

# Indxx Hedged Dividend Income Index

*A True Income Alternative*

December 2014

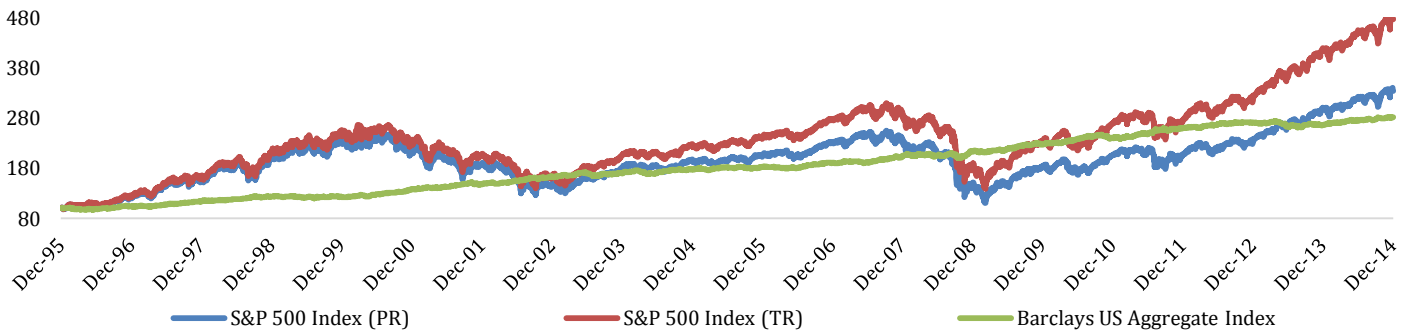


**indxx**

The Indxx Hedged Dividend Income Index (IDIVALS) is a sector neutral index which is designed to measure the performance of a strategy utilizing three portfolios: a long portfolio (with 100% long position in the Indxx Long High Dividend Index); a short portfolio (with 50% short position in the Indxx Short Low Dividend Index); and a 50% long position in the Indxx Cash Index.

### Pure Income Exposure

Figure 1: Performance Chart



- S&P 500 Total return index has provided excess returns of nearly 141% over S&P 500 Price Return Index on cumulative basis during period 1995-2014 which is comparable to 181% returned by fixed-income benchmark, Barclays US Aggregate Index.
- Income slice of S&P 500 become even juicier if it is considered that S&P 500 PR and S&P 500 TR have identical volatilities which shows that these additional returns are earned at almost zero additional risk.
- Considering the fact that interest rates in US are expected to rise from 0% later in the year, a product capturing income slice would be much more attractive to the investors than fixed-income products.
- IDIVALS effectively captures dividend slice by taking long position on high dividend-yielding securities with record of consistent dividend payments and taking short position on securities paying no dividends or having low dividend yields. 50% hedge strategy and sector-balanced portfolio construction approach provide IDIVALS has robust in-built mechanism to control market risk and sectorial risk and provide a pure income exposure to investors.

