

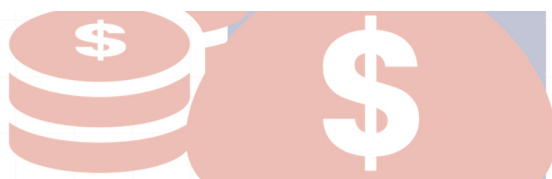


Hedge Fund Overview

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Introduction: Hedge Funds vs Traditional Mutual Funds



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Hedge Fund Characteristics:



Broader range of **allowable investment types**, e.g. derivatives and short-selling



Seek **absolute returns**



Accessible to **high net worth, sophisticated** and **institutional investors** only, i.e. not available to **retail investors**



Higher minimum investments

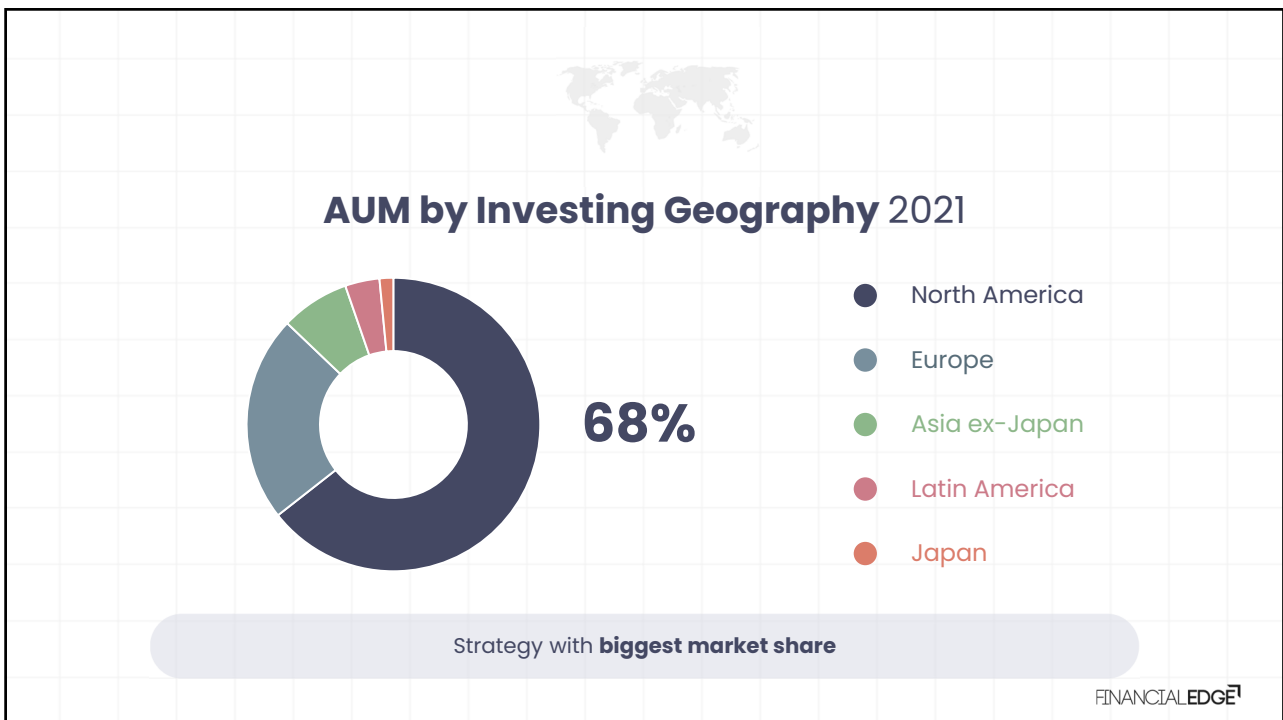
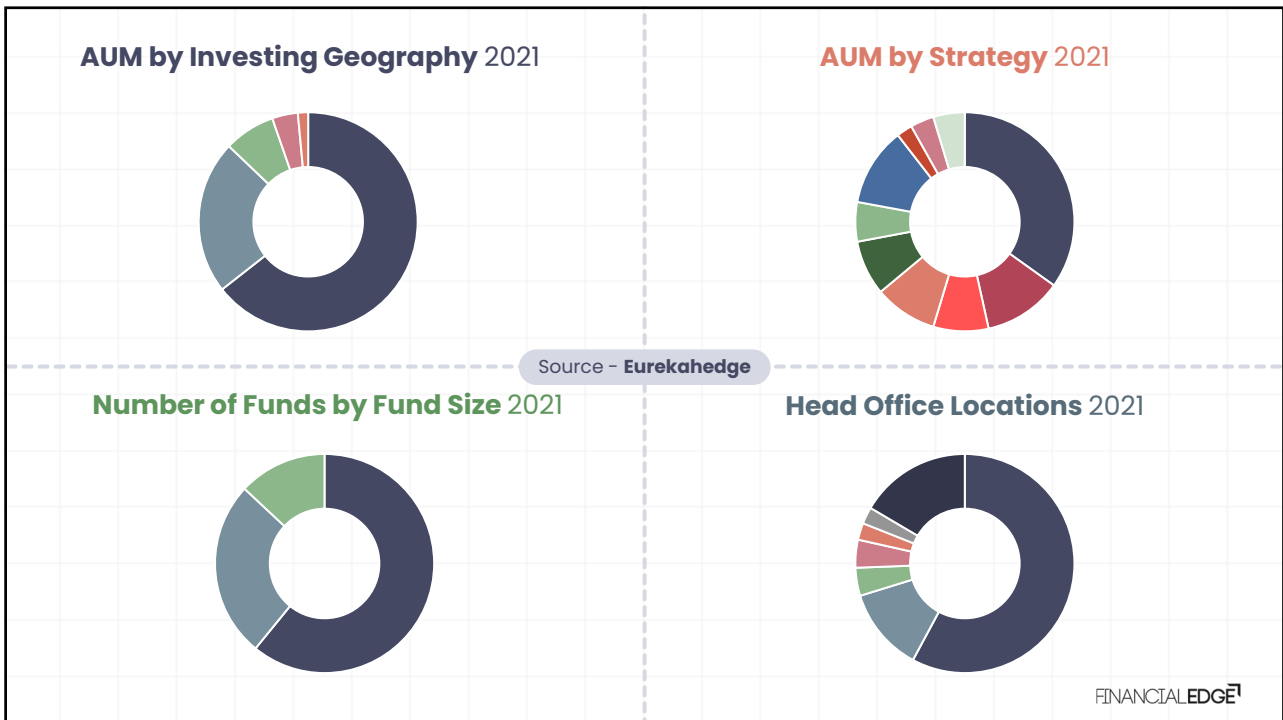


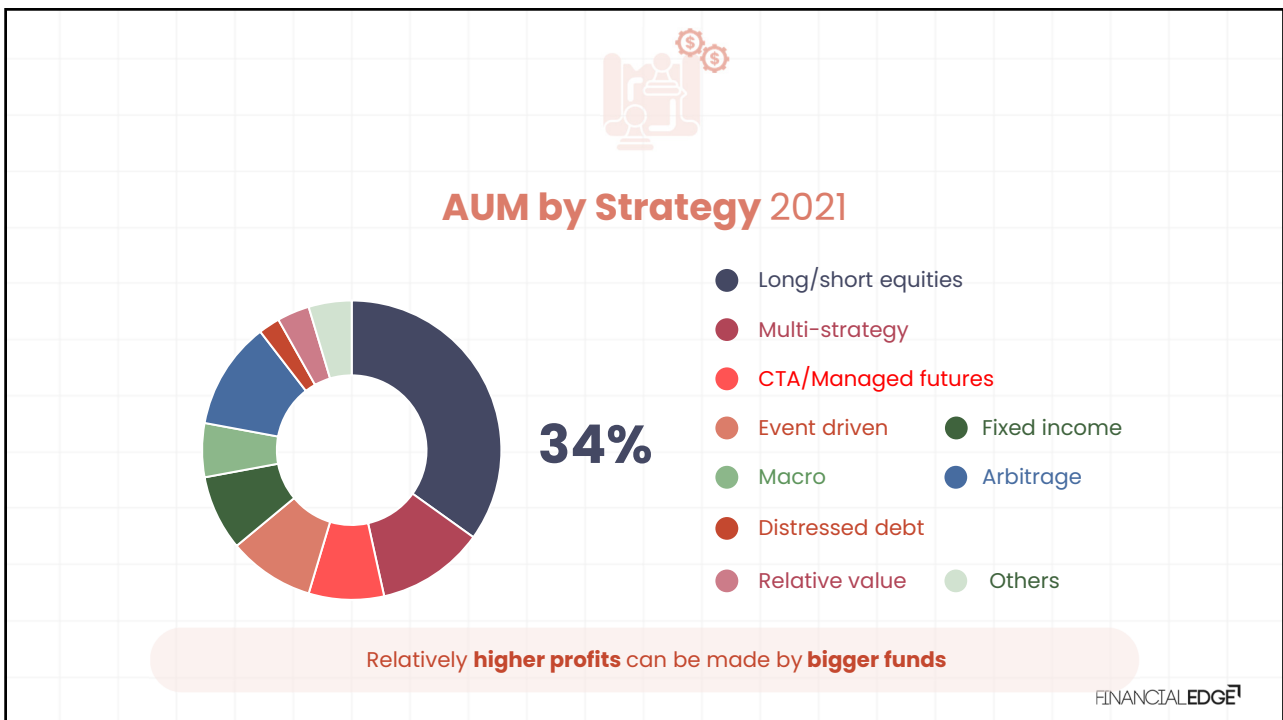
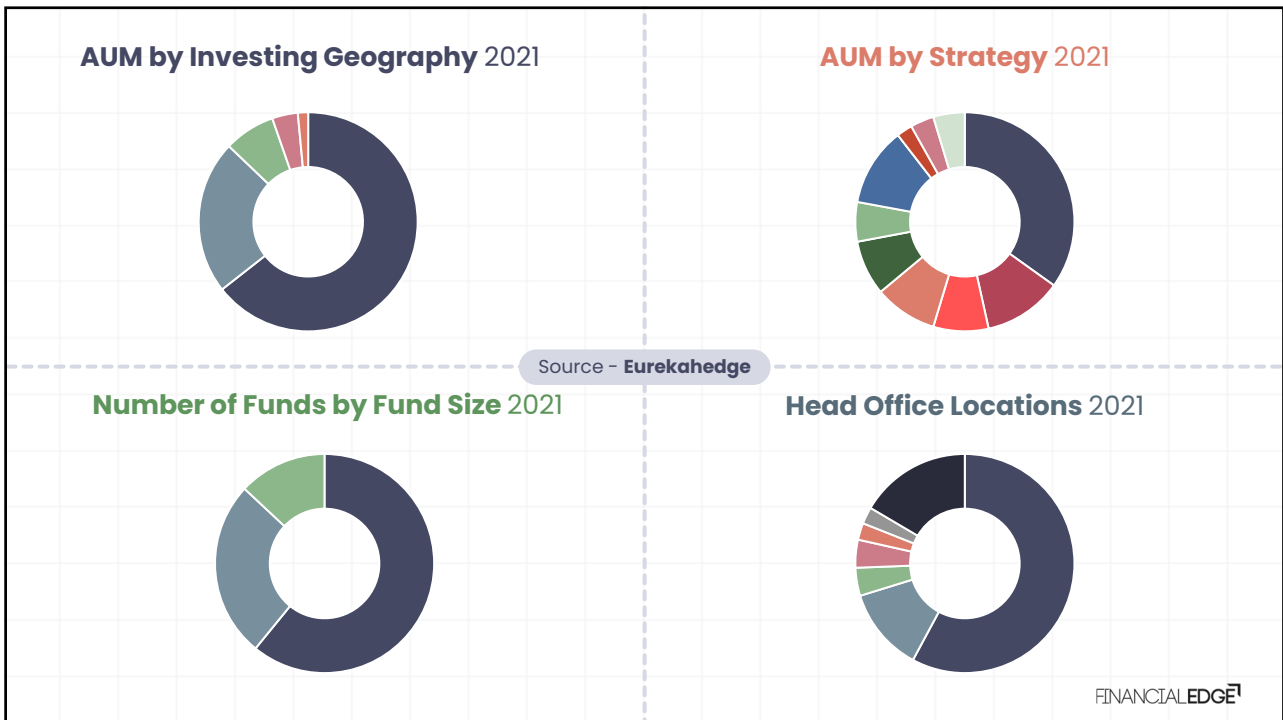
Less liquid

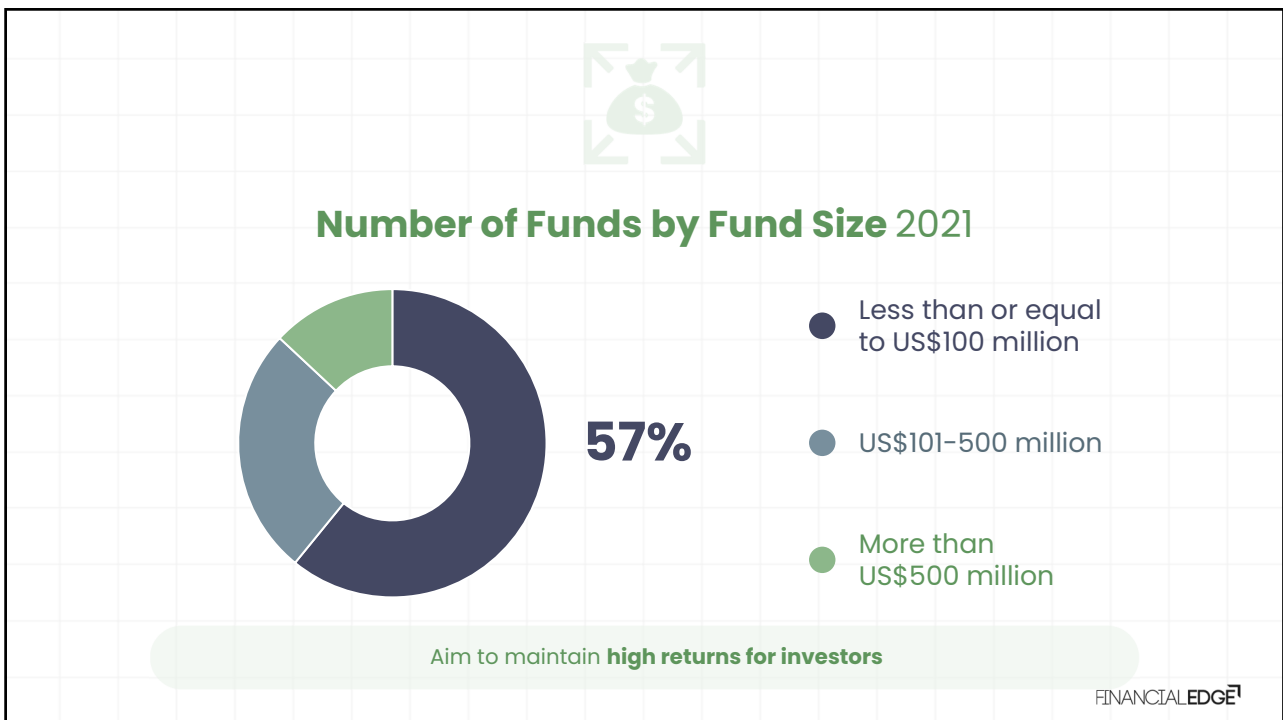
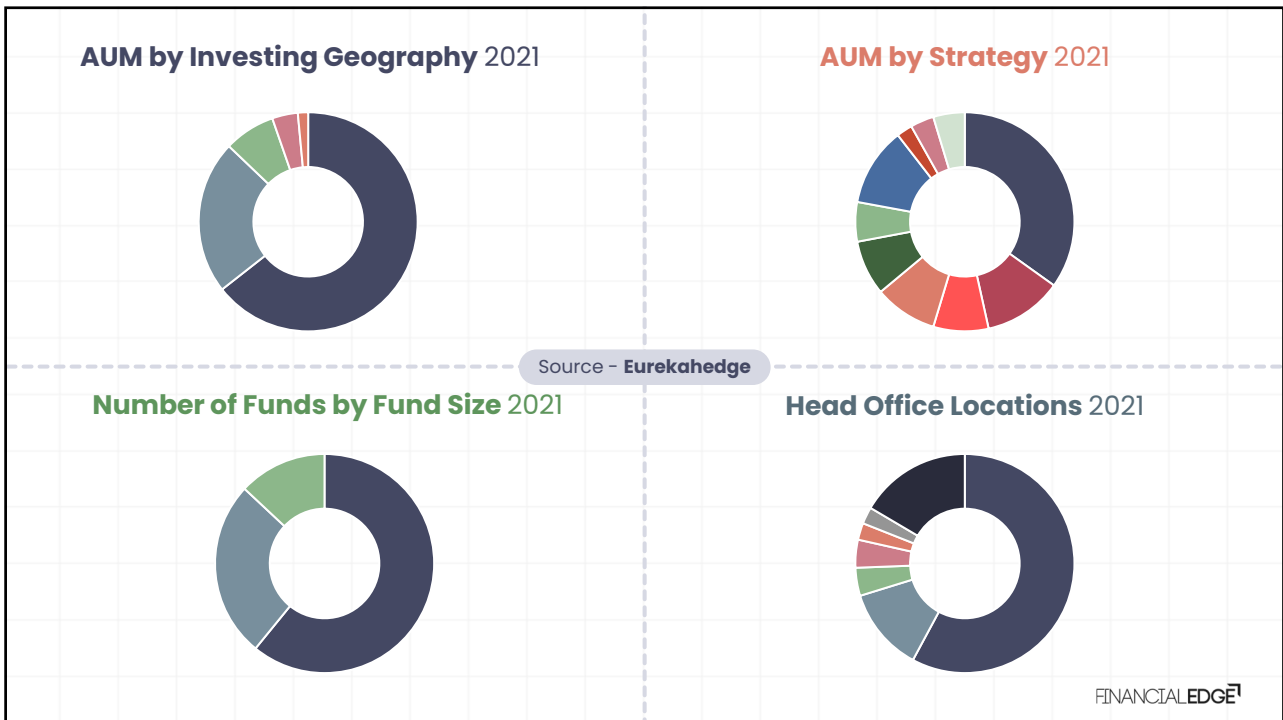


