Impact Investing: The Performance Realities

Anna Snider
Head of Due Diligence for the Chief Investment Office
Global Wealth & Investment Management, Bank of America Merrill Lynch

SUMMARY

[illegible]

[illegible]

- [illegible]
- [illegible]
- [illegible]
- [illegible]
- [illegible]

Key Implications

[illegible] has significantly evolved as an investment and risk management approach and now may allow investors to reflect environmental, social and governance considerations into their investment portfolios without having to give up return.

[illegible] across a more holistic set of impact factors, above and beyond traditional risk and return, can potentially enhance investment selection and serve to lower overall portfolio volatility, aiding in the risk-adjusted profile of portfolios.

[illegible] in the impact space, or certain types of sustainable companies, may provide the potential for alpha or excess return over the market; at a minimum, impact investments can often be used in a client's market based portfolio while preserving risk and return as compared with other market rate investments.

[illegible] allowing a client to simultaneously pursue both their financial and non-financial goals.

What is impact investing?

Impact investing is a term that has different meanings for different people. On the face of it, impact may seem subjective and the kinds of impact an investor would like to make are likely as unique as he or she is. Nevertheless, as the impact investing space has grown, a more concrete definition can be advanced.

Bank of America Global Wealth and Investment Management has adopted the Global Impact Investing Network's definition and views impact investing as: "Investments made into companies, organizations and funds with the intention to generate measurable social and environmental impact alongside a financial return.[1]" Other common terms for aspects of impact investing include socially responsible investing (SRI); environmental, social and governance (ESG) investing; and values-based investing (VBI). While they have some distinctions, they share common elements of investing strategies designed to create positive change in society.

[1] [illegible]

In its simplest terms, impact investng is the process of choosing an investment wih the goal of generatng both financial retrns and non-financial impact These investments span the spectrm of asset classes and vehicles, such as pblicly taded equites, fixed income instrments and private investments.

In the impact fnd space, new pblic/private financing strctres are receiving interest from for-profit insttutons and policymakers from the White Hose to local mnicipal issers. In the last five years, there has been a marked increase in social impact partnerships [2], where retrn is predicated on the sccess of addressing a partclar social isse that reslts in government cost savings, as well as green bonds that allow investors to gain scalable access to alternate energy and sstainable projects. The Green Bond market stood at US $121 billion as of April 30th, 2016. The niverse is now comprised of 700+ bonds, from 26 contries in 24 crrencies. [3]

Examples of ESG Factors

[illegible]

Pblished goals and progress in managing environmental impact retrn
Resorce tlizaton - water, waste, energy
Dedicated sstainability office, liability management

[illegible]

Corporate philanthropy, commnity involvement
Working conditons, spply chain management
Updated and inclsive HR policies, progressive pay policies

[illegible]

Reportng and disclosre
Pblished policies, balance of powers, board strctre
Prodct recalls, fines, setlements, consmer and employee lawsits

There are even companies, inclding newer strctres known as B Corporatons, which have a "doble bottom line," wih a dal objective of financial retrn and social or environmental benefit Impact investng is an area of investments that is growing, driven by entrepreneurs, established bsiness leaders and mainsteam investors.

Is there a tradeo between "doing well and doing good?"

When impact investng started to emerge in the 1970s, investors sed negative screening exlding certain stocks or indstries from portfolios to align investments wih their vales. For example, an investor may have chosen to screen ot investments related to alcohol, tobacco or weapons manfacturers.

While exlding certain investments can provide the benefit of better aligning a portfolio wih an investor's vales, this approach can be limited as an investment approach. Negative screens can sometmes amplify risk by eroding diversificaton and potentally casing nintended concentraton of exposre to specific firms or sectors that can reslt in a portfolio's failre to perform in-line wih a benchmark or achieve an expected rate of retrn. While some investors accepted this as the price for honoring their beliefs, many did not And shortfalls in retrns entrenched negative perceptons abot impact investng.

A good example of how negative screening can lead to significant nderperformance can be seen in the energy sector. Ten years ago, investors concerned abot climate change had to rely on negative screening of carbon-intensive investments, like coal and oil companies or alternately, invest in a nascent clean tech strategy When energy markets increased in vale sbstantally over the last decade, and clean tech went throgh a significant correcton, investors lacked a viable alternative to provide them exposre to the energy sector and they missed ot on significant gains wih no recorse.

However, the impact investng landscape has come a long way since the 1970s. Today, investors and fnd managers harness the power of increased availability of impact data from companies and data providers to review investments sing positive environmental, social and governance data. This combined wih modern portfolio constrcton techniqes helps redce the risk and performance drawbacks of negative screening.

Changes to the impact investing landscape

Evolton in the impact investng space has largely been a reslt of pressres coming from the investng commnity itself. Large insttutons and private fondatons--inclding pension fnds and endowments--are one grop of investors that have been asking for more responsible investment strategies. There is also a strong demand from individal investors, who demand more transparency in their investments across impact traits, sch as sstainability and

[2] [illegible]
[3] [illegible]

governance. These individual investors are driving the era of the "conscious consumer," shopping at organic food stores, buying clothing and accessories from companies with social missions and driving environmentally sensitive cars. Finally, the historic COP21 agreements in 2015 will drive increased global reporting on greenhouse gas emissions as well as innovation in how private capital can be harnessed to address climate change.

