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# NEWSLETTER

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## NEWS OF PEABODY RIVER

Once again, the Peabody River newsletter arrives long after it was due. And the reason is familiar: It can take a long time until we're satisfied that the essay, which makes up the bulk of the newsletter, is as free from error as we can make it, and has few, if any, loose ends. This essay is the second and final part of our presentation of the concept of asset class allocation. We console and excuse ourselves with the thought that we've allowed sufficient time for our dedicated readers to finish the first part. Because asset class allocation lies at the center of our investment process, we owe our friends and clients a clear account of what we're up to.

Over these last few months, Peabody River has remained much as it has been. We continue our course of continual self-improvement, with Bob concentrating on the macroeconomy and the theoretical work that helps us understand it—the academic discussion of the field is, as many academicians agree, in a sorry state—and Adam concentrating on financial economics and how best to fit investment advice into overall financial planning.

Adam published three articles this year in the weekly online professional newsletter *AdvisorPerspectives* (which also reprints the essays that appear here). One was an account of [Alan Greenspan's appearance](#) before the Boston Security Analysts Society in February. The other two were write-ups of talks by other analysts of their work on topics of current interest: the [price of gold](#), and a [possible cost of socially responsible investing](#). Adam's article on the latter stirred up a fuss. In our view, the analyst's work was flimsy (though he has done good work on other topics), but his critics grabbed

the wrong end of the stick and were beating him over the part of his analysis that should have been uncontroversial.

This episode, for us, illustrates how much emotion can be invested in investment decisions, and for extraneous reasons. We'll have more to say about socially-responsible investing a couple of essays hence. I'll just say here that we're comfortable with it, as long as the investor understands what it can and cannot do and accepts that implementing it almost certainly entails some costs.

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### **BRIEF REVIEW OF THE FIRST THREE QUARTERS OF 2013**

The U.S. stock market was the place to be for the first nine months of this year. The S&P 500, the standard measure of the U.S. market, had returns that far exceeded those of any other major asset class. The S&P 500 stock index had a total return of 19.79% for the first nine months and 5.24% for the most recent quarter. Within the U.S. market, the stocks of small companies did especially well, with a return of 28.66% for the nine months, and 10.73% for the quarter. Any diversification away from the U.S. stock markets was bound to hurt, and to hurt badly.

In contrast, the U.S. bond market, as represented by the Barclays Capital U.S. Aggregate Bond index, had a total return of -1.89% for the first nine months and 0.57 for the quarter.

Internationally, returns were also poor. As an indication of what we have been up against, I point to the MSCI All Country World Index (ex-US), which had a return of 10.57% for the nine months, and 10.37% for the quarter. If you do the subtraction, you can see that the international markets, until the end of June, had virtually no return, then recovered in the third quarter.

The stocks of companies in emerging markets, which Peabody River overweights, had virtually no return. The bright spots in the international stock markets were Japan, which had a better return than the U.S., 24.31%, and Europe. I still believe that investors should have broad exposure to international stocks for reasons that I have stated several times in the past, all grounded in the concept of diversification.

It is unsurprising that fixed income (that is, bonds), did not do well in the U.S., as just noted. Internationally, it was even worse. Emerging market debt, which lately we have overweighted, was especially poor, with a return of -8.17% for the nine months. There were warning signs about this early in the year, and we decided to maintain the weight but not to add to the positions in our clients' portfolios. We believe that emerging market debt is both volatile and a reasonable holding for the long run. Some investors are running away from it, and we suspect that we're seeing the all-to-familiar pattern of investors getting out of an investment at precisely the wrong time. That's not to say that we're anticipating a turnaround in emerging market debt anytime soon, but we are also

not foreseeing a further decline. As we repeatedly state, we don't make short-term forecasts of any kind.

Real estate, with a return of 3.6% for the nine months, did not contribute much to anyone's portfolio. In more normal times, that would, however, have been considered a pretty good return for nine months. Commodities had a lamentable return of -9.89%. We've always limited commodities to a small proportion of our clients' portfolios, tentatively and for diversification. We're reevaluating whether we should include them at all.

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## ASSET CLASS ALLOCATION AND PORTFOLIOS

### Part 2: Critique and Complication

#### How Not to Justify Asset Class Allocation

In Part 1 of this essay, I explained that for asset class allocation to become an investment practice, it required a foundation of theory. And Modern Portfolio Theory was that foundation. But today, most financial journalists and investment advisors who proffer advice centered on asset class allocation are—if I may judge from their writings—oblivious of this. And why shouldn't they be? Theory is abstract and difficult to apprehend.

So a foundational theory alone was insufficient for building such a prominent edifice of practice. There also had to be a superstructure of evidence, concrete facts that clearly attested to the efficacy of asset class allocation. Plausible evidence, which was easily apprehended by financial journalists and investment advisors, appeared in a research paper that was published in 1986.<sup>1</sup> This is one of the most widely cited and misunderstood papers in the field of investing. Even its own authors seem to have misunderstood it, though not as egregiously as the many careless investment writers who imagined that they were echoing its conclusions to the public. But all the same, with this paper, asset class allocation at last became identified with good investment practice.

