

# Whither Capital Markets in Developing Countries? Many Lessons from Latin America

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# Structure of Presentation

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- ✚ Latin financial systems have under-performed
- ✚ What went wrong?
  - ✚ H1: Insufficient/inconsistent reforms
  - ✚ H2: Wrong sequencing
  - ✚ H3: Wrong expectations
- ✚ Back to basics
  - ✚ Financial globalization
  - ✚ Size
  - ✚ Segmentation of access

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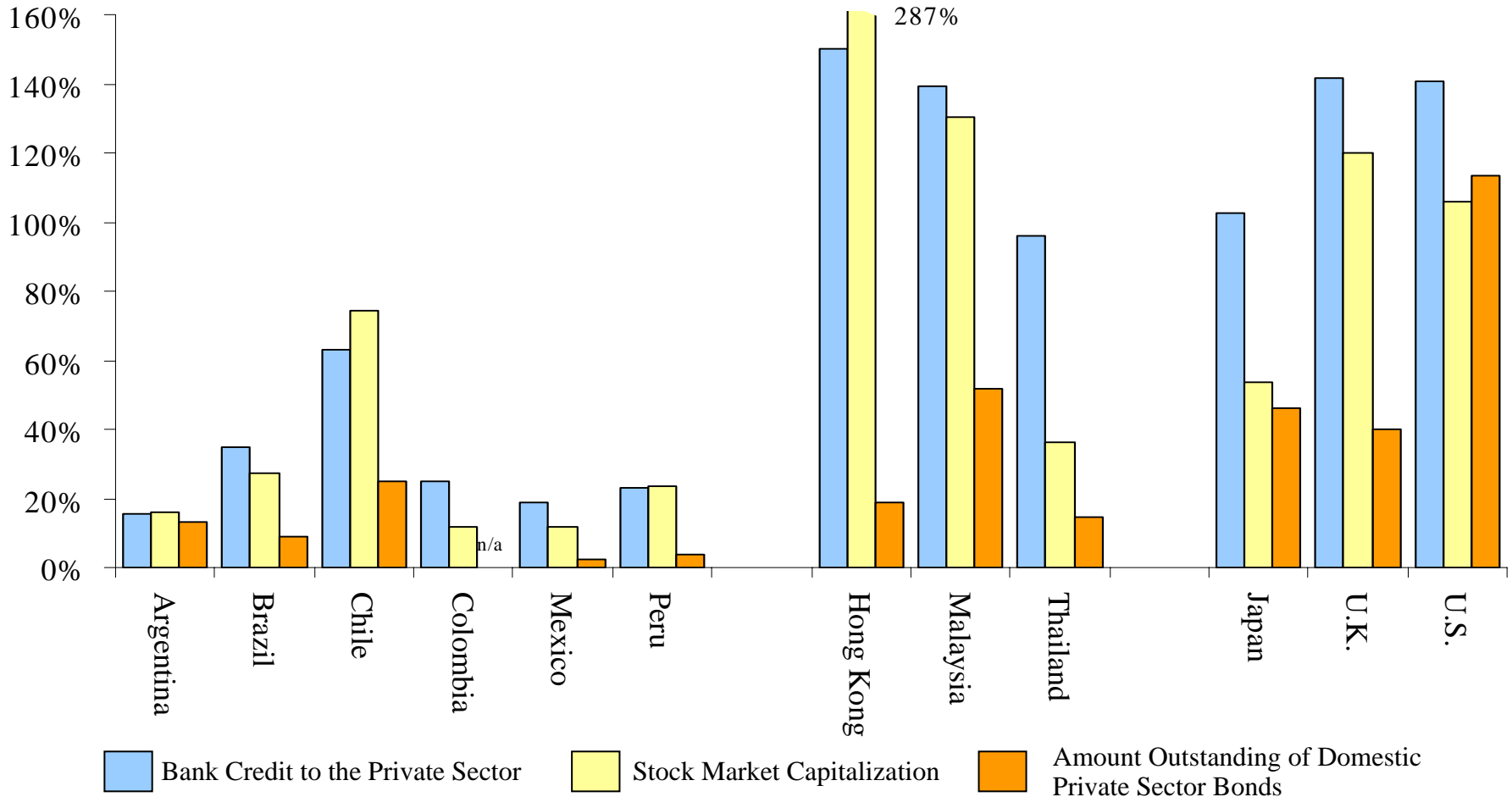
# Latin Financial Systems Have Under-Performed

# Latin Financial Markets

## Comparatively Small and Underdeveloped

### Financial Sector Size Across Countries

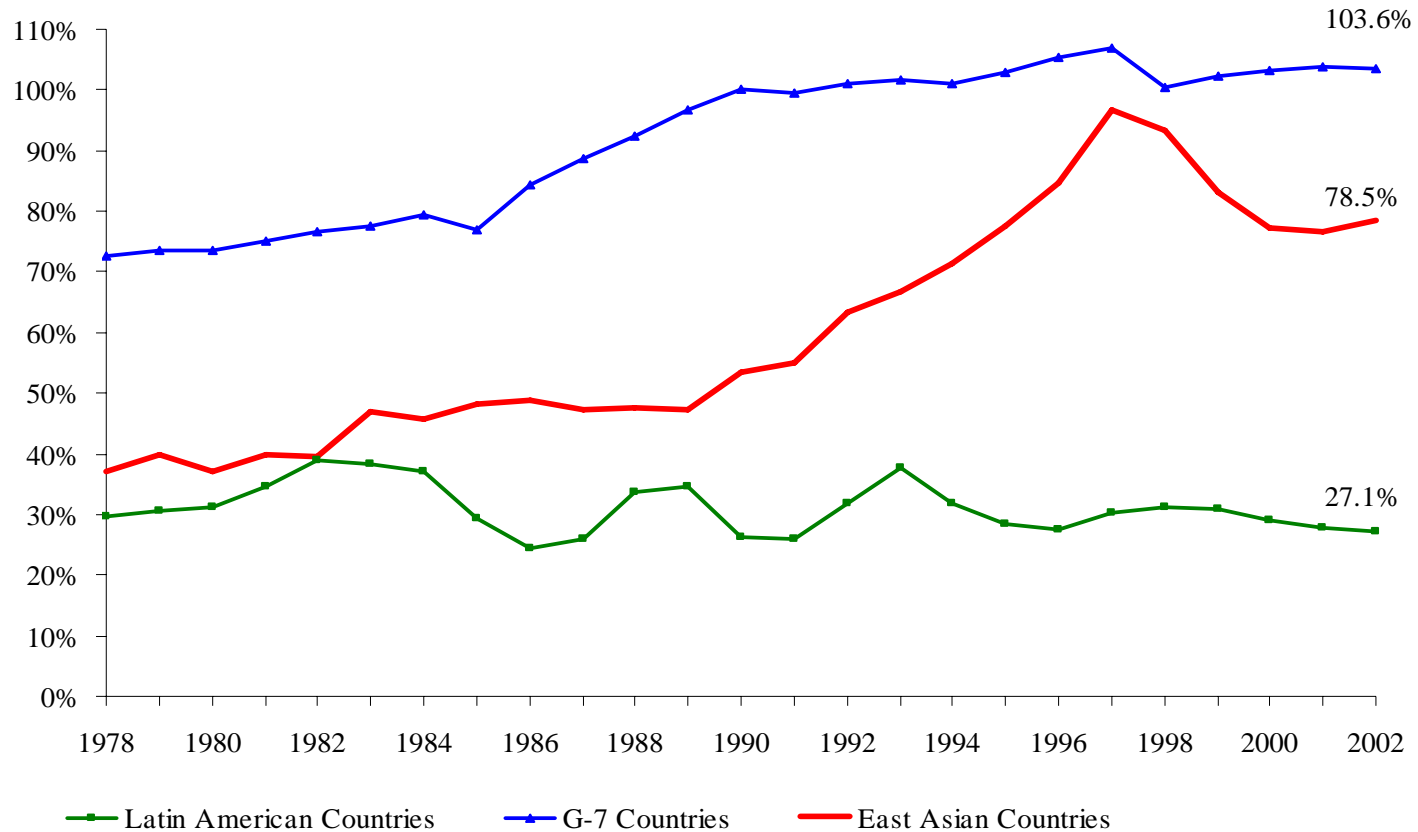
Percent of GDP, 2002



# Credit to the Private Sector in LatAm Trails Behind

## Credit to the Private Sector by Deposit-Taking Institutions

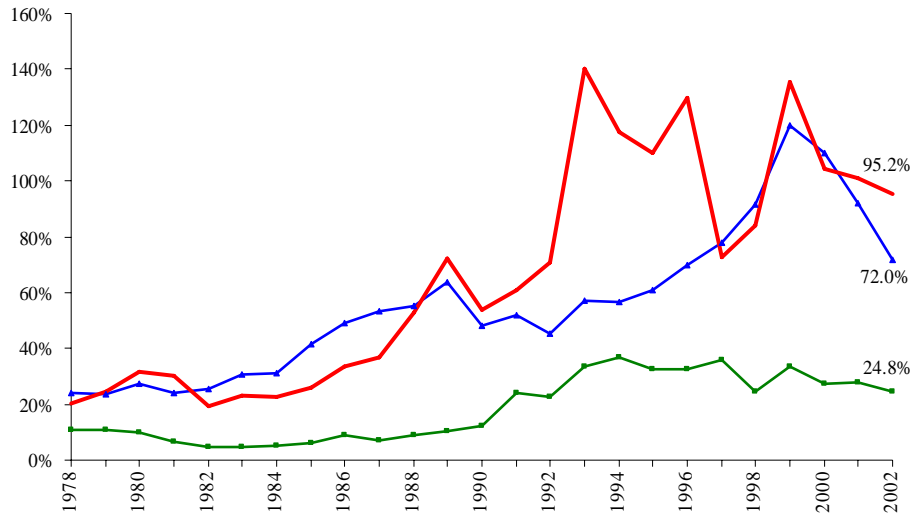
Percent of GDP



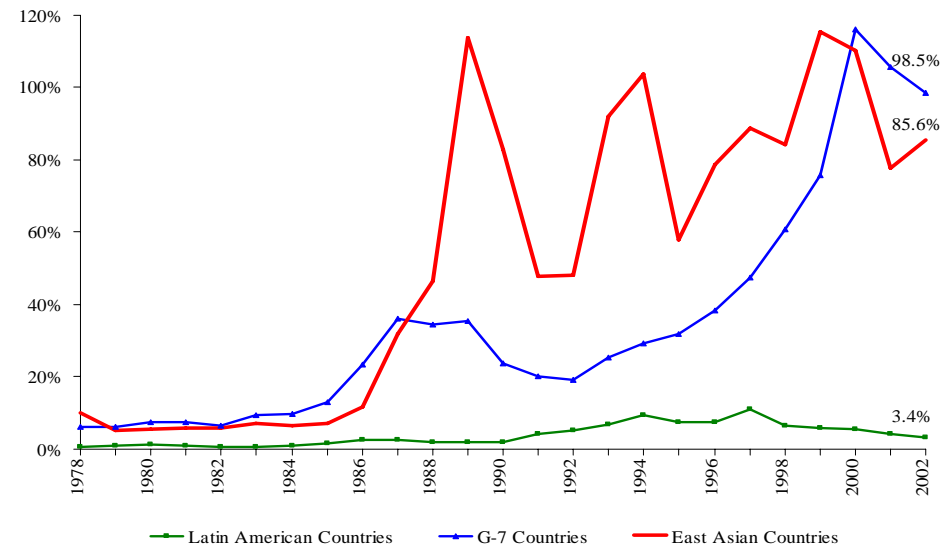
Source: Whither Latin American Capital Markets?, 2004.

