Canadian equity derivatives



Quarterly Newsletter



General information



Patrick Ceresna

Patrick Ceresna is the Chief Derivative Market Strategist for Learn To Trade Global (LTTG) and optionsource.net and has been a content provider and speaker for the Montreal Exchange for over 5 years. Patrick is a Chartered Market Technician (CMT), Derivative Market Specialist (DMS) and Canadian Investment Manager (CIM) by designation. Prior to becoming a partner at LTTG, Patrick spent ten years working at key financial firms in numerous trading roles including the tr ading of a large fund dedicated exclusively to options writing. Patrick specializes in analyzing the intermarket relationships of the broader derivatives market and the impact those trends have on trading and investment decision making.

2017 Trading Calendar

OCTOBER						NOVEMBER					DECEMBER								
S	М	Т	W T	F	S	S	М	Т	W	Т	F	S	S	М	Т	W	Т	F	S
1	2	3	4 5	6	7				1	2	3	4						1	2
8	9	10	11 12	13	14	5	6	7	8	9	10	11	3	4	5	6	7	8	9
15	16	17	18 19	20	21	12	13	14	15	16	17	18	10	11	12	13	14	(15)	16
22	23	24	25 26	27	28	19		21		23		25	17	18	19	20	21	22	23
29	30	31				26	27	28	29	30			24	25	26	27	28	29	30
													31						

- --- Listing
- ----- Last trading day
- Expiration
- Equity & ETFs options
- Weekly options
- S&P/TSX 60 Index Options (SX0)
- Options on the US Dollar (USX)

For more information, please contact:

Richard Ho, CAIA, DMS, FCSI

Senior Manager Equity Derivatives

T: 1514871-7889

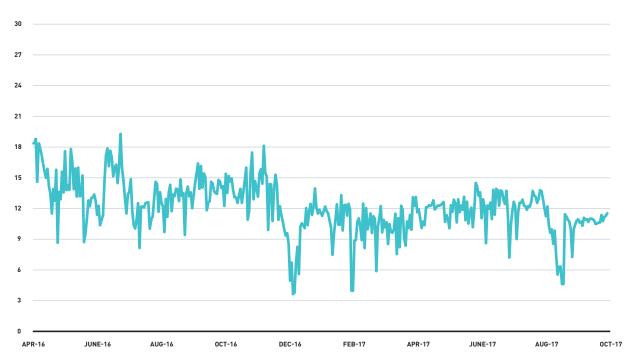
E: richard.ho@tmx.com

The manager's commentary

Opportunities in the Current Low Volatility Markets

In a recent interview on RealVision, the famed hedge fund manager Kyle Bass suggested that being long volatility is the best trade in the world right now. What does he see? We have an opportunity during this article to put into context the current option market landscape and the potential opportunities it represents.

When put into perspective, the current market may represent one of the most significant mispricing of volatility that I have seen in my career. With almost all global asset classes trading near historically high valuations, volatility has never been cheaper. In Canada, the VIXC, our measure of implied volatility on the options for the TSX 60 Index is hovering at the 11.00 handle. Beyond a few very brief spikes below 10, this is the lowest sustained level in the post financial crisis era.



S&P / TSX 60 VIX, D, TSX

To explore volatility, we need to understand how volatility and the VIXC are calculated. The calculations are based on the estimates for the 30-day implied volatility on the Near-term and next-term options, calls and puts, on the S&P/TSX 60. With the Canadian markets trading close to their all-time highs, the markets are pricing little volatility risk of either a big bullish breakout higher or a significant breakdown.

The question being asked is 'Are options mispriced or is this the relative fair value of the market's belief of pending complacency in the upcoming months?'

I would like to propose that it is a mispricing and an opportunity. However, in order to draw that conclusion, we must ask: if it was a mispricing, why does it exist?

Two Contributing Drivers to Suppress Volatility

Has the popularity of the yield enhancing covered call strategy changed the return dynamics?

In a yield starved world, the income enhancing covered call strategy has become one of the staple strategies for investors to create alpha. This has given birth to an array of funds and ETFs with the focus on systematic option writing. So where does the conundrum exist?

Derivatives such as options need two counterparties, a buyer and a seller, to come into existence. Over the last half century, the growth of the options market has been directly influenced by liquidity, or more correctly liquidity providers, like market makers, willing to be the counterparty to these transactions. Therefore, the equilibrium of the buyers vs. the sellers is a core precipitating factor in the price discovery for these options.

