Reason, Rationality and Fiduciary Duty

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The concept of fiduciary duty sits at the confluence of two powerful streams of Western intellectual thought, the legal and the economic: the legal because fiduciaries are managing the assets of others whose interests the law seeks to protect; the economic because fiduciaries assume the role of investors in the marketplace in managing these assets.

These legal and economic traditions pull fiduciaries in different and sometimes conflicting directions because their standards of appropriate behavior differ. Lawyers often use the standard of "reasonable" behavior, while economists frequently presuppose that people act "rationally." Reasonable behavior, which finds notable expression in tort law, supposes that one takes into account the effect of one's actions on others. The reasonable is by extension concerned with the protection or enhancement of the common good. Rational behavior, which is axiomatic to many neoclassical economists, is essentially self-interested and seeks to identify the most efficient means of achieving one's personal ends. The rational is primarily concerned with the attainment of private goals.

This paper argues that since the last decades of the 20th century the discipline of modern finance, under the influence of Modern Portfolio Theory, has directed fiduciaries to act rationally—that is, in the sole financial interests of their funds—downplaying the effects of their investments on others. This approach has deemphasized a previous interpretation of fiduciary duty that drew on a conception of prudence characterized by wisdom, discretion and intelligence—one that

accounted to a greater degree for the relationship between one's investments and their effects on others in the real world. As an increasing number of institutional investors have adopted the self-interested, rational approach, its limitations and inadequacies have become increasingly apparent. In particular, the rational investor does not possess the capabilities of reason to assess the objective well-being of beneficiaries, recognize fundamental sources of investment reward in the real economy, or fulfill the fiduciary obligation to allocate benefits impartially between current and future generations.

One indication of the increasing discomfort among institutional investors with this overly rational approach is reflected in their growing interest in the practice of sustainable and responsible investment. This practice leads fiduciaries to manage their funds in ways that are reasonable as well as rational—that is to say, that take the interests of others as embodied in the real world and the economy, as well as themselves as embodied in their funds, into account.

Reason and rationality can work in a complementary fashion to make investment long-term in its perspective and beneficial to society and the real economy as well as to specific funds or portfolios. Determining how to accomplish this challenging task is part of the obligation of fiduciaries as they seek to realize the full potential of the investment assets entrusted to their care.

Part One: Reasonable Investment and Fiduciary Duty

Distinction between Reason and Rationality

Although the terms reason and rationality can be used interchangeably, this paper draws on distinctions made by 20th century thinkers such as John Rawls,

Amartya Sen, and Jon Elster. Rawls, for example, points out that we often make a common sense distinction between the concepts of reason and rationality when we make remarks such as "Their proposal was perfectly rational given their strong bargaining position, but it was nevertheless highly unreasonable, even outrageous." [1]

As Rawls explains, persons can be said to act reasonably when "they are ready to propose principles and standards as fair terms of cooperation and to abide with them willingly, given the assurance that others will likewise do so."[2] As a reasonable person, one understands one's decisions and actions *with reference to others* in society and to agreed-upon principles and standards. This conception of reason, familiar in tort law, is also often associated with certain traditions of moral philosophy and bound up with the concepts of fairness, justice and the public good.

Although rational persons act as if "every interest is an interest of a self," that "self" need not be narrowly defined. [3] One's self interest can encompass that of one's family, community or nation. One's self-interest does not depend, however, on a broadly shared idea of mutually agreed upon standards and principles. Rational behavior is based on the efficient achievement of one's self-interested goals *without reference to others*. This conception of rationality is often associated with utilitarian philosophies and bound up with concepts of efficiency, maximization of usefulness, and private welfare or happiness.

The distinction between reasonable behavior as a publicly oriented process that takes into account the opinions and expectations of others and rational behavior as a self-interested, efficient maximization of personal interests is used for this discussion of fiduciary duties.

The Reasonable, the Rational, and Trends in Interpretation of Fiduciary Duty

The reasonable man is a standard frequently invoked in the law, particularly tort law. *Black's Dictionary of Law* defines a reasonable person as:

> A hypothetical person used as a legal standard, esp. to determine whether someone acted with negligence: specif., a person who exercises the degree of attention, knowledge, intelligence, and judgment *that society requires of its members* for the protection of their own and others' interests. [4] [emphasis added]

Reasonableness here is defined in terms of the interests of oneself in relationship to society's interests and the interests of others and supposes that individuals use "judgment" in order to understand what society requires.

The courts and regulators in the United States have applied the language of reasonableness to financial matters and fiduciary issues over the years. In the seminal *Harvard College v. Amory* ruling on the duties of fiduciaries in 1830, the courts instructed trustees "to observe how men of prudence, discretion and intelligence manage their own affairs, not in regard to speculation, but in regard to the permanent disposition of their funds, considering the probable income, as well as the probable safety of the capital to be invested." [5]

Trustees are instructed to observe the prudent behavior of *others* and to distinguish speculation, which runs contrary to the fiduciary duty of care, from "the permanent disposition" of funds—that is, something akin to what we might call today long-term investments or preservation of capital.

In a more contemporary context, the Securities and Exchange Commission's 1999 Staff Accounting Bulletin 99 on materiality asserts that "A matter is 'material' if there is a substantial likelihood that *a reasonable person* would consider it

important."[6] [emphasis added] Similarly, in its 2010 interpretive guidance on what information corporations should disclose to investors on the materiality of climate change to their operations, the Commission noted that "Information is material if there is a substantial likelihood that a *reasonable i*nvestor would consider it important in deciding how to vote or make an investment decision . . . ." [emphasis added] The Commission's argument here also drew on the similar definition of materiality and the reasonable investor set forth by the U.S. Supreme Court in *TSC Industries v. Northway, Inc.*[7]

During much of the 20th century, this emphasis on prudence, diligence and intelligence led to what today would be viewed as very conservative investment practices. As Jay Youngdahl reminds us, as late as 1959:

> The Second Restatements of Trust mandated that the following were improper investments:
> The (1) purchase of securities for purposes of speculation, for example, purchase of shares of stock on margin or purchase of bonds selling at a great discount because of uncertainty where they will be paid on discount because of uncertainty whether "they will be paid on maturity; (2) purchase of securities in new and untried enterprises: (3) employment of trust property in the carrying on of trade or business; (4) purchase of land or other things for resale.[8]

Starting in the latter half of the 20th century, two major developments contributed to the evolution of a new definition of what the duties of care and loyalty meant for fiduciaries.