# Latin Securities Markets Have Not Compensated: Stock Market Cap & Liquidity Lag other Regions

Market Capitalization / GDP



Value Traded Domestically / GDP

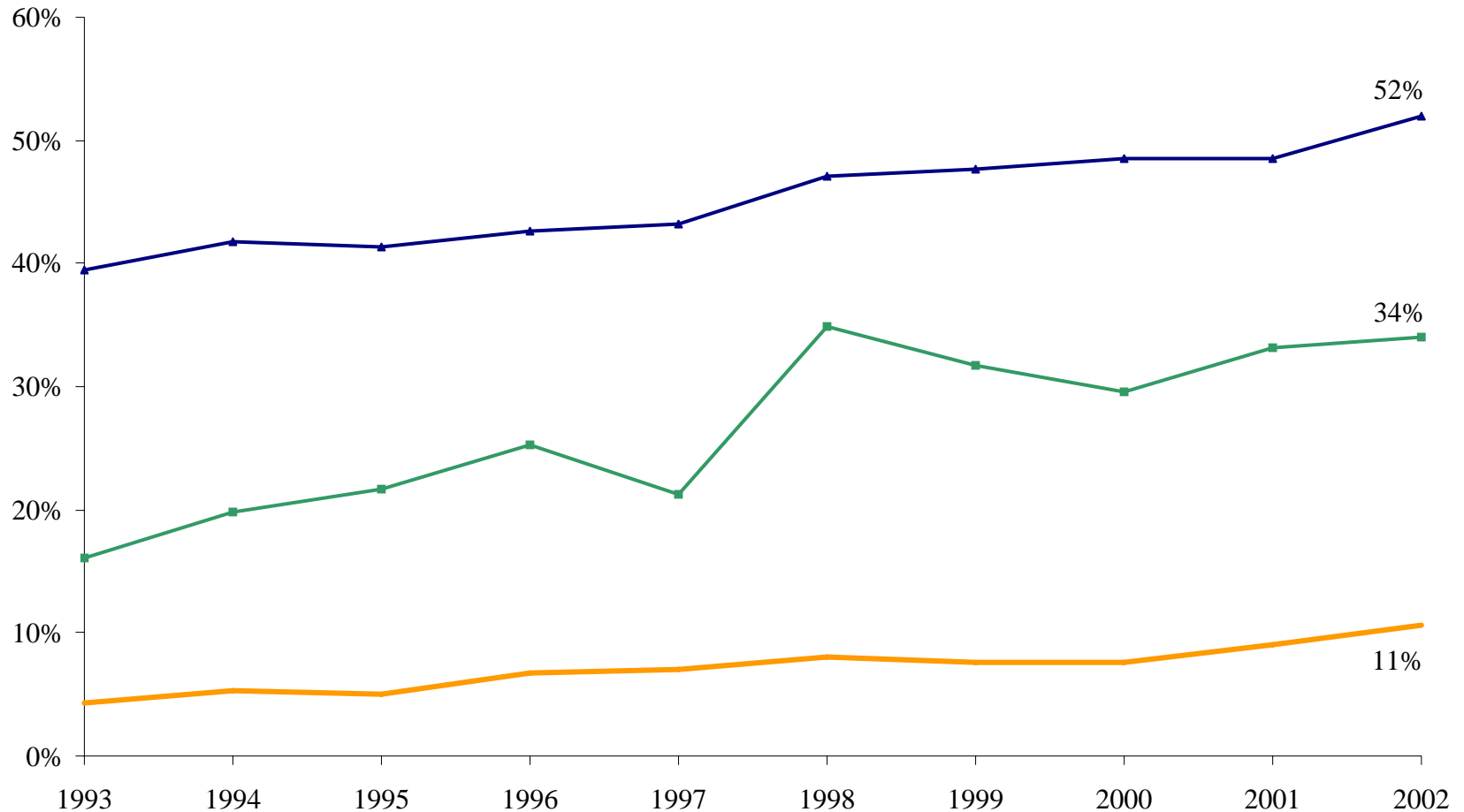


Source: Whither Latin American Capital Markets?, 2004.

# Corporate Bond Markets Also Trail Behind

## Domestic Private Sector Bonds Outstanding

Percent of GDP



Source: [Whither Latin American Capital Markets?](#), 2004.

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# What Went Wrong?

H1: Insufficient and Inconsistent Reform

# H1: Thesis and Diagnosis

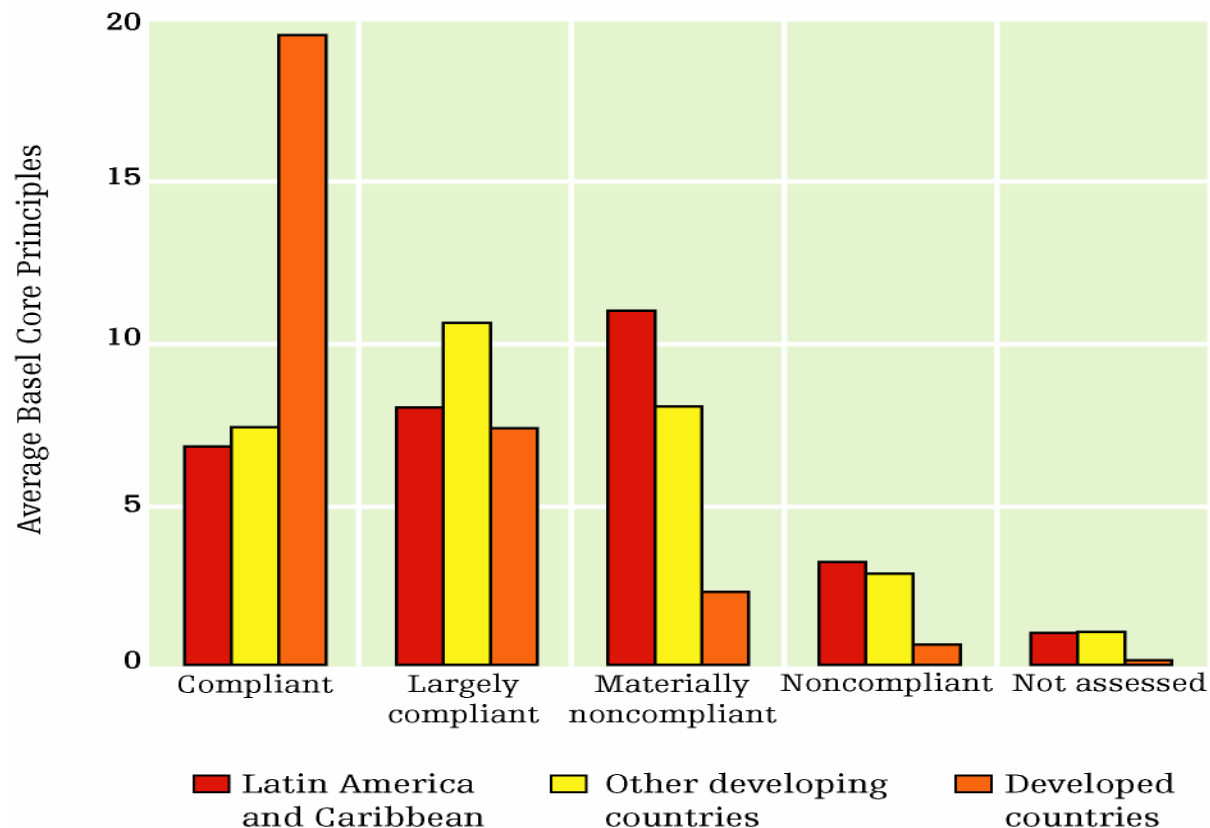
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- ✚ What needs to be done is well-known
  - ✦ Guided by international standards and codes
- ✚ Reform is not easy...
  - ✦ It is complex and multidimensional
  - ✦ Application to country circumstances is challenging
  - ✦ Crises are part of growing pains
- ✚ ... but reforms are right and will get us “there”
  - ✦ Perseverance will eventually pay – witness Chile
  - ✦ “There” = mini Wall Streets?
- ✚ Latin under-performance is due to reform shortfall and inconsistent reform implementation

# H1: Assessment

## True, LatAm is Far from Int'l Financial Standards...

**FIGURE 6.2** Compliance by Average Country Type

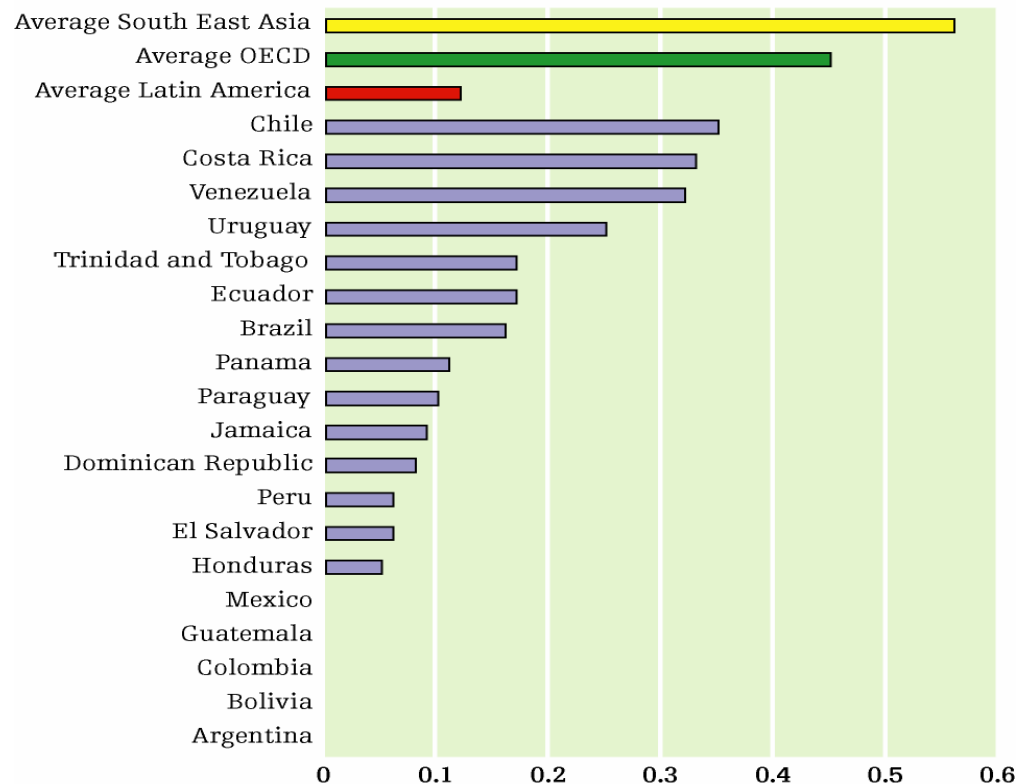


*Source:* World Bank/IMF Financial Sector Assessment Program.

