

Gerenciamento da Dívida Pública: Experiência Brasileira e Internacional

Paulo Leme
Managing Director
Brasília, D.F.
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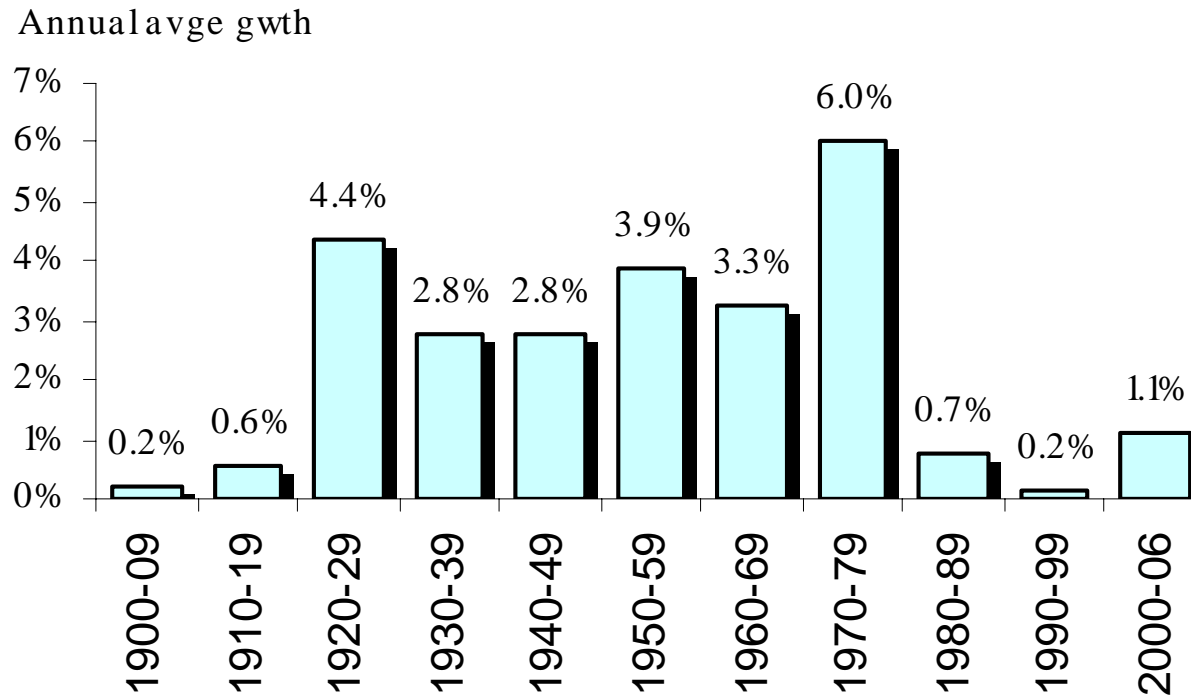
1. Understanding the fiscal and debt management problems
2. Public Debt Management – International Experience
3. Public Debt Management – the Brazilian vs. Mexican Experience
4. Brazil - Addressing the Supply of Public Debt
5. Brazil - Addressing the Domestic Demand for Public Debt
6. Brazil – Measures to Encourage Foreign Participation in Local Markets

Conclusion – First Best is Fiscal Adjustment

1. Understanding the Fiscal Policy and Debt Management Problems

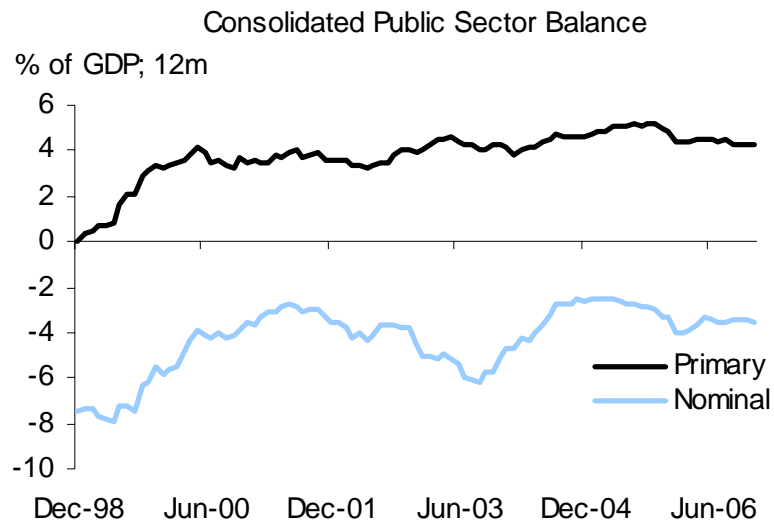
- Instruments: spending; taxes; and public debt (inter-temporal taxation)
- **Public debt management** – select instruments, maturities and currencies to minimize costs and risks
- At 41% of GDP, total gvt. spending is high relative to its income per capita
- High level of spending stems in part from welfare programs
- To finance such programs, the government raises taxes and issues public debt
- At 38% of GDP, the tax burden is too high relative to its income per capita
- At 49.5% and 71.8% of GDP, the stocks of net and gross public debt are high relative to the stock of private financial wealth
- **Crowding out** – is high, stifling private investments and growth

Brazil - Secular Decline in Real GDP Growth Per Capita



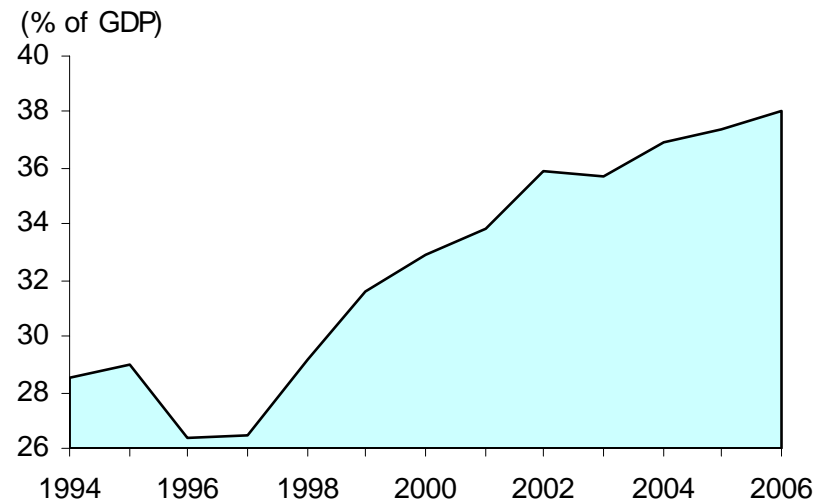
Source: Goldman Sachs based on BACEN.

Brazil – Nominal and Primary Fiscal Balances



Source: BACEN and Goldman Sachs.

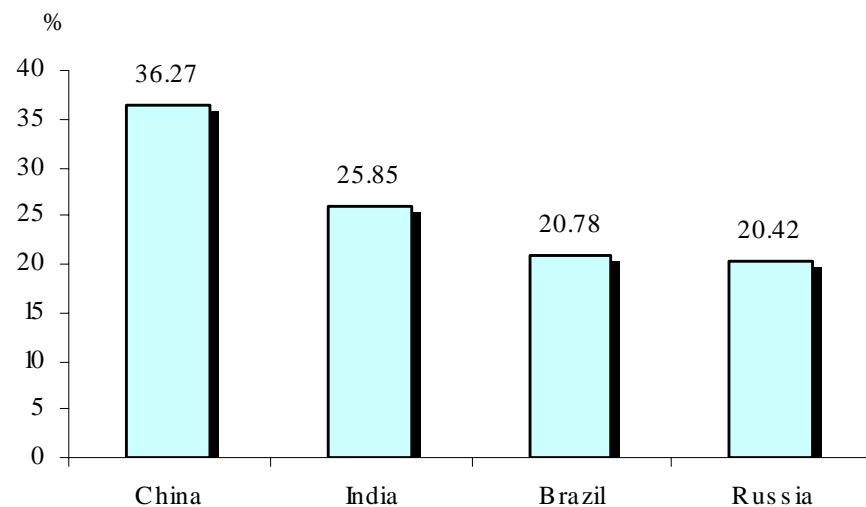
Brazil: Evolution of the Total Tax Burden*



Source: Brazilian Institute of Tax Policy.