Institutional investors were some of the first to start incorporating impact investing criteria into their mandates and are taking an increasingly formalized approach to impact investing. One example of this trend is The California State Public Employee Retirement System (CalPERS) that recently issued a statement that it would evaluate all managers along ESG lines[4]. Such definitive action by one of the largest pension funds in the country has a profound impact on the behavior of other investors. Further evidence is seen in the 2,200 financial institutions, asset managers, service providers and other industry participants that have signed the Principles for Responsible Investment.[5]

Yet, adoption is far from universal. A recent Merrill Lynch survey showed that less than 25% of investors know what impact investing options are available to them.[6] There is evidence that some institutions lack the understanding of how ESG investing works. A survey of 200 university endowments by the Commonfund Institute found that just 53 are "actively engaged in responsible investing," with just 17 having formally incorporated ESG criteria. Factors such as the difficulty of finding suitably knowledgeable investment managers and a lack of understanding by decision-makers have limited adoption.[7] The same report also shows that certain investors, such as investment managers at public funds in more politically conservative states, may neither support the specific goals of some ESG investments nor be willing to risk a backlash by critics of those investments.[8]

A significant hurdle that investors, specifically institutional boards, face in adopting more robust impact investing guidelines is concern around breaching fiduciary duty and whether ESG investments will deliver competitive returns. Seen leading the way are mission-aligned investors, such as endowments, foundations and schools. These investors are broadening their analysis of both companies and investment managers to incorporate ESG considerations and becoming conscious of their fiduciary duty in considering other factors beyond simply maximizing short term returns. In fact, the PRI has asked the Department of Labor to examine its definition of fiduciary duty to incorporate these concepts.[9]

Though institutional assets are much larger than those of individual investors, individual investors are driving the demand for impact investing. The U.S. Trust Annual Insights on Wealth and Worth survey indicates a growing desire among wealthy individuals and families to use their wealth for societal impact. More than half of the investors surveyed said that social impact investing is "the right thing to do." In addition, 49% say they want to make a positive impact on the world and 53% say that corporate America should be accountable for its actions.[10]

These same investors are also changing how they approach investing, with nearly six in ten investors stating that they now consider the social and ele fedn5r ucompani(when in)13 (y10 (six in)told ia

inv(men)4 (ts)11 9d 5 (vfalenniids (wc)6 (onsidhe soc (y1,e al4 (iidother)10 ( )
Totm invest6 (c)6 holdahe soc4 (6 mer)-4stment d a(o e)3 appr now cche U.S
on Wealth and Worth subey ggensid4rato(ee(be)9.9 ( )JTE)10asoxin)ton4 (e
Mmon2G223atXors are st oher (o (tsocial impac)-13 (tin)13 (y10 ((men)4 (
tqivdmtar

social responsibility reports. By 2014, 80% of the S&P 500 companies were creating corporate social responsibility reports.[13]

There has also been substantial growth in indexes, network services and other collaborative or aggregative sources of social responsibility data from a range of financial index providers. Industry leading data providers like MSCI, Sustainalytics, Thompson Reuters and Bloomberg are all providing data to inform impact investing decisions, with now large teams of ESG focused analysts collecting thousands of ESG data points on companies. However, data from these sources is sometimes difficult to put in context and no one provider has become the go-to source providing easily comparable data in a universally accepted standard.

Compared with traditional investment analysis tools such as credit ratings, there is no broadly accepted source or methodology for evaluating impact investments. In fact, there is no single, standardized way to evaluate the impact of any securities in this space. Efforts are underway to develop frameworks for measurement, notably through the Sustainability Accounting Standards Board (SASB), to define materiality thresholds for the environmental, social and governance factors to qualify as an impact investment, but the market is still evolving towards this goal.

Enhancements to data quality and portfolio construction

While there is still room to grow, the structural changes in the markets and financial innovation have dramatically improved how managers can incorporate impact analysis into their portfolios. Investors are increasingly armed with better data and improved portfolio construction techniques that make it even easier to integrate impact into an investment process.

The proliferation of data means that investors have the environmental, social and governance data that, along with traditional financial analysis, they can use to make informed decisions around investing in sustainable companies. Investors no longer have to focus on leaving out specific exposures through negative screening, but rather can use ESG integration to replace them with other investments that have similar risk/return characteristics thereby mitigating the risks of exclusion. With the improvement in available data, the number of strategies that now incorporate impact investing into their portfolios has grown significantly (see exhibit 2). ESG factors were incorporated into 925 investment funds in 2014, up from 720 two years earlier and 55 in 1995 as more and more mainstream managers see how they can use impact criteria in their investment management processes.[14] Even when faced with imperfect data, investors can now make better choices that allow them to maintain a balanced portfolio.

What does ESG integration look like? A simple example exists in the healthcare space. While traditional negative screening focused on removing tobacco companies, positive integration allows investors to take that capital and invest it in another consumer goods company that provides healthy drinking water to the developing world, or a healthcare company that manufactures life saving drugs.

Using substitution methods based on the advances in factor-based analysis as well as portfolio optimization techniques, investors can employ positive ESG factors to remove certain exposures and substitute others while maintaining the overall risk and reward characteristics of the portfolio. For example, an investor worried about climate change can exclude a coal

Exhibit 1: [illegible]

[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Global	MSCI ACWI	Jan/1/1997-Dec/31/13	-5.51%	1.59%	2.75%
U.S.	Russell 3000	Jan/1/1988-Dec/31/13	-4.33%	0.67%	3.08%
Australia	S&P/ASX 200	Jan/1/2002-Dec/31/13	-4.48%	2.42%	1.26%
Canada	S&P/TSX Composite	Jan/1/2000-Dec/31/13	-12.39%	5.89%	3.67%

[illegible]

Exhibit 2: [illegible]

[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Number of Funds	55	144	168	181	200	201	260	493	720	925
Total Net Assets (In Billions)	$12	$96	$154	$136	$151	$179	$202	$569	$1,013	$4,306

[illegible]

13 [illegible]

14 [illegible]

companybtadd a firm making inestments in renewbles to retain exposre to the energysector. Another technique is selectng stocks based on financial and ESG factors, then sing optmizaton to netalize anysector biases that reslted from this approach.

