

The Case for Globalized Research

The awarding of a share of the 1990 Nobel Prize in Economics to Harry Markowitz, creator of the concept of an “efficiently” allocated investment portfolio, marked the official coming of age of the principal of diversification in financial management. As is its custom, the Nobel committee had taken its time in recognizing Markowitz’ achievement. He had written his seminal paper—*Portfolio Selection*—nearly 40 years before, and the revolution it inspired was firmly in place when the award was announced. A whole body of thought based upon Markowitz concept of efficiency in investments had become well developed, and dominant in the business of investment management. It was known by the imposing name of Modern Portfolio Theory, or “MPT.”

The heart and soul of MPT is to manage risk by diversifying portfolio assets by return characteristics and by the interrelation of those characteristics. It had been understood for a very long time that variability in return characteristics is desirable, and that it can be obtained by diversifying portfolio holdings internationally. It has heavily emphasized, for example, by British market theorist Henry Lowenfeld in a book published in 1909, and credited—at least at Yale University—as the first full explication of a theory of international diversification¹. Lowenfeld provides a key insight in describing the value of what today is called low correlation among portfolio assets:

The idea of investing capital in a variety of stocks is to prevent any financial disaster adversely influencing more than a small portion of the total capital...So that not only must capital be sub-divided among a number of stocks, but care must also be taken to select for the purpose stocks which are susceptible to as widely divergent influences as possible (Pages 7-8).

Later Lowenfeld elaborated on his concept of “divergent influences,” stressing that investors can obtain the advantages of this allocation strategy by diversifying internationally:

A sound investment scheme is the result of an accurately balanced system of poise and counterpoise. But the central idea of counterpoise is lost sight of when the choice of stocks is ...wholly restricted to the stocks of one country (Pages 63-64).

To his credit, Lowenfeld himself points out that, even in his day, this idea was not new:

...the idea of Geographical Distribution of Capital is broadly based upon a wide application of the old adage—“Don’t put all your eggs into one basket.” And “basket” here means “country” (Page 187).

Indeed, Lowenfeld’s analysis, while extraordinarily insightful, is essentially a rigorous application of common sense (which is not to say it is a trivial accomplishment). Given the mathematical tools available to him, he could not address the issue of portfolio design in any greater depth than to say that securities, to be in proper “counterpoise,” should be of identical quality and equally weighted.

The revolutionary feature of Markowitz’ work was the use of latter day statistical tools not only to quantify their variation under “divergent influences,” but also to measure their *covariance*—how they

behaved in relation to one another. That made it possible to precisely “counterpoise” assets using nuanced combinations of characteristics, rather than simply attempting to smooth risk factors by subjectively matching the “quality” of all portfolio positions, and assigning equal weights.

Using modern methods of measuring central tendency, Markowitz graphed a large set of portfolios, plotting return versus standard deviation (as a proxy for risk). The result was a parabola, with a kind of bat-winged outer edge. The feature of interest however was a much smoother boundary of the parabola along the return axis. This represented the set of portfolios that delivered the highest return at any selected level of risk. That is, they were the *dominant* portfolios in the array.

This dominant fringe of the Markowitz parabola came to be regarded as a distinct—and entirely new—thing unto itself: the *efficient frontier*² of investment portfolios. Any universe of portfolios with sufficient data points will generate an efficient frontier if plotted along axes of standard deviation and historical return. Lowenfeld’s old adage now could be addressed with a precision greater than any he could have imagined. There now was a method using powerful, well-established statistical tools and hard historical data to determine not only what eggs to put into what basket, but also—and most importantly—the number and size of those eggs.

For international investing, this was akin to a reprise of the gold strike at Sutter’s Mill. Institutional investors who might have looked askance at foreign markets as outposts to be left to wild-eyed adventurers, now saw them as troves of a new kind of treasure: low correlation. After Markowitz work, it was understood universally that a highly volatile security that correlated weakly, or—better—negatively, with premium equities and bonds, would *reduce* the overall volatility of a blue chip portfolio, and possibly add a little spice to the return data as well. International markets, rich in such low-correlated securities, thereby came within the compass of highly respectable, sober-sided fund managers looking not for easy plunder, but to diversify their risk. This work, along with that of other prime movers in MPT³, provided the theoretical basis for what first was a movement, later a rush, to international investment. Today, brokers in Hong Kong, Seoul, Bangkok, Tokyo and other points once thought exotic cater to clientele more resembling Indiana University than Indiana Jones.

Since 1960—about the time Markowitz put his original thesis into book form—the equity capitalization of non-US markets has risen by a factor of approximately 120^4 from about \$134 billion to \$16.1 trillion. Over the same time span, the economies of the world’s Developing Nations transformed from a pre-emergent stage befitting their then-common designation as “Third World” countries, to a genuinely epochal boom phase that might only now be reaching full stride. The market capitalization of companies listed on the Hong Kong stock exchange is now more than seven times that of the entire world outside the U.S. in 1960. Exchanges in Korea, India, Taiwan, China and Singapore are larger by factors ranging from two to nearly five (Ibbotson/Brinson and Bloomberg).

No theory of finance—even one that wins a Nobel Prize—could account entirely for such an influx of capital. Concurrent with, abetted by, fed by, and feeding this boom in the markets was a real-world boom in the economies of the developing world. Data from the World Bank show the Gross Domestic Product of developing nations (those outside of the U.S., Europe and Japan) increased 5.7 times in real terms from 1969 to 2007. The big story was and is in East Asia (outside Japan), which grew by 9.7 times over this 39-year span, including a growth factor of 27.7 for China. Hong Kong, South Korea, Taiwan and Malaysia grew by double-digit factors, and Thailand (9.9) was just below. By contrast, the

GDP for the “developed” world outside the U.S. grew about 2.7 times, and that of the U.S. about 3.1 times.