The first involved fundamental transformations in the financial landscape: the globalization of financial markets; advances in information technology; and innovations in investment products. These transformations made possible the application of new theories of risk control, diversification, derivative trading, and the

reliance on markets to correctly price securities—collectively assembled under the banner of Modern Portfolio Theory (MPT).[9]

MPT directed fiduciaries toward a rational, rather than a reasonable, approach to investment. Academic economists with a mathematical bent, rather than legal scholars or financial professionals, laid the groundwork for MPT, substituting risk control at a portfolio level for specific, judgment-based security selection as the basis for prudent investment. In 1992, the American Law Institute's Third Restatement of the Law of Trusts portrayed the fiduciary as a "prudent *investor*," as opposed to the prudent *man*, and directed the fiduciary to follow the dictates of modern portfolio theory.[10]

The second major development was the recognition of the potential abuse of the rapidly growing pension fund assets controlled by fiduciaries as the last half of the 20th century progressed. By 2008, the cumulative value of pension fund assets worldwide had grown to $22 trillion.[11] As of 2007, the assets of pension funds in the members of the Organization for Economic Co-operation and Development were the equivalent on average of 67% of their total Gross Domestic Product.[12] Responsibility for the substantial investments of sovereign wealth funds, mutual funds, bank trust departments, and life insurance company assets also fell under the control of fiduciaries.

With this growing financial responsibility came an increasing recognition of fiduciaries' potential for conflicts of interest in the management of their funds. For example, in the 1960s and 1970s, the Teamsters Central States Pension Fund in the United States became involved in a series of scandals involving corruption and self-dealing.[13]

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Government officials, academics, consultants correctly perceived these narrowly corrupt abuses as a threat to beneficiaries. Indeed, they were broadly concerned that pension fund assets "would end up being managed not in workers' interests, but in the interests of politicians, corporate executives, labor leaders, and the financial services industry."[14] These concerns were also extended to a set of investment decisions more broadly described as "political"—investments that supported local community economic development and those that incorporated consideration of any societal or environmental implications beyond portfolio-level returns. Critics of these positive approaches, for example, raised concerns about pension funds' policies of divesting from companies that were deriving profits from operations under the apartheid legal system in South Africa. [15]

Where others more positively recognized the potential of the rapidly accumulating pools of pension-fund assets to contribute to economic growth, job creation and societal well-being,[16] various government officials, academics and consultants viewed such potential uses of pension fund assets with the same suspicion as personal conflicts of interest. They did not necessarily object to the concept of societal well-being in and of itself. However, because modern portfolio theory does not allow for the concept that portfolio-level decisions can positively impact the economy or society, local and "social" investments were collectively portrayed as violations of fiduciary duty along with corrupt self dealing. The problem here was not that such positive goals were self-interested *per se*, but that they misidentified the "self" that fiduciaries should be serving. In the view of those following the dictates of MPT, fiduciaries should be self-interested, but that self should be defined as, and confined solely to, the returns of the portfolio. Any concern outside that of the portfolio-level returns was an abuse.

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This particular version of the rational approach to investment found broad acceptance in part because it solved two problems. First, it focused fiduciaries' attention on the exploding world of investment opportunities that, according t0 MPT, could potentially enhance their portfolios' performance without increasing their overall risk. Second, it eliminated from the investment process self-interest in the form of personal or politically related considerations.

This rational, self-interested approach to fiduciary duty rapidly crowded out the more reason-based thinking that empowered fiduciaries to define prudence in terms of the effect of portfolio-level decisions on "others" and society as a whole. This shift away from a conception of the fiduciary based on the legal tradition of reasonable behavior capable of judgment was reflected in a shift in plain text interpretation of the Employment Retirement Income Security Act (ERISA) provided by the Department of Labor. In 1994 in its Interpretive Bulletin related to investing in economically targeted investments, it declared that:

> The Department has construed the requirements that a fiduciary act solely in *the interest of, and for the exclusive purpose of providing benefits to, participants and beneficiaries* as prohibiting a fiduciary from subordinating the interests of participants and beneficiaries in their retirement income to unrelated objectives.[17] [emphasis added]

In 2008 the Department of Labor revised this language to assert that:

> [F]iduciaries may never subordinate the economic interests of the plan to unrelated objectives, and may not select investments on the basis of any factor outside the *economic interest of the plan* except in very limited circumstances . . . .[18] [emphasis added]

This shift of interpretation from the broader interests of beneficiaries to the narrower interests of the plan directs fiduciaries to focus on the relative financial performance of the funds entrusted to their care and to set aside considerations of

the implications of their investment decisions for the objective well-being of their beneficiaries or of the society and environment in which they live.

Current State of Reasonable Investment

This narrowing of focus was intended to address the perceived agency problems of that time. However, as an increasing number of fiduciaries have come to adopt the precepts of MPT, their policies and practices have created an additional set of problems, in particular their contribution to the destabilizing the financial markets, while simultaneously showing themselves incapable of dealing with the implications of their investments for the sustainability of the economy and the environment.

This tension between the concern for others and the concern for self narrowly defined places fiduciaries in an uncomfortable position where the old definition of investment prudence (e.g., hold only high-quality bonds) has long since vanished and the new definition (e.g., pursue aggressive portfolio-level risk management) no longer provides a viable sense of security. Fiduciaries cannot reasonably ignore the instability in today's financial markets and its effects on their participants and beneficiaries, not to mention the economy. Nor can they reasonably neglect to ask themselves how their investment decisions and practices relate to these problems and the increasing weakness of the very governments upon which their beneficiaries' future financial security heavily depends. Yet the narrowly focused tools that MPT places in their hands are of little help in addressing these questions.

As these weaknesses in the systematic application of MPT have become increasingly apparent, an increasing number of institutional investors have begun exploring ways in which essentially reasonable approaches to investment— that is,

those that take into account the effects of their investments in the real world—can supplement their current practices.

