

Making Sense of Emerging Market Debt

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Agenda

1. Emerging Market Debt (EMD) Microstructure
 - Sectors, Trends and Technicals
2. EMD as a source of Risk and Return
 - Perception of Risk
 - Defaults and Recovery
 - Return Accrual to domestic vs. foreign investors
 - Active management
3. Role of EMD in client portfolios
4. Outlook for the asset class

Emerging Market Debt Microstructure Sectors, Trends and Technicals

Emerging market debt – sector composition

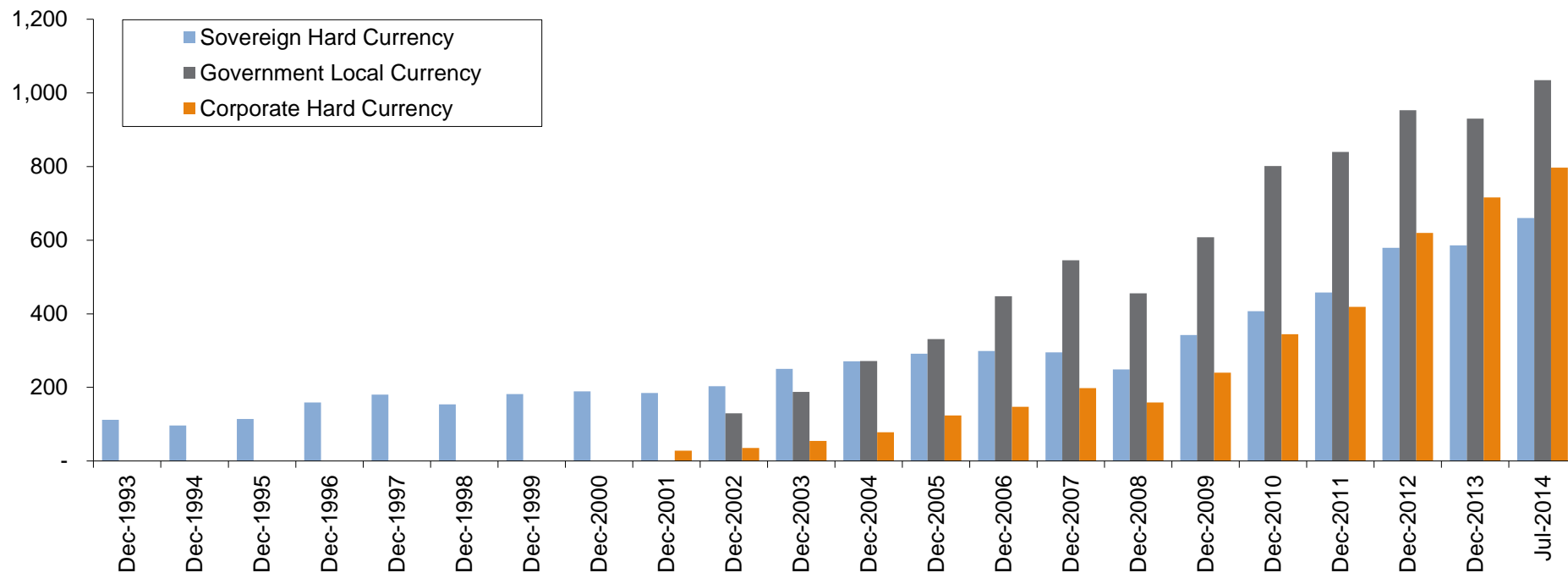
Sector Strategy	Hard Currency Debt	Local Currency Debt	Corporate Debt																														
Index	JPMorgan Emerging Markets Bond Index Global (JPM EMBI Global)	JPMorgan Government Bond Index– Emerging Markets Global (JPM GBI–EM Global)	JPMorgan Corporate Emerging Markets Bond Index Broad (JPM CEMBI Broad)																														
Currency	USD	Local Currency	USD																														
Credit Quality (Moody's/S&P/Fitch)	Baa3/BBB-/BBB-	Baa2/BBB+/BBB+	Baa2/BBB/BBB																														
Duration	7.17 years	4.74 years	5.24 years																														
Yield	5.97% ¹	6.58% ²	5.60% ¹																														
Number of Issues	467	196	1166																														
Market Value	USD 673 Billion	USD 953 Billion	USD 802 Billion																														
Historical Regional Distribution (%MV) Current values labeled																																	
Top 5 Countries (%MV)	<table> <tr><td>Mexico</td><td>13%</td></tr> <tr><td>Russia</td><td>8%</td></tr> <tr><td>Indonesia</td><td>8%</td></tr> <tr><td>Turkey</td><td>8%</td></tr> <tr><td>Brazil</td><td>7%</td></tr> </table>	Mexico	13%	Russia	8%	Indonesia	8%	Turkey	8%	Brazil	7%	<table> <tr><td>Brazil</td><td>21%</td></tr> <tr><td>Mexico</td><td>18%</td></tr> <tr><td>Poland</td><td>9%</td></tr> <tr><td>South Africa</td><td>8%</td></tr> <tr><td>Turkey</td><td>8%</td></tr> </table>	Brazil	21%	Mexico	18%	Poland	9%	South Africa	8%	Turkey	8%	<table> <tr><td>China</td><td>17%</td></tr> <tr><td>Brazil</td><td>16%</td></tr> <tr><td>Russia</td><td>10%</td></tr> <tr><td>Hong Kong</td><td>8%</td></tr> <tr><td>Mexico</td><td>7%</td></tr> </table>	China	17%	Brazil	16%	Russia	10%	Hong Kong	8%	Mexico	7%
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Source: J.P. Morgan Asset Management. As at 28/02/2015. Indices do not include fees or operating expenses and are not available for actual investment. Past performance is not an indication of future performance. ¹Yield to Worst, ²Yield to Maturity.

Steady growth of AuM across all EMD asset classes

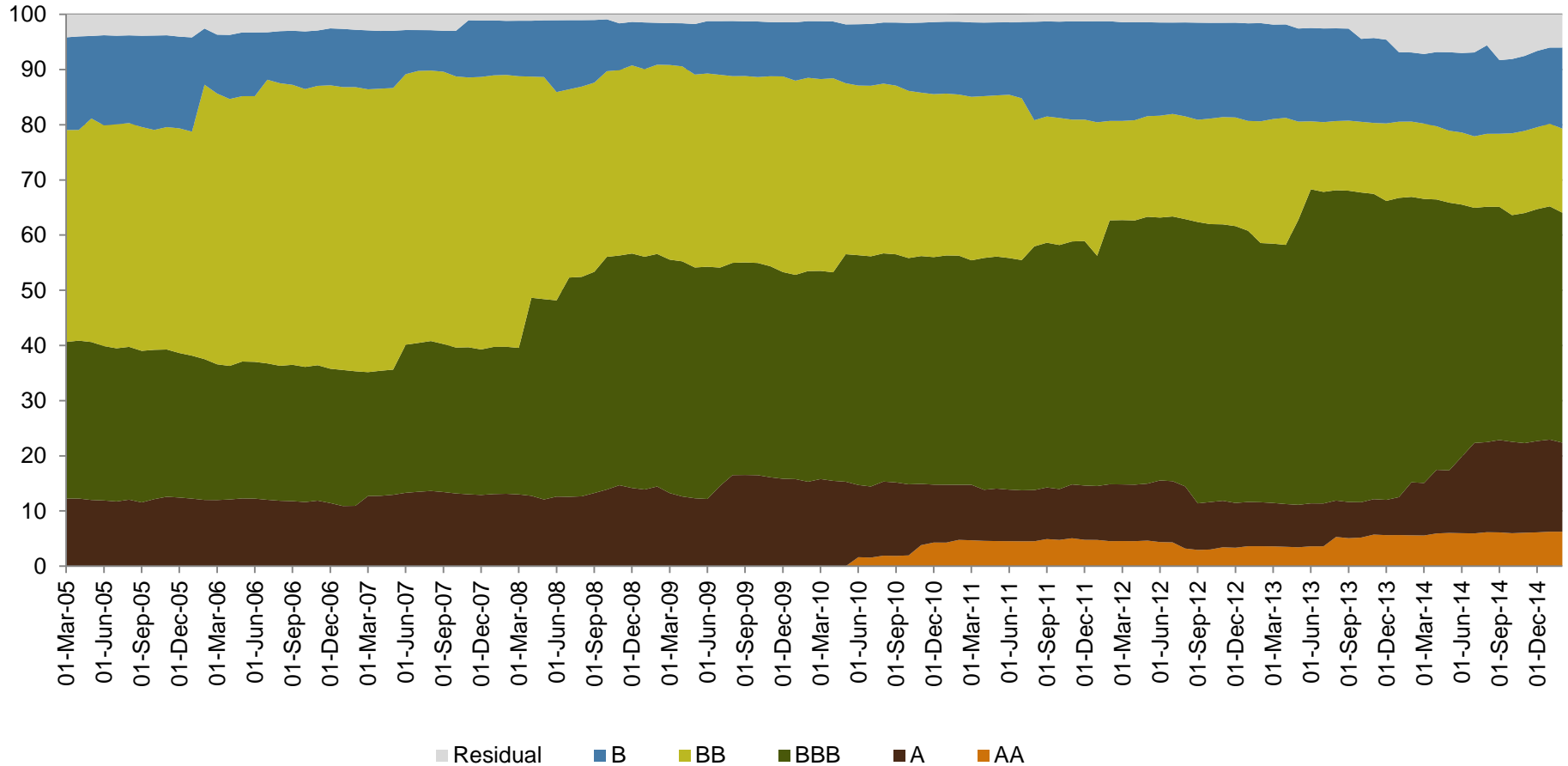
Benchmark AUM

USD billion



Source: J.P. Morgan Asset Management, August 2014. *Sovereign Hard Currency: JPM EMBI Global Index, Corporate Hard Currency: JPM CEMBI Broad Index and Government Local Currency: JPM GBI-EM Global Diversified Index

EM sovereign rating improvement: around 65% rated investment grade



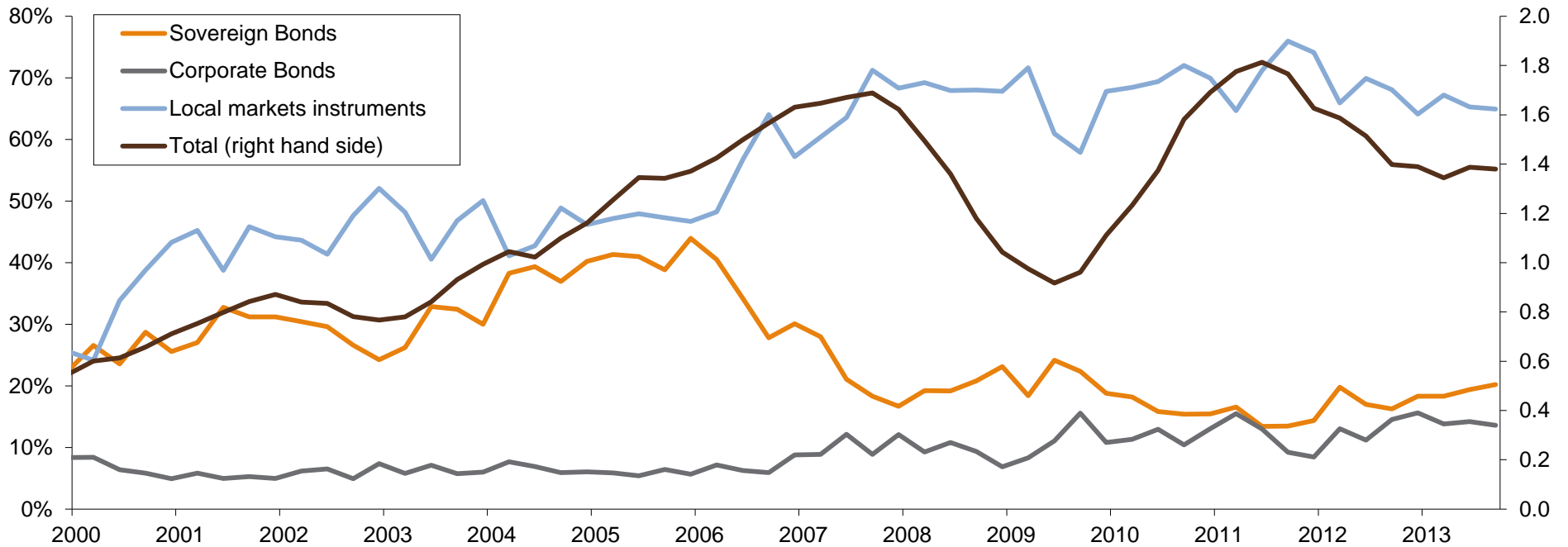
Source: J.P. Morgan Asset Management, as at March 2015, Index: JPMorgan EMBI Global Diversified Index

