

Thoughts on Local Debt Markets and Challenges Ahead

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Some Macro and Micro Drivers of Local Debt Markets

Key Macro Drivers for Local Debt Market Development

- The Commodity Cycle –relative price shifts versus more speculative elements
 - Commodity exporters and importers will fare differently especially given extent of weak or strong fiscal and current account stance—and debt vulnerability (external and local)
- Monetary Policy and inflation targeting in a world of significant relative price shifts and implications for introduction of more heterodox policies
 - capital controls,
 - exchange rate intervention
 - micro policies—to slow credit growth (e.g. controls on lending and/or reserve requirements)
- Credit market distress in developed markets and possible spread to EM credits
- Fiscal policies in emerging markets and extent of fiscal space
 - subsidies and administered prices and commodity demand
 - tax policies
- Liability management policies
 - Swaps of external for local debt
 - Adoption of more complex local debt liability management operations—involving –re-openings, buy-backs

Key Micro Drivers for Local Debt Market Development

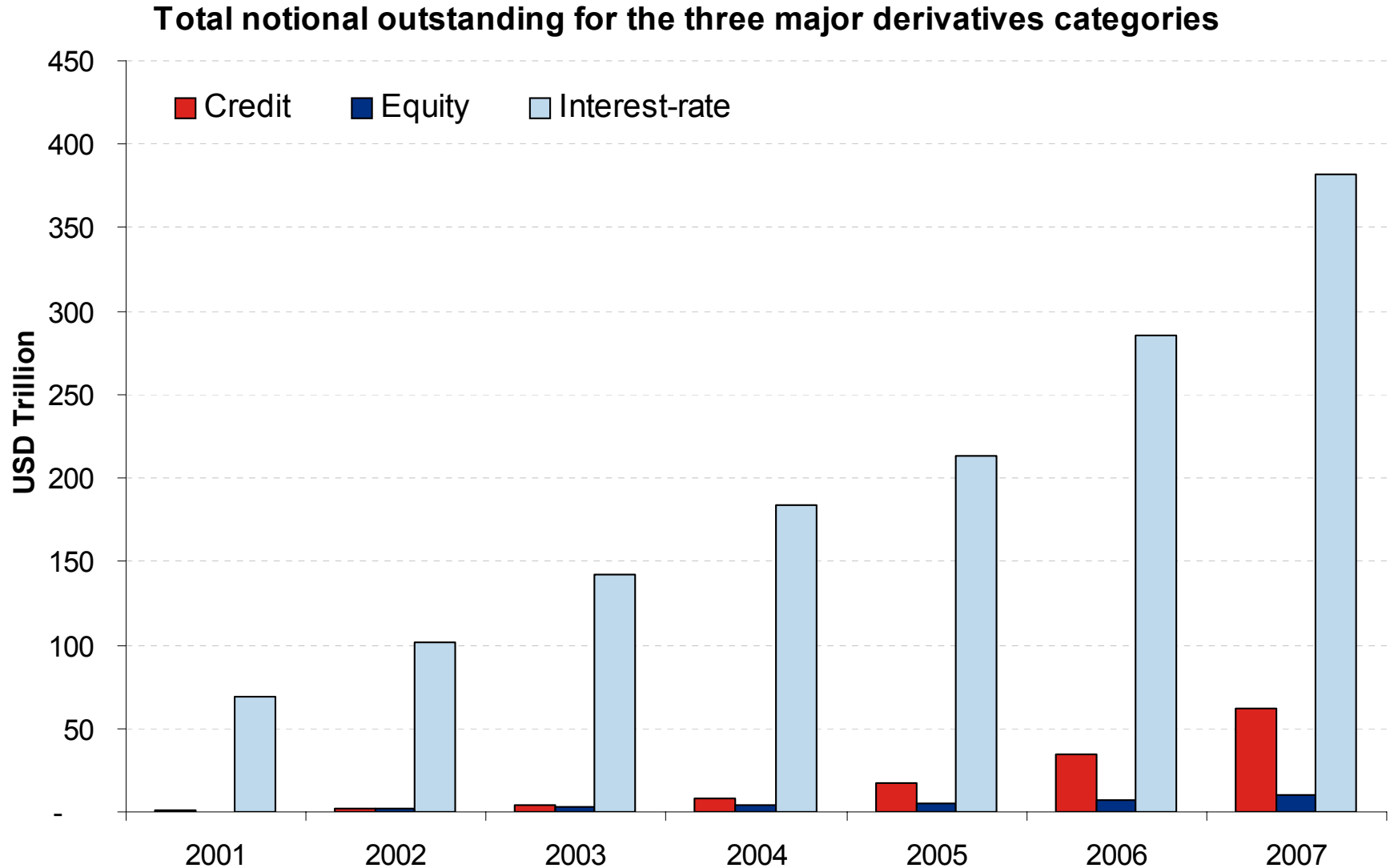
- Index Creation and varieties including ETFs in local government debt will be more of a reality
 - Indexes and products relating to credit in EM countries will continue to develop (e.g. indexes of regional corporate debt)
- Counterparty Credit risk in local versus offshore markets
- Regulatory changes in EM and developed markets will be key. Things to watch:
 - Revisions to Basel II
 - Revisions to valuation standards (European and US perspectives)
 - Liquidity standards
 - Counter-cyclical capital regulations or other measures to dampen extent of booms or busts

