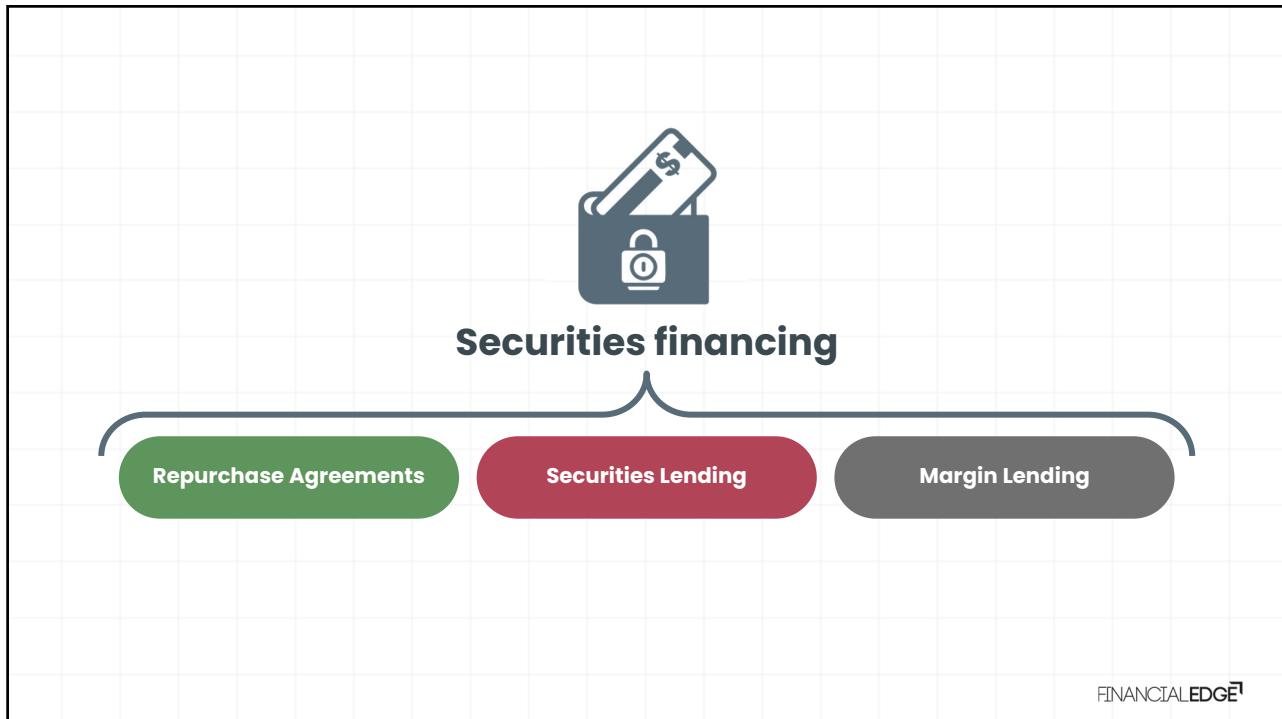
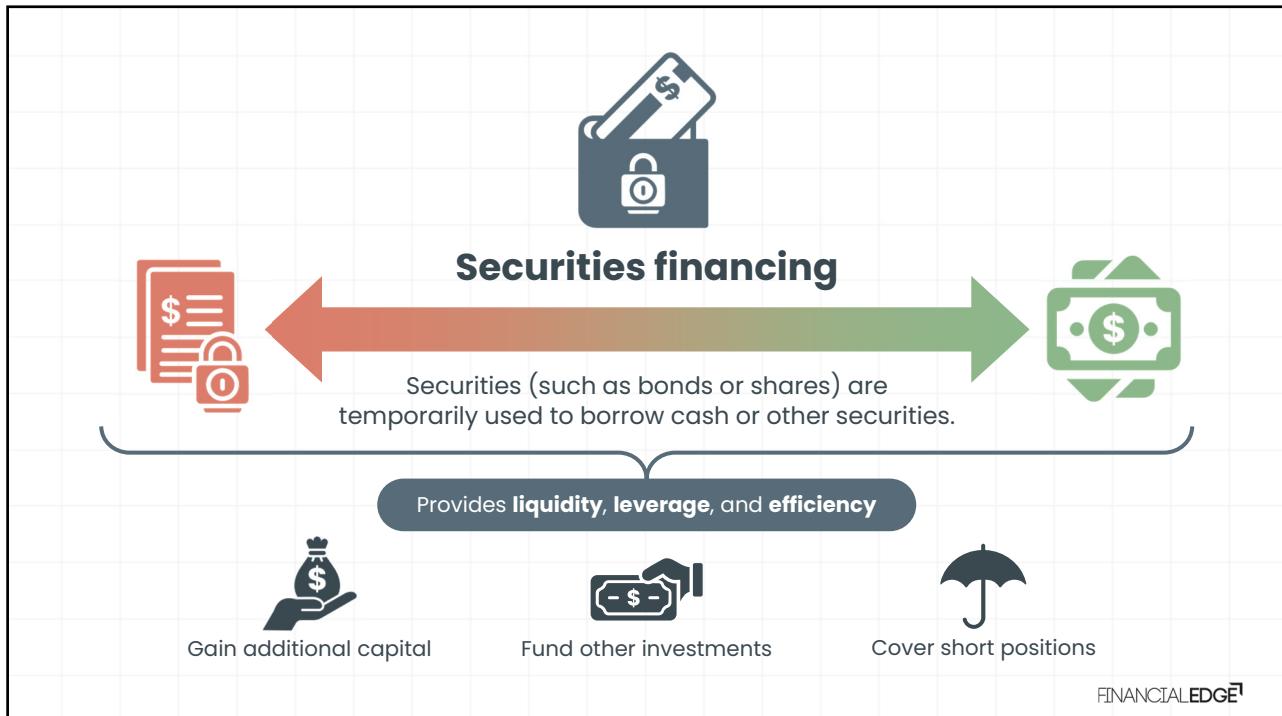


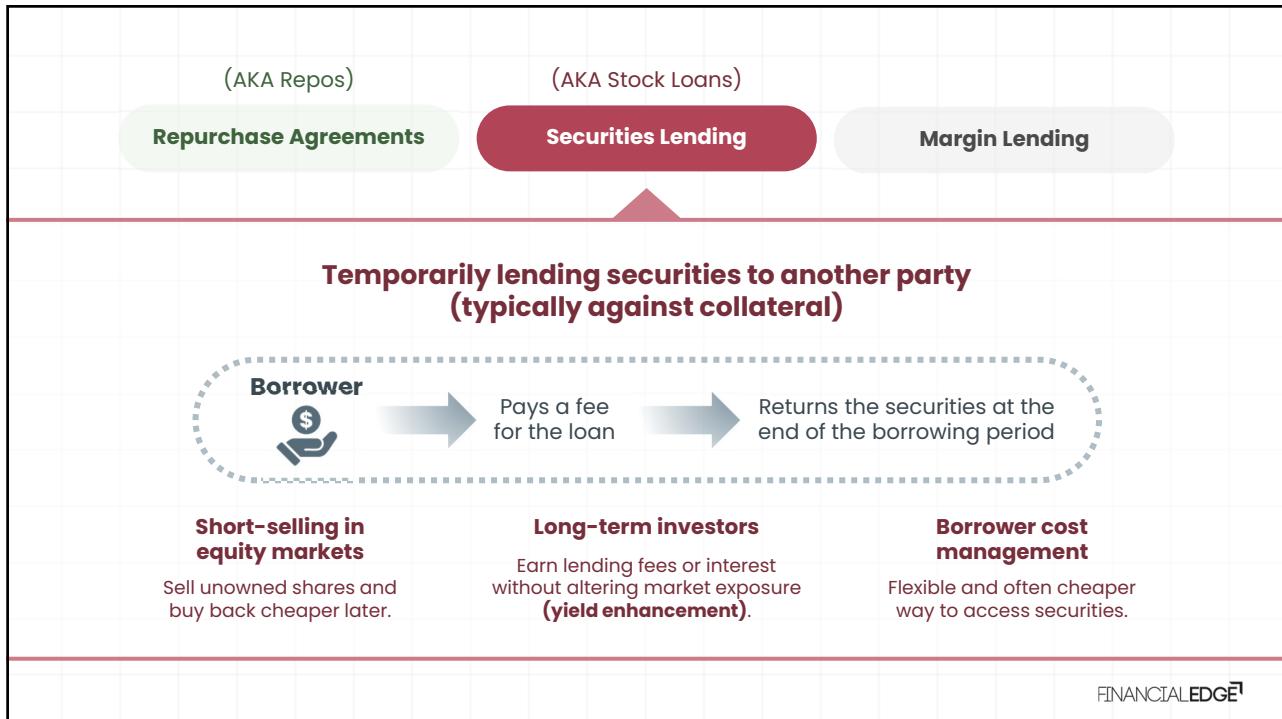
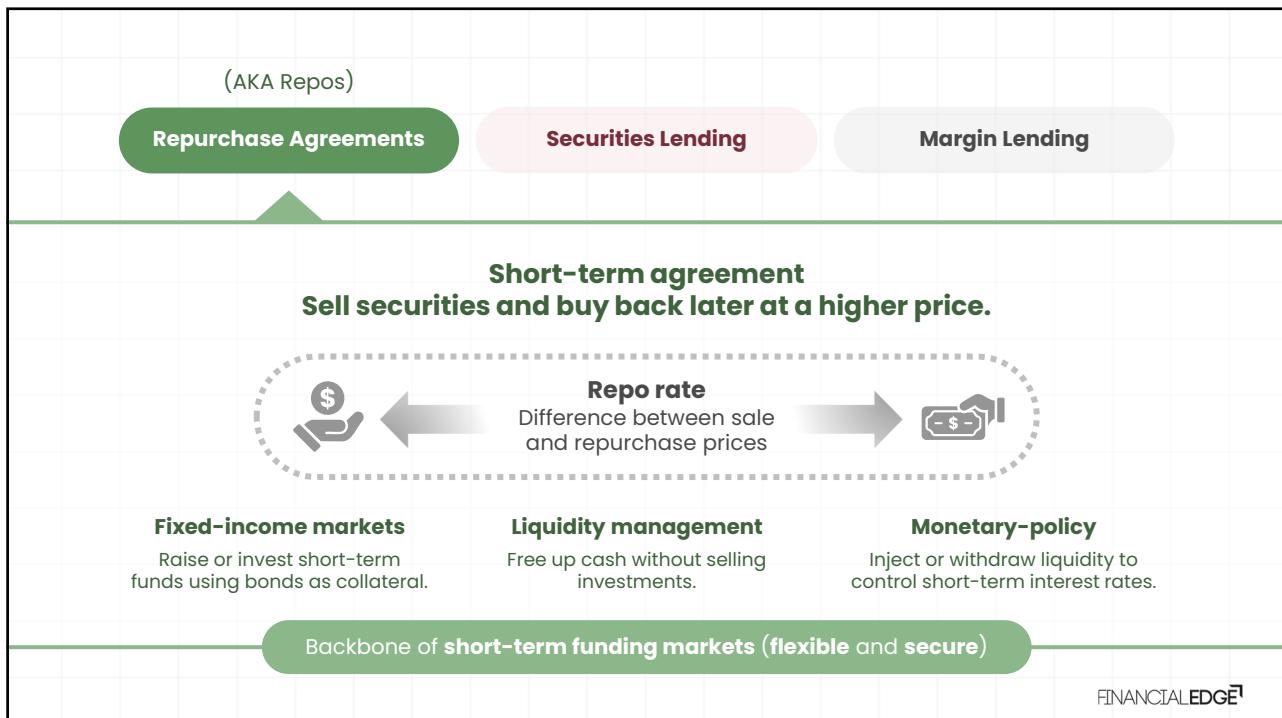