Local markets dominate EM trading activity

Total debt trading activity excluding CDS Index

% of total trading volumes

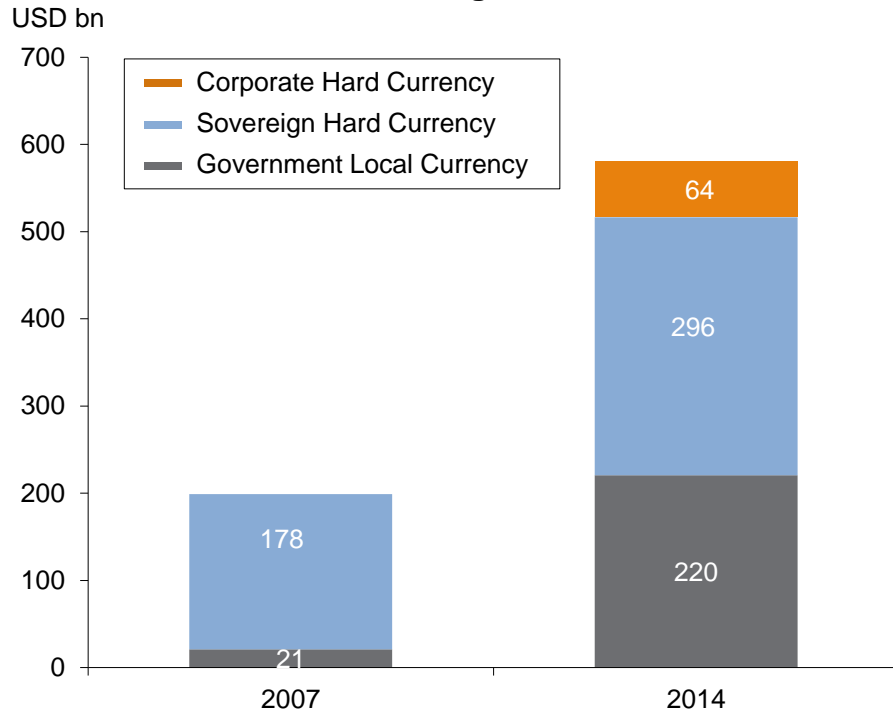
12-month moving average, \$tn



Source: J.P. Morgan Asset Management, EMTA, 3Q 2013; CDS Index denotes to the Credit Default Swap Index

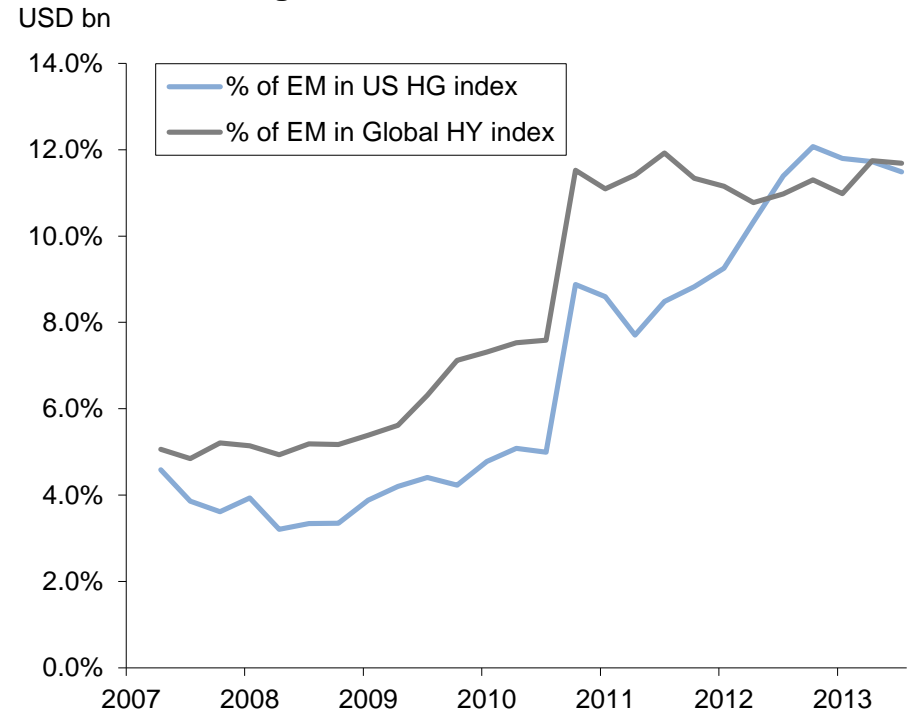
Growing demand for EM debt in global strategies

AUM benchmarked to J.P. Morgan EM fixed income indices



Source: J.P. Morgan Asset Management, June 2014

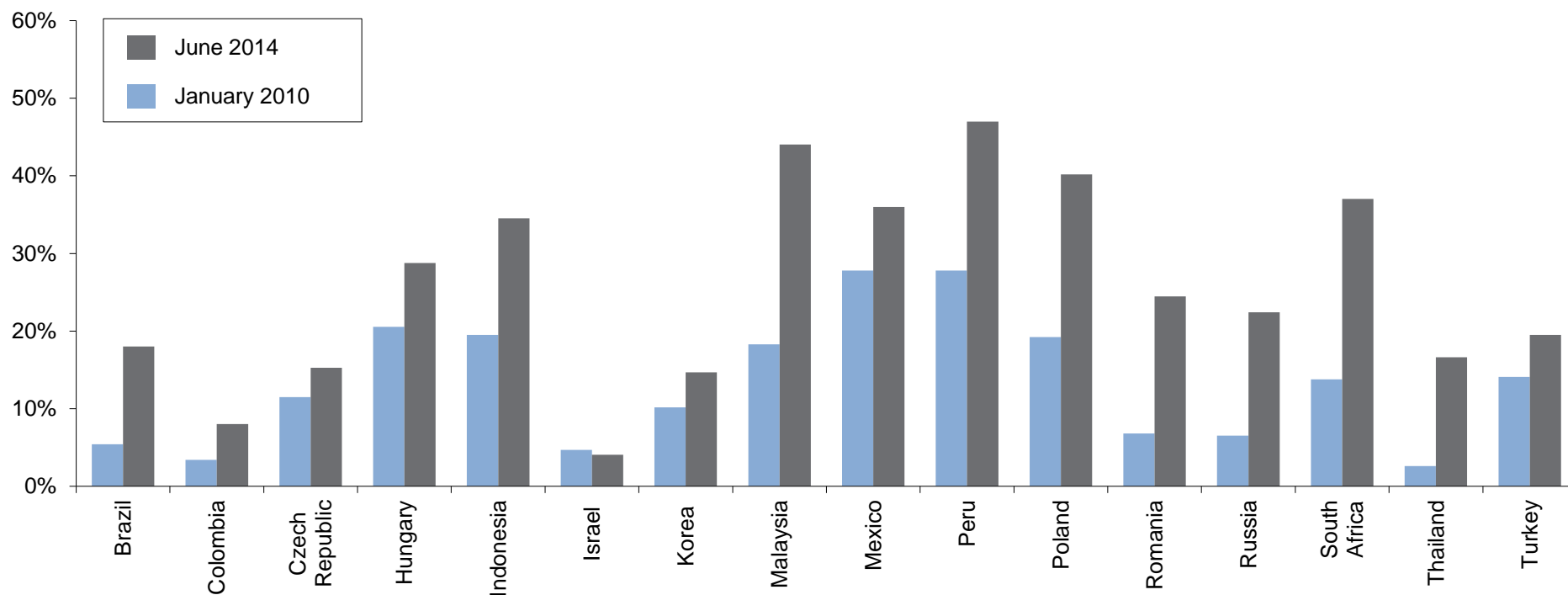
Share of EMD in global bond indices



Note: In 2Q2011 index inclusion criteria for EM in indices changed to be more inclusive.

Foreign participation in EM local markets has increased

% of foreign ownership of local government bonds



Source: J.P. Morgan Asset Management, June 2014, For illustrative purposes only

Emerging market debt as a source of risk and return

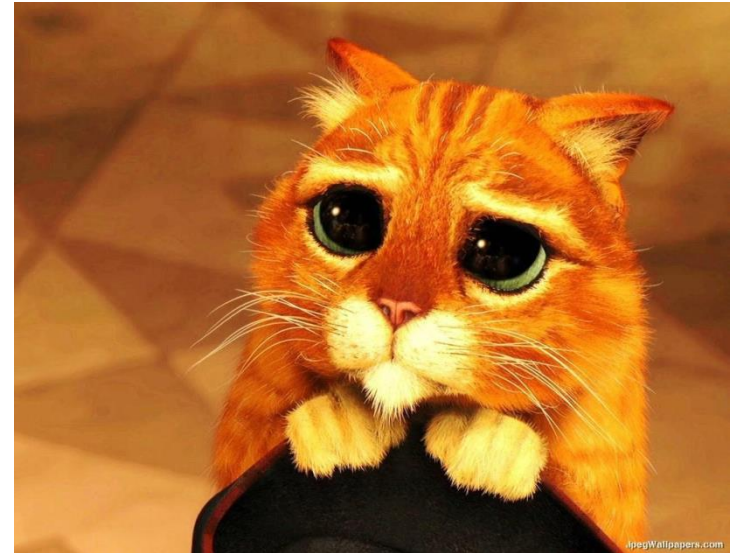
Perception of Risk in Emerging Market Debt

