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Redefining Shareholder Value Maximization: Identifying key sustainable investment strategies and their role in rehabilitating corporate purpose

Iris Wan Wan Duong Committee on Global Thought Columbia University

Abstract

The purpose of this essay is to situate investing in a commercial context where consideration of ESG and impact factors at the least does not compromise investment returns, and hence excludes discussions on non-profits, private foundations and charitable organizations. Instead, I look into pension funds, private equities and hedge funds whose primary fiduciary duty is to serve the economic interest of beneficiaries. Grounded in case studies and real-life interviews, this essay explore ways in which investors can transcend their roles of merely financiers to become gatekeepers, value creators and reformers of corporate mission, steering companies towards the path of sustainability. Ultimately, by examining the regulatory framework, valuation models and implementation tactics of various sustainable investment strategies, this essay seeks to illuminate a new understanding of 'value maximization' that ties positive externalities to long term portfolio performance.

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Table of Contents

- 1. Reimagining Capitalism for a New Corporate Purpose
- 2. Maximizing 'Value' in Sustainable Investing
- 3. ESG Integration: The Gatekeeper
 - 3.1 The Mechanism of Integrating ESG Factors in Equity Valuation
 - 3.2 Fiduciary Duty of Pension Funds: Dissecting the Employee Retirement Income Security Act of 1974
 - 3.3 Case Study: Pension Investing with the Office of New York City Comptroller Scott M. Stringer
- 4. Impact Investing: The Value Creator
 - 4.1 Acting in Clients' 'Best Interest': The Investment Advisors Act of 1940
 - 4.2 'Impact' Mapping: The Theory of Change
 - 4.3 Case Study: Volery Capital Private Equity Impact Fund
- 5. 'Impact' Activist Fund: The Reformer
 - 5.1 Impact Activist Fund versus Traditional Hedge Fund Activism
 - 5.2 Activist Tactics & Impact Reforms
 - 5.3 Case Study: Reenergizing ExxonMobil with Engine 1
- 6. Roadblocks to Sustainable Investing
 - 6.1 The Lack of Standardized Framework for Impact Measurement
 - 6.2 When Doing Good is Not Profitable
 - 6.3 Sustainable Investing: A Complex Reality
- 7. A Future Towards Market Sustainability
- 8. Bibliography

1. Reimagining Capitalism for a New Corporate Purpose

Frederic Jameson had a rather bleak outlook on capitalism. He noted, "someone once said that it is easier to imagine the end of the world than to imagine the end of capitalism. We can now revise that and witness the attempt to imagine capitalism by way of imagining the end of the world." But what if capitalism can be *re*imagined by way of *saving* the world?

The vice and virtue of capitalism are economic incentive — the incentive that fuels hard work, competition, creation of wealth and unprecedented technological advancement, is the same incentive that drives exploitation, collusion, income disparity, and economic degradation. This beating heart of capitalism, though much critiqued, resonates with that of fundamental human character. Our current incarnation of capitalism has put much emphasis on shareholder value maximization, a doctrine that legitimatizes the relentless pursuit of profit by corporate executives in order to accommodate solely the short-term interests of shareholders. Yet the unilateral focus on shareholders has led to huge disengagement with other corporate actors, the campaign to reimagine capitalism marks a growing divergence in the perception of 'value'. The rise of climate change as an existential threat coupled with the surge of populist reactions have pushed discourses on corporate social responsibility to transform drastically in recent years. In 2019, the Business Roundtable released a new statement on redefining corporate purpose from shareholder primacy to a commitment to all stakeholders, including customers, employees, suppliers and communities, and ultimately "promote an economy that serves all Americans" (Business Roundtable, 2019). Consequently, investors are urged to harness their financial power and catalyze this change in mission by integrating sustainability as part of their new investment ethos. Big lenders such as IP Morgan aims to commit \$200 billion to clean energy financing by 2025 in support of the Paris Agreement. BlackRock Chairman Larry Fink in his 2021 letter to CEOs reiterated that "climate risk is investment risk" (BlackRock, 2021), thereby requiring all fifteen thousand portfolio companies to disclose sustainability reports according to the Sustainability Accounting Standards Board (SASB) guidelines and Task Force on Climate-related Financial Disclosures (TCFD) metrics. 'Corporate sustainability' has become the new buzzword, but how sustainable are the efforts in achieving that?

Philanthropic efforts have proven insufficient to curb climate crisis or to narrow widening inequality, which calls for a greater need to mobilize private capital and create an *incentive-based solution* to reform corporate purpose. In 2017, 80% of the large-cap S&P 500 index and 78% of the broad-market Russell 3000 index were owned by institutional investors (Pensions & Investments, 2017). Large asset owners with trillions of assets under management and significant stakes across companies large and small can be powerful agents of change, influencing governance and business strategies of portfolio entities. By incorporating sustainability issues in their capital allocation decisions, they are effectively encouraging and enforcing portfolio companies to integrate positive environmental, social and governance (ESG) impacts as part of their corporate mission, thus accelerating the movement towards a fairer and more inclusive capitalism. The purpose of this essay is to situate investing in a *commercial* context where consideration of ESG and impact factors at the least does not compromise investment returns, and hence excludes discussions on non-profits,

private foundations and charitable organizations. Instead, I look into pension funds, private equities and hedge funds whose primary fiduciary duty is to serve the economic interest of beneficiaries. Grounded in case studies and real-life interviews, this essay explore ways in which investors can transcend their roles of merely financiers to become gatekeepers, value creators and reformers of corporate mission, steering companies towards the path of sustainability. Ultimately, by examining the regulatory framework, valuation models and implementation tactics of various sustainable investment strategies, this essay seeks to illuminate a new understanding of 'value maximization' that ties positive externalities to long term portfolio performance.

2. Maximizing 'Value' in Sustainable Investing

In her book Value of Everything: Making and Taking in the Global Economy, Mariana Mazzucato observes how the idea of "value" has evolved over the years, from being an "objective theory of value" "tied to the conditions in which those goods and services were produced" to a normative concept, in which "value" is determined by "by the dynamics of price, due to scarcity and [consumers'] preferences" (Mazzucato, 2018). This subjective and reductive definition of 'value' as 'market price' explains why Milton Friedman attributes social responsibility of a business to pure profit maximization, whereby the success of an enterprise is ubiquitously measured by share price performance. However, this myopic approach only encourages managers to adopt short-term management practices such as share buybacks to financially engineer a share price boost, without actually considering the long-term fundamentals of a company. It also ignores the fact that the success of an enterprise relies on the collective effort and mutual trust between multiple constituencies. Conversely, stakeholder theory seeks to broaden the definition of 'value'. It does not clash with the profit-oriented engine of capitalism, but simply "emphasizes the social relationships between management and employees, between the company and the community, the quality of the products produced, and so on", and recognizes how combining social relationships with financial goals helps companies create a more "sustainable 'competitive advantage" (Mazzucato, 2018, p. 174). Under stakeholder capitalism, investors seeking 'value' maximization do not merely look to price-to-earnings ratio and dividend yield as benchmarks. Rather, investors are to adopt a 'sustainable' lens to screen their investments and evaluate them on the basis of financial and social returns.

