

B400 + SDOGX: The Backbone of a Core U.S. Equity Position

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Much has been written in recent years about what investors are getting when they invest in a 'smart beta' strategy. Indexing purists argue that a 'smart beta index,' in particular, is oxymoronic and a contradiction to the role traditional market cap weighted indexes have played in providing investors with a truly passive exposure to equities. Frankly, we don't disagree. However, we would rather focus our research on *investment outcomes* than on academic discussions. In this regard, an investor that considers himself as truly passive should own one single position: an index fund that tracks the entire market. For purposes of this paper's illustrations, we will use the Russell 3000 as such vehicle, which represents over 98% of the U.S. equity market aggregate market cap. Anything besides this (other than, say, an index fund tracking the Dow Jones U.S. Total Stock Market Index) is an active bet on a segment of the market. Even an investment in the S&P 500 represents a bet on large stocks.

When focusing on *investment outcomes*, the average investor normally seeks a combination of the following three: capital preservation, capital appreciation and income generation. Bonds have typically provided a good measure of capital preservation and income, while equities have provided a good measure of capital appreciation. In recent years, however, as bond yields have declined to zero and even into negative territory in some cases, stocks have been called to provide income as well as capital appreciation. Investors who have shifted some of the assets they would have normally invested in bonds toward equities, frankly, have been handsomely rewarded, as these have provided not only the income they sought but also capital appreciation to boot. We can find no better example of such combination than the S-Network Sector Dividend Dogs Index (SDOGX). An investor that bought a vehicle tracking SDOGX ten years ago, would have earned 11.3% per year (before fees), with 4.5% of that coming from dividend payments from the underlying 50 constituents (for a complete primer on the index's methodology please refer to <http://sdogx.snetglobalindexes.com/>)¹. Going back to the index's inception, in December 1999², an investor buying \$100 of an SDOGX vehicle would have earned almost three times as much as an investment in the Russell 3000 Index (before fees), as illustrated in Figure 1.

Figure 1. Growth of 100 December 31, 1999 Through November 30, 2016.



Sources: Bloomberg and MarketGrader Research

¹ One cannot invest in an index. The examples provided in this paper are for illustration purposes only and do not take into account transaction costs or management fees.

² The index's inception date was December 31, 1999 according to S-Network Global Indexes.

Capital Appreciation

Regular readers of MarketGrader's Research papers will know that our broadest measure of capital appreciation in the U.S. market is the Barron's 400 Index (for more on that index's methodology, please refer to http://global.marketgrader.com/indexes/overview/Barrons_400). Unlike SDOGX, its goal is not to provide dividend income, although many of its constituents do pay a dividend. Historically, however, the dividend portion of the index's total return has represented only about 1.2% per year compared to 4.5% for SDOGX. An investor that had owned a vehicle tracking B400 in the last ten years would have earned a total return of 8.1% per year, before fees³. And for comparison's sake, a \$100 investment in December 1999⁴ would have resulted in a return 2.3 times the size of an equal investment in the Russell 3000 (before fees), as illustrated in Figure 2.

Figure 2. Growth of 100 December 31, 1999 Through November 30, 2016.



Sources: Bloomberg and MarketGrader Research

In summary, an investor owning either SDOGX or B400 since the beginning of 2000 to date would have done much better than the total stock market as measured by the Russell 3000, which, on a total return basis (including dividends) returned 5.0% per year, through November 30, 2016. This represents an underperformance of 6.7% per year vs. SDOGX and 5.2% vs. B400. Naturally, at this point the reader may ask, why not just own SDOGX if it has clearly outperformed both the market and a capital appreciation vehicle?

³ One cannot invest in an index. The examples provided in this paper are for illustration purposes only and do not take into account transaction costs or management fees.

⁴ The Barron's 400 index was first published on August 29, 2007. All estimated daily historical closing prices prior to that date are based on back-testing (i.e., calculations of how the index might have performed in the past if it had existed). Backtested performance information is purely hypothetical and is solely for informational purposes. Backtested performance does not represent actual performance, and should not be interpreted as an indication of actual performance. Past performance is not indicative of future results. "The Barron's 400 IndexSM" is calculated by NYSE Euronext or its affiliates and published by MarketGrader. "Barron's®," "Barron's 400SM" and "Barron's 400 IndexSM" are trademarks or service marks of Dow Jones & Company, Inc. or its affiliates and have been licensed to MarketGrader.

A Tale of Two Markets

The stock market since 2000 may be broken down into two distinct cycles based on market correlations among size segments and sectors. Following the dot-com bubble of the late 90s, anyone not invested in a market capitalization weighted benchmark did better than the overall market. Following the bursting of that bubble, beginning in March 2000, the dispersion of stock market returns grew as money flowed out of overpriced stocks heretofore dominating the benchmarks in search for value. Stock pickers and active managers overall did well as did non-market cap weighted indexes. Correlations among market sectors relative to the S&P 500 stayed relatively low, allowing investors to clearly bet on winners and losers after a decade of an almost unimpeded rise in stock values, driven by large caps.

