HORIZON KINETICS

Alternative Income Investing

What to do when your bond portfolio is running on empty.

***No Gas for the Next 108 Miles*[1]**

Many investment strategies rely on higher yielding assets as a key driver of returns. Unfortunately, at current historic-low interest rate levels, many of these strategies have begun to disappoint and are likely to continue to do so. Further, a lack of income generation can result in higher levels of portfolio volatility, i.e., decreased efficiency, as investment strategies become disproportionately dependent upon capital appreciation for returns.

Low yields leave investors who rely on bonds as the cornerstone of their portfolio in a 'pickle[2]'. On first base, continued low rates all but guarantee a lack of adequate real income. At second base looms the potential for rising interest rates that may cause significant capital losses in longer duration bond portfolios. Hence, it is no surprise that the use of less traditional income-oriented investments as supplements to bond portfolios continues to grow daily. Many investors have essentially run outside the base path and into the outfield to try to avoid being tagged out.

As investor demand for income continues to flood the far corners of the investment landscape, a handful of asset classes—think investment grade bonds, high yield bonds, closed-end bond funds ('CEFs), real estate investment trusts ("REITs"), and master limited partnerships ('MLPs')—have been the beneficiaries of significant asset flows. Such focus and concentration rarely, if ever, leads to investment results consistent with investors' expectations or historical observations. Necessity may be the mother of invention, but within financial markets, scarcity, not demand, may prove to be the father of asset valuation bubbles.

Although the current investment environment is frustrating to those of us with a strong affinity for income, we find the challenge to be intellectually invigorating. We believe that investors' demands for income oriented investments are justified and present an opportunity for innovation. In response to this pursuit of income, we propose *Alternative Income Investing* ("AII") as a solution, a fruit borne of our own necessities.

We believe that AII provides an efficient source of income alongside traditional longer term fixed income and broader yield-oriented strategies and, at the same time, beneficially diversifies risk exposures. Let's formally outline some of the benefits we believe AII can offer investors.

a. A reasonable rate of return; that is, income in excess of short- to intermediate-term bonds.
b. Long-term volatility levels more consistent with bond markets than with equity markets.
c. Avoidance of duration, convexity, and reinvestment risks inherent in traditional long-

Illustrative purposes only.

[1] According to Wikipedia, the longest stretch of U.S. Interstate without services is a 108 mile section of I-70 in eastern Utah that spans the San Rafael Swell.
[2] A 'pickle' is a baseball term used to describe a situation in which a base runner is caught between two defensive players who are attempting to tag the runner out.

term bonds.

d. *Minimal or negative correlation with traditional bond portfolios.*
e. *Liquidity, transparency, and a reasonable fee, each of which becomes particularly important in a low-return world.*

Establishing a Framework

A growing number of sophisticated institutions advocate a strategy termed 'Risk Parity.[3]' The concept is relatively straightforward; an investor uses leverage to increase both the return from, and the volatility of, their bond portfolio to the point at which its expected return is more equity-like. Historically, bonds have provided a higher risk-adjusted return than equities—that is, bonds offer more 'efficiency' than equities, which can offer more total return potential. Therefore, applying leverage to bonds should be a desirably efficient means of boosting returns and reducing portfolio risk given their low correlation with equities. While Risk Parity may be an intuitive and effective solution for institutions, average investors usually lack access to inexpensive leverage, and cranking up the wattage on their bond portfolios at a time when interest rates are near historical lows may usher in unwelcome levels of volatility.[4]

Rather than converting bond risk/return into equity-like risk/return via leverage, which deliberately increases bond portfolio risk, converting equity risk into 'bond-like' risk to generate yield seems like an attractive way to generate income and reduce equity volatility. Transforming the equity investment payoff structure to be more 'bond-like' can either decrease risk on an absolute basis, or, through asset class diversification, offers a different-but-not-higher form of risk. Reducing equity risk to produce income is likely more consistent with the conservative nature of the average risk-averse bond investor. After all, equities are part of a firm's capital structure. They are subordinated securities with uncertain cash flows rather than fixed payments, and have only residual claims limited to a firm's assets in excess of its liabilities.