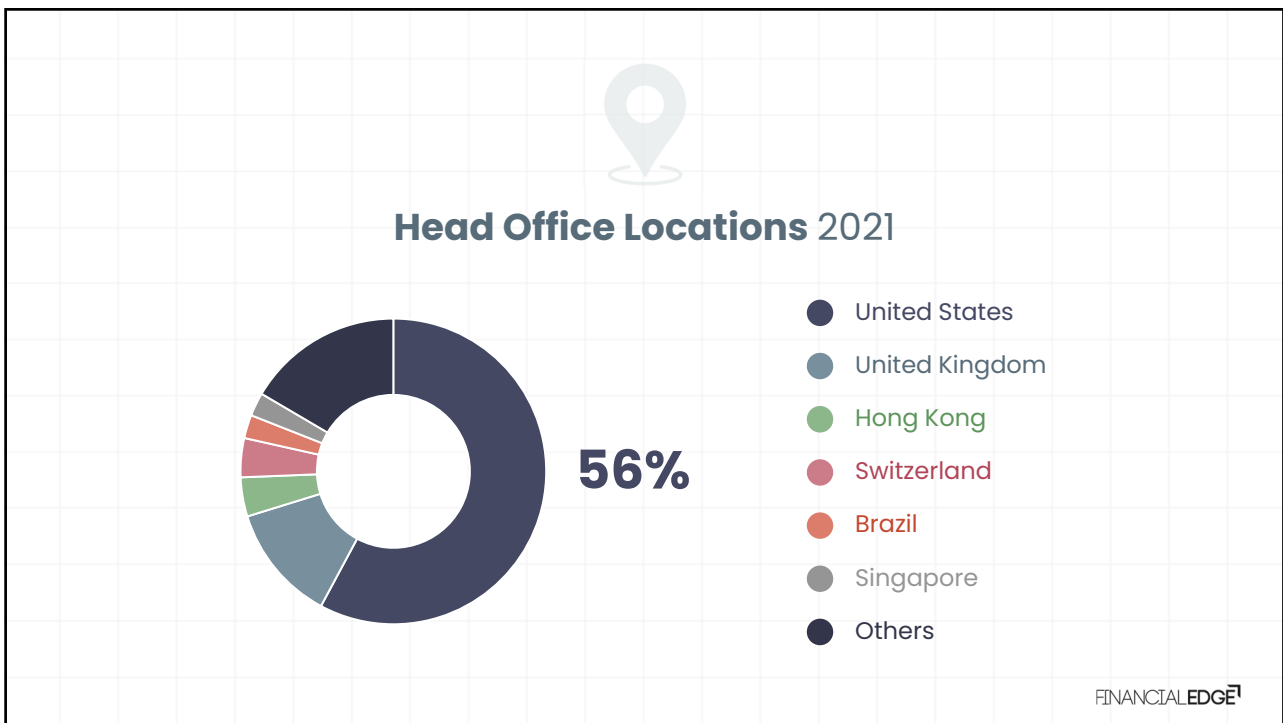
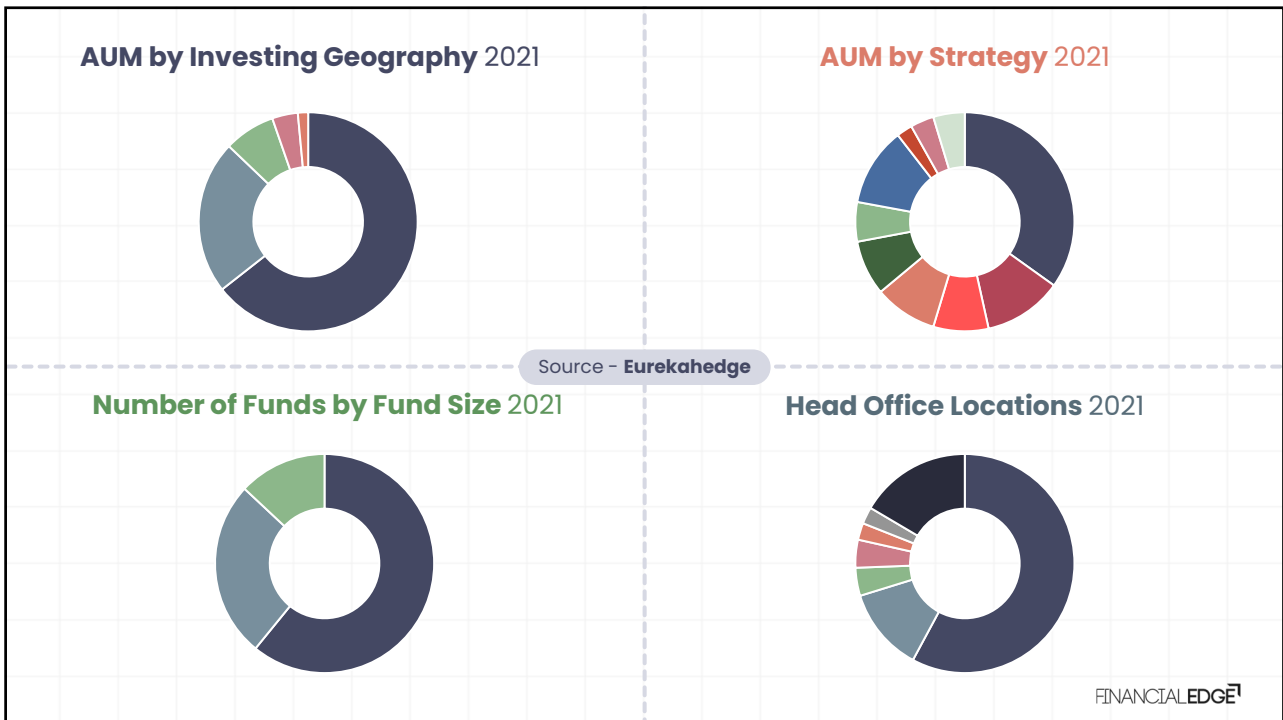
Hedge Fund Industry & Performance



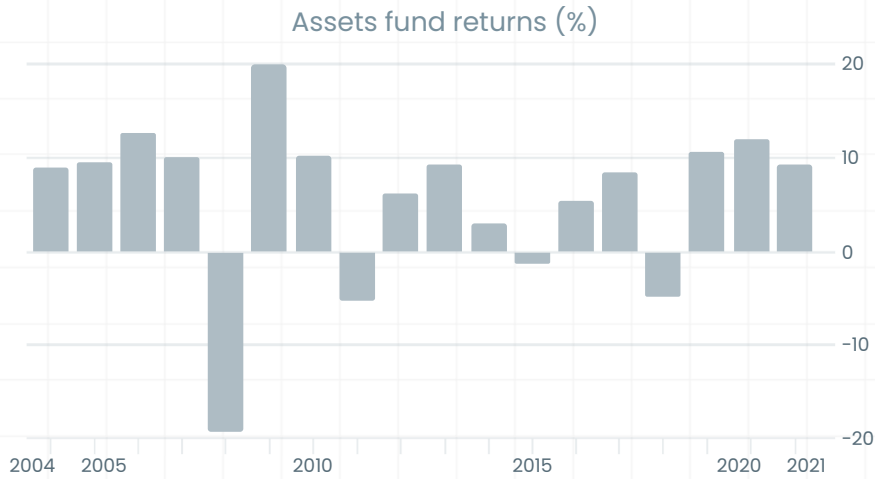








Global hedge fund returns have **stabilized** after a **difficult decade**

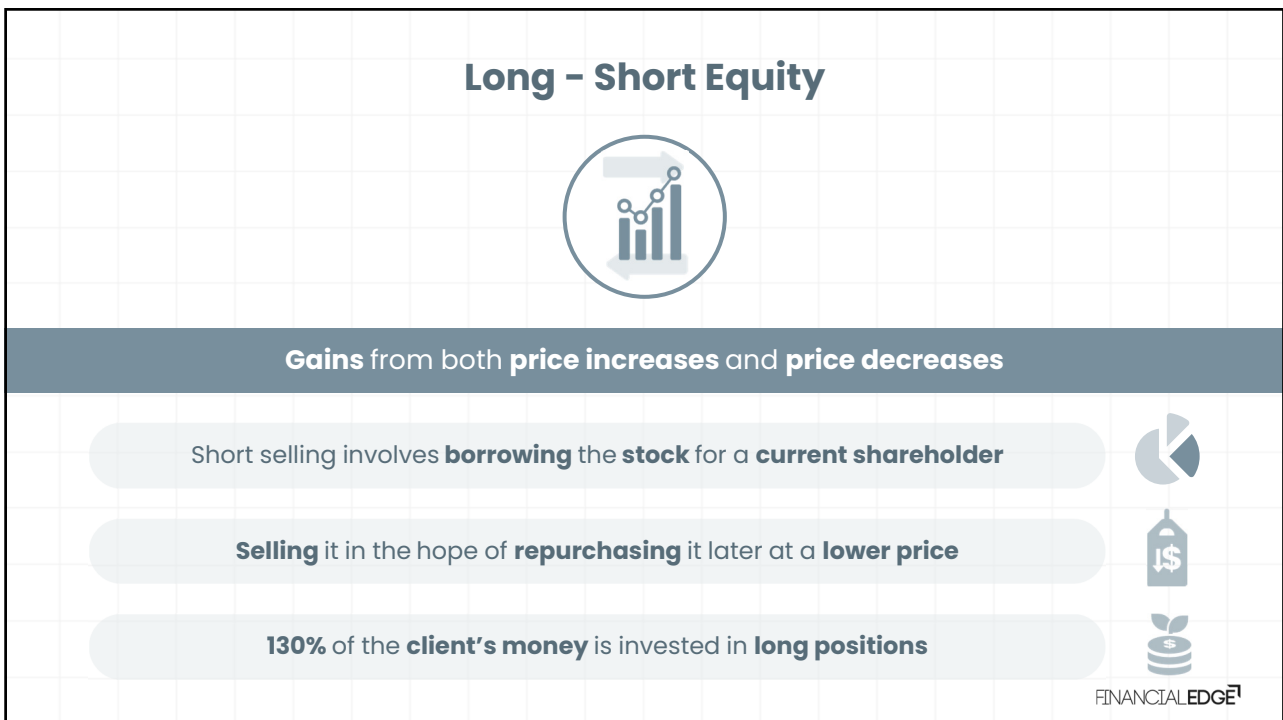
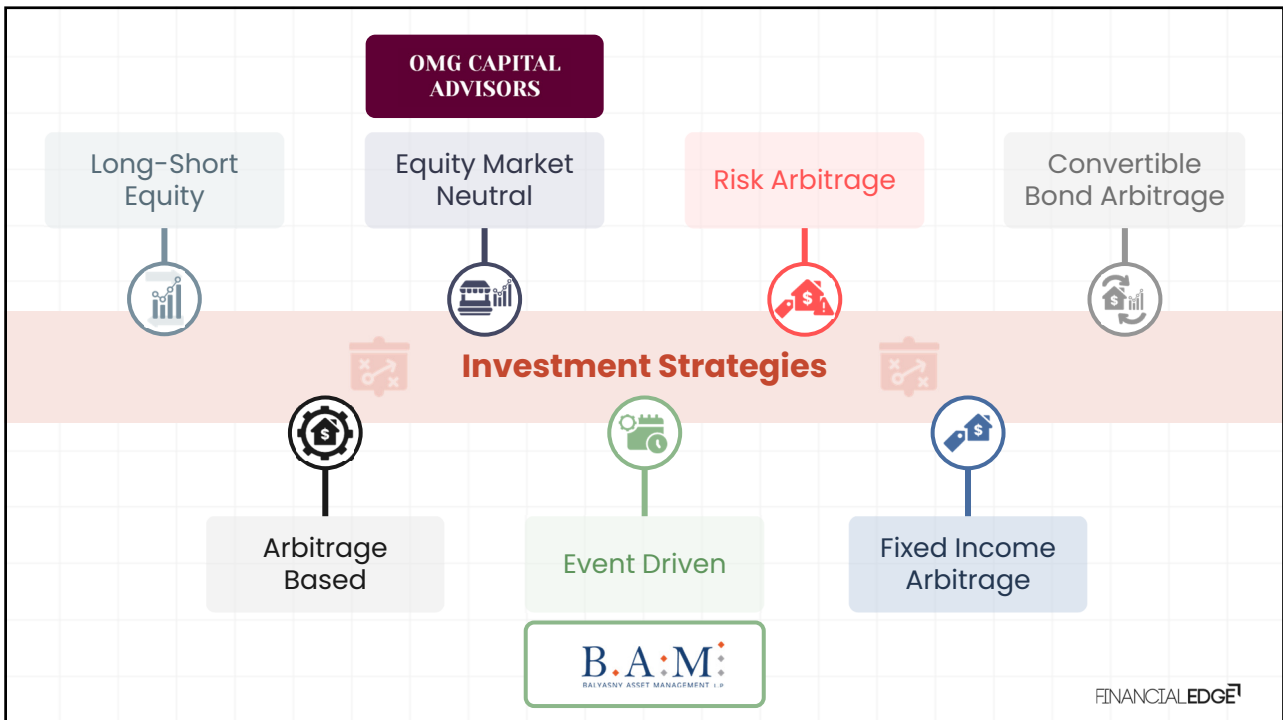


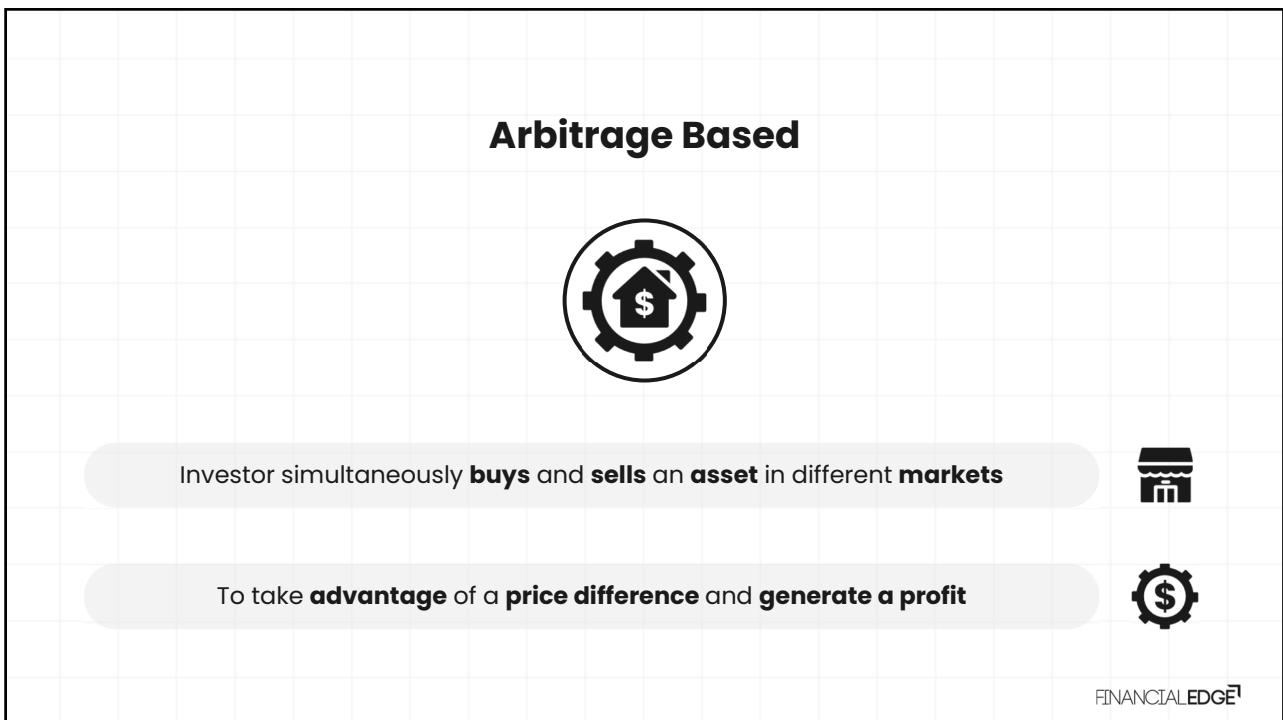
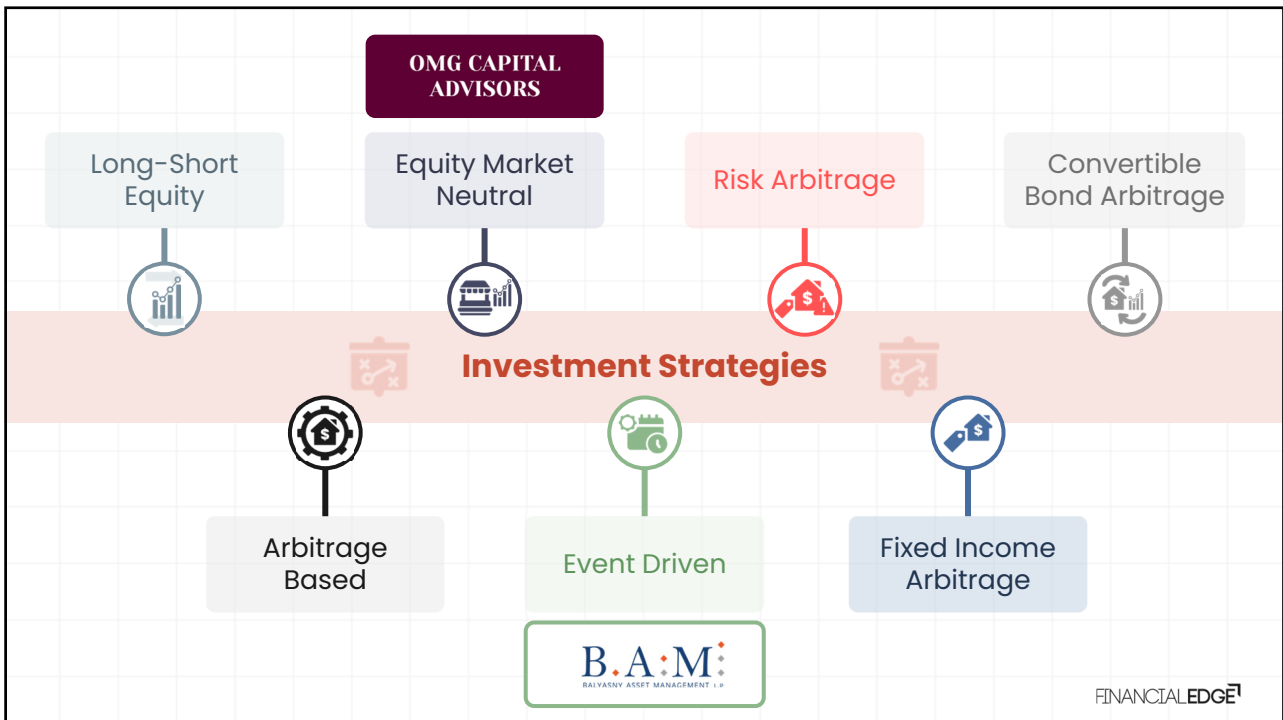
Significant **variability of performance** between different **hedge funds**

