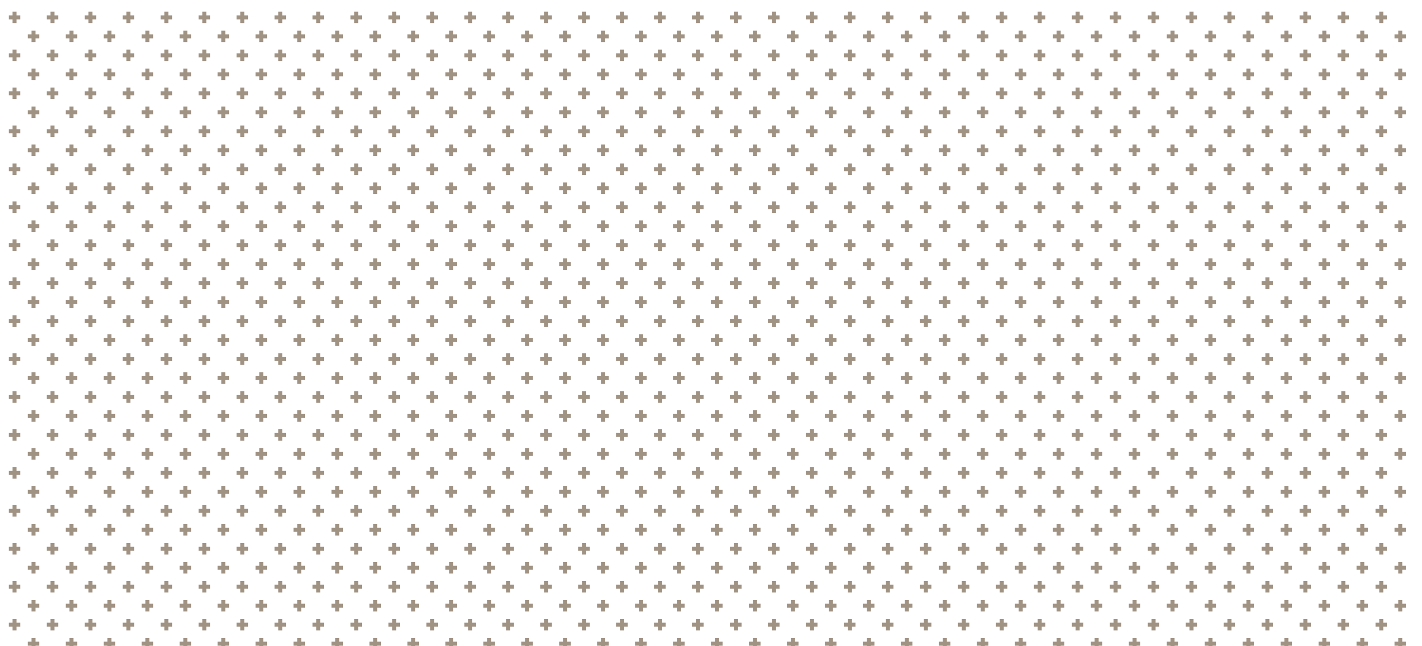
LOMBARD ODIER
INVESTMENT MANAGERS

RETHINK YOUR EMERGING MARKET DEBT EXPOSURE

In the new paradigm of fixed income markets, the search for yield remains at the forefront of investors' objectives. Our fundamentals-based approach places quality at the heart of portfolio construction, while embracing less trading in this fractured liquidity environment.