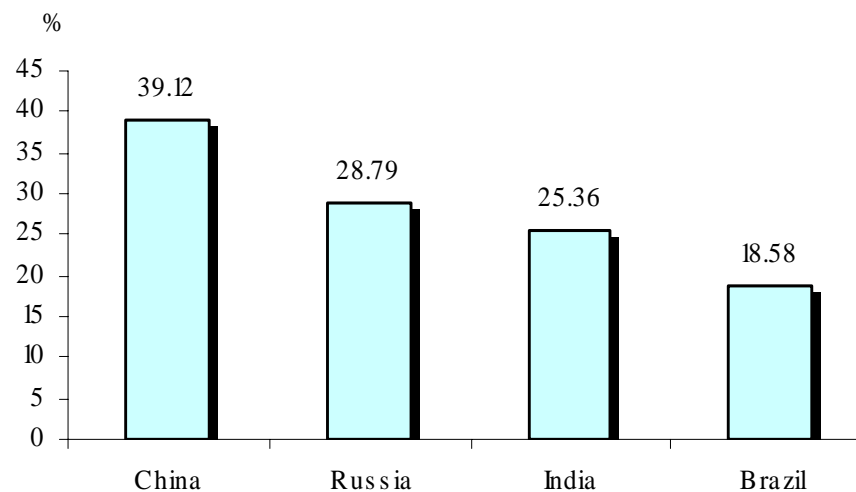
Brazil Saves and Invests too Little to Grow Faster

BRICs - Investment to GDP ratio (average of last 10 years)



Source: BACEN, IIF.

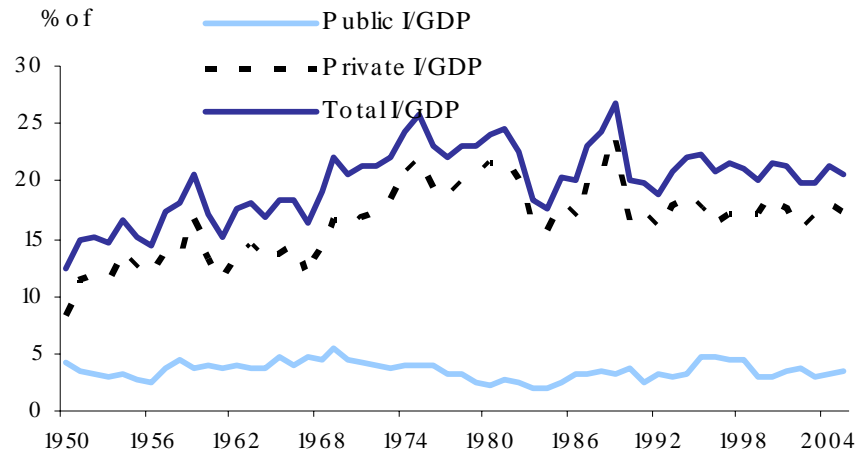
BRICs - Domestic Savings to GDP ratio (average of last 10 years)



Source: Central Bank, IIF.

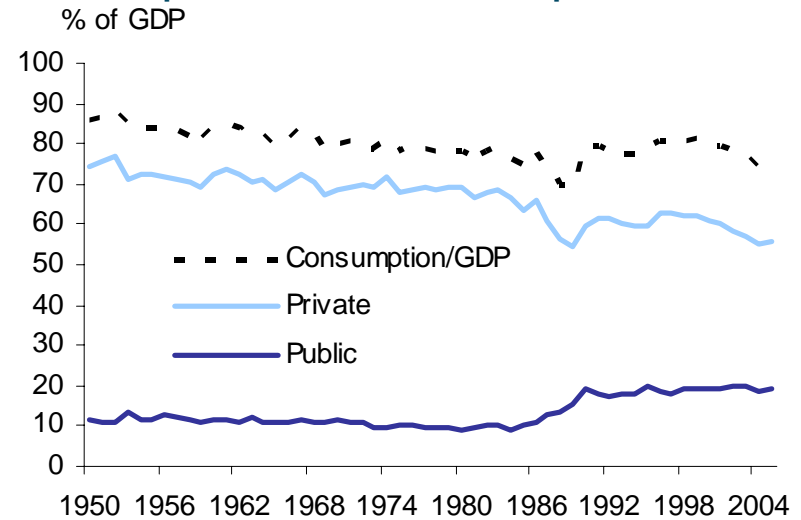
Brazil - Govt. Crowds Out Private Sector

Brazil - Composition of Investment (Current Prices)



Source: Goldman Sachs based on BACEN.

Brazil - Public Consumption Increased At The Expense Of Private Consumption



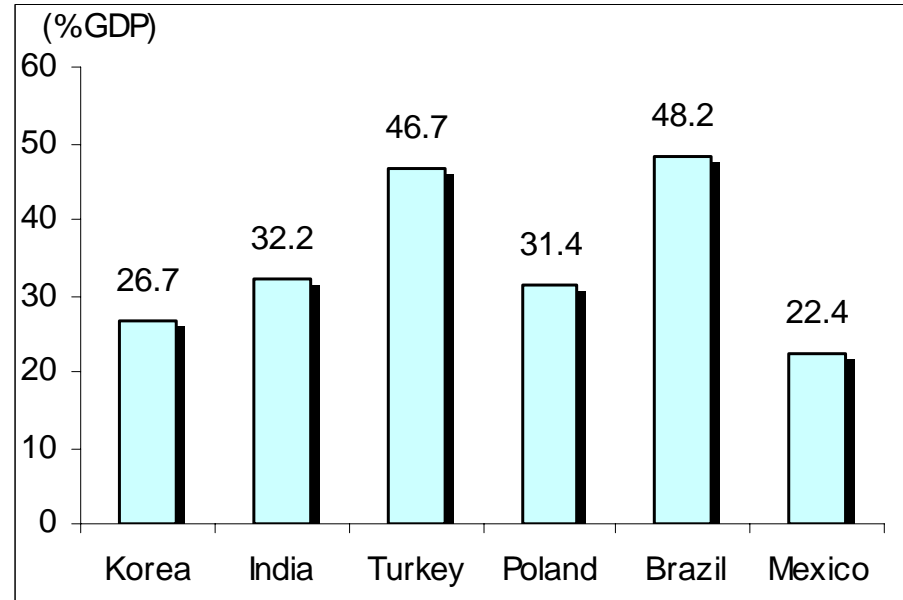
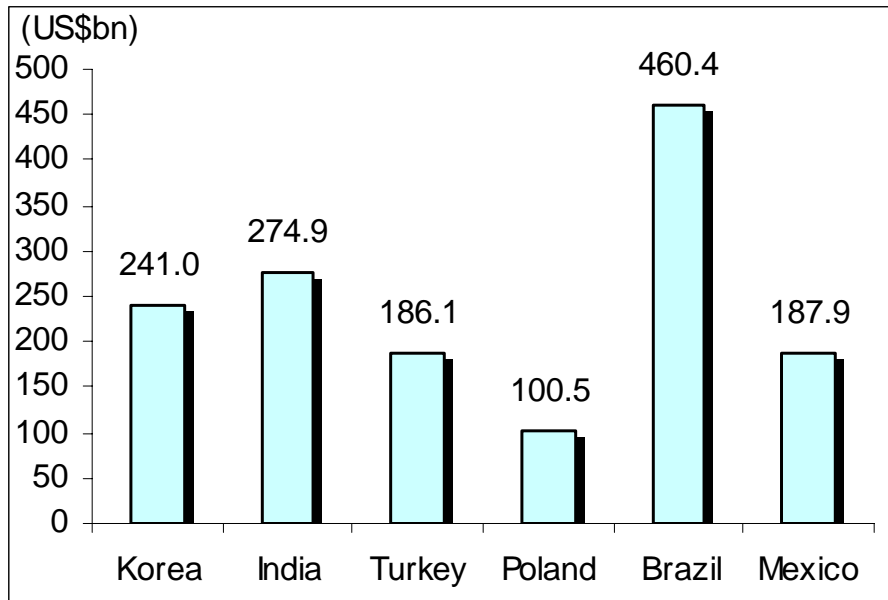
Source: Goldman Sachs based on BACEN.

