Private Bank

CIO Strategy Bulletin Special Edition

March 21, 2021

Why Ignoring Sustainability is a Portfolio Risk

David Bailin, Chief Investment Officer
Steven Wieting, Chief Investment Strategist and Chief Economist
Harlin Singh, Head – Sustainable Investing
Malcolm Spittler, Global Investment Strategy
Joseph Fiorica, Head – Global Equity Strategy

Sustainability has grown more important even in a year of turmoil

In past years, an investor could emphasize or ignore sustainability factors at their discretion, with personal views not market fundamentals driving their choice. But that has been changing rapidly, with sustainability increasingly functioning as a driver of performance and portfolio stability. For instance, according to Morningstar, in Q1 2020, sustainable strategies saw a net inflow of $45.6BN, compared to an outflow of $384.7BN for the overall fund universe amid the coronavirus pandemic market sell-off. Global sustainably invested AUM (measured primarily by ESG data integration) reached $40.5T in 2020. That represents roughly 33.8% – 40.5% of the estimated $100T - $120T total global AUM under professional management.

Despite how often it is talked about, we are often asked: What is a sustainable investment? Broadly, sustainable investing encompasses many different methods, and means different things to different investors, but the end goal is to use Environmental, Social, and Governance data to ensure that an investor's core portfolio is constructed in a manner that accounts for not only what each company is doing business in – but also how each company is doing business.

This ranges from excluding companies that don't meet the investor's values (i.e. excluding "sin" stocks) to evaluations of whether a business has a sustainable business model or has a place in a future sustainable economy. Thus, sustainable investing has shifted from primarily focusing on a short list of exclusions or inclusions to broader thematic views. For example, we see many strategies exclude the entire fossil fuels sector both because of the harm caused by greenhouse gas emissions but also due to the risk to those assets in a world shifting towards a post carbon future. The shift from values-alignment to a concept of "do no significant harm" has been the primary driver of a growth in the list of portfolio exclusions. On the other end of the spectrum, are investors seeking value in sustainable themes – such as renewable energy, clean water, affordable housing, and healthcare.

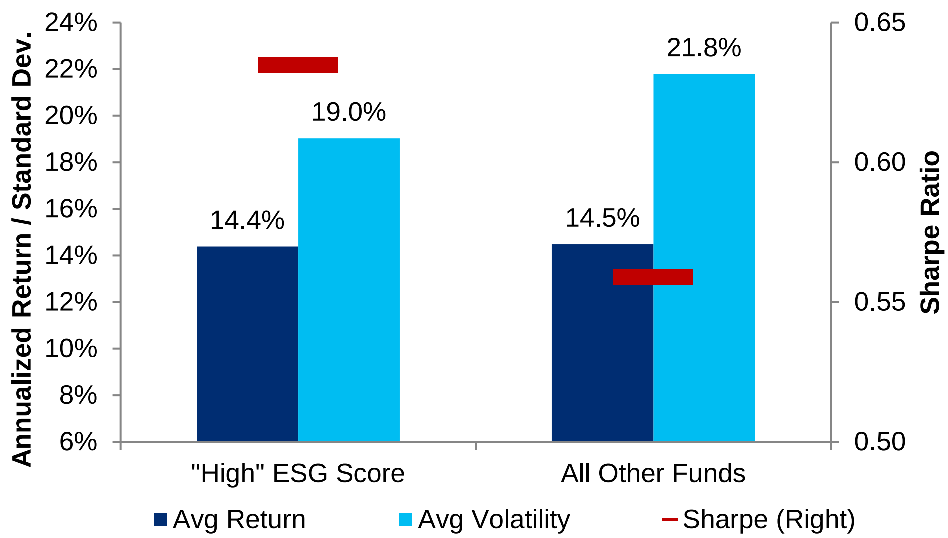
Non-Financial ESG Factors Can Matter for Total Returns

This growth in sustainable investment AUM can be attributed to a recognition that while once thought to be non-financial, ESG factors are actually material in investment decision-making. The financial materiality can play out in the following ways:

1. Ignoring ESG factors can be an expensive mistake – Sustainable factors such as environmental impact or social responsibility have emerged as a new nexus for risk and increasingly, a driver for alpha. Many investors are realizing, that whether or not they care about the societal or environmental impacts resulting from the companies they invest in, they assume a great deal of additional risk simply by ignoring these factors.

   Investors are using ESG data to drive alpha – both by mitigating downside risks, but also by identifying companies that will outperform based on their E, S, and G characteristics. Likewise, investors can look forward to a future world and see what business models have no place in that future economy. As we noted two years ago in Outlook 2020, when petroleum started to replace whale oil it took more than sixty years before whaling interests were gone entirely. Yet a savvy investor at the time could have seen the writing on the wall for the industry when a cheaper, cleaner, more useful (and yes more ESG friendly) alternative arrived with the first oil wells.

