The Ultimate Income Portfolio: 7.1% Yield with Low Risk

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In July of 2010, I introduced a portfolio-construction strategy called the Ultimate Income Portfolio (UIP). I have updated that strategy annually, revising the holdings and reviewing the previous year's results. (Here are the results for 2011, 2012 and 2013 My goal is to provide the maximum available yield while diversifying to reduce risk. I set a target risk, which is within the range that most individual investors seek. I also sell covered call options against portfolio holdings to increase income.

In this article, I analyze the performance of last year's UIP and generate the UIP for 2014-15. The result is a portfolio that yields 7.1% with a risk level equivalent to a 70/30 stock/bond index fund. I also explore some of the lessons learned from four years of tracking and revising the portfolios.

Background

Some investors focus on the yield generated by their portfolios rather than on the expected total return. Typically, they prefer to use the income provided by their portfolios, without relying on principal, to reduce the possibility that they will have to sell assets during market declines. Relying only on portfolio income should eliminate the possibility of exhausting portfolio assets.

But the income generated by a portfolio may fluctuate and may not keep up with inflation. Relying only on income does not mean that an acceptable level of income will be generated. For those investors who are weighing the costs and benefits of an income strategy, as well as for those who prefer income to capital appreciation, it is crucial to understand how much income is available at acceptable risk levels.

The four previous iterations of the UIP have been implemented in increasingly difficult conditions for income seekers. The Fed has kept interest rates on Treasury bonds at or near record lows. As a result, the available yields from almost every asset class have dropped. Many income investors have invested in riskier asset classes including equities, real-estate investment trusts, master-limited partnerships (MLPs) and lower-grade bonds to achieve levels of income that were available from Treasury bonds in past decades. The silver lining to this environment is that inflation has also remained low, so that there is less incremental loss of purchasing power.

The good news from the past four years is that it has remained possible to generate high levels of income with risk levels consistent with those chosen by many individual investors. Even as the very low-interest-rate environment has persisted and market valuations have trended higher, there are attractive income portfolios.

Reviewing the 2013 Ultimate Income Portfolio

The total return for the UIP for the 12-month period through September 2014, without selling covered calls, was 9.8% including dividends. The total return including the covered call sales was 9.0%. The reason why this was lower is explained below. The total realized yield without selling covered calls was 6.0% and the total yield in the case with covered calls was 7.6%. Realized yield is the actual yield that the portfolio provided over the period. Selling call options is guaranteed to increase yield, because the option premiums are a source of income. The total return from the portfolio in the case of selling calls is actually lower than without calls because the price appreciation sacrificed by selling calls exceeded the call premiums. This is not an uncommon outcome.

All results from prior years are shown in Appendix A. The cumulative four-year annualized total return from the UIP was 9.0% and the average annual realized total yield (including covered calls) has been 8.6% per year.

UIP holdings and yield as of October 1, 2013

Name	Ticker	Weight	Yield
iShares Short-Term Bond	SHY	15.0%	0.3%
iShares High Yield Bond	HYG	10.5%	6.5%
iShares S&P U.S. Preferred Stock	PFF	10.0%	5.8%
iShares Corporate Bond	LQD	9.0%	3.9%
Windstream Holdings	WIN	5.0%	11.8%
SPDR S&P International Dividend	DWX	5.0%	6.8%
Wells Fargo Global Dividend	EOD	5.0%	11.6%
Calumet Specialty Product Partners	CLMT	5.0%	9.2%
Kinder Morgan Energy Partners	KMP	5.0%	6.6%
Seadrill	SDRL	5.0%	7.8%
iShares Mortgage REIT	REM	5.0%	15.3%
Boardwalk Pipeline Partners	BWP	5.0%	7.2%
Vanguard Extended Duration Bond	EDV	5.0%	3.8%
National Grid PLC	NGG	5.0%	5.4%
Frontier Communications	FTR	3.0%	9.2%
Wisdom Tree Global Real Estate	DRW	2.5%	11.1%

While the overall results from the UIP for 2013-14 provided income and total return consistent with expectations, there was variability in performance among individual positions. Boardwalk Pipeline Partners (BWP) went from a high of more than $30 per share in October 2013 to a low of less than $13 per share in March. Seadrill (SDRL) has fallen from a high of about $46 in November 2013 to a low of $25 today. On the other end of the performance spectrum, Frontier Communications (FTR) gained 65% and Windstream Holdings (WIN) gained 47% for the 12-month period through September

2014.

Those huge swings were within what was expected based on the volatility projections when the portfolio was designed, but experiencing this level of volatility is sobering. The projected volatility for SDRL in the UIP analysis performed Oct.1, 2013, was 36%. The 32% loss in SDRL for the year was well within the range of expected returns given this level of volatility. These results show that the observed levels of volatility in individual holdings may be too high for many income investors even though, in theory, investors should only concern themselves with the total portfolio risk and return.