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Executive summary

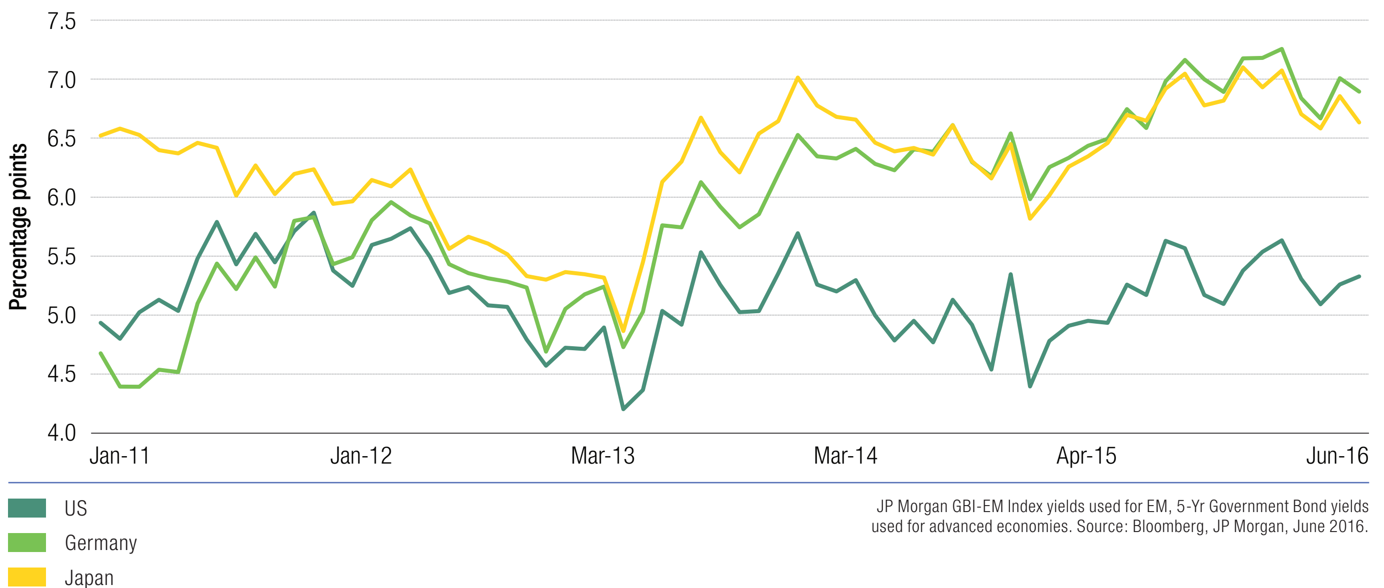
- Traditional risk premia are currently subdued and interest rates in key developed markets look likely to remain historically low for some time, leading investors to look elsewhere to generate returns
- We believe that emerging market assets offer attractive opportunities through their improving fundamentals and attractive valuations
- On the fundamentals front, there are clear signs of a cyclical upswing in growth coupled with an improving external profile for a number of key developing economies
- On the valuations front, real interest rates in EM countries remain high against a backdrop of falling inflation, while interest rate differentials versus developed economies are now at multi-year highs. On the currency front, there is strong evidence of under-valuation as nominal exchange rates in the EM world are starting to improve
- Focusing on key risk factors, such as full-blown China financial meltdown and a potentially hawkish US monetary policy path going forward, our analysis shows lesser cause for concern given China's strong external balance-sheet and increasing evidence of a structurally cautious Fed appearing on the horizon
- When it comes to implementation, it is important to note that fixed income markets are generally witnessing a paradigm shift, which is manifesting itself as fractured liquidity.[1] Rising central bank dominance combined with tightening regulations such as BASEL III are damaging the market-making capabilities of the banking sector
- We believe that in this environment of damaged liquidity, market-cap benchmarks are ill-equipped to deal with the new realities, as they are designed to reward leverage
- This problem is even more acute for active managers within fixed income, who tend to deviate from market-cap benchmarks by relying on high turnover in anticipation of market developments
- Building a better starting point is crucial; we recommend investors trade less and bring quality to the heart of the portfolio construction process.

[1] See our latest research titled "A new paradigm in fixed income markets and implications for portfolio management," September 2016, for more details.

Emerging markets revisited as an attractive asset class

The last few years have been testing for EM investors. That said, EMs now offer attractive valuations while most advanced economies continue to experience anaemic growth and expensive asset valuations. Negative nominal rates and increased central bank dominance are forcing investors to hunt for yield. Within this context, EM local currency debt provides diversification and significant yield pickup vis-à-vis developed markets (e.g., 6.80% and 5.15% above German bunds and US treasuries respectively). Also, the current 1.1% yield advantage over hard currency debt is attractive.

FIG. 1 – EM YIELD DIFFERENTIAL VERSUS ADVANCED ECONOMIES AT MULTI-YEAR HIGHS



JP Morgan GBI-EM Index yields used for EM, 5-Yr Government Bond yields used for advanced economies. Source: Bloomberg, JP Morgan, June 2016.

