

# **Beyond Risk: Notes toward Responsible Alternatives for Investment**

## **Theory**

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## **Introduction**

This paper argues that the dominant theory of investing today, Modern Portfolio Theory, is based on a definition of success that fails to acknowledge the extent to which investments at the portfolio level can affect the overall financial markets. In particular, its techniques for controlling risk at the portfolio level—diversification, securitization, and hedging—can actually increase market-level risks to the detriment of finance and the economy as a whole. In addition, the benefits that accrue from the practice of this theory are at best part of a zero-sum game and available to only a limited number of investors. In addition the more investors that adopt its practices, particularly risk-control techniques, the less likely these practices are to succeed. Reform of this theory is not sufficient. Alternatives are needed.

This paper suggests that a better definition of success in investing can be found in investment techniques that first and foremost bring benefits at a market level, rather than a portfolio level. These techniques can be based on the particular functions of each asset class and the benefits these asset classes are intended to bring to society. The definition of success in investment can then be based on the

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degree to which skillful investors, particularly institutional investors, can maximize these broader benefits.

Asset classes—be they cash, public equities, fixed income, real estate, venture capital, private equity, or commodities—have evolved to serve distinct societal purposes. Those who successfully make investment decisions that enhance these purposes maximize market-level and general economic returns. Moreover, the more investors that use these asset classes as intended, the greater are the benefits that accrue at the market level through the realization of societies that are ultimately just and sustainable.

**Part One: Why Modern Portfolio Theory Provides an Inadequate Definition  
of Success**

“Generally speaking, the easy question is the wrong question.”

-- Daniel Kahneman

The contemporary practice of finance and investment is driven in large part by the basic principles of Modern Portfolio Theory, which is currently under attack from various quarters. In particular its techniques for risk management and the maximization of short-term returns are said, on a large scale, to have contributed to the current financial crisis in which poor risk management brought the global financial system to the momentary brink of collapse and, on a smaller scale, to such speculative bubbles as that in the commodities markets, which in 2008 not only saw the doubling of the price of oil, but put the cost of wheat and rice out of reach of many of the poor in the developing world. (Mason 2009)

Modern Portfolio Theory (MPT) was developed from approximately 1953 to 1972 through the work of academics who devised an elegant set of models of how the stock markets behave and how investors' success in investing at the portfolio level can be defined.

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The hypotheses developed during those two decades—many of which focus on the definition and management of risk—have provided the basis for MPT's influential theory of success in investing. Four of its most basic tenets are that:

- Diversification reduces risk. Diversification offsets the risks of individual holdings and, properly managed, can thereby increase rewards without increasing portfolio-level risks.
- Markets are efficient. Liquid and transparent markets reflect all information available at any given time and hence price securities traded in these markets appropriately.
- Rewards and risks are related. The greater the risk taken by investors, the greater the rewards they should expect. Money managers are successful only if the returns they achieve are adjusted for the risks they take.
- Options can be priced. Future rises and falls in the price of securities or markets can be hedged against by using options and other derivatives, for which accurate pricing models are available. (Bernstein 2005)

These four principles—and their almost infinite and mathematically sophisticated variations and corollaries—are among the cornerstones on which much of MPT

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has been built. As a theory and practice, MPT was initially ignored by traditional money managers, for whom the relatively unsophisticated, but straight-forward definition of risk was something like “the chance that things would go wrong” and the definition of prudence in investment was generally speaking “preservation of capital.” (Bernstein 2007, Fox 2009) By the 1980s, the contributions of MPTs progenitors—Harry Markowitz, William Sharpe, Eugene Fama, Myron Scholes, Fischer Black— became widely recognized. A number of these were awarded the Nobel Prize (technically, the Sviriges Riksbank Prize in Economic Sciences in Memory of Alfred Nobel). In the 1990s, major institutional investors in substantial numbers began to adopt its policies and practices, and by the turn of the century, it had become increasingly applied to all asset classes.

The primary contribution of MPT to the theory of investment is that it conceived of investing, and addressed the question of risk in investing, at a portfolio level—not, as previously done, at the individual security level. At the portfolio level, MPT defines success in investment in relation to the risks taken and it measures that success in one of two ways—beating “the market” or matching its returns at the lowest possible cost.

Beating the market involves using a series of techniques—including diversification, securitization, and hedging—to control the risk and increase rewards of the overall portfolio relative to benchmarks that represent “the market.”

These techniques have the virtue of allowing investors to purchase individual securities that have relatively high levels of risks that can be offset in various ways and therefore don't increase their portfolios' overall risk. Because riskier securities generally provide greater returns, these risk-control techniques increase a portfolio's returns without increasing its overall level of risk. Those who adopt this strategy are often referred to as active investors, and when they achieve greater returns than their peers without taking greater risks they are, according to MPT, successful.<sup>1</sup>

A second definition of success, according to MPT, is constructing a portfolio that matches market risks and rewards while keeping costs at a minimum. This is generally called passive or index investing—a financial index being a benchmark that captures the risk/reward characteristics of an asset class within the market. Indexing is simplicity itself: the investor buys securities that capture the characteristics of the asset class in question and holds them forever. Because no further research or transaction expenses are involved once the securities are purchased, this strategy assures low costs. MPT considers matching market returns at the lowest possible cost a success because it has shown that most

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<sup>1</sup> This distinction between investment managers' concern with returns at a portfolio level versus at a market level has a parallel in current debates about the responsibilities and legal obligations of corporate managers. While case law in the United States appears to endorse the position that corporate managers' primary obligation is to maximize benefits to stockowners by increasing stock price, others argue that "the long-term financial interests of stable, sustainable operating companies and economies" should also be among the concerns of corporate managers and the regulators that guide their decisions. (De Graaf and Williams 2009) Greenfield has argued that among the elements necessary for such a system are "fairness as a measuring stick, the priority of the particular, the importance of nonfinancial factors, the absence of a supreme stakeholder, and a focus on process." (Greenfield, 2006)

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active managers as a whole don't consistently outperform these index-benchmarks, and their high fees are therefore a wasted expense and a long-term drag on performance.

While MPT's assertion that an active manager can beat the markets appears to some extent to contradict its contention that the passive manager should behave as if s/he cannot, the two coexist relatively comfortably because MPT holds that, although most active managers don't beat the markets consistently, some do some of the time.

Despite its broad acceptance among institutional investors, MPT has over the years come under a variety of attacks. Behavioral economists have attacked MPT's assumption that investors in practice always act rationally—*i.e.*, make choices that are in their short-term self interest. Practitioners and statisticians have attacked MPT's assertion that stock returns always behave as if randomly distributed—*i.e.*, fall in a classic bell curve with fat tails of insignificant consequence. Market fundamentalists have questioned MPT's assumptions that markets can correctly price securities and efficiently allocates assets—*i.e.*, are more reliable than government and regulation in creating sound economies. Proponents of MPT themselves have acknowledged that their theories may not at times work in practice due to the actual costs of doing business—*i.e.*, transaction costs make certain techniques impractical. (Bernstein 2007, Fox 2009, Kahneman

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and Tversky 1979, Korten 1995, De Graff and Williams 2009, Stiglitz 2002, 2003, Taleb 2007)

Recently, critics have laid responsibility, or at least partial responsibility, for the 2008 collapse of the worldwide financial markets and its devastating economic consequences at MPT's door. They have variously argued that MPT's innovations have been abused by the greedy and unethical in the financial community; introduced excessive risk into the financial system; can be useless in times of crisis or are even inherently flawed. (Bookstaber 2007, Mason 2009, Tett 2009)

This paper will not elaborate in detail on these numerous, thoughtful critiques. They are in essence correct. Markets do not always behave rationally. Government is essential for the maintenance of a stable and equitable financial system. Wall Street has been unconscionably greedy. Today's financial practices have put our global financial markets in jeopardy through the systematic application of MPT's risk control techniques.

The focus of this paper will be on one particular criticism of MPT and its negative consequences—its assumption that portfolio management techniques do not affect market-level risks and returns. This observation is important because it implies that the responsibilities of investors cannot be neatly contained at the

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portfolio level, but must include their decisions' implications at a market and societal level.