Implications

Clearly the importance of international investing has been established beyond question. If ever it was advisable for fund managers to ignore international opportunities—and Lowenstein very ably made the case that it was not—it is no longer even possible. The vigorous growth of the East Asian economies is now fully reflected in the tempo in international markets, and it is now possible to make a plausible argument that a highly accelerated process is in place that will take those markets from boom to saturation. The prototype is the familiar one of the U.S. stock markets from 1982 to 2000, during which two enormous bull markets, separated by a brief recession, propelled the Standard & Poor’s Index from about 124 to nearly 1500—a growth multiple of 12. This ended, of course, in a severe price reversal. However, a second change occurred in the U.S. markets that might prove more enduring than a slump in prices, and also more applicable to the markets in Asia and other sectors of the Developing World: a pronounced shift toward alternative investment strategies.

The underlying theory is straightforward: Markets in highly developed countries are extremely sophisticated, highly regulated and generally quite efficient. Since high efficiency equates to low opportunity, investors are widening their horizons in search of return. Looking for new markets, new strategies and new methodologies, they turn to international economies, which are presumed to be less evolved and therefore less efficient, and also to alternative investment strategies, which promise a degree of liberation from conventional attitudes, and (perhaps more importantly) from the more constricting aspects of regulation.

This roughly sketched model of investments progressing from the conventional and constricted to the global and liberated, theoretically would have been in place throughout the history of capital markets. However, the relatively sedate pace of its unfolding suddenly shifted as the technology bubble of the 1990’s pushed everything into fast forward. Now the event that academicians had for decades declared inevitable (the arrival of genuinely efficient markets), but no one ever expected really to happen, perhaps has happened. Maybe opportunities for arbitrage, at least for ordinary long-only, buy-and-hold investors, effectively have gone extinct—or at least become sufficiently scarce to prompt what McKinsey & Company calls “a structural shift in the traditional asset management model⁵.”

There is a long history of human institutions coming a cropper immediately after announcing they had attained ultimate omega of evolutionary development. Wized professionals therefore will never be among those proclaiming aloud that capital markets have reached efficiency in any strong form. Down on the trading floor, that one will never pass the sniff test. But likewise, no one would deny that very large amounts of money are on the move, and something of possibly lasting importance is afoot.

For example, the growth trajectory of hedge funds emphatically suggests a secular shift has occurred in the “traditional asset management model.” Hedge funds have enlarged their assets under management by a factor three since 2000 and by *a factor of 1,000* since 1969⁶. Factoring in leverage—nearly ubiquitous in alternative fund management—the capital footprint of hedge funds now exceeds \$6 trillion (McKinsey, 2007).

Another persuasive indication of a global shift toward alternative forms of investment—and one that no doubt is quite measurable to skeptics working on the floors of stock exchanges—is the fact that, since the bear market “bottom” in 2002, more market capitalization has been taken out of public markets by private deals than has been brought into the markets by public offerings. Furthermore, this has happened every year since 2002, with public-to-private deals in 2006 more than doubling initial offerings: \$525 billion to \$256 billion (McKinsey, 2007).

Even more to the point, foreign direct investment in developing countries since 1990 has grown more ten-fold, from about \$25 billion to nearly \$300 billion, according to data from the World Bank.

Mandate for Fund Advisors

Fund advisors are taking these capital flows as a mandate to do what they are hired to do: identify opportunity. While fund managers come knocking in plentitude on the doors of investment consultants, the large volume of new funds—especially in alternative investments—creates uncertainty that the best opportunities are revealing themselves. Put simply, there is a serious impetus for stationing research capabilities abroad, to “put boots on the ground” as phrased by Charu Fernando, Director of Portfolio Management for Pymford International fund managers in London.

Although the empirical case for far-flung research resources has not been made, investment consultants are not in a position to wait, lest the competitive advantage going to early-movers be captured by competing firms. Recent announcements from investment consulting firms have told of new offices being opened from Dublin to Sydney, joining others already “on the ground” in Hong Kong and Tokyo. Africa, a location of choice for burgeoning vaults of petrodollars, cannot be far behind.

One certainty: When researchers dispatched from consulting firms reach their new venues in developing countries, they’ll find plenty to do.

ENDNOTES:

1. *Investment An Exact Science*, London Review of Reviews, 1909. The book, recently discovered in the archives of the Yale's Mudd Library, is posted on the website of Professor William N. Goetzmann, Director of the International Center for Finance at the Yale School of Management (<http://viking.som.yale.edu>).
2. In his Nobel lecture, Markowitz described the efficient frontier as "the set of Pareto optimal expected return, variance of return combinations." A Pareto optimum occurs in an economic system when no individual can be made better off without another being made worse off.
3. Most prominent among these theoreticians was William F. Sharpe, creator of the Capital Assets Pricing Model, who also shared the 1990 Nobel Prize in Economics (the third winner was Merton H. Miller).
4. Data from 1960 from *Global Investing* by Roger G. Ibbotson and Gary P. Brinson, McGraw-Hill, 1993. Capitalization figure for 2006 from Morgan Stanley Capital International.
5. McKinsey & Company, *The New Power Brokers: How Oil, Asia, Hedge Funds, and Private Equity Are Shaping Global Capital Markets*, October 2007, Page 25.
6. Stefanani, Filippo, *Investment Strategies of Hedge Funds*, 2006, Wiley Finance Series. Stefanani puts the sum of assets under the management of hedge funds at approximately \$1.6 billion in 1969. Data from McKinsey, 2007, puts the total AUM for hedge funds at \$490 billion at the end of 2000 and \$1.7 trillion in the second quarter of 2007.