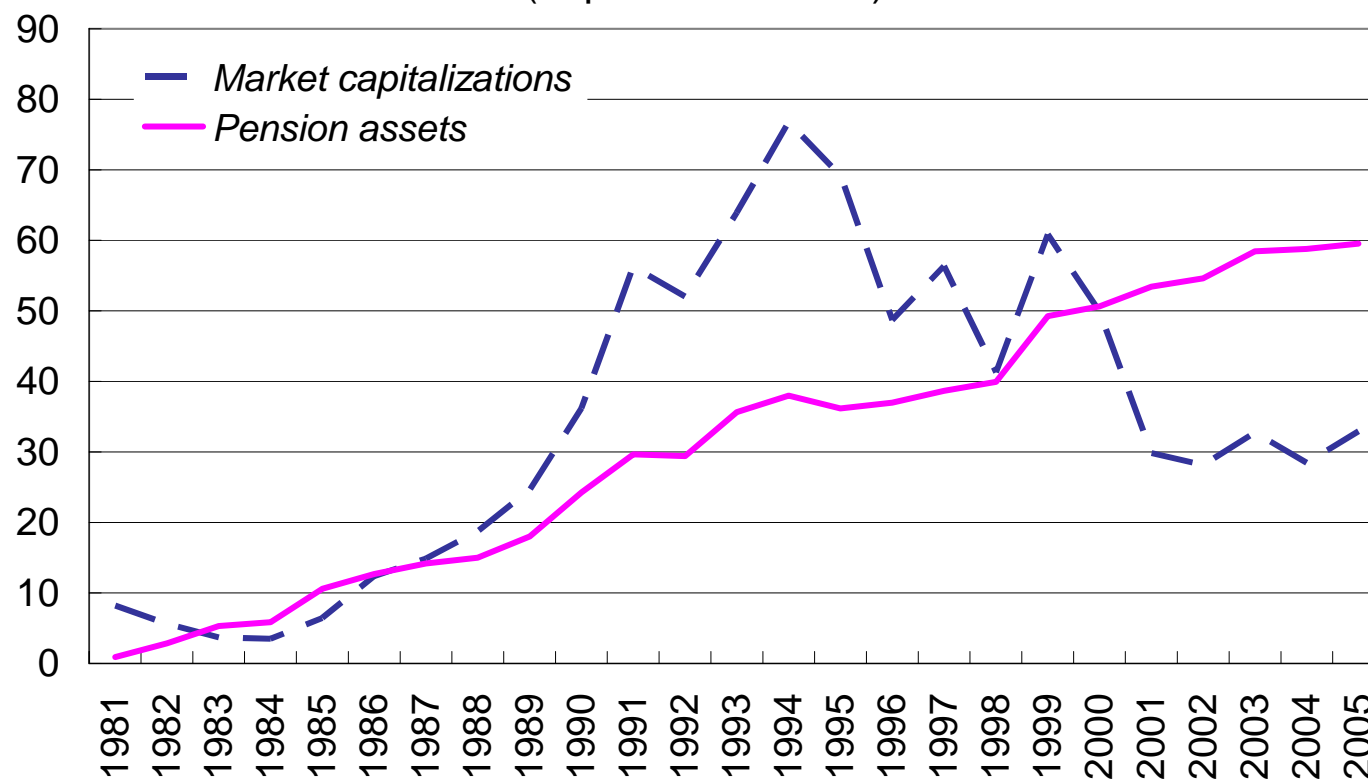
1/ Including securitizations.

Source: Soueid (2005).

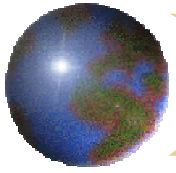


## *Nonetheless, it's important for PFM's to diversify abroad!*

Figure 8. Chile: Pension Assets and Market Capitalization, 1981–2005  
(In percent of GDP)



Source: FIAP; IFS; IFC; and staff calculations.



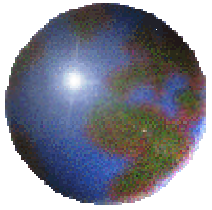
# *Pension reform has the potential to transform India's capital markets*

## ⊕ Positive factors

- ⊞ Huge *potential* market size
- ⊞ Favorable starting point in the demographic transition
- ⊞ State-of-the art market infrastructure, deep and liquid equity markets, and reforms under way to strengthen bond market infrastructure and develop new markets (e.g., securitization)

## ⊕ Negatives :

- ⊞ Scope of reform too small: need to level the playing field (tax benefits& guarantees) to entice workers to switch
- ⊞ Draft Bill leaves no scope for diversification abroad
- ⊞ Amendments could severely curtail the impact of the reform



# *Discussion*