# H1: Assessment

## ... And its Contractual Environment is Relatively Weak

**FIGURE 2.6** Effective Creditor Rights  
(Index, 0-1)

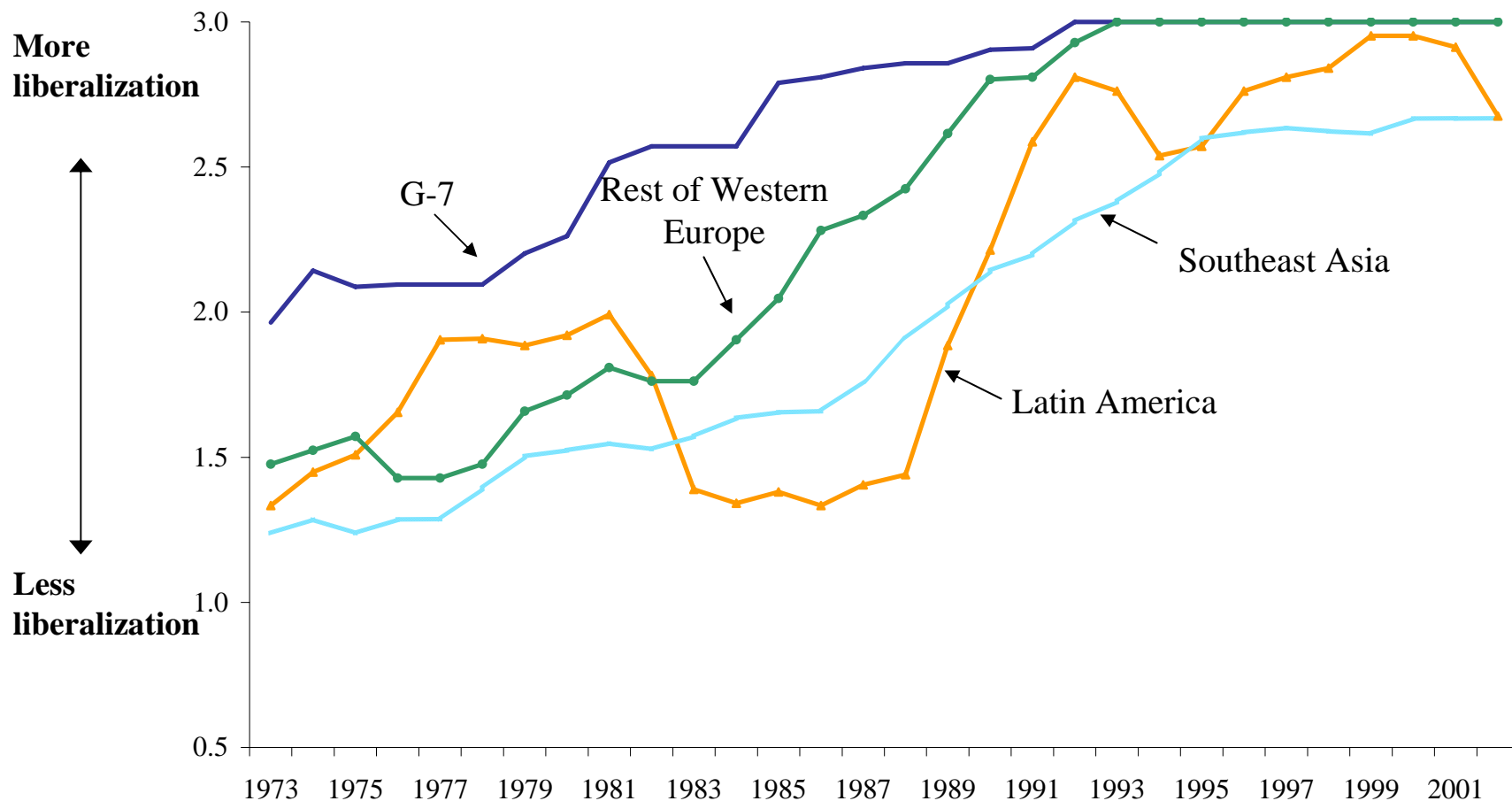


*Note:* The effective creditor rights index measures legal protection for creditors and the degree of law enforcement. The index ranges from 0 to 1. Higher values measure greater creditor protection.

*Source:* La Porta and others (1998); World Bank (2003); Chapter 12 of this Report.

# H1: Assessment

## But LatAm Liberalized Financial Markets Aggressively...

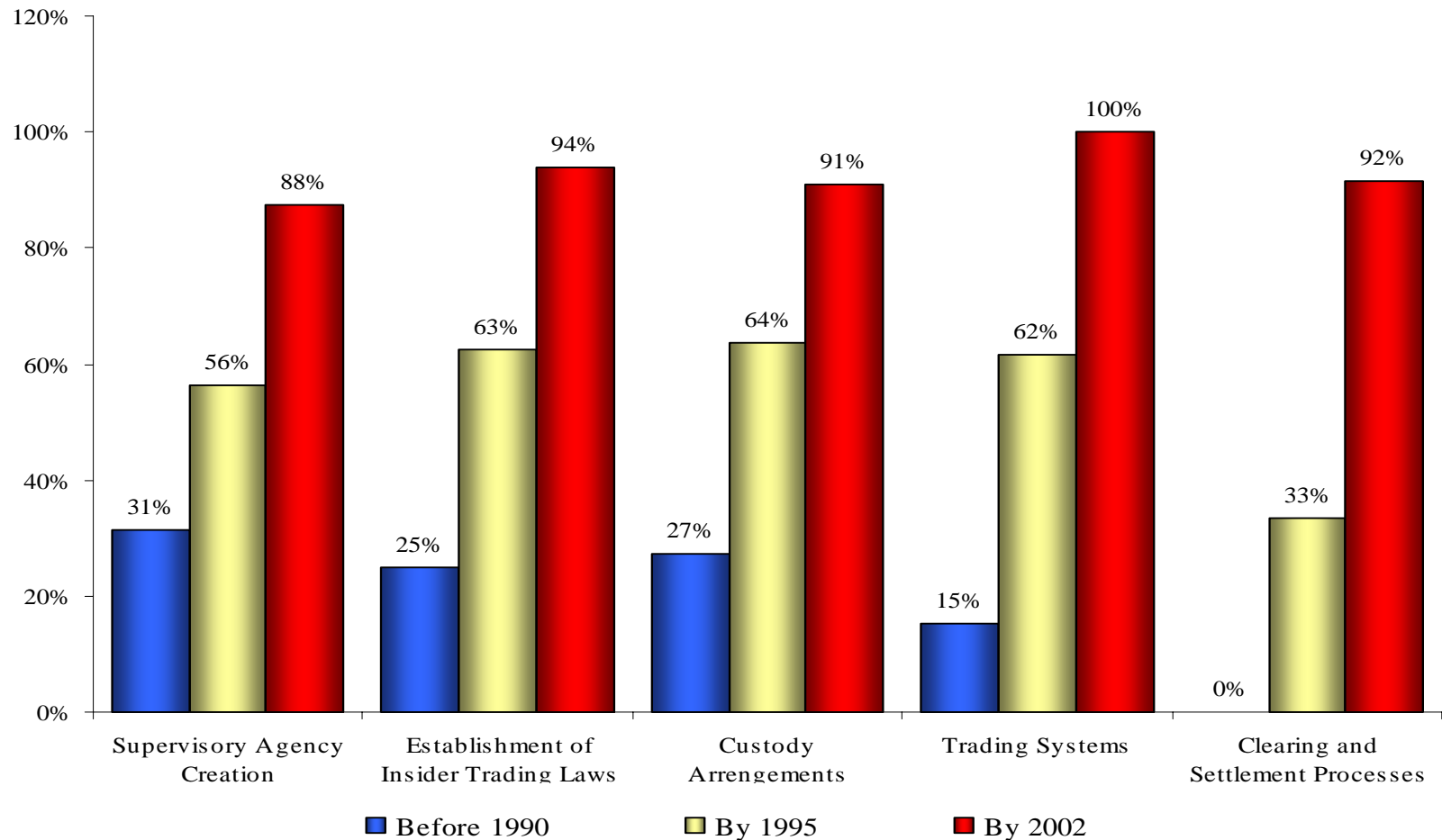


The liberalization index is calculated as the simple average of three indices (liberalization of the capital account, domestic financial sector, and stock market) that range between 1 and 3, where 1 means no liberalization and 3 means full liberalization. These data are then aggregated as the simple average between countries of each region.