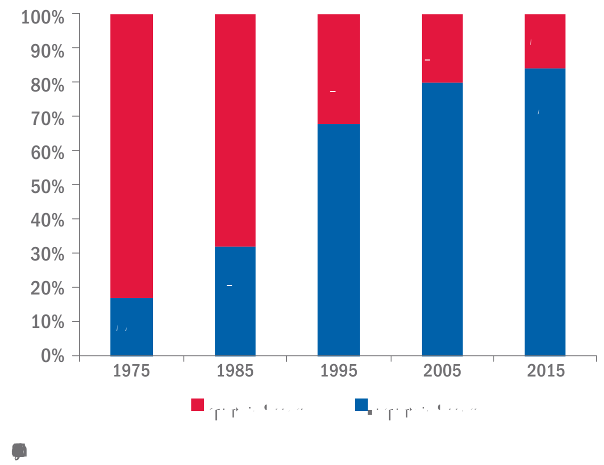
Improements in porfolio constrcton techniqes now allowinestors and fnd managers to incorporate robst qantitate and factor research analysis into their inestment decision processes to help bild a porfolio wth posite impactand retn. Hoever, inestors still hae to be carefl abothe degree to which theyalter the porfolio from the reference indexor benchmark. A recentstdybythe Aperio Grop on porfolio sbstton showthatdiestng from carbon intensie inestments can proe difficlt For example, optmized carbon-free porfolios in markets wth large concentratons in carbon assets historicallyhae generated sbstantal tacking error, reslting from sector oerweightng thatoccrs oer tme. Ehibit1 showthese sector biases thatreslted from a stdybyAperio in which theycreated hypothetcal carbon-free Tracking Porfolios oer differentme periods across forgeographies.

Diestng carbon inestments meanta shiftnotto other sectors btto related ones—in this instance to the tilites and materials sectors. The difficltyof this narrowsbstton highlights the difficltyof smartscreening and the skill reqired to create robstimpactporfolios. Hoever, when done right wth the combinaton of beter data and improed processes, the impacton porfolio performance can be mitgated. Mostmanagers nowse optmizaton processes to netalize large sector bets which can help redce tacking error.

How does impact investing aect portfolio returns?

Two-thirds of inestors are ncertain abowhether impact inestments can offer compette retns.[15] This percepton is somewhatjstified gien the enhanced risk and redced performance thatmanyexperienced sing negate screening techniqes in the earlydays of impactinestng. These perceptons are also likelyinflenced bya long historyof prist inestors who wold arge thatthe sole objecte of a pblic companyis to maximize shareholder vale. These same inestors mightalso iewanyresorces dedicated to ESG related improements as a conflict or atleastan inestment constaint

Hoever, wth all the improements in the impactinestng space, smartse of impactdata has been shown to help



redce porfolio olatlitybyhelping managers identifyrisks beyond the balance sheetand een help spotopportnites in the marketplace. In fact as will be shown below companies who demonstrate ESG prdence hae been able to redce risk and potentallyenhance shareholder vale. As a reslt these benefits can actallyhelp lead to enhanced risk management and performance of a porfolio.

How can impact criteria help identify risks?

As inestors harness the growing aailabilityof impact inestng data, a natral qeston arises: Does an expanded setof non-financial ESG data lead to beter risk and retn characteristcs of a porfolio? Gien the non-financial risks that mayexistin an inestment the shortanswer is yes.

One of the mostintrigiing analyses thatspports whyimpact factors are importantin the ealaton of corporatons is Ehibit3. Todayfirms look erydifferent fortyyears ago, tangible assets—items like propertyfactories and eqipment—made p more than 80% of the vale of the S&P 500 companies. Todaythatrato has been reersed, wth 80 percentof vale nowcomprised of intangible assets sch as intellectal propertymarketshare, brand awreness and perceptons of a companys effecton societyand the enironment[16]

When mostof the valaton of pblic companies is made p of intangible assets, increasinglynonfinancial measres sch as a companys brand and reptaton, hman capital and R&D are keyto the ealaton of a companyas we seen wth the newssrronding Volkswgen in 2015 and sbseqent material drop in the companys stock price. A growing body of commentary shows that using ESG-related criteria actually helps to augment traditional financial analysis by increasing an investor's ability to assess risks that sit outside of the balance sheet, but are critical to the financial well-being of the company. Therefore, when used alongside traditional financial and risk analysis, this data can lead to better investment decision making.

From a practical standpoint, using impact analysis to evaluate companies can help mitigate risk, regardless of whether the investment is being evaluated for impact. There is wide recognition that companies that do not have good governance, that lack good management, that fail to consider environmental risks or that disregard community impacts are ignoring risks to their bottom line.

In fact, there is a range of ESG-related risks that companies face. Issues such as climate change, health and safety concerns, and issues with transparency, risk management and governance can have a direct financial impact when they affect a company's operations. The classic case of this is of course the BP oil spill. Poor supply chains and labor policies, and the associated potential PR backlash, can pose a significant reputational risk that translates into lost sales, lower valuations and, in the extreme, consumer boycotts.