An unmanageable beast

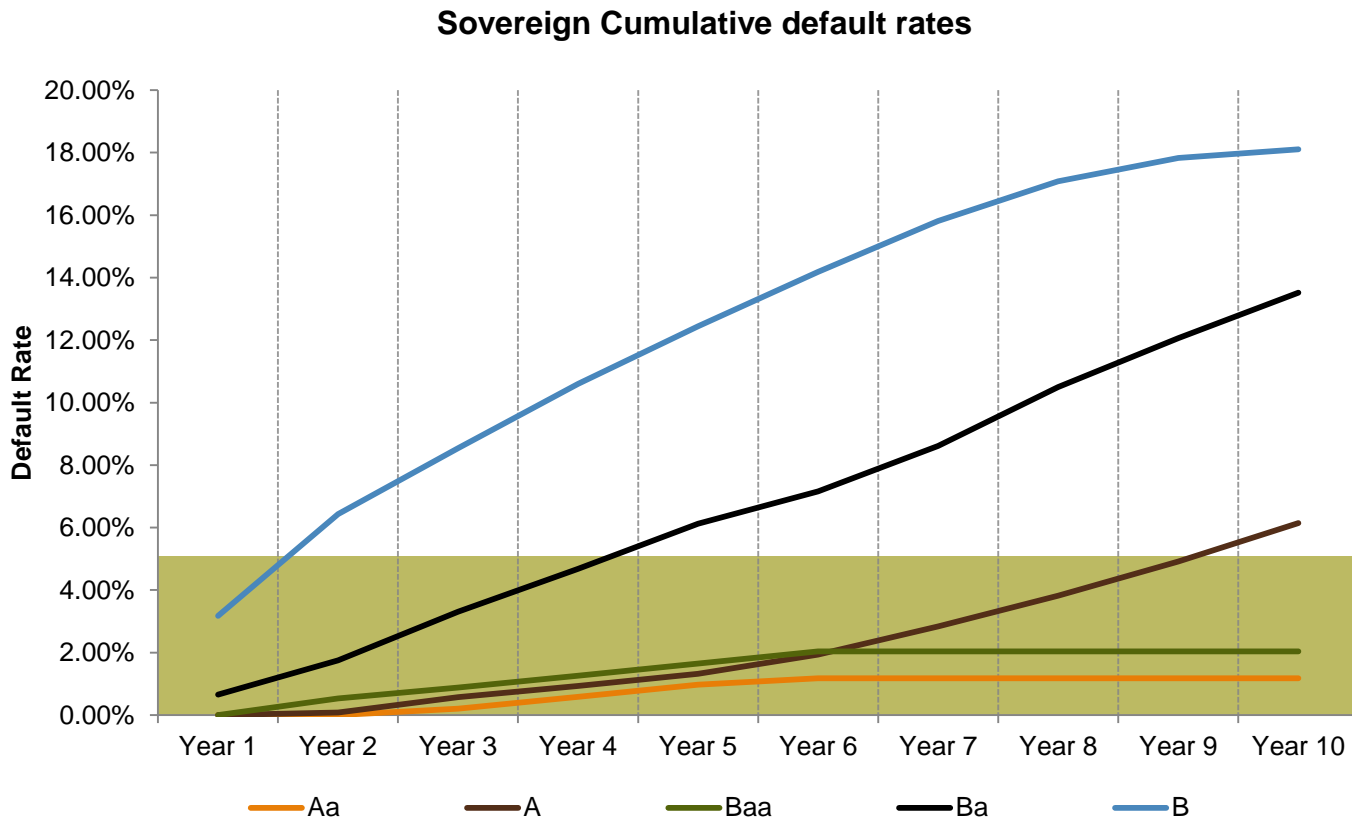


OR

A manageable Pet

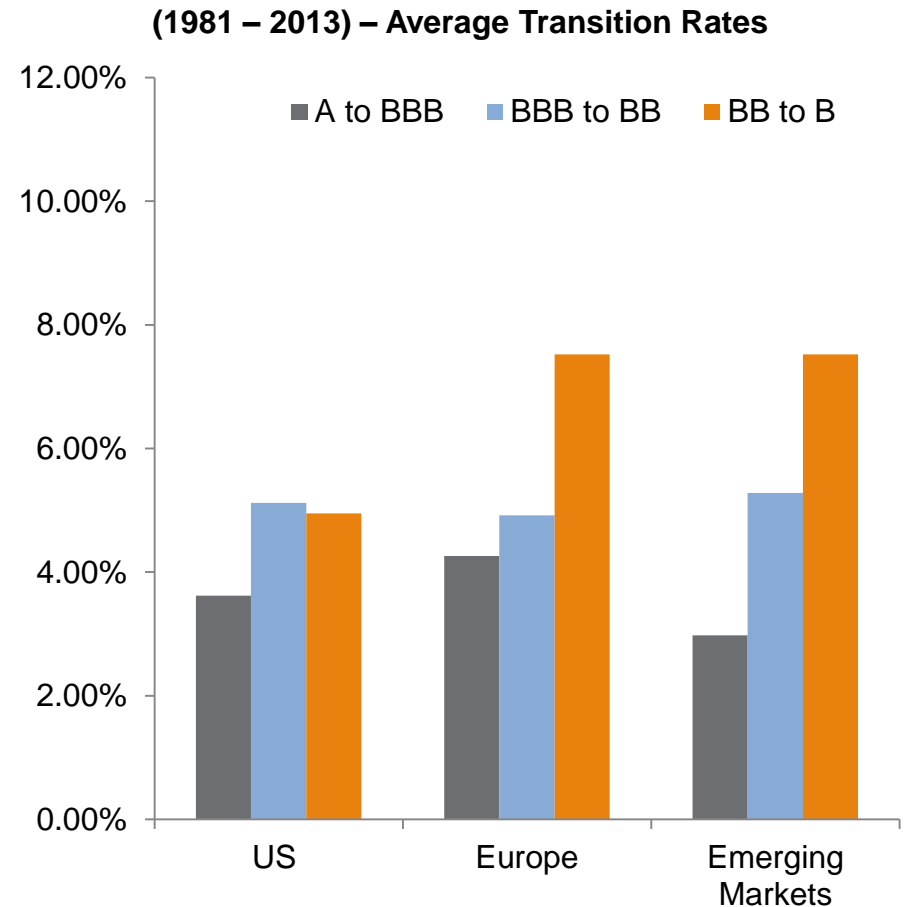
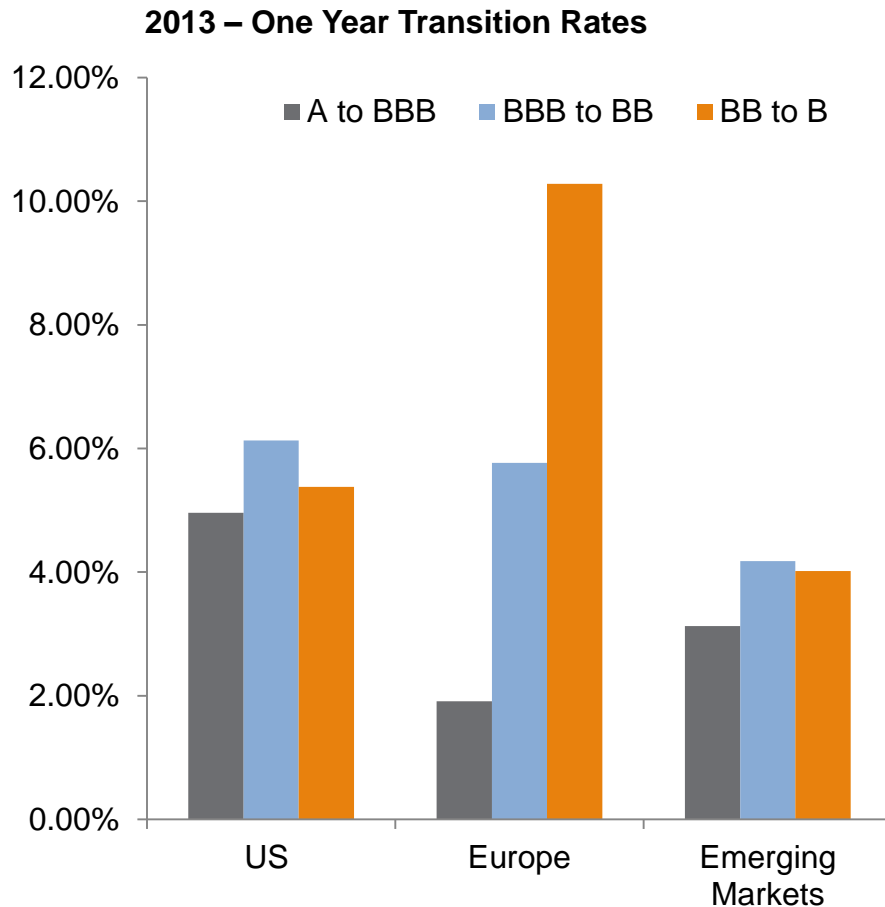


Sovereign ratings are a reasonably good predictor of future defaults



Source: Moody's as of December 2014, For illustrative purposes only

Rating migration patterns in EM corporate investment grade sector is similar to US or European investment grade corporate sector



Source: S&P, as of December 2013

An analysis of Sovereign Recovery rates and haircuts

- Average Recovery rates are around 49%

Defaulting/Restructuring Country	Year Of Default	Average Trading Price (% Of PAR)
Russia	1998	18
Pakistan	1999	52
Ecuador	1999	44
Ukraine	2000	69
Ivory Coast	2000	18
Argentina	2001	27
Moldova	2002	60
Uruguay	2003	66
Grenada*	2004	65
Dominican Republic	2005	95
Belize	2006	76
Seychelles	2008	30
Ecuador	2008	28
Jamaica	2010	90
Greece	2012	24
Belize	2012	40

Source: Moody's as of December 2014, * on an issuer weighted basis

- Frequently there is difference between haircuts for domestic and foreign investors

Country	Categories	Average haircut in % (conventional definition)
Russia	GKO/OFZ residents	45.7
	GKO/OFZ non-residents	61.5
Ukraine	OVDP Residents	18.2
	OVDP non residents	59.2
	International bonds	40.1
Pakistan	Eurobonds	30.4
Ecuador	International bonds	60.0
Argentina	Phase 1 (residents)	58.1
	2005 International	67.0
Uruguay	Domestic	36.2
	External	26.2

Source: IMF, July 2005, OVDP: Ukrainian local currency debt, OFZ: Russian local currency bonds

Do foreign investors benefit from investing in EM economies?