Evolution of the global investor base—more global and expanding

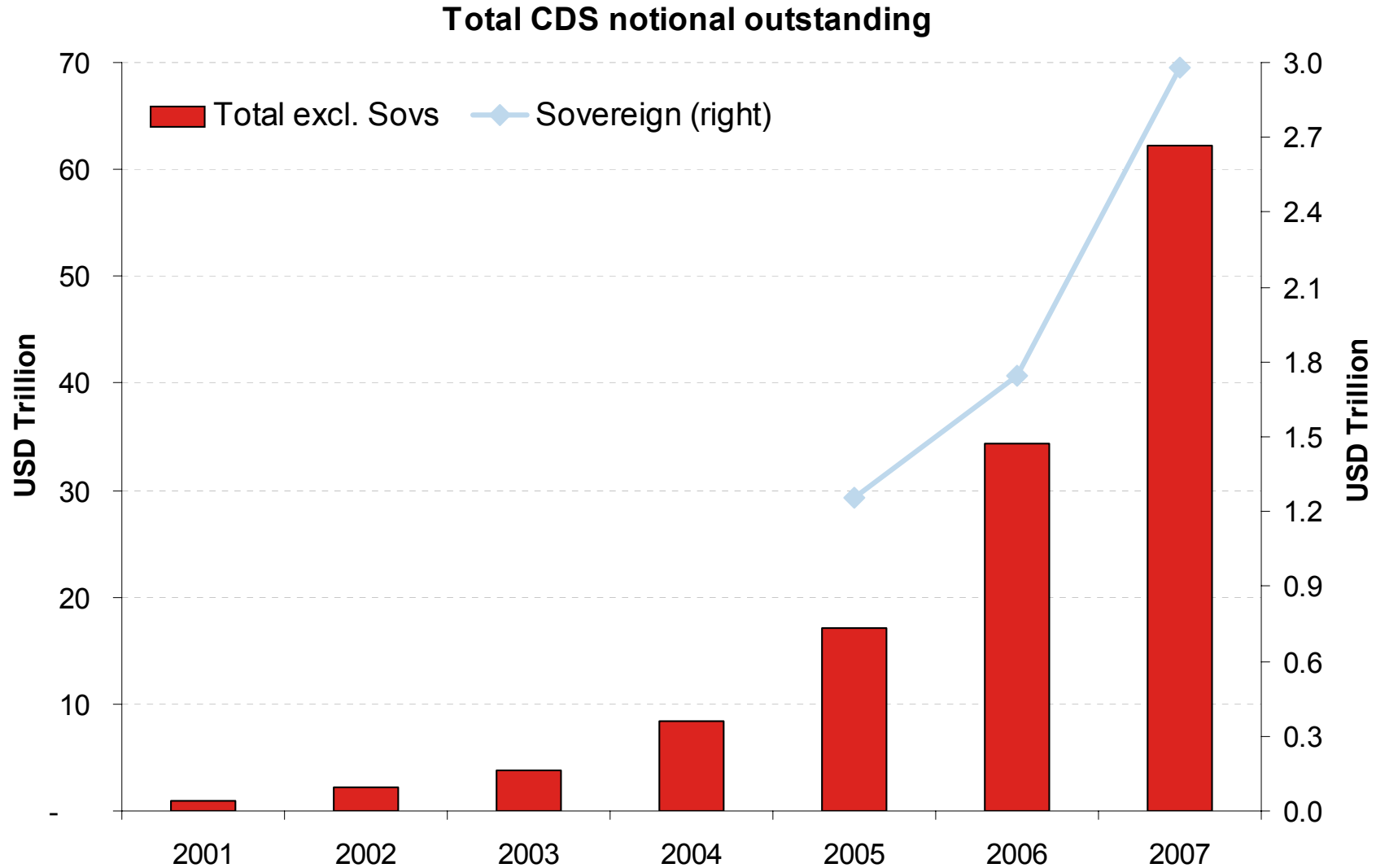
- SWFs and their increasing interest in EM markets
- CB investments in EM hard currency debt if investment grade
- Hedge Funds evolution as de-levering and consolidation in that global industry proceeds
- Family Offices and Funds of HFs
- Role of investment/trading areas of multinational banks
- Real money accounts (external and local): Pension Funds, Mutual Funds, Insurance Companies and key large fixed income funds will play an essential role—
 - Just 8 large pension and mutual funds largely located in the US run over US\$ 4 trillion (more than double all of the hedge fund assets)—
 - Inclusion of all pension and provident funds this number would amount to way over US\$ 20 trillion

