

# Global Investment Solutions An Asset Allocation Revival

March 2004

White Paper Series



### **UBS Global Asset Management White Paper Series**

This article is taken from UBS Global Asset Management's White Paper Series, dedicated to providing in-depth, innovative investment research. In addition to research on specific asset classes, sectors and regions, we conduct studies of broader strategic issues, and other investment related topics that help advance the intellectual foundation of our industry.

The White Paper Series is an integral part of Global Investment Solutions (GIS). GIS helps UBS maintain its position as the recognized leading solutions provider for institutional and private clients, building on our strength and expertise in the areas of asset allocation and risk management. GIS offers a range of solutions to clients' investment needs, including asset and liability modeling; strategic and active asset allocation; risk management; portfolio management; and education and training.

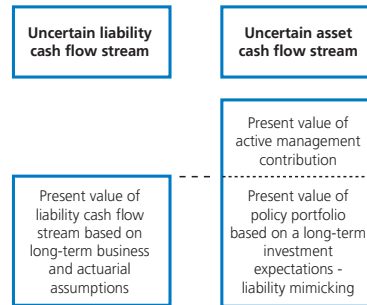
*The interaction of individuals, possessing different knowledge and different views, is what constitutes the life of thought. The growth of reason is a social process based on the existence of such differences.*

F.A. Hayek

Every now and then, thoughtfully posed questions give rise to insights that significantly advance the intellectual foundation of our industry. Peter Bernstein recently asked whether policy portfolios are obsolete, thus, initiating a broad dialogue. In his March 1, 2003 *Economics and Portfolio Strategy* report, he suggested that “policy portfolios are obsolete” and that “the time has come to take off the policy corset and breathe freely.”<sup>1</sup> Kevin Kneafsey of Barclays Global Investors responded with the observation that “policy portfolios are *not* obsolete, but they are grossly misused.”<sup>2</sup> He proceeds to reframe the policy portfolio as a hedge portfolio that funds the investor’s liability stream, providing the highest probability of meeting future consumption needs. He concludes that policy portfolios are essential, but not as the industry has become accustomed to using them. In a later report, Bernstein concurs with Kneafsey’s conclusions and bolsters the important advancement that his original question sparked.<sup>3</sup>

Kneafsey’s observation provides a reminder that asset management comprises all of the activities associated with deferring current consumption into future consumption (saving). These activities have the objective of maximizing future consumption. Were it not for the uncertainty of the desired future consumption stream (for example, the obligations of a pension plan, foundation or endowment) and the uncertainty of the investment performance (the cash flows that asset management activities generate), the task would be trivial. It is far from trivial.

We would like to weigh in on this discussion.<sup>4</sup> In part, because of these uncertainties, the asset management problem should be recast as a risk management problem, whereby the investment policy defines an asset mix with a beta of one and an acceptable degree of residual risk with respect to the present value of the future liability stream, taking into account uncertain liabilities and uncertain long-term investment expectations. Active asset management involves exceeding the performance of the liability-mimicking policy portfolio through both return enhancement and risk reduction.



This paper is of the same mind as the observations of Bernstein and Kneafsey and suggests a path toward achieving investor objectives. The main conclusions are:

- Policy portfolios are not obsolete.
- Policy portfolios can inappropriately constrain beta management.
- Separating the investment decision into beta exposures to hedge the liability stream and absolute return investing to create alpha is predicated on an incorrect assumption and leads to suboptimal investment performance.
- Portfolio management should be separated into policy asset allocation, active asset allocation and security selection, each paralleling a specific aspect of risk management. Specifically, active asset allocation primarily involves active beta management, and active security selection involves active residual, or alpha, risk management.

### A look back

The late 1960s and 1970s were characterized by large swings in equity markets and the adoption of tools preferred by Markowitz, Sharpe, Lintner and others. Modern portfolio theory contributed to the broad use of policy and active asset allocation, as a means of managing total portfolio returns and risk. During the 1980s and 1990s, a generally monolithic bull market convinced many investors that active asset allocation was a futile pursuit. Many plans, foundations and endowments drifted to a paradigm in which asset class exposures were passively held at policy levels. In this paradigm, active management came through security selection by “traditional” managers.