According to the United Nations Principles for Responsible Investment (UN PRI), there are three ways in which investors can source and filter through investment opportunities: **norm-based screening** to evaluate investments against minimum ESG standards, **positive screening** to select outstanding ESG performers or companies with positive intentionality such as social enterprises, and **negative screening** to exclude bad ESG performers, which by default eliminate companies from certain sectors such as oil and gas, tobacco and firearms.

All three screenings intend to divest from companies who do not conform to ESG standards, but what is the opportunity cost of those exclusions? And how effective is divestment? Common index funds such as the S&P 500 cover a broad

basket of securities that will inevitably include mega-cap fossil fuel owners such as ExxonMobil, which creates a problem of 'passive investing' where index fund investors still indirectly finance these oil and gas giants. Negative screening of individual companies is not enough to undo the pollution damage by large gas companies, thus I propose a new type 'inclusive' negative screening, where bad actors can still become desirable targets for certain asset owners, particularly activist investors whose goal is to engage with the management of the company and push for better internal reforms. Correspondingly, three investment strategies are identified: ESG integration, impact investing and impact activist fund. Depending on its institutional type, different assets owners have their respective fiduciary duties, disclosure and funding requirements to adhere to, which determine their flexibility and selection of investment strategies:

Sustainable Investing Ecosystem			
Asset owners	Institutional/ retail investors, endowments, foundations, pension funds, sovereign wealth funds, insurance, private equity, venture capitals, hedge funds		Activist hedge funds
Screening	Norm-based	Positive	Inclusive-negative
Strategy	ESG Integration	Impact Investing	Impact Activist Fund
Definition	The aggregate worth of a company is valued based on based on its ESG standards, alongside traditional financial metrics	Investments made with the intention to generate positive, measurable social and environmental impact alongside a financial return. ¹	Investors target companies that generate negative externalities, instigate reforms and force target firms to change
Investment target	Normal corporations abiding by ESG standards	Businesses with an explicit intention to create <i>positive</i> impact	Underperforming companies that requires activist interventions
Fund examples	Neuberger Berman, FSN Capital Partners	Bridges Venture, Elevar Equity, Volery Capital	Engine 1, Impactive Capital, JANA Partners
Notable measurement frameworks	Sustainability Accounting Standards Board (SASB), Global Reporting Initiative (GRI), MSCI rating	Impact Reporting and Investment Standards (IRIS), Global Impact Investing Rating System (GIIRS), Social Return on Investment (SROI)	Internal auditing

3. ESG Integration: The Gatekeeper

3.1 The Mechanism of Integrating ESG Factors in Equity Valuation

All three screenings intend to divest from companies who do not conform to ESG standards, but what is the opportunity cost of those exclusions? And how effective is divestment ESG investing focuses on pushing environmental, social, and governance standards to become the norm. In a discounted cash flow model, ESG factors can impact the future cash flow (short term performance), terminal value (long term performance), discount rate (risk), and hence the overall valuation of a company. Mathematically, the first step is to integrate ESG factors into the financial forecast by adjusting the revenue and revenue growth rate on the income statement by the amount that reflects the level of ESG risks or opportunities. For instance, an automobile manufacturer can expect a decrease in sales of diesel cars and increase in sales of electrical vehicles. Mining companies that do not observe workplace safety standards may encounter lawsuits, union strikes, or fatal accidents, resulting in higher labor cost, litigation expenses and loss of productivity. On the balance sheet, one-off impairment charges and asset write-downs could decrease a company's earnings for the year. Regulatory changes also often have significant impacts on capital expenditures listed on the cash flow statement, such as forcing an electricity producer to upgrade its coal power plants to meet new environmental regulation. ESG factors could materially impact specific line items on each financial statement, which influence a company's free cash flow within the forecast period.

Secondly, the terminal value constitutes a majority (50-70%) of a company's total value. It implies an accounting assumption whereby the company will continuously grow and operate at a certain growth rate beyond the forecast period, and is the strongest lever in driving a company's enterprise value. As fossil fuel reserves diminish over time and energy consumption pattern shifts toward natural gas, a shrinking fossil fuel company with zero perpetual growth will have a minimal terminal value compared to a renewable energy company with expanding business opportunities.

Similarly, ESG risks can heighten a company's cost of capital through increased operational costs, cost of litigation, physical risk, reputational damage etc. Companies that opt out of the ESG lens could potentially face a risk of stranded assets, meaning obsolete assets that have exceeded their useful life and are prematurely forced into long term/ permanent closure. These assets either face impairment charges or are converted to liabilities on the balance sheet, and are recorded as a loss of profit on the income statement. Devaluation of coal-fired plants are particularly prevalent nowadays as countries seek to transition to a low-carbon economy. According to a Financial Times report, there is an estimated "\$900 billion cost of stranded energy assets" (Livsey, 2020). Capital-intensive coal companies are often highly leveraged, and a decrease in revenue streams could imply a greater default risk and incur a higher cost of debt. A higher discount rate translates to a lower net present value of an investment, thus a lower valuation.

ESG integration is not a new valuation method. It simply demands a more thorough due diligence, risk assessment and accurate growth projection when evaluating a company. To investors, it paints a more holistic picture of the intrinsic value of an investment opportunity that considers both its economic standing today

and its ability to general cash flow on an ongoing basis. To ground this in reality, Fidelity International reported that stocks with higher ESG rating have significantly outperformed their lower rated peers in the first nine months of 2020 during the COVID pandemic (Fidelity International, 2021). Their resilient trading performance in the midst of economic downturn is testimony to the risk mitigating potential of ESG integration, justifying pursuing sustainability as part of 'shareholder value maximization'.?

3.2 Fiduciary Duty of Pension Funds: Dissecting the Employee Retirement Income Security Act of 1974

Are returns compromised in ESG investing? The case of pension investing offers an example of a balancing act that prioritizes investments return while driving efforts in sustainable investing. The Employee Retirement Income Security Act of 1974 (ERISA) is a federal law that governs the fiduciary duty of private-sector pension funds, which declares that plan fiduciary must "plan *solely* in the interest of the participants and beneficiaries and for the *exclusive* purpose of providing benefits" to them ("Fiduciary Responsibilities", 2021). Under ERISA, fiduciary is not permitted to sacrifice economic returns to promote collateral social goals. It must diversify the plan's investments to mitigate risk of large losses, avoid conflict of interest, and discharge its duties "with the care, skill, prudence and diligence under the circumstances then prevailing" (("Fiduciary Responsibilities", 2021). Contentious debate surrounding the role of ESG factors in investment analysis has led some to question whether putting in place non-financial metrics would compromise a fiduciary's duty of loyalty.