Figure 1: Relative Performance of "High" ESG Funds



Source: Morningstar; January 1, 2010 – December 31, 2020. Past performance is not indicative of future results. Office of the Chief Investment Strategist, Citi Private Bank. We used data on 528 US equity funds with data back to 2010 from the Morningstar database. Of these, 58 were assigned to the high ESG score universe based on Morningstar's methodology; all others totaled 470 funds. We compared the high ESG funds and all others on an equal-weighted basis for return and standard deviation. The Sharpe ratios shown were calculated on the aggregated returns and standard deviations. Sharpe ratio is the measure of risk-adjusted return of a financial portfolio. A portfolio with a higher Sharpe ratio is considered superior relative to its peers.

2. Investing for the future – Traditional business factor models need to be evaluated for new risks from the shift to a low carbon economy and more engaged consumers who can boycott and hold firms accountable when they ignore broad social issues.

   There's an increasing body of investors who have a view on the future of the world, ourselves included. This future has populations living longer, a carbon transition to address the impacts of climate change, increased development in emerging markets resulting in greater demand for improved health systems and education, and a significant focus on cybersecurity and data protection. A close reader will see that these changes are an almost perfect fit for our broader Unstoppable Trends.

3. Driving change with investments – A smaller, but powerful body of investors sees an outsized opportunity to invest in the themes mentioned above to achieve so-called double or triple bottom line investing. These are individuals who are making capital available where they believe it will do the most good – and who are also closing funding gaps using the demand for environmental and social change to drive profits.

Some of them see the opportunity to make a positive impact and have been able to quantify a double bottom line, and others see an opportunity for outsized returns by investing in the companies that are either creating future technologies or are supporting them. For example, companies that are already positioned for an energy transition could be great indicators of portfolio resilience in the future. But there's also an opportunity for investment in companies that are helping those that aren't prepared for the transition.

Likewise, existing companies that are pivoting their business models might address the demand for education in emerging markets, but the increased demand leaves room for new entrants to deliver innovation. While some investors will focus on a specific thematic area, others will use this concept as an opportunity to reconfigure an entire financial ecosystem to one that considers a future world that offers progress for both its people and the planet. This is furthered by direct engagement and stewardship activities. This goes beyond even shareholder rights – social media and the rise of the subscriber based e-Commerce economy makes consumers not just purchasers of goods and services but members of communities that expect companies to consider all their stakeholders.

So why now? And is there a bubble created by ESG-labeled strategies?

In 2021, the World Economic Forum named extreme weather, climate action failure, and human environmental damage the top 3 risks facing the global economy

Figure 2: World Economic Forum Named Extreme Weather, Climate action Failure and Human Environmental Damage the top 3 Risks Facing the Global Economy

Source: World Economic Forum Global Risks Report 2021.

International surveys have showed that most people in the world now view climate change as a fundamental threat. Savvy companies and investors have accepted the need to address the funding gaps that exist in addressing climate change and COVID-19 highlighted the vast inequities faced by different populations, encouraging many investors to take up the mantle and be a force for greater good.

In the last year the number of companies that have announced net zero carbon targets put the total at over 1,100 companies that have such commitments (UNFCCC). It is not only small companies. Of the 10 largest publically traded companies seven of them are or have set a date to be carbon neutral, and several have substantially more aggressive targets. In fact tech behemoths appear to be competing on which can make the largest changes: Google claims to already be carbon neutral over the entire lifetime of the company, Microsoft plans to be carbon negative by 2030, and Apple is shooting for an entirely carbon neutral supply chain by 2030. In addition, some of the largest oil companies and historic polluters have also set net zero carbon targets. The events of the past year have also highlighted a greater need for supply chain integrity and resilience in our healthcare systems.

Figure 3: Many of the Largest Firms Globally Have Explicit Carbon Neutral Targets

Name	Market Cap (USD)	Country	Sector Name	Sustainability Commitment
Apple Inc.	2,073,540.0	USA	Information Technology	Neutral supply chain by 2030
Microsoft Corporation	1,703,180.0	USA	Information Technology	Carbon negative by 2030
Amazon.com, Inc.	1,327,910.0	USA	Consumer Discretionary	Net zero carbon by 2040
Alphabet Inc.	1,259,348.0	USA	Communication Services	Carbon-free by 2030
Facebook, Inc.	658,399.0	USA	Communication Services	Net zero emissions by 2030
Taiwan Semiconductor Manufacturing Co.	531,327.0	Taiwan	Information Technology	Reduce emissions by 40%
Tesla Inc	530,521.0	USA	Consumer Discretionary	N/A
Tencent Holdings Ltd.	504,255.0	China	Communication Services	Rearchitect the planet to accommodate 10 billion humans by 2050
JPMorgan Chase & Co.	470,399.0	USA	Financials	Plans to announce targets this year
Alibaba Group Holding Ltd.	456,062.0	China	Consumer Discretionary	Subsidiaries like Ant Group committed to carbon neutrality by 2030

