

Case for An Unconstrained Bond Portfolio

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Contributors

Mirae Asset Global Investments (USA)
Global Fixed Income Investment Unit

Joon Hyuk Heo,
Head of Global Fixed Income

Vishal Saxena,
Fixed Income Portfolio Analyst

Executive Summary

The search for yield is one of the pressing challenges in today's market environment for investors. We believe that low interest rates in developed economies are a result of a combination of factors such as an ageing population, polarisation of wealth, and investments in capital-light businesses and automation. These are structural issues, so any temporary rise in yields due to hiking policy rates or ending quantitative easing is unlikely to alter the secular low interest rate environment.

As such, we believe that given better risk-reward characteristics in emerging market (EM) assets, an unconstrained approach with an emerging market bias allows for flexible risk allocation that can target attractive risk-adjusted returns in various kinds of market conditions. Pursuing such a dynamic allocation would potentially result in a better outcome from both a principal protection as well as a return perspective.

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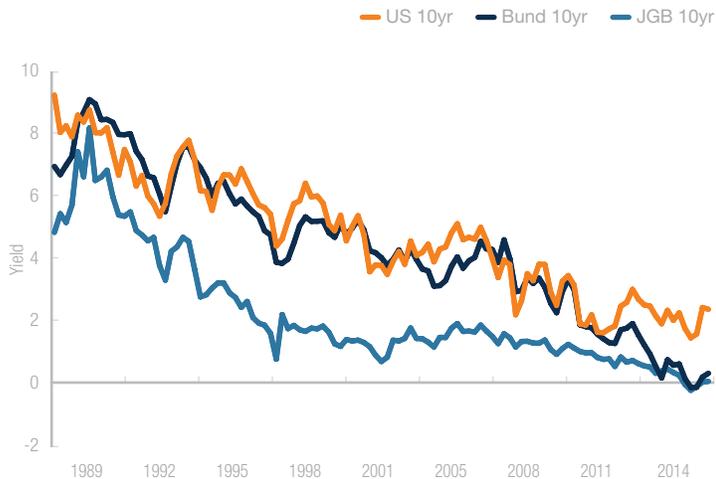
Developed Markets

In developed markets (DMs), yields are at record low levels as a result of demographic changes coupled with non-traditional monetary policies, like quantitative easing (QE), by central banks around the world.

“Low interest rates in DMs are a result of factors such as ageing, polarization of wealth, and investments in capital-light businesses and automation.”

Government Bond Yields in Advanced Economies

Source: Bloomberg, Mirae Asset Global Investments (2017)

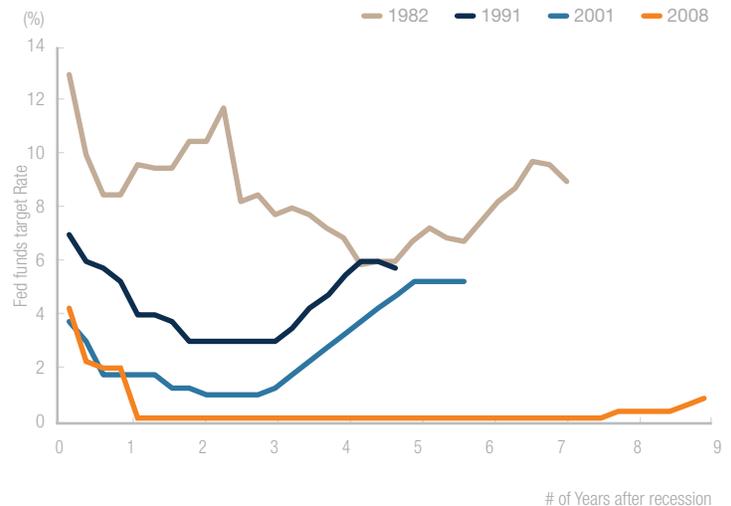


Central banks tend to lower policy rates during recessions to boost investment through cheaper financing. As the economy recovers and inflation picks up, policy rates typically recover. However, the current outlook for interest rates differs significantly from previous economic cycles, when policy rates rose swiftly after hitting the bottom. During previous economic cycles, before the financial crisis of 2008, US Fed policy rates returned to pre-crisis levels in approximately five years. In the current economic cycle, despite central banks' unconventional monetary policies, low interest rates have failed to stoke inflation in DMs.