Local Debt Markets in Relation to Derivatives: Some Numbers

\$455 Trillion In the Three Major Derivatives Categories in 2007



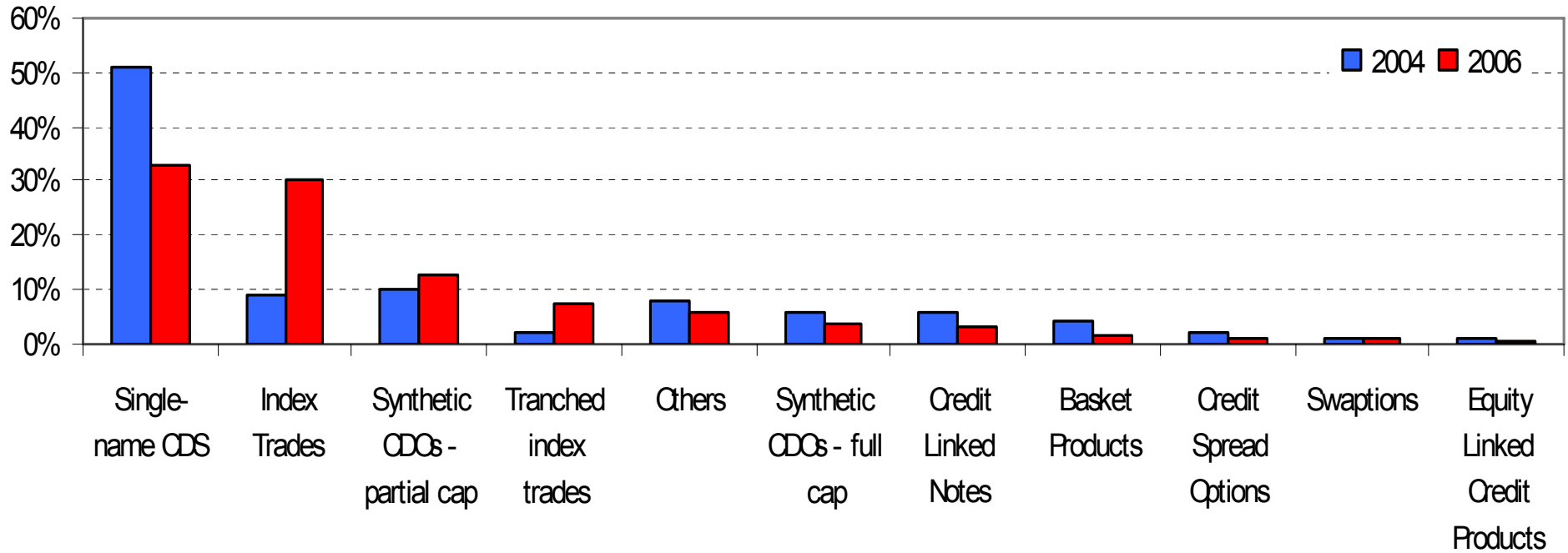
Credit Default Swaps Growth



Note: 2007 sovereign value is an estimate

Sources: ISDA, BIS.

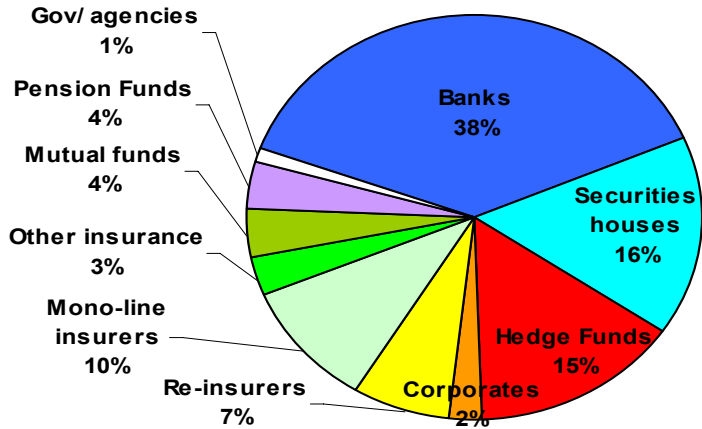
Product Usage Breakdown 2003/2004 versus 2005/2006



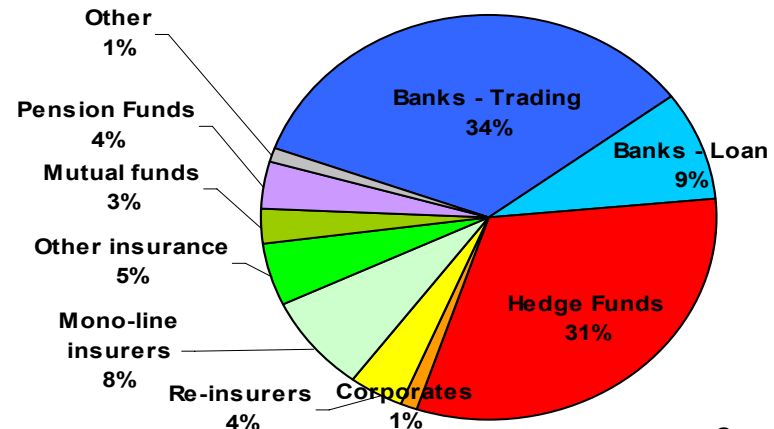
Source: BBA Surveys

Buyers Versus Sellers of Protection

Sellers of Protection 2003/04 (Left) versus 2005/06 (Right)

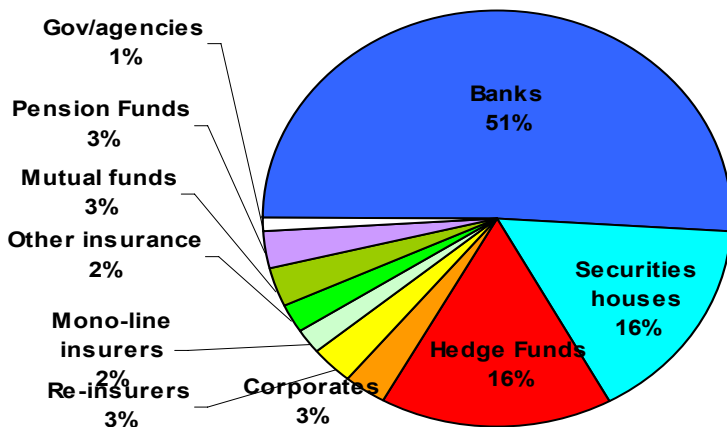


Source: BBA Surveys

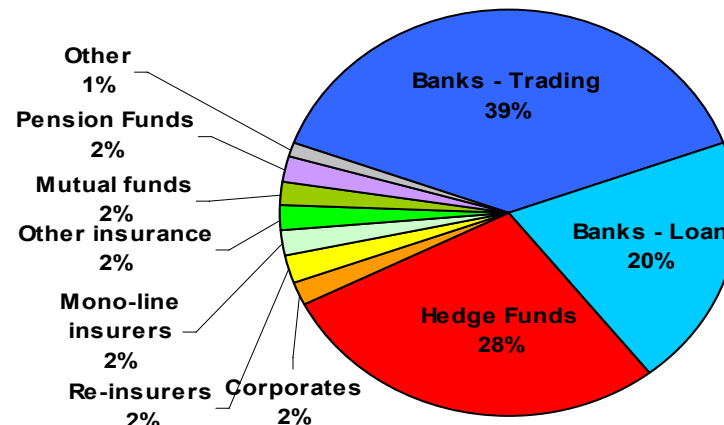


Source: BBA Surveys

Buyers of Protection 2003/04 (Left) versus 2005/06 (Right)



