

Responsible investing in focus: Emerging market bonds

By Julie Salsbery and Shane Gallagher

In brief

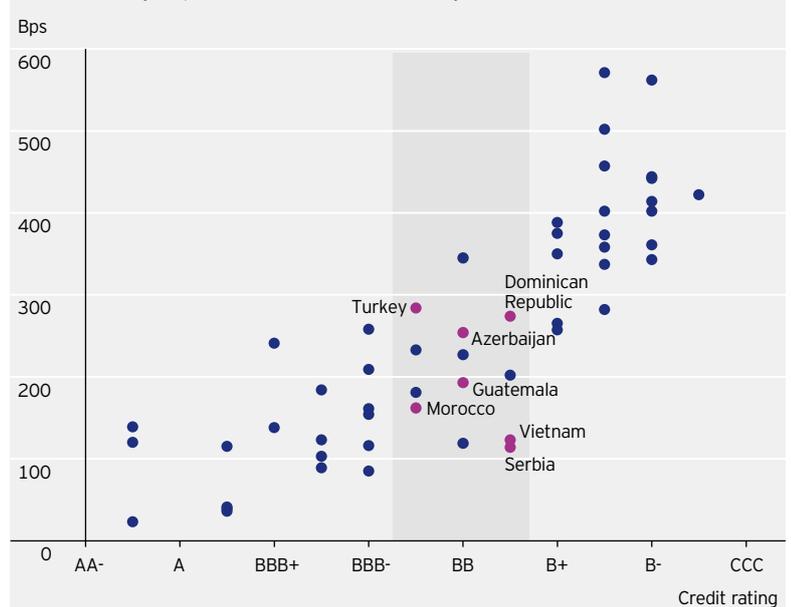
Invesco Fixed Income believes ESG-focused fundamental analysis can improve the assessment of emerging market sovereign risk. However, we find that identifying effective ESG indicators is critical when it comes to anticipating market performance. We also find that, for emerging market sovereign bonds, RI has historically resulted in comparable returns, or even outperformance. There is also a strong case in favour of active rather than passive investing. Indeed, there appears to be no place for passive investing when it comes to RI in emerging market bonds. Furthermore, two case studies show that RI has the potential to generate positive outcomes for future generations. We conclude by summarizing Invesco Fixed Income's own RI approach.

This paper addresses three questions that often arise when considering investing through an ESG lens: Can an ESG-focused fundamental analysis improve the assessment of investment risk? What is the impact of ESG investment objectives on returns? Is RI likely to have an impact on the world and help lead to better future outcomes? We believe that emerging market bonds offer some compelling insights into these questions.

Figure 1 highlights that emerging market countries with similar fundamental credit ratings can be valued quite differently by the marketplace.¹ We analyzed historical data to find out whether ESG factors help explain these differences in valuation.

In theory, differences in ESG factors could be behind disparate valuations among countries with similar credit quality. Basic economics suggest that

Figure 1
EM Sovereign spread versus credit rating (selected countries)



Note: Purple dots indicate countries with BB credit ratings that also hold a BB ESG rating. Sources: Bloomberg Barclays, Invesco. Data as at 20 October 2017.

The acronyms ESG and SRI come up a lot these days, but their meaning is often unclear. ESG refers to three areas of analysis (environmental, social and governance) that can be used to help determine the likely impact of corporate behaviour on future financial performance. The acronym SRI is less clearly defined, and can mean "socially responsible investing" or "sustainable, responsible and impact" investing. For this paper, we adopt a broad interpretation and use the term Responsible Investing (RI) to represent investing in a manner that meets the needs of the present without compromising the ability of future generations to meet their own needs. Generally, we view ESG as non-financial attributes used by analysts to help assess risk, while RI is viewed as a set of client-specified guidelines used by portfolio managers to construct client portfolios.

sustainable long-term growth, a key factor in debt sustainability (and, therefore, credit quality), is based on three factors of production: land, labour and capital. ESG analysis can provide insight into these factors of production. For example, environmental factors can help determine whether natural resources (land, water and air) are being used in optimal and sustainable ways. Social factors can be used to analyze the efficient development and utilization of a country's labour resources by assessing health, safety and education metrics. And governance relates to the legal and financial underpinnings that are critical for access to capital.

