Pax World Investments

For Tomorrow®

Three Ways Sustainable Investors Can Source Factor Returns

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ESG portfolio strategies are becoming increasingly more sophisticated. The worlds of sustainable and smart beta investing are converging, providing investors with new ways to capture financial factors *and* environmental, social and governance (ESG) factors in their portfolios.

For a growing segment of sustainable investing portfolios, particularly those focused on large cap equities, the process is all about capturing the right ESG factor exposures. Thanks to a growing body of research that examines how sustainability impacts financial performance,[1] ESG analysts are organizing data and shaping quantitative ESG rating systems to hone in on material factors. Today ESG can be implemented in portfolios in the same manner as traditional financial factors, such as quality and low volatility.

Let's explore in greater detail why sustainable investing is progressing in this direction and consider how investors, like Pax World, are sourcing ESG factor returns.

What's driving factor integration in sustainable investing?

There are a number of reasons why a quantitative, rules-based framework is gaining prominence in sustainable investing. We see four main catalysts.

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KEY TAKEAWAYS

- Smart beta approaches are gaining prominence in sustainable investing, especially in large cap where it can be difficult for active managers to achieve alpha.
- ESG integration is now firmly recognized as a strategy for mitigating risk and adding value that can be systematically captured and emphasized when assembling a portfolio of securities.
- Whether in the context of a broad market, narrow theme, or in concert with financial factors, it's easier than ever for investors to integrate ESG factors into portfolios.

[1] Visit Pax World's Sustainable Investing Research page for a list of studies on the financial impact of ESG factors: http://paxworld.com/about/sustainable-investing

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Underperformance of active large-cap managers

It's widely noted that active large cap managers continue to struggle relative to benchmarks. 77 percent of active U.S. large cap core managers have underperformed passive alternatives over the last 10 years (period ending 12/31/16). And more recently over the last 5 years, U.S. Large Cap Russell Indices and the MSCI EAFE Index have outperformed 80 percent or more of active managers in their respective Lipper peer groups.[2]

Large cap active managers are operating in the most efficient area of the market, where it is difficult to produce consistent, differentiated ideas based solely on traditional financial analysis. ESG integration has the potential to provide an information advantage.

The rise of smart beta

As large cap active managers in aggregate have disappointed, smart beta has taken hold as an increasingly popular and attractive hybrid between active and passive management. Smart beta, also referred to as factor-based investing, is a strategy where a portfolio of securities is over weighted, or tilted, toward certain factors—rather than market capitalization—in an effort to potentially enhance return and reduce risk.

Smart beta strategies combine some of the advantages of passive management (i.e. lower fees) with the potential to exploit long-established anomalies in financial factors such as quality, value and low volatility. The returns to these factors can be cyclical, but for patient, long-term investors they have demonstrated an ability to deliver excess returns across market cycles.[3]

Research shows ESG as a driver of positive risk/reward results

Factors are investment characteristics that explain the risk and return behavior of a security. Numerous studies in recent years have shown that companies with better sustainability profiles are better positioned to deliver excess returns and/or lower risk.[4] ESG integration is now recognized as a strategy for mitigating risk and adding value that can be systematically captured and emphasized when assembling a portfolio of securities.

ESG data improvements

The increasing availability of ESG data and research has facilitated the use of ESG factors. Now more than ever, experienced ESG analysts can analyze, shape and deploy sustainability data to create their own ESG ratings. Today's more comprehensive ratings allow investors to target specific ESG factor exposures with more accuracy.

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For index definitions, please see page 5.

[2] Source: Lipper, Russell Investments, MSCI data.

[3] Select studies for varied financial factors - Quality factor: Robert Novy-Marx, "The other side of value: The gross profitability premium," Journal of Financial Economics, Volume 108, Issue 1, April 2013, Pages 1–28.

Volatility factor: Baker, Malcolm; Bradley, Brendan; Wurgler, Jeffrey, "Benchmarks as Limits to Arbitrage: Understanding the Low-Volatility Anomaly," Financial Analysts Journal 67.1 (Jan/Feb 2011): 40-54.

Value factor: Eugene F. Fama and Kenneth R. French, "A Five Factor Asset Pricing Model," Journal of Financial Economics, Volume 116, Issue 1, April 2015, Pages 1–22.

[4] Mozzaffar Khan, George Serafeim, Aaron Yoon, "Corporate Sustainability: First Evidence of Materiality," Harvard Business School Working Paper 15-073, 2015.

Three ways to systematically harness ESG in portfolios

Now that we have considered *why* ESG integration and factor investing are converging, let's review *what* it looks like in practice. The following three examples illustrate the expanded options that sustainable investors now have for their long-term allocations.