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MPT is called modern *portfolio* theory for good reason: it defines success in investing at a portfolio level. The risk-control techniques that lie at its core address what it refers to as “unsystemic risk”—that is, risk related to a portfolio level. It generally ignores the possibility that investors may negatively or positively affect “systemic” risks—that is, risk at the market level. If the market as a whole goes down, managers should not be blamed, nor should they take credit if it goes up. They should only be praised or blamed for what they can control—the performance of their portfolios relative to that of the overall market.

As Harry Markowitz, one of the founding fathers of MPT put it in a recent article in *The Professional Investor*:

Systemic risk, due to beta, does not diversify away; unsystemic risk does....This does not mean that individual securities are no longer subject to idiosyncratic risks. It means, rather, that the systemic risk swamps the unsystemic risk during [a crisis]...MPT never promised high returns with

low risk. You pays [sic] your money and you takes [sic] your choice.

(Markowitz 2009)

MPT assumes that investors are essentially unable to control risks and rewards that arise at the market level or, put differently, that the actions of investors do not influence the market.

This assumption, although it simplifies the theoretical tasks of MPT, is a mistake. Understanding the relationship between investors' portfolio-level choices and returns at the market or societal levels is challenging. It is simpler to understand the relationship between investors' choices and portfolio returns. However, profound adverse consequences are ignored when the difficult question of the relationship of portfolio-level investing to the markets and society as a whole is left unexamined.<sup>2</sup>

MPT's inclination to disassociate investment performance from market performance can be illustrated in graphic form by looking at the bell curve upon

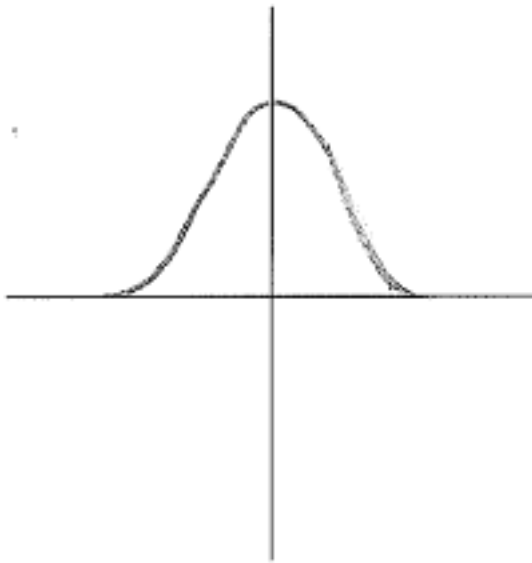
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<sup>2</sup> Certain theorists of the financial markets have in fact noted this connection and contended with its implications. For example, according to Justin Fox (2009), in 1938 Frederick Macaulay had pointed out that:

The errors made by investors and speculators betting on the future via financial markets weren't random, though. They were "systemic" and "constant," the inevitable result of the "emotions, lack of logic and insufficiency of knowledge" that characterized all human decision making but especially decision making about the future. These systematic errors, Macaulay argued, were the main cause of the "violent social disturbances" known as the business cycle. The cure he prescribed was more government planning of economic activity, so the future might hold fewer surprises.

which one of MPT's fundamental assertions rests: the returns of stock prices are essentially random, with extreme variations happening relatively infrequently. Such distributions result in what is called a Gaussian bell curve that looks like this.

Figure 1.



This bell curve represents the percentage change of stocks (or a single stock) which over time is randomly distributed around a mean that represents its expected return. This chart says that the prices of stocks are as likely to go up as they are to go down, and more likely to go up or down a little than a lot. This is

sometimes referred to as a random walk.

One of the implications of this theory is that investors who are actively trading are as likely to lose as to win. In short, the stock market looks like a zero-sum game. This view of the stock market as a zero-sum game is the reason why many institutional investors have adopted index investing. If, as active traders, they are as likely to win as lose in the long-run, the best thing to do is to keep costs as low as possible by trading as infrequently as possible.

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Participants in a truly zero-sum game are essentially gamblers, and not just gamblers, but losers in the long run. They gamble that they will be the ones to be on the right side of the curve earning above-normal returns and that they will be there consistently. The law of averages, however, says everyone will end up in the middle in the end—and because there are transaction costs to investing, the more actively investors trade the more they will lose.

If this is so, it's reasonable to ask why investors play the markets at all. The answer to this theoretically puzzling question is rather straightforward. They invest because in the end the stock market goes up more than it goes down. It is generally a rising tide, although one on which some ships randomly rise faster than others. The reason for this rising tide is growth of the overall economy. Investors invest in stocks because they assume the economy will grow.

As Peter Bernstein puts it

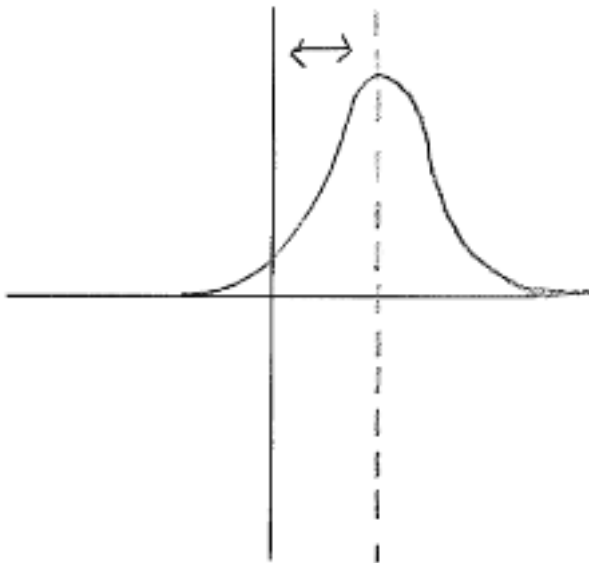
[Investing] has to be a positive-sum game to some extent, or else no one would play....But where does that positive sum come from in the first place? From the growth of the economy itself, whose fruit must accrue to someone, some where, some time. (Bernstein 2005).

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Investors may behave as if the market is a zero-sum game, seeking to beat their peers or minimize their costs, but they are really in it because, independent of the daily games they play, they benefit from the overall growth of the market and the economy as a whole.

Here then is a more complete representation of what the bell curve for stock market returns looks like according to MPT.

Figure 2



The bell curve is here positioned to the right of a vertical axis that can be thought of as representing a world in which the stock market as a whole never goes up. The distance between that no-growth axis and the axis around which stock market returns are

evenly distributed is the reason investors invest, and properly speaking should be their single most important concern. The further the bell curve falls to the right the better off investors as whole are.

For MPT to ignore the question of whether their investments affect the growth of the economy positively or negatively—that is to say, the distance to the right of this axis that the bell curve falls—may simplify its tasks, but it leaves unexamined several important possibilities. Among them is the possibility that, as some argue today, MPT’s risk-control and return-enhancement techniques when widely used actually cause the bell curve to shift to the left—that is to say, hurt the markets and the economy as a whole. It similarly ignores the possibility that when investments are aligned with their natural societal functions, they could push this axis toward the right, to the benefit of all.

It may seem counterintuitive to argue that risk-control techniques increase risk. However, they can do so in theory and in practice if, while reducing risk at the portfolio level, they increase uncontrolled risk at the market level. Instead of being disconnected from the systemic risks of the market, they increase it *by increasing systemic risk through the increase of the supply of, and demand for, risky products.*

It is arguable that the 2008 credit crisis illustrates just such an effect. The collapse of the housing price bubble in the United States that led ultimately to a global financial and economic crisis can be directly tied to the demand for high-risk, high-return securitized loans legitimized by MPT’s various risk-control techniques. Although these techniques allowed investors to increase their

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portfolios' returns, they also allowed substantial amounts of risk to be spread throughout the markets of the world, to its ultimate detriment.<sup>3</sup>

This spreading of increased risk throughout the markets that has been the consequence of MPT's risk-control and risk-enhancement techniques is a phenomenon that has been widely noted. Here are only two of the many recent critical commentators on the subject.

