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Using Options In a Balanced Portfolio Strategy



Toronto Stock Exchange | TSX Venture Exchange | **Montréal Exchange** | Natural Gas Exchange | Montréal Climate Exchange | Boston Options Exchange

Canadian Derivatives Clearing Corporation | TMX Datalinx | Equicom | PC Bond | Shorcan

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Objectives of a Balanced Portfolio



- Through asset allocation among stocks, bonds, commodities and cash the objective is to create an optimal risk adjusted return.
- Reduced volatility.
- Reduced risk.

Why is Yield Important?



- Yield is the income return on an investment.
- Traditionally refers to the interest or dividends received from a security.
- New ways to consider enhancing yield include a number of options strategies.

What are Absolute Returns?



Absolute Return

- is concerned with the return of a particular asset.
- Yield is an absolute return.

Relative Return

- is concerned with performance relative to a benchmark or measure.

Absolute Returns Option Writing



- Absolute returns has a new dynamic from an options writing perspective.
- Premium cash flow creates a real return.
- The cash flow is immediately realized.

Modern Portfolio Theory



- Theory that it is possible to construct an optimal portfolio offering the maximum possible expected return for a given level of risk.
- This requires Security Valuation, Asset Allocation, Optimization and Performance Measurement.

Modern Portfolio Theory



Asset Allocation broken down:

- Diversification to remove unsystematic risk.
- Optimizing the best risk adjusted returns of assets.

Modern Portfolio Theory



Alpha

- Measure of risk-adjusted performance.
- Any returns that exceed the risk adjusted performance compared to a benchmark is Alpha.

Options and MPT



- How do options change the dynamic in an optimized portfolio?
- Option writing reduces volatility.
- Creates alpha through creating equity style returns with less risk.

Calculating Return with Options



1. Capital Gains.

2. Dividends.

3. Premium from
Option Writing.

Traditional methods
of return.

Additional method
of creating real
returns.

Why Options?



“Over a ten-year period, if the compound return from stocks is 14% or less, a covered call strategy would not only reduce volatility but increase one’s return.”

Long Term Investment Alternatives for Fiduciaries
by Dr. Sheen Kassouf, University of California, Irvine

MX Covered Call Writers Index



17 Years of comparison 1993-2010

INDEX	RETURN	STANDARD DEVIATION
MCWX	305%	12.35%
XIU	245%	18.97%

Equity style returns with less risk.

Perception of Returns



- Many investors do not recognize the difference between realized and unrealized gains.
- Investors overvalue unrealized returns.
- Many investors never realize gains on stocks or simply replace a stock with a similar beta stock that is simply a transfer of risk with no change in the volatility risk.



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Crisis Insurance

Hedging a Balanced ETF Portfolio



Bear Markets




- Exponentially more statistical outlying events to the downside than any model will account for.
- Shortcoming of statistical models in periods of panic.
- Accounting for periods where there risk of a broad asset debasement.

Investor Case Study



- Middle aged investor with a respectable investment portfolio of \$600,000.00
- Investor has decided to manage their own investments through a self-directed trading account.
- Focus is to be diversified among Canadian ETF's as to avoid currency risk.

Investor Portfolio April 29th 2011



Position	Symbol	Qty	Price	Exposure
S&P/TSX 60 Index Fund	XIU	5000	\$20.03	\$100,150.00
S&P/TSX Capped REIT Index Fund	XRE	5000	\$14.96	\$74,800.00
S&P/TSX Capped Financials Index	XFN	3000	\$22.50	\$67,500.00
S&P/TSX Global Gold Index Fund	XGD	2000	\$23.47	\$46,940.00
MSCI World Index Fund	XWD	3500	\$22.87	\$80,045.00
DEX Universe Bond Index Fund	XBB	4000	\$30.35	\$91,050.00
Money Market Fund				\$39,515.00

Seasonality



- Investor is concerned about the “Sell in May and go away” adage.
- Particularly the investor is concern is with the \$100,000.00 XIU investment.
- What options are out there for investor beyond outright selling the position?

Aversion to Risk



- During market declines, most investors are willing to accept 5-10% swings in their accounts.
- It is the fear of a 20%+ decline that forces investors to panic.
- In this case the investor simply wants to remove the risk of catastrophic loss.

Hedging the XIU



- It is April 29th, 2011 (last trading day before May).
- XIU – S&P/TSX 60 – Trading at \$20.03
- Investor has 5000 shares.
- Investor would like to hedge all risk beyond a 5% downside.
- Investor feels there is only limited upside over that timeframe.
- To reduce costs, investor considers a collar strategy.