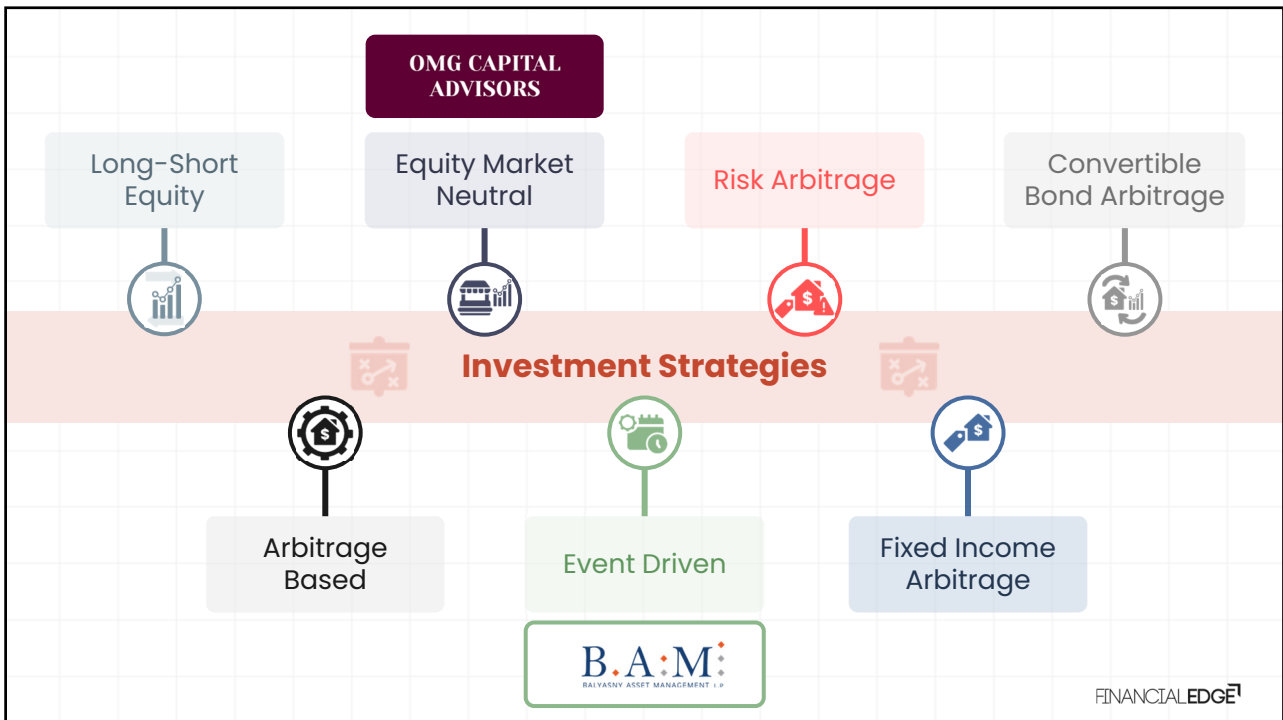


Hedge Fund Investment Strategies - Part 1










Equity Market Neutral




OMG CAPITAL ADVISORS

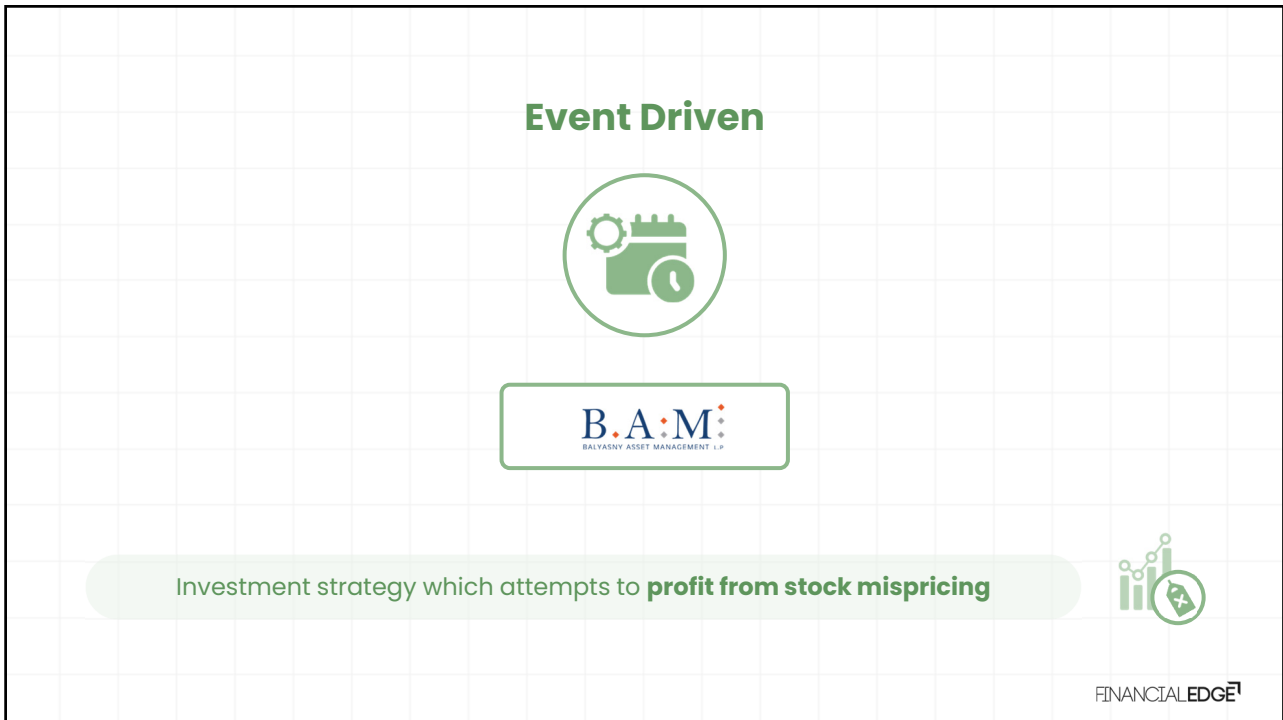
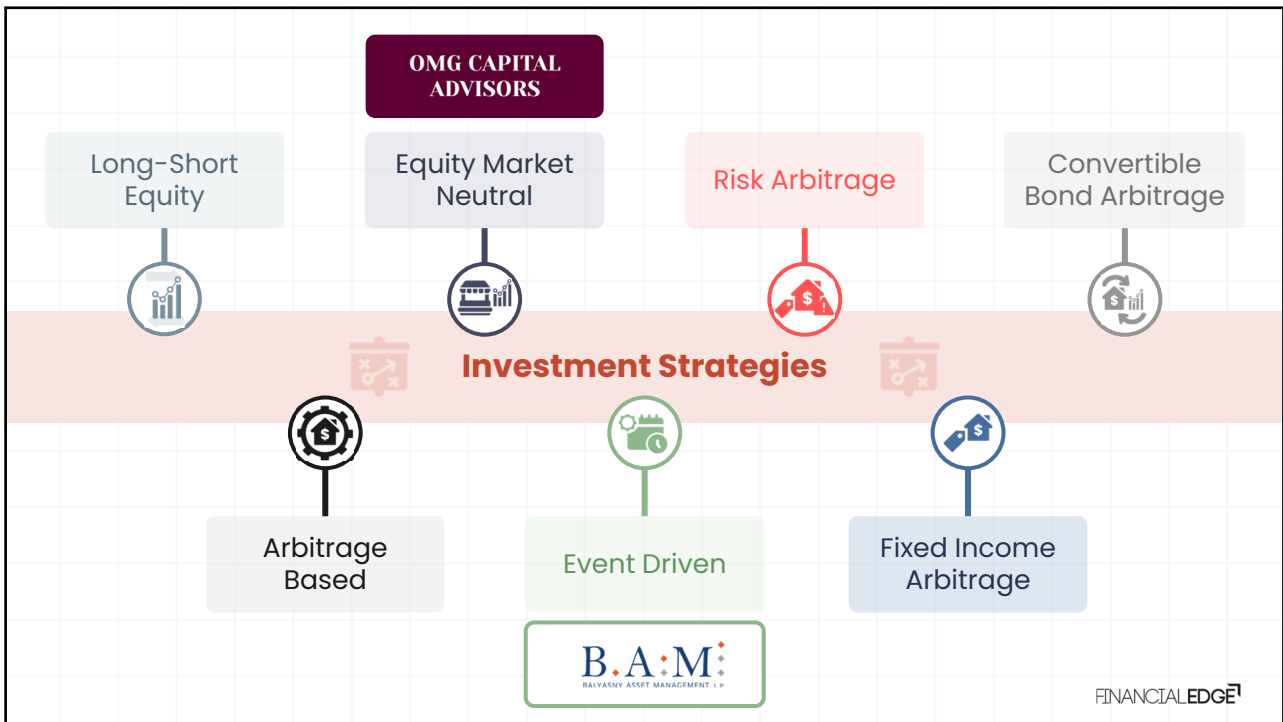
Market-neutral strategy is designed to be generally neutral to **market movements**

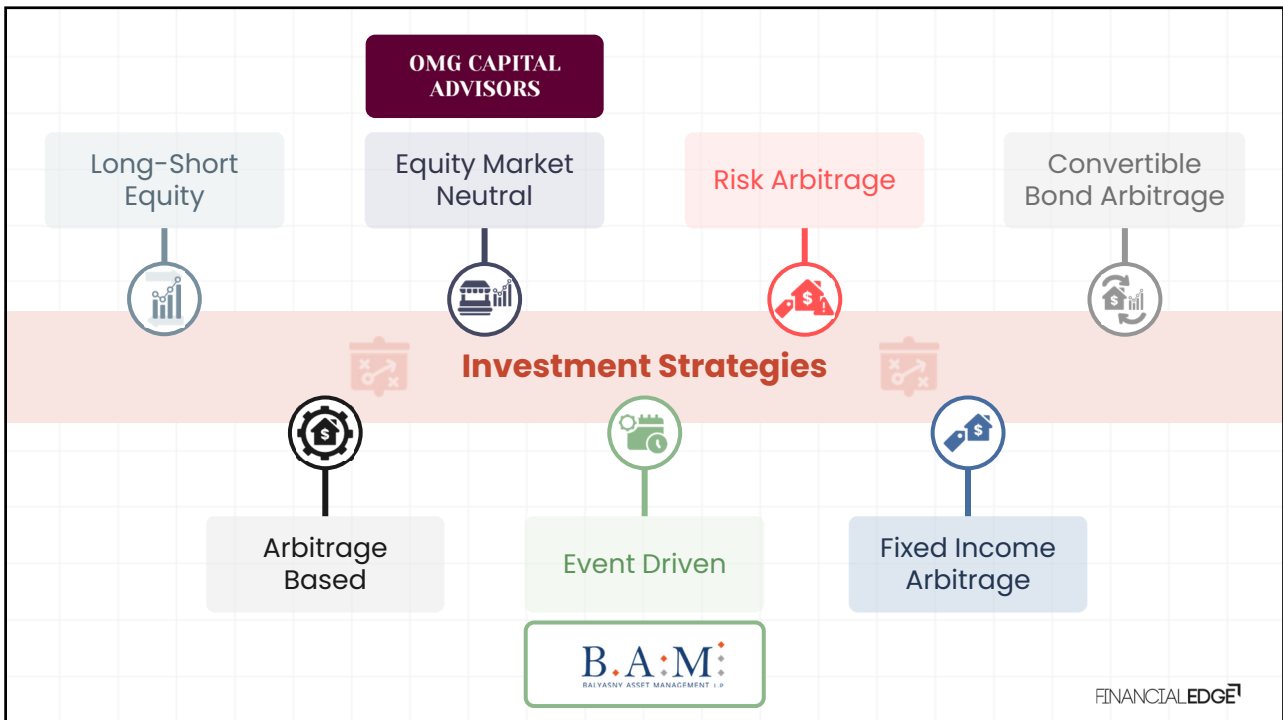
Gains and **losses** resulting from **broad market movements** will **cancel each other out**

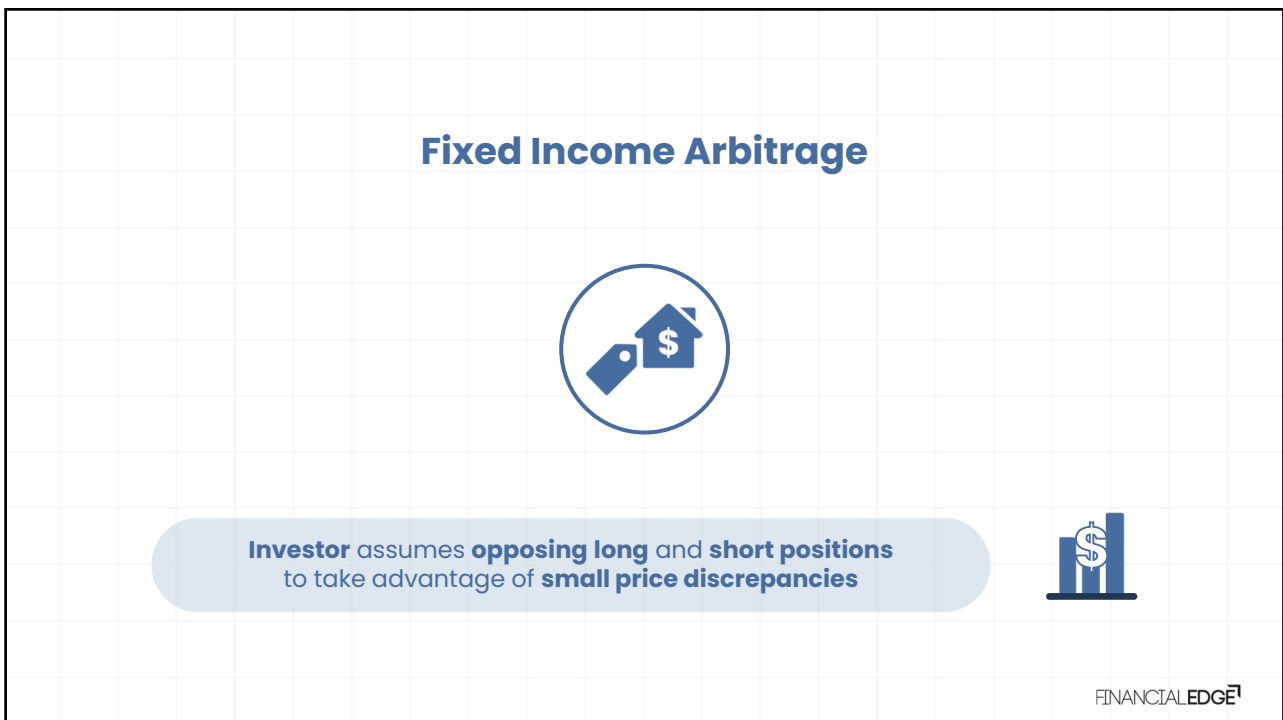
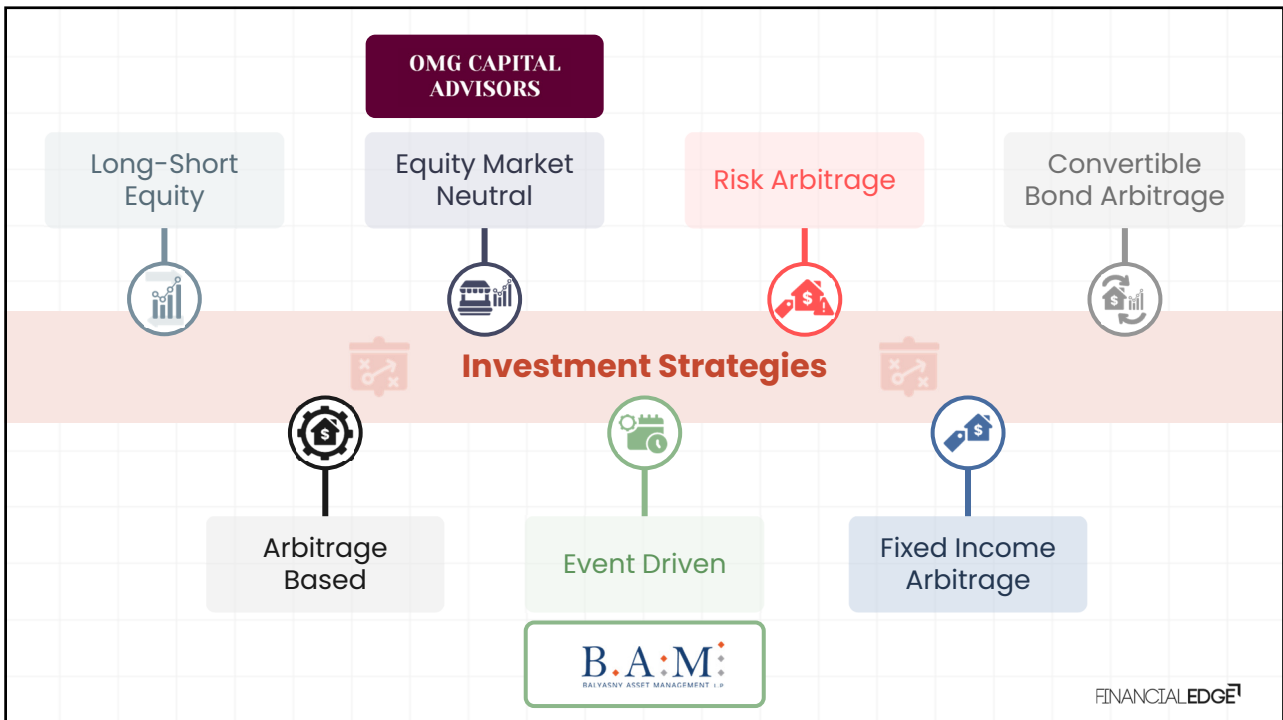
Gains for the fund are made from **identifying mispriced securities** within the market

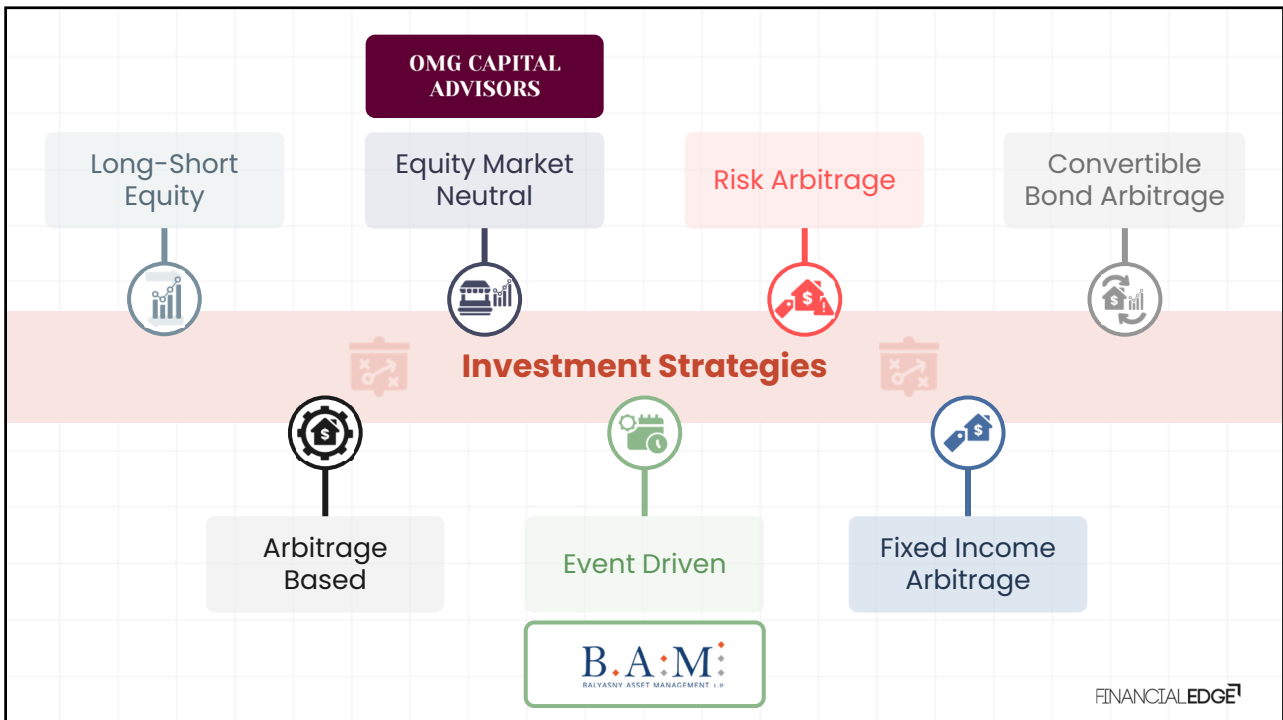


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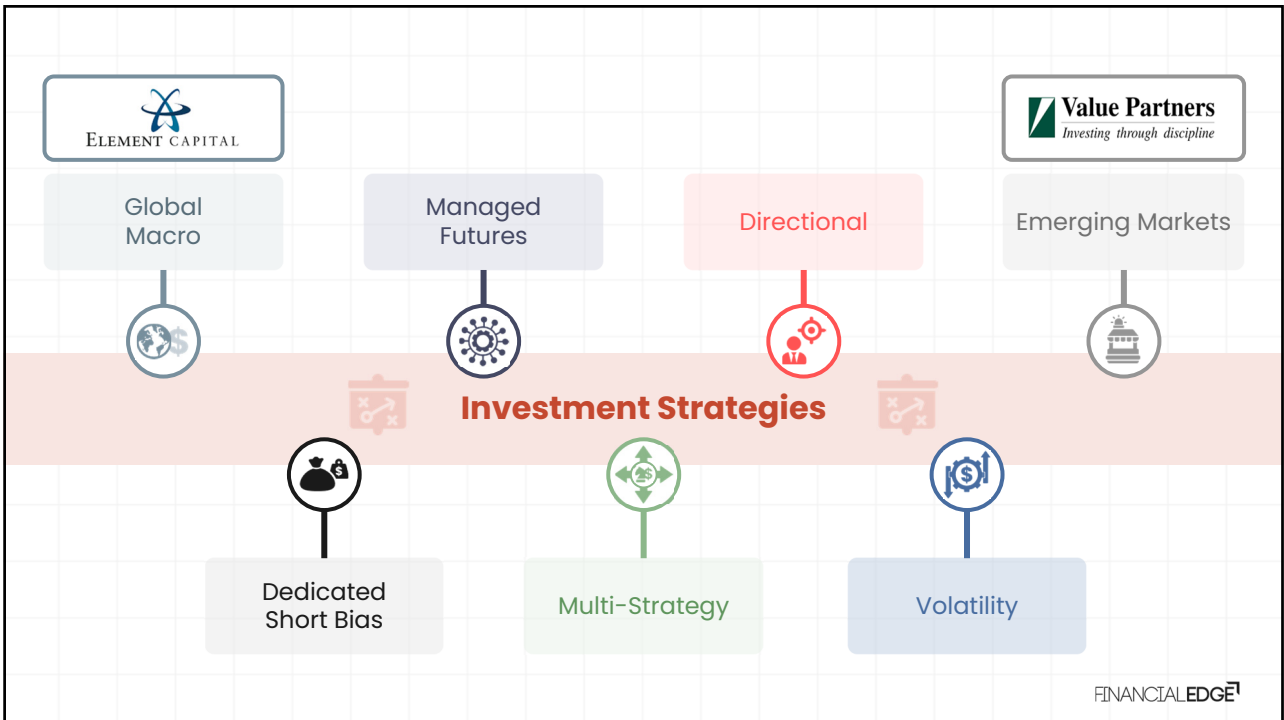
Convertible Bond Arbitrage