Early on, many savvy money managers recognized the consistency and benefits that come from strategic premium collecting strategies and began utilizing the strategies to differentiate themselves. The growing demand from the money management industry invariably institutionalized this process and has given birth to an entire niche of funds and ETFs that systematically sell covered calls for that enhanced income. In a yield starved world, an ever-growing number of investors and advisors have been adding these funds to their asset allocation models. The question I would ask now is 'Has the growth in the assets under management of these systematic funds become a "pig in a python"?'

Back to my starting point, there must be a buyer for every seller in the options market. If the broader interest on the sell side is growing at a faster pace than the buy side, it arguably presents obstacles for the market makers who end up having to hedge or liquidate the imbalance from their books. If so, what influence does it have on the options?

I believe the charting of the volatility skews reflect this "pig in a python" imbalance. Why? Because most systematic buy write strategies naturally target a specific delta or OTM premium return.

The chart below represents the S&P/TSX 60 Index ETF (TSX:XIU) December 15th 2017 (71 days till expiration) options volatility skew. Rather than a healthy "U" shaped curve one would be accustomed to seeing, we see a top left to bottom right shaped curve. This is not just prevalent in the index options, but through many of the top 60 large cap stocks in Canada.

S&P / TSX60 Index ETF (TSX: XIU)



What we see is that the implied volatility in options 5% lower (\$22.25 strike) on the XIU carry a 12.75% implied while the options 5% higher (\$24.50 strike) carry an implied volatility of 6.55%. An out of the money covered call writer on the index is finding a small and scarce premium relative to the trader considering the lower strike options.

This pattern is evident not just in Canada, but in many US and European indices. Is this the market's anticipation that there is negligible upside left on the markets or is the enormous premium selling systematic funds suppressing the curve?

Impact of Volatility Trading

Over the last few decades, the volatility indices around the world were utilized as a measure of the risk premium being priced into the markets. This has given the volatility index the nickname of the fear index, as spikes in index would often reflect fear and anxiety of traders looking to hedge risk. Yet something has noticeably changed south of the border, where volatility has become a product that is now being actively traded for profit. In my mind, this is dynamically evolving the global volatility markets. In Canada, we have not taken that next step, but I would speculate that the prolific growth of direct volatility trading in the U.S. is having a direct influence on suppressing global volatility abroad, including in Canada.

Is the Volatility Index (VIX) in the U.S. a measure of volatility or is it rather just reflecting the trader's anticipation of future volatility? It sounds like a small nuance, but I think it is much more significant. Over the last several years, the negative carry in the term structure of the VIX futures has become the closest thing to a free money trade. It has brought about record levels of short interest at the speculative level, most commonly expressed in short volatility ETFs. In a global financial ecosystem, the rampant selling of volatility has for certain contributed to what we identify today as the best trade in the market.

Opportunities

So how does a portfolio manager, advisor or independent investor take advantage of this supposed volatility mispricing?

One can venture into the world of market timing and seek to profit from the inevitable reversion to much more normal levels of volatility. This can be expressed by buying puts, straddles and other long Vega strategies. However,I regress to point out that market timing is a challenging exercise that is often fraught with humility. Therefore, only those traders with the highest conviction of this inevitability should actively consider these opportunities.

Alternatively, the low volatility creates convexity in the trading of call options to the upside as an alternative to owning the stocks, ETFs and indexes. In a period of lofty market valuations, there is an increasingly tail risk that a geopolitical event or an economic surprise could trigger a market correction. Being long equities in a delta 1 exposure offers almost no asymmetry. Alternatively, a portfolio manager who builds strong investment themes can express those with relatively low-cost options which offer upside participation with a defined downside risk. This optionality has never been more attractively priced. Considering today's market conditions, the long call option offers you the perfect win big if you are "right" and lose small when you are "wrong" trade-off.

The options playbook

Playing the Rebound in Goldcorp (TSX: G)

RThe consideration on positioning for the rebound on the perennial dog of the senior gold miners. Back during the 2009-2011 gold bull market, Goldcorp was considered one of the darlings of the industry. In the subsequent bear market of the last 6 years, the story has soured. While they have an array of high quality properties, a number of management missteps have caused the stock to be left behind while much more stable gold miners and gold royalty companies, such as Franco-Nevada, have flourished. Overall, investors have lost the appetite for Goldcorp. However, is it not when the stock is most unloved that you get to buy it at the cheapest price? It might be an interesting time to lease out the stock with a long-term call option and see if time will turn the tides for this once darling.