## Securities Financing and Lending



## Securities Financing Overview





(AKA Repos)

(AKA Stock Loans)

**Repurchase Agreements****Securities Lending****Margin Lending**

**Investors borrow money to buy securities,  
using the purchased securities as collateral**

Increases investor purchasing power

**Flexible****Cheaper**

Allows investors to expand  
their exposure without having  
to sell existing holdings.

**Risky**

If the portfolio value falls, the stock's  
downward movement may be  
exacerbated by selling the collateral  
assets to meet a margin call.

## Securities Financing Motives



## Securities financing key functions

Liquidity Management



Yield Enhancement



Short Selling



Cost Management

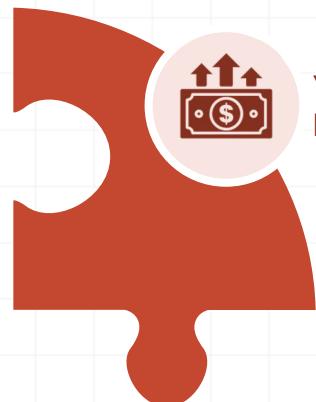


Institutions use securities financing to manage their liquidity needs (**ensuring they have enough cash for operations**)

Often more **flexible** and **cheaper** than short-term bank loans

### Liquidity Management





### Yield Enhancement

Lending out securities earns **additional income** (fees or interest)

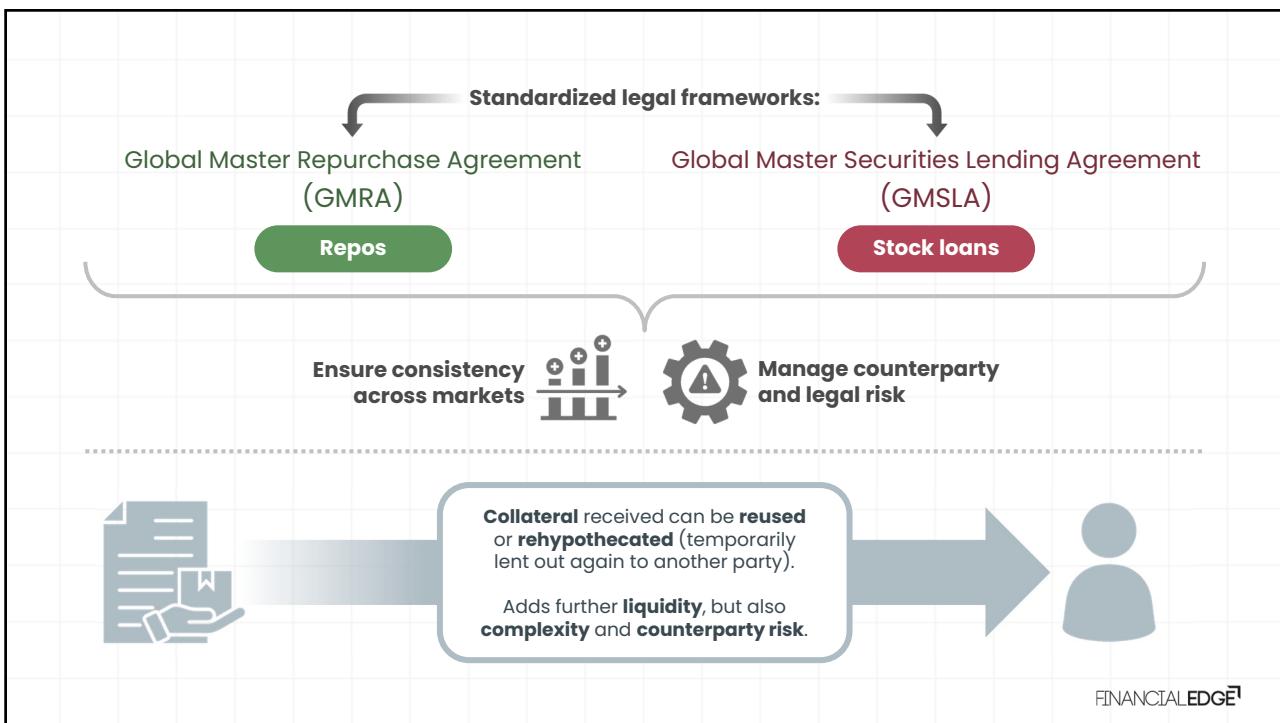
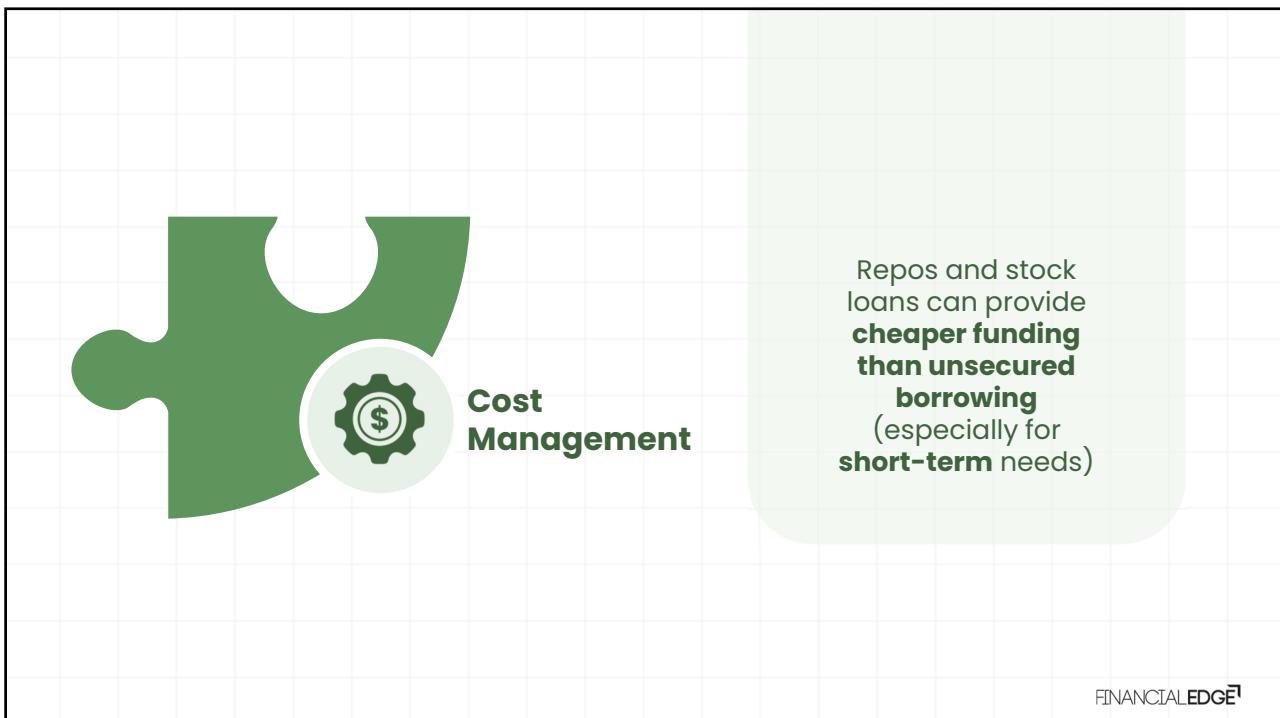
**Boosts the overall yield** on their investment portfolio

Borrow securities to sell them short (if the price declines, they can buy **back later at a lower cost and profit**)

Adds **liquidity**, **price discovery**, and **depth** to the markets, but can create **short-term volatility** and **controversy**

### Short Selling

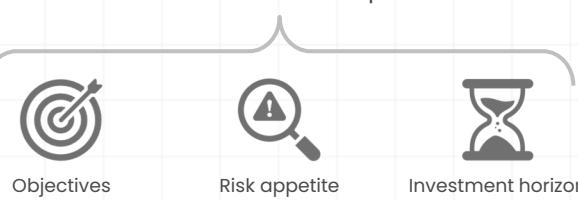




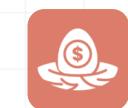
# Equity Trading Strategies

## Equity Trading Strategies

How investors use equities



As a **liquid established** asset class, equity investing attracts a wide range of participants:



**Pension funds**



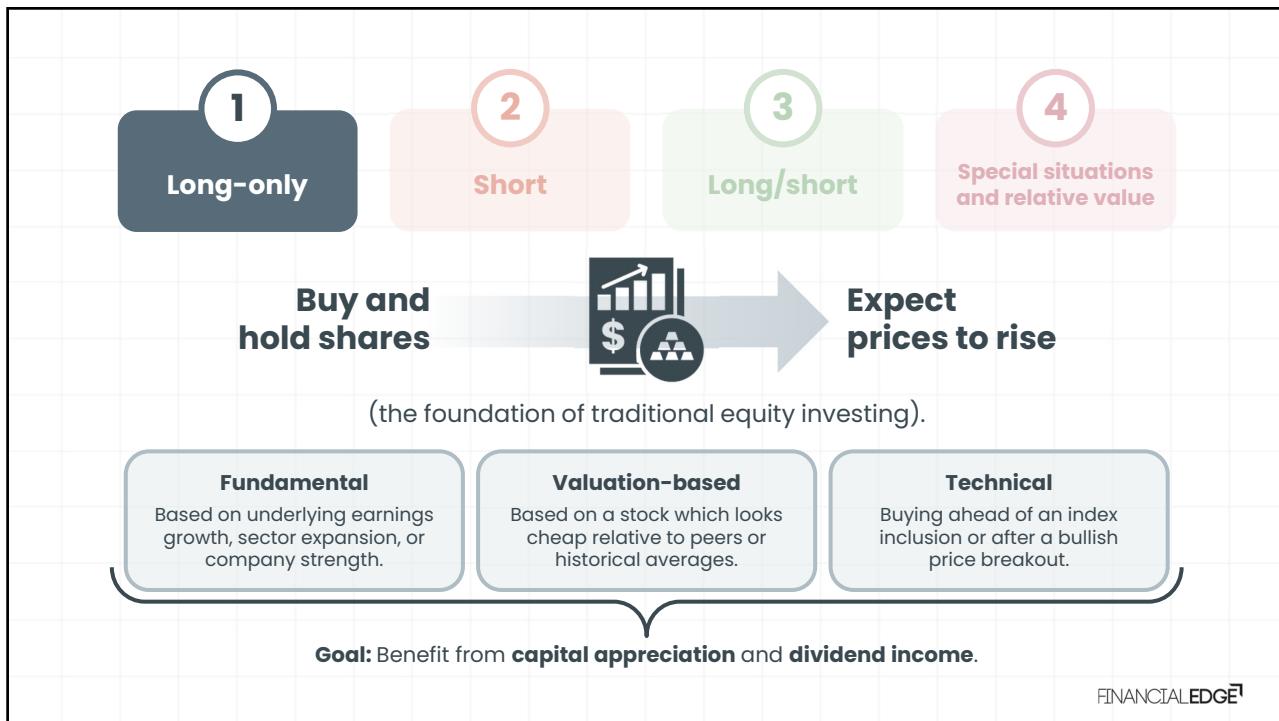
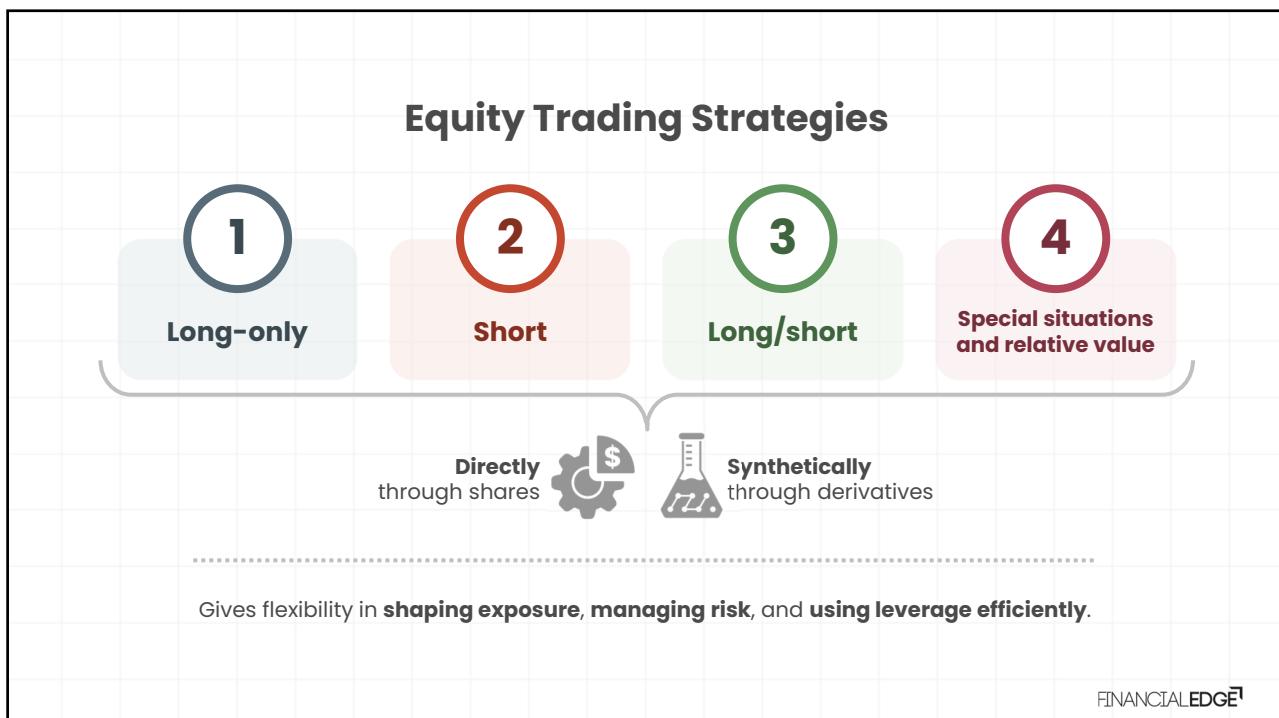
**Insurance companies**

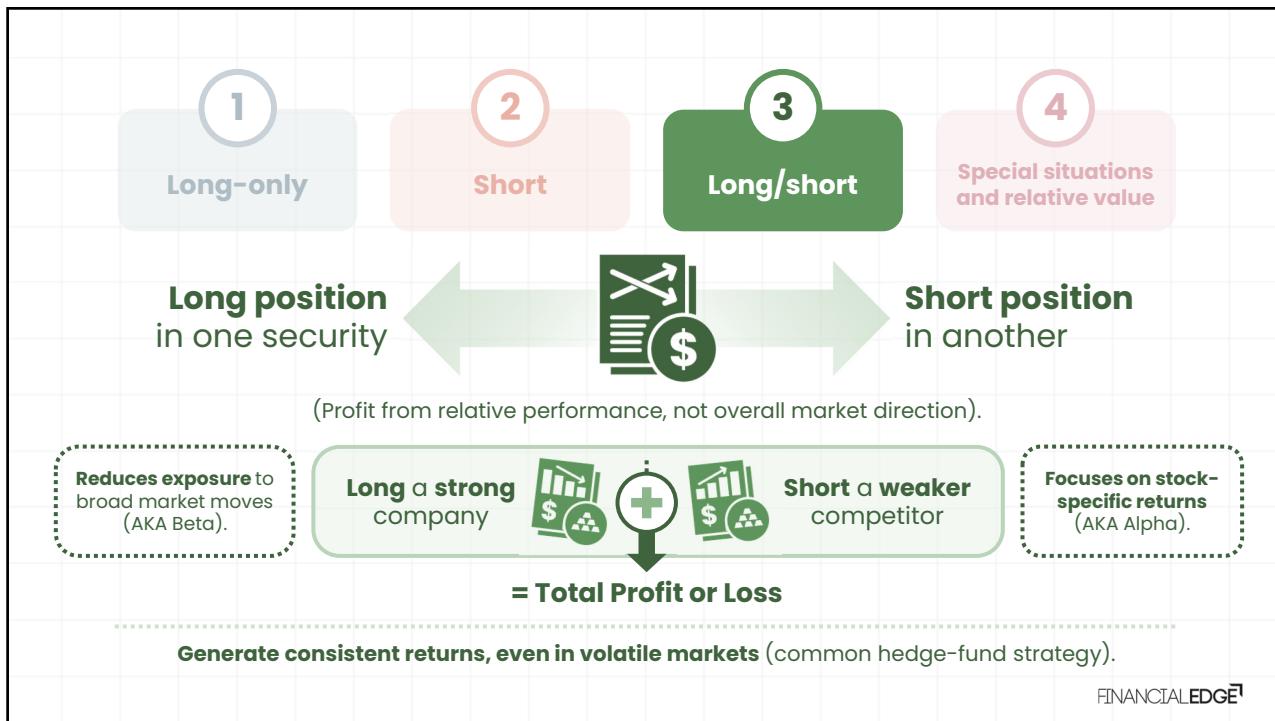
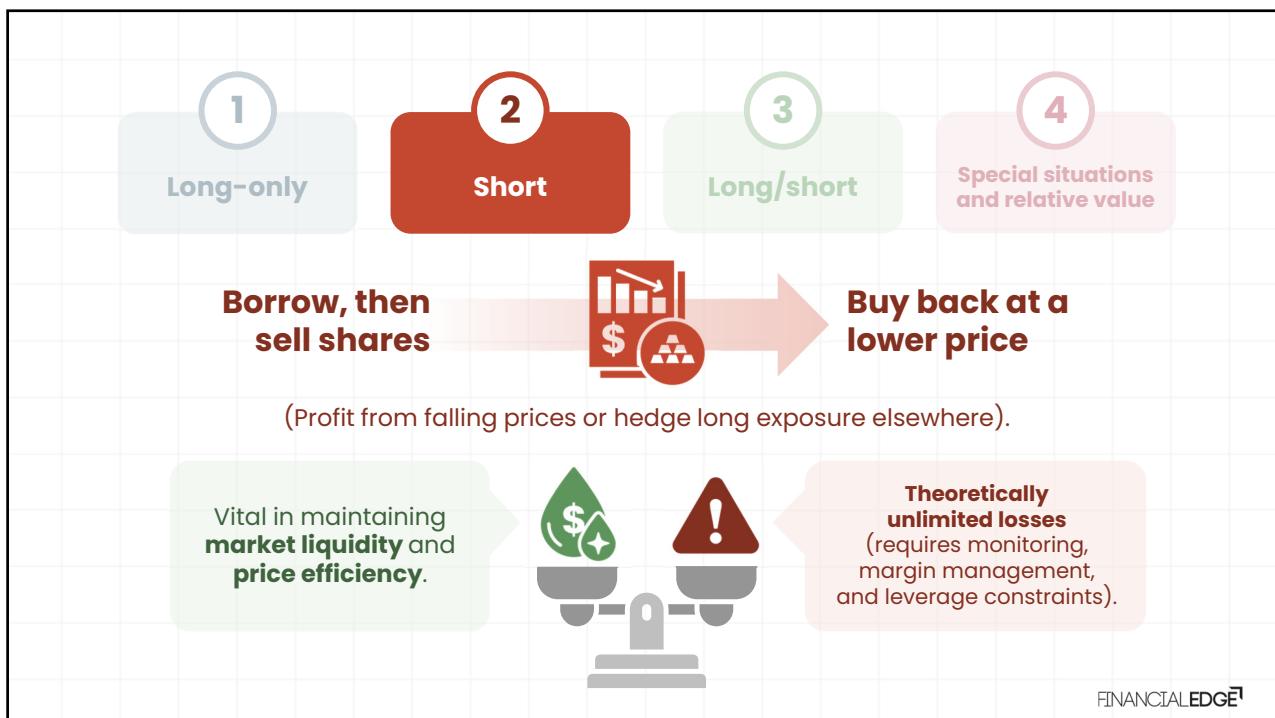


**Hedge funds**



**Active traders**





1 Long-only

2 Short

3 Long/short

4 Special situations and relative value

**Targets specific corporate events or pricing inefficiencies**  
(prices of related securities temporarily diverge from fair value).