These approaches fall into three general categories:

- The universal owner approach, *i.e.,* concern about the effect of their investments on the whole economy on which their beneficiaries ultimately depend
- The sustainable or responsible investment approach, *i.e.,* concern about the effect of their investments on the quality of the environment and society in which their current and future beneficiaries live
- The broad-based-norms approach, *i.e.,* concern that their investments be consistent with certain universally recognized norms and standards that are associated with the governance of the world in which their beneficiaries conduct their daily lives

The *universal owner* approach argues that the portfolios of the largest institutional investors are of such a size that they "own the economy" and that their mandate to safeguard their assets is effectively a mandate to safeguard the economy.

This universal owner theory was first proposed by Robert Monks and Nell Minnow and later elaborated by James Hawley and Andrew Williams. The implication of this approach is that attention to portfolio-level returns alone is inadequate and that "universal" considerations of economic well-being are in fact synonymous with the well-being of their beneficiaries.

> [U]niversal owners are uniquely positioned to develop and pursue a potentially virtuous efficiency cycle of minimizing negative externalities [on the economy] and encouraging positive ones by the firms in their portfolios. . . .Universal owners need to begin a process of extending the definition of prudential fiduciary duty to include attention to the universal aspects of their portfolios.[19]

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This approach embodies the intuitively reasonable position that investments overall won't do well unless the economy is doing well. This contrasts with the somewhat nonsensical position that rational investors all too often find themselves taking when asserting that an investment strategy was a "success" because, although the overall market was down 20%, say, their portfolio was "only" down 19%.

It also suggests a broader view of investment in which investors, each seeking competitive returns, deliberately identify a mosaic of investment opportunities that cumulatively strengthen and benefit the economy as a whole. They do so with a deliberate eye both to identifying uniquely rewarding investment opportunities that simultaneously creatie new investment opportunities for all.

This is a reasonable approach because, as Rawls puts it:

> Reasonable persons, we say, are not moved by the general good as such but desire for its own sake a social world in which they, as free and equal, can cooperate with others on terms all can accept. They insist that reciprocity should hold within that world so that *each benefits along with others*.[20] [emphasis added]

An increasing number of institutional investors are taking this universal approach, making investments that cumulatively can promote the general well-being as well as enhance their individual portfolios' returns. Recent examples include decisions by the California Public Employees Retirement System to invest $800 million in infrastructure projects;[21] by TIAA-CREF to invest $50 million with Good Energies, Inc., in energy efficiency projects;[22] and by J.P. Morgan, The Bill & Melinda Gates Foundation, The Gatsby Charitable Foundation, and The Rockefeller Foundation to invest cooperatively $25 million in an African Agricultural Capital Fund managed by Pearl Capital Partners.[23] These are investments that in the aggregate promote

sustainability and societal well-being while separately offering opportunities for attractive returns.

The *sustainable or responsible investment* approach has been adopted by fiduciaries at numerous mutual funds, religious organizations, foundations, and sovereign wealth funds since the 1980s. What distinguishes this approach from that of the universal investor is its emphasis on the impacts of investments on the well-being of society broadly construed, rather than simply on the economy. It makes these considerations because, as Rawls observes, “Reasonable people take into account the consequences of their actions on others’ well-being.”[24]

Others’ well-being includes potential harm that might result from investments. Prior to the early 1970s, many religious investors defined harmful investments as those in “sin stocks”—alcohol, gambling and tobacco, and in certain cases military contracting. This approach was typified by John Wesley, founder of the Methodists, who believed one should “Gain all you can, without hurting either yourself or your neighbor, in soul or body.”[25]

Starting in the 1970s in the United States, responsible investors extended their concerns to matters of environmental sustainability, peace and justice and civil rights. As early as 1972, the authors of *The Ethical Investor*, one of the first serious studies of the theoretical underpinnings of the social investment movement, took the position that investors had an inherent obligation to consider the potential social harm caused by one’s investments—and of the practical reasonableness of such considerations.

> Although the notion of social injury is imprecise, and although many hard cases will be encountered in applying it [to investments], we think that it is a helpful designation and that cases can be decided on the basis of it. In the law, many notions (such as negligence in the law of

> torts or consideration in the law of contracts) are equally vague but have received content from repeated decision-making over time.[26]

In the 1990s the concept of sustainability began to drive the investment policies and practices of an increasing number of responsible investors, including institutional investors, in Europe. These investors were influenced in part by the 1987publication of the Brundtland Report, which highlighted and defined the concept of sustainability and the 1997 ratification of the Kyoto Protocol on climate change. Developments such as these led to the emergence of so-called *green* funds, especially in Europe, less concerned with avoidance and stressing identification of specific positive sectors or activities linked to the environment, such as renewable energy and clean technologies.[27]

This trend toward positive social and environmental opportunities has continued into the first decade of the 21st century with the emerging emphasis on "impact" investing, which often focuses on small-scale investments with high environmental and social impacts. [28]

Some argue that these sustainable or responsible investment practices are fulfilling a self-interested, rational role: it "doesn't pay" to harm others and it does pay to consider positive environmental and social impacts. Sustainable and responsible practices should help portfolio performance in the long run because doing harm hurts companies' reputations, incurs legal liabilities, and proves short-sighted and, conversely, positives enhance customer loyalty, attract quality employees, and help ensure long-term viability.

Whether there is actually a financial cost or benefit to the performance of sustainable and responsible investment practices has been the subject of academic debate since the 1980s. Many of these studies have found no statistically significant differences in financial performance between portfolios that take social and

environmental factors into account and those that do not. For example, Kurtz and DiBartolomeo found that, after adjusting for risk factors, a longstanding U.S. social investment index produced positive returns statistically indistinguishable from the similarly maintained Standard and Poor's 500 Index over an 18-year period.[29]

However, these reasonably inclined investors can also be seen as having a motivations beyond narrow financial self-interest and as being driven by deeper values: the inherent duty that comes with responsibility for substantial assets in a world where assets are unevenly distributed. As Amartya Sen argues, with accumulations of money, such as those entrusted to fiduciaries, comes an unequal allocation of power that requires action not solely motivated by gain on the part of those who have the disproportionate access to that power.

