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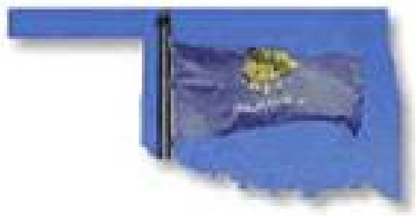

Oklahoma State Pension Commission

Emerging Markets

November 13, 2013

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Agenda

Recent History of Emerging Markets

Post Financial Crisis – The Case for EM

What Happened?

What Now?

Outlook

- **Emerging Market countries have been an engine of global growth for the last several decades**
- **Growth outlook for these countries, while subdued relative to the prior decade, is still quite strong and well above developed countries**
- **The long-term shift towards emerging markets is likely to continue**
  - Global output
  - Political force
- **That shift is likely to be accompanied by significant volatility**
  - As it has been historically
- **Recent challenges regarding capital flows have the makings of balance of payments/currency crises in certain countries**
  - These challenges could manifest into full fledge crises
  - If so, they are likely to get much worse before they get better
    - Further currency depreciation, equity losses, and economic contraction

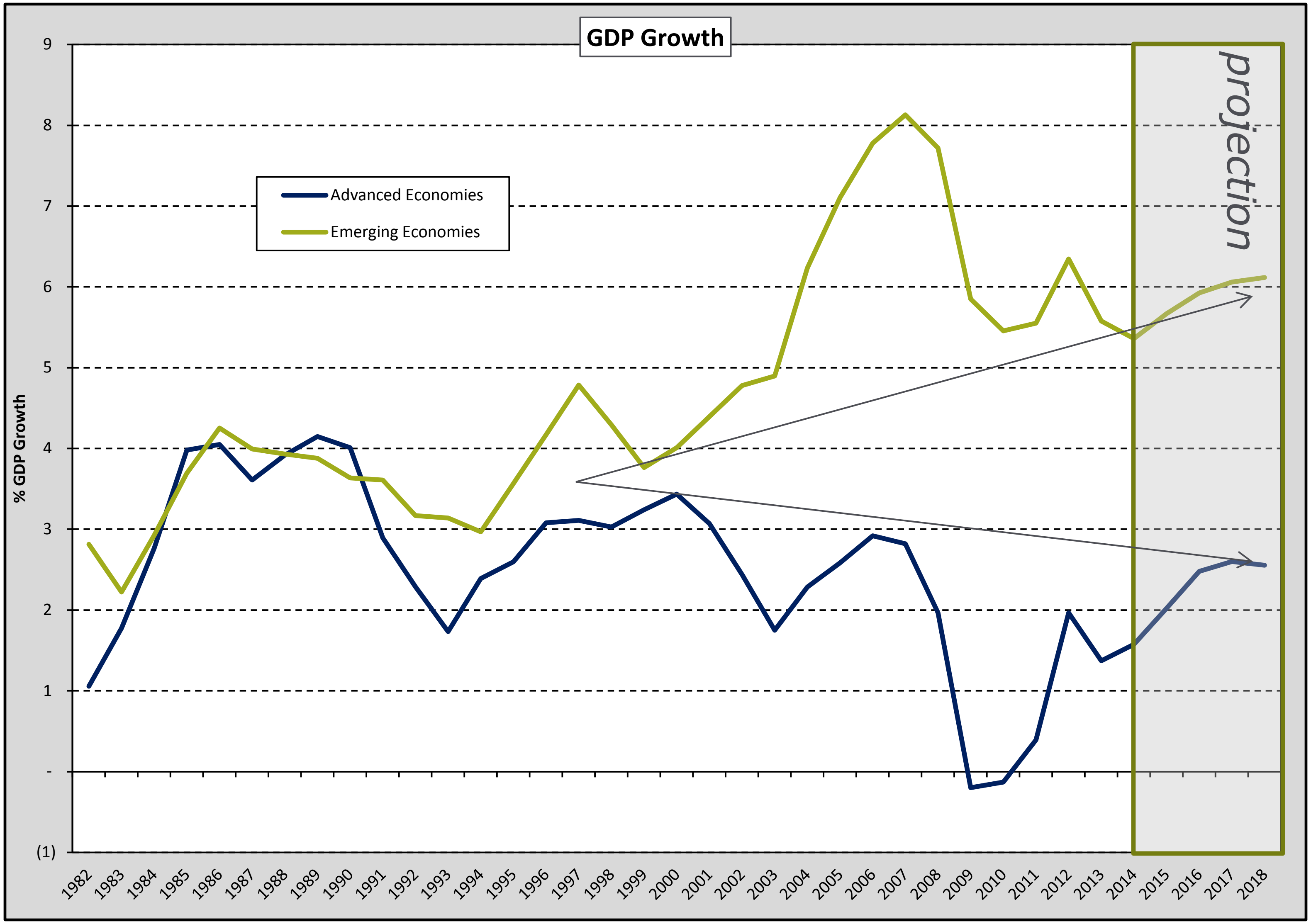
Recent History Of Emerging Markets

Booming Emerging Markets Over the Last Two Decades

- **In the 1990s, a confluence of political and market drivers created dynamics that positioned emerging economies for tremendous economic growth**
  - Economic liberalization and political will to support growth
    - Focus on growth and development in China
    - Fall of communism in Eastern Europe
  - Developed countries in strong financial position
    - Strong growth led to willingness to run current account deficits
    - Not threatened by emerging countries and willing to engage in trade
  - Advancing technology
    - Efficient management of supply chains
    - Lower shipping costs
  - Low labor costs and undervalued emerging currencies
    - Emerging markets become major players in global trade
  - Rising commodity prices
    - Further tailwind to commodity-rich, emerging countries

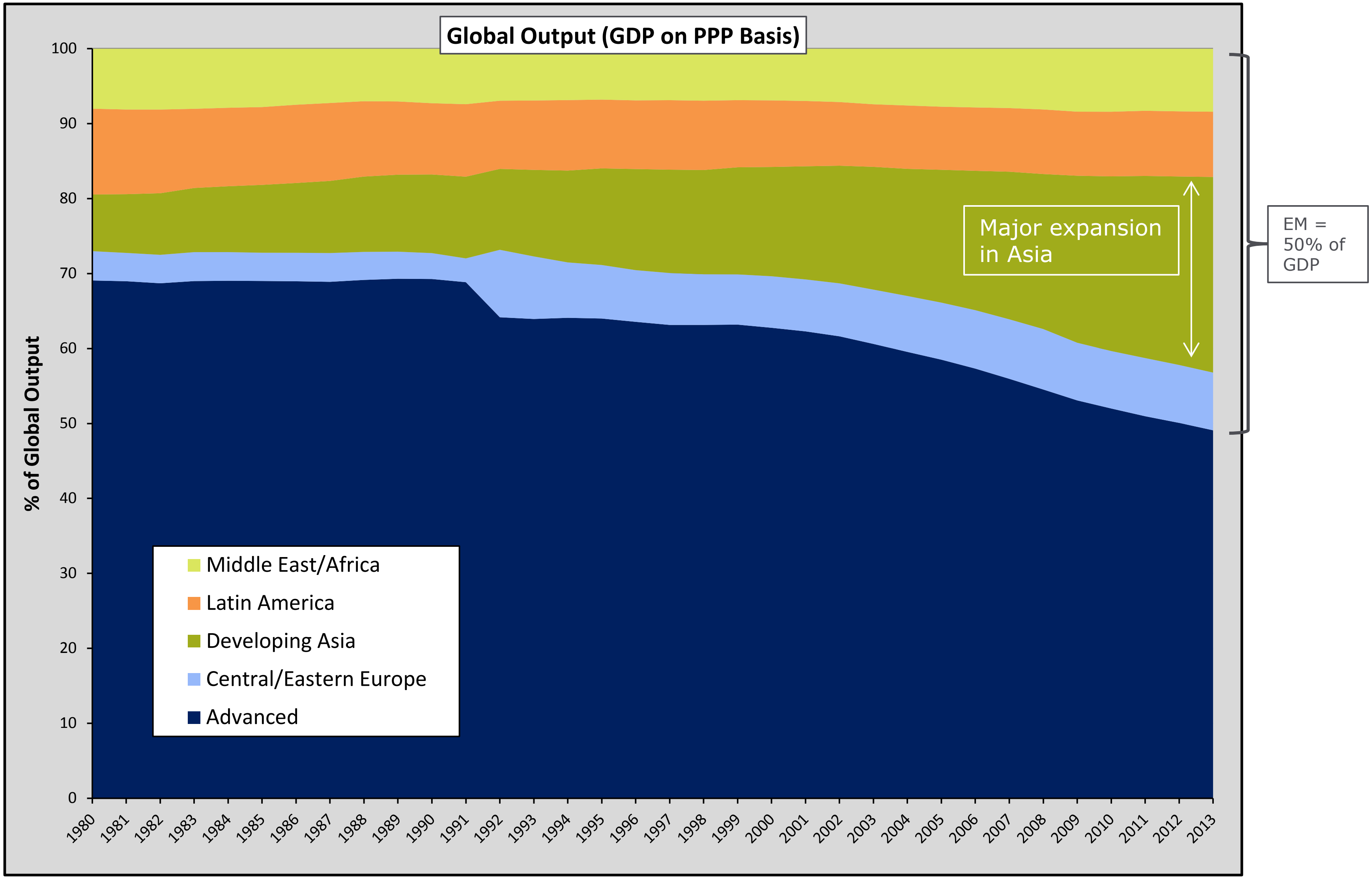
- **Collectively, emerging markets became the engine of global growth**

