

The Evolution of Risk Management

Why Do Investors Need Risk Management?

During bear markets, investors can lose big—and getting back to breakeven can take years. Risk management is the key to preserving wealth in challenging markets so investors have more to invest in favorable markets.

Bear Market Facts

15

Between 1929 and 2009 there were **15 bear markets**, defined as those periods when the S&P 500 fell at least 20%

36%
LOSS

The average bear market slashed almost 39.4% from stock prices. Omit the 1929 crash, when values declined 87%, and the result is still **an average loss of 36.1%**.

3.6
YEARS

On average, a new bear market begins every 5.5 years, with an average duration of 18.1 months. Omitting the distortion of the 1929 crash, the average time lost making up bear markets (zero earnings): **3.6 years**.

Mathematics of declines and gains

Amount of market decline	Gain needed to break even
5%	5.3%
-10%	11.1%
-25%	33.3%
-33.3%	50%
-50%	100%
-75%	300%
-90%	900%

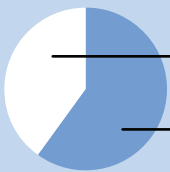
History of Risk Management

Economists and financial experts have tried to solve the “investment risk problem” for decades, resulting in the discovery of the following risk-management breakthroughs and challenges.

Modern Portfolio Theory and Diversification

Harry Markowitz first introduced the concept of diversification. His work, which served as the foundation for modern portfolio theory (MPT), concluded that an investor could reduce the overall risk of a portfolio by including investments that have low correlations to one another.¹

Traditional A.A. Core Example



Bonds 40%
Stocks 60%

Capital Asset Pricing Model (CAPM)

Bill Sharpe introduced the capital asset pricing model (CAPM), which describes the relationship between risk and expected return, and introduced "beta" as a measure of sensitivity to market risk.² This allowed investors to model risk and return expectations for securities by incorporating their sensitivity to systematic risk.

90% of Risk Is Due to Asset Allocation Decisions

Gary Brinson, Randolph Hood, and Gilbert Beebower studied the allocations of 91 pension funds and concluded that asset allocation decisions, on average, explained more than 90% of pension fund risk, as measured by the volatility of returns over time.³ This discovery led the investment industry to focus on asset allocation decisions as the primary method used for risk reduction within investment portfolios.

Variation in Returns Come From Market Movements

Roger Ibbotson and Paul Kaplan showed that a large portion of the variation in time-series returns comes from general stock market movements, not the specific asset allocation decisions.⁴ This research supported the case for active management and stock market timing to help reduce downside risk in portfolios due to stock market movements.

Financial Crisis: Traditional Risk Management Fails

During the Great Recession, traditional asset allocation and diversification failed to protect investors from big losses because portfolios built using this approach were more correlated than previously thought.

1952

Bear market

Duration in months

% of decline

Years needed to break even

14

21.6

2.1

1964

6

28.0

1.8

8

22.2

1.4

18

36.1

3.3

21

48.2

7.6

21

27.1

2.1

1986

4

33.5

1.9

3

19.9

0.6

2000

31

49.2

4.7

2008

17

56.8

3.0

In 1981, Flexible Plan Investments introduces a modern approach to building risk-managed portfolios.

The Next Step Forward: Dynamic Risk Management & Strategic Diversification

Dynamic risk management

- Seeks favorable risk-adjusted returns and less volatility in any market environment.
- Uses sophisticated algorithms and models to capture gains and help protect against losses in a wide variety of sectors, asset classes, and geographies.
- Focuses on controlling portfolio risk based on a client's risk tolerance.
- Has the flexibility to alter course based on market conditions.

Strategic diversification

- Goes beyond asset-class diversification.
- Includes a mix of actively managed strategies that use multiple investment methodologies that respond differently to various market environments.
- Increases odds that some part of the portfolio is correctly positioned to weather market storms.

Sources

1. Andrew Beattie, "Understanding The History Of The Modern Portfolio," Investopedia, March 2018, <https://www.investopedia.com/articles/07/portfolio-history.asp#ixzz5ORzDMIYM>
2. William Sharpe, "Capital Asset Prices: A Theory of Market Equilibrium under Conditions of Risk," Journal of Finance, September 1964, <https://doi.org/10.1111/j.1540-6261.1964.tb02865.x>.
3. Gary Brinson, Randolph Hood, and Gilbert Beebower, "Determinants of Portfolio Performance," Financial Analysts Journal, July–August 1986, 39–44, <https://doi.org/10.2469/faj.v51.n1.1869>.
4. Roger Ibbotson and Paul D. Kaplan, "Does Asset Allocation Policy Explain 40, 90 or 100 Percent of Performance?" Financial Analysts Journal, January–February 2000, 26–32, <https://doi.org/10.2469/faj.v56.n1.2327>.