An el-dorado of modern day



OR

Nearly Zero

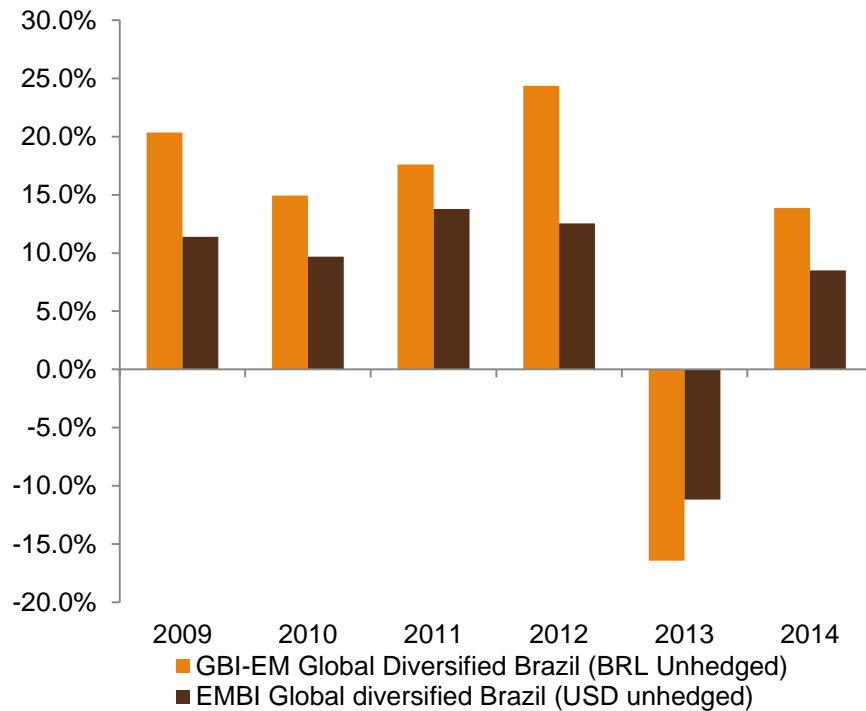


Comparing local investor and foreign investors' experience

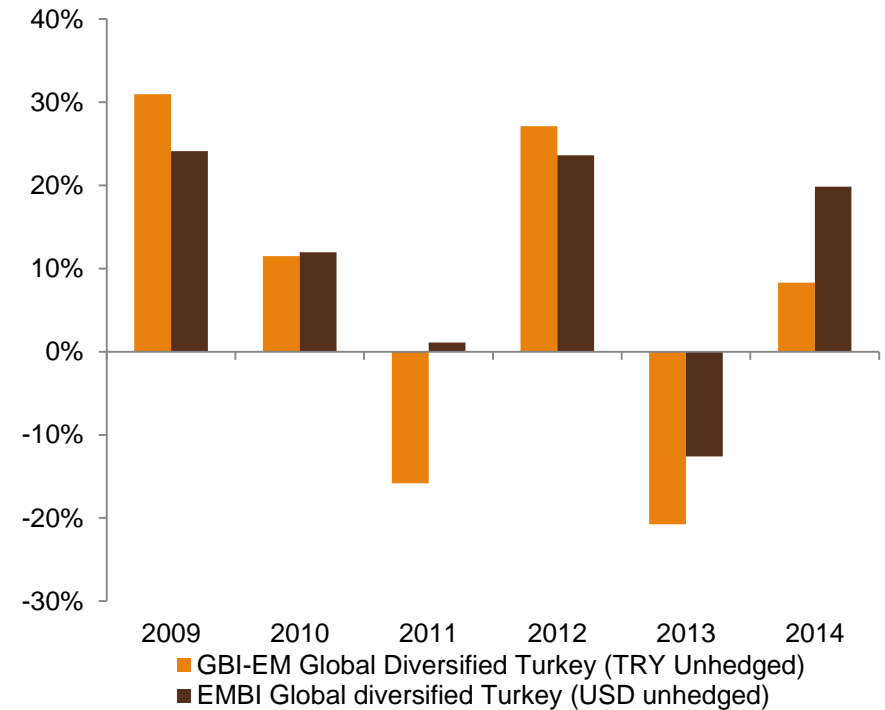
- It is challenging to compare local investors' experience vs. foreign investors' experience from similar investments
- Three main factors which impact the difference in performance
 - Tax
 - Capital Control
 - Currency
- Comparing local currency Brazilian bonds' performance to external Brazilian bonds' performance, after adjusting for the currency performance
- Local investors are often better off in countries with intervention-prone central banks, whereas countries which are a bit more open, the offshore investors tend to have similar experience compared to local investors

Comparing the experience of domestic and foreign investors (1)

Investor experience in Brazil



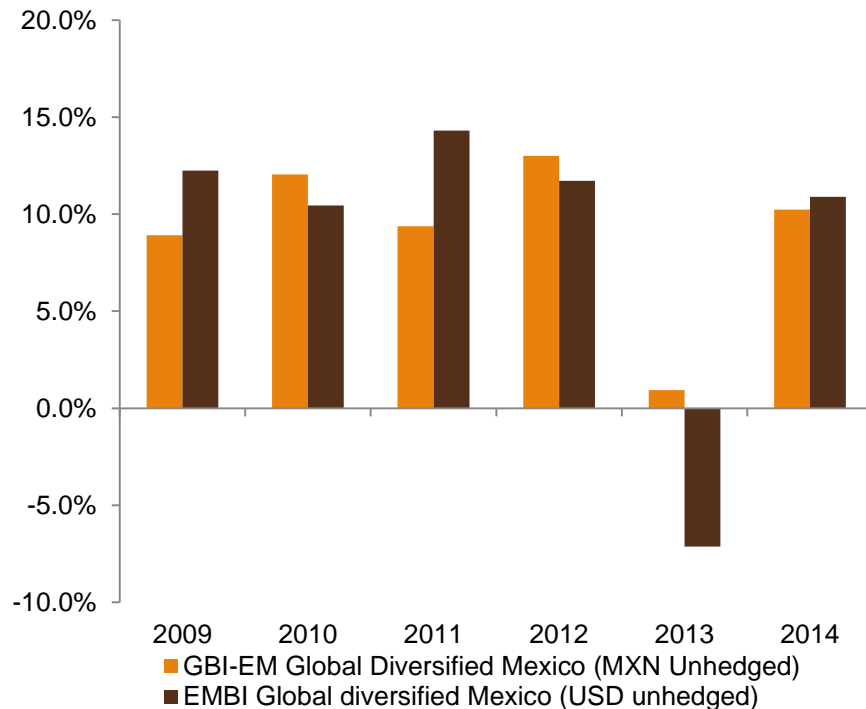
Investor experience in Turkey



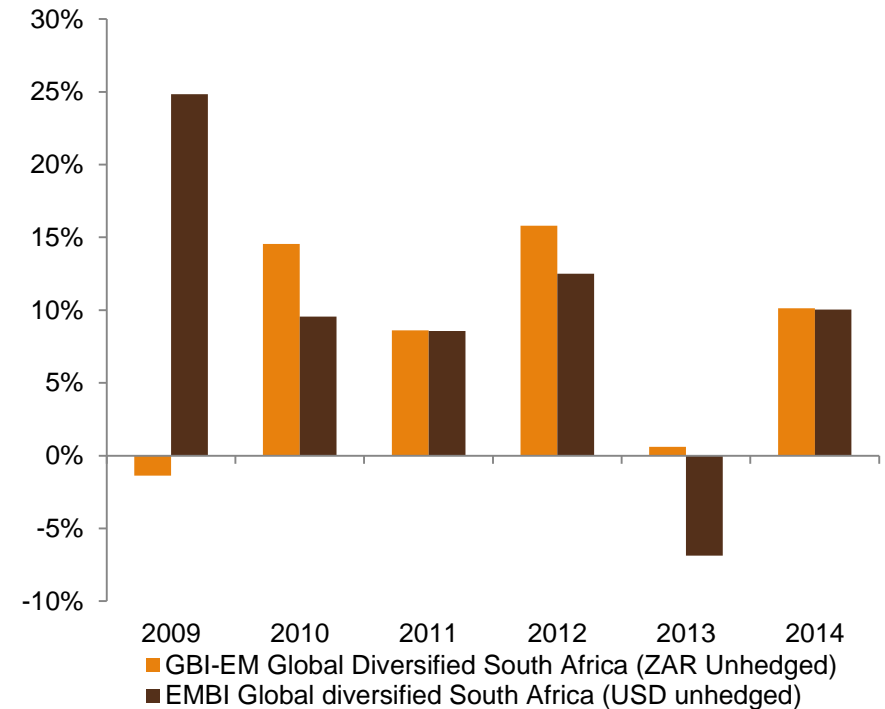
Source: J.P.Morgan Asset Management, Bloomberg, March 2015

Comparing the experience of domestic and foreign investors (2)

Investor experience in Mexico

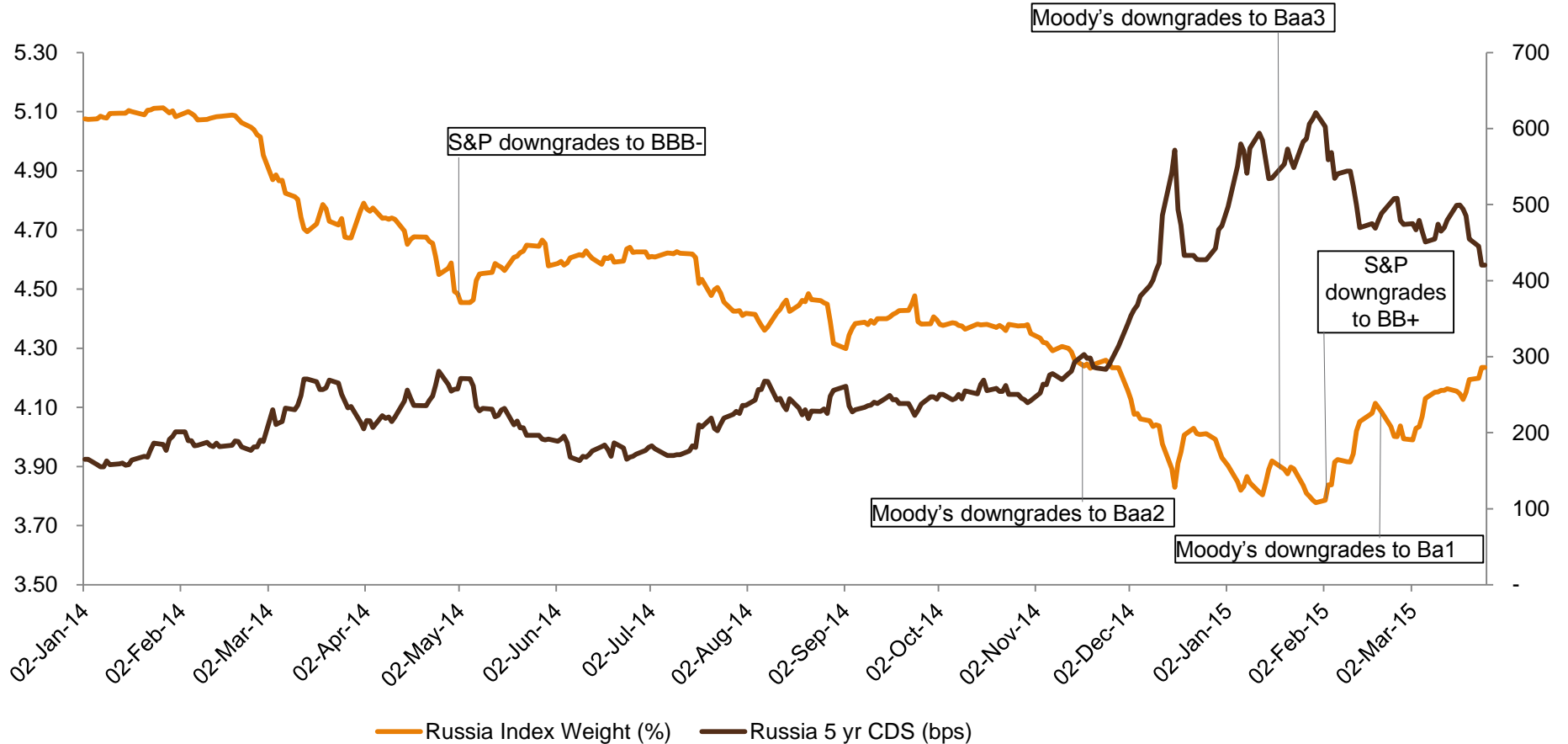


Investor experience in South Africa



Active management in Emerging market debt

- A relatively inefficient asset class – benchmarks tend to reflect the market information with significant lag