> "For the first time in several years, the tide of cheapening EM valuations is beginning to turn as the asset class is starting to experience sustained inflows"

In addition to the substantial yield pickup, there is now strong evidence of improving macro fundamentals across a range of developing countries. Specifically, we find evidence of a cyclical pickup in EM growth (both in absolute and relative terms to developed markets) and visible improvement in external imbalances from the late-2013 levels. Structurally, most EMs have strengthened their balance sheets, especially compared to 1997/8, making them less susceptible to balance-of-payments shocks.

Taking on EM currency exposure as a local EM debt investor appears equally compelling as a number of EM currencies are in deep under-valuation territory on a range of metrics. For the first time in several years, the tide of cheapening EM valuations is beginning to turn as the asset class is starting to experience sustained inflows.

However, given the seismic shifts we are witnessing in the nature and shape of the global financial system and the consequent implications on traditional investing frameworks, assessing the risk/return profile of an asset class also needs to be done with careful consideration given to implementation.

In this respect, it is also worth noting that the extensive use of QE has led to an increase in commonality in investor positions. This is particularly the case in the EM space, where positions are predominantly accessed through market-cap-weighted portfolios. In addition, the risk of continuous outflows has led managers to hug market-cap-based benchmarks to improve access to liquidity. In our view, this herding phenomenon flags the risks of market cap-based investment strategies

See important information at the end of this document.

and damages liquidity further. Moreover, as noted above, tightening regulations and rising central bank dominance are leading to a fractured liquidity environment, putting the spotlight on portfolio construction.

Overall, emerging bond markets seem well positioned to benefit, given the broader macro backdrop. In this context, we strongly believe that implementation matters.

Risks of traditional emerging market-cap benchmarks

Given the increased heterogeneity in the developing economy space, investing in EMs is far from straightforward. A key feature of the EM landscape that has come to the fore over the past two years is the stronger differentiation in underlying economic fundamentals. For instance, various EM countries are experiencing their own shifts in real economic growth, inflation, current account and budget balance dynamics. Of course, commodity price dynamics and their impact on various countries, depending on their net export/import status, have also played a role in driving this differentiation. Underlying structural shifts have also been in play, as we have seen in India.

TABLE 1 – THE DIFFERING DIRECTIONS OF KEY FUNDAMENTAL DATA POINTS FOR EM NATIONS FROM 2014 TO 2015

COUNTRY	REAL GDP GROWTH	INFLATION	CURRENT ACCOUNT BALANCE	FISCAL BALANCE
Argentina	↑	↓	↓	↓
Brazil	↓	↑	↑	↓
Chile	↑	↑	↑	↓
China	↓	↓	↑	↓
Colombia	↓	↑	↓	↓
Hungary	↓	↑	↑	↑
India	↑	↓	↑	↓
Indonesia	↓	↑	↑	↓
Malaysia	↓	↓	↓	↑
Mexico	↑	↓	↓	↓
Peru	↑	→	→	↓
Philippines	↓	↓	↑	↓
Poland	↑	↓	↓	↑
Romania	↑	↓	↓	↑
Russia	↓	↑	↑	↓
South Africa	→	↓	↑	↑
Thailand	↑	↓	↑	↑
Turkey	↓	↓	↑	↓
Venezuela	↓	↑	↓	↓

