



Advanced Options Strategies: Synthetic Long and Short Stock Positions



Options
Strategies

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What is a synthetic stock position?

Synthetic long and short stock positions offer traders alternative methods to achieve stock-like exposure using options contracts. They can provide capital efficiency and flexibility while maintaining similar risk-reward profiles to traditional stock positions.

Benefits of trading synthetic long and short stock positions

Synthetic stock positions offer several compelling advantages for sophisticated options traders.

1 Capital efficiency

Often requires less initial capital than equivalent stock positions, as option premiums partially offset each other.

2 Cost management

Avoids fees related to hard-to-borrow stocks and the uptick rule restrictions associated with short selling.

- 3 Leverage**
Offers the potential for higher returns relative to capital deployed, though this also increases risk.
- 4 Trading flexibility**
Provides short exposure in accounts that prohibit direct short selling, like IRAs.

Understanding the risks of synthetic positions

While synthetic long and short stock positions offer attractive benefits, they come with specific risks that traders must understand and manage.

- 1 Unlimited loss potential**
Both synthetic long and short positions can generate unlimited losses if markets move adversely. Stop losses should be used to mitigate this risk.
- 2 Assignment risk**
The short option in the spread can be assigned any time before expiration, particularly with American-style options. If the short option goes in the money, you might face early assignment, especially if there's an upcoming dividend payment.
- 3 Impact of early assignment**
Early assignment can disrupt the spread's intended risk profile and create unexpected margin requirements or stock positions. Managing an assignment requires quick action and can result in additional transaction costs. Traders should monitor their positions closely when short options become in the money and consider closing or rolling the spread to avoid assignment.
- 4 Time decay risk**
Time decay presents another challenge, particularly affecting the long options in the position. As expiration approaches, the rate of time decay accelerates, potentially eroding the value of the long options faster than the benefit received from the short option. This time decay risk makes position timing and management crucial for success.

Types of synthetic stock positions

Synthetic long stock

A synthetic long stock position can be used instead of buying stock when expecting an upward price movement in the underlying.

a. Structure

- Buy one near or at-the-money call option.
- Sell a put option with the same strike price and expiration.

b. Profit and risk

- This combination creates a position that mimics owning stock, with the position gaining value as the stock price rises and losing value as it falls.
- When the stock price moves above the strike price, the call option gains value while the short put loses less.
- Below the strike price, the short put loses value while the long call's losses are limited.
- **Maximum profit:** Unlimited on upward price movement.
- **Maximum risk:** Limited from the put's strike price to zero plus the premium paid for the call option.

c. Breakeven prices

- **Debit position breakeven:** Strike price of the long call plus the premium paid.
- **Credit position breakeven:** Strike price of the long call minus the premium collected.

Trade example: Synthetic long stock position

Xcel Energy (XEL) appeared in the RadarScreen® filter on the Synthetic Long workspace. The stock is in a weekly uptrend and has retraced to a demand area where the price is expected to bounce.



Watch the Webinar – “Synthetic Strategies: Alternative Approaches to Directional Trading”. Discover capital-efficient alternative methods to achieve stock-like exposure using options contracts.

	Symbol ▲	Description	Last	Open Int - All Opts	IV Range... IV Range%	Impl Volty- All Opts IV All	IV Avg	MACD MACD	MACDAvg
1	NASDAQ 100 Index								
2	ADSK	Autodesk, Inc	309.49	70,465	10.85	26.49%	33.82%	2.88	3.41
3	ANSS	Ansys Inc	343.08	17,977	17.16	24.48%	30.29%	2.47	4.11
4	BKNG	Booking Hldgs Inc	5,258.79	64,313	6.23	24.77%	27.73%	135.48	157.67
5	CHTR(HB	Charter Communications I	389.63	63,637	16.87	31.05%	31.14%	4.64	7.92
6	CPRT	Copart Inc	62.13	60,866	9.56	21.73%	25.24%	1.80	2.02
7	CRWD	CrowdStrike Holdings Inc	364.64	470,704	9.98	37.86%	46.68%	9.47	10.83
8	CSGP	Costar Grp	78.22	37,486	18.84	30.21%	31.58%	0.58	0.82
9	CTSH	Cognizant Tech Solutions'	80.75	91,171	18.87	21.27%	21.61%	0.78	0.83
10	MDB	MongoDB Inc	289.20	291,045	13.69	48.14%	71.02%	5.75	11.00
11	PANW	Palo Alto Networks Inc	400.39	411,260	10.16	30.82%	36.69%	5.45	6.03
12	PCAR	PACCAR Inc	113.18	34,194	15.32	23.34%	23.80%	1.46	2.06
13	XEL	Xcel Energy	68.75	21,906	5.37	16.13%	17.20%	0.52	1.08
14	ZS	Zscaler Inc	206.01	216,802	9.29	36.41%	48.22%	3.01	3.90
15									