Investors regularly perform a form of equity-to-bond payoff conversion via a covered call strategy, i.e., equity buy-write, by buying a stock while collecting an option premium from selling a call option on the long equity position. The expected pay-off is a guaranteed cash flow from any stock dividends paid, plus the call option premium, less any losses in the underlying equity value. Essentially, the investor has created a bond-like pay-off by capping the upside and reducing the down side by collecting cash flows. We consider this is a reasonable approach in some

A generic collateralized equity put writing strategy invests in a short-term, risk-free collateral portfolio usually comprised of U.S. Treasury Bills and writes (sells) equity put options with an aggregate notional value equal to the market value of the collateral portfolio.[5] The put options sold are typically at-the-money or out-of-the-money, i.e., the strike prices are equal to or less than the underlying stock price. In theory, the payoff of an at-the-money put writing strategy is consistent with an at-the-money covered call writing strategy. In reality, we believe equity put writing offers more degrees of freedom and higher capital efficiency. Thus, we believe it is a closer to optimal strategy for generating income.

[3] Further explanation is available in Addendum.
[4] GMO White Paper, *The Hidden Risks of Risk Parity Portfolios,* March 2010, provides a comprehensive discussion.
[5] More specifically, the total notional value may equal the collateral plus the premiums collected from selling put options.

circumstances, but we believe a more elegant solution exists.

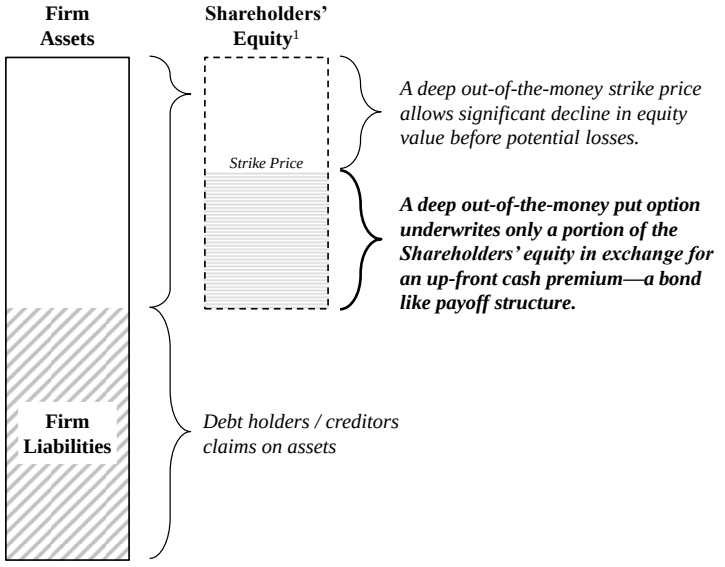
Collateralized equity put writing provides a sound foundation upon which to build a strategy that fulfills the conditions we outlined above. This is neither a new idea nor an untested strategy. Many large institutions, including the likes of Goldman Sachs, GMO, and Cambridge Associates have highlighted its merits and have recommended various iterations of put writing[6].

Generating Alternative Income

AII seeks to generate income from three primary sources of risk/return: a) short-term risk-free interest rates implicit in risky assets, b) short-term investment grade credit spreads, and c) long-term equity volatility premiums. The risk-free rate of return needs little explanation, and given that it is effectively zero at present, we will move on to a discussion of source b.

Returning to our idea of converting equity risk to bond-like risk, consider the following illustration of a firm's capital structure intended to relate a creditor's claims on assets to an out-of-the-money equity option.

Firm Capital Structure Illustration – Out-of-the-Money Put Option



[1]*We assume that the firm's common stock trades at 1x book value so that Shareholders' Equity equals the equity market value of the company.*

For illustration purposes only.

Traditionally, investors have had limited choices: they could become a creditor to or an equity shareholder of a company. Today, investors employ a variety of hybrid investment approaches using derivatives. In particular, writing a put on the equity value of the firm and collecting a guaranteed, up-front cash premium approximates a bond linked to the equity market value of the

[6] Goldman Sachs, *Bond Buyers Equity Basket*, November 2012; GMO, *We Have Met the Enemy, and He Is Us*, February 2013; Cambridge Associates, *The Benefits of Selling Volatility*, 2011.

firm. Further, investors can reduce the volatility associated with the equity value of the firm by writing an option that is out-of-the-money, i.e., assuming only a targeted percentage of the firm's equity risk.

Similar to a corporate bond yield spread that varies inversely with the perceived credit worthiness of the company, an equity option's premium varies directly with the perceived riskiness of the underlying company's equity market value. An option on a company's stock whose equity value is expected to vary significantly over time will have a relatively higher 'implied volatility' which, in turn, produces a relatively higher dollar premium—a form of 'equity spread' in concept.

AII writes long-term, deep out-of-the-money equity put options to convert equity volatility into a more 'bond-like' payoff. With strike prices well below underlying equity values, deep out-of-the-money options are unlikely to incur losses during average declines in equity values while their premium yields (premium divided by notional capital at risk) are generally higher than yields offered by limited duration investment grade bonds.