Correlation between spreads and ESG metrics has been weak...

But, according to our analysis, the evaluation of ESG metrics and ratings does not significantly help to explain historical differences in valuation. The shaded area in figure 1 highlights those countries with credit ratings of BB-/BB/BB+. The purple dots designate sovereigns that are also rated BB for ESG factors.² The purple dots show that, despite similar fundamental and ESG ratings, disparity in valuations persists.

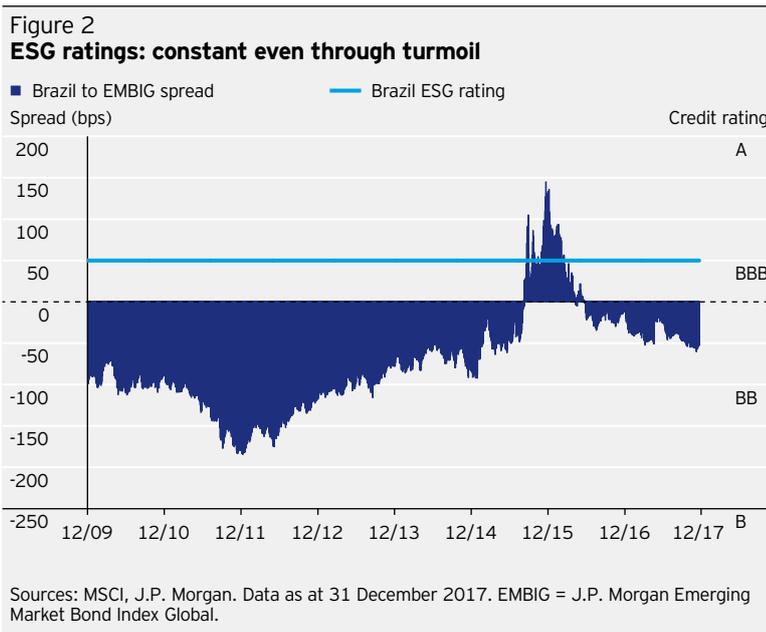
In our view, this disparity is due to two factors. First, as with fundamental credit ratings, ESG ratings tend to be backward-looking and often change with a considerable time lag. In other words, market valuations adjust more quickly to incoming information than do ratings. Second, and more importantly, political developments have exhibited powerful and more immediate impacts on valuations. Historically, political regimes have dramatically influenced environmental, social and governance outcomes through their policy choices. To highlight this point, figure 2 shows that Brazil's ESG score remained steady from 2009 to 2017, even though the country was besieged by political turmoil and yield spreads widened versus the index.³

... but underlying factors that drive governance may be helpful

But while Brazil's stable overall ESG scores failed to sufficiently warn of its impending political scandal and the resulting market fallout, underlying signals within the governance aspect of ESG analysis did. For emerging markets, we believe governance factors tend to have the greatest impact on both credit quality and changes in market valuations.⁴ One way to illuminate the impact of governance is by analyzing the World Bank's Worldwide Governance Indicators (WGIs), which take into account factors such as political stability and the rule of law.⁵