The paper's authors looked at pension plans, not mutual funds or private portfolios, and only to the extent that those pension plans held stocks, bonds, and cash. (Back in the early 1980s, few pension plans invested to any great degree in other asset classes or in alternative investments, like hedge funds.) The authors' conclusions, from their analysis of a database of pension plans' changing values over a span of time, were that asset class allocation, rather than the selection of investments within

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<sup>1</sup> Gary P. Brinson, L. Randolph Hood, Gilbert L. Beebower, "Determinants of Portfolio Performance," *Financial Analysts Journal*, July-August 1986, pp. 39-44.

the asset classes, was far and away the major source of investment returns, and that, on average, asset class allocation explained more than 90% of the variability of a pension plan's returns.<sup>2</sup>

Let's scrutinize that last statement. It has led to countless mistaken repetitions of the claim that asset class allocation is the source of more than 90% of a portfolio's returns. Please note, unlike so many investment professionals, the unobvious difference in wording: The paper did *not* say 90% of the returns, but 90% of the *variability* of returns. Yet, to cite but one example, in the week that I am writing this paragraph, I read in *Barron's* that "Most investors have heard the axiom that 90% of portfolio performance can be explained by their allocation decisions."<sup>3</sup>

Even the paper's stated finding, concerning variability (or volatility), is unremarkable; it could have been foretold without crunching numbers. The returns of stocks, as an asset class, are much more volatile than the returns of bonds, let alone cash. If one portfolio is invested 90% in stocks and 10% in cash, and a second portfolio is 10% in stocks and 90% in cash, which one will have the more volatile returns? The first, of course. This will be true even if stocks end up at the same price from which they started during the period of our analysis, or if they go down. It will also very likely be true whether stocks, as an asset class, are represented by only a handful of names or by an index fund, or whether the managers make judicious shifts over time in response to changing economic forecasts or keep their allocations constant.

Consider, by analogy, that you've been informed that the ability of a group of people to walk directly from point A to point B, as measured by their cumulative wanderings off the straight course, is determined by the allocation of ages within the group: what percentage are under five years old, what percentage are between five and ten years old, what percentage between ten and fifteen, and so on. Of course it is! It's almost entirely dependent upon the percentage consisting of peripatetic children under the age of five. Everyone else, of whatever age, will follow the instructions to walk directly from A to B. The relative proportions of the other age groups are beside the point. So, similarly, the conclusion that asset class allocation explains most of the *variability* of returns was both obvious and trivial.<sup>4</sup>

To appreciate why the 90% claim, if made with respect to the *returns* to asset class allocations, rather than the variability of returns, doesn't amount even to a rule of thumb, you must first put out of your mind a clarification that I made in Part 1 of this essay. There, I said that when allocating among asset classes, you should define the asset classes in a way that reflects how you intend to use them in the portfolio, not as they might be defined by some standard, ready-at-hand comprehensive

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<sup>2</sup> "But the investment policy return [that is, long-term asset class allocation] ... explained on average fully 93.6 per cent of the total variation in actual plan return; in particular plans it explained no less than 75.5 per cent and up to 98.6 per cent of total return variation."

<sup>3</sup> *Barron's*, March 11, 2013, vol. XCIII, no. 10, p 33.

<sup>4</sup> A thorough critique of the paper is Roger G. Ibbotson and Paul D. Kaplan, "Does Asset Allocation Policy Explain 40, 90, or 100 Percent of Performance?" *Financial Analysts Journal*, January-February 2000, pp. 26-33.

benchmark. For example, if you intend to fulfill the stock allocation of your portfolio with—just to be extreme and ridiculous—only oil company stocks, then you shouldn't define "stocks" as the S&P 500 and the statistics appertaining to that benchmark; the returns and risks of oil company stocks will almost certainly be very different from the returns and risks of the S&P 500 index. You should, instead, define "stocks" by an index of oil company stocks.<sup>5</sup> Most practitioners of asset class allocation, however, fail to heed this distinction, as did the authors of the 1986 paper. To them, all stocks are stocks, and that means that the S&P 500 index represents them, and all bonds are bonds, and some comprehensive bond index, perhaps the Barclays Capital Aggregate Bond Index, represents them.

From the point of view of these practitioners and financial journalists, the critical distinction, then, is between asset class allocation and **security selection**, which is the choice of individual investments from within asset classes. And their misunderstanding, because they're under the misapprehension that the 1986 paper proved something that it didn't, is that 90% of the returns to a portfolio are determined by asset class allocation and 10% by security selection. This, if true, would be a "Fancy that!" factoid, because—as I, too, have been at pains to explain, but for entirely different reasons—it runs counter to the traditional and longstanding view that the only thing that matters is stock selection.

