

Why the Market Gets Sustainable Investing Wrong

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Active Managers, Who Seek to Identify Assets with the Potential to Beat or Lag A Benchmark, Love Market Inefficiencies.

When market participants lack, discount, or ignore relevant data, the resulting information gaps create asset mispricing that active managers may exploit to generate alpha for clients. We believe sustainable investing, including environmental, social, and governance (ESG) integration and engagement, impact investing, and other approaches is a particularly inefficient market segment. This paper addresses several key inefficiencies and explains how we believe investors can take advantage of them:

- 1. The market's focus on short-term growth
- 2. Inconsistent, backward-looking ESG ratings
- 3. Emerging market (EM) indices' underexposure to structural development
- 4. Blind spots in climate risk analysis
- 5. An undefined impact investing universe

The Sustainable Investing Ecosystem

Sustainable investing approaches vary widely, from philanthropies that provide capital without seeking financial profit, to market-based, "nonconcessionary" strategies that aim to outperform benchmarks and produce competitive returns. All of Wellington's sustainable investment approaches are nonconcessionary. Each has a defined philosophy and process for identifying market inefficiencies, and a repeatable method for exploiting them.

Our market-based sustainable investing strategies include:

Negative screening: Also called exclusionary investing, these strategies avoid exposure to businesses perceived as having negative effects on society or the environment. This is the only category of sustainable investing defined by what investors exclude from a portfolio.

ESG integration and engagement: Portfolio managers of these strategies aim to understand how various ESG practices can affect a company's fortunes and invest in companies whose positive ESG traits they believe can enhance its long-term relative value. They typically engage with managements and boards to improve these practices and unlock that value.

Thematic investing: Certain themes or megatrends, such as climate change or economic development, are another avenue for sustainable investing. Companies with well-defined strategies for mitigating or adapting to climate change may be good long-term investments, and many of the structural forces supporting development – improving productivity, inclusiveness, and living standards – encompass sustainable issues and have the potential to generate differentiated returns.

Impact investing: Impact investors seek to own securities of companies whose core goods and services address major global social and environmental problems, such as food insecurity, lack of access to technology, resource degradation, and many others. Impact investors intend to create positive outcomes for the world while seeking to generate a financial return.

SDG investing: Aligning a portfolio in accordance with the United Nations' 17 Sustainable Development Goals (SDGs) is another approach to sustainable investing. The SDGs are a framework for identifying – and addressing – major social and environmental issues, to secure a peaceful, prosperous world for future generations.

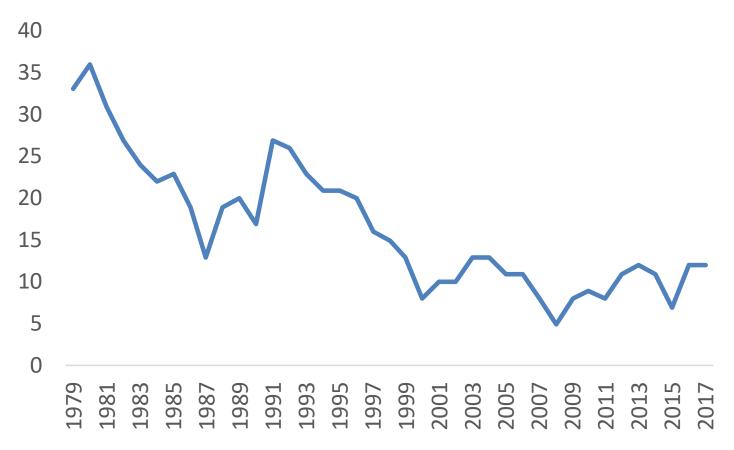


Exhibit 1: Short-Term has Taken Hold

Source: The World Bank, World Federation of Exchanges Database

Inefficiency 1: The Market's Focus on Short-Term Growth

Over the past 40 years, the average equity holding period has declined from three years to less than one (Exhibit 1). While many market participants focus on quarterly earning guidance, profit margins, or growth rates, sustainable investors can explore longer-term, sustainable growth opportunities. We have found evidence to suggest that investing differently from a benchmark and holding stocks for longer periods can result in outperformance.