- **Brazil** - Concentration of short-term maturities and floating rate debt are endogenous mechanisms to protect against high “macro systemic risk”
- Macro systemic risk – non-diversifiable, reflecting macro fundamentals
- **International experience:** by reducing “macro systemic risk”, sovereigns lengthened maturity and duration; and improved currency composition of debt
- **Brazil** – solved external problem; now, it has to solve the fiscal problem
- **Fiscal problem:** primary spending and tax burden are high
- **Public debt management (PDM):** is the “second best” strategy. For PDM to be effective it must be supported by measures that reduce systemic macro risk
- PDM should be used to reduce vulnerabilities associated with high concentration of ST maturities and high share of floating rate debt
- Yet, the **optimal fiscal approach** is to tackle the spending/tax/size of debt problems

2. International Debt Management Experience

- **Most applicable cases for Brazil: Mexico, Poland, and Israel**
- **Lessons from Mexico, Poland and Israel:**
 - They all reduced the public debt to GDP ratio faster through stronger fiscal adjustment
 - Stabilization programs reduced the level and variance of inflation
 - Stronger fiscal cash flow and balance sheet ratios led to investment grade ratings
 - Lower country risk reduced domestic real interest rates
 - These developments reduced nominal interest rates and risk premia across the curve
 - **Results:** lower concentration of short-term maturities; longer maturity and duration
- **In what follows:**
 - **Quick International Comparison of Local Bond Markets**
 - **Quick Comparison between Mexico and Brazil**

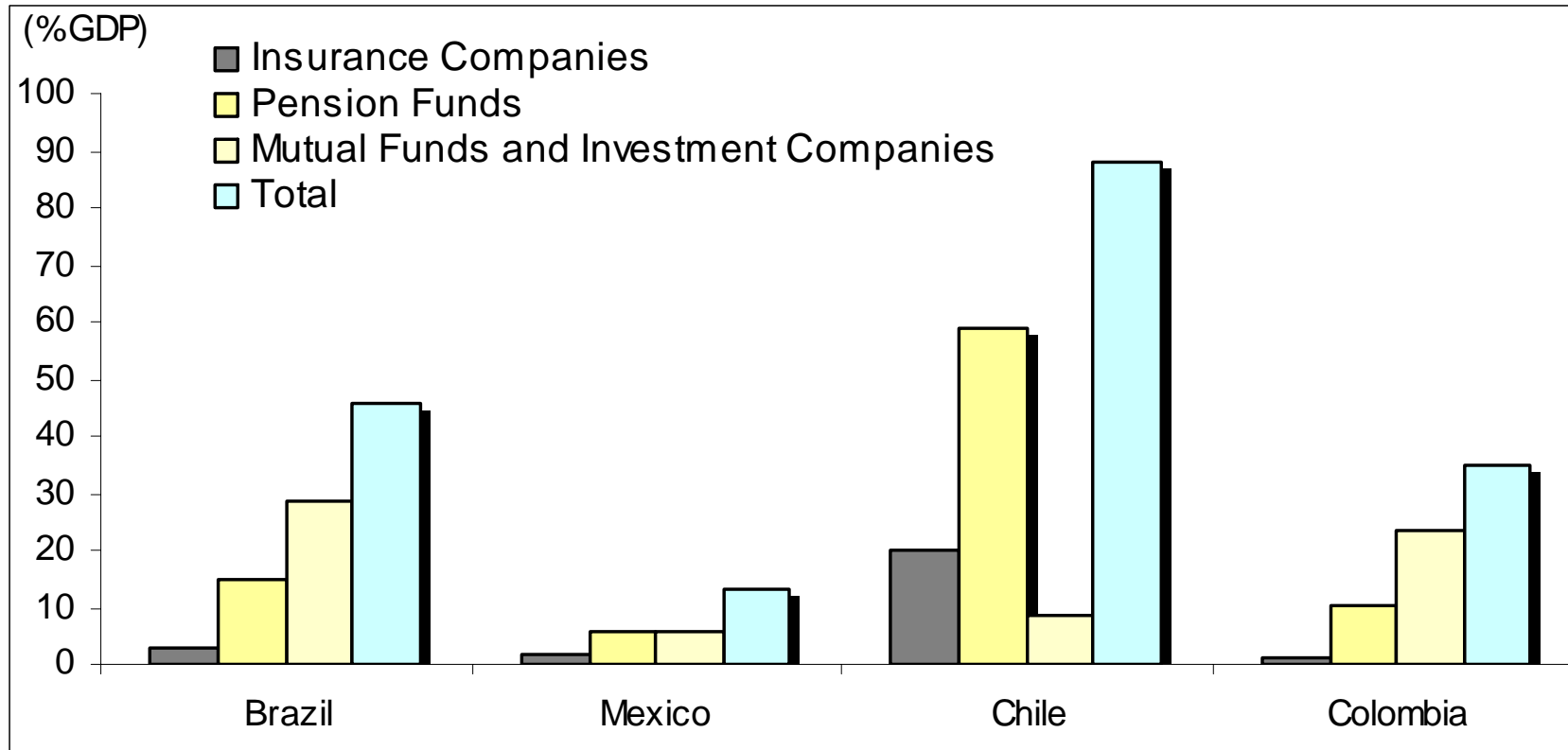
The International Landscape - Sizes of Domestic Govt. Bond Markets



Source: BIS Quarterly Review: September 2006 .

Note: Data as of March 2006.

