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ALUMNI CORNER

Operational Guide to Covered Call Writing

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This article would help as an operational guide to covered calls. It covers basic concepts which help understand one of the option strategies (a rather complex subject). Further, it covers accounting of covered calls in books of the company and also briefly touches upon the tax treatment.

Normally, covered calls are advised at times when equity markets are high to earn better premium. However, during current situation also one can benefit from writing calls. If one evaluates equity market in the Covid-19 lockdown period, it can be observed, that the markets are devoid of any logic and economics and are more sentiment driven. On 1st Jun 2020, the Nifty50 index rose substantially, reasons "first phase of lifting the lockdown" (Ref news brief on Investing.com).

But unfortunately, markets fail to understand that the manufacturing activities have been shut for past almost 2 months now. One need to evaluate whether the corporate activities, demand, jobs, etc. would support the earnings of the companies to sustain the share price movement on day to day basis.

What are covered calls:

Every corporate holding equity shares would like to have these investments generate additional income than just dividend income. How does one do that – through covered calls. It is an option strategy, where the holder of the stock writes call options (right to purchase the underlying) at a particular strike. The call option is called covered because the writer of the call options holds the stock. Companies should avoid writing calls on stocks which are part of the trade investments, lest the company has to deliver the stock on exercise.

On exercise, the holder will have to deliver the stock at the strike price or if the call expires, the seller of the call option earns the premium. A holder of the call option would exercise the right to buy the stock when the stock price is above the strike. So, the holder is able to buy the stock, in a way at a discounted price.

The income for the writer of an option is the premium earned on the calls written. It is advisable that the charges payable on call writing are well negotiated with the broker.

Various aspects of covered calls:

The holder of the stock sells a call option (popularly known as the writer of the option) which is out of the money (OTM). OTM means the strike price is above the current stock price. An in the money (ITM) call option earns a higher premium than an OTM option.

In the current scenario, it is advisable to write options deep out of the money, to avoid delivery of stock in case of exercise of the option. In case the company has decided to sell a particular at the predetermined price and is also ready to hold the stock for some more time, then the company may write calls at the proposed selling price. This will enable the company to earn the targeted selling price and also earn a little extra income by way of premiums. However, the downside to this is, the calls may be written but the stock price may fall below the intend selling price (till the time open position is held) and the company may lose the intended sale price for the little extra income (premiums).

An ITM call option premium is significantly higher than an OTM call option premium

Illustration: Source NSE 29-5-2020, 3.30 pm

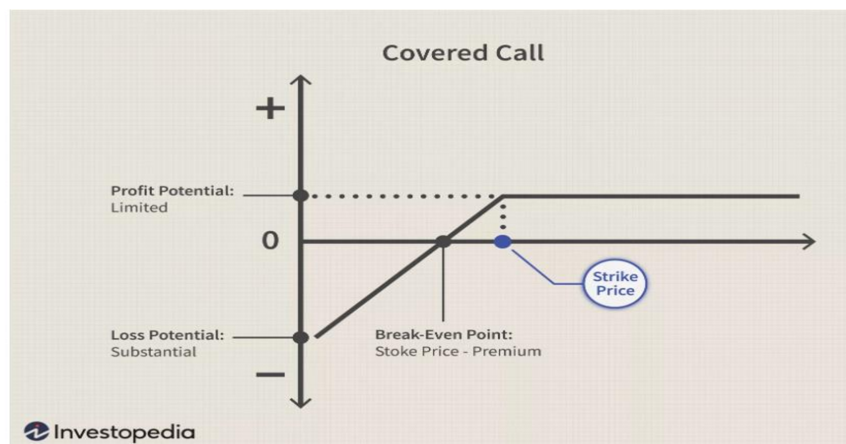
HDFC Limited: Stock price Rs 1667

Jun expiry 1660 strike: Call premium CMP is Rs 71.50

Jun expiry 2000 strike: Call premium CMP is Rs 4.20

At 1660 strike, the option is in the money and hence the premium earned is high, whereas at 2000 strike it is deep OTM, hence the premium earned is a very small amount.

Payoff of a covered call



(Source: Investopedia)

One may now analyse, the profit/ loss under various scenarios with movement in stock price.