During the Clinton administration, an 'all things being equal' test was introduced in accordance with the Interpretive Bulletin (IB) 94-01, which allows investors to consider ESG factors only as tiebreakers if two investments share the same financial profile. During the Bush administration, the Department of Labor released IB 2008-01 stating that "collateral, noneconomic factors should rarely be considered in selecting plan investments" and placed heavy documentation requirements should fiduciaries consider any collateral benefits, thus discouraging fiduciaries from considering ESG factors even in situations where they have an economic link to investments (Morgan Lewis, 2015). The proper recognition of the material financial impact of ESG factors only officially came about in Obama's introduction of the IB 2015-01. It acknowledged that "ESG factors may have a direct relationship to the economic value of a plan's investment", and hence justified the consideration of ESG factors to be "proper components of the fiduciary's primary analysis of the economic merits of competing investment choices" (Morgan Lewis, 2015). The bulletin also lowered the reporting requirements and therefore encouraged economically targeted investments (ETIs), which are known as "socially responsible investments" that "produce benefits in addition to, and apart from, the financial return on the invested assets" (Morgan Lewis, 2015).

I argue that basing investment decisions solely on pecuniary factors is not an act of prudence, but rather an act of negligence that exposes assets to stranded asset risk and systematic risk. As part of prudent decision making, fiduciaries should "inform themselves, prior to making a business decision, of all material information

reasonably available to them" (Smith v. Van Gorkom, 1985) (Cornell Law School, 2021), a disregard of ESG analysis which evidently has material links to financial statements is a blatant dismissal of a comprehensive economic analysis of investment opportunities, and thus a breach of fiduciary duty. Furthermore, Andreas Hoepner pinpoints that "due to the sheer size" of pension funds, their financial performance is "largely dependent on the performance of financial markets as a whole instead of the returns to individual assets" (Hoepnera, 2011). This acute observation provides extra incentive for pension funds to allocate resources on investments that have a positive impact on the economic stability of the community. This investment strategy, on one hand, works in favor of the financial interest of beneficiaries. On the other hand, it also improves the economic conditions of the area that the beneficiaries are located in, demonstrating an alignment between monetary and impact returns that ultimately benefits city workers. Between 2016-2020, the Trump administration rolled back some of Obama's efforts: the latest rule on 'Financial Factors in Selecting Plan Investments' (2020) labels ESG benefits as "non-pecuniary factors" and once again limits their role to merely "tiebreakers" (Thompson Hine, 2020). Nonetheless, such regulatory changes have illustrated the government's ability to forcibly align ESG standards with financial factors. Recognizing the value of ESG factors and translating that across legal frameworks will beneficially shape the investment strategies of pension funds, and if done right, this will have a tremendous impact on reforming corporate purpose.

3.3 Case Study: Pension Investing with the Office of New York City Comptroller Scott M. Stringer

Many sections of ERISA are applicable to public sector pension funds (CFA Institute, 2021), such as the New York City Pension Funds. The NYC Pension Funds is the fourth largest pension plan in the U.S. and represents a system of five independent funds that encompasses the Employees' Retirement System (NYCERS), the Teachers' Retirement System (TRS), the Police Pension Fund (POLICE), the Fire Pension Fund (FIRE), and the Board of Education Retirement System (BERS), totaling \$240 billion in assets under management ("Pension/ Investment Management", 2021). It is also a UN PRI signatory. As part of an interview with Jimmy Yan, who serves as the Special Counsel to the Deputy Comptroller for Asset Management & Chief Investment Officer at the Office of New York City Comptroller Scott M. Stringer, we explored practical ways in which ESG factors can be integrated in an economic-based investment process while achieving competitive risk-adjusted market rates of returns:

- i. Company engagement through the Boardroom Accountability Project: engage with the board & management teams of investee enterprise by voting on shareholder resolutions, filing shareholder proposals and nominating directors through 'proxy access'
 - Implement boardroom diversity by calling on companies to adopt a 'Rooney Rule' and consider women and people of color for every board seat and CEO appointments ("Boardroom Accountability Project.", 2020)

- In April 2020, NYC Pension Funds launched a 'Vote No' campaign against Lee Raymond who serves on the board of JP Morgan and has deep ties to the fossil fuel industry ("Boardroom Accountability Project.", 2020)
- ii. **ESG** integration in the due diligence process: by adhering to the five principles of good governance accountability, investor rights, aligned interest, transparency and legal action ("Corporate Governance", 2021), ESG practices and policies of managers are factored into the decision-making process of all investments
- iii. **ESG-themed investing**: set forth climate solutions goal to double investment in climate change solutions from \$2 billion to \$4 billion across all asset classes
- iv. Economically Targeted Investments (ETIs): allocate 2% of the pension assets to ETIs that are focused on providing affordable housing through anti-predatory lending strategy and construction of 42,907 affordable apartments ("Economically Targeted Investments", 2021). The latter rehabilitation program also indirectly created job opportunities within the construction industry, tying financial return to the stability of the community
- v. **Divestments** in firearm manufacturers/ retailers, private prisons, tobacco and fossil fuel reserve owners as a way to de-risk its portfolio
 - As part of its commitment to clean energy solutions, NYC Pension Funds announced in Jan 2021 a \$4 billion divestment from fossil fuels company securities to de-risk (Kerber, 2021)

In the words of Assistant Secretary of Labor Jeanne Wilson, "plan fiduciaries must put the growth and security of workers' retirement savings first" ("U.S. Department of Labor Issues Final Rule", 2021). Through ESG integration and ETI investing, the New York City pension funds ensure their continual commitment to the financial interests of city workers while engendering positive ancillary effects such as job creation, whom city workers equally benefit from. Here, the pursuit of shareholder value maximization takes on new meanings. For one, active ownership — the use of shareholder rights "to influence the activities or behavior of investee companies" — in the form of strategic engagement and proxy voting has become a popular tool for equity investors to improve long term value of companies ("A Practical Guide", 2018). Investor-corporate dialogue is a direct way to build mutual understanding between investors and investees. Investors can participate in shaping corporate strategy, assist companies to achieve ESG goals, and ultimately ensure sound governance. For instance, former ExxonMobil CEO Lee Raymond stepped down from the board of JP Morgan in December 2020 following a series of vote-out campaign (Kellaher, 2020). Secondly, divestment is a form of risk mitigation. Modern portfolio theory states that the risk of one investment should not be viewed alone, but assessed based on how it will affect the overall risk and return of an entire portfolio. To secure long term viability of funds, large endowments such as the University of California has fully divested from fossil fuels since May 2020 (Asmelash, 2020). By capitalizing on their large investor power, long time horizon and inherently diversified portfolio, pension funds are advantageously positioned to yield high margins through economies of scale and modify corporate behavior by putting in place ESG metrics as the gatekeeper to their vast investment universe.

4. Impact Investing: The Value Creator

Another critical observation by Mariana Mazzucato is the distinction between 'value creation' and 'value extraction. Modern economics focus on the latter, describing activities that "[move] around existing resources and outputs, and gaining disproportionately from the ensuing trade". On the contrary, 'value creation' refers to "ways in which different types of resources (human, physical and intangible) are established and interact to produce new goods and services" (Mazzucato, 2018, p. 16). This is what impact investing is all about.

