ESG INVESTING BULLETIN

September 2016 Summary

With the majority of world stock indices in positive territory, market sentiment towards environmental, social or governance (ESG) investing was mostly optimistic through the third quarter supported by a few important developments in the public and private space.

The U.S., China, India, New Zealand and finally, European Union, ratified their Paris agreements, bringing the total number of parties to 72, which represents 57%[1] of global greenhouse gas (GHG) emissions. The European Commission established a taskforce to develop a comprehensive strategy on sustainable finance, and the giant European Fund for Strategic Investment (EFSI) announced that €200 billion will be channeled into low-carbon energy. We are also seeing new heights of green bond issuance, with $58[2] billion since the beginning of the year, according to Bloomberg.

At the same time, this year's shareholder voting resolutions at the large oil/gas producers have caused strong debates and highlighted potential weaknesses of the implementation of fiduciary duties by pension trustees and investment managers.

This issue discusses the most recent regulatory innovations in the fiduciary duty space. We also look at various ESG parameters from the lens of financial materiality and discuss how these parameters can be different from each other. It's important to note that when we use the term ESG we are referring to the assessment of E, S and G data in the risks and opportunities of a company, distinct from negative screening.

Lastly, we examine the positive aspects of combining factor based investing with an ESG overlay.

In this issue:

Time to Deconstruct the ESG Alphabet

Aligning Fiduciary Duty and ESG

The Alchemy of Factor Investing & ESG

ESG Index Returns

TIME TO DECONSTRUCT THE ESG ALPHABET

Over the past decade, we've seen a dramatic increase in ESG investments in the market as well as significant changes in the concept of ESG investing. Ten years ago, discussions centered on the collection and accuracy of non-financial data that could be included in financial analysis, with the assumption that stronger ESG behaviors should be rewarded with higher market returns. At that time, corporate disclosure on ESG issues was not mandatory and mostly aspirational. To put this in perspective, 20% of companies in the S&P 500 Index issued standalone corporate sustainability reports in 2011. By 2015, this rose to 81%[3].

Whilst the depth and accuracy of ESG data has improved substantially over the past 10 years, the underpinning focus of most investors is addressing the relationship between risk-adjusted returns and ESG[4] through incorporating financial

20%

OF COMPANIES IN THE S&P 500 INDEX ISSUED STANDALONE CORPORATE SUSTAINABILITY REPORTS IN 2011…

BY 2015 IT HAD RISEN TO…

81%

[1] UN Framework Convention on Climate Change. https://unfccc.int
[2] Bloomberg monthly green bonds report – September 2016
[3] Governance & Accountability Institute report. June 2016.
[4] Governance & Accountability Institute report. June 2016.

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materiality into the ESG equation.

Some academic research will point out the strong negative correlation between ESG focused investing and stock volatility as well as the positive correlation between ESG ratings and risk-adjusted returns[5]. Yet, because the umbrella term "ESG rating" is a multi-factor concept, it is far more difficult to either support or refute the claim that higher return companies have higher ESG ratings. As a large asset manager with US$55[6] billion in ESG assets, Northern Trust Asset Management acknowledges the relevance of ESG analytics in managing investing portfolios. Yet we also recognize that various ESG indicators each have different levels of impact on financial materiality and direct development.

Not all components of ESG scores are equally important when it comes to having predictable and positive impacts on total stock returns and return on equity[7]. Using the sector-level materiality maps of corporate sustainability parameters produced by the Sustainability Accounting Standards Board (SASB), Khan, Serafeim and Yoon[8] showed that firms with high scores on sustainability parameters classified as "material" significantly outperformed firms with poor scores. In contrast, analysis of firms with high-performing sustainability parameters not classified as material did not show such outperformance.

As investors navigate through the ESG alphabet and the plethora of ESG rating methodologies, is it time to deconstruct ESG indicators based on our understanding of financial materiality?