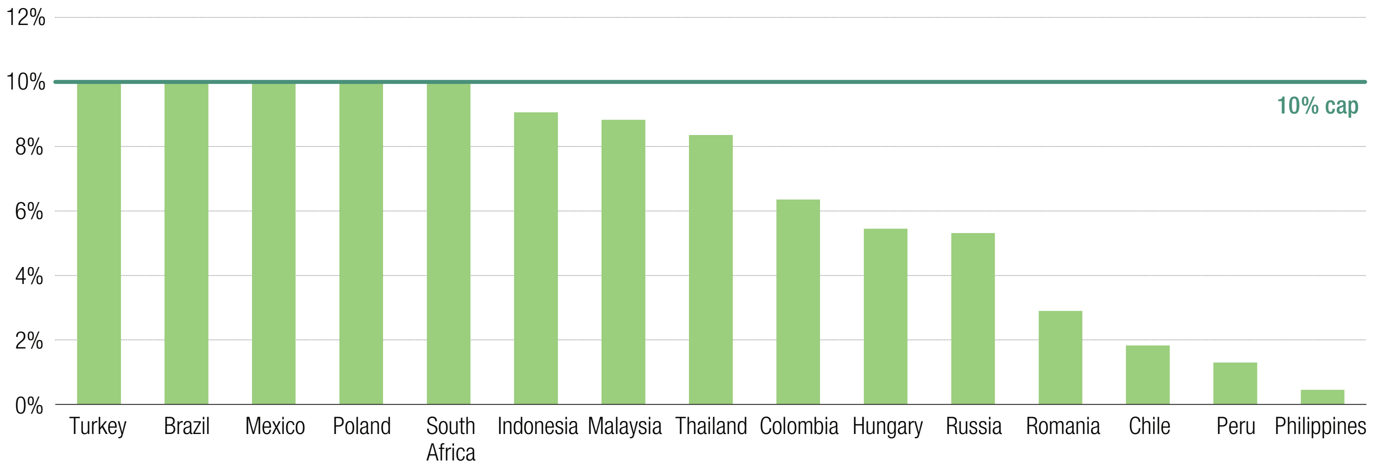
↑ Increased/less negative
↓ Decreased/more negative
→ No change

Source: Bloomberg, IMF. Units for fundamentals: real GDP growth – % YOY, inflation – CPI % YOY, current account balance – % of GDP, fiscal balance – % of GDP.

However, investors have traditionally considered EMs to be a monolithic asset class and do not take into account these differentiating dynamics when it comes to building a starting point. Since the majority of investors in EM debt will use market-cap-weighted indices as a starting point, it is important to understand how they are constructed as well as what their drawbacks are.

By design, the traditional bond approach is heavily weighted towards the most indebted issuers, regardless of their capacity to service their debt. In the emerging space, the situation does not improve, even with the inclusion of an arbitrary 10% cap on country weightings. The cap mechanism actually delivers an increase in the weight of countries with potentially higher risk.

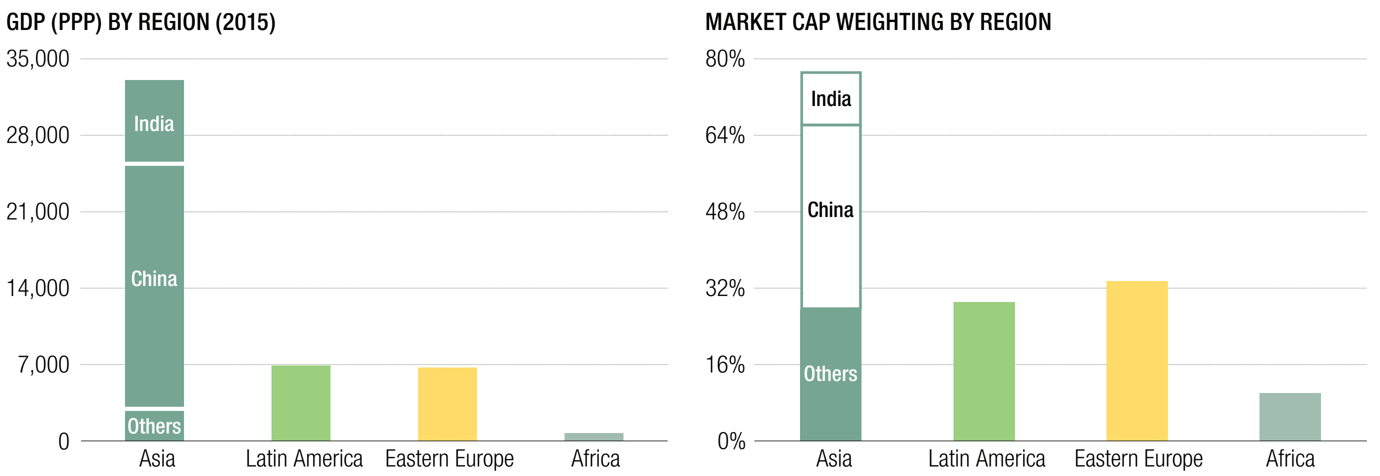
FIG. 2 – JPM GBI-EM GLOBAL DIVERSIFIED (CONSTRAINED) BENCHMARK – COUNTRY ALLOCATIONS



Sources: LOIM, JP Morgan, April 2016.
Holdings and/or allocations are subject to change.