If we buy 100 shares of the stock at \$68.75, the cost would be \$6,875, not including commissions and fees.

Order Confirmation

Would you like to place the following order(s)?

Buy 100 XEL @ 68.7500 Limit

Order Details

Account: SIM1097305M
 Duration: Day
 Route: Intelligent

Symbol Snapshot

Xcel Energy (XEL) - NASDAQ
 Last: \$68.76 x 405 (TRF)
 Bid: \$68.75 x 400
 Ask: \$68.76 x 300
 As of: 12/12/2024 3:39:42 PM

Estimated Cost of Trade: \$6,875.00
Estimated Commission: \$1.00

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Synthetic long stock

We will build the options position using the 21 March 2025 options with 99 days until expiration to minimize time decay. The current price is between two strikes, so we have a choice to make when creating the position.

First, we can buy the 65 call for \$5.20 and sell the 65 put for \$1.15. The resulting synthetic long has a cost of \$4.05.

The screenshot shows the TradeStation OptionsStation Pro interface. At the top, the stock symbol is XEL (Xcel Energy) with a last price of 68.78 and a net change of 0.42. The main table displays options for XEL, categorized into CALLS and PUTS. The selected trade is a synthetic long stock position consisting of buying a 65 call for 5.20 and selling a 65 put for 1.15, resulting in a net debit of 4.05. The interface also shows a 'Trade' section with a 'Place Order' button and various order parameters like Limit Price (4.05), Stop Price (3.88), and Route (Intelligent).

CALLS														PUTS			
Pos	Theo Val...	Vega	Theta	Delta	Bid	Ask	Strike	Bid	Ask	Delta	Theta	Vega	Theo Val...	Pos			
17 Jan 25 (36d)	24.29	0.00	-0.01	1.00	21.90	25.90	45	0.10	0.75	-0.05	-0.01	0.04	16.56%	(±2.86)			
21 Mar 25 (99d)	19.34	0.00	-0.01	1.00	17.30	20.60	50	0.10	0.50	-0.05	-0.01	0.03	18.12%	(±5.20)			
	14.41	0.05	-0.01	0.93	13.80	15.70	55	0.05	0.75	-0.07	-0.01	0.05		0.01			
	9.59	0.07	-0.01	0.89	9.00	10.90	60	0.30	0.60	-0.10	-0.01	0.06		0.13			
	5.32	0.10	-0.01	0.81	5.00	5.20	65	1.15	1.30	-0.25	-0.01	0.11		0.81			
	2.30	0.14	-0.01	0.49	1.90	2.10	70	3.10	3.30	-0.50	-0.01	0.14		2.79			
	0.75	0.10	-0.01	0.20	0.55	0.65	75	6.80	7.10	-0.71	-0.01	0.12		6.40			
	0.18	0.04	0.00	0.06	0.05	0.25	80	10.10	13.30	-0.80	-0.01	0.10		11.23			
	0.03	0.06	-0.01	0.09	0.05	0.75	85	14.60	18.30	-0.86	0.00	0.08		16.23			
	0.01	0.04	-0.01	0.06	0.00	0.55	90	19.90	23.30	-0.85	-0.01	0.08		21.23			

The synthetic long stock costs \$405 but also requires a margin of about \$1,600. This is much lower than the \$6,875 needed to buy the stock. For details on margin requirements, visit [TradeStation's Options Margin Requirements](#).