Climate change alignment

There is little doubt that climate change alignment deserves to be singled out as an important subject within the environmental portion of ESG. As a key topic within the sustainability concept, we could even suggest that it deserves its own representative letter in the ESG acronym. As highlighted in previous bulletins, new designs for proper alignment metrics, reporting frameworks and investment strategies are being developed in order to meet the targets set at COP21 late last year.

Governance

If we were to deconstruct the "E," "S" and the "G" based solely on financial materiality, governance would be listed first. However, corporate governance is not homogeneous; moreover, some underlying governance factors might be highly linked to one another. For instance, board independence and involvement in controls are a prerequisite to building an effective and balanced management remuneration system. Equally, strong internal audit processes will be a necessary condition for the arm's length nature of related party transactions. Furthermore, governance parameters also affect both environmental and social indicators. When management is focusing on long-term goals, it inherently guides the organization to manage negative externalities as part of the long-term objective.

As evidenced by a number of empirical studies[9] governance scores have good performance prediction power, due to the fact that some companies have solid

Financial Materiality:

Signals the likelihood and magnitude that an ESG indicator can affect the financial condition or operating performance of a company, or on the entire industry

Examples of Materiality Sustainability Issues:

Financials sector:

- Business ethics and transparency of payments,
- Lifestyle impacts of products and services
- Systemic risk management

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[5] ."The Benefits of Socially Responsible Investing: An Active Manager's Perspective," De & Clayman (2014).

[6] As of June 2016

[7] "Are All Components of ESG Score Equally Important" De & Clayman (2010)

[8] "Corporate Sustainability: First Evidence on Materiality,"), Khan, Serafeim and Yoon (2015)

[9] Amman, Oesch, Schmid, "Corporate Governance and Firm Value: International Evidence", Journal of Empirical Finance 18 (2011) pp. 36-55 & Cremers, Nair, "Governance Mechanisms and Equity Prices", Journal of Finance Vol. LX, No. 6 pp. 2,859-2,894

governance structures and mechanisms in place, which aren't always fully priced by the market.

To conclude, while composite ESG scores are broad comparative indicators of corporate behaviors, we see a clear need to focus on specific parameters within ESG that have proven, or are perceived to have bigger impact on companies' financial performances. Clearly, climate change alignment and governance are the headlines, but further research may discover other characteristics that are powerful as well.

ALIGNING FIDUCIARY DUTY AND ESG

Momentum has been building for pension fund trustees over the past few years around the debate of incorporating ESG within their fiduciary duty. Clarity has now been reached around the key legal and philosophical elements, although the practical tools that pension trustees can implement are still in their infancy. But how did we arrive here?

2012

THE YEAR THE KAY REVIEW OF EQUITY MARKETS WAS COMMISSIONED

The genesis of the conversation happened in the UK in 2012 with the government commissioned Kay Review of Equity Markets. The report raised concerns that key investment process participants were focused on maximizing short-term financial returns instead of considering long-term and sustainable success factors. As a result, the UK Law Commission was assigned to review the legal concept of fiduciary duty.

The commission explained that "fiduciary duty" meant that investment decisions should take into account all factors that are financially material to investment performance. Further the primary aim of a pension fund's investment strategy is to secure the best realistic return over the long term, given the need to control for risks.

Those definitions are well known. Yet as part of the review, the commission added ESG factors to the scope of fiduciary duty, with significant attention to their financial implications. Also, in a long-term strategy, trustees also can be guided by such non-financial considerations as improving members' quality of life or disapproving of certain industries. To incorporate ESG, trustees must therefore ensure that such considerations will be shared by its members and that the decisions they make will not detrimentally affect a fund's performance in any way. Prudence becomes a key concept here, as good judgment needs to be derived from experience and knowledge and be expressed with a realistic and frugal attitude. The key impact of the Kay Review has been to increase the scope of judgement and expertise of pension fund trustees, thereby adding to their responsibilities.

