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Why ESG Matters in Emerging Markets

The January 2019 collapse of a Brazilian mine tailings dam—which released 11.7 million cubic meters of toxic mud, killed a reported 270 people, and led to a corruption probe—underscores the critical but underappreciated value of environmental, social, and governance (ESG) considerations in emerging markets (EMs). In this paper, we examine the growing materiality of ESG factors to investing in EMs, exploring both risks and opportunities.

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ESG: More Important in Emerging Markets?

Blake Pontius, CFA

The majority of ESG-aware asset managers surveyed by Citi Research in October 2018 expressed the view that ESG factors are more important in EMs than developed markets, particularly from a corporate governance risk perspective.[1]

Generally, weaker corporate governance practices in EMs relative to developed markets have played a role in shaping this opinion. More seasoned, quality-focused investors have long appreciated the need to be sharp on governance considerations when investing in frontier countries such as Kenya and Argentina, as well as larger EM countries such as China, India, and Brazil.

EMs have more state-owned enterprises, necessitating a higher level of scrutiny of governance practices by prospective investors. While varying across different countries, there is generally a greater prevalence of family founders with majority stakes within emerging markets. Lower rates of board director independence and weaker corporate transparency are other realities contributing to the elevated governance risk profile.

Beyond these more obvious considerations related to governance and business culture, we have seen a variety of environmental and social issues become increasingly relevant to investors. From an environmental perspective, combating air, soil, and water pollution is becoming a more significant focus of government policy in China and India. From a social perspective, investors are increasingly scrutinizing how companies are managing broader stakeholder relationships that can materially affect financial performance.

1 Sustainability in CEEMEA," Citi Research, as of 10/29/18.

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ESG: More Important in Emerging Markets? (continued)

Back to the Brazilian Dam Disaster

The latter point takes us back to the Brazilian dam disaster. The resource-intensive energy and materials sectors continue to play an important role in the socioeconomic welfare of many emerging and frontier economies, with accompanying ESG risk factors that can potentially impact share price performance.

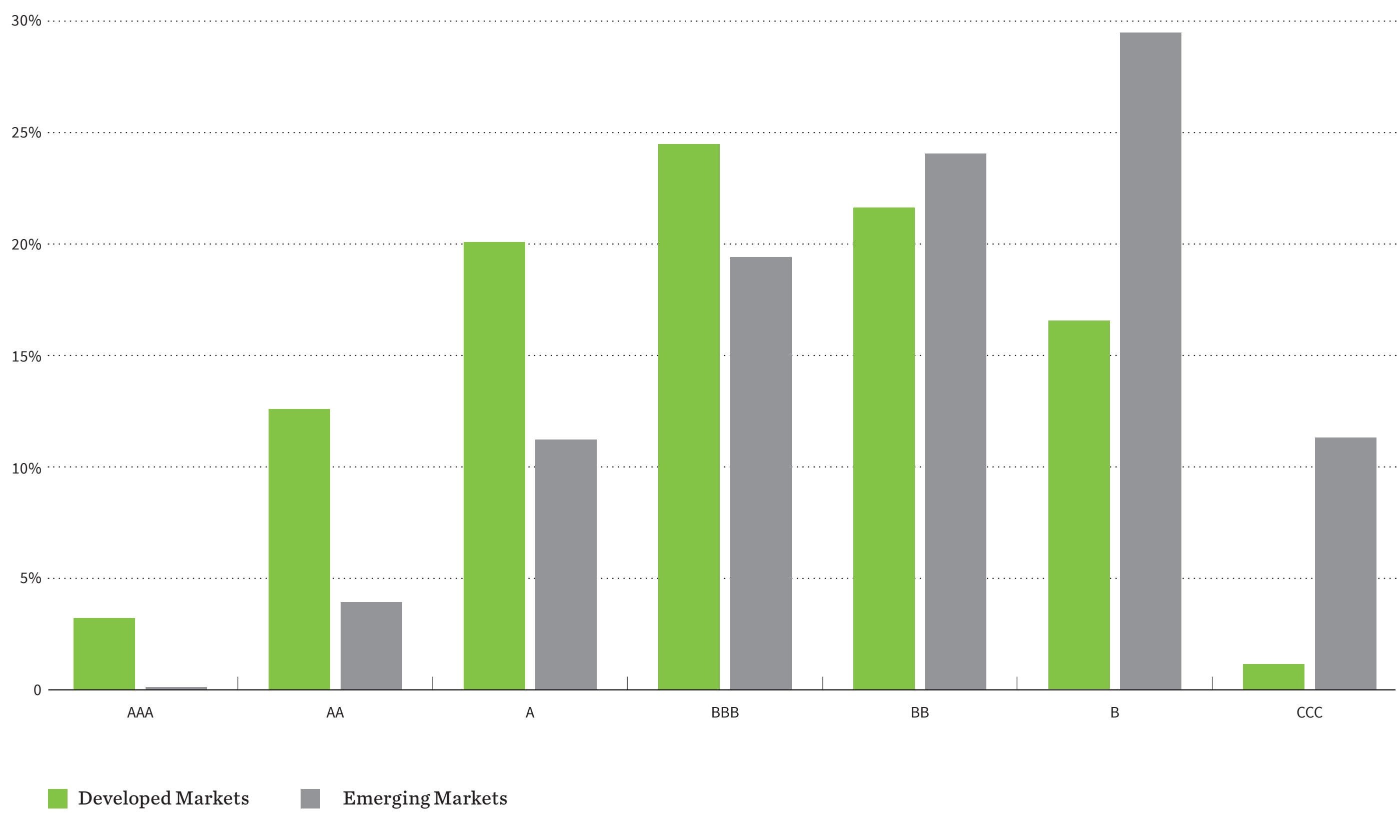
For example, mining companies that operate in environmentally sensitive areas where indigenous populations live have to be thoughtful about how they develop resources. They must also ensure the safety of their employees through ongoing capital investments and training. Brazil's Vale SA, which owns the dam that collapsed in Brumadinho, knows that all too well. The company has since announced that it will close all 10 of its dams in the country with a similar design.