Like any other investment strategies ranging from value to growth investing, impact investing presents a differentiated creative approach to investing. The Global Impact Investing Network (GIIN) defines impact investment as "investments made with the *intention* to generate positive, measurable social and environmental impact alongside a financial return" ("What You Need to Know about Impact Investing", 2021). It emphasizes two things: an **intentionality** to do good and the **convergence** between impact and financial returns. Investment themes span from gender lens investing, sustainable agriculture, to renewable energy, and the objective is often related to advancing the United Nations Sustainable Development Goals. While ESG investors aim to hold companies accountable to basic ESG standards, impact investors actively pursue opportunities that generate positive externalities.

4.1 Acting in Clients' 'Best Interest': The Investment Advisors Act of 1940

Similar to ERISA for pension funds, the Investment Advisors Act of 1940 ('Advisors Act') establishes the fiduciary duty of private equity fund managers, which comprises a duty of care and duty of loyalty. The Securities and Exchange Commission (SEC) released an interpretative guidance in 2019, which underscores investors' duty of care to (i) "provide advice that is in the best interest of the client", (ii) "seek best execution of a client's transactions where the adviser has the responsibility to select broker to execute client trades", and (iii) "provide advice and monitoring over the course of the relationship" (Commission Interpretation Regarding Standard of Conduct, 2019). There remains no clear regulatory framework for ESG/ impact investing, and what is classified as 'best interest' remains to be a point of contention. Nonetheless, the guideline clarifies that fiduciary duty "follows the contours of the relationship between the adviser and its client, and the adviser and its client may shape that relationship by agreement, provided that there is full and fair disclosure and informed consent" (Commission Interpretation Regarding Standard of Conduct, 2019). In other words, fiduciary duty should be examined on the basis of the agreed upon relationship between the investor and beneficiary set forth in the terms and conditions of offering materials and disclosure agreement.

It does not assume that impact investing does or does not automatically conform with fiduciary duties, but asserts that "the burden of ensuring that an [impact] investment strategy is consistent with an adviser's fiduciary duties largely falls to each

adviser when designing and offering such strategies to clients" ("ESG Investing: Considerations for U.S. Registered Investment Advisers", 2020). Despite its ambiguous nature, the term "best interest" actually provides a degree of flexibility for investors to design its own investment strategy. Should investors wish to pursue impact investing as means to achieve clients' investment objectives, it will be up to advisors to memorialize in the advisory agreement and offering documents "what advisors understand by [impact] strategy", "the specific contours of how [impact] factors are utilized when making investment decisions" and disclose any material ESG impacts in future reporting ("ESG Investing: Considerations for U.S. Registered Investment Advisers", 2020).

Furthermore, a prevailing misconception of impact investing is that it only produces below market returns and therefore breaches the Advisors Act. However, GIIN's Annual Impact Investor Survey 2020 found 67% of the respondents targeting risk-adjusted market rate of returns ("Annual Impact Investor Survey 2020", 2020). In fact, a growing body of academic literature has shown that there is no apparent tradeoff between impact and financial return. Cambridge Associates collaborated with GIIN in 2015 to publish the 'Impact Investing Benchmark' and found that impact investment funds that raised under \$100 million had produced a 9.5% internal rate of return ("Introducing the Impact Investing Benchmark", 2015, 14), not dissimilar to the annual average return of the S&P 500. Adam Schor presented a successful case on impact investing for endowments by integrating it as part of a fair-return strategy for a university (Schor, 2020, pp. 24-43). Elevar Equity, founded by Maya Chorengel who is also the Co-Managing Partner of TPG Rise Fund, adopts a "commercial approach to impact investing" in low-income communities while maintaining a "benchmark market performance", and is one of the most successful private equity firms to establish a "direct correlation between high impact and returns" (About Elevar", 2020). Bridges Venture, founded by the father of impact investing Ronald Cohen, has raised over £1 billion external capital and likewise is a thematic investor that has consistently delivered "attractive returns" while "[generating] better social and environmental outcomes" ("Annual Report 2018-2019", 2018, p. 8). As an example, despite sluggish activity in the property market in 2019, its SME workplace business 'Flexspace' saw a 70% boost in net rental income in order to meet the demands of industrial property ("Annual Report 2018-2019", 2018, p. 30). In other words, profit-maximizing investors can also be socially motivated.

One reason why impact investment may be financially profitable is the thematic growth underlying impact industries. Impact themes often focus on categories with expanding business opportunities and a guaranteed consumer demand, such as renewable energy, water resource and waste management systems. Sustainable investment practice is by virtue forward looking and thus automatically eradicates the stranded asset risk. As one door closes, another door opens. For instance, while the coal pipeline has tumbled nearly 70% between 2015-2018 (Shearer et al., 2019, p. 5), renewable energy has increased 100% between 2000-2018 to become the fastest-growing energy source in the U.S. ("Renewable Energy", 2020). To put these growth rates into context, the market is forecasted to grow at a compound annual growth rate of over 6% in 2020-2015 ("United States Renewable Energy Market Report 2020", 2020). By riding on the tailwinds of macro trends, such as the transition to renewable energy, this materially translates to increased

revenue streams. As with ESG integration in equity valuation, investors can safely augment the perpetual growth rate of sustainable assets when calculating terminal value as they are deemed to be "long lasting". The discount rate effectively captures the risk factor of company, which can be used to reward impact investments with low volatility and penalize ESG defectors with uncertain future. Since renewable energy assets are not subject to the volatility of oil price, this gives them access to a lower cost of capital and thus a higher valuation. One of the most exhaustive studies was conducted by Gunnar Friede, in which he pooled together over 2200 individual studies to show that "ESG investing is empirically very well founded", for "90% of studies find a nonnegative ESG—corporate-financial-performance relation", meaning that ESG/ impact investing has neutral to positive impact on financial returns (Friede et al., 2015, pp. 210-233). There is plenty of potential for investors to monetize non-pecuniary utility, and impact investing is the space where impact and financial return intersect.

4.2 'Impact' Mapping: The Theory of Change

Impact measurements can be broadly categorized into absolute versus relative methodologies. Absolute measurements refer to examples such as the B Impact Measurement (B-Corp Questionnaire), UN Reporting Guidelines and Score Cards, while relative measurements include Buffet's 'Impact Rate of Return', Social Return on Investment, IRIS/ GIIRS ratings, and the Additionality concept. Depending on the nature of impact outcome, it is up to investors' discretion to determine which approach to adopt. Nevertheless, as a general rule of thumb, every impact investor should be able to complete a 'Theory of Change' exercise so as to explicitly demonstrate how change is materialized through investments.