**Pairs trading**

**Index arbitrage**

Take advantage of small, short-term discrepancies between correlated pairs of stocks or a stock index and its futures contract.

1 Long-only

2 Short

3 Long/short

4 Special situations and relative value

**Focus on event-driven opportunities.**

**Risk / Merger arbitrage**  
Long the target's shares and short the acquirer's shares.

**Convertible bond arbitrage**  
Buy a convertible bond and hedge out its individual risks.

**Rights issue arbitrage**  
Exploit temporary stock mispricing during a rights offering.

Depend heavily on **liquidity, execution speed, and precise hedging**

## Equity Trading Strategies

1

Long-only

2

Short

3

Long/short

4

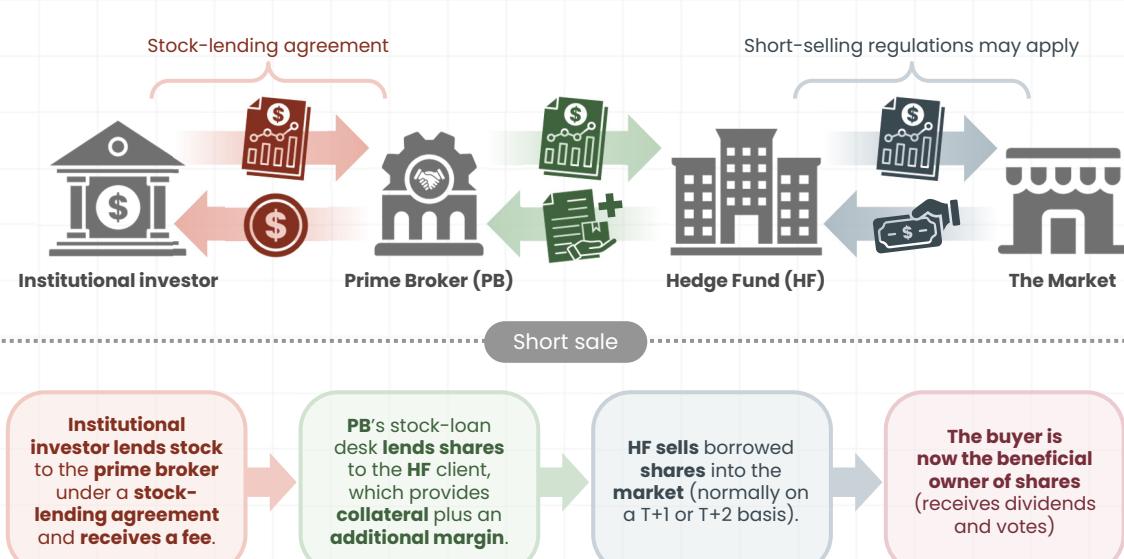
Special situations  
and relative value

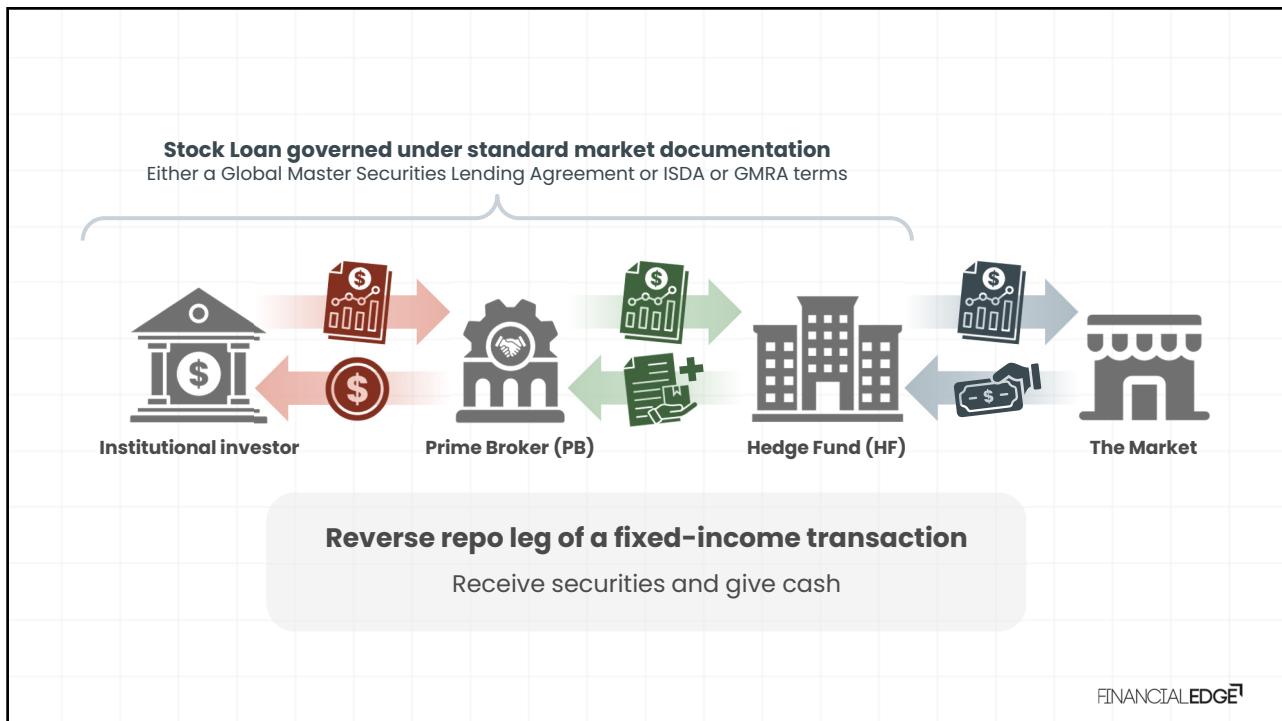
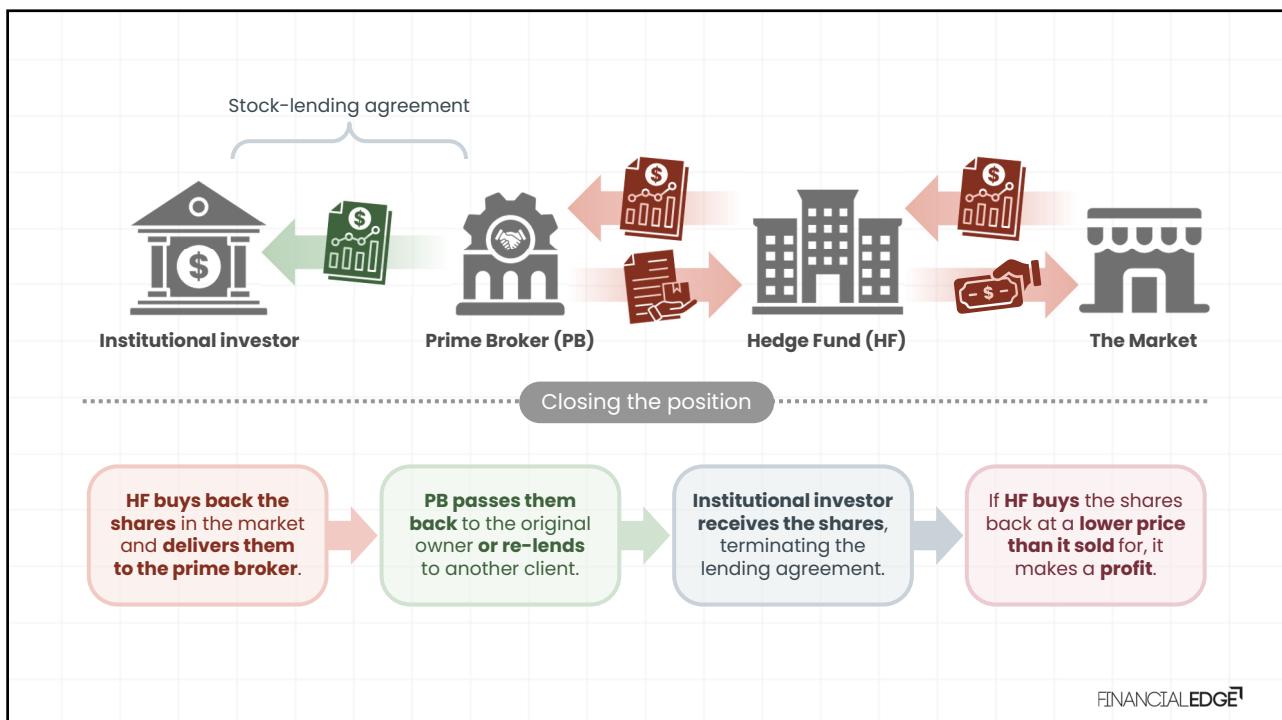
## Short Selling Mechanics



## Short selling

Just another way for investors to express a view on where prices are heading.





## Stock-borrow fees



Depend on **supply and demand**

**Liquid (easy-to-borrow) stock**

20 basis points per year

**Specials (hard-to-borrow) stock**

500+ basis points per year

If the borrow is difficult to find, the **prime broker or investor may require a term loan** (if the hedge fund covers its short early, it will still pay the full).



E.g. company is **in trouble** or heavily involved in a **merger-arbitrage trade**.