Let's undermine their mistake from a different direction: The one thing that everyone correctly knows about diversification is that it files down the rough edges of returns, leaving fewer and smaller deviations, over time, from the average return. Let's consider three portfolios, starting on January 1, 2001: The first portfolio is 100% bonds, the second is 100% stocks, and the third is 50% bonds and 50% stocks. The one that is 100% stocks is invested entirely in an S&P 500 index fund, and so is very diversified. The one that is 100% bonds is invested entirely in an index fund that mimics the Barclays Capital Aggregate Bond index. And the one that is 50/50 invests its bond portion in the Barclays Capital Aggregate Bond index fund, but for stocks, it relies, not on an index fund, but on just three select stocks of large companies, two "hot" ones and a "blue chip": Enron, WorldCom, and General Motors—which means that the stock portion is barely diversified. After thirteen years, as of December 31, 2012, the three portfolios' annualized rates of return (before subtracting fees and taxes) were:

100% stock index portfolio: 2.6% rate of return

100% bond index portfolio: 5.8% rate of return

50% select stocks and 50% bond index portfolio: 0.0% rate of return.<sup>6</sup>

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<sup>5</sup> This is a gross simplification. Benchmarking is complicated. But if, in this example, we were being pragmatic, then the oil stock benchmark would probably be good enough.

<sup>6</sup> I am assuming that the third portfolio begins with 50% stocks and 50% bonds and that there is no subsequent rebalancing. If there were, the annualized return of our 50/50 portfolio would have been less than 0%.

Obviously, asset class allocation cannot account for the differences between the third portfolio's return and the returns of the other two portfolios. If it could, the third portfolio's return would have fallen between the other two.

Now, you may object that I set this up as an absurd case by choosing only the stocks of companies that went bankrupt, and that the third portfolio is therefore unrealistic. My reply is that the argument holds regardless. In less extreme cases, yes, asset class allocation will matter more than it did here. But until we give up the idea that all investments in stocks, as an asset class, are at all times and in all portfolios defined by the S&P 500, and that other asset classes are also defined by the least-considered choice of index, or unless the holdings of stocks and bonds are very diversified, then security selection, not asset class allocation, will likely account for a large proportion of many portfolios' returns.<sup>7</sup> And not in a good way: If the markets are as efficient as I have argued that they are, security selection will almost always detract from the investment performance that could have been achieved by investing in index funds that represent the asset classes.<sup>8</sup>

I am basically reworking my argument in Part 1 of this essay, that the definition of an asset class for the purpose of constructing a portfolio should reflect what is actually being stuffed into the portfolio.

So of course asset class allocation isn't responsible for 90% of most portfolios' returns, *unless* most portfolios hold stocks that behave more or less like the S&P 500 index—which most don't. But if, on the contrary, you or your advisor constructs your portfolio solely from index mutual funds and the exchange-traded funds that represent broad asset classes and subclasses, then asset class allocation will be responsible for 100% of your portfolio's returns, and security selection won't matter one bit, because there wasn't any.<sup>9</sup>

I won't delve further into the problems with the 1986 paper; if these were easy to explain, controversy over the paper's significance wouldn't have lasted more than twenty-five years. As I have just shown, however, its evidence concerning asset class allocation was deceptively too easy for the common investment advisor and journalist to apprehend.

Let it suffice to say that the reason to practice asset class allocation is *not* that it is inevitably the prime source of returns to a portfolio. Rather, it's because, if the markets have a tendency toward efficiency, that is to say, toward setting the prices of investments in a way that is very difficult to beat (even if the markets aren't perfectly efficient), then, as an organizing method, it's a far superior

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<sup>7</sup> Mark Krizman and Sébastien Page, "Asset Allocation versus Security Selection: Evidence from Global Markets," *Journal of Asset Management*, Vol. 3 No. 3 (2002), pp. 202–212.

<sup>8</sup> With the standard proviso that it is returns in relation to risk, not returns alone, that are the best measure of performance.

<sup>9</sup> Except to create the indices. But that's not what we mean by "security selection," which is the selection of stocks that will have performance superior to that of an index to the asset class of stocks. Some investors do not grasp this difference.

way to manipulate the balance of return and risk of a portfolio and to fit that balance to the needs of an investor. If the markets are extremely efficient, it may be the only way to achieve this balance.<sup>10</sup>

Furthermore, as I will explain in my next essay, contrary to the common belief that greater volatility implies greater average return, that relationship really doesn't hold very well at the level of individual stocks, though it seems to hold for diversified portfolios of stocks and for asset classes. The failure of the relationship compounds with the difficulty of selecting superior individual stocks and bonds (and other kinds of investments). The consequence is the near impossibility of creating a suitable overall balance of expected (or hoped-for) return and risk in a portfolio through security selection alone. This is all the more reason that asset class allocation is a much more practicable method of achieving the right balance, though, of course, it still comes without any guarantee that the practitioner of asset class allocation will be right.

Asset class allocation is not a foundational concept, like return or risk. It is, as I've said, a way of bringing order to investing. To the extent that the stock holdings, the bond holdings, and so forth are pretty well diversified in most portfolios, asset class allocation is *likely* (but not certain) to be the explanation of a large proportion of those portfolios' investment results. If a portfolio's holdings are not very diversified, then asset class allocation will matter less as an explanation.

### **Do I Contradict Myself?**

Some way back in this essay, you may have thought "Gotcha!" because you'd caught me in an inconsistency: I've explained the Efficient Markets Hypothesis, which implies that it is close to impossible—though no one believes that it is truly impossible—to choose investments that will have returns greater than those of the market, after making due allowance for risk and good luck. Another way of stating the Efficient Markets Hypothesis is that it implies that there is nothing to be gained by forecasting the performance of investments. So, if I believe that the markets are very efficient, why should I be forecasting the returns and risks of asset classes? Am I not contradicting myself?