1 Peter Bernstein. “Are Policy Portfolios Obsolete?” *Economics and Portfolio Strategy*, March 1, 2003.

2 Kevin Kneafsey. “Solving the Investor’s Problem.” Barclays Global Investors, *Investment Insights*, August 2003.

3 Peter Bernstein. “Which Policy Do You Mean?” *Economics and Portfolio Strategy*, August 15, 2003.

4 UBS Global Asset Management has been at the forefront of asset allocation theory for more than two decades (see list of papers on page 6). These contributions to the development of investment policy have been matched by active management of multi-asset portfolios to provide superb risk-adjusted returns to clients over time. We have managed globally diversified portfolios for more than 20 years; both asset allocation and security selection are important sources of value in the management of these portfolios. As the industry has evolved and investors have become more sophisticated, we added a leveraged portfolio to actively change the risk/return profile of the underlying globally diversified portfolio. And most recently, extending our asset allocation tradition even further, we launched a balanced, benchmark-free portfolio that decouples market and security selection.

Unfortunately, the first part of the present decade has proven rather painful. Passive asset allocations did not serve investors well, as portfolio values plunged and the realization dawned that investors' interests, perhaps, had not been adequately served. In other words, investors' liability streams did not appear to have been adequately hedged. The three-year period that ended on December 31, 2003 excessively impaired asset values relative to the anticipated liability stream, leaving many plans technically underfunded and foundations struggling to meet spending obligations. The chart below shows four distinct regimes for the US equity market, starting in the late 1940s.

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### The shift to alpha management

A predominant response to the developments of the last three years is to seek higher returns without incurring additional market, or beta, risk. Investors are increasingly adopt-

ing a paradigm in which market risk is shunned, and active management is shifted from traditional managers, who incur market risk, to absolute return strategies of "alternative" managers, who incur active, or alpha, risk.

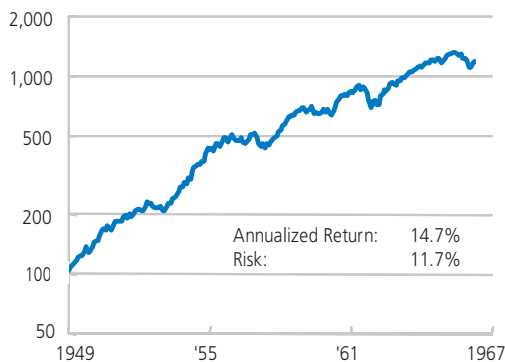
This radical paradigm shift strikes us as odd, considering that market risk is easily identified and, since it is nondiversifiable, is compensated. Active risk, on the other hand, is not easily identified, and not necessarily compensated. Market risk can be a very powerful and efficient source of return, and should not be ignored. However, it should be taken in a more judicious manner than has been common practice over the past two decades.

Bernstein was correct in asking whether policy portfolios are obsolete, and to suggest that a "fresh start toward asset allocation" must occur. "Flexibility," he said, "has to be the watchword." Kneafsey moves the dialogue further by suggesting that the policy portfolio serves the important "single task of hedging the liability stream" (my emphasis). "The beta risk of the policy portfolio is minimized versus the liability," and the constraints that bind construction of optimal portfolio alphas are removed. "By... seeking alpha where the highest quality alpha is available, the highest quality alpha from many sources contribute to the portfolio alpha in proportion to their quality, not in proportion to their underlying beta representation in the policy portfolio."