# H1: Assessment

## ... And Was an Active Financial Reformer in the 1990s

Percentage of Latin American Countries Having Implemented Reforms



# H1: Assessment

## But Reform Impact is Not Obvious – Case of Stock Mkts

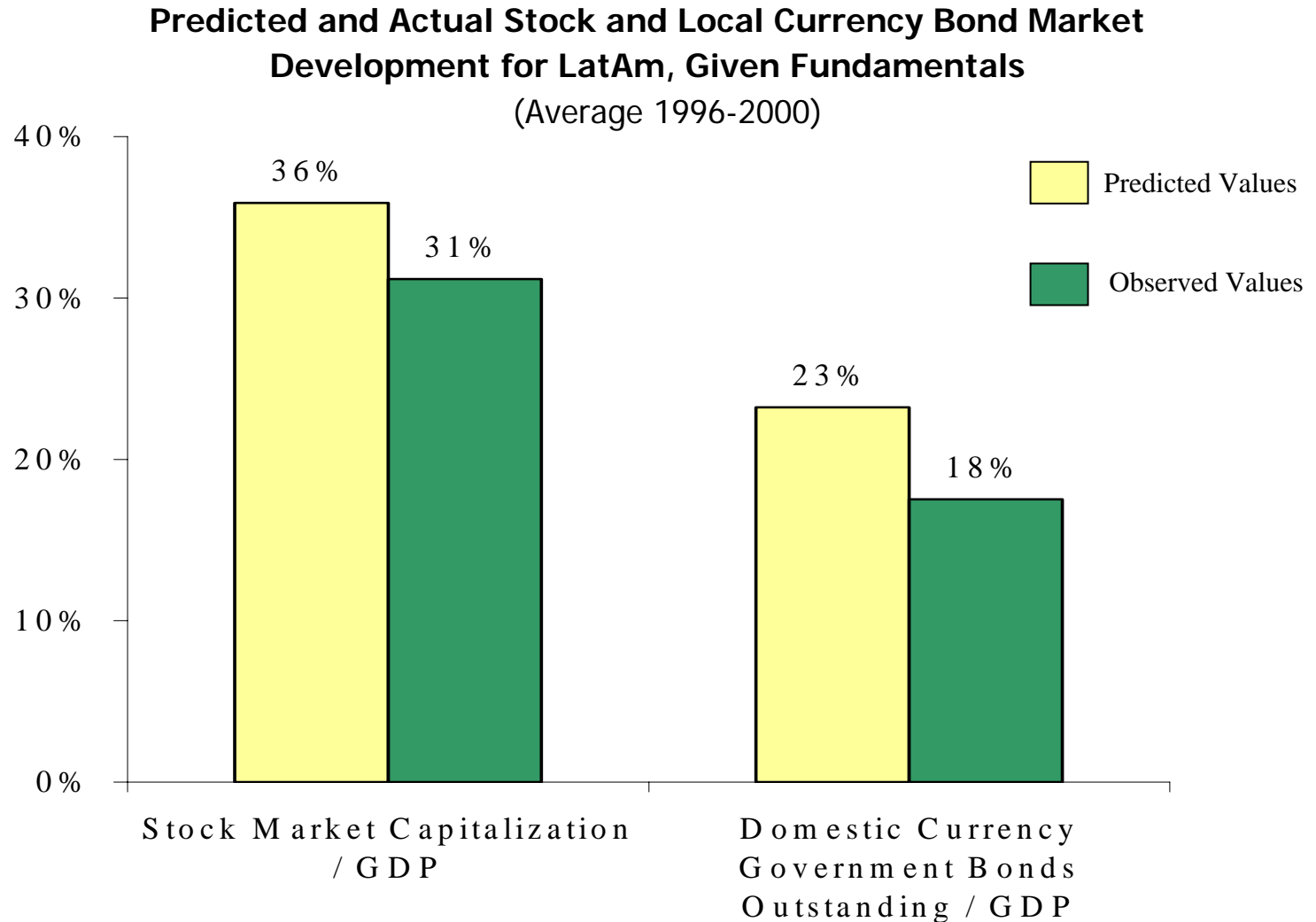
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- ✚ Econometric evidence shows that reforms boost domestic stock market activity *as well as* its internationalization...
- ✚ ... but not symmetrically – “pro-internationalization bias”
  - ✚ Reforms favor stock market internationalization *more than* local stock market development (De la Torre and Schmukler, 2004)
- ✚ Bias may be because internationalization takes place *at the expense* of local market development
  - ✚ Internationalization hurts local markets via trade migration, spillover, and diversion effects (Levine & Schmukler, 2004)
- ✚ LatAm is different – it has a “domestic market shortfall”

# H1: Assessment

## Latin “Shortfall” in Domestic Mkts, Given Fundamentals

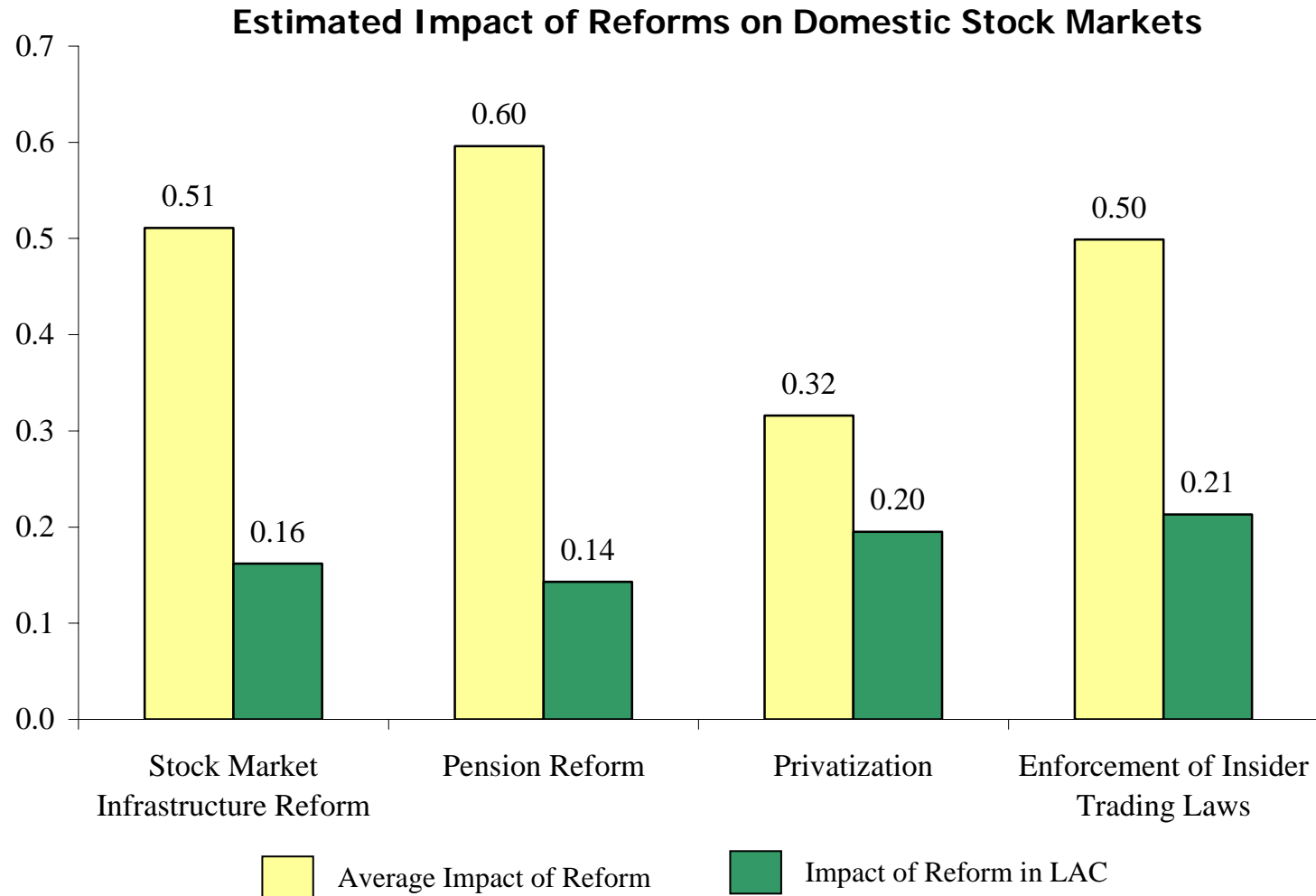
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# H1: Assessment

## Latin “Shortfall” in Reform Impact on Local Stock Mkts

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What Went Wrong?  
H2: Wrong Sequencing

## H2: Thesis and Diagnosis

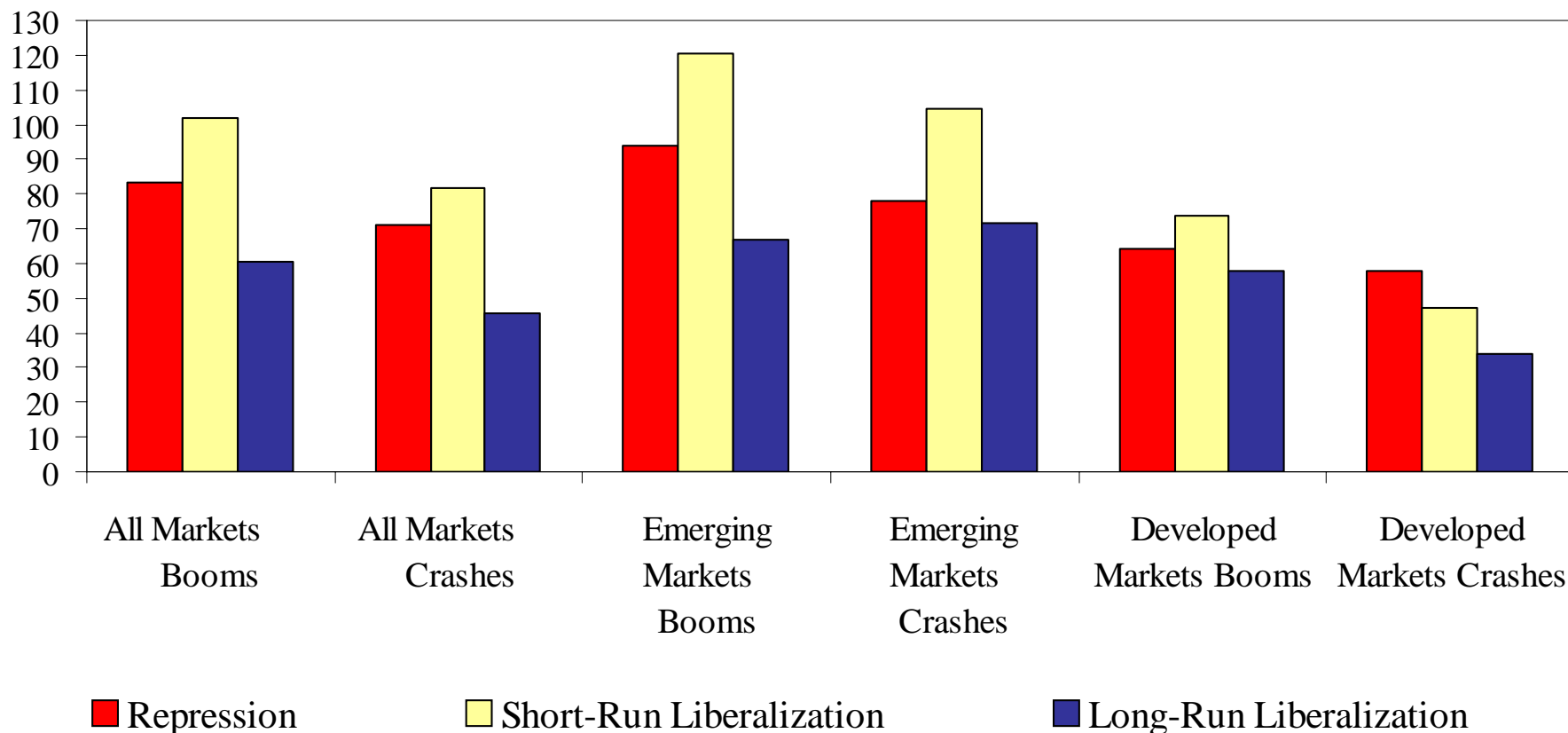
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- ✚ Int'l standards say where to go but not how to get there
- ✚ Sequencing is essential
- ✚ Financial fragility and underdevelopment is the result of wrong sequencing
  - ✚ Premature liberalization (before institutional & regulatory strengthening) magnifies boom-bust cycles
  - ✚ Premature int'l financial integration (before development of local currency debt markets) accentuates mismatches and vulnerability
  - ✚ Inattention to preconditions (ignoring building-block nature of financial development) renders certain reforms ineffective