Global Growth Fueled By Emerging Markets Over the Last Two Decades



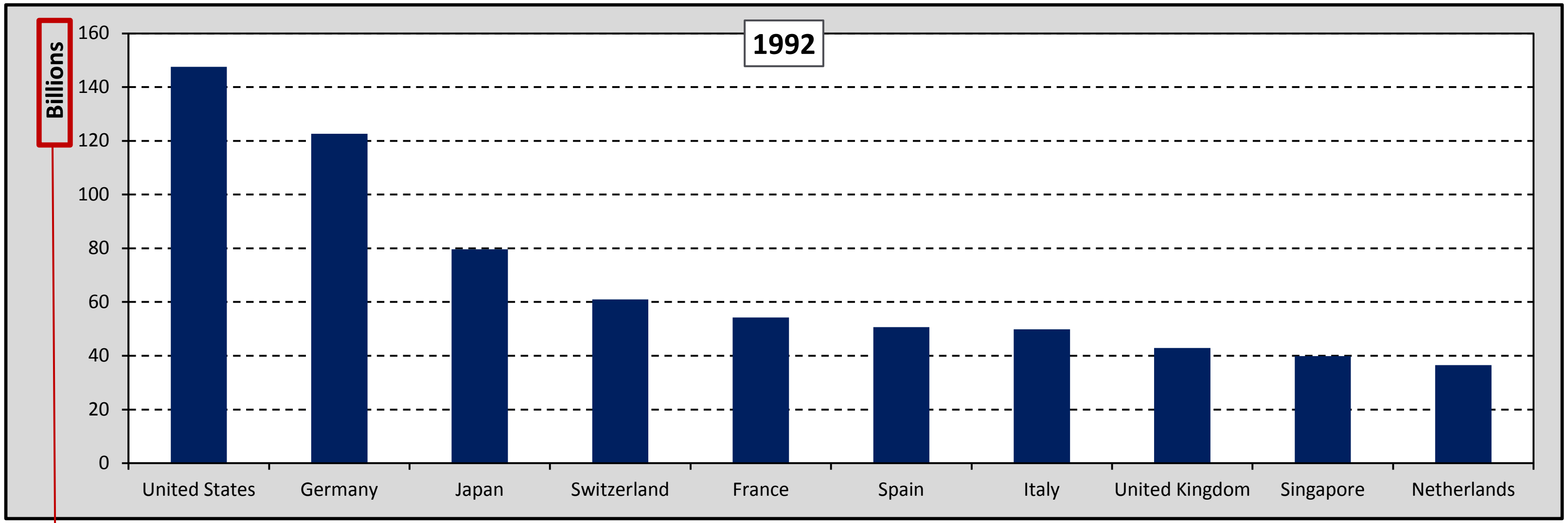
Source: IMF

Global Economic Rebalancing – Emerging Economies Now Half of Global Production

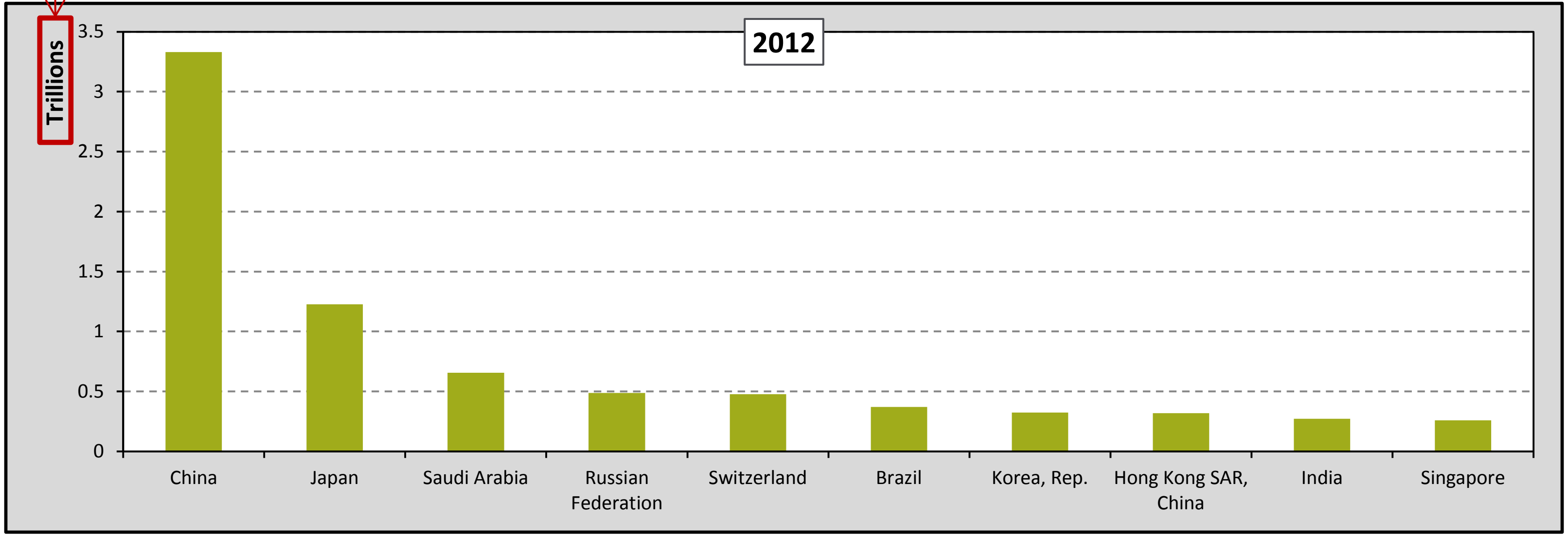


Source: IMF

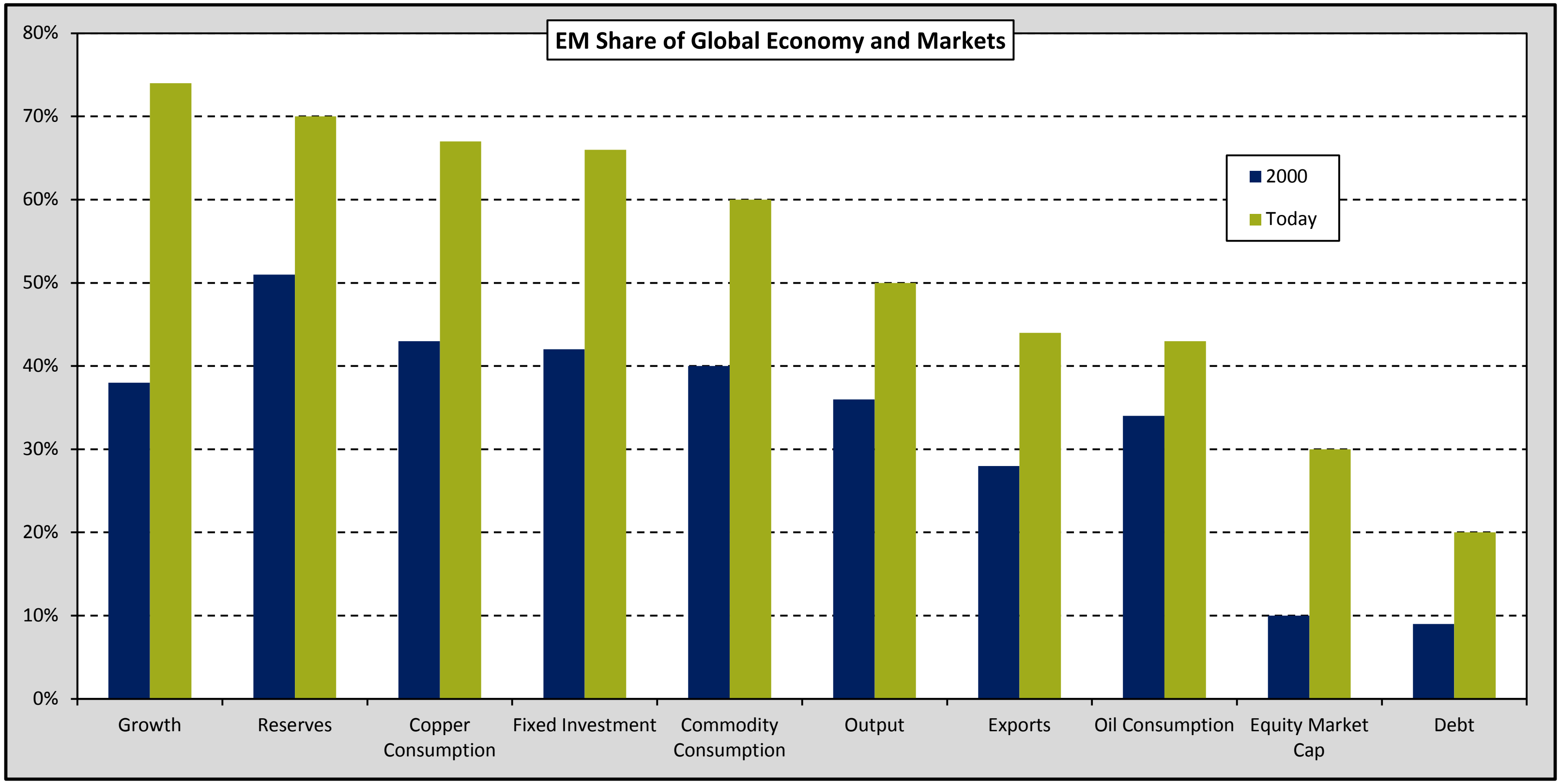
Total Reserves – Top Ten Countries (not including Sovereign Wealth Assets)



Source: World Bank



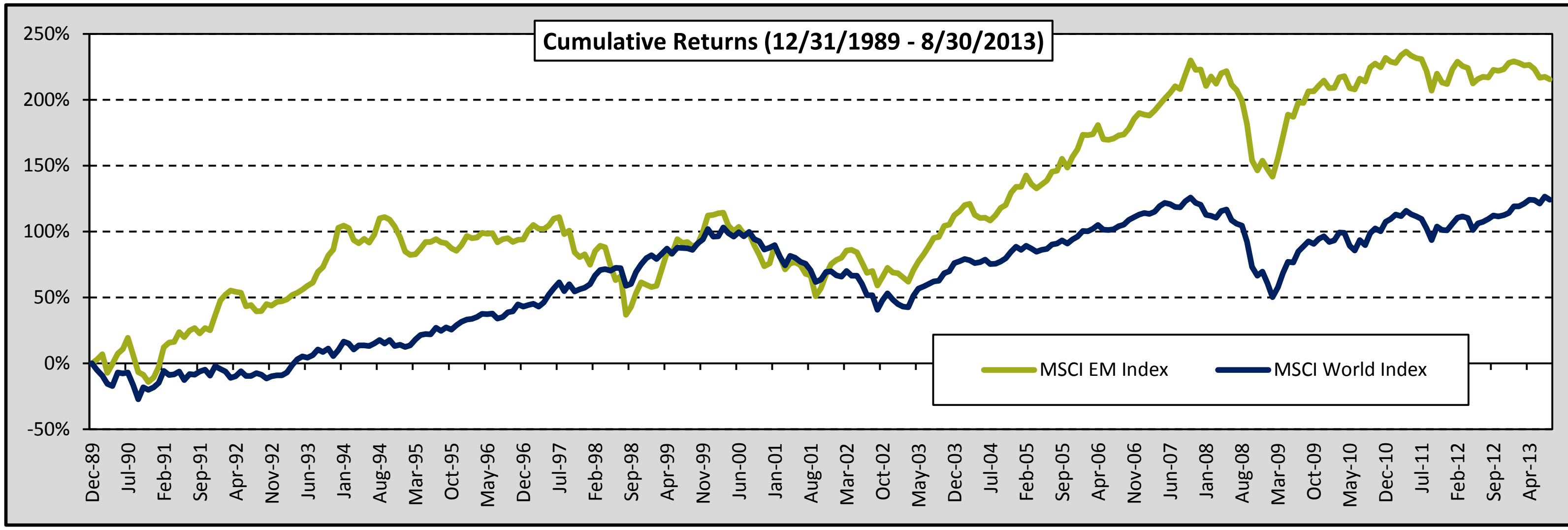
Source: World Bank



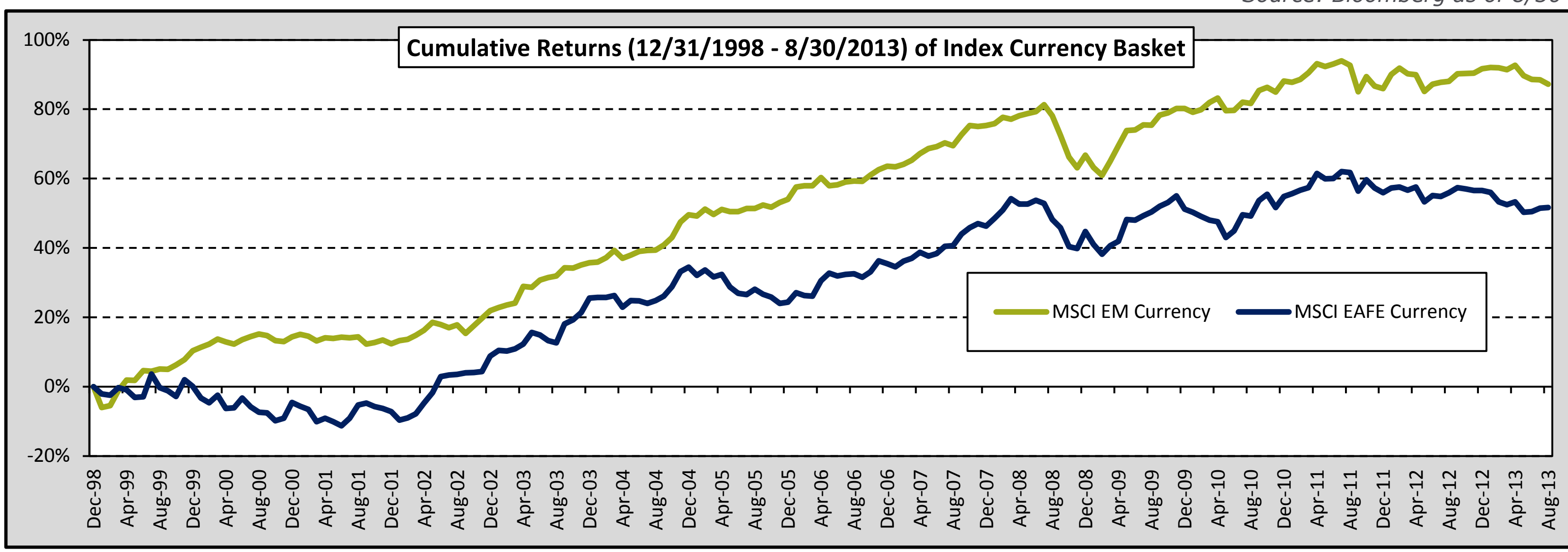
Source: Bridgewater

- **Emerging markets became major trading partners with the developed world**
  - Accumulation of assets (reserves)
  - Target of investment (Fixed investment, Equities, Debt)
  - Fuel for internal growth and development (Copper, Commodity, Oil consumption)

Financial Markets Have Participated Favorably in This Shift



Source: Bloomberg as of 8/30



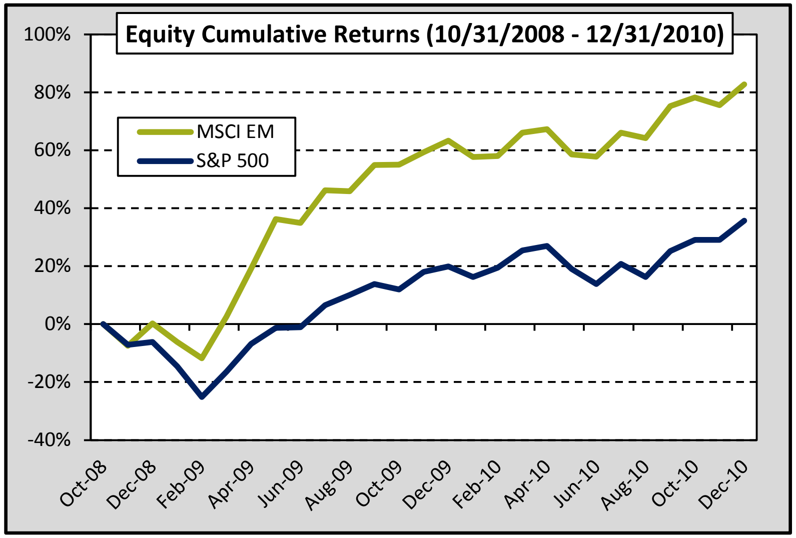
Source: Bloomberg as of 8/30

Post-Financial Crisis – The Case for EM

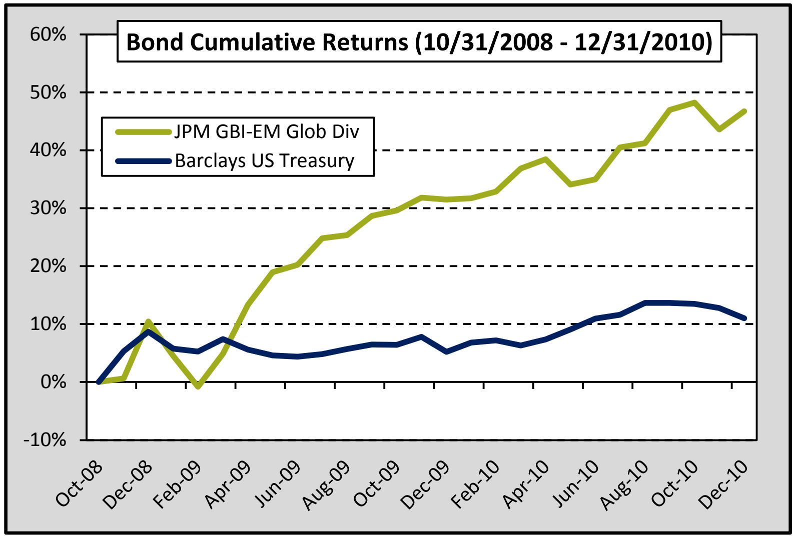
- **Like the rest of the world, Emerging Markets were caught in the liquidity squeeze of 2008**

- **But, the subsequent recovery was powerful**
  - Emerging countries faced less challenging fiscal and debt situations
  - Economic growth returned more rapidly
  - Financial markets responded with dramatic rallies across stocks and bonds

- **Capital followed as investors sought the higher returns of fast-growing and less debt-burdened emerging markets**



Source: Bloomberg



Source: Bloomberg

2011

- **Examine portfolio structure – the implementation within each asset class – for example:**
  - Top-down strategies that could benefit from continued macro markets
  - Long/short and/or quality-focused managers within the equity allocation
  - Fixed income structured into objective-driven hedges and/or global unconstrained strategies
  - International equity to include small cap developed and emerging
    - Accessing growth of the emerging consumer

