
Fixed Return Optionss

FROs

A Comparison of Hedging
Stock with Long Finish Low
FROs and Standard Listed
Options



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Finish Low FRO

- At expiration, the holder of a Finish Low FRO will automatically receive \$100.00 per contract if the Finish Low FRO finishes in-the-money.
- For a Finish Low FRO to be in-the-money, the expiration Friday Amex FRO Settlement Index^(SM) must be below the strike price. For example, if the all day expiration Friday Amex FRO Settlement Index^(SM) were \$24.99 or lower, the \$25.00 strike price Finish Low FRO would be in-the-money.

Long Puts

- In order to realize any profit at expiration, the holder of a long put must either sell or exercise the long position.
- For a put to be in the money, the closing price of the underlying security must be below the strike price. For example, if the closing price of the underlying security were \$24.99 or lower, the \$25.00 strike price put would be in-the-money.
- American style, physical settlement.

Short Covered Calls

- Selling calls short against a long stock position (covered writing) will provide a measure of downside protection equal to the premium received for the sale.
- Covered writing carries the obligation to sell the underlying security at the strike price until expiration; therefore, the covered writer gives up any stock appreciation above the strike price.
- For a call to be in-the-money the closing price of the underlying security must be above the strike price. For example, if the closing price of the underlying security was \$25.01 or higher, the \$25.00 strike price call would be in-the-money.



Maximum Profit, Loss and Breakeven

Long Finish Low FRO

- Maximum Loss (cost of the hedge) is equal to the total purchase price.
- Maximum value of \$100.00 is achieved when the Amex FRO Settlement Index^(SM) is below breakeven at expiration.
- Breakeven = strike price - \$0.01.
- European style, cash settled, automatically exercised when the expiration Friday Amex FRO Settlement Index^(SM) is below the Finish Low FRO strike price.

Long Put

- Maximum Loss (cost of the hedge) is equal to the total purchase price.
- Maximum profit is equal to the strike price less the premium paid.
- Breakeven = strike price – the premium paid.
- Must be either sold or exercised on expiration Friday to realize any profit or hedge benefit.
- American style, can be exercised at any time during the life of the option.

Short Covered Call

- Maximum hedge is equal to the premium received.
- Maximum profit if exercised is equal to the strike price plus the premium received paid less the original stock purchase price.
- Breakeven = strike price – the premium paid.
- Must be either bought back or expire worthless on expiration Friday to realize any hedge benefit.
- American style, can be assigned at any time during the life of the option.

The table below illustrates the maximum profit, loss and the breakeven point for the Finish Low FRO, the long put and the short covered call.



	Long Finish Low FRO	Long Put	Short Covered Call
Maximum Profit	\$100 - the premium paid	The strike price - the premium paid	The premium received if unexercised. If exercised than the strike price + the premium received - the original cost of the stock
Maximum Loss	Purchase price	Purchase price	The original cost of the stock - the premium received
Breakeven	The strike price - \$0.01	The strike price - the premium paid	The original cost of the stock - the premium received

Hedge Example

- XYZ is trading at \$85.00.
- You are long 500 shares @ \$80.00.
- The \$85.00 strike price Finish Low FRO is trading at \$0.31.
- The \$85.00 strike price standard listed put is trading at \$0.75.
- The \$85.00 strike price standard listed call is trading at \$2.90.
- You want to hedge down to \$75.00.

Determining the Finish High FRO Quantity Needed

In order to determine how many Finish Low FROs to buy for hedging you will need to do the following:

1. Subtract the level of hedge desired from the original price of the underlying. This yield the level of protection.
 - a. \$80.00 (original price of the underlying) - \$75.00 (level of hedge desired) = \$5.00.
2. Multiply the level of protection by number of shares owned. This yields the total dollars of hedge desired.
 - a. \$5.00 (level of protection) x 500 (number of shares) = \$2500.00.
3. Subtract the per contract cost of the Finish Low FRO from \$100.00 (long Finish Low FRO in-the-money maximum value). This yields the total per contract profit potential.