Consider the following table comparing short-term bond yields for 10 well-known companies to the premium yields for out-of-the-money put options expiring in January 2015.

BOND ISSUE	S&P RATING	BOND YIELD	JAN 2015 CONTRACT		PCT. MONEY	ANN. PREM. YIELD	MULT. OF BOND YLD.
AMZN 0.65 11/27/15	AA-	0.71%	AMZN	P160	62%	3.5%	**5.0x**
GE 5 1/2 02/15/15	AA+	0.75%	GE	P18	77%	3.6%	**4.8x**
WMT 2 1/4 07/08/15	AA	0.42%	WMT	P65	89%	3.6%	**8.6x**
TWC 8 1/4 02/14/14	BBB	0.76%	TWX	P45	80%	3.9%	**5.1x**
GS 3.3 05/03/15	A-	0.80%	GS	P120	80%	3.8%	**4.8x**
CAT 1.05 03/26/15	A	0.55%	CAT	P65	75%	4.2%	**7.7x**
DE 0 7/8 04/17/15	A	0.50%	DE	P65	74%	3.8%	**7.6x**
CVS 3 1/4 05/18/15	BBB+	0.73%	CVS	P47	85%	3.5%	**4.9x**
AXP 5 1/8 08/25/14	A-	0.55%	AXP	P52.5	80%	3.7%	**6.7x**
DOW 5.9 02/15/15	BBB	0.85%	DOW	P23	69%	4.4%	**5.2x**

Source: Bloomberg, COB 3/20/2013

The last column summarizes our point. The premium yields for assuming a company's equity risk with downside protection over a period roughly consistent with the short-term debt of the same company may provide a compensatory rate of return. By comparison, the iShares Barclays 1-3 Year U.S. Credit exchange-traded fund ('ETF') offered a 30-Day SEC Yield of 0.66% as of 3/19/2013. In practice, an investor can engineer a rate of return and reduce risk by selecting the lowest strike possible that still provides the potential to earn their targeted rate of return.

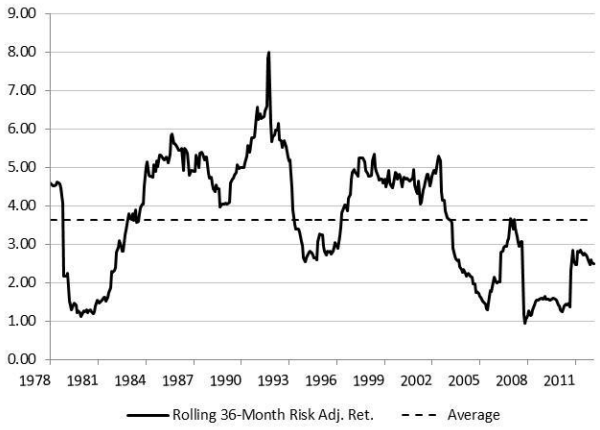
A nuance regarding option premiums that is worth a brief mention is their inevitable decay. For an at-the-money option, i.e., an option with zero intrinsic value, the premium is the dollar

valuation of the option's time value—options can have positive or negative time value depending on where the strike price is in relation to the underlying security price. This value will inevitably decay as time passes and expiration approaches. By utilizing out-of-the-money options, AII seeks to capture this time decay as though it were the accrual of a bond yield or dividend yield.

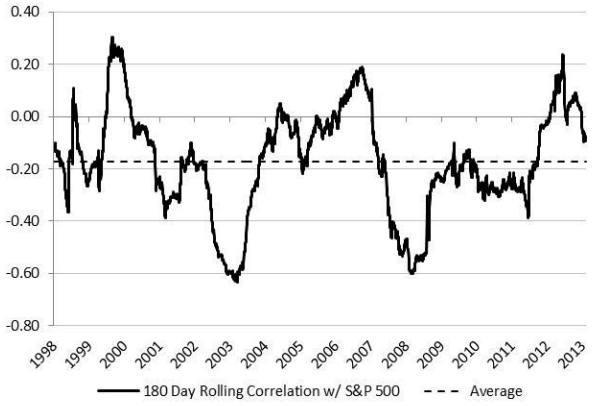
Collateral Management

One of the benefits of collateralized equity put writing is the freedom to invest the collateral portfolio in income-producing assets. Ideally, collateral investments should offer relatively high risk-adjusted returns in both rising and declining interest rate environments and should be relatively uncorrelated with U.S. equity markets and market volatility levels. The chart below shows that the average rolling 3-year risk-adjusted return for the Barclays 1-3 Year U.S Credit Index has been approximately 3.6 since 1976.