> Mutual benefit, based on symmetry and reciprocity, is not the only foundation for thinking about reasonable behavior towards others. Having effective power and the obligations that can follow unidirectionally from it can also be an important basis for impartial reasoning, going well beyond the motivation of mutual benefits."[30]

These obligations might include, for example, an obligation not to profit from investments complicit with genocide or environmental injustice. Or, more positively, they might involve helping those lacking access to capital, to information technologies in developing countries or to vaccines to stop the spread of communicable disease in underserved regions.

As of 2011, the Norway Government Pension, for example, had eliminated from its portfolio nine companies involved in creating severe environmental damage and 17 companies involved in the production of tobacco products.[31] The U.K. pension fund managers Universities Superannuation Scheme and Hermes Fund Managers and the Dutch pension fund managers APG and PGGM are among the investors in

the Access to Medicines Index, which ranks pharmaceutical companies on their efforts to provide access to medicine to underserved populations.[32]

In a similar approach, *broad-based norms and standards* have served as guidelines for institutional investors who seek an impartial and objective basis for their responsible investment policies in order to avoid the appearance that their decisions derive from merely personal ethics or local political pressures. These investors have sought out the broadest, most widely recognized and accepted norms and standards as the means for guiding their policies—for example, the Nuclear Non-Proliferation Treaty or the United Nations' Universal Declaration of Human Rights.

Sen has described such broadly accepted norms as having resulted from "reasoning that we can reflectively *sustain.*"[33] [emphasis in the original] Here sustainable means reasoning that can stand up to the scrutiny of others. The broader the definition of the "others" that have been involved, the more likely the decision is to be free from the personal or political biases of the fiduciaries themselves.

SNS Asset Management, the money management arm of the Dutch insurance and financial services company SNS REAAL, with over €50 billion under management, employs a number of social and environmental principles in its fundamental investment policies. These principles address such issues as human rights, child and forced labor, controversial weapons systems and environmental contamination. SNS explains that

> The[se] fundamental principles are derived from international treaties, guidelines or codes. They are not based on subjective preferences, but on broadly-accepted values in the global civilization that are set down internationally in authoritative documents.[34]

Similarly the Ethics Committee of the Norway Pension Fund has made decisions to exclude companies manufacturing cluster bombs, supplying military weapons or

equipment to the government of Burma, and companies with complicity in human rights violations. The justification for adopting these policies rests largely on the existence of broad-based international norms of what constitutes reasonable and ethical behavior. [35]

Part Two: Implications for Reasonable Fiduciaries

The demands of rationality serve a useful function in directing fiduciaries' attention to the maximization of portfolio-level returns and their obligation to keep their decisions free from personal conflicts of interest and local political pressures. Reasonable decision-making by fiduciaries, however, offers a number of strengths that the rational approach lacks. A reasonable fiduciary can be particularly helpful in understanding how investments can

- Make beneficiaries objectively better off
- Create value that allows each fund to benefit along with others
- Be fair and impartial with respect to future generations

The Reasonable Fiduciary, Objectivity and Benefits

Reasonable fiduciaries seek to understand the effect of their investments in the real world, and can therefore consider objectively trends in the overall well-being of their beneficiaries.

Rational fiduciaries are limited to considerations of the "economic benefit" of their plans. They seek either to outperform a risk-adjusted, asset-based benchmark, or to reduce fees while assuring market-rate returns. Both add financial value to portfolios and can therefore be said to make beneficiaries happy in a limited self-interested sense.

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Fiduciaries should, however, care if their beneficiaries are objectively better off—not simply happy—in the same sense that doctors should care whether their patients are objectively healthy, not simply "feeling good." Patients may assert that smoking or drinking excessively makes them "feel good," but a doctor has an obligation to determine if these activities are making them objectively unhealthy.

The benefit of solely financial returns is essentially a subjective one. It makes you feel good to know you have money in the bank, but you don't know if that money makes you better off without looking to the objective circumstances in your life. Fiduciaries whose "sole" goal is the economic interest of the plan cannot by definition refer to the outside world. This is the inevitable consequence of what Jon Elster terms "the radically subjective nature of the notion of rationality."[36]

More specifically put, rational fiduciaries are not, and essentially cannot be, concerned with whether, during the past quarter or year, their beneficiaries' funds have lost ground to price increases or can purchase the same quality of health care or higher education services that they did a year ago; whether the environment in which their beneficiaries are living is more or less healthy; whether the streets they walk on at night are more or less secure; whether their beneficiaries' potential for secure retirement income from contributions by their employer or government has increased or decreased; or whether the financial markets on which their beneficiaries depend for the growth of their retirement assets have become more or less honest and stable.

It is not necessarily the case that investments with a positive relative financial performance provide a positive benefit to current or future beneficiaries. Fiduciaries cannot know whether this is so without reference to the outside world and the

relationship between their investments and the society and environment in which their beneficiaries live.

Among the connections between their investments and the real world that a fiduciary might consider are the following.

- *The cost of health care.* One of retirees' primary concerns is affordable, high-quality affordable health care. In recent decades, the costs of health care in the United States have been rising faster than the cost of living.
- *The state of the environment and its relationship to current and future investment prospects.* The well-being of beneficiaries depends to a substantial extent on the existence of robust and sustainable environmental resources.
- *The state of financial markets and their relationship to the economy.* The long-term well-being of beneficiaries depends to a substantial extent on the existence of stable financial markets and healthy economies.
- *The financial strength of local and national governments.* Current and future beneficiaries depend on local and national governments to pay a substantial portion of their overall retirement benefits.
- *The prospects for security at home and peace abroad.* It is difficult to see how current and future beneficiaries can be said to be objectively better off if they are living in neighborhoods that are increasingly unsafe or in a world plagued by armed conflicts.

Beneficiaries being objectively better off does not require that they feel good about this objective state. Indeed, they may not care about whether the cost of health care is rising exponentially; whether the physical environment is deteriorating or urban streets are becoming unsafe; or whether the government or corporation for which

they are working and on which they depend for promised retirement benefits is becoming financially unsound. They may not care if future generations inherit a livable world. Fiduciaries have no way of knowing what will make specific beneficiaries happy.