### True Alternative: Equity or Fixed-Income ?

Figure 2: TTM Volatility

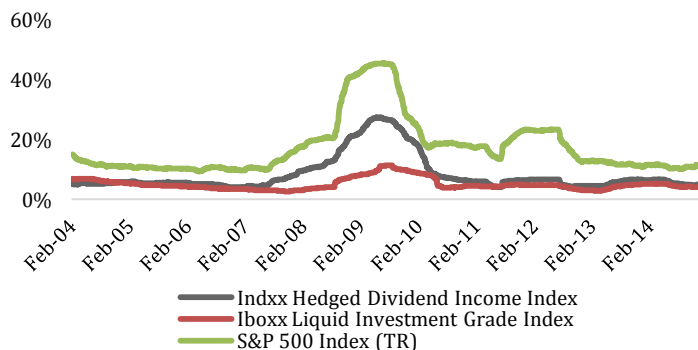
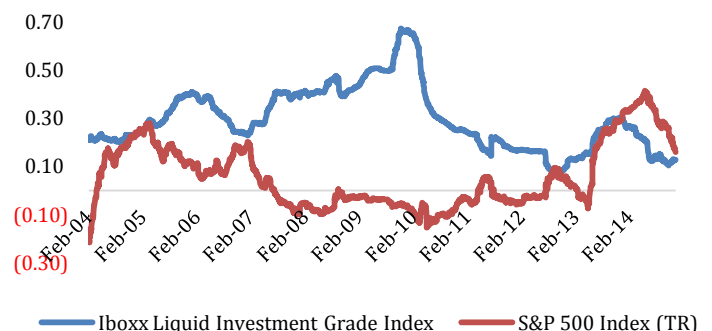
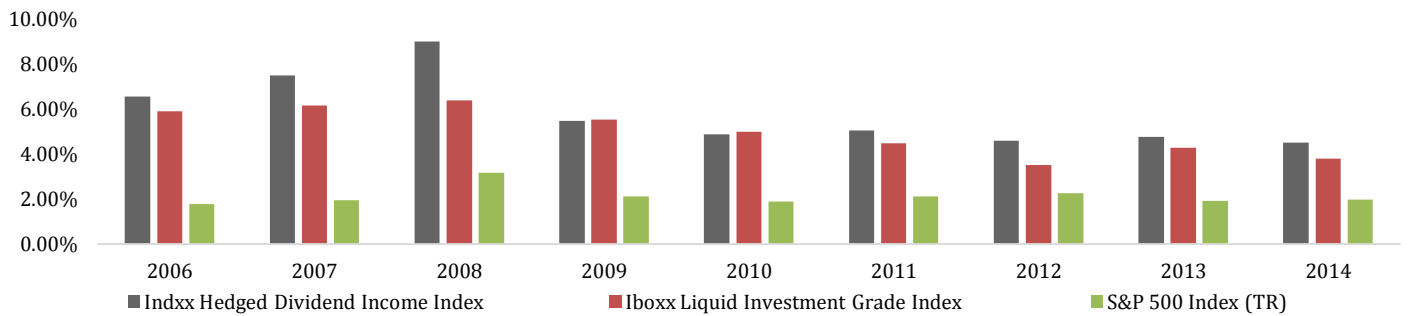


Figure 3: TTM Beta for IDIVALS w.r.t. Benchmarks



- IDIVALS has shown significantly lower volatility, almost comparable to Iboxx Liquid Investment Grade Index for most of its history except the period 2007-2009 when volatility for product remained between debt and equity benchmarks.
- Beta for product with equity remained near or below 0.40 w.r.t. S&P 500 for most of the period. However, it is visible that over the last 1 year, product has maintained higher beta with fixed-income benchmark than equity benchmark.

## High Income Yield on Consistent Basis

**Figure 2: TTM Income Yield**


- IDIVALS has maintained higher income yield than iBoxx Liquid Investment Grade Index on consistent basis and significantly higher income yield than S&P 500.
- Considering S&P 500 as representative set for US equities, it can be observed that US companies have lowest debt levels on books in last 25 years, have registered best performance of last 60 years in terms of free cash flow over the last 5 years and have paid highest dividends to investors last year in the history while maintaining modest dividend payout ratio of 35%. Clearly, corporates have capability to maintain or increase their dividend payments.
- With Fed all set to embark on interest rate hike this year, bonds can come under strong selling pressure. Moreover, financial markets can see sharp rise in short-term volatility as a result of actions by Fed. In these circumstances, IDIVALS with in-built protection against market risk and sustainable incomes can be a suitable alternative for investors.

## Performance Analysis

**Table 1: Calendar Year Returns**

Year	Indxx Hedged Dividend Income Index	Iboxx Liquid Investment Grade Index	S&P 500 Index (TR)
2003	14.49%	4.51%	34.16%
2004	12.56%	5.75%	10.88%
2005	-2.94%	0.84%	4.91%
2006	13.45%	3.98%	15.79%
2007	-5.77%	4.02%	5.49%
2008	-15.30%	0.96%	-37.00%
2009	23.13%	12.80%	26.46%
2010	14.31%	9.37%	15.06%
2011	12.45%	9.15%	2.11%
2012	1.61%	11.84%	16.00%
2013	6.72%	-2.40%	32.39%
2014	15.67%	8.66%	13.69%

- IDIVALS has outperformed iBoxx Liquid Investment Grade Index in 8 out of 11 years under observation which position it as a much better income strategy considering that volatility for both products has remained in similar range for most of the observation period.
- Apart from years (such as 2003 and 2013) marked by bullish shift in the market, IDIVALS has managed to provide comparable (or even better) returns to S&P 500. In high volatility periods such as 2008 (-15.30% v/s -37%) and 2011 (12.45% v/s 2.11%), IDIVALS has provided significant outperformance over S&P 500 Index.
- IDIVALS is a unique alternative offering that can protect investors against market risk associated with equity strategies and interest rate risk associated with fixed-income investment while providing strong income stream on consistent basis.

