The Ratio Put Spread

- **Credit or Debit Spread**
- **Undefined Risk**
- **Defined Reward**
- **Mildly Bullish, Mildly Bearish, Neutral**
- **Higher Probability, Lower Reward**

www.sharenavigator.ie

Hippo Financial Trading Ltd Trading as Share Navigator
Company Number 547242

1. The Ratio Put Spread Explained

Welcome to the Put Ratio Spread Option Strategy course. This strategy will suit a trader who is Mildly Bullish, Neutral or Mildly Bearish on a stock or index.

Explained in its simplest terms the Put Ratio Spread is a combination of Put Options which allows you to profit from stocks that you believe will stay above a certain price. This Put Ratio Spread is pretty similar to a Short Put but can offer a better Risk to Reward profile and slightly higher probability of success. It also allows you to profit when the share price falls to a certain price. Hence why the strategy can be considered Mildly Bearish.

The Put Ratio Spread is a High Probability Strategy. The chances of being successful are usually over 80% with the way we (at Share Navigator) trade. But you must remember that the risk is Undefined which means that losses mount as the share price falls below your break even price. That being said, the Put Ratio Spread is one of our preferred 'go to' strategies at Share Navigator when Implied Volatility is High.

Finally, the Put Ratio Spread can be placed as a Debit or a Credit.During this course we are going to show you:

1. How to create a Put Ratio Spread
2. How to calculate Risk and Reward
3. How to create a Profit & Loss table
4. How to find Probabilities of success
5. How to identify your breakeven price
6. When to place the Put Ratio Spread and manage the trade

With every strategy there are pros and cons. During this course we will highlight these to you.

The course consists of video, pdf, quizzes, assignments etc….. It is important that you complete the assignments. The only way to learn about options is 'to do'. You will have access to a 'Demo' account and will be able to practice implementing the strategies learnt. This is important. So practice, practice, practice.

1.1. Short Explainer Video

CLICK HERE to view.

1.2. How to create a Ratio Put Spread

A ratio put spread is made up entirely of put options on the same underlying stock (or index). It's constructed by purchasing one or more puts with one strike price and selling (writing) more puts than purchased with a lower strike price but the same expiration month. The result is a position consisting of long higher-strike puts and short lower-strike puts at a ratio of long to short that's less than 1:1 (1:2, 1:3, 2:3 etc.). It therefore includes naked (uncovered) short put contracts.

Ratio put spread =

buy higher-strike put(s) + sell greater number lower-strike put(s)

1.3. Debit Spread

A ratio put spread may be established for a net debit, a net credit, or even money. This depends entirely on the prices of the options chosen, and the ratio of long contracts to short.

Ratio put spread = debit, credit or even money spread.

1.4. Example

Look at the put option quotes on SPY below for the Jan 20th expiry (6 weeks from today), remember SPY is trading at $225.15.

STRIKE	PUTS			
	DELTA	GAMMA	THETA	BID x ASK
210	-0.101	0.015	-0.025	0.63 x 0.64
211	-0.113	0.017	-0.026	0.70 x 0.72
212	-0.127	0.018	-0.028	0.78 x 0.80
213	-0.142	0.020	-0.029	0.87 x 0.89
214	-0.159	0.023	-0.031	0.98 x 1.00
215	-0.178	0.025	-0.032	1.10 x 1.12

To establish a ratio put spread with SPY options, we might buy 1 Jan 20th $211 put for $0.72, and at the same time sell 2 SPY Jan 20th $210 puts for $0.63. The result is us holding an SPY Jan 20th $211/$210 ratio put spread at a 1:2 ratio for a credit of $0.54 ($0.72 paid vs. 2 x $0.63 received) or $54 total.

1.5. Share Price Outlook

The ratio put spread is a neutral to slightly bearish/bullish strategy. It's generally used when low underlying stock volatility is expected. With our SPY example, we expect SPY to stabilize and close at (or above) the $210 short put strike price at expiration. This spread can take on a slightly bearish characteristic if the short puts' strike price is out-of-the-money when the spread is established.

Ratio Put Spread: neutral to slightly bearish and also can be considered mildly bullish when established at a credit.

Note: If we established this trade as a debit the outlook would be neutral to slightly bearish only. That is why we like establishing a credit because it gives us an opportunity to profit from rising and falling share prices.

