



# **The Nineteenth Dubrovnik Economic Conference**

Organized by the Croatian National Bank



**Sergio Schmukler**

## **Capital Market Development in Emerging Economies: Challenges Ahead**

Hotel "Grand Villa Argentina",  
Dubrovnik  
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Draft version

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# Capital Market Development in Emerging Economies: Challenges Ahead

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Sergio Schmukler  
World Bank

19th Dubrovnik Economic Conference  
June 12- June 14, 2013  
Dubrovnik, Croatia



# Introduction

- Two important questions:
  1. What are some of the challenges in financial development (FD)?
  2. What is the role of institutional investors in this process and in these challenges?

# Introduction

- Only selected challenges in FD (not stability)
- Developing country/emerging market (EM) perspective
- Capital markets and institutional investors (not specifically banks)
- Bird's eye view—wide range of issues
- Scattered evidence from different sources
- Go through the evidence first
- Discuss policy issues later

# Introduction

- Over the last two decades, big push to develop financial markets
- From a bank-based model to a more complete model
- Savings through capital markets with dispersed ownership
- Widespread access to finance to all firms
- “U.S. model”
- As a consequence of all the reforms and efforts, markets have indeed developed and integrated
- Also become significantly more complex and interconnected

# Introduction

- Large institutional investors expected to play a crucial role
- Retirement (in addition to voluntary) savings
- Channeled through asset managers, particularly mutual funds and pension funds
- Invest in many companies and countries
- Informed investors, able to make independent decisions
- Invest long term
- Take advantage of arbitrage opportunities
- Absorb shocks, particularly equity investors
- Help stabilize and develop the financial system

# Introduction

- Despite many new developments, many challenges remain
- Large heterogeneity across regions and countries
  - No convergence yet – advanced economies developed even more
  - Many of the improvements centered in certain areas, and countries
- Many shortcomings in several important EMs
  - Bank credit stagnated in various countries
  - Firm financing from banks decreased in relative terms
  - Bond markets expanded, but with limitations
  - In banks and bonds, public sector still captures significant share
  - Equity markets still small, illiquid, and concentrated in large firms
  - Institutional investors sophisticated and large in several countries, but with much more limited role than previously thought

# Introduction

- Far away from model of dispersed ownership and participation
- Supply versus demand effects
  - Constraints not on lack of available funds: domestic & foreign savers
  - Many assets available for investment not purchased by institutional investors or foreigners, which hold large resources
  - Institutional investors seem to shy away from risk
  - Incentives to banks to move first into relatively easy markets (consumer, leasing, services), after big corporations left to capital markets
  - Incentives to asset managers and the overall functioning of financial systems does not contribute to expectations

# Introduction

- Many firms not becoming public or not accessing markets
  - Capital markets service only few firms, with increasing size and concentration domestically and abroad
  - Substantial financing through retained earnings and banks
- Regulations do not seem to be the main obstacle
- Several challenges ahead
  - Growing savings
  - Role of financial intermediaries
  - Need for more risk taking paired with stability
  - Spillovers to all firms
  - Need to catch up
  - Complexities and interconnectedness

# Outline

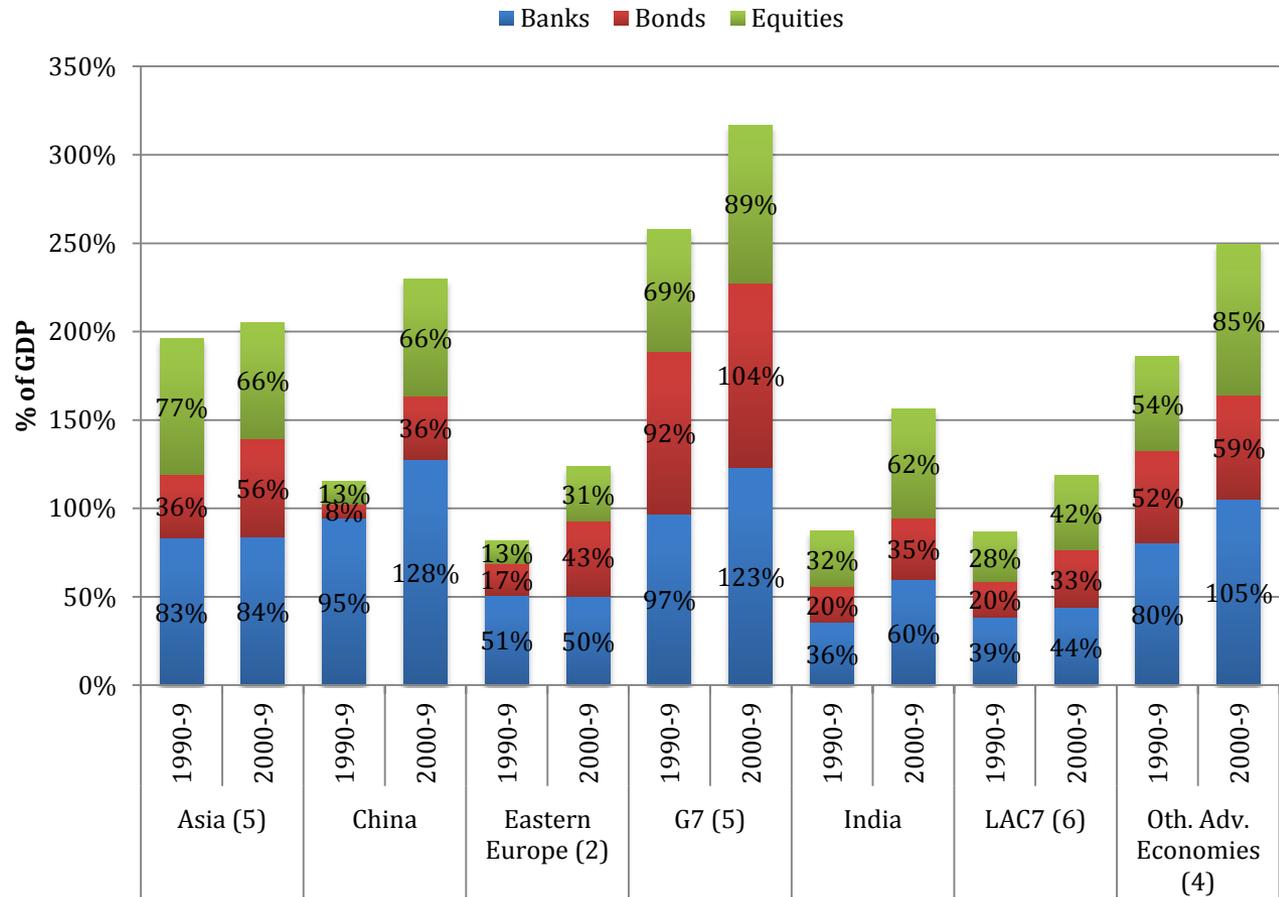
- Financial development: banks, bond markets, stock markets
- Institutional investors

# Outline

- Financial development: banks, bond and stock markets
- Institutional investors

# Size of Financial Systems Has Increased

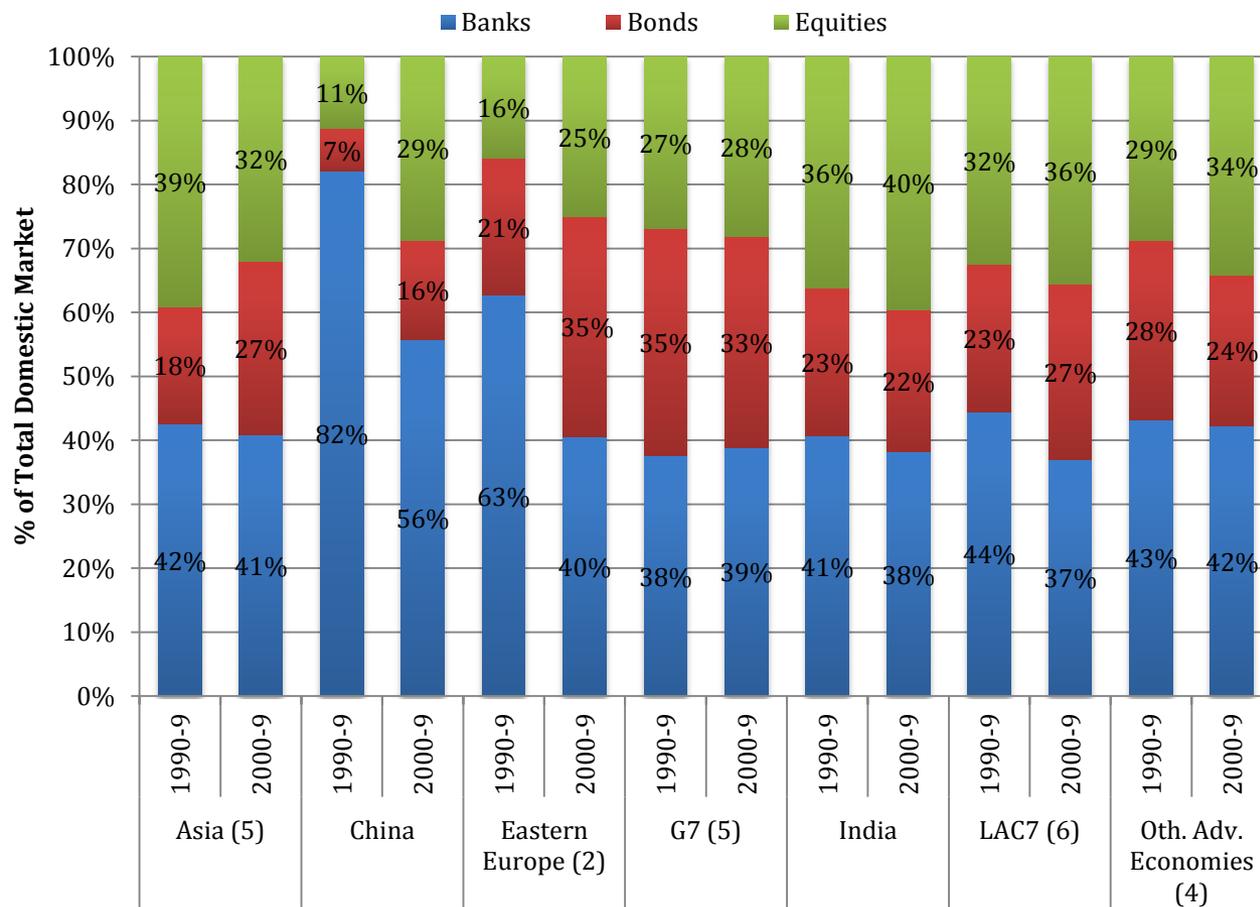
## Size of Domestic Financial System



Source: IFS, BIS, and WDI. Eastern Europe: Poland, Russia, Turkey, Hungary, Czech Republic, Croatia, Lithuania

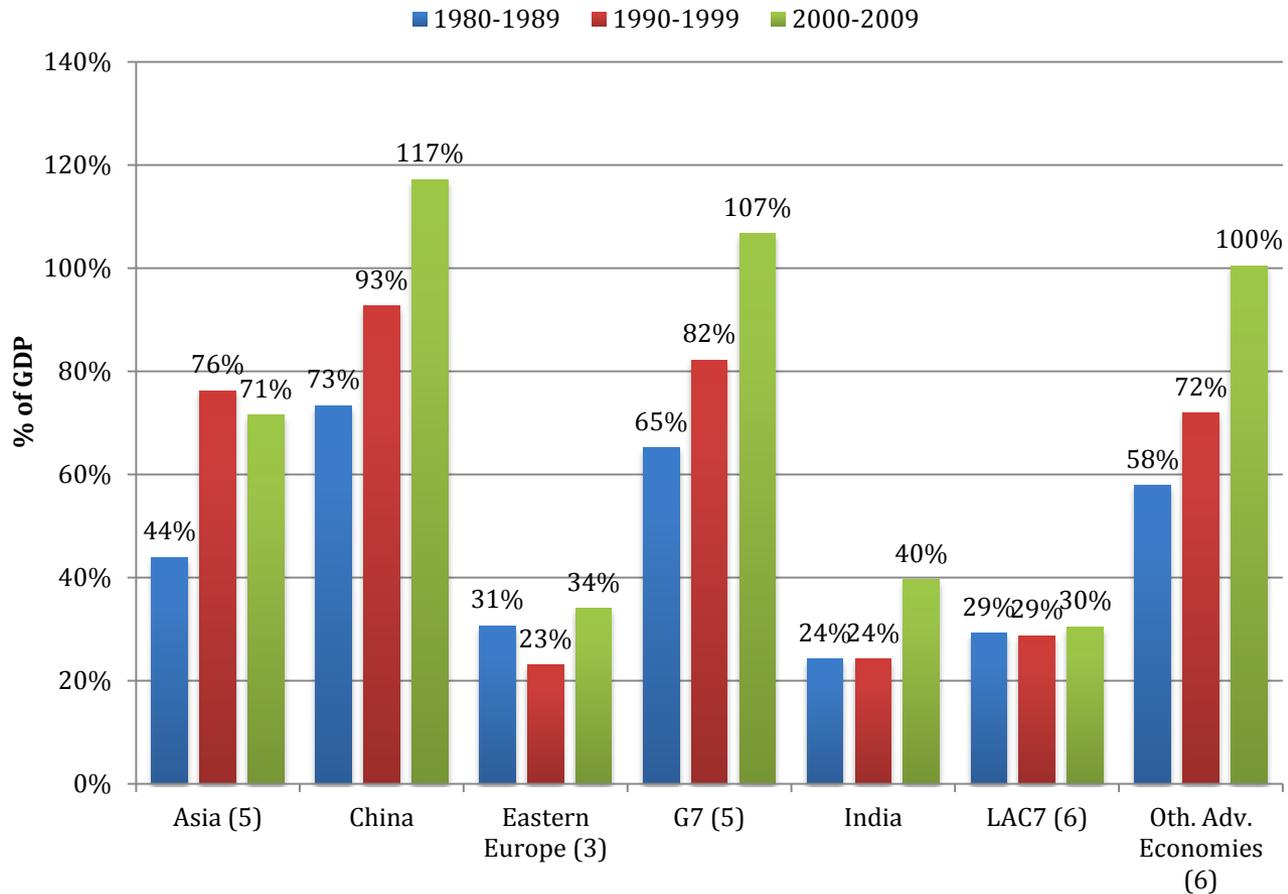
# Relative Size: Bonds, Equity Have Gained Prominence Domestically Across Regions

## Size of Domestic Financial System



# Banks: Uneven Evolution

## Private Bank Claims

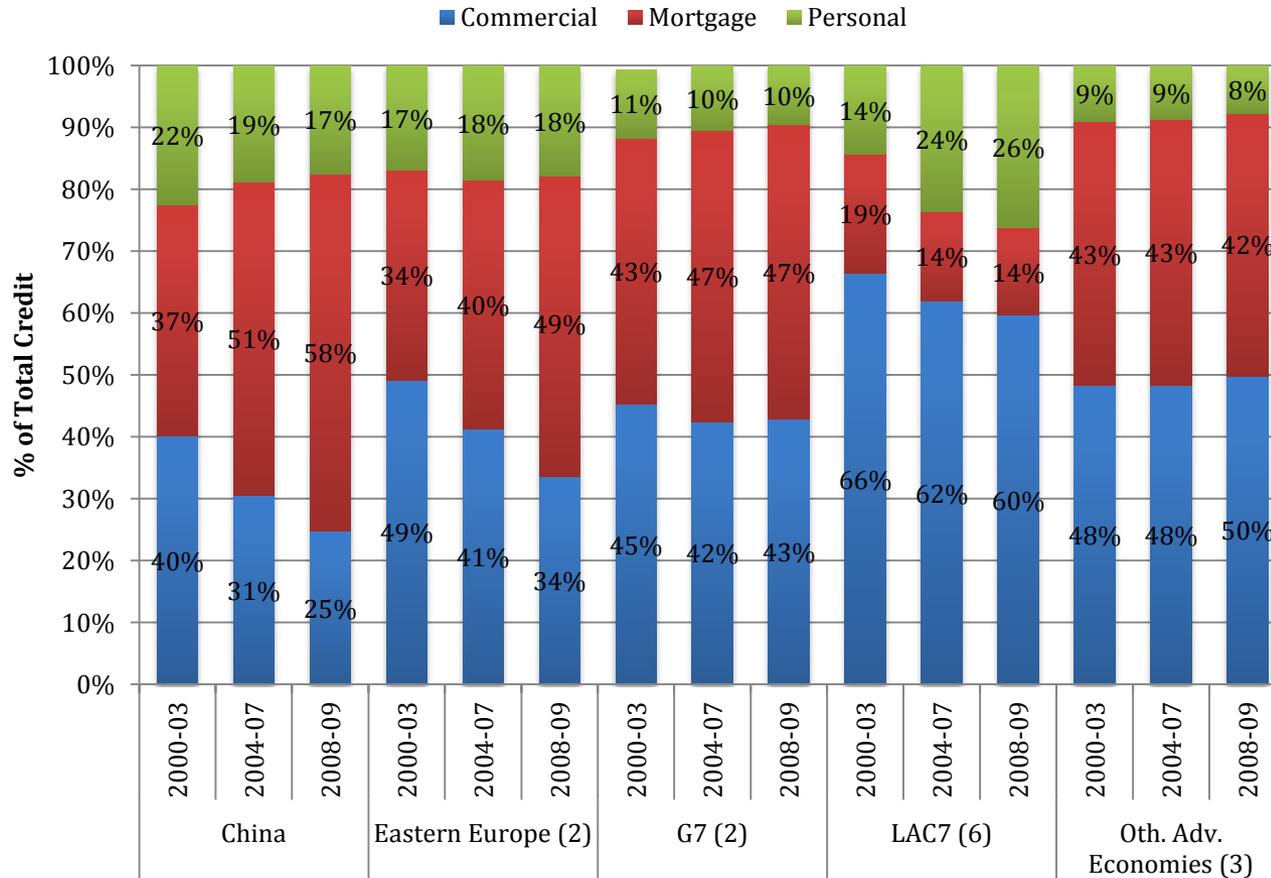


Numbers in parentheses next to region names represent the number of countries included in the graphs.