No.

Well, not really.

There are three responses to the charge of inconsistency: one a mere clarification, one partly concessionary, and one deeply rooted in the hypothesis of market efficiency itself, and therefore preserving my consistency.

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<sup>10</sup> The only alternative, to my knowledge, would be allocation by risk factors, a much more abstract and mathematically technical method.

## Clarification

First, we aren't lacking for reasonable qualitative long-range forecasts of the returns and risks for many asset classes. We investment professionals are quite sure—most of us—both that stocks should have greater returns than bonds in the long run, and that those returns should continue to be more volatile, and therefore more risky, than the returns of bonds.<sup>11</sup> We're also quite sure that bonds that mature at later dates will continue, most of the time, to offer higher returns than bonds that mature earlier. Corporate bonds will usually offer higher returns, with greater volatility of returns, than U.S. government bonds, because they carry greater risk of default, however slight. The legal and economic design of stocks and bonds should make all of this so, and history confirms it. We also think it very likely that the stocks of small companies will offer higher returns, with greater risk, than the stocks of large companies, because we've seen them do so over long stretches of time in the past, and in different countries' stock markets, even though we haven't completely pinned down the theory to explain this. And so forth. In short, we can be pretty confident of some qualitative forecasts of the rankings, by return and by risk, of various asset classes and sub-classes.

The Efficient Markets Hypothesis was never intended to gainsay these basic forecasts. But these qualitative forecasts take us only so far as to reckon that an investor should have a greater or lesser proportion of risky asset classes in his portfolio; they don't allow us to say how much. We're in a bind. Any process we might design to calculate *numerical* long-term forecasts, even crude ones, like those I considered when introducing the idea of the equity risk premium,<sup>12</sup> might be used to create short-term forecasts. And if the markets are efficient, then we shouldn't expect to gain an advantage by advancing from one short-term forecast to the next. If we say that we won't make forecasts, and that we'll just make projections based on long-term history (as some investment professionals do), then we actually haven't solved the problem: Projection of the past into the future is still a forecast. Further, such projections are dependent upon the choice of long-term historical period for statistics, which would necessarily require a justification with reference to what we think the future holds.

## Concession

For my second response to the charge of contradicting market efficiency, I confess: Many of us who believe that the markets are pretty nearly efficient at the level of individual investments nonetheless suspect—and many also believe that there is proof—that the markets sometimes get prices wildly wrong in aggregate. That is, the stock market can price individual stocks accurately relative to each

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<sup>11</sup> But some analysts, notably Rob Arnott, believe that the future long-term equity risk premium (the excess return of stocks over bonds), is likely to be very low indeed, perhaps as low as 1%. Robert D. Arnott, "Equity Risk Premium Myths," in P. Brett Hammond, Jr., Martin L. Leibowitz, and Laurence B. Siegel, *Rethinking the Equity Risk Premium* (Charlottesville: Research Foundation of the CFA Institute, 2011), pp. 71-100.

<sup>12</sup> See Peabody River Asset Management *Newsletter*, issue 11, April 2011, essay, "[What Return Can We Expect from Stocks?](#)"



other, while at the same time getting wrong the price of the stock market as a whole.<sup>13</sup> The same can be true of other asset classes.

For an entire asset class to be mispriced, buyers or sellers must systematically get wrong, for all the individual investments they are evaluating, one or more of the components of their valuation formulas or estimation methods. A case in point is the real estate market in the half-decade up to 2008. There is good reason to believe that those who were buying real estate back then were consistently overestimating, by a long shot and for whatever reason, the long-term future growth rate of the prices of many of the properties that they were buying. (In actuality, they may have been converting future prices into present-day prices with the wrong conversion factors—that is, discount rates—but that explanation is hard to grasp intuitively; if you recall the conversations and uninformed writings of the time, real estate investors and sellers were justifying the rising prices with exaggerated expectations of growth, to the same effect. Either way, there was a systematic error.) But it's not easy to prove that a one-time mispricing of this sort is truly a mistake.<sup>14</sup> In isolation, it's little more than an anecdote. Anecdotes are illustrations or, when most useful, disproof. Often, they convince the credulous but leave the thoughtful unmoved.

It is precisely this distinction, between efficiency within an asset class and efficiency among asset classes, that constitutes the outstanding difference between Robert Shiller and Eugene Fama, who shared the 2013 Nobel Prize in economics. Fama has argued that the markets' pricing of entire asset classes cannot be gainsaid, whereas Shiller has adduced evidence that the stock market and the real estate market, in particular, have often been more volatile than can be justified by fundamental economic facts, from which it must logically follow that their prices, collectively, are often wrong. Shiller agrees with Fama that, within the stock market, stocks are priced efficiently.<sup>15</sup>

In the absence of airtight proof or demonstration, the occasional mispricing of asset classes, and, even more important for the investor, the possibility of taking advantage of these mispricings, must instead be a matter of conviction. I incline toward the view that asset classes can be mispriced and that skilled investors can sometimes restructure their portfolios accordingly.

### **Embracing the Criticism: Black-Litterman**

My third response to the charge of inconsistency is not to sidestep it, but to deny it altogether. By so doing, we can reconcile the idea of efficiency with our qualitative forecasts for the returns to the various asset classes and with our compulsion to second-guess the markets.