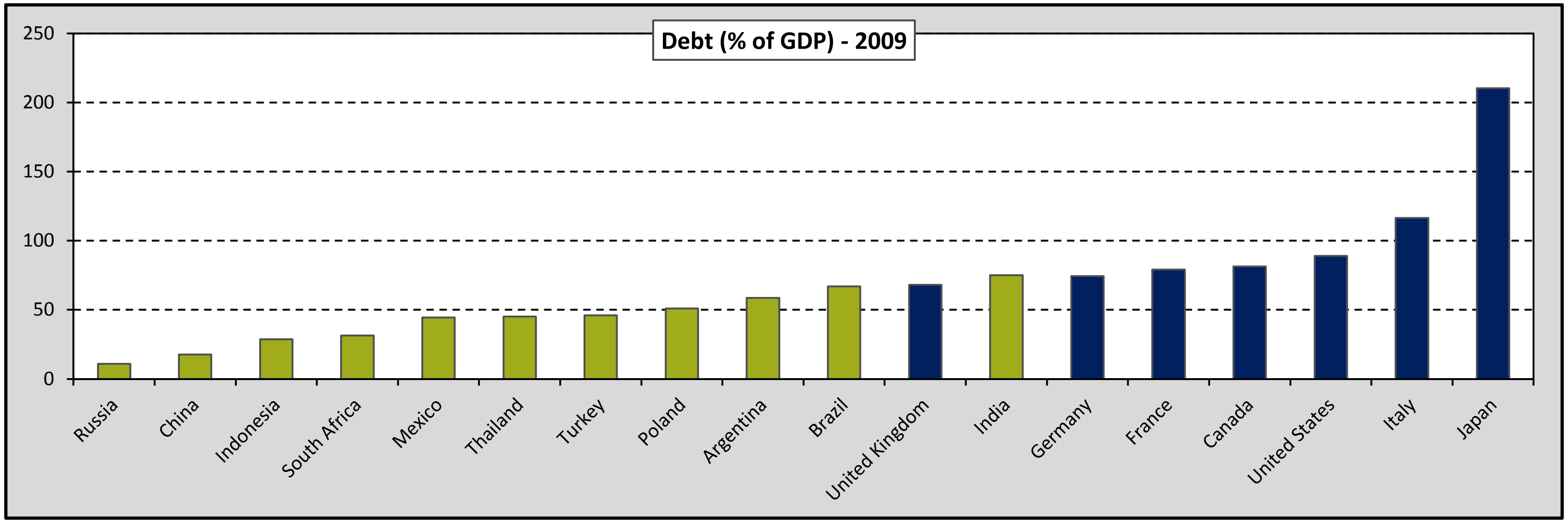
2012

- **Global economic leadership expected from emerging countries**
  - Higher relative investment performance expected as part of this transition
  - Owners of "stuff people want" and increasingly home of "people wanting stuff"
- **Continue to increase emerging markets exposure**
  - Typical US institutional allocation still under market-capitalization weighting
  - While potential for slowdown has increased, long-term structural themes for outperformance remain in place across equity, debt, and currencies

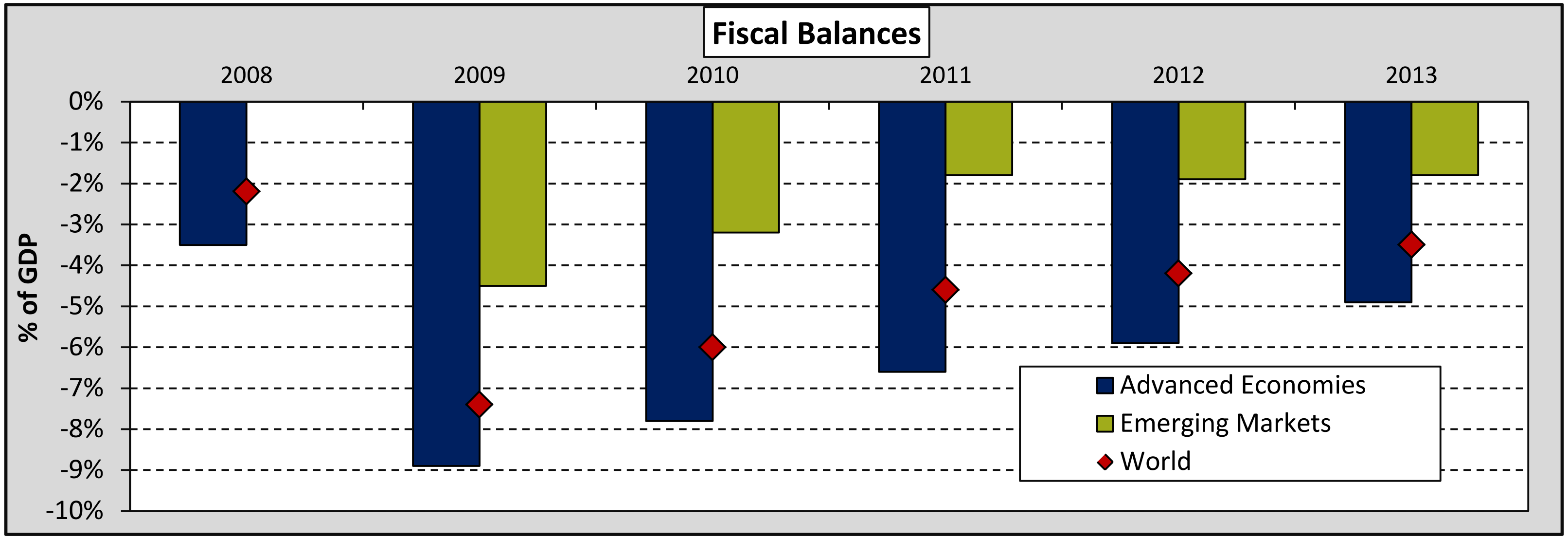
2013

- **Continue building allocations in emerging markets and real assets**
  - Developing countries consistently demonstrate superior fundamentals to G7 markets
  - Most investors remain vulnerable to higher inflation, with limited real assets exposure

Lower Debt Levels and Better Fiscal Situations in Emerging Market Countries

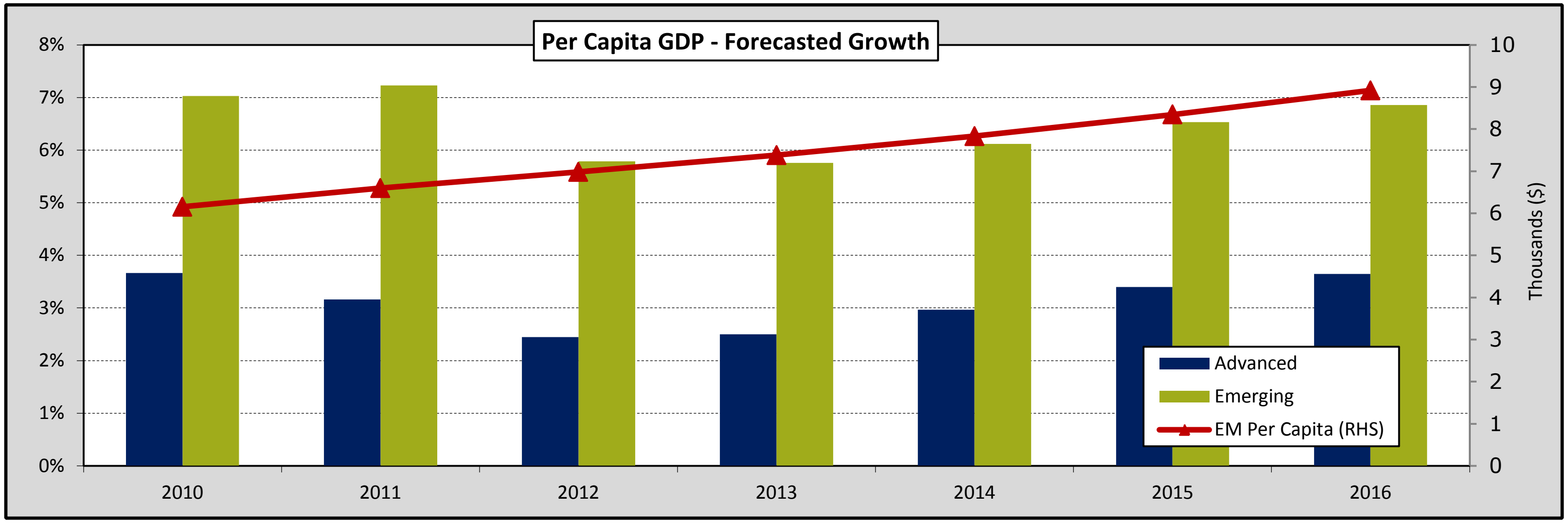


Source: IMF



Source: IMF

Emerging Markets – Driving Global Growth Through a Developing Middle Class



Source: IMF, NEPC 2012 Assumptions & Actions

- **Emerging markets present high risk-adjusted returns for long-term investors**

- **Despite negative performance for the broad market in 2011, domestic-focused sectors (consumer staples, discretionary, etc.) were more defensive**

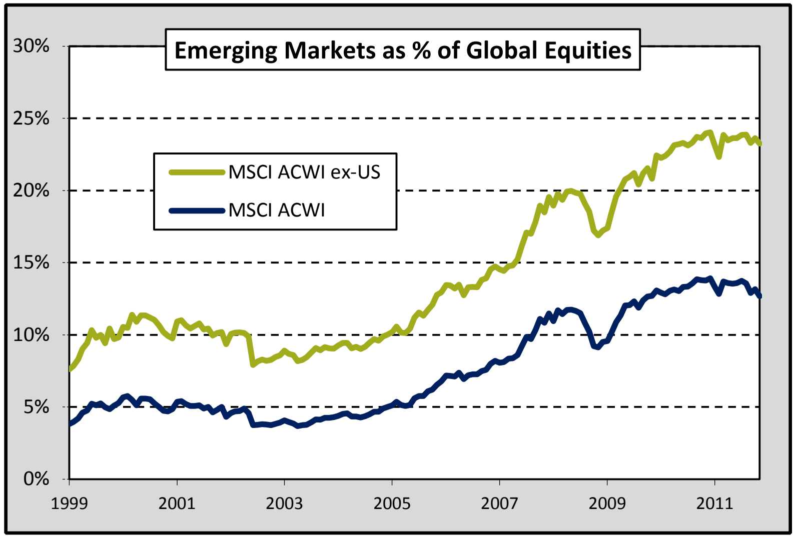
- **Tremendous production expected to materialize**
  - Per capita GDP expected to increase by approximately $2,300 by 2016
  - The BRIC countries alone have a population of 2.8 billion
    - Almost $6.5 trillion of additional production

Relative Emerging Markets Exposure – Investors Are Generally Underweight EM

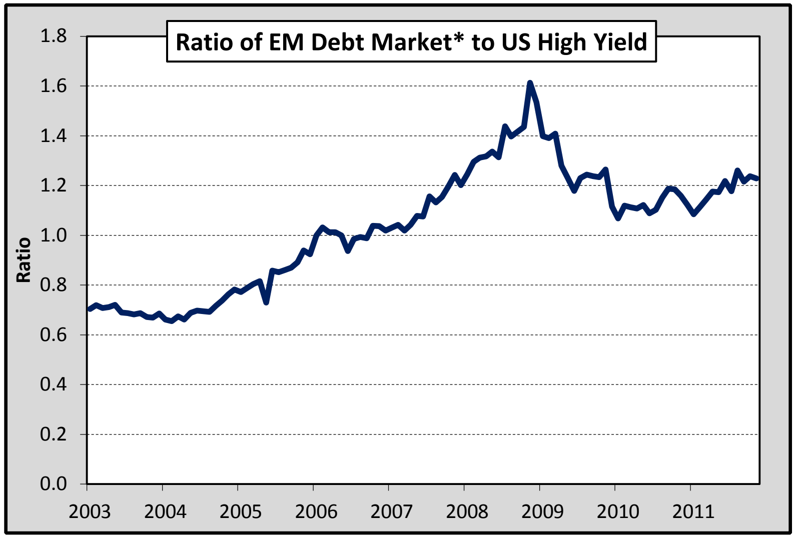
- **Investors generally remained underweight emerging markets**

- **Consider increasing exposure to equities, debt, and currencies to equal or above market cap weightings**
  – 50% equity allocation requires 7% emerging equity allocation simply to equal global market weights
  – Emerging debt market has actually grown larger than US High Yield
    - Consider increasing portfolio allocations to at or above High Yield targets

- **Recent performance below 5-7 year expectations provides reasonable buying opportunity**



Source: FactSet

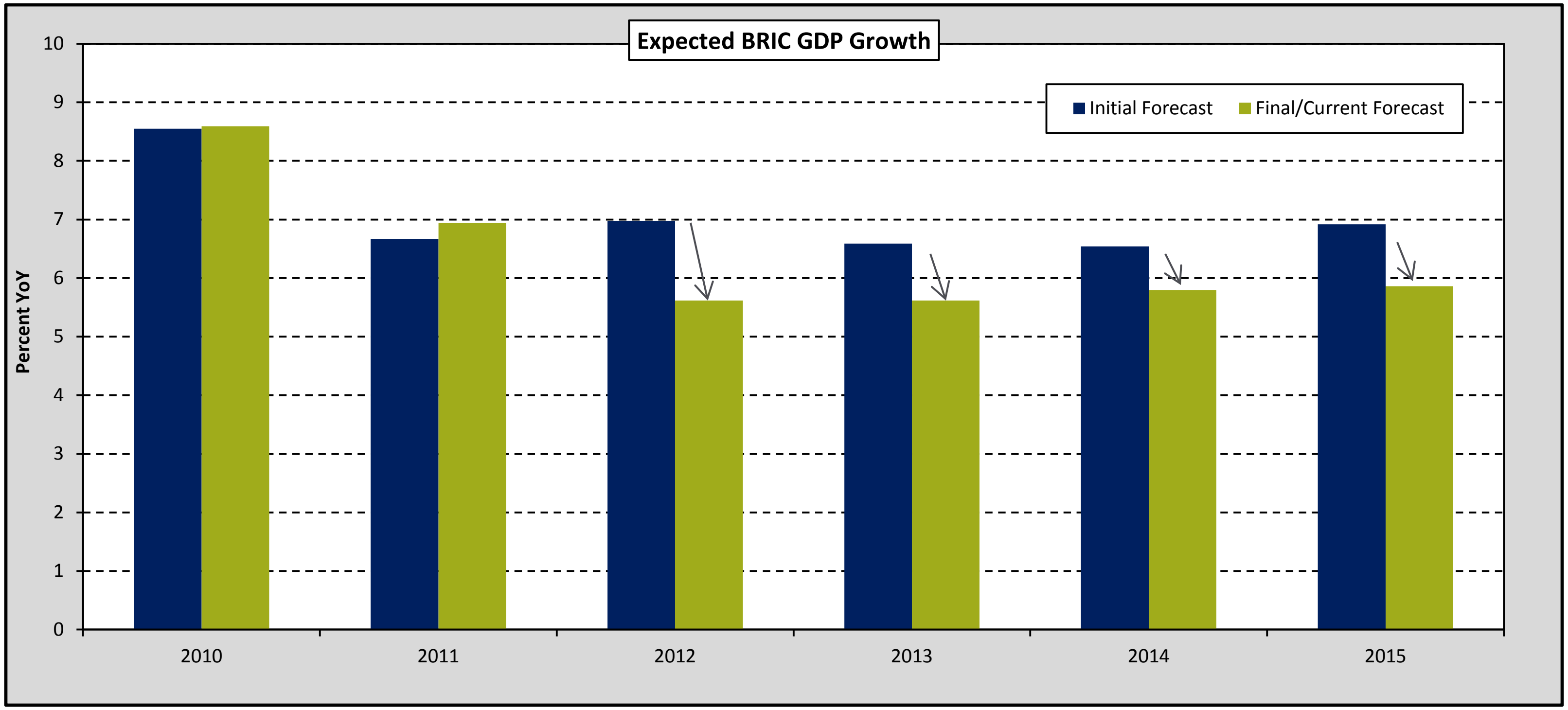


*Source: Barclays, JP Morgan *EM Local + External Markets*

Source: NEPC 2012 Assumptions & Actions

What Happened?

