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Performance Attribution of the First Biblically Responsible-based SRI Index

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Abstract

In the U.S., two of the most important investment trends over the last 10 years have been the rise of index investing and the rise of Sustainable, Responsible and Impact (SRI) investing. So, it would make sense that new indexes would emerge based on SRI principles. One such index is the new Inspire Small/Mid Cap Impact Equal Weight Index, which is the first biblically-based SRI index. This paper briefly discusses the methodology of this index and shows that its strong back-tested risk-adjusted returns (relative to its non-SRI S&P benchmark), are not due to sector bias (as one would expect), but are attributed to favorable stock selection within each industry sector. This index is likely the beginning of a wave of more sophisticated passive products that will meet the needs of niche investor populations better than the active products of the past.

I. Introduction

In the U.S., two investment trends have been dramatic over the last 10 years:

- the rise of index investing, and
- the rise of Sustainable, Responsible and Impact (SRI) investing

As of 2016, flows from active to index funds have surpassed one trillion dollars and SRI Investing has achieved $9 trillion of assets under management (see Figures 1 and 2)[1].

So, it would make sense that these two trends would collide and new SRI indexes would emerge. One such index is the Inspire Small/Mid Cap Impact Equal Weight Index. This index has a unique faith-based construction that has performed well relative to its non-SRI S&P benchmark. This is likely the beginning of a new breed of indexes that will serve niche investors better than previous active products of the past.

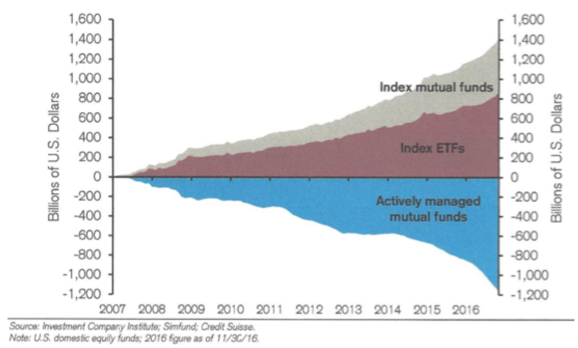

Figure 1: *Index investing has grown dramatically at the expense of active investing.*

Figure 2: *SRI investing has grown dramatically to just under $9 billion of AUM as of 2016.*

[1] Sources: Figure 1: Mauboussin, Michael, J., Dan Callahan, and Darius Majd, "Looking for the Easy Game," Credit Suisse, 2017, Figure 2: U.S. SIF Foundation

II. Index construction

Unlike most existing SRI indexes[2], this index focuses on small-to-medium companies, weighting its index constituents equally[3].

In addition, this is the first passive SRI product that explicitly ties the construction of its index to a biblically-based worldview, in particular, a reformed, non-denominational Christian worldview that emphasizes traditional Biblical views on all environmental, social and governance issues.

Although applying a Christian worldview to active investing products has been done for more than 100 years[4], this is the first passive index based on "Biblically Responsible Investing" (BRI) principles to be introduced to the financial markets.

The Inspire index is constructed using an *Impact Scoring* methodology that essentially overweights companies that are aligned with biblical values and excludes companies that are not aligned with biblical values.

Companies with a high Impact score may have one or more of the following characteristics:

- inspiring primary business activity that uplifts society
- positive environmental policies
- support biblical values through philanthropy
- operate with a perceived high level of integrity

Companies that have a low Impact Score would likely be involved in the enabling of certain types of activities that are contrary to what the Bible says will enable human flourishing, such as abortion, pornography, labor abuse, non-traditional family values, and gambling.

[2]For example: MSCI's KLD 400 Social Index, FTSE's 4Good Index Series, Calvert's Social Index, Dow Jones'Sustainability Index

[3]Chow et al., (2011), found a significant improvement in returns when equally-weighting an index (versus market-cap weighting)

[4]During the late 1800s, the Quakers and the Methodists followed investment practices that prohibited investing in companies that were involved in slavery, smuggling and conspicuous consumption

III. Performance

i. Risk-adjusted Returns

Probably the biggest criticism of SRI investing is that constructing a portfolio from a restricted universe of opportunities will impose too great a cost on the portfolio's risk-adjusted returns, relative to their unrestrained counterparts. In other words, when trying to "do good," there will be too heavy a cost on the portfolio.

When looking at the Inspire Small/Mid Cap Impact Equal Weight Index, early indications show a possible positive risk-adjusted performance benefit when using Inspire's Impact Scoring methodology to construct their index. From 2012 to 2016, the Inspire index outperformed an equally weighted 50/50 blend of the S&P 400 and S&P 600 by over 4%, on an annualized basis, while maintaining a similar standard deviation.

Table 1: *Risk-adjusted Performance*

5-year annualized returns			
Index	Returns	StDev	Sharpe
Inspire	18.7%	15.8%	1.03
Benchmark	14.3%	15.9%	0.75

This back tested performance result is not inconsistent with many academic studies over the years, which have shown that there is either a neutral or small benefit to risk-adjusted performance when adding different types of SRI criteria to the managing of an investment product.[5]

ii. Attribution

Another significant criticism of SRI investing is that sector bias is really what drives the performance. DiBartolomeo and Kurtz [1999] demonstrated that the positive outperformance of one of the oldest SRI indexes, the Domini 400 Social

[5]Revelli, C. and Viviani, J.-L. (2015), Stone et al. [2002], Hamilton, Jo, and Statman [1993], Guerard [1997], Goldreyer, Ahmed, and Diltz [1999], and Bauer, Koedijk, and Otten [2005] provide similar evidence

index, was largely due to economic and sector exposures that are the result of the screening process itself.

It would make sense that certain sectors, like oil and gas, would naturally "screen themselves out" of most SRI indexes looking to protect the environment. So, given the possibility of sector biases embedded in SRI products, should it be assumed that any outperformance relative to a benchmark is simply due to large "sector bets" that happen to go in the favor of the SRI index?

When conducting a performance attribution on the Inspire index relative to the S&P benchmark, there is no evidence that sector bets contributed to the outperformance.[6]

Table 2: *Performance Attribution*

5-year annualized alpha	
Category	Alpha
Total Alpha	4.2%
Sector Weighting Effect	*-0.5%*
Security Selection Effect	*4.7%*

In fact, according to the data summarized in Table 2, sector bets were a drag on relative performance (-50 basis points) while security selection within each sector was the primary reason for the strong relative performance of the Inspire Small/Mid Cap Impact Equal Weight Index relative to the equally weighted 50/50 blend of the S&P 400 and S&P 600 (+470 basis points).

[6] Using the BHB model for attribution (Brinson, Hood, and Beebower, 1986). GICS sectors were used for the S&P benchmark; However, for the Inspire index, the sectors were first determined using The Industrial Classification Benchmark (ICB) sectors and then they were unofficially mapped to a GICS sector manually. An "Other" sector was used, which primarily represents the Real Estate sector, which was carved out of the S&P Financials sector during September of 2016. The small difference in alpha between tables 1 and 2 (4.4% vs. 4.2%) is due to rounding errors associated with the attribution methodology

IV. Conclusion

Given the continued popularity of both passive index and SRI investing, new SRI indexes will likely proliferate during the next couple of years. The creation of the Inspire Small/Mid Cap Impact Equal Weight Index is the beginning of a wave of more sophisticated passive products that will better meet the needs of niche investor populations (e.g., faith-based investors) than the high-fee active products of the past.

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