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## Dividend payments





**Original investor**  
Expects to receive dividends



**Prime Broker (PB)**



**Hedge Fund (HF)**  
Doesn't receive the dividend



**The Market**

Synthetic cash-dividend



**Ensures the lender is made whole**  
(as if it had never lent the shares in the first place).

**Short seller shouldn't be at a loss**  
(stock price should fall by the size of the dividend).

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# Short Selling Risk & Regulations



## Short selling

Closely **monitored** and **regulated**



## Uptick rule

**Restricts new short sales** once a stock's price has **fallen significantly** during the day.

**Prevent short sellers accelerating a downward spiral.**

## Uptick rule



If a stock has dropped by 10% or more from its previous day's closing price, short sales can only take place on an **up tick** (priced above the current best bid).



Best bid:  
\$20.00



Best offer:  
\$20.02



Short sale at any price  
**above \$20.00**

Helps **slow momentum** and **stabilize trading** when markets become stressed

Historically, many countries have **temporarily banned short selling completely** for **certain sectors**.



Operational risks

### Stock Recall



Original investor  
can recall shares  
if needed

### Short Squeeze



Prime broker usually  
replaces stock from  
another source

In **tight markets**, recalls can **force short sellers to repurchase** shares to cover their position.

**Drives the price even higher.**

## Short interest



Shares sold short



Not yet covered



Expressed as either:

Percentage of **total shares outstanding**

**"Days to cover"** ratio (how many days it would take to buy back all outstanding shorts)

Rising short interest suggests **bearish sentiment**.

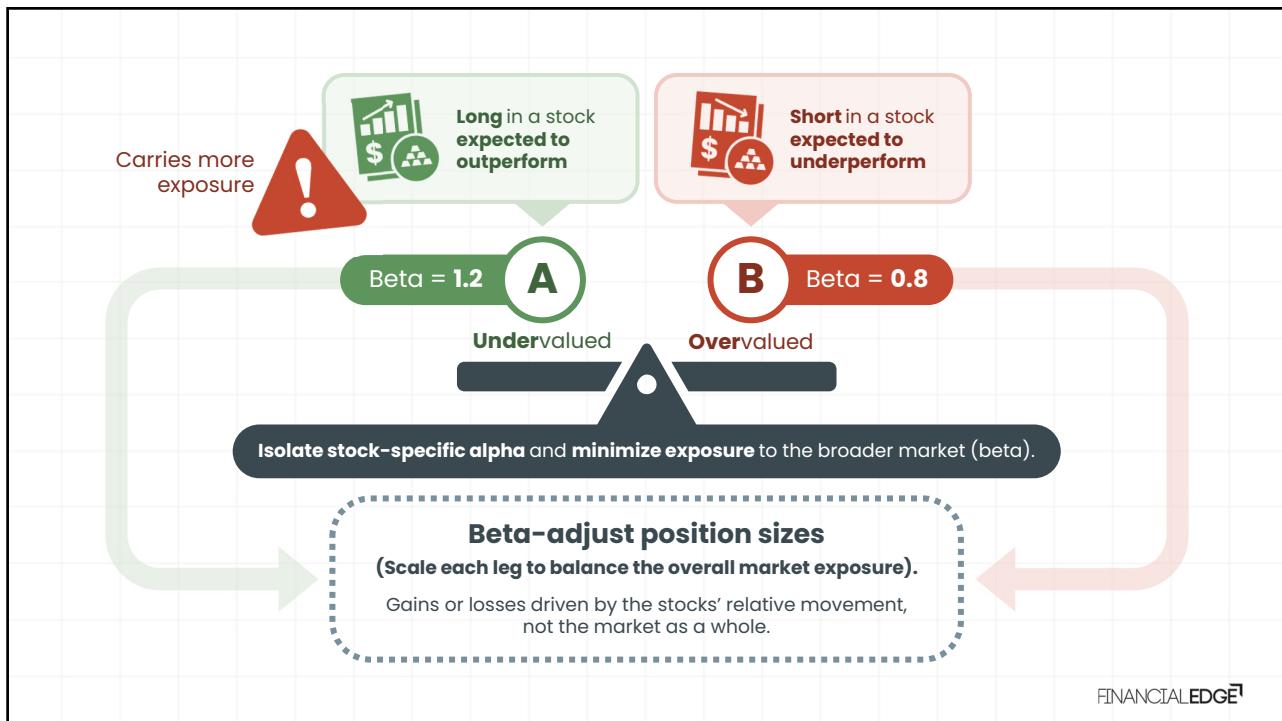


Declining short interest indicates **covering (confidence)**.



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# Equity Long Short Trading Strategies





## What drives returns?



Long in a stock expected to outperform

**Earnings upgrades**

**New product launches or corporate developments**

**Higher-than-expected dividends**

**Positive news that attracts equity investors**



Short in a stock expected to underperform

**Sector downgrades**

**Profit warnings**

**Earnings disappointments**

**Rising financing and input costs that could pressure margins**



## Long/short equity strategy

**Idiosyncratic risk** – specific factors affecting each company

**If you're right** (long position outperforms the short) the spread between the two prices narrows in your favor.



Long in a stock expected to outperform



Short in a stock expected to underperform

**If you're wrong** (long position underperforms and the short rallies) the trade loses money.

# Margin Lending



## Margin Lending

Raise or deploy cash using existing securities as collateral.

AKA **margin loans** or **securities-based lending**.

**Fully collateralized** by the purchased securities.

**Maximum limit** to borrowed funds.



**Bank**



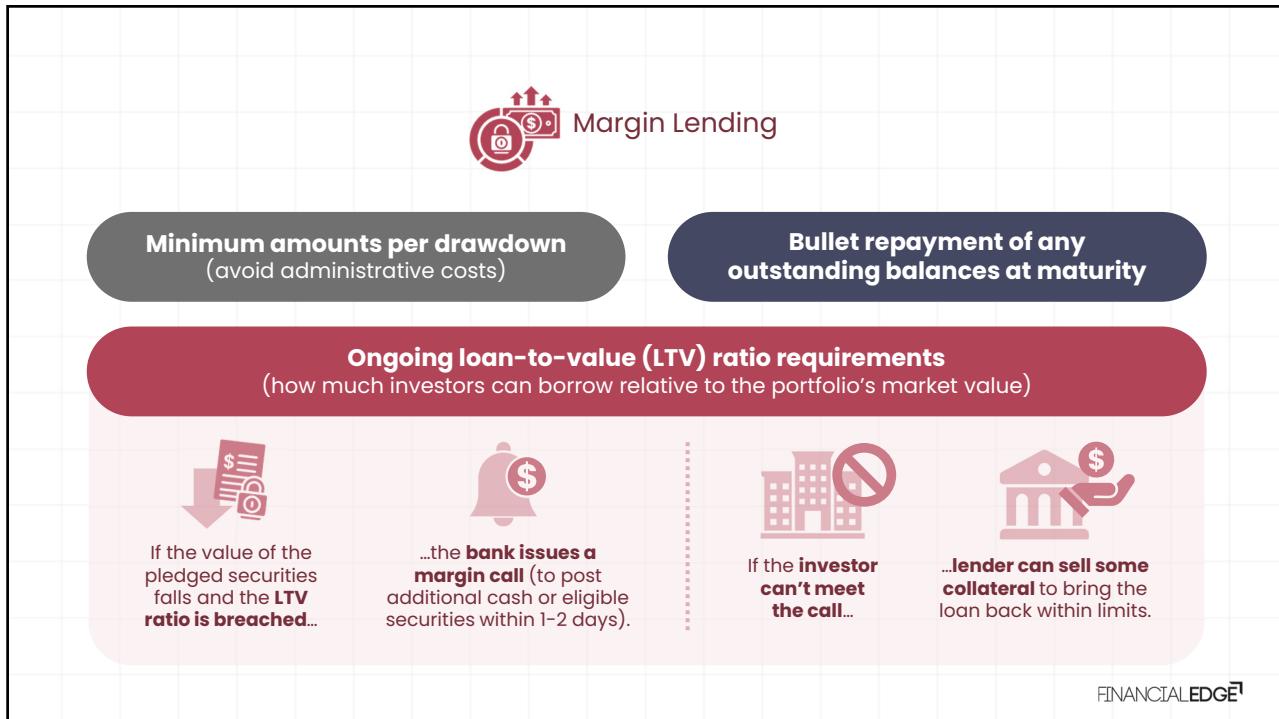
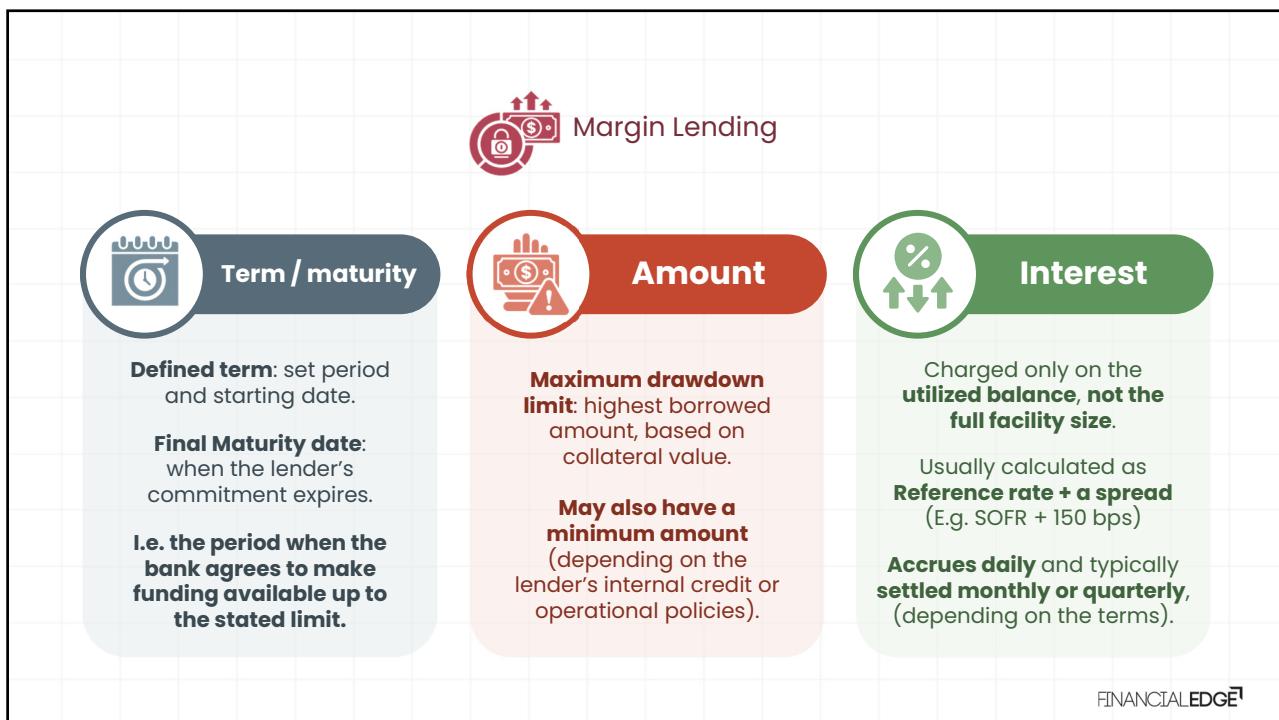
**Revolving Credit Facility (RCF)**

Access funds **without selling assets**.