Ratings Reflect Greater Risks, but also Opportunities

These risks are evident in the ESG ratings distributions of emerging versus developed markets. Conventional ratings distributions, such as the one shown below from MSCI, reflect a negative skew in emerging markets relative to developed markets. (Applying MSCI's ratings methodology, CCC is the lowest ESG rating assigned to companies on an industry-relative basis and AAA is the best.) Exhibit 1 illustrates.

EXHIBIT 1

MSCI ESG Ratings Distribution, Developed Versus Emerging Markets



Source: MSCI, as of May 2018. MSCI ESG ratings rate companies on an AAA (leader) to CCC (laggard) scale based on their exposure to industry-specific ESG risks and their ability to manage those risks relative to peers.

This negative skew in ESG ratings reflects some of the risks I discussed above, with a consistent overhang being weaker governance structures for companies across different sectors within EMs. Companies lacking a majority independent board, for example, are systematically penalized. The existence of a combined chairperson and CEO or dual share classes with unequal voting rights are also detrimental to the rating.

Over time, we expect ESG ratings for EM companies to improve broadly as more capital flows into ESG-focused equity and fixed-income strategies, and as more asset managers integrate ESG considerations in traditional strategies.

We have already seen tremendous growth in ESG-focused emerging markets fund assets, from less than $1 billion in 2008 to $20 billion in 2018, as measured by EPFR and Citi Research. EM ESG funds now account for nearly 10% of global EM funds, up from just 2% a decade ago.

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China is the world's worst polluter, so why feature it in a discussion about the critical but underappreciated value of ESG considerations in EMs? It is also the world's largest investor in clean energy.

China's War on Pollution

Air pollution is still dangerously high in cities like Beijing and Shanghai, and despite experiencing a 32% reduction over the past four years, it is still at five times the World Health Organization's recommended levels.

In 2014, Premier Li Keqiang declared a "war on pollution," prompting tighter enforcement of environmental regulations and a significant push to shift China's electricity generation capacity away from coal toward natural gas and renewables.

Fossil fuel consumption is expected to peak in 2020, according to the 2018 China Renewable Energy Outlook. Wind and solar capacity installations have ramped up aggressively. Additionally, the Northern Chinese provinces are targeting 35% of total energy consumption coming from renewables by 2030.