- a. $\$100.00$ (long Finish Low FRO in-the-money maximum value)
 $-\$31.00$ (cost of long Finish Low FRO ($\$0.31 \times 100$)) = $\$69.00$
(maximum per contract profit potential).
4. Divide the total hedge desired by maximum profit potential of the long Finish Low FRO. This yields the number of FROs needed.
 - a. $\$2500.00$ (total hedge desired) / $\$69.00$ (maximum per contract profit potential of the long Finish Low FRO) = 37 FROs needed.

Three Hedge Choices

1. Buy 37 of the $\$85.00$ strike price Finish Low FROs for $\$0.31$ for a total cost of $\$1,147.00$ ($\$0.31 \times 37 \times 100$).
2. Buy 5 of the $\$85.00$ strike price standard listed puts for $\$0.75$ for a total cost of $\$375.00$ ($\$0.75 \times 5 \times 100$).
3. Sell 5 of the $\$85.00$ standard listed calls for $\$1,450.00$ ($\$2.90 \times 5 \times 100$).

Buying the Finish Low FRO or the standard listed put option will require additional capital and will raise the breakeven point. Since the Finish Low FRO has a maximum value of $\$3,700.00$ ($37 \times \$100.00$) and therefore a maximum gain of $\$2,553.00$ ($\$3,700.00 - \$1,147.00$) it offers only $\$5.00$ ($\$2,553.00 / 500$) per share worth of protection. The long standard listed put has a maximum gain (protection) of $\$42,125.00$ ($(\$85.00 - \$0.75) \times 500$) and offers the purest form of hedge. If the underlying equity should fall to $\$0.00$ the put would be worth $\$42,125.00$. The sale of the standard listed call would bring in $\$1,450.00$. No additional capital is necessary. However, this short call carries an obligation to sell the underlying stock at the strike price. The seller gives up appreciation above $\$85.00$ and now has a maximum profit of $\$3,950.00$ ($(\$85.00 + \$2.90) - (\$80.00 \times 500)$).

The Finish Low FRO is cash settled and will be automatically exercised if it is in-the-money at expiration. The standard listed options may require action at expiration, which may carry additional transaction costs. In order to realize the hedge benefit the listed put must either be sold or exercised at expiration. The listed call will realize its maximum hedge value if the underlying stays below the strike price and the short call expires worthless. If the underlying rises above the strike and the call finishes in-the-money the writer either will be forced to sell the underlying via assignment or will have to buy back the short call to end the possibility of assignment.



\$85.00 Strike Price

	AFSI* / Closing Price @ Expiration	Long 500 Shares P & (L) (\$40,000.00)	Hedge Type	Hedge P & (L)	NET P & (L)	
1		(\$2,555.00)	Long 37 FROs	\$2,553.00	(\$2.00)	1
2	\$74.89	(\$2,555.00)	Long 5 Puts	\$4,680.00	\$2,125.00	2
3		(\$2,555.00)	Short 5 Calls	\$1,450.00	(\$1,105.00)	3
4		(\$1,450.00)	Long 37 FROs	\$2,553.00	\$1,103.00	4
5	\$77.10	(\$1,450.00)	Long 5 Puts	\$3,575.00	\$2,125.00	5
6		(\$1,450.00)	Short 5 Calls	\$1,450.00	\$0.00	6
7		(\$430.00)	Long 37 FROs	\$2,553.00	\$2,123.00	7
8	\$79.14	(\$430.00)	Long 5 Puts	\$2,555.00	\$2,125.00	8
9		(\$430.00)	Short 5 Calls	\$1,450.00	\$1,020.00	9
10		\$0.00	Long 37 FROs	\$2,553.00	\$2,553.00	10
11	\$80.00	\$0.00	Long 5 Puts	\$2,125.00	\$2,125.00	11
12		\$0.00	Short 5 Calls	\$1,450.00	\$1,450.00	12
13		\$2,125.00	Long 37 FROs	\$2,553.00	\$4,678.00	13
14	\$84.25	\$2,125.00	Long 5 Puts	\$0.00	\$2,125.00	14
15		\$2,125.00	Short 5 Calls	\$1,450.00	\$3,575.00	15
16		\$2,495.00	Long 37 FROs	\$2,553.00	\$5,048.00	16
17	\$84.99	\$2,495.00	Long 5 Puts	(\$370.00)	\$2,125.00	17
18		\$2,495.00	Short 5 Calls	\$1,450.00	\$3,945.00	18
19		\$2,750.00	Long 37 FROs	(\$1,147.00)	\$1,603.00	19
20	\$85.50	\$2,750.00	Long 5 Puts	(\$375.00)	\$2,375.00	20
21		\$2,750.00	Short 5 Calls	\$1,200.00	\$3,950.00	21
22		\$3,950.00	Long 37 FROs	(\$1,147.00)	\$2,803.00	22
23	\$87.90	\$3,950.00	Long 5 Puts	(\$375.00)	\$3,575.00	23
24		\$3,950.00	Short 5 Calls	\$0.00	\$3,950.00	24
25		\$5,000.00	Long 37 FROs	(\$1,147.00)	\$3,853.00	25
26	\$90.00	\$5,000.00	Long 5 Puts	(\$375.00)	\$4,625.00	26
27		\$5,000.00	Short 5 Calls	(\$1,050.00)	\$3,950.00	27