Financial products that purport to reduce the risks of investing can end up actually magnifying those risks... We are now seeing the destructive results of structured finance products that disguised the real risks of subprime mortgage loans as low-risk, high-return investment opportunities.” (Jacobs 2009)

[H]edge funds, though seeming like a niche activity for the rich, inject massive risk and instability into the entire system—but monopolize the rewards for their investors.” (Mason 2009)

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<sup>3</sup> Poor underwriting standards, excessive leverage, and poor risk management also lie at the heart of the 2008 securitization and credit bubble. Clearly, MPT does not call for, or necessitate, such abuses. However, it does legitimize the pursuit of increased risk taking as a primary tactic for investors—and leads to the increase in overall risk in financial markets in general. The dangers of the poor management of risk at the portfolio level can be catastrophic. In addition, however, this paper argues that even the proper management of risk at the portfolio level will lead to uncontrolled and unmanageable risk at the market level. The search for “tail insurance” to control for market-level risk, as has been proposed by some as a remedy for the recent credit crisis, is essentially a quixotic one. El-Erian, for example, advocates “tail insurance,” arguing that institutional investors “should supplement [traditional risk management approaches] by spending time and resources identifying what your left tails are and aggressively hedging them in a responsive and cost-effective manner.” (El-Erian, 2009)

The result of this increased level of risk in the markets is that the chances of what are sometimes referred to as “fat tail” events occurring is also increased . In the language of statistics, a fat tail event is an event of substantial magnitude that arises at the end—or “tail”— of a bell curve. It is a statistical anomaly that falls outside the expected normal distribution. In terms of the financial markets, these fat tail events are crashes, burst bubbles, panics and other crises. It can be argued that by increasing both supply of, and demand for, risky products, MPT has increased the likelihood of these fat tail events occurring.

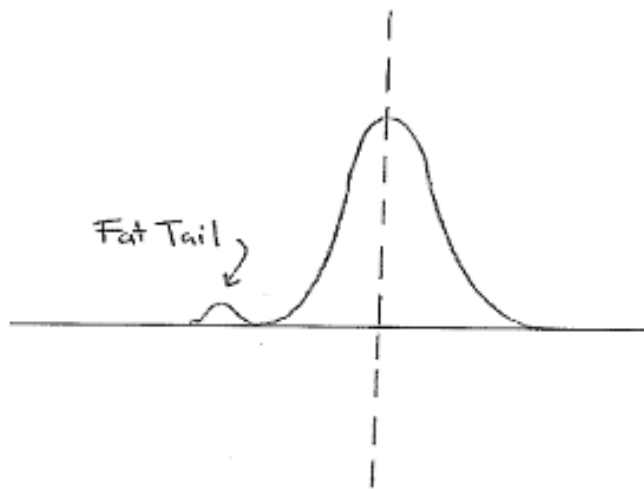
Among MPT’s techniques that have increased these risks are

- Securitization and the aggressive selling of risky loans
- Hedging strategies that create liquidity problems when used by numerous market players at the same time
- Deregulation of financial services that results in the creation of huge unregulated “shadow” financial systems
- Correlation of risks that trigger the failure of one risky financial product when another fails

In addition, by defining success in investing as the beating of benchmarks and simultaneously asserting that certain risks can be controlled, MPT has encouraged

the taking on high levels of debt to enhance returns. This is otherwise known as excessive leverage. When our largest financial institutions indulged in this practice they not only jeopardized their own existence, but put our entire global financial system at risk.

Figure 3.



On the bell curve fat tails may appear small, because their occurrence is infrequent. Their effect on the market, however, is large. As Taleb (2007) puts it, they are not like the random occurrence of an eight-foot-tall

man, a statistical anomaly of anecdotal interest to a student of human height.

When fat tails occur in the financial world, they affect the market profoundly and can move the median return of all investors in these markets to the left. A world where fat tails are likely to happen with frequency might be represented in the following graph:<sup>4</sup>

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<sup>4</sup> One implication of this argument might be, for example, that those practicing MPT have contributed to the poor returns of the stock markets in the United States over the past decade. The annualized return of the Standard & Poor's 500 stock index from August 1999 to August 2009 was -0.79%, in part because of two dramatic crashes in stock price due to bubbles produced by irrationally exuberant investors. During the period, the economy as a whole grew, so the growth of the economy did not result in returns to investors, as MPT would like us to believe. Moreover, it is unclear how much more the economy as a whole might have grown over this period had it not been for these crashes. Further study would be necessary to determine if

Figure 4.

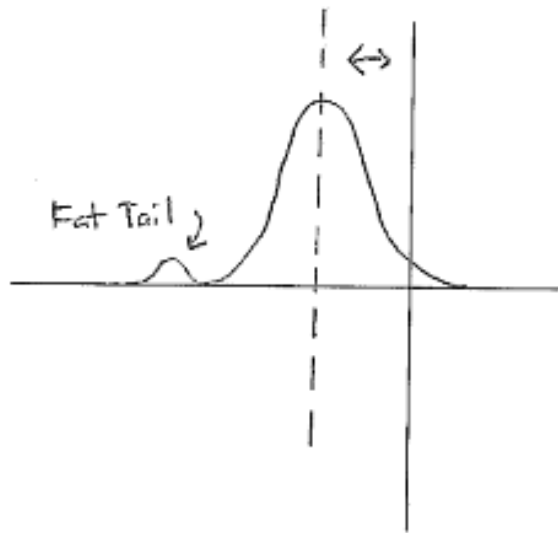


Figure 3 and 4 illustrate the relatively straightforward point that the risk/reward decisions of investors in constructing their portfolios can influence the risk/reward characteristics of markets and the

economy as a whole. Investors ignore this ability to influence markets at their peril in the sense that investment abuses can harm the market as a whole, as well as in the sense that ignoring the proper use of investment tools foregoes opportunities to benefit the markets and the economy as a whole.

In addition to the challenges created by MPT's assumption that its practices are unrelated to market returns, additional problems arise because MPT's risk/reward techniques work only for some of the investors some of the time, both on a theoretical and practical level.

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there is a causal relationship between MPT, the increase in the likelihood of fat tail events occurring, and the effect of these fat tail events on the financial markets and the economy as a whole.

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Active managers who strive to beat the market are sometimes known as “alpha chasers”—alpha being the name MPT gives to the value managers add to their portfolios once various levels of risk are taken into account relative to their returns. Chasing alpha is by definition a zero-sum game, because for every winner there is a loser in the market. Still, some do win. As the economist Paul Samuelson describes it:

[M]odern 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 in trading against willful uninformed 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.

In other words, a small number of smart investors can beat the markets when fools make bad bets. These gains are available, in Samuelson’s words, to “the happy few.” (Bernstein 2007)

At best, alpha chasing corrects temporary aberrations in market price—a minor contribution to financial management. At worst, it represents a reallocation of wealth from the pockets of those without access to information and technology

to the pockets of “a minute minority” with that access. This raises questions of fairness and justice addressed in more depth in the second part of this paper.

Just as active management cannot benefit all, neither can indexing. On a theoretical level, by definition it cannot be used by everyone in the market. Were everyone to index, there would be no one in the market to set prices, which would then freeze and never change.

Although the likelihood of such a scenario occurring is nil, the question points to one of the weaknesses of indexing as an investment philosophy. That is, index investors abdicate any responsibility to set price. This abdication of responsibility—which ultimately finds its justification in the efficient market hypothesis’ assertion that stocks are priced correctly by markets at all times—undercuts one of the basic purposes of public exchanges, which is to provide management of companies with investors’ feedback on the value of their firms. The more investors who index, the fewer there are to provide this valuable feedback.

In effect, index investors amplify whatever the characteristics of the market are at a given time. Although indexers often portray themselves as long-term investors because they buy and hold stock, this is not really the case. Indexes are a reflection of whatever the market is at any given time. If the market is overpriced

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because of a valuation bubble, indexers are investors in, and contributors to, that bubble. If the market is short-term they are short term. As Simon Zadek of AccountAbility once put it, “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.” (World Economic Forum 2005)

In addition, many of the techniques advocated by MPT work only if relatively few investors use them. These are generally techniques that depend on hedging. If used by many, they collapse in times of crisis because they cause liquidity problems—that is to say, various hedging programs will all try to make the same trade at the same time, freezing the markets because there is not enough product to execute all the trades. This phenomenon has been a concern since 1987 when, during the October market collapse, a type of hedging known as “portfolio insurance” not only failed to protect portfolios from loss of value, but actually exacerbated the market declines. (Bookstaber 2007, Fox 2009)

Because of its focus on various short-term, portfolio-oriented questions, MPT manifests itself in techniques that work only for a few at any given time and, as MPT explicitly acknowledges, not for the market as a whole. In confining itself to this easier question of the relationship of investment to portfolio returns, MPT

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has unintentionally made investing considerably riskier, more short-term, and beneficial only to the few.