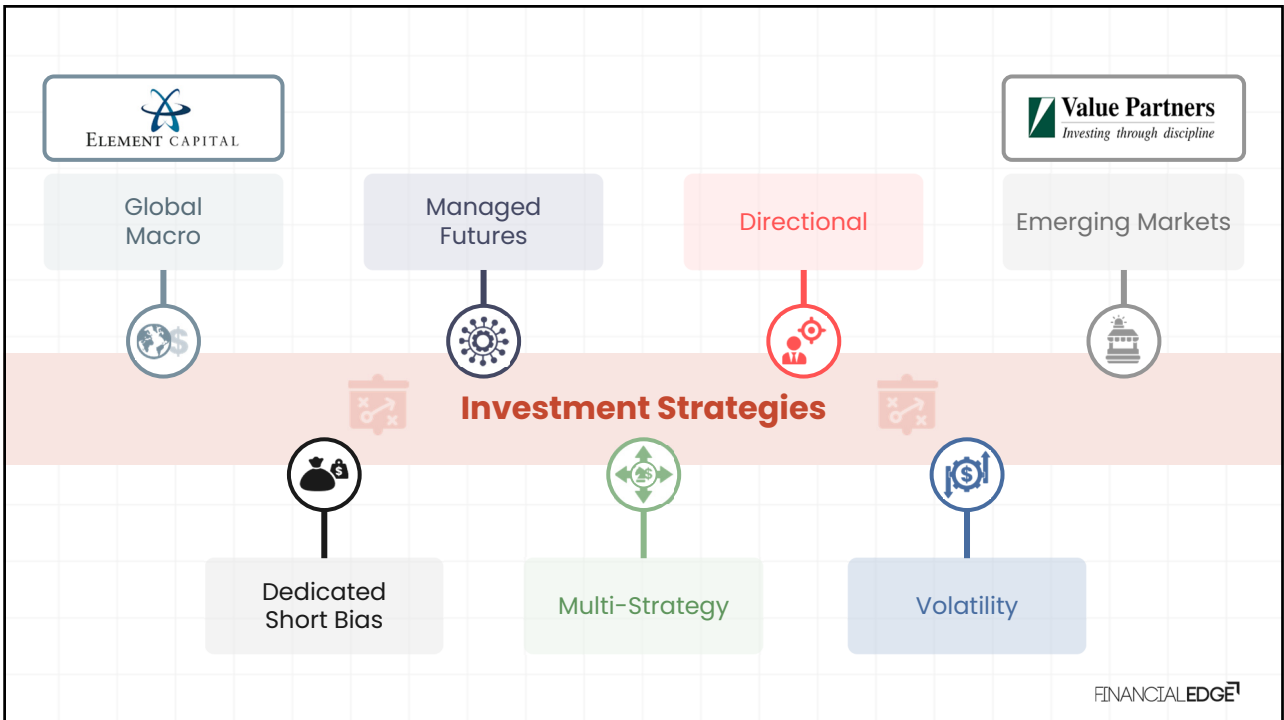
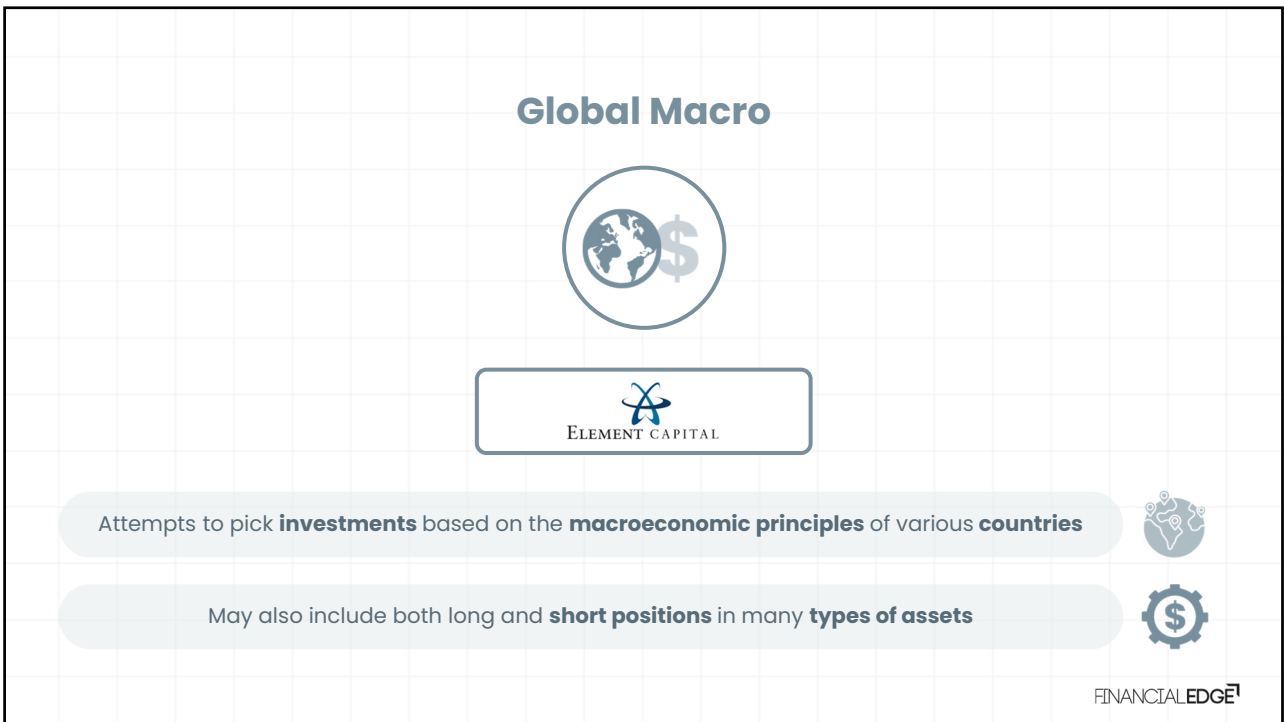
Bond that can be converted into a **fixed number of shares** of the company

Taking **long** and **short** positions on a **convertible bond** and the **stock of the company**

The goal of this strategy is to have the **right amount of hedging**

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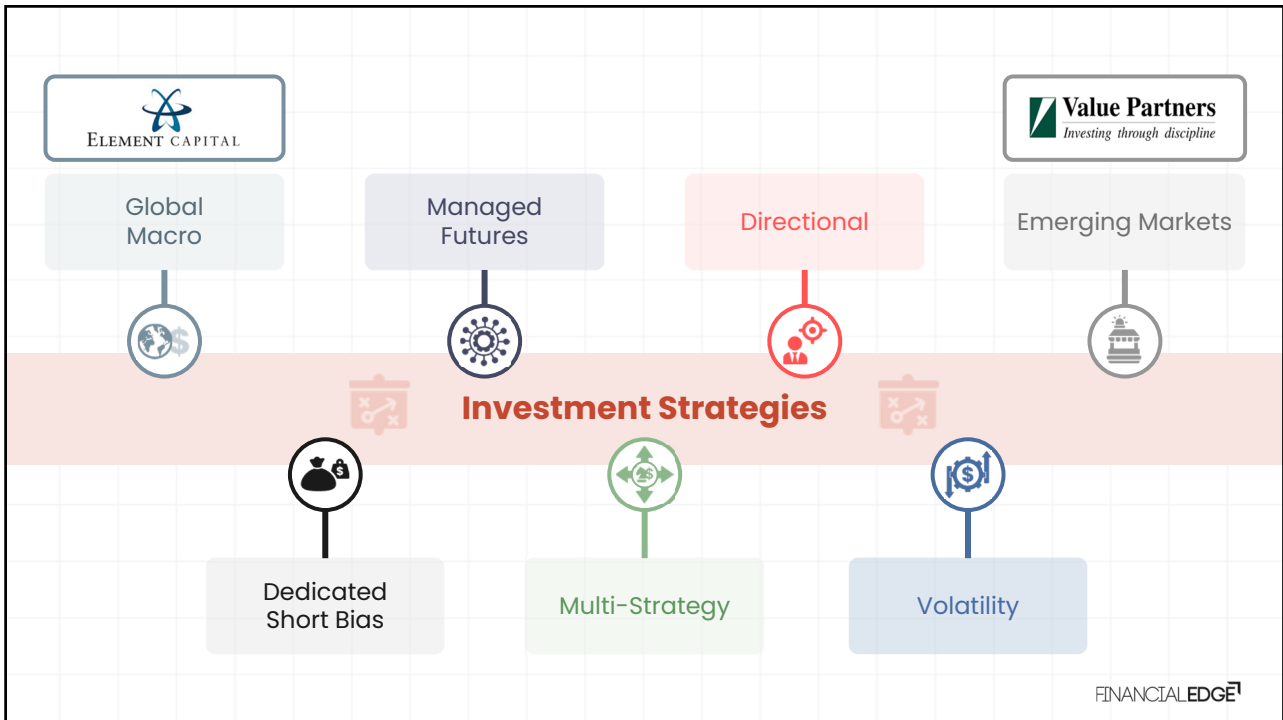
Dedicated Short Bias



Maintains a **net short exposure to the market** through a combination of **short** and **long positions**



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Managed Futures



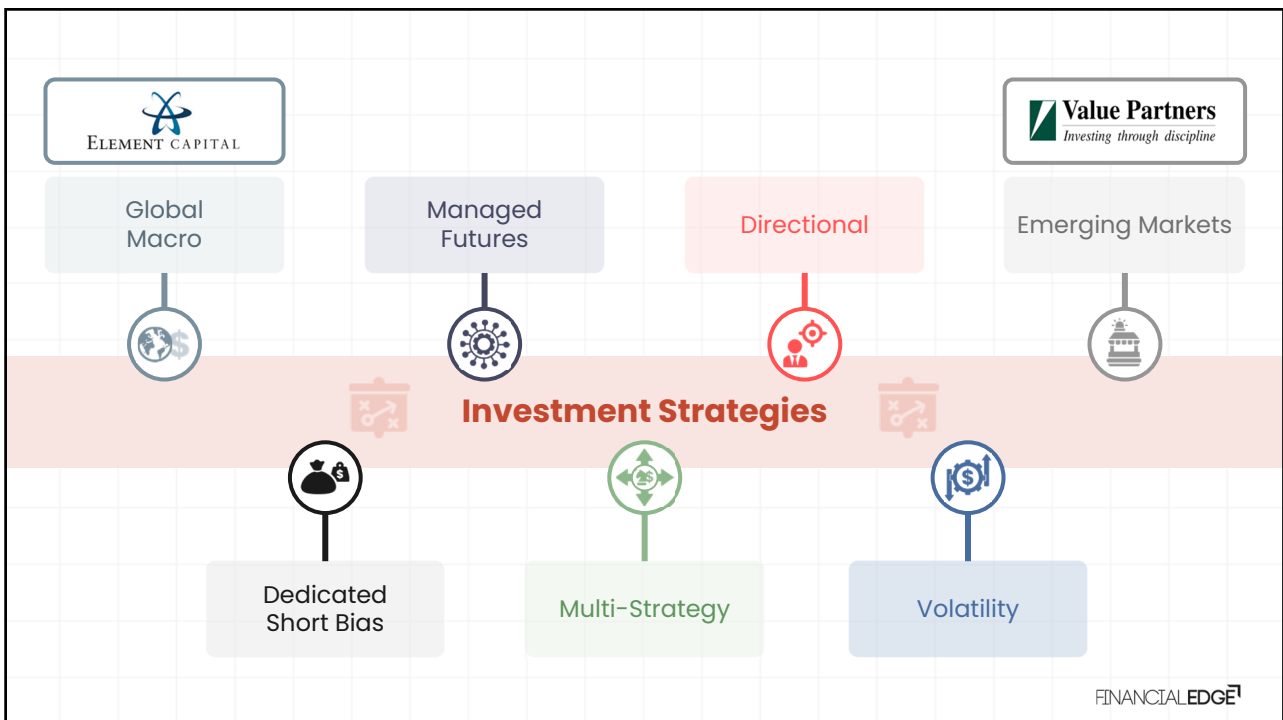
The portfolio manager assembles a **diversified portfolio** of **futures contracts**



Much **greater exposure** can be achieved for the same **initial outlay of cash**



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Multi Strategy



Engage in a variety of **investment strategies**, the scope of which will be **determined** by each individual hedge fund



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Multi Strategy



Diversification Benefit



Smooth Returns

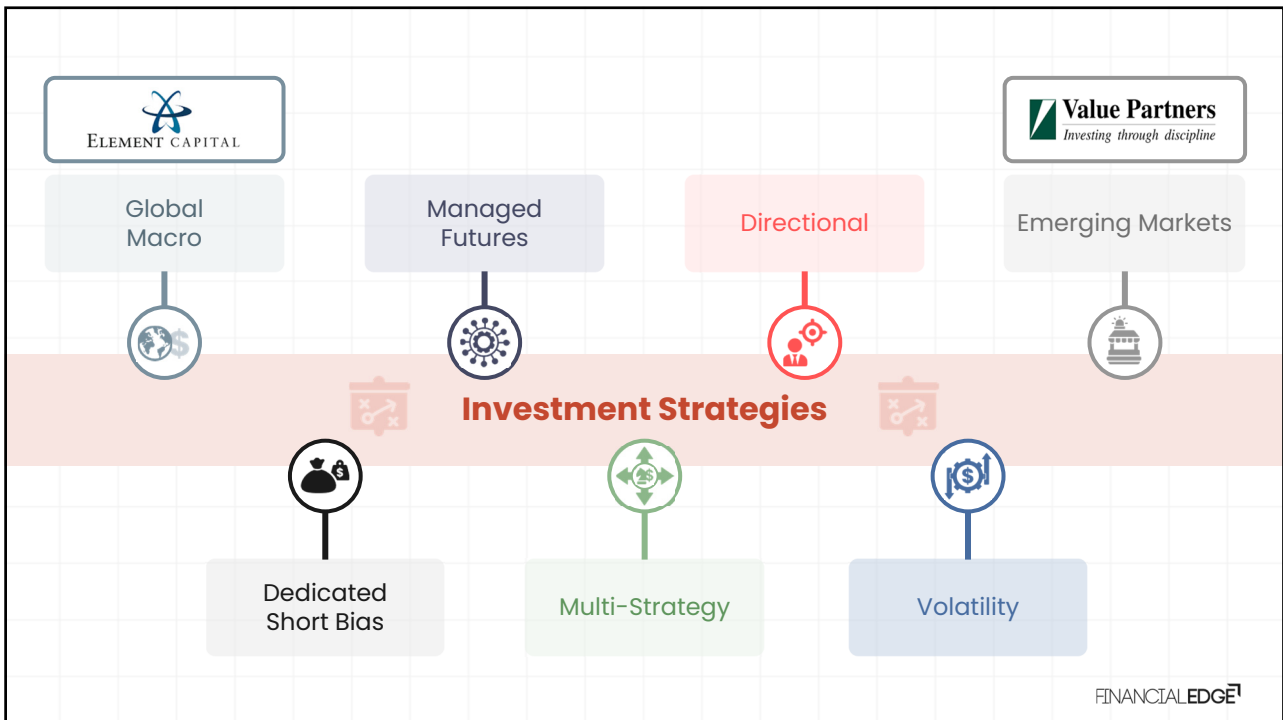


Reduce Volatility



Decrease Asset-class and Single-strategy Risks

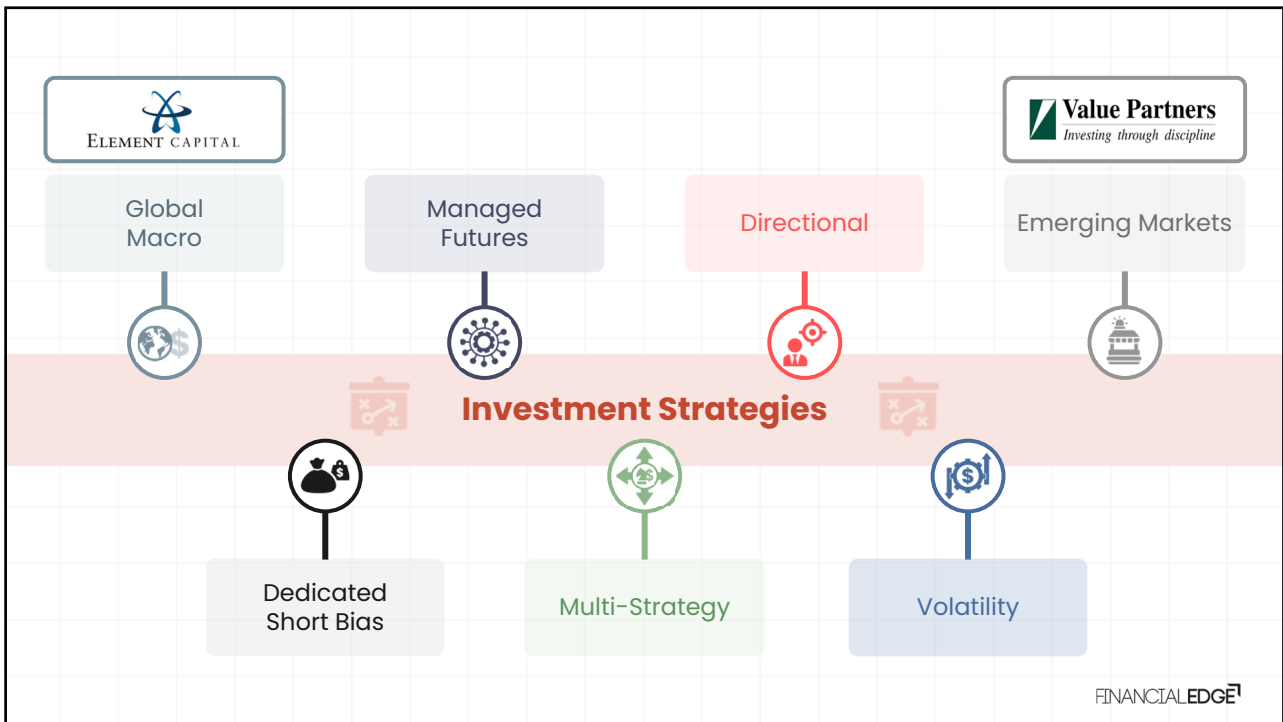
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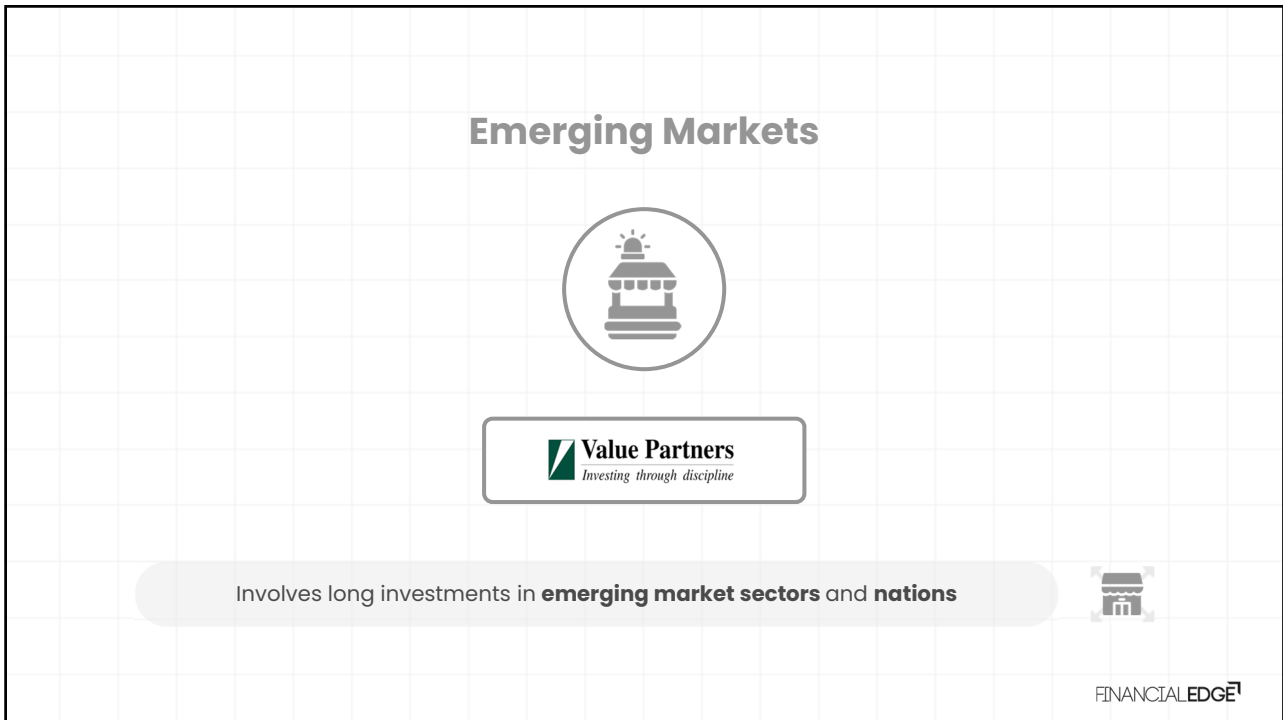
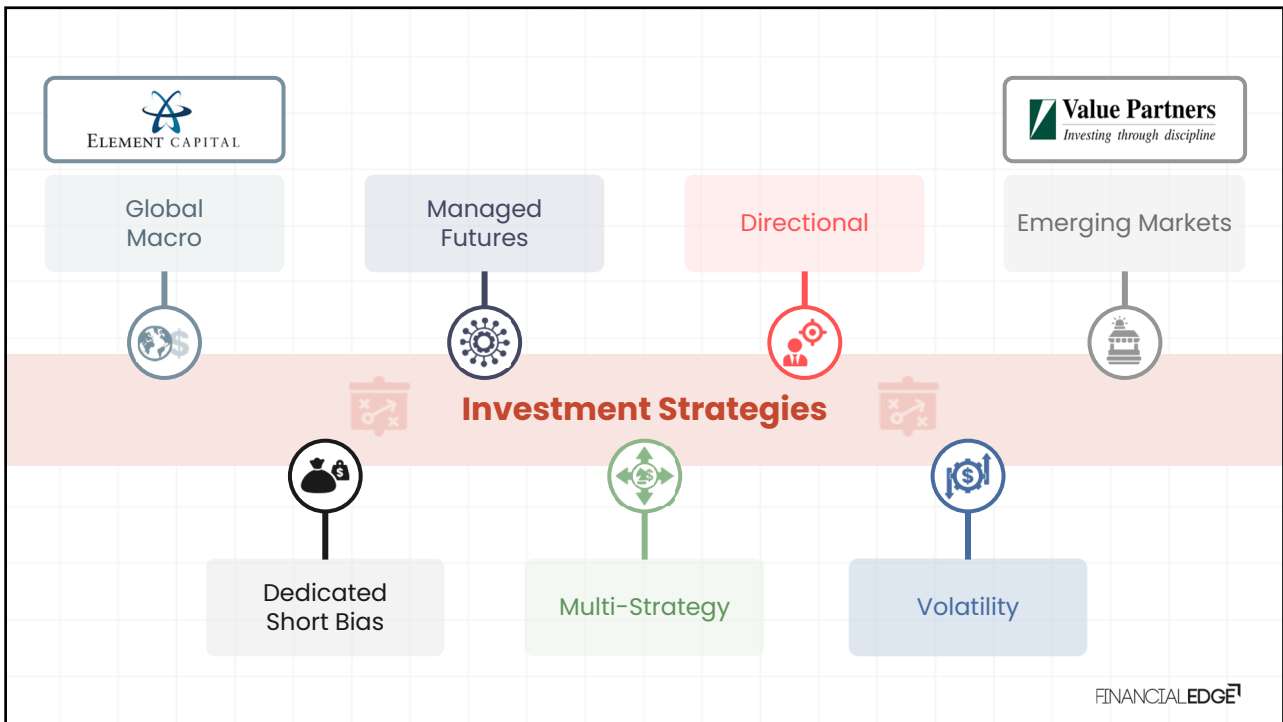