In Exhibit 4, looking at the available analysis helps bring these issues into focus. A recent study by Breckenridge shows that using ESG factors enhanced an investment manager's ability to perform credit analysis and evaluate risk management more broadly—so much so that the firm now uses ESG factors in all its investment decisions. The correlations of ESG factors to financial factors were found to be very low and when using

Exhibit 4: [illegible]

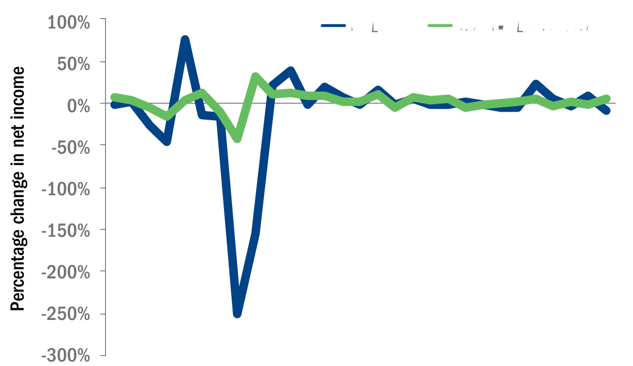


Exhibit 5: [illegible]

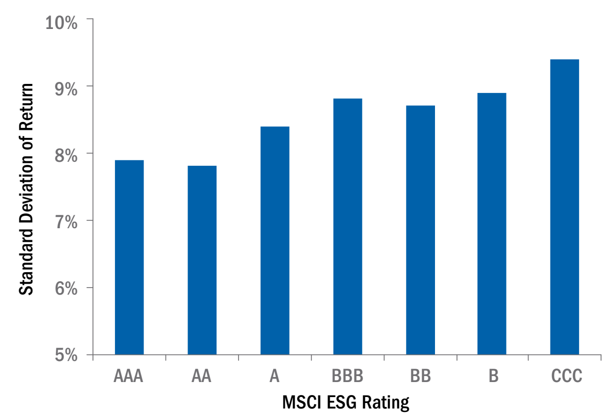


Exhibit 6: [illegible]

[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
*MSCI KLD 400 Social Inde ***	-12.08	-20.10	28.47	10.31	3.00	13.26	3.72	-34.94	31.73	11.89	1.60	13.24	36.20	12.72
MSCI USA IMI GR USD	-11.02	-21.65	31.01	12.32	6.41	15.70	5.78	-36.98	28.72	17.17	1.23	16.41	33.39	12.51
S&P 500 TR USD	-11.89	-22.10	28.68	10.88	4.91	15.79	5.49	-37.00	26.46	15.06	2.11	16.00	32.39	13.69
E ce														
MSCI KLD . MSCI USA IMI GR	-1.06	1.55	-2.54	-2.01	-3.41	-2.44	-2.06	2.04	3.01	-5.28	0.37	-3.17	2.81	0.21
MSCI KLD . S&P 500	-0.19	2.00	-0.21	-0.57	-1.91	-2.53	-1.77	2.06	5.27	-3.17	-0.51	-2.76	3.81	-0.97

hese factors, Breckinridge ws able to identfy additonal creditrisks. Furhermore, hey fond hatcompanies hat manage heir ESG risks ended to be more stable creditrisks and had lower earnings volatlity [17]

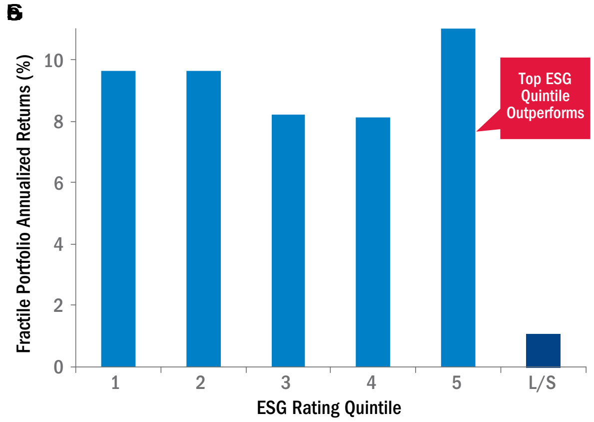
In additon, a paper by Analytc Investors also analyzed he volatlity of MSCI ESG rated [18] companies (mapped to he seven pointletter scale wh ratngs from AAA (highest) to CCC (lowest)) fond hathigher rated ESG companies had a more stable retn pattern, leading to he potental for ESG analysis to preserve capital in a portfolio (see exhibit5).

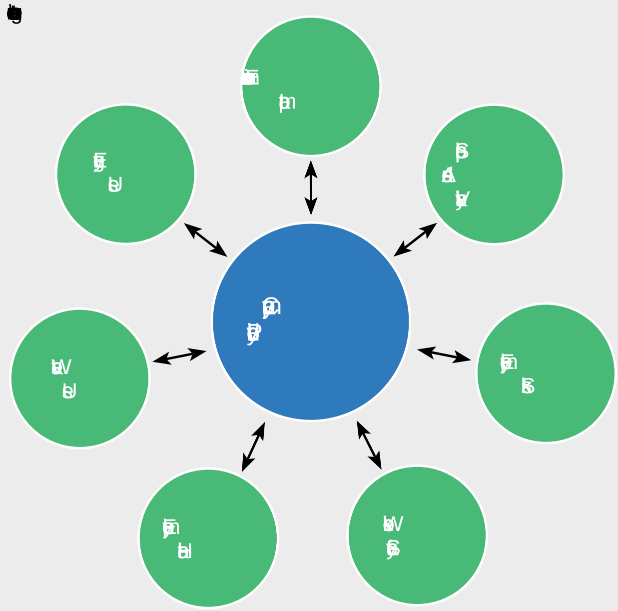
Anoher stdy by Detsche Bank Climate Change Adisors analyzed existng academic and practtoner research and fond hatcompanies identfied as having high CSR or ESG rankings historically have had a stong correlaton wh sperior risk-adjsted secrites retrns. [19] These companies typically have a lower costof debtcapital and eqity which is likely a reflecton of he marketrewarding hem wh a lower costof capital in exchange for lower risk. However, in he same stdy companies designated as having SRI qualites, which primarily se exclsionary screens, showed lite additonal benefit, although hey did notnderperform he broader markets. [20]

