Controlling Risks in Equity Focused ETF

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(article 1 out of 4)

EXECUTIVE SUMMARY

Risk is an inherent part of our life. In the immortal words of President Theodore Roosevelt: "Risk is like fire: If controlled it will help you; if uncontrolled it will rise up and destroy you." In the world of investments, taking risks is a prerequisite for achieving returns, and controlling the risk is the key for a successful investment.

The first step of controlling the risk is to break it down to individual risk components. We will examine and demonstrate the main components and will briefly describe some of the available possibilities to control them. Using the right system for controlling the risk can enhance the investment returns while minimizing the volatility for the investor.

SCOPE

Some of the definitions and conclusions in this paper are general in nature. Our main aim, however, is to focus on equity investment and in particular on using Smart Beta ETFs. Over the last 15 years, the Smart Beta ETF industry has grown from nearly null to about half a trillion USD. Consequently, we will focus in this article on the risk components which are relevant to indices used by this industry. This article will be followed by several subsequent articles which delve deeper into each risk component.

INDIVIDUAL RISK COMPONENTS

The individual risk components ebb and flow with market conditions. A risk component can be dominant at some period while dormant at others. Identifying this cycle correctly is sometimes described as "an art". We submit that the right tools can be used