1.6. Motivation for Spreading

Since we are neutral on SPY, we expect to profit from the premium received from writing the short put contracts which we believe will expire at-the-money and with no value.

Ratio put spread: profit from premium of written puts

1.7. Maximum Profit

CLICK HERE to watch a video outlining the max profit for the ratio put spread.

The maximum profit for a ratio put spread is limited, and will occur if SPY closes exactly at the short $210 put strike price at expiration. Note, this is a highly improbable event to occur.

Under this circumstance, the long SPY $211 put will be worth its intrinsic value (the difference between the puts' strike prices) and the short SPY $210 puts will expire at-the-money and worthless. The maximum profit amount may be calculated with the following formula:

Maximum profit = (strike price differential x number of long puts) + net credit received (or minus net debit paid)

The maximum profit for the SPY example would occur if the underlying stock (or index) closed exactly at the short put strike price of $210 at expiration. The long $211 put

would have an intrinsic value of $1, and the short $210 puts would expire at-the-money and with no value.
Maximum profit = ($1.00 strike difference x 1 long put) + $0.54 (credit) = $1.54, or $154 total.

This is a major reason why the put ratio spread can be more effective than the short put strategy. Comparing the two strategies below and simply buying the stock of SPY at $225.15, you will see that the max profit potential of the put ratio spread is higher than the short put. The long stock has a better max profit profile as upside profit potential is not capped. But don't make a judgment just yet, there are more comparisons to be done later.

	$211/$210 Put Ratio Spread	Short $210 Put	Buy the shares at $225.15
Max Profit	$154	$63	Unlimited

1.8. Maximum Loss

[CLICK HERE](#) to watch a video outlining the risk of a Ratio Put Spread.
On the downside, since more $210 puts are written than the $211 puts purchased, the potential loss from the extra, uncovered short puts is substantial, limited only by SPY declining to no less than zero. The more uncovered puts, the greater this loss can be.

Downside maximum loss = unlimited

When comparing the put ratio spread versus the short put and buy the stock at $215.15, the downside loss for all strategies is said to be unlimited. But assuming the number of uncovered puts is the same in both option strategies, there will be less risk for the put ratio spread as the break-even price will be lower. This will be illustrated later.

	$211/$210 Put Ratio Spread	Short $210 Put	Buy the shares at $225.15
Max Profit	$154	$63	Unlimited
Max Loss	Unlimited	Unlimited	Unlimited

1.9. Margin & Risk

If you establish a short option position you will be required to margin this position. This means that you must provide funds or securities as a guarantee since a short option position usually entails you assuming an obligation and you must show that you are financially able to do so.

Some short options will be considered covered and will not require any margin. Margin requirements for the more complex option strategies can be difficult to calculate. Fortunately, this task has been automated at most brokerage houses.

The margin for our SPY example was $3,066 to establish the trade. Please note that this margin requirement will rise and fall as the share price moves up or down. Margin can also increase if there is a spike in volatility. This is not a static figure. Margin will also depend on other positions in your portfolio and the size of your portfolio.

A common mistake with amateur option traders is that they use too much margin on trades. This generally leads to margin calls at some point. The key is to trade small and trade often. Be happy to take small profits often.

Note: For people who are beginners to option trading, you should stick with option strategies that carry 'defined' risk. This means that you know exactly what you can lose before you place a trade. An alternative strategy for total beginners would be the bull put spread.

Trading on margin is risky, when you don't understand or know what you are doing. Comparing the margin requirement on the SPY put ratio spread versus buying the SPY stock at $225.15 versus simply selling the $210 put you will notice that there is more risk in buying the stock versus the other two strategies:

	$211/$210 Put Ratio Spread	Short $210 Put	Buy the shares at $225.15
Max Profit	$154	$63	Unlimited
Max Loss	Unlimited	Unlimited	Unlimited
Margin	$3,055	$3,055	$5,628

1.10. Upside Loss/Upside Profit

When we establish the ratio put spread as a **credit**...it gives us two ways of profiting:

1. When the share price stays above the long $211 put strike. For our SPY example that occurs when SPY trades above the long-put option strike of $211. Credit received was $0.54 or $54 total.
2. When the share price of SPY falls to the $210 short strike price = The max profit as outlined above of $154 is achieved.

However, If the spread was initially established at a **net debit**, this debit amount paid would be the limited upside loss. If the spread was initially established for even money, there is no upside profit or loss.