**Quickly exploit** market opportunities.



**Investor**



# Equity Merger Arbitrage – Special Situation Investing

Special-situation strategies



## Merger arbitrage

AKA **Risk** arbitrage

Proposed takeover or merger may fail if:



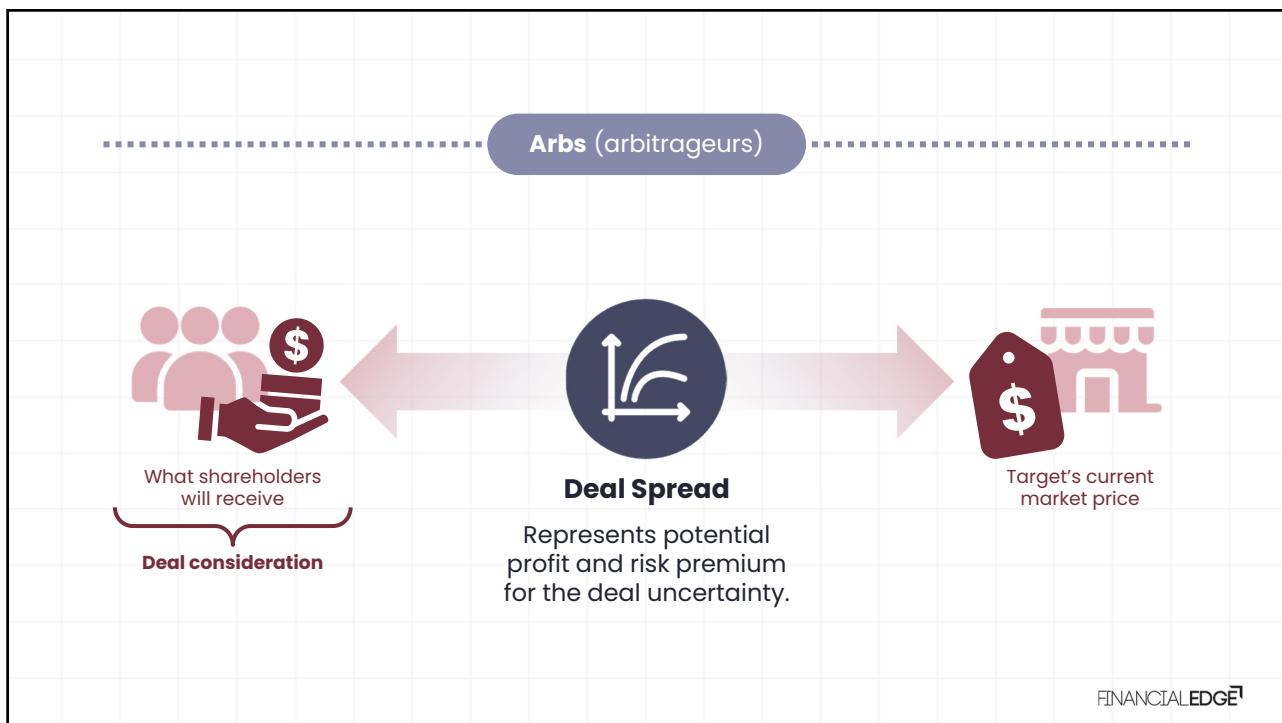
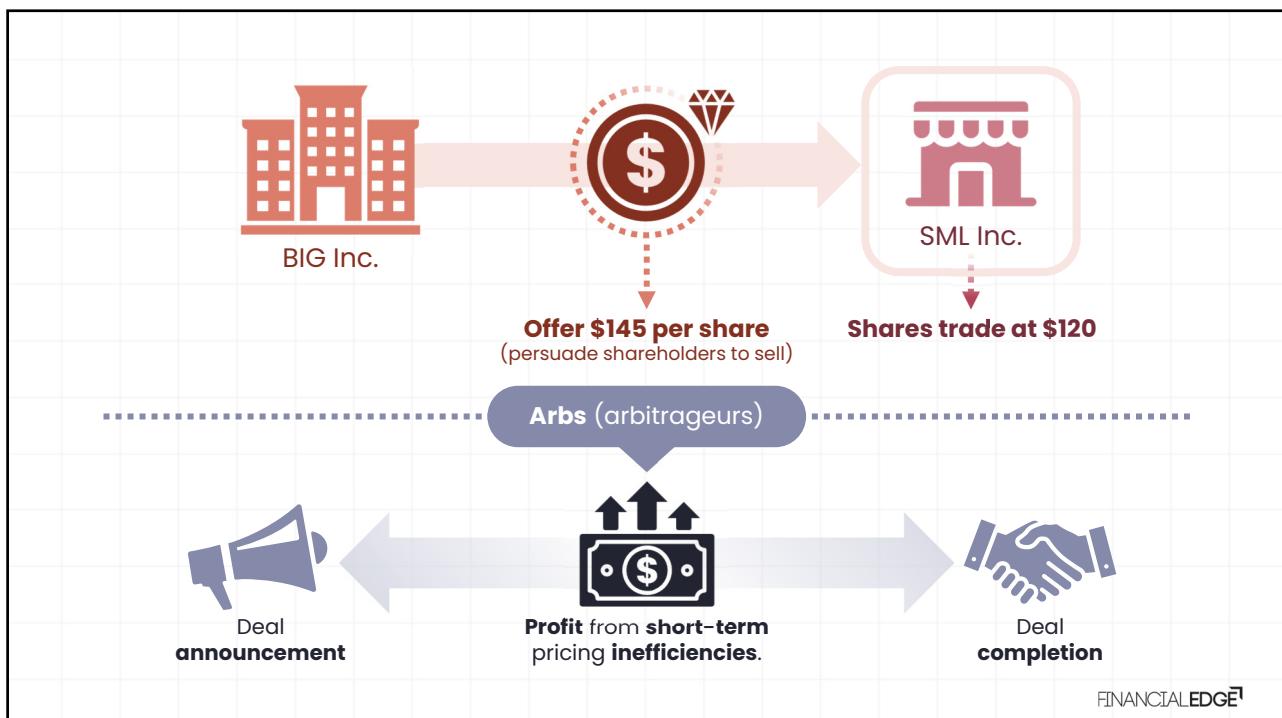
Regulators  
block it

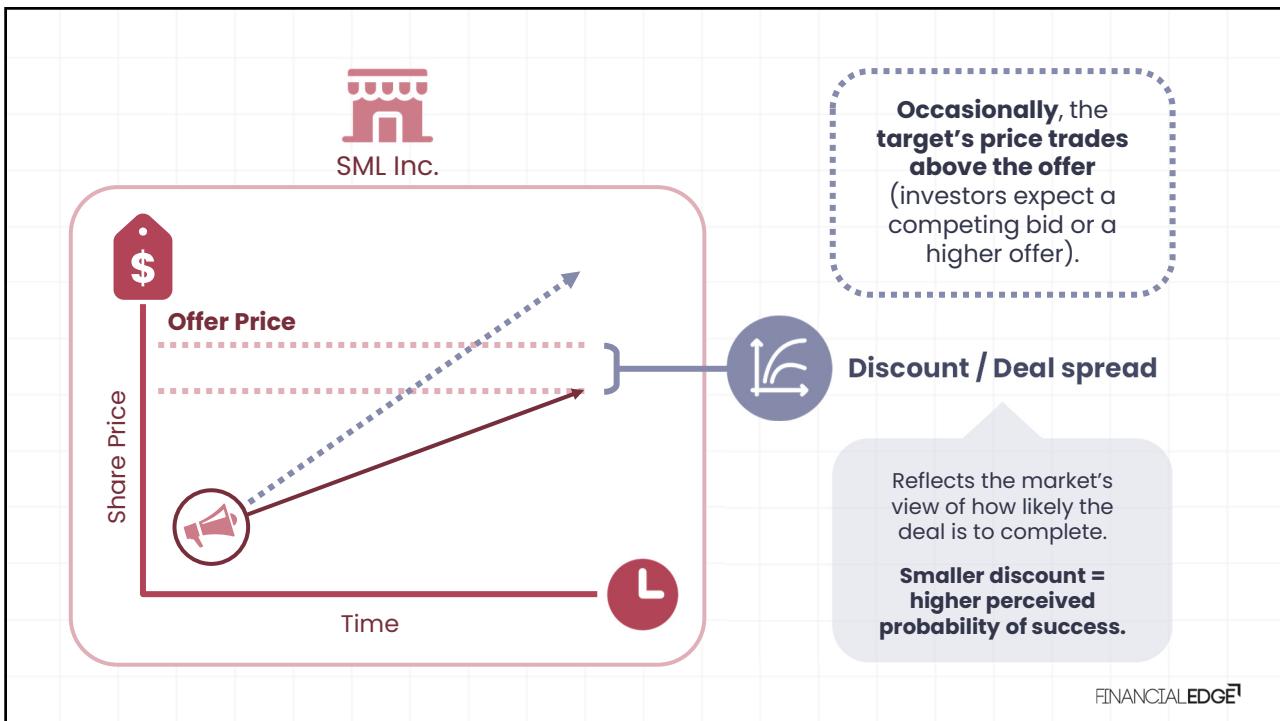
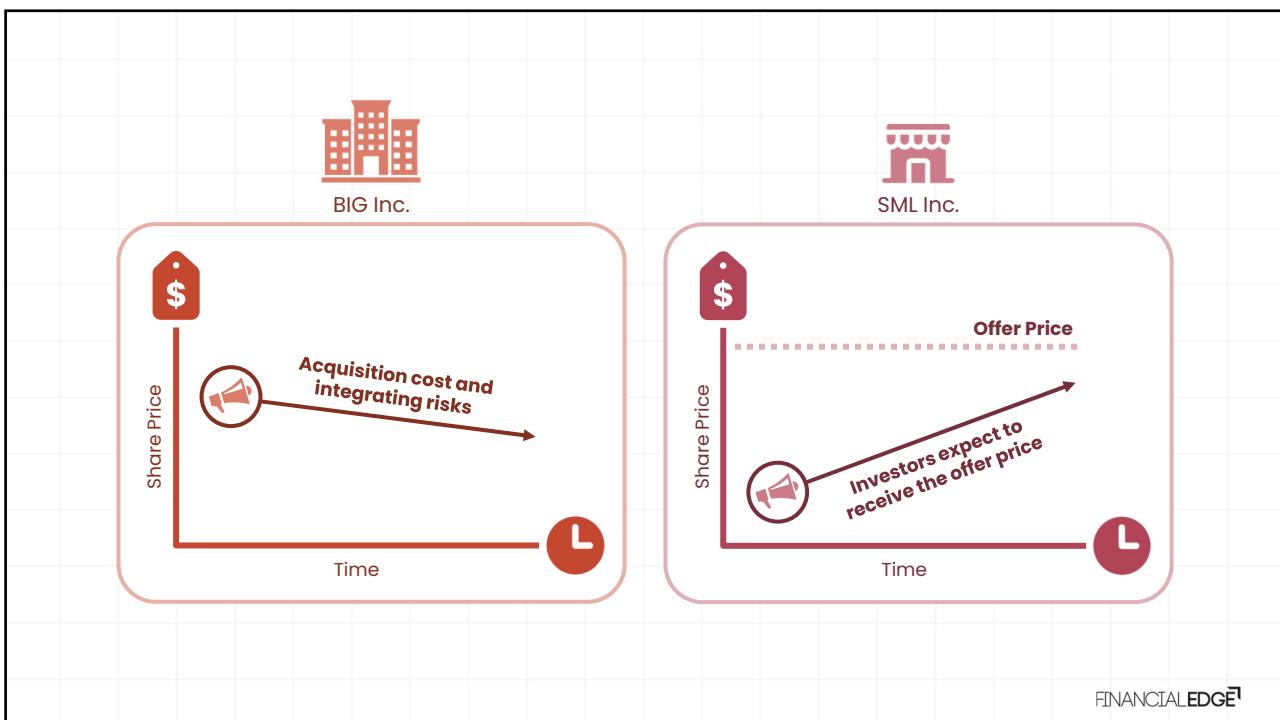