Exhibit 2 shows the results of one study conducted in 2015 in which researchers at Notre Dame and Rutgers universities divided a set of investment funds into four groups according to their degree of active share and their "duration," or investment holding period. (High active share implies differing from a benchmark; low active share implies similarity to it.) The analysis looked at regression of turnover and active share between 1994 and 2012 for US-specific, actual data, comparing the fifth and first quintiles. The study found that the funds with high active share and long duration significantly outperformed the funds with either lower active share or shorter duration.

Exploiting Inefficiency 1: Engaging with Companies to Unlock Value

Sustainable investors have an opportunity to extend investment horizons and engage with companies on material ESG issues that may potentially unlock value over time. In our view, short-term-focused investors do not bother to understand a company's long-term strategy or meet with the board to discuss issues like capital allocation decisions or corporate culture. In addition, since they may not be in the stock long enough to vote a proxy, a company may not care what they think. We believe material ESG issues are strategic business issues that can affect performance, and that understanding them can lead to better investment decisions. By extending investment horizons and engaging with companies to better understand and advise them, we believe active managers can help unlock long-term value and thus generate added value for asset owners.

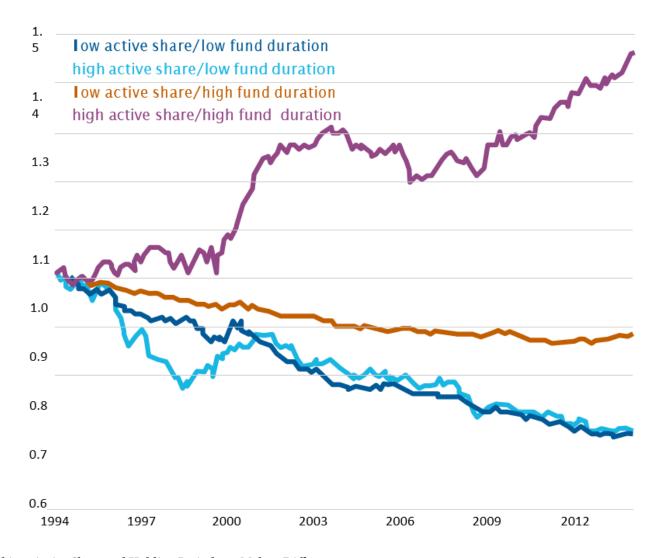
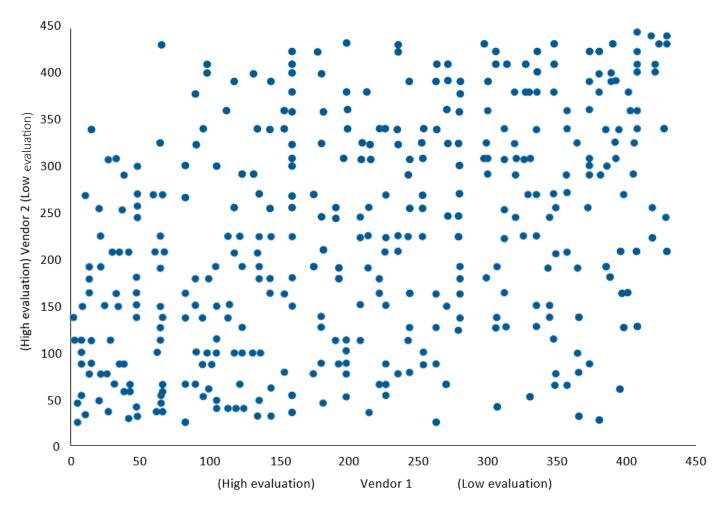


