PACIFIC LIFE

THE ABCs OF ESG

ENVIRONMENTAL / SOCIAL / GOVERNANCE

A White Paper for Pacific Life by Pacific Life Fund Advisors LLC

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Established in 2007, PLFA provides multi-asset-class solutions through its Asset Allocation, Manager Oversight, and Investment Risk Management groups. PLFA is an SEC-registered investment advisor and a wholly owned subsidiary of Pacific Life Insurance Company (Pacific Life).

As of 3/31/21, PLFA managed approximately $34.2 billion in total assets under management.

Navigating ESG Investing

ESG (which stands for environmental, social, and governance), sustainability, and impact are terms most investors have heard often these days. The overarching concept seems simple enough: invest in companies that are making the world a better place so investors can save for retirement while saving the environment. Dig deeper, however, and many questions arise:

- How has ESG investing changed over time?
- How do investors measure the impact of their investments?
- Will investors have to sacrifice performance, take on more risk, or pay higher fees to have their dollars do good?
- How does ESG investing get incorporated into a portfolio?

This paper aims to answer these questions so that investors can understand the current landscape of ESG investing and can make an informed decision on how to integrate ESG with investment objectives.

ESG EVOLUTION

Ethical investing is not a novel concept. Its origins can be traced back to the 18^{th} century when John Wesley, the founder of the Methodist faith, outlined values-based investing principles in his *The Use of Money*[1] sermon. In it, he said that "to gain money we must not lose our souls" and thus should not engage with businesses that may directly or indirectly harm our neighbors, even as we should seek to "gain all we can." In today's language, we would say that John Wesley advocated for achieving the highest risk-adjusted level of return while limiting negative impacts to stakeholders.

> "To gain money we must not lose our souls."
>
> - John Wesley

Socially Responsible Investing

This method of excluding, or screening out, companies that engage in practices not aligned with commonly held investor values is called SRI, which stands for socially responsible investing. Since simply narrowing the investment universe can reduce diversification and lower risk-adjusted performance, most ESG detractors blame SRI for allegedly sapping returns. Yet, there are few modern ESG strategies that rely purely on negative screens. The figure below summarizes how ESG investing has evolved to offer comprehensive solutions for investors who want to generate competitive performance while producing a positive impact on the world.

From Exclusion to Inclusion to Diversified Engagement

ESG 1.0 (SRI)	ESG 2.0 (Inclusion)	ESG 3.0 (Diversified Engagement)
Avoid companies and industries seen as objectionable to a common set of values (for example, tobacco, weapons, deforestation, or lack of employee diversity).	Invest inclusively across all industries into companies that are implementing measures to create positive stakeholder outcomes and long-term shareholder value.	Invest across asset classes and provide exposure to a broad range of E, S, and G factors. Directly engage with companies to unlock positive impact for both stakeholders and shareholders.

[1]Wesley, John. "The Use of Money." *The Sermons of John Wesley - Sermon 50*. Wesley Center Online.

A Rise in Demand

Along with greater sophistication came a significant rise in demand. Morningstar reported a **123% increase in ESG retail funds during the trailing one year through March 2021**[1] and **$51 billion of inflows**[2], which is a continuation of accelerating trends seen since 2015. Looking across all professionally managed U.S. assets, which includes the far larger institutional universe, ESG-linked investments stood at **$17 trillion at the end of 2019** according to the U.S. Social Investment Forum (SIF) Foundation's "Report on U.S. Sustainable and Impact Investing Trends 2020."[3] This means that ESG investments represent roughly a third of all professionally managed U.S. assets and more than a fivefold increase since 2010 when "ESG 2.0" strategies began coming to the forefront. As sustainable investing continues evolving to meet investors' needs, its market share is likely to continue growing too.

123%	$51B	$17T
increase in retail ESG fund assets during the past year through March 2021	of inflows for retail ESG funds in 2020	in ESG-linked investments at the end of 2019

> As sustainable investing continues evolving to meet investors' needs, its market share is likely to continue growing too.

[1] Stankiewicz, Alyssa. "Sustainable Fund Flows Reach New Heights in 2021's First Quarter." *Sustainability Matters*. Morningstar. April 30, 2021.

[2] Hale, Jon. "A Broken Record: Flows for U.S. Sustainable Funds Again Reach New Heights." *Sustainability Matters*. Morningstar. January 28, 2021.