In the bigger scope of things, we need to understand that the persistent decline in interest rates over the last 30 years is not a result of monetary or fiscal policies.

Federal Funds Rate Across Economic Cycles

Source: Bloomberg, Mirae Asset Global Investments (2017)



Low interest rates in DMs are a result of factors such as ageing, polarization of wealth, and investments in capital-light businesses and automation. These are structural issues and any temporary rise in yields due to raising policy rates or ending the QE is unlikely to change the low interest rate environment.

High Duration Risk in Core Assets

Bond investments generate returns through exposure to certain risk premia such as term factor (duration risk), credit quality (default risk) and/or liquidity (risk surrounding the ability to convert instruments to cash at fair market price).

A government bond's embedded yield compensates investors for the duration risk involved in investing in a fixed rate bond. A spread over government bond yield compensates for default risks related to investing in non-government securities.

Traditional fixed income portfolios are generally benchmarked to a market index such as the Barclays US Aggregate Index, which tracks high quality 'core' assets such as US Treasuries, mortgage-backed securities and investment grade corporate bonds. Duration risk has become the single largest risk factor in traditional portfolios due to low yields, large exposure to government bonds, and tight corporate spreads in the investment grade sector.

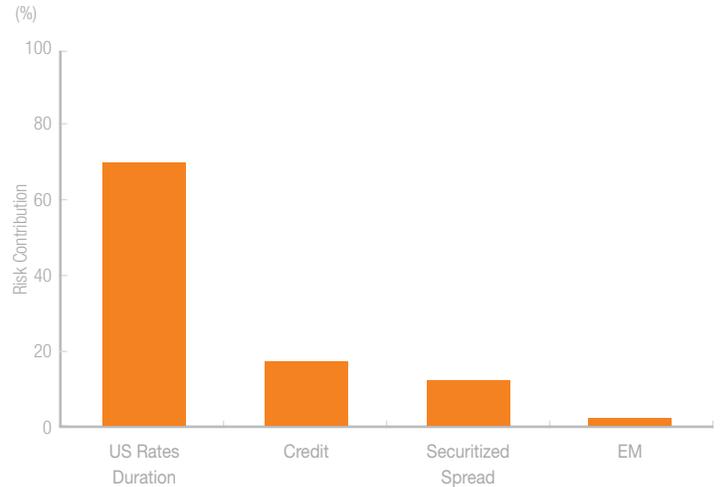
Fixed income portfolios tracking the Barclay's US Aggregate Index have benefitted significantly from a 30-year decline in major government bond yields and a higher coupon in US investment grade credit. Historically, high government bond yields effectively compensated for duration risk, but now, with the extremely low yields, portfolios need to rely on a further decline in interest rates to generate meaningful positive total return.

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As duration risk becomes ever more concentrated in traditional portfolios, even a small rise in interest rates can produce significant capital losses and potentially generate negative total return for investors.