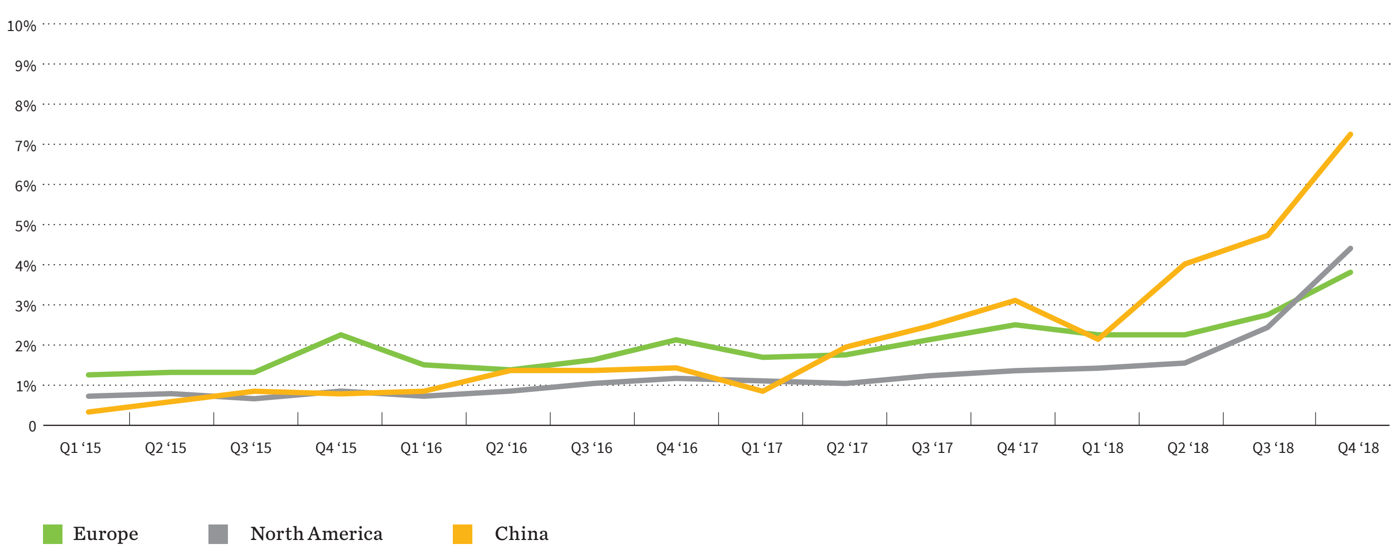
China is also investing heavily to become the leading market for electric vehicles (EVs) and batteries. "The conventional perception of China's economy is that it's driven by manufacturing and other old-world industries," wrote my colleague, William Blair Portfolio Manager Vivian Lin Thurston, in a blog post. "But this view doesn't capture the remarkable advancements in innovation coming out of the country."

Chinese auto manufacturers derive a higher percentage of sales from electric vehicles than their developed-market peers. According to Bloomberg New Energy Finance, China represents 76% of all commissioned lithium-ion battery manufacturing capacity; it logged 60% of global EV sales in the fourth quarter of 2018, and it held 50% of global public vehicle charging infrastructure at the end of 2018.

As Exhibit 2 illustrates, EVs account for approximately 7% of new vehicle sales in China—the world's largest auto market—up from only 1% two years ago. Ultimately, the production of EVs and batteries is playing a major role in China's evolution to a technology and innovation-driven economy.

EXHIBIT 2

Electric Vehicle Sales as a Percentage of Total Passenger Vehicle Sales



Sources: China Association of Automotive Manufacturers, Bloomberg NEF, William Blair, as of 12/31/18.

China's ESG Transformation (continued)

China is also a world leader in the issuance of green bonds (used to finance clean energy and low-carbon transportation). China's 13th five-year plan, announced in 2015, articulated a policy defining implementation of a green financial system. The country overtook traditional green financing giants such as the United States and France in 2016 and 2017, and was second only to the United States in 2018, issuing $34 billion in green bonds.

China's consistent tightening of environmental policy standards, even when detrimental to economic growth, is transformational. This important point should not be lost on sustainability-minded investors seeking to deploy patient capital.

China was the fastest-growing market for sustainable investing from 2014 to 2016, and there are a number of intriguing investment themes embedded in the "Clean China" opportunity. A few examples from CLSA are summarized in Exhibit 3.

> "China's consistent tightening of environmental policy standards, even when detrimental to economic growth, is transformational."
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> **Blake Pontius, CFA**

EXHIBIT 3

Clean China Investment Themes

Stock Baskets	Descriptions
Renewable Operators	Power-generation utilities that use renewable and non-polluting sources of energy including solar, hydro, wind, and natural gas
Solar	Companies engaged in consulting, R&D, and/or manufacturing of equipment needed to harness solar energy
Wind Equipment	Companies engaged in R&D, manufacturing, design, and/or sale of equipment needed to harness wind energy
Gas	Companies linked to the exploration, distribution, and/or sale of gas for consumers
Water Treatment	Water treatment solutions, including those for polluted water, water scarcity, water safety, etc.
Waste Management	Companies engaged in environmental protection through solid waste treatment, recycling services and waste-to-power solutions
Miscellaneous Environmental-Related	Companies engaged in other activities, such as nuclear power, integrated environmental protection, and new energy R&D
Electric Vehicle	Companies involved in R&D and production of electric vehicles or battery raw materials such as lithium and cobalts

Sources: CLSA. For illustrative purposes only. Not intended as investment advice.

Clearly, there are many different ways to access growth opportunities around China's environmental clean-up initiatives, whether in the utilities sector with alternative power generation, in the autos sector with electric vehicles, or elsewhere.