In addition, traditional EM indices ignore China and India, which are the biggest emerging economies (representing 50% of EM GDP), due to stringent accessibility criteria.

FIG. 3 – TRADITIONAL EM MARKET CAP INDICES IGNORE CHINA AND INDIA



Source: LOIM, IMF World Economic Outlook. April 2016.

EM market-cap benchmarks therefore expose investors to concentrated risks. In practice, active managers as well as passive or ETF managers tend to follow the methodology of market-cap indices. When it comes to active management, we believe that higher trading costs resulting from the damage to the liquidity environment can erode outperformance and reduce an active manager's ability to provide tangible differentiation from market-cap benchmarks. This is because their ability to run high turnovers is impaired. It is therefore increasingly important for investors to consider whether high turnover-based active management is the appropriate implementation approach to traditional fixed income asset classes.

We believe that in a world of negative yields, increased market risks, widespread central bank dominance and fractured liquidity, a good starting point to portfolio construction is critical. Market-cap benchmarks are no longer adequate as they are ill-equipped to deal with the new paradigm of fixed income investing.

A different way to access emerging markets: focus on quality and trade less

Our approach is different. To overcome the problem with using market cap as a starting point, we focus instead on the underlying credit risk fundamentals of issuers. We thereby bring quality to the heart of the portfolio construction process under a low-turnover framework. In addition, the increasing structural differentiation we are seeing in EMs presents the need for for an approach that treats each country based on its merit rather than on its capacity to borrow.

In terms of portfolio construction mechanics, we apply an **economic allocation,** which takes into account a set of fundamental factors to assess issuers' creditworthiness, thereby reducing default risk exposure (60%). We then add a **market-based allocation,** which incorporates a liquidity adjustment (20%) and a yield adjustment (20%). The table below shows the various factors that we use to build sovereign bond portfolios.

FIG. 4 – OUR FUNDAMENTAL APPROACH TO FIXED INCOME INVESTING IS DIFFERENT

ECONOMIC ALLOCATION 60%	MARKET-BASED ALLOCATION 40%
INDEBTEDNESS Investing in healthier issuers ☐ Public debt to GDP ☐ Net international investment position ☐ Fiscal balance ☐ Private debt to GDP ☐ Current account balance ↓ Higher debt levels reduce the weight	**YIELD** Favouring countries with attractive yields ☐ Yield to worst ↓ When the yield drops (price increases) the weights are reduced
SIZE Favouring higher income issuers ☐ GDP-PPP ↑ Larger countries generate higher weights	**LIQUIDITY** Favouring the more liquid countries ☐ Average bid offer spread ↑ Issuers with better liquidity receive a higher weight
SOCIAL IMBALANCES Looking for social stability ☐ Old age dependency ratio ☐ Misery index (inflation rate + unemployment rate) ☐ Political stability ↑ Favourable/stronger dynamics result in higher weights	

Source: LOIM. For illustrative purposes only. Holdings and/or allocations are subject to change.

Specifically, the economic allocation component of our rule-based portfolio construction comprises the following three sub-factor groups:

1. **Indebtedness:** investing in healthier issuers. Here, fundamental factors need to be considered to gauge a country's debt burden and ability to service its debt. We focus on public debt, fiscal balance, current account and net external debt as key metrics
2. **Size:** favouring larger countries. Larger countries tend to be more capable of raising and paying their debt; therefore, our approach allocates a larger portfolio share to countries with higher nominal GDP (PPP-weighted). However, this metric itself is not enough to fully capture all aspects of creditworthiness
3. **Social imbalances:** focusing on social and political stability metrics. Credit risk is not a short-term phenomenon: a country's ability/willingness to repay its debt is also influenced by the degree of trust between the public and the government. In this respect, it is important that social and political imbalances are taken into consideration: misery and political risks have led to debt repudiation episodes, e.g., the Russian repudiation of 1917 or the 2002 default of Argentina. In addition to these risks, old-age dependency can eventually result in a massive surge in public debt, as countries with high elderly dependency ratios require social support that is very likely to fall within the scope of government budgets.