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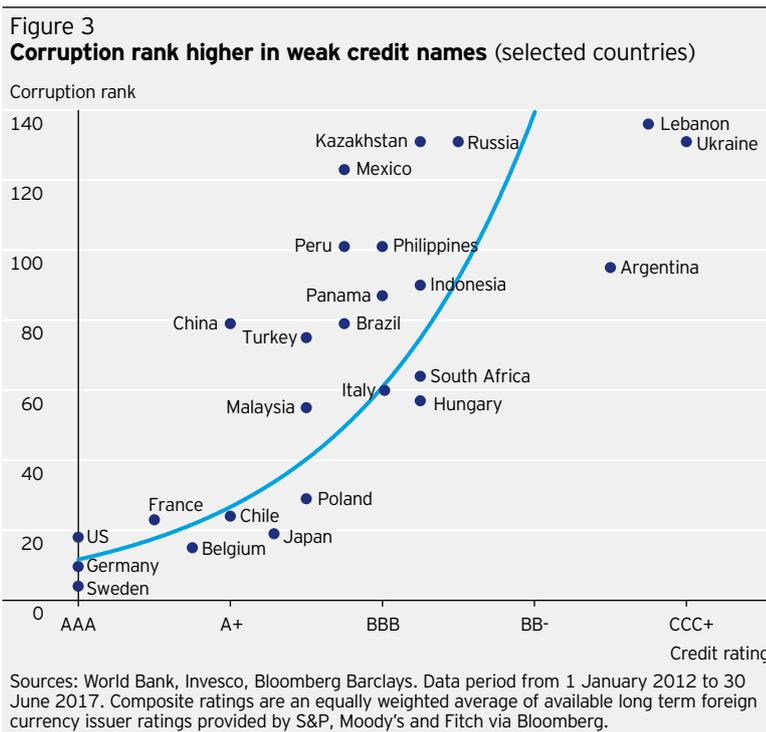
Taking the weighted average of the World Bank's six key governance indicators, we found that Brazil's overall governance score fell by 10 points from 2010 to 2016. Only Egypt (-11 points) and Mozambique



(-22 points) saw their scores fall by more over that period. The two driving elements of Brazil's overall decline were declines in the scores for control of corruption (-4 points) and political stability (-3 points). These underlying indicators pointed to the eventual deterioration in political conditions.

Thus, although Brazil's overall ESG scores (figure 2) did not help assess or foresee investment risk, the underlying governance metrics did provide the right signals.

A simple chart (figure 3) showing selected sovereign rankings in terms of level of corruption versus its credit rating shows a positive correlation - high



credit quality countries tend to have lower levels of corruption and vice versa. This correlation suggests that, as the level of corruption improves (declining corruption), so should credit quality. Sovereigns should move down and toward the left on the chart and this should correspond to better market performance.

Indeed, our research shows that countries on an improving trajectory with respect to governance broadly outperformed the J.P. Morgan Emerging Market Bond Index - Global Diversified (EMBI-GD) from 2012 to July 2017.⁶ We compared the weighted average score of all six World Governance Indicators for each country in the index and compared the change in that score to the country's annualized return. Since the global financial crisis, 71% of countries with improved average governance scores outperformed the index, while 75% of countries with falling scores underperformed.⁶

While a focus on governance appears to improve assessments of investment risk, changes in the political environment were often the most important signal. Unfortunately, when it comes to politics, even if a risk is known, as was the case in Brazil, it is difficult to forecast either the timing or impact of political developments, emphasizing the importance of active assessment.

Traditional emerging market bond investing versus RI: comparable returns, different drivers