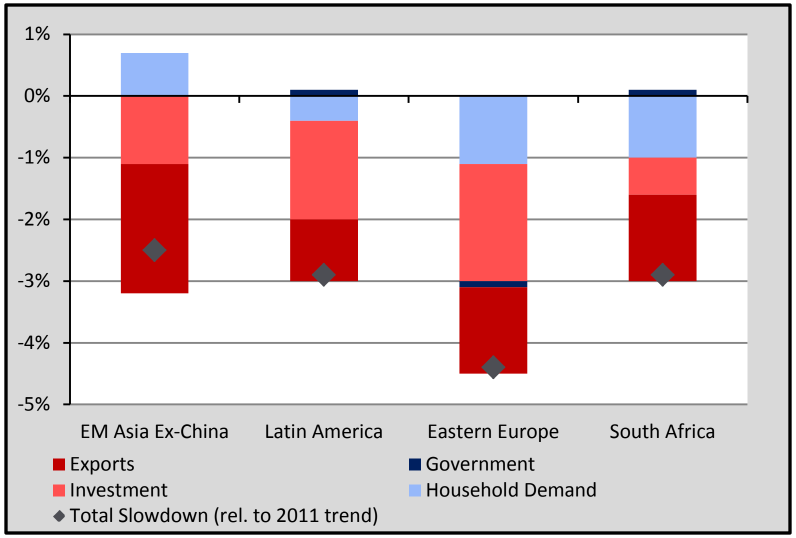
Economic Growth – Below Expectations But Still Strong



Source: Bloomberg

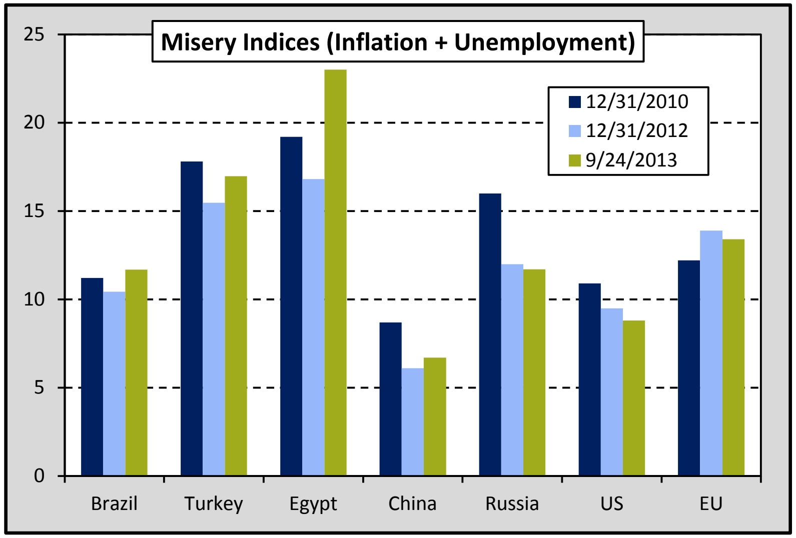
- **Emerging market growth disappointed relative to bullish expectations**
- **Future forecasts have been adjusted downward accordingly**

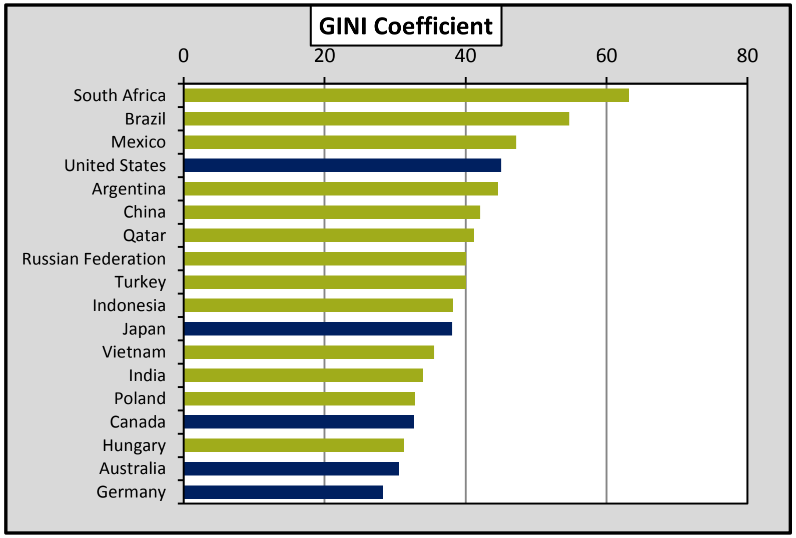
- **Lower developed world growth has led to less demand for goods produced in emerging markets**
- **In addition, wage increases and currency gains over the last decade have eroded much of EM's competitiveness advantage**
- **Much of the prior decades growth boom was helped by significant investment**
  - Investment into emerging markets has been much more constrained
- **Emerging markets must adapt to less investment as part of total growth**
  - More growth expected to come from domestic consumption



Source: Bridgewater

Source: Bloomberg



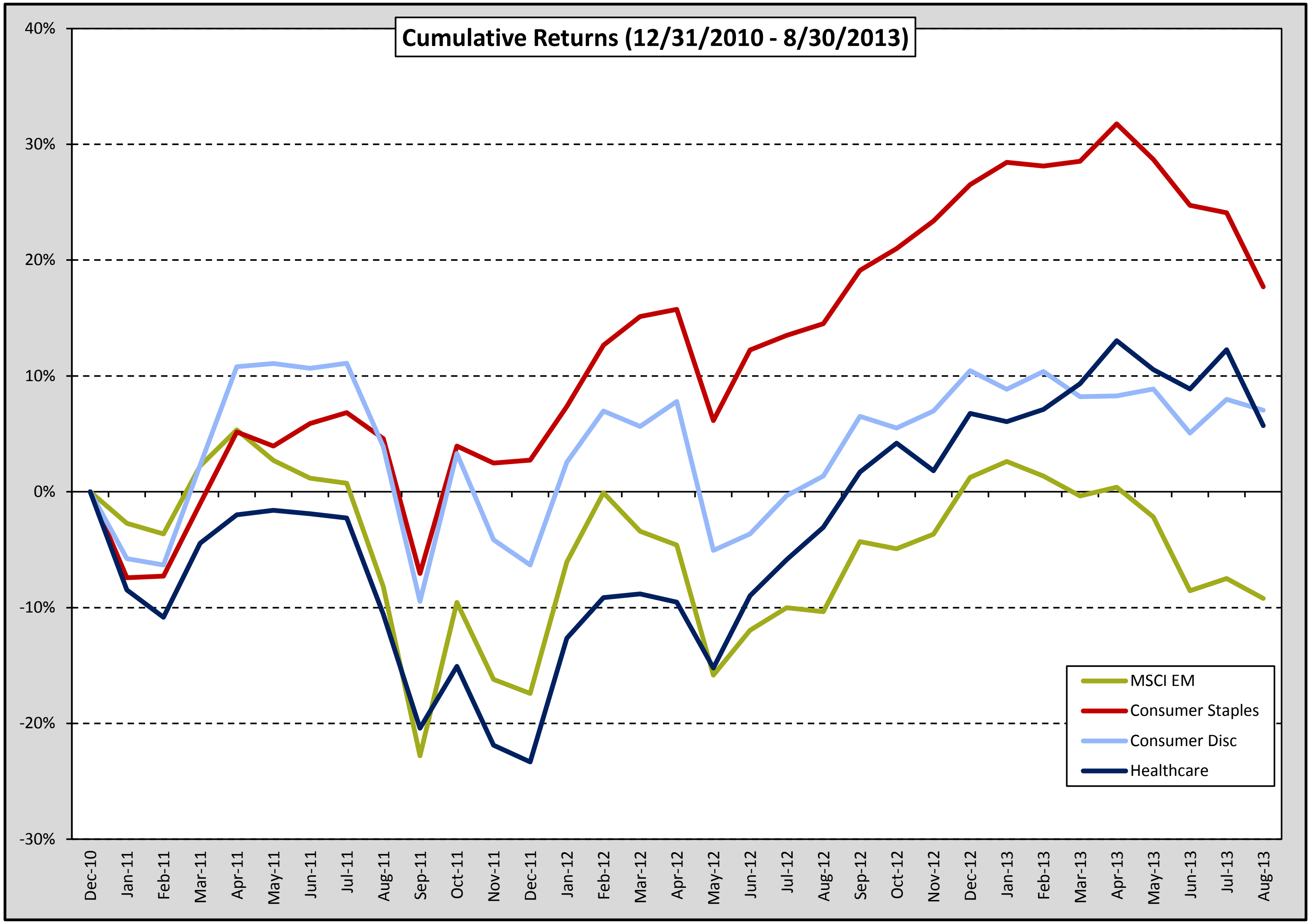


Source: Bloomberg

Source: The World Bank

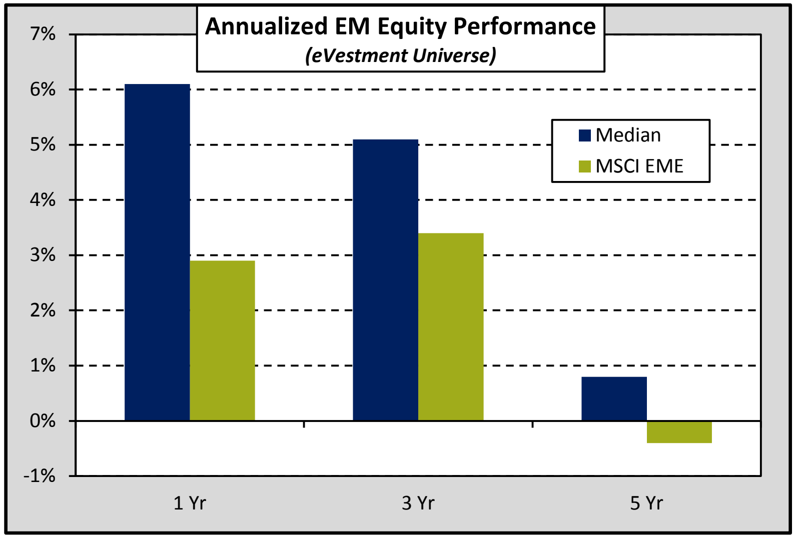
- **Developed economies have shown modest signs of stable recovery**
  - Many emerging countries have reversed course in 2013, contributing to a wake of social unrest
- **Though many emerging countries are experiencing the positive prospect of a middle class expansion**
  - Expansion is generally occurring within social structures based on elevated income inequality

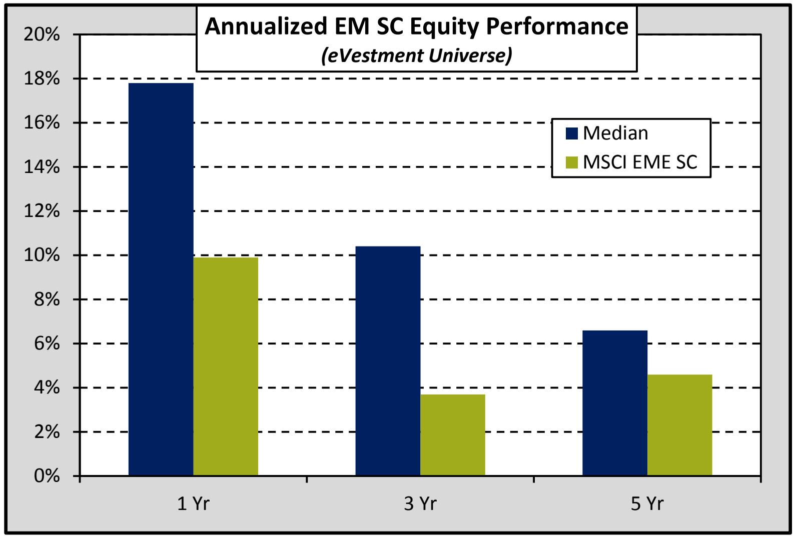
The Consumption Story Has Worked



Source: Bloomberg

EM Universe Performance – 6/30





Source: eVestment Alliance

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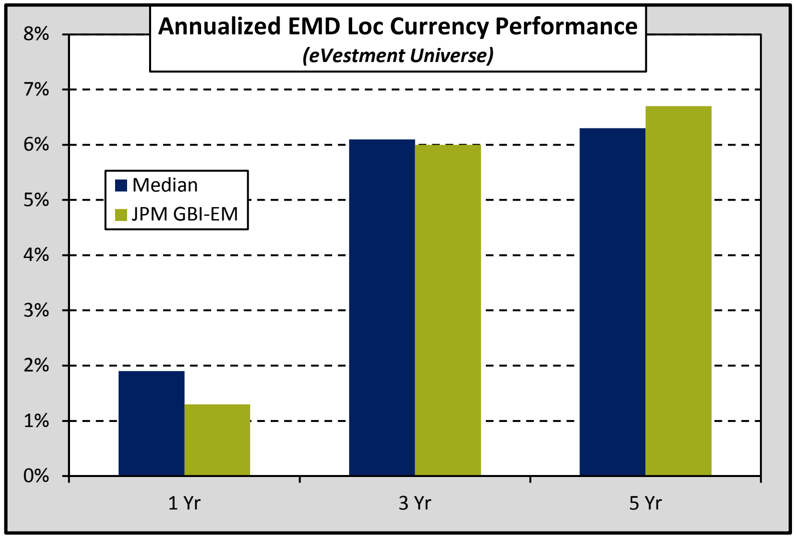