Source: IMF's IFS

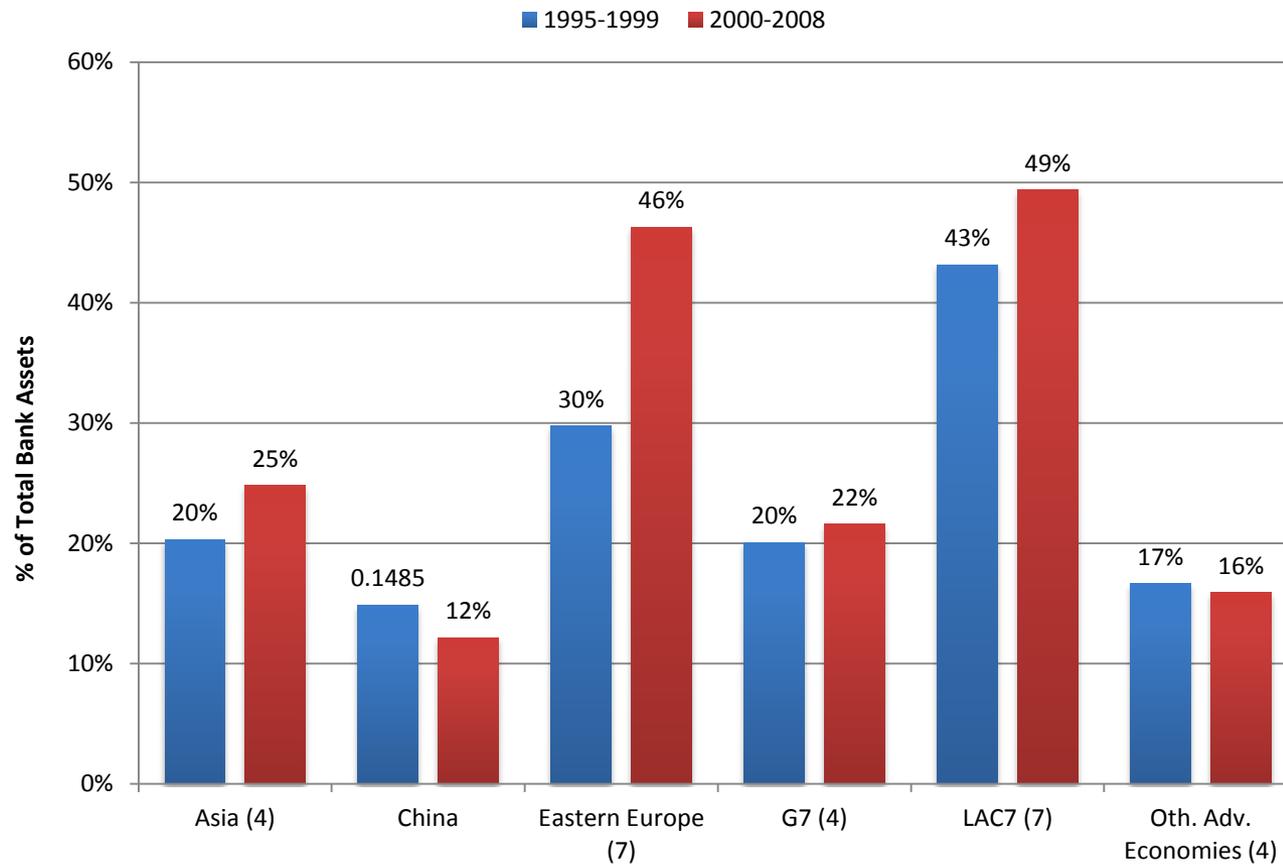
# Banks: Relative Decline in Corporate Lending

## Credit Composition



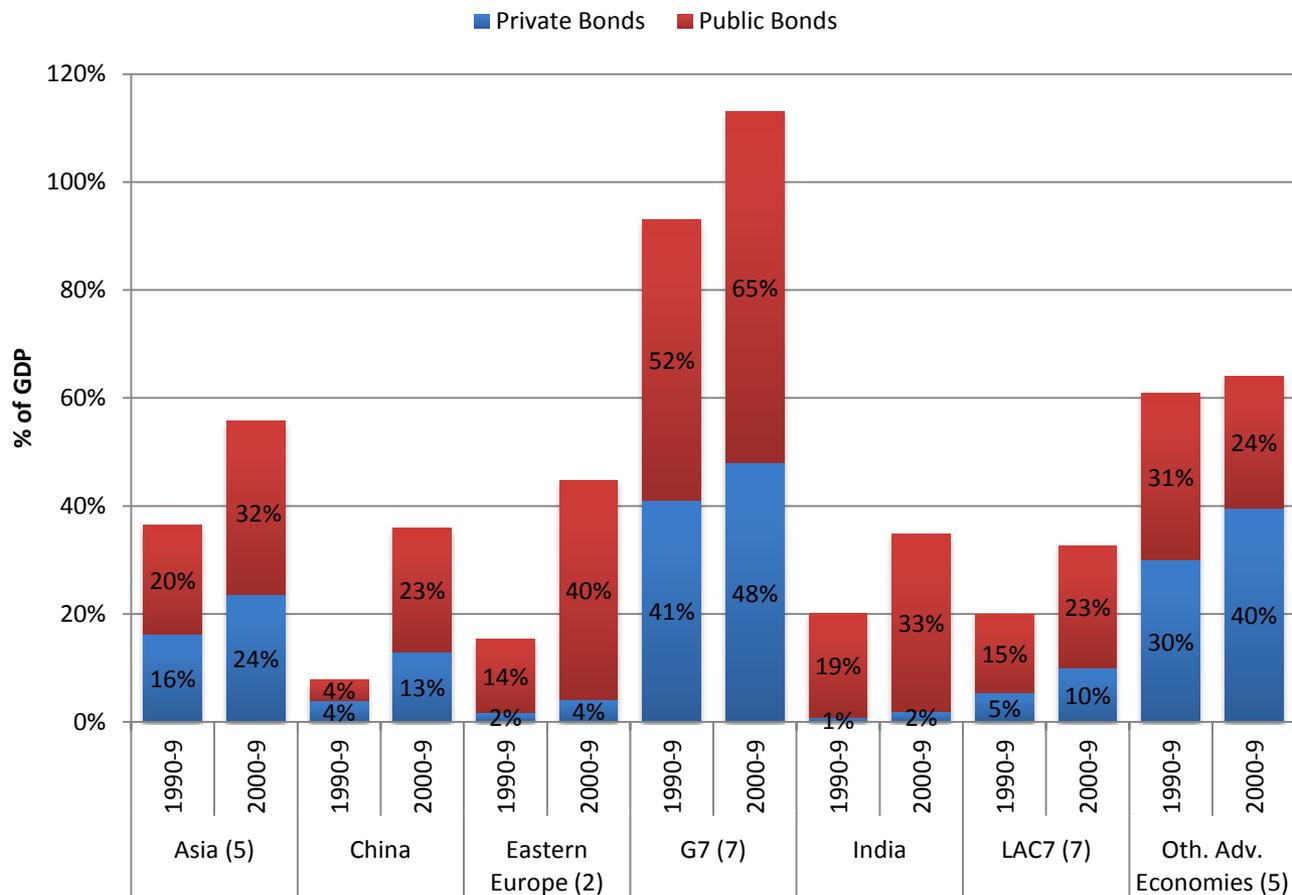
# Banks: Foreigners Significant and Growing

## Relative Size of Foreign Banks



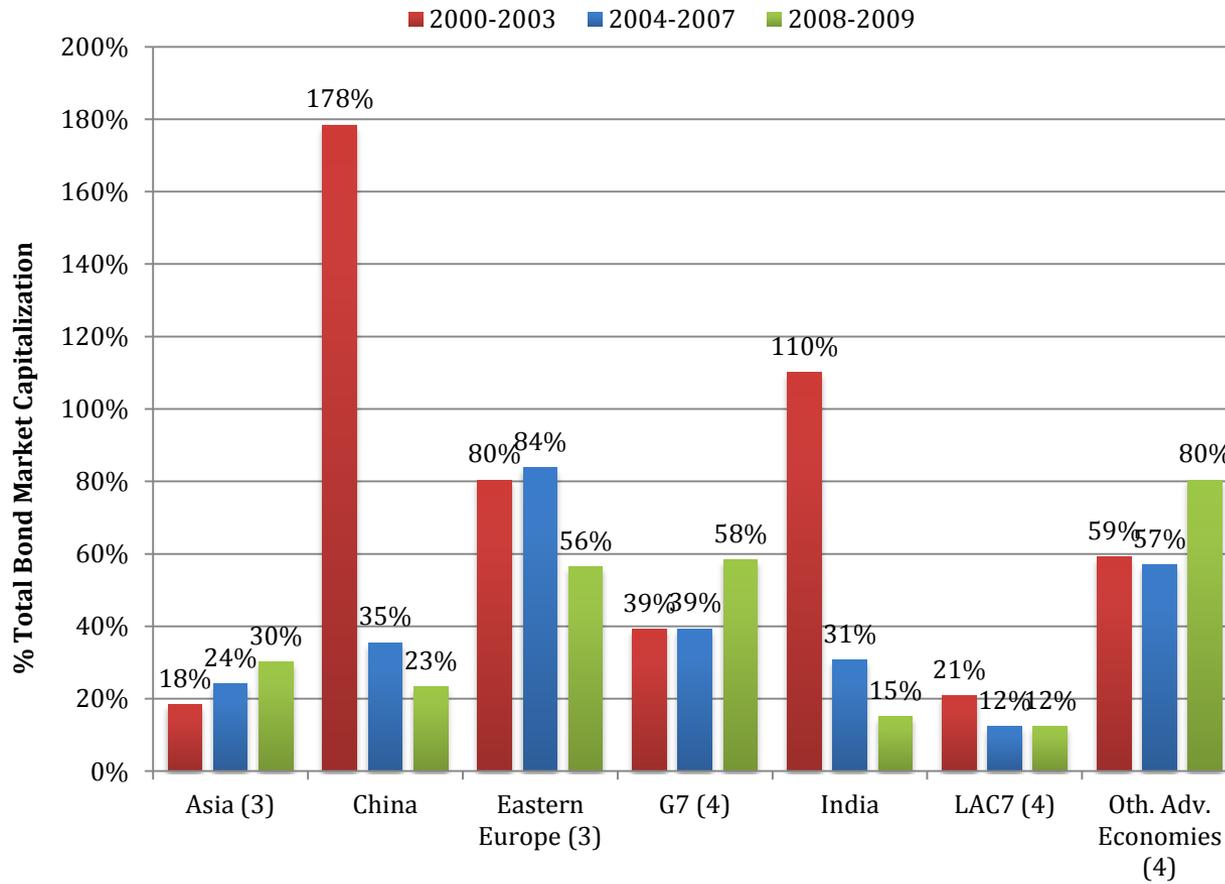
# Bond Markets Have Expanded, But Public Sector Still Large and Growing