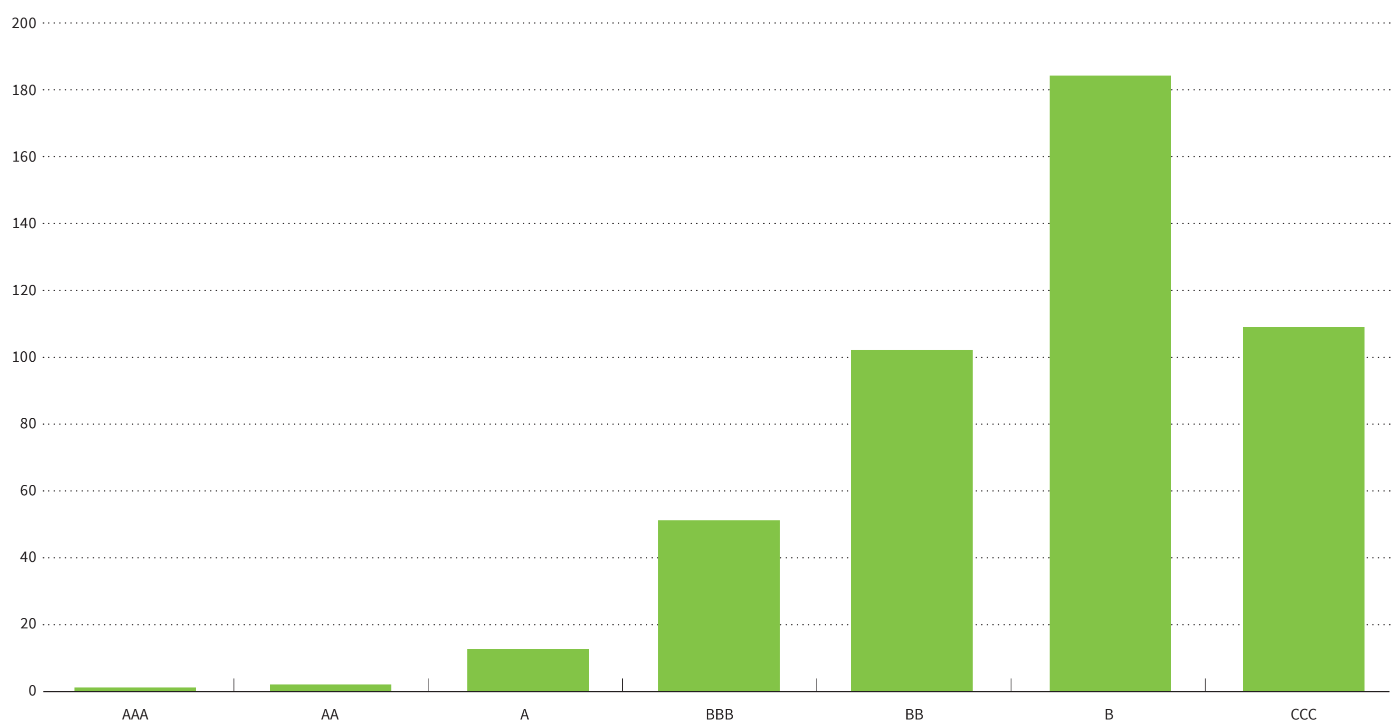
Potential Edge for Active Managers

Active investors who integrate ESG in their process may have an edge when it comes to assessing these sustainability-themed opportunities and engaging with companies to positively influence ESG practices. Currently, we see a clear negative skew when comparing China's ESG ratings to EMs as a whole. Exhibit 4 illustrates. The distribution for Chinese companies skews negatively toward CCC and B ratings (CCC is the worst and AAA is the best). Roughly 86% of more than 400 constituents in the MSCI China A Index received less than a BBB rating, which is average.

We believe increased foreign institutional investor ownership will gradually help improve these ratings, with companies being pressed to incorporate, measure, and disclose better ESG business practices. A further catalyst will likely be the Chinese security regulator's mandate that all listed companies and bond issuers disclose ESG risks associated with their operations in 2020. These efforts should drive positive change over time, and active investors with on-the-ground research operations will be positioned to take advantage of it.

EXHIBIT 4

MSCI China A Index Ratings Distribution



Source: MSCI, William Blair, as of May 2018. MSCI ESG ratings rate companies on a scale of AAA (leader) to CCC (laggard) based on their exposure to industry-specific ESG risks and their ability to manage those risks relative to peers.

Improving Disclosures Drive Results

Investors have gained an appreciation for the importance of ESG factors in EMs. But so have corporate executives, as reflected in improving transparency and sustainability-related disclosures. The resulting impact on value creation potential is intriguing.