# H2: Assessment

## Liberalization Has Raised Instability in SR, Not in LR...

Boom-Bust Cycles and Financial Liberalization



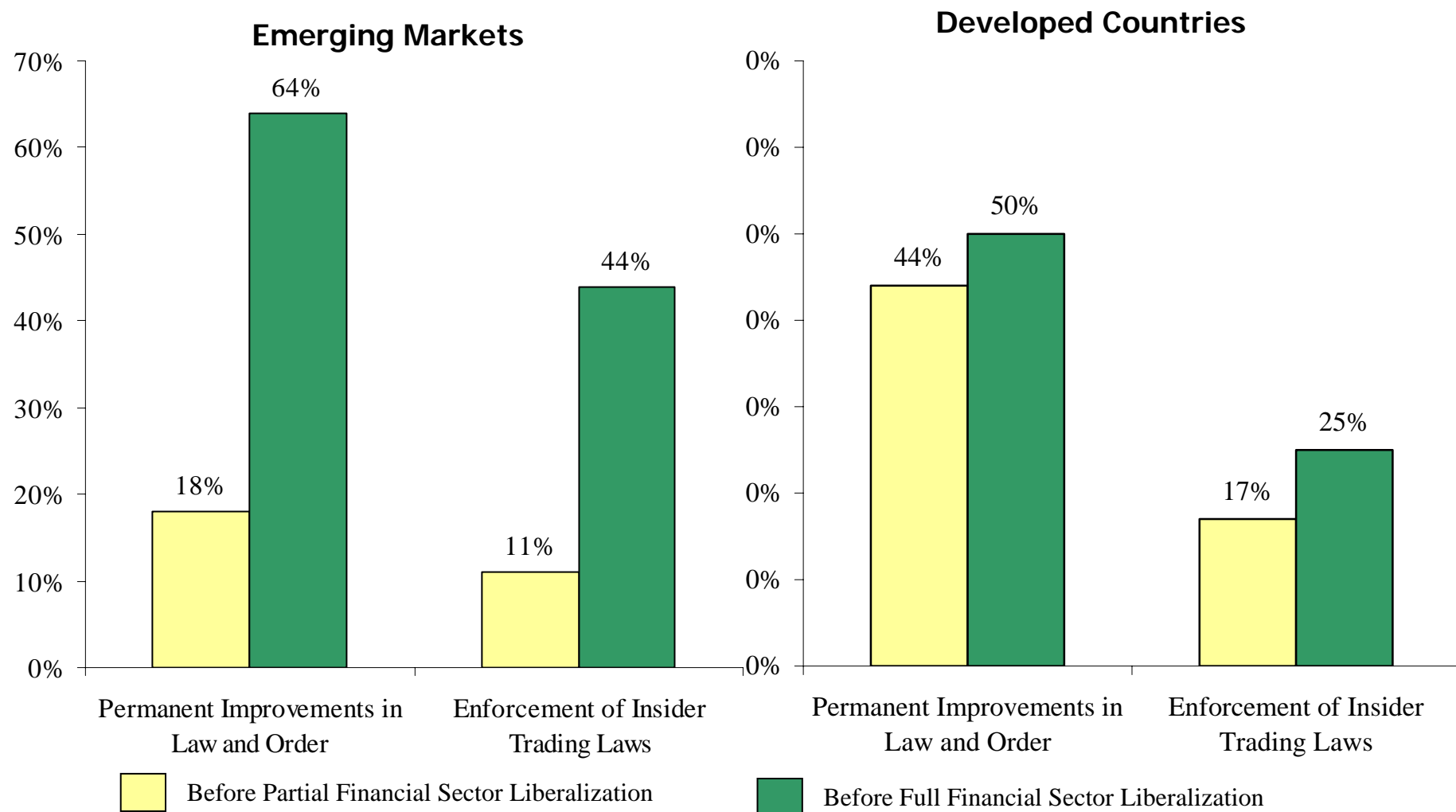
The figure shows the average amplitude of booms and crashes in the different periods and markets.

Source: Kaminsky and Schmukler (2001)

# H2: Assessment

## ... Arguably Because Liberalization Stimulates Reforms

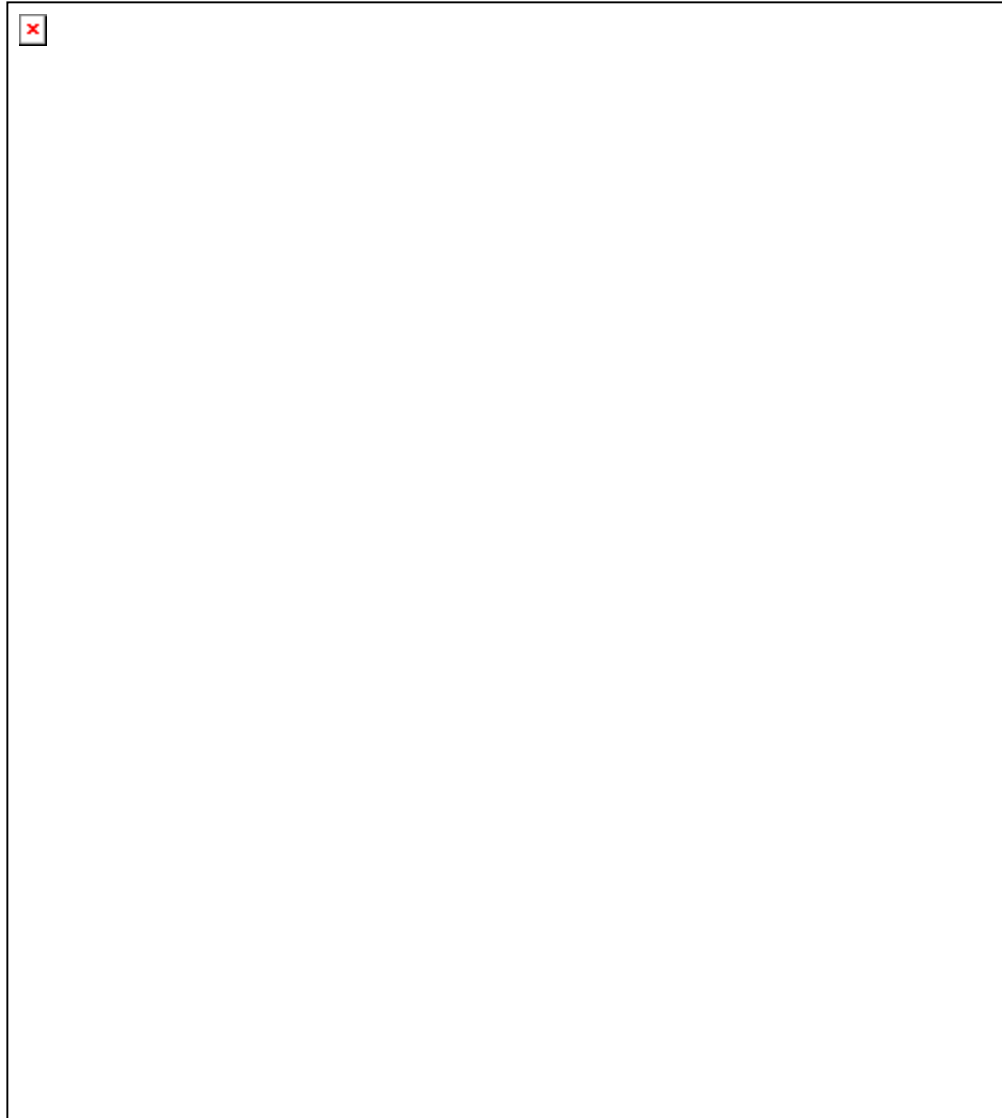
Percentage of Countries Having Implemented Reforms



# H2: Assessment

## Currency Mismatches Do Reflect Poor Peso Debt Mkts

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# H2: Assessment

## But ...

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- ✚ No evidence that liberalization itself engenders mismatches
- ✚ Mismatches also arise in closed financial systems
  - ✚ Currency mismatches via off-shores
  - ✚ Duration mismatches
- ✚ Closed systems are not immune to crises (of different type)
- ✚ No evidence that faulty sequencing hinders financial development permanently...
- ✚ ... but evidence that liberalization stimulates reforms
- ✚ It is doubtful that financial systems can be kept closed
  - ✚ Given globalization trends, financial engineering, technology
  - ✚ Especially in countries that are already liberalized and open

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What Went Wrong?  
H3: Wrong Expectations

# H3: Thesis and Diagnosis

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- ✚ For all their insights, H1 and H2 have shortcomings
  - ✚ H1 underestimates actual reform effort in LatAm...
  - ✚ ... and its predictions are dissonant with “pro-internationalization bias” and “domestic shortfall”
  - ✚ H2 naively assumes that resistance to reform will yield in the absence of competition at home and from abroad...
  - ✚ ... and it has not shown that liberalization and financial opening are harmful in the long run
  - ✚ H1 and H2: both assume that developed financial markets are the goal and benchmark for developing countries
- ✚ Step back, revisit basic issues, and adjust expectations

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# Back to Basics

1. Financial Globalization
  2. Size
3. Segmentation of Access

# Financial Globalization

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- ✚ It is not a detail!
  - ✚ Measuring financial development by domestic variables alone is misguided – what matters is access to financial services
- ✚ It can magnify weak-currency problems in debt markets
  - ✚ Weak currencies are those not easily accepted as store of value
  - ✚ In small open economies, the shock-absorption function of local currencies could undermine their store-of-value function
- ✚ It can undercut development of local stock markets
  - ✚ Stock market internationalization can have negative spillovers on the local market but does not result in balance sheet vulnerabilities