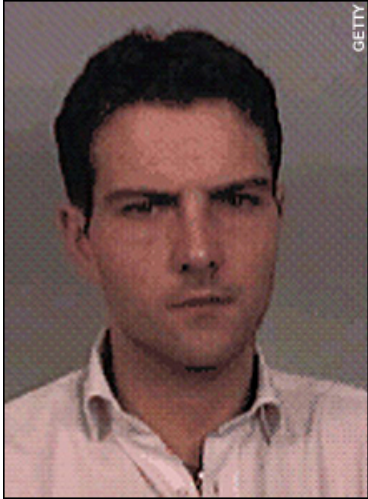
Source: BBA Surveys



Source: BBA Surveys

Million-Dollar Men? Try Billion+

Jérôme Kerviel – 7BN



Brian Hunter – 6.7 BN



John Meriwether – 5.9 BN



Yasuo Hamanaka – 2.6 BN



Heinz Schimmelbusch – 1.4 BN



Nick Leeson – 1.3 BN

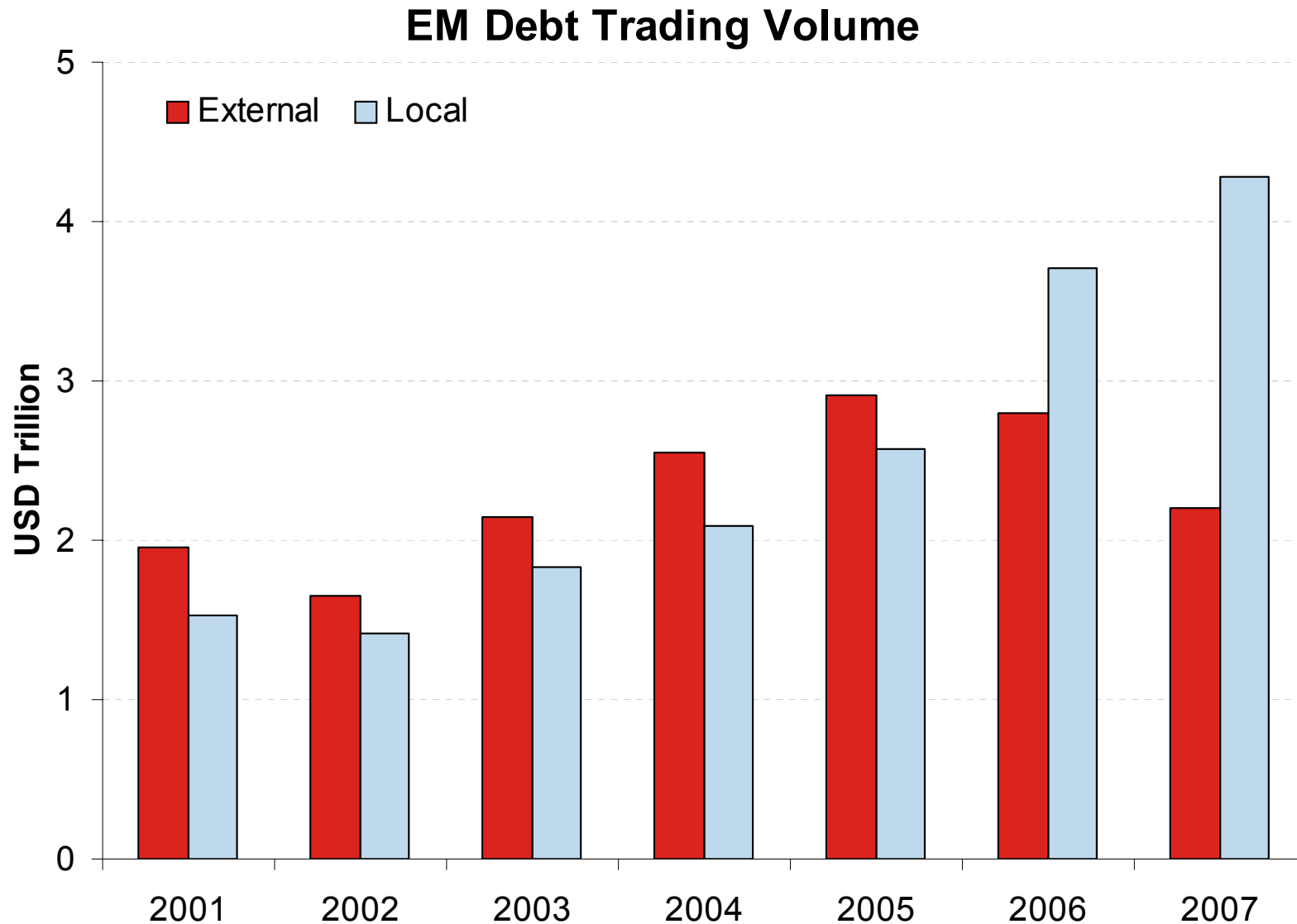


Credit Derivatives keep growing in EM markets despite recent market events

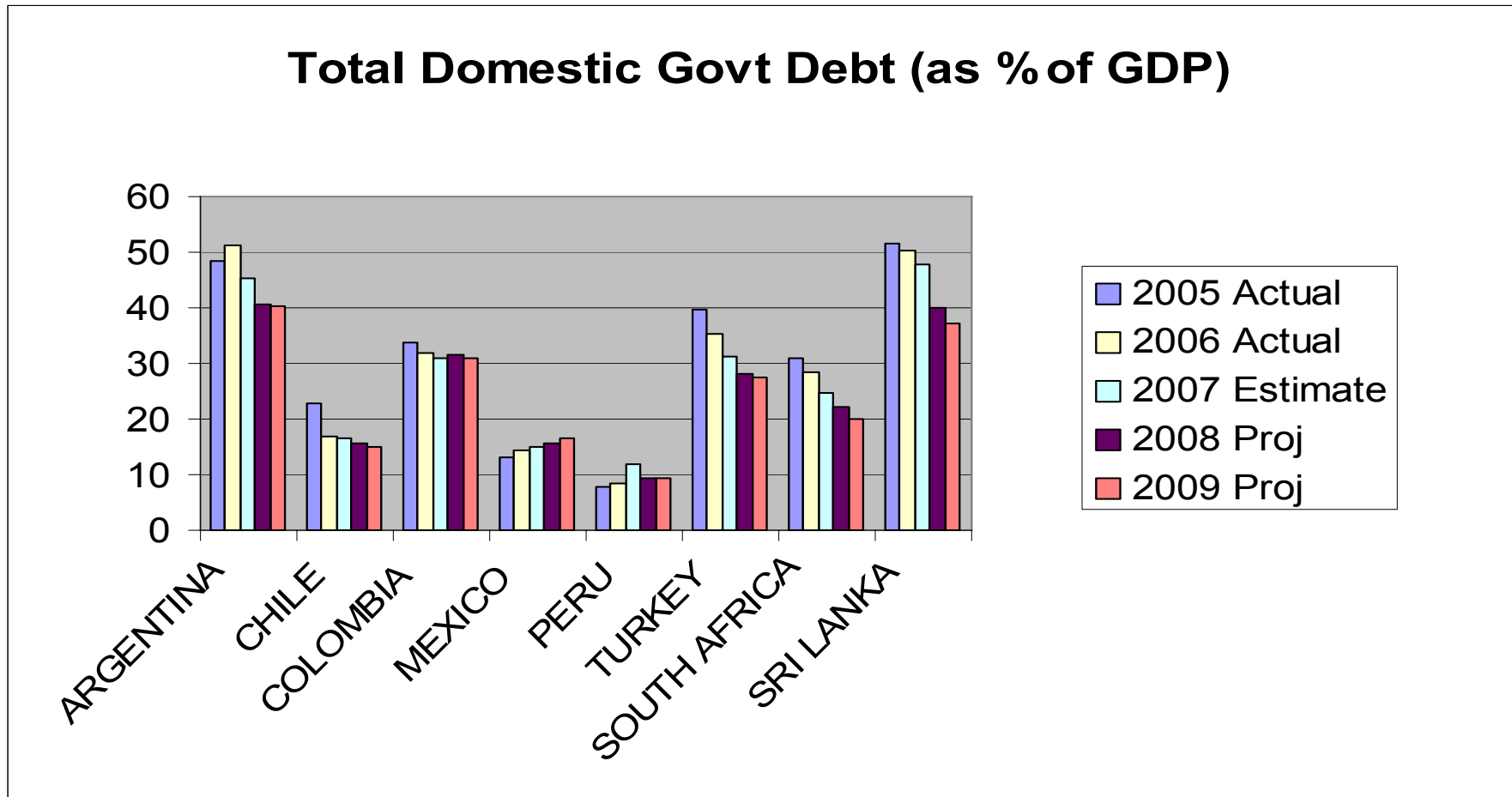
- Most Credit derivatives markets have become transparent and liquid
 - CDX/iTraxx indexes are the most liquid instrument in the credit markets
 - Single Name CDS on EM Sovereigns continues to expand
 - Several countries looking to adapt and design ways to incorporate local jurisdictions to the growing Credit Derivatives world
- Broader investor base
 - Cash-based credit investors have become active in structured credit products in addition to the traditional types of buyers and sellers of default protection
- Liquid markets in credit default indexes (e.g CDX/iTraxx), portfolio products (single-tranche CDOs), credit volatility and hybrid credit products allow investors, corporates and financial institutions to expand the range of investment and hedging strategies

Local Debt Markets: A quick look at Selected Markets

Evolution of EM Debt Trading Volume (External and Local)