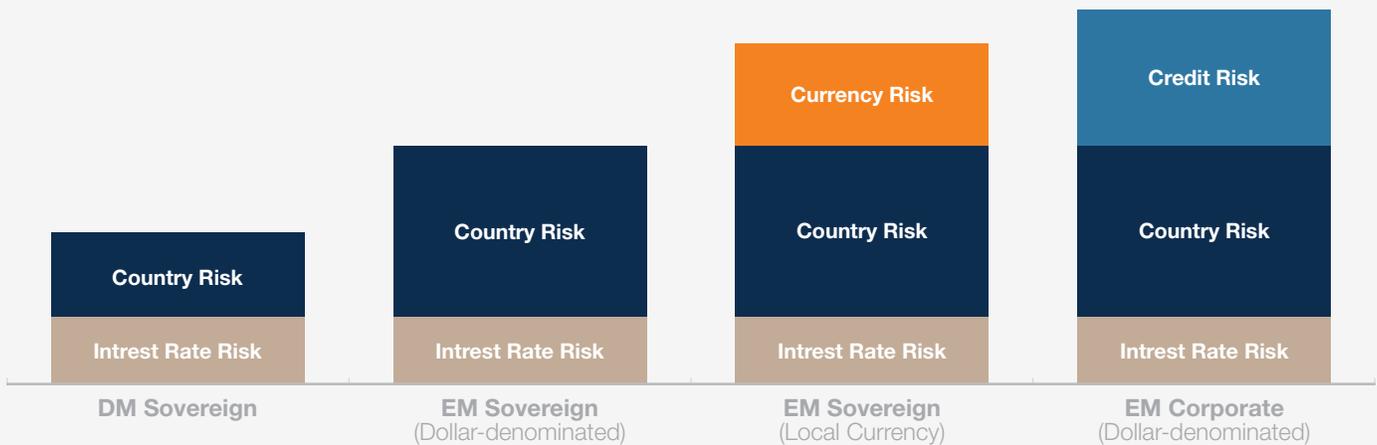
US Aggregate Risk Distribution

Source: Bloomberg PORT, Mirae Asset Global Investments (As of June 5, 2017)



Aggregate Risk Distribution by Bond Asset Classes

Source: Samsung Securities



Illustrative Purpose Only

Emerging Markets

There is no denying that emerging market (EM) assets have faced many crises in the past. In the early 1990s, many EM countries ran large trade deficits and had their exchange rates pegged to the US dollar. At that time, EMs were highly dependent on foreign currency debt and deficits were usually financed in the form of foreign bank loans. Financing in the local currency bond markets was almost impossible due to the lack of domestic capital formation in the absence of domestic institutional players.

Foreign banks became reluctant to roll over their financing when any external or internal shock hit. As a result, capital flows would reverse and the country's currency would come under heavy pressure to devalue. Many countries used their foreign exchange (FX) reserves to keep the pegged value of their currencies. Eventually, due to the small size of their FX reserves, significant devaluation of EM currencies and a surge in domestic interest rates usually proved unavoidable. This used to be a typical snapshot of a currency crisis in EMs before 2000.

When Alan Greenspan, former Chairman of the US Federal Reserve, decided to raise interest rates in 1994, it set in motion a wave of currency crises in Asia and Latin America. This led to a corporate debt crisis forcing companies to restructure their US dollar debt.

Expanded Asset Classes

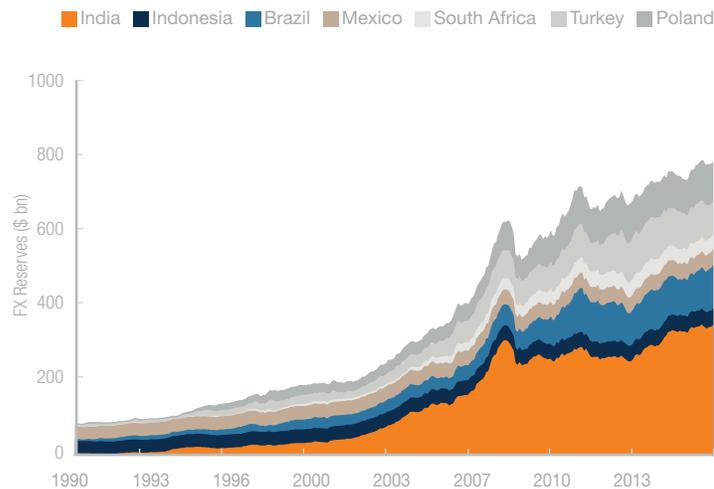
After the crisis, many EM countries abandoned their fixed exchange rate regimes. Many also began to build a large war chest of foreign currency assets, providing protection against systematic market risks.