Breakeven analysis

The breakeven price is \$69.05, calculated as the long 65 strike plus the \$4.05 premium paid.



Maximum loss

A maximum loss of \$6,905 will occur if the underlying stock drops to zero at expiration. This is the 65 strike times 100 shares plus the premium paid.

Profit potential before expiration

The trade does not need to be held until its expiration. If the underlying price moves upward and results in a satisfactory profit, the position could be exited by selling the long in-the-money call and buying to cover the short out-of-the-money put.

Trade management

The position can be closed manually or managed with an activation rule. For example, you can set up an exit order that triggers when a certain profit or loss has been achieved. This approach allows the trade to adapt to market conditions and capitalize on price movement. More information on activation rules can be found in the Options Education Center here: [Placing Activation Rules on Options Orders | TradeStation](#)

The synthetic long stock for a credit

If we expected a significant upward price movement in the underlying stock, we could open the synthetic long stock position using the out-of-the-money 70 strike. The call cost \$2.10, and the put sold for \$3.10. The resulting synthetic long has a credit of \$1.00.

Pos	Theo Val...	Vega	Theta	Delta	Bid	Ask	Strike	Bid	Ask	Delta	Theta	Vega	Theo Val...	Pos
17 Jan 25 (36d)	24.29	0.00	-0.01	1.00	21.90	25.90	45	0.10	0.75	-0.05	-0.01	0.04	16.51%	(±2.85)
21 Mar 25 (99d)	19.35	0.00	-0.01	1.00	17.30	20.60	50	0.10	0.50	-0.05	-0.01	0.03	18.11%	(±5.20)
	14.42	0.05	-0.01	0.93	13.80	15.70	55	0.05	0.75	-0.07	-0.01	0.05		
	9.59	0.07	-0.01	0.89	9.00	10.90	60	0.30	0.60	-0.10	-0.01	0.06		
	5.32	0.10	-0.01	0.81	5.00	5.20	65	1.15	1.30	-0.25	-0.01	0.11		
	2.30	0.14	-0.01	0.49	1.90	2.10	70	3.10	3.30	-0.50	-0.01	0.14		2.78
	0.75	0.10	-0.01	0.20	0.55	0.65	75	6.80	7.10	-0.71	-0.01	0.12		6.39
	0.18	0.04	0.00	0.06	0.05	0.25	80	10.10	13.30	-0.80	-0.01	0.10		11.22
	0.03	0.06	-0.01	0.09	0.05	0.75	85	14.60	18.30	-0.86	0.00	0.08		16.22
	0.01	0.04	-0.01	0.06	0.00	0.55	90	19.90	23.30	-0.85	-0.01	0.08		21.22

Breakeven analysis

The breakeven price is \$69.00, calculated as the long 70 strike minus the 1.00 premium received.

Price	Pinned	Plot	Theo P/L	Value	Delta	Theta	Gamma	Vega	Rho
65.00		1. Mar 21, 25 [DTE 0...]	-400.00	-500.00	100.00	0.00	0.00	0.00	0.00
69.00		1. Mar 21, 25 [DTE 0...]	0.00	-100.00	100.00	0.00	0.00	0.00	0.00
74.00		1. Mar 21, 25 [DTE 0...]	500.00	400.00	100.00	0.00	0.00	0.00	0.00

Spread	Price	Max Profit	Max Loss	Delta	Vega	Theta
Combo	1.00 (CR)	∞	-6,900.00	98.72	-0.01	-0.45

Maximum loss

A maximum loss of \$6,900 will occur if the underlying stock drops to zero at expiration. This is the 70 strike times 100 shares minus the premium collected.

Trade management

The position can be closed manually or managed like the debit synthetic.