This all changed with the financial crisis of 2008, which, as far as equities were concerned, was a liquidity crisis. As banks, hedge funds and investment managers, who were heavily invested in non-liquid assets, were forced to mark to market assets with no market bids, the resulting markdowns resulted in margin calls that forced the massive liquidation of equity positions that rapidly pushed all stock market correlations close to one. Following the market bottom of 2009, as investors gradually returned to the stock market, correlations among size segments and sectors never declined to historical averages and instead transitioned into what many referred to as a “risk-on/risk-off” market. Market returns were largely driven by massive liquidity injections by central banks and by macro-economic factors and events. The overabundance of money in financial assets had a dual effect on stock prices: it increased the price of all risk assets and, as bond yields collapsed, it forced fixed income investors into untraditional sources of yield (income), including MLPs, REITs and dividend paying stocks. This brings us back to the very different paths by which SDOGX and B400 achieved market-beating returns in the past decade.

In all 17 years since 2000 (including 2016 through November), SDOGX outperformed B400 in 8 years, on a total return basis (thus, B400 outperformed in 9 of the 17 years). This made for a very nice balance in annual returns between the two indexes. However, when we break down annual returns into the two market cycles mentioned above (2000-2008 and 2009-2016), a different picture emerges. Figure 3 illustrates the annual returns of the total and price returns series for SDOGX and B400.

Figure 3. Annual Returns SDOGX, B400 and Russell 3000

Calendar Year Returns	SDOGX TR	B400 TR	SDOGX PR	B400 PR	Russell 3K TR	SDOGX TR - B400 TR	SDOGX PR - B400 PR	SDOGXTR - SDOGXPR	B400TR - B400PR
2016*	22.7%	15.0%	18.3%	13.4%	11.7%	7.8%	4.9%	4.5%	1.6%
2015	-2.8%	-3.1%	-6.6%	-4.5%	0.5%	0.3%	-2.0%	3.8%	1.4%
2014	15.6%	7.1%	11.1%	5.6%	12.6%	8.6%	5.5%	4.5%	1.4%
2013	35.0%	41.6%	29.5%	40.0%	33.6%	-6.6%	-10.6%	5.5%	1.6%
2012	11.2%	15.1%	6.0%	13.8%	16.4%	-3.8%	-7.8%	5.2%	1.2%
2011	12.3%	0.5%	7.3%	-0.4%	1.0%	11.8%	7.7%	5.0%	0.9%
2010	20.3%	24.0%	15.0%	22.6%	16.9%	-3.6%	-7.6%	5.4%	1.4%
2009	48.4%	41.1%	41.0%	39.1%	28.3%	7.2%	2.0%	7.3%	2.0%
2008	-33.0%	-39.2%	-36.2%	-40.0%	-37.3%	6.2%	3.8%	3.2%	0.8%
2007	3.3%	6.2%	-0.2%	5.1%	5.1%	-2.8%	-5.3%	3.6%	1.1%
2006	20.7%	12.7%	16.5%	11.6%	15.7%	8.0%	4.9%	4.3%	1.1%
2005	5.4%	12.0%	1.8%	11.0%	6.1%	-6.5%	-9.2%	3.6%	1.0%
2004	17.5%	23.5%	13.3%	22.6%	11.9%	-5.9%	-9.2%	4.2%	0.9%
2003	39.1%	45.1%	33.7%	43.8%	31.1%	-6.0%	-10.1%	5.4%	1.3%
2002	-15.1%	-9.8%	-18.3%	-10.8%	-21.5%	-5.3%	-7.5%	3.2%	0.9%
2001	18.2%	-0.6%	14.4%	-1.8%	-11.5%	18.8%	16.1%	3.8%	1.1%
2000	8.1%	15.9%	3.6%	14.6%	-7.5%	-7.8%	-11.0%	4.5%	1.3%
Average annual excess return:						1.2%	-2.1%	4.5%	1.2%

*Through November 30 2016. Sources: Bloomberg and MarketGrader Research

As is clear in the table above, since 2009 SDOGX outperformed B400 in 5 out of 8 years (62.5%), while in the previous 9 years, B400 outperformed SDOGX in 6 of them (66.7%).

Furthermore, it is also important that we look at the sources of returns (price vs. dividend) as much as the differences in total returns between both indexes. When including dividends in both return series, the average annual outperformance of SDOGX across all 17 years was 1.2% per year. When excluding dividends, and focusing only on the capital appreciation potential inherent in each index, B400 outperforms SDOGX by 2.1% per year.