Profit or loss under various scenarios:

Particulars	Price	Premium Amount
Stock Price	100	
Sell Call Strike	110	5

Profit/loss under various scenarios

Stock Price	Sell Call
80	5
100	5
105	5
110	5
111	4
112	3
113	2
114	1
115	0
116	-1
120	-5
130	-15
150	-35

One can evaluate from the above, if the strike is 110, so long as the stock price is below the strike price there is no change in the premium earned. Stock price at 115 acts as the break-even point, i.e., (strike + premium earned), any movement above this level, the writer starts making loss.

How is the premium decided on call option:

The most popular model - the Black Scholes pricing model is used to determine the premium on a call. It is advisable to check the premium before writing call options, lest the writer is caught on the wrong foot.

Call premium is a function of underlying stock price, the date of writing the calls, days to expiry, the volatility, risk free rate of return and the strike. All inputs are easily available on the NSE website.

Home ▸ Live Market ▸ Option Chain ▸ Equity Derivatives ▸ Options Contracts

Option Chain (Equity Derivatives)

Underlying Stock: HDFC 1817.00 As on Jun 02, 2020 15:30:30 IST

View Options Contracts for: Select Index OR Search for an underlying stock: GO Filter by: Expiry Date 25JUN2020 Futures contracts

CALLS												PUTS										
Chart	OI	Chng in OI	Volume	IV	LTP	Net Chng	Bid Qty	Bid Price	Ask Price	Ask Qty	Strike Price	Bid Qty	Bid Price	Ask Price	Ask Qty	Net Chng	LTP	IV	Volume	Chng in OI	OI	Chart
	220,000	31,750	1,895	41.71	46.95	24.30	250	45.05	46.50	250	1900.00	1,250	121.80	138.70	5,750	-51.25	130.75	49.00	23	500	14,750	
	-	-	-	-	-	-	250	36.30	43.30	250	1920.00	1,500	138.05	157.65	2,750	-	-	-	-	-	-	
	2,000	2,000	9	36.50	26.80	-28.90	3,750	29.70	40.55	4,000	1940.00	2,000	151.60	169.05	2,750	-	-	-	-	-	-	
	10,500	7,750	100	39.54	29.00	12.80	1,750	29.50	32.50	500	1950.00	2,750	153.80	176.10	2,750	-	-	-	-	-	-	

Source: NSE

Writing calls when the volatility is high helps to earn a higher premium.

Call writing process can be divided into 3 stages

Prior to writing calls, holding the open position and closing an open position

Prior to writing calls -

- If the intent of writing a call option is to earn a little additional income on the stocks held, then one may write the calls with a strike of around 10% - 15% above the current market price. This may not hold true in the current scenario where one may witness huge volatility in the stock. The safest option would be to write calls deep OTM, though the premium is low, the chances of delivery of stock are bleak. This will help only when the quantity of calls written is large at that particular strike and premium.
- However, in the current scenario also the option writer has huge opportunity to write premiums and square up positions in a day or so also.
- Typically, in a normal market scenario, option writer may check the 52-week high-low and 3 months high-low. It would decide the optimal entry level depending upon the market trend, sector and stock specific news, 52-week/3-month high-low.
- Avoid writing calls at low.
- It helps to check the liquidity at the intended strike and then take open positions.
- Ideally, the one may prefer writing calls where the current market price is above the cost price, but this would be considering the market situations at a given point of time.
- Strikes with higher Implied volatility (IV) fetch higher premiums. Corporate announcements as these also affect IV.

Carrying an open position

It can be quite stressful when you are carrying an open position, post writing the call the stock price rises and suddenly you would realize, one is carrying a market to market loss (MTM).

Let’s analyse: Pidilite Industries Limited

Stock price as on 2.6.2020 4.00 pm Rs 1493.95

Last 7 days historical data

View historical price data: For past: 7 Days Get Data More than 3 months Data? Click Here

Download file in csv format

Date	Symbol	Series	Open	High	Low	LTP	Close	Volume	Turnover (in Lakhs)
02-Jun-2020	PIDILITIND	EQ	1,483.70	1,510.00	1,471.80	1493.95	1,490.80	7,31,527	10,941.77
01-Jun-2020	PIDILITIND	EQ	1,488.00	1,504.00	1,466.45	1475.00	1,473.15	9,24,436	13,758.35
29-May-2020	PIDILITIND	EQ	1,426.00	1,485.85	1,417.40	1469.00	1,468.40	15,74,181	22,807.12
28-May-2020	PIDILITIND	EQ	1,406.00	1,434.95	1,402.80	1432.00	1,425.35	9,15,640	13,006.96
27-May-2020	PIDILITIND	EQ	1,406.55	1,427.85	1,395.00	1402.45	1,402.80	5,71,770	8,079.59
26-May-2020	PIDILITIND	EQ	1,405.00	1,439.00	1,400.50	1402.00	1,412.45	7,93,658	11,283.33

Now if the writer has written a call on 29th May 2020, in the morning when the price is Rs 1426, the position is in a loss as of 2nd June 2020 (within 4 days).