After a turbulent decade in the 1990s, EMs enjoyed robust growth in the 2000s. Favorable external conditions such as demand from China, rising global trade and easy financing conditions played a major role in driving EM growth. For EM countries that were commodity exporters, the China-driven boom in commodity prices raised investments and GDP growth.

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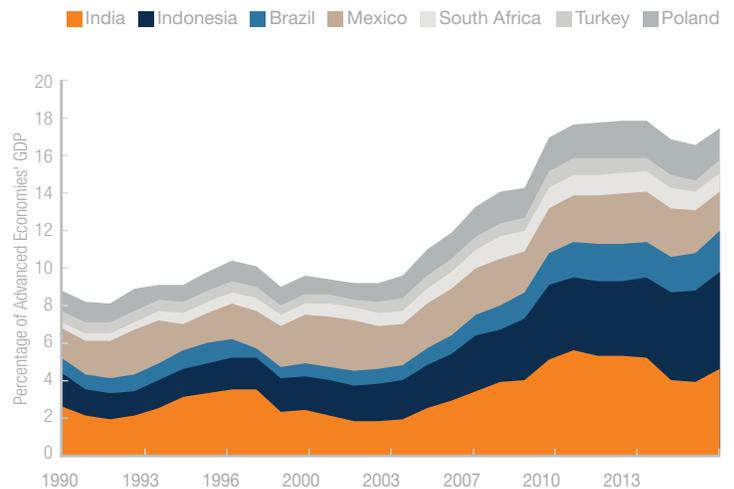
Foreign Currency Reserves of Select EM Countries

Source: IMF, Mirae Asset Global Investments (2017)



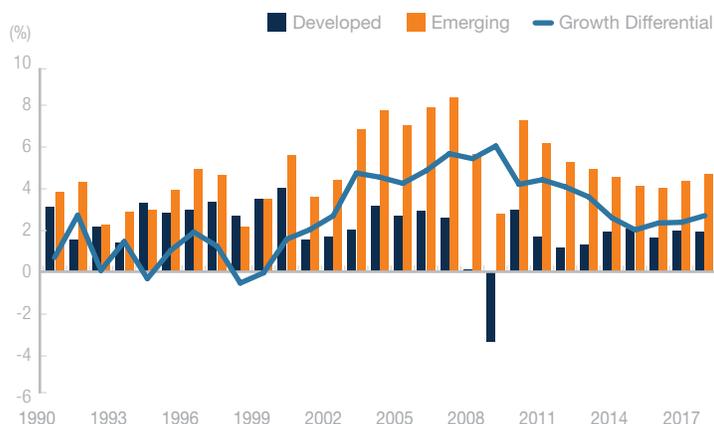
Percentage of Advanced Economies' GDP

Source: IMF, Mirae Asset Global Investments (2017)



EM-DM GDP Growth and Differential Comparison

Source: IMF, Mirae Asset Global Investments (2017)