Kneafsey's comments are motivating, but could be misleading. Taken literally, one might conclude that Kneafsey is sug-

### US Equity Market Investment Regimes - S&P 500 total returns, January 1949 to December 2003

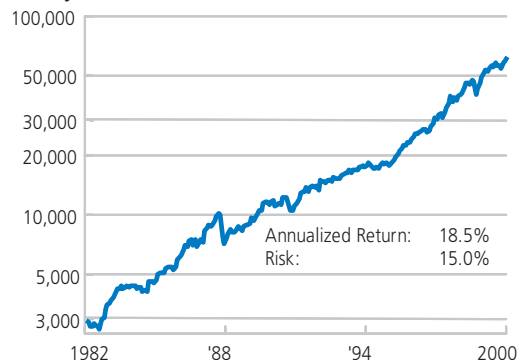
January 1, 1949 - December 31, 1966



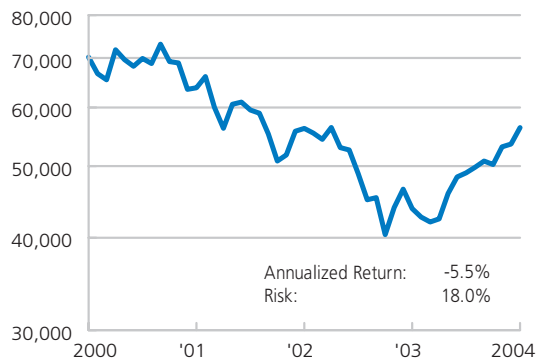
January 1, 1967 - December 31, 1981



January 1, 1982 - December 31, 1999



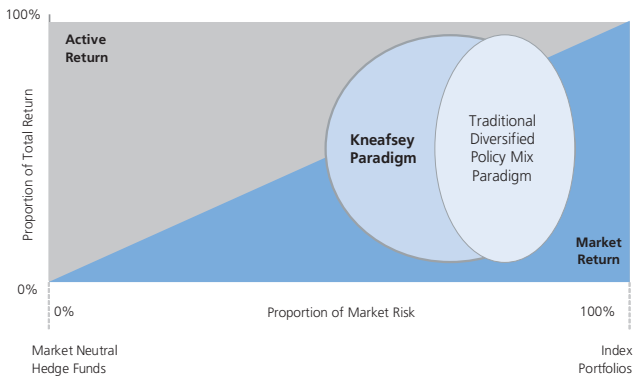
January 1, 2000 - December 31, 2003



gesting that active asset allocation is obsolete, endorsing a combination of absolute return strategies with little or no beta impact and passive portfolios (or select active portfolios from traditional managers) held at policy allocations to provide a liability hedge. He labels active asset allocation a low information ratio strategy and relegates it to competing with absolute return strategies to be layered on top of the liability-mimicking policy portfolio.

Whether or not the active alpha is transferred to the policy allocation with derivatives, this paradigm, depicted below, results in a relatively static mix of market and active sources of return. At the right hand side of the graph, market risk dominates the sources of total return. On the left, market risk is all but eliminated, and active risk dominates as the predominant source of total return. The Kneafsey approach is, thus, not too dissimilar from the traditional diversified policy paradigm, except that the active risk and return become a greater proportion of the total risk and return.

**The Kneafsey Paradigm**



If the future capital market environment were like the 1980s and 1990s, characterized by an equity bull market, then Kneafsey's dismissal of active asset allocation would have limited downside. However, if it is characterized by equity market swings similar to those common in the late 1960s and 1970s, this dismissal would sacrifice an important potential contributor to increased future consumption above the liability cash flow stream and the reduced uncertainty associated with that consumption. That potential contributor is the active management of market risk (beta) exposure. Since the future is unknown, perhaps Bernstein's call for flexibility should indeed be considered further. Kneafsey posits, "the policy portfolio seeks to maximize the probability of funding the liability while minimizing the amount that has to be saved," and should be required to behave like the investor's liability.

I believe that this stance could be misleading and constrain or preclude active market risk management.