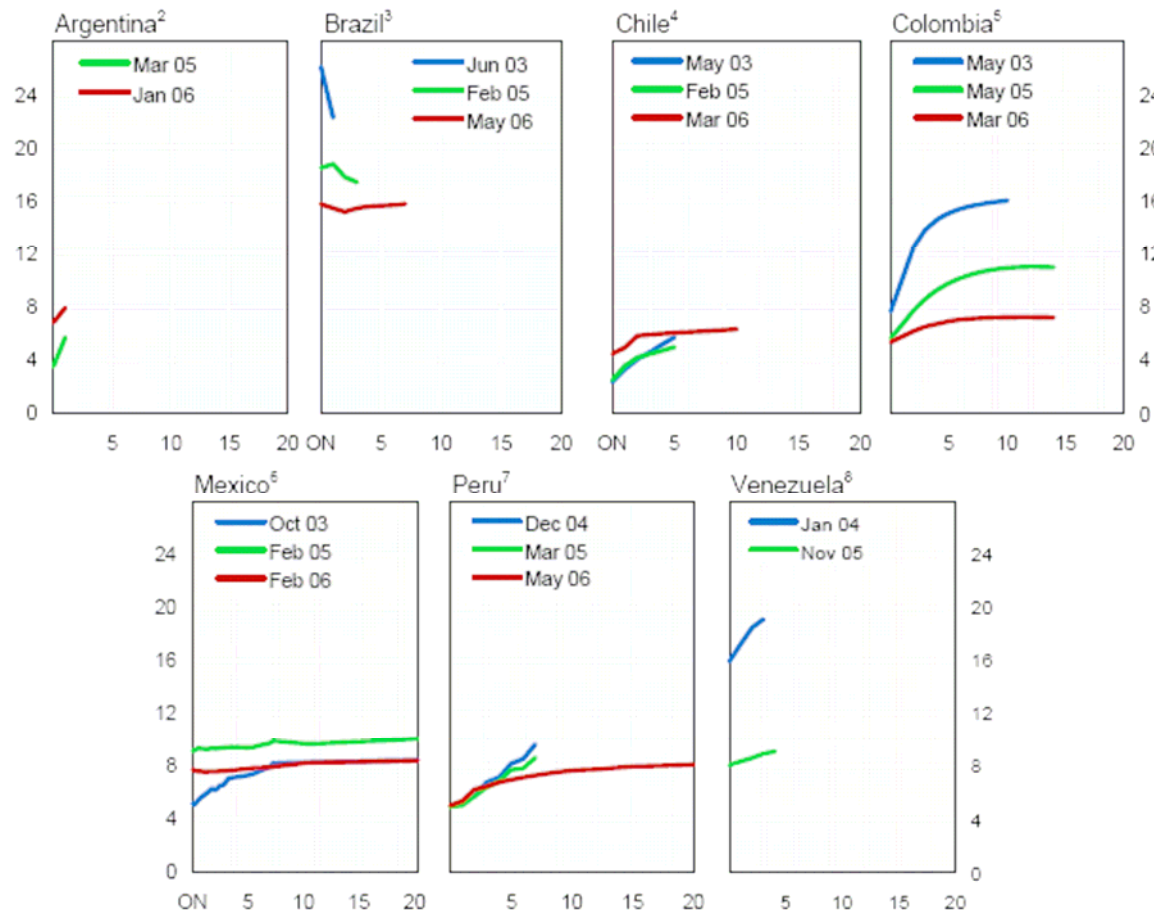
International Landscape - Domestic Institutional Investors are Crucial



Source: All data – 2003; from IADB, 2007 IPES Report, Borensztein, Levy Yeyati, Panizza, October 2006

International Landscape - Yield Curves for Local Debt Markets in Latam

Yield curves of domestic fixed rate local currency government bonds¹



¹ Remaining maturities in years (ON = overnight). ² Lebac. ³ Swap rates; long-term; government bonds (NTN-F). ⁴ Central bank issues. ⁵ Zero coupon yield curve. ⁶ Cetes and government bonds. ⁷ Government bonds, secondary market. ⁸ Government bonds (Vebonos), auctions.

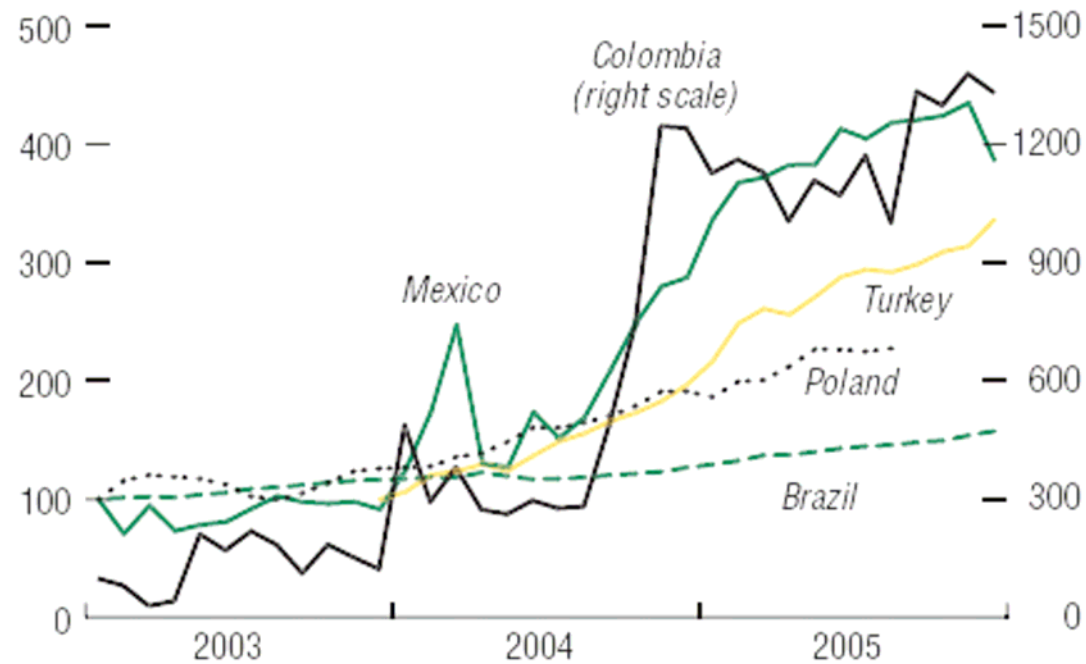
Indicators Of Secondary Market Liquidity In Local Government Securities Markets

| 2005 | Annual turnover | | Bid-ask spread | Average size of transaction related to bid-ask spread |
|----------------------|---------------------------|---|--|---|
| | In billions of US dollars | As a percentage of outstanding securities | | |
| Argentina | 91.5 | 187 | 10–50 bp on fixed rate and inflation-indexed bonds | ARS 2–10m |
| Brazil | 433.0 | 79 | 5 bp on fixed rate bonds | BRL 10–50m |
| Chile | 26.0 | 98 | 5 bp on fixed rate bonds | CLP 100m |
| Colombia | 45.0 | 132 | 5–10 bp on inflation-indexed bonds | UF 100,000 |
| Mexico | 696.7 | 494 | 3–5 bp on fixed rate bonds | COP 2bn |
| Peru | 2.6 | 46 | 3–5 bp on fixed rate bonds | MXN 50–100m |
| Venezuela | 2.8 | 39 | 5–15 bp on inflation-indexed bonds | MXN 5–10m |
| Total | 1,297.6 | 160 | 10–20 bp on fixed rate bonds | USD 1m |
| <i>Memo:</i> | | | 50–100 bp on floating rate bonds | VEB 2.4bn |
| <i>United States</i> | <i>138,756.0</i> | <i>2,186</i> | ... | ... |
| | | | <i>0.8–1.6 bp on fixed rate bonds</i> | <i>USD 25m</i> |

Note: Annual turnover data for Latin American countries correspond to secondary market transactions reported by major dealers and money management firms to EMTA. Annual turnover for the United States is based on daily inter-dealer transactions in US Treasury securities as reported in the Statistical Supplement to the Federal Reserve Bulletin.