# Size

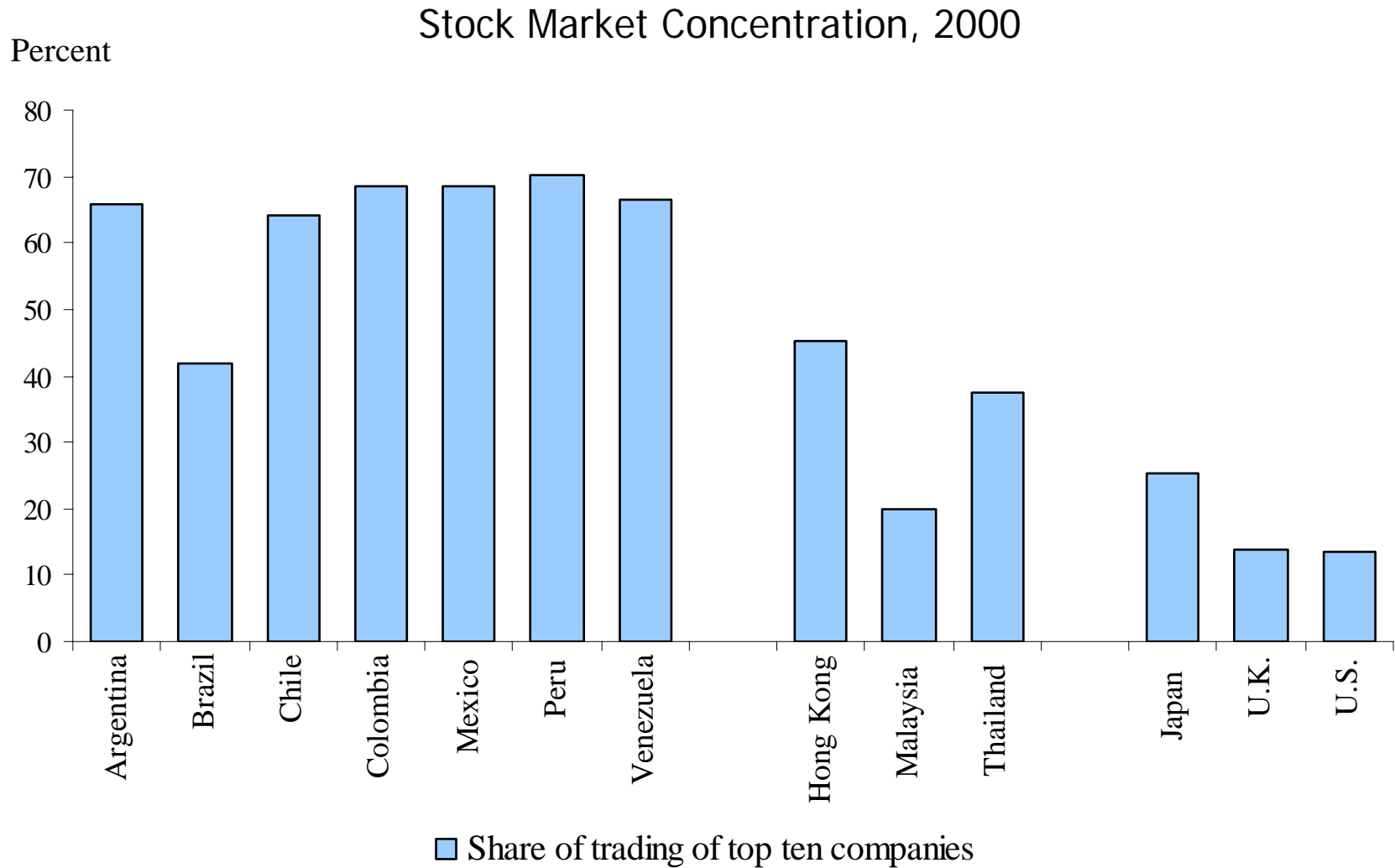
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- ✚ Liquidity is a positive function of size of market and issues
  - ✚ Ongoing clustering of world-wide liquidity in few int'l centers
  - ✚ Illiquidity begets illiquidity
  - ✚ Illiquidity hampers “price revelation” – core function of capital mkts
- ✚ Larger economies and financial markets facilitate the development of local currency debt markets
- ✚ Size of issues matter for risk diversification
  - ✚ Small issues are too marginal or redundant in risk diversification strategies of local and foreign institutional investors
  - ✚ Small issuers/issues are not included in portfolios of pension funds when their investment regulations are relaxed (the case of Chile)

# Segmentation of Access

## A Few Large Companies Dominate Latin Stock Markets

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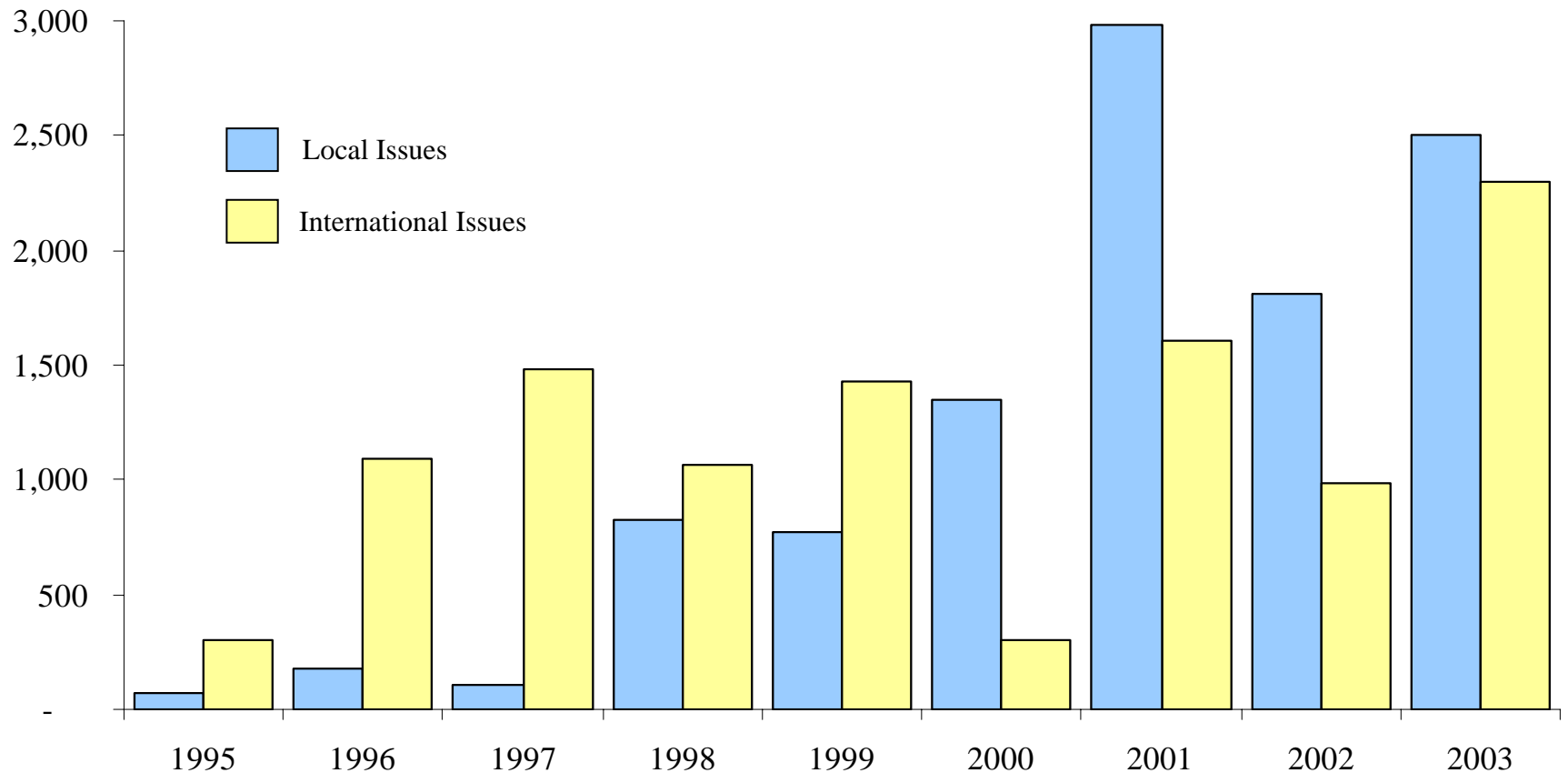
# Segmentation of Access

## Even in Successful Corporate Bond Mkts, Like Chile's...

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Chile - Corporate Bonds issues in Domestic and International Markets

Million U.S. dollars

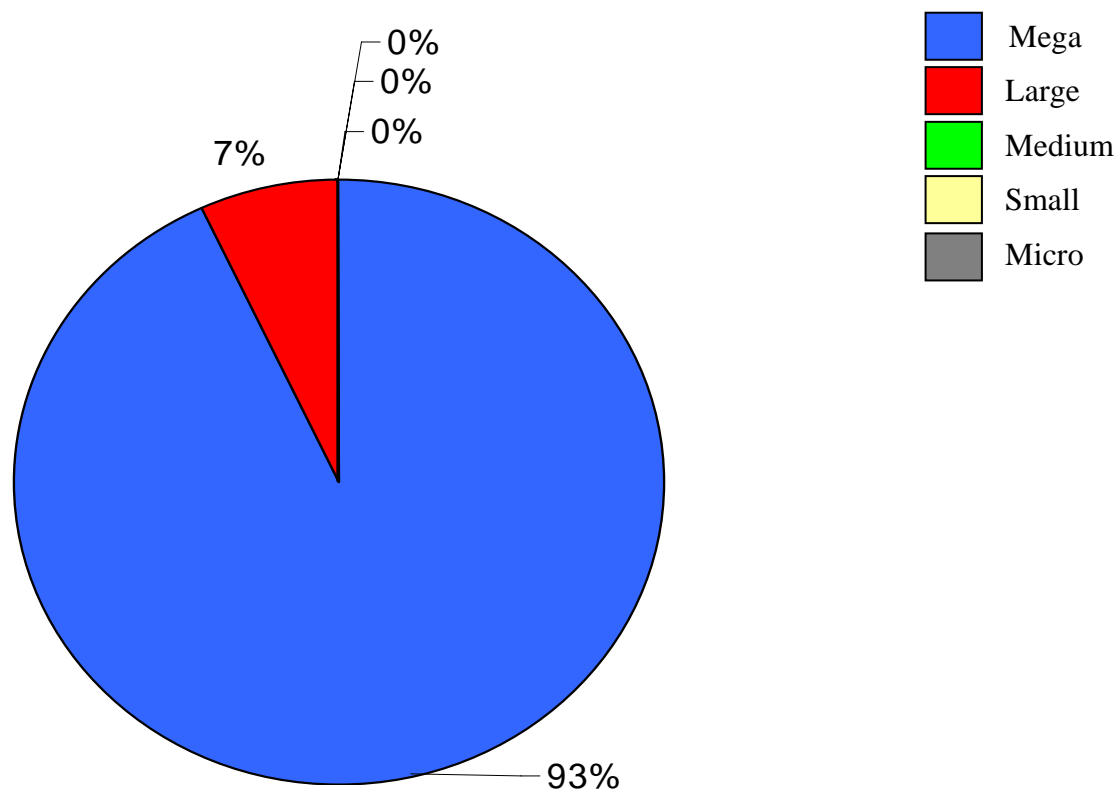


# Segmentation of Access

## ... Only A Few Large Companies Have Access

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Chile – Corporate Bond Issues in the Local Market by Firm Size  
(Cumulative Issues for 2000-2003)



Mega firms are defined as those with annual sales net of VAT above UF600,000 (US\$17.2 million); large firms have sales between UF100,000 (US\$2.8 million) and UF600,000; medium firms have sales between UF25,000 (US\$0.7 million) and UF100,000; small firms have sales between UF2,400 (US\$68,688) and UF25,000 and micro firms have sales below UF2,400. Micro firms represent around 82 percent of all firms, while small firms are 15 percent and medium firms two percent. Large and mega firms combined account for only one percent of all firms. *Source: World Bank (2004)*

# Segmentation of Access

## Banks Too May Be Discouraged from Lending to SMEs

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- ✚ In weak contractual environments, Basel- and AML-type regulations may undermine SME access to finance
  - ✳ Banks' ability to engage in “relationship finance” with opaque SMEs in informal sector is hindered
  - ✳ Bank credit exposure to the local sovereign is encouraged
    - As it does not require regulatory capital
  - ✳ But contractual and informational environment is not yet conducive to “arm’s-length” or “impersonal” lending to SMEs
- ✚ Unintended effects of Basel- and AML-type regulations?
  - ✳ Crowding out *and...*
  - ✳ ... a bias in favor of “commoditized lending” (consumer, micro)
    - Lending to SMEs is not easily “commodity-izable”

# Conclusion

## More Questions than Answers

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- ✚ How to overcome the Latin “shortfall” in local currency debt markets without barriers to international integration?
  - ✚ The key missing market is for long-duration peso debt
  - ✚ Is there a role for multilateral development banks?
  