We therefore draw two conclusions from the results presented above.

1. First, each index has excelled at delivering on its goal; namely, SDOGX in generating income from a selection of dividend-paying stocks and B400 in delivering capital appreciation.
2. Second, the overall relative outperformance of SDOGX against B400 has come largely as a result of its strong performance in recent years and, more specifically, its income generating advantage.

These two conclusions lead us to ask the following questions: assuming both indexes continue to deliver on their stated goals, how will they perform relative to each other when the current market cycle turns again as it inevitably will? More specifically, how will the total return of SDOGX be affected by a rise in interest rates, during which large cap dividend stocks will once again have to compete with long-dated bonds? How will a broader dispersion of returns affect the performance of both indexes not only relative to each other but also relative to the overall market itself?

While we wish we had the answers to these questions, it is not unreasonable to assume that both of these indexes will continue to serve investors well for different reasons. We cannot predict interest rate cycles any more than we can predict where the market will close at the end of 2017. Two predictable outcomes, however, are that companies will continue to pay dividends and that stocks will continue to grow. So, to the extent that both SDOGX and B400 have demonstrably delivered on two of the three *investment outcomes* outlined at the beginning of this paper, an investor could do worse than own them both. In addition to the quality of both indexes and their proven ability to deliver on their goals, there is another factor that makes a combination of the two not only appealing but, in fact, sensible: within the equity asset class, the returns of both indexes are relatively uncorrelated to each other. In fact, going back to SDOGX's base date of Dec. 31, 1999, the monthly return correlation of the index to B400 has been 0.78 compared to 0.86 for SDOGX and the Russell 3000 Index. This partly explains why both indexes "took turns" outperforming each other during the last 17 years (8 for SDOGX and 9 for B400). Figure 4 illustrates the distinct advantage an investor would have over the stock market when owning a 50/50 combination of SDOGX and B400. Furthermore, an investor harvesting returns from the "winning" strategy would be well advised to reinvest those returns in the recent "losing" strategy in an effort to maintain a balanced approach to equity investing. Of course, if that investor has greater need for income or for capital appreciation, he will know which portion of the basket to overweigh.

Figure 4. Growth of 100 December 31, 1999 Through November 30, 2016.
Diversified Mix is rebalanced to 50% SDOGX and 50% B400 at the beginning of each calendar year.



Sources: Bloomberg and MarketGrader Research

Conclusions

- In the long run, SDOGX and B400 complement each other strongly with SDOGX outperforming in 8 of 17 calendar years and B400 outperforming in the remaining 9 years.
- Across all 17 years, when dividends are included in annual returns, SDOGX outperformed B400, on average, by 1.2% per year; when only capital appreciation is taken into account, B400 outperformed SDOGX, on average, by 2.1% per year.
- The monthly return correlation between both indexes, at 0.78, is lower than the 0.86 between SDOGX and the Russell 3000 and the 0.93 between B400 and the Russell 3000.
- A long-term investment in a 50/50 mix of both indexes would have resulted in a gain 2.5 times greater than a passive investment in the overall U.S. stock market as represented by the Russell 3000.

Appendix

Annualized Returns SDOGX, B400, Russell 1000 and Russell 3000.

Annualized Returns*	SDOGX TR	B400 TR	SDOGX PR	B400 PR	Russell 3K TR	Russell 1K TR	SDOGX TR -B400 TR	SDOGX PR -B400 PR
1-Year	21.5%	9.9%	16.7%	8.2%	9.4%	6.9%	11.7%	8.6%
3-Years	12.2%	6.8%	7.8%	5.3%	9.1%	8.5%	5.4%	2.5%
5-Years	16.3%	14.0%	11.5%	12.5%	14.6%	14.2%	2.3%	-1.0%
10-Years	11.3%	8.1%	6.6%	6.8%	7.1%	6.9%	3.2%	-0.2%
Since 12/31/1999	11.7%	10.2%	7.2%	9.0%	5.0%	4.7%	1.5%	-1.8%

* Ending November 2016. Sources: Bloomberg and MarketGrader Research

Monthly Return Correlations SDOGX, B400, Russell 1000 and Russell 3000.

	SDOGX TR	B400 TR	SDOGX PR	B400 PR	Russell 3K TR	Russell 1K TR
SDOGX TR	1.00	0.78	1.00	0.78	0.86	0.86
B400 TR		1.00	0.78	1.00	0.93	0.92
SDOGX PR			1.00	0.78	0.85	0.86
B400 PR				1.00	0.93	0.92
Russell 3K TR					1.00	1.00
Russell 1K TR						1.00

Sources: Bloomberg and MarketGrader Research