Source: J.P.Morgan, Bloomberg, March 2015

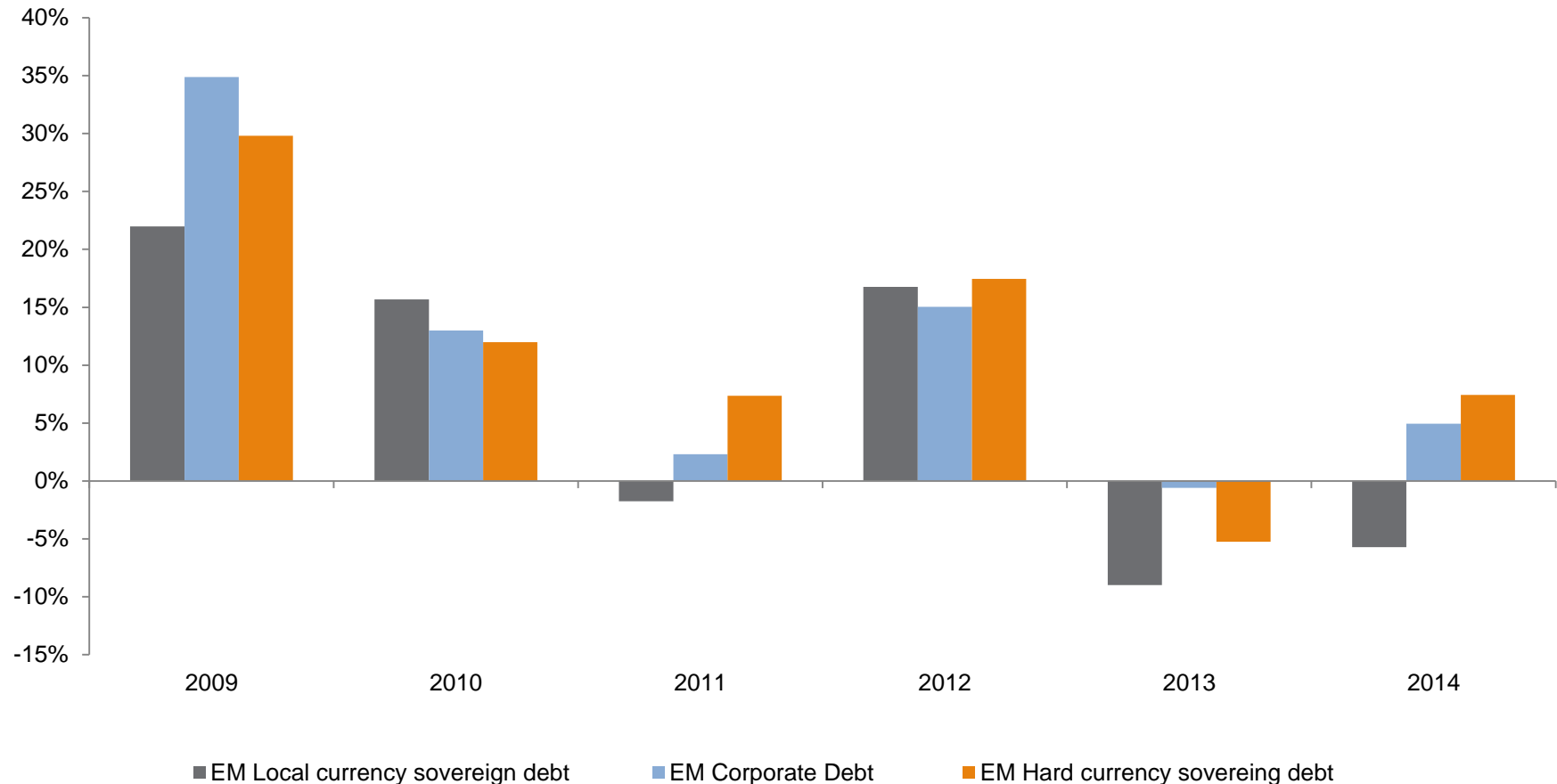
Half of the alpha in EM corporate portfolio in 2014 came from being underweight Russia

Top/Bottom 10 attribution by Country (bps) in JPMorgan Funds – Emerging Market Corporate Bond Fund during 2014

Top/Bottom 10	Relative Weight (%MV)	Relative Contribution (bps)	Carry effect (bps)	Curve effect (bps)	Credit effect (bps)	Residual (bps)	Currency (bps)
Mexico	3.78	50	27	25	-4	2	0
Russia	-1.75	41	-11	7	47	-3	0
Ukraine	-0.93	35	-13	-1	49	0	0
India	1.60	25	8	12	11	-2	-4
Indonesia	-0.25	25	-8	-1	35	-1	0
Chile	0.38	20	0	12	5	2	0
Brazil	0.67	17	7	8	5	-4	0
Argentina	0.16	11	2	1	9	-1	0
Panama	1.04	11	5	2	3	1	0
Sri Lanka	0.76	10	4	1	5	0	0
Poland	-0.26	-11	-1	-2	-1	0	-7
Philippines	-1.40	-13	-7	-2	-3	0	0
Hong Kong	-1.81	-13	-4	-4	-4	-2	0
Colombia	-1.90	-17	-8	-7	0	-1	0
Qatar	-2.88	-19	-9	-13	3	0	0
Nigeria	1.09	-20	8	1	-27	-2	0
Israel	-2.89	-20	-12	-10	1	1	0
Singapore	-1.94	-21	-5	-5	-13	1	0
Turkey	-1.46	-22	-8	-5	-8	-1	0
Kazakhstan	0.19	-23	-4	3	-11	0	-10

Source: J.P. Morgan Asset Management. As of 31st December 2014. Total alpha, gross of fees, in 2014 was 85bps.

Active asset allocation is important, in addition to active country, sector and security selection



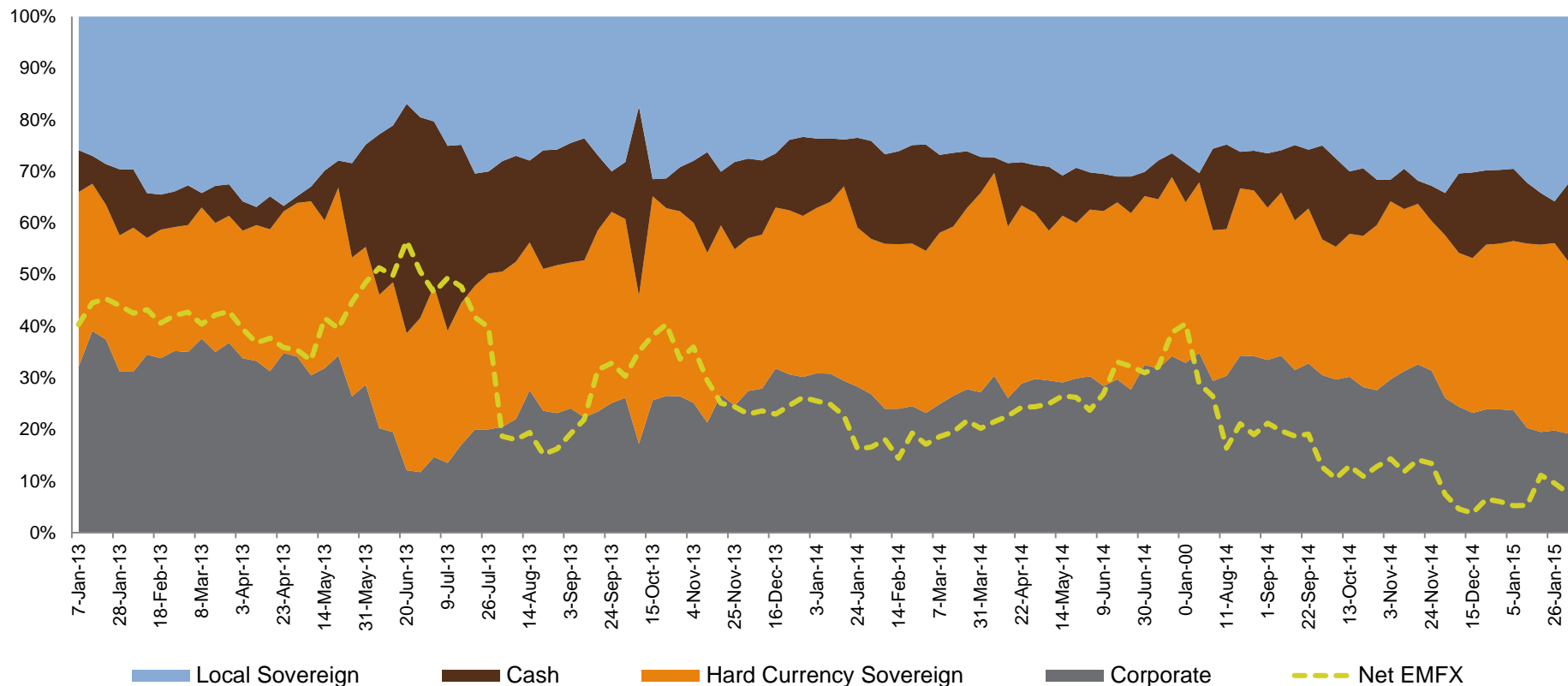
Source: J.P. Morgan Asset Management. As of 31st December 2014. Indices used are: JPMorgan GBI-EM Global Diversified Index (unhedged USD), JPMorgan CEMBI Broad Diversified Index, and JPMorgan EMBI Global Diversified Index, respectively

Historical asset allocation: JPMorgan Funds - Emerging Markets Strategic Bond Fund

As at 2nd February 2015

JPMorgan Funds – Emerging Markets Strategic Bond Fund

Sector allocation (% MV)



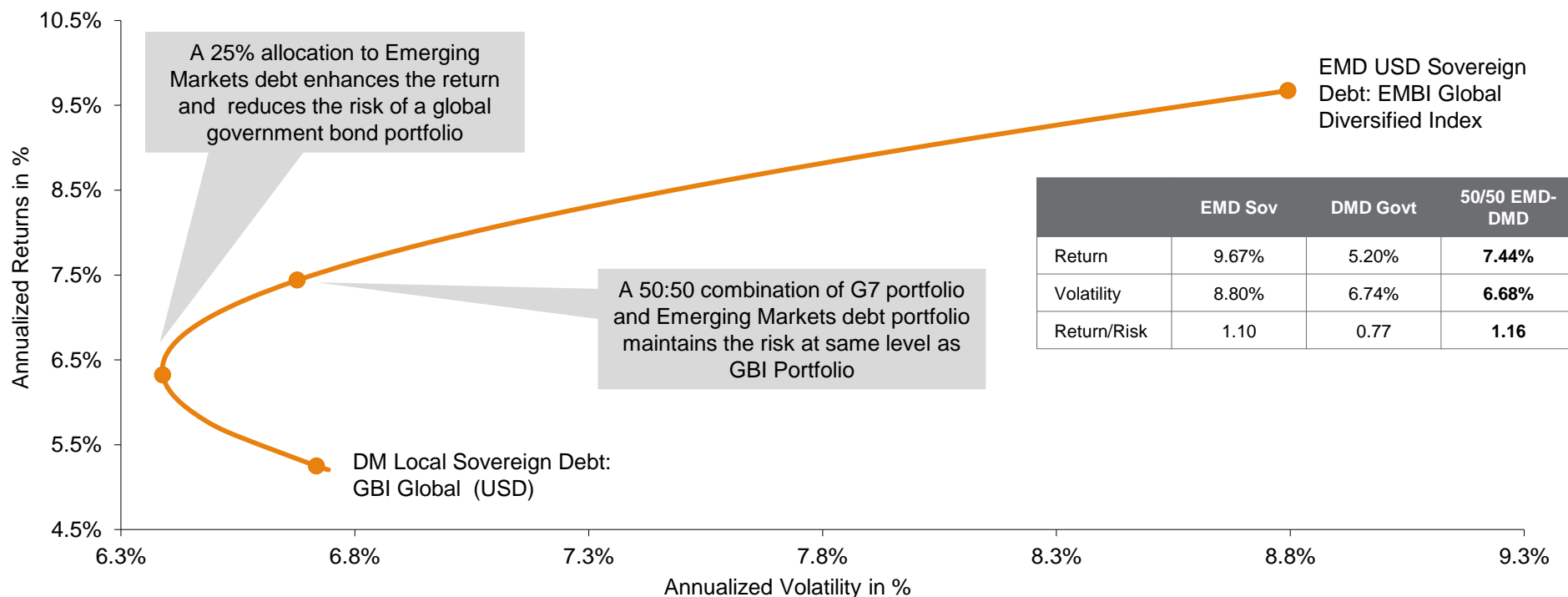
Source: J.P. Morgan Asset Management.

The Fund is an actively managed portfolio; holdings, sector weights, allocations and leverage as applicable, are subject to change and the Fund is managed to internal guidelines which are not absolute and can change over time. The targets and aims provided are the Investment Manager's targets and aims only.