- ✚ Can small Latin countries overcome the size problem and generate a suitable version of local stock markets?
  - ✚ One that features systematic illiquidity and accepts the pro-internationalization bias of reforms
  
- ✚ How can SME access to finance be broadened where Basel- and AML-type regulations coexist with a weak contractual environment and financial globalization?

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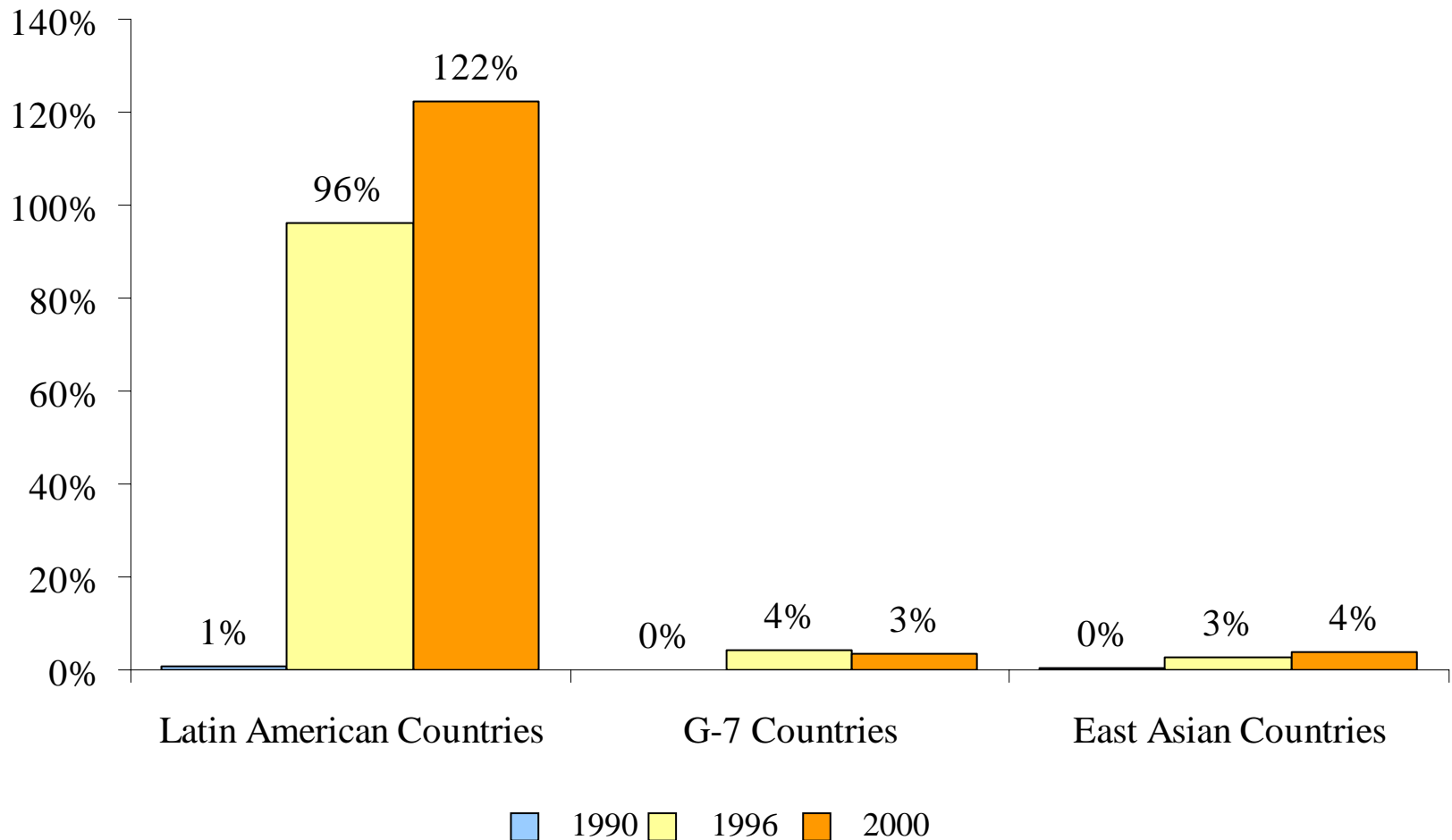
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# Bonus Material

# LAC is a Leader in Stock Market Internationalization

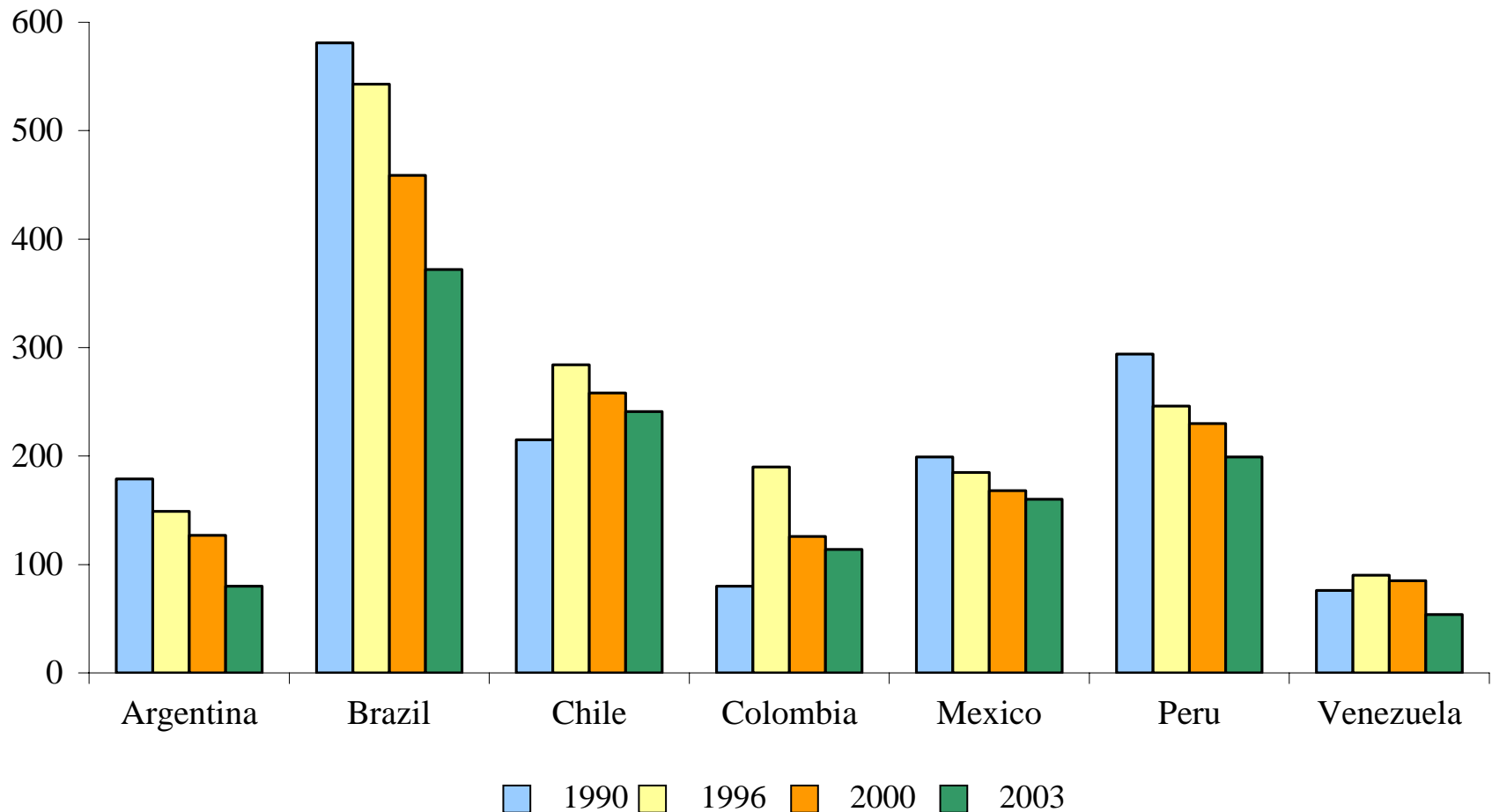
## Ratio of Value Traded Abroad to Value Traded Domestically