Source: Bloomberg, Company Filings as of March 12, 2021

For illustrative purposes only. This should not be construed as an offer of, or recommendation of companies discussed. Past performance is no guarantee of future returns. Real results may vary

Figure 4: Even some of the Largest Traditional Energy Producers have Begun Setting Net Zero Target

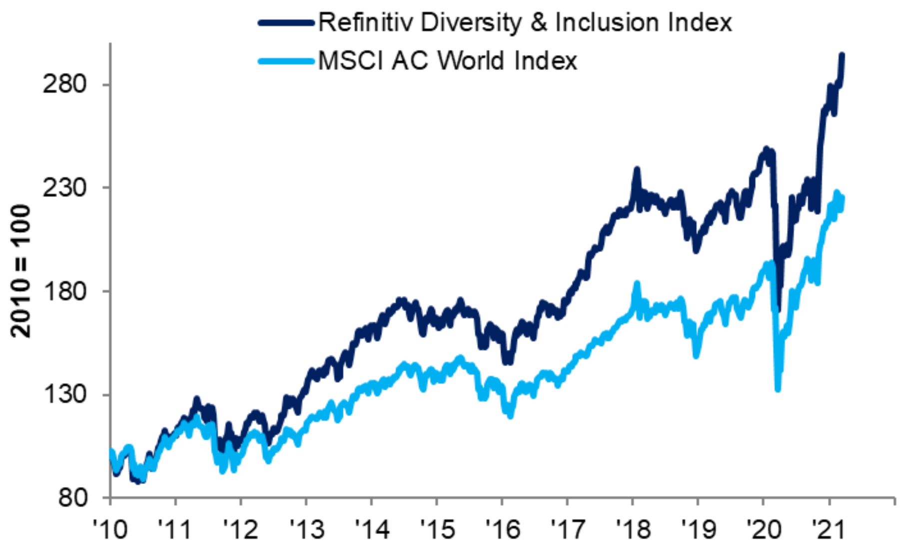
Name	Market Cap (USD)	Country	Sector Name	Sustainability Commitment
Exxon Mobil Corporation	259,233.0	USA	Energy	Reduce emissions 15-20% by 2025, eliminate flaring by 2030, 40-50% decrease in methane intensity
Chevron Corporation	214,047.0	USA	Energy	26-40% carbon reduction for oil and gas by 2028, 53% reduction in methane, eliminate flaring by 2028
Royal Dutch Shell Plc	167,873.5	UK	Energy	Net zero emissions by 2050
Total SE	125,830.0	France	Energy	Net zero emissions by 2050
BP p.l.c.	90,503.2	UK	Energy	Net zero emissions by 2050

Source: Bloomberg, Company Filings as of March 12, 2021

For illustrative purposes only. This should not be construed as an offer of, or recommendation of companies discussed. Past performance is no guarantee of future returns. Real results may vary

Simultaneously, diversity is at the top of many companies' priorities as the Black Lives Matter movement has drawn additional attention to the treatment of people of color by companies and countries. Not all of this is out of a moral responsibility – there are concrete costs to not having an inclusive and diverse workforce.

Figure 5: The Most Diverse Firms have also seen Outsized Share Price Performance



Source: Bloomberg as of March 12, 2021.

Indices are unmanaged. An investor cannot invest directly in an index. They are shown for illustrative purposes only and do not represent the performance of any specific investment. Past performance is no guarantee of future results. Real results may vary.

Investors are increasingly engaging with the companies they own to drive positive change, in some cases demanding incremental targets to achieving large-scale emissions and waste reductions.

The conversation goes beyond alternative energy, but encompasses everything from waste from packaging, recycling, supply chain integrity, and even farming (according to the EPA agriculture produces 10% of total greenhouse gases).