Comparing the put ratio spread to the short put and long stock strategies, the short put strategy in our example would have a slight edge over the put ratio spread. See the matrix below:

	$211/$210 Put Ratio Spread	Short $210 Put	Buy the shares at $225.15
Max Profit	$154	$63	Unlimited
Max Loss	Unlimited	Unlimited	Unlimited
Margin	$3,055	$3,055	$5,628
Likely Profit	$54. We make this profit above $211. And make $154 at $210.	$63. We make this profit above $210.	Unknown. But if shares fell to $210. Loss would be $1,515

1.11. Return on Margin

The best way to try and estimate return on investments for short naked option strategies is to use a 'return on margin' calculation. It is not perfect as margin is not a fixed number but it is the best way to compare strategies.

The return on margin formula is simply:

(Max profit potential/margin) * 100

Looking at our SPY example:

{$154 (Max Profit)/$3,055 (Margin)}*100

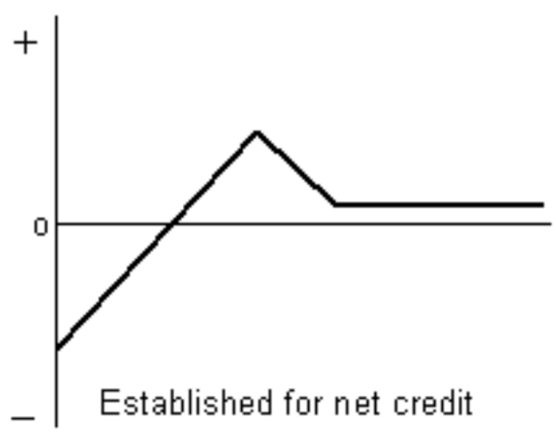
= 5.04%

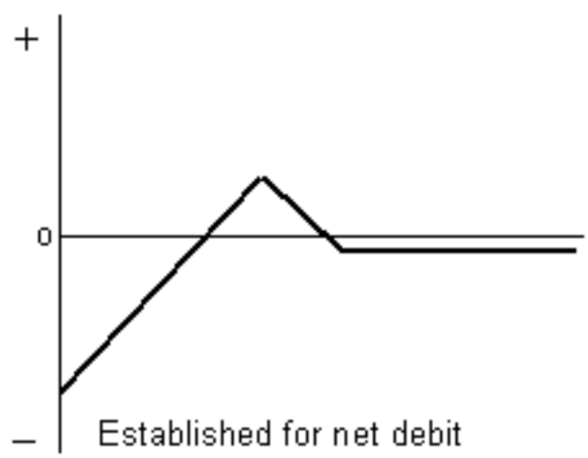
1.12. Break Even Price

[CLICK HERE] to watch a video outlining breakeven price with the Ratio Put Spread.

The break-even price for a ratio put spread at expiration will occur on the downside of the short put strike price. It may be calculated in advance with the following formula:

Break-even price = lower strike price – (maximum profit divided by uncovered puts)





Again, look at the charts above, you will notice that when a ratio put spread is established at a net debit that the profit opportunities are limited whereas there are more profit opportunities when established as a credit. Also, when established for a debit there are two break-even prices.

At expiration, the break-even price for the SPY Jan 20th $211/$210 put ratio spread would be a closing underlying price equal to $210 (lower strike price) – ($1.54 maximum profit divided by 1 uncovered put) = $208.46

$210 lower strike – ($1.54 maximum profit divided by 1 uncovered put)