1. *Core: A market-cap weighted portfolio, tilted toward ESG*

Specialty indexed approaches utilizing ESG ratings can be used to build a market-like portfolio of sustainable companies. Indexes of more sustainable companies date back to the 1990's with the launch of the Domini Social Index. Known today as the MSCI KLD 400 Social Index, it is a U.S. capitalization weighted index of 400 companies that has long been considered a proxy for the sustainable U.S. equity market. The MSCI KLD 400 Social Index has delivered returns that modestly exceed the S&P 500 Index since its inception in 1990.[5]

Sustainable indexing continues to evolve with an increased reliance on ESG ratings. One international equity example is the MSCI EAFE ESG Index, which includes companies "with the highest ESG Ratings representing 50 percent of the market capitalization of each sector and region" of the MSCI EAFE Index.[6] Since its inception in 2007 the MSCI EAFE ESG Index has outperformed the MSCI EAFE Index by 0.58 percent annualized.[7]

Like the MSCI EAFE ESG Index that it is designed to track, the **Pax MSCI International ESG Index Fund (PXINX)** is constructed to have a stronger sustainability profile than the broad developed international market as represented by the MSCI EAFE Index. The aim is to capture the potential stronger risk-adjusted performance that the ESG factor may add over the long term.

2. *Thematic: A portfolio targeting a more specific ESG factor*

A second approach is applying smart beta investing to a particular ESG issue or theme. One such area is gender diversity. Overwhelmingly, research shows that companies that embrace gender diversity on their boards and in management deliver higher value to shareholders.[8]

Whether it's advancing women in leadership or combatting climate change through low carbon portfolios, a narrow theme presents an opportunity for ESG analysts to systematize their research and create rankings that can then be used in an optimization framework. At Pax World, our sustainability research team has collected gender data globally, organized it and weighted it to create a gender score that is used as a fundamental factor in the **Pax Ellevate Global Women's Index Fund (PXWEX)**.

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For index definitions, please see page 5.

[5] Source: MSCI and Standard and Poors data.

[6] MSCI EAFE ESG Index, Factsheet May 2016.

[7] Source: MSCI data. The MSCI EAFE ESG Index has outperformed the MSCI EAFE Index by 0.58% annualized from 10/01/07 to 12/30/16 (cumulative outperformance from 10/01/07 to 12/30/16 is 5.48%). Comparable returns since index inception are shown gross which includes dividend reinvestment without a reduction from tax. Past performance is no guarantee of future results. Index performance is not necessarily representative of Fund performance.

[8] Visit Pax Ellevate's Gender Research page for a list of studies on the relationship between gender diversity and corporate performance: http://www.paxellevate.com/resources/gender-research

In essence, the Fund is designed to capture investment returns associated with gender diversity and women's leadership.

3. *Multifactor: A portfolio integrating ESG and financial factors*

   A third approach integrates both financial and ESG factors into portfolio construction. Multifactor smart beta portfolios provide an element of diversification by blending a mix of well-established financial factors. If a single factor falls out of favor in the short term, such as value or momentum, then other target factors may help shield investors. The sustainable investing version of this multifactor approach builds upon that diversification argument. The ESG factor is introduced as another source of potential excess return and risk reduction.

   Pax World recently moved in this direction with the launches of the **Pax ESG Beta® Quality Fund (PXWGX)** and the **Pax ESG Beta® Dividend Fund (PAXDX)**—both are multifactor strategies that emphasize stocks with stronger ESG profiles. The Pax ESG Beta Quality Fund focuses on stocks with higher profitability, higher earnings quality, lower risk, and lower valuations. The Pax ESG Beta Dividend Fund focuses on dividend-paying stocks with higher dividend yield and higher quality fundamentals that may support future dividend payments. As a key input into the process for both Funds, the Pax Sustainability Score[9] aims to capture material ESG information regarding a company's risk and performance potential.

Here to Stay

These factor-based investment concepts are not new. Investing in forward thinking companies with more sustainable business models has long been part of active management, including here at Pax World. What is new, is that there are quantitative ways to capture them consistently and persistently in a market-oriented portfolio. In large cap where it is difficult to achieve alpha,[10] that is good news for investors.

Because of the catalysts noted earlier, we believe ESG factor-based investing is here to stay. So whether it is within the context of a broad market, narrow theme or in concert with financial factors, it's easier than ever for investors to harness the power of sustainable investing.

Pax World Management LLC

Pax World Management LLC, investment adviser to Pax World Funds, is a pioneer in the field of sustainable investing. Pax World integrates environmental, social and governance (ESG) research into its investment process to better manage risk and deliver competitive long-term investment performance. For over 45 years, Pax World has made it possible for investors to align their investments with their values and have a positive social and environmental impact. Today, its platform of sustainable investing solutions includes a family of mutual funds, as well as separately managed accounts.