MPT is in effect the wrong answer to the wrong question. It is wrong that risk can ultimately be controlled at the portfolio level because it fails to take into account that investment decisions made at the portfolio level, when widely adopted, affect markets as a whole. The very question of controlling risk at the portfolio level is therefore a misleading one. Beating benchmarks turns out not only to be difficult to do, but an exercise that ultimately harms the markets and therefore all investors. What is needed is a definition of success in investment that directs investors toward practices that accrue benefits to the markets and society as a whole, not simply to individual portfolios.

In short, if MPT can influence markets negatively, can we devise an alternative system of investment that will influence markets positively? That is the question that we turn to in the second part of this paper.

**Part Two: Notes toward an Alternative Theory of Investment**

A collection of anomalies [is] not a real theory. You need a theory to beat a theory.

-- Andrew Lo

Because the currently best-recognized theory of modern finance is unable to define investment success at a market level and does not provide investment techniques that work when widely used, it is crucial that academics and practitioners explore alternative concepts. In doing so, today's all-pervasive definition of investment success as the measurement of risk-adjusted returns at a portfolio level will need to be re-examined. Doing so is both challenging and uncomfortable, given the attention and recognition given to the current model. We cannot afford, however, a repetition of the 2008-2009 financial and economic crises provoked in part by current financial practices.

An alternative theory needs to ask what the purpose of investment is and how that purpose is best expressed and its goals realized. We need to think about investment assuming that we care about its intended results.

This essay argues that ultimately the purpose of financial markets as they have evolved is to support governments in the task of creating just and sustainable societies. The purpose of these markets is best realized when an understanding of the societal functions of specific asset classes leads to their skillful use in support of these goals.

Today, although criticisms of MPT are numerous and general, proposed alternatives are still few and lacking in specifics. Alternative conceptions of how investors ought to behave include the “universal owner” and “fiduciary capitalism” as expounded by James Hawley and Andrew Williams (Hawley and Williams 2000); the adoption of United Nations Global Compact’s Principles of Responsible Investment and the increased integration of environmental, social, and governance (ESG) factors into mainstream investment; and the integration of personal values into investment. (Statman)

This paper proposes an additional approach, one that ties investment performance to decisions at an asset-class level, and measures success at the market level based on indicators that flow naturally from the intended functions of these assets. It does so because when investors understand and act to enhance the particular nature of each asset class, they will be compelled to consider the implications of their investment decisions at a market and societal level, rather

than at a strictly portfolio level. Whether this groundwork is solid enough to bear the weight of a fully developed theory and practice remains to be seen.

### **Need for Alternative Theory**

Over the past four decades, theories have come to play an important role in the financial community, where previously they had little influence. In Justin Fox's words, "the discipline's teachings were a mix of common sense, judgment, and tradition." (Fox 2009) MPT has changed all that in profound ways. It is both a theory that describes the functioning of the financial markets and a prescription for behavior within those markets. It is derived from observations of the financial markets and has simultaneously changed those markets' characteristics.

Some might argue that no theory is better than a bad theory and that the clock can simply be turned back to a simpler day. This paper assumes, however, that in our more complicated global financial markets, basic theories and principles to guide investment are now necessary.<sup>5</sup>

In particular, new theories or principles of investment are necessary to envision and implement alternatives to current financial practices that have emerged as the

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<sup>5</sup> Slager and Koedijk (2007), for example, have argued that a "coherent set of investment beliefs provide the basis for a good investment policy" and found that few institutional investors spelled out explicitly the beliefs on which their investment policies were based.

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logical extension of MPT's principles. New theory and principles can contribute to fundamental change in the investment community by guiding:

- Regulators to limit the supply of risky financial products as well as the demand for them
- Academics to research how responsible investment can advance societies, rather than enhance portfolios
- Fiduciaries to seek investments that enhance the function of their asset classes, rather than beat benchmarks

The concepts for alternative theories suggested in this paper flow from two observations and two assumptions. First, the paper observes that the asset classes in which investments are made have distinct, “natural” social and financial characteristics, and that these asset classes differ from one another particularly because they have been created for different societal purposes.<sup>6</sup> Second, it assumes

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<sup>6</sup> The observation that asset classes have certain “natural” characteristics and were “created” for certain functions leads to a complicated discussion of the interrelationship between individual initiative and government direction. That is, individual players—be they speculators or long term investors in financial markets—can use these markets for narrow, self-serving purposes, and to a certain extent are always free to do so. If there weren't an element of short-term self-benefit in investment, few would play the game. However, government exercises control over virtually all important financial markets not only to control potential abuses, but to assure they continue to serve vital societal functions—not simply to provide investors with opportunities for short-term profits. For example, governments don't issue bonds—one of the largest of the asset classes—so that investors can beat fixed-income benchmarks or profit from arbitrage. They issue bonds to fund a range of public goods. Similarly, private investment in real estate is not intended for the speculative flipping of properties or even as a hedge against inflation, although it is certainly used for both. The real estate industry is regulated by the government to help enhance its basic societal function of providing affordable living and working space in livable communities. The markets for these distinct assets are designed and regulated to enhance these overriding societal purposes. Government,

that the goal of legitimate governments is the creation of just and sustainable societies and that these governments use regulated financial markets in support of that goal.<sup>7</sup>

Working from this base, this paper elaborates a definition of success in investment and poses three questions.

- 1) What are the natural functions and benefits of individual asset classes?
- 2) Why should success be defined as enhancing these functions and benefits?
- 3) How does the appropriate use of asset classes benefit society as a whole?

Most simply put, this paper defines success in the financial markets as *investments in asset classes that maximize the societal benefits for which they were created.*

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for example, gives tax breaks to investors in most bonds issued by states and cities to encourage investors' use of this mechanism for funding needed services at a local level.

<sup>7</sup> These assumptions about government are also broad and implicitly controversial. Alternative conceptions abound as to what constitutes legitimate government, how those governing should define justice and sustainability, and what the proper role of government in the maintenance of financial markets should be. Any full-blown theory of finance must contend to some degree with issues of this sort. Ultimately finance cannot be separated from politics and it is important that the political context in which financial theory evolves and financial markets operate be as clearly articulated as possible. This paper spells out its assumptions briefly here with the understanding that the fuller exploration of such assumptions is part of the task of those concerned with theory and practice in this area.

Although the answers proposed here to these three questions are brief and provisional, they may suggest directions in which alternative theories of investment might be further elaborated.

**What are the natural functions and benefits of individual asset classes?**

It is in some senses self-evident that asset classes differ in their financial and societal characteristics. Cash obviously isn't the same as stocks; stocks differ from bonds; bonds don't serve the same function as real estate. These differences exist because these asset classes have evolved over the years to serve particular societal functions.

A brief elaboration of the social function of six commonly used asset classes can help highlight these differences and stress the diverse and complementary ways in which investment opportunities, when properly used, function in society. The recognition of differences in function among asset classes contrasts with MPT's treatment of asset classes, in which they are abstracted into financial benchmarks of interest solely for their risk and return characteristics. MPT's definition of success in effect precludes consideration of the societal functions of specific asset classes.

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The six asset classes discussed here are cash, fixed-income, public equities, real estate, venture capital, and commodities.

*Cash*—essentially deposits in lending institutions—is the oldest of asset classes. Among its primary purposes are to preserve capital, facilitate commerce, and serve as a capital base for lending institutions. It is perhaps simplest to say that the natural function of cash, which primarily takes the form of deposits in banks, savings and loans, and credit unions, is to *promote community economic development* because cash can be easily pooled within a community and lent back out to that community. Cash is also the asset class that most easily provides access to financial services for those struggling to work their way up out of poverty. In particular, cash investments lend stability to individuals as they live and work while promoting home ownership and small-scale entrepreneurship as well as to larger businesses through pooled loans and project finance. Today, however, many banks are increasingly focusing for their profits on such fee-generating activities as ATMs, overdraft penalties, and credit cards, rather than on profits from community lending.