Regulatory developments

This year, regulatory and government bodies have taken vital steps designed to jolt pension trustees and other investment professionals into changing their investment mindset.

The UK pension's regulator published the defined contribution (DC) schemes' Code of Practice and six pension guides. Collectively, these provide practical tools to help pension trustees better cope with the discretionary power embedded in the Law

Further Reading:

In our paper "Responsible Investing for the Modern Fiduciary" we provide further details around the general concepts and analysis of issues surrounding fiduciary obligations.

Commission's guidance. Guide 4, which covers investment governance, highlights the long-term nature of investments and risk. It specifically refers to risks relating to climate change, unsustainable business practices and unsound corporate governance. It echoes the revisions also made earlier this year to the Institutions for Occupational Retirement Provision (IORP) directive, which forces pension funds in the European Union to assess climate change and social risks in their investment decisions.

The U.S. is advancing and moving in the same direction. The U.S. Department of Labor (DOL) amendment of the Employee Retirement Income Security Act (ERISA) addresses the perceived materiality of ESG factors when analyzing potential investments. This will again bridge the ESG overlay as long as ESG has a positive or neutral impact on performance.

But what is next?

Arrangements with investment managers and advisors can be tools in implementing the guidelines. They are to be fundamentally underpinned by this shift toward jointly meeting long-term and diverse performance objectives. Pension trustees could seek more help from investment managers and investment advisers in sustainability risk analysis. And we could see investment managers undertaking additional stewardship activities on the trustees' behalf, which would manifest an important shift to long-term focus in investment management mandates.

We feel there is still room for effective interaction between pension trustees and their beneficiaries. The Asset Owners Disclosure Project (AODP) published research that points to a "crisis of accountability" at pension funds. The research quotes examples of letters from members and beneficiaries asking institutions to support climate-related resolutions at fossil fuel companies. However, these issues were still to be addressed. Is interaction part of the fiduciary process? Clearly yes, and the recent defined contribution pension guide points to it too.

In summary, the latest attempts to reconcile the notion of fiduciary duty with ESG investing encourage investment trustees to apply prudence when looking at ESG. It can be said that weighing up the financial materiality of specific ESG parameters and other elements is the major factor to consider. However, there is still a clear need for effective shareholder engagement with both beneficiaries and investment managers, and this is an essential element of realizing an enhanced concept of fiduciary duty for all.

THE ALCHEMY OF FACTOR INVESTING & ESG

Currently, the investment themes of factor investing and ESG seem to be growing in popularity with equal vigor, especially with the movement of investments from active to passive strategies. We are also increasingly seeing examples where interest in both has manifested itself in a combination of the two themes.

Why do investors see a natural fit between factor-based strategies and ESG investing?

While factor investing aims to boost risk-adjusted-returns, investors focus on fundamental ESG characteristics with the aim of further contributing to the long-term value creation potential and control of downside risks. However, it is important to keep in mind that ESG exposure leads to certain changes with regard to other factors (See Exhibit 1) and these unintended biases need to be controlled.

What is Factor-Investing?

Factor investing involves assessing investor objectives, identifying appropriate factors (such as value, low volatility or quality) and ensuring increased exposure to these factors. Such increased exposure is achieved via the use of specific factor indices, which either apply a different weighting strategy to market-cap weighted indices or use specific factor-based stock selection rules.

EXHIBIT 1: THE PERFORMANCE ATTRIBUTION OF MSCI ESG WORLD INDEX

Factor	Active Residual Exposure
Growth	-0.11
Momentum	0.01
Size	-0.08
Value	-0.05
Volatility	-0.03

Source: MSCI, data as of August 31, 2016

As both ESG and factor investing approaches allow multiple ways of interpretation, there is no single method to implement a combination of both. There have been a few innovations by index providers in this area (see Exhibit 2). Their approaches vary not only in terms of specific factors used but also in terms of the index construction rules.