Hedging the XIU



- Building hedge out to September (144 days)
- Collar requires a combination of a covered call with a protective put.
- Investor is considering a
 - XIU Sep \$21.00 Covered Call
 - XIU Sep \$19.00 Protective Put

Hedging the XIU



- Investor sells 50 contracts of the XIU Sep \$21.00 Covered Call for \$0.35 for a \$1,750.00 income.
- Investor buys 50 contracts of the XIU Sep \$19.00 Protective Put for \$0.50 for a \$2,500.00 cost.
- Total cost to the investor is \$750.00 but will receive the \$600.00(\$0.12) dividend in June.

Hedging vs. Diversification



- If investor hedges risk with options, it reduces the need for diversification.
- This gives the investor the benefit of more concentrated theme/story based ideas while keeping a handle on absolute risk.



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Covered Call Writing On Your Diversified Portfolio



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Covered Calls



- Sell a call option secured by the underlying.
- Considered covered because the risk associated with the call is removed through the ownership of the stock.

Covered Calls



- Covered calls create Alpha because of the probabilities associated with them.
- Comprehending the advantages is to understand probabilities.

Calculating Returns



- \$50 Canadian bank stock.
- Implied volatility 20%.
- Expected return 5%.
- \$0.65 quarterly dividend or 5.20% yield.

Dividend adjusted probability:

- Above \$50.00 in 90 days is 47.78%.
- Below \$50.00 in 90 days is 52.22%.

Covered Call Returns



- \$50 Canadian bank stock.
- Implied volatility 20%.
- \$0.65 quarterly dividend or 5.20% yield.
- \$1.25 for 90 day \$52.00 covered call.

Dividend adjusted probability:

- Above \$52.00 in 90 days is 32.61%.
- Below \$52.00 in 90 days is 67.39%.

Covered Call Returns



- 67.39% chance that investor realizes a 3.80% real return in 90 days while continuing to own the stock. That yield annualizes at 15.20%.
- 32.61% chance that the stock is exercised.
 - \$0.65 dividend.
 - \$1.25 premium.
 - \$2.00 realized capital gain.
 - **\$3.90** total real return or 7.80% in 90 days.

Covered Call Returns



- Covered call premium is an immediate adjustment on cost base.
- \$50.00 purchase.
- \$1.25 for the 90 day \$52.00 covered call.
- \$48.75 adjusted cost base.

Dividend adjusted probability.

- above \$48.75 in 90 days is 57.90%.
- Below \$48.75 in 90 days is 42.10%.

In Summary on Covered Calls



Covered calls

- Create absolute return.
- Reduce your cost base.
- Periodically forfeit upside moves in order to achieve longer term consistency.



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Selling Puts to Average Down



Selling Puts



- Obligates the seller of the put to potentially buy the stock.
 - At a specific price.
 - Over a specific time.

Selling Puts to Average Down



- Sell puts to average down on a position that moved against you.
- Particularly useful strategy in diversified portfolios that are not concentrated in any one stock.
- Strategy to earn premium returns and average down your cost base on stocks if exercised.

TD Bank Example



- Investor has \$600,000.00 portfolio.
- On July 4th, 2011 - buys 300 TD Bank at \$82.00 for \$24,600.00

TD Example



- August 2nd, 2011 - stock is trading \$7.00 lower at \$75.00.
- Investor still likes the stock.
- Delicate process to covered call write at the lower prices before the stock recovers.
- Investor wants to earn some income while waiting for the stock to return.

TD Example



- August 2nd, 2011
- Investor sells 3 puts to October at the \$70.00 strike.
- Put Bid price is \$1.28.
- Investor makes \$384.00 income.
- The investor must be prepared to potentially own an additional 300 shares in the averaging down process.

TD Example



- Over the October expiration with the stock above \$70.00.
- The 3 puts profitably expire creating an income stream.
- Investor continues to own 300 shares.

TD Example



- Over the October expiration with the stock below \$70.00
- The 3 puts get exercised at \$70.00.
- Now investor owns 300 additional shares at a \$68.72 cost base.
- New ACB for the 600 shares is \$75.36 or \$45,216.00 position.

Considerations



- You have to like the stock.
- You should not be overweight the position.
- You must be willing to own the shares if the puts get exercised.

Options as a Portfolio Management Tool



- Investors need to stop treating options as a speculative vehicle.
- Options need to be considered as a portfolio management tool.
- When used effectively, options can provide:
 - Strategic Leverage
 - Protection
 - Income