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A different societal role is played by the largest asset class in the world today: *fixed income*. This asset class can be thought of primarily as bonds issued by governments and large corporations to fund, respectively, public works and large-scale projects that have long-term returns. Since governments issue the vast

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majority of these bonds, it is perhaps simplest to say that its natural function is to *promote the creation of public goods* such as education, transportation, security, and a regulated financial system. Fixed income also allows corporations to raise funds for large-scale capital investments that pay off only in the long-term.

Although fixed income products run the gamut from short to long term, one of their unique roles is their ability to fund long-term, publicly oriented investments in the infrastructure of our society. Today, however, many of the investment tools use in the fixed income markets used for arbitrage and other market anomalies having little to do with support for public goods.

The asset class most commonly associated with investing is *public equities*—stock in large publicly traded corporations, usually traded on exchanges. Stocks and stock exchanges can be thought of ideally as a means of raising capital for large scale enterprises while simultaneously imposing on them a competitive discipline that drives them to continually improve efficiency. It is perhaps simplest to say that this asset class's natural virtue is to *promote continual feedback to private enterprises on their abilities to efficiently deliver goods and services* on a large scale. In particular, stock investments—through an elaborate system of transparency, disclosure, and feedback—help assure that incremental change is forced on mature commercial and industrial institutions. Today, however, public exchanges are increasingly dominated by short-term traders and speculators,

including so-called “high frequency” and “flash” traders and those using “dark pools.”

*Real estate* is unusual as an asset class in that you live, work, and conduct business in it. It is available to individual investors primarily in the relatively illiquid form of housing, but also includes industrial, office, commercial and agricultural properties. It is perhaps simplest to say that its natural function is to *promote the creation of livable communities* through the effective organization of living and working space. It is one of the most physical of asset classes and most directly connected to the environment, and creates a physical environment and infrastructure that will for decades define our sense of who we are and how we live. In the past decade, however, real estate has been dominated by highly indebted speculators who contributed to an asset bubble that could only be sustained if real estate prices rose rapidly and forever.

*Venture capital* is among the riskiest and most speculative of asset classes. It makes big bets on start-up businesses, many of which break new technological ground. Most fail, but those that succeed bring outsized returns. Its natural function, put most simply, is to *promote change in how business is conducted*, at its best commercializing emerging technologies that promote economic development and sustainability. In recent decades it has funded breakthroughs in information technology and internet communications, and is currently investing

heavily in clean technology and alternative energy, offering the hope of a revolutionary shift away from a fossil-fuel economy. Literally, the venture capital of today shapes the world we live in tomorrow.

The creation of *commodities* exchanges originally had a relatively narrow societal purpose. It served to protect farmers and natural resources producers or users against large unanticipated swings in price. Its virtue and primary function is to *protect producers and hence consumers from undue market fluctuations*. Today, however, commodities are often used purely for speculation and traded as a bundle in indexes. As noted below, speculative bubbles in food-related commodities can have particularly devastating real-life consequences.

The markets for each of these asset classes, as well as others not covered here, have been developed, regulated, and refined over the years in ways that, when not abused, can strengthen and amplify their societal benefits

Acting ultimately through government, society permits and encourages their continued existence because they bring particular benefits and fill particular needs. This range of asset classes forms a mosaic of tools, each of which works in its own way toward the creation of societies that are—in the hands of an honest and well functioning government—just and sustainable. If they fail to continue to

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fill these useful roles, society would, or at least should in theory, modify or do away with them entirely.

As asset classes, they find somewhat different expression in their specifics from country to country, region to region, or era to era, depending upon local conditions of economic development, cultural norms, political philosophies, and historical precedent. Their essential nature and the benefits they naturally provide, however, remain the same.

### **Why should success be defined as enhancing these functions and benefits?**

It is in a certain sense self-evident that asset classes should be used for the societal purposes for which they were created and that they should not be used in ways that harm that society. These asset classes are tools and tools should function as intended. The financial community's definition of success as beating benchmarks on a risk-adjusted basis, however, so ignores the intended purposes of asset classes that it can end up promoting not only the misuse of these tools, but the abuse of these tools in ways that they end up harming those they were intended to help.

This paper suggests three basic reasons why it is useful to define skill<sup>8</sup> in investing as using asset classes for their intended purposes.

- It is the most efficient way to build a just and sustainable society.
- It best assures that financial innovation will contribute to the development of such a society.
- It encourages prudent behavior among the constituents of each asset class.

The natural attributes of asset classes, when fully articulated, can provide benchmarks and frameworks against which to measure the effectiveness of a particular investment in benefiting society—effectively an asset-class-based alternative measurement of returns.

*Efficiency.* On the most basic level, using asset classes for the societal purposes for which they were intended is simply a question of efficiency.<sup>9</sup>

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<sup>8</sup> This paper assumes that skill in investment will also incorporate the ability to manage the question of financial returns well. Investments, after all, have financial returns. It does not, however, address the question of what the measurement of success in achieving financial returns would be if, as is implicit in this paper, financial returns were no longer measured against narrowly defined financial benchmarks. The concept of beating benchmarks as the measurement of investment skill has become so ingrained in our thinking that it is almost impossible to articulate what alternatives might look like. One useful starting point might be the concept of a “reasonable” return—where the assessment of “reasonable” took into account the “fairness” of profits made by those offering the vehicle in which the investment was made.

<sup>9</sup> The role of efficiency described here differs sharply from that imbedded in MPT. One of the corollaries of MPT’s efficient market theory is that because markets can price securities efficiently they are also helpful in the efficient allocation of assets. This assertion is part of a larger argument that government price controls (that is, government interference in the market) is an inefficient way to run an economy. Because the market can provide and process more information more rapidly, it is more efficient in setting prices and

For example, it can be seen from recent experience that it is not only inefficient, but outright harmful to society, when the commodities market becomes dominated by speculative interests. In 2007 and 2008, a bubble of major proportions took place with the prices of most commodities in the world doubling in a year's time. This bubble was fueled in part by institutional investors, seeking to enhance their portfolio returns, who poured funds into commodity indexes. These steep increases in the prices of such commodities as oil and steel severely disrupted the economies of developed nations. More seriously, the increases in the costs of rice and wheat literally took food out of the mouths of the hungry in the developing world. (Mason 2009) Those seeking short-term portfolio gains turned the natural and proper function of the commodities markets on its head, disrupting supplies and markets to the detriment of society.

Contrast this inefficient abuse of commodities with the recent emergence of microfinance—very small loans made to economically disadvantaged individuals who had previously not been served by mainstream finance. Microfinance is an efficient use of cash to promote community development at the very smallest end of the lending scale. Over the past three decades those who understood the natural

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therefore in allocating how assets are deployed in the economy. This paper instead relates efficiency to the use of market mechanisms or asset classes and it asserts, in effect, that when abused or misunderstood market mechanisms can harm the markets they were intended to serve or, equally well, miss opportunities to serve those markets—both of which are inefficient uses of the tools of finance. Price, here, is not the mechanism used to measure efficiency.

ability of cash to empower once it gets out onto the street developed an effective tool for serving the previously impoverished. By aligning with its natural function, these financial institutions have efficiently served a sizable segment of the society previously ignored by the mainstream. A number of the Indian banks most aggressively pursuing the microfinance strategy either are partially owned by the Indian government or required to undertake microlending by regulation, a fact that underscores society's interest in assuring that this asset class's benefits be maximized.

*Innovation.* A second related reason for the appropriate use of asset classes is that it naturally directs innovation to beneficial and societally sustainable ends.