Figure 1.25. Nonresident Holdings of Local Government Bonds

(Rebased, January 2003 = 100)

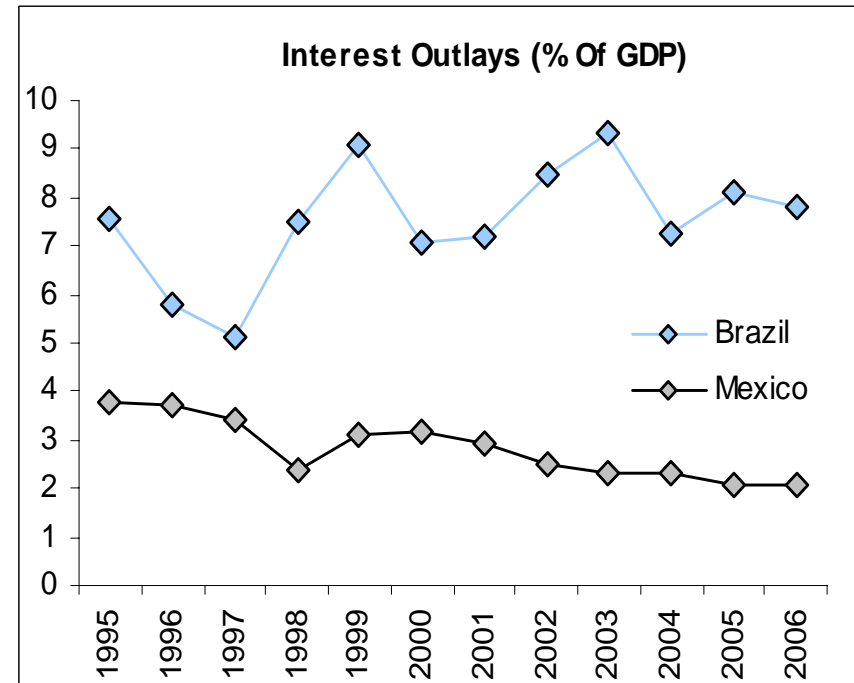
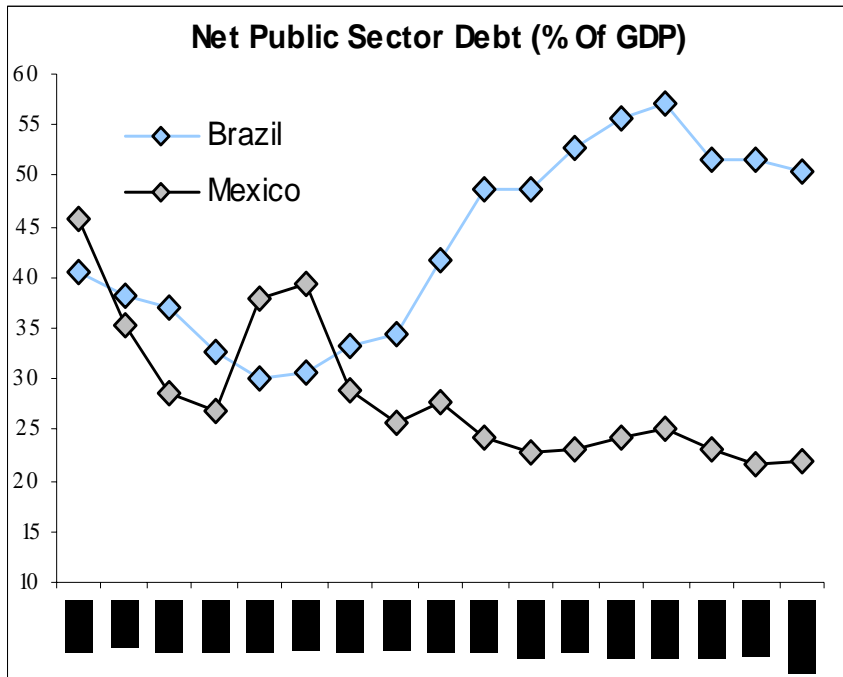


Sources: National authorities; and IMF staff estimates.

3. Brazil vs. Mexico – Stylized Facts

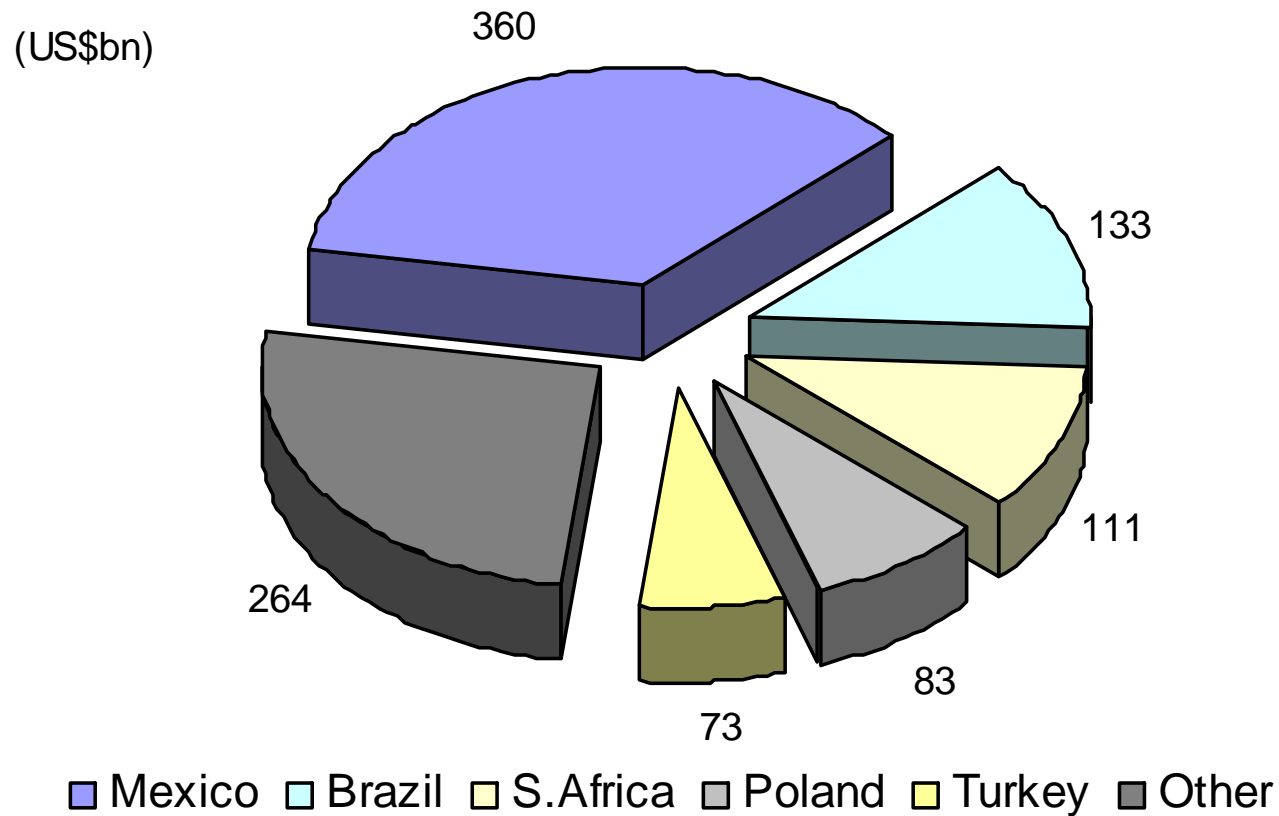
- **Brazil and Mexico are the largest/most liquid markets**
- **Both lead other sovereigns in terms of quality of debt management**
- **Overall goals and strategies are similar**
- **The main differences are that Mexico:**
 - **Achieved fiscal balance and lowered its stock of public debt**
 - **Achieved investment grade and lowered real interest rates**
 - **Easy entry/exit for foreign investors – opened capital account and harmonized tax issues**
- **Financial reforms in Mexico developed local corporate debt market**