Here is the breakdown:

- Goldcorp (TSX:G) is trading at \$16.68 on October 5th
- Goldcorp has a 52 week range of \$15.56-\$23.35
- The January 18th, 2019 \$15.00 call is asking \$3.40

In this case, rather than laying the cost to buy the shares outright, the long-term call options can be bought for \$3.40. Note that there is \$1.68 of intrinsic value in the options. The remaining \$1.72 represents just over a 10% cost for just under 16 months of time. While on the surface it appears a steep cost, one simply needs to be reminded of the volatility this stock is capable of. Back in the first half of 2016, Goldcorp almost doubled in price from \$13.55 to almost \$27.00. The 10% premium is still small relative to the potential gains the stock can achieve.



GOLDCORP INC. D, TSX

Cash Covered Put on Enbridge (TSX:ENB)

This oil and gas pipeline company has been caught in the downdraft of the energy sector correction throughout the majority of 2017. Is this an opportunity or is it better to wait on the sidelines? Enbridge remains a reputable high dividend paying stock with a respectable \$2.44 (4.96%) dividend. The company has many things going for it that appeals to investors. Not only does the it have an extensive North American pipeline infrastructure, but it is also developing a green power and transmission division. If their investment pays off, the future cash flows will ensure that dividends are not only sustainable, but also have room to grow. With that said, we are looking at a strategy which involves selling at-the-money puts, not only for income, but also as a way to potentially accumulate the shares at these more favorable lower prices.

Here is the breakdown:

- Enbridge (TSX:ENB) is trading a \$52.12 on October 5th
- ENB has a 52 week range of \$48.98-\$59.18
- The January 19th, 2018 \$52.00 put is trading at \$1.75
- Every put sold represents an obligation to potentially have to buy 100 shares or \$5,200.00 (\$52.00x100) of stock by the expiration.

The \$1.75 premium represents a 3.36% income in just 106 days for undertaking the obligation.

- If the stock declines below \$52.00, investors will be assigned to the shares with an adjusted cost base (break-even) of \$50.25 (\$52.00-\$1.75) which, if assigned, is relatively close to its 52-week low of \$48.98.
- If the stock remains range bound or bullish, the investor will generate a respectable income return on a blue-chip stock.



ENBRIDGE INC. D, TSX

Market Statistics

En date du 30 septembre, 2017

Top 10 Most Active Option Classes

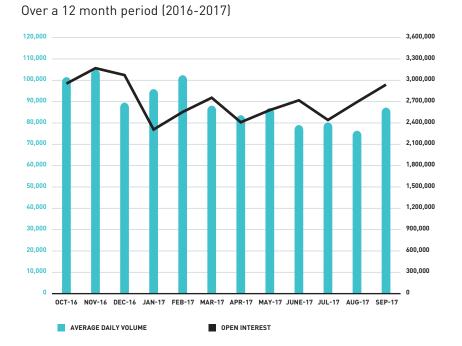
COMPANIES	SYMBOL	VOLUME	INSTITUTIONAL	RETAIL	INSTITUTIONAL %	RETAIL %
1 iShares S&P/TSX 60 Index ETF	XIU	3,027,078	2,813,887	213,191	93%	7 %
2 Banque Toronto-Dominion (La)	TD	185,672	66,137	119,535	36 %	64 %
3 Banque Royale du Canada	RY	184,497	54,435	130,062	30 %	70 %
4 Banque Canadienne Impériale de Commerce	СМ	182,129	72,511	109,618	40 %	60 %
5 Teck Resources Limited, Cl. B	TECK	157,901	60,059	97,842	38 %	62 %
6 Cenovus Energy Inc.	CVE	145,766	68,688	77,078	47 %	53 %
7 Banque de Nouvelle-Écosse (La)	BNS	144,134	51,710	92,424	36 %	64 %
8 iShares S&P/TSX Global Gold Index ETF	XGD	135,141	110,755	24,386	82 %	18 %
9 FINB BMO équipondéré banques	ZEB	124,751	123,475	1,276	99 %	1 %
10 Société Financière Manuvie	MFC	124,467	70,922	53,545	57 %	43 %