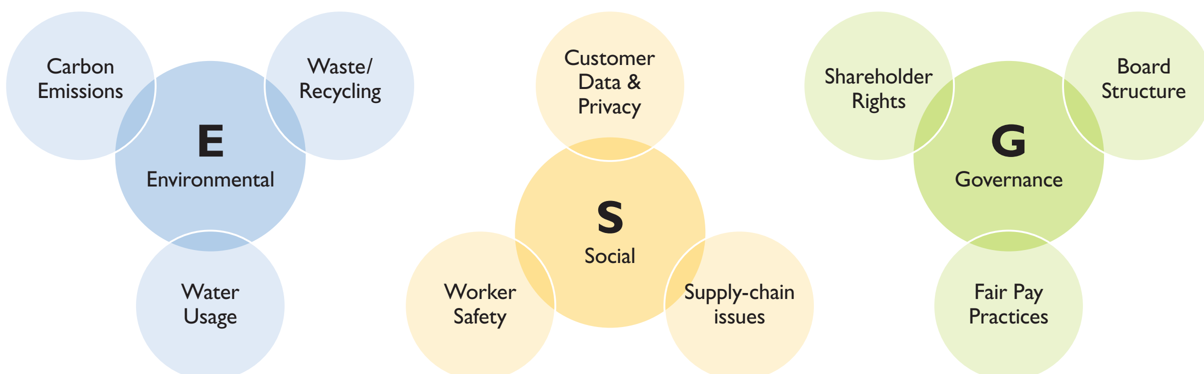
[3] U.S. SIF Foundation. *Report on U.S. Sustainable and Impact Investing Trends 2020*. The Forum for Sustainable and Responsible Investment. 2020.

QUANTIFYING IMPACT: THE DISPARATE STATE OF ESG RATINGS

Transparency

As ESG investors became more sophisticated, they've demanded greater transparency into how their funds are invested across various E, S, and G factors. Environmental considerations cover a company's efforts to use less water, reduce carbon emissions, and recycle rather than trash the byproducts of its production. Examples of social metrics include improving worker safety standards, keeping customers' data secure, and ensuring that its supply chain is free of issues such as forced labor. Governance measures include shareholder rights—such as giving shareholders the same voting rights as management, the diversity and independence of its board members, and whether it pays all employees fairly and without regard to gender and race.

The E, the S, and the G



Ratings

To address the need for transparency, several providers of ESG ratings, such as MSCI and Sustainalytics, have emerged. Much like credit rating agencies assess the health of companies' balance sheets, ESG raters seek to evaluate firms' and funds' exposure to environmental, social, and governance factors. The challenge is that, unlike with accounting metrics for measuring credit risk, there is currently no common standard to measure ESG metrics such as the ones listed above. Thus, while the correlation between Moody's and S&P credit ratings is 0.92, the correlation among ESG raters' scores is just 0.54 on average, according to an MIT Sloan Study.[1]

What Can Investors Do?

While it's important to be aware of this discordance among rating agencies, it should not dissuade investment into ESG strategies. Rather, investors should ensure that their funds have a clear and thought-out policy for measuring and reporting ESG attribution. As sustainable investing continues to grow, PLFA expects that a shared set of standards will emerge and make ESG attribution simpler. Until then, investors in multiple ESG funds should understand how to properly aggregate their exposure to key ESG metrics. Alternatively, a multi-asset ESG product may offer a turnkey solution for providing transparent exposure to a broad range of ESG factors, competitive performance, and straightforward integration with a portfolio of traditional asset classes.

[1]Berg, Florian. *Aggregate Confusion: The Divergence of ESG Ratings*. SSRN. May 17, 2020.