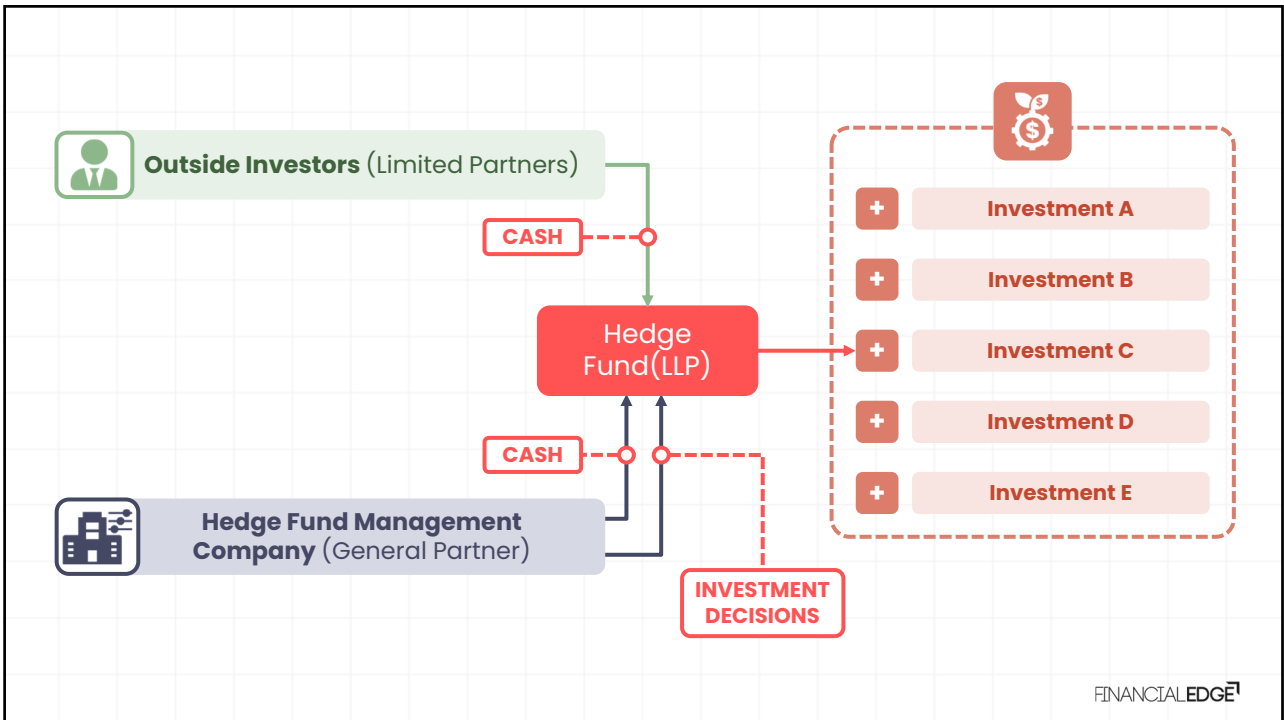
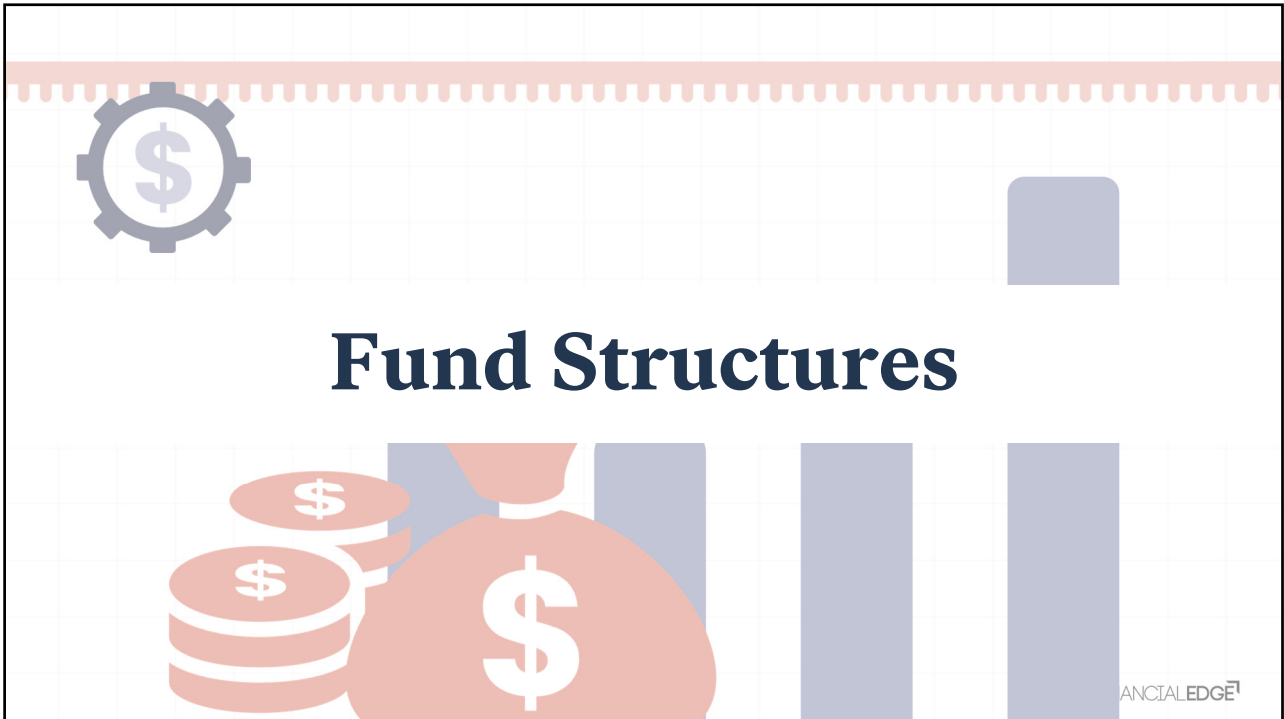
Directional

Managers of directional funds maintain some **exposure to the market**, but they try to get **higher-than-expected returns** for the amount of risk that they take

FINANCIALEDGE¹

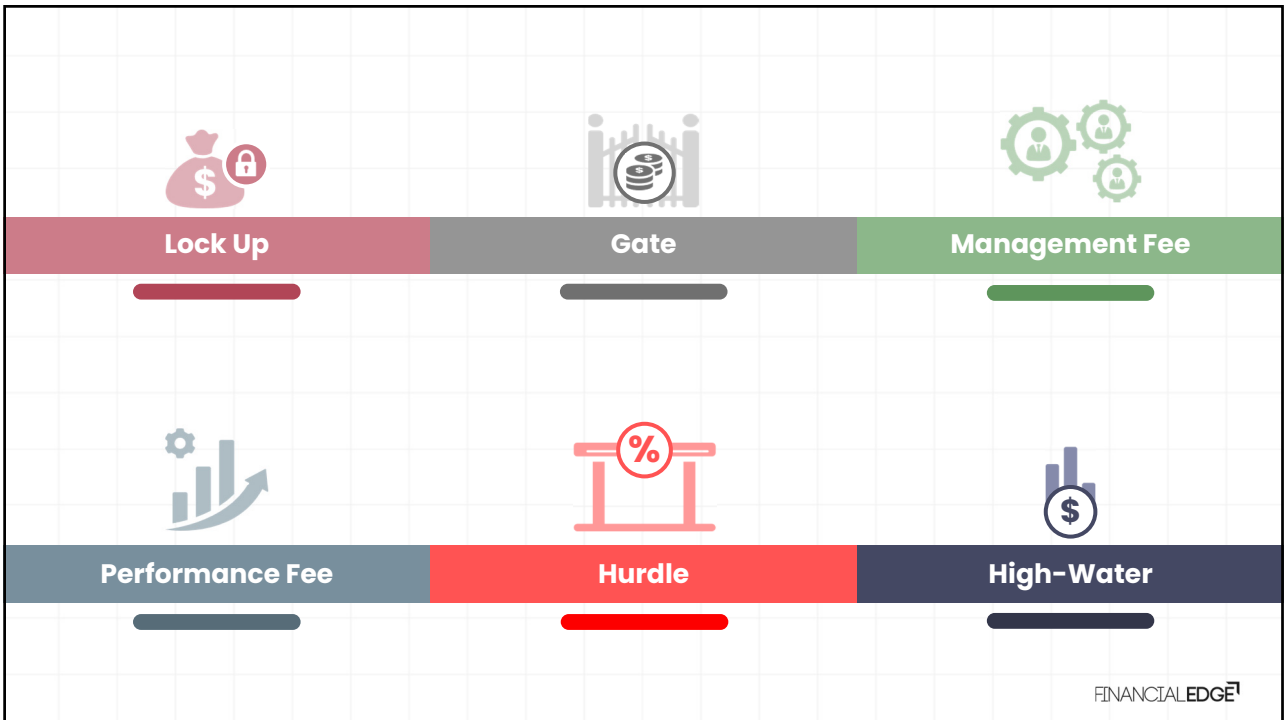






Typical Hedge Fund Fee Structures and Restrictions

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Lock Up

Hedge fund manager to set up their **initial strategy**

Allows time for the fund to demonstrate the **strength of its strategy**

Many institutional investors have placed restrictions on the maximum **allowable lock up period, typically 1-2 years**



Lock Up



Hurdle



Management Fee




Performance Fee



Hurdle



High-Water









Gate

Prevent a situation where **redemption requests** add to the **market value losses**, a fund is experiencing

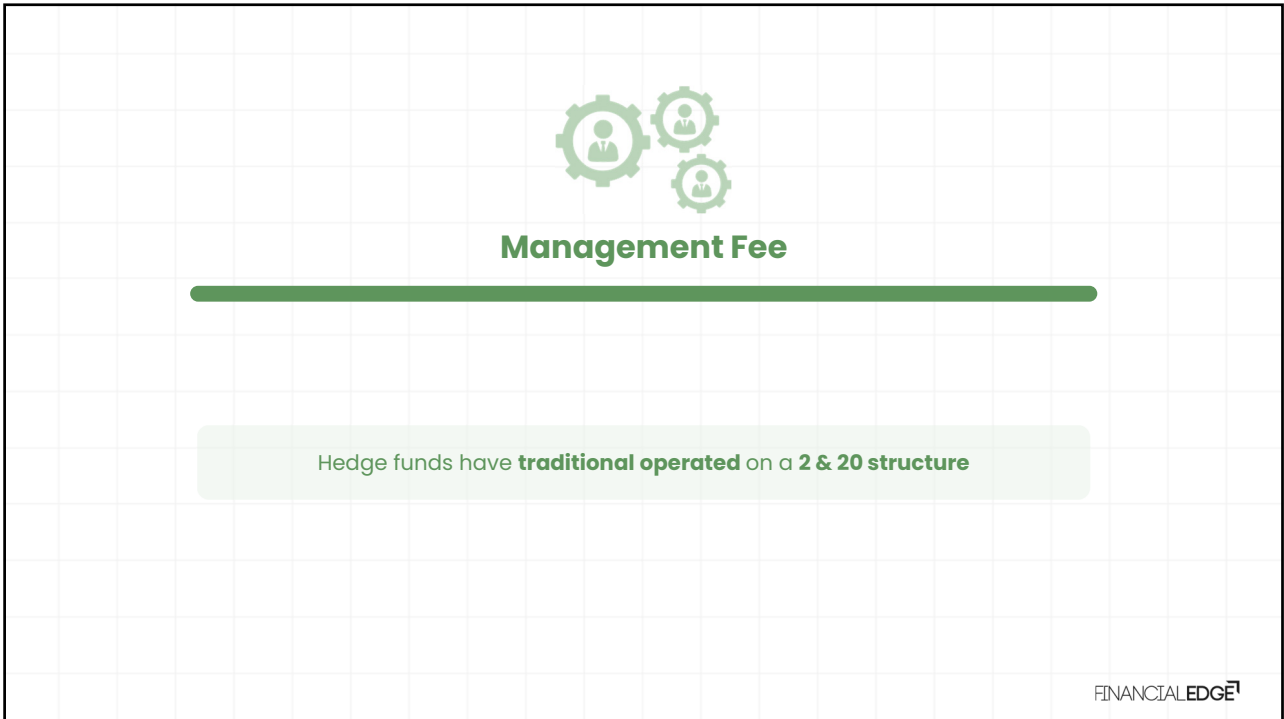
Hard gates prevent any **liquidations** when they are triggered


Soft gates allow investors to withdraw their money from the fund if they **agree to pay a redemption fee**, which could range from **2% - 5%**

FINANCIALEDGE¹

 <p>Lock Up</p>	 <p>Gate</p>	 <p>Management Fee</p>
 <p>Performance Fee</p>	 <p>Hurdle</p>	 <p>High-Water</p>

FINANCIALEDGE¹

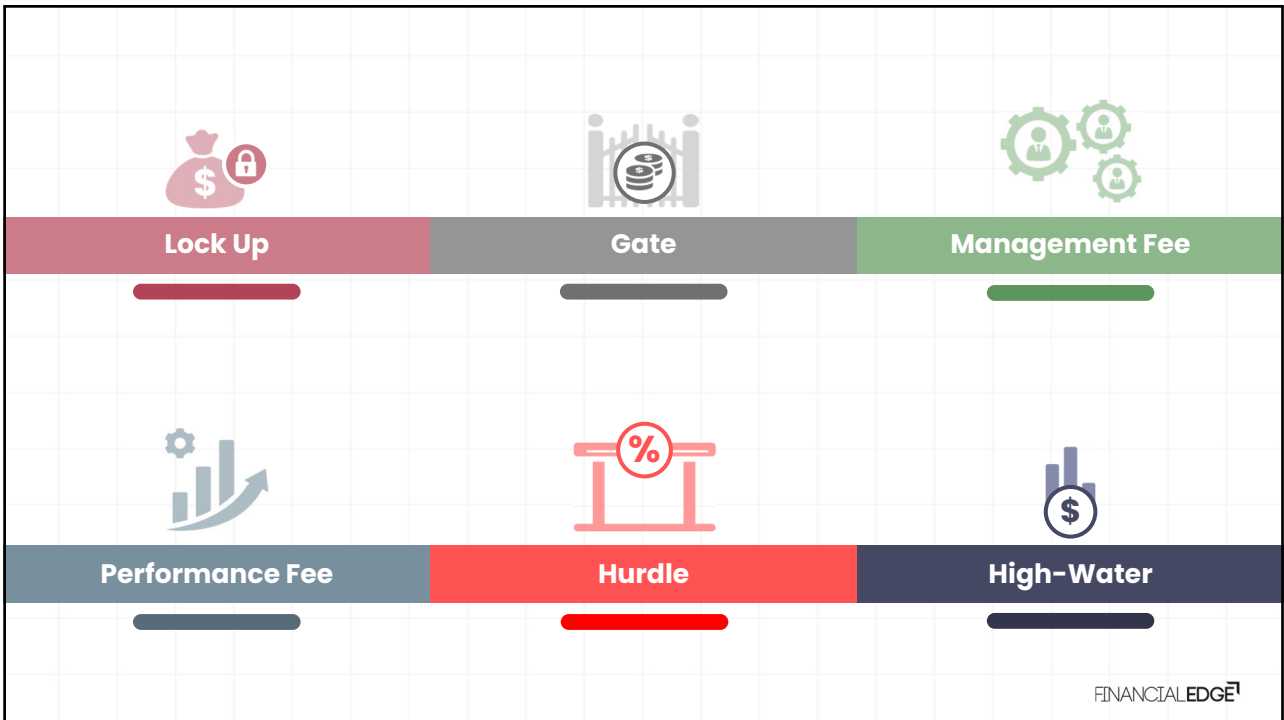










Management Fee

Hedge funds have **traditional operated** on a **2 & 20 structure**

FINANCIALEDGE¹



 <p>Lock Up</p> <hr style="border: 2px solid red;"/>	 <p>Gate</p> <hr style="border: 2px solid gray;"/>	 <p>Management Fee</p> <hr style="border: 2px solid green;"/>
 <p>Performance Fee</p> <hr style="border: 2px solid blue;"/>	 <p>Hurdle</p> <hr style="border: 2px solid red;"/>	 <p>High-Water</p> <hr style="border: 2px solid darkblue;"/>

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Performance Fee

Annual management fee of **2% of the assets under management (or AUM)** is paid to the GP and a further **20% performance fee is paid**, which equates to **20% of the gains made** by the fund