= $208.46

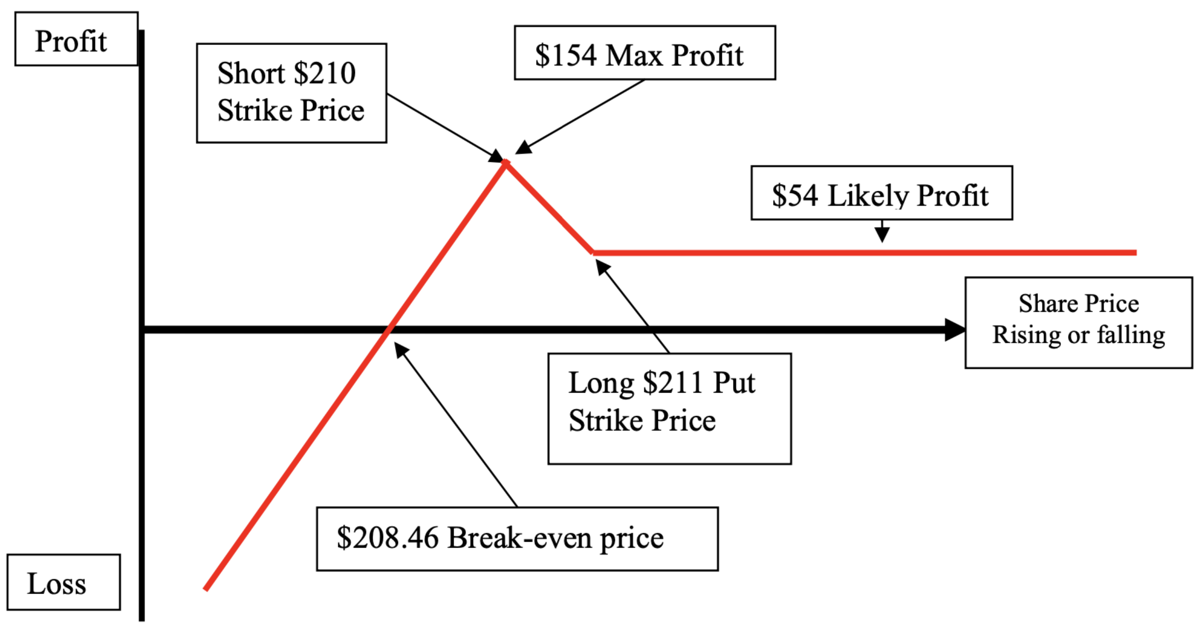


Figure 11: Profit and Loss Dynamics for the SPY $211/$210 Ratio Put Spread

1.13. Downside Leeway & Probability

CLICK HERE to watch a video outlining the probability of profit.

When you buy a stock the only way you can profit is when the share price rises or when you get paid a dividend. Another major advantage of the put ratio spread strategy is the downside leeway it gives you. The share price of SPY could fall by a certain amount and we would still make a profit.

Remember in our SPY example. The share price of SPY was $225.15 when we placed the $211/$210 put ratio spread. The breakeven on the trade was $208.46. This means that the share price of SPY could fall $16.69 ($225.15-$208.46) before we make a loss at expiration. This is the equivalent of a 7.4% fall in the value of the SPY share price.

We call this the 'downside leeway'.

Now let's consider our chances of winning. Which is more likely, SPY to close above $208.46 or SPY to close above $225.15? Obviously, SPY has a much better chance of closing above $208.46.

Most online brokers will tell you the probability of profit on every option trade you place. The probability with the SPY example was 97%. Does this mean we are guaranteed to make profit? No, but it means that you have much better odds.

In fact, when you buy a share you only have a 50/50 chance of profit, the short put strategy also has high chances of profit at 95%, but the put ratio spread has the best chance of all.

1.14. Profit & Loss Before Expiration

Before expiration, an investor can take a profit or cut a loss by closing out the spread. This involves selling the long put(s) and buying the short put(s), and these closing trades may be executed simultaneously in one spread transaction. Profit or loss would simply be the net difference between the debit initially paid (or credit received) for the spread and the credit received (or debit paid) at its closing.

1.15. Profit and Loss Table

CLICK HERE to watch a video showing you how to do P&L tables for the Ratio Put spread. It is important for you to get into the habit of creating profit and loss tables. Here is an example of a P&L table for the SPY Jan 20th $211/$210 Put Ratio Spread. Remember for the spread:

SPY Price	Long 1 $211 Put Value at expiry	Short 2 $210 Puts Value at expiry	Credit received for Spread	Spread Profit/Loss
$202	+ $900	– $1,600	+ $54	-$646
$203	+ $800	– $1,400	+ $54	-$546
$204	+ $700	– $1,200	+ $54	-$446
$205	+ $600	– $1,000	+ $54	-$346
$206	+ $500	– $800	+ $54	-$246
$207	+ $400	– $600	+ $54	-$146
$208	+ $300	– $400	+ $54	-$46
$209	+ $200	– $200	+ $54	+ $54
$210	+ $100	0	+ $54	+ $154
$211	0	0	+ $54	+ $54
$212	0	0	+ $54	+ $54

1.16. Impact of Volatility

A decrease in volatility generally has a positive effect on a ratio put spread; an increase in volatility generally has a negative effect.