There is no doubt that executives are becoming more aware of how ESG factors could affect their businesses. Take for example the World Economic Forum's annual survey, which ranks different risk factors CEOs are concerned about. Over time, we have seen a shift from economic-focused risk factors to ESG-focused risk factors, as Exhibit 5 illustrates

EXHIBIT 5

CEO Ranking of Risk Factors, 2010-2020

	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
1st	Asset-price collapse	Fiscal crises	Financial failure	Financial failure	Fiscal crises	Water crises	Climate action failure	Weapons of mass destruction	Weapons of mass destruction	Weapons of mass destruction	Climate action failure
2nd	Deglobalization (developed)	Climate change	Water crises	Water crises	Climate action failure	Infectious diseases	Weapons of mass destruction	Extreme weather	Extreme weather	Climate action failure	Weapons of mass destruction
3rd	Oil-price spikes	Geopolitical conflict	Food crises	Fiscal imbalances	Water crises	Weapons of mass destruction	Water crises	Water crises	Natural disasters	Extreme weather	Biodiversity loss
4th	Chronic disease	Asset-price collapse	Fiscal imbalances	Weapons of mass destruction	Unemployment	Interstate conflict	Involuntary migration	Natural disasters	Climate action failure	Water crises	Extreme weather
5th	Fiscal crises	Energy price volatility	Energy price volatility	Climate action failure	Infrastructure breakdown	Climate action failure	Energy price shock	Climate action failure	Water crises	Natural disasters	Water crises

Economic   Environmental   Geopolitical   Societal   Technological

Source: World Economic Forum Global Risks Report 2020.

Disclosures of ESG-Related Factors

As executives become more aware of material risks and opportunities around ESG, they are more likely to integrate those into strategy. This is already occurring, with more companies moving beyond boilerplate language in sustainability reports and setting quantifiable targets for various ESG-related metrics, from emission levels and water intensity to worker accident rates, tracking their progress in a transparent way.

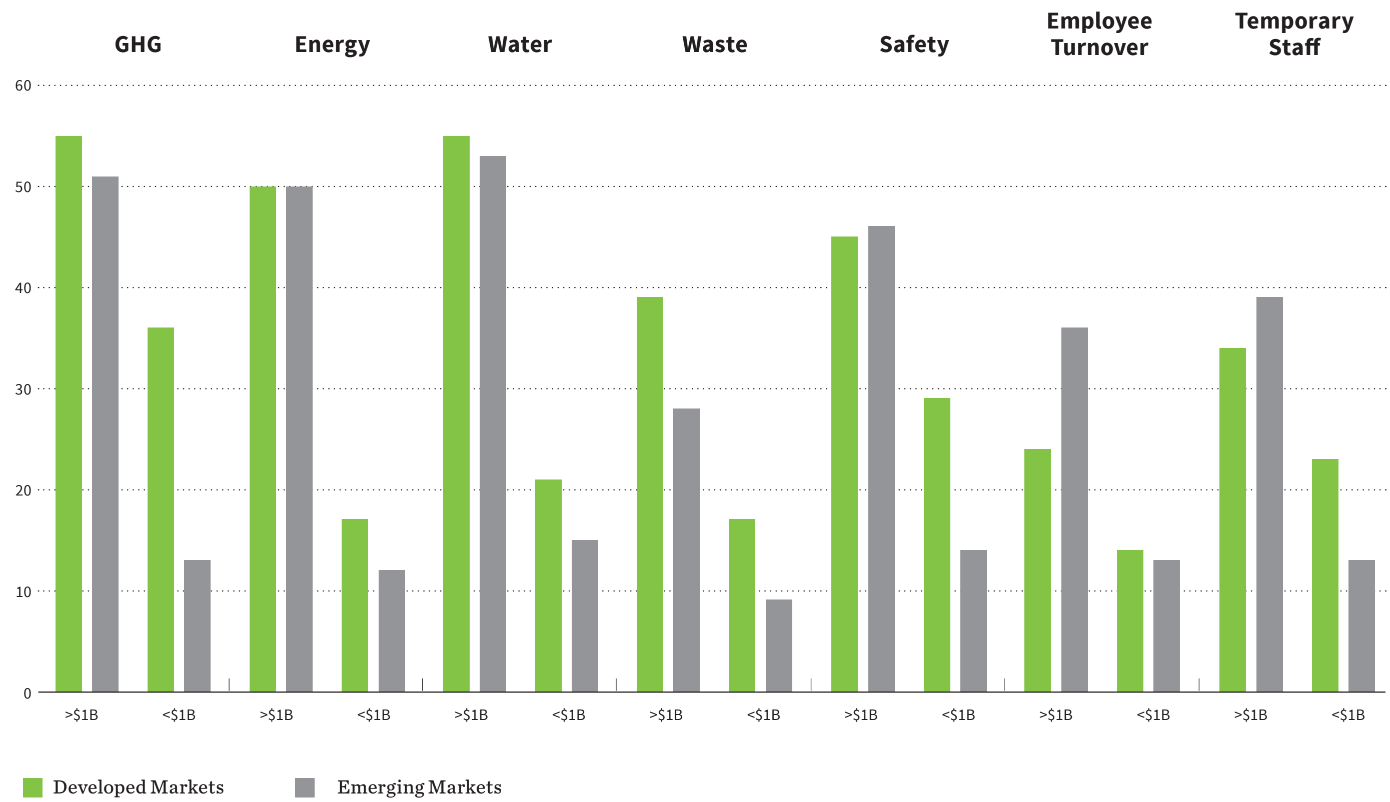
Generally, we have seen higher rates of sustainability disclosure for large companies than small companies globally, and for developed-market-domiciled companies versus their EM peers. There is evidence that the tide is turning, however.