Role of Emerging Market Debt in Client Portfolios

Adding EM Sovereign to Global Govt bonds can enhance the yield and reduces the risk of the portfolio

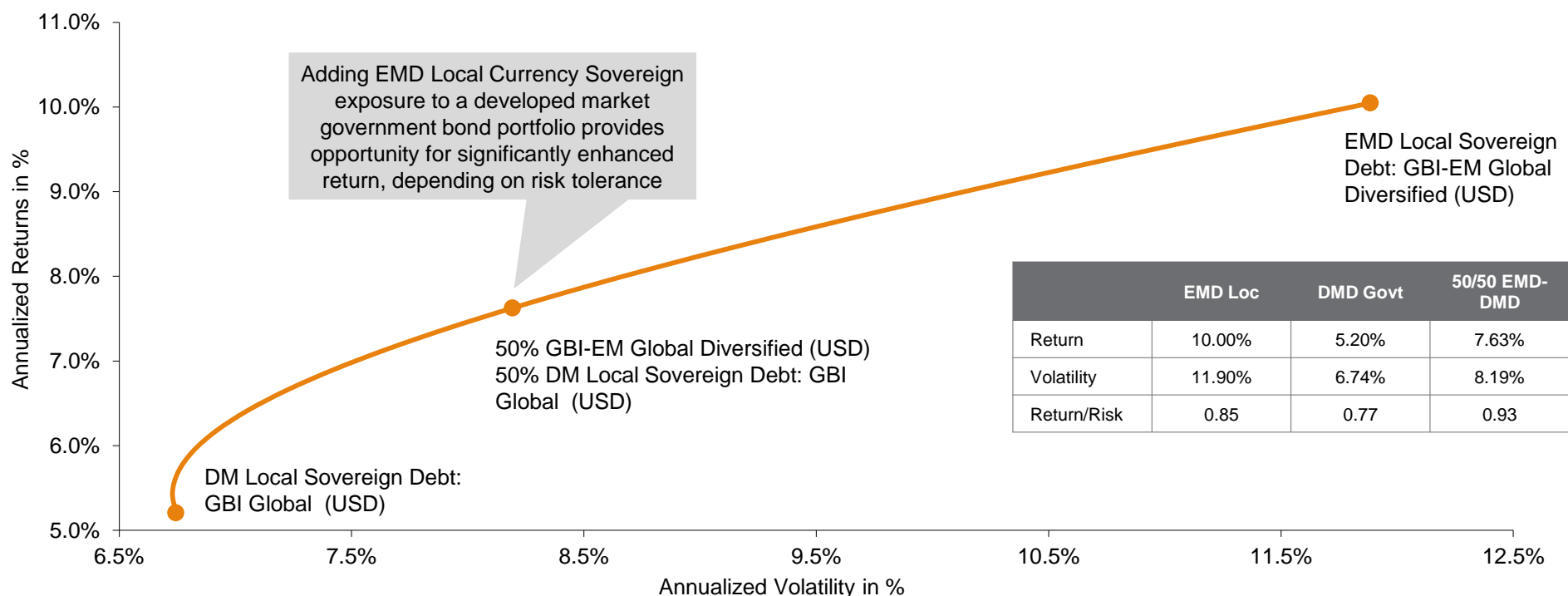
Efficient frontier for EM Sovereign (USD) and DM Sovereign Debt (Local Currency, unhedged)



Source: J.P. Morgan Asset Management, Bloomberg, July 2014, For illustrative purposes only

Adding EM Local Currency Government to Global Govt bonds portfolio has diversification benefits

Efficient frontier for EM Sovereign (Local Currency, unhedged) and DM Sovereign Debt (Local Currency, unhedged)



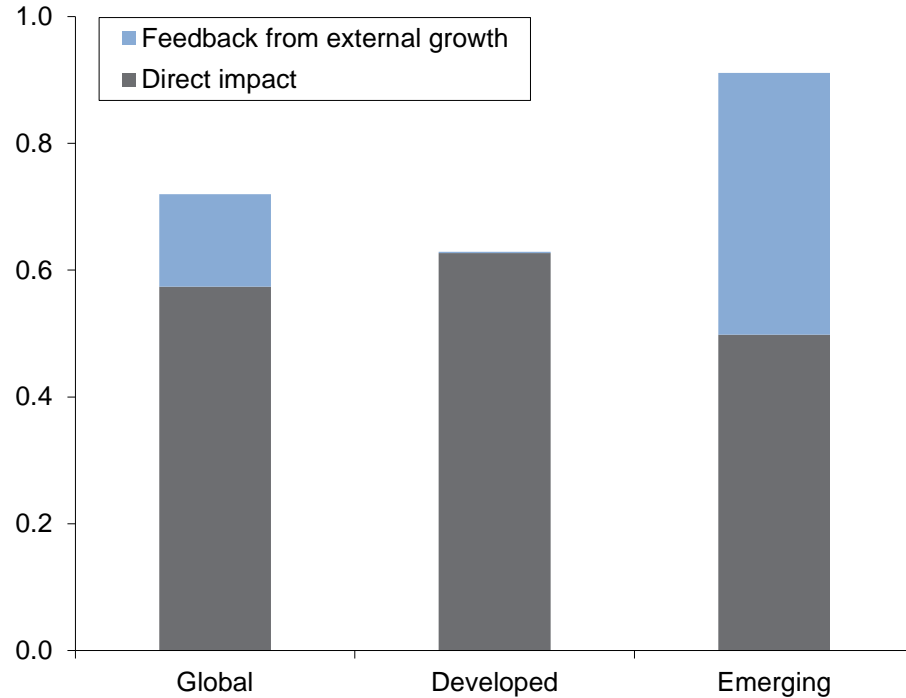
Source: J.P. Morgan Asset Management, Bloomberg, July 2014, For illustrative purposes only

Outlook

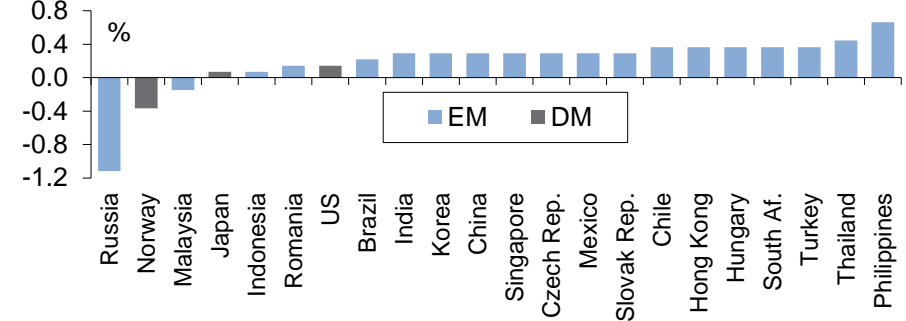
The impact of weaker oil is not uniform across EM

Impact from oil price shock on real GDP growth

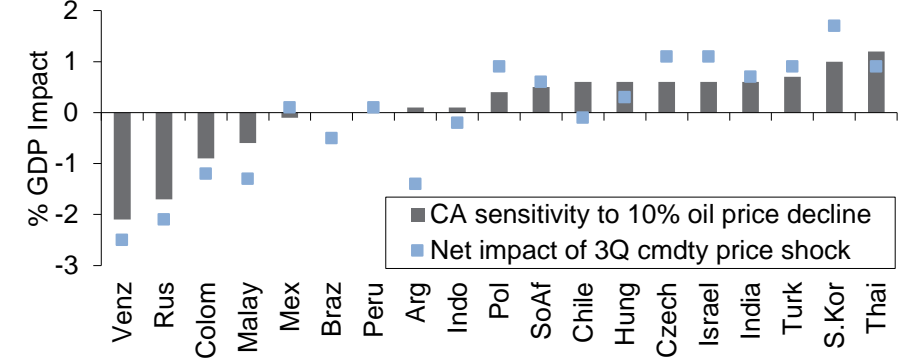
%-point on annualised growth over 2-quarters



Impact on GDP after one year of \$15 decline in the price of oil



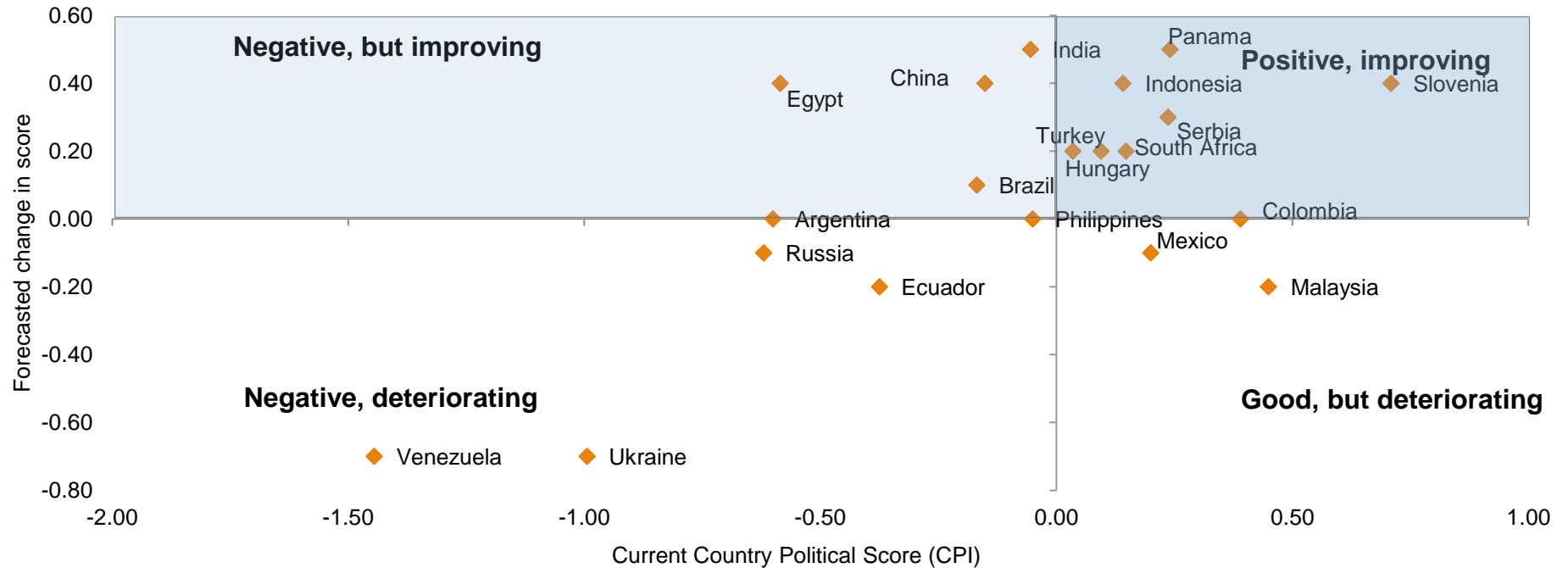
Current account sensitivity to 10% oil price decline



Source: J.P. Morgan Asset Management, Bloomberg. December 2014.

Axes of differentiation: where are the reform stories?