Let us analyse call option movement:

Quote As on Jun 02, 2020 15:30:30 IST

Pidilite Industries Limited - PIDILITIND

Get Underlying Quote | Option Chain

Index Derivatives | Stock Derivatives | Currency Derivatives

Instrument Type: Stock Options | Symbol : PIDILITIND | Expiry Date : 25JUN2020 | Option Type : Call | Strike Price : 1500.00 | Get Data

46.10 ▲ 4.05 9.63%	Prev. Close	Open	High	Low	Close
	42.05	42.35	60.00	42.25	48.15

Fundamentals | Historical Data

Historical price data for PIDILITIND-FO for the last week — Download this data

High Low — For more Details Click Here

View historical price data: For past: 7 Days Get Data

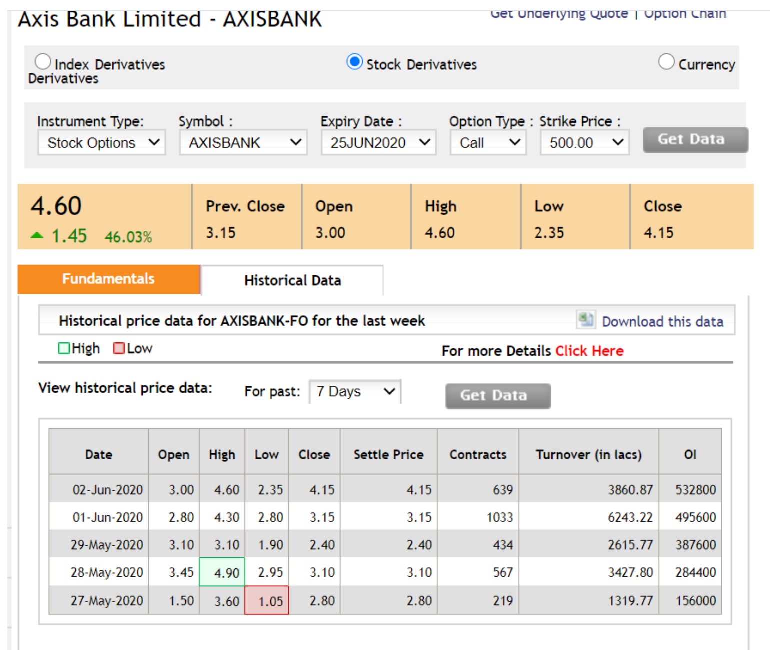
Date	Open	High	Low	Close	Settle Price	Contracts	Turnover (in lacs)	OI
02-Jun-2020	42.35	60.00	42.25	48.15	48.15	342	2657.70	133500
01-Jun-2020	41.50	51.00	39.40	42.05	42.05	643	4970.44	132000
29-May-2020	34.00	38.70	30.10	37.05	37.05	557	4275.89	127500
28-May-2020	24.95	34.50	24.20	31.60	31.60	41	313.63	12500
27-May-2020	30.35	31.00	25.70	25.70	36.80	6	45.89	3500

Strike 1500; June expiry.

Premium received on 28th May around Rs 24.95, the current market price of the same call in 3 days is Rs 60. Why did this happen, Nifty rose, and the underlying stock price moved from 1426 to 1493?

It is necessary to continuously monitor of the stock price and premium movement. Though the above share movement didn't give any opportunity to curtail loss on the 1500 strike Pidilite Industries.

Now let us do the analysis of Axis Bank 500 call June expiry:


Axis Bank Limited - AXISBANK
Get Underlying Quote | Option Chain
Index Derivatives Derivatives | Stock Derivatives | Currency
Instrument Type: Stock Options | Symbol : AXISBANK | Expiry Date : 25JUN2020 | Option Type : Call | Strike Price : 500.00 | Get Data

