

**Workshop on Developing Government Bond Markets in
Latin America
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**Debt Management, Debt Markets and
Credibility: What Comes First?**

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Debt Management, Debt Markets and Credibility: What Comes First?

- I. Intertemporal smoothing
- II. Standard cost-risk optimization
- III. Credibility enhancement
- IV. Local debt market development
- V. Summary

I. Debt Management for Macro Smoothing

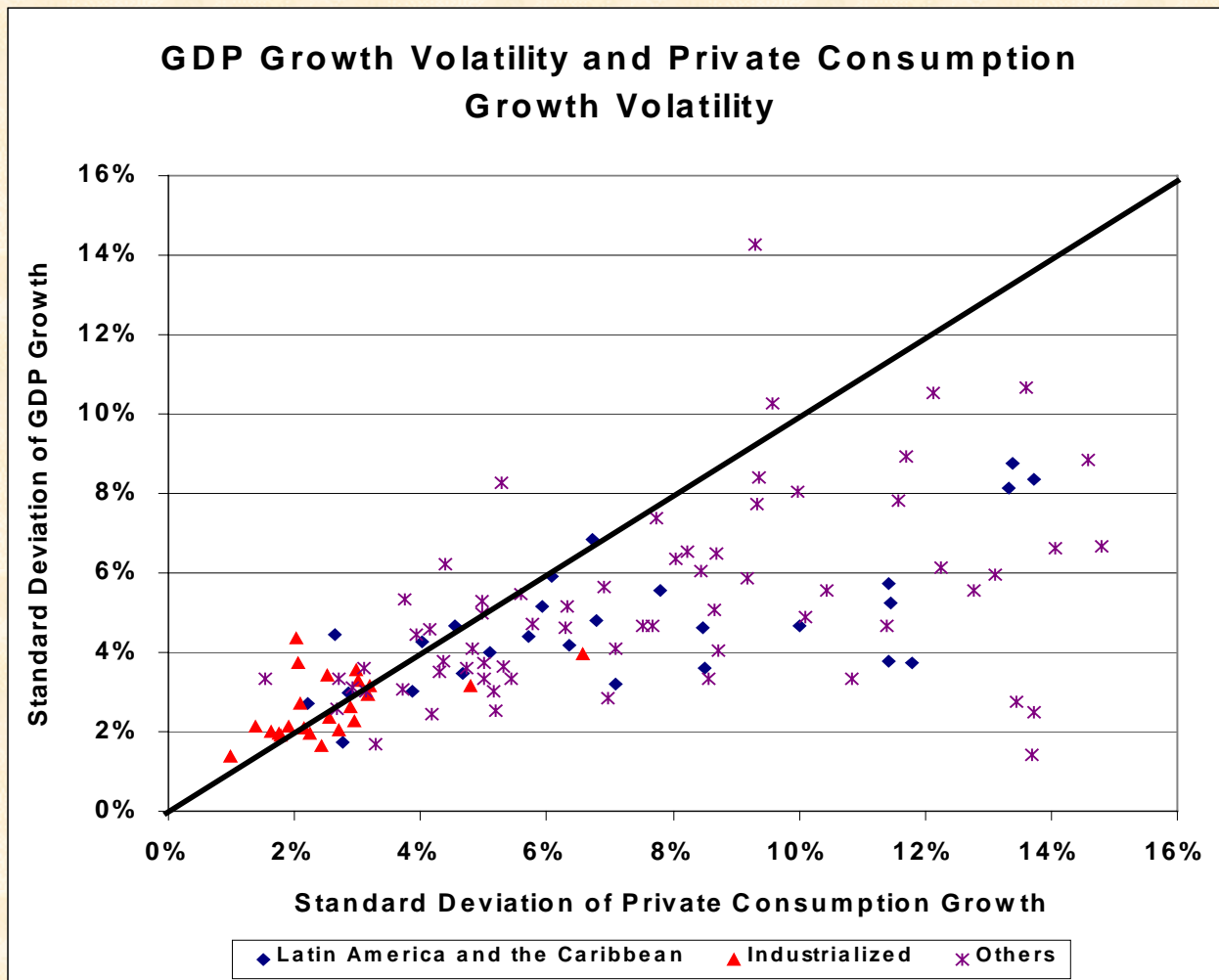
- ❑ 1. Debt should increase when revenue falls due to transitory shocks, in order to stabilize public spending (and, hence, aggregate consumption)
- ❑ 2. Debt service should decline when revenue falls due to transitory shocks, in order to stabilize public spending (and, hence, aggregate consumption)

I. Debt Management for Macro Smoothing

- To achieve 1, need access to credit during bad times
- To achieve 2, need to use financial instruments indexed to main exogenous, cyclical sources of income

I. Debt Management for Macro Smoothing

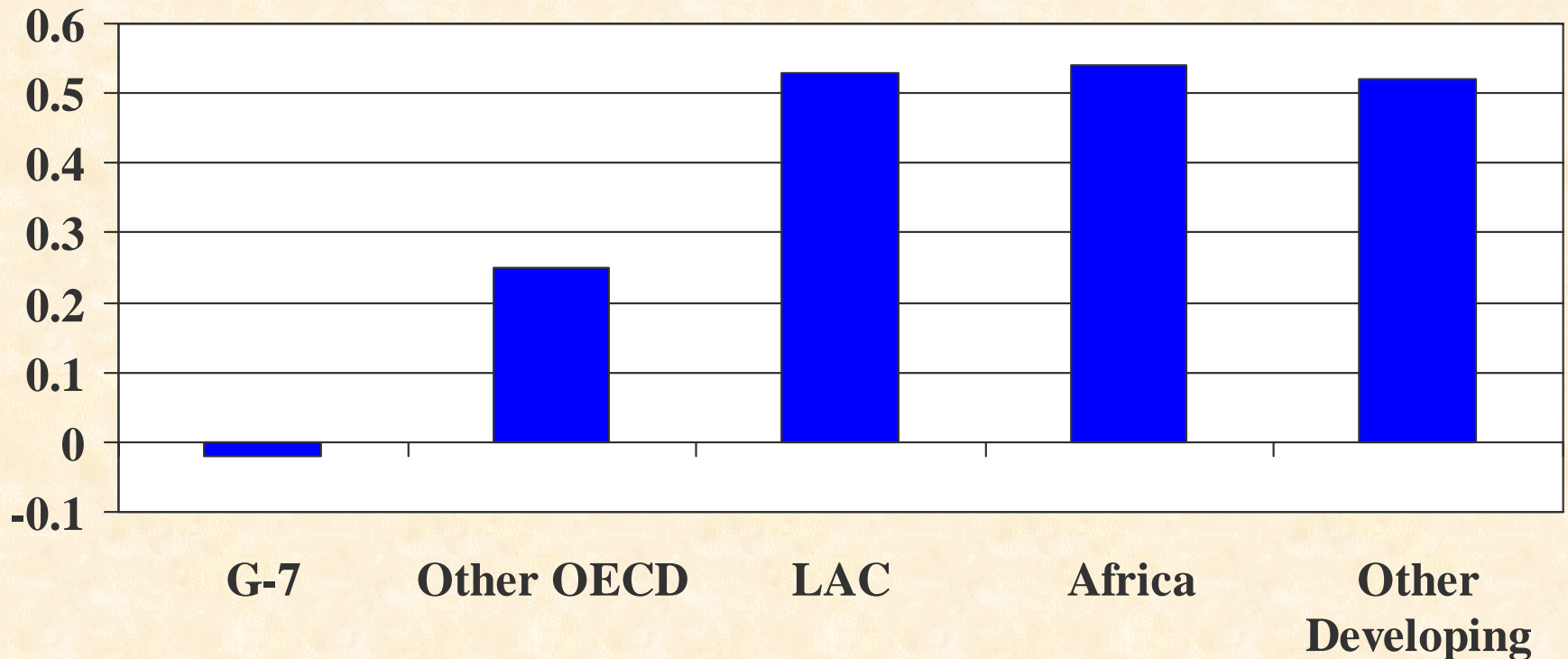
Reality check #1: Most developing countries can't smooth consumption