EXHIBIT 2: FACTOR INVESTING ESG INDICES

Index / Portfolio Name	Date Launched	Factors used in combination with ESG
iStoxx Global ESG Select 100 Index	January 2014	Dividend yield and volatility
DJSI Ethical Europe Low Volatility Index	March 2015	Volatility
DJSI Europe Diversified Low Volatility High Dividend Index	July 2015	Volatility and dividend yield
MSCI Governance Quality index	July 2015	Quality
DJSI Europe Diversified High Beta High Dividend Index	November 2015	Beta and dividend yield
S&P Long-Term Value Creation Global Index	January 2016	Quality
STOXX ESG Leaders Diversification Select Index	May 2016	Dividend yield, volatility and correlations
Solactive Global Ethical Low Volatility Index	September 2016	Volatility

Source: Bloomberg

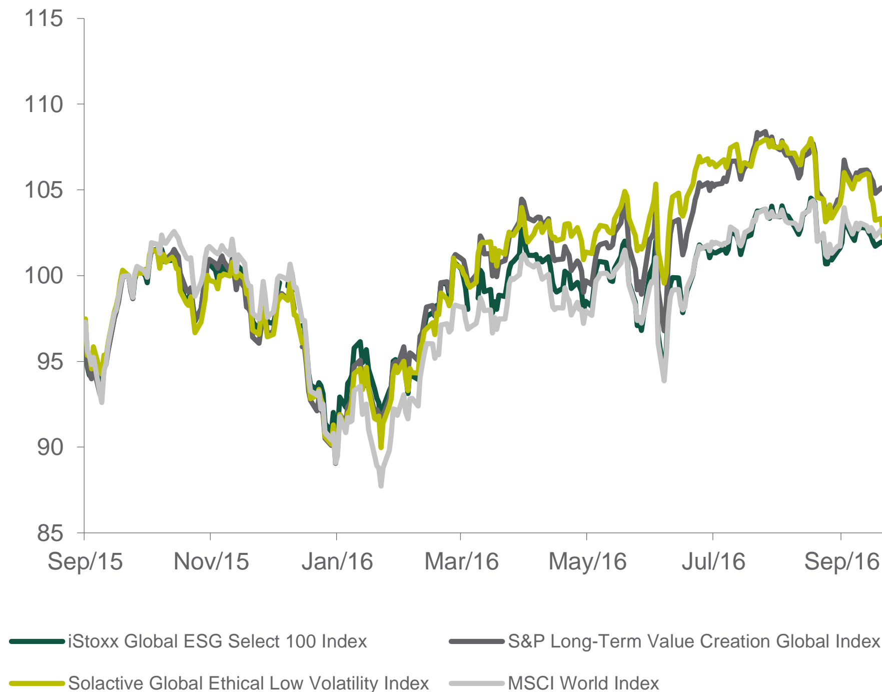
Some indices apply a risk factor tilt or selection while using an ESG best-in-class index as a universe. Examples include indices launched by Dow Jones on the universe of the DJSI Europe and DJSI Europe Diversified. Others, such as S&P Long-Term Value Creation Index or MSCI Governance Quality Index, use synthetic scores combining ESG rating with another factor rating for stock selection and/or weighting. Empirical data suggests that such methods lead to improved performance (see Exhibit 3 for examples).

6%

GROWTH OF ASSETS IN EXCHANGE-TRADED PRODUCTS ISSUED UNDER FACTOR-INVESTING STRATEGIES BETWEEN 2015 AND 2016[10]

[10] Morningstar's third annual *Global Guide to Strategic-Beta Exchange-Traded Products* report

EXHIBIT 3: COMPARISON OF PERFORMANCE OF FACTOR-BASED ESG INDICES VS MSCI WORLD



Source: Bloomberg September 2015 - 2016. Index has been rebased at 100 as of September. Values given in USD. Past performance is no guarantee of future results.