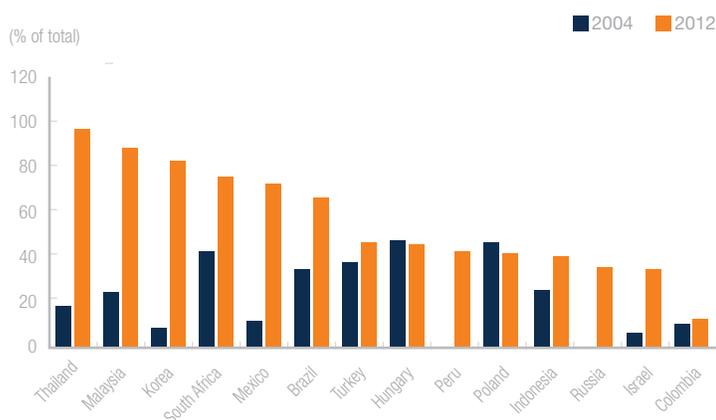


Local Currency Sovereign Debt

A better external environment with a new regime of floating FX systems in EMs led to the development of domestic institutions such as pension funds, mutual funds, and insurance companies. This created a natural demand for local debt with longer maturities to match the duration of their liabilities. Since 2000, EM governments have issued the majority of their debt in their local currency. Constant demand from domestic buyers led to the stabilization of the local debt markets. According to the Financial Times, on average, local investors held 68% of debt issued by their government as of 2015. Local currency debt accounted for roughly 55% of outstanding tradable debt in 2000 while this share increased to about 83% in 2013, according to the World Bank.

Local Currency Share of External Government Debt

Source: Financial Times, Du and Schreger (2014), Oxford Economics



The majority of EM debt is rated investment grade by major rating agencies. Foreign investors are also attracted to local currency sovereign bonds because they offer higher yields compared to comparable DM bonds. It is, however, important to note that currency volatility is directly passed on to the investor who invests in local currency bonds.

Hard Currency Sovereign Debt

From an investors' standpoint, the rising share of local currency sovereign debt has profound positive implications for debt issued in euros and US dollars. Decades ago, when the majority of EM debt was issued in US dollars, the most effective way for a distressed government to reduce their debt burden was to impose haircuts with debt restructuring. Today, a small share of dollar denominated debt means distressed sovereigns have less incentive to apply haircuts on dollar denominated debt, given the high legal and reputation cost of such a default on dollar debt. Countries with a high debt burden tend to rely on their local debt markets, which, in the event of a crisis, make their currencies come under depreciation pressure which has a limited impact on their dollar sovereign debt.

Rapid growth and reforms in many EM countries have led to a significant improvement in the credit quality of dollar-denominated debt. In the 1990s, less than 5 percent of bonds included in the JP Morgan EMBI Global Index were of investment grade quality, today the share is 52% (as of May 2017).

EM Corporate Debt

As we discussed earlier, interest rates in the US and the rest of DMs fell rapidly after the global financial crisis in 2008. Successive quantitative easing also made sure that yields continued to fall, even years after the financial crisis. As a result, the demand for US dollar-denominated spread products has risen considerably. Since governments now prefer their local markets, EM corporations, particularly in Asia, have begun to fill that demand.

Apart from demand for spread products, deleveraging in the banking sector after the financial crisis also forced EM corporations to find alternative sources of funding.

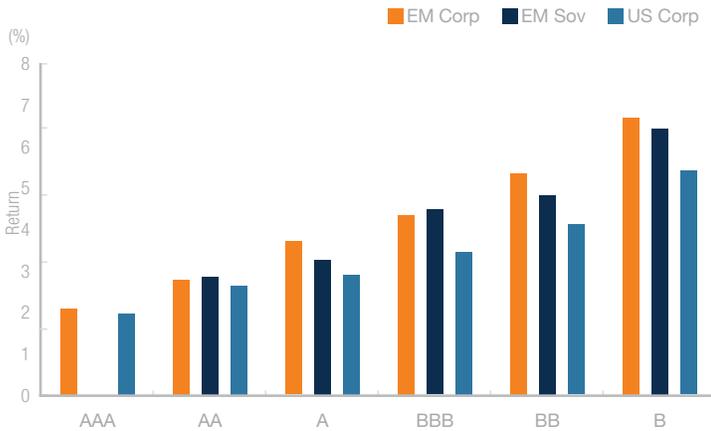
Given the improving fundamentals of EMs, the issuance of investment grade rated bonds is increasing. EM corporate debt offers attractive yields relative to similarly-rated debt in DMs. The EM corporate debt universe is diverse and offers an opportunity to get exposure to all major industries across all geographic regions.