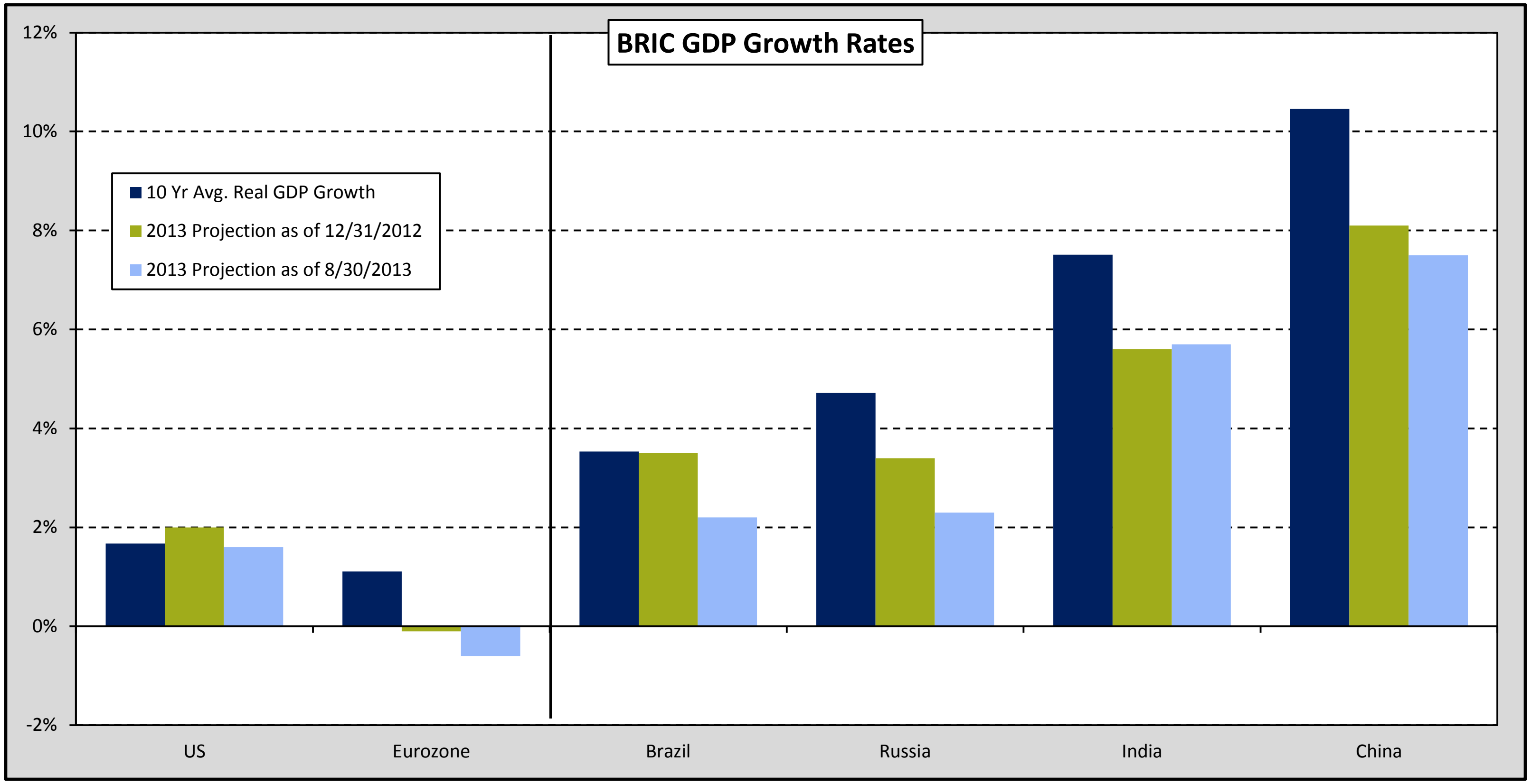
- **Trailing EM equity index returns are relatively lackluster**
- **However, active managers have been able to add significant value, especially in less efficient markets**
- **In EMD, active has been less stellar but index is tougher to beat**
  - Country weights
  - Transaction costs

What Now?

Resetting the Outlook For Emerging Markets

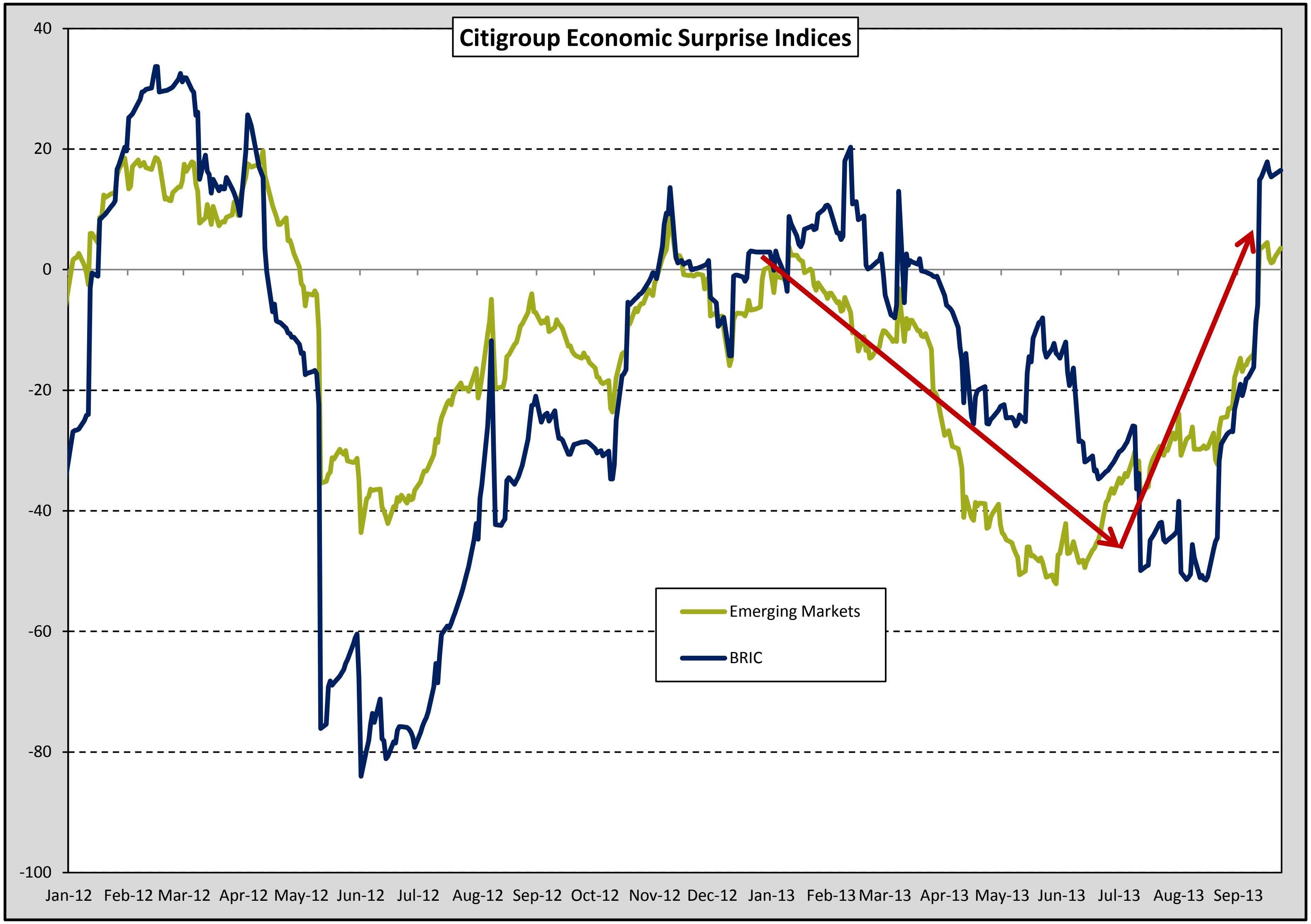
- **More reasonable expectations priced into markets**
  - Perhaps even a bit on the pessimistic side
- **Still expected to grow at significantly higher rate than developed world**
- **Attractive valuations**
  - Low Price-to-Earnings and other equity valuation measures (for certain parts of the market)
  - Attractive fixed income yields
- **Better positioned economically**
  - Lower debt levels
  - Better fiscal balance
- **Operating in a global monetary environment that remains very stimulative**
  - Yield and currency adjustment following Fed "Taper" comments was painful
  - But easy policy should promote growth of developed world which helps growth of EM world
- **Balance of Payments challenges**
  - Certain countries became dependent on capital inflows/credit over the last several years
  - As flows contract, they may face a painful adjustment process
- **Continued volatility as development continues**
  - Growth engine must now transition from exports and investment to consumption
  - Even with the most bullish view on EM equities or debt, one must expect a high degree of volatility
    - High 20s for equity
    - Mid teens for debt

- **Despite slowing growth and reduced forecasts, emerging economies are still expected to grow at a higher rate than developed economies**
  - Though growth is in place, a more nuanced view on emerging economies may be required going forward