## Composition of Bond Markets, % of GDP



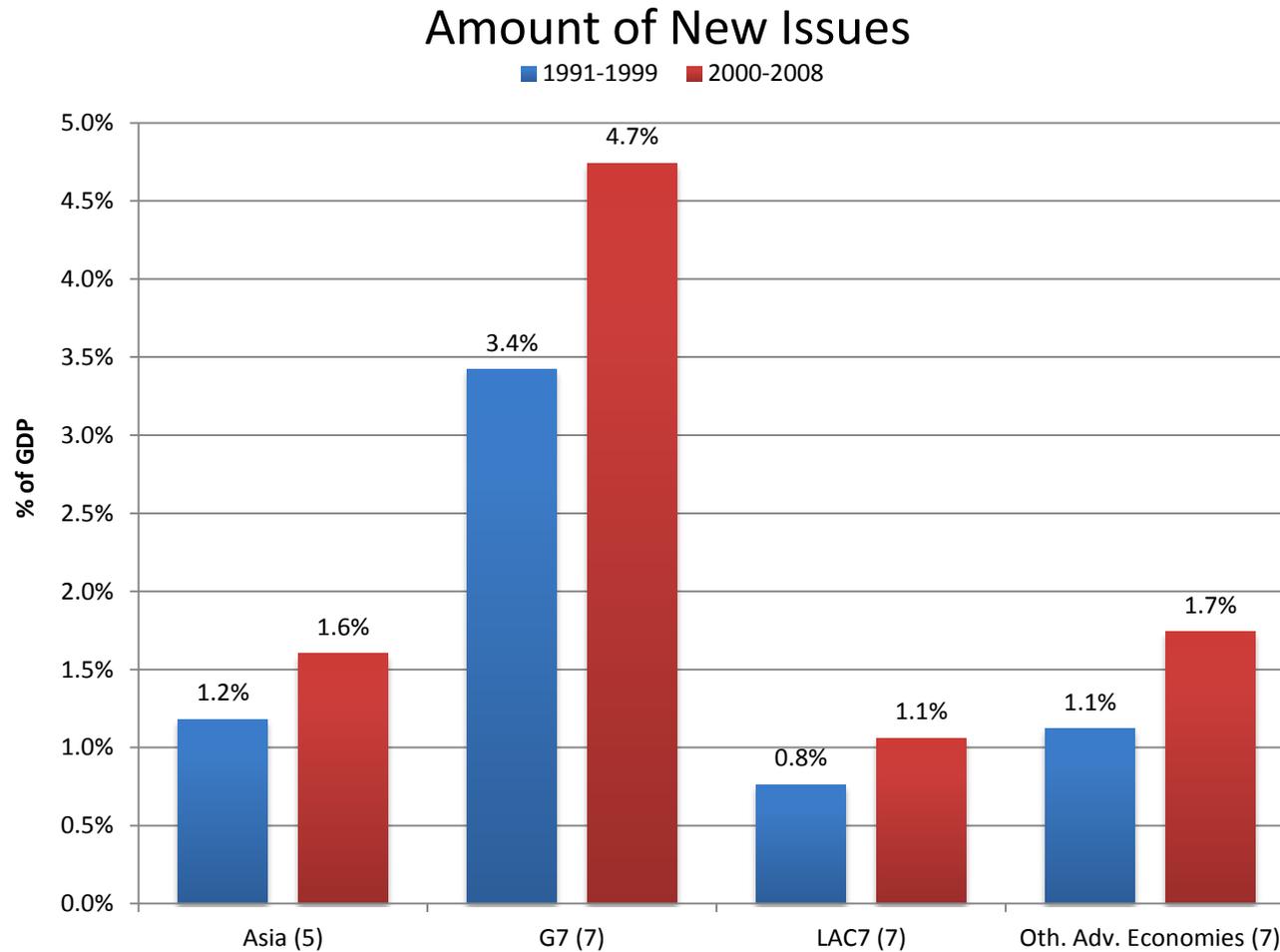
# Bond Market Turnover Not on the Rise

## Bond Value Trading as % of Total Bond Market Capitalization



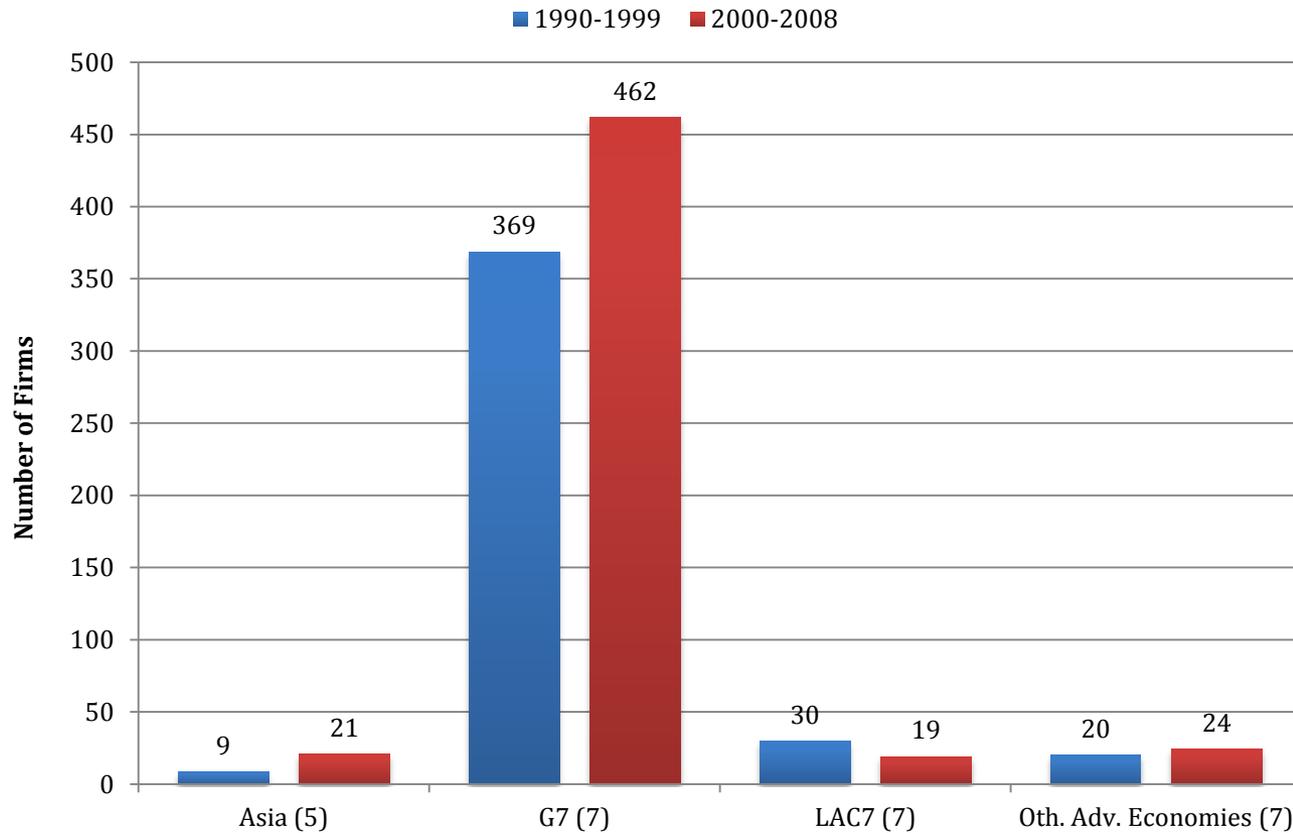
Note: Trading data includes domestic private, domestic public and foreign bonds traded in local stock exchanges. Source: World Federation of Exchanges (WFE)

# Private Bond Issuance Is Small ...



# Private Bonds: Few (and Fewer) Firms Use Markets

Average Number of Firms Issuing Bonds

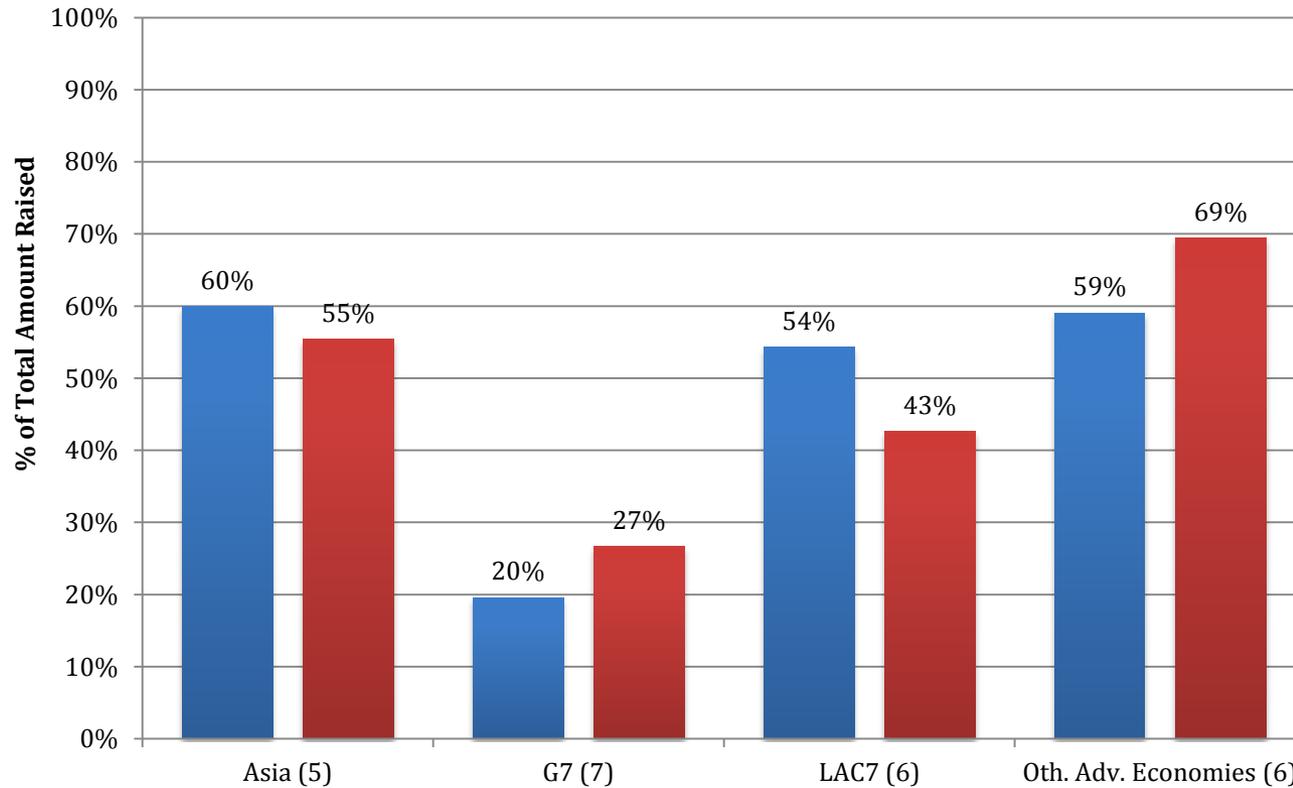


# Private Bonds: Few Issues Capture Significant Share

## Concentration in Private Bond Markets

### Amount Raised by Top 5 Issues

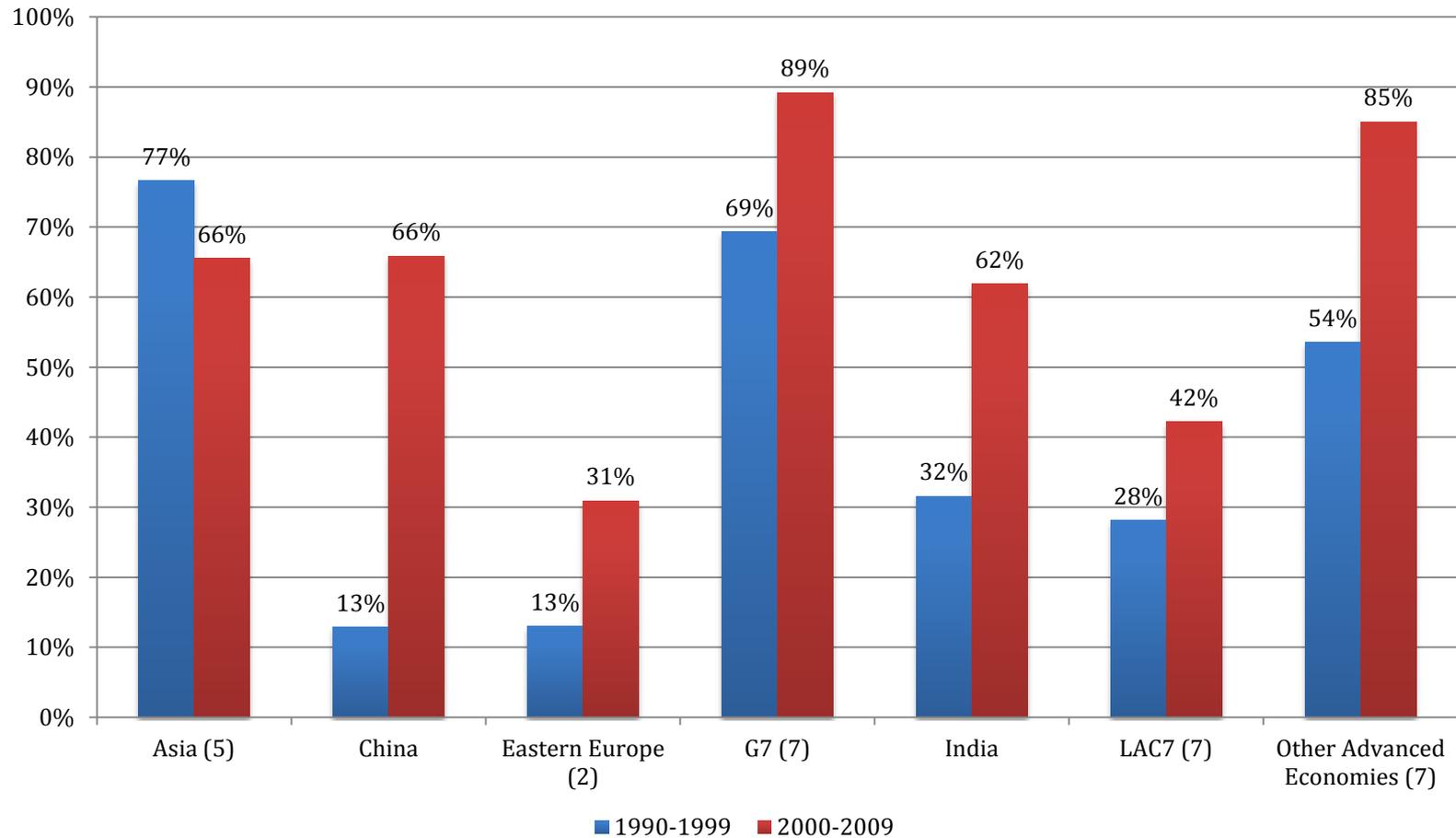
■ 1991-1999 ■ 2000-2008



*Note: Concentration is defined as the top-5 issues as a percentage of the total amount raised by firms in domestic bond markets. Numbers in the base of the bars represent the average number of yearly issues. Source: SDC*