While ESG data and ratngs do help inform investors and heir se may even lower portfolio volatlity itis importanthatinvestors do notconfse ESG ratngs wh an expected performance or creditratng, like sell side by/sell ratngs or a Moody's ratng. For example, investors also freqently are provided wh he evidence hathe KLD indexhas otperformed he S&P 500. The MSCI KLD 400 Social Indextacks he top 400 U.S. companies wh otstanding ESG ratngs and exclsdes companies whose prodcts have negatve social or environmental impacts. However, when yu look athe attibtion of retrns, mch of he performance has to do wh sector bets or owning/not owning individal companies, notas a resltprely derived from he firms' ESG ratngs. However, he indexdoes exhibit lower volatlity over he long term, adding to he hesis hat historically investng in hese companies has athe very least preserved capital in a portfolio context (see exhibit6).

While here is debate as to wheher ESG ratngs can lead to enhanced performance, mltple stdies and Bank of America's Global Wealh & InvestmentManagementChief Investment Office's internal analysis showhathere are benefits to he risk-adjsted retrn profile of a portfolio. Otof he actvely managed pblic eqity stategies hatmetboh investment and ESG integraton criteria, 60% otperformed oher GWIM

Exhibit 7:





CIO Due Diligence analyst covered strategies, which on average have a higher risk-adjusted return than the universe.

Do impact investments also offer the potential for alpha generation?

There is a growing body of research on the alpha-generating potential of impact investing, both empirical studies by companies and academic evaluations. While multiple studies have emerged, it is difficult to generalize about their conclusions and whether impact investing can generate superior returns in comparison to traditional strategies. However, it is worth noting that a significant portion of the timeline of these studies include a period in which negative screening was the predominant approach. Given the enhancements in data and portfolio construction techniques identified above, these results would likely look different if this analysis was conducted again in ten years' time.

Also, when looking at ESG ratings for public companies, a high rating does not automatically equate with high performance expectations. In fact, when looking at an individual company analysis performed by Deutsche Bank the most highly ESG-rated companies did show slight outperformance, but the lowest rated ESG companies outperformed the second and third highest quintiles (see exhibit 7, previous page).[21]

However, other studies have shown that firms that have made a proactive commitment to being environmentally and socially responsible and are serious about good governance practices, also referred to in much of the academic studies as "sustainable companies," are generally better run, more profitable and enjoyed associated cost savings.[22] One could deduce that these savings would allow an investor to create a portfolio of such companies and, if not capture some element of outperformance, at least provide the potential to deliver strong relative performance to the broader market.

Michael Porter, who authored the early work on shareholder value, has done much work on linking corporate value to the emphasis that companies place on responsible and sustainable business models, which he calls " shared value. "

Similarly in exhibit 8, a study performed by Eccles, Ioannou and Serafeim analyzed two sets of 180 U.S. companies from 1993 to 2010. One set of companies had adopted sustainability policies by 1993 and were termed "High Sustainability" companies, while the other set had not and were termed "Low Sustainability" companies. "High sustainability" companies delivered returns 47% higher than their low-sustainability equivalents between 1993 and 2010 while exhibiting lower volatility both on a value and equal weighted basis.[23]

Exhibit 8: **Figure 1**

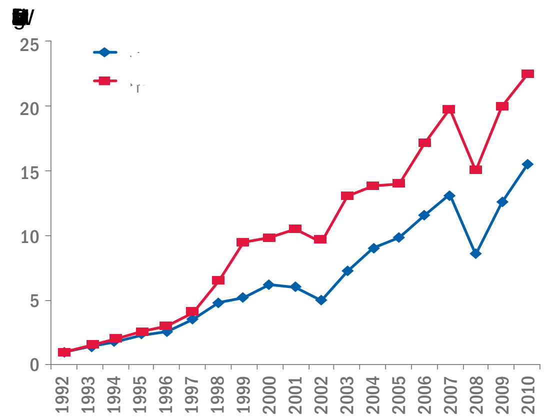


Figure 2

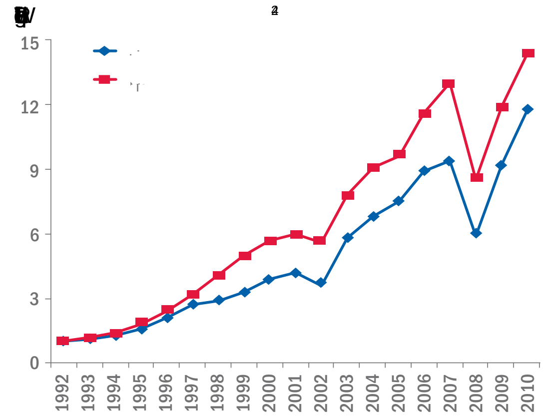


Exhibit 9:

Sustainable Investing	17.9
MSCI World	14.9
S&P 500	13.4
Negative Screening	13.2

Sustainable Investing: The Art of Long Term Performance.

hese stategies. Acte Share represent he share of porfolio holdings hatdiffer from he benchmark indexholdings. A stdybyCremers and Petajisto fond hathe highest ranking acte fnds, hose ih an acte share of 80% or higher, operformed heir benchmark indexs. [26] The research indicates hatfnds ih high acte share maybe able o

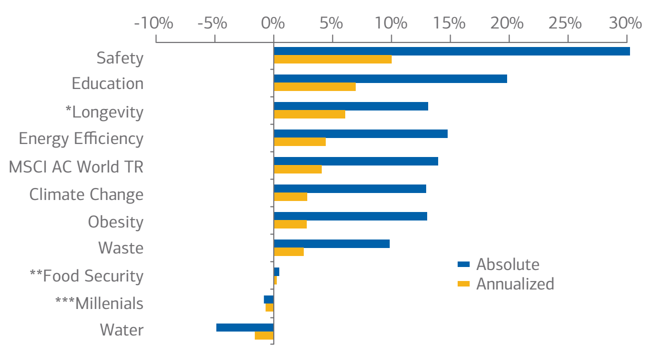
Exhibit 11: [illegible]

[illegible]	[illegible]	[illegible]
•Cybersecrity •Robots & AI •Virtal/ Agmented/ Mixed Reality	•Water •Sstainable Assets (inclides Waste, Climate Change & Exteme Weather) •Alternate Energy (inclides Energy Efficiencyand Clean Tech) •Green Bonds	•Healthcare (inclides LongevityPandemics, Obesityand Safety •Aging •Botom Billions •Health & Wellness •Millennials & Centennials

Exhibit 12: [illegible]

Inception date 12/6/13

Thema ic Primer Pick Performance ince incep ion (hro gh Sep ember 4, 2016) [30]



[illegible]

prodce higher retrns in some stategies. Ouranalysis shows hat58% of ouESG stategies [27] rank in he top decile for acte share hen compared o heir respecte taditonal actely managed peer grops. [28]

Finallya keyfocs of manyimpactinestors is long-term inestng, hich heybeliee proides a more sstainable ay for companies o generate long erm retrns rather han a focs on managing qarter o qarter. The stdyin exhibit10 showhatde o he generallylonger tme horizon, byand hold nate of professional inestors in he impactinestng space, a resltng benefito inestors in sch stategies is he possible redcton of taxconseqences, relate o higher trnoer stategies.

Thematic impact investing

As integraton of impactdata into he inestmentanalysis gains tacton among inestors across he pblic and priate inestng space, impactinestors are becoming more engaged in directng priate capital o climate change, healthcare and edcaton concerns or social ineqalites, hich in additon o haing significantscale economic impacts, also hae large impacts on societyand he enironment In A Transforming World[29], Merrill Lynch and U.S. Trstidentfied nmeros sch hemes as material, long-term inestmentopportnites, hatare also impactinestng opportnites (see exhibit 11). BofA Merrill Lynch Global Research has been tacking he performance of manyof hese hemes, hich nlike he diersified sstainable stategies hathae been highlighted so far, tend o hae a more defined impactfocs and smaller nierse. These hematc inestments exhibithe potental for otsized retrns btih higher risk, sch as in he ater space, hich can exhibithigher olatlityThese stategies also tend o hae high acte share, hich, as indicated aboe, can be an indicator of operformance in some markets.

As more impactinestmentstategies incorporate analysis on sstainabilityand focs on hose hemes hatill impact societyfor years o come, impactinestng notonlyproides he inestor he abilityo hae a positve impactih heir inestments, btalso proide an opportnityfor groth.

[illegible]

Exhibit 13: [illegible]

	[illegible]	[illegible]	[illegible]
[illegible]	Green Bonds	Resource Efficiency Equities Thematic Sector Equity Funds	Alternative Energy Small & Medium Enterprises (SME) Financing Impact Venture/Growth Equity
[illegible]	Sustainable (ESG) Corporate Bonds Sustainable (ESG) Municipal Debt	Diversified Global/U.S. Sustainable Equity (ESG)	Sustainable Private Equity Sustainable Real Assets
[illegible]	Community Loan/Development Funds	Negatively/Socially Screened Equities	Social Impact Partnerships, Microfinance

[illegible] ⟷ [illegible]

A range of risk and return profiles

While there is a common misconception that impact investments require a below-market return or are generally more risky than traditional investments, many diversified public equity and fixed income strategies that integrate ESG provide market-like returns, and some more targeted public and private strategies may have the ability to outperform, as described below. Exhibit 13 shows a representation of the impact investing universe across public and private investments and an illustration of the range of potential investment risks and returns. The risks of many impact investments are not necessarily greater than their traditional counterparts, but they often are different, and understanding what those risks are is critical.

For example, investors in an alternative energy strategy are using capital to create a positive impact on the environment. So in addition to having the potential for lowering carbon emissions, investors are expecting a higher return because alternative energy companies are working in a high growth oriented space. However, the scale of the alternative energy sector, while maturing, is still small and might not be able to absorb significant capital inflows or outflows. These issues of scale and capacity are common in the impact investing landscape, particularly in smaller private markets where many of the social venture strategies that have potential for commercial and impact success are still early in their development.