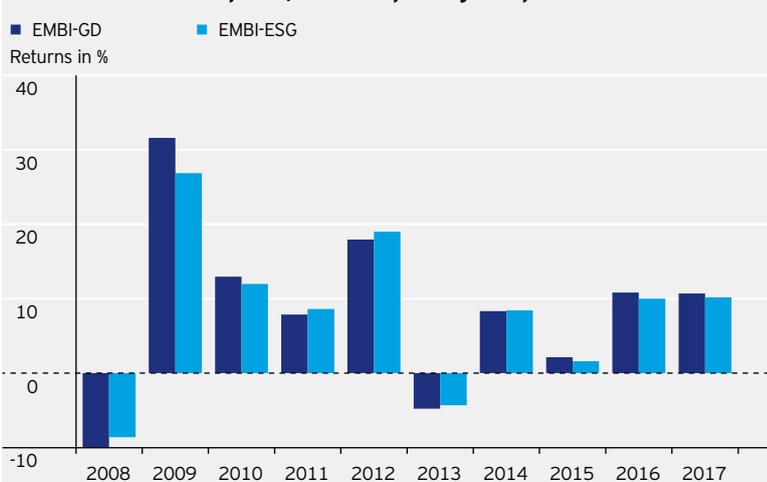
Our research also shows that returns for emerging markets sovereign bond investors have been generally comparable between traditional and ESG-focused investing (figure 4). In other words, it is not a foregone conclusion that investors must reduce their return expectations to achieve RI goals. To compare outcomes, we used the J.P. Morgan Emerging Market Bond Index - Global Diversified (EMBI-GD) and an ESG-subset comprised of sovereigns rated BBB or better for ESG criteria by MSCI (EMBI-ESG).

The annual returns in figure 4 highlight some important points. First, returns are positively correlated and are similar in magnitude each year. Second, in up markets, the ESG-subset performed comparably to the traditional index, but outperformed in each down market (2008 and 2013). Therefore, although the EMBI-GD modestly outperformed on an annualized basis (8.4% annualized versus 8.2% for the EMBI-ESG), the lower downside capture and lower volatility (8.4% versus 8.7%) suggest slightly better risk-adjusted returns for the ESG-subset (figure 5).

We believe the lower risk profile of the ESG-subset was likely due to the high correlation between credit quality and ESG quality, but we were surprised by the similarity in ESG returns compared to the overall index. Disaggregating the returns into the portions from yield and capital appreciation shed some light

Stronger ESG metrics were rewarded in the marketplace with capital appreciation.

Figure 4
Limited downside capture, limited upside give-up



Sources: MSCI, J.P. Morgan, Invesco. Data as at 31 December 2017. Returns are total return, annualized, in US dollars. EMBI-GD is J.P. Morgan Emerging Market Bond Index - Global Diversified. EMBI-ESG is ESG subset comprised of sovereigns rated BBB or better for ESG criteria by MSCI. **Past performance is not a guide to future returns.**

Figure 5
Annual risk and return metrics for EMBI-GD vs EMBI-ESG

in %	EMBI-GD	EMBI-ESG
Return	8.4	8.2
Return from yield	6.3	5.6
Return from capital appreciation	2.1	2.6
Volatility (annualized)	8.7	8.4

Sources: MSCI, J.P. Morgan, Invesco. Data period from 31 December 2007 to 31 December 2017. Returns are total return, annualized, in USD. EMBI-GD is J.P. Morgan Emerging Market Bond Index - Global Diversified. EMBI-ESG is ESG subset comprised of sovereigns rated BBB or better for ESG criteria by MSCI. **Past performance is not a guide to future returns.**

(figure 5). As anticipated, the slightly higher credit profile of the ESG subset meant that less of the return came from yield, as higher quality bonds typically have lower interest rates. There was a substantial offset for this lower yield in the form of greater capital appreciation in the ESG-subset. We believe this outcome - countries with stronger ESG metrics were rewarded in the marketplace with capital appreciation - ties back to our earlier finding that 71% of countries whose average governance score improved outperformed the index.⁶

These details help set future expectations for investing in the emerging markets sovereign space. Two conclusions are notable:

- Sovereigns with higher fundamental credit quality may naturally exhibit higher ESG quality, but the reverse is not necessarily true. Countries seeking to build a sustainable debt profile may recognize that good environmental, social and governance practices may help them achieve their long-term growth and financial objectives. But countries that happen to score well on ESG factors do not necessarily also have good financial metrics and a lower probability of default. Careful analysis on both fronts is required.