The Theory of Change as issued by UNICEF (also known as the Impact Value Chain/ Logic Model) outlines a step-by-step guide of tracking how inputs lead to intended outcomes. I have chosen this for several reasons: firstly, regardless of the project, participants or impact outcome, the Theory is universally applicable to any investment at any stage of the development. Secondly, the Theory's methodological approach to enacting change reinforces the clear intentionality of impact investments. Thirdly, impact management should be an iterative process to ensure optimal impact. By documenting every step, the Theory provides actionable insights for investors and managers to identify the data that needs to be collected, monitor and adjust their interventions (inputs/ activities), and ultimately form a feedback loop to certify that the intended results are achieved. Fourthly, the meticulous breakdown also requires some degree of measurable data as 'output', which forms the basis of impact reporting and ensures that return is quantifiable. The Theory is as follows: Input \rightarrow Activities \rightarrow Output \rightarrow Outcome \rightarrow Impact (Rogers, 2014). Input refers to the capital, human resource and any assets needed for the investment. Activities are the actions occurred to produce value, such as distributing solar panels, lowering healthcare for low-income communities or hiring teachers. Activities produce output, which can be quantifiably and qualitatively assessed by using predetermined, industry-specific Key Performance Indicators. Outcome refers to the larger distributive effect made on the community. Impact denotes the funds' overall influence in the community, including both financial and impact return. From start to finish, the Theory of Change articulates a coherent narrative that links investors' contribution to impact creation, enforcing accountability and consistency throughout the process while evincing the 'value-creating' potential of impact investing.

4.3 Case Study: Volery Capital Private Equity Impact Fund

The traditional business model of private equity (PE) involves acquiring a company through a leveraged buyout, performing operational enhancements, then assuming an exit after 3-5 years at a higher price to realize a return on investment. PE firms are often structured as a limited partnership agreement between limited partners (LPs) who commit the capital and general partners (GPs) who manage the portfolio and make investment decisions. The two-twenty fee structure, in which GPs earn 2% of the investment capital as management fee and 20% carried interest should investment returns outperform a predefined hurdle, provides extra incentive for GPs to optimize investment outcomes. In this light, how can investors optimize the PE fund structure to execute impact missions in such a way that is congruent with fiduciary duty? How can impact strategy operate within this judicial framework of the Advisors Act?

Recognized as one of the ImpactAssets 50, Volery Capital provides an exemplary model of a growth-oriented private equity that simultaneously yields "superior economic and impact returns" ("Strategy", 2021). Grounded in the belief that impact propositions are accretive to financial returns, its investments seek to address climate change and promote inclusive economic growth. Volery's investment strategy features an aligned interest between impact-oriented GPs and mainstream LPs in order to achieve a double bottom line impact, its success case can be extrapolated to a more general template for other PE investors to learn as follows:

- i. **Sourcing & due diligence**: employ a rigorous due diligence process when underwriting cash flows to *holistically* evaluate company managers based on their orientation to impact, which is anchored in the in-house 'ALPHA' framework
 - Approach to impact: How does a company manager assess ESG risks and opportunities? Set goals and action plans around ESG considerations? Is the impact outcome measurable?
 - Leadership: What is the level of ESG expertise on the team? How committed is the senior management team to ESG considerations? How does the team engage with stakeholders? Is there training at the junior level?
 - Presentation: How, and how often, does the firm measure and report impact and financial return to stakeholders? Are reports standardized? How does the manager forecast expected outcomes around ESG considerations?
 - Hypothesis to Impact: Is the manager articulating a relevant thesis for addressing a significant challenge? Is the firm's action plan accretive to investment thesis? Does the manager consider both negative and positive externalities?
 - Application of Values Within the Firm: Does the firm "practice what it preaches"? Are quality benefits and compensation provided to employees? Inclusive work culture? Does the firm engage with the broader community in which it is based in?

- Another important aspect of the due diligence process is examining financial return, specifically to identify and underwrite the alignment between economic and impact

- ii. **Value-add strategies**: As an example, Volery provides capital and strategic support to scale and institutionalize portfolio companies ("Strategy", 2021)
 - Provide technical assistance and capacity building: for instance, help firm to recruit and retain talent, implement state-of-the-art approach to risk and compliance practices, scale and enhance financial profitability, strategize product development and supply chain efficiency
 - Assist in capital raising: deploy fundraising strategies and provide investee with networks to connect to LPs and consultants
 - Strengthen ESG reporting and integrate ESG considerations in firm and product development
 - Marketing and investor relations: help investee articulate their differentiated strategy, tell impact stories effectively and connect to LPs

iii. Optimize exit opportunities:

- Despite a short holding period (3-5 years), this does not clash with the long-term orientation of sustainable investing due to the ability of PE investor to optimize value on exit. Should value-add strategies be successful in materially increasing the valuation of portfolio company, PE investor could exit at a price higher than the buy-in cost and realize a return

Company managers that demonstrate impact stewardship and superior execution ability are attractive targets for PE impact investors, and having a robust due diligence framework to select high performing managers is crucial for investors to secure alpha returns and mainstream impact. PE firms are extremely well poised to achieve competitive returns. For one, through active engagement protocols and value add strategies, PE investors can directly shape portfolio companies' strategies and work with companies to help them meet the intended impact ("A Guide for Impact Investment Fund Managers", 2021). Secondly, the composition of revenue for the GP changes over the life of a fund and grows nonlinearly should the fund outperforms, therefore motivating GP to strive for attractive returns. During the early years of fund formation and deal sourcing, GPs' main source of income is the management fee (2% of the committed capital). As capital is deployed, the management fee decreases and GP's performance fee becomes contingent upon the fund's return. As fund matures, LPs would first recover all of their invested capital. If it continues to perform above hurdle rates, a disproportionately large share of investment returns will then be allocated to GP according to a distribution waterfall schedule. The 20% of excess returns gives PE investors strong incentives to make profits and prove the economic case that financial returns are not sacrificed for the sake of impact. PE firms are thus one of the most influential actors to catalyze the development of the impact investment space.

5. Impact Activist Funds: The Reformer

It is intuitive to see the 'value' of ESG and impact investing, but what is the 'value' in investing in ESG laggards? What are the value maximization opportunities

of targeting ESG under-performers? And what lessons can we learn from traditional shareholder activism by hedge funds?

5.1 'Impact' Activist Fund versus Traditional Hedge Fund Activism

The term 'Impact' Activist Fund is a spin-off from 'hedge fund activism'. Traditionally, activist hedge funds would acquire a huge stake in a public company's share and try to obtain seats on the company's board in order to effect significant change within the company. Activists may instigate a series of operational, financial and governance reforms, with the ultimate aim of maximizing shareholder value. As observed by Alon Brav, target firms are typically "cash-cows with low growth prospects" (Brav et al., 2010, p. 4). They are not in financial distress, rather, they are small, undervalued firms with "sound operating cash flow but low sales growth rates, leverage and dividend payout ratios" (Brav et al., 2010, p. 4). They present opportunities for hedge funds to cut cost, increase leverage, raise margins and earn a return on exit. Depending on the target, activists would initiate clear, though not mutually exclusive, objectives for intervention. They can be broadly put into five categories: "general undervaluation/maximize shareholder value," "capital structure," "business strategy," "sale of target company," and "governance" (Brav et al., 2010, p. 12).