I. Debt Management for Macro Smoothing

Reality check #2: Only G-7 economies have countercyclical public consumption

Correlations of Business Cycle with Government Consumption



Source: Talvi & Végh (2000), Table 1.

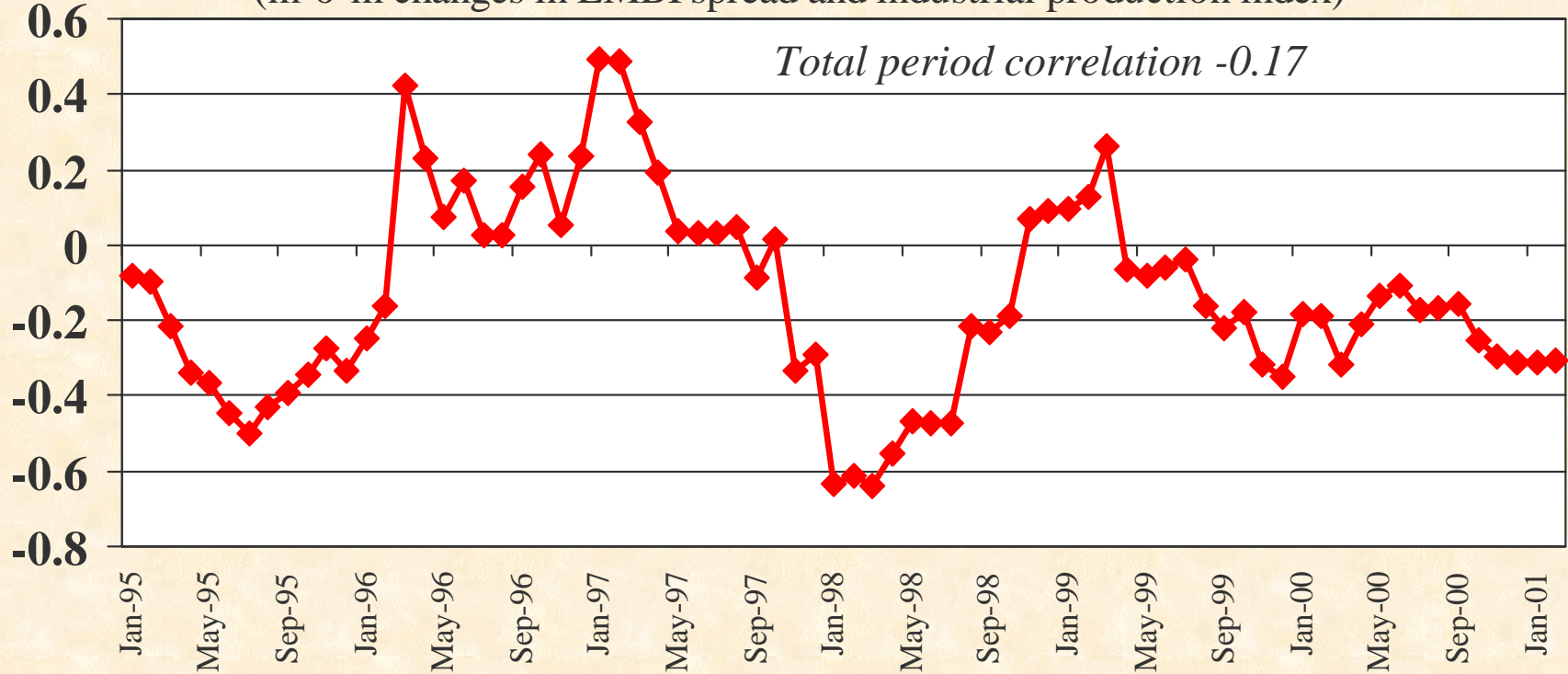
I. Debt Management for Macro Smoothing

Reality check #3: Emerging markets' spreads tend to be pro-cyclical

Mexico

EMBI Spread and Output 12-month moving correlation

(m-o-m changes in EMBI spread and industrial production index)



Source: JPMorgan and INEGI

I. Debt Management for Macro Smoothing

Why is smoothing difficult?

