

## <del>С</del>-Т.

## **Key Questions**

## Who Was Harry Markowitz, and Why Should Investors Know His Name?

George Mateyo, Chief Investment Officer

<u>The Key Wealth Institute</u> is a team of highly experienced professionals from across wealth management, dedicated to delivering commentary and financial advice. From strategies to manage your wealth to the latest political and industry news, the Key Wealth Institute provides proactive insights to help grow your wealth.

For most all investors, a well-crafted Investment Policy Statement (IPS) serves as the cornerstone of a welldesigned investment plan, and when creating an IPS, establishing a portfolio's Strategic Asset Allocation is one of the most important decisions an investor can make. Such claims are based on decades of research which has consistently demonstrated that over 90% of the variability of an investment portfolio's long-term total return is derived from asset allocation.<sup>1</sup>

This foundational concept is widely accepted and is practiced by individual and institutional investors alike, and its origins can be linked to one man: Dr. Harry Markowitz. Markowitz was a professor of finance at the Rady School of Management at the University of California, San Diego and recently passed away at the age of 95.

At the time when Markowitz was completing his studies at the University of Chicago, most investors believed that the best way to achieve investment success was to identify individual stocks of companies that were thought to have the highest odds of outperforming. Pick a winning stock was considered to be a winning strategy.

Markowitz had a different view, and in 1952 in an essay

titled "Portfolio Selection," he theorized that risky assets should not be viewed by themselves but in the context of a portfolio as a whole, a powerful concept that revolutionized how investment portfolios were constructed and later led him to earn a Nobel Prize.

This notion may sound intuitive today, but at the time and in the early years thereafter, it was groundbreaking. In the words of one of the many obituaries written in recognition of the person once lauded as "the finance man of the century," Markowitz "launched a revolution in finance, upending traditional thinking about investing."

Referred to as Modern Portfolio Theory (MPT), Markowitz revealed that investment portfolios could be made "efficient" or optimized by structuring a portfolio to maximize return for a given level of risk. Or, alternatively, a portfolio could be engineered to minimize the risk of a portfolio for a given level of return.

The essence of Markowitz's theory was the discovery that the risk of any portfolio is not determined by the risk of its individual components. Rather, the risk of a portfolio is a function of how individual components (e.g., stocks and bonds) relate to each other.

Once Markowitz's innovative research was endorsed, MPT became used in portfolio construction in nearuniversal fashion and remains at the core of the investment process for many investment firms 70 years later. Quoting from another tribute: "It was the first time that the benefits of [portfolio] diversification had been codified and quantified.... This breakthrough insight has permeated all aspects of money management with few professionals unfamiliar with his work."

<sup>1</sup> Brinson, Hood and Beebower, 1986. Determinants of Portfolio Performance. Financial Analysts Journal 42

That said, while we too are proponents of this approach, some limitations exist which should be noted.

First, Markowitz chose to define risk as the standard deviation (or the variability) of returns. Such is a useful tool for academics and statisticians, but it is too abstract for most investors to comprehend or to easily apply to their own financial circumstances. Have you ever heard a meteorologist state, "There's a 75% chance of rain tomorrow with a 6% standard deviation"? Me neither.

Additionally, Markowitz's approach also assumes investors solely fixate on maximizing return or minimizing risk. Likewise, MPT assumes investors have one static, near-perpetual time horizon. Most investors, on the other hand, have multiple objectives hoping to be reached over multiple time windows such as short-term goals and longer-term goals.

Finally, designing a portfolio based strictly on MPT requires accepting a great many underlying assumptions, most notably, how assets are expected to interact with each other over the long run – a difficult proposition to say the least. In short, despite its power, MPT has its limits, a fact that many have pointed out, including Dr. Markowitz himself!<sup>2</sup>

To combat these challenges, we believe that by including a Goals-Based Capital Allocation Approach combined with Harry Markowitz's renowned MPT, not only will our clients be better informed, but the probability of better investment outcomes may be increased.

Importantly, we would not suggest that MPT should be replaced by a Goals-Based Approach. For instance, once an advisor has sufficiently captured all of a client's goals and determined the amount of money necessary to achieve each goal, the portfolio manager must decide which investments are most likely to realize each goal. And one of the best tools to aid in this process is the inclusion of Modern Portfolio Theory. Still, there are significant benefits from incorporating a Goals-Based Approach alongside MPT, most notably an increased likelihood of achieving one's long-term investment success. Opponents of a Goals-Based Approach argue that through the creation of "sub-portfolios" (or a portfolio for each individualized goal), the total portfolio may become poorly diversified. This argument, however, ignores the fact that in most instances, the assets across the various sub-portfolios are fungible, meaning that those assets can usually be reallocated amongst the portfolios as market conditions or the client's expectations change.

Furthermore, once a sub-portfolio for each goal has been structured, the portfolio manager must review a client's aggregated portfolio to ensure it has been optimally constructed in such a manner that no unintended risks are evident, no overlapping or unnecessary exposures are apparent, and all liquidity needs have been properly accounted for. Doing so further requires applying concepts of MPT.

Regardless of the portfolio construction method(s) applied, communicating progress to a client is of paramount importance. This notion further reinforces our view that a Goals-Based Approach should exist alongside MPT.

Dr. Markowitz deserves tremendous credit for providing a framework by which investment portfolios should be constructed and managed; he left a permanent mark on our profession. And despite its limitations, we believe his legacy will live on.

<sup>2</sup> Chhabra, Ashvin "Beyond Markowitz: A comprehensive Wealth Allocation for Individuals." The Journal of Wealth Management, Spring 2005. Das, Sanjiv and Harry Markowitz "Portfolios for Investors Who Want to Reach Their Goals While Staying on the Mean-Variance Efficient Frontier." The Journal of Wealth Management, Fall 2011



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