Risk Adjusted Returns
Barclays 1-3 Yr. U.S. Credit Index
January 1976 – February 2013 (Monthly)



Return Correlation with S&P 500
Barclays 1-3 Yr. U.S. Credit Index
May 1997 – February 2013 (Daily)



Source: Barclays Capital PLC

Thus, a portfolio of short duration fixed income bonds, including U.S. Government, agency, and corporate securities is a reasonable collateral base for AII. A short duration posture helps avoid significant price volatility from changes in interest rates and/or spreads, allows bond coupons to reset more frequently, and reduces liquidity and refinancing risks. Admittedly, in presenting historical analysis to select collateral it appears as though we are following a practice we denounced earlier—expecting these securities to act as they have historically. However, we believe that our choice is based on common sense, as research suggests that long-term U.S Government bonds have historically been the most attractive collateral for an equity put writing strategy. But, given current market conditions using long-term bonds as collateral seems less prudent.

In addition to generating incremental income, the collateral portfolio can dampen the aggregate volatility of the AII strategy as investors seek safety in higher quality bonds. From the right-hand chart above, the average 180-Day correlation of the Barclays 1-3 Yr. U.S Credit Index to the

S&P 500 Index has been -0.17. Clearly, during periods in which equity and bond markets become correlated, mark-to-market volatility for the strategy will increase. Over time, however, a high quality, short duration collateral portfolio should bring a higher level of capital efficiency to a put writing strategy than a similar strategy that utilizes cash and cash equivalent investments that currently offer a negligible nominal yield.

There is no 'Free Lunch'; only Risk Management

Despite their perpetual efforts to develop strategies promising returns or income without risk, investors have found neither. Nor will they. Whenever it appears they have, the music eventually stops, and some of the investments prove to be frauds, and investors end up suffering losses beyond normal market risks. So, let's discuss the key risks of AII and how they are managed.

Accept Mark-to-Market Risk, Avoid Capital Impairment

When investing with equity options, it is important to distinguish between mark-to-market losses and intrinsic, or realized, losses. Both contribute to day-to-day volatility. However, only the latter type produces real economic losses.[7] Consider that a bond's market value can fluctuate significantly from its par value prior to maturity as interest rates and credit spreads change. Yet, at maturity the value of the bond price will converge to the final principal payment value (the bond's face value), assuming the issuer can fulfill its obligations. A similar dynamic exists with equity options. An option's market value will fluctuate prior to expiration, but its terminal expiration value is strictly defined by its intrinsic value, which is a function of its strike price and its underlying security price. Any time value decays to zero upon expiration of the option.

A put option is considered in-the-money when the strike price is above the underlying security price, creating a positive intrinsic value. By writing/selling deep out-of-the-money put options, AII seeks to limit the probability of option positions having positive intrinsic values at expiration, which would result in stock assignments and subsequent realized losses.

Mark-to-market volatility of an option is primarily driven by fluctuations in the underlying security price and the implied volatility used by market participants to value the option. Both contribute to an option's price volatility and are important risks to quantify. Accordingly, they have Greek terminology which we will only mention here. The first is 'delta' which is simply the approximation of the change in the option price for a given change in the underlying stock price. The second is 'vega' which is the sensitivity of an option's market value to changes in implied volatility levels. While the mark-to-market volatility of a short put option position can be uncomfortably high over short periods, it will not translate into a realized loss of capital at expiration so long as the strike price remains below the underlying stock price—that is, the put option maintains zero intrinsic value.

The takeaway is that a deep out-of-the-money put option price may fluctuate due to changes in its underlying stock price and its implied volatility. However, the ultimate determination of capital losses, if any, is the option's terminal intrinsic value at expiration, similar to how the price of a discounted corporate bond ultimately converges to par. AII

[7] This statement assumes option positions are held to expiration; trading options prior to expiration can result in realized losses.

accepts mark-to-market risks in exchange for up-front option premiums, but seeks to actively avoid capital impairment arising from intrinsic value losses.

Option Portfolio Risk Management

Equity put writing is a form of insurance underwriting. We collect premiums to insure someone against a loss related to an asset. We are able to invest the float, i.e., premiums, and the collateral portfolio to generate additional returns. We can choose what risks to underwrite and set deductibles, i.e. strike prices, depending on risk levels. One unique difference is that we can cancel an insurance policy prior to expiration. So, like any successful insurance business, equity put writing requires a sound risk philosophy. Diversification, an emphasis on higher quality companies, and a buy-to-close discipline can limit the losses and volatility of the option portfolio.