What reasonable fiduciaries can determine is what, in their best judgment, the objective state of their beneficiaries is and whether their investment decisions on the whole are acting in a such way as to make that a positive one.

The Reasonable Fiduciary and the Creation of Value

Reasonable fiduciaries focus on ways in which their investments can benefit the whole—including the financial system and the economy—while increasing their funds' return. In doing so, they effectively create value for the beneficiaries of all funds, rather than simply benefitting their own at others' expense. By contrast, rational fiduciaries exclusively focused on their funds' economic interests are likely to fail to fully comprehend these longer-term, sustainable sources of value and seek short-term, unsustainable benefits—frequently at others' expense.

If fiduciaries define the sole economic interest of their plans as *beating the market*—that is, outperforming their peers—they are likely to behave as if the market is a zero-sum game. To outperform one's peers it is necessary to identify and take advantage of their mistakes. The primary techniques for doing so are 1) knowing what the historical value of a company is and avoiding irrational overpricing or underpricing of its securities; and 2) knowing more than one's peers through better research. Those pursuing these techniques effectively presuppose that a limited number of highly sophisticated investors can consistently take advantage of less

sophisticated investors' mistakes. In Paul Samuelson's words, these techniques work only for "the happy few."

> [M]odern day bourses display what I like to call Limited Micro Efficiency. So long as a minute minority of investors, possessed of considerable assets, can seek gain by trading against willful uniformed bettors, the Limited Efficiency of Markets will be empirically observable. The temporary appearance of aberrant price profiles coaxes action from alert traders who act gleefully to wipe out the aberration.
>
> . . .
>
> My pitch on this occasion is not exclusively or even primarily aimed at practical men. The less of them who become sophisticated, the better for us happy few."[37]

In other words, self-interested fiduciaries of the largest, most sophisticated funds can "gleefully" take advantage of others in the market and consider themselves the "happy few." Those from whom they extract excess returns in this zero-sum game may be the beneficiaries of less-sophisticated funds or even unsophisticated individual investors who are their own beneficiaries. The net effect to the overall world of beneficiaries is a redistribution of wealth with the winners being "a minute minority of investors, possessed of considerable assets," but with no necessary net gain to the system as a whole.

This is not to say that the system as a whole cannot produce net gains, but in this approach to investment, system-level gains do not come as a result of the investment decisions of asset owners. As Peter Bernstein describes this situation:

> It [investment] has to be a positive-sum game to some extent, or else no one would play. . . But where does that positive sum come from in the first place? From the growth of the economy itself, whose fruits must accrue to someone, somewhere, some time.[38]

If economic growth occurs independently of everyone's investment decisions, one rational decision is to strive to "beat the market," taking advantage of every opportunity to gain the edge over others. The less scrupulous may trade illegally on

insider information.[39] Hedge funds may refuse to disclose their holdings and investment strategies. "Dark pools of liquidity" may be created for institutional investors to trade anonymously. Equity investors may purchase the stock of corporations that externalize environmental damage onto society or employ forced labor. Those exploiting mispricing in the fixed-income markets may leverage their bets, taking on huge debt to maximize their returns.[40] Investment banks may purchase credit default swaps, shorting the bonds of their own and others' governments, or bet against the mortgaged-backed securities that they themselves have created.[41]

Academics and investment professionals may differ as to whether it is possible to "beat the market" consistently through these and other means—and fiduciaries often expend considerable resources in evaluating the performance of managers versus benchmarks and versus each other in efforts to find those who can do so—but the crucial point here is that parties are behaving as if their investment decisions are disconnected from the underlying forces driving value creation in society.

The other rational approach to an apparently zero-sum investment game is passive, or index, investing. If you believe that your investment decisions have no relation either to returns generated by the market or to one's ability to generate returns above those provided by the market, then one rational approach is to "buy the market" and cut your costs. Keeping fees and transaction costs as low as possible is at least guaranteed to help portfolio performance, whatever that may turn out to be.

Although index investing may be a rational and self-interested approach, it also creates problems by removing judgment from investment decision-making.

Indexers buy and sell at today's market prices. They make no judgment as to whether that price reflects underlying value—whether a stock or the whole market is overpriced or underpriced. They don't have to pay for high-priced stock analysts. They don't have to research the investments they are making. They place blind faith in the markets to serve the economy well and to give them the best possible returns.

Counterintuitively, this widely adopted buy-and-hold approach increases the short-termism of the markets. Simon Zadek accurately describes the situation when he asserts, "When pension funds say they are long-term investors, what they mean is that they have rolling investments in largely indexed linked funds. To speak accurately this makes them *perpetual investors* making short-term investments, forever."[42] [emphasis in original]

As increasing numbers of passive index investors enter the markets they encourage a blind "herding" behavior that exacerbates the bubbles and bursts created by the speculators who are increasingly left to set prices in the markets. In addition, indexers deprive corporate managers of intelligent feedback from the capital markets through the price mechanism, thus undercutting one of the primary purposes of financial markets: to allocate funds efficiently through informed and intelligent choices.

Similarly in the debt markets individual judgment is removed as institutional investors increasingly rely on credit rating agencies such as Standard & Poor's and Moody's to assess the creditworthiness of their investments. Their ratings of securitized and other fixed-income products reduce investors' monitoring obligations and costs but also eliminate their use of independent judgment. The problems with this approach became dramatically apparent with the collapse of the market for

mortgage-backed collateralized debt obligations in 2008, when many of the strong ratings given to these securities turned out to be worthless.

In his book *A Call for Judgment*, Amar Bhidé points out that while it is possible to scale up manufacturing operations of, say, a computer from a few thousand units to hundreds of thousands without sacrificing quality and thereby gain efficiencies of scale, the same is far more problematic for finance. Sound financial decisions depend on the sound analysis and judgment of individual situations and personal relationships, and those cannot be easily scaled up. As he puts it, "Relying on case-by-case judgment does have drawbacks: It is labor intensive and slow. But mechanized decision-making is rarely a good alternative when the choices involve willful humans."[43]

Both reasonable and rational fiduciaries understand that a primary source of wealth associated with their funds derives from the underlying strength of the economy and the financial systems through which they operate. Rational fiduciaries will remain concerned solely with the financial benefit to their funds achieved by outperforming their peers or by cutting costs. Reasonable fiduciaries, however, will also take into consideration how their investments impact positively or negatively the stability of the financial system, the direction of the economy, and the sustainability of the environment.