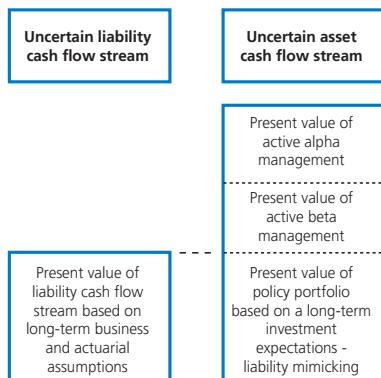
A diversified portfolio of assets provides a claim on the supply of capital market returns generated by the global economy. Sometimes these assets are priced at their intrinsic values, but most times they are not. If these mispricings are idiosyncratic and not systematic, then absolute return strategies that focus on alpha without affecting beta are appropriate. However, there are many examples of opportunities created across asset classes by systematic deviations of prices from intrinsic values:

- In the mid-1960s and late 1990s, US equity mispricings were systematic. In the mid-1960s, US equities entered the "tronics" boom culminating in a climax characterized by IPOs peppered with the word "electronics" in company names. Similarly, the late 1990s experienced the TMT—technology, media and telecom—bubble, and every company seemed destined to adopt a "dot-com" moniker.
- In the early 1980s, nominal Treasury interest rates peaked at about 15% at the long end of the yield curve. This proved to be a fantastic systematic opportunity, and the Sharpe ratio of bonds exceeded that of equities from that point in time through the peak of the equity market bubble.

In the case of systematic deviations, the most efficient means of meeting future consumption needs and, perhaps more importantly, of not suffering critical asset portfolio declines, is management of beta. It is meaningless from this perspective to argue whether asset allocation or security selection is more important. They are, of course, both important. However, rejecting active asset allocation as unimportant constrains asset allocation to the single task of hedging the liability stream. Such a constraint is a shackle that binds the portfolio to periodically grossly inefficient allocations, decreasing the probability of funding future consumption (the liability).

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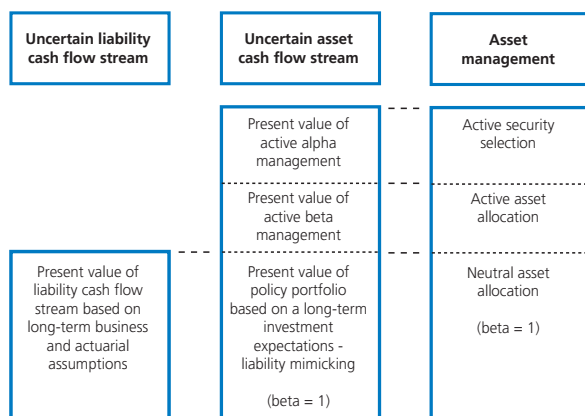
Without systematic asset mispricings, investment committees could be content to define the structure of the liabilities, set a policy portfolio and passively adhere to it. Since there are systematic asset mispricings, the investment committee must not chain the portfolio to a static policy portfolio. Rather, it must determine how to best manage beta (market) risk and alpha (active) risk.



**In search of a new paradigm**

It is better to consider the liability-mimicking portfolio that hedges the liability stream as a "neutral asset allocation" instead of a policy asset allocation. In this paradigm, the neutral asset allocation originates from long-term asset class expectations, cognizant of the risk that these expectations may be wrong over certain horizons. As systematic and idiosyncratic mispricings arise through time, active asset allocation should manage the beta (market) risk, and active security selection should manage the alpha (active) residual risk.

It is not, as Bernstein says, the case that "the policy portfolio and risk management are one and the same thing." Rather, the neutral asset allocation, active asset allocation and security selection are the different facets of risk management. The neutral asset allocation presents the risk that the equilibrium expectations do not prevail for a period of time. Therefore, the active asset allocation represents the management of market risk in response to systematic opportunities requiring deviations from the unit beta specified by the neutral portfolio. Finally, security selection is the management of active risk in response to idiosyncratic opportunities.

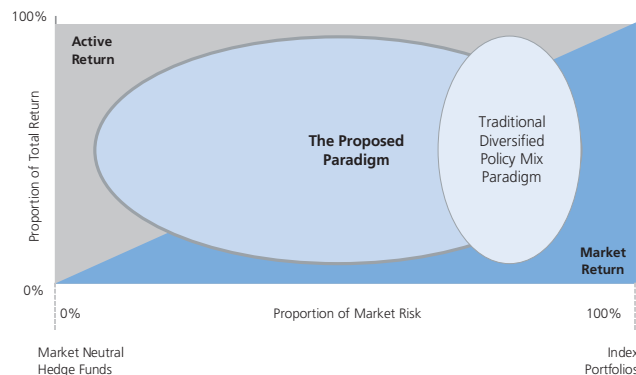


Different aspects of portfolio management parallel different aspects of risk management, and the investment management paradigm can be considered along risk dimensions. It is critical to separate these three aspects of portfolio management: (i) beta=1; (ii) active beta management; and (iii) active alpha management—and to manage the two active facets in order to maximize future consumption with minimum uncertainty relative to the liability stream.