First, option notional exposure to each company is limited to a fraction of the strategy's total exposure. This approach places an absolute limit on the maximum intrinsic loss impact of any single company exposure on the strategy overall. Additionally, exposures to companies and industries tend to be more evenly distributed than in traditional market cap weighted approaches. It is important to avoid co-dependence and concentration that result from market dynamics—think technology and financials in the past 20 years.

Second, focusing on higher quality companies with proven business models and/or attractive valuations can further insulate the portfolio from potentially significant losses. Although our fundamental analysis seeks to avoid companies with excessive valuation risk, we are ultimately willing to accept 'quotational' price risk but seek to avoid fundamentals-based losses.

The last consideration, which is no less important than the others, is management of option exposures as the time values collapse and stock prices fluctuate around strike prices. In the case where time values collapse due to rising stock prices, declining volatility, or simply the passage of time, short option positions maybe rolled in a methodical manner. A short put option position with little time value only offers a one-way event risk. Similarly, positions for which stock prices decline to levels at or near strike prices are covered to avoid the potential for significant intrinsic losses.

Collateral Portfolio Risk Management

AII maintains a portfolio of cash and bonds with a market value that is equal to or greater than the notional exposure of the options, which satisfies the aggregate commitment to purchase equities. Hence, it is considered a fully collateralized put writing strategy. By maintaining fully collateralized short put positions, the potential need to cover option positions during periods of market volatility can be markedly reduced, if not completely eliminated.

By design, the collateral portfolio emphasizes liquidity and avoids significant credit, interest rate, and issuer risk by building a high quality, short duration portfolio of government and corporate bonds. Corporate issuer exposures are limited to avoid single issuer risk. Further, the collateral portfolio tends to underweight the financials sector relative to broader short duration bond indexes as financial credit spreads tend to have high levels of correlation with market volatility

levels. As an additional layer of liquidity, the strategy may hold bond exchange-traded funds ETFs and CEFs that offer broad diversification and increased levels of liquidity.

A Closing Thought

We believe that the continued march towards traditional income-based strategies will only drive prospective asset yields lower and result in disappointment. Ovid wrote that "Nothing is stronger than habit[8]." This may be true, but 'greed' might give 'habit' a real run for its money.

Alternative income investing is not a panacea for investors' income needs. It is a unique income-oriented investment approach that is designed to complement investors' existing portfolios. Risk/return efficiency, income generation, diversified exposures, and a limited correlation with long-term bonds are only a few of its virtues.

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Addendum

More on Risk Parity

Leverage is applied to a bond portfolio to produce an expected rate of return more consistent with equity markets. Depending on an investor's risk preferences one might consider leveraging a bond portfolio such as the Barclays Aggregate Bond index ("AGG") by 1.5x to 2.0x to generate a materially higher return. For our purposes, let us leverage the AGG by 1.75x and refer to the new return expectation at AGG_Lev.

20 Year Summary as of 1/31/2013

	AGG	AGG_LEV	S&P500
Annualized Return	6.20	8.10	8.45
Volatility	3.65	6.33	15.15
Risk Adjusted Return	1.70	1.28	0.56

In a traditional portfolio equity and bonds are blended together based on dollar weights, e.g. 60% bonds and 40% equities. In the Risk Parity approach, bonds and equities are weighted based on risk. As the word 'parity' implies, bonds and equities are weighted such that both exposures contribute equal amounts of risk to the aggregate portfolio.

[8] Wikiquote: Publius Ovidius Naso (Ovid), Ars Amatoria (The Art of Love) II, 345

Referring back to a 60/40 portfolio, bonds might be a larger weight by assets, while the equity exposure may account for a majority of the portfolio's volatility. Using the S&P 500 Index as a proxy for equity exposure and blending it with the AGG_Lev portfolio on an equal contribution to risk[9] basis yields the Blended Portfolio statistics in the following table.

20 Year Summary as of 1/31/2013

	AGG_LEV	S&P500	Blended Portfolio
Annualized Return	8.10	8.45	8.65
Volatility	6.33	15.15	6.43
Risk Adjusted Return	1.28	0.56	1.34

The Risk Parity allocation for these two assets is approximately 70% AGG_Lev and 30% S&P. In dollar terms, an initial $100 investment would be allocated as $70 to AGG_Lev exposure and $30 to the S&P 500 exposure. However, the AGG_Lev exposure carries a leverage ratio of 1.75x so the $70 allocated would become $123 ($70 plus $53 in leverage) in bond exposure. Total gross exposure would be $153.

[9] For two asset portfolio one can find the equal contribution to risk weights as $W_B = (1/Vol_B) / (1/Vol_B + 1/Vol_E)$, $W_E = 1\text{-}W_B$