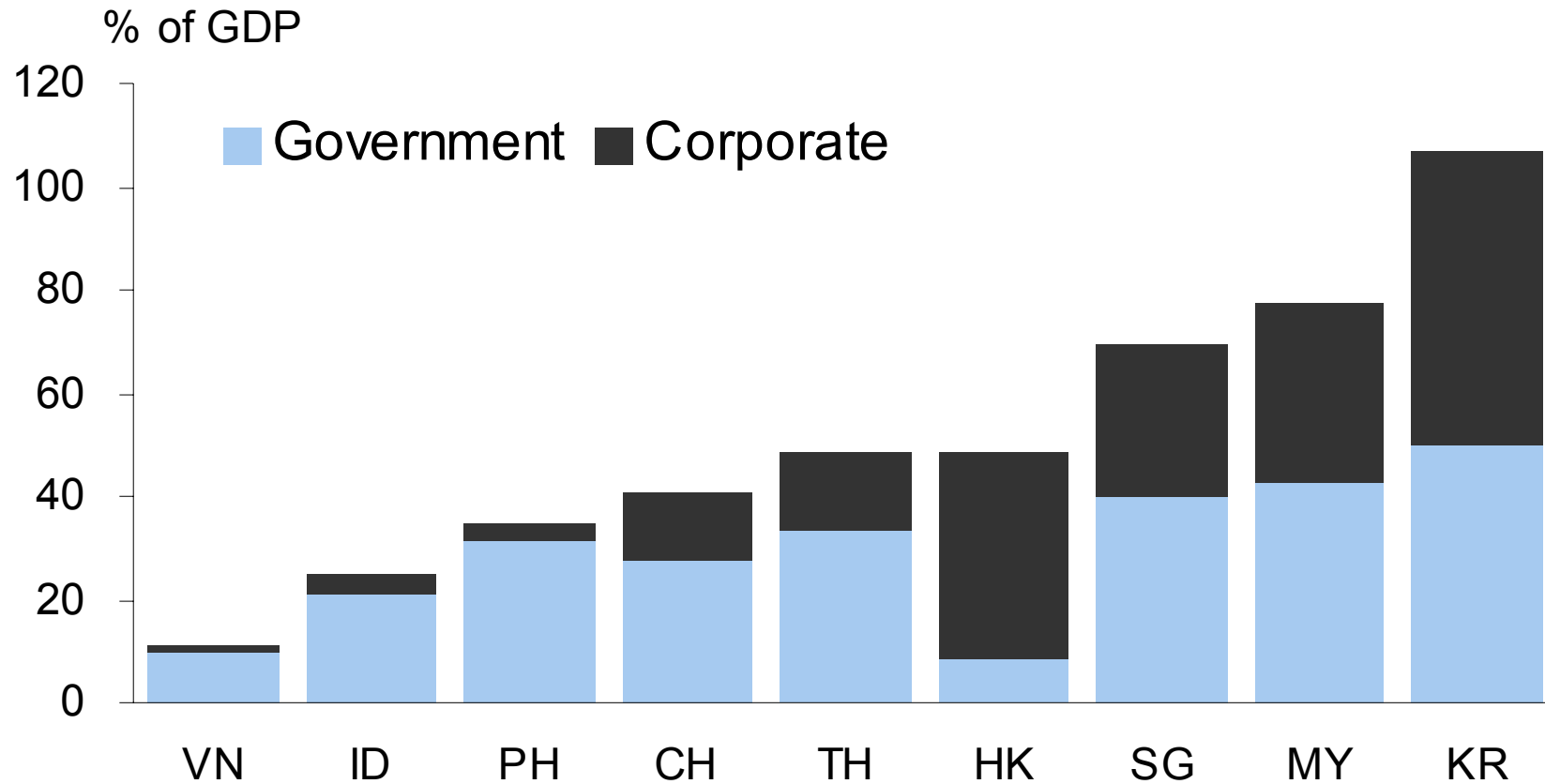


Total Domestic Government Debt, as percentage of GDP



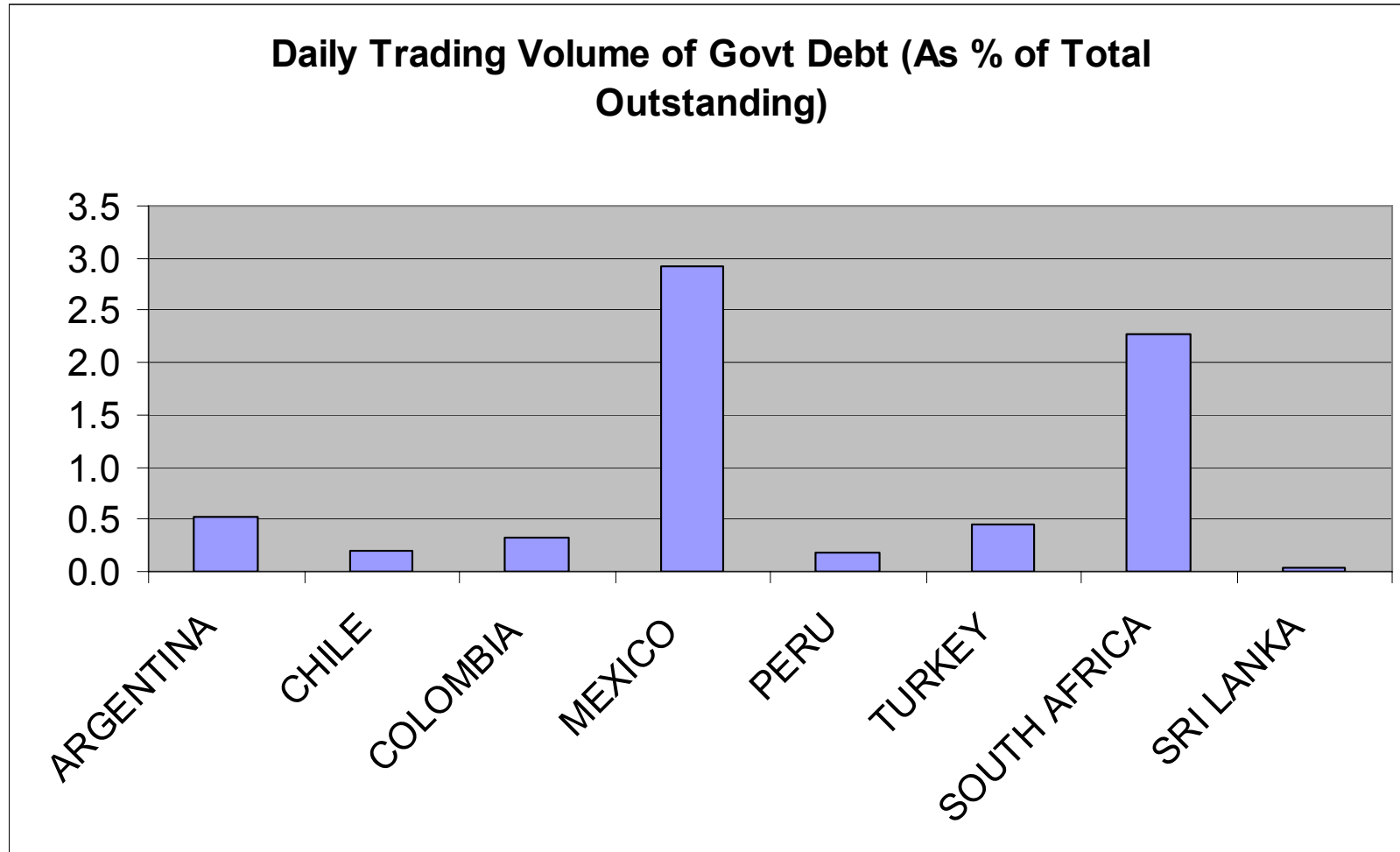
Source: EMTA, Citigroup

Total Domestic Government and Corporate Debt, as Percentage of GDP, for Asia



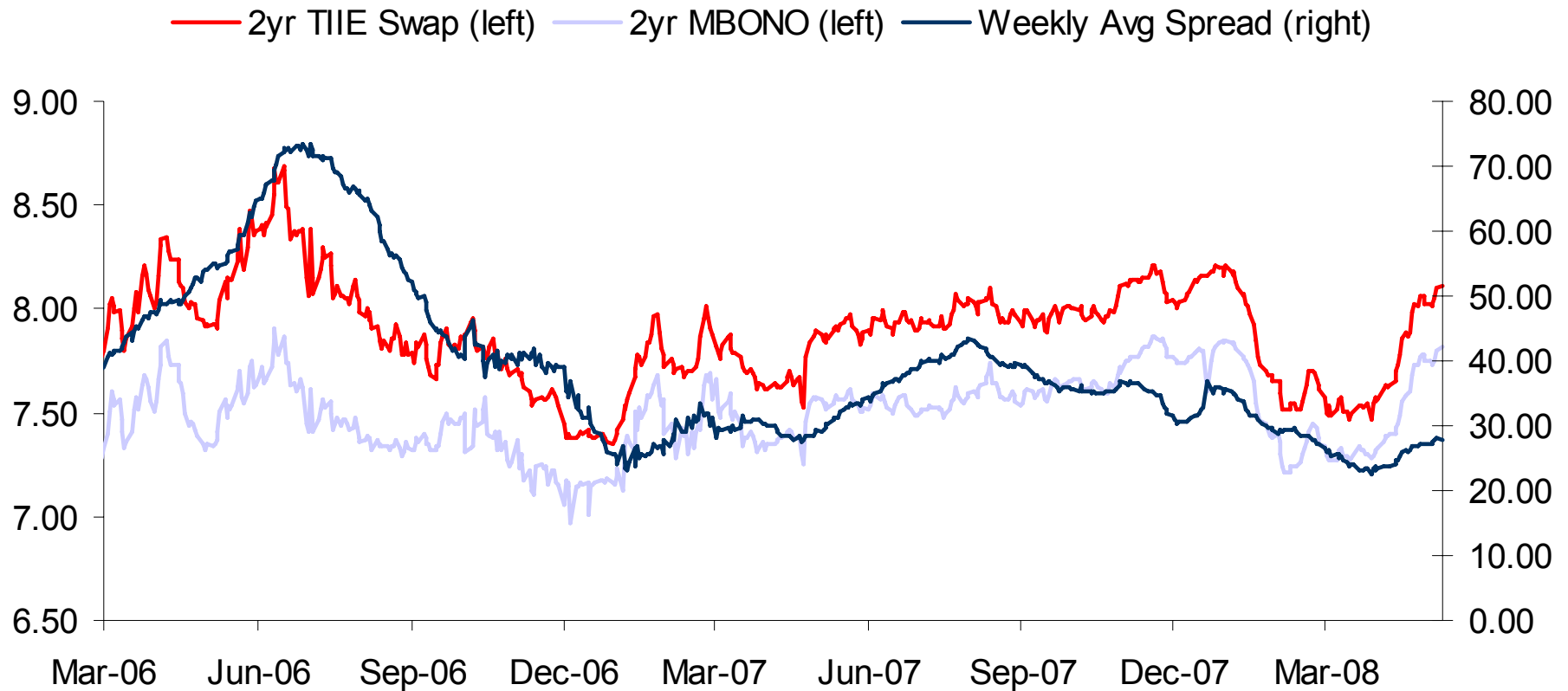
Source: Citigroup

Daily Trading Volume of Government Debt for Selected Countries



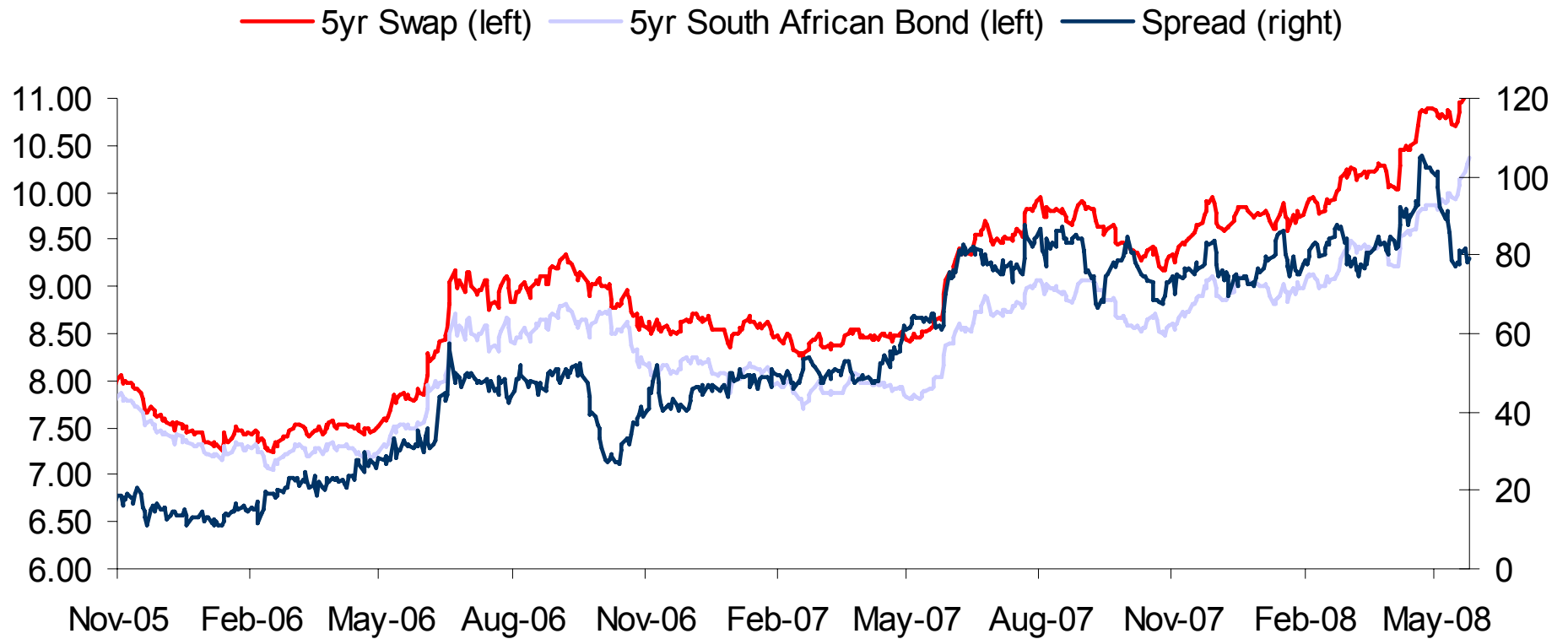
Source: EMTA, Citigroup

Mexico – Swap Spread has Decreased Over Time



Source: Bloomberg

South Africa – Swap Spread Tends to Come Down at Extreme Levels



Source: Bloomberg

Myths and Realities of Local Debt Market Development

Eight Myths and Realities of Debt Market Development

- **Myth 1:** Trading more products on exchanges will reduce systemic risk— a proposal even making the rounds in reference to US markets in the aftermath of problems in US structured product markets
- **Reality:** Using exchanges as entities that can help contain risks in OTC derivative transactions and the use of CCPs to better allow for netting in OTC credit derivative transactions can make sense if carefully designed—but this is not the same as forcing all trading onto exchanges (e.g. BMF in Brazil or India CCPs).
- **Myth 2:** Uniform valuation standards across all forms of institutions for like contracts will enhance debt market development.
- **Reality:** This is very unclear. One example would be the area of contractual savings institutions that naturally can take advantage of the liquidity risk premium by virtue of having either no actual liabilities (i.e. pure defined contribution plans) or hybrid or defined benefits with very long term liabilities. Some of these investments may not even qualify for level 3 (de facto model valuation) in the portfolio and should be classified as hold to maturity and not mark to market. Very long duration government debt may not always be marketable. Hence treating
- **Myth 3:** Entry of foreign capital into local markets breeds much greater instability and increases volatility—especially of capital flows