- Capital appreciation can only go so far in bonds. Unlike equities, whose share prices can rise without limit as markets reward good practices, ESG practices can push bond prices only so high given limits on how low interest rates can go. A subset of an EM bond index consisting of higher quality (and thus lower yielding) bonds may underperform the broader market that includes higher yielding assets.

Given these insights, we believe a passive approach is unlikely to yield the best returns when it comes to ESG-focused portfolios. A passive approach, as highlighted by our ESG-subset, would gain exposure to those countries that already carry a higher ESG rating and, therefore, a potentially lower yield. Our analysts are focused on finding those countries setting ESG policies in the right direction for the future. In this way, we would expect to capture greater capital appreciation potential.

The opportunity for impact is especially high in emerging market bonds

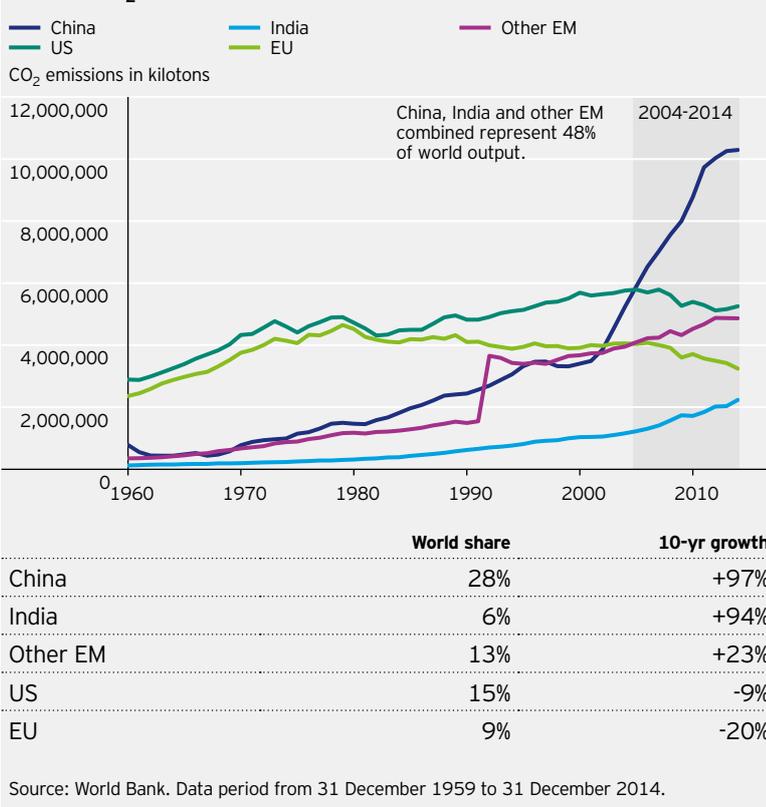
Under the ancient Hippocratic Oath, doctors should “first, do no harm.” But, in the modern world, we expect more from doctors. We also expect their services to lead to improved health. The same can be said for RI. Initially, ESG-minded asset owners asked asset managers to invest their funds in a manner that did not negatively impact future outcomes. However, more and more, we are seeing asset owners interested in having their investment choices make a positive contribution to our collective futures. This new phase of RI is where Invesco Fixed Income sees the most potential within the emerging markets.

The emerging markets are, by definition, at an earlier stage of development in a number of areas, many of which are closely related to environmental, social and governance issues. Given their early stage of development, and the fact that emerging economies represent the bulk of the world’s natural resources and human capital, we believe investment dollars spent with deliberation have the potential to create a significant impact.

If a client wishes to support efforts to reduce greenhouse gas emissions, a focus on emerging markets, rather than developed markets, could make a greater positive impact.

For example, if a client wishes to support efforts to reduce greenhouse gas emissions, a focus on emerging markets, rather than developed markets, could make a greater positive impact. While developed countries have led the charge in reducing emissions, emerging market emissions comprise a significant and rapidly growing proportion of overall emissions.