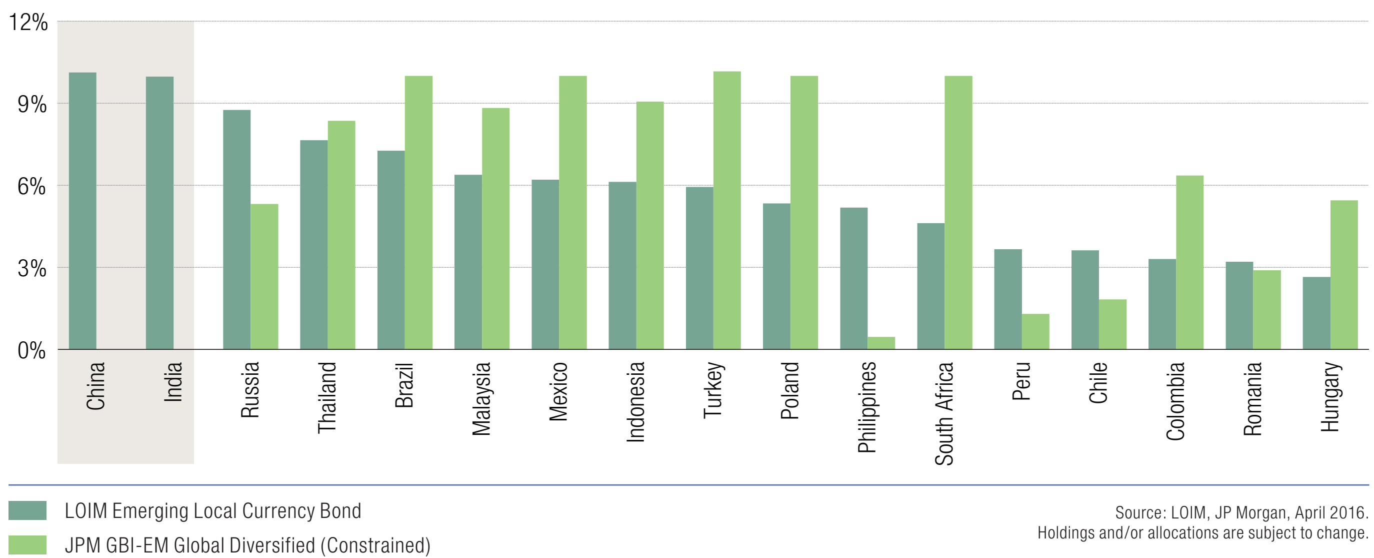
The economic allocation accounts for 60% of the weighting scheme. Once the economic allocation is established, we apply yield and liquidity adjustments for each country.

- **Liquidity adjustment:** With regard to fixed income investing in today's environment, an issuer's "investability" is an important concern. In that sense, liquidity adjustment takes into consideration the market liquidity of bonds by overweighting issuers with the highest liquidity and underweighting those with the lowest. This adjustment is based on bid-ask prices and accounts for 20% of the final allocation
- **Yield adjustment:** The liquidity adjustment is further augmented by assessing the yield factor, whereby countries with higher yield (all else being constant) are given an advantage to more effectively traverse the quality/yield trade-off. That is why we believe that assessing and deploying the yield factor makes sense, particularly in the current environment. The measure of valuation factor is incorporated for sovereign issuers by using each country's yield to maturity. The valuation adjustment also has a 20% weight in the construction scheme.

Turning to the resulting country allocation, we consider that our emerging fundamental strategy provides greater diversification and includes China and India, while what we consider to be fundamentally "vulnerable" countries – such as Turkey, South Africa and Brazil – are assigned lower weights compared to the market-cap benchmark.

See important information at the end of this document.

FIG. 5 – COUNTRY WEIGHTING ALLOCATIONS



Source: LOIM, JP Morgan, April 2016.
Holdings and/or allocations are subject to change.

TWO LEVELS OF CREDIT RISK MITIGATION CAN OFFER A MORE EFFICIENT EXPOSURE TO EMERGING MARKETS...