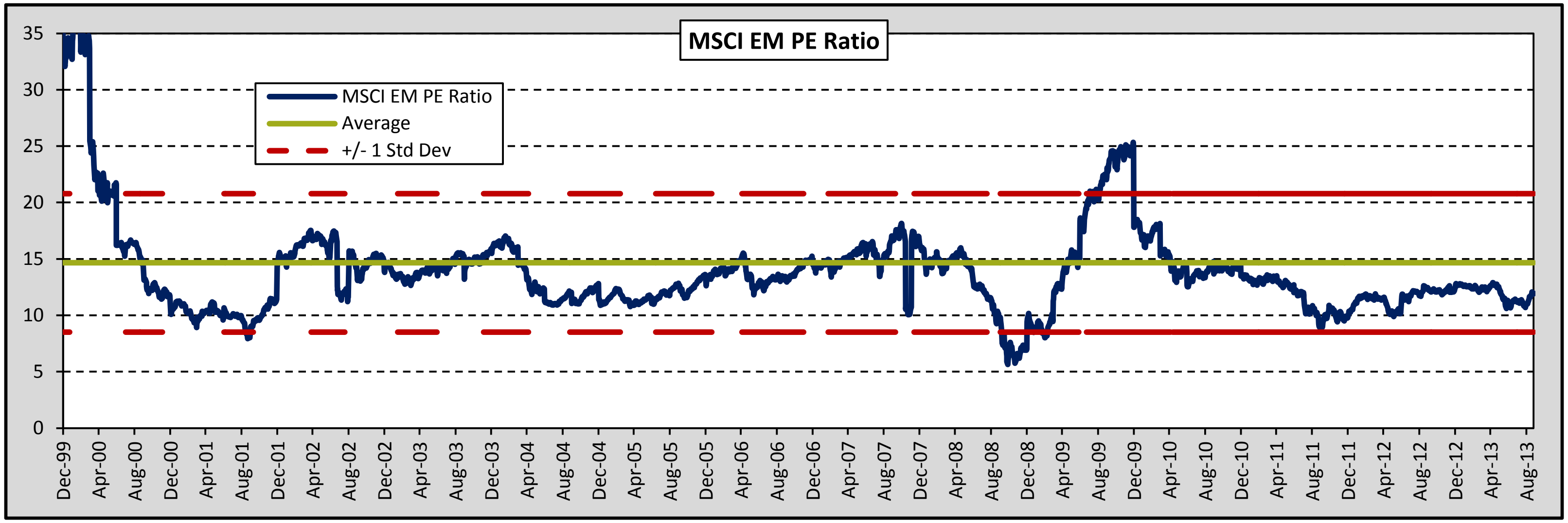
Source: Bloomberg

Economic Surprise Index – Recent Observations Have Exceeded Expectations

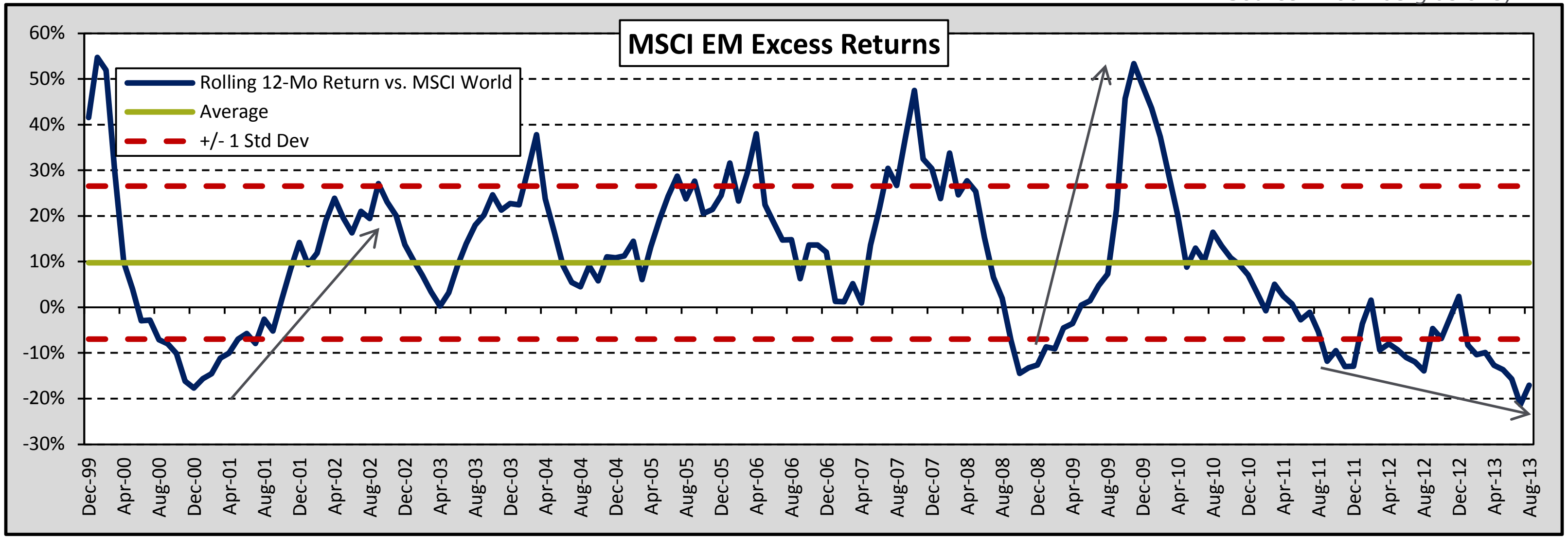


Source: Bloomberg as of 9/24

Valuations Remain Attractive and Performance Relative to EAFE Is At Lower Bound

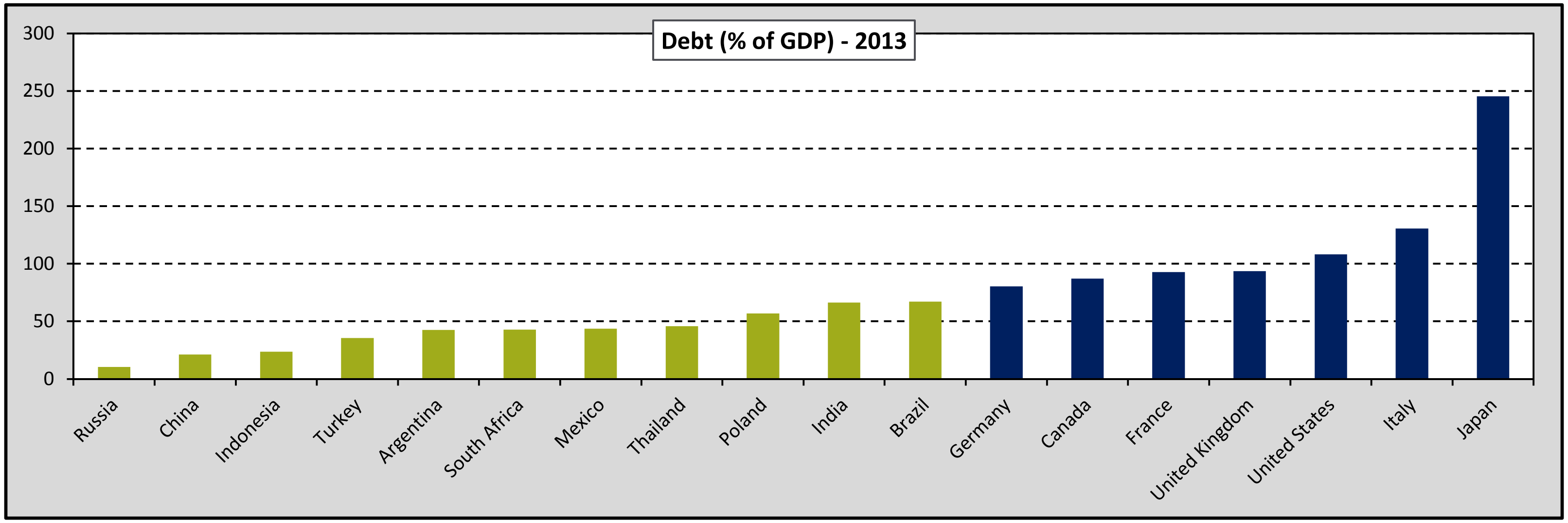


Source: Bloomberg as of 9/24

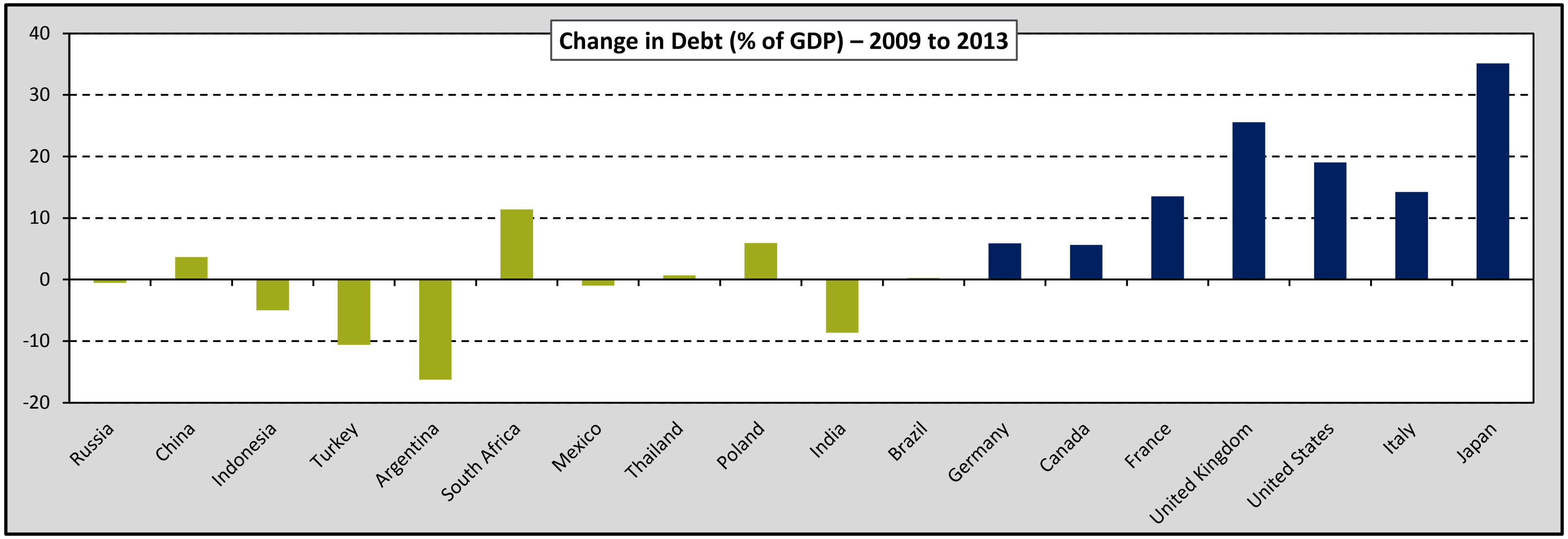


Source: Bloomberg as of 8/30

Debt Levels in Emerging Markets Remain Well Below Most of the Developed World

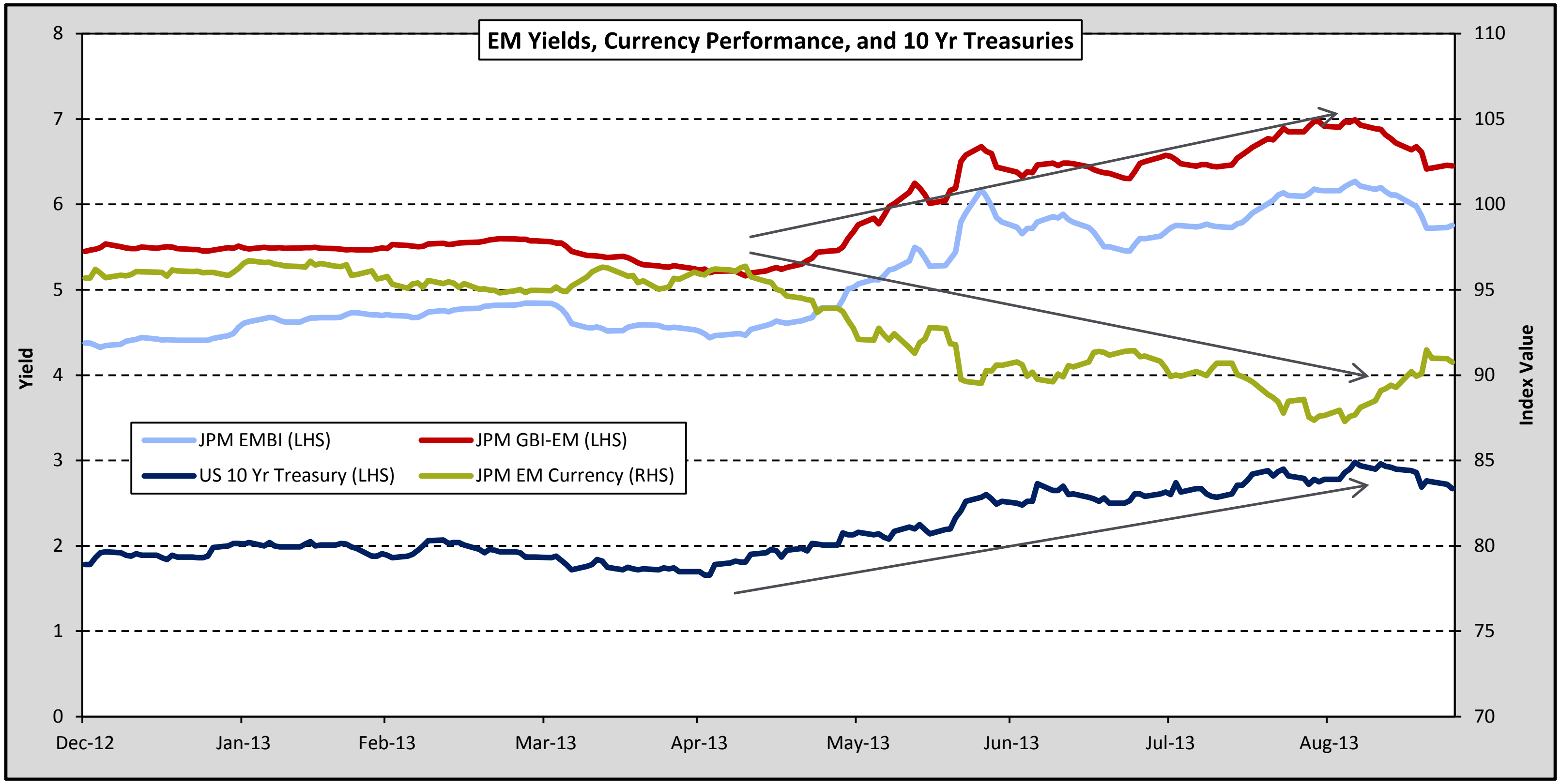


Source: IMF



Source: IMF

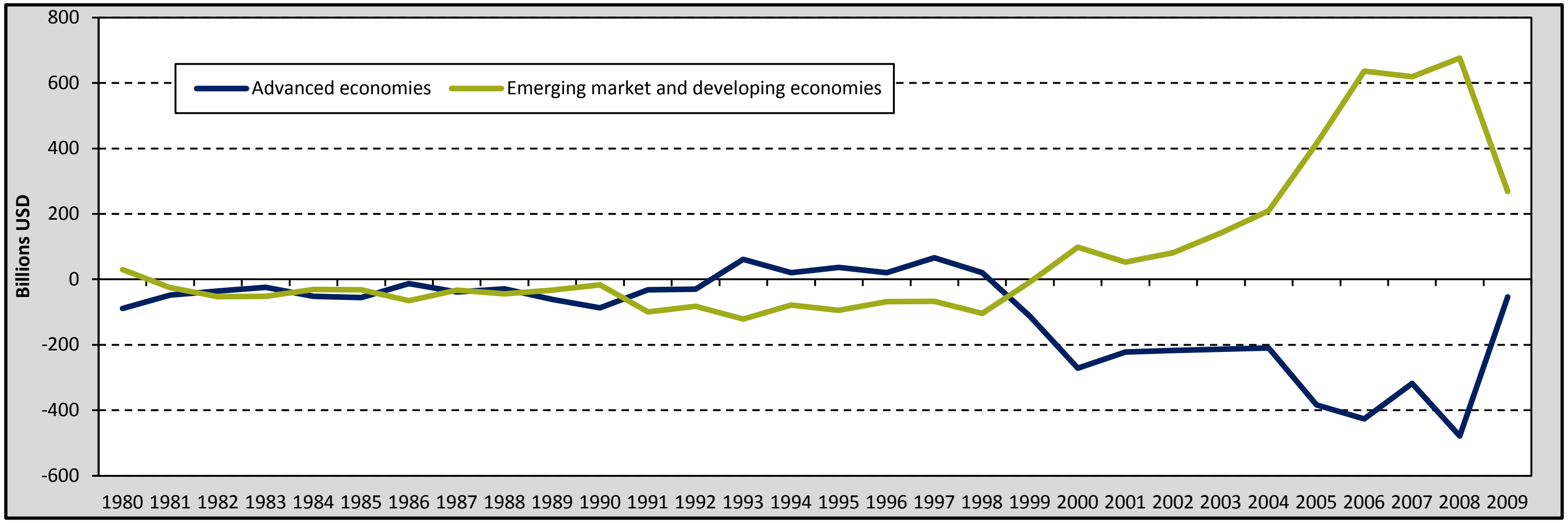
Spike in Treasury Rates Had Negative Implications for Emerging Markets



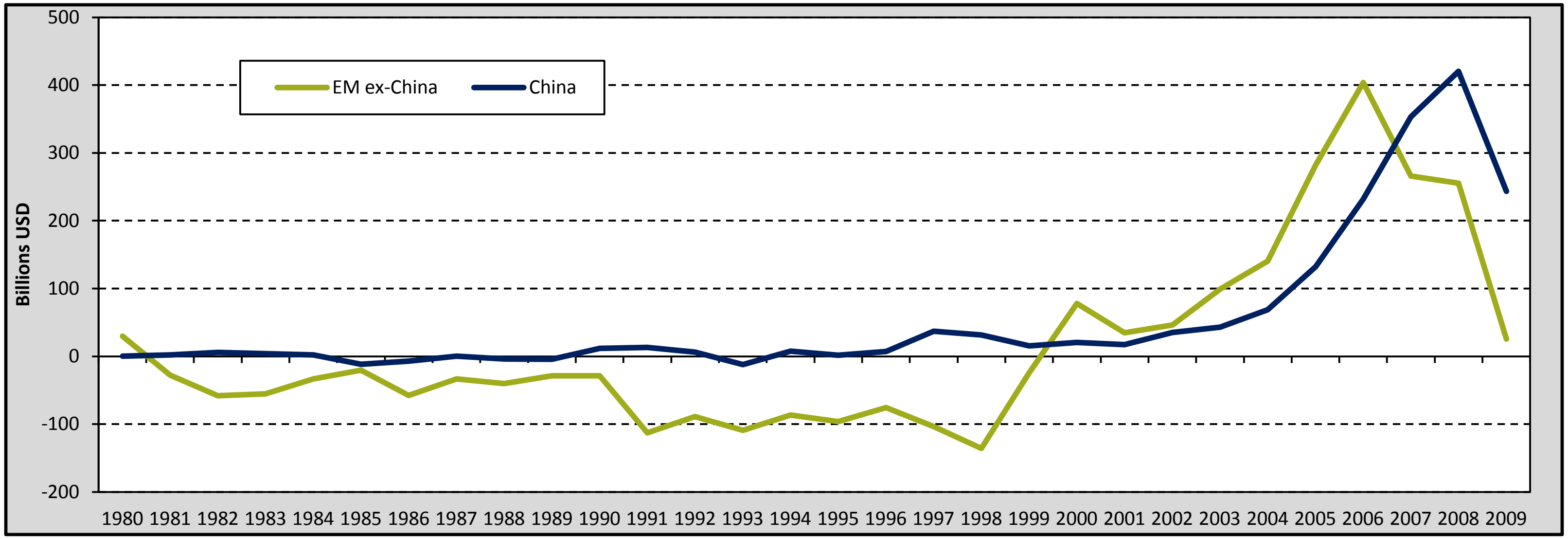
Source: Bloomberg

- **Uptick in Treasury yields since May has led to a corresponding widening of yields in emerging markets**
- **Underperformance has been magnified by widening credit spreads and currency depreciation for local debt**