Figure 6
China's CO₂ emissions



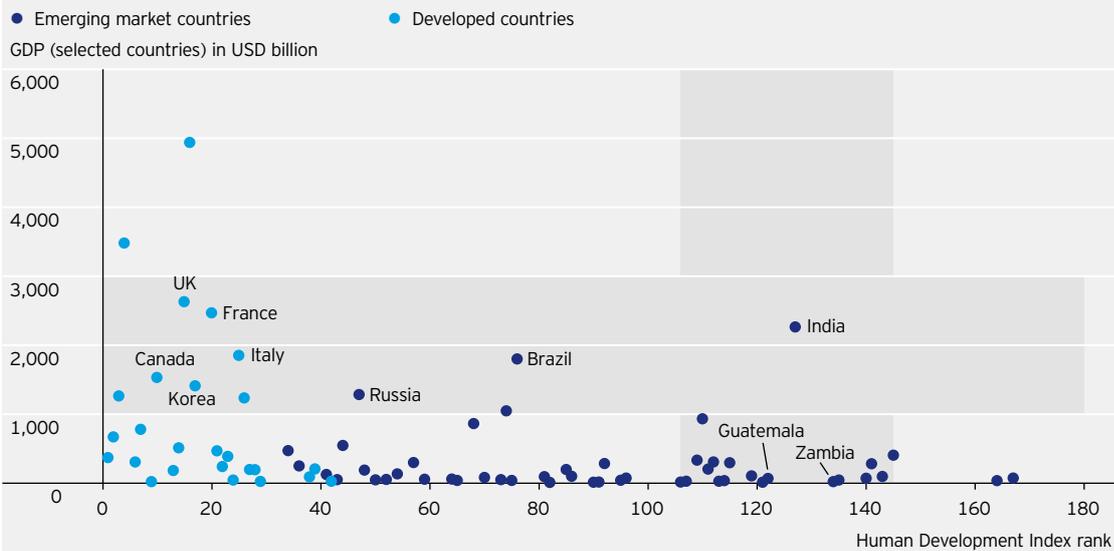
Emissions from China, India, Russia and developing countries in Latin America and the Middle East together represent nearly half of total global greenhouse gas emissions.⁷ Similarly, investors seeking to make a positive impact on social issues have a wide range of emerging market levers to pull, especially when it comes to improving education and reducing poverty.

To illustrate the above points, we look at two case studies: Chinese CO₂ emissions and human capital development in India. In both cases, there is still much room for improvement - and thus immense potential for positive impact generated by investment in these countries.

Figure 6 shows that China alone represents 28% of world CO₂ emissions, and its output has increased by 97% over the past decade, offsetting reductions of 9% and 20% in the US and European Union, respectively. Clearly, focusing investment dollars to support green energy initiatives in China could have a huge impact. Despite issuing its first green bond as recently as 2015, China has already emerged as the world leader in this field, with more than USD 60 billion in total green bond issuance.⁸

For investors seeking a social perspective, emerging markets can also offer plenty of opportunities. For example, India is the world’s sixth-largest economy, its fourth-fastest growing economy (projected at 7.2%⁹) and is its largest democracy. Yet, from a human development standpoint, it ranks 131 out of 188 countries - putting it at the same level as much smaller countries such as Bhutan, Timor-Leste, Vanuatu and Tajikistan (figure 7). India’s healthcare

Figure 7
Country GDP versus Human Development Index rank



Sources: United Nations Development Programme, World Economic Organization. Data as at 31 December 2016.

has also lagged. Its infant mortality rate is 35 per 1,000 live births, placing it nearer to the 54/1,000 ratio seen in fragile, conflict-plagued regions than Germany's 3/1,000 ratio, for example.¹⁰ Similar results are found with respect to education. India ranks in the 23rd percentile for adult literacy - below Uganda, Cambodia and Syria.¹⁰

Conclusion: The Invesco Fixed Income approach to RI in emerging market bonds

With the above findings in mind, the approach we take to achieving our clients' dual objectives of maximizing return on capital and delivering on

ESG principles is highly active. We believe an active approach is necessary to ensure that investment objectives are aligned with ESG goals, that performance targets are appropriately set and have the best chance for success, and that agreed-upon outcomes are measurable over time.