Lock Up



Gate



Management Fee



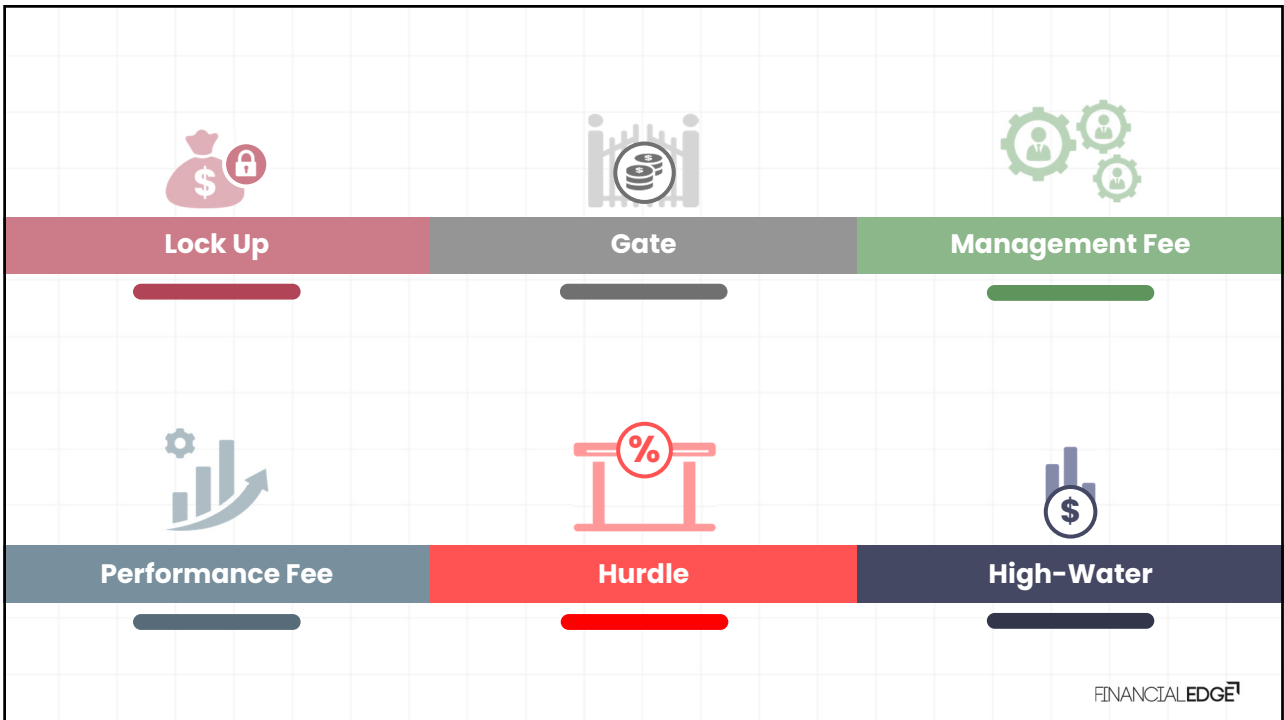
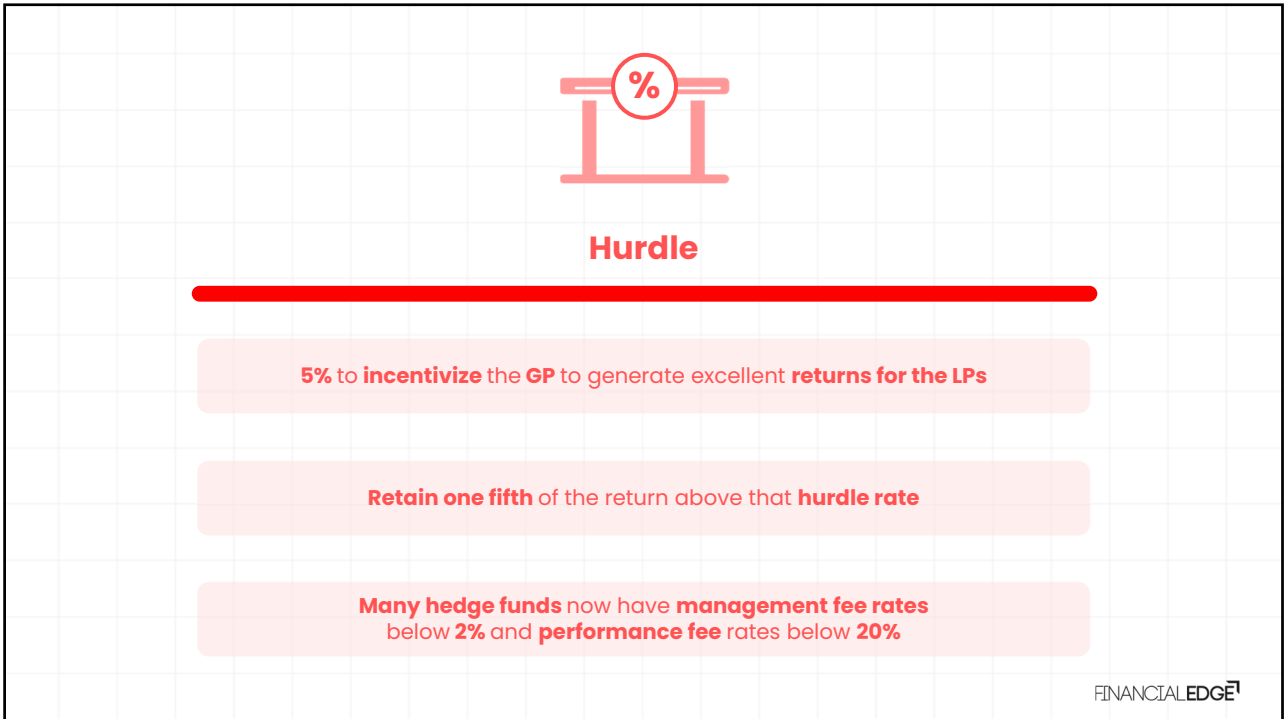
Performance Fee



Hurdle



High-Water





High-Water

A high-water mark is the **highest value a fund has reached** in the past

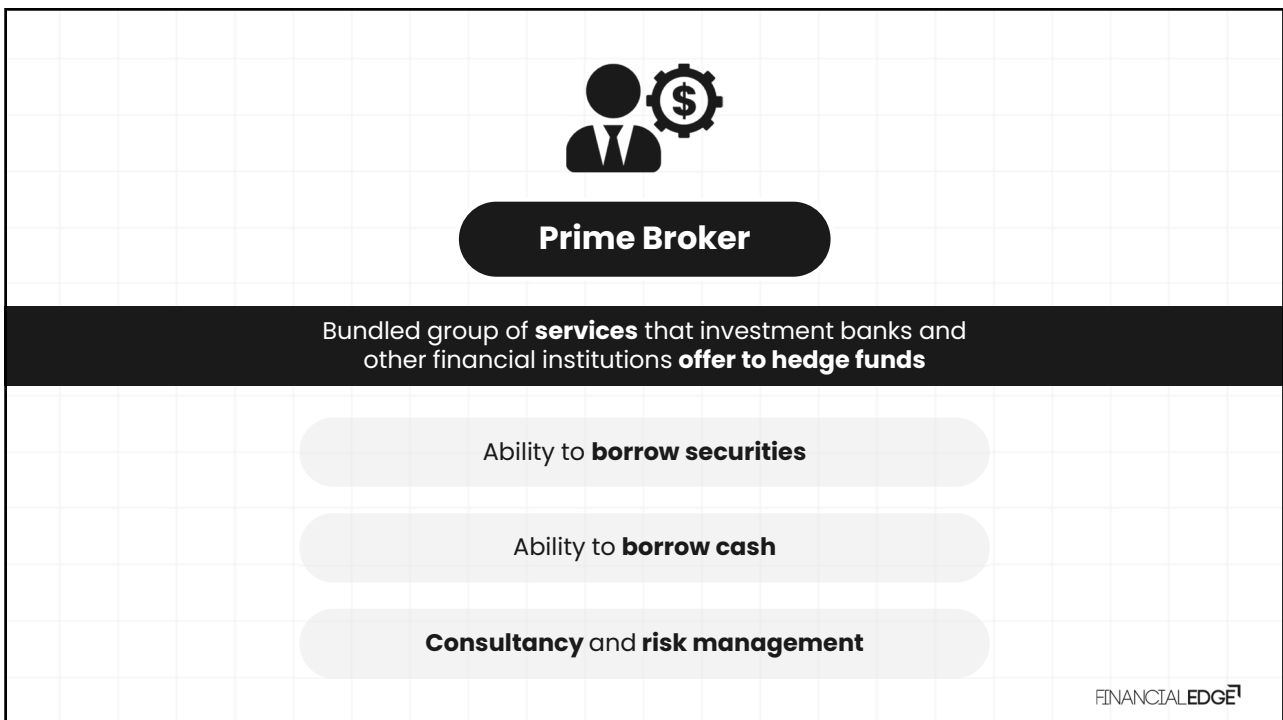
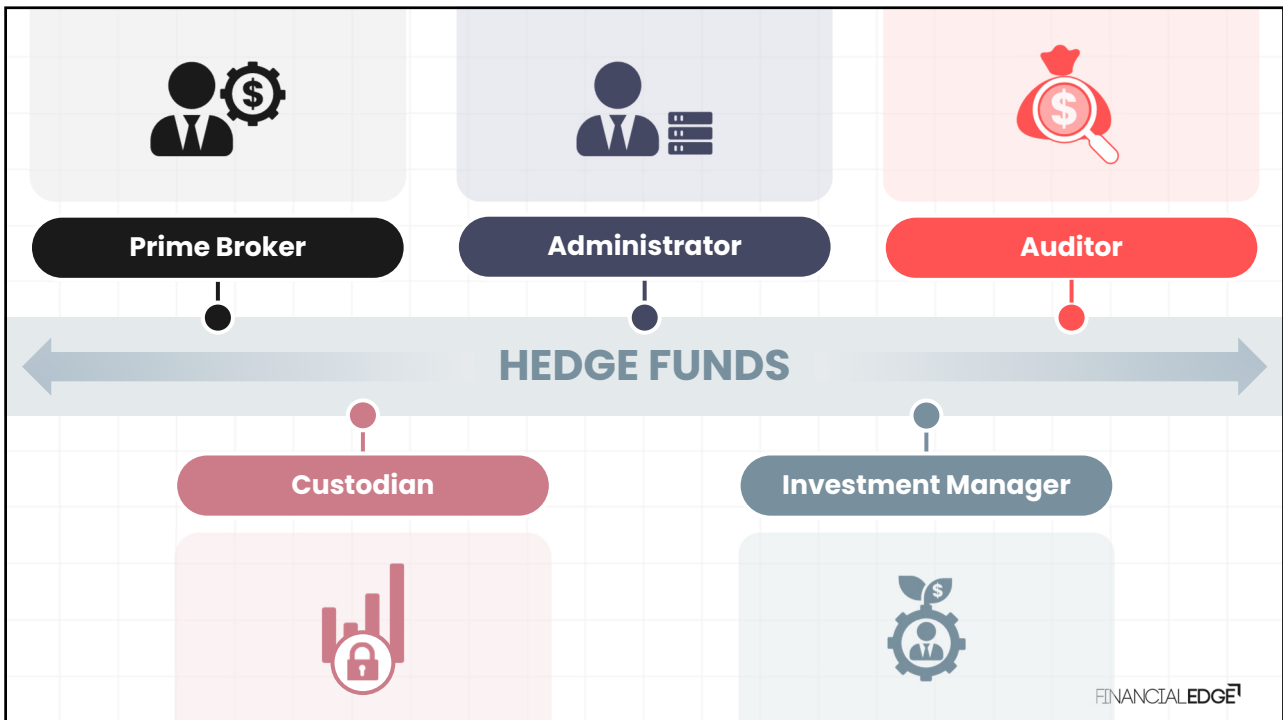
The high-water mark is **used as a base line** in determining **performance fees** that an **investor must pay**

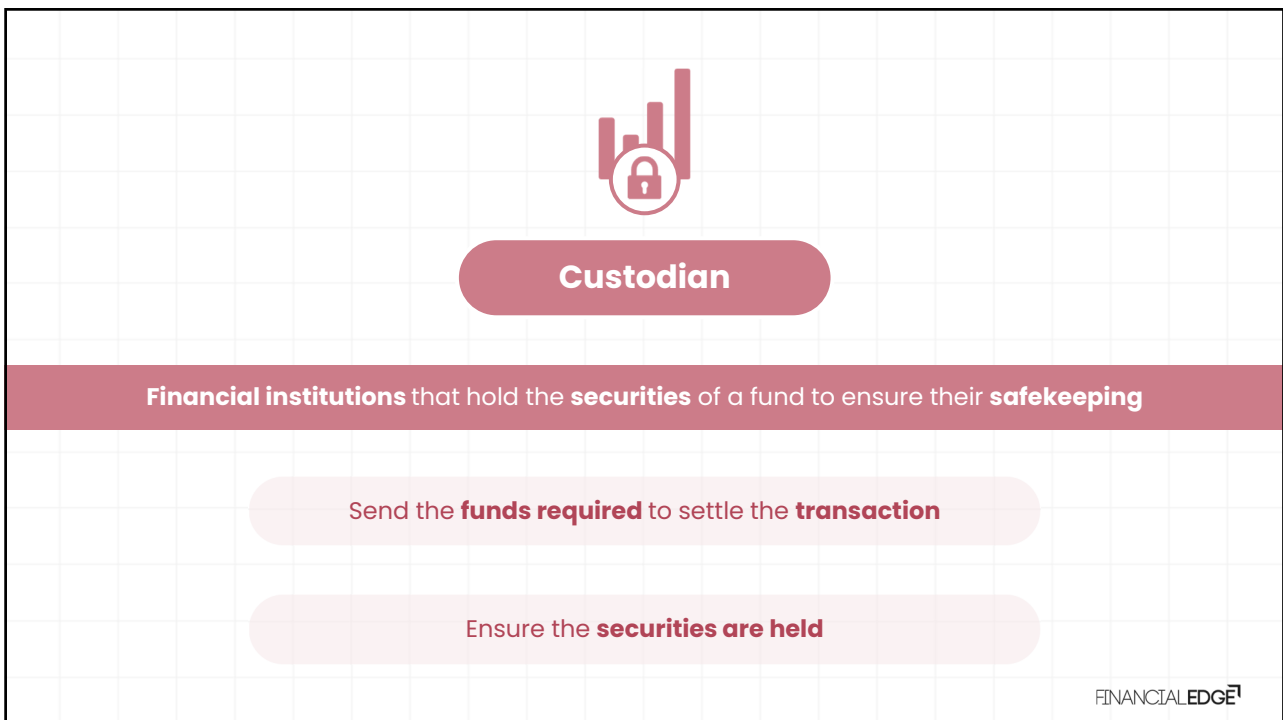
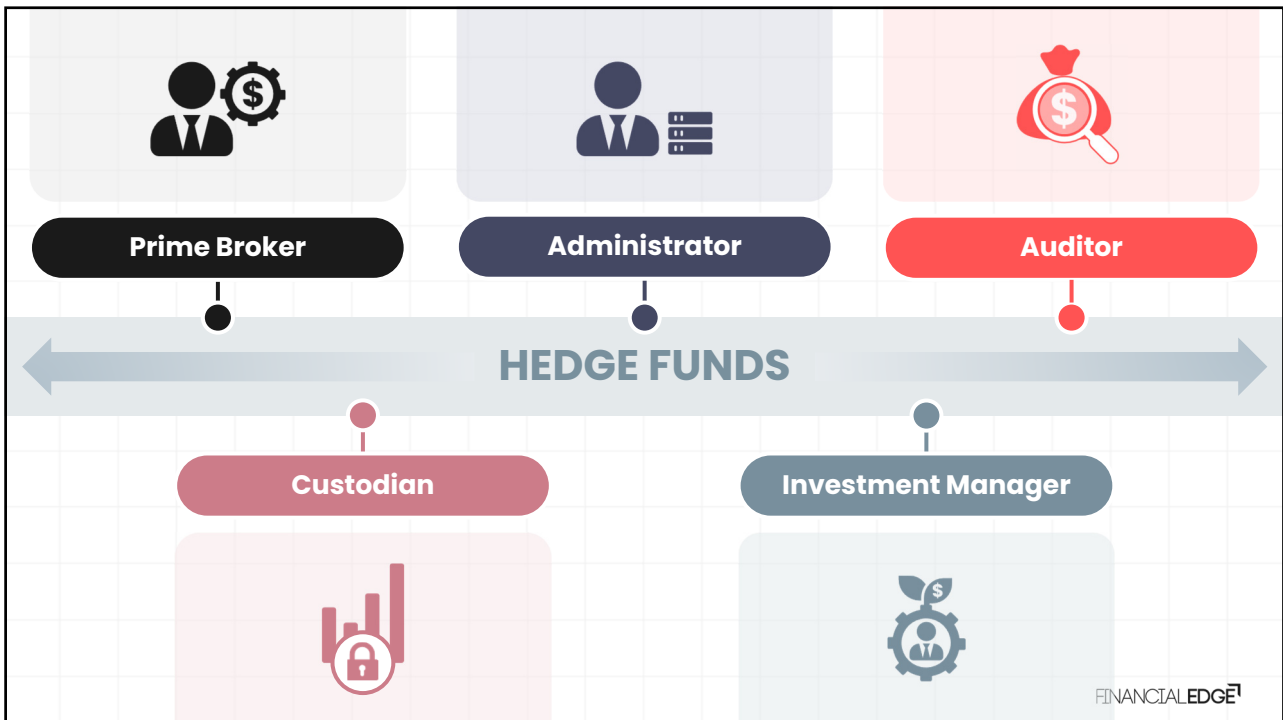
Protect investors from paying a **performance fee** for the **fund manager** merely **recovering past losses**

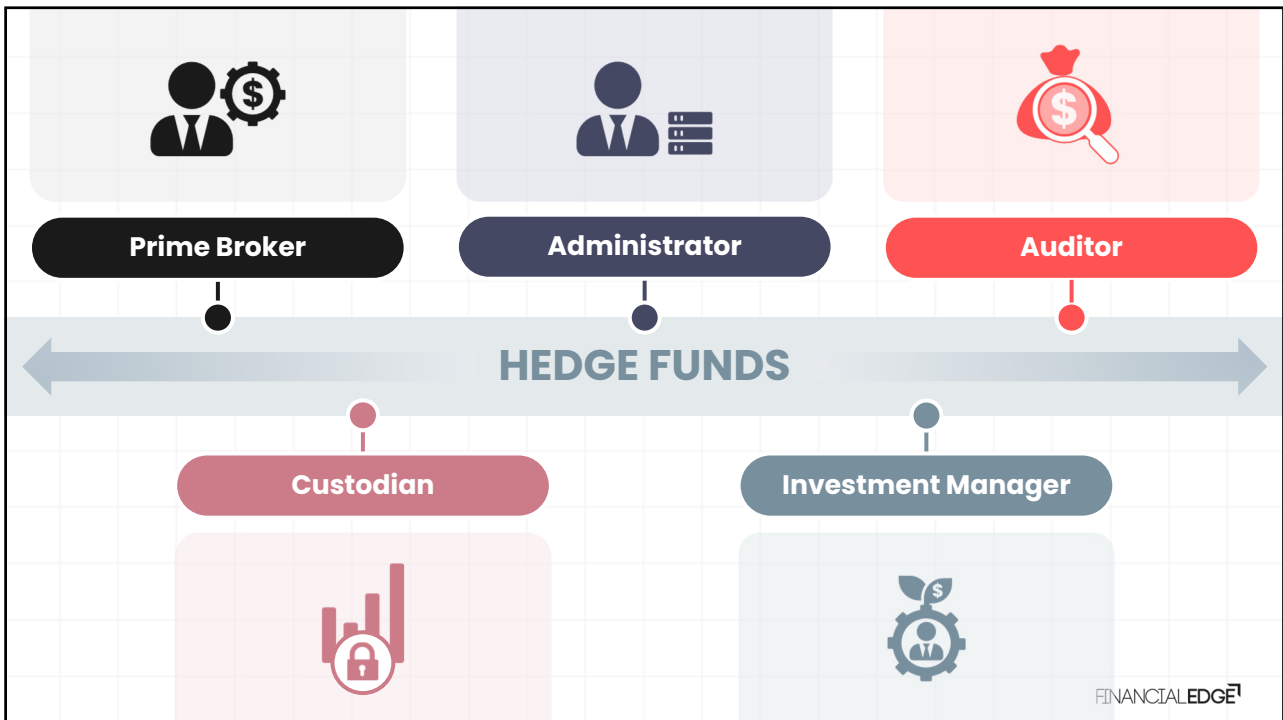
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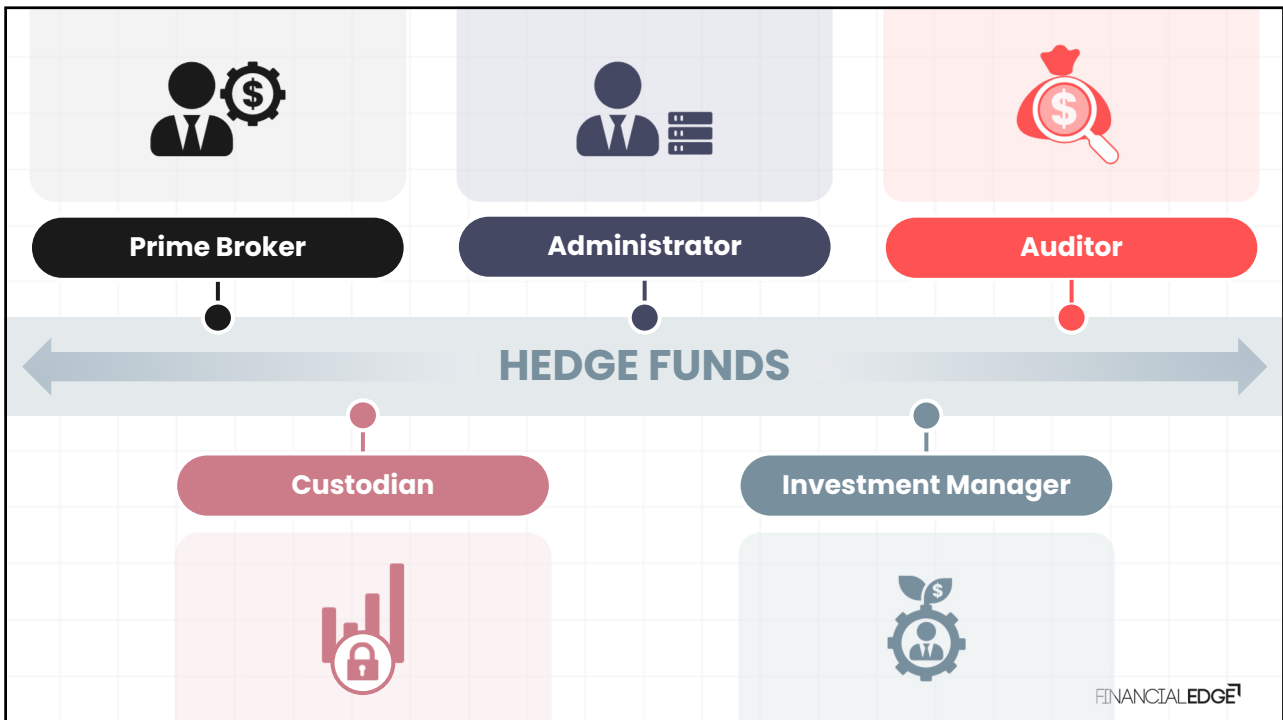
Hedge Fund Service Providers