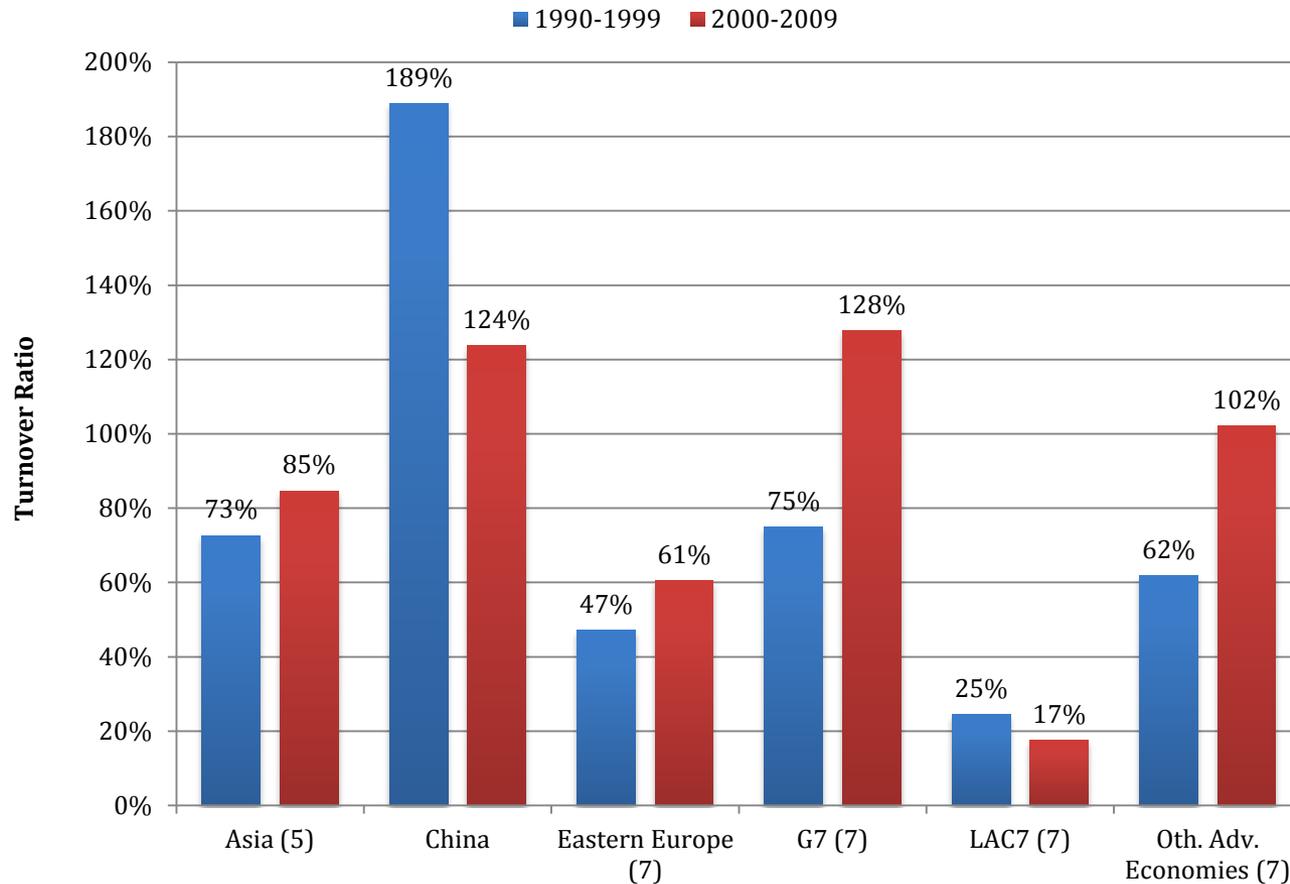
# Equity Market Capitalization

## Market Capitalization as % of GDP



# Equity Trading: A Different Picture than Mkt. Cap.

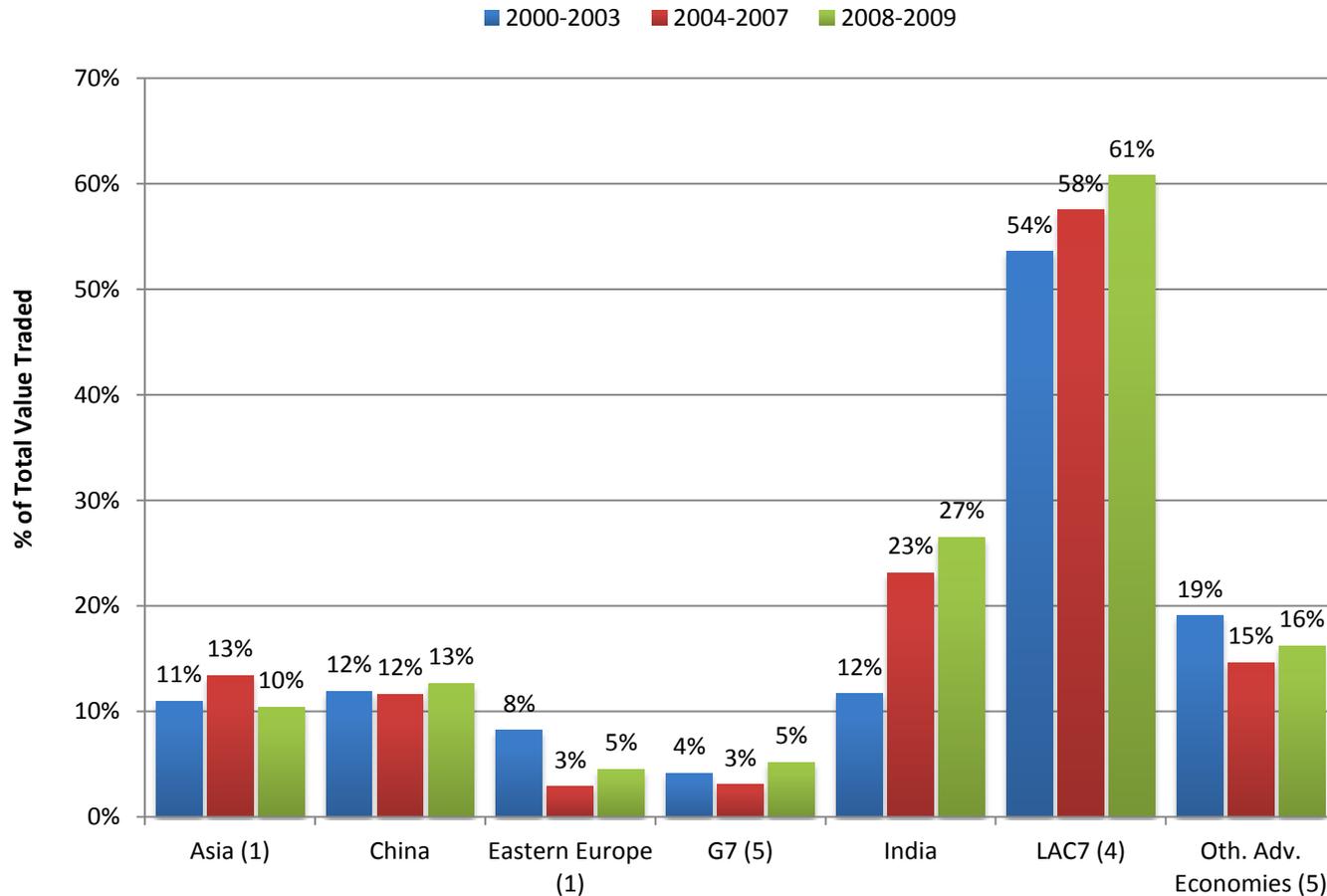
## Trading Activity – Turnover Ratio



Note: Turnover ratio is defined as the total value traded per year in domestic markets over total market capitalization. Source: SDC

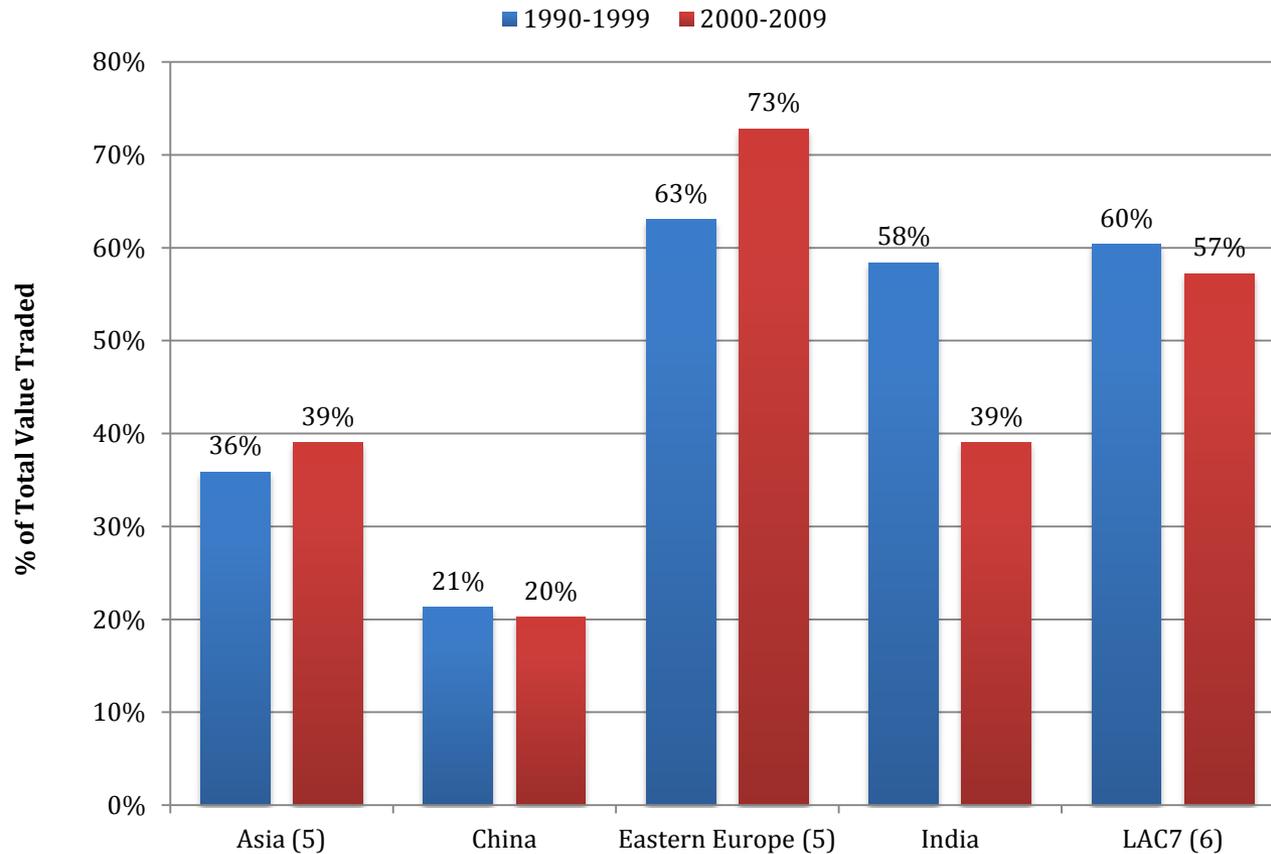
# Partly Explained by Trading Abroad

## Value Traded Abroad to Total Value Traded



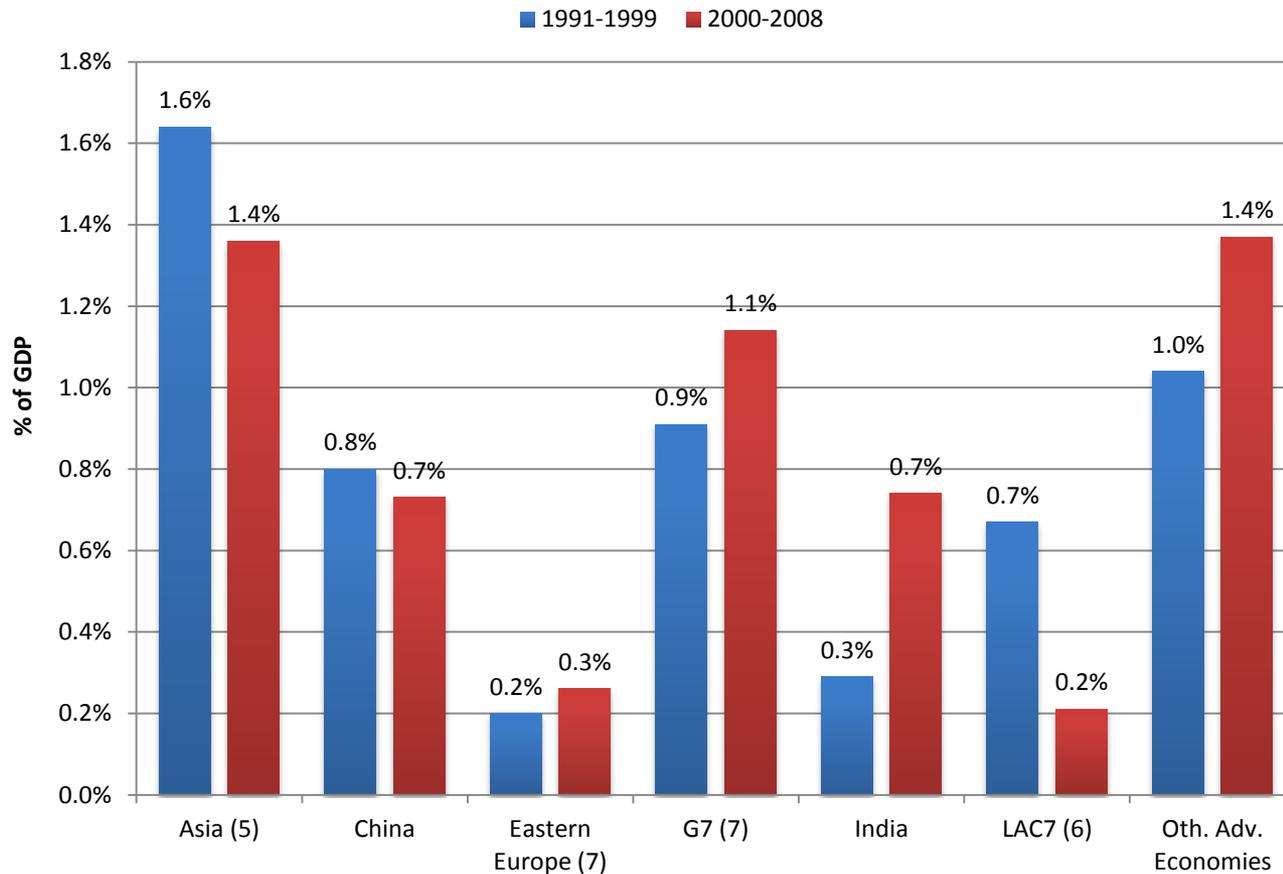
# Trading Is Somewhat Concentrated

Concentration in Domestic Equity Markets  
Share of Value Traded by Top 5 Companies



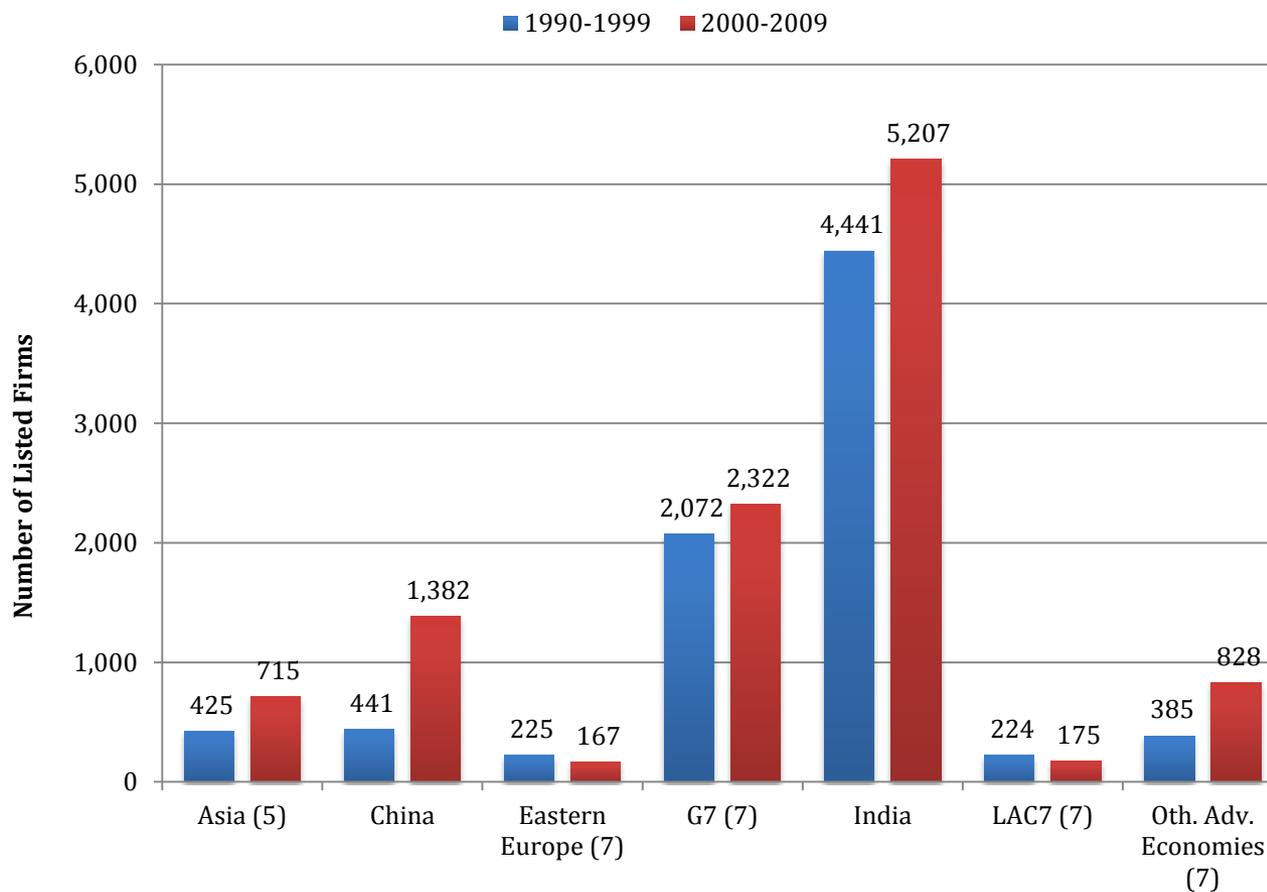
# Breadth of Equity Markets: Issuance Activity Small