Exhibit 2: Active Share and Holding Period can Make a Difference

Source: "Patient Capital Outperformance: The Investment Skill of High Active Share Managers Who Trade Infrequently" by Martijn Cremers (Notre Dame, Ankur Pareek (Rutgers Business School), December 2015



Comparison of 400 ESG Scores from Third-Party Vendors Exhibit 3: Third-Party ESG Ratings are Backward-Looking and Don't Always Agree Sources: CLSA, GPIF, 4Q18

Inefficiency 2: Inconsistent, Backward-Looking ESG Ratings

A relatively large number of vendors develop ESG scores and ratings. While these vendors perform a valuable service, the scores are based on disclosure data and thus are backward-looking. Moreover, each vendor has its own emphasis, which results in inconsistent scoring. While some market participants may use this as a reason to discount ESG data, we see this discrepancy as a potentially exploitable inefficiency.

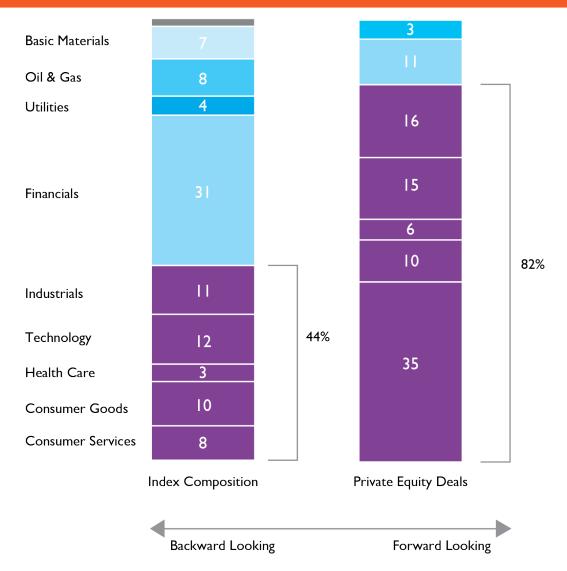
The retroactive nature and lack of correlation among third-party ESG ratings presents another opening for active investors to deliver for clients – particularly those investment firms with proprietary research capabilities. Exhibit 3 plots ESG scores from two prominent data vendors for the same set of 400 companies. Vendor one's scores are along the horizontal axis, with high-scoring companies (with good ESG practices) toward the left and low-scoring companies on the right. Vendor two's scores are along the vertical axis, with high-scoring companies farther down and low scoring companies farther up. If the vendors' ratings on each company were identical, then the dots would form a 45-degree plot line. However, the dots are scattered, meaning these vendors have very different ESG assessments of the same companies. In

addition, because third-party ratings are disclosure-based, they are retroactive assessments that do not forecast a company's trajectory.

Exploiting Inefficiency 2: Multidisciplinary Research and Extensive Engagement

Our equity, credit, and ESG research teams collaborate in a multidisciplinary approach that allows us to triangulate the value of individual securities, gaining a deeper, more holistic, and forward-looking understanding of the investment mosaic. We believe that by having multiple specialists engaged in the analysis and dialogue with company managements and boards, a manager can derive differentiated insights. Further, we feel that multifaceted proprietary research is a more accurate path to assessing a company's trajectory or a security's future value.

We consider ourselves to be constructivist in our engagement approach, with the goal of producing positive results by helping companies improve their ESG practices. For example, by encouraging board diversity and independence, highlighting the potential to lower production costs by increasing water-use efficiency, or advocating for better health and safety practices, we think active managers can guide companies to better financial performance and long-term outcomes.



FTSE Emerging Market Index data is as of October 31, 2015. Private equity deals shown are for the first half of 2015 to 30 June 2015 and are the number of PE deals monitored by EMPEA covering all EM countries within the survey. Purple highlights underrepresented industries within public markets.