For seven key sustainability metrics tracked by the Sustainable Stock Exchange Initiative, the chart below shows rates of disclosure for developed and EM companies broken down by market-capitalization segments—less than $1 billion and greater than $1 billion.

The market-cap discrepancy is evident for every indicator, with larger companies (greater than $1 billion) exhibiting higher rates of disclosure, which is not surprising given their greater resources to commit to sustainability reporting. What is perhaps more interesting is that for the majority of indicators—greenhouse gas emissions (GHG), energy, water use, safety—EM companies greater than $1 billion are reporting key indicators at comparable rates to their developed market counterparts. Exhibit 6 illustrates.

EXHIBIT 6

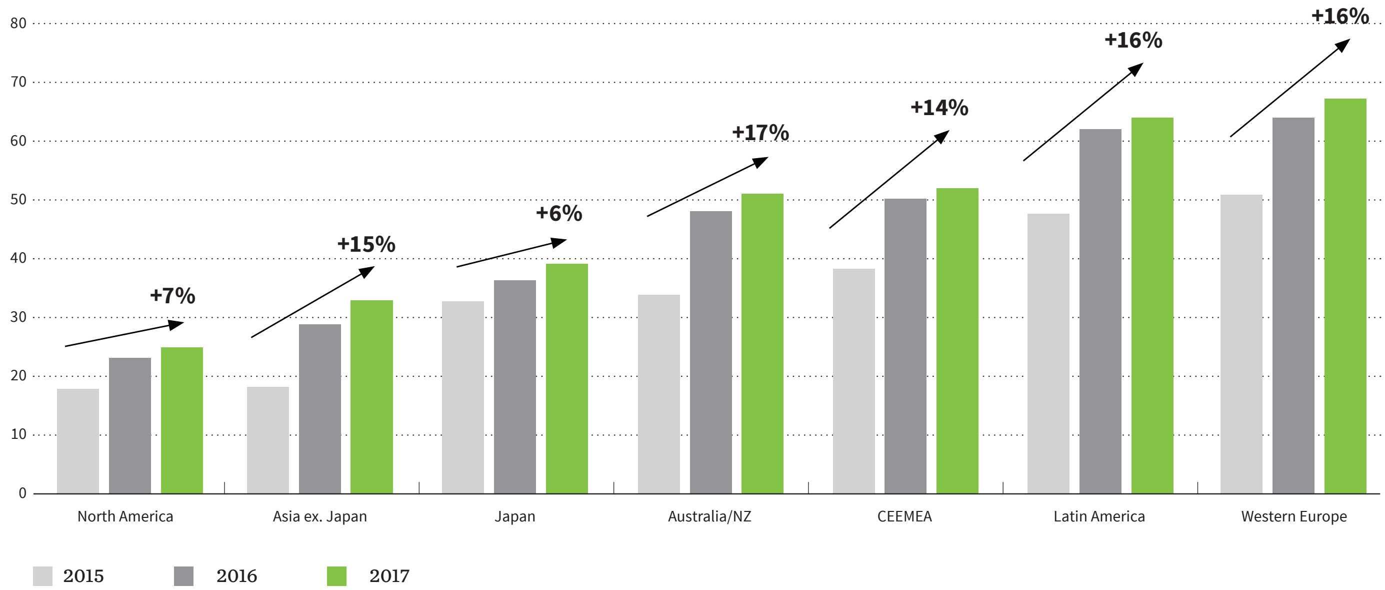
Disclosure of Key Indicators, Developed Versus Emerging Markets



Source: Sustainable Stock Exchange Initiative 2018 Report on Progress. Based on FTSE-Russell data.

EXHIBIT 7

Increase in Environmental and Social Metrics Disclosed by Region, 2015-2017



Sources: Thomson Reuters, Bloomberg, FactSet, Goldman Sachs Investment Research, William Blair, as of 2017.

As EM companies begin to disclose more, there is scope for ratings improvement and increased capital flows from the growing pool of investors integrating ESG considerations. Beyond the quantity of disclosures, there is evidence that disclosure quality is improving as companies and investors focus more on industry-specific environmental and social factors.

This improvement has been particularly notable within EMs. Data from Goldman Sachs Sustain measuring 2015-2017 disclosure rates for the most financially relevant metrics—including water withdrawal, sulphur oxide emissions, employee turnover, and women employees—show double-digit growth rates in reporting for companies based in Asia ex-Japan, CEEMEA, and Latin America. Exhibit 7 illustrates.

It is worth reiterating that this data set focuses on industry-specific metrics that Goldman Sachs linked to positive sector-relative share price performance for companies in their coverage universe. For example, its analysis emphasizes employee turnover disclosures for human-capital-intensive industries such as IT services, compared to water intensity disclosures for semiconductor wafer manufacturers. That is important to us as investors, because we're more interested in companies that are focusing on financially material issues.