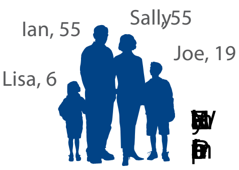
Recently, studies from both Cambridge Associates in conjunction with Global Impact Investing Initiative (GIIN)[31] and separately from Wharton at the University of Pennsylvania[32] have shown that impact managers in the private equity and debt space that hold themselves out as market-rate investments have indeed produced results that are either on par or above traditional private equity strategies. Though the sample sizes were relatively small in these reports given where the impact investing industry is in its maturation, the findings are important for investors, and this type of evidence is being collected by more and more entities looking to prove out the impact thesis.

Conversely, investments in strategies such as microfinance and community development offer a significant potential for social impact, but often yield lower returns than traditional strategies with non-rated credit risk. This is due to the fact that there needs to be a cap on the return that can be extracted from loans designed to benefit low-income communities. However, as opposed to traditional philanthropy, the difference is that impact investing is designed so that the investor actually receives the capital back, with a return, depending of course on the program meeting certain metrics and realization of the targeted improvements. One of the goals of impact investing is to create a mechanism for the markets to reinvest that capital, thus creating the potential to scale and magnify the social and environmental impact.

[illegible]

[illegible]	[illegible]
• Thematic ETFs • ESG public equity/debt • Structured impact notes • Sustainable private equity • Green hedge funds • Green bonds	• Social Impact Bonds • Niche, private thematic investments • Non-profit finance

[31] [illegible]
[32] [illegible]



- Lisa and Joe hae partcipated in Habitatfor Hmanity
- Joe is ata school were stdentgrops engage iwh 350.org
- Sallyspports charites for edcatng wmen and girls
- Ian has mltple generatons of eterans in his family

- Inestin ays hatspport edcaton forwmen andgirls
- Reflectenironmentally responsible practces in porfolio
- Reflectimportantsocial issus, sch as eterans rights and lowincome commnity spport

Do notjeopardize standard of liing

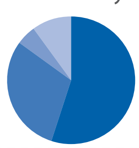
Preserve Lifestye

Safety

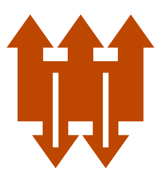
Cash Flow

Principal Protecton

Maintain lifestye

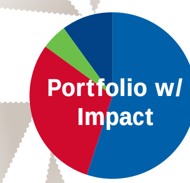


Enhance lifestye and society



- Inclde a social impact bond hat focses on eterans rights

- Add an allocaton o a fnd hat epands edcatonal opportnites for wmen



- Inclde World Bank garanteed green bonds o reflectclients enironmental interest

- Inestin a fnd hatealates companies on issus ranging from deforestaton o hman rights in he spplychain

- Add an allocaton o a mlti manager hatintegrats ESG factors ino heir inestment process

Some impactinvestments also provide retns ted o non-marketfactors. One example is he NYImPACT social impactbond, he natons firstpayfor-sccess program o link investors and a state governmento finance social change based on provable positive otcomes. The program helps former convicts reintegrate into societyand find jobs, reducing costs o he state. If sccessfl, he $13.5 million program cold save taxpayers more han $30 million a year.[33] While he retns o investors mayexceed whathey cold earn from a taditonal core bond portfolio, heystll are not likelyo match he retns from more vente-like initatives and manyof hese stuctures come wih philanhropic garantees o de-risk his completelynewfinancing stucte. This tells s hatcontextis critcal in evalatng impact investments.

Finallyhere are some impactinvestments where he investor has opted o accepta belowmarketrate of retn because he investmentwold notbe viable otherwise, or is in an undeveloped sector which creates risk hatmightrequire philanhropic sbsidyThese kinds of investments are where he issue being addressed has litte potental for profit sch as combatng AIDS in Africa. Transmission preventon programs have verylitte abilityo provide retn, even hogh heyprodce hge social and economic benefits o he affected poplatons. Exhibit13 showshe range of risk and retns profiles for impactinvestments.

Fnd managers, pblic officials, nonprofitleaders and ohers are tying o find ways o better captre and monetze for investors more of he social and economic benefits of impact investments. Sccess in doing so wold enable fnds o address social issues while more consistentlygeneratng a retn appropriate o risk.

Impact Investing Within a Goals-Based Framework

AtMerrill Lynch, welook ateach clients financial sitaton hrogh a goals-based lens. Within his approach, itmaybe possible for a combinaton of financial and non-financial goals o be achieved byincorporatng impactinvestments.

As described earlier, manyimpactinvestments can be sed in he core marketportfolio, allowing investors o direct heir capital o investmentopportnites while maintaining a taditonal marketbased retn and risk profile. Where sitable, opportnistc impactinvestments can hen be sed o flfill an investors more aspiratonal goals: eiher o take liqidityor newer markets investmentrisk for a greater retn alongside a positive social or environmental impact, or o explore goals hatgo beyond financial retn and focs instead on having a lastng impacton heir commnityhe environmentor society atlarge hatcan help hem leave he legacyheywant On he previos page, welisthe types of impactinvestments hatfall nder he marketand aspiratonal goals based portfolios and an illstaton of howyomightbe able o begin hinking abouts yorowportfolios.

Risks of Investing in Impact Investments

While here are manyimpactstategies hatdo have longer tack records, as he investmentapproach is expanding, here are manystategies hatmayhave limited performance historyAs described above, data availabilityand standardized frameworks are stll evolving boh for he private and pblic impactinvestments indstyand will be sbjecto mltple improvements in coming years. As sch, reportng arond he partclar impacts of impactinvestng stategies are sbject o he managers definiton of hose reslts and investors shold be aware of hese isses prior o investment Finally as impactinvestng approaches are being more widely integrated into investmentprocesses, itis importantfor investors o acknowledge hatcertain portfolio managers and oher investors offering soltons in his space are stll in heir developmental stage and investors need o be aware of hese risks.