Traditional balanced portfolio management binds active asset allocation and active security selection together. Underweighting an asset class is akin to underweighting security selection within that asset class. To illustrate, assume that asset allocation analysis points to a US equity market that is generally overvalued. From an asset allocation perspective, this would dictate an avoidance of this market. However, assume that the entire overvaluation in US equities is driven by just a few sectors. By avoiding the market from an asset allocation perspective, a traditional balanced portfolio would unfortunately also avoid the positive sector selection opportunity. Ideally, we would prefer to concentrate our holdings in the undervalued portions of the market (active risk), while reducing exposure to the broad market (beta risk).

If market and active risk were separable, investors would assume active risk through a long/short US equity portfolio, shorting the least attractive sectors and purchasing the relatively more attractive sectors to capture the full active opportunity. In the above example, they would use derivatives to adjust broad market (beta) exposure by buying or shorting the broad US equity market (by buying or selling short US equity index futures). When asset class overvaluation is significant, it may be appropriate to establish a net short position in the asset class in an attempt to generate absolute return. In essence, by making independent market and active decisions, investors are free to capture added value that would otherwise be forfeited.

**The Proposed Paradigm**



This proposed paradigm, depicted below, offers substantially more flexibility than that implied by the current public discourse. Active risk is increased or decreased in line with the associated opportunity set. By allowing asset allocation to do more than hedge the liability stream, a much wider array of combinations of active and market risk are available.

Clearly, risk management is not only important in so far as it parallels aspects of portfolio management; it is a key element of the process and must be integrated into portfolio construction at each level. The ability to shift sources of risk from market exposure to active risk consistent with a liability-driven risk mandate map is integral to this approach.

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This absolute return paradigm is more consistent with the real underlying objective of maximizing future consumption with minimum uncertainty relative to the liability stream. Moreover, decoupling market and active risk management suggests an important revival of active asset allocation. Whether or not active asset allocation has more or less potential to enhance returns than active security selection, considering both as important aspects of the portfolio management process reflects cognition of the increased breadth that comes from additional flexibility.

**Further reading**

Gary P. Brinson, Jeffrey J. Diermeier and Gary G. Schlarbaum. "A Composite Portfolio Benchmark for Pension Plans." *Financial Analysts Journal*, March-April 1986.

Gary P. Brinson, L. Randolph Hood and Gilbert L. Beebower. "Determinants of Portfolio Performance." *Financial Analysts Journal*, July-August 1986.

Gary P. Brinson, Brian D. Singer and Gilbert L. Beebower. "Determinants of Portfolio Performance II: An Update." *Financial Analysts Journal*, May-June 1991.

Brian Singer, Renato Staub and Kevin Terhaar. "An Appropriate Policy Allocation for Alternative Investments." *Journal of Portfolio Management*, Spring 2003.

**Previously published papers in the White Paper Series include:**

Brian Singer, Renato Staub and Kevin Terhaar. "An Appropriate Policy Allocation for Alternative Investments." *Journal of Portfolio Management*, Spring 2003.

Renato Staub and Jeffrey Diermeier. "Segmentation, Illiquidity and Returns." *Journal of Investment Management*, First Quarter 2003.

**Author:**

Brian Singer  
Global Head of Asset Allocation & Risk Management,  
Chief Investment Officer - Americas  
Tel. +1-312-525 7164  
brian.singer@ubs.com

**To request any of our white papers, please contact:**

April Powell  
Tel. +312-525 7792  
april.powell@ubs.com

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