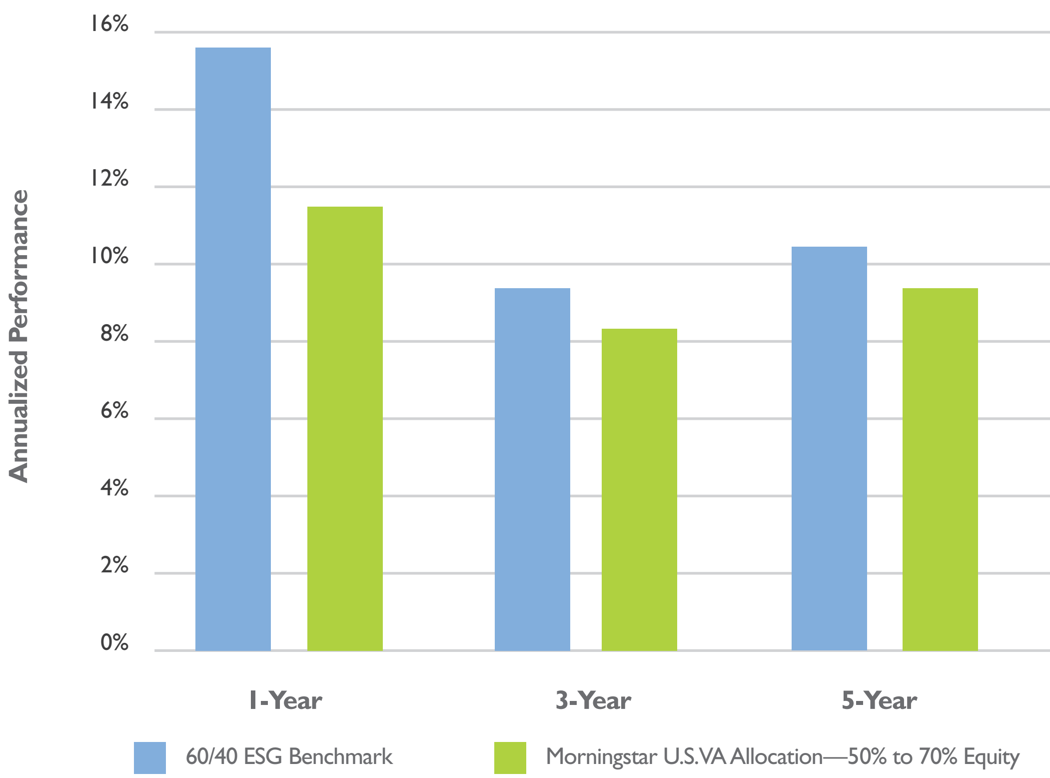
DISPELLING MISCONCEPTIONS: SUSTAINABILITY WITHOUT SACRIFICES

Performance

Despite an ever-smaller contingent of naysayers, the body of evidence shows that ESG considerations at both the security and fund levels are not a hindrance to performance. Instead, they are more likely to be harbingers of superior long-term risk-adjusted returns. One example is the paper by Hang, et. al.[1] which aggregated the findings of 142 separate studies and found a positive link between companies' efforts to become more environmentally conscious and their financial outperformance in subsequent years. Moreover, as seen through the 2008 financial crisis and the unprecedented turbulence of 2020, ESG funds can provide downside protection during periods of economic upheaval and are generally less volatile than strategies that don't consider sustainability according to a Morgan Stanley analysis of more than 3,000 retail funds.[2]

Our own analysis confirms this as well when looking at the performance of a static 60/40 ESG benchmark against Morningstar 50%–70% VA Allocation funds. Even though these funds could, and generally did, adjust their strategic and intra-asset allocations to take advantage of the market environment, they nonetheless trailed the benchmark during all three periods shown below.

ESG Benchmark vs. Variable Annuity (VA) Asset-Allocation Funds



Past performance does not guarantee future results.

Note: 60/40 ESG Benchmark represents a static composite of 60% ACWI ESG and 40% Bloomberg Barclays MSCI Global Aggregate ESG

[1] Hang, Markus. *It's merely a mater of time: A meta-analysis of the causality between environmental performance and financial performance.* OPUS—Augsburg University Publication Server. June 22, 2018.

[2] Institute for Sustainable Investing. "Sustainable Funds Outperform Peers in 2020 During Coronavirus." Morgan Stanley. February 24, 2021.

Can ESG Metrics Lead to Outperformance?

While viewing strong ESG metrics as potential **alpha sources** is still novel among retail investors, it is commonplace among professionals. A 2019 survey conducted by Pensions & Investments[1] found that 90% of institutional investors believe ESG-integrated portfolios are likely to perform as well or better than non-ESG portfolios.

The reason companies with strong ESG metrics may outperform peers with weaker metrics likely can be traced to changing government policies and consumer preferences. Governments around the globe have been enacting **laws to reduce pollution, increase data privacy, and foster workplace diversity.** Companies that fail to keep up with these regulations are likely to lose market share if not face outright fines. Similarly, today's consumers tap and swipe their values whether they are buying a fair-trade espresso or an electric car. Firms with bona-fide sustainability credentials can thus create lasting loyalty to their brands.

Fees

When it comes to fees, ESG funds have moved with the rest of the investment industry's momentum toward lower fees. Morningstar reports[2] that many recently launched, ESG funds were among the cheapest in their respective categories and, on average, ESG fund expense ratios are equal to or lower than their peers'.

Conclusion

To conclude, sustainable investing has come a long way from its theological beginnings more than two centuries ago. The ESG landscape continues to evolve at a rapid pace and ascertaining a fund's ESG attribution remains a challenge due to the lack of a unified rating standard. Nevertheless, sustainable strategies showed resilience through a financial crisis and a pandemic, demonstrating their ability to boost investors' risk-adjusted returns. Furthermore secular consumer and government trends bode well for companies that look after their stakeholders as well as shareholders.

Definitions

Alpha: Alpha is a measure of the performance of an investment relative to a suitable benchmark index.

[1] Bradford, Hazel. "Public funds taking the lead in spectacular boom of ESG." *Special Report: ESG Investing.* Pensions&Investments. August 19, 2019.

[2] Lynch, Katherine. "Where to Find Low-Cost ESG Funds." *Advisor Insights*. Morningstar. June 6, 2020.

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