Currently, innovation in the financial world is disproportionately directed to products whose goal is the maximization risk-adjusted returns of assets rather than their natural societal function. At best, these new products ignore the intended purposes of the asset class for which they are created, and at worst undercut the basic purpose, causing substantial societal harm. For example, credit default swaps (CDSs) were one such major innovation, theoretically created to help the credit markets take the risk out of risky loans. They are, in essence, a kind of insurance that theoretically protects lenders from defaults. Within a decade CDSs had a notional market value of some \$60 trillion and, ironically, dramatically increased the incentives for investors to keep risky loans in their portfolios in order to boost

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short-term returns. In 2008, exposure to CDSs caused the effective bankruptcy of AIG, one of the largest insurance companies in the world and played a role in the collapse of Lehman Brothers, one of the oldest and best known investment banks on Wall Street. CDSs, intended to help the credit markets, ended up exacerbating the credit market crisis of 2008 that threatened the viability of the entire global finance system. (Tett 2009)

By contrast, during this same period, far from Wall Street and its alpha chasers, one of the most influential innovative new developments in real estate was taking place. U.S Green Building Council understood that it is in society's long-term interest that buildings be environmentally sustainable. It developed its LEED standards for new and refurbished building that showed how, by taking the long-term view, developers could design into buildings environmentally friendly features that ultimately had financial benefits as well. This innovation did not come from those promoting short-term profits in the real estate world, where innovation meant building energy inefficiency cheaply into today's structures and letting society bear the long-term costs. Instead it came from those who sought to align investment in real-estate with the societal goals for which it was created.

*Prudence.* The third reason for the appropriate use of asset classes is that it imposes a discipline of prudence on the members of the asset class.

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When investors focus blindly only on increasing their portfolios' returns, they can encourage imprudent behavior on the part of those in whom they invest. Nowhere was this more dramatically clear than when, chasing unbelievably high returns, some of the largest pension funds and institutional investors in the United Kingdom, not to mention ordinary individual investors, poured money into Iceland's banks in 2007 and 2008—this, despite warnings that these banks were being run irresponsibly. A Danske Bank report at that time on the state of Iceland's banking system warned that, in Michael Lewis's words, it consisted of:

[A]n incredible web of cronyism: bankers buying stuff from one another at inflated prices, borrowing tens of billions of dollars and re-lending it to the members of their little Icelandic tribe, who then used it to buy up a messy pile of foreign assets. (Lewis 2009)

None of this stopped theoretically sophisticated institutional investors from placing billions of dollars with these banks. Reportedly U.K. investors placed some \$30 billion with Icelandic banks, helping fuel a bubble of immense proportions that, when it burst, nearly bankrupted that country. These investors were arguably driven by a desire to beat their benchmark by capitalizing on the unrealistically high returns promised by these banks. In doing so, they failed to ask the fundamental questions about the prudence of the banks' practices, and indeed could be said to have encouraged them.

By contrast, a small band of socially responsible investors in public equities have long demanded prudence from those companies in which they invest when it comes to social and environmental issues. They have entered into productive dialogue with The Gap on labor standards at overseas contractors, resulting in that company adopting an industry-leading set of monitoring and reporting practices; with Yahoo and other Internet providers on censorship in China, resulting in a ground-breaking set of principles for companies to adopt in countries where censorship is a concern; and with Kimberly-Clark on its forestry policies in the environmentally sensitive boreal forests of Canada, resulting in precedent-setting new policies on sustainable forestry. Success for these investors includes encouraging behavior on the part of those in which they invest when it comes to issues with broad social and environmental implications not just for the company or its industry, but for society as a whole.

Responsible investors in asset classes define prudence in their investment process in part as cultivating prudent practices by the members of that asset class, rather than as maximizing short-term profits by any means. By understanding the appropriate uses of each asset class, the practices of these investors lead to a reduction in the social and environmental risks and an enhancement of the rewards that it provides.

In addition, grounding the definition of success in investment at the asset-class level on the societal function of each asset provides a means of measuring success at the market level. One of the major difficulties in shifting the focus of investors from the portfolio level to the market level is that the benefits at this more inclusive level are aggregated and communal. It is difficult for individual investors to see the tangible effects of their investments on the whole.

An analogous problem of what to measure and how to measure it arises for those seeking to develop alternatives to the narrowly focused measurement of economic progress provided by current calculations of Gross Domestic Product. It is intuitively appealing to talk of increases in well-being or happiness as a measure of progress, but difficult to define what these terms mean and what indicators capture their rise and fall.

One approach that might help measure market- or society-level returns would involve a framework for each asset class that enumerates the natural benefits it can provide and elaborates on the specific actions necessary to capture those benefits. This framework could then be used as an assessment tool to benchmark the success of investors in allocating their assets so as to maximize these benefits. The benchmarks based on these asset-class-related benefits would serve to align specific investment decisions with the larger goals of society. The

more investors succeeded in such alignment, the greater the benefits to investors and society as a whole.

**How does the appropriate use of asset classes benefit society as a whole?**

Because using asset classes for the societal purposes for which they are intended focuses investors on the effects of investment at a market and societal level, it solves three dilemmas that often arise when investors follow the precepts of MPT.

The first is the free rider problem. Often investors are aware of problems related to their investments that it would be broadly beneficial to address. For example, they might well view excessive CEO compensation as coming improperly at shareholders' expense, costing a company its good reputation, tarnishing the image of business in America, or creating fundamentally unjust social inequalities. However, if they devote their time and resources to attacking this problem, any benefits would accrue to other investors at no cost, as well as to themselves. Why should others enjoy a free ride at the responsible investors' expense? Indeed, if engaged in frequently, such expensive and generous gestures will ultimately cut into their own returns while others profit at their expense.

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Once success and skill in investing can be seen and measured in the appropriate use of asset classes—in this case, using the opportunities for engagement that public equities provide to limit CEO compensation—to ends that ultimately benefit the market and society as a whole, then responsible equity investors who tackle such problems productively will produce attractive returns (*i.e.*, demonstrable benefits to society) for which they can be rewarded. Presumably these rewards would take the form of attracting and retaining clients, as well as the ability to charge higher fees for quality service. A measurement system that could capture and publicize the market-level or societal-level benefits these investors achieve would assure that they retain and attract clients who understand that enhancing market-level returns in the long run outweighs beating a portfolio's benchmark.

In addition, the free-rider problem can be viewed as a variation of the question of why investors should “do the right thing” and avoid unethical, but legal, behavior that might enhance portfolio-level returns, but harm the moral fabric of society. If unethical behavior can be equated with misuse of the intended purpose of investment and success in investment can be measured against investments' proper use, then the perception of unethical behavior—currently viewed as positive if it enhances portfolio-level returns—would be more clearly negative and thereby minimized.

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The second problem it solves is a similar one related to fiduciary duty. As long as fiduciary duty is defined as maximizing risk-adjusted returns as measured against asset-class benchmarks, managers have difficulty addressing societal, as opposed to financial, problems that may directly affect their beneficiaries.

Consider the dilemma of the pension fund manager who sees investing in profitable pharmaceutical companies beneficial to their future retirees' portfolios and simultaneously as support for companies driving health care costs for these same retirees to unsustainable levels. Or of the manager who feels compelled to help his clients' portfolios by investing in oil company stocks as oil prices rise, but also believes that the costs to society of global warming will far exceed any minor contributions these stocks will make.

Amy Domini highlights this issue when she writes that:

While looking after the best interest of the beneficiaries and their dependants sounds like a noble goal, this section [of the ERISA law governing fiduciaries of certain pension funds], which has come to be known as the “exclusive benefit” section, has created an understanding that *nothing but making money* can enter into the mind of the fiduciary. But the language of the law, and I would argue the intent of the law, is not stated that way. The language directs the fiduciary to think of nothing but “the benefits.”

We need clarification as to the meaning of benefit. To interpret it as meaning, “make money” is to accept bizarre consequences. Under that definition, I may kill people to make money. In fact, under that definition I could kill the beneficiary to make money.<sup>10</sup> (Domini 2009)

Using asset classes for their intended purposes allows fiduciaries to identify and look to product returns to the markets and society that ultimately will reward their beneficiaries in ways that financial returns at the portfolio level could never achieve. The fact that a given investment may or may not beat a benchmark at a given time—a goal of questionable societal benefit to begin with—would no longer be the driving force behind their decision-making.

