

HISTORY OF PORTFOLIO THEORY AND INVESTMENT MANAGEMENT BREAKTHROUGHS¹

Prior to the 1920's

Investing in Stocks Limited to the Very Wealthy

Prior to the 1920's, only the truly wealthy in the U.S. had access to services enabling them to buy shares of publicly traded companies.

1924

First Mutual Fund is Created

Massachusetts Investors Trust On March 21, 1924, the first official mutual fund in North America was born. It was called the Massachusetts Investors Trust. This mutual fund structure was the start of the democratization process that gave investors real access to the capital markets. It allowed everyone to buy into the equity markets in a diversified fashion.

1950

Conventional Wisdom

circa 1950

Although a few mutual funds existed, mainstream investment thinking at this time was: Analyze securities one-by-one and focus on picking winners. Concentrate holdings to maximize returns. Broad diversification was considered undesirable. Said Loeb: "Once you attain competency, diversification is undesirable. One or two, or at most, three or four securities should be bought. Competent investors will never be satisfied beating the averages by a few small percentage points."

Gerald M. Loeb

The Battle for Investment Survival, 1935

1952

Diversification and Portfolio Risk

Harry Markowitz

Nobel Prize in Economics, 1990

Markowitz conducts landmark research, concluding that diversification reduces risk. He redefines the concept of portfolio risk versus security risk. An optimal portfolio can be constructed to maximize return for a given standard deviation.

1958

The Role of Stocks

James Tobin

Nobel Prize in Economics, 1981

Tobin creates the Separation Theorem, which has two tenets: form portfolio of risky assets, and temper risk by lending and borrowing. Research shifts focus from stock selection to portfolio structure. "*Liquidity Preference as Behavior Toward Risk*," *The Review of Economic Studies*, February 1958.

1961

Investments and Capital Structure

Merton Miller and Franco Modigliani

Nobel Prizes in Economics, 1985 & 1990

This research focuses on determining the link between a company's corporate finance decisions and its company stock return. Conclusion: a firm's value is unrelated to its dividend policy. Dividend policy is an unreliable guide for stock selection.

1964

Single-Factor Asset Pricing

Risk/Return Model

William Sharpe

Nobel Prize in Economics, 1990

Capital Asset Pricing Model (CAPM): introduces a theoretical model that defines risk as volatility relative to market. CAPM is used for evaluating the risk and expected return of securities and portfolios. A stock's cost of capital (the investor's expected return) is proportional to the stock's risk relative to the entire stock universe.

1965

Behavior of Securities Price

Paul Samuelson, MIT

Nobel Prize in Economics, 1970

Market prices are the best estimates of value. Price changes follow random patterns. Future stock prices are unpredictable. "*Proof That Properly Anticipated Prices Fluctuate Randomly*," *Industrial Management Review*, Spring 1965.

1966

Efficient Markets Hypothesis

Eugene F. Fama

University of Chicago

Fama conducts extensive research on stock price trading patterns. He extends work on the unpredictability of stock prices, and finds that prices quickly incorporate information. Fama develops a concept called "Efficient Markets Hypothesis," which asserts that prices reflect values and information accurately and quickly. It is difficult, if not impossible, to capture returns in excess of market returns without taking greater-than-market levels of risk. Investors cannot identify superior stocks using fundamental information or price patterns.

1968

First Major Studies of Manager Performance

Michael Jensen, 1965

A.G. Becker Corporation, 1968

These first studies of U.S mutual funds (Jensen) and of institutional plans (A.G. Becker Corp.) indicate that active managers underperform indexes. Becker Corp. starts consulting industry with the creation of “Green Book” performance tables comparing results to benchmarks. These are the first studies showing that investment professionals fail to outperform market indexes. *Michael Jensen, “The Performance of Mutual Funds in the period 1945-1964,” Journal of Finance, December 1965.*

1972

Options Pricing Model

Fisher Black, University of Chicago
Myron Scholes, University of Chicago
Robert Merton, Harvard University
Nobel Prize in Economics, 1997

The development of the Options Pricing Model allows new ways to segment, quantify and manage risk. It spurs the development of a market for alternative investments.

1973

Random Prices and Practical Investing

John McQuown, Wells Fargo Bank, 1971
Rex Siquel, American National Bank, 1973

We see the birth of index funds as the banks develop the first passive S&P 500 Index funds.

1975

A Major Plan First Commits to Indexing

New York Telephone Company invests \$40 million in an S&P 500 index fund.

New York Telephone Company is the first major plan to index Large U.S. Companies. This helps launch the era of indexed investing. “Fund spokesman are quick to point out you can't buy the market averages. It's time the public could.”

Burton G. Malkiel
A Random Walk Down Wall Street, 1973 ed.

1977

Database of Securities Prices

Collects extensive public market dating back to 1926
Roger Ibbotson and Rex Siquel
“Stocks, Bonds, Bills, and Inflation”

An extensive returns database for multiple asset classes is first developed and will become one of the most widely used investment databases amongst institutional investors. This new empirical database for evaluating asset class returns and assisting asset allocation decisions changes the way institutional investors build portfolios.

1981

The Small-Company Effect

Rolf Banz

University of Chicago

Banz researches NYSE stocks returns from 1926-1975, and finds that in the long term, small companies have higher expected returns than large companies and behave differently.

1990

Nobel Prize Recognizes Modern Finance

Nobel recognizes economists who shape the way we invest, emphasizing the role of science in finance. William Sharpe wins for the Capital Asset Pricing Model, “beta,” and relative risk. Harry Markowitz wins for his work on portfolio diversification and the concept of risk and return.

1991

Determinants of Portfolio Performance

Brinson, Singer and Beebower, *Financial Analysts Journal*, May 1991

This research assesses the impact of passive (benchmark) and active asset allocations and security selection on 82 large pension plans over the 1977-87 period and finds that on average, benchmark asset allocation (allocation policy) explains 91.5% of the variation in quarterly returns.

1992

Multifactor Asset Pricing Model and Value Effect

Eugene Fama and Kenneth French

University of Chicago, Dartmouth College

Their research improves on the single-factor asset pricing model (CAPM). They publish a landmark study entitled “The Cross Section of Expected Stock Returns” in the *Journal of Finance*, June 1992, and identify market, size and value factors in returns. Their development of the three-factor asset pricing model is an invaluable asset allocation and portfolio analysis tool, and revolutionizes the way investors and advisors construct and analyze portfolios.

1989 to present

Evolution of Asset Class Investment Tools

Canadian investors and advisors alike get access to a broad selection of asset class investment tools empowering themselves to build better portfolios. Leading-edge portfolio construction concepts and strategies once reserved for large institutional investors can be implemented on a cost effective basis for all investors.

ⁱ Source: *Dimensional Fund Advisors*