Shareholders  
vote against it



Financing  
falls through





**Arbitrageur**

Aims to:

**Buy after the deal is announced and...**  
...sell at **offer price** once transaction **closes**.

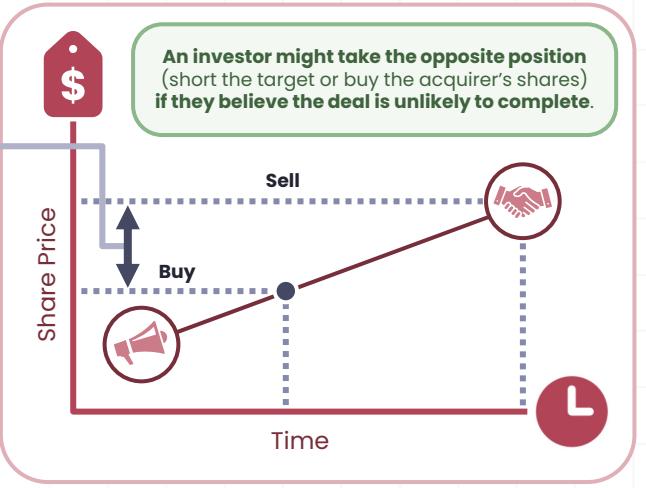
**Expected profit =**  
**Deal price – Today's price**  
(adjusted for time to completion)



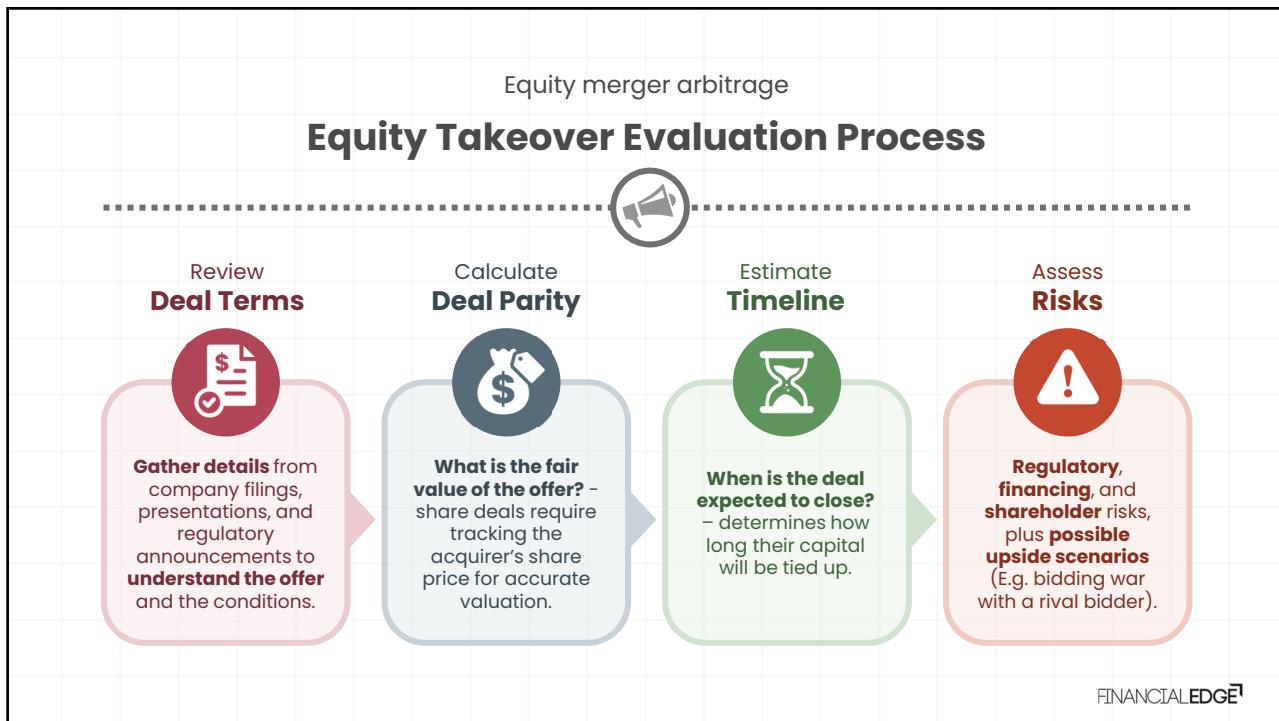
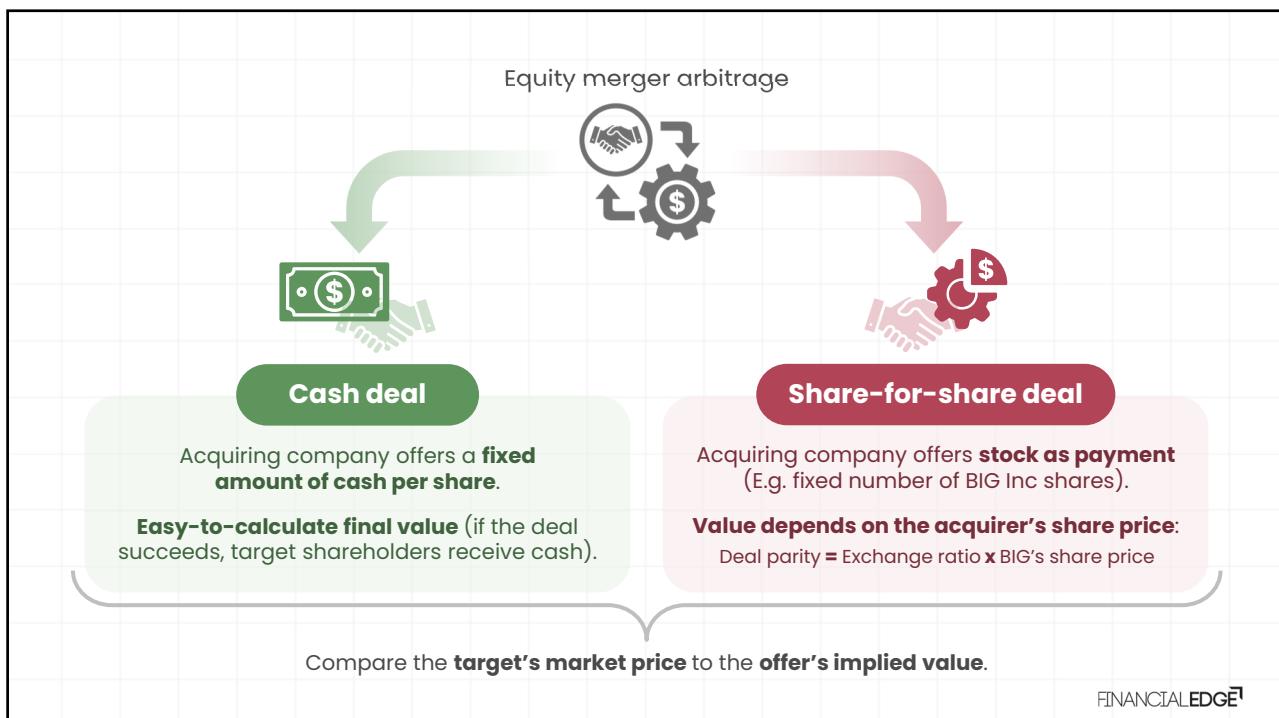
**Expected return** compared to the **risk-free rate** and **other opportunities**.