Attractive Valuations

Recent global conditions have been favorable for EMs. Inflation is still weak in DMs and we believe that interest rates will remain at a very low level in the foreseeable future. Under these circumstances, EMs offer many opportunities in both local and hard currency sectors. After adjusting for credit quality, EMs generally offer better value relative to DMs. For example, EM corporate bonds yields are typically 100bps higher than those of US corporate bonds of the same credit quality (as of May 2017).

Return Profiles by Credit Rating : EM vs. DM

Source: JP Morgan, Bloomberg, Mirae Asset Global Investments (2017)



Similarly, duration risk and yield balance in EM asset classes is much more attractive than it is in DMs. The extra yield premium compounds and therefore has the potential to offer a higher total return compared to DM assets over a long-term investment horizon.

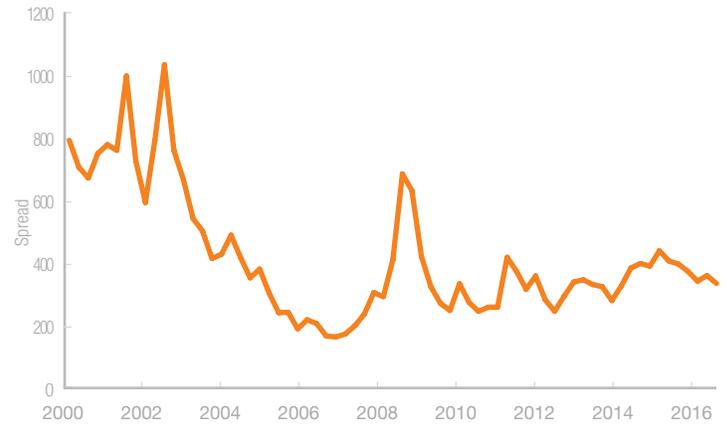
Yield vs. Duration Map

Source: JP Morgan, Bloomberg, Mirae Asset Global Investments (2017)



Emerging Markets Bond Global Index Historical Spread

Source: JP Morgan, Bloomberg, Mirae Asset Global Investments (2017)



Emerging Market Debt Outlook

The market capitalization of EM debt has grown significantly over the last 15 years. In 2000, the outstanding EM sovereign debt amounted to USD 1.3 trillion. By 2015, it had grown six fold to USD 7 trillion. At these levels, current EM debt is almost half of the size of the US Treasury market, the world's biggest and most liquid market.

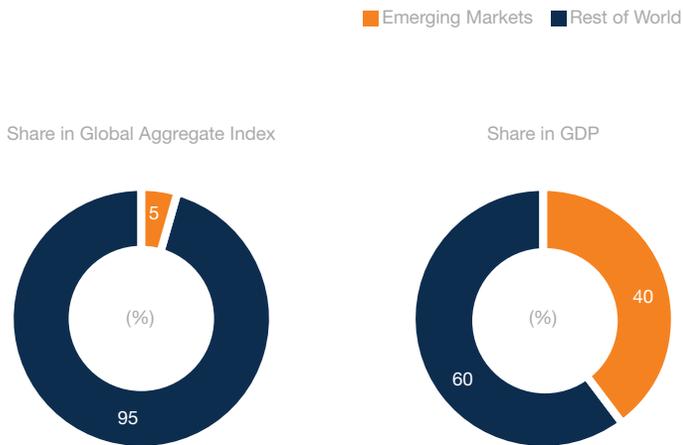
Even after the rapid rise in EM debt issuance over the last 15 years, there is still a significant difference between the size and depth of capital markets in EMs and DMs. This discrepancy necessitates a different strategy for investing in EM fixed income assets.

Traditional market capitalization weighted indices assign higher weights to heavily indebted borrowers. This strategy has evolved in DMs where countries and corporations benefit from deep and highly liquid bond markets to meet their financing needs. However, the same strategy may be suboptimal in EMs as investing in EMs warrants an informed judgment about systematic risks and liquidity constraints.