Three individual MLPs comprised a total of 15% of this portfolio (BWP, KMP and CLMT). Their performances highlighted how volatile this asset class can be. BWP lost almost 36%, KMP gained almost 24% and CLMT gained 10.6% over the year.

The allocation to high-yield bonds (represented by HYG) decreased over the past several years, from 15% in 2011 to 10.5% for the most recent 12 months. The lower allocations were driven by falling yields, as prices have risen. HYG had annualized total return of 10.3% for the three years through September 2013. The relatively modest 10.5% return for high-yield bonds in the last year has actually made this asset class look attractive compared to other asset classes that have experienced larger gains (and subsequently greater declines in yield). MLPs have returned 23.3% (using MLPI to represent the share class), utility stocks (represented by XLU) are up by 16.8% and long-term government bonds (TLT) have returned 12.8%.

The sales of covered calls, assumed to be at the bid price when the portfolio was constructed, provided an additional 1.6% in income for the year. The portfolio's total return would have been somewhat higher without covered calls (9.8% versus 9%). But a number of the underlying holdings enjoyed significant price gains. Selling off the potential upside in the form of call options was not a profitable trade for the past year.

The UIP's performance for 2013-14 was consistent with expectations and with past years. The total yields, both with and without covered calls, are very close to the projected yield. While four years is too short a period from which to draw definitive conclusions, each year in which the realized income matches the projected income – even in the face of huge swings in individual holding values – provides additional comfort with the approach.

The Ultimate Income Portfolio for 2014-15

I constructed the UIP for the coming year by identifying candidates on the basis of yield and both trailing and projected volatility. I have set the target risk level to be equal to the volatility of a portfolio allocated 70% to the S&P 500 and 30% to the Barclays aggregate bond index (hereafter referred to as the 70/30 portfolio). I also set the portfolio to have a neutral exposure to changes in interest rates.

The risk projections used here were generated by Quantext Portfolio Planner (QPP), a Monte Carlo portfolio-planning tool that I developed. This tool accounts for the correlations between assets when determining the diversification benefit in mitigating risk and when estimating the total return. I use the implied volatility of options on SPY to project the volatility of the S&P 500. QPP then projects volatility for all other asset classes. For more details as to how this process works, see here.

The original goal for the UIP in 2010 was to maximize yield for a portfolio with risk comparable to that of TLT, a long-term Treasury exchange-traded fund (ETF). But the high volatility of longer-duration bonds has made me question the appropriateness of this risk benchmark. The best forward-looking estimate of volatility is the implied volatility derived from put options. The implied volatility of at-the-money put options on TLT expiring in June 2015 (the middle of the next year) is 16.75%, and the implied volatility of June 2015 at-the-money put options on SPY is 17.8%. The current QPP projected volatility for TLT is higher than that of the S&P 500 (19.2% for TLT versus 17.8% for the S&P500). I set the target risk level to match the 70/30 portfolio because this is more reasonable for an individual investor. The projected volatility for the 70/30 portfolio is 12.6% (annualized).

In general, bond returns have a negative correlation and stocks have a positive correlation to increasing Treasury bond yields. Over the past three years, investment-grade corporate bonds (represented by LQD) have exhibited a -58% correlation to 10-year Treasury yield, while the 70/30 portfolio has had a +27% correlation to the same. While it is a given that interest rates must rise at some point, I have merely specified that the UIP should be fairly neutral with regard to changes in Treasury yield. The correlation between the returns from the new UIP and the 10-year Treasury yield was -11% over the past three years.

Ultimate Income Portfolio for 2014-2105

	Fund	Ticker	Weight	Yield
Fixed Income Funds	iShares U.S. Preferred Stock	PFF	15%	7.0%
	Vanguard Extended Duration Treasury Bond	EDV	4%	3.1%
	iShares iBoxx Investment Grade Corp Bond	LQD	8%	3.5%
	Petritus High Yield Bond	HYLD	12%	7.8%
Equity and REIT funds	Wells Fargo Advantage Global Dividend Oppty	EOD	9%	9.1%
	iShares Mortgage REIT	REM	6%	13.4%
	Global X Super Dividend	SDIV	5%	6.2%
	iShares MSCI United Kingdon	EWU	6%	6.7%
	iShares Global Telecom	IXP	6%	11.9%
	SPDR International Dividend	DWX	4%	6.9%
Individual Equities	Zurich Insurance Group	ZURVY	6%	6.5%
	New York Community Bancorp	NYCB	3%	6.4%
	GlaxoSmithKline	GSK	4%	5.8%
	BCE Inc.	BCE	4%	5.2%
	National Grid	NGG	4%	4.9%
	Duke Energy	DUK	4%	4.2%

This portfolio has a current yield of 7.1% and projected volatility of 12.5%. Along with generating risk projections, QPP also estimated the total return for the portfolio. The expected total return for the UIP is 7.4% as compared to 6.5% for the 70/30 portfolio. While the estimate for expected total return is highly uncertain, it makes sense that the current yield should be quite close to the total return. By maximizing yield, we give up most of the potential for the price appreciation that accompanies growth.