Anna K. Snider, CAIA, Managing Director, Head of De Diligence for he Chief InvestmentOffice, Global Wealh & InvestmentManagement, Bank of America Merrill Lynch.

Anna is responsible for manager research across all asset classes for he wealh managementbsinesses. She also defines and exectes investmentstategies focsing on impactstategyresearch, hoghtleadership and investment implementaton.

Prior o his role, Anna was partof he alternative investments grop where she advised clients on hedge fnd and private assets portfolio consructon and became head of research for externallymanaged alternative investmentfnd of fnds.

She was also a senior analystin he risk managementdivision atU.S. Trst Anna offers manyyears of investmentand risk analysis experience, having held positons athe Federal Reserve Bank of NewYork, JP Morgan and UBS focsing on market, creditand operatonal risk management

She gradated from ConnectctCollege. She holds he Chartered Alternative InvestmentAnalyst[SM] (CAIASM) designaton. Anna serves as chair of he board for High Water Women, a fondaton based in NewYork City

[3] [illegible]

The Global Wealth & Investment Management (GWIM) Chief Investment Office provides industry-leading investment solutions, portfolio construction advice and wealth management guidance. This material was prepared by the GWIM Chief Investment Office and is not a publication of BofA Merrill Lynch Global Research. The views expressed are those of the GWIM Chief Investment Office only and are subject to change. This information should not be construed as investment advice. It is presented for information purposes only and is not intended to be either a specific offer by any Merrill Lynch entity to sell or provide, or a specific invitation for a consumer to apply for, any particular retail financial product or service that may be available.

This information and any discussion should not be construed as a personalized and individual client recommendation, which should be based on each client's investment objectives, risk tolerance, liquidity needs and financial situation. This information and any discussion also is not intended as a specific offer by Merrill Lynch, its affiliates, or any related entity to sell or provide, or a specific invitation for a consumer to apply for, any particular retail financial product or service. Investments and opinions are subject to change due to market conditions and the opinions and guidance may not be profitable or realized. Any information presented in connection with BofA Merrill Lynch Global Research is general in nature and is not intended to provide personal investment advice. The information does not take into account the specific investment objectives, financial situation and particular needs of any specific person who may receive it. Investors should understand that statements regarding future prospects may not be realized.

This article is provided for information and educational purposes only. The opinions and views expressed do not necessarily reflect the opinions and views of Bank of America or any of its affiliates. Assumptions, opinions and estimates are as of the date of this material and are subject to change without notice. Past performance does not guarantee future results. The information contained in this material does not constitute advice on the tax consequences of making any particular investment decision. This material does not take into account a client's particular investment objectives, financial situation or needs and is not intended as a recommendation, offer or solicitation for the purchase or sale of any security, financial instrument or strategy. Before acting on any recommendation, clients should consider whether it is suitable for their particular circumstances and, if necessary, seek professional advice.

The investments discussed have varying degrees of risk. Some of the risks involved with equities include the possibility that the value of the stocks may fluctuate in response to events specific to the companies or markets, as well as economic, political or social events in the U.S. or abroad. Bonds are subject to interest rate, inflation and credit risks. Investments in high-yield bonds may be subject to greater market fluctuations and risk of loss of income and principal than securities in higher-rated categories. Historically, municipal bonds have been high-quality investments relative to other fixed income securities. However, not all municipal bonds are high grade, and when deciding whether to invest in municipal bonds, you should consider: default risk, market risk and liquidity risk. Income is generally exempt from federal taxes and state taxes for residents of the issuing state. While the interest income is tax-exempt, capital gains, if any, will be subject to taxes. Income for some investors may be subject to the federal Alternative Minimum Tax (AMT). Investments in foreign securities involve special risks, including foreign currency risk and the possibility of substantial volatility due to adverse political, economic or other developments. These risks are magnified for investments made in emerging and frontier markets. Investments in a certain industry or sector may pose additional risk due to lack of diversification and sector concentration. Investments in real estate securities can be subject to fluctuations in the value of the underlying properties, the effect of economic conditions on real estate values, changes in interest rates and risk related to renting properties, such as rental defaults. There are special risks associated with an investment in commodities, including market price fluctuations, regulatory changes, interest rate changes, credit risk, economic changes and the impact of adverse political or financial factors.

Alternative Investments, such as hedge funds and private equity, can result in higher return potential but also higher loss potential. Before you invest in alternative investments, you should consider your overall financial situation, how much money you have to invest, your need for liquidity, and your tolerance for risk. Some or all alternative investment programs may not be suitable for certain investors.

An offer to purchase Interests in a Social Impact Partnership or Social Impact Bond offering can only be made pursuant to a Confidential Private Placement Memorandum ("PPM"), which contains important information concerning risk factors, conflicts and other material aspects of the Company and must be carefully read before any decision to invest is made. Social Impact Bonds are a new and evolving investment opportunity which are highly speculative and involves a high degree of risk. An investor could lose all or a substantial amount of their investment. *There i no econdar marke nor i one e pec ed o de elop for he e in e men and here ma be re ric ion on ran ferring ch in e men . The peci c erm of an indi id al o ering ma pro ide for b an ial or o al lo in he e en ha peci c arge are no me and m be caref ll re ie ed i h he ario po en ial o come caref ll con idered.*

 ARYHRNSR