## Equity Markets – Issuance Activity



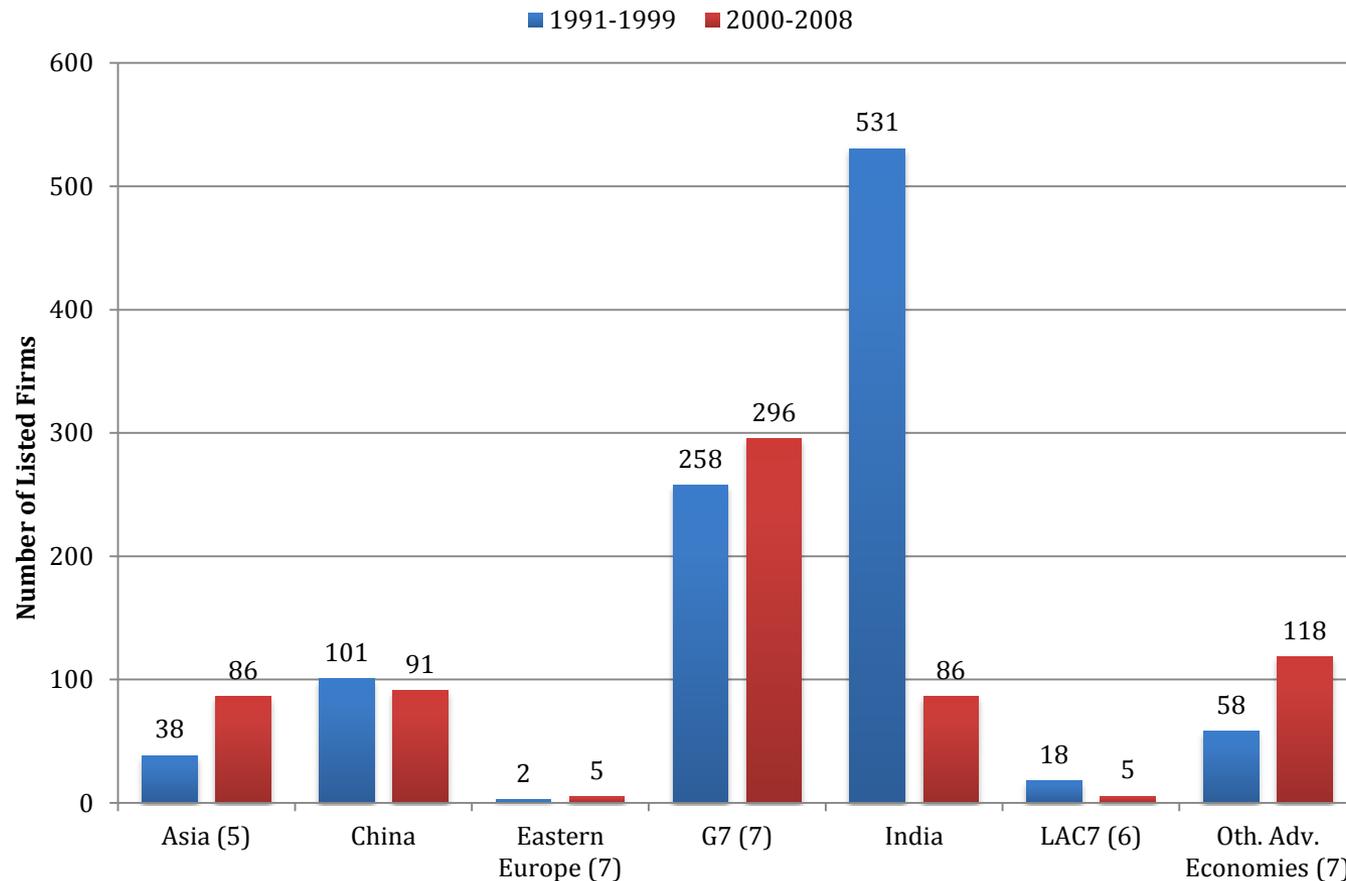
# Equity Markets: Few Firms List

## Number of Listed Firms



# Equity Markets: Even Fewer Firms Raise Capital

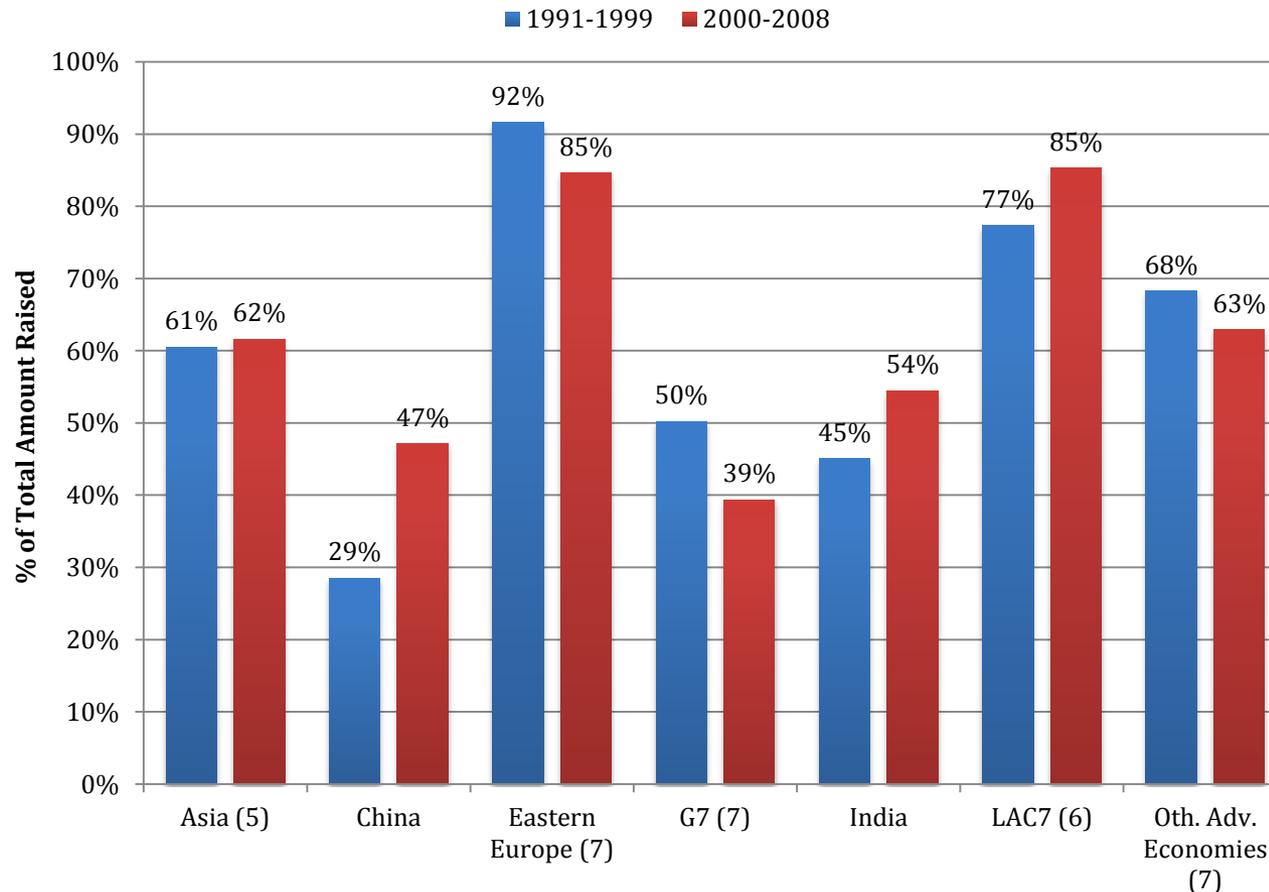
## Average Number of Firms Raising Capital



# Equity Markets: Also with Significant Concentration

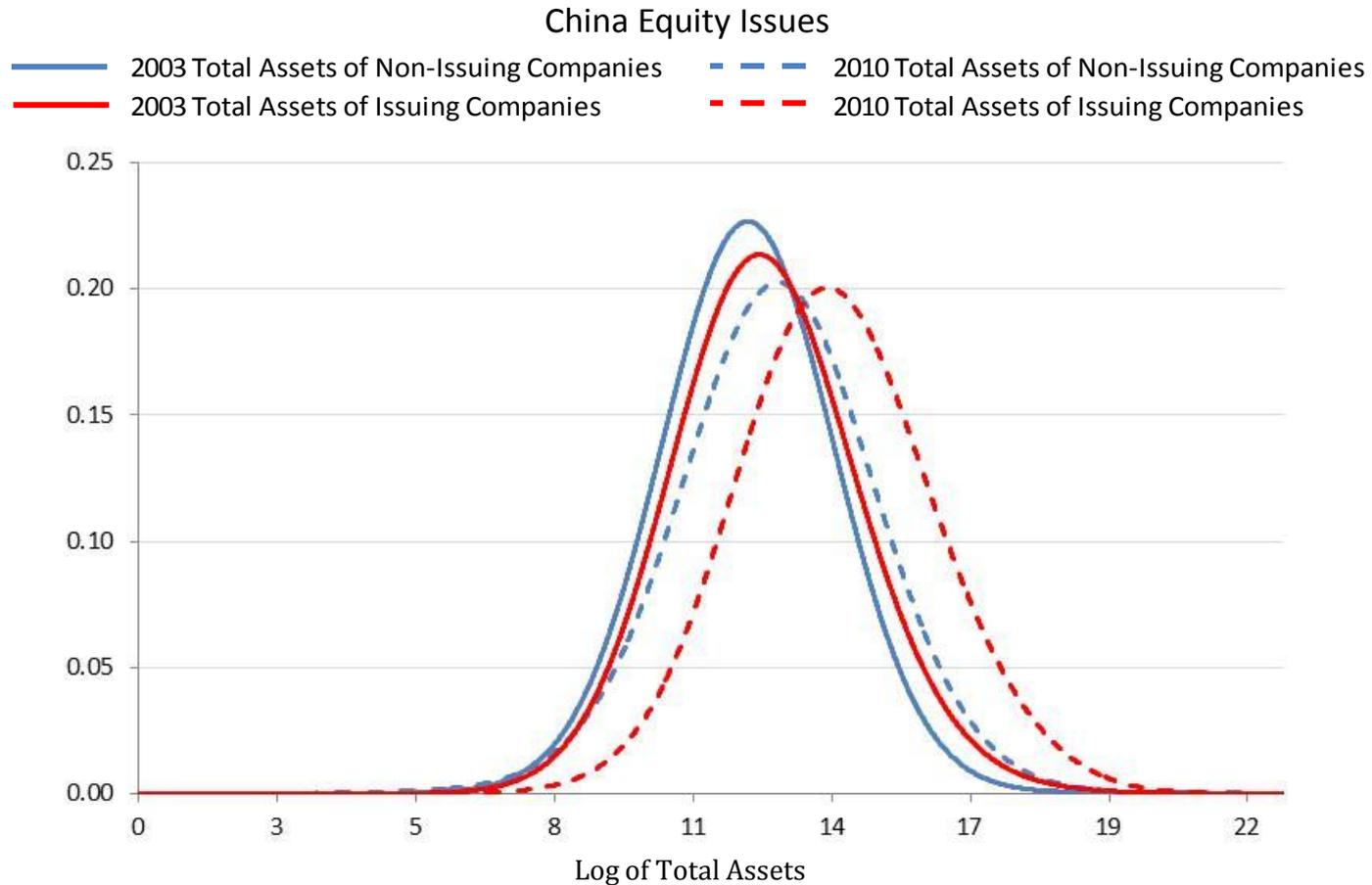
## Concentration in Domestic Equity Markets

Share of Amount Raised by Top 5 Issues



# Issuing Firms Larger than Non-issuers, Grow More

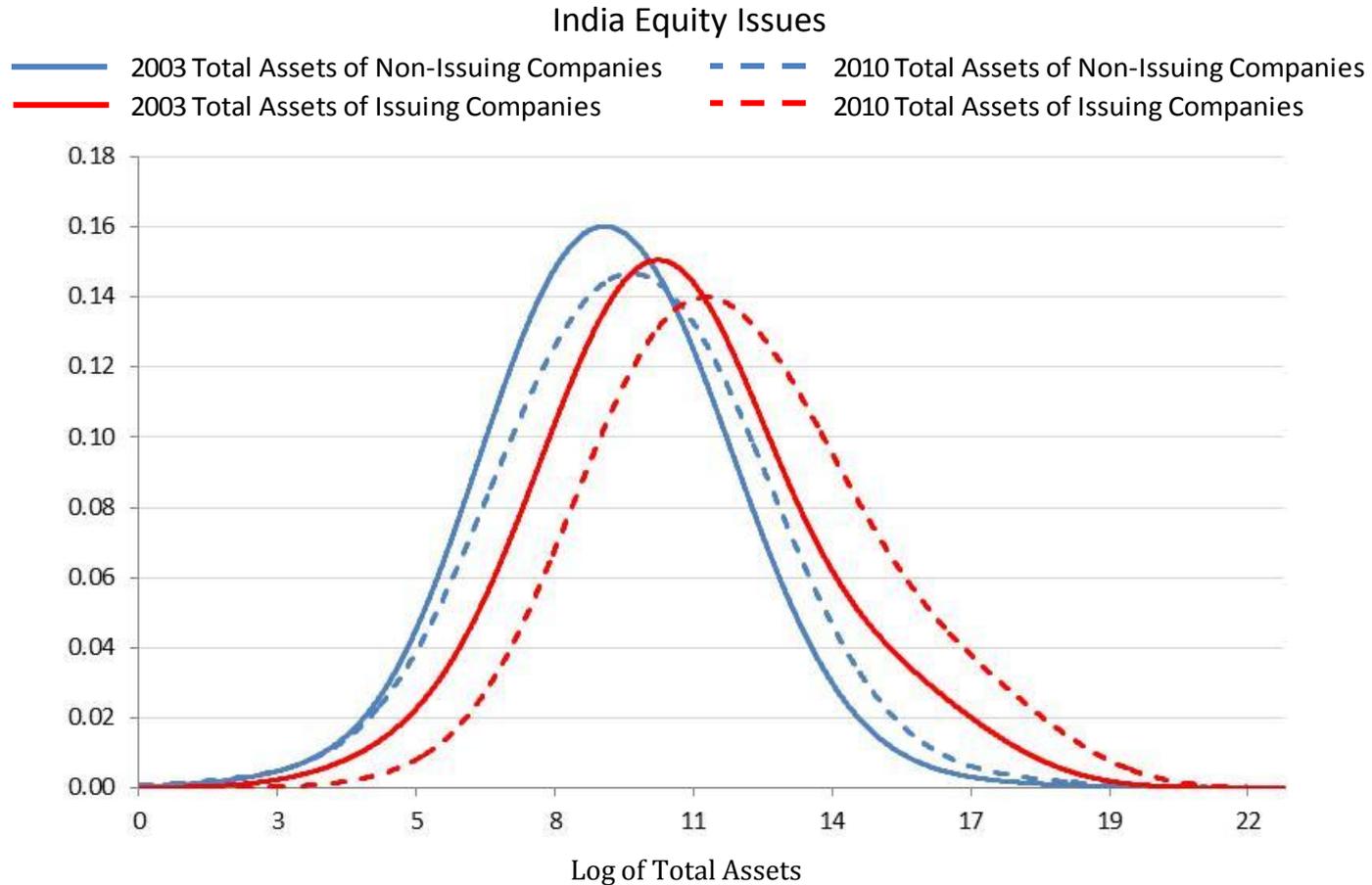
## Firm Size Distribution by Issuance Activity



*A firm is considered as issuing if it had at least one equity issue between 2003 and 2010.*

# Issuing Firms Larger than Non-issuers, Grow More

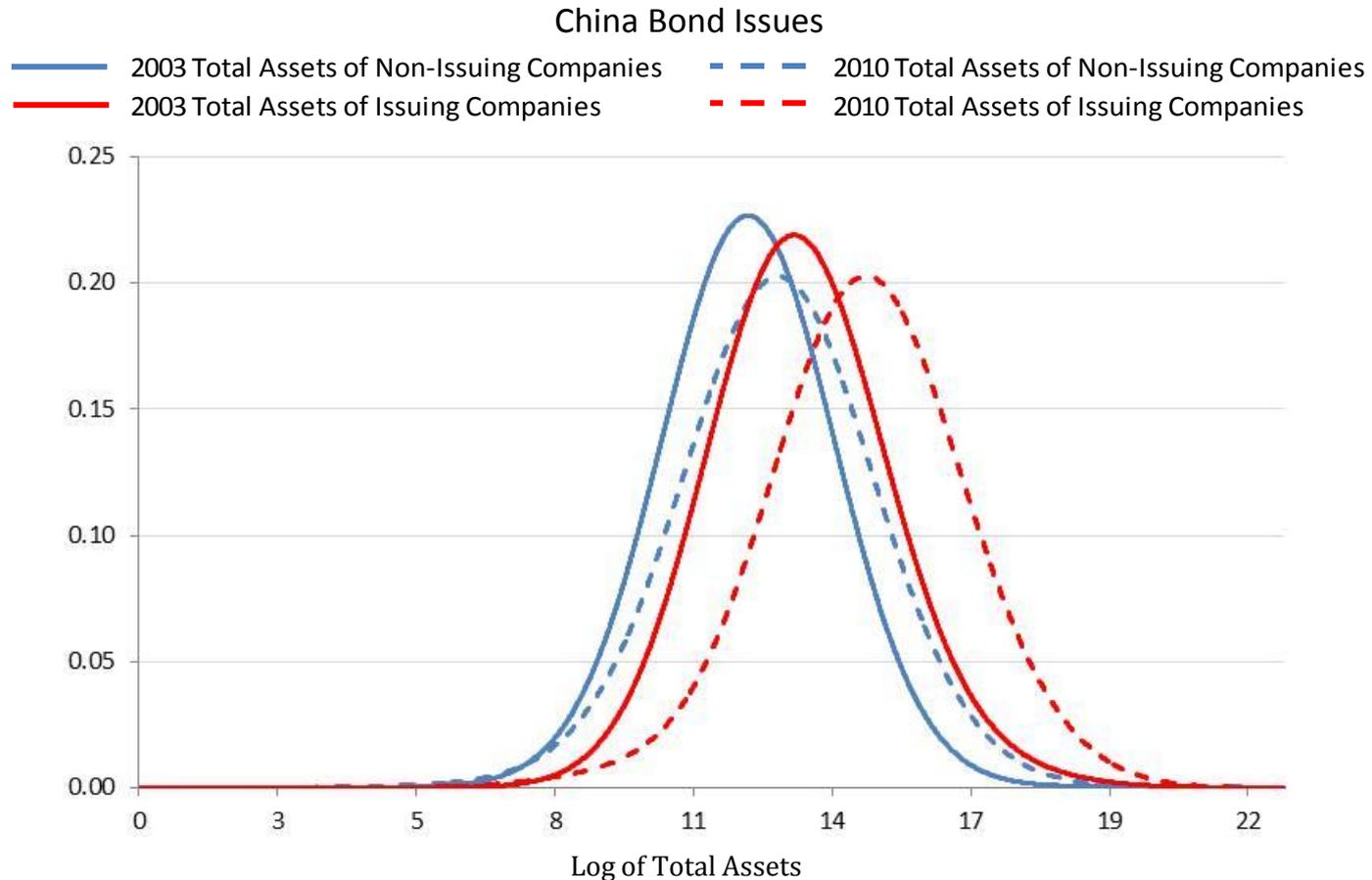
## Firm Size Distribution by Issuance Activity



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# For Bond Issuers, the Results Are Starker ...