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<sup>13</sup> I did say explicitly that this was my view in my essay on the Efficient Markets Hypothesis. See also Mark Kritzman, "Post-Crisis Investment Management," *Financial Analysts Journal*, January-February 2011, pp. 4-8.

<sup>14</sup> See Peabody River Asset Management *Newsletter*, issue 8, July 2010, essay, "[Is the Market Efficient?](#)" especially p. 13.

<sup>15</sup> Robert J. Shiller, "[Sharing Nobel Honors, and Agreeing to Disagree](#)," *New York Times*, 26 October 2013.

The approach to asset class allocation that sets forth from the presumption of market efficiency was originally laid out by Fischer Black and Robert Litterman.<sup>16</sup> When I attended a special lecture by Litterman at MIT in March 2013, he was introduced by Robert Merton, the Nobel prize-winning economist, who described the Black-Litterman paper, published in 1992, as “still cutting edge.” Economists, by the way, are in universal agreement that, but for his premature death, Litterman’s co-author, Black, would have shared the 1997 Nobel prize in economics with Merton and Myron Scholes for their work in the theory of how the prices of financial options should be calculated.

According to the Black-Litterman approach, you begin your investment analysis with the presumption that the markets have priced correctly all individual investments, which necessarily implies that all the asset classes are priced correctly. To put this in language that an economist would understand, the presumption is that the world’s financial markets are in **equilibrium**. This means that all the assets classes in the world currently exist in the correct proportions, as measured by their aggregate prices. And if this presumption is right, then every investor’s portfolio should hold every investment, or every asset class, in the same proportions in which they exist in the world (after leaving out whatever can’t practicably be held at all or held in the right proportion, like gold).<sup>17</sup>

But Black and Litterman didn’t assume that the asset classes really were always priced correctly and leave it at that; the assumption, according to them, provides only the starting point, a neutral reference point, for further analysis. They wrote, “We believe there are two distinct sources of information about future excess returns—investor views and market equilibrium. We assume that both sources of information are uncertain and are best expressed as probability distributions.” So the next step in their method is to estimate, by whatever economic methods you find helpful, the extent to which you think asset classes, some or all, are overpriced or underpriced. But, if you are honest with yourself, you have to admit that you aren’t 100% confident in your estimates of the extent of this mispricing. Therefore, you adjust your estimates of the mispricing by your degrees of confidence in your estimates. (There are precise ways of doing this, based on Bayes’s Theorem, which dates from the eighteenth century, and which tells us clearly, in a mathematical formula, how much to correct a supposition in light of our confidence that the original supposition was right and the probability that new information is both true and has some bearing on the matter.<sup>18</sup>) And Black and Litterman don’t require that you have precise numerical forecasts of future prices or returns: “In our approach, views represent the subjective feelings of the investor about relative values offered in different markets. If an investor does not have a view about a given market, he should not have to state one.” But even without making economic forecasts or a judgment of the relative values of different asset classes with respect to their prices, there may be good, dispassionate cause to alter the

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<sup>16</sup> Fischer Black and Robert Litterman, “Global Portfolio Optimization,” *Financial Analysts Journal*, September-October 1992, pp. 28-43.

<sup>17</sup> Black and Litterman also address the issue of whether the holdings should be hedged for fluctuations in the currency exchange rates.

<sup>18</sup> Sharon Bertsch McGrayne, *The Theory that Would Not Die: How Bayes’ Rule Cracked the Enigma Code, Hunted down Russian Submarines, and Emerged Triumphant from Two Centuries of Controversy*. (New Haven: Yale University Press, 2011).

allocations among asset classes. For example, Fama and his students have shown how stock markets have peculiar ways of pricing risk, with the result that an investment manager working within the Black-Litterman framework should probably build a portfolio with a larger proportion of the stocks of small companies than those stocks' share of the global stock market might suggest.

Black and Litterman's methodology takes account of uncertainty in the outlook for returns only. Richard and Robert Michaud have extended this slightly, using their proprietary technique of optimizing portfolios, by developing a way to take account, as well, of uncertainty in the expectations for future volatilities and the correlations of returns.<sup>19</sup>

Still, if you really, really believe that the market is entirely correct in pricing the asset classes, your portfolio should hold them in the same proportions in which they exist in the world at large. This means that, as of 31 December 2011, your portfolio would have held 10.6% U.S. stocks, 48.7% U.S. bonds (both government and corporate), 21.5% foreign stocks, and 19.2% foreign bonds.<sup>20</sup> (I could, of course, add other asset classes and sub-classes to this specification.) I'm guessing that those are not the proportions that you were expecting. These proportions amount to one important reason, though not the only one, that I add hearty lashings of foreign stocks and bonds to my clients' portfolios, though not in their global proportions.

You may have noticed that I tried to slip something by you when I wrote that "your portfolio should hold [all asset classes] in the same proportions in which they exist in the world": Risk tolerance has dropped out of the picture. But it hasn't, really. That's because Black-Litterman asset class allocation is only one piece of portfolio management. In this framework (and not only this framework), the investor or her advisor customizes the balance of return and risk of the total portfolio by varying the proportion of all investments, on the one hand, and cash, on the other.<sup>21</sup> But this is leading us into territory that we'll explore three essays hence, when we consider portfolio management.