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EM Weight in Global Aggregate Index and Global GDP (2016)

Source: IMF, Bloomberg, Mirae Asset Global Investments (2017)



Today, EMs account for 40% of global GDP, but the EM weighting in the Global Aggregate Index is just 5%. As EM debt continues to improve in credit quality, demand from local market participants, such as pension funds and a developing middle class, will lead the expansion of local EM liquidity. The search for yield, due to lower long-term rates in DMs, will continue to fuel the demand for dollar-denominated spread products.

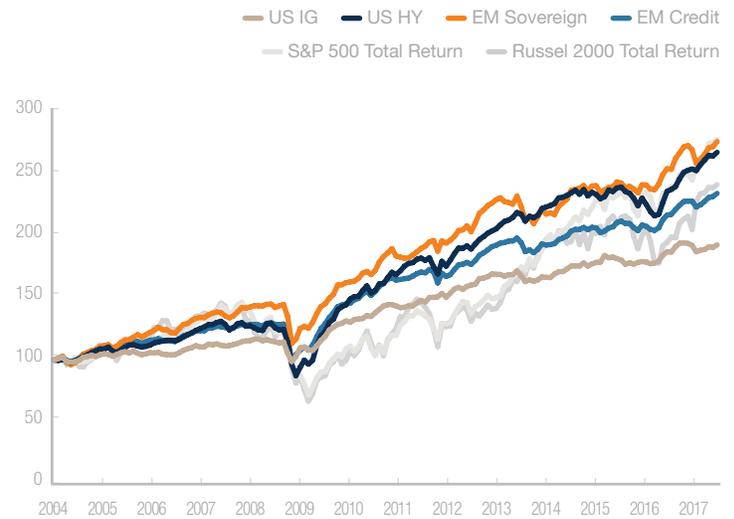
Risky Assets in Economic Cycles

Although DM treasuries dominate traditional portfolios, global fixed income markets offer a diverse range of products across a full spectrum of sectors, credit quality, duration and geography. A portfolio that is not constrained by a benchmark can diversify its risk exposure by allocating to a broad range of sectors. In such a portfolio, duration risk becomes just one of many risk factors. Allocation to non-core sectors, such as EM sovereigns and credit, can generate attractive risk-adjusted returns across all market environments in the long term.

One of the top concerns around investing in EMs is their high volatility. We believe that the effect of short term volatility is mitigated over the long term by the compounding effect of higher income. Higher carry acts as a cushion against rising interest rates and has a significant contribution in total return over a long period.

Historical Performance of Major Fixed Income and Equity Indices

Source: Bloomberg, Mirae Asset Global Investments (2017)



In 2008, most fixed income and equity markets suffered significant losses as a result of the global financial crisis. Equity markets lost more than 40% from their peak in 2007 and even investment grade credit fell by more than 15%. However, fixed income spread sectors recovered dramatically after hitting a bottom in 2008 and had regained much of their losses by mid-2009. In contrast, the recovery in equities was much slower. It took more than four years for the S&P 500 Index and Russell 2000 Index to recover. After almost a decade, the MSCI EM Equity Index is still below its peak of late 2007.

“ A portfolio that is not constrained by a benchmark can diversify its risk exposure by allocating to a broad range of sectors. ”

Global Dynamic Asset Allocation

History has shown that no single fixed income sector performs well in every macroeconomic environment. Every asset class has a distinct risk profile and reacts differently to changing economic and geopolitical environments. As an asset class, EMs are also not immune to the impact from global shocks. Both DMs and EMs offer risks and opportunities, but their relative performance is heavily influenced by economic cycles. It is therefore important to understand where we are in the economic cycle and when to have a risk-on, risk-off, or neutral posture. High allocation to risky assets during a recession, or overweighting defensive sectors during a recovery could be sub-optimal from a total return perspective. High volatility can erode capital during a recession and therefore diminish the ability to generate alpha during a recovery.