- H1: Capital markets punish bad policies
- H2: Debt management capacity is deficient
- H3: Capital markets for emerging economies are incomplete
 - Why no bonds indexed to TOT and/or EMBI ?
 - Contagion and excessive punishment despite more than a decade of reforms
 - Recent financial crises driven by private behavior (private sector lending to the private sector) and not by obvious fiscal indiscipline

II. Cost-Risk Optimization

- ❑ Several types of risk to consider:
 - ❑ Rollover risk (highest for short-term debt)
 - ❑ Interest rate risk (highest for low-duration debt)
 - ❑ Exchange risk (foreign-currency debt)
- ❑ Different instruments have different risk and cost implications

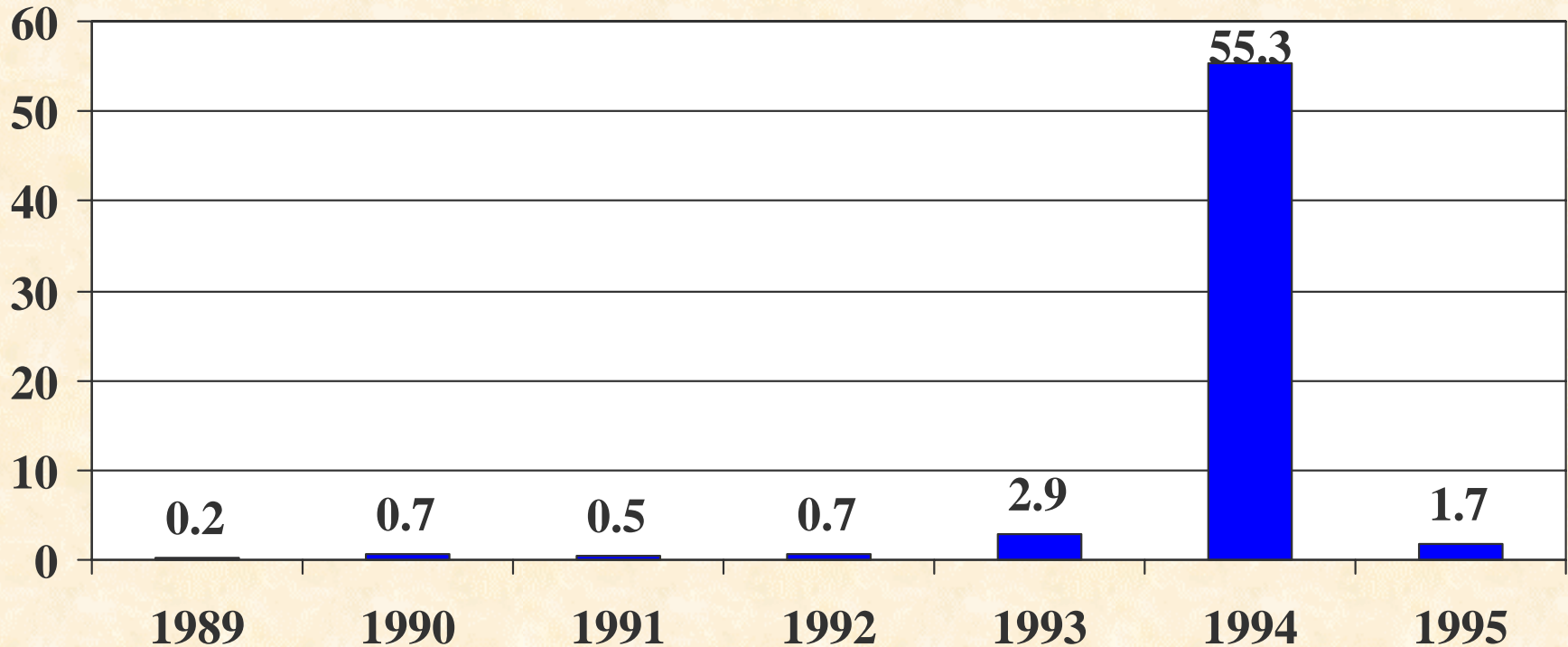
II. Cost-Risk Optimization

- ❑ Debt diversification (maturities, currencies, indexation...) to balance cost and various risks through an appropriate mix of debt instruments
- ❑ As perceived probability of crisis increases, cost of funding should rise to contain risk

II. Cost-Risk Minimization

Reality check #1: Pre-Tequila Mexico--major increase in Tesobonos regardless of risk

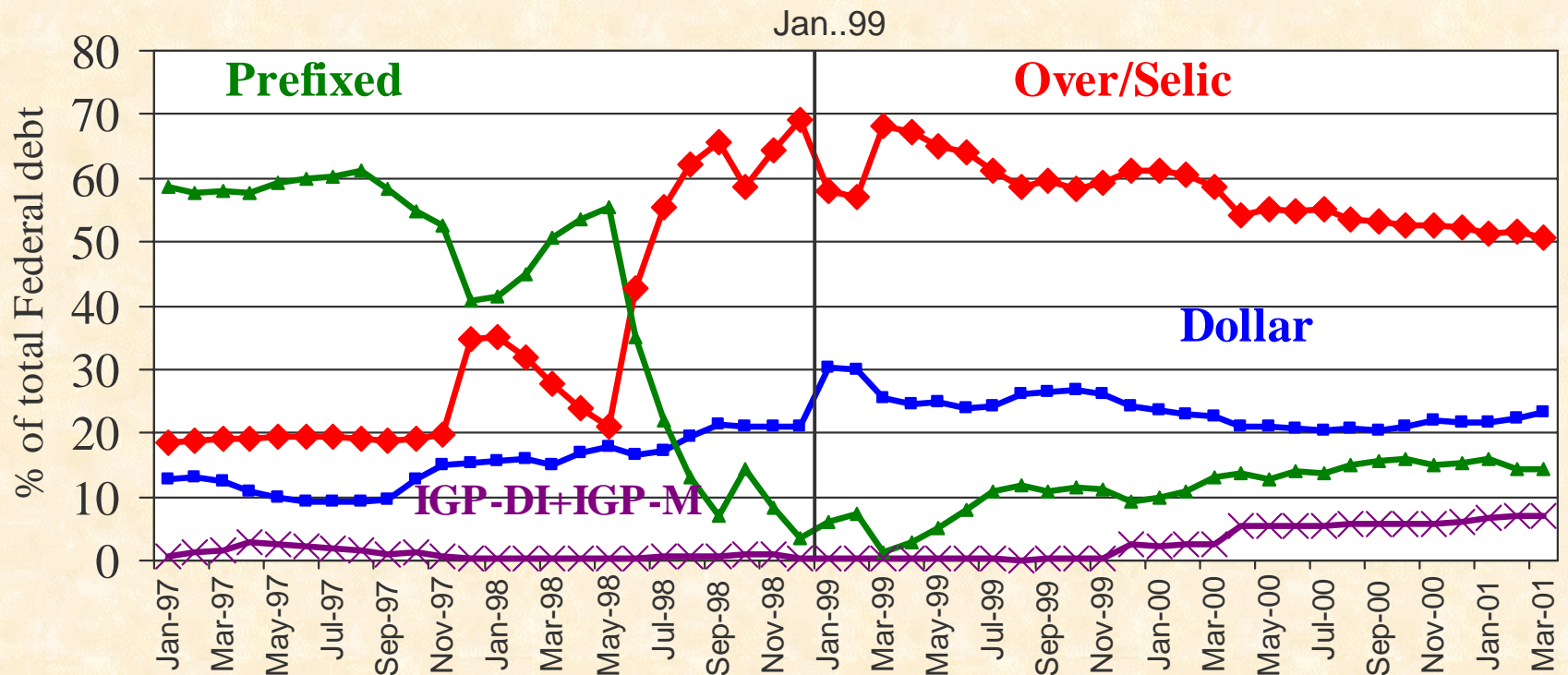
Tesobonos
Percent share of total public debt