They will do so because of what Rawls terms a willingness "to recognize the burden of judgments and to accept their consequences."[44] That is to say, when more than mere price considerations become part of the investment process, investors are forced ask questions about whether their investments have a net positive effect on the economy (including society and the environment) and the financial system as a whole.

Reason, Rationality and Fiduciary Duty

Consider the contrasting questions that a reasonable and a rational investor might ask with regards to investments and their consequences in the telecommunications, pharmaceutical, and energy industries.

Telecommunications. Reasonable investors might favor mobile telephone companies whose business model includes providing services in emerging markets on the grounds that every 10% increase in the mobile phone penetration rate leads to a 1.2% increase in GDP.[45] Rational investors might confine their analysis to short-term relative profitability and end up with only mobile telephone companies with no exposure to emerging markets.

Pharmaceuticals. Reasonable investors might favor a pharmaceutical company whose business model includes vaccines on the grounds that vaccination programs can make meaningful contributions to economic development and can help raise standards of living throughout the world.[46] Rational investors might be swayed only by the higher-margins of patent-protected drugs and avoid these firms entirely.

Alternative Energy. Reasonable investors might consider investments in energy companies developing viable sources of alternative energy on the grounds that the possibility of long-term damage to our environment and economy from fossil-fuel-induced global warming is real. Rational investors might limit their investment horizons to considerations of the short-term prospects for increases in oil-company stock prices linked to oil-price increases.

Similarly, a reasonable understanding of the specific societal functions of the asset classes in which they invest can help reasonable fiduciaries avoid complex financial products that skirt regulations intended to assure the integrity and long-term public benefit of those asset classes. For example, in the asset class of cash,

Reason, Rationality and Fiduciary Duty

Wall Street innovations in the 2000s led to the creation of two products that ultimately collapsed in the market crisis of 2008: auction-rate securities (ARS) and structured investment vehicle (SIVs). These financially innovative products were marketed to institutional investors as a means of adding a few hundredths of a percent in returns to their cash holdings, typically in the form of money market accounts. Both innovations broke down in the 2007-2008 financial crises, leaving investors dependent on these products without access to their investments and/or substantial losses.[47]

Because cash in Main Street banks plays an invaluable role in assuring stability in the financial system and in promoting sustainable community development, government monitors and insures these financial institutions. Reasonable investors recognized the long-term public interest embodied in the integrity of this form of the asset class and will favor its stability over the marginal additional returns of Wall Street's questionable innovative products.

Government similarly structures and regulates other asset classes to enhance their stability and promote their public purpose. In the case of fixed-income investment, where government-issued bonds by definition help create public goods, governments provide tax-breaks on their income in recognition of that public good. Real estate investments, which play a key role in the development of livable cities and home ownership, are a cornerstone of a stable society. Consequently governments have developed myriad regulations to assure high-quality construction and zoning laws to protect the integrity of neighborhoods, as well as providing tax incentives to encourage home ownership.

Reasonable thinking about the public good encourages fiduciaries to respect the broader benefits of the asset classes that have been developed by society over the

years. These fiduciaries consequently have a reason to view with caution those complex Wall Street's financial innovations that undercut these benefits, a reason that rational fiduciaries, in a never-ending search for additional returns, may ignore.

It may be rational to put considerations of the financial performance of one's fund ahead of considerations of the integrity of the financial markets and the public good, but it is not reasonable. We know that rational fiduciaries pursuing the sole economic interest of the funds will do so as efficiently as possible. However, we do not know what profoundly harmful innovations they may devise in doing so.

The Reasonable Fiduciary, Sustainability and Future Generations

Part of the fiduciary's duty of loyalty is a duty of impartiality, including impartial consideration of benefits for future generations. This duty of impartiality and its relationship to questions of sustainability has been relatively neglected until recently. As one legal scholar described the situation "[T]he nature and implications of the duty [of impartiality] have been left vaguely defined and infrequently explained."[48] Consequently, the American Law Institute devoted considerable attention to this question in its 1992 Third Restatement of Trust Investment Law, addressing in particular issues such as the differing needs of beneficiaries for income and tax benefits, and the like, "[i]n addition to the obvious competition between present and future interests."

This competition between present and future generations is particularly relevant for pension funds, sovereign wealth funds, and other funds with long time horizons. The U.S. Supreme Court has made its relevance for pension funds clear in its *Varity v. Howe (*1996) ruling where it held that "the common law of trusts [made applicable to ERISA §§404, 409] recognizes the need to preserve assets to satisfy

future, as well as present, claims and requires a trustee to take impartial account of the interest of all beneficiaries."[49]

In a 2011 article, Hawley, Johnson and Waitzer stressed the importance of this concept of intergenerational impartiality for fiduciaries.

> Fiduciaries must ensure that their decision-making processes balance allocation of capital between near-term needs and future wealth creation and consider the potential transfer of risks between participant generations. Intergenerational wealth maximization requires active consideration of a range of factors beyond narrow financial criteria.[50]

Narrow reliance on the efficient tools of current price and calculable risk make this task difficult for the rational fiduciary. The efficiency with which today's price and tomorrow's risks can be measured and managed drives solely rational fiduciaries toward short-term anonymous investment decision-making that offers little hope of encompassing the interests of future generations.

Because it involves intergenerational equity, the duty of impartiality drives responsible investors to confront questions of sustainability and sustainable development, which was defined in the Report of the 1987 Brundtland Commission, *Our Common Future,* as "development that meets the needs of the present without compromising the ability of future generations to meet their own needs."[51]

To address intergenerational equity, fiduciaries must go beyond financial criteria—*i.e.,* today's price and yesterday's returns as defined by the market—if they are to manage assets impartially across generations. Reasonable investors are equipped to consider questions of future value rather than price because they are willing to assess the impact of their investment decisions on others including generations to come, with all the uncertainties that come with that exercise.