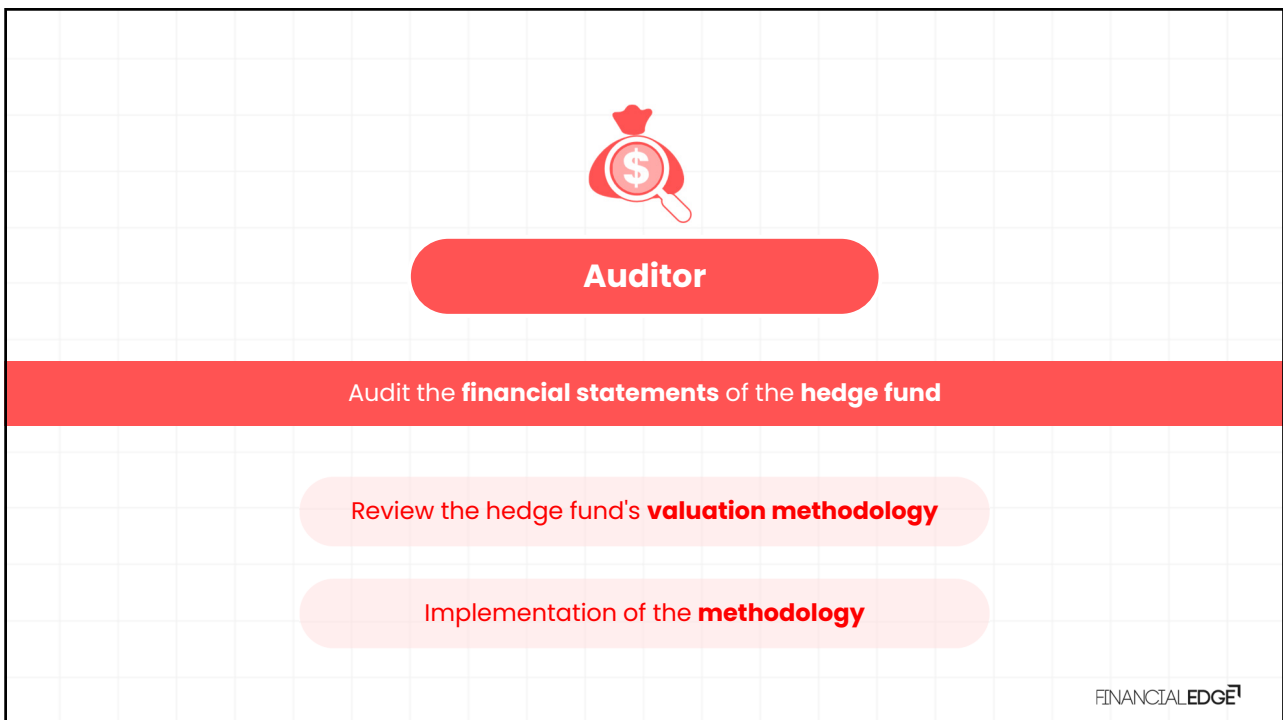
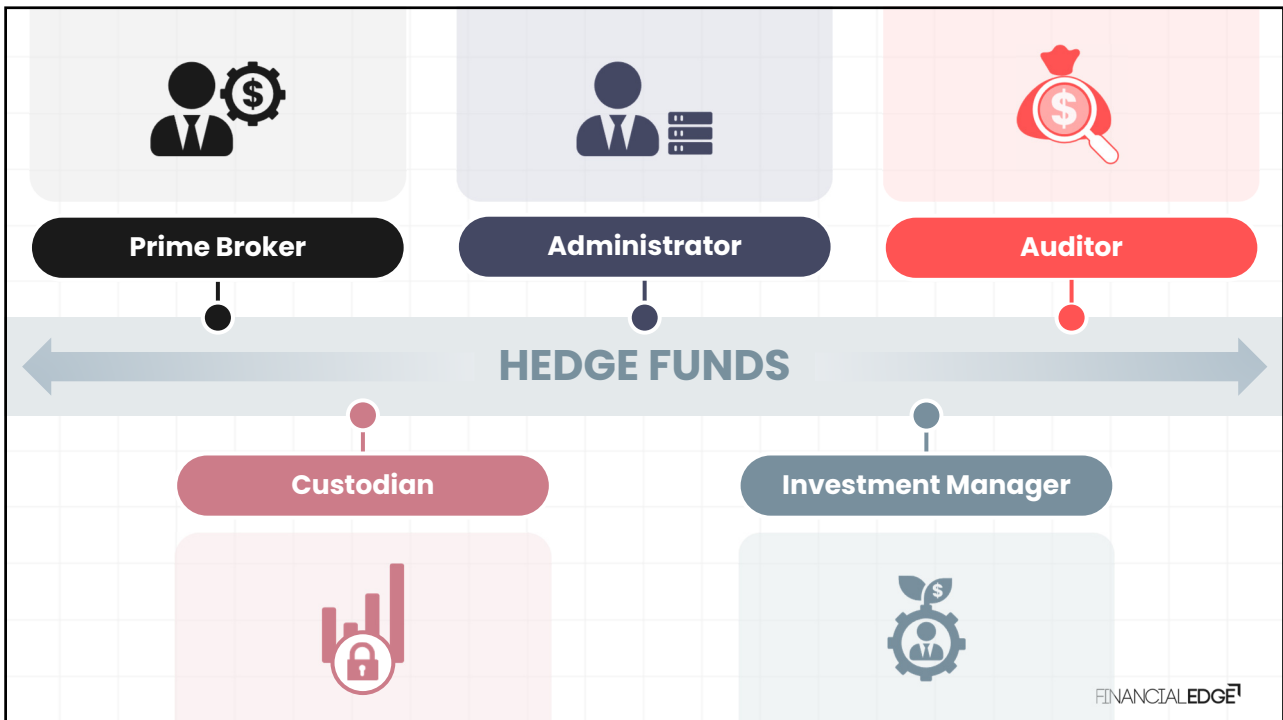
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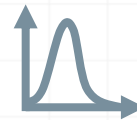
Traditional Measures of Exposure

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Jensen's Alpha



Sharpe Ratio



Value at Risk

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Jensen's Alpha

Jensen's Measure is calculated as:

$$\alpha_p = \bar{r}_p - [r_f + \beta_p (\bar{r}_m - r_f)]$$

Where:

\bar{r}_p = Expected total portfolio return

r_f = Risk free rate

β_p = Beta of the portfolio

\bar{r}_m = Expected market return



Sharpe Ratio

$$= \frac{\bar{r}_p - r_f}{\sigma_p}$$

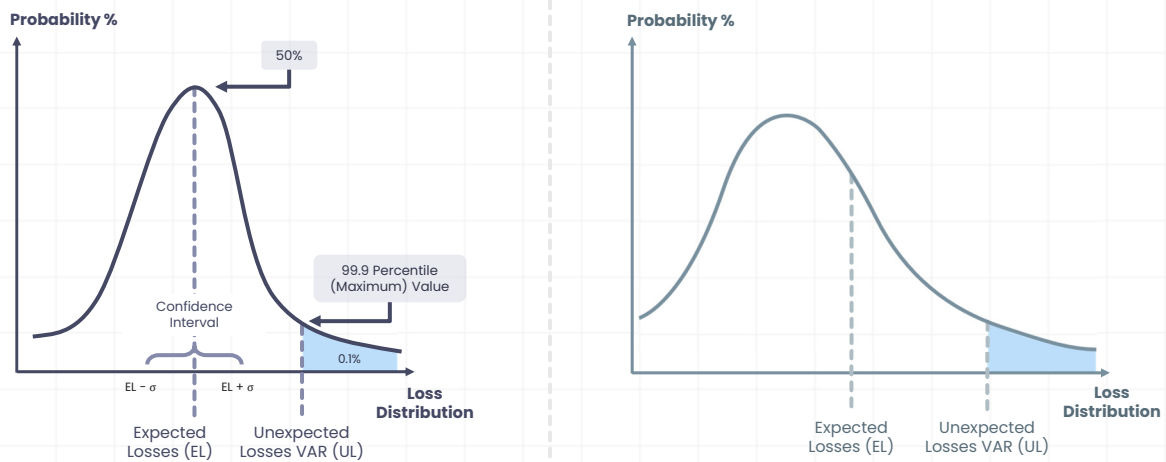
Where:

\bar{r}_p = Expected portfolio return

r_f = Risk free rate

σ_p = Portfolio standard deviation

Value at Risk (VaR) Skewed Losses for Funds

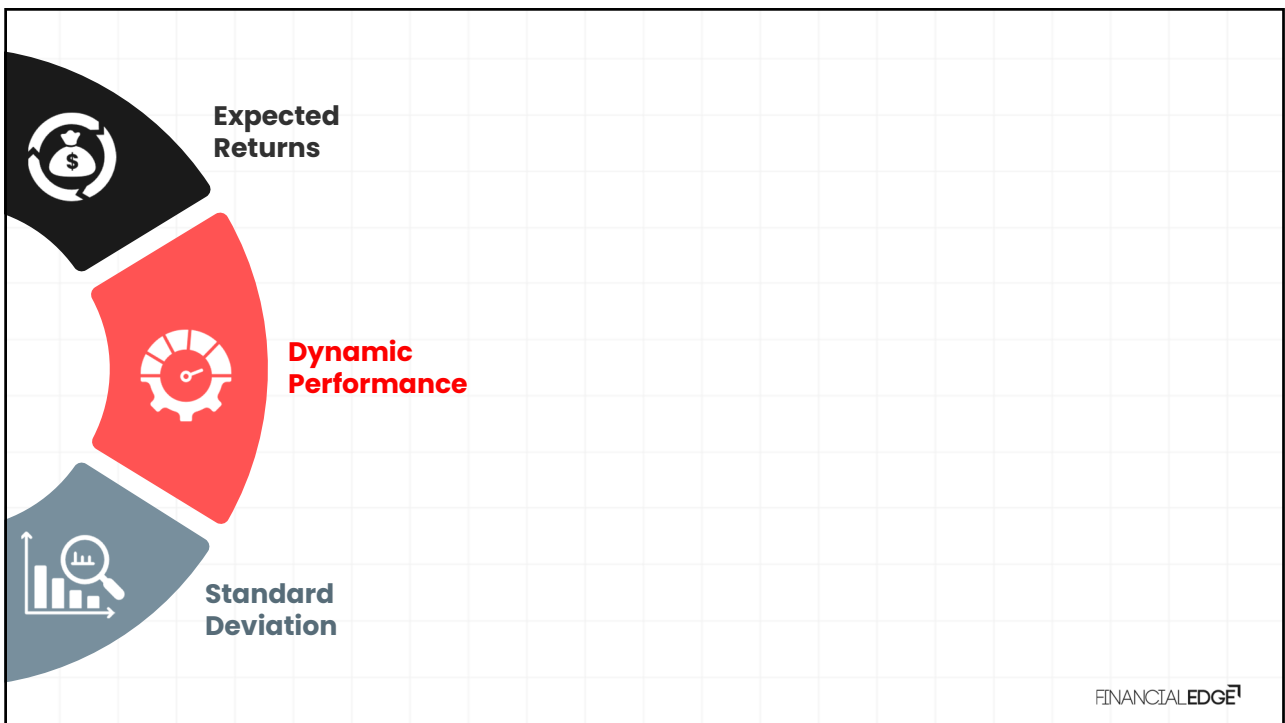


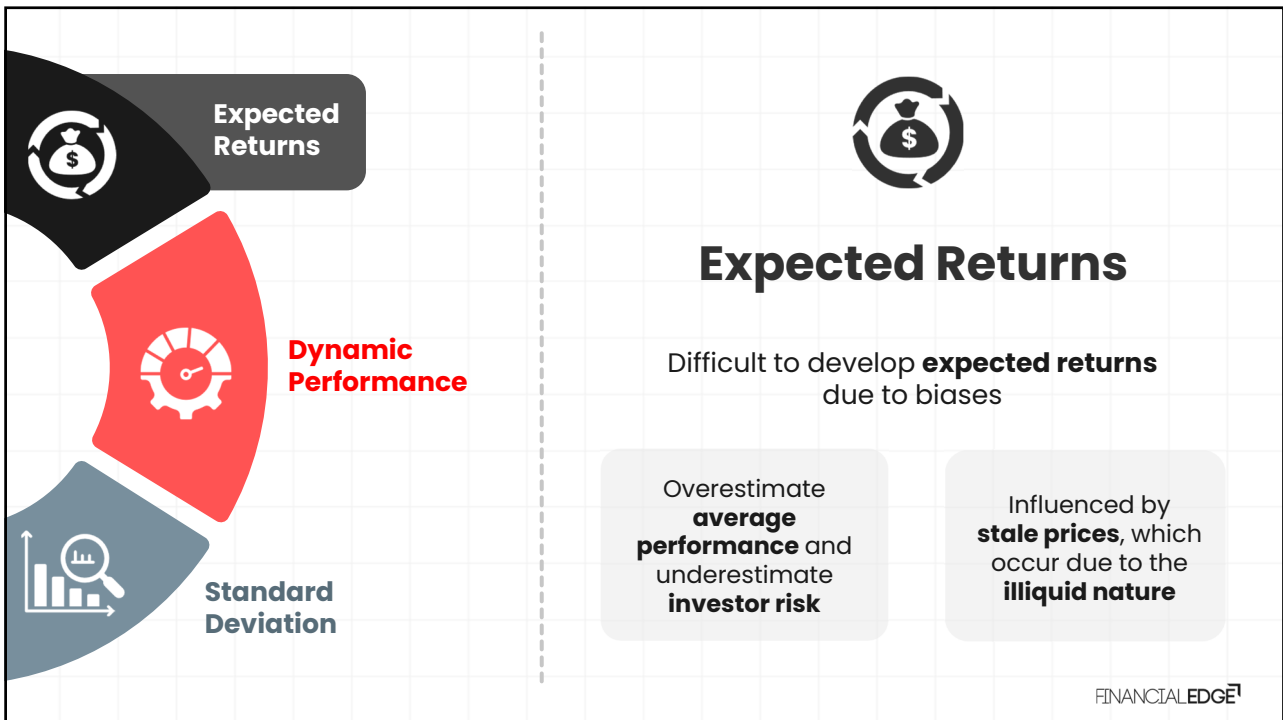


Difficulties in Applying Traditional Analysis to Hedge Funds




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The infographic features a vertical stack of three curved segments on the left: a black segment with a money bag icon labeled 'Expected Returns', a red segment with a gear icon labeled 'Dynamic Performance', and a blue segment with a bar chart icon labeled 'Standard Deviation'. A dashed vertical line separates this from the main content area on the right.

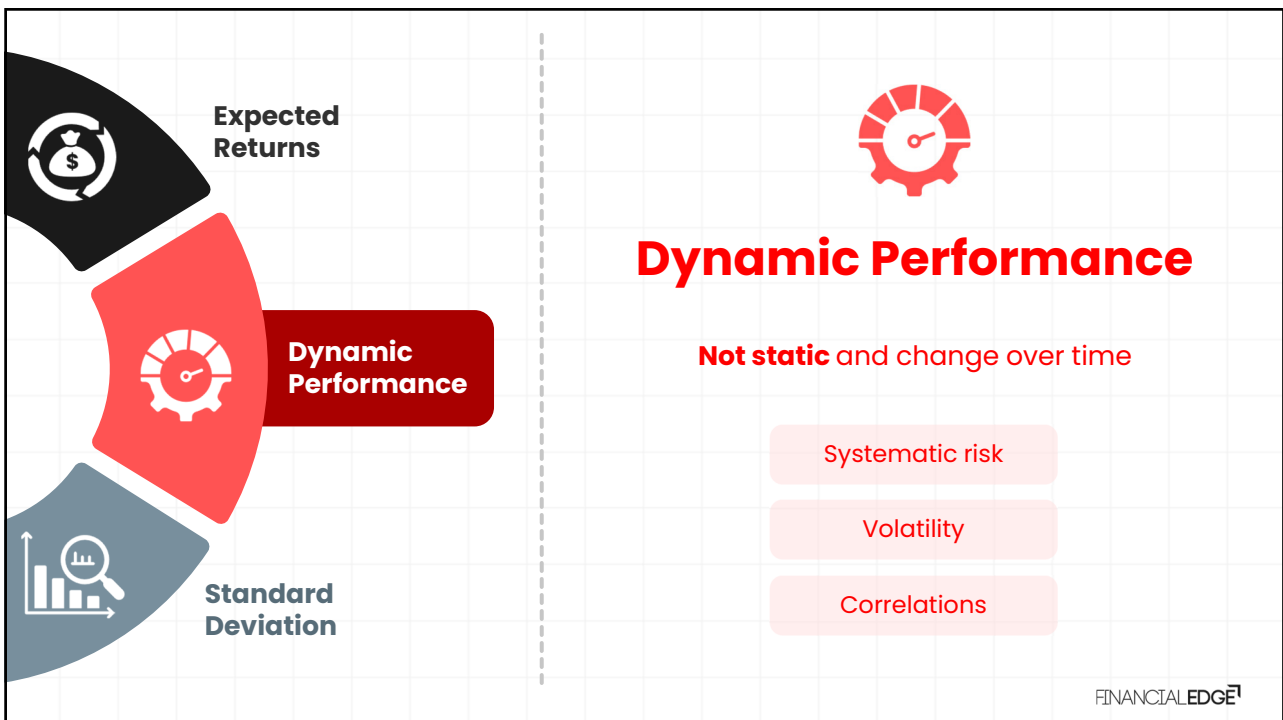

Expected Returns

Difficult to develop **expected returns** due to biases


Overestimate **average performance** and underestimate **investor risk**

Influenced by **stale prices**, which occur due to the **illiquid nature**

FINANCIALEDGE⁷



The infographic features a vertical stack of three curved segments on the left: a black segment with a money bag icon labeled 'Expected Returns', a red segment with a gear icon labeled 'Dynamic Performance', and a blue segment with a bar chart icon labeled 'Standard Deviation'. A dashed vertical line separates this from the main content area on the right.


Dynamic Performance

Not static and change over time

Systematic risk

Volatility

Correlations

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Expected Returns

Dynamic Performance

Standard Deviation

Standard Deviation

Incomplete measure of risk

Requires an **assumption** that returns follow a normal **distribution**

Underestimates the **full risk** faced by hedge fund investors

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Due Diligence Checks & Information Sources

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Investments into hedge funds are **more illiquid** than traditional mutual funds investments



Long initial lock up periods



Only periodic redemption dates



Carry out extensive **due diligence** before making an **investment** into the fund



Corporate organization



Financial statements & forecasts



Audits



Insurance



Many others...