These disclosure trends reflect a growing acknowledgement of the increasing materiality of environmental and social issues by EM company executives and investors. Further impetus has been provided by various EM stock exchanges joining the Sustainable Stock Exchange Initiative, which promotes corporate transparency and performance on ESG issues. These include the Shenzhen and Shanghai stock exchanges, India's BSE, Bursa Malaysia, and Brazil's B3.

Looking ahead, we believe the convergence of investor, economic, and regulatory pressures will drive greater transparency and a more intentional alignment of sustainability efforts with business strategy for EM companies.

ESG: Link to Financial Performance

Solidifying the link to financial performance is a critical aspect of this alignment and the future growth of ESG investing in EMs.

Historically, investors have struggled between doing well and doing good—but now they do not have to choose. Contrary to prevailing opinion among critics, who continue to equate sustainable investing with restricted universes and concessionary returns, we believe ESG integration is about investing more inclusively in pursuit of strong returns.

Despite all of the interest and asset flows into the space in recent years, the sustainable investing movement continues to confront the critical question of performance: does achieving positive ESG characteristics or environmental/social impact necessitate below-market returns? A growing body of academic and industry research suggests this is not the case.

> "A Goldman Sachs study shows that if you avoid laggards on material environmental and social issues in EMs, you can add value."
>
> **Blake Pontius, CFA**

Environmental and Social Analysis Has Added Alpha

To examine the relationship between sustainability and corporate performance within EMs, Goldman Sachs grouped companies into quartiles by environmental and social scores based on Refinitiv data and Goldman's analysis of materiality.

Companies with low environmental and social scores typically had less carbon-efficient assets, lower diversity, higher staff turnover, and lower levels of worker safety.

Goldman then compared the top three quartiles to the bottom quartile based on sales growth, earnings growth, operating margin (EBITDA) expansion, and cash return on capital invested (CROCI) expansion.

Companies in the bottom quartile underperformed those in the top three quartiles for rolling three-year periods between 2010 and 2016 on a sector-relative basis.

ESG Factors Have Improved Sharpe Ratios

Another interesting study from JP Morgan's Quantitative Research team looked at how embedding ESG into a traditional multi-factor model (with traditional factors such as quality, momentum, growth, and earnings revisions) affected risk-adjusted performance. Its analysis of the top 50 MSCI Emerging Markets Index companies based on MSCI ESG industry-adjusted scores found that combining ESG with traditional style factors materially enhanced returns and decreased risk, resulting in higher Sharpe ratios for different strategies.

The effect was most pronounced within quality, momentum, growth, and earnings revisions strategies, as shown in Exhibit 8. Importantly, portfolio drawdowns were significantly lower for the strategies that integrated ESG. This analysis is intriguing in that it suggests ESG has efficacy above and beyond traditional style factors.

EXHIBIT 8

Backtest Summary of Factors and Equal-Weight ESG Combination

Factor	Returns	Volatility	Sharpe	Drawdown
Quality	3.3%	7.6%	0.43	–11.1%
ESG + Quality	4.2%	5.9%	0.72	–8.4%
Momentum	7.3%	9.4%	0.78	–25.9%
ESG + Momentum	6.1%	5.0%	1.23	–4.7%
Growth	0.4%	7.8%	0.05	–22.2%
ESG + Growth	3.2%	4.5%	0.70	–3.3%
EPS Revisions	5.5%	7.1%	0.77	–13.3%
ESG + EPS Revisions	4.9%	4.9%	1.01	–5.2%

Source: Khuram Chaudry, J.P. Morgan. Performance shown is between January 2007 and September 2016. Results are based on a simple two-factor model made up equally of ESG (industry-adjusted) and another fundamental quantitative factor. Portfolios represent top 50 stocks on the combined score, rebalanced monthly. The hypothetical performance shown does not represent the actual results of any account or strategy and does not reflect any fees or expenses. **Past performance is not indicative of future returns.** See "Important Disclosures" for additional information.

ESG Tilt Strategy Has Added Value in EMs

ESG indices also provide valuable insight to the question of efficacy. The MSCI Emerging Markets ESG Leaders Index, comprising best-in-class companies using MSCI's ESG ratings framework, outperformed the MSCI Emerging Markets Index by 348 basis points annualized from September 2007 to January 2020. The ESG Index also achieved a significantly higher Sharpe ratio—more than double that of the mainstream index (0.30 vs. 0.14), as Exhibit 9 illustrates.

These studies and index performance help demonstrate the potential efficacy of ESG factors. The increasing amount of sustainability data that becomes available over the coming years will help further quantify the contribution of ESG.