Brazil vs. Mexico - Size and Cost of Total Public Debt



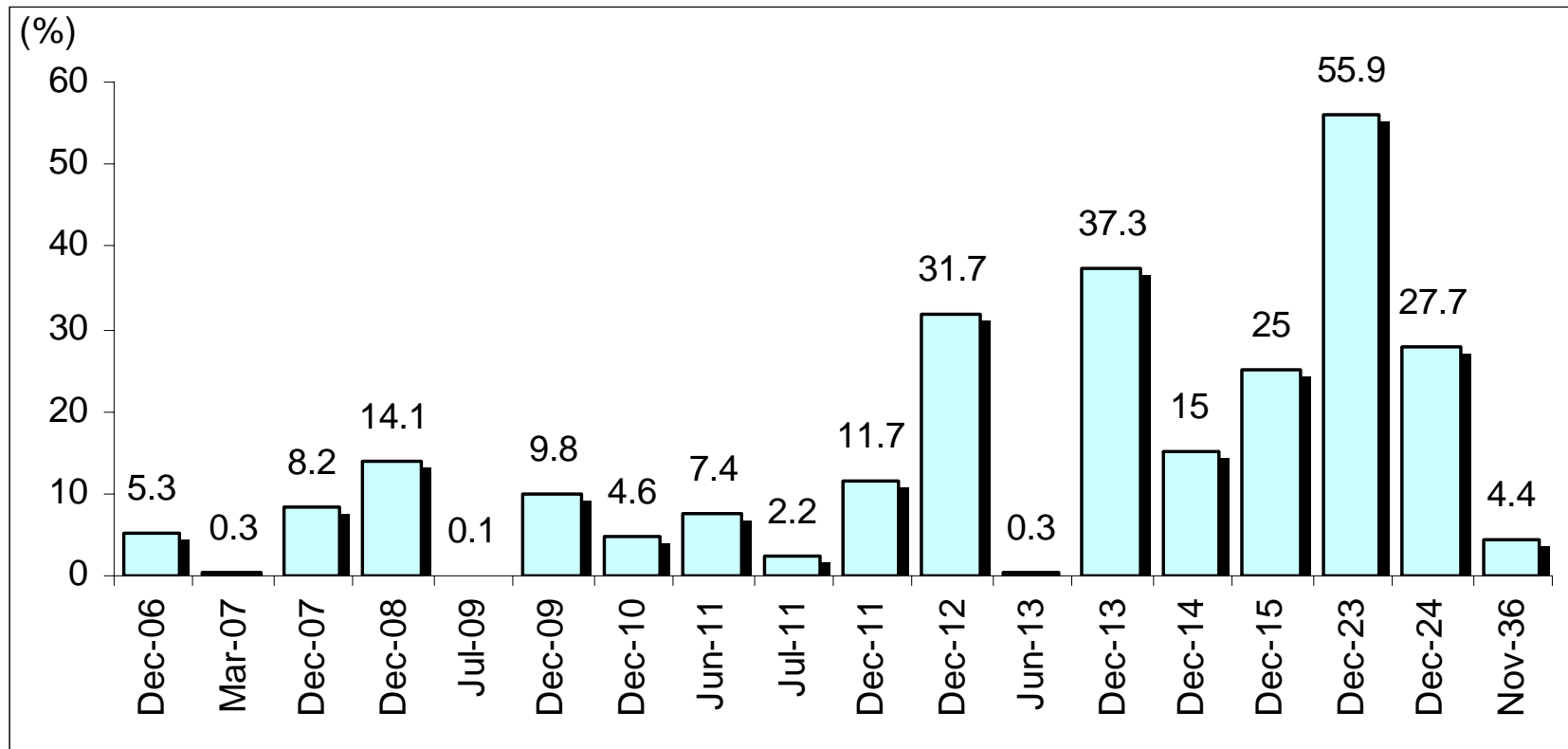
Source: Hacienda and BACEN.

Brazil vs. Mexico- Local Market Trading Volumes (EMTA)



Source: EMTA.
 Note: Volume traded up 63% yoy. Data as of 3Q2006.

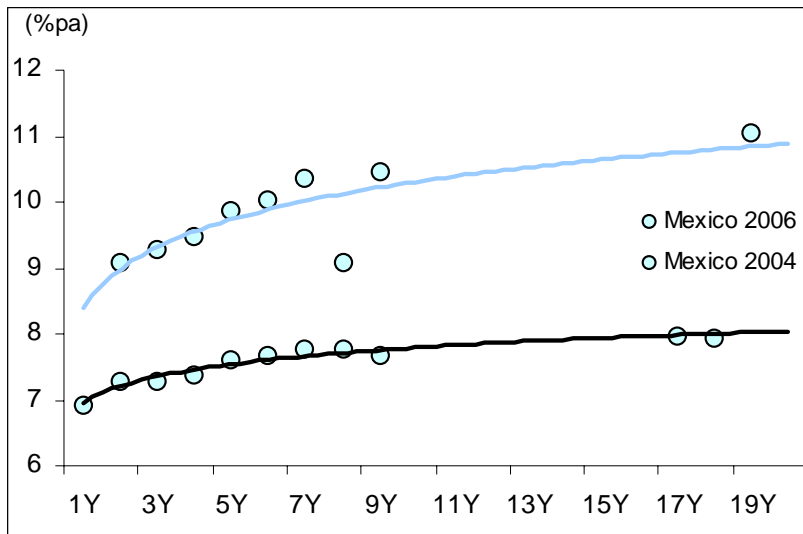
Mexico - Foreign Investors Park in the Long end of the Curve ¹.



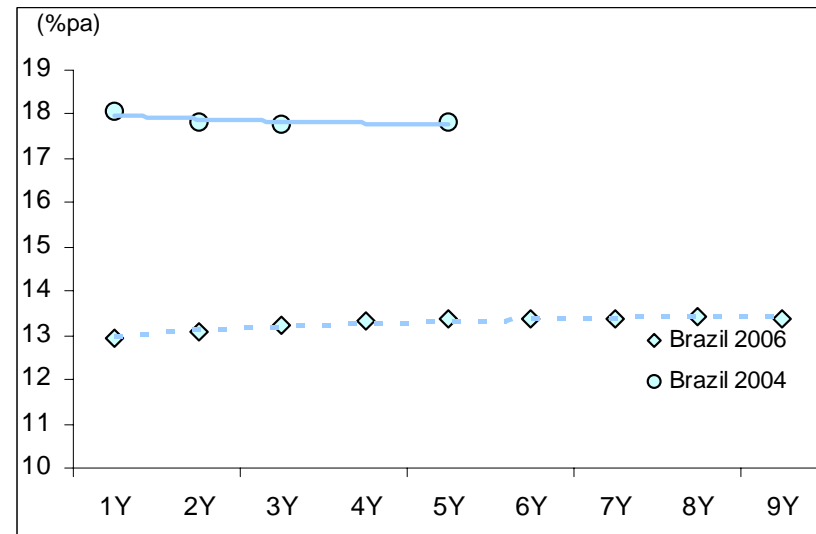
Source: Banamex.