## **Other Asset Class Allocations: Tactics and Strategies**

Not infrequently, analysts will come up with forecasts for short-term returns for the various asset classes that are different from their expectations for long-term returns (and sometimes their short-term and long-term forecasts of risks will differ, too). Maybe an analyst's long-term forecasts resemble the long-term historical statistics, but the analyst believes that one asset class or another is

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<sup>19</sup> Richard O. Michaud, David N. Esch, and Robert O. Michaud, "Deconstructing Black-Litterman: How to Get the Portfolio You Already Knew You Wanted." *Journal of Investment Management*, Vol. 11, No. 1, (2013), pp. 6–20. The Michauds have patented their method, so it is not for general use.

<sup>20</sup> I have calculated these percentages from the dollar values, the most recent I could find, presented in the Accenture report, *Capital Markets Key Facts 2012: "Know Your Numbers"*.

<sup>21</sup> This does not mean that the best portfolios are limited to bond-like returns; in theory, at least, those who want more return, with more risk, could use leverage. I will, I repeat, discuss this in a later essay.

currently overvalued or undervalued, and in the short term will return to its “true” value, which he thinks he knows. In such a case, the analyst or advisor may present you with one asset class allocation for the long term, but implement another for the short term.

For some years, it was common to hear investment folk talk of **tactical asset class allocation**,<sup>22</sup> which was for the short term, versus **strategic asset class allocation**, for the long term. Some investment advisors would engage in both at the same time. For large institutions, the cost of buying and selling all the individual investments that had to be exchanged in order to shift the allocations was prohibitive, and the practice of tactical asset allocation was therefore carried out with a small fraction of the portfolio, using derivatives (about which I will say no more here) almost as a separate kind of investment, rather as a large investor or institution today might invest only a portion of its portfolio in hedge funds. Perhaps it’s just that I converse with a different set of professionals now, but it seems to me that the practice of having two asset class allocations at once has fallen into desuetude. And it was always far from common, because you had to be rather sophisticated and well off to use derivatives in this way. Now, especially for individual investors, who can more easily than large institutions trade at minimal cost entire asset classes by using just a handful of exchange-traded funds (ETFs) and mutual funds, there is really no obstacle to having a single overall asset class allocation and changing it as the advisor sees fit. Taxes on capital gains, however, can diminish the benefits of such trading, even when it is done skillfully. If the forecasts used to justify the changes are wrong, then the costs of trading, including taxes, are an unmitigated waste of money.

Tactical asset class allocation is similar to **market timing**. This term has no canonical definition. In the minds of a few, it is synonymous with tactical asset class allocation, but it usually means the practice of getting into stocks when the prospects for the stock market look good, and shifting to cash when it looks as if the stock market will go down. Although originally just a term of art, connoting no moral judgment, “market timing” is now sometimes spoken with a sneer, when the speaker believes that because no one can get it right consistently, it is a recipe for disastrous performance in the long run.<sup>23</sup> I have heard serious portfolio managers aver that, while they might implement a tactical asset allocation, they would never engage in market timing. This is just pettifoggery.

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<sup>22</sup> I believe that this concept was developed by the analyst, commentator, and investment company executive Rob Arnott, but he may have been building on earlier work.

<sup>23</sup> The reason that market timing is so nearly impossible—and this is a problem, too, for tactical asset class allocation—is that the average returns to the stock market over spans of many years are attributable almost entirely to exceptionally good returns during a very few months. If you happen not to be invested in the stock market during those months, your returns won’t be much different from 0.

## Rebalancing an Asset Class Allocation

Even if you can't time the markets, however, you can very reasonably update your long-term forecasts of what they will do. It would be almost perverse for an analyst not to change his forecasts. Forecasts are the lifeblood of the financial world, and we're all constantly plied with fresh information by the popular and financial news media for the purpose of altering our outlook. If your forecasts for the markets change, then it follows that your asset class allocations should change, tactically, strategically, or both.

And even without a change of forecast, there is usually a sound reason for considering a change to the asset class allocation of a portfolio: The allocation as it is doesn't match what the investor or his advisor believes it ought to be. That happens simply because the markets are continually changing prices. (If, for example, your portfolio is 70% stocks and 30% bonds, and stocks have a return of 25% while bonds have a return of -5%, then your portfolio will become roughly 75% stocks and 25% bonds.<sup>24</sup>) Few investment advisors continually rebalance an existing asset class allocation back to the one that strategy dictates, because doing so incurs not only the costs of buying and selling, but also, for taxable accounts, the taxes due on the capital gains that are realized by the sale of assets that have gone up in price. But normally, rebalance they do, sooner or later, or else they use new cash contributions to buy more of the asset classes that have less than their intended allocations. In my previous essay, on portfolio optimization, I addressed with some technicality and, depending on your taste for this sort of thing, tedium, how and how often to rebalance any investment portfolio in light of changing market prices. I'll spare you a repetition.<sup>25</sup>