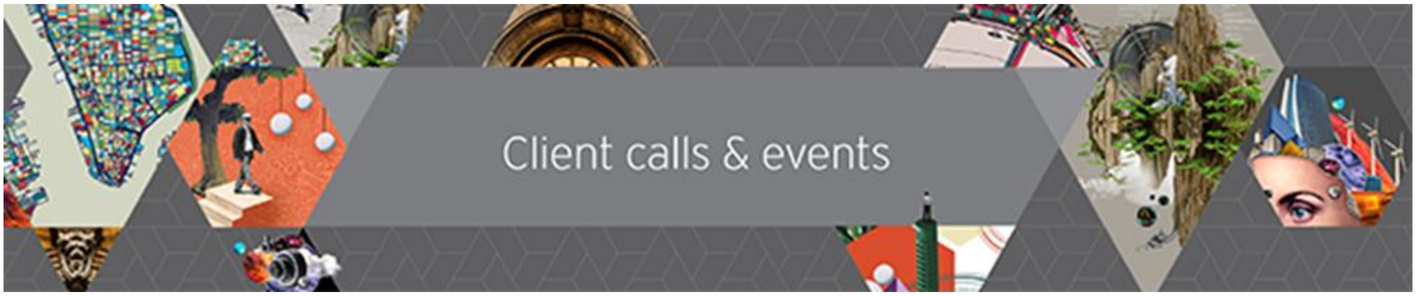
Governments while not necessarily leading the charge are definitely on the bandwagon and regulatory developments are picking up the laggards who have not proactively addressed these issues. In Europe, the EU Taxonomy and Sustainable Finance Disclosure Regulations (SFDR) have been pushing asset managers and companies to increase transparency as it relates to ESG investments. Beyond risk management, this push has several positive outcomes: prevention of greenwashing, reorientation of capital flows towards sustainable investments, and offers a degree of consistent transparency for investors to evaluate investment opportunities. A few years ago, the picture was different, with much disagreement from various jurisdictions on whether or not commitments to addressing climate change could negatively impact local businesses. Now, we are aware, that high polluting industries, companies that do not treat their employees and supply chains with integrity are at risk anyway.

At the end of the day, every company has positive and negative impacts to the environment and society. In the past, these had not been measured and reported regularly, but that is changing as data disclosures and AI and NLP technologies allow for more real-time determinations of every company's ESG footprint.

As investors look for more information to drive investment decisions, impact data is increasingly relevant to the extent that it can both improve portfolio quality and drive returns. In heavily polluting industries, it's intuitive to consider environmental impacts as they relate to financial performance, but even in so-called clean technologies, companies are considering their net impact – and there will be winners and losers.

Many investors have considered adding impact as a third dimension to risk and return. We recognize that this may cause some confusion because it implies that impact is directly correlated to a risk or return, and there might be a trade-off. We do not view this as a trade-off, rather it is another consideration for investors as they allocate capital.

The oft used, probably apocryphal quote from Benjamin Franklin about "doing well by doing good" has likely never been as relevant as it is today. Investors and businesses can improve their image, bottom line and environmental and social impacts with a focus on the major unstoppable trends that are now remaking our global economy.



INVESTMENT PRODUCTS: NOT FDIC INSURED · NOT CDIC INSURED · NOT GOVERNMENT INSURED · NO BANK GUARANTEE · MAY LOSE VALUE

This email contains promotional materials. If you do not wish to receive any further promotional emails from Citi Private Bank, please email donotspam@citi.com **with "UNSUBSCRIBE" in the subject line. Email is not a secure environment; therefore, do not use email to communicate any information that is confidential such as your account number or social security number.**

Citi Private Bank is a business of Citigroup Inc. ("Citigroup"), which provides its clients access to a broad array of products and services available through bank and non-bank affiliates of Citigroup. Not all products and services are provided by all affiliates or are available at all locations. In the U.S., investment products and services are provided by Citigroup Global Markets Inc. ("CGMI"), member FINRA and SIPC, and Citi Private Advisory, LLC ("Citi Advisory"), member FINRA and SIPC. CGMI accounts are carried by Pershing LLC, member FINRA, NYSE, SIPC. Citi Advisory acts as distributor of certain alternative investment products to clients of Citi Private Bank. CGMI, Citi Advisory and Citibank, N.A. are affiliated companies under the common control of Citigroup.

Outside the U.S., investment products and services are provided by other Citigroup affiliates. Investment Management services (including portfolio management) are available through CGMI, Citi Advisory, Citibank, N.A. and other affiliated advisory businesses. These Citigroup affiliates, including Citi Advisory, will be compensated for the respective investment management, advisory, administrative, distribution and placement services they may provide.

Read additional important information

Past performance is not indicative of future results. Real results may vary.

MBS are also sensitive to interest rate changes which can negatively impact the market value of the security. During times of heightened volatility, MBS can experience greater levels of illiquidity and larger price movements.

Important information, including information relating to risk considerations can be found in the link above.

Views, opinions and estimates expressed herein may differ from the opinions expressed by other Citi businesses or affiliates, and are not intended to be a forecast of future events, a guarantee of future results, or investment advice, and are subject to change without notice based on market and other conditions. Citi is under no duty to update this presentation and accepts no liability for any loss (whether direct, indirect or consequential) that may arise from any use of the information contained in or derived from this presentation.

www.citiprivatebank.com