The concept of an 'impact' activist fund is to capture the 'activist' spirit and 'profit' incentive of hedge funds and make them corporate mission reformers. Compared to shareholder advocacy by ESG investors, impact activism represents a more aggressive form of intervention. For target selection, key emphasis is put on a firm's ESG standards (or its lack of). Any firms scoring a low ESG ranking are potential targets for impact activist funds. Be it firms adopting bad labour practices, creating excessive pollution or simply lacking boardroom diversity, it is believed that firms that do not value externality will experience detrimental effects on their stock price over time. Henceforth, value maximization opportunities come in the form of improved ESG ratings, whereby sophisticated activist investors intercept corporate behavior and implement reforms to enhance companies' ESG standing, which would then translate to an increase in share price.

Yet there are few key differences. For one, while activist hedge funds often target financially underperforming companies and work towards improving profitability and operational efficiency, impact funds seek to rectify malpractices of 'bad-behaving' corrupted firms and reorient their business models to become sustainable *and* profitable, striving for a double bottom line. Traditional targets are often small, which allows hedge funds to "accumulate a significant ownership with a given amount of capital" (Brav et al., 2010, p. 4). Conversely, impact activists have no fear of pursing mega-cap public companies as exhibited in the Engine One case study below. In fact, some investors believe that targeting a leader in its field would be a great way to publicize the activist campaign and illustrate to other peers within the sector on how to drive long term positive results.

Secondly, there has been considerable debate about the long-term impact of hedge fund activism on target companies. While most investors share the view that activist targets experience an initial spike in share price, there is no general consensus

on the long-term effects following adversarial interventions. Mark Desjardine argues that activist targets are victims of "pump and dump scheme", whose value "drops in later years relative to similar non-targeted companies" and would hamper "socially responsible efforts of companies" ("Activist Hedge Funds: Good for Some, Bad for Others?", 2021). Alon Brav's empirical research indicates that "hedge fund activism has been successful in improving operating performance, increasing payouts, and reducing agency costs", and is "associated with an almost immediate increase in payout and heightened discipline of the CEO" (Brav et al., 2010, p. 40). This controversy however is not applicable to impact activist funds. The purpose of an impact activist intervention is not a short-term flip on share price, but to tackle the fundamentals of a company that drives better value for shareholders and stakeholders. Incorporating the 'sustainability' component inherently guarantees long term value, and activist protocols will closely monitor target CEO's code of behavior. Since hedge funds share the same two-twenty compensation structure as PE firms and often earn 20% of excess return, they have the financial incentive to reconcile impact outcomes with profit. As they exit their investments at a higher value, activist investors validate the economic case that there is a math-based positive correlation between greater impact and higher financial return.

5.2 Activist Tactics & Impact Reforms

Hedge funds are lightly regulated investment vehicles, and therefore uniquely positioned to act as corporate governance police officers than any other institutional investors. Compared to mutual funds which need to maintain a diversified portfolio as mandated in the Investment Company Act of 1940, the agile organizational structure of hedge funds allows them to "hold highly concentrated positions" in target firms, use leverage and derivative securities to "extend their reach", and launch a successful campaign (Brav, 2008, p. 1730). Unlike pension funds whose fiduciary duty is bound by the ERISA, hedge funds suffer from fewer conflicts of interest "because they are not beholden to the management of the firms whose shares they hold" (Brav et al., 2008, p. 1730), and face less scrutiny when it comes to fulfilling investors obligations. Moreover, hedge funds often have "lock-up provisions that restrict the investors from withdrawing their principal" for a minimum of two years or longer, thereby granting investors the flexibility to pursue "intermediate and long-term activist objectives" (Brav et al., 2010, p. 3). These advantages give hedge funds significant influence over target firms' management.

Consequently, activist hedge funds are known for their ability to reshape the boardroom through proxy fights, long slates (i.e. when the activist nominates Directors to replace 50%+ of the incumbent board), or using litigation to challenge boardroom decisions. There are six main tactic categories, the level of aggression ranges from communicating with the management regularly to enhance shareholder value, to seeking board representation without conflict or a proxy content, making formal shareholders proposal or public criticism, waging a proxy war in order to gain board representation or sue existing management, launching a proxy war to replace the board, and ultimately suing a company in a take-over bid (Brav et al., 2010, p. 15). Depending on the target's degree of openness, level of negative externality and susceptibility to change, impact activist funds can adopt similar methods of

approaching target firms. Furthermore, impact reforms will be systematically implemented in the target firm to ensure minimum adherence to ESG considerations, while capitalizing on opportunities for operational efficiency and financial improvement. By deploying a team of highly incentivized and experienced managers to enact changes within the target, activist investors ensure the target is meeting the threshold of the sustainable corporate purpose. During and post-investment, the firm can be valued by its (i) short term profitability (ii) long term post-investment profitability and (iii) ESG standards.

5.3 Case Study: Reenergizing ExxonMobil with Engine 1

Shareholder activism has met with a recent surge in popularity as investors seek to address their ESG concerns in a more active manner. According to Deloitte, the number of campaigns targeting large-cap companies (market capitalization of \$10 billion or more) rose by a compound annual growth rate of 4% between 2014—2018 ("Be Your Own Activist: Developing an Activist Mindset", 2019). As hedge funds amass greater capital and share ownership, large corporations are increasingly vulnerable to a "knock out in proxy contest" ("Be Your Own Activist: Developing an Activist Mindset", 2019).

In this light, we can turn to the case of Engine No. 1, launched by hedge fund veteran Chris James in December 2020 with the motto to "engage as active owners" and align the "interests of Main Street and Wall Street" ("A New Way of Seeing Value", 2021). It has \$250 million internal capital, its first activist campaign is an acquisition of a \$40 million stake in the US oil and gas giant ExxonMobil. An interview with Jennifer Grancio, Executive at Engine No. 1 has shed light on the mechanism of activist investing. Firstly, the firm sources its targets using two criteria (i) pursing the market leader to make the loudest voice (ii) valuing negative externality in the absolute dollar amount, which often means targeting bigger companies have a bigger total impact. In determining intervention objectives, Engine No. 1 concentrates on addressing and quantifying the biggest impacts that most drive share price over time. ExxonMobil is a classic example in which it is currently a cash cow oil giant, but its performance is lagging behind. The existing management teams believe that environmental damage does not have material impacts on the company's bottom line, though its underperformance compared to the S&P 500 and its proxy peers in recent years has shown otherwise. In response, Engine No. 1 proposed the following solutions ("The Case for Change", 2021):

- Refresh the board with highly qualified, climate focused directors: run a proxy fight seeking to overhaul business by installing four directors
- ii. Improve capital allocation decision and cut unproductive capital expenditure such as lowering the required break-even oil and gas price
- iii. Implement a strategic plan for sustainable term value creation, such as invest in clean energy, achieve emission reduce targets etc.
- iv. Realign management compensation to ensure better shareholder value creation

Similar to impact investments, activist fund performance should be **quantifiable**, **industry-specific** and **comparable**. The firm hires an in-house data scientist team to substantiate, through data modelling, its investment thesis that there

is a negative correlation between negative externality and future value of the company. In particular this is captured in the valuation methods, be it in DCF or trading multiples in public company comparables.