II. Cost-Risk Minimization

Reality check #2: Brazil prior to Jan 99--lower cost at apparently any risk

Brazil: Inflation, Dollar, Prefixed and Over/Selic-Linked Federal Debt January 1997-March 2001



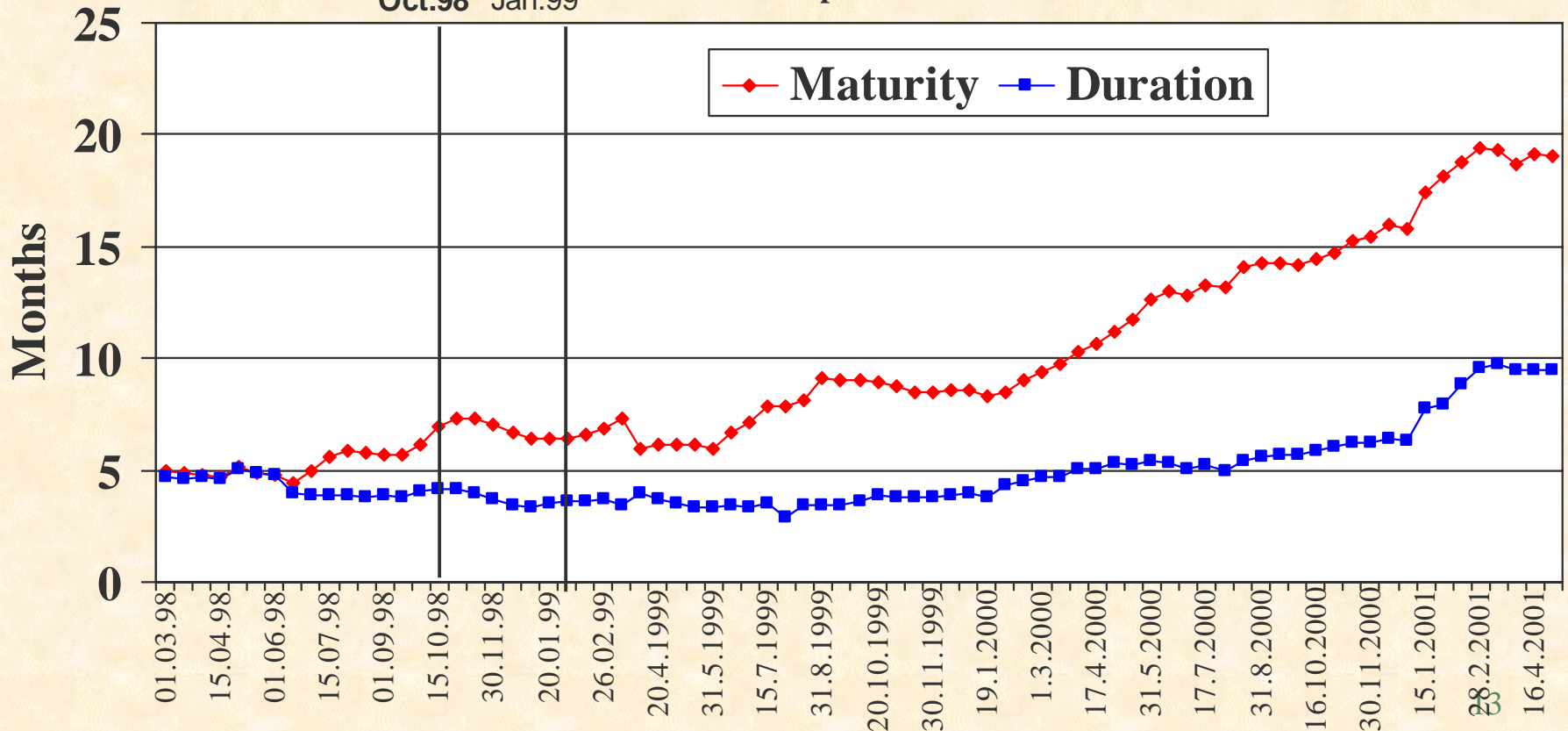
Source: Central Bank

II. Cost-Risk Minimization

Reality check #3: Brazil prior to 1999--increased maturity
but no gain in duration

Brazil: Average Maturity of Federal Bonds

Oct.98 Jan.99 March 1998 - April 2001



II. Cost-Risk Optimization

Why is cost-risk optimization difficult?

- H1: Deficiencies in debt management capacity and/or myopic politics -- postponing the inevitable
Although visible progress in *external* debt diversification
- H2: Difficult trade-offs in reduction of different risks (e.g., rollover vs. interest rate risk)
- H3: **Credibility risks.**
- H4: **No markets for long-term, domestic-currency denominated, fixed-interest rate debt in most of LAC**

III. Debt Management for Credibility Enhancement

- ❑ Use indexation to enhance credibility -- tie your own hands to eliminate time-inconsistency problems (particularly if record of “successful” surprises)
 - ❑ Floaters should index to domestic inflation
 - ❑ Fixers should index to US dollar
- ❑ Credibility enhancement may favor ‘corner solutions’ and run against diversification