The third dilemma resolved is one that I have called the short-term measurement dilemma. (Lydenberg 2009) When the market is valued according to a short-term measurement—that is, stock price—and when managers’ performance is measured against these prices, then long-term investing becomes virtually impossible. As Alain Leclair, president of the French Association of Financial Management, has put it: “We face a dilemma...In practically all aspects [of investing], although everything ought to direct us to adopt a long-term

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<sup>10</sup> Of course, killing people outright is illegal and fiduciaries cannot commit illegal acts for financial gain. But fiduciaries can invest in tobacco companies whose products arguably harm their beneficiaries. In addition they can invest in companies that have committed outright illegal acts—environmental pollution, workplace safety violations—that may have harmed their beneficiaries. What the obligation of fiduciaries is in these situations is not a trivial question.

approach, we are forced to measure and act in the short term.” (Grollier and Leclair, 2006) This same dilemma applies to all asset classes once price-based, risk-adjusted returns become the benchmark for measuring success.

This dichotomy is often portrayed as the measurement of short-term *financial* versus long-term *non-financial* returns. (The long-term is considered non-financial essentially because its consideration involves uncertainties that are often impossible to translate into today’s stock price.) If this dichotomy is recast as that between short-term returns at the portfolio level and returns at the market level, which are more inherently long-term—and if overall success is measured at the market level—then the dilemma disappears. The long-term and the market take precedence over the short-term and the portfolio.

In addition to addressing these particular dilemmas, a system of investment based on the proper use of asset classes has the benefit of adding increasing value—that is, performing better—as more investors adopt its use. A variety of investors will choose a variety of asset-class allocations that will work in mutually supportive ways toward the same goal: a just and sustainable society. For example, assuming one reasonable goal of society should be to use energy as efficiently as possible, one investor may use venture capital to fund revolutionary technologies, more efficient at generating electricity; a second may press publicly traded companies to use the energy they purchase more effectively; and a third may use

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real estate investments to create walkable cities where transportation costs decrease and greenhouse gas emissions are sharply reduced Together, their investments have complementary societal goals that cumulatively enhance each others' returns.

Unlike the investment practices implicit in the application of MPT, the more investors that adopt this approach, the more likely investors in the aggregate are to achieve their long-term goals.

### **Is Outperformance the Best Measure of Success?**

One additional question of importance must be addressed. It can be put simply. If I can outperform my peers—either by reducing my costs or by beating my benchmark—why shouldn't I just do it? In the end, some investors will find themselves with better performance than others. Why not me? After all, if I see a \$20 bill on the sidewalk, I should pick it up, right? Only a fool would walk by.

Expressed as naked self-interest, this argument is difficult to counter. However, investors do not operate in a vacuum, or even in a world of individual, disconnected, atomistic compartments. Their actions are interrelated, and affect the markets and society as a whole. The question can be more properly addressed if this interconnectedness is acknowledged and the challenge framed more

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broadly: why should society work to keep some investors from gaining at the expense of others, even although they can, through unrestrained power or cunning, do so.

There are three important reasons why society places limits on the abilities of some investors to gain at others' expense. They related to:

- Fairness and justice
- Scams and lawlessness
- The basic character of our government.

If the greater resources of “the happy few” enable them to consistently benefit at others' expense, they by definition have an unfair advantage in the marketplace. If this advantage accrues to the same handful of the rich and powerful, the system is clearly unfair.

Today's system, where MPT's twin definitions of success dominate, gives a handful of large institutional investors such unfair advantages. There are some who have the resources to assure themselves of better information than their competitors, not to mention the man in the street. Certain large investment banks and universities are among those who boast of beating the markets regularly. Large institutional investors also have the market clout to demand preferential

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treatment, and in particular less expensive services than are available to others. In the case of large institutional index investors, this can mean investing at virtually no transaction cost at all.

It is not accurate to say that these large investors are picking up a \$20 bill that is lying on the street. Only a few can see that it is there. And in fact it isn't on the street at all—it is in someone else's pocket. Just because the happy few have the knowledge and the market clout to take the \$20 out of someone else's pocket, even if it is legal to do so, doesn't mean it is fair. Society should not encourage financial practice or theory that gives the advantage to the few at the expense of the many.

Second, in practice, the striving for outperformance through MPT's risk control techniques—this chasing of alpha—also leads many sophisticated investors, who can easily be conned into believing they are among the happy few, to fall more easily for scams. The unscrupulous on Wall Street are encouraged to develop products so complicated that through what amounts to a sleight of hand the risky appears riskless and when products that promise great returns fail, these managers still charge handsomely for their services.

As Gao Xiqing, the president of the China Investment Corporation, China's sovereign wealth fund, put it in an interview with James Fallow, when asked about

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the usefulness of derivatives—one of the mainstays of MPT and its diversification tactics: “If you look at every one of these [derivative] products, they make sense. But in the aggregate they are bullshit. They are crap. They serve to cheat people.” By cheat, he means they don’t work when investors most need them to. (Fallows 2008) In just this way, scores of institutional investors discovered that one supposedly safe alternative to cash investments called auction-rate securities, sold to them in the billions of dollars as securities that could achieve slightly higher rates of return than money market funds, actually became totally worthless when the credit markets froze up in 2008.

In practice, risk control is susceptible to such infinite variations and complications that it is almost impossible for most institutional investors of reasonable intelligence and skill to keep up with the newest cons. The temptations to game the system are too great for the unscrupulous to resist and the traps are too many for the sophisticated to avoid once investors start asking why can’t they, and they alone, beat the system.

Finally and even more seriously, attitudes toward the proper handling of finance and the proper way to govern cannot be separated. Finance and government are inevitably joined at the hip, and if the former is allowed to abuse systems for its private, individual gain, the latter will not be far behind.

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Injustice and lawlessness in the management of our financial system can easily spill over into our management of government as well. Powerful players cross over between the two worlds all the time. Each influences the other through contributions, gifts, subsidies, tax breaks and a host of other direct and indirect means. Theories that rule one world will rule the other sooner or later. If the financial community broadly accepts that they are playing a zero-sum game where it is “every man for himself,” those in government may soon start playing by the same rule. This is not to say that any alternative theory of finance, how thoughtful or well conceived, can eliminate corruption and power seeking entirely from either world. However, if we are to keep these tendencies within tolerable bounds, it is important that our theories and aspirations start from a point where both worlds are aligned with the goals of justice and sustainability.

To return to the original question, it is in society’s interest to use whatever tools it has to keep those in the financial community who seek simply to maximize their own returns at the expense of others from dominating the markets. Thinking they can beat the system leads investors to behave as if they were in a casino. As Keynes wisely observed:

Speculators may do no harm as bubbles on a steady stream of enterprise.

But the position is serious when enterprise becomes the bubble on a whirlpool of speculation. When the capital development of a country

becomes a by-product of the activities of a casino, the job is likely to be ill-done. (Keynes)

Society—and for society, read also government—has a number of tools at its disposal to cut back on these abusive practices and the dominance of short-term speculation. They fall into the categories of regulation, theory building, and cultural change—and all are necessary, if any are to succeed.

Regulation is an obvious and crucial first step.<sup>11</sup> Financial markets must be strictly regulated to prevent too many risky products from being offered on the supply side and to tame the “appetite for risk” on the demand side. Many sensible suggestions for such reforms, particularly on the supply side, are now being put forward by governments around the world. These must be aggressively pursued. In addition, greater attention needs to be paid to regulation of the demand side. Fiduciaries, in particular, need to be reined when they are considering innovative, risky products for their portfolios.

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<sup>11</sup> Numerous important national and international government regulatory initiatives are currently being proposed to place limits on the financial community. These include considerations for increased taxes on short-term investments, a Tobin-tax on financial trading, limits on the compensation of CEO and traders at major financial institutions, increased capital ratios at banks to prevent excessive leverage, re-instatement of the up-tick run on short selling, requirements that those securitizing debt retain ownership of a portion of the securities they sell, greater transparency in the credit default swap markets, “living will” plans for the dismantlement, without government bailouts, of large financial institutions in case of crises, and so on. Implementation of some combination of these regulatory initiatives is essential if our financial systems are to operate with stability. This paper’s argues for the importance of an accompanying theory and cultural change that promote stability and align investments with regulatory goals because regulation is always in danger of dismantlement or capture by vested interests unless societal norms and expectations support its continuation and enforcement.

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Theory building needs to go hand in hand with regulation, in part because it can guide regulation not only to discourage current abuses, but also to encourage future constructive practices. In addition, a theory of finance that provides underlying support to regulation will help undercut temptations at a future date to roll back current reforms.