Exhibit 4: EM Market Capitalization is Skewed to Past Winners Sources: FTSE, EMPEA, Wellington Management

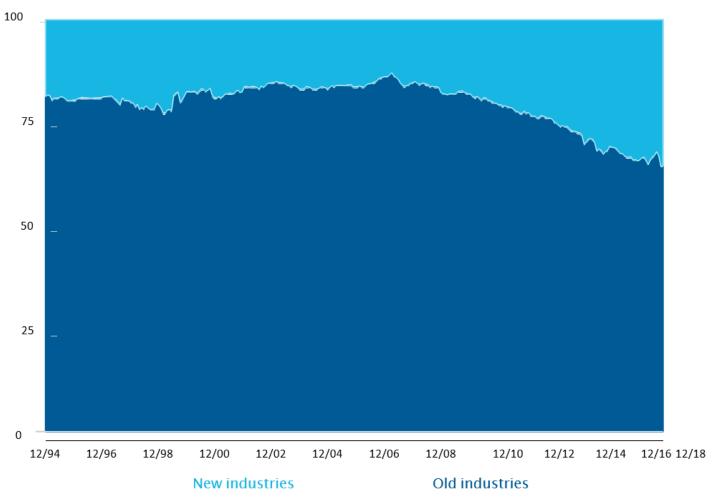
Inefficiency 3: Emerging Market (EM) Equity Indices' Underexposure to Structural Development

For most of the past two decades, above-trend growth shaped emerging market economies and skewed market-cap-weighted EM equity indices toward industries associated with high, cyclical growth. In recent years, however, EM governments have reoriented policy priorities to support economic development rather than a growth-at-all-costs approach. The effect of this divergence results in another inefficiency that can potentially be exploited.

Economic growth is often conflated with economic development, but the concepts are distinct. While quantitative metrics such as a change in GDP or national income measure growth, economic development refers to the quality of those changes. Across EMs, structural forces like greater inclusiveness, enhanced productivity, improved living standards, and better sustainability are gaining traction. Sectors closely tied to those forces, such as health care, consumer products, and technology, are benefiting.

As Exhibit 4 shows, financials, utilities, telecommunications, energy, and materials accounted for more than half of total EM equity market cap in late 2015. In that same year, private equity – forward-looking capital – was flowing to areas with the potential to benefit directly or indirectly from secular development trends, such as health care, technology, industrials, and consumer goods and services.

A more recent survey of private-equity intentions, as well as anecdotal evidence, indicates that private equity allocations continue to favor those sectors; however, EM index composition is still largely weighted toward past growth drivers like natural resources and financials (Exhibit 5). This suggests that EM equity indices are misaligned and that investors who hug the benchmark are underexposed to development-related segments with the potential to outperform.



Based on MSCI Emerging Markets Index, December 1994 – December 2018. | New industries defined as consumer related (consumer staples, consumer services, media, retailing, household durables, leisure products, software, internet software and services), health care (heath care equipment and services, biotechnology, life sciences tools and services), broadening financial markets (thrifts and mortgage finance, consumer finance, capital markets, insurance), and clean power (gas utilities, water utilities, independent power, renewable electricity producers). Old industries defined as natural resources (energy and materials), exporters (industrials, automobiles, auto components, textiles and apparel, luxury goods, pharmaceuticals, technology hardware and equipment, IT services, semiconductors, semiconductor equipment), and state-owned enterprises (banks, diversified financials, real estate, electric utilities, multi-utilities). Exhibit 5: Industry Composition in MSCI Emerging Markets Index: 1995 - 2018

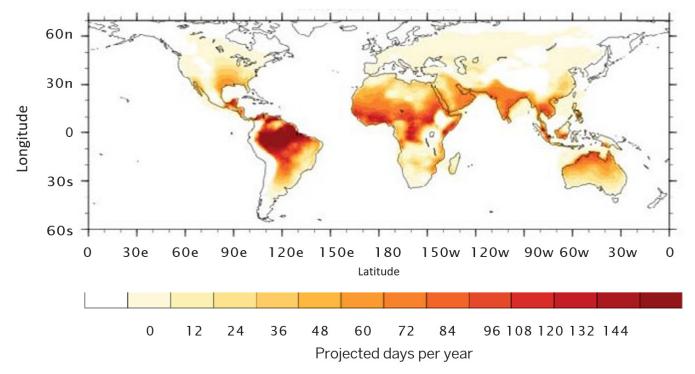
Exhibit 5: Industry Composition in MSCI Emerging Markets Index: 1995 - 2018 Sources: MSCI, Wellington Management