- **Reality:** This topic is far more subtle than is often indicated. We recently reviewed the impact of large shocks (e.g. credit shock, inflation or recession scares etc.) on our access book (local debt in the hands of foreign investors in exotic countries). We did not see a massive run-off. Larger impacts have been felt in countries with bad policies in an idiosyncratic sense and that are more vulnerable, where liquidity is greater—e.g. have large negative basic balance positions and/or very weak fiscal and monetary policy regimes.

Eight Myths and Realities of Debt Market Development

- **Myth 4:** CCPs concentrate too much risk and impede competition so one either does not want them at all or one needs multiple CCPs to assure more competition among them and less concentration of risks in one entity.
- **Reality:** The business aspect of a CCP needs to be taken carefully into account—who will invest and for what purpose. Models abound here –and the ownership structure of an efficient CCP need not be only private. Market participants can and should have an interest in seeing to it that a CCP is properly capitalized and more importantly has proper staffing and expertise—that is very related to proper governance. The issue of standards and best practices can come into play here—to better address this myth via sound technical advice.
- **Myth 5:** Local debt markets can develop well without any significant local market investors.
- **Reality:** This argument is overstated and is often used in the case of relatively small economies. In most economies a diversified set of holders including foreign entities can be positive. There are many reasons why having some local investor presence can be supportive and stabilizing. There are of course always issues that revolve around stress to major foreign banks that have large operations in an emerging market—so we refer here to wholly locally owned and operated institutional investors.

Eight Myths and Realities of Debt Market Development

- **Myth 6:** Money markets, monetary policy and exchange rate policy do not matter for local debt market development.
- **Reality:** Just not true. Money markets are central—yet still an area in many frontier markets where there is still need for extensive reforms. Even in China challenges remain in this area. Iti