# Significant De-Listings in LAC Stocks Markets...

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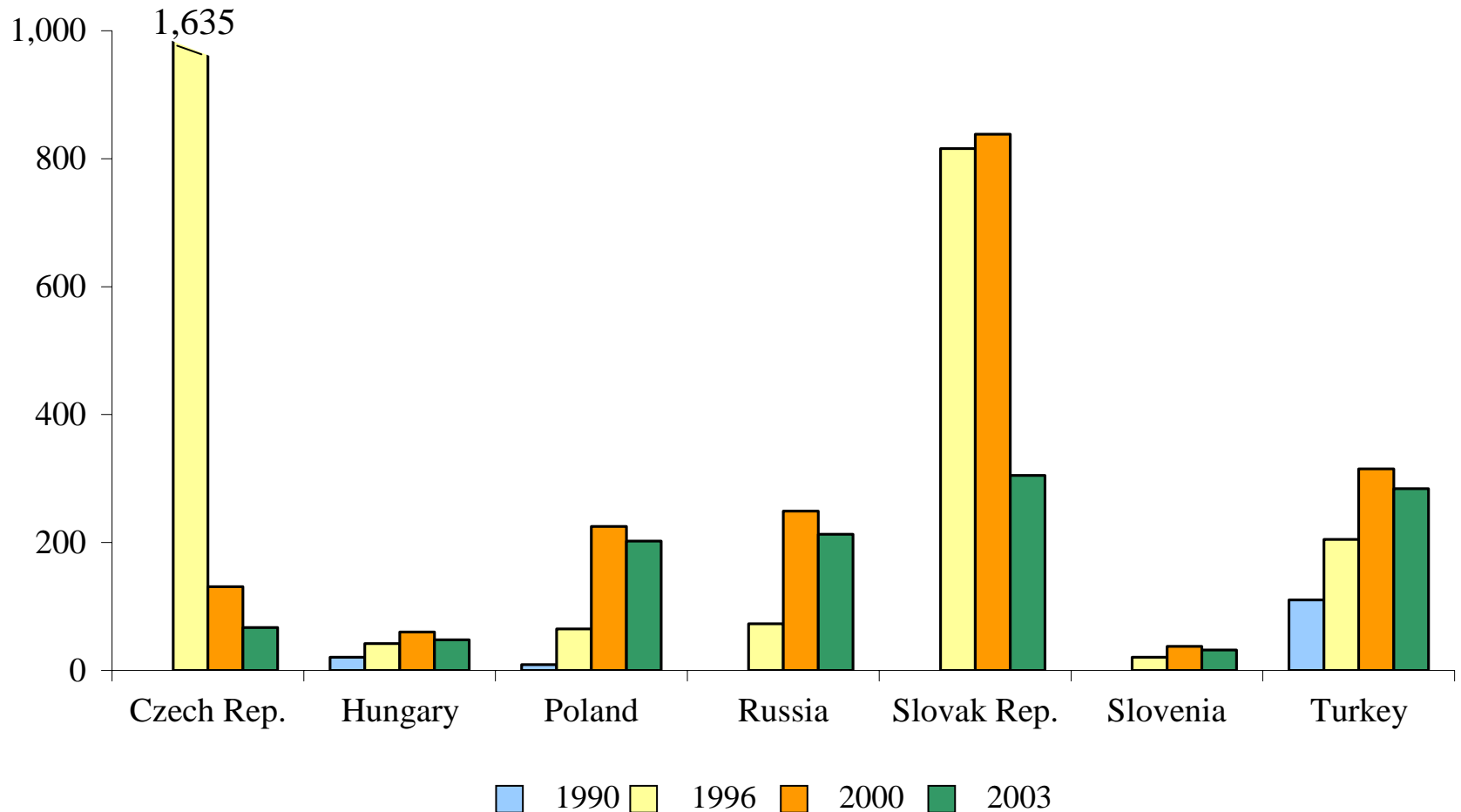
Number of Firms Listed in Domestic Stock Exchanges in Latin America



## ...And in Markets in Eastern Europe

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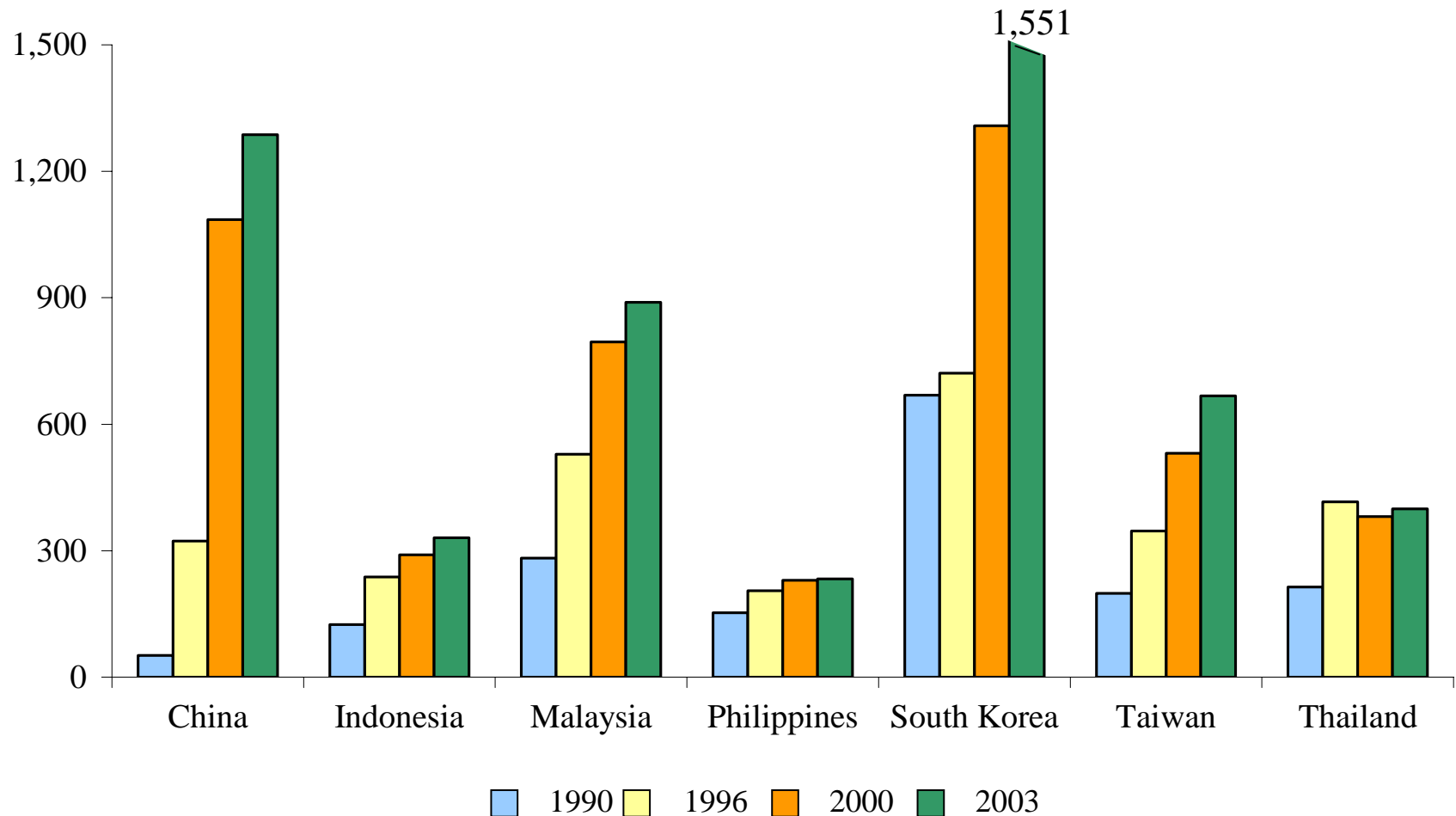
Number of Firms Listed in Domestic Stock Exchanges in Eastern Europe



# But More Listings in East Asian Stock Markets

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Number of Firms Listed in Domestic Stock Exchanges in South East Asia



# H1: Assessment

## Reforms Enhanced Financial Development Everywhere

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### Dependent Variable: Market Capitalization / GDP

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|                                     |       |      |       |      |       |           |
|-------------------------------------|-------|------|-------|------|-------|-----------|
| Financial liberalization            | 0.244 | ***  |       |      |       |           |
| Infrastructure reform               |       |      | 0.427 | ***  |       |           |
| Institutional reform                |       |      |       |      | 0.233 | ***       |
| Enforcement of insider trading laws |       |      |       |      |       | 0.469 *** |
| Pension reform                      |       |      |       |      |       | 0.440 *** |
| Privatization                       |       |      |       |      |       | 0.285 *** |
| No. of Observations                 | 1,108 | 605  | 568   | 816  | 368   | 904       |
| No. of Countries                    | 49    | 23   | 33    | 33   | 17    | 39        |
| R-squared                           | 0.23  | 0.26 | 0.11  | 0.28 | 0.20  | 0.26      |

Least square regressions estimated using fixed effects models for countries implementing reforms between 1975 and 2002. A constant is estimated but not reported.

\*, \*\*, \*\*\* mean significant at 10, 5, and 1 percent, respectively

# H1: Assessment

## But Reforms Favored Stock Mrkt Internationalization...

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### Dependent Variable: Value Traded Abroad / Value Traded Domestically

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|                                     |       |      |      |      |      |      |
|-------------------------------------|-------|------|------|------|------|------|
| Financial liberalization            | 0.077 | ***  |      |      |      |      |
| Infrastructure reform               | 0.415 | ***  |      |      |      |      |
| Institutional reform                | 0.154 | ***  |      |      |      |      |
| Enforcement of insider trading laws | 0.155 | ***  |      |      |      |      |
| Pension reform                      | 0.361 | ***  |      |      |      |      |
| Privatization                       | 0.089 | *    |      |      |      |      |
| No. of Observations                 | 341   | 156  | 260  | 313  | 114  | 311  |
| No. of Countries                    | 32    | 13   | 23   | 27   | 11   | 28   |
| R-squared                           | 0.02  | 0.15 | 0.05 | 0.06 | 0.13 | 0.01 |

Least square regressions estimated using fixed effects models for countries implementing reforms between 1975 and 2000. A constant is estimated but not reported.

\*, \*\*, \*\*\* mean significant at 10, 5, and 1 percent, respectively

# H1: Assessment

## ... and Internationalization Hurt Local Stock Markets

| Dependent Variable: Log of One Plus the Turnover Ratio of Domestic Firms |           |           |           |           |           |           |
|--|-----------|-----------|-----------|-----------|-----------|-----------|
| Share of internationalized firms   | -1.39 *** | -2.98 *** | -3.01 *** | -2.55 *** | -2.93 *** | -2.56 *** |
| Log of one plus aggregate turnover ratio in international markets        | 0.24 ***  | 0.18 ***  | 0.17 ***  | 0.22 ***  | 0.17 ***  | 0.19 ***  |
| Log of GDP per capita  |           |           | 0.20 ***  |           |           | 0.16 ***  |
| Law and order  |           |           |           | 0.05 ***  |           | 0.04 ***  |
| Capital account liberalization   |           |           |           |           | -0.01     | -0.02     |
| Log of total assets  |           | -0.06 *** | -0.06 *** | -0.06 *** | -0.06 *** | -0.06 *** |
| Number of firms  | 2,400     | 1,531     | 1,530     | 1,509     | 1,517     | 1,494     |
| Number of observations   | 12,762    | 7,312     | 7,298     | 7,233     | 7,138     | 7,045     |
| Country dummies  | Yes       | Yes       | Yes       | Yes       | Yes       | Yes       |
| Year dummies   | Yes       | Yes       | Yes       | Yes       | Yes       | Yes       |
| R-squared  | 0.70      | 0.71      | 0.71      | 0.71      | 0.70      | 0.70      |

Least square regressions with robust standard errors for a panel of data covering over 3,000 firms across 55 emerging market countries during the years 1989 to 2000.

\*, \*\*, \*\*\* mean significant at 10, 5, and 1 percent, respectively