Exhibit 2 also shows that there are certain preferred risk factors, such as low volatility and high dividend yields that are most commonly selected for the combination with ESG. Yet, we believe that quality measures, which are less exposed to cyclicality, but are underpinned by fundamental characteristics of companies, tells an interesting corporate story in combination with ESG.

The outcome of alchemy

The scoop resides in the creation of a unique embedded portfolio profile characterized by companies that share high financial and non-financial sustainability factors. We therefore see these two groups complement each other in enforcing better risk management, strategic decision-making and accomplishment discipline.

The definition of quality is a subjective one. Ours consists of three categories:

1. Management efficiency (which speaks about the management's ability to run the company with relatively low debt level, but still ensure good pace of growth)
2. Profitability (which indicates the company's level of current financial success)
3. Cash generation (which assesses the company's ability to generate cash for its operations)

To a certain extent quality and ESG are correlated. We can therefore expect that prudent financial management will discover social and environmental risks and opportunities that may have positive financial effects. Inversely, companies with

strong ESG characteristics will be likely to show evidence of better financial discipline.

We could go even further and suggest that a combination like this can blueprint a firm's DNA outside of the parameters included in quality or ESG, leading to such positive traits as:

- Strategic consistency
- Ability to adequately respond to market challenges
- Ability to innovate in a way that is beneficial to shareholders, the environment and society

This concept suggests that the combination of high quality and high ESG factors may have long-lasting positive effects. Another thing is certain, while the combinations of various factors and ESG continue to grow and may include other factors such as dividend yield and value, the options for improved fundamentals and discussions for investors will increase.

Further Reading:

"DOING GOOD AND DOING WELL" - Discover how, through overlaying a Northern Trust Quality factor into your ESG portfolio, you can emphasize the long-run sustainability of ESG practices while increasing the likelihood of performance above the benchmark.

ESG INDEX RETURNS

The highlighted areas represent the highest performance by an index within each region.

Index	1 Year	3 Years	5 Years
MSCI WORLD ESG	12.52%	6.34%	12.12%
MSCI WORLD SRI	**13.64%**	6.13%	11.58%
MSCI WORLD	12.02%	**6.44%**	**12.27%**
FTSE4GOOD GLOBAL	9.50%	5.90%	12.10%
FTSE4GOOD GLOBAL 100	8.70%	5.40%	11.50%
FTSE DEVELOPED	**12.20%**	**6.30%**	**12.20%**
DOW JONES SUSTAINABILITY WORLD INDEX	9.92%	2.84%	8.89%
DOW JONES WORLD INDEX	**11.96%**	**6.13%**	**12.05%**
MSCI EUROPE ESG	1.99%	6.96%	12.46%
MSCI EUROPE SRI	**4.77%**	**8.09%**	**13.73%**
MSCI EUROPE	1.80%	5.80%	11.34%
DOW JONES SUSTAINABILITY EUROPE INDEX	2.61%	-0.23%	7.68%
DOW JONES EUROPE INDEX	**2.80%**	**0.15%**	**8.21%**
MSCI PACIFIC ESG	16.24%	3.69%	**7.89%**
MSCI PACIFIC SRI	**16.96%**	**4.08%**	7.50%
MSCI PACIFIC	15.06%	2.57%	7.53%
DOW JONES SUSTAINABILITY ASIA PACIFIC INDEX	13.36%	0.23%	6.65%
DOW JONES ASIA PACIFIC INDEX	**16.28%**	**3.38%**	**7.20%**
MSCI NORTH AMERICA ESG	14.68%	**16.24%**	**18.66%**
MSCI NORTH AMERICA SRI	**15.61%**	8.05%	12.70%
MSCI NORTH AMERICA	14.39%	9.49%	14.57%
DOW JONES NORTH AMERICA SUSTAINABILITY INDEX	**17.86%**	9.13%	**13.05%**
DOW JONES AMERICAS INDEX	15.25%	**14.31%**	6.94%

Source: Northern Trust, Index Providers (As of 9/30/2016)

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