Exploiting Inefficiency 3: Focus on Secular Development Themes

We believe that markets underappreciate the political determination that exists to make economic progress more stable and inclusive. Two of our sustainable investing portfolio managers have collaborated with Professor Maryann Feldman of the University of North Carolina on the construction of a proprietary index to study and track progress along each of these four forces of structural change. By focusing on development rather than on cyclical growth, they seek to take a longer-term, differentiated approach to EM equity investing. Consequently, they invest more heavily in the sectors aligned with the structural development forces identified above.

Inefficiency 4: Blind Spots in Climate Risk Analysis

Climate change presents two types of financial risks: transitional risks posed by changes in climate-related policy, regulation, and legislation; and physical risks posed by environmental threats from drought, flooding, rising sea levels, and more. In our view, most climate risk analysis currently focuses on transition risks, with less attention to the impact of physical risks on capital markets and investment portfolios. To us, this is a massive information blind spot, as we believe the physical risks of climate change, including heat, drought, rising sea levels, and several others will have profound effects on asset prices around the world.



Additional days per year in National Weather Service danger zone throughout the 2020 – 2029 decade. World based on 1951 – 1980 reference period. Danger zone is defined as the National Weather Service Heat Index danger and extreme danger zones, which include heat index values above 103°F. This is the source for heat advisories. The target data presented is hypothetical in nature. No assurance or guarantee is made that any target data can or will be achieved. Actual experience may not reflect all of the data or may be outside of stated ranges. For illustrative purposes only.

Exhibit 6: Many Regions will get Hotter

Sources: National Weather Service

Exploiting Inefficiency 4: Bridging the Gap Between Science and Finance

In September 2018, we began a multiyear collaboration with Woods Hole Research Center (WHRC), the top-ranked independent climate research institute for the past four years by the International Center for Climate Governance, to understand the implications of physical climate risk on securities, industries, and economies. Working side by side with climate scientists, we are studying the implications of six climate factors: heat, drought, wildfire, hurricanes, floods, and water availability.

For each climate variable, we conduct a scientific literature review and determine which metric is most relevant for answering capital market questions. These climate scientists then create granular maps showing how these variables are likely to affect various geographic areas over time. We then overlay these maps with various securities and their characteristics to assess whether or not we believe these climate outcomes are appropriately priced.

In the study of heat, for example, we chose a measure that combines temperature and humidity into an index, because above certain levels, heat endangers human health. The map in Exhibit 6 shows the additional number of days per year that various geographies will experience danger-zone readings, as determined by our metric of heat and humidity, over the next

decade. Locations in orange will experience two more months of dangerous heat whereas the deepest red colors mean almost five additional months. We think this will have profound effects on capital markets with regard to migration, agriculture, and infrastructure. While some places will need to spend massive amounts of money to adapt to rising temperatures, others may experience migration, as people relocate to more livable places.

These eventualities have considerable implications for securities associated with fixed physical locations, such as regional banks, theme parks, farmland, municipal bonds, or real estate investment trusts (REITs). In our work, we aim to answer macro questions such as, "Will India get rich before it gets too hot?" and micro questions like, "What is the revenue hit to a theme park forced to close 20 days per year because of high temperatures?" We also aim to determine through engagement how well management teams understand and appreciate the effects of climate change on their business, and whether they are deploying capital proactively to stay competitive.