Reason, Rationality and Fiduciary Duty

Much of today's investment theory is built on the work of neoclassical economists, who judge price to be the best available measurement of value in part because of the anonymous markets through which it is set. Price is efficient precisely because it is free of extraneous value-laden information. As Milton and Rose Friedman argued, "The price system transmits only the important information and only to the people who need to know."[52]

These economists are not unaware that non-financial information and values are not captured in price. But rather than attempt to measure and account for these values, they have decided that it is simply more efficient (*i.e.,* rational) to take price as the best available approximation of all values. As Bernstein describes situation:

> Perhaps the best estimates of shadow prices [*i.e.,* intrinsic value] are the prices set in the marketplace, every minute of every trading day. Those prices may not be precisely equal to the shadow prices, but no other estimate of intrinsic value is likely to be more accurate than what buyers and sellers agree on the in the marketplace.[53]

This belief in the efficiency of price as the best estimate of value and the most rational basis for decision-making finds its most complete expression in the much-studied, much-debated Efficient Market Hypothesis (EMH). EMH in its various manifestations essentially holds that today's price is the best price available because the market efficiently incorporates all available information in its determinations.

Bhidé points out that prices are a highly useful means of allocating resources and matching supply and demand, and that interfering with them is "usually a bad thing," but goes on to warn that:

> [P]rices aren't a be-all and end-all. Competition is rarely just about price, and most decisions—about buying houses, securing employment, seeking medical treatment, or going to the movies—involve considerations far beyond how much money will change hands. . . . *Dialogue—between two individuals or among large groups, and in person, over the phone, or via the Internet—plays at least as*

> *important a role in coordinating actions and aggregating information.*[54] [emphasis in original]

Accepting today's price as an efficient means of determining intrinsic value avoids what Bhidé describes as the "costly and time-consuming nature of dialogue."[55] But it leaves modern-day, rational investors unable to comprehend, let alone contend with, something as complicated as the impartial consideration of the well-being of future generations.

This discrimination against the interests of future generations can be seen in the short-termism that rational, price-based investment practices have driven into today's market. Holding periods for institutional investors have shortened dramatically. According to the NYSE Factbook, the average holding period for stocks in 1960 was 100 months (8 years). By 1970 it had dropped to 63 months (5 years). By 1980 it had dropped to 33 months, by 1990 to 26 months, by 2000 to just 14 months, and in 2010 just six months.[56]

Short-termism has in turn resulted in increased volatility in the financial markets. A September 2011 *New York Times* study found that in the first decade of the 2000s, intraday fluctuations of more than 4% in stock prices occurred six times more frequently than in the four previous decades and that swings in closing prices of more than 4% occurred on average 2% of the time during that decade, as opposed to only approximately 0.25% of the time in the previous decade. The *Times* quoted economist Andrew Lo as asserting that "The last few years have been the most volatile for all of recorded history."[57]

Today's volatility and short-termism are matters of great concern for society as a whole and for the best interests of future generations because of the dislocations and imbalances they create. Robert Skidelsky cites John Maynard Keynes' view that

price volatility is profoundly harmful to society and a source of fundamental unfairness.

> [P]eople cannot be expected to take proper account of the consequences of their economic acts if the standard of value [i.e., price is constantly fluctuating. [Keynes wrote that] "Unemployment, the precarious life of the worker, the disappointment of expectation, the sudden loss of savings, the excessive windfalls of individuals, the speculator, the profiteer—all these proceed, in large measure from the instability of the standard of value."[58]

The short-term focus on price and the volatility that follows in the wake of this short-termism are the insurmountable obstacles that keep solely rational fiduciaries from impartial consideration of future generations. The tool that reason places in the reasonable fiduciary's hands that allows for impartial consideration of the future is the ability to cope with questions of intrinsic value and uncertainty. Reason is naturally disposed to considerations of the future—or, as Elster remarks, "Reason requires impartiality about the future."[59]

The future may be relatively certain in the inanimate physical world (*e.g.,* the sun will rise tomorrow at 8:23) as well in the life insurance world (*e.g.,* 25% of 65 year olds will live to the age of 90). But in the investment world, the future is to a greater or lesser extent always uncertain (*e.g.,* who knows what Microsoft's stock price will be next month?). As Paul Davidson observes, "The economic system is moving through calendar time from an irrevocable past to an uncertain and statistically unpredictable future."[60]

In his *Treatise on Probability* Keynes distinguished among three types of risk: precisely calculable risks or probabilities (e.g., casino odds); risks that are only calculable in relative terms (e.g., the likelihood of rain tomorrow); and irreducible uncertainties (*e.g.,* the price of oil ten years from now). Rational investors have

developed risk control models that can cope with the first and to a certain extent the second type of probabilities in investment. But they have a dangerous tendency to ignore the third. Indeed, as has been pointed out by Taleb and others, the current financial system has paid a considerable price because increasing numbers of large institutional investors have acted as if all risks can be calculated and controlled and that irreducible uncertainties can be ignored.[61] In Skidelsky's words, "[U]nderlying the escalating succession of financial crises we have recently experienced is the failure of economics to take uncertainty seriously."[62]

But how then do reasonable investors cope with the irreducibly uncertain aspects of the future? Keynes's answer was that they fall back on convention. "[F]aced with varying degrees of uncertainty, it is rational to fall back on conventions, stories, rules of thumb, habits, traditions in forming our expectations and deciding how to act."[63] In other words, forms of what could be called common sense are a reasonable approach to investment in the face of uncertainty. Common sense may not be able to predict the uncertain future—no one can do that—but it is as reasonable an approach as possible.

If prudent and reasonable behavior in the face of irreducible uncertainty on the part of investors means falling back on convention, that of governments is in Keynes' view of a related sort. While uncertainties cannot be eliminated, their range can be reduced and it is government's role to do so. "If . . . there is bound to be irreducible uncertainty in financial operations, the state has an additional role, which is to protect the economy as a whole against the consequences of uncertainty."[64] That is to say, government needs to acknowledge uncertainties, account for them, and to minimize their sway as prudently as possible. As Skidelsky observes, "Prudence in the face of the unknown is the key to Keynes's philosophy of statesmanship."[65] By

analogy, we can view sovereign wealth funds and public pensions as fiscal agents of national and local governments whose fiduciaries share these governments' broad interest in protecting future as well as present beneficiaries against "irreducible uncertainty in financial operations" and wish "to protect the economy as a whole against the consequences of uncertainty."