Our investment process can be summarised as a two-step default risk mitigation implementation:

- **Level 1: Beta portfolio construction** using systematic allocation coupled with efficient replication. The construction is based on publicly available fundamental data as our fundamental index aims to assess issuers' creditworthiness and therefore reduce underlying default risk within the portfolio
- **Level 2: Credit risk monitoring** drawing upon the expertise and research of credit and macro analysts to further mitigate default risk by monitoring issuers' solvency and investability, and intervening to reduce positions when required.

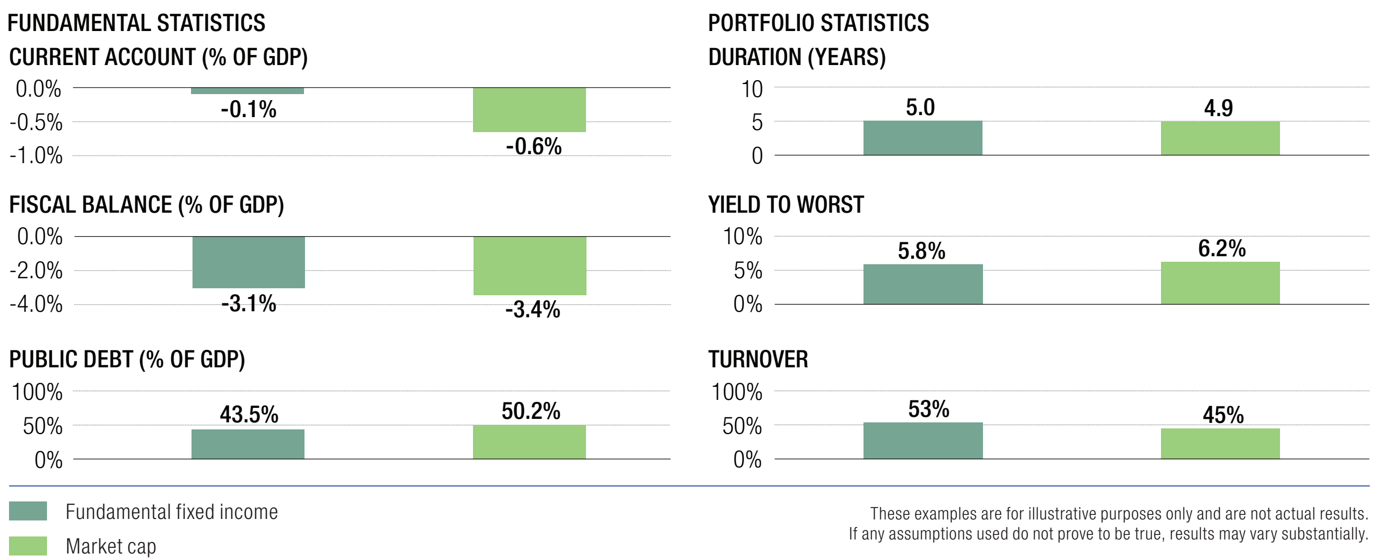
...WHILE TRADING LESS IN THIS FRACTURED LIQUIDITY ENVIRONMENT

In addition, our fundamentals-driven approach is well suited to the "trade less" framework that we recommend, given its semi-annual rebalancing frequency. This is because new fundamental data is used to re-assess portfolio weights every six months. The result is lower turnover, which is very much comparable to a passive market-cap replication, while being considerably lower than active-based implementation.

THE CASE FOR A SOUNDER AND MORE RESILIENT INVESTMENT APPROACH THAT AIMS TO DELIVER HIGHER RISK-ADJUSTED RETURNS AND LOWER DRAWDOWNS

To better illustrate how a fundamentals-driven approach can bring quality to a portfolio, Figures 6a and 6b overleaf show the portfolio characteristics of market-cap construction compared to our fundamental fixed income construction technique.

FIG. 6a – A QUALITY-LED DIVERSIFICATION SUITED TO A PRUDENT SEARCH FOR YIELD...



These examples are for illustrative purposes only and are not actual results. If any assumptions used do not prove to be true, results may vary substantially.