1. Share of tenor held by foreign investors.

Brazil and Mexico Yield Curve 2004-2006

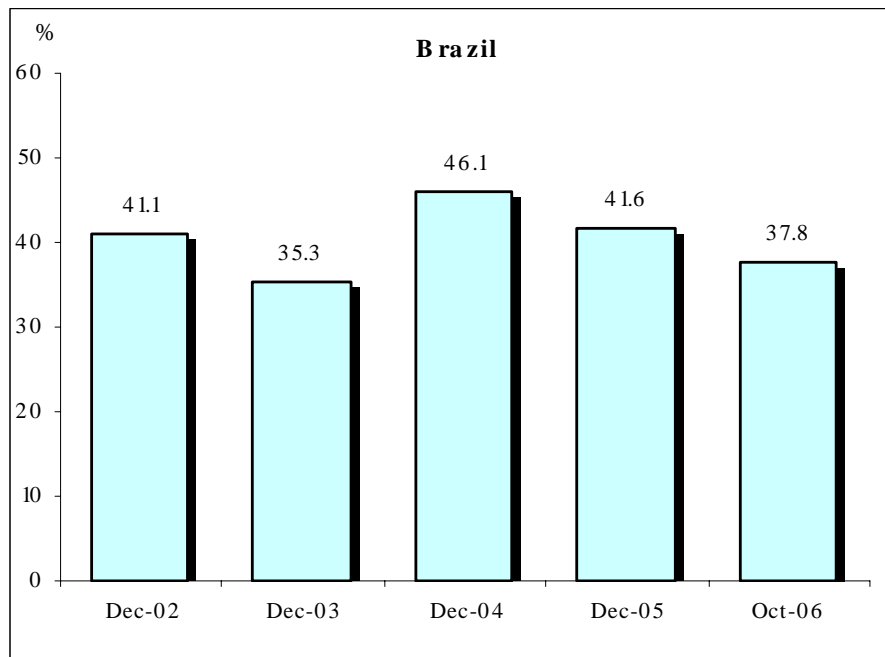


Source: Goldman Sachs.

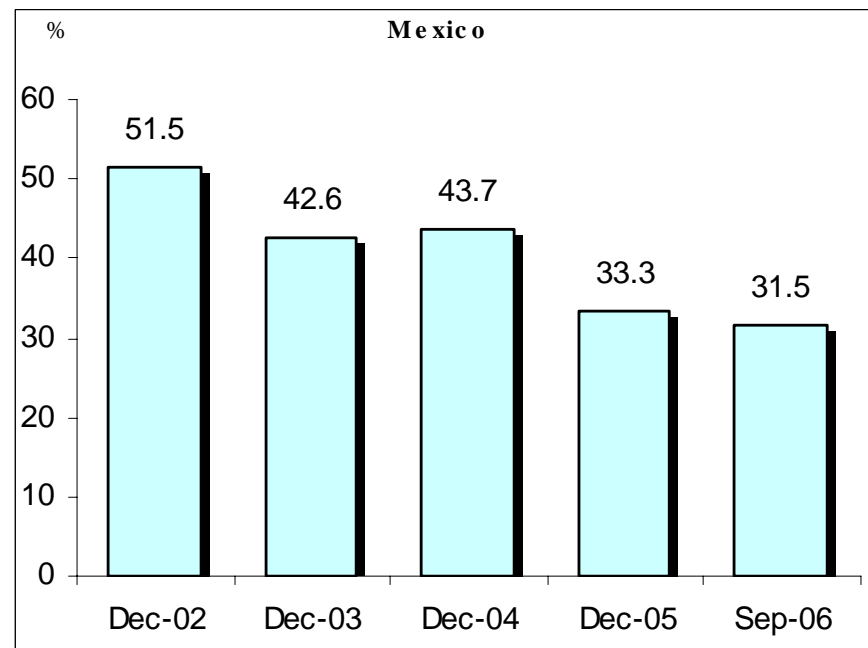


Source: Goldman Sachs.