- **Myth 7:** There is no need for a primary market or primary dealers (PDs) for a market to develop.
- **Reality:** Despite the fact that one can argue that PDs create a lack of competition there are various reasons why they can play a proper role if one is disciplined in trying to measure PD performance a task that is difficult. This said –primary markets even if they involve auctions to a wider array of agents are essential especially for debt management purposes.
- **Myth 8:** Debt Managers need not concern themselves with exposures of market participants—it is a prudential matter
- **Reality:** Country after country ignores the implications of rapid and complex exposures of investors and does not demand information and despite offshore exposures more regulatory cooperation/coordination across borders is needed given relative sizes of exposures on and offshore

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- Primary dealer for banks in Hong Kong, India, Indonesia, Malaysia, Philippines, Singapore, Taiwan, Thailand & Vietnam
- Most comprehensive platform in Asia—presence in 14 countries
- AP EMCT has 10 members solely dedicated to local currency trading
- Economists and strategists developing new trading strategies for Asian Credits

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- Primary dealer for banks in DRC, Egypt, Kenya, Nigeria, Uganda, Tanzania & Zambia
- Most comprehensive platform in Africa—presence in 10 countries
- CEEMEA EMCT has -- members solely dedicated to local currency credit trading
- Economists and strategists developing new trading strategies for African Credits

Citi Local Presence in Latin America



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- Most comprehensive platform in Latin America—presence in almost every country
- EMCT has 6 members solely dedicated to local currency / local credit structuring and trading
- Economists and strategists developing new trading strategies for Credits
- Structuring and trading presence in local offices that leverage synergies and flows

Leading the EM Trading Strategy Team



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