Therefore, a dynamic allocation between EMs and DMs, as well as a tactical allocation between strategic and defensive sectors is necessary, in our view.

We believe that an unconstrained investment approach allows for flexible risk allocation that can target attractive risk-adjusted returns in various kinds of market conditions. This approach relies on understanding the various sources of risks and efficiently budgeting for them to generate alpha and minimize volatility. Unlike index tracking strategies, an unconstrained strategy can achieve capital preservation during periods of extreme market volatility by increasing its allocation to safer products. At the same time, it can generate higher alpha by adding risk when valuations look cheap. Most unconstrained approaches move risk weights within the DM risk parameters. We believe that, given better risk reward characteristics in EM assets, an unconstrained approach with an EM bias has the potential to provide better outcome from a principal protection and return perspective.

Annual Total Return by Fixed Income Sector

Source: Bloomberg, Mirae Asset Global Investments (2017)

2008	DM Treasury 9.42%	Short UST 2.85%	EM Local -7.92%	EM Sovereign -12.03%	EM Corporate -15.86%	High Yield -25.24%
2009	High Yield 57.69%	EM Corporate 34.88%	EM Sovereign 29.82%	EM Local 21.01%	DM Treasury 0.72%	Short UST 0.37%
2010	EM Local 15.44%	High Yield 15.07%	EM Corporate 13.08%	EM Sovereign 12.24%	DM Treasury 4.24%	Short UST 0.29%
2011	EM Sovereign 7.35%	DM Treasury 6.17%	High Yield 3.63%	EM Corporate 2.31%	Short UST 0.23%	EM Local -1.91%
2012	High Yield 19.24%	EM Sovereign 17.44%	EM Corporate 15.02%	EM Local 14.98%	DM Treasury 4.20%	Short UST 0.15%
2013	High Yield 6.47%	Short UST 0.14%	DM Treasury -0.35%	EM Corporate -0.60%	EM Sovereign -5.25%	EM Local -8.52%
2014	DM Treasury 8.48%	EM Sovereign 7.43%	EM Corporate 4.96%	High Yield 2.58%	Short UST 0.09%	EM Local -4.68%
2015	DM Treasury 1.35%	EM Corporate 1.30%	EM Sovereign 1.18%	Short UST 0.13%	High Yield -0.69%	EM Local -16.98%
2016	High Yield 15.60%	EM Local 11.73%	EM Sovereign 10.15%	EM Corporate 9.65%	DM Treasury 3.69%	Short UST 0.52%

Global Offices

Mirae Asset Global Investments

12F, Tower1, GRAN SEOUL Bldg, 33 Jong-ro,
Jongno-gu, Seoul, 03159, Korea
Tel. +82-2-3774-8200

Mirae Asset Global Investments (HK)

Level 15, Three Pacific Place, 1 Queen's
Road East, Hong Kong, HK
Tel. +852-2295-1500

Mirae Asset Global Investments (UK)

4-6 Royal Exchange Buildings,
London, EC3V 3NL, United Kingdom
Tel. +44-20-7715-9900

Mirae Asset Global Investments (USA)

625 Madison Avenue
3rd Floor, New York, NY, 10022, USA
Tel. +1-212-205-8300

Mirae Asset Global Investments (Taiwan)

6F, NO. 42, Sec.2 Zhongshan N. Rd.,
Taipei City 10445, Taiwan (R.O.C)
Tel. +886-2-7725-7555

Mirae Asset Global Investments (India)

Unit No. 606, 6th Floor, Windsor Building
Off. C.S.T Road, Vidyanageri Marg,
Kalina, Sanatacruz (East), Mumbai
400 098, India
Tel. +91-22-6780-0300

Mirae Asset Global Investments (Brazil)

Rua Olimpíadas, 194/200,
12 Andar, CJ 121, Vila Olímpia
São Paulo, CEP 04551-000, Brazil
Tel: +55-11-2608-8500

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