Synthetic short stock

A synthetic short stock options position replicates short stock exposure, profiting from price declines and losing value in rising markets.

a. Structure

- Buy one near or at-the-money put option.
- Sell a call option with the same strike price and expiration.

b. Profit and risk

- **Maximum profit:** From breakeven to zero on downward movement.
- **Maximum risk:** Unlimited on upward movement.

c. Breakeven prices

- **Debit position breakeven:** Strike price of the long put minus the premium paid.
- **Credit position breakeven:** Strike price of the long put plus the premium collected.

Trade example: Synthetic short stock position

Enphase Energy Inc. (ENPH) appeared in the RadarScreen filter on the Synthetic Short workspace. The stock is in a weekly downtrend, and the daily price looks ready to drop due to selling pressure.



Explore Strategies – Discover options strategies and empower your trading with the knowledge and skills to navigate dynamic market conditions.

	Symbol ▲	Description	Last	Open Int - AI...	IV Range ... IV Range%	Impl Volty- All Opts IV All	IV Avg	MACD MACD	MACD...
1	S&P 500 Index								
2	ADI	Analog Devices	217.72	102,318	15.23	27.94%	30.57%	-1.05	-1.41
3	AES	AES Corp	13.55	350,273	22.30	40.30%	43.02%	-0.44	-0.65
4	AMGN	Amgen Inc	273.73	224,678	36.71	33.43%	35.55%	-8.99	-9.31
5	ECL	Ecolab Inc	248.81	10,785	12.31	16.73%	17.72%	-0.34	-0.61
6	ENPH	Enphase Energy Inc	72.95	370,911	26.68	60.77%	61.56%	-1.10	-2.56
7	GEHC	GE Healthcare Technolog	81.63	103,781	6.58	22.03%	24.32%	-1.09	-1.23
8	JNPR	Juniper Networks	37.30	214,496	35.08	27.19%	34.03%	-0.22	-0.48
9	MPWR	Monolithic Power System	605.45	28,089	33.93	49.49%	49.58%	-35.50	-50.50
10	MRNA	Moderna Inc	42.72	700,558	30.97	67.98%	72.03%	-1.63	-2.39
11	MTCH	Match Group Inc	30.49	321,237	22.37	38.88%	44.27%	-0.55	-0.61
12	NOC	Northrop Grumman	481.51	31,360	29.53	20.36%	20.75%	-8.88	-8.88
13	TGT	Target Corp	135.02	629,918	13.21	26.64%	32.34%	-3.50	-4.59
14	TMO	Thermo Fisher Scientific I	525.00	61,629	28.44	22.75%	22.94%	-5.25	-8.48
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Shorting 100 shares of stock at the current \$73 price level would require \$7,300, not including commissions and fees.

Order Confirmation

Would you like to place the following order(s)?

Sell Short 100 ENPH @ 73.0000 Limit

Order Details

Account: SIM1097305M
 Duration: Day+
 Route: Intelligent

Symbol Snapshot

Enphase Energy Inc (ENPH) - NASDAQ
 Last: \$72.95 x 1878 (ARCX)
 Bid: \$72.95 x 200
 Ask: \$73.50 x 100
 As of: 12/12/2024 4:43:18 PM

Estimated Credit: \$7,300.00
Estimated Commission: \$1.00

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Synthetic short stock

We will build the options position using the 21 March 2025 options with 99 days until expiration to minimize the time decay. The current price is between two strikes, but we will use the in-the-money strike to reduce the probability of early assignment.

We can buy the 75 put for \$11.05 and sell the 75 call for \$9.70. The resulting synthetic short has a cost of \$1.35. Including the approximate \$2,400 margin needed for the position, the cost of \$2,535 is much lower than the \$7,300 required to short the stock.