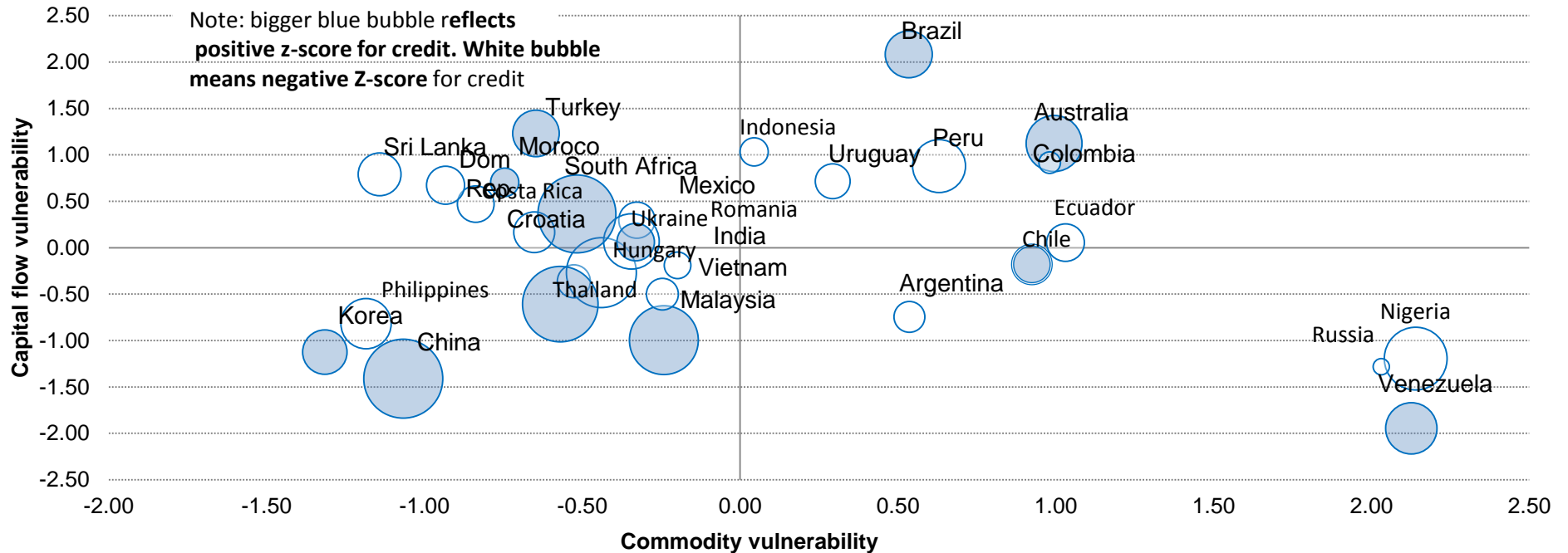
Country political score



Source: J.P. Morgan Asset Management, December 2014

Axes of Differentiation: commodities, credit, and capital flows

Commodity, capital flow and credit vulnerabilities

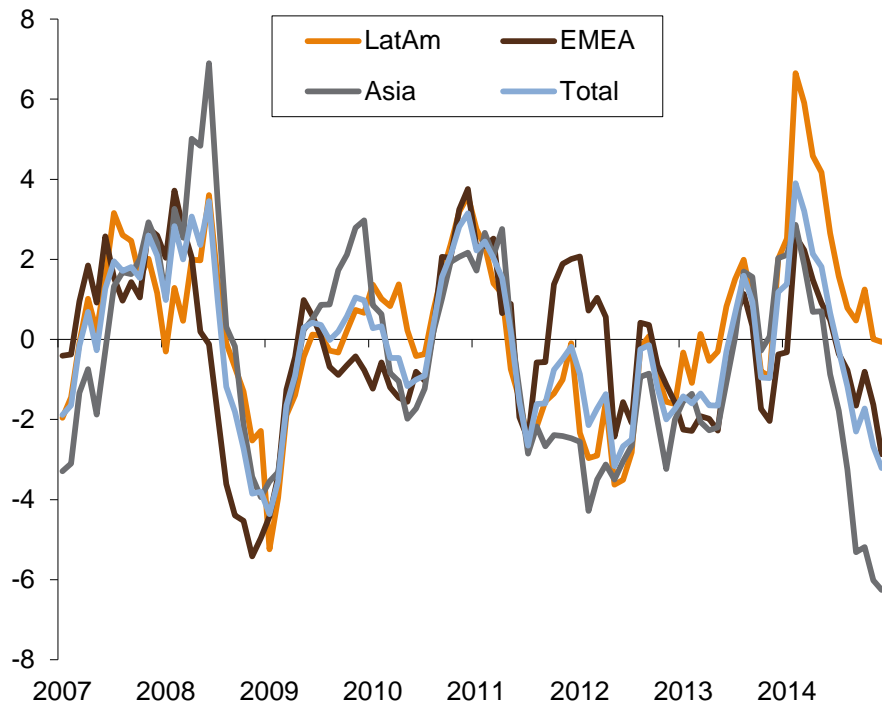


Source: J.P. Morgan Asset Management. Data Sources: UNCTAD, World Bank and S&P. Commodity vulnerability: normalised score which includes both share of commodity exports and terms of trade gains. Capital flow vulnerability: normalised score which includes current account position and net external liabilities, expressed in terms of current account revenues. Credit vulnerabilities: normalised score which includes both total domestic credit (including credit to government) and domestic credit growth.

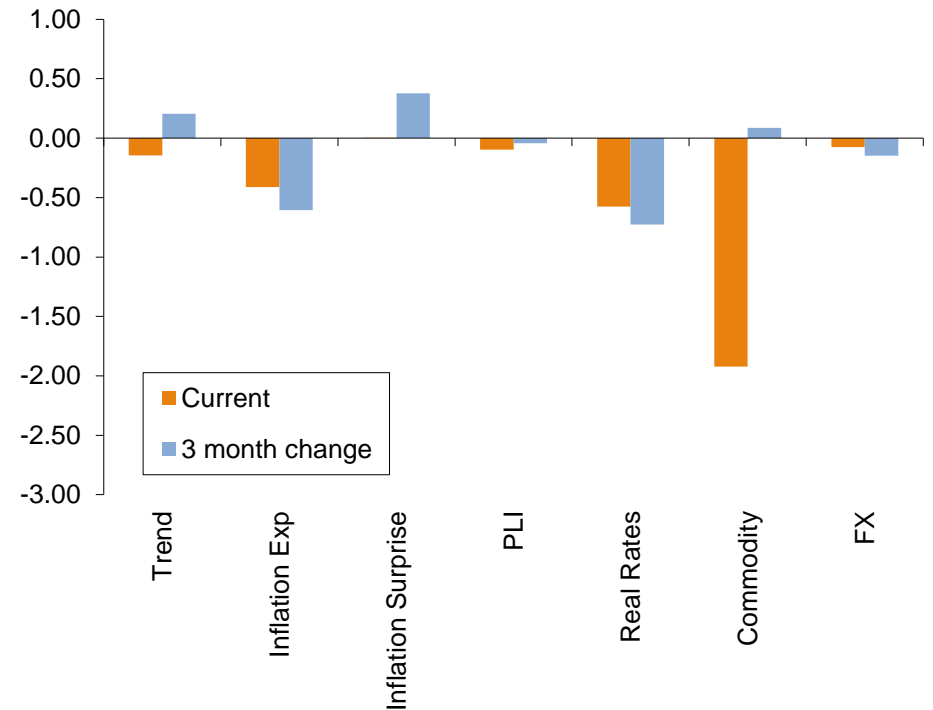
As at December 2014

Disinflation spreading throughout EM

JPMAM EM inflation pressure gauge regional summary



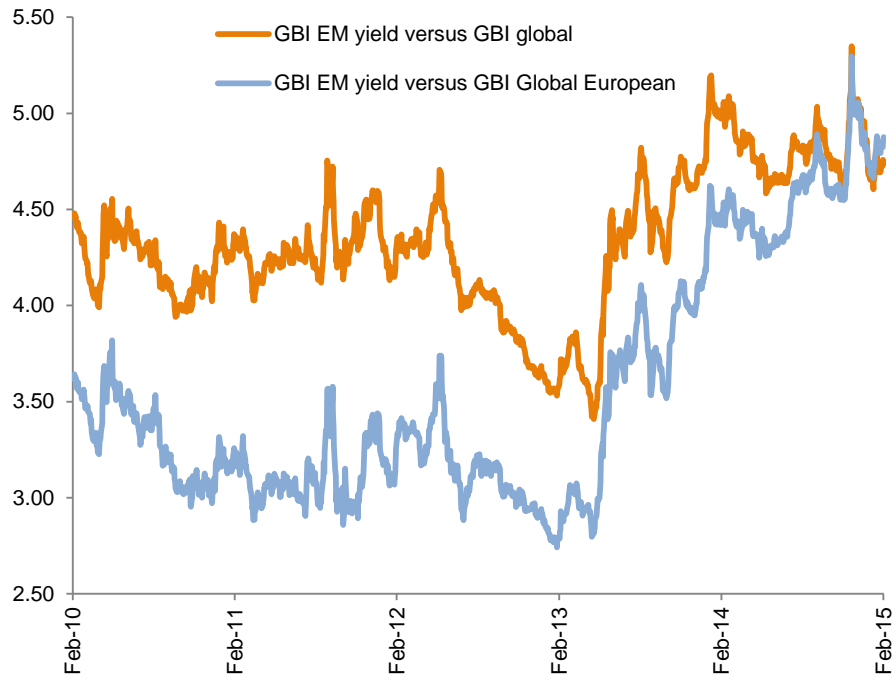
JPMAM EM inflation pressure gauge components



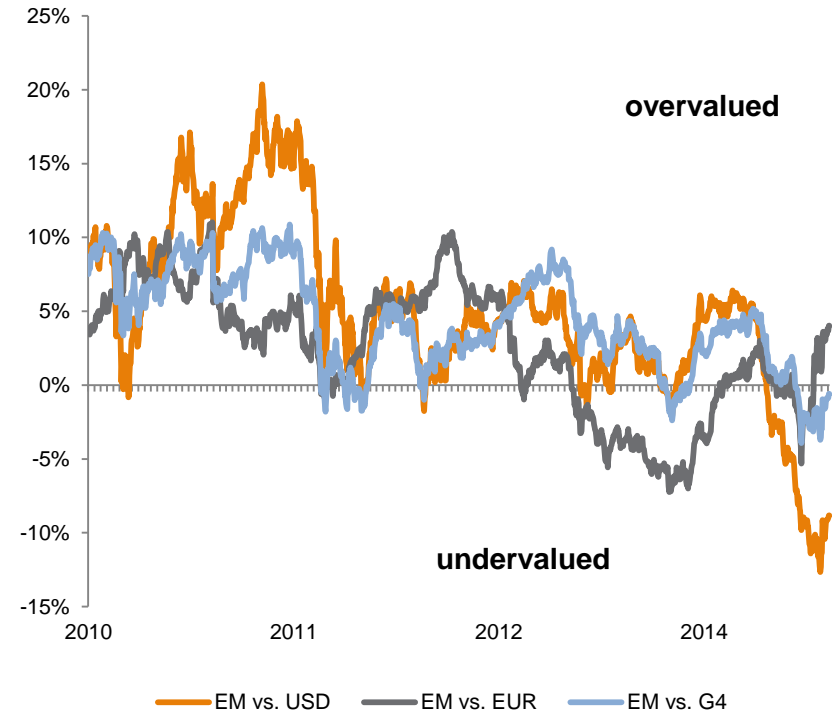
Source: J.P. Morgan Asset Management, December 2014. Our proprietary EM inflation pressure gauge systematically tracks inflationary pressures in EM countries. PLI: proprietary leading indicators.

EM Local Currency Debt valuations look attractive

GBI-EM yield versus GBI Global and GBI Global European
%



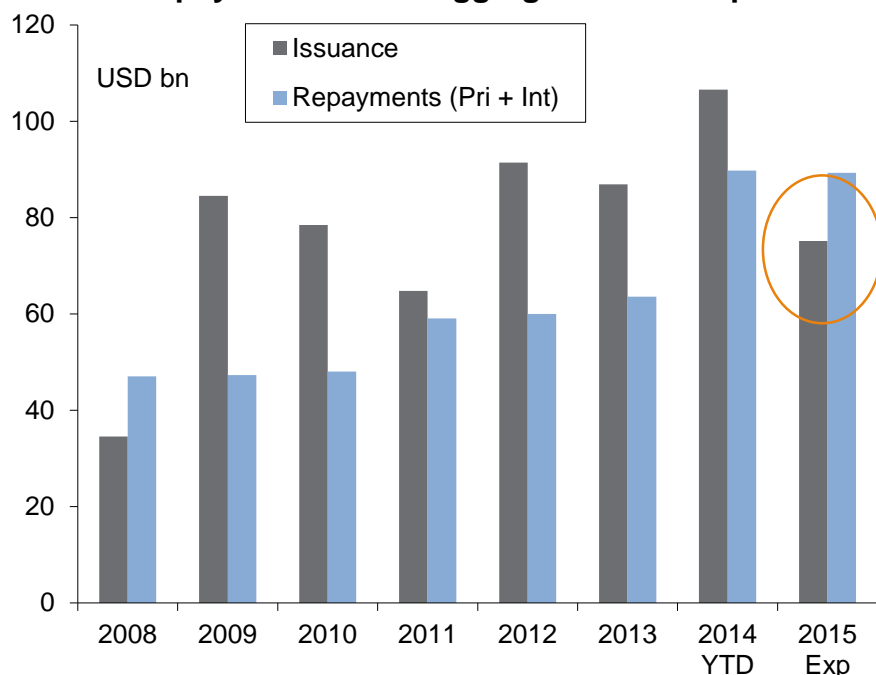
EM FX valuations
%



Source: J.P. Morgan Asset Management. Data as of February 26, 2015.