Due Diligence Best Practices

Public document review



Taxes

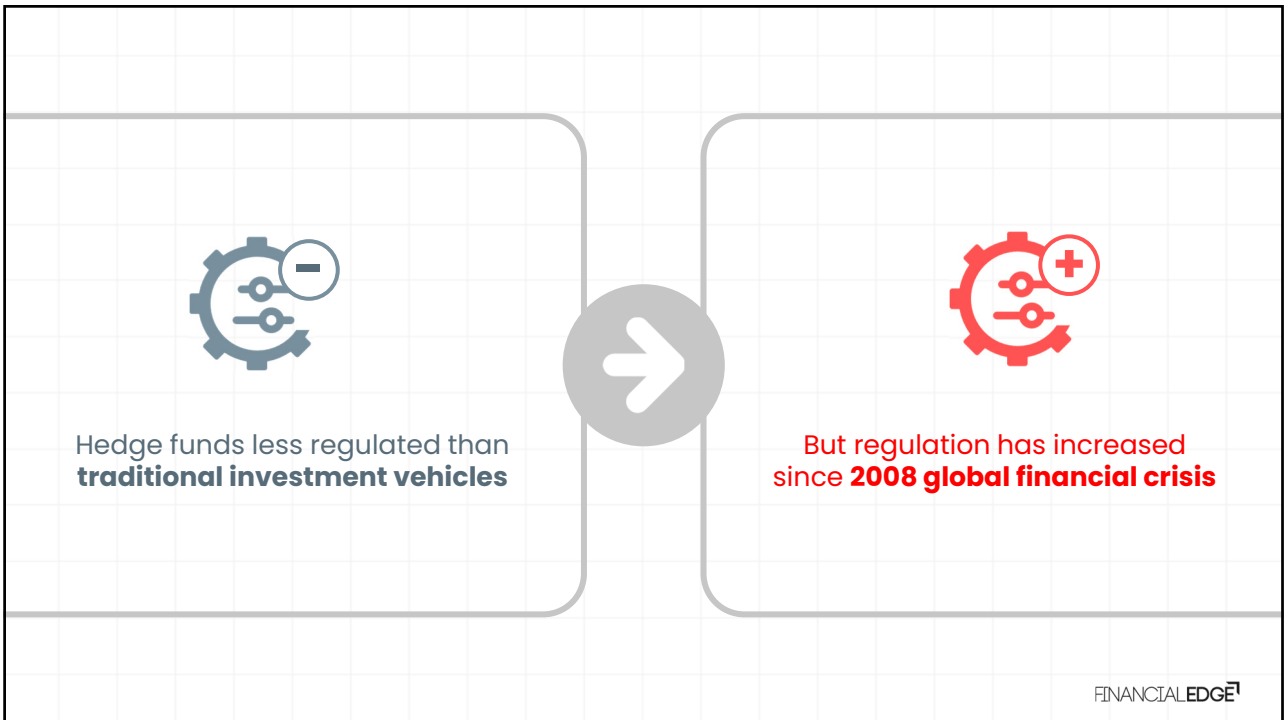


Management & employees



Legal





Changes Since 2008 Global Financial Crisis

In US



Dodd-Frank Act (2010) requires all hedge funds over **\$25m to be registered with SEC**

If under \$100 million of AUM through appropriately sophisticated state regulator

SEC had more oversight over the activities of hedge funds

In Europe



Increased **regulation covering:**

Disclosure of short positions to regulators

Risk management and financial stability

Investor disclosure

Conflict management

Calculation and publication of fund values

Internal systems and controls

Marketing

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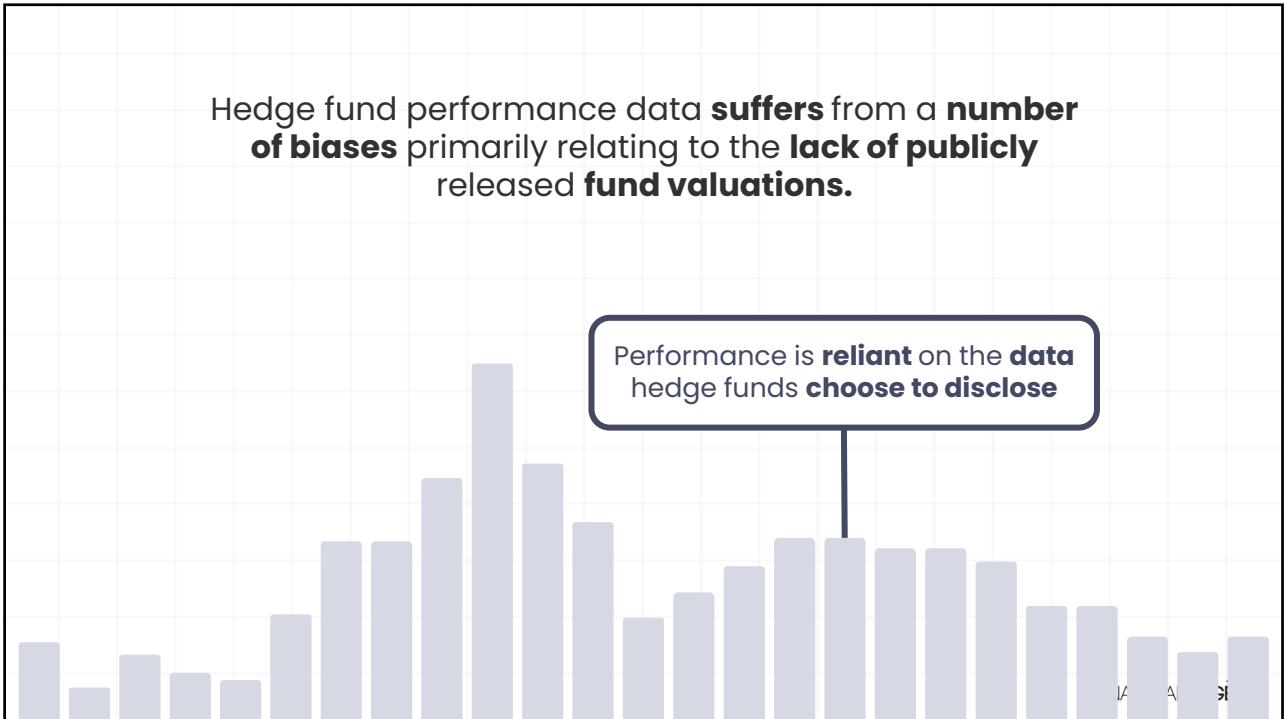
Bias in Hedge Funds



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Hedge fund performance data **suffers** from a **number of biases** primarily relating to the **lack of publicly released fund valuations**.

Performance is **reliant** on the **data** hedge funds **choose to disclose**



Selection Bias

Some hedge fund **managers** may...



Only report data to index providers in relation to the **well performing** funds




Not submit data on **poorly performing** funds




Will lead to **upward bias** in the index's **calculation of performance**

Backfill Bias

Historic fund performance...



Being **included** in an index when a **fund first reports** data



Likely been in **existence** for a number of **years**

Will result in an **improvement** in the **historic performance** of the index once this data is included

Selection Bias


Backfill Bias

Survivorship Bias


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Survivorship Bias

Historic fund performance...



Removed from the **index** if fund **ceases reporting** to an index provider



Far more likely to be **poorly performing** funds

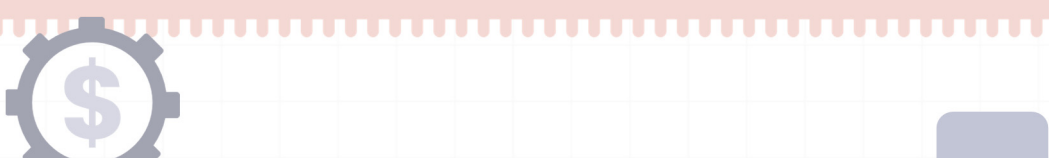
Will result in an **improvement** in the **historic performance**

Selection Bias


Backfill Bias

Survivorship Bias

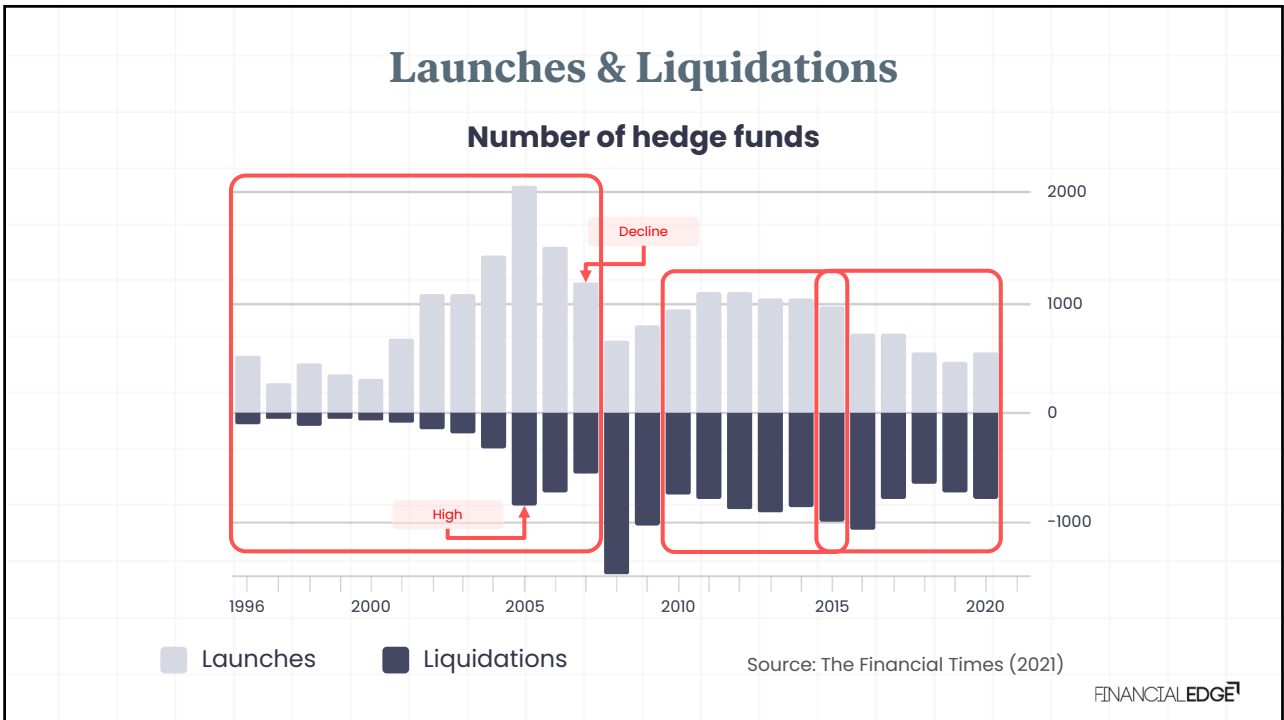
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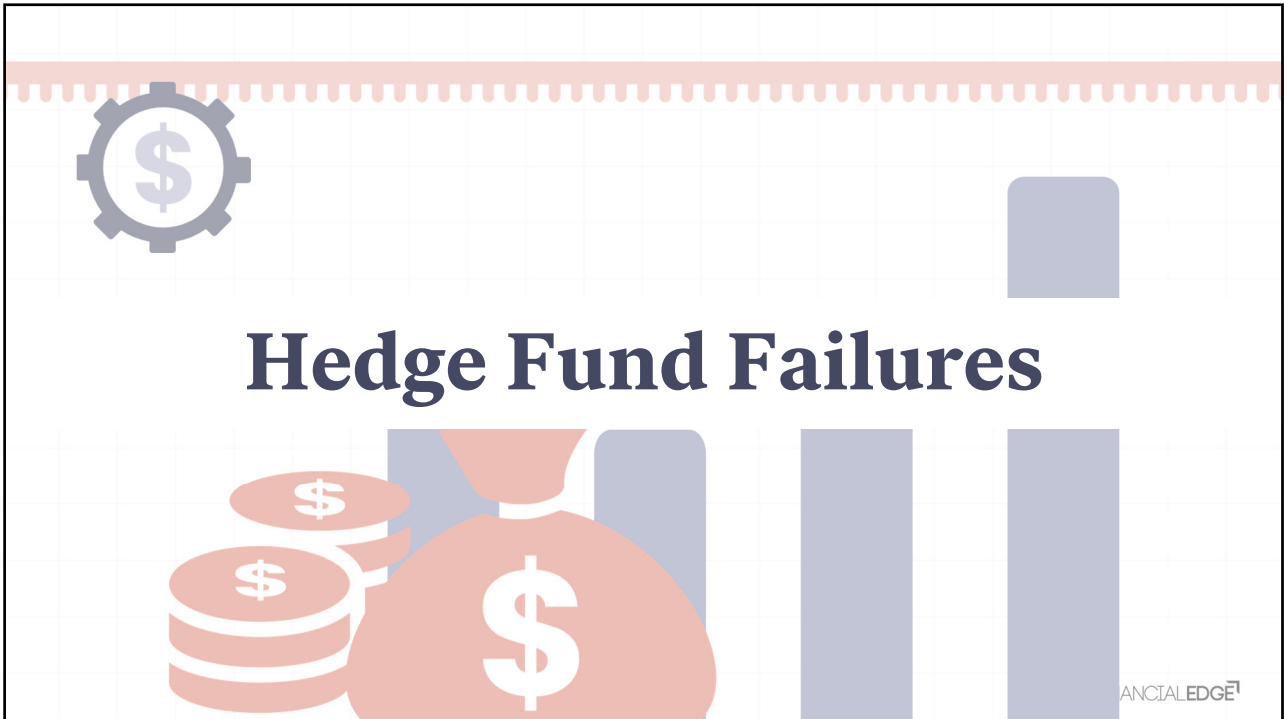


Hedge Fund New Entrants and Liquidations



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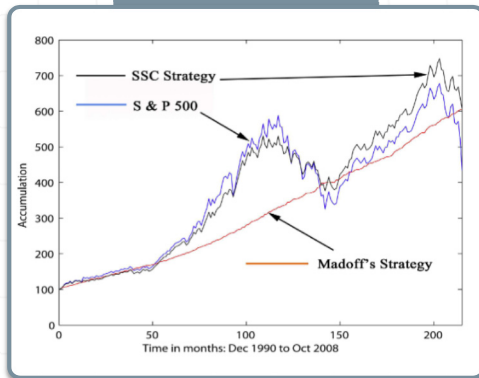
Madoff

Bernie Madoff defrauds his hedge fund investors of **\$65 billion in 2008**

LTCM

Long-Term Capital Management was a massive hedge fund with **\$126 billion in assets**

Madoff



Bernie Madoff defrauds his hedge fund investors of **\$65 billion in 2008**

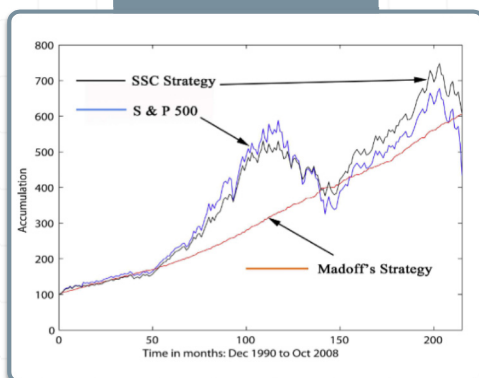
Ponzi Scheme (also known as Pyramid Selling)



Form of fraud that **pays profits** to **earlier investors** with **funds** from more **recent investors**

Cannot attract **new funds** fast enough

Madoff



Bernie Madoff defrauds his hedge fund investors of **\$65 billion in 2008**

Key Lessons

1

Beware **bond-like volatility** with **equity-like returns**

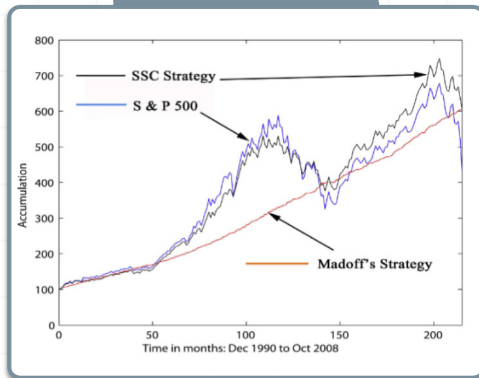
2

Secretive firms are often **secretive** for a **reason**

3

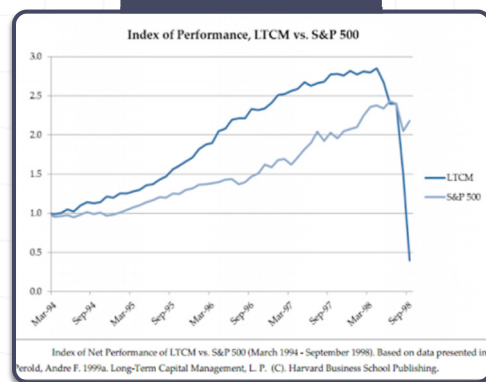
Regulators are often **financial archeologists**

Madoff



Bernie Madoff defrauds his hedge fund investors of **\$65 billion in 2008**

LTCM



Long-Term Capital Management was a massive hedge fund with **\$126 billion in assets**

Arbitrage Strategy

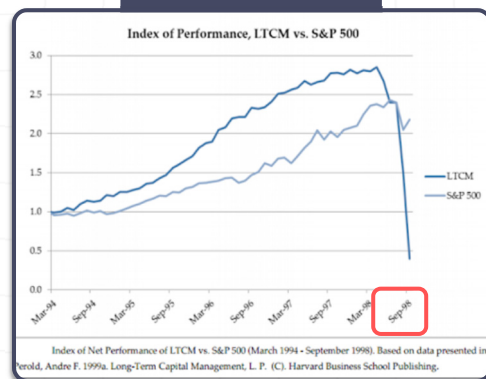


Profiting from **mispricing** of similar **securities** in different markets

Significant amounts of **leverage**

It almost collapsed in late **1998** but was bailed out by **14 other banks**

LTCM



Long-Term Capital Management was a massive hedge fund with **\$126 billion in assets**

Why was LTCM bailed out?



'Too **big** to fail' and posed a **systemic** risk

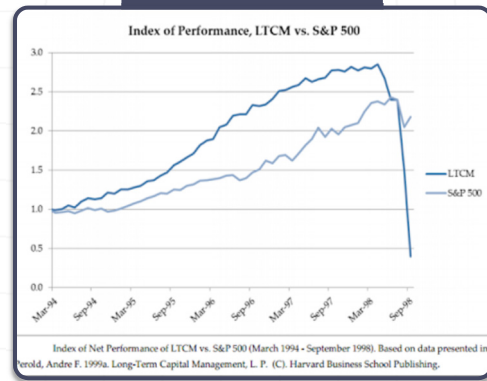


Other **financial institutions** would suffer significant **losses**



Pressured by senior **political leaders** to structure **syndicated bail out** plan

LTCM



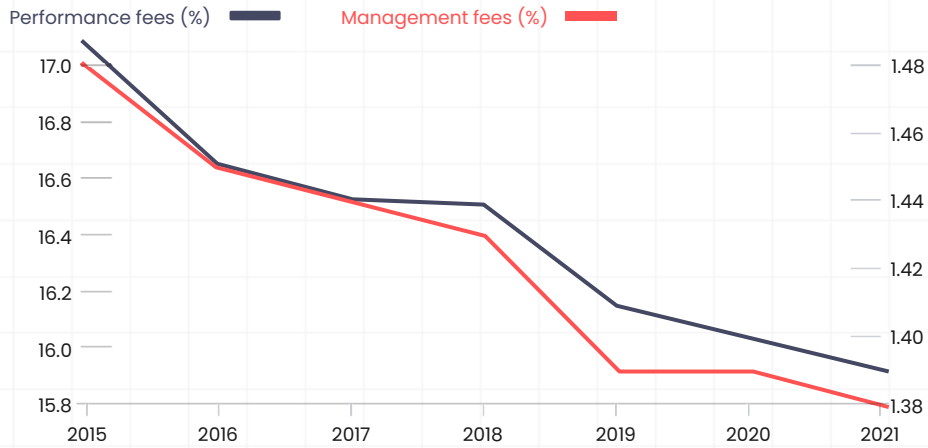
Long-Term Capital Management was a massive hedge fund with **\$126 billion in assets**



The Future of Hedge Funds



The traditional '2-and-20' fee system is dying as both **hedge fund** and **asset management fees** come **under pressure from new FinTech solutions**



Source: EurekaHedge (2021)



Plenary



<p>High-Risk/ High Return</p>	<p>Limited Access</p>	<p>Fee Pressures</p>	<p>Due Diligence</p>
<p>Hedge funds are a high-risk potentially high-return investment opportunity</p>	<p>Hedge funds are not accessible to retail investors owing to the risks taken. They attract comparatively less regulatory oversight</p>	<p>Hedge funds continue to grow but are increasingly coming under fee pressure from technological disruption</p>	<p>Due diligence is vital prior to investing in a hedge fund</p>

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Appendix: Further Reading



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[Monthly Hedge Fund Performance Review](#) by Aurum's Fund Data Engine

[Investing in Hedge Funds](#) by Mercer (2021)

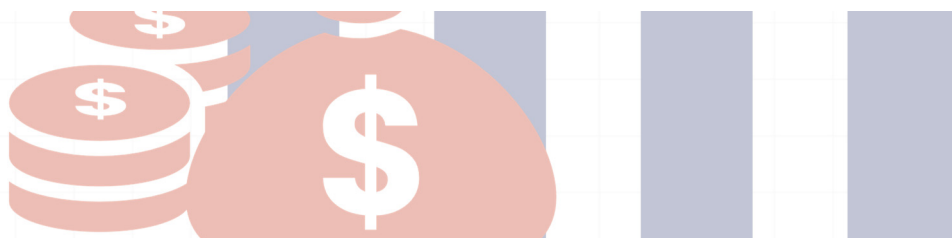
[Global Hedge Fund Benchmark Study](#) by AIMA (2021)

[Hedge Funds](#) by The SEC (2021)

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Stress Tests for Hedge Fund Scenarios

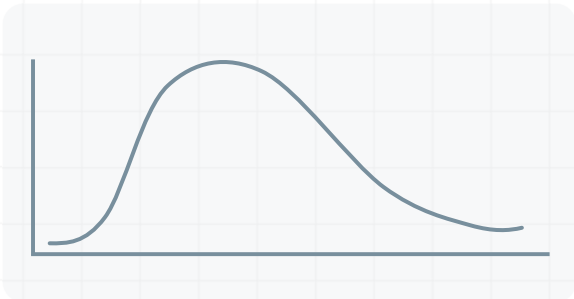


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Distribution of Default Probabilities



Normal Scenario



Stress Scenario



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