III. Debt Management for Credibility Enhancement

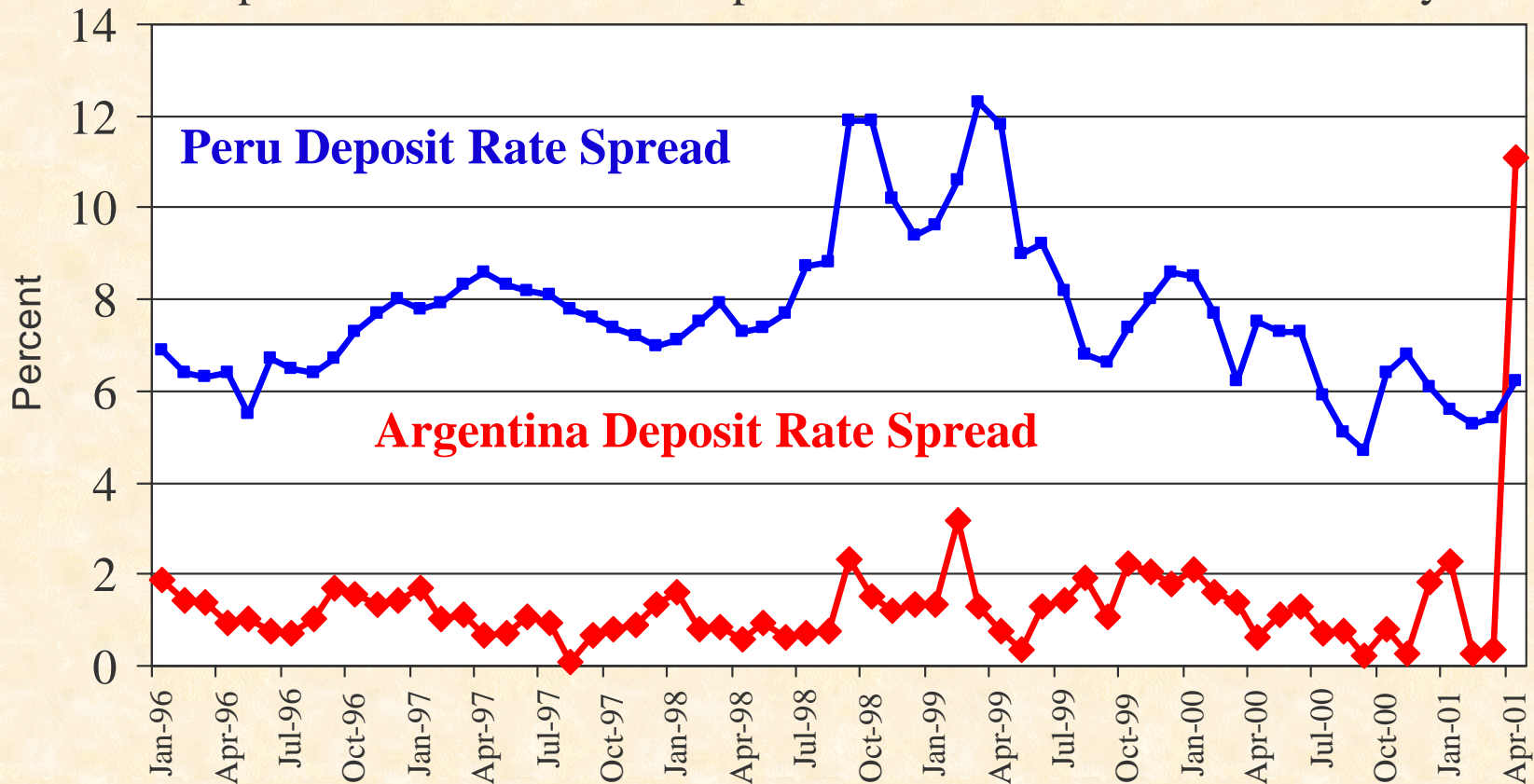
Reality Check #1

- ❑ Argentina: All debt in US\$ ()
- ❑ Chile: Most debt in UF ()
- ❑ Peru: Floater with all debt in US\$ (Why?)
- ❑ Brazil: Floater with multiple indexation (Transition?)

III. Debt Management for Credibility Enhancement

Peru: a floater with a peso problem

Spread between Dollar Deposits in US\$ and in Local Currency

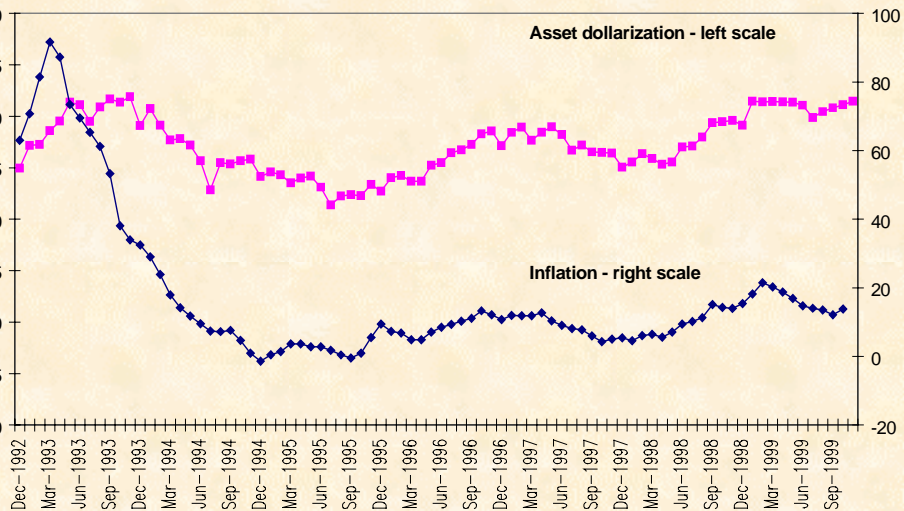


Source: Haver database for Peru (Central Bank) and Datastream for Argentina (Central Bank)

III. Debt Management for Credibility Enhancement

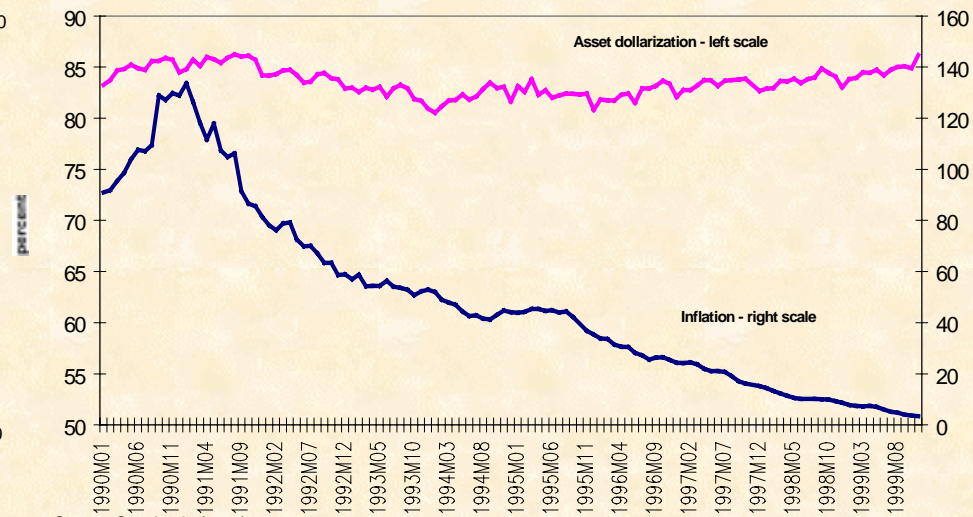
Reality check #2: Peru and Uruguay--dollarization inertia despite price stabilization