We find that focusing on the United Nations' Principles for Responsible Investing (UNPRI) and Sustainable Development Goals (SDGs) can be helpful in aligning client priorities with investment opportunities. As seen in figure 8, the UN's 17 SDGs are well-attuned to common RI themes. If a client is interested in

Figure 8

SUSTAINABLE DEVELOPMENT GOALS



Source: United Nations, <http://www.un.org/sustainabledevelopment>. Invesco supports the Sustainable Development Goals.

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positively influencing environmental issues, such as reducing CO₂ emissions, investments can be aligned with goals 6, 7 and 13-15. A focus on social or human development issues can be guided by SDGs 1-5. Each SDG has several underlying goals (169 individual targets in total) that can be further coordinated with investment opportunities. The United Nations Conference on Trade and Development (UNCTAD) estimates that meeting these targets will require USD 5-7 trillion in investment each year from 2015-2030, the bulk of which is expected to come from private capital.¹¹

Attracting the needed resources will likely be challenging. But we believe it is possible and are therefore optimistic that many of these important objectives can be met. To quote Archimedes: "Give me a lever long enough, and a fulcrum on which to set it, and I can move the world." We believe RI is a very strong fulcrum, and the lever becomes longer with each new RI mandate.

About the authors



Julie Salsbery

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Julie Salsbery is focused on positioning our funds across retail and institutional distribution channels, discussing our investment views and emerging market products with clients, contributing to thought leadership and marketing initiatives, and managing non-investment aspects of the emerging market team.



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Shane Gallagher works with Invesco Fixed Income's client portfolio managers to provide insight on market movements, investment performance and emerging investing trends. His work is used to both communicate Invesco Fixed Income's value proposition across various asset classes as well as guide future capability development.

Notes

- 1 Average of Moody's, S&P, and Fitch. Market valuation expressed as spread (sovereign yield over risk-free rate).
- 2 ESG ratings are provided by MSCI using proprietary information and technology to assign to each sovereign entity a rating for Environmental, Social and Governance scores as well as an aggregate. For more information on MSCI's rating process, visit <https://www.msci.com/esg-integration>
- 3 In late 2015 and early 2016, Brazil's government was rocked by a scandal involving Petrobras, Brazil's national oil company, which ultimately resulted in the removal of dozens of high-ranking politicians, including President Dilma Rousseff.
- 4 Consequently, Invesco's EM ESG ratings assign a 60% weight to Governance versus 25% for Social and 15% for Environmental.
- 5 The World Bank's Worldwide Governance Indicators capture six key dimensions of governance: Voice & Accountability, Political Stability & Lack of Violence, Government Effectiveness, Regulatory Quality, and Rule of Law; www.govindicators.org
- 6 J.P. Morgan Emerging Market Bond Index - Global Diversified, World Bank, Invesco; data from January 2012 to July 2017.
- 7 World Bank; data as at 31 December 2014.
- 8 Ken Hu, CIO, Invesco Asia-Pacific, China green bonds: A sustainable asset class, October 2017.
- 9 World Economic Forum, 9 June 2017; www.weforum.org
- 10 World Development Indicators, Invesco; data as at 15 November 2017.
- 11 United Nations Development Programme Website: "What kind of blender do we need to finance the SDGs", 13 July 2017.

About risk

Emerging markets investing requires awareness of specific market risks, such as potentially lower levels of market liquidity and greater volatility. The value of investments and any income will fluctuate (this may partly be the result of exchange rate fluctuations) and investors may not get back the full amount invested.

Important information

Data as at 28 February 2018, unless otherwise stated.

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