For index definitions, please see page 5.

9 The Pax Sustainability Score is a proprietary ranking of companies' ESG performance.

10 Alpha is a coefficient measuring risk-adjusted performance, considering the risk due to the specific security, rather than the overall market.

Index Definitions

U.S. Large Cap Russell Indices include the Russell 1000 Index, the Russell 1000 Growth Index, and the Russell 1000 Value Index.

The Russell 1000 Index measures the performance of the 1,000 largest U.S. companies, as measured by market capitalization. It is a subset of the Russell 3000 Index, which measures the largest 3,000 companies. The Russell 1000 Index is comprised of over 90% of the total market capitalization of all listed U.S stocks. One cannot invest directly in an index.

The Russell 1000 Growth Index measures the performance of the large-cap growth segment of the U.S. equity universe. It includes those companies in the Russell 1000 Index with higher price-to-book ratios and higher forecasted growth values. The Russell 1000 Index measures the performance of the 1,000 largest companies, as measured by market capitalization.

Russell 1000 Value Index: A market capitalization-weighted index that measures the performance of those Russell 1000 companies with lower price-to-book ratios and lower forecasted growth rates.

The MSCI EAFE (Europe, Australasia, Far East) Index is a free float-adjusted market capitalization index that is designed to measure the equity market performance of developed markets, excluding the U.S. and Canada. The MSCI EAFE Index consists of the following 21 developed market country indices: Australia, Austria, Belgium, Denmark, Finland, France, Germany, Hong Kong, Ireland, Israel, Italy, Japan, the Netherlands, New Zealand, Norway, Portugal, Singapore, Spain, Sweden, Switzerland, and the United Kingdom. Performance for the MSCI EAFE Index is shown "net", which includes dividend reinvestments after deduction of foreign withholding tax.

The MSCI KLD 400 Social Index is a capitalization weighted index of 400 US securities that provides exposure to companies with outstanding Environmental, Social and Governance (ESG) ratings and excludes companies whose products have negative social or environmental impacts.

S&P 500 Stock Index is an unmanaged index of large capitalization common stocks.

The MSCI EAFE ESG Index is designed to measure the performance of equity securities of issuers of developed countries around the world excluding the U.S. and Canada that have high Environmental, Social and Governance (ESG) ratings relative to their sector and industry peers, as rated by MSCI ESG Research annually.

The MSCI World Index is a free float-adjusted market capitalization weighted index that is designed to measure the equity market performance of developed markets. The MSCI World (Net) Index consists of the following 23 developed market country indices: Australia, Austria, Belgium, Canada, Denmark, Finland, France, Germany, Hong Kong, Ireland, Israel, Italy, Japan, Netherlands, New Zealand, Norway, Portugal, Singapore, Spain, Sweden, Switzerland, the United Kingdom, and the United States. Performance for the MSCI World Index is shown "net", which includes dividend reinvestments after deduction of foreign withholding tax.

One cannot invest directly in an index.

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You should consider a fund's investment objectives, risks, and charges and expenses carefully before investing. For this and other important information, please obtain a fund prospectus by calling 800.767.1729 or visiting www.paxworld.com. Please read it carefully before investing. An investment in the Pax World Funds involves risk, including loss of principal.

Past performance is no guarantee of future results.

RISK: Equity investments are subject to market fluctuations, a fund's share price can fall because of weakness in the broad market, a particular industry, or specific holdings. Emerging market and international investments involve risk of capital loss from unfavorable fluctuations in currency values, differences in generally accepted accounting principles, economic or political instability in other nations or increased volatility and lower trading volume. Investments in high yield bonds generally are subjected to greater price volatility based on fluctuations in issuer and credit quality. When investing in bonds, you are subject, but not limited to, the same interest rate, inflation and credit risks associated with the underlying bonds owned by the Fund. Mortgage related securities tend to become more sensitive to interest rate changes as interest rates rise, increasing their volatility. Funds that emphasize investments in mid-size and smaller companies generally will experience greater price volatility. Investing in non-diversified funds generally will be more volatile and loss of principal could be greater than investing in more diversified funds. Diversification does not eliminate the risk of experiencing investment losses.

Effective June 30, 2016 the Pax Growth Fund (the "Predecessor Fund") was renamed the Pax ESG Beta Quality Fund (the Fund). The Predecessor Fund is treated as the survivor of the renaming for accounting and performance reporting purposes. Accordingly, all performance and other information shown for the Fund for periods prior to 6/30/2016 is that of the Predecessor Fund.

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