Finally, cultural change is necessary so that those who profit at others expense are not viewed as icons of progress and bastions of right thinking, but rather as narrowly, self-interest speculators. The “greed is good” doctrine is not only false, but should be a matter of shame. As Adam Smith points out in his *Theory of Moral Sentiments* “the desire of praise-worthiness, and in the aversion to blame-worthiness” is as powerful a motivator of human behavior as financial gain. (Buchan 2006)

Given the sorry state of theory and practice in today’s financial community, it may seem that such arguments for discouraging the unbridled pursuit of self-interest are naïve or run against basic human nature—that it is hopeless to propose what is in the best interests of society as a whole. When indulging in such thoughts, however, it is good to be reminded that, not fifty years ago, the better part of the financial community—and fiduciaries in particular—operated comfortably under the principles that risk taking was imprudent, that maximizing short-term profits in zero-sum games was unwise, and that investors’ and society’s

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long-term interests were compatible. MPT has shown us some of the limitations of the investment practices of those days, which certainly had flaws that needed to be addressed. But the new set of practices MPT has introduced into the field are flawed in profound ways of their own. The point here is not that past days were better than our own. Rather, it is that investment theories and practices, whatever their particularities, are not part of human nature. They are societal constructs and are reflections of their times. They are what we choose to make them.

### **Theory in Practice**

Evolving a new definition of success in investing will mean substantial practical work. A program of research, accompanied by the development of tools for practice, needs to be undertaken that further develops:

- Understanding of the underlying purpose of investment
- Understanding of how specific asset classes can be used to support that purpose

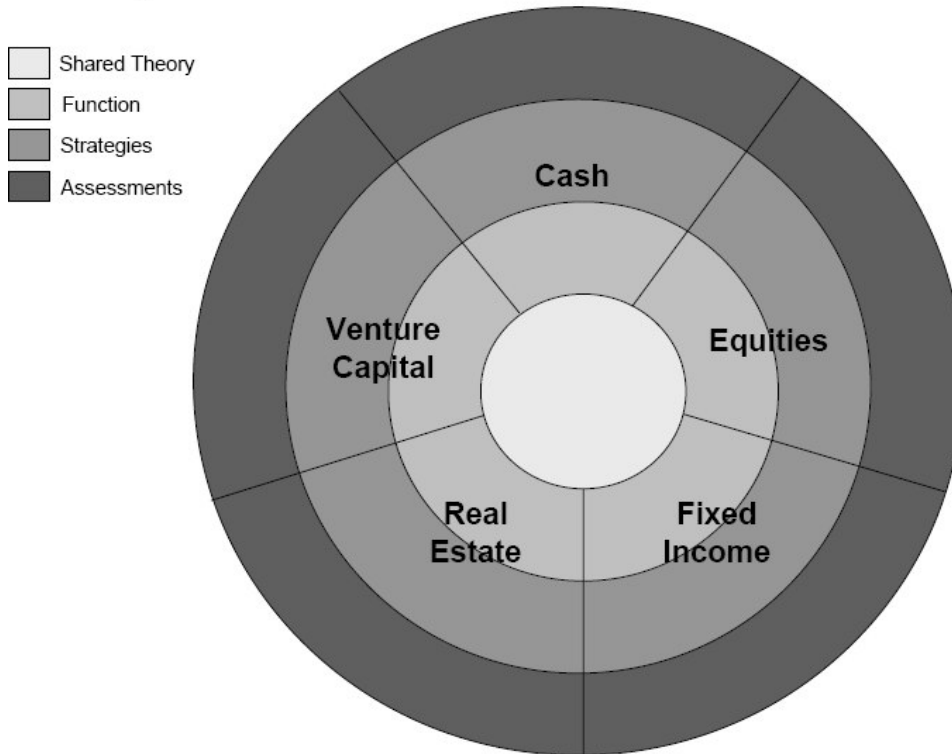
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- Cultivation of the investment skills necessary to allocate across asset classes and select specific investments within asset classes so as to realize that purpose
- Developing metrics by which to measure the success and skill of investors achieving these goals and to reward them when they do so

These various tasks are represented in Figure 5.

Figure 5

## Responsible Investment Research Schematic



This target-chart represents a process that responsible investors could rely on in making investment decisions at the asset class level. They would begin with a theory at the heart of the investment process that assesses asset classes according to their proper functions in society. They would then proceed outward through the concentric circles along distinct paths for each asset class, first identifying its proper function in society and the benefits it is naturally suited to bring, then

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developing strategies for aligning investments with those functions and thereby maximizing those benefits, and finally measuring and assessing their success in achieving their goals through the selection of those investment opportunities.

What the actual implementation of such an investment practice would look like should be further explored. The current practices of a small, but growing, number of responsible investors can provide glimpses of the benefits that broader-scale implementation might bring.

To illustrate this point, let us assume that urban revitalization is a reasonable goal on the road to the creation of a just and sustainable society. Three asset classes—cash, fixed income, and real estate—lend themselves particularly well toward achieving that goal. Table One lists a few investors consciously using investments toward that end and the investment vehicles they have chosen.

**Table One**

**Current Use of Asset Classes for Urban Revitalization**

<b>Asset Class</b>	<b>Investor</b>	<b>Investment</b>
Cash	Socially Responsible Investors	CDFI Banks and Credit Unions
Fixed Income	Mainstream Banks	CRA-Qualified Mortgage-Backed Securities
Real Estate	State Pension Funds	Economically Targeted Investments

Table Two presupposes a world in which these asset classes are used by substantial numbers of investors across a broader spectrum of investment vehicles.

**Table Two**

**Potential Use of Asset Classes for Urban Revitalization**

<b>Asset Class</b>	<b>Investor</b>	<b>Investment</b>
Cash	<ul style="list-style-type: none"> <li>- Mutual Funds</li> <li>- Endowments</li> <li>- Corporate Cash Managers</li> <li>- Socially Responsible Investors</li> </ul>	<ul style="list-style-type: none"> <li>- Community Banks</li> <li>-CDFI Banks and Credit Unions</li> <li>- Microfinance Banks</li> </ul>
Fixed Income	<ul style="list-style-type: none"> <li>- Mainstream Banks</li> <li>- Insurance Companies</li> <li>- Investment Banks</li> <li>- Trust Officers</li> <li>- Pension Funds</li> </ul>	<ul style="list-style-type: none"> <li>- Municipal Bonds in Low-Income Regions</li> <li>- Federal Infrastructure Bonds</li> <li>- Quasi-Governmental Organization Economic Development Bonds</li> <li>- CRA-Qualified Mortgage-Backed Securities</li> </ul>
Real Estate	<ul style="list-style-type: none"> <li>- Pension Funds</li> <li>- Insurance Companies</li> <li>- Endowments</li> </ul>	<ul style="list-style-type: none"> <li>- Transit Oriented Development</li> <li>- Workforce Housing</li> <li>- Urban Infill</li> <li>- Smart Growth Projects</li> <li>- Economically Targeted Investments</li> </ul>

These two tables are intended to illustrate the essential point that because the vast majority of institutional investors these days have become distracted by MPT's focus on beating benchmarks, substantial opportunities for investing in

particular asset classes to enhance their societal benefits are currently underutilized, to the detriment of investors and society alike.

Implicit in the overview of what is necessary for the implementation of an asset-class-based approach to investment are a number of major tasks. Among the most important and challenging of these is that institutional investors must consider the important question of what the purpose of investment is and how it relates to the creation of just and sustainable societies. Because definitions of justice and sustainability will differ from investor to investor, from government to government, from region to region, and from era to era, this amounts to an ongoing debate about how a society should look and behave. To deny that institutions as they invest their funds take part in such debates is to abdicate the responsibility that comes with being a member of society, interconnected with others with every action and decision we make.

## **Conclusion**

The choices that investors make matter to markets and to society as a whole. Using asset classes skillfully for their intended purposes—aligning investments with their intended societal goals—may not be as easy as manipulating assets to increase risk-adjusted returns, but it leads down a road that is surely more productive in the long run. We must move forward from where we

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are into this under-researched and under-appreciated territory or the financial and economic crises that will next overtake us where we now stand will be even more severe than the one we confront today.

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