Hawley et al. have pointed out that the pursuit of intergenerational equity "requires active consideration of a range of factors beyond narrow financial criteria." These include non-financial criteria related to the sustainability of society and the stability of the financial markets, in addition to those more narrowly related to today's market price and calculable risks.

A reasonable fiduciary might conclude that the issues of global warming and human rights are likely to be with us for generations to come, as are concerns about the non-proliferation of nuclear weapons and the elimination of communicable childhood diseases. A reasoned consideration about the benefits that could be equitably distributed between current and future generations might also include such things as:

- The capability to live in a healthy environment, to have access to high-quality, low-cost health care, and to choose a lifestyle that includes healthy food
- The opportunity to have access to communications technologies that can facilitate education, commerce, and entertainment
- The ability to live in a society with a government that can support the development of local economies and can provide security—income and otherwise—to retirees.

To understand how investments can be used to reduce the realm of uncertainty about what kind of a world will make future generations objectively better off may be a challenging task, but it is one on which reasonable persons engaging in open and impartial public reasoning can surely make progress.

Need for Both Reason and Rationality

This paper has concentrated on the limits of rationality and the virtues of reason to dramatize the point that the tools of rational behavior in finance have been so extensively elaborated in recent decades as to effectively crowd out those of reason and common sense. This is not to say that the two are diametrically opposed or that reason should supersede or replace rationality as the driving force in investment. In fact, the two not only can coexist but need to complement each other in practice.

Philosophers dealing with the relative roles of reason and rationality in society recognize their necessarily complementary nature. As Rawls puts it:

> [W]ithin the idea of fair cooperation the reasonable and the rational are complementary ideas....As complementary ideas, neither the reasonable nor the rational can stand without the other. Merely reasonable agents have no ends of their own they wanted to advance by fair cooperation; merely rational agents lack a sense of justice and fail to recognize the independent validity of the claims of others.[66]

Or, as the cultural anthropologist Stephen Gudeman argues, "[T]he economy is built around the dialectical relation of two value realms, mutuality and trade, and contains a tension between two ways of making material life—for the self and for others."[67]

For financial fiduciaries this view implies that they must remain fully aware of the needs of their beneficiaries—that is, of their beneficiaries' self-interested ends including the returns of their portfolios. At the same time they should be equally aware of the effect of their decisions on others—that is, of their ability to influence

society and the financial markets positively or negatively as they go about theit daily task of investment.

It is not surprising that fiduciaries feel uncomfortable from time to time in this role of serving two masters. In the short run, one's task as a fiduciary might be simplified if all one has to do is look out for the "economic interests of the plan," leaving to blind faith considerations of how that narrowly conceived self-interest might promote stable financial markets, a sound economy, and a sustainable environment currently and into the uncertain future. Ultimately, however, fiduciaries cannot avoid considerations of how their decisions can maximize the positive effects and minimize the negative effects of their investments every day.

Serving these two masters may involve extra costs, take extra effort, and leave the door open to free riders. But as challenging as these additional concerns may be, they can be dealt with through a combination of best practice, education, regulation, and cultural change. They are concerns that political will and collective action can overcome.

We have reached a point in the financial world where rational behavior has been extended beyond the limits of its usefulness. The hyperactive search for yet more self-interested investments has begun to destabilize finance, harm social structures, and neglect much-needed opportunities to build sustainability and durability into our world. The limits of rationality are not all that obscure and the potential of reason not that difficult to discern. As Sen rightly observes, "The insistence . . . on defining rationality simply as intelligent promotion of personal self-interest sells human reasoning extremely short."[68]

It is time for fiduciaries to return reason, with its insistence on the outward-looking acknowledgment of one's duty to others and the importance of the

sustainability of future generations, to its rightful place alongside self-interested rationality. It is time for fiduciaries to listen to the calls of the likes of Ed Waitzer when he insists that

> The time has come for trustees and investment managers to assume a broader and more active leadership role in financial markets and beyond. Why? Because their failure to look ahead and outward, given the increasingly obvious impacts on investment over the long term, may well constitute a failure of duties owed to those who entrust their savings with them. [69]

Conclusion

Since the 1970s and 1980s, fiduciaries have been increasingly counseled to take an exclusively rational approach to the execution of their duties. A combination of technological developments, financial innovations and new investment management theories developed by academic economists prompted this development, which has dramatically changed the face of the investment landscape. One effect of these changes has been the crowding out of previous modes of fiduciary behavior that were more reasonable.

This turn to a more purely rational approach to investment solved a number of investment management problems by making available to the fiduciary new asset classes and financial innovations. It has, however, created a series of challenges of its own because the more those institutional investors adopted its practices, the more unstable and short-term financial markets became and the less effective the new investment techniques were in producing their desired benefits.

To help remedy this situation, fiduciaries must revisit some of the basic principles of reasonable behavior: an attention to the effect of their actions on others and the real-world implications of their investment decisions. A return to reason will

help fiduciaries better understand how their specific investment decisions can promote:

- The objective well-being of their beneficiaries and the world they live in
- The sources of long-term rewards within financial markets
- The impartial allocation of benefits among current and future generations

These reasonable considerations are better tailored to the emerging world of the 21st century than are the more self-interested and efficient considerations that flow inevitably from a purely rational approach. They are better able to cope with those questions of long-term value creation, environmental sustainability, and social justice that will increasingly confront us as we move into a technologically advanced world of nine billion persons with all the desires and aspirations of highly developed societies.

Finance as it has evolved under the tutelage of those advocating self-interested rationality has sharpened its laser-like focus on "beating the markets" and in that process has become disconnected from the real world. This connection needs to be restored through a reaffirmed sense that, through the objective principles of reasonable behavior, one's investments can, and indeed should, contribute not only to one's own limited good but to the broader public good as well.

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