## Healthy Rebalancing

There is a sort of asset class reallocation known to and deplored—in most cases, rightly—by nearly all financial advisors, whereby an investor sells stocks as the stock market goes down, and buys as the market goes up, in a distinctly sorry form of amateur market timing. The result, historically and almost inevitably, is very poor investment results. The investor finds himself in the long run with less wealth than he would have had if he hadn't rebalanced the portfolio at all. It's easy to understand the investor's reasoning. Many investors find it counterintuitive to buy stocks when they've gone down in price and therefore look bad, and to sell them when they've gone up and look good, even though that's the essence of the uncontroversial maxim, "Buy low, sell high." The investors reason, "The market is going down" so, sell. Or, "The market is going up," so, buy. Language and thought cleave so tightly to one another that I don't know if it's the language or the idea that bears primary blame, but the language is clearly wrong. Anyone inclined to voice such

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<sup>24</sup> I'm assuming that all dividends are reinvested in stocks and all interest income is reinvested in bonds.

<sup>25</sup> See Peabody River Asset Management *Newsletter*, issue 14, September 2012, essay, "[How to Build a Portfolio](#)," especially p. 15-16.

thoughts should instead say, “The market has been going down,” or “The market has been going up.” At any instant, you don’t know, even though you may think you do, what the market *is* doing or where it’s headed. I’m not saying that the stock market can’t be forecast at all, but it certainly can’t be forecast by casual induction from the obvious, refracted through emotion.

Leaving to one side this mistaken rebalancing of asset classes, there is hardly an investment advisor anywhere who does not regard the regular rebalancing of a portfolio back to its planned asset class allocation as akin to eating more vegetables, exercising, and getting a good night’s sleep. No one believes in setting the allocations once and then doing nothing.

Here’s why this is reasonable, conventional advice. Take a good look at the following table of the performance of three portfolios. One portfolio consists of 100% U.S. stocks (represented by the S&P 500, and so a broad asset class). The second portfolio consists, at the outset, of 70% U.S. stocks and 30% U.S. bonds (represented by long-term U.S. government bonds), which is rebalanced back to the same proportions at the end of each year. And the third portfolio also consists, at the outset, of 70% U.S. stocks and 30% U.S. bonds, the same as the previous portfolio, but it is never rebalanced. The span of time is 1971 to 2012. The table shows the annual rate of return and the volatility of the returns of each portfolio.<sup>26</sup> Don’t get hung up on the exact meaning of the volatility measure; the point is to see how the measure differs among the different portfolios. (I’m using the common statistical measure of volatility, standard deviation.)

	Annual Rates of Return	Volatility of Returns
100% Stocks	10.09%	17.73
70% Stocks, 30% Bonds: Rebalanced	10.20%	13.11
70% Stocks, 30% Bonds: Not Rebalanced	9.78%	14.46

Notice that the 70/30 portfolio, rebalanced annually, actually had a slightly greater return than stocks alone, and at the same time, had much lower volatility. It also had a greater return, with lower volatility, than the 70/30 portfolio that wasn’t rebalanced. Mind you, this is just one illustration drawn from one span of years; that’s to say, it’s an anecdote, not a proof that any asset class allocation, when rebalanced regularly, is superior to one that isn’t rebalanced. But I didn’t cherry-pick this example, and you’ll find something like this pattern during most long spans of years.<sup>27</sup>

<sup>26</sup> Data drawn from *Ibbotson SBBI 2013 Classic Yearbook: Market Results for Stocks, Bonds, Bills, and Inflation 1926-2012* (Chicago: Morningstar, Inc., 2013).

<sup>27</sup> Given that we’ve recently experienced what may have been the greatest bull market in bonds ever, the data in this example were bound to show that a mixed portfolio was roughly the equal of a stock portfolio when measured by their rates of return. To demonstrate convincingly the virtues of regular rebalancing, I’d have to produce a similar table showing returns and volatility over many different spans of years and show that, by and large, there is a pattern of respectable returns with lower volatility to the rebalanced portfolio. The respectable returns and lower volatility of the rebalanced portfolio are not entirely independent characteristics. When two series of returns have the same *average*, the series with the lower volatility will have a greater *rate* of return. See Peabody River Asset Management *Newsletter*, issue 4, July 2009, essay, “[How to Think about Return and Risk at the Same Time \(Part 1 of 2\)](#).”

## Messing with Your Head

But despite the signal virtues of regular rebalancing, let me mix it up a bit. If I spent more time among professors of the humanities, I would say that I wanted to “problematize” the idea of asset class rebalancing. I can think of three reasons to challenge the consensus.

First, because markets representing the different asset classes are in constant motion both up and down, there’s a good chance that actual asset class allocations that have become out of whack with an investor’s intended allocations will eventually move back into whack of their own accord, without the manager’s having undertaken any rebalancing at all. This is a reason to be hesitant to rebalance, even when the forecast extra return from rebalancing is greater than the cost of making the sales and purchases.<sup>28</sup>

Second, risk tolerance adjusts, to some degree, to changing asset class allocations.<sup>29</sup>

Consider an investor whose appropriate asset class allocation was 60% stocks, 40% bonds. Perhaps through sheer neglect, she didn’t rebalance her portfolio as the stock market went up, and the portfolio now stands at 90% stocks and 10% bonds. Also, because the stock market has gone up, she’s much wealthier. A loss of, oh, say, 30 percent of her stock holdings (equaling 27% of the total portfolio) now might be painful, but not as dire as it would have been before the stock market ascended. That’s because the remaining value of her total portfolio after the loss would still be greater than it was back when the allocation was 60/40. So maybe it would be wrong to rebalance all the way back to 60% stocks, which would correspond to a lower risk tolerance than she now has.