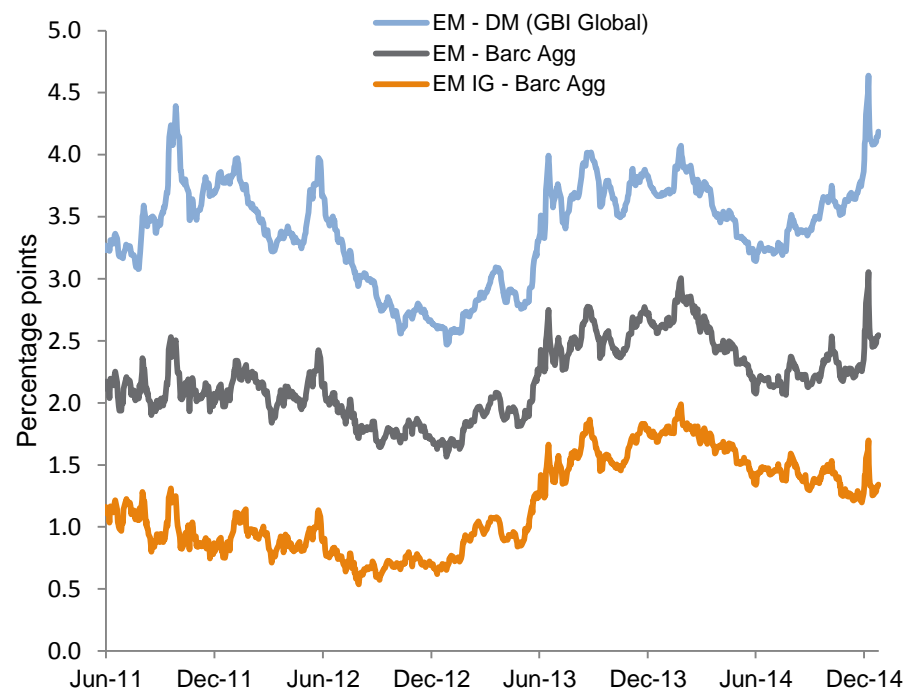
EM Sovereign: favourable supply pipeline, attractive valuations

Negative net sovereign supply expected in 2015, with heaviest repayments in Q1. Aggregate EM debt profile.



Source: J.P.Morgan Asset Management, Barclays, Deutsche Bank. Forecasts, projections and other forward looking statements are based upon current beliefs and expectations. They are for illustrative purposes only and serve as an indication of what may occur. Given the inherent uncertainties and risks associated with forecasts, projections and other forward statements, actual events, results or performance may differ materially from those reflected or contemplated. December 2014

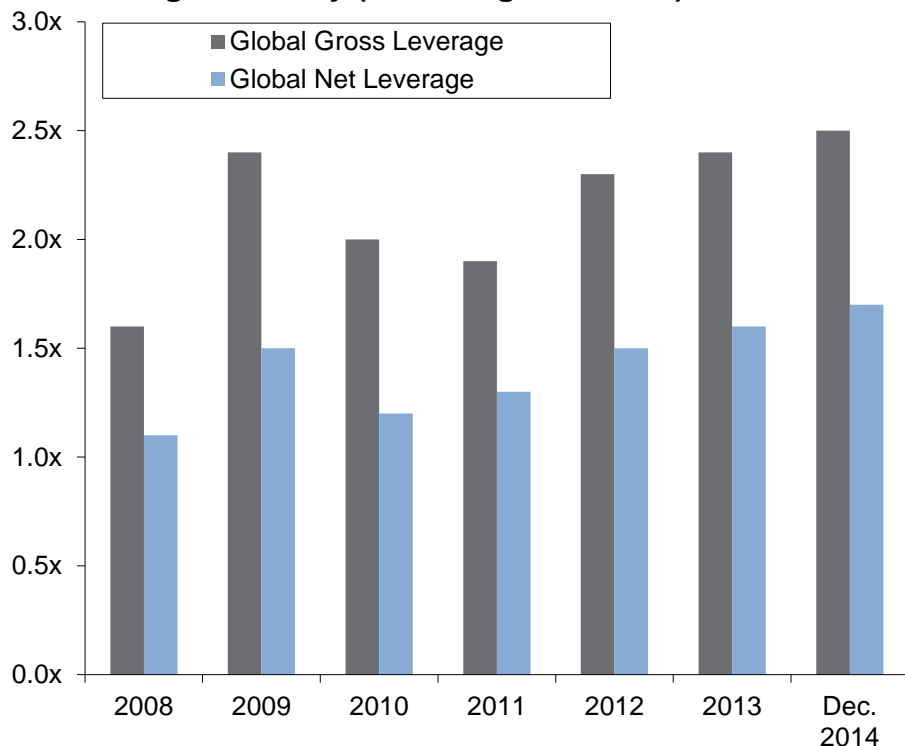
EM (EMBIG) vs DM - yield difference



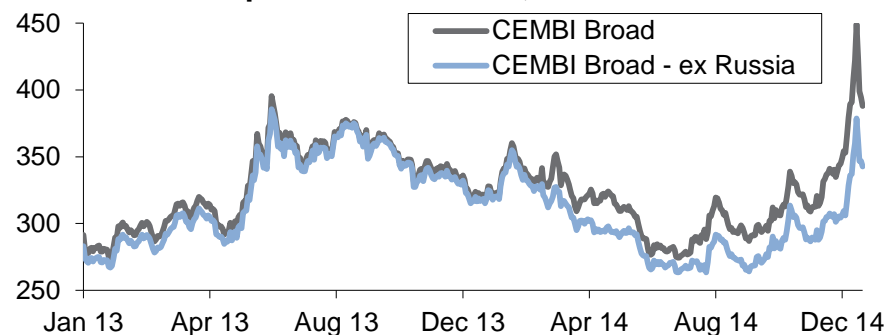
Source: JPMorgan, Barclays. *EMBIG: JPMorgan EMBI Global Index. Barc Agg: Barclays Aggregate. January 2015

EM Corporates: fundamentals decline on the margin, solvency not an issue

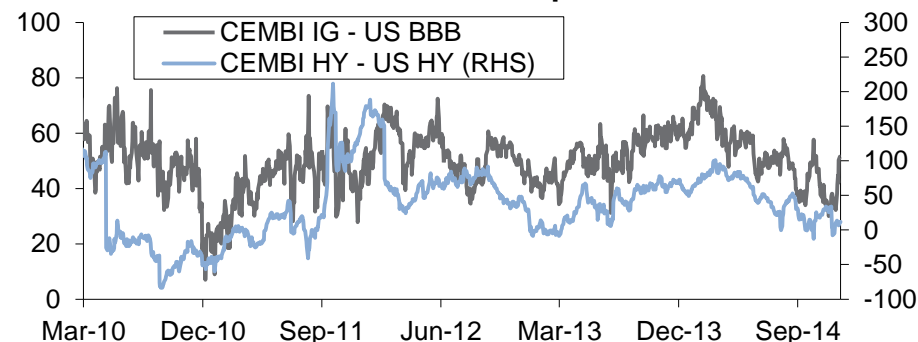
EM Leverage is steady (excluding Petrobras)



CEMBI Broad Spread at YTD wide, but still lower ex-Russia



CEMBI Broad Diversified vs DM - Spread Difference



Source: J.P.Morgan Asset Management, December 2014. CEMBIBD: JPMorgan Corporate Emerging Market Bond Index Broad Diversified. Indices do not include fees or operating expenses and are not available for actual investment. Past performance is not an indication of future performance.

Investment Objectives and key risks

JPMorgan Funds – Emerging Markets Corporate Bond Fund

Investment Objective	To achieve a return in excess of corporate bond markets of emerging market countries by investing primarily in emerging market corporate debt securities, using financial derivative instruments where appropriate.
Risks	<p>The value of your investment may fall as well as rise and you may get back less than you originally invested.</p> <p>The value of debt securities may change significantly depending on economic and interest rate conditions as well as the credit worthiness of the issuer. Issuers of debt securities may fail to meet payment obligations or the credit rating of debt securities may be downgraded. These risks are typically increased for emerging market and below investment grade debt securities.</p> <p>In addition, emerging markets may be subject to increased political, regulatory and economic instability, less developed custody and settlement practices, poor transparency and greater financial risks. Emerging market currencies may be subject to volatile price movements. Emerging market and below investment grade debt securities may also be subject to higher volatility and lower liquidity than non emerging market and investment grade debt securities respectively.</p> <p>The credit worthiness of unrated debt securities is not measured by reference to an independent credit rating agency.</p> <p>The Sub-Fund may be concentrated in a limited number of emerging market corporate issuers and as a result, may be more volatile than more broadly diversified funds.</p> <p>The value of financial derivative instruments can be volatile. This is because a small movement in the value of the underlying asset can cause a large movement in the value of the financial derivative instrument and therefore, investment in such instruments may result in losses in excess of the amount invested by the Sub-Fund.</p> <p>Movements in currency exchange rates can adversely affect the return of your investment. The currency hedging that may be used to minimise the effect of currency fluctuations may not always be successful.</p>

JPMorgan Funds – Emerging Markets Strategic Bond Fund

Investment Objective	To achieve a return in excess of the benchmark by exploiting investment opportunities in emerging market debt and emerging market currency markets, using financial derivative instruments where appropriate.
Risks	<p>The value of your investment may fall as well as rise and you may get back less than you originally invested.</p> <p>The value of debt securities may change significantly depending on economic and interest rate conditions as well as the credit worthiness of the issuer. Issuers of debt securities may fail to meet payment obligations or the credit rating of debt securities may be downgraded. These risks are typically increased for emerging market and below investment grade debt securities.</p> <p>In addition, emerging markets may be subject to increased political, regulatory and economic instability, less developed custody and settlement practices, poor transparency and greater financial risks. Emerging market currencies may be subject to volatile price movements. Emerging market and below investment grade debt securities may also be subject to higher volatility and lower liquidity than non emerging market and investment grade debt securities respectively.</p> <p>The credit worthiness of unrated debt securities is not measured by reference to an independent credit rating agency.</p> <p>Asset-backed securities may be highly illiquid, subject to adverse changes to interest rates and to the risk that the payment obligations relating to the underlying asset are not met.</p> <p>The Sub-Fund may be concentrated in a limited number of countries, sectors or issuers and as a result, may be more volatile than more broadly diversified funds.</p> <p>The value of financial derivative instruments can be volatile. This is because a small movement in the value of the underlying asset can cause a large movement in the value of the financial derivative instrument and therefore, investment in such instruments may result in losses in excess of the amount invested by the Sub-Fund.</p> <p>The possible loss from taking a short position on a security may be unlimited as there is no restriction on the price to which a security may rise. The short selling of investments may be subject to changes in regulations, which could adversely impact returns to investors.</p> <p>Movements in currency exchange rates can adversely affect the return of your investment. The currency hedging that may be used to minimise the effect of currency fluctuations may not always be successful.</p>

A full list of risks disclosures can be obtained from the latest available prospectus or the KIID document

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