The estimated total return for the 70/30 portfolio results from expected return of 8.3% for the S&P 500 and 2.2% for the aggregate bond index (AGG).

As in past years, I calculated the additional yield available from selling covered calls against the holdings for which there are listed options. This is less than 1% of additional yield. The low prices available for call options are due to the prevailing low-volatility environment. In June 2010, when the original UIP was published, VIX was at 29.7%, while it stood at 16.3% at the end of September of 2014. Lower volatility results in cheaper call options. Because of the very low prices of calls, the UIP assumes that no calls are sold for 2014-15. These results do not necessarily mean that calls are too cheap. The low prices may represent low expectations for potential gains.

Comparison to previous years

The expected total yield for the UIP for 2014-15 is lower than it has been in previous years as a result of increasing valuations for almost all risk asset classes and for income-generating asset classes in particular. The available income from selling call options is also sufficiently low, largely due to low volatility, so I've concluded that covered calls simply aren't worth the effort required. While this lowers income, the benefit is that there is more potential upside in the event of market gains.

A substantial shift from last year is that there is no allocation to short-term bonds (SHY). In last year's UIP there was a 15% allocation to SHY, which reduced portfolio risk and offset the high risk of a number of other positions. In the new UIP, there are fewer high-yield and high-risk individual holdings.

In 2010, the UIP, shown below, was equally weighted across nine individual stocks and one high-yield bond fund (COY). The yield from that portfolio without selling covered calls was 6.1%. Today, the same portfolio yields 4.6%. Note that COY is no longer listed, so I substituted a high-yield ETF (HYLD) to calculate recent yield. At that time, the iShares Select Dividend ETF (DVY) had a yield of 3.9%, and LQD, an investment-grade bond ETF, had a yield of 5.3%. Today, DVY yields 3.2% and LQD yields 3.5%.

Ultimate Income Portfolio from July 2010

Name	Ticker	Percentage of Funds
High Yield Bond Fund	COY	10%
Con Ed	ED	10%
Dominion	D	10%
Pinnacle West	PNW	10%
Xcel	XEL	10%
Duke	DUK	10%
Verizon	VZ	10%
AT&T	T	10%
Glaxo	GSK	10%
Bristol Meyers	BMY	10%

Rising prices across almost every risk asset require that investors look to riskier assets for income. But the projected volatility for the new UIP (12.5%) is lower than it was in 2010 (21%; see Appendix A), primarily due to a decrease in market-wide volatility levels over that period. In other words, this is a lower-yield environment but also one with substantially lower risk – based on option prices, which are the best measures of risk available. Thus, while the current UIP invests in riskier assets today than in 2010, the prevailing risk levels have fallen substantially.

Final thoughts

After four years, the UIP strategy is performing to expectations. The holdings have changed substantially over this period, however, and the allocation for the coming year is very different than the original UIP in 2010. Back then, a combination of blue-chip stocks and a modest allocation to high-yield bonds provided 1.3 times the yield of the same portfolio today.

This year's UIP shows that it is possible to generate substantial real yield despite lower-than-historical yields across many asset classes. The available income is lower than last year, a continuation of a trend since the first UIP was first introduced. As market valuations increase, yields fall and investors become more complacent. It is harder to get paid to take on risk. Unless one has a very optimistic assessment of the expected price appreciation for stocks going forward, it is hard to beat 7.1% in income along with the potential for price appreciation, a fairly neutral position with regard to interest rates and a risk level equivalent to the 70/30.

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Appendix A: Projected and realized risk, return, and yield for each year's UIP

	Expected Yield When Constructed	Realized Total Return (12 months)	Realized Total Yield (12 months)	Projected Volatility	Realized Volatility
2010 UIP	9.7%	14.8%	9.7%	21.0%	8.0%
2011 UIP	8.7%	10.5%	9.3%	15.2%	9.3%
2012 UIP	9.0%	2.2%	7.9%	14.9%	9.2%
2013 UIP	8.1%	9.0%	7.6%	11.0%	8.1%
2014 UIP	7.1%	n/a	n/a	12.5%	n/a