Now consider the contrary. Her appropriate asset class allocation was 60% stocks, but again through neglect, she didn’t rebalance her portfolio as the stock market declined, and her portfolio currently stands at 20% stocks and 80 % bonds. Her capacity to deal with a further loss of 30 percent of the total portfolio is now far less than it was at the outset, because she has so much less wealth to begin with. But she also has much less exposure to the investment risk of stocks, and so the probability of that 30 percent loss has diminished. It might therefore be a mistake to rebalance her portfolio all the way back to an allocation that matched her initial risk tolerance. (This line of thought, as you can see, reinforces the argument against selling stocks in a panic during a stock market swoon.)

Third, there’s a contrary line of thought that runs: Risk tolerance be damned. From this perspective, the critical concept is **risk capacity**, the minimum level of wealth that allows an investor to get by

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<sup>28</sup> See note 25.

<sup>29</sup> Readers with a willingness to delve into this issue at a more technical level may find of interest a paper by André F. Perold and William F. Sharpe, ‘Dynamic Strategies for Asset Allocation,’ *Financial Analysts Journal*, January-February 1988, pp. 16-27. Note, however, that in their exploration of buy-and-hold versus constant mix, they neglect the framework of portfolio optimization, that is, taking risk tolerance into account.

without suffering severe discomfort.<sup>30</sup> That level of wealth is a floor, an absolute. Risk capacity dominates risk tolerance, narrowly conceived as a purely psychological characteristic. So, as wealth declines because the stock markets are shriveling, the investor should progressively convert stocks (and other risky investments) into cash until the cash allocation of the portfolio equals the level of the floor. Whatever portion of the portfolio remains after the cash allocation has grown to equal the value of the floor is the seed corn for cultivating risky investments as the market once more turns fertile and grows, and the cash can slowly be ploughed back into the market. As you've surely already noticed, this approach actually validates the instincts of the panicking investors I described earlier, though there isn't desperation in this procedure; there's a methodical, mathematical (but not too complicated) and deliberate way to carry it out, and it's not the same as converting the entire portfolio to cash. (You will also observe that this line of thought is similar to the way that risk tolerance and cash fit into the Black-Litterman framework, though it is not quite the same.) This is the essence and the simplest form of what is meant by **portfolio insurance**, a concept that has received a bad rap because it was blamed for exacerbating the stock market crash of October 1987.<sup>31</sup>

Now, I'm not attempting to seduce you into repudiating the conventional view of rebalancing the asset class allocation of a portfolio to the percentages set by policy. I am suggesting, however, that mechanically and thoughtlessly rebalancing an asset class allocation to rigidly established percentages might, in some contexts, not best serve your financial well-being. All three alternative arguments are compatible with Modern Portfolio Theory except the third, and that is an exception only insofar as the theory neglects the concept of risk capacity. But risk capacity doesn't so much invalidate the theory as circumscribe the financial assets that should be put at risk as investments, and to which the theory therefore applies.<sup>32</sup> Once again, I'm referring to the proportion of investments, on the one hand, and cash, on the other.

## Conclusion

Despite a raft of misunderstandings about asset class allocation—it rests on a theoretical foundation most investment managers don't recognize and many would wrongly repudiate if they did; it is commonly justified with evidence that doesn't withstand scrutiny; often when implementing it, the investor forgets and defies the fundamental goal of achieving an optimal balance between return and

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<sup>30</sup> See Peabody River Asset Management *Newsletter*, issue 12, October 2011, essay, "[Why Invest? \(Part 1 of 2\)](#)."

<sup>31</sup> The problem may have been that, like a number of investment practices that may be beneficial for investors one by one, portfolio insurance could paralyze the market if too many investors tried to practice it all at once. The accusation is that, by requiring investors to sell stocks into a market that was already falling, portfolio insurance caused selling to snowball. As implemented, portfolio insurance is not simply the buying and selling of stocks; it is "synthesized," using derivatives. I once heard Robert Ferguson, of the firm of Leland, O'Brien & Rubinstein, which was famous at the time as the inventor and principle practitioner of portfolio insurance, say that his firm had no difficulty in executing trades on the day of the crash; he denied the snowball effect.

<sup>32</sup> The Capital Asset Pricing Model (CAPM), which incorporates Modern Portfolio Theory, does take into account risk capacity as well as risk tolerance, by specifying an allocation between cash and risky investments. But empirical investigation has demonstrated that it poorly represents the reality of the behavior of actual investments.



risk—asset class allocation has become central to the management of portfolios. So important has it become that “asset class allocation” is often used interchangeably with “portfolio management.” That, too, is a mistake. But asset class allocation deserves its centrality, because, in a world where common investments are under constant scrutiny from all sides and can therefore very seldom be picked to produce superior results, it is the only lever in the complex mechanism of risk and return that one can grasp with any reasonable hope of manipulating them over the full range of their values.

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