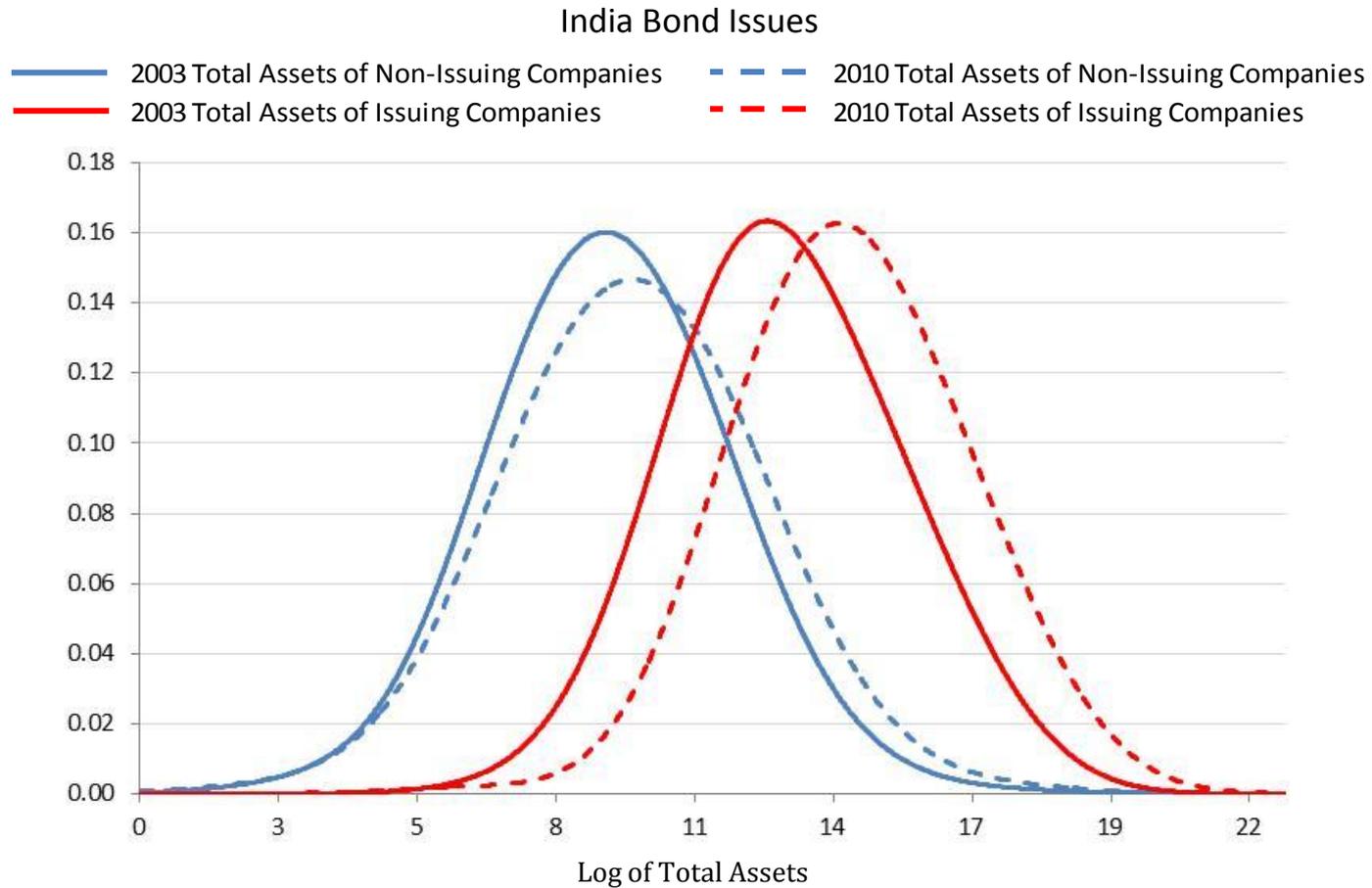
## Firm Size Distribution by Issuance Activity



*A firm is considered as issuing if it had at least one equity issue between 2003 and 2010.*

# ... More So in India

## Firm Size Distribution by Issuance Activity



*A firm is considered as issuing if it had at least one equity issue between 2003 and 2010.*

# Outline

- Financial development: banks, bond and stock markets
- Institutional investors

# Organization of the Evidence

- Hard to have a unified framework to analyze the evidence
- Findings from different papers using data from Chile, the U.S., and the world financial centers
- Findings on different aspects of institutional investor behavior, in particular their asset allocation
- Emphasis on regulated investors (mutual funds & pension funds)
- Food for thought
  - Role of institutional investors
  - Incentives at the manager and investor level
  - Public policy

# Evidence on Institutional Investors

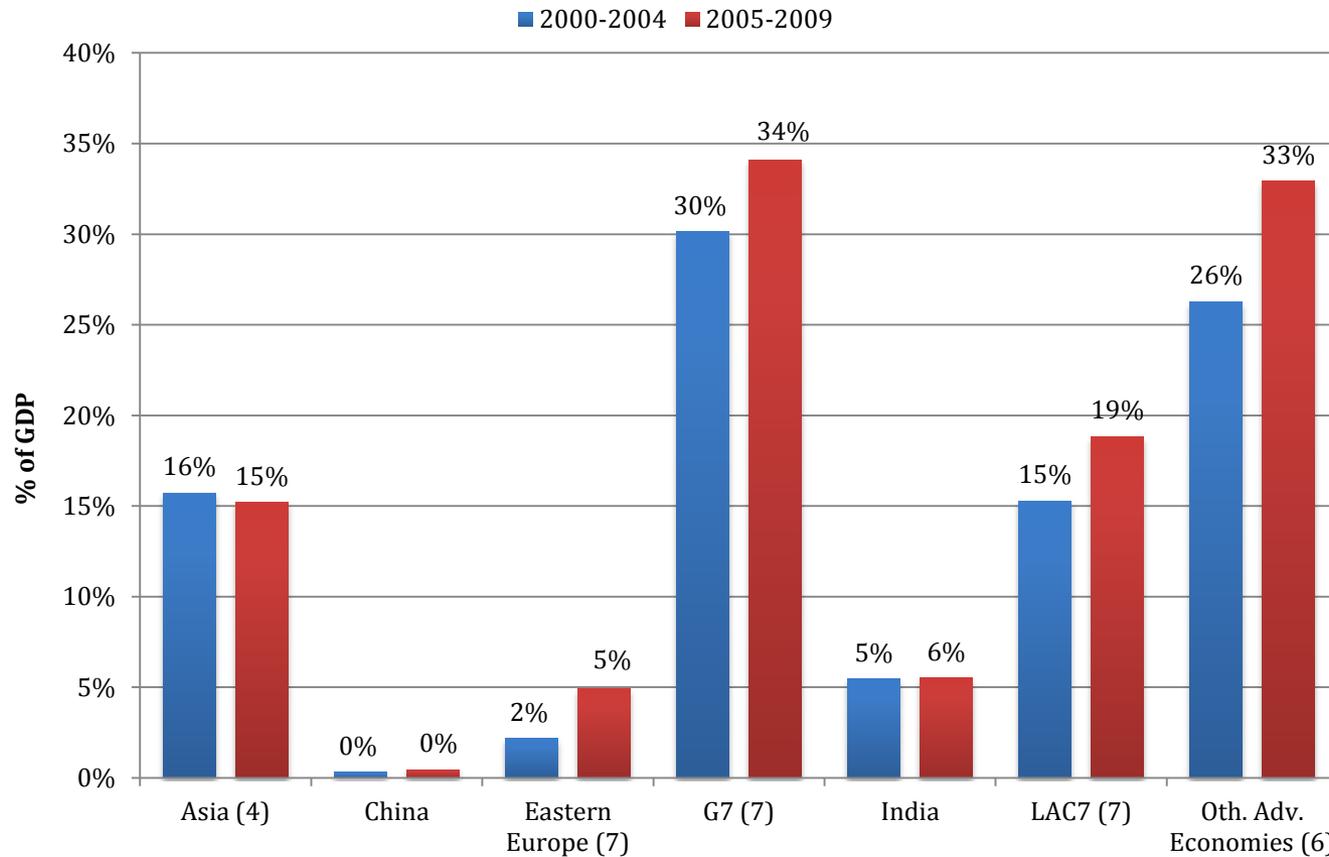
- Overview
  - Size of pension funds and mutual funds
  - Asset allocation
- Pension funds in Chile
  - Trading and herding
  - Long-term investors?
- International evidence
  - Diversification
  - Pro-cyclicality
  - Benchmark effect

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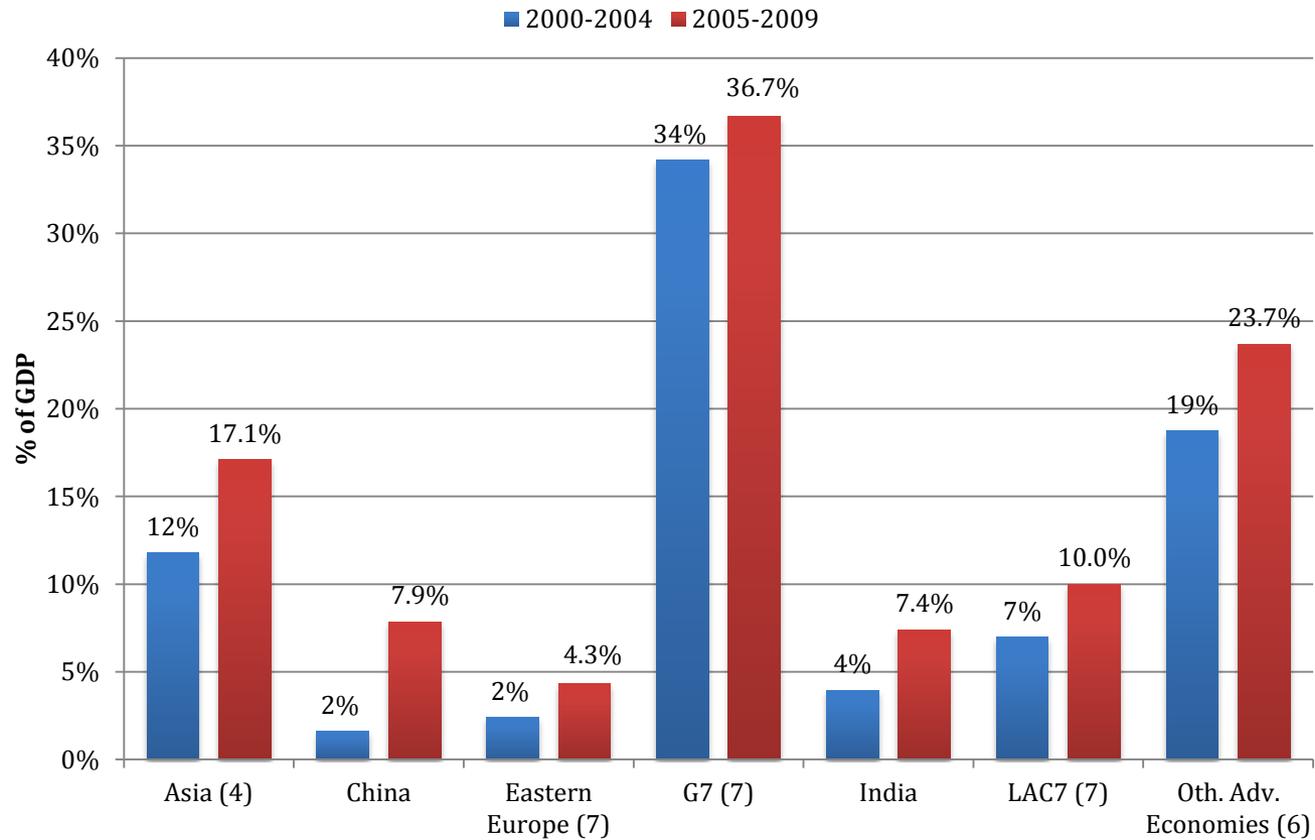
# Pension Funds Gaining Ground