- i. Similar to integrating ESG factors when creating a DCF, unsustainable companies are given a higher discount factor which lead to a lower future value of such companies. ExxonMobil have close to zero terminal value
- ii. Engine No. 1 adopts the method of trading comparables to benchmark ExxonMobil against its peers, but emphasis is put on expanding a traditionally narrow universe of comparable companies to highlight what the target is "missing". This means comparing ExxonMobil to its *broad* energy peers. Instead of comparing ExxonMobil to other oil and gas giants such as Chevron or ConocoPhillips, the universe should also include renewable energy companies such as NextEra Energy to illustrate a stark difference in the long-term performance in those two sets of companies. Through the method of benchmarking and capturing market data, this shows that companies who invest in clean energy are earning a higher margin as opposed to forgoing a 'commercial rate of return'.

The singular focus on quarterly and annual returns has misled managers to undervalue the environmental damage. ExxonMobil's Return on Capital Employed (ROCE) for Upstream Projects has plunged from an average of 35% in 2001-10 to 6% in recent years; it is currently experiencing its highest debt level in history, its debt being downgraded twice by S&P in 2016 ("The Case for Change", 2021). Evidently, bad corporate behavior has material impacts that can be captured in the valuation exercise — its high cost of debt means a higher discount rate, its decreasing ROCE leads to minimal terminal value, resulting in trading multiples lower than industry peers. In this case of significant undervaluation, impact activism is a productive force of good that improves shareholder value in the traditional economic sense as well as social return sense.

6. Roadblocks to Sustainable Investing

6.1 The Lack of Standardized Framework for Impact Measurement

Sustainable investing is not without its challenges. SEC Commissioner Hester M. Peirce expressed her skepticism towards ESG investing in her 2019 remarks before the American Enterprise Institute, "E, S, and G tend to travel in a pack these days, which makes it hard to establish reliable metrics for affixing scarlet letters. Governance at least offers some concrete markers, such as whether there are different share classes with different voting rights...In comparison to governance, the environmental and social categories tend to be much more nebulous... Not only is it difficult to define what should be included in ESG, but, once you do, it is difficult to figure out how to measure success or failure" (Peirce, 2019). Indeed, the lack of standardized framework for impact measurement is one of the biggest defenses against impact investing.

But even in traditional investing, the discounted cash flow model (DCF) is not a one-size-fits-all valuation method. Airlines, oil and gas companies, financial institutions,

real estate companies and start-ups all require industry-specific valuation methods to determine their free cash flow. The formula of enterprise value is as follow: $Enterprise\ value\ (EV) = equity\ value\ +\ debt\ +\ minority\ interest\ +\ preferred\ shares\ -\ cash$

Yet banks differ from normal companies in many ways. They have a huge cash reserve which diminishes the enterprise value. They do not reinvest debt into their business, but rather uses it to create products (loans) and earn revenue in the form of interests. Instead, banks use a dividend discount model (DDM) to find their annual dividends payout and arrive at an equity value. Similarly, a DCF may work well for a retail company with predictable cash flows, but not for an exploration & production company in the oil and gas sector, which is exposed to cyclical commodity prices and huge capital expenditures. As opposed to using a DCF, mining companies rely on energy reserves as value drivers to find their net asset value until natural resources run out. Lastly, common trading multiples such as EV/revenue, EV/EBITDA (earnings before interest, tax, depreciation, amortization) may not be applicable to loss-making technology start-ups or pharmaceutical companies with massive research and development cost.

It is standard practice for investment analysts to devise industry-specific multiples such as EV/ page views for internet companies, EV/ EBITDAX (X for exploration cost) for energy companies, Price/FFO (funds from operations) for real estate investment trusts to truly gauge their profitability. By the same logic, industry specification represents the basic requirement to measure impact returns. 'Impact' is a blanket term encompassing environmental and social outcomes, but just as one would not compare the revenue generated by a start-up with that of a mega-cap energy giant, impact data is more meaningful when it is measured relative to its peers and comparable within an industry rather than across. Responding to investors who believe that 'impact' is inherently subjective (such as 'lives improved'), that is only true to a certain extent. In cases such as carbon accounting, monitoring the number of jobs created or school enrollment rates, rigorous data collection protocols can be implemented to extract quantifiable data. The impact investing field has witnessed positive developments in recent years, with notable frameworks such as the Impact Reporting and Investment Standards (IRIS) and Global Impact Investment Rating System (GIIRS) being vastly adopted by impact investors.

6.2 When Doing Good is Not Profitable

Every investment entails a certain potential for loss, this essay does not pretend that all investments generating positive social return will automatically become profitable. The California Public Employees' Retirement System One way (CalPERS) started a clean energy fund in 2007 and has so far reported losses, with an annualized negative return of -9.7%. So how do we minimize risks in impact investments without deterring capital from the private sector?

One mechanism to overcome commercial losses is through blended finance, which is defined as the "strategic use of development finance and philanthropic funds to mobilize private capital flows to emerging & frontier markets". It refers to the commingling of philanthropic and commercial money, whereby social investors (e.g. private foundations, nonprofits) invest alongside private investors (e.g.

commercial private equity, venture capital) to help de-risk commercial money while maximizing impact. Blended finance can be structured in many ways to deliver tailored financing solutions. Oftentimes, philanthropic investors act as a guarantee / risk cushion to insure the losses should a transaction go wrong. Philanthropic investors may deploy concessionary capital to subsidize return of the investment fund, so that commercial investors are repaid first in the repayment structure and earn a market-rate return. Public donors can also provide grant-funded technical assistance platforms to deliver strategic coordination in the investment process. As an example, the US Development Finance Corporation engages with private investors to offer political and security insurance and encourage funding in developing countries. Terra Silva is a \$90 million collaborative impact investing fund launched by the David and Lucile Packard Foundation and MacArthur Foundation with a focus on climate change and sustainable forestry. It deemed itself as a form of "catalytic capital" that pools together "patient, risk tolerant, concessionary, flexible" capital with private financing "in order to unlock impact and additional investment that would not otherwise be possible", and help "build market infrastructure for climate-smart forestry". By combining grant and investment capital synergistically, this accelerates a greater flow of capital to address the SDG funding gap, creates more investment opportunities and provides higher risk protection for commercial investors entering the impact investing space.