OptionStation Pro

Symbol	Description	Last	Net Chg	High	Low	Volume	Beta Weighting	Account
ENPH	Enphase Energy Inc	73.00	-1.23	74.42	72.75	1,987,922	SPY	All Accounts

CALLS							PUTS							
Pos	Theo Val...	Vega	Theta	Delta	Bid	Ask	Strike	Bid	Ask	Delta	Theta	Vega	Theo Val...	Pos
	18.74	0.09	-0.04	0.84	21.10	21.75	55	2.72	3.55	-0.17	-0.03	0.10	0.11	
	14.12	0.12	-0.05	0.77	17.20	19.75	60	4.15	4.45	-0.23	-0.04	0.11	0.44	
	9.99	0.13	-0.05	0.70	13.95	15.30	65	6.00	6.10	-0.30	-0.04	0.13	1.25	
	6.58	0.14	-0.05	0.63	11.90	12.45	70	7.30	8.40	-0.37	-0.04	0.14	2.80	
	4.03	0.15	-0.06	0.55	9.70	10.15	75	10.00	11.05	-0.45	-0.04	0.15	5.23	
	2.30	0.15	-0.06	0.48	8.00	8.20	80	13.90	15.15	-0.51	-0.05	0.15	8.52	
	1.23	0.15	-0.05	0.40	5.15	6.55	85	16.30	18.05	-0.59	-0.04	0.15	12.54	
	0.61	0.14	-0.05	0.35	4.20	6.15	90	20.55	22.00	-0.65	-0.04	0.14	17.08	
	0.29	0.13	-0.05	0.30	3.95	4.15	95	24.75	25.85	-0.70	-0.04	0.13	22.00	

Trade	Spread	Delta	Theta	Max Profit	Max Loss
Combo		-100.51	1.15	7,365.00	-∞

Order Type	Limit Price	Stop Price	Route	Duration	Account Number
Limit	1.35	0.60	Intelligent	Day	SIM1097305M

Order Type: Limit, Limit Price: 1.35, Stop Price: 0.60, Route: Intelligent, Duration: Day, Account Number: SIM1097305M

Order Entry Summary: Buy 1 ENPH 21 Mar 25 75 Put, Sell 1 ENPH 21 Mar 25 75 Call. Net Cost: 1.35.

Order Type: Limit, Limit Price: 1.35, Stop Price: 0.60, Route: Intelligent, Duration: Day, Account Number: SIM1097305M

Order Entry Summary: Buy 1 ENPH 21 Mar 25 75 Put, Sell 1 ENPH 21 Mar 25 75 Call. Net Cost: 1.35.

Order Type: Limit, Limit Price: 1.35, Stop Price: 0.60, Route: Intelligent, Duration: Day, Account Number: SIM1097305M

Order Entry Summary: Buy 1 ENPH 21 Mar 25 75 Put, Sell 1 ENPH 21 Mar 25 75 Call. Net Cost: 1.35.

Breakeven analysis

The breakeven price is \$73.65, calculated as the long 75 strike minus the \$1.35 premium paid.



Maximum loss

The maximum loss is infinite since there is no cap on how high the stock price can go. A stop loss should be applied to mitigate the risk.

Profit potential before expiration

The trade does not need to be held until its expiration. If the underlying price moves downward and results in a satisfactory profit, the position could be exited by selling the long in-the-money put and buying to cover the short out-of-the-money call.

Trade management

The position can be closed manually or managed with an activation rule.

Volatility effect on synthetic stock positions

Monitoring implied volatility

Because synthetics comprise both a long and short option position, Vega is generally very low. As a result, changes in implied volatility should not greatly impact the position.

Conclusion

Technical considerations play a vital role in synthetic position management. Traders must understand initial and maintenance margin requirements, monitor account equity levels, and maintain adequate cash for potential assignment. Tax implications differ from standard stock positions and may involve wash sale considerations, making consultation with tax professionals advisable.

Success with synthetic stock positions requires a thorough understanding of position dynamics, active risk management, and disciplined execution. Traders can practice these strategies in TradeStation's simulated trading environment. It's advisable to begin with small positions and scale gradually as the trader gains experience. Each trade should align with clearly defined risk tolerance levels and investment objectives. Through careful implementation and management, synthetic positions can be valuable tools in a comprehensive trading strategy.



Review Options Level – Ready to take your options trading to the next level? Learn about your option level and make sure it's right for you. Boost your trading potential!

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