## Pension Fund Assets



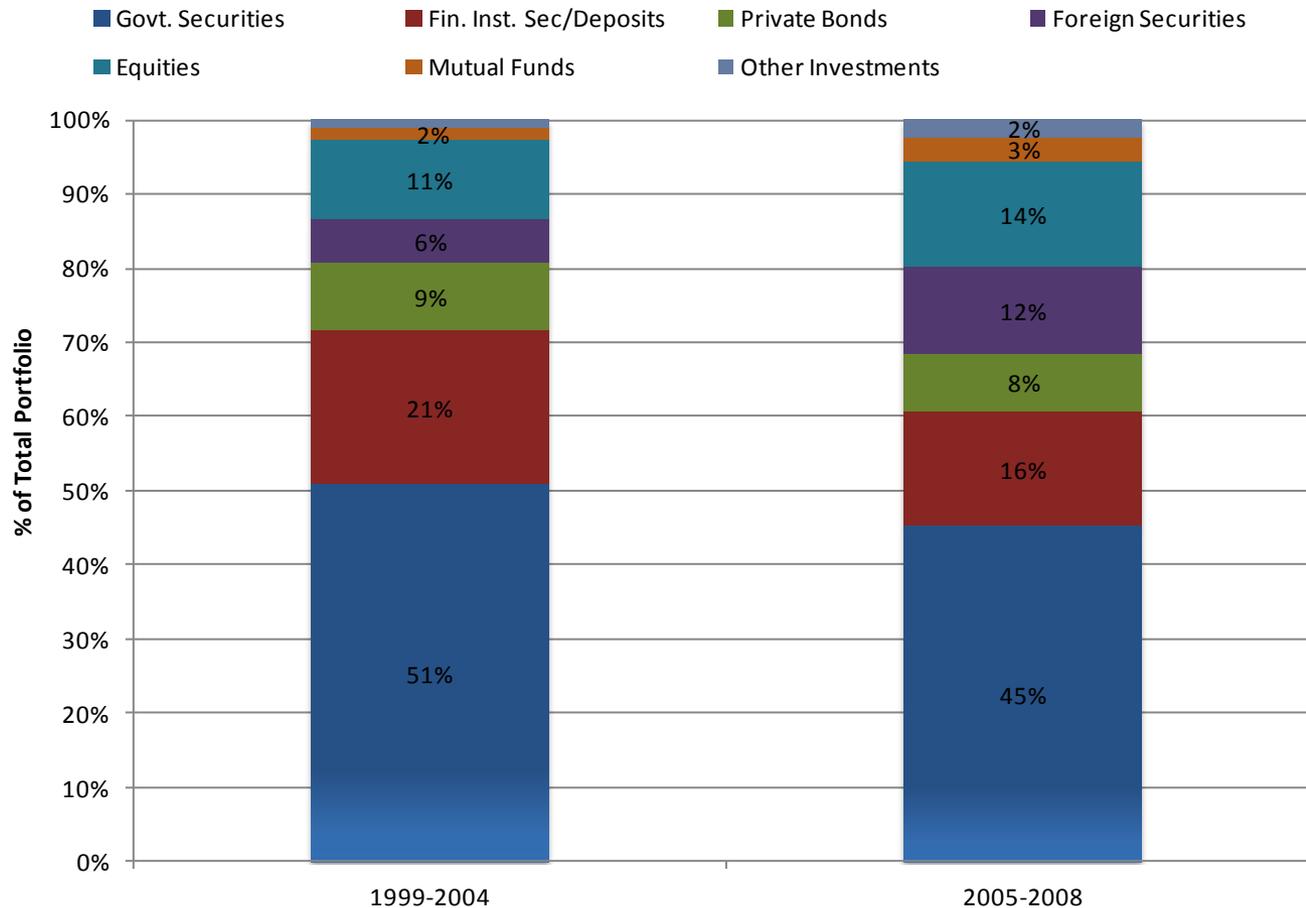
# Mutual Funds Growing Too

## Mutual Fund Assets

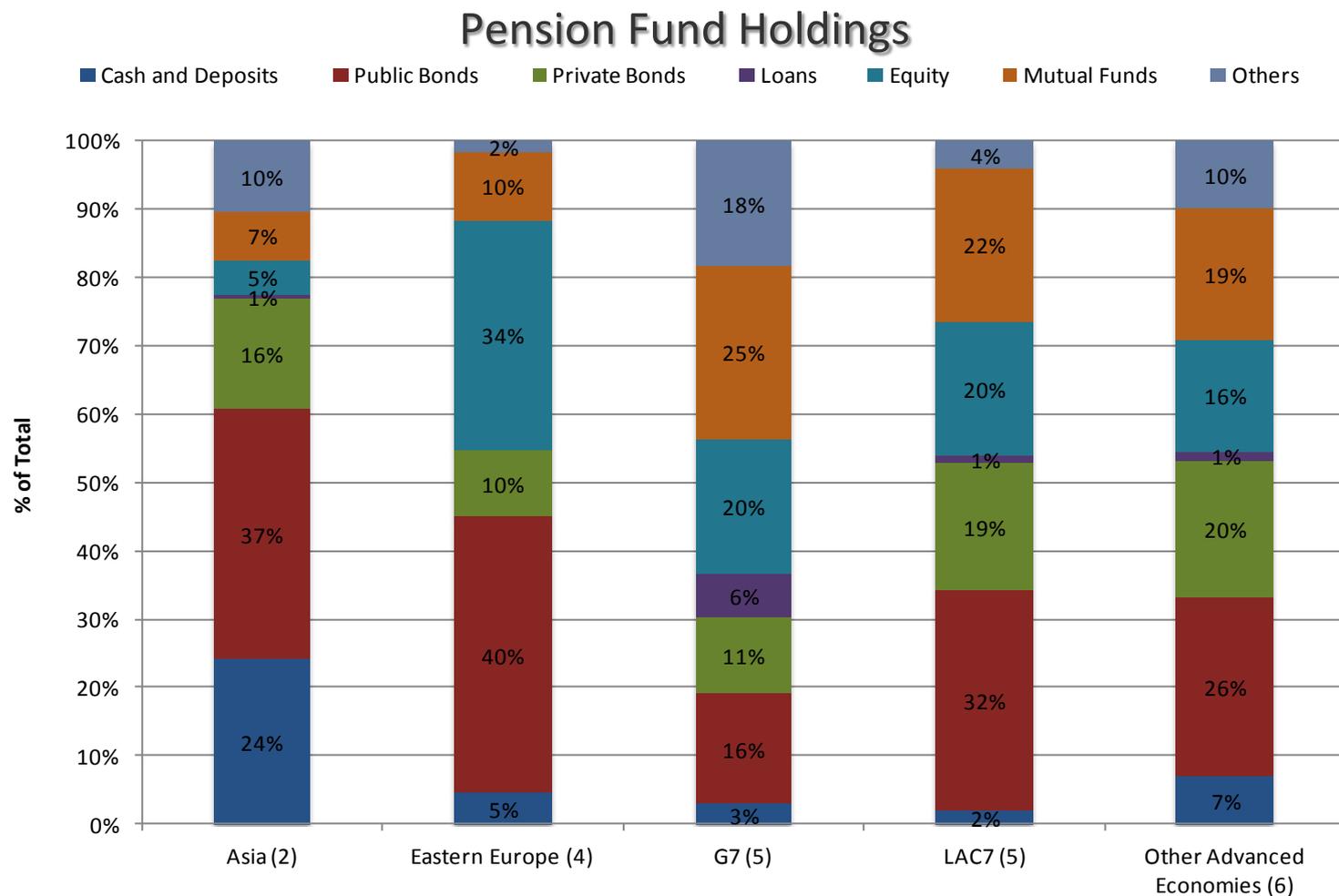


# ... However, Portfolios Are Concentrated in Deposits and Public Bonds

## Composition of Pension Fund Investments in Latin America



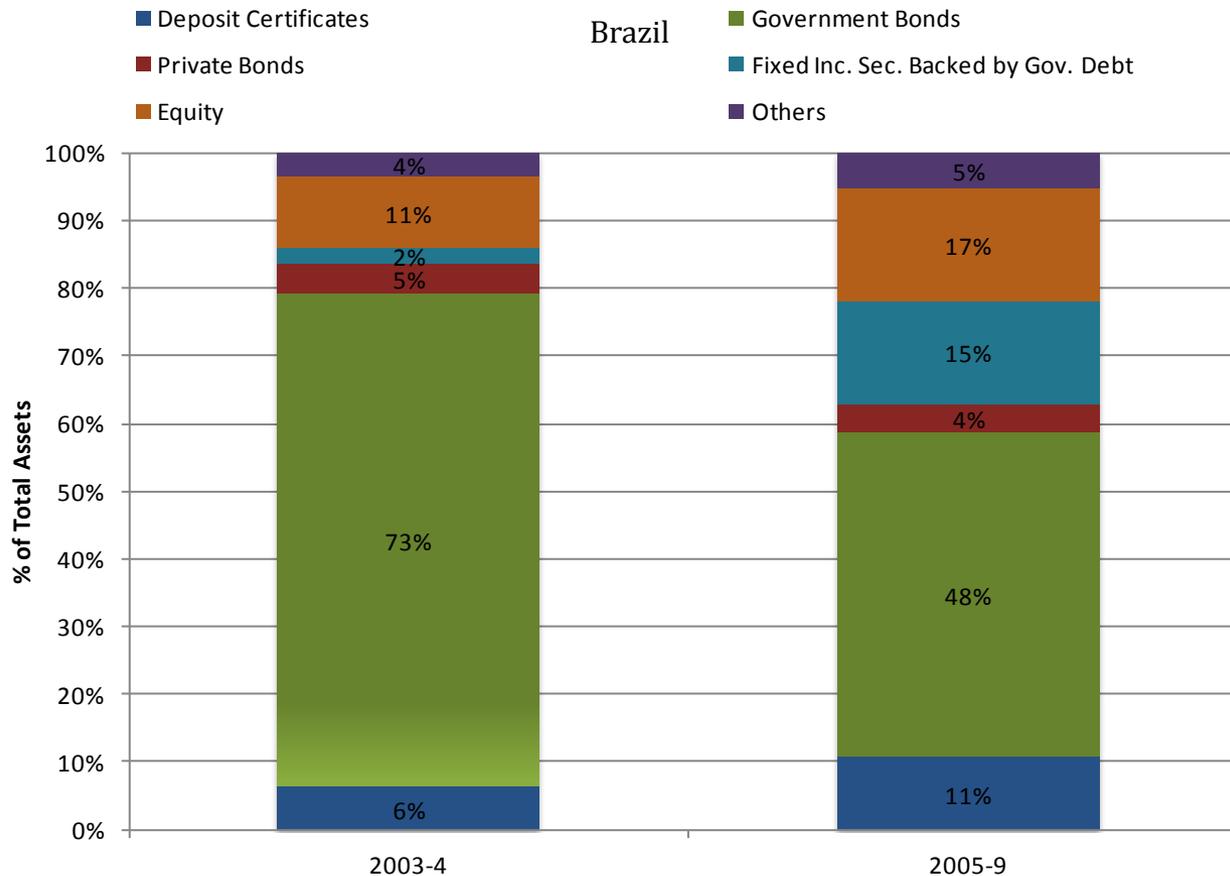
# ... However, Portfolios Are Concentrated in Deposits and Public Bonds



Source: OECD – Latest available information. Data for most countries are from 2009.

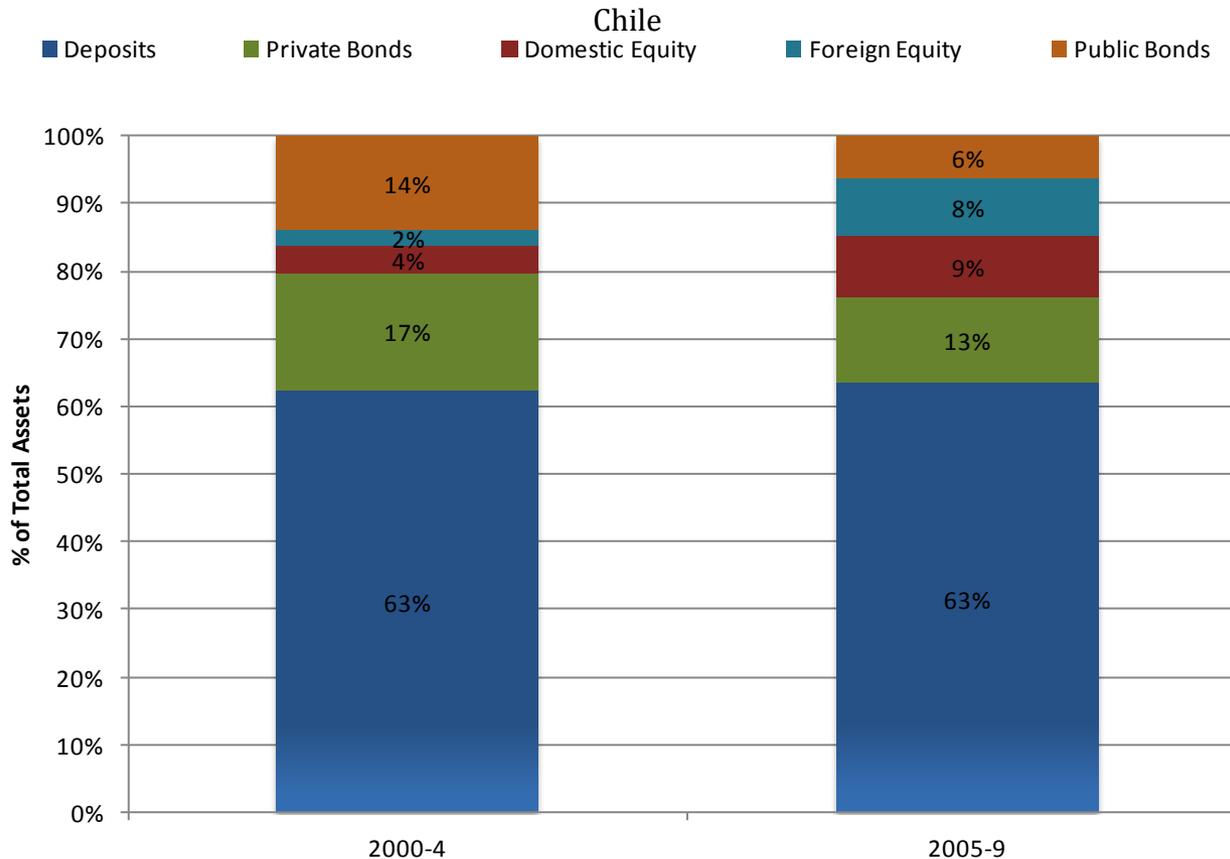
# Mutual Fund Assets Also Concentrated in Bonds and MM Instruments

## Mutual Funds - Portfolio Holdings



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## Mutual Funds - Portfolio Holdings

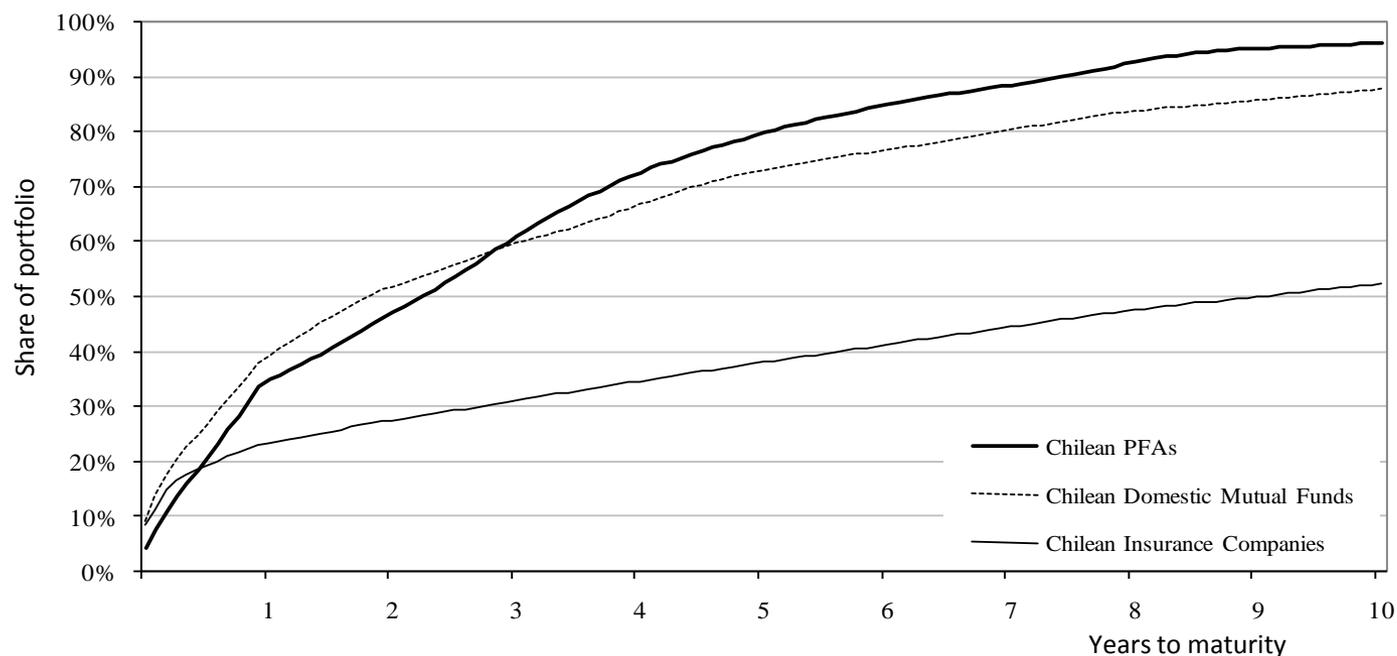


# Evidence on Institutional Investors

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# Along with MFs, They Tend to Invest Short Term

Maturity Structure of Chilean Domestic Mutual Funds and PFAs vs. Insurance Companies