6.3 Sustainable Investing: A Complex Reality

Sustainable investing presents a complex reality, and there is still a long way to go before this industry reaches consolidation. For one, the lack of SEC regulatory guidelines on ESG investing makes it hard for investors to overcome structural biases on their own. Without a clear legal framework, how should investors adjudicate an investment that yields successful impact returns, but at the expense of financial loss? What is the newly defined fiduciary duty of ESG investors? Will it consist of a duty of care, duty of loyalty, and duty of mission? How do we avoid dating accounting pitfalls and manipulations in impact measurement? Sustainable investing requires a long term orientation, yet the concept 'time value of money' espouses that money today worth more than money tomorrow, and locking up capital for a prolonged time frame would result in a lower internal rate of return (IRR) of an investment. What are the opportunity costs that investors should consider when allocating capital? These are the areas that merit further research.

As we look back at the history of how various investment vehicles were created and popularized in different eras: hedge funds in the 50s, venture capitals in the 70s, private equities in the 80s, what will be the new investment model for 2020 and onwards? Financial innovation is a continuous journey of developing tools to meet the needs of the market. These investment vehicles have undergone major changes before reaching their level of sophistication today, so it is only normal for any emerging type of investment model to face the initial wave of market skepticism and regulatory hurdles. The key here is to turn theory into practice — it is more important to make *something* happen than designing the perfect investment strategy. A great push for sustainability has met with a great deal of empty slogans and 'impact washing'. But as Beate Sjåfjell echoed, "we must avoid merely replacing the

'shareholder' in shareholder primacy with 'stakeholder'", for "a mere canvassing of 'stakeholder interests' without practical commitment is inadequate to address climate challenges and achieve UN Sustainable Development Goals (Sjåfjell et al., 2020). We need to *experience* the problem before we can come up practical solutions, theorization must lead to execution in order to effect changes in the real world.

7. A Future Toward Market Sustainability

Shareholder value maximization is a systemically entrenched notion that requires the collective effort of corporations, investors, creditors and regulators to re-orient corporate purpose to be something more meaningful and sustainable. This paper chooses to focus on the investors' perspective in implementing ESG integration, impact investing, and impact activist funds for two reasons. Firstly, depending on country, state and regime type, it may take months even years for regulators to pass legislative reforms, and sustainability is often not politicians' first priority. Sustainable investing is to some degree self-driven by investors themselves who, as long as they see an alignment between impact and financial return, can implement strategies the next day. The legitimacy and financial prowess of the investment community also mean it has a great, if not greatest, sway over investee companies. A divestment by an investor is a humiliating denouncement of the ESG credentials of the target company and could seriously impair the target's ability to secure financing in the future. Investors can therefore assume the roles of gatekeeper, value creator and reformer to compel corporations to integrate ESG into their corporate mission. Secondly, as Henry Kissinger asserts, "order must be cultivated, it cannot be imposed". The economic pulse of a reimagined capitalism plays to the heart of human incentive, the profit-oriented approach to sustainable investing represents a scalable solution to achieve a sustainable future. As demonstrated throughout the paper, ESG integration works in favor of beneficiaries' interest and could materially enhance the valuation and reduce risk of a portfolio, impact investing as a commercial activity can be performed without a necessary deployment of concessionary capital, and value maximization opportunities lie within investing in ESG underperformers by impact activist funds.

On a global level, what is the least that *all* investors, regardless of size and type, can do to align themselves with the new corporate mission? Among the three strategies outlined above, which is the most effective way of investing sustainably while pursuing 'stakeholder' value maximization? Let's take a step back: the investment industry today is highly concentrated, with the top five asset managers holding 22.7% of externally managed assets, and the top 10 holding 34% (Eccles & Klimenko, 2019). These universal owners with a global stock portfolio can no longer diversify away system-level risks and hedge against the global economy, "they have become too big to let the planet fail" (Eccles & Klimenko, 2019). So what investors should focus on, in fact, is to improve the market as a whole and ensure *system* sustainability by means of securing financial return. In other words, all investors should adopt an ESG lens in all investment decision-making across all asset class. Hiromichi Mizuno, the Chief Investment Officer of the world's largest pension fund Japan's Government Pension Investment Fund (GPIF) with roughly \$1.55 trillion in assets under management, epitomizes this approach. He noted, "we are a classic

universal owner with intergenerational responsibilities and thus have an inherently long-term view" (Eccles & Klimenko, 2019). He therefore championed a new business model of GPIF with an ESG focus: it emphasizes stewardship responsibility by becoming highly selective in picking which asset managers to invest in, and actively engages with portfolio companies through proxy voting and shareholder resolutions. By enforcing "best practices among investors and companies", Mizuno aims to capitalize on the long term investment objective and huge asset pool of his pension fund to "affect the system, including system sustainability" (Morrow, 2018). His approach is substantiated by a groundbreaking research by George Serafeim from Harvard Business School, who provides concrete evidence that "firms with good performance on material sustainability issues significantly outperform firms with poor performance on these issues, suggesting that investments in sustainability issues are shareholder-value enhancing" (Serafeim et al., 2015). The astonish growth in passive investing has surpassed that of actively managed funds in recent years (Gittelsohn, 2019). With more passive investors pouring their money into market index funds (e.g. S&P 500, Dow Jones Industrial Average), they have great incentive to see the market do well and have their portfolio companies address any material ESG concerns. Corporate engagement is therefore a reliable tool for managers to invest sustainably and improve portfolio performance. Ultimately, ESG integration should be the collective responsibility of both institutional and retail investors to safeguard market sustainability.

Oscar Wilde famously noted, a cynic is "a man who knows the price of everything and the value of nothing", denoting a decoupling between 'price' and 'value'. Indeed, shareholder 'value' should not be limited to the provincial definition of share 'price'. Stakeholder capitalism does not imply a redistribution of resources that forgo shareholder interests, but rather relies on a holistic understanding of what 'value' compromises in order to a win-win situation. Sustainable investors are free to pursue 'shareholder value maximization' while keeping the interests of other stakeholders as heart. Having demonstrated the economic case that corporate sustainability could materially maximize shareholder value, this fortifies the responsibility of investors to integrate ESG standards in investment decisions as part of their basic fiduciary duty. Institutionalization of impact investments will ultimately turbocharge capital flows towards important outcomes. Finally, sustainable investment should not be a sleeve in a portfolio, but a lens on all asset classes that shapes acquisition target selections and capital allocation decisions. By tapping into the investors' desire for profit, sustainable investing should simply be the new way of doing business.

To summarize, with a renewed definition of 'shareholder value maximization', I have a listed a few indispensable components that all institutional investors should incorporate in their sustainable investment strategy:

- i. Become a signatory of the UN Principles for Responsible Investment to demonstrate an official commitment to sustainability and keep investors accountable through annual PRI transparency reporting
- ii. Consider ESG factors in the asset management selection, investment screening and due diligence process

- iii. Align impact performance with financial return. Specifically, to acknowledge that ESG risks and opportunities pose a material financial impact in equity/ fixed income valuation, and integrate them in the analyses
- iv. Adopt impact measurements that are (i) **quantifiable**: how is the company's bottom line impacted, (ii) **comparable**: how is the company performing relative to its peers, (iii) **industry-specific**
- v. Establish an ESG Risk Management team to publish transparent, standardized sustainability disclosure, which are then independently reviewed by the board or external agencies

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