4.60 ▲ 1.45 46.03%	Prev. Close	Open	High	Low	Close
	3.15	3.00	4.60	2.35	4.15

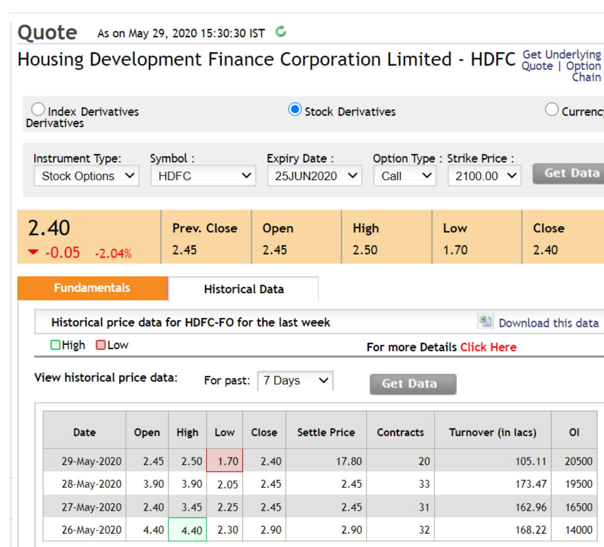
Fundamentals | Historical Data
Historical price data for AXISBANK-FO for the last week | Download this data
High Low | For more Details Click Here
View historical price data: For past: 7 Days | Get Data

Date	Open	High	Low	Close	Settle Price	Contracts	Turnover (in lacs)	OI
02-Jun-2020	3.00	4.60	2.35	4.15	4.15	639	3860.87	532800
01-Jun-2020	2.80	4.30	2.80	3.15	3.15	1033	6243.22	495600
29-May-2020	3.10	3.10	1.90	2.40	2.40	434	2615.77	387600
28-May-2020	3.45	4.90	2.95	3.10	3.10	567	3427.80	284400
27-May-2020	1.50	3.60	1.05	2.80	2.80	219	1319.77	156000

Source: NSE website

Axis bank 500 strike gave the writer to square the open position written on 28th May at two instances, one on 29th May 2020 at a premium of 1.90 and on 2nd Jun 2020 at a premium of Rs 2.35. Thus, there was phenomenal gains to be made in a day's time or even over 3 days.

Now let us evaluate HDFC Limited


Quote As on May 29, 2020 15:30:30 IST
Housing Development Finance Corporation Limited - HDFC
Get Underlying Quote | Option Chain
Index Derivatives Derivatives | Stock Derivatives | Currency
Instrument Type: Stock Options | Symbol : HDFC | Expiry Date : 25JUN2020 | Option Type : Call | Strike Price : 2100.00 | Get Data

2.40 ▼ -0.05 -2.04%	Prev. Close	Open	High	Low	Close
	2.45	2.45	2.50	1.70	2.40

Fundamentals | Historical Data
Historical price data for HDFC-FO for the last week | Download this data
High Low | For more Details Click Here
View historical price data: For past: 7 Days | Get Data

Date	Open	High	Low	Close	Settle Price	Contracts	Turnover (in lacs)	OI
29-May-2020	2.45	2.50	1.70	2.40	17.80	20	105.11	20500
28-May-2020	3.90	3.90	2.05	2.45	2.45	33	173.47	19500
27-May-2020	2.40	3.45	2.25	2.45	2.45	31	162.96	16500
26-May-2020	4.40	4.40	2.30	2.90	2.90	32	168.22	14000

(NSE extracts) 29th May 2020

HDFC Limited: Strike 2100

CMP on 26th May 2020, Rs 4.40

CMP on 29th May 2020, Rs 1.70

Date of writing	Expiry	Strike	Qty written	Prem recd pu	Total prem
26-05-2020	25-Jun-20	2100	5,00,000	4.4	22,00,000
29-05-2020	25-Jun-20	2100	5,00,000	-1.7	-8,50,000
		Net profit		2.7	13,50,000
		Profit % , in 4 day period			61%