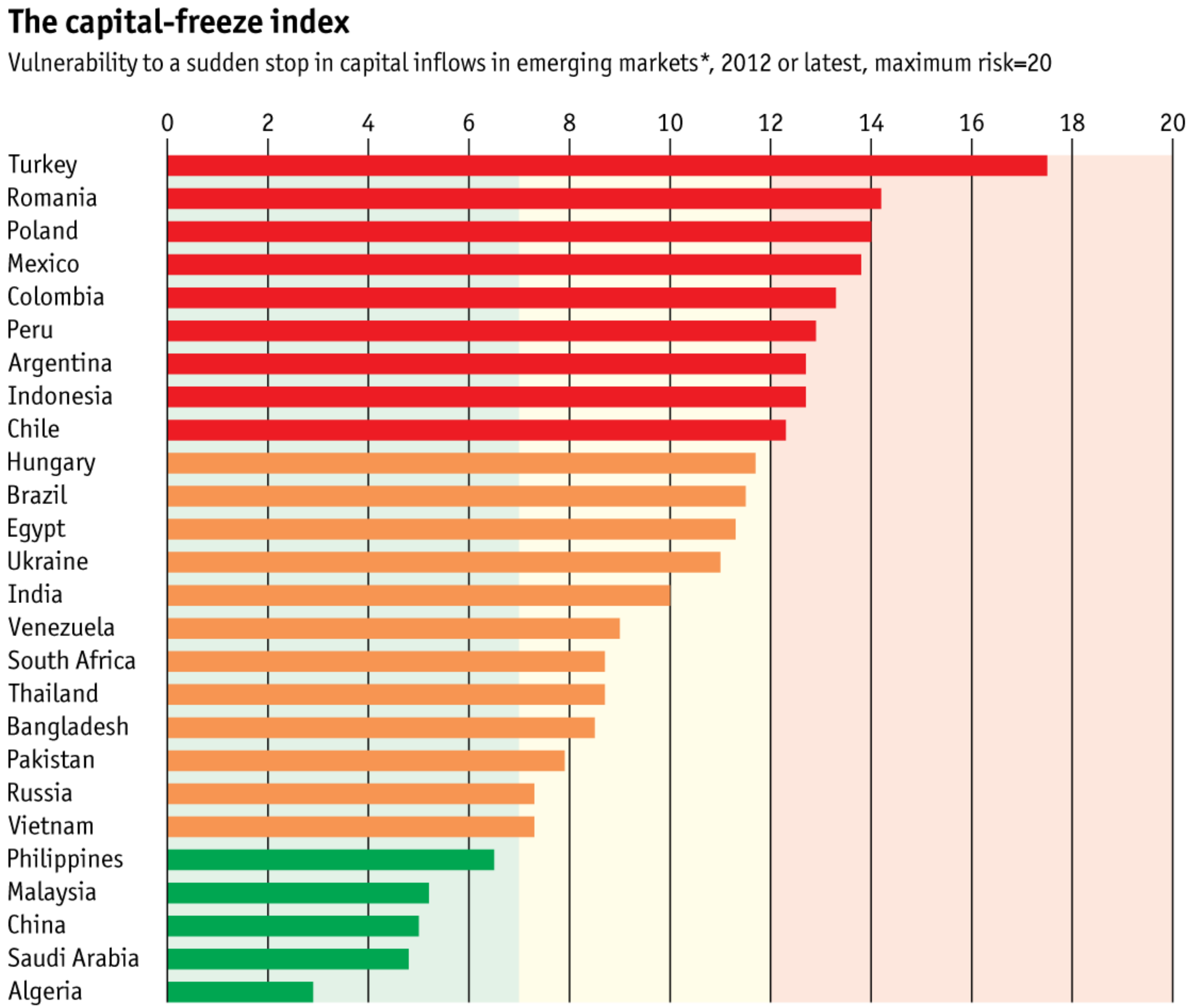
Current Account Balances Have Reverted (Particularly EM ex-China)



Source: IMF

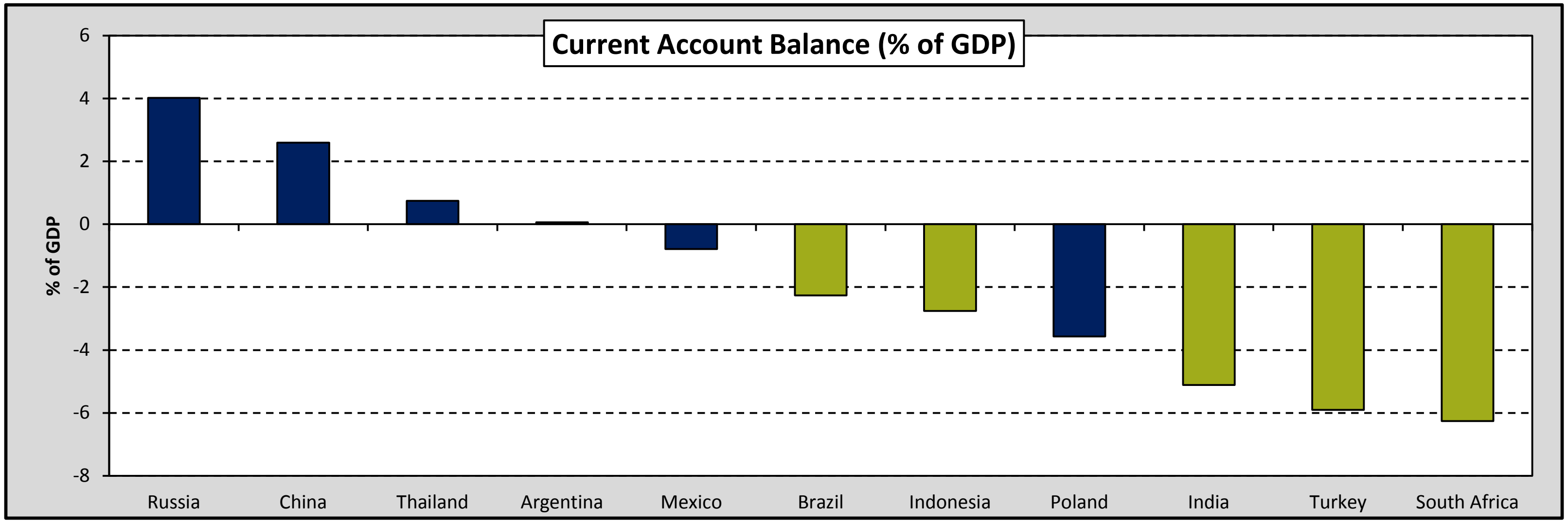


Source: IMF



Source: The Economist

EM Countries With Current Account Deficits Face Currency Headwinds



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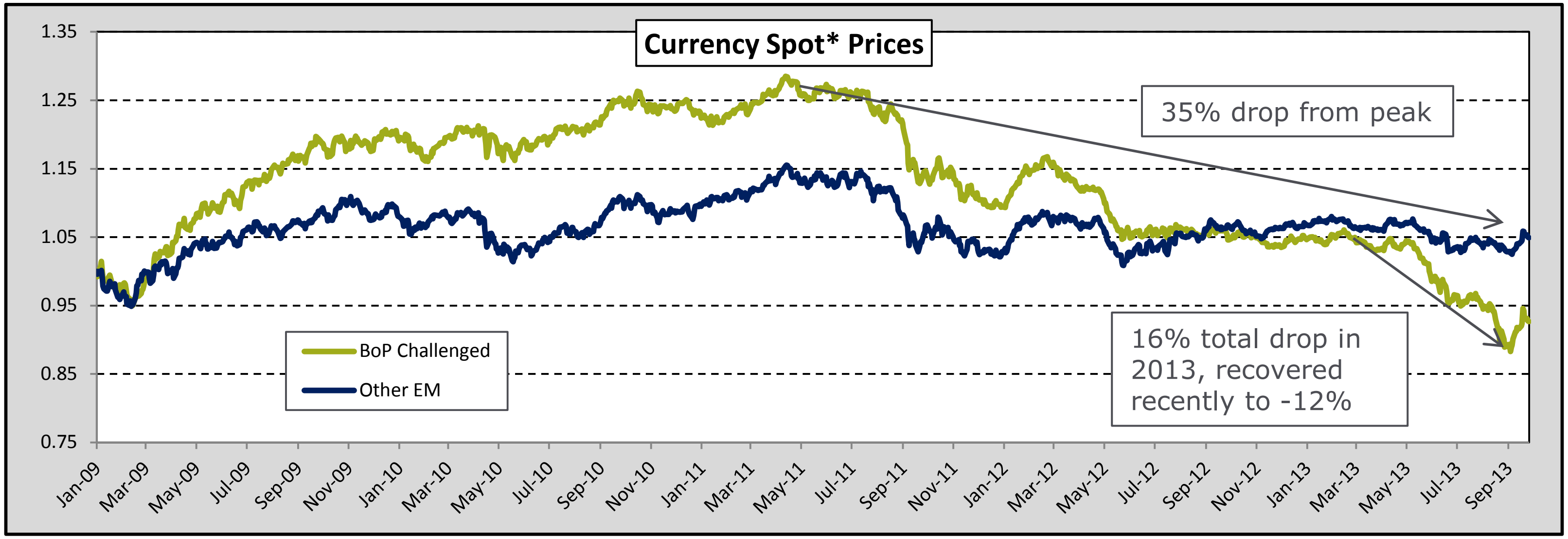
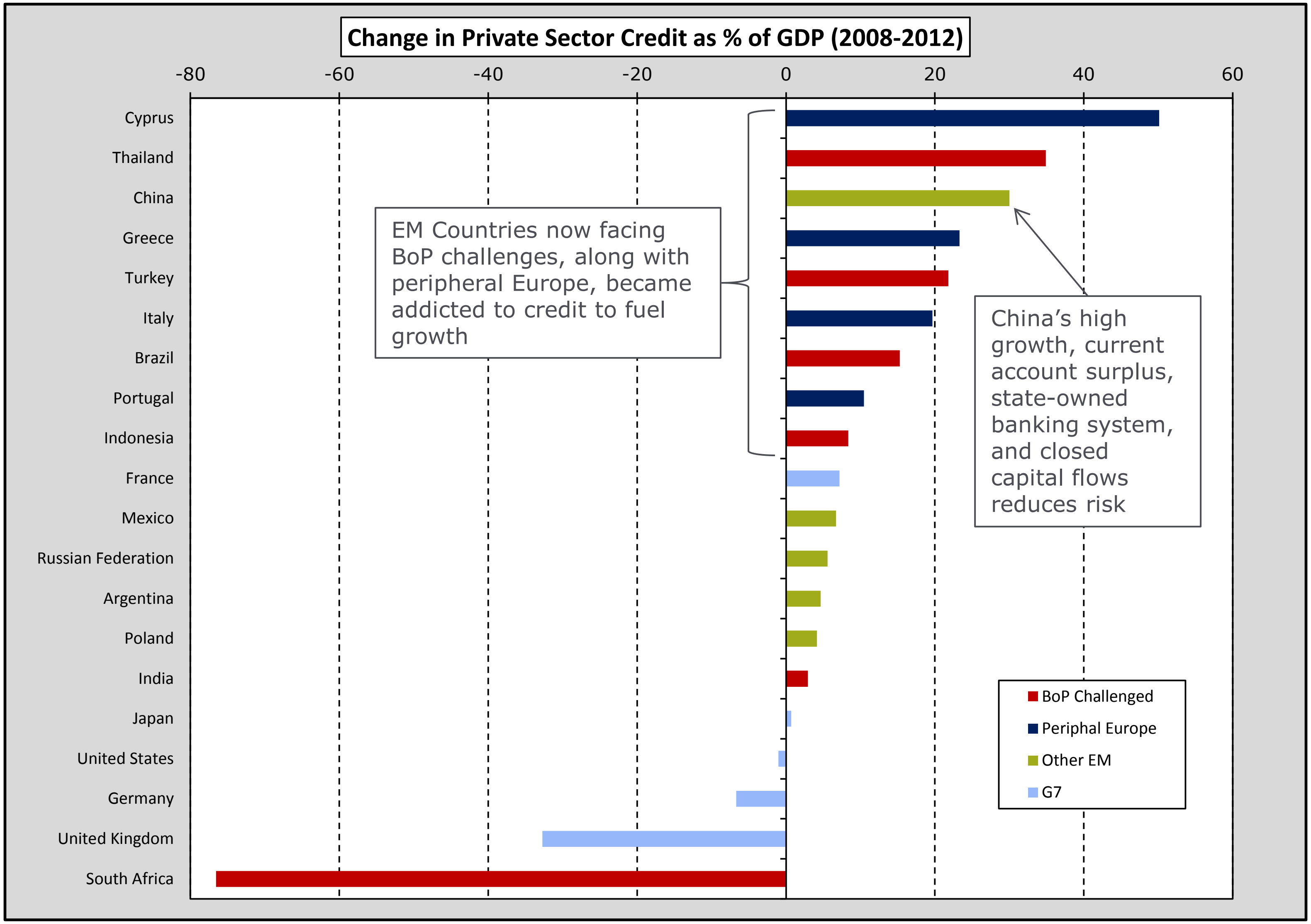


Source: Bloomberg

**Versus USD; Brazilian Real, Indian Rupee, Indonesian Rupiah, Turkish Lira, and South African Rand make up BoP Challenged basket*

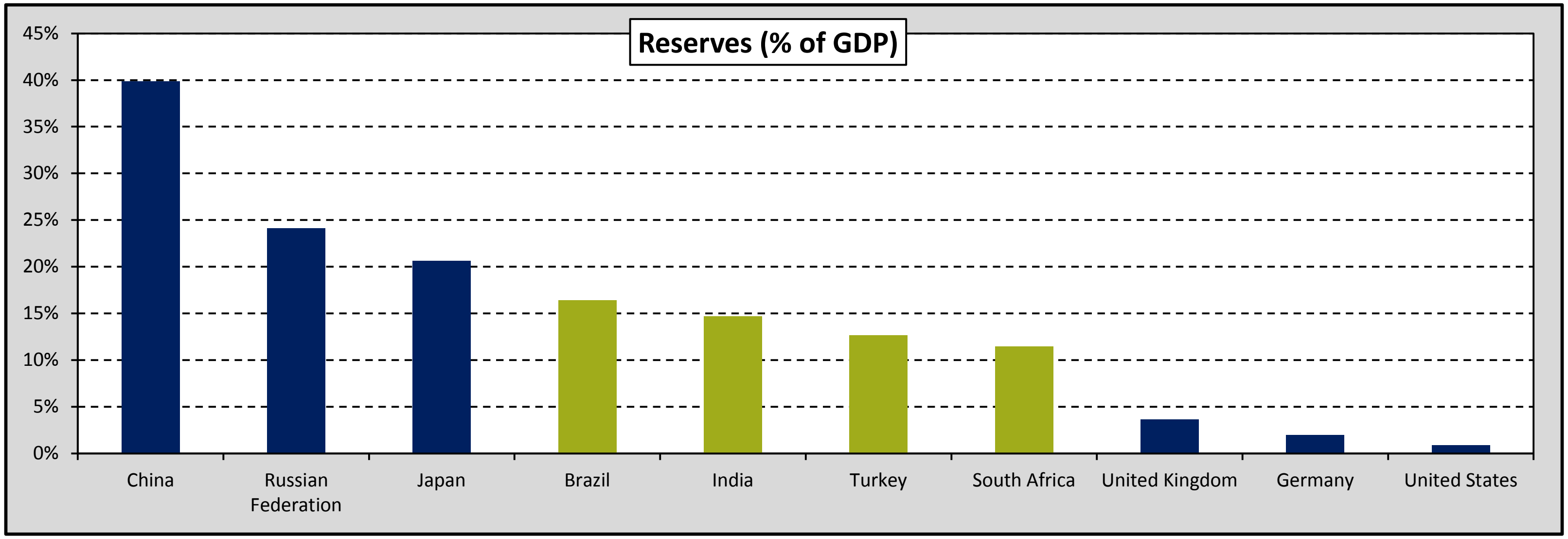
Some Emerging Market Countries Dependent on Private Credit



- **Countries under BoP crises are likely to require further adjustment**
  - Average currency depreciation from peak is ~35% (12% in 2013)
  - Average currency depreciation in typical BoP crisis is ~70%
    - Along with contracting growth, equity drawdowns, widening spreads, etc.