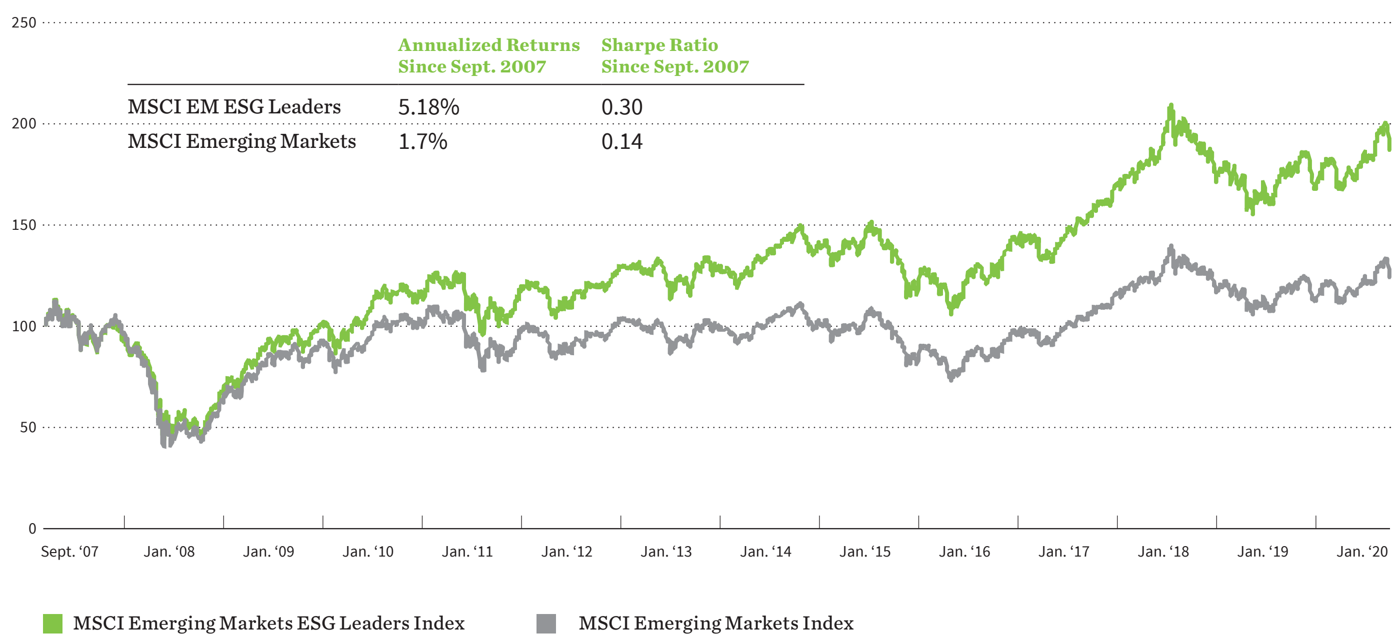
The Role of Fundamental Analysis

The risks and opportunities companies face related to factors such as climate change, demographic shifts, regulatory pressures, and new expectations among customers, workers, and other stakeholders are constantly evolving. By incorporating sustainability and corporate governance factors into our fundamental analysis, we are working to create a more complete picture of the risks and opportunities facing companies today and in the future.

EXHIBIT 9

MSCI EM ESG Leaders Index Versus MSCI Emerging Markets Index

Cumulative Index Performance—Gross Returns (USD)



	Annualized Returns Since Sept. 2007	Sharpe Ratio Since Sept. 2007
MSCI EM ESG Leaders	5.18%	0.30
MSCI Emerging Markets	1.7%	0.14

Source: MSCI, as of January 2020. The MSCI Emerging Markets ESG Leaders Index was launched on 6/6/13; data prior to the launch date is backtested. **Past performance is not indicative of future returns.** See "Important Disclosures" for additional information.

About William Blair
William Blair is committed to building enduring relationships with our clients and providing expertise and solutions to meet their evolving needs. We work closely with the most sophisticated investors globally across institutional and intermediary channels. We are 100% active-employee-owned with broad-based ownership. Our investment teams are solely focused on active management and employ disciplined, analytical research processes across a wide range of strategies. As of December 31, 2019, we manage $58.4 billion in assets. We are based in Chicago with resources in New York, London, Zurich, Sydney, Stockholm, and The Hague, and dedicated coverage for Canada.

The **MSCI Emerging Markets Index** is a free float-adjusted market capitalization index that is designed to measure equity market performance in the global emerging markets. The **MSCI Emerging Markets ESG Leaders Index** is a capitalization-weighted index that provides exposure to companies with high ESG performance relative to their sector peers. Indices are unmanaged, do not incur fees or expenses, and cannot be invested in directly.

Alpha is a measure of an investment's return in excess of the market's return, after both have been adjusted for risk. **Drawdown** is the peak-to-trough decline during a specific record period of an investment. **Sharpe Ratio** is a risk-adjusted measure calculated using standard deviation and excess return to determine reward per unit of risk.

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