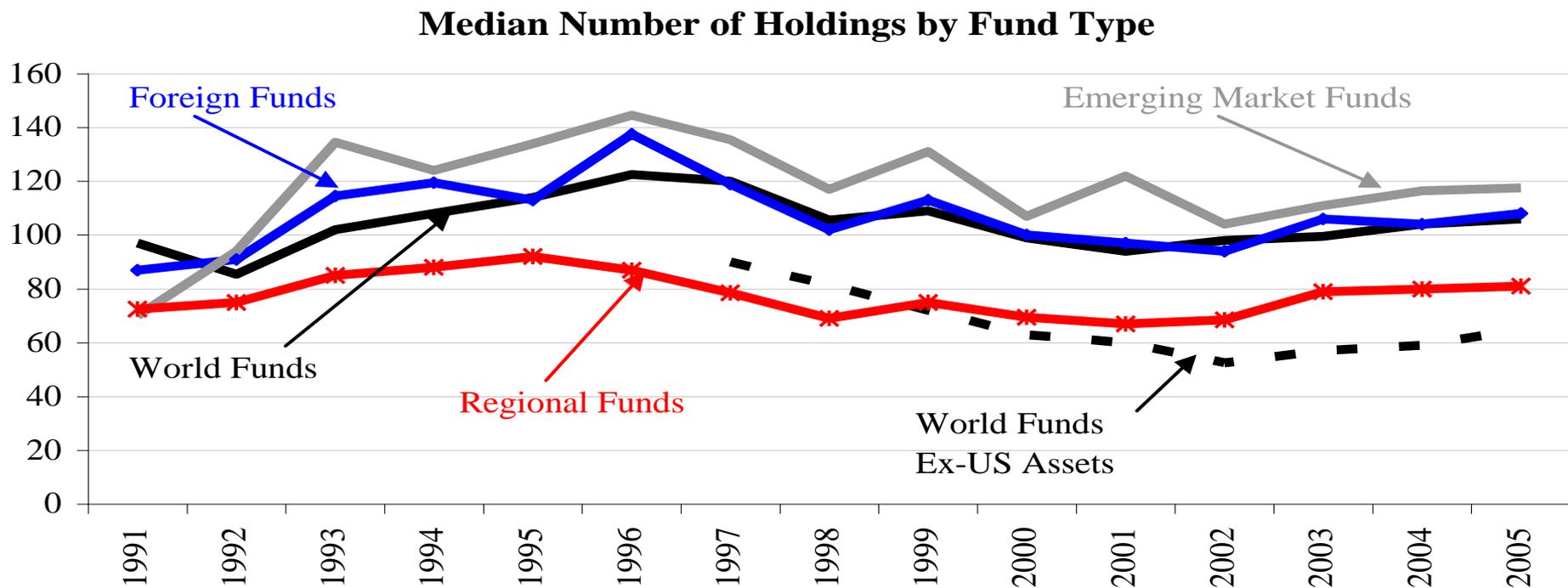
	<u>Avg. Maturity</u>
(1) Chilean Insurance Companies	10.32
(2) Chilean Domestic Mutual Funds	3.88
(3) Chilean PFAs	3.16

Note: This figure compares the maturity structure of Chilean insurance companies to that of Chilean domestic mutual funds and PFAs. Only medium- and long-term bond mutual funds are taken into account. Source: Opazo, Raddatz, Schmukler (2013)

# Outline

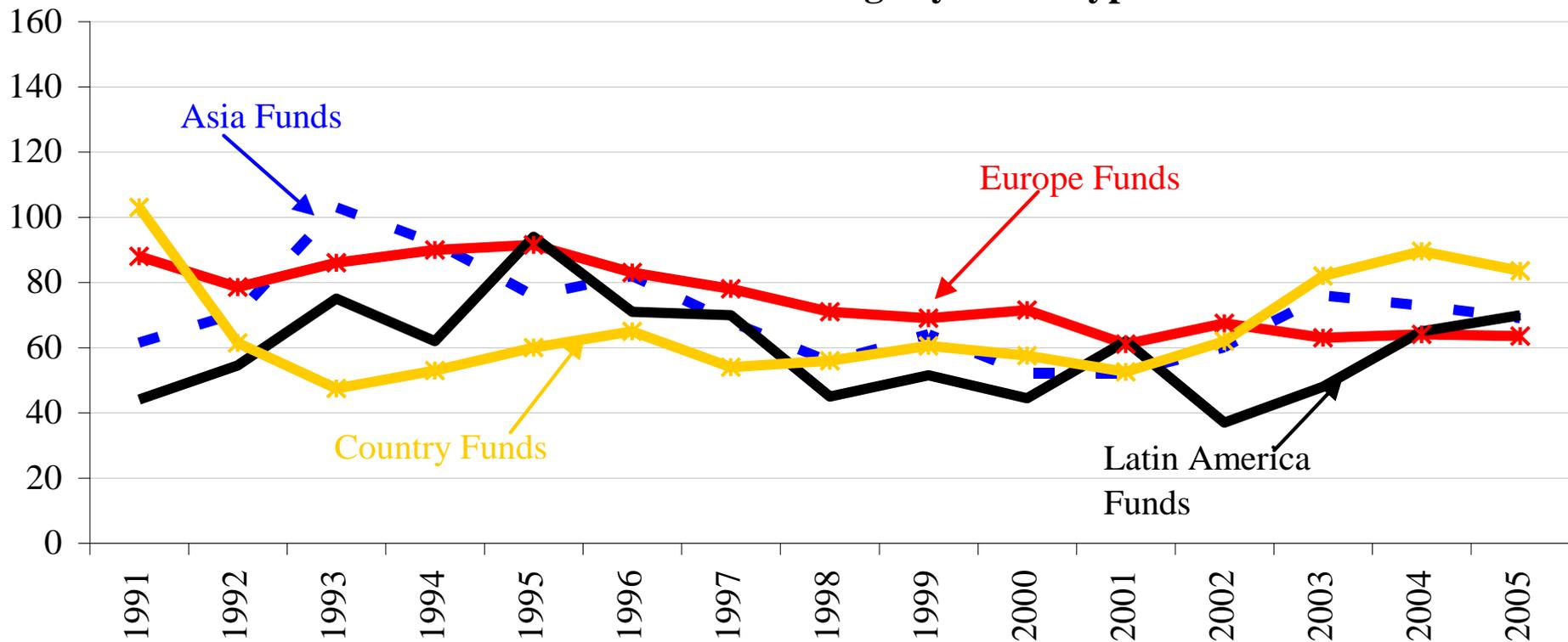
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# Similar Number of Holdings Across Fund Types and Relatively Constant over Time



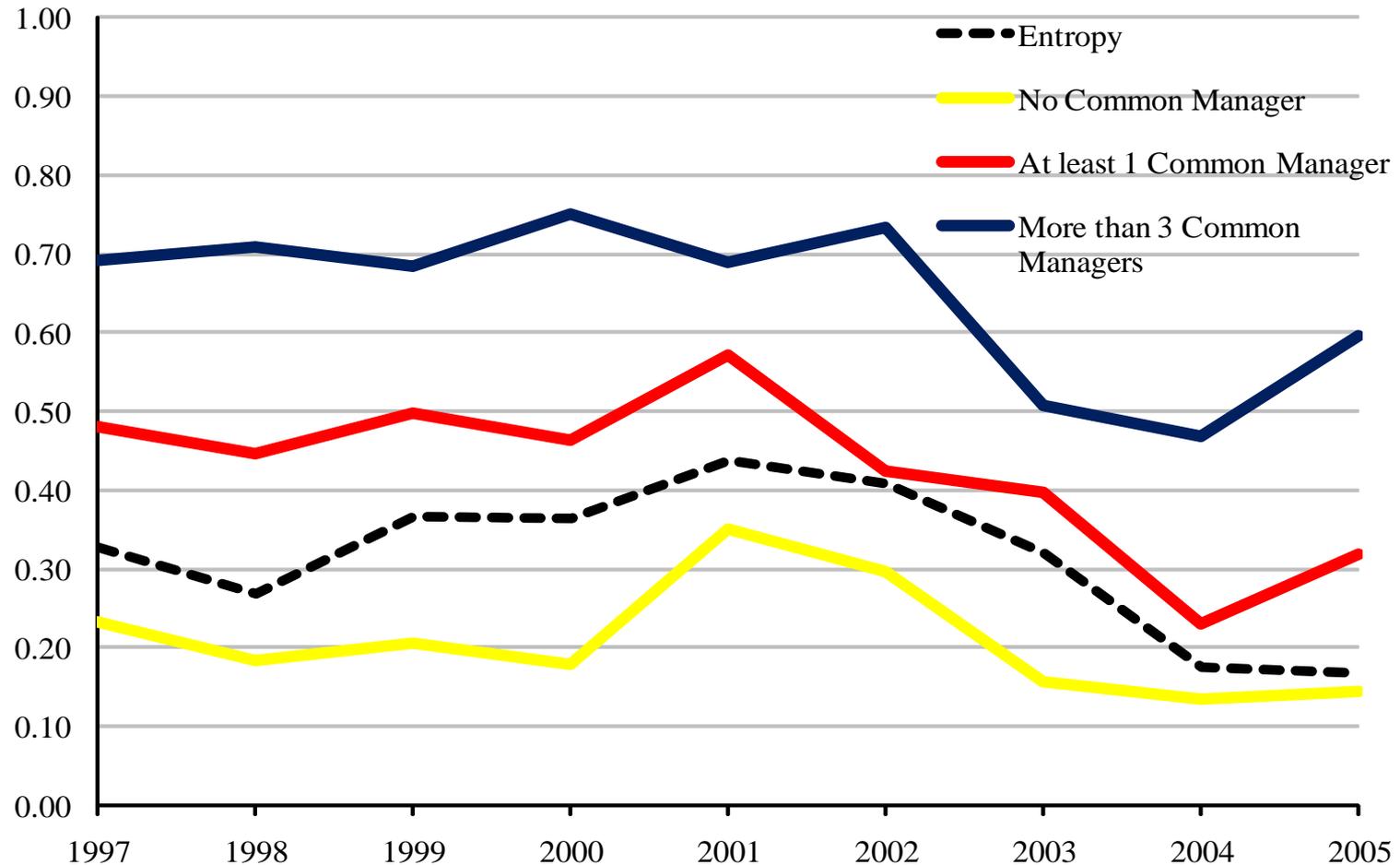
# Similar Number of Holdings Across Fund Types and Relatively Constant over Time

## Median Number of Holdings by Fund Type



# Having Managers in Common Increases Entropy

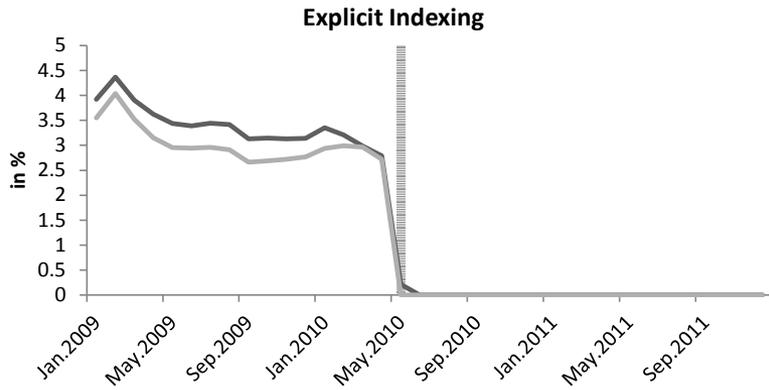
## Entropy Measures across All Holdings



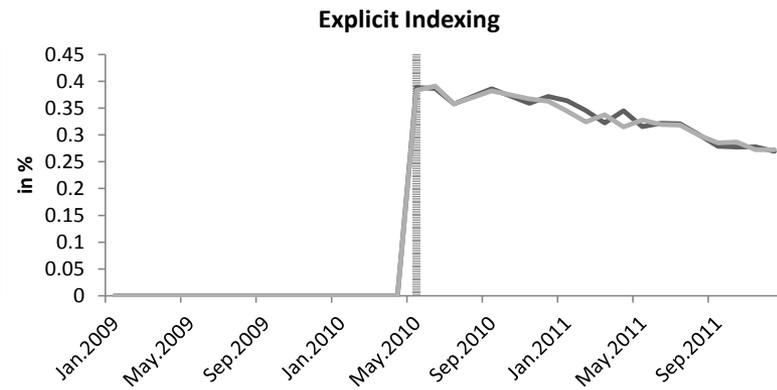
# Equity Mutual Funds Appear to Follow their Benchmarks to a Great Extent

Israel's Upgrade from the Emerging Market Index to Developed Market Index

**Global Emerging Funds and MSCI EM Index**

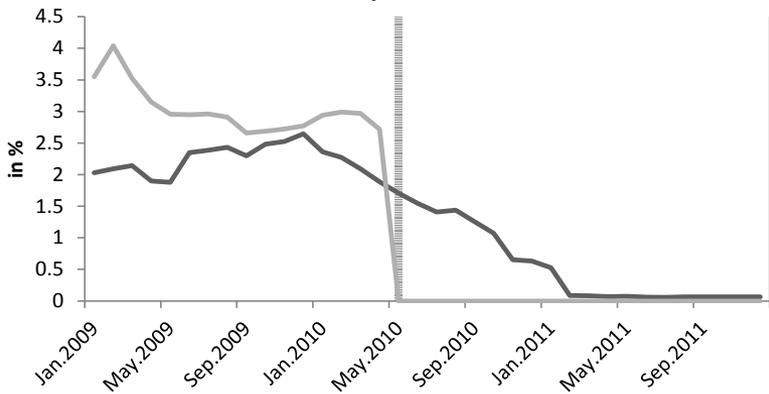


**Global Funds and MSCI World Index**

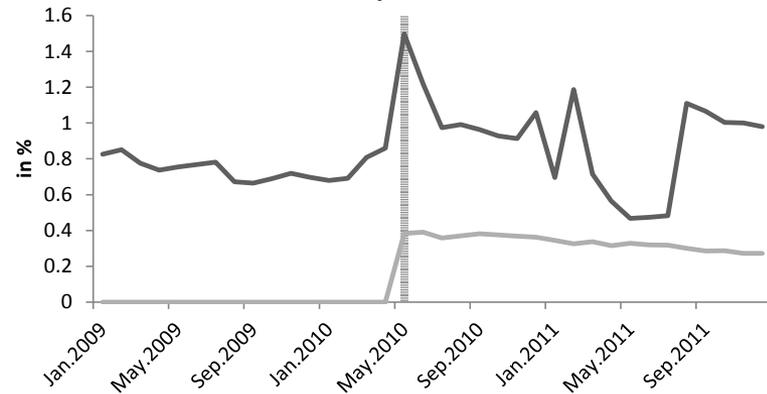


— Mean Weight Israel      — Benchmark Weight

**Truly Active**



**Truly Active**



# Concluding Remarks: Bottom Line

- In terms of financial development, substantially different and better than before, even when “insurmountable”
  - Deeper systems, in domestic and international fronts
  - More saving and more resources available in the economy
  - Less crowding out by governments, but governments still large
  - According to some measures, consumers appear to be better served
  - Financial system more complex, somewhat more diversified
    - Not that much bank-based
    - Bonds and equity play bigger role, corporate bonds emerging
    - Institutional investors much more prominent
  - Nature of financing is also changing

# Concluding Remarks: Bottom Line

- But no finance for all!
  - Financial development through capital markets not spread to all firms
- Constraints not on the supply side of funds
- Constraints not on the availability of investable assets
- Constraints likely not on specific regulatory issues
  - These get much attention at country level, but this is a cross-country issue
- Financial intermediation process more difficult than thought
  - First expands to areas relatively easy to finance
  - Incentives might play crucial role for more risk taking
  - Might not yield socially optimal outcome
  - Financial intermediaries brain of the economy,
  - ... but works differently than expected

# Concluding Remarks: Bottom Line

- Not clear how to proceed in many areas
  - Institutional investors are emblematic
  - Similarly with banks, capital markets, and financial integration
- Nor what to expect of capital market financing
- Plus lack of obvious paradigm at international level
  - Collapse of role models: no roadmap after the crisis
  - E.g. what to make of securitization and mortgage financing?
- Eventually, need to catch up, grow, and take risk without undermining stability: strong trade-off
  - Macro-prudential policies might not help
  - Hard to distinguish spurious boom from leapfrog
  - Especially for lagging areas and countries

# Some of the General Policy Challenges

- Generate healthy competition among financial intermediaries without perverse incentives
- Promote market discipline through standardization
- Foster benchmarking without boosting short-termism, herding, and volatility
- Foster long-term risk while being able to monitor managers
- Contrarian behavior and long-term arbitrage opportunities without generating backlash due to negative outcomes
- Take advantage of useful international diversification

# Going Long and Riskier

- Asset managers, including pension funds
  - Large chunk of domestic savings intermediated by asset managers
  - Spend significant part of fees in marketing – perhaps could be diverted to asset management?
  - Avoid risk taking, forgoing good long-term returns for investors ...
  - ... and risk capital for corporations
  - But at the same time shield them from volatility
  - Herd to be close to the pack
- Difficult task to change investment model
  - Without “excessive” risk taking
  - Without alienating investors
  - Generating proper incentives

# Problems Are Widespread

- U.S. and developed countries' institutional investors too present some odd investment patterns
- Invest in few stocks
- Do not share information within companies
- Are pro-cyclical even when investing in equities and even when shocks have already hit them
- Are subject to shocks from investors
- Follow benchmarks, which adds to pro-cyclicality
- Organizational problems seem to pervade the industry
- No clear alternative model

**Thank you!**