Most Crossed Option Classes

COMPANIES	SYMBOLE	VOLUME			
1 iShares S&P/TSX 60 Index ETF	XIU	2,813,887	11 Teck Resources Limited	TECK	
2 FINB BMO équipondéré banques	ZEB	123,475	12 BMO S&P 500 Index ETF	ZSP	
3 iShares S&P/TSX Global Gold Index ETF	XGD	110,755	13 OceanaGold Corporation	OGC	
4 Options sur l'indice S&P/TSX 60	SX0	88,272	14 Banque Royale du Canada	RY	
5 FINB BMO S&P/TSX Capped Composite Index	ZCN	75,990	15 Alimentation Couche Tard Inc., Cl. B	ATD.B	
6 Banque Canadienne Impériale de Commerce	СМ	72,511	16 Banque de Nouvelle-Écosse (La)	BNS	
7 iShares S&P/TSX Capped Energy Index ETF	XEG	72,335	17 Detour Gold Corp.	DGC	
8 Société Financière Manuvie	MFC	70,922	18 Banque Nationale du Canada	NA	
9 Cenovus Energy Inc.	CVE	68,688	19 Suncor Énergie Inc.	SU	
0 Banque Toronto-Dominion (La)	TD	66,137	20 Services financiers Element	EFN	

Options Trading Volume by Sector

Pourcentage Pourcentage SECTEUR **Telecommunication Services** Financials 27.24% 3.13% Energy 23.27% **Consumer Staples** 3.03% Materials Information Technology 22.17% 2.00% Industrials **Health Care** 6.78% 1.75% **Consumer Discretionary Real Estate** 1.12% 5.98% Utilities 3.55%



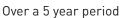
Equity Average Daily Volume and Open Interest

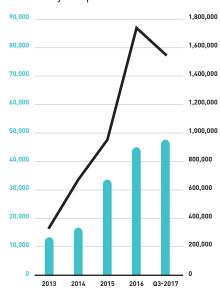
Over a 5 year period



ETF Average Daily Volume and Open Interest







Trading Tools

→ Covered Call Calculator

→ Options Calculator

→ TMX Trading Simulator

er

Useful Links

GUIDES → Equity derivatives	MX INDICES → S&P/TSX 60 VIX Index (VIXC)	OTHERS → Options List
 → Index derivatives → Currency derivatives > Equity options for regime 	 → MX Covered Straddle Writers' Index (MPCX) → MX Covered Call Writers' Index (MCWX) 	→ Put/Call Ratios
→ Equity options tax regime		
🗂 m-x.tv	OptionMatters.ca	y m-x.ca/twitte
f m-x.ca/facebook	in m-x.ca/linkedin	m-x.ca/rss

© 2017 Bourse de Montréal Inc.

This document is sent to you on a general information basis only. The information provided in this document, including financial and economic data, quotes and any analysis or interpretation thereof, is provided solely on an information basis and shall not be interpreted in any jurisdiction as an advice or a recommendation with respect to the purchase or sale of any derivative instrument, underlying security or any other financial instrument or as a legal, accounting, tax, financial or investment advice. Bourse de Montréal Inc. recommends that you consult your own advisors in accordance with your needs. All references in this document to specifications, rules and obligations concerning a product are subject to the Rules and Policies of Bourse de Montréal Inc. and its clearinghouse, the Canadian Derivatives Clearing Corporation. Although care has been taken in the preparation of this document, Bourse de Montréal Inc. and/or its affiliates take no responsibility for errors or omissions and reserve the right to amend or review, at any time and without prior notice, the content of this document. Bourse de Montréal Inc., its affiliates, directors, officers, employees and agents will not be liable for damages, losses or costs incurred as a result of the use of any information appearing in this document.

Standard & Poor's and S&P are registered trademarks of Standard & Poor's Financial Services LLC ("S&P") and have been licensed for use by S&P Dow Jones Indices LLC and sublicensed for certain purposes by Bourse de Montréal Inc. TSX is a registered trademark of TSX Inc., and has been licensed for use by S&P Dow Jones Indices LLC and Bourse de Montréal Inc. The S&P/TSX 60 Index is a product of S&P Dow Jones Indices LLC, and has been licensed for use by Bourse de Montréal Inc. The products mentioned in this document are not sponsored, endorsed, sold or promoted by S&P Dow Jones Indices LLC, Dow Jones, S&P, their respective affiliates, or TSX Inc., and neither S&P Dow Jones Indices LLC, Dow Jones, S&P, their respective affiliates or TSX Inc., make any representation regarding the advisability of investing in such product(s).

"BAX[®]", "OBX[®]", "ONX[®]", "OIS-MX[™]", "CGZ[®]", "CGB[®]", "CGB[®]", "LGB[®]", "OGB[®]", "SXO[™]", "SXF[™]", "SXM[™]", "SXA[™]", "SXB[™]", "SXB[™], "SXB[™]", "SXB[™]", "SXB[™]", "SX

Montréal Exchange, Montréal Exchange logo, Converge, and Converge logo are trademarks of Bourse de Montréal Inc.