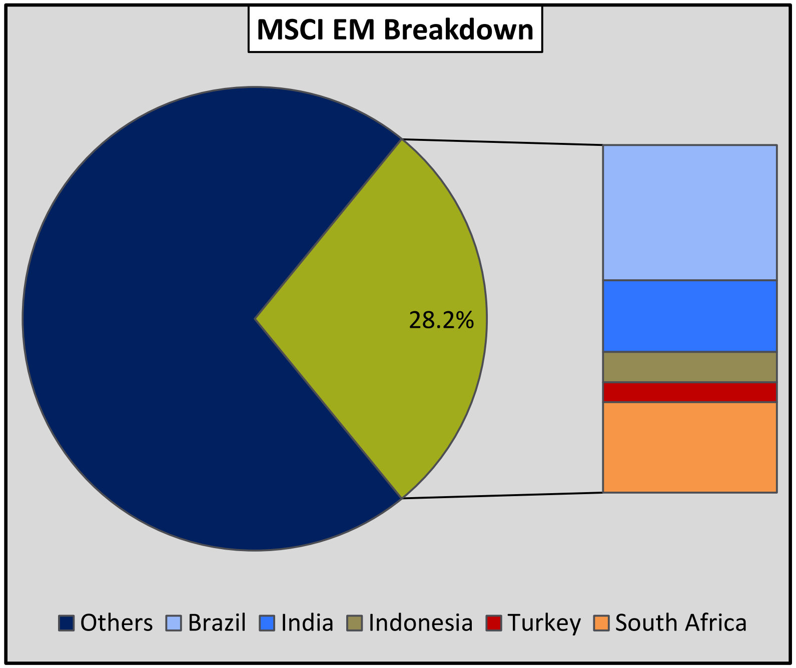
    (Source: Bridgewater)

- **While further adjustment is likely to occur, there are reasons to expect these adjustments to be less severe than history**
  - These countries have meaningful reserves to manage short-term liquidity challenges
  - More of their debt is in local currency than in historical crises
  - Less developed banking exposure to these countries (less likelihood of contagion)

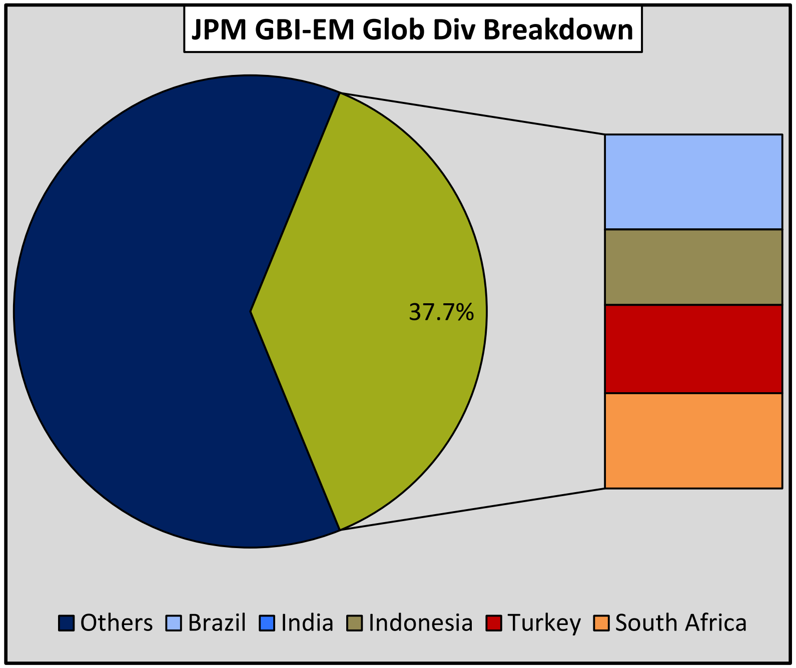


Source: IMF

Index Composition by BoP Challenged Countries



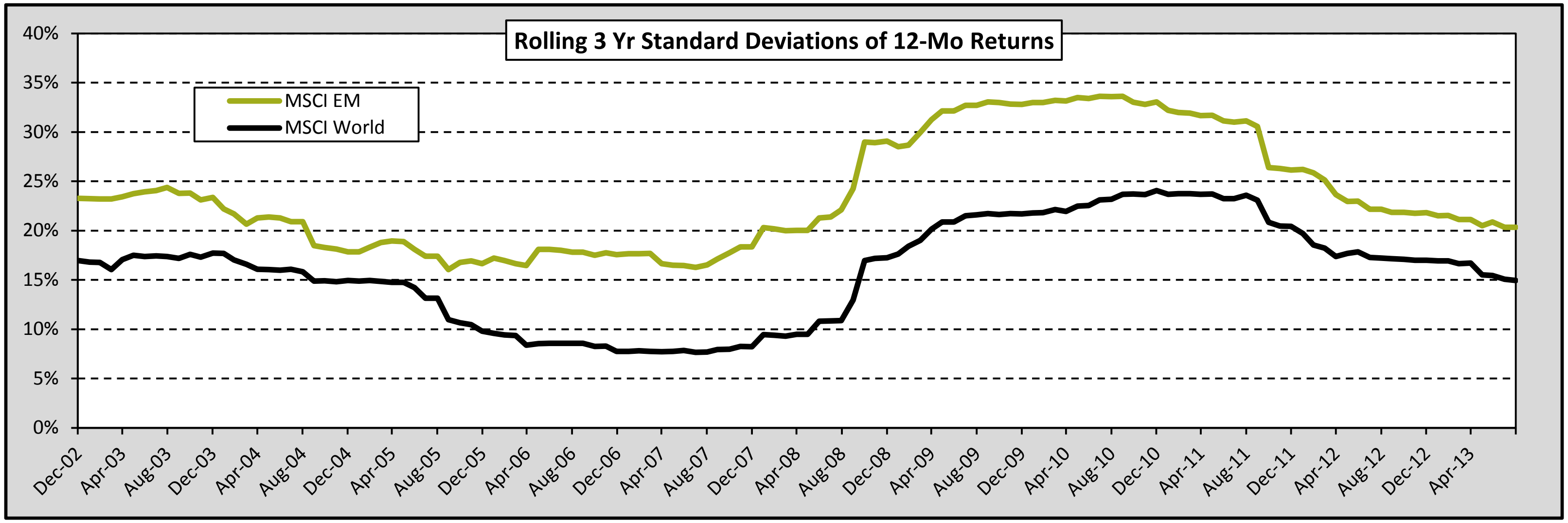
Source: Bloomberg



Source: Bloomberg

- **BoP challenged countries compose significant portions of major emerging equity and bond indices**
  - Brazil, Indonesia, India, Turkey, and South Africa
- **Active management, in particular a top down perspective, is critical given macro forces**
  - Market complexity and index structure could benefit diligent active managers

Emerging Equities Volatility



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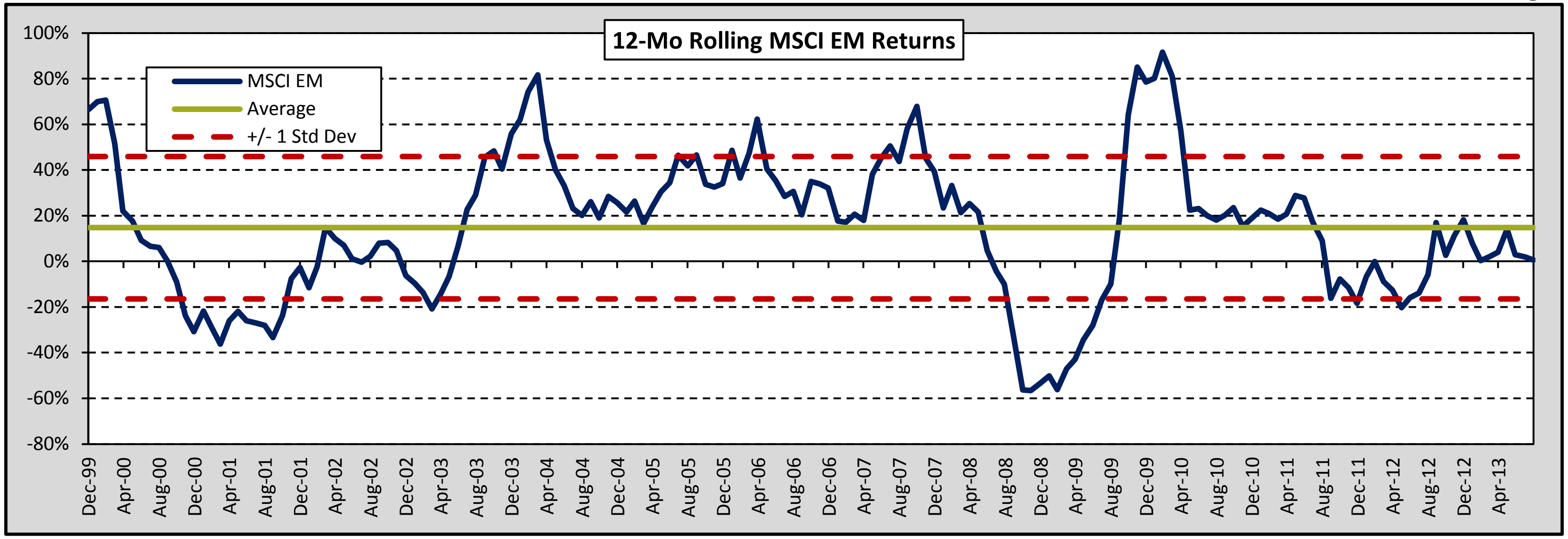
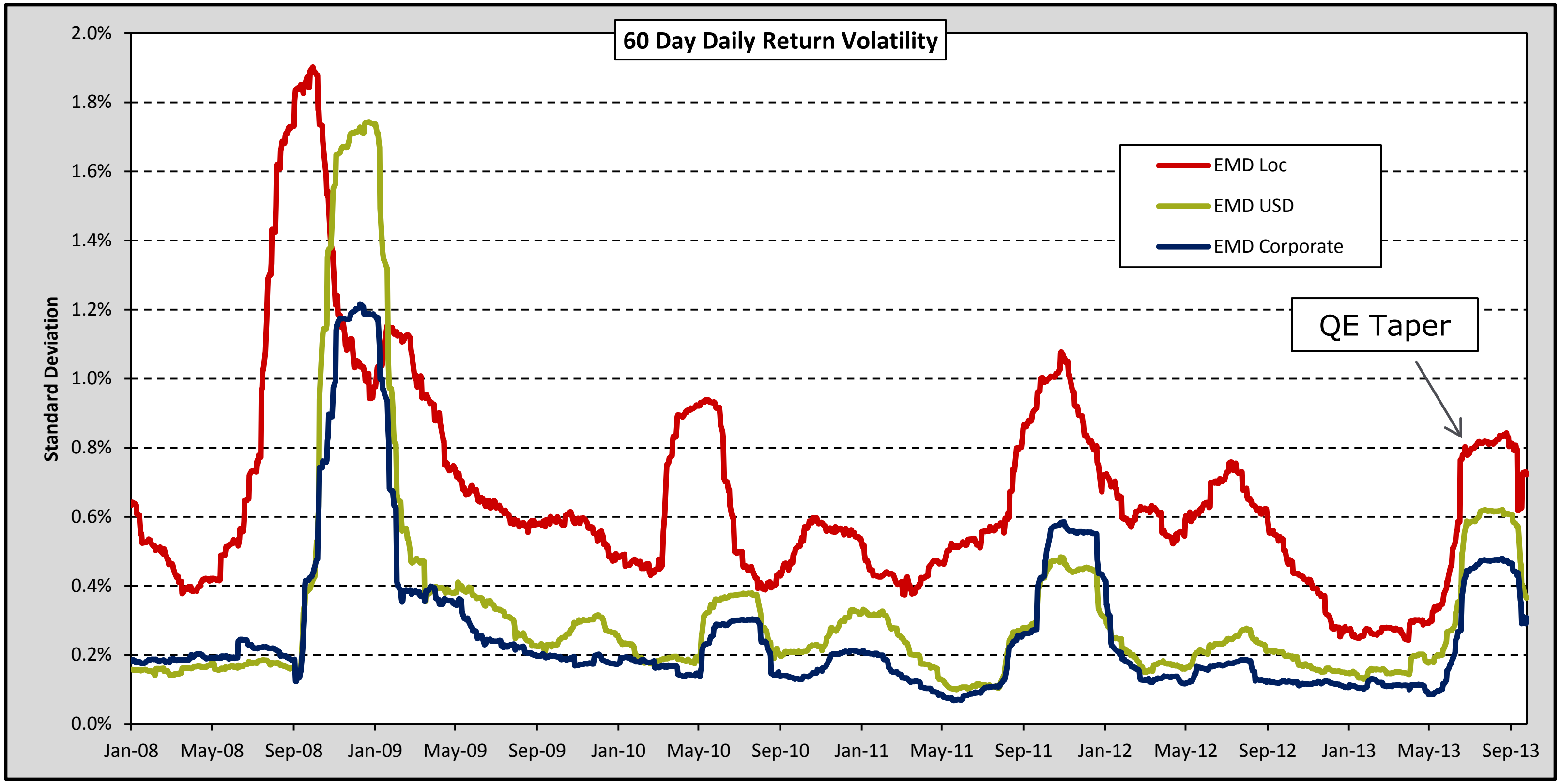


Source: Bloomberg

Emerging Market Debt Volatility Profile



Source: Bloomberg

- **Emerging Market Debt is prone to cyclical spikes in volatility, specifically local currency debt**

- **High beta active managers suffer during cyclical volatility spikes**

Conclusion

- **Emerging markets remain likely to outpace developed markets in economic growth**
  - Yet lower than recent experience
- **There are several reasons to maintain a bullish outlook on EM**
  - Growth is still high relative to the developed world
  - Overall valuations attractive on a historical basis
  - Healthy government balance sheets
  - Continued development of middle class
- **There are also reasons to proceed with caution**
  - Slowing growth (though now priced in)
  - Balance of payment issues in prominent countries
    - Potential to get worse before it gets better
  - Economies face challenging growth
    - Transition to reliance on Consumption vs. Investment/exports
    - Social unrest and political turmoil threaten to derail this path
- **Looking forward, a more nuanced view on emerging markets is needed to navigate a tricky environment**
  - Individual EM countries are likely to behave in a more idiosyncratic fashion
  - Sound active management can alleviate some of the macro challenges
  - Critical to recognize that higher return expectations come with high volatility
- **Asset Allocation Committee will be studying this closely as we kickoff our 2014 assumption setting process**