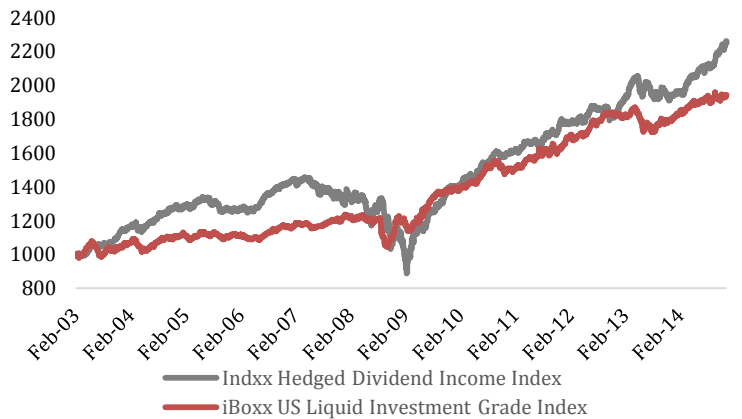
### Product Snapshot (as of 31<sup>st</sup> Dec, 2014)

**Table 2: Fundamentals**

Base Date	2/28/2003
Current Index Value	2,248
52 Week High/Low	2,262/1,933
Sharpe Ratio*	1.37
Dividend Yield** (Long Index)	4.98%
Dividend Yield** (Short Index)	0.51%
Cash Yield**	0.02%
Net Dividend Yield**	4.49%
Dividend Growth** (Long Index)	10.50%
Dividend Growth**(Short Index)	4.70%

\*Over last 5 years \*\*LTM Basis

**Figure 3: Performance chart**



**Table 3: Risk/Return Statistics**

Statistics	QTD	1 Year	2 Year	5 Year	Since Base Date
<b>Annualized Returns</b>					
Indxx Hedged Dividend Income Index	6.41%	15.67%	11.10%	10.02%	6.81%
Iboxx Liquid Investment Grade Index	2.14%	8.66%	2.98%	7.20%	5.55%
S&P 500 (TR) Index	4.93%	13.69%	22.68%	15.45%	9.68%
<b>Beta</b>					
S&P 500 (TR) Index	0.19	0.13	0.21	0.19	0.37
Iboxx Liquid Investment Grade Index	-0.08	0.22	0.39	0.14	-0.06
<b>Correlation (w.r.t)</b>					
S&P 500 (TR) Index	0.48	0.3	0.41	0.52	0.72
Iboxx Liquid Investment Grade Index	-0.06	0.18	0.31	0.11	-0.03
<b>Standard Deviation</b>					
Indxx Hedged Dividend Income Index	5.67%	4.83%	5.75%	5.75%	9.88%
Iboxx Liquid Investment Grade Index	4.66%	4.13%	4.61%	4.33%	5.41%
S&P 500 (TR) Index	14.19%	11.29%	11.12%	15.73%	19.14%

Return for period greater than 1 year are annualized

**Table 4: Index Characteristics**

	Indxx Long High Dividend Index	Indxx Short Low Dividend Index
No. of Constituents	100	167
Total Market Cap (\$ Mn)	2,775,711	4,559,514
Average Market Cap (\$ Mn)	27,757	27,302
Median Market Cap (\$ Mn)	9,213	10,953
Largest Constituent (\$ Mn)	253,766	391,482
Smallest Constituent (\$ Mn)	3,173	2,858

**Table 5: Sector Breakdown**

Sector	Indxx Long High Dividend Index	Indxx Short Low Dividend Index
Utilities	25.00%	12.50%
Financials	22.00%	11.00%
Energy	20.00%	10.00%
Consumer Discretionary	12.00%	6.00%
Information Technology	5.00%	2.50%
Industrials	4.00%	2.00%
Telecommunication Services	4.00%	2.00%
Consumer Staples	4.00%	2.00%
Materials	3.00%	1.50%
Health Care	1.00%	0.50%