*Amex FRO Settlement Index^(SM)

The table above illustrates the value of different hedges at different Amex FRO Settlement Index^(SM) prices or closing prices. Remember that the Amex FRO Settlement Index^(SM) and closing price will most likely differ.

Notice that the Finish Low FRO outperforms the standard listed options from \$84.99 (line #16) to \$79.14. The maximum value of the FRO is achieved at \$84.99.

The long standard listed put option begins to be profitable below \$84.25 (line #14) and even though the put has no value at \$84.25, the maximum hedge is realized and the net profit of \$2,125.00 remains even as the



underlying continues to drop (lines 11, 8, 5 and 2). The profit on the long put offsets the loss on the underlying. The short standard call option outperforms the Finish Low FRO and the standard list put above \$85.00 (line #21). However, as you see the covered call has a maximum profit potential of \$3,950.00 (Lines 24 and 27). The short call losses value as the underlying increases offsetting any gains in the underlying.

Summary

At expiration, hedging stock positions with standard listed put option may require the investor to take action. At expiration, the holder of a long in-the-money put will either sell the long standard listed put option or exercise it and sell the underlying stock. These additional trades will carry additional transaction costs that will reduce the hedge or add to the loss incurred with original trade. Since Finish Low FROs are cash settled no additional transactions are necessary. If a Finish Low FRO closes in-the-money at expiration, the holder would automatically receive \$100.00 per contract. The Finish Low FRO will allow the investor to hedge risk based on a dollar amount and will probably not offer as pure a hedge as a standard listed put would. However, since the breakeven point for the Finish Low FRO is the strike price less \$0.01, the Finish Low FRO will reach breakeven more quickly than a standard listed put option and will yield greater protection close to the strike price. Short call options offer a limited amount of protection and limit profit potential.



For the sake of simplicity, the examples shown do not take into consideration commissions and other transaction fees, tax considerations, or margin requirements, which are factors that may significantly affect the economic consequences of a given strategy. An investor should review transaction costs, margin requirements and tax considerations with a broker and tax advisor before entering into any options strategy.

Fixed Return Options (FROs) involve risk and are not suitable for everyone. Prior to buying or selling a FRO, a person must receive a copy of *Characteristics and Risks of Standardized Options*. Copies may be obtained from your broker, one of the options exchanges or The Options Clearing Corporation, One North Wacker Drive, Suite 500, Chicago, IL 60606 or call 1-888-OPTIONS or visit www.888options.com.

FROs exercise and assignment is based on an all day expiration day Amex FRO Settlement Index^(SM) so it is possible for the standard listed options to be in-the-money at expiration and the FROs to be out-of-the-money or for the FROs to be in-the-money and the standard listed options to be out-of-the-money. An investor must understand FROs settlement before entering into any FROs transaction.

Any strategies discussed, including examples using actual securities and price data, are strictly for illustrative and education purposes and are not to be construed as an endorsement, recommendation or solicitation to buy or sell securities. Supporting documentation will be supplied upon written request.

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