A wide spread (uncertain) = High potential return  
But also High chance of collapse

**SML Inc.**



## Equity Merger Arbitrage - Cash Deals and Share Deals



## Equity merger arbitrage



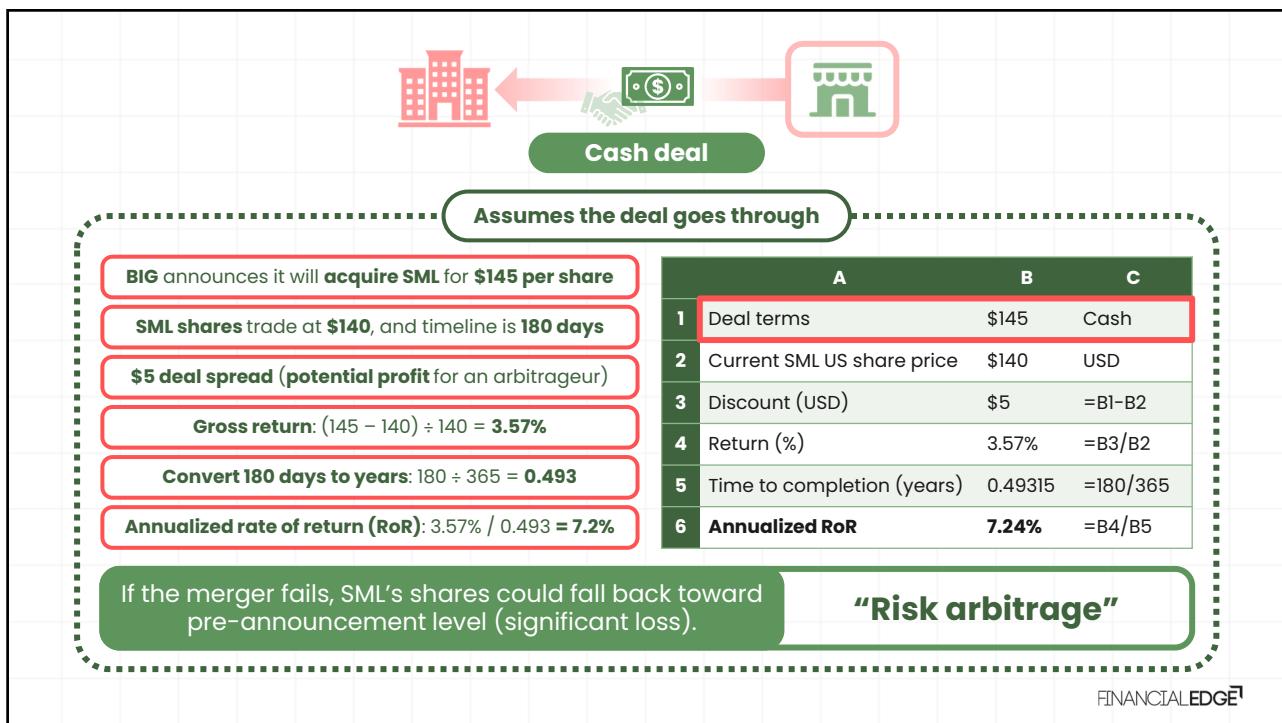
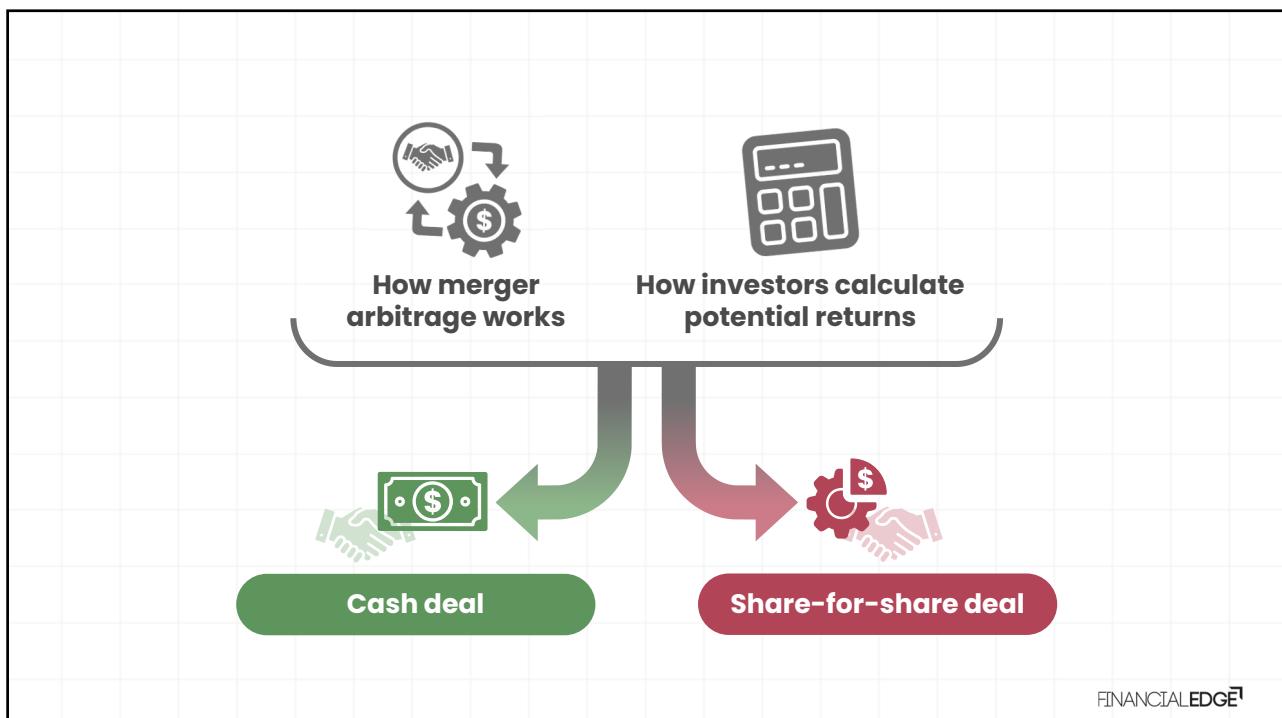
**Managing the risk** that the deal fails or changes.



**Earn the spread** between today's price and the offer value.

**What is the market paying me for taking on this deal risk – and is it enough?**

## Equity Merger Arbitrage – Rate of Return on Cash Deals





**Share-for-share deal**

**BIG offers 0.453 of shares for each of SML's shares**

**BIG current market price: \$320.09**

**Deal parity:  $0.453 \times 320.09 = \$145.0$**

**SML shares trade at \$140**

**Deal spread:  $145 - 140 = \$5$**

**Gross return:  $5 \div 140 = 3.57\%$**

**Annualized rate of return (RoR):  $3.57\% / 0.493 = 7.2\%$**

A	B	C
1 Deal terms	0.453	Shares of BIG US
2 Current BIG US share price	\$320.09	USD
3 <b>Current deal value</b>	<b>\$145.0</b>	$=B1*B2$
4 Current SML US share price	\$140	USD
5 Discount (USD)	\$5.0	$=B3-B4$
6 Return (%)	3.57%	$=B5/B4$
7 Time to completion (years)	0.49315	$=180/365$
8 <b>Annualized RoR</b>	<b>7.24%</b>	$=B6/B7$

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**Share-for-share deal**

A	B	C
1 Deal terms	0.453	Shares of BIG US
2 Current BIG US share price	\$320.09	USD
<b>3 Current deal value</b>	<b>\$145.0</b>	$=B1*B2$
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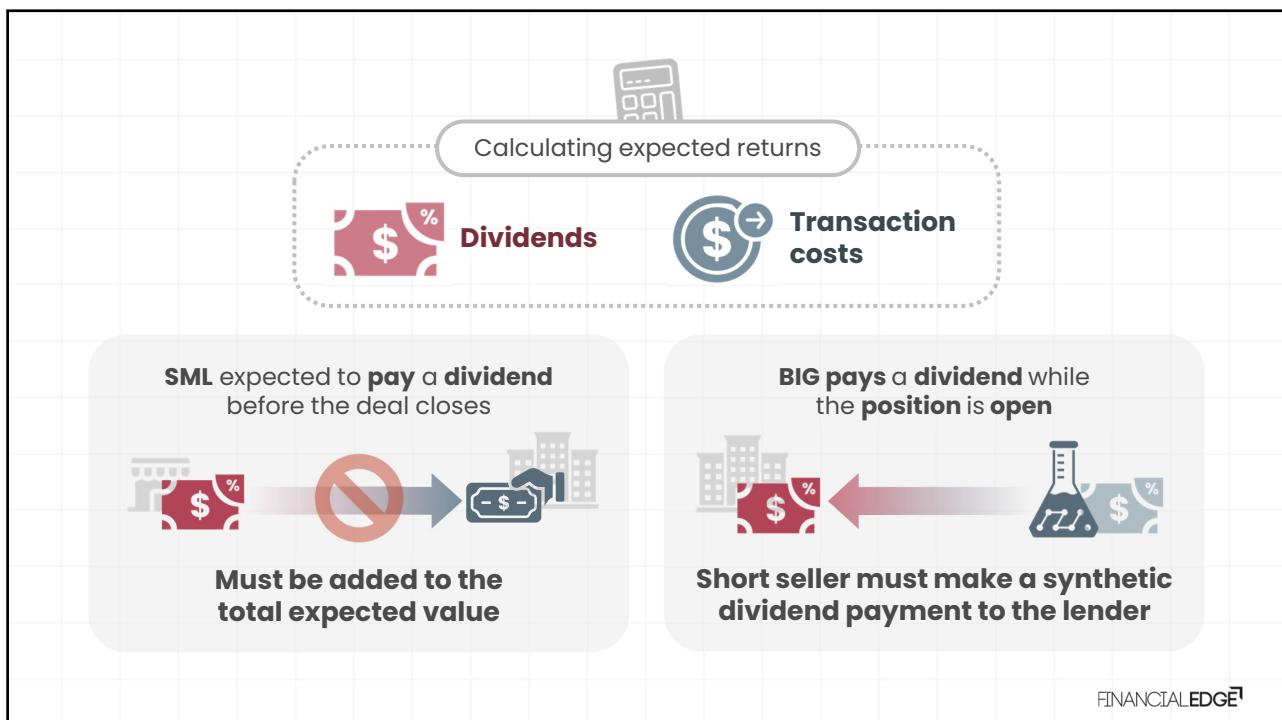
**Offer value depends on BIG's fluctuating share price.**

**Hedge to Lock-in the spread value**

**Market-neutral position**

Buy 100,000 of SML's shares       $100,000 \times 0.453$       Short-sell 45,300 of BIG's shares

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