> "Our fundamentals-based strategy tends to be more resilient than a market-cap benchmark, as evidenced by its lower drawdowns"

The key differences between the market-cap and fundamental fixed income approaches can be summarised in the following two points:

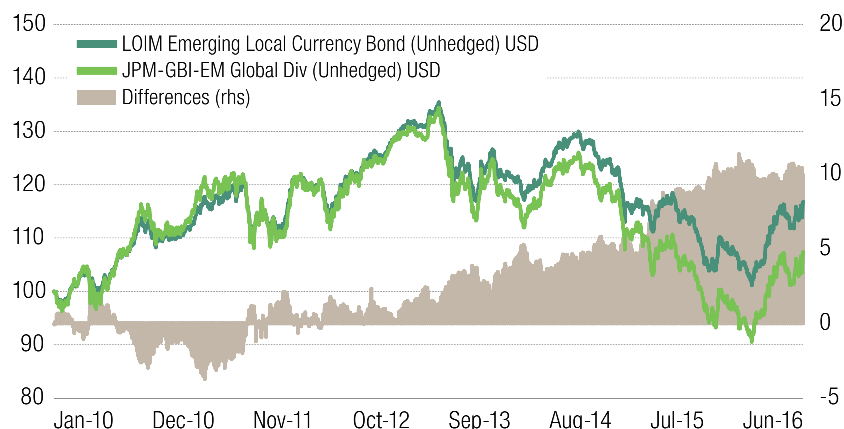
1. Both portfolio construction approaches show a very similar duration profile; however, the yield-to-worst of a fundamentals-driven portfolio is around 40 bps lower than that of a market-cap portfolio (5.8% versus 6.2% p.a. using data as at 30 June 2016)
2. Against this lower yield, a fundamentals-driven portfolio generally shows much better credit quality fundamentals (such as current account, fiscal balance and public debt) when compared to a market-cap approach. All of these factors are shown to have a direct link to underlying sovereign default risk by research.

Turning to performance statistics, over the long term, our quality-based, diversified approach has indeed delivered a more efficient market exposure to EM fixed income by providing higher risk-adjusted returns to investors (Sharpe ratio of 0.28 versus 0.08 for market-cap, see Figure 6b). Furthermore, our fundamentals-based strategy tends to be more resilient compared to a market-cap benchmark in down-markets, as shown by the significantly lower drawdown compared to the standard JPM Market-Cap Index.

Lastly, the tracking error of 3-4% shows that our fundamentals-based approach is considerably different from a market-cap approach, as it focuses on delivering quality-led diversification.

FIG. 6b – ... THAT AIMS TO DELIVER HIGHER RISK-ADJUSTED RETURNS AND LOWER DRAWDOWNS OVER TIME

LOIM EMERGING LOCAL CURRENCY BOND VERSUS JPM GBI-EM GLOBAL DIVERSIFIED



PERFORMANCE STATISTICS (30 JUNE 2016)

	ANNUALISED INCEPTION TO DATE (SINCE 12 JANUARY 2010)	
	LOIM INDEX	MC BENCH[1]
Return	2.42%	1.15%
Volatility	7.42%	9.86%
Sharpe ratio	0.28	0.08
Max drawdown	-25.33%	-32.67%
Excess return	1.28%	–
Tracking error	3.30%	–

	2010	2011	2012	2013	2014	2015	2016
LOIM index	14.01%	0.41%	15.51%	-6.12%	-4.62%	-9.41%	11.45%
Market-cap benchmark[1]	15.68%	-1.75%	16.76%	-8.98%	-5.72%	-14.92%	14.30%
Excess return	-1.67%	2.16%	-1.24%	-2.86%	1.10%	5.51%	-2.85%

Source: LOIM, 30 June 2016. Past performance is not a guarantee of future results.
[1] JPM GBI-EM Global Div (Unhedged) USD.

All in all, we believe that bringing quality to the heart of the portfolio construction process by using a fundamentals-driven approach can help investors adopt a "trade less" framework in response to a world of damaged liquidity. Moreover, the modular and transparent nature of the approach means that fundamentals-driven implementation lends itself to customisation (investment universe, factor weights, turnover etc.), thus allowing added flexibility when it comes to meeting specific investor needs.

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Emerging markets securities may be less liquid and more volatile and are subject to a number of additional risks including, but not limited to, currency fluctuations and political instability.

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