Inefficiency 5: An Undefined Imact Investing Universe

The basic inefficiency with impact investing is that the universe of publicly traded securities to choose from remains undefined. While industry groups like the Global Impact Investing Network (GIIN) have made great progress on impact measurement and reporting standards, and the United Nations Sustainable Development Goals offer an important framework, impact investors have to establish their own impact criteria and research for themselves which companies qualify.

Exploiting Inefficiency 5: Deepening our Analysis to Uncover Value Drivers

Our research estimates that, on the equity side, nearly 500 publicly traded companies across a range of sectors, geographies, and market caps qualify for our impact approaches. In fixed income, we have identified a broad universe totaling approximately US\$1 trillion. While named categories of green bonds and impact bonds are options, these require analysis to determine whether they meet our criteria for impact. In addition, some corporate, agency, municipal, and commercial mortgage-backed securities may meet our materiality criteria — the majority of bond proceeds must be aimed at an impact goal like affordable housing or zero-carbonemissions transport. We see the tendency to limit the fixed income investment universe to named green bonds and impact bonds as another inefficiency.

We believe companies whose products and services help solve the world's biggest problems may be global growth engines in coming years. By defining the universe and studying these stocks through the impact lens, we believe we can arrive at differentiated insights that may add value for clients.

While a first step is to define and hone the definition of the impact universe, we believe it is also critical to analyze impact companies with a nontraditional lens. For example, while traditional analysis may compare a company that converts solid waste into energy to a traditional waste management business model, we take a different view. The fortunes of waste-to-energy companies depend more on the prices of recycled metal and energy than on traditional inputs, so the traditional analysts' miscategorization can lead to asset mispricing. Similarly, many telecommunications companies are helping to broaden access to financial services in emerging markets. We find that voice and data pricing drive these stock prices much less than prices for mobile money and mobile credit. Traditional telecommunications analysts tend to cover these companies, but we believe their capabilities as nonbank financial services will determine their level of success.

Conclusion

Rapid evolution in the sustainable investing universe creates market inefficiencies. The most significant information gaps we see are focusing on near-term growth, relying on third-party ESG ratings, ignoring physical climate risks, failing to appreciate opportunities in EM economic development, underutilizing engagement with companies as a means of unlocking value, and misunderstanding the impact investing opportunity set.

We believe active investors, with thorough analysis and proprietary research, have ample opportunities to generate alpha in this space by identifying and exploiting the inefficiencies that exist.

Principle Risks: Common Stock Risk, Concentration Risk, Emerging Risk, Currency Risk, and Liquidity Risk.

Disclosure

Any views expressed here are those of the authors as of publication, are based on available information and are subject to change without notice. All investors should consider the risks that may impact their capital, before investing. The data shown in the Exhibits is for informational purposes only, is subject to change, and is not indicative of future portfolio characteristics or returns. Actual results may vary for each client due to specific client guidelines, holdings, and other factors.

Endnotes

- 1. In the middle are approaches that emphasize values alignment, offering below-market or "concessionary" returns; with catalytic capital investing, for example, investors are willing to take lower returns and assume disproportionate risk to encourage investment by others who may have higher return expectations.
- 2. 2017 Global LP Survey.

Author Bio



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Wendy is the director of Sustainable Investment, setting the research agenda and strategies for the firm's sustainable investment practice, including impact, climate, and long-term engagement strategies. As vice chair, she is a senior member of the firm's management team

and works with the CEO with respect to strategic initiatives and external affairs of the organization.

In addition, she is a member of the firm's Investment Stewardship Committee, and Hedge Fund Review Group, and serves as vice chair of the Compensation Committee and chair of the Strategic Relationship Advisory Committee and the Wellington Management Australia Board. She also serves as a director on the board of the United Nations-supported Principles for Responsible Investment.

Previously, Wendy conducted research on long-term multi-asset themes and led the development of multi-asset portfolios for the firm's global client base as the director of Global Multi-Asset Strategies.

Wendy received her MBA, with honors, from Vanderbilt University and her BBA, summa cum laude, from the University of Mississippi. She also holds the Chartered Financial Analyst designation.