Brazil vs. Mexico - Domestic Public Debt Falling Due in 12-months

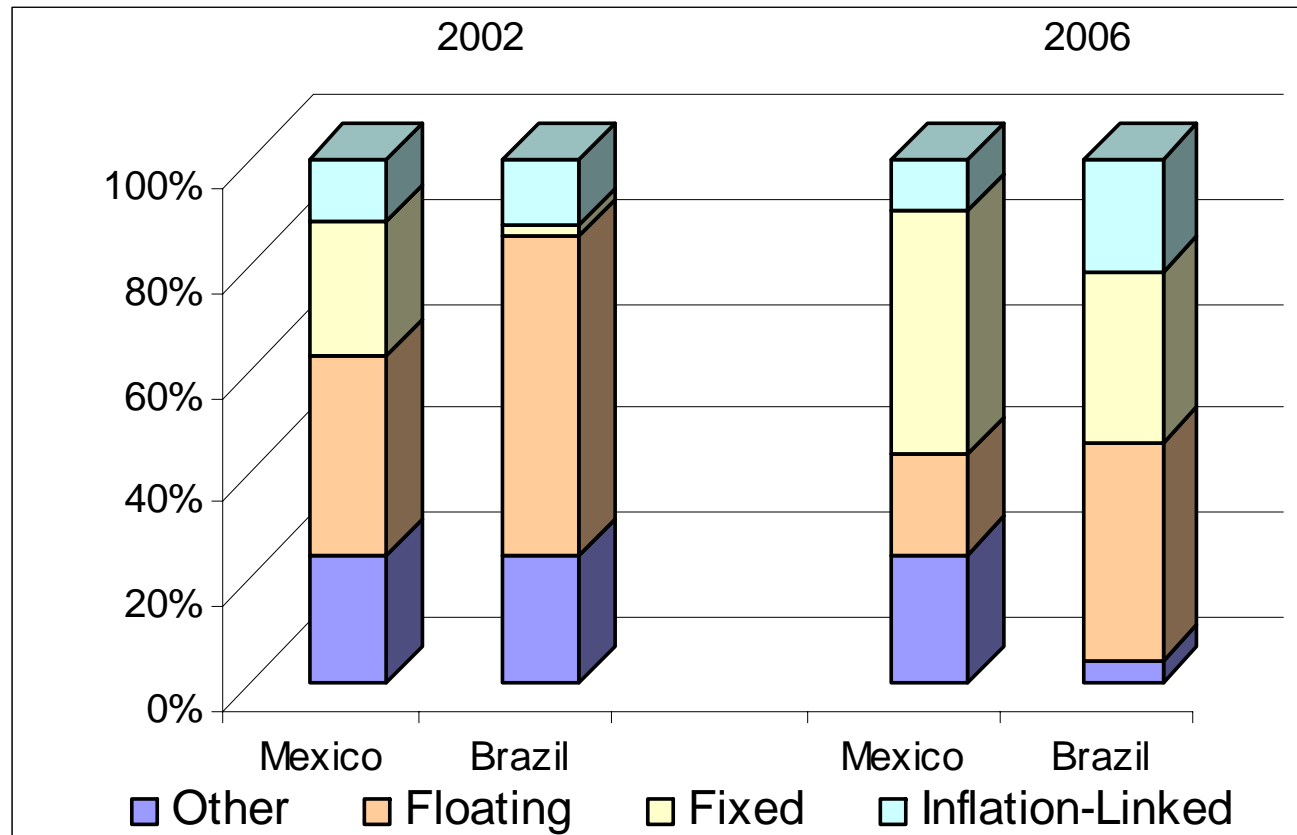


Source: BACEN and STN



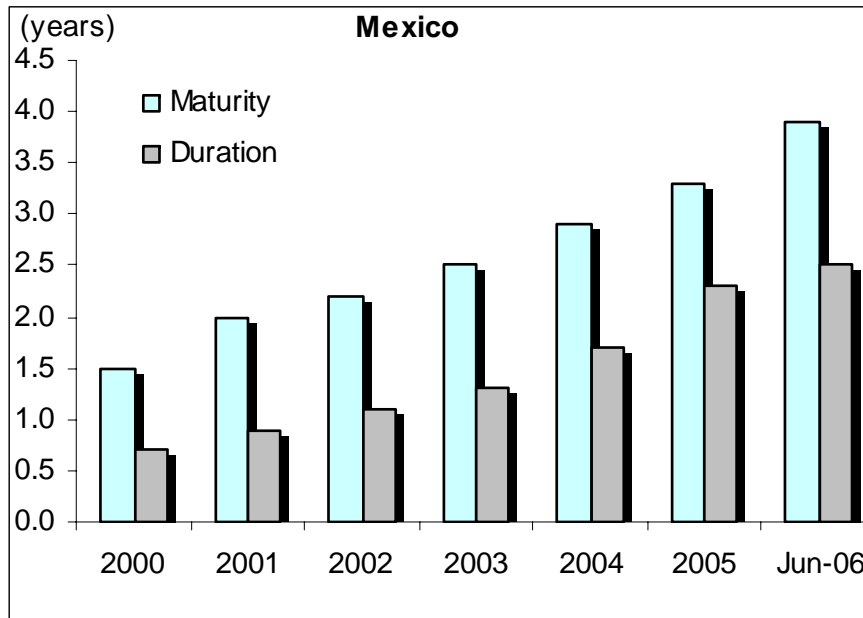
Source: Hacienda.

Brazil vs. Mexico - Composition of Domestic Public Debt

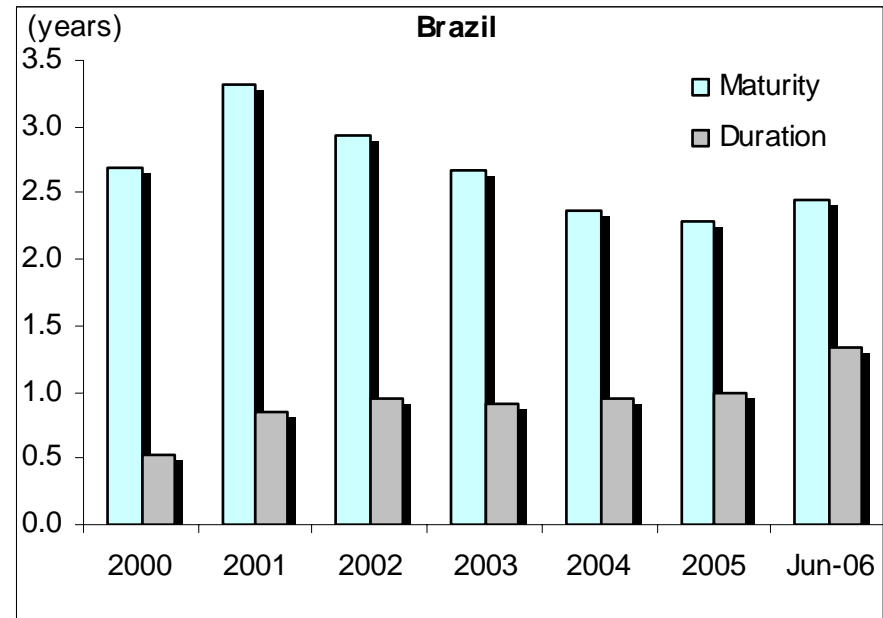


Source: SHCP and Brazilian National Treasury For Brazil (2002), the bulk of "other" represents dollarized debt.

Brazil vs. Mexico - Average Maturity and Duration of Domestic Public Debt



Source: SHCP.



Source: BACEN, STN.

4. Brazil - Debt Management – Supply Side

- **Action:** reduce the stock of public debt faster
- **Improve the composition of the stock of public debt:**
 - Eliminate dollarized debt – done
 - Continue to reduce the share of external debt
 - Increase the share of fixed and reduce the share of floating rate debt
 - Lengthen the average maturity and duration of domestic public debt
- **Main challenge** – limit the “premium” required to lengthen maturities
- This means that the government must be careful with the speed and volumes at which it lengthens its yield curve
- **Original sin** – optimal composition between domestic and external
 - Trade off between maturity and refinancing risk vs. FX risk

5. Brazil - Debt Management – Domestic Demand Side

- **Action:** reduce obstacles inhibiting domestic demand growth
- **Flow demand:** GDP growth, reduce tax hindrances to private savings, increase demand for fixed income instruments
- **Stock demand:**
 - Long-term – gradually free “compulsory savings” (FAT, FGTS)
 - Increase role of private retirement funds
 - Structural reforms of the RGPS and the RPPS
- Continue to develop benchmarks for fixed income funds
- **Tax reform:** reduce tax obstacles (CPMF, IOF, capital gains tax)

6. Brazil - Debt Management –The External Demand Side

- **Stylized fact - strong and growing external demand for local government debt**
- **Driver - continued increase in global assets under management and compression of bond yields. Is it permanent or cyclical ?**
- **Brazil - foreign demand for local bonds is strong**
- **Size - market should continue to grow**
- **Yield - high carry with expectations of lower real interest rates**
- **Local markets are liquid most of the time**
- **Sophisticated derivatives markets (BM&F and balcão)**

Brazil - Debt Management – Measures to Increase Foreign Participation (I)

- **Action** – taxes are the main hindrance to further growth
 - **CPMF** is an important obstacle
 - Extend exemptions on capital gains taxes to foreigner investors for corporate bonds, debentures, and credit products
- Reduce number and increase liquidity of Treasury benchmarks
- Treasury auctions should recognize difference between foreign and domestic demand for DPMFi
- Commitment to pre-announced auction schedule (to reduce vol)
- Improve “price discovery” with foreign investors
- Safety guard – increase flexibility of collateral with BM&F

Debt Management – Measures to Increase Foreign Participation (II)

- **Registration of foreign investors through 2689 – could be made even faster**
- **Custody – scope for increasing competition in the custody market**
- **Settlement – could be made as fast/efficient as Euroclear**
- **Consolidate external BRL curve – encourage further external BRL issues**
- **Occasional intervention to address market dislocations are welcome by foreign investors**

Conclusions – First Best is Fiscal Adjustment

- Brazil has made significant progress toward macroeconomic stability
- This includes progress on debt reduction and liability management
- The next frontier: improvements on the fiscal front should be as revolutionary as they were for the balance of payments and external debt
- To this end – need to deepen and improve the quality of fiscal adjustment
- Fiscal adjustment should be based on spending cuts
- Stronger fiscal adjustment would reduce D/GDP faster; and reduce “macro” risks
- Such fiscal actions would take debt management to the next level:
 - reduce the share of short-term debt and concentration of maturities;
 - lengthen average maturity and duration
- Ultimate goal: crowd in private sector and bolster GDP growth

Borensztein, Levy Yeyati, Panizza, “Living With Debt”, IPES 2007, Interamerican Development Bank, October 2006

Garcia, M and Salomão, L, “Alongamento dos Títulos de Renda Fixa no Brasil”, Março 2006.

Garcia, M, “Public Debt Management, Monetary Policy, and Financial Institutions”, June 2002.

GFSR, International Monetary Fund, various issues

Jeanneau, S. and Tovar, C, “Domestic bond markets in Latin America: achievements and challenges”, BIS Quarterly report, June 2006.

Secretaría de Hacienda y Crédito Público, “Lineamientos Estratégicos Para el Manejo del Crédito Público”, September 2005

Tesouro Nacional, “Plano Anual de Financiamento”, 2005 and 2006

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