**Peru: Asset dollarization and inflation
1992:12-1999:12**



Source: Sepulveda (2000)
Asset dollarization = Foreign Currency Deposits in M3 (%)

**Uruguay: Asset Dollarization and Inflation
1990:01 - 1999:12**



Source: Sepulveda (2000)
Asset dollarization = Foreign Currency Deposits in M3 (%)

III. Debt Management for Credibility Enhancement

Why is credibility enhancement difficult?

- ❑ Objective function of public sector goes beyond narrow financial considerations about its own portfolio
 - ❑ Public debt management *should* consider balance sheet of economy as a whole (and flow effects as well)
- ❑ Tough dilemmas for floaters w/“liability dollarization”
 - ❑ “Fear of floating” limits willingness to begin issuing domestic-currency debt
 - ❑ CPI-indexed debt at fixed margin over inflation is difficult to place where the real interest rate is high and volatile (a case of severe “peso problem”)

IV. Development of Local Debt Markets

- ❑ Good debt management has positive externalities
 - ❑ Providing a benchmark yield curve as a pricing foundation for financial products and portfolio valuation
 - ❑ Helping increase overall financial stability
- ❑ Bad debt management has negative externalities:
 - ❑ Crowding out lending to the private sector
 - ❑ Driving private sector into currency mismatches
- ❑ Debt market development facilitates macro policy
 - ❑ Providing a channel for long-term government financing.
 - ❑ Assisting monetary policy management, by allowing use of market-based, indirect monetary policy instruments

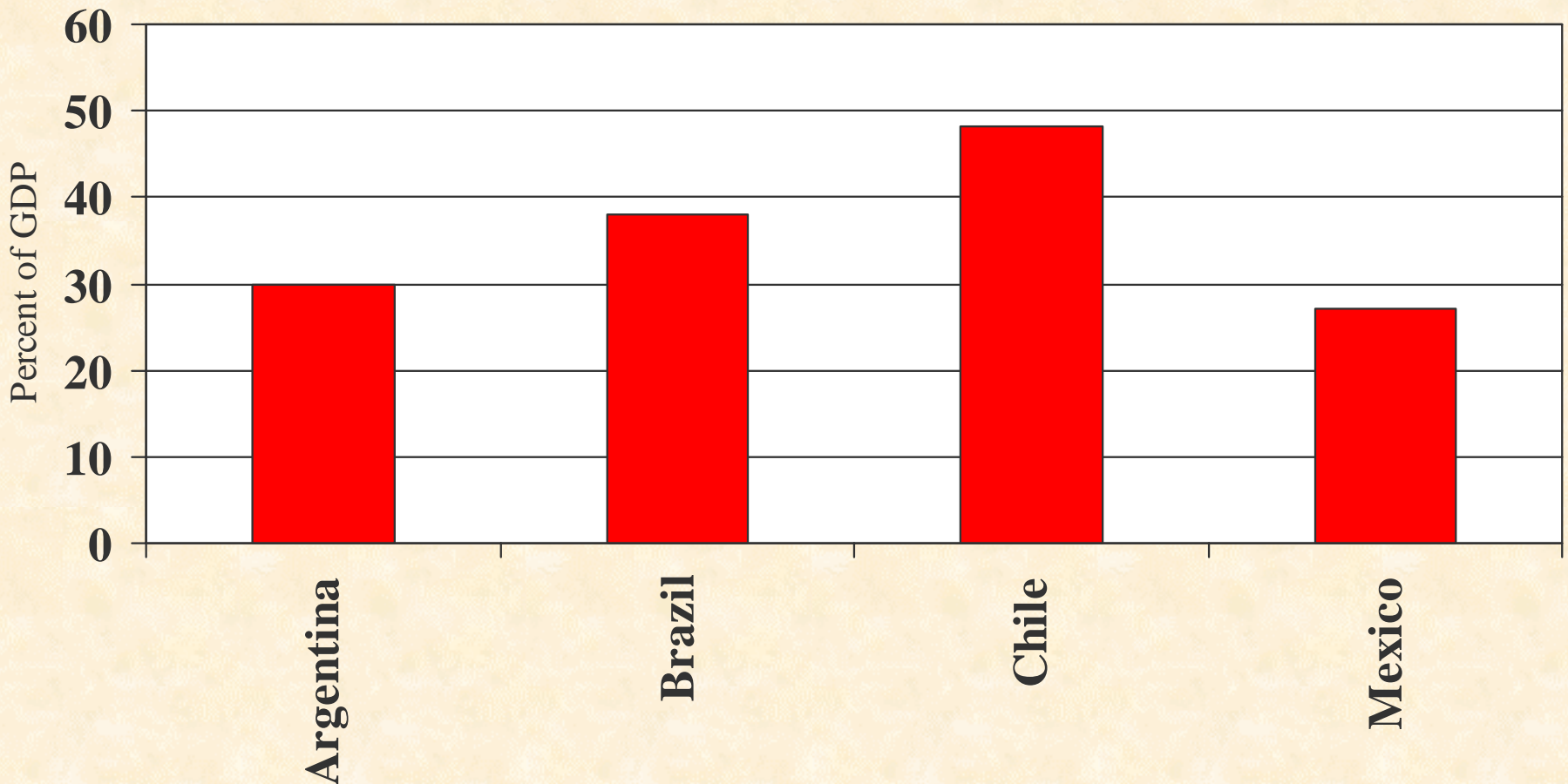
IV. Development of Local Debt Markets

In emerging markets, debt market development faces major challenges:

- ❑ Macro instability and lack of institutional investors hinders governments' ability to issue long-term and fixed rate instruments
- ❑ Weak financial systems hinder market liquidity and efficiency (e.g., weak intermediaries hamper proper functioning of inter-bank and repo bond transactions)