1.17. Impact of Time Decay (Theta)

Time decay generally has a positive effect on a ratio put spread because there are more short puts than long ones. This is especially the case if the underlying stock (or index) stabilizes around the short strike price as expected.

STRIKE	PUTS DELTA	GAMMA	THETA	BID x ASK
210	-0.101	0.015	-0.025	0.63 x 0.64
211	-0.113	0.017	-0.026	0.70 x 0.72
212	-0.127	0.018	-0.028	0.78 x 0.80
213	-0.142	0.020	-0.029	0.87 x 0.89
214	-0.159	0.023	-0.031	0.98 x 1.00
215	-0.178	0.025	-0.032	1.10 x 1.12

Looking at the SPY Jan 20th $211/$210 put ratio spread, we have two positions to consider.

- First, we bought the $211 put. The theta value is -0.026.
- Second, we sold 2 contracts of the $210 Put. The theta value is -0.025.
- Because we sold two theta value changes to positive +0.050. Therefore, the net theta for the entire trade is +0.024 (0.05-0.025).

This means that the time value of the SPY Jan 20th $211/$210 put ratio spread will erode by $0.024 per share or $2.40 total per day. Now theta is working to our advantage as the value of the put options continues to decay as time passes.

CLICK HERE to watch a video on the impact of Theta on the Ratio Put Spread.

1.18. Impact of Delta

Delta is the rate of change in the value of an option for a $1 move in the underlying share price.

STRIKE	PUTS			
	DELTA	GAMMA	THETA	BID x ASK
210	-0.101	0.015	-0.025	0.63 x 0.64
211	-0.113	0.017	-0.026	0.70 x 0.72
212	-0.127	0.018	-0.028	0.78 x 0.80
213	-0.142	0.020	-0.029	0.87 x 0.89
214	-0.159	0.023	-0.031	0.98 x 1.00
215	-0.178	0.025	-0.032	1.10 x 1.12

In our example with the SPY Jan 20th $211/$210 put ratio spread, we have two positions to think about.

- First, we are long 1 contract of the $211 put with a delta of -0.113.
- Second, we sold 2 contracts of the $210 put with a delta -0.101. Because we sold 2 contracts of the $210 put the delta changes to positive +0.202.
- The net delta for the SPY Jan 20th $211/$210 ratio put spread is +0.089 (0.202-0.113).
- This means that the value of the SPY Jan 20th $211/$210 put ratio spread will go up by $0.089 per share or $8.90 total for a $1 rise in SPY and vice versa.

We can also consider delta as the same as owning 8.9 shares of SPY. Think about it...if SPY rose by $1 and we owned 8.9 shares we would make a profit of $8.90. The exact same as the SPY put ratio spread.

A couple of things to know about delta:

1. Positive delta is a bullish bias
2. Negative delta is a bearish bias
3. You should always consider the overall delta position in your portfolio – we like to be option sellers and keep our overall portfolio delta as neutral as possible. In this way we do not get too upset in moves in the market up or down. As a general rule of thumb we like to keep our deltas below plus or minus 1% of the value of our portfolio.

CLICK HERE to watch a video showing the impact of Delta on the Ratio Put Spread.

1.19. Assignment Risk

Assignment on any Equity option or American-style index option can, by contract terms, occur at any time before expiration, although this generally occurs when the option is in-the-money.

1.20. Equity Options

For an equity put option, early assignment generally occurs when the short put is deep in-the-money, expiration is relatively near, and its premium has little or no time value. If a ratio put spread holder is assigned early on short puts, then he may exercise as many long puts and to sell shares purchased via the assignment obligation. If assigned on uncovered puts (i.e., more short puts than he is long) then he must purchase underlying shares.

1.21. American-Style Index Options

If early assignment is received on covered short puts of a ratio put spread, the cash settlement procedure for index options will create a debit in the investor's brokerage account equal to the cash settlement amount. This cash amount is determined at the end of the day the long put is exercised by its owner. After receiving assignment notification, usually the next business day, when the investor exercises an equal number of long puts the cash settlement amount credited to his account will be determined at the end of that day. There is a full day's market risk if the long option is not sold during the trading day assignment is received.

If assigned on uncovered short puts (i.e., more short puts than he is long), the cash settlement procedure will create a debit in the investor's brokerage account equal to the total cash settlement amount.