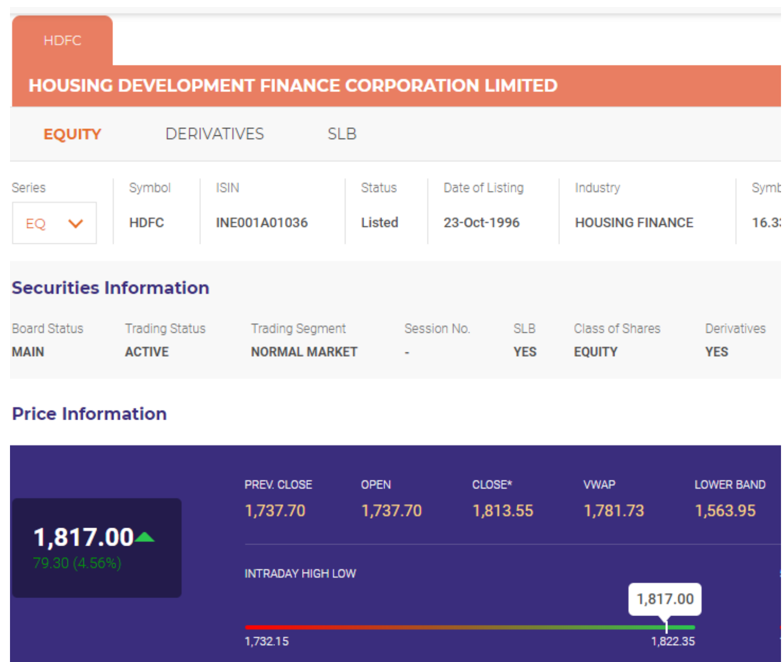
The writer would have to wait through the remaining time (till expiry) to achieve the balance 40% profit potential. While we are discussing the opportunities to close out earlier, one should not forget that the stock may fall further, and the call writer is giving up some profits.

The above takes us to the next step in call writing, while carrying an open position

- After the calls are written, it is very important to continuously monitor of the stock price and premium movement. Writer is the best judge whether he can square at 25%, 40% or even wait till 90%.

How does he do this – in a normal scenario watch underlying share price movement.

During the Covid-19 lockdown period, the above rule may not help as the stocks are witnessing intraday movement is as large as 5%, watch HDFC Limited on 2nd Jun 2020



(Source: NSE website)

- If a particular open position reaches in the money, the call writer may rollover the position at the same/higher strike, else may also decide the delivery in situations when the strike price meets his expected sale price.

How does the writer exit the open position:

- Call expires: If the stock price has remained at the same level, the writer may let the open position expire. The call expires with nil value. This generally works well in case of PSU stocks.
- Call is exercised and stock is delivered (i.e. fulfil the obligation on the call): In this case the writer initially gets the premium. Further on expiry, the writer receives (Stock price * number of calls written). It helps to hold the underlying in the same demat account through which calls are written. This saves on last minute rush.

- Square up the position: This will help if the writer wishes to hold the stock and not deliver it. Here the writer buys back the call, when he does not intend deliver the stock. Here there are chances where the writer has to buyback the call at huge premium and book a loss.

- Rolling out calls: This involves a rollout of the call to the next month at the same strike price. "Rolling out" refers to the process of closing the open position and selling a new call with the same strike in a subsequent month. Alternatively, one can Rollout to the next month and move the strike up or down. One can also close out early to avoid earnings volatility.

Track earnings announcement date. Track the stock price just say 4 to 6 days before Earnings announcement date

Accounting Entries for covered calls in case of call writer (a company)

- **When the option is squared off**

A. Bank
    To Derivative liability

(When the covered call is sold, entry for premium received)

B. Derivative liability
    To Bank
    To P& L

(When the covered call is bought, entry for premium paid)

Net of A and B is the income to the call writer.

- **When option is sold, and the stock is physically delivered on expiry**

A. Bank

To Derivative liability

(When the covered call is sold, entry for premium received)

B. Bank (Strike price * number of options written)

To Investment

To Other Comprehensive income

(When the shares are physically delivered).

C. Derivative liability

To Option income

(Recognising the income and writing off the liability, which was created when the option was sold)

At end of each quarter, the liability is marked to mark to recognise the gain or loss on options written

Tax implications

As mentioned above, the overall profit/ (loss) of the writer will comprise of premium income earned by the writer for writing the call option and gain/ (loss) arising on settlement where the call option is exercised by the Option Holder, i.e., there will be two specific events viz. creation of a call option and subsequent settlement thereof.

The net income would be grouped as business income:

- As per section 28(i) of the Income Tax Act, profits and gains of any ‘business’ shall be chargeable to income-tax as business income.
- Section 2(13) of the Income Tax Act defines the term ‘business’ to includes any trade, commerce or manufacture or any ‘adventure or concern’ in the nature of trade, commerce or manufacture.

To summarise, covered calls can be a good strategy to make equity shares held in the portfolio, earn an extra income (along with dividends). Further large holdings held, and calls written against 75% of the holding would also fetch decent premiums. It is also about quantum of calls written.

+ All share price data is from NSE website
+ News references are from Investing.com
+ Charts are from investopedia.com