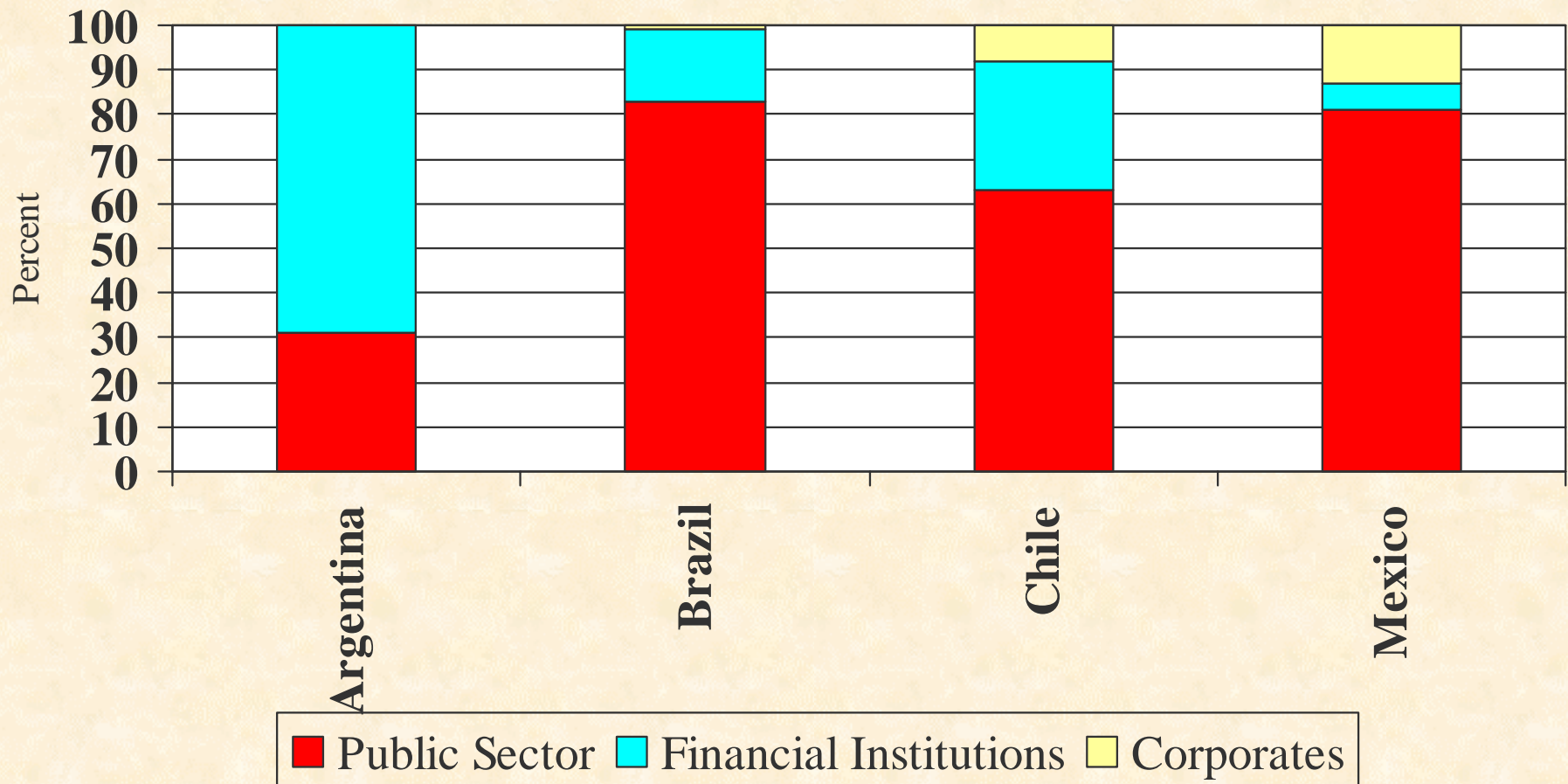
IV. Development of Local Debt Markets

Size of Domestic Debt Markets in 2000



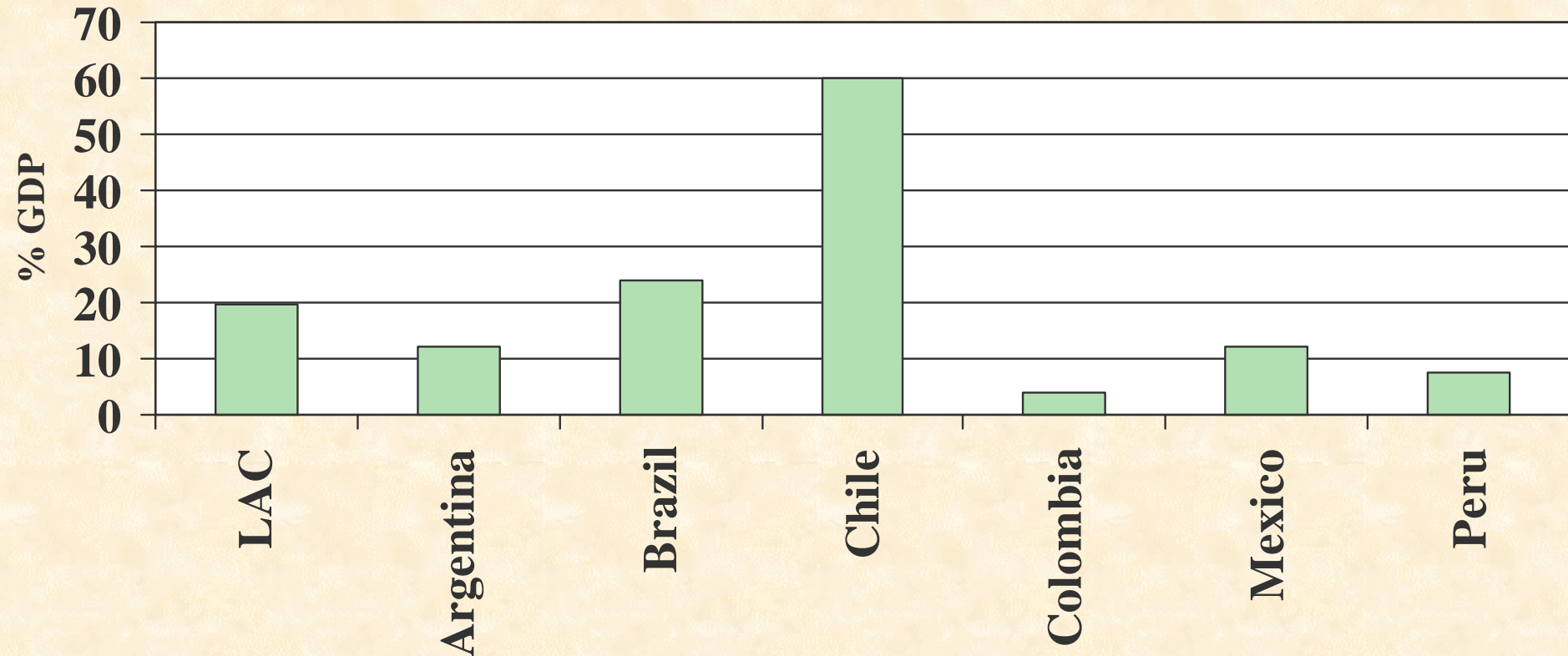
IV. Development of Local Debt Markets

Composition of Domestic Debt Markets in 2000



IV. Development of Local Debt Markets

Institutional Investor Funds* in Latin America



*: Includes private pension funds, insurance companies and mutual funds.

Source: Brazil, Colombia and Chile: del Valle, et. al (2001) from OECD Pension Systems, 2000, data are for end-1998 (Peru for end-2000). Argentina, Mexico (includes non-mandatory occupational pension funds) and Peru: latest WB-FSAP Reports.

V. Principles of debt management: summary

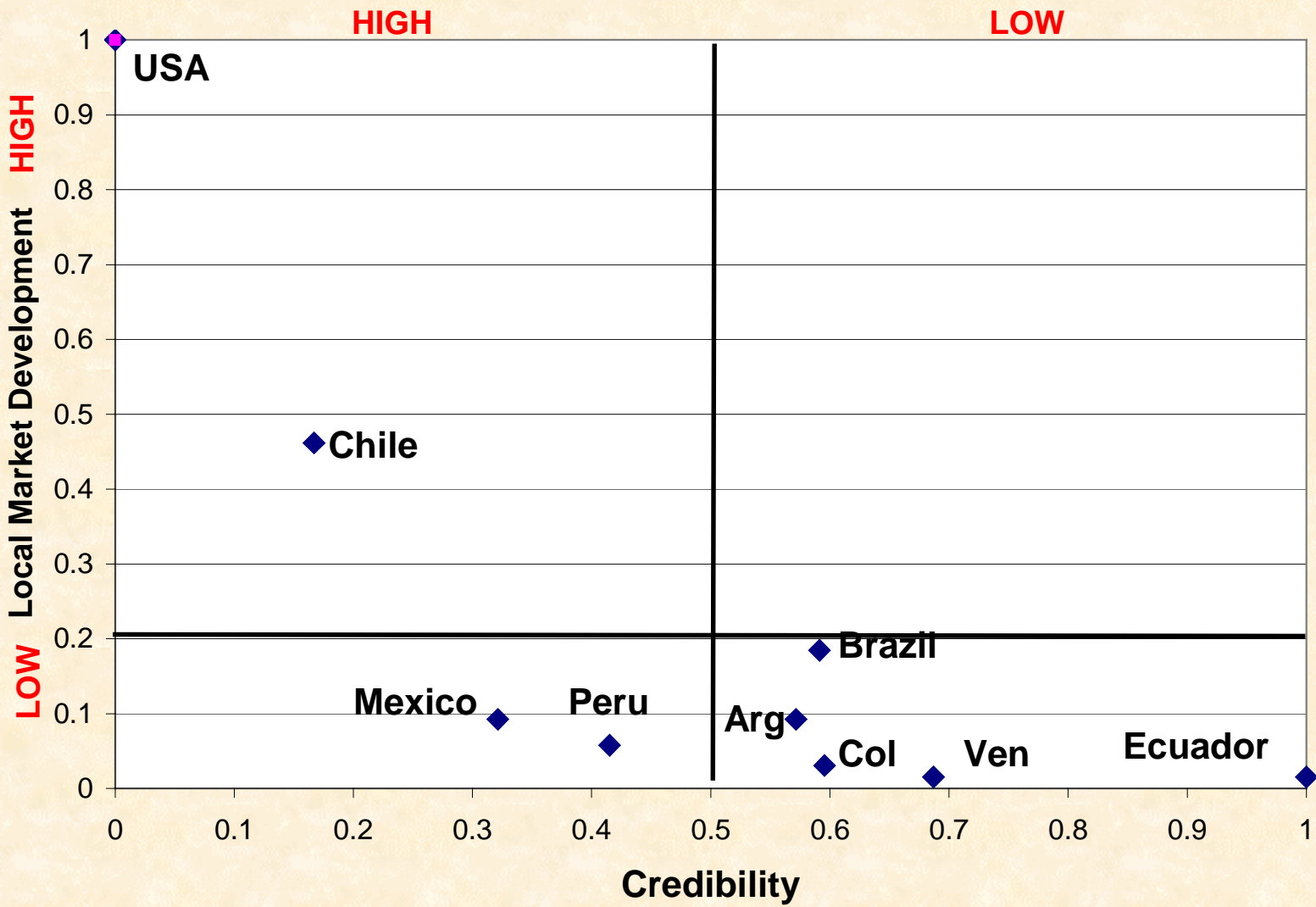
- ❑ No simple “debt management recipe” for all countries
 - Cost-risk considerations matter, but not the whole picture: need to balance also objectives of policy credibility (signaling via indexed instruments) and market development (externalities of long-term fixed instruments)
- ❑ Self-insurance and self-protection needed to smooth and act counter-cyclically with missing markets
 - Build buffers in good times (stabilization funds, high international reserves, debt portfolio diversification, adjustable liquidity ratios, adjustable generic provisioning requirements)

V. Principles of debt management: summary

(cont'd)

- Elusive “credibility” --inflation stabilization necessary but not sufficient
 - Key question: under what conditions can floaters with “peso problem” and “liability dollarization” escape the trap and build markets for LT, domestic-currency, fixed-rate debt?
- Role for the IFIs?
 - Contingent credit lines
 - Systematically *lend* to certain clients in their domestic currencies and *borrow* in certain clients’ currencies

V. Principles of debt management: a roadmap



Note: For the positioning of countries: the medians of percentage deviation of spreads from the Latin Average for the period 01/03/01-06/04/01 and the size of institutional investors as % of GDP.