1.22. Powerpoint Video

CLICK HERE to view

1.23. Ratio Put Vs Short Put

CLICK HERE to watch a video outlining the pros and cons of each strategy.

1.24. Ratio Put Spread: Actions to take at expiry

The action you take at expiry will depend on where the share price is trading at:

1. **If the share price is above the long put strike price:** Both put options will be out-the-money and worthless. The position will disappear on the next trading day. Simply enjoy the profits (if you placed the trade as a credit!). If you place it as a debit you will lose the debit paid.
2. **If the share price is below the short puts strike price:** Both the long and the short puts will be in-the-money and you may have a loss or a profit depending on where the share price is trading. If you do nothing you will end up buying the number of shares from the uncovered short puts. You have can do either of the following:
    a. Let the entire position expire. The long put will partially cover the short put position. But you will take assignment of the shares from the uncovered put(s). You can then sell the shares later to close the long stock position. You would only do this if you were bullish on the stock.
    b. Roll out the uncovered put for another month and generate more credit. The long put will offset the remaining puts. You will be left with a short put position for the new expiry. You would only do this if you were bullish on the stock.
    c. Roll out the entire trade and generate more credit. Again, you would only do this if you were bullish on the stock.
    d. Close-down the uncovered put.The long put will offset the remaining put. You will take the profit or loss on the entire trade depending on where the share price is trading.
3. **The share price is between both strikes:** This is a great position to be in as value is gaining on the long put side of the trade also. You have can do the following:
    a. The short put(s) option will be out-the-money and has no value. But the long put option does have value. You can simply close the long put. This is a bonus for you in this trade if you placed it as a credit.
    b. Let the trade expire. The short puts will expire worthless but you will be short the number of shares from the long put position that you have. Your broker will automatically sell the shares from the long put. The risk here is that if after expiry Friday the share price gaps up above the price you 'shorted' them at, the short stock position will be in a loss position. We don't like taking this chance.

c. Close the entire trade together. This is not something we like to do as you are paying more trading commissions to close-down the short puts which are set to expire worthless.
d. Rollout the entire trade for a net credit again.

1.25. Ratio Put Spread: Our View

With every option strategy, there are pros and cons. However, this is one of our favorite strategies for trading indexes. We love the fact that you have two ways to profit when you place the trade as a credit. Sometimes people say that it is the same as placing a 'short put', but the risk profile changes when placed as a ratio put spread and it is less risky than being short a put.

The downside is that you are not taking in as much credit as you do with the short put. Novice investors or investors with small trading accounts should stick with the bull put spread strategy.

2. Placing and Managing a Ratio Put Spread

2.1. How to place a Ratio Put Spread

CLICK HERE to view.

2.2. How to manage a Ratio Put Spread

CLICK HERE.

2.3. Rolling out a Ratio Put Spread

CLICK HERE

2.4. Closing down the trade

CLICK HERE

2.5. Test Your Knowledge 1

CLICK HERE to take the quiz

2.6. Test your knowledge 2

At this stage it is best if you start practicing for real so this is what we want you to do:

1. Pick any option able stock that you have a mildly bearish/bullish outlook
2. Place a Ratio Put Spread 1:2 at a credit
3. Do a profit & Loss table
4. Place the trade in a 'Simulated' or 'Demo' account with an online broker
5. Identify your breakeven
6. Identify your Max Loss
7. Identify your Max Profit
8. Share your insights on our daily members web meetings

2.7. Please leave a Review on Google

CLICK HERE to leave a review of this course on Google. We would love to get your feedback. Thank you.

3. Mentoring Service

Embark on a streamlined journey to financial proficiency with our Stock and Options Mentoring Service. Elevate your learning curve by enlisting a **personal** mentor who will guide you through the intricacies of stock and options trading. Our comprehensive program offers:

- Weekly one-on-one mentoring sessions, ensuring personalized attention and targeted skill development.
- Gain a competitive edge with daily live market updates
- Exclusive access to curated stock watchlists
- Insights into our meticulously crafted options and futures trades.
- Save valuable time, effort, and money as you fast-track your education with our dedicated support system.

With daily assistance and a wealth of resources at your fingertips, you'll not only navigate the markets more confidently but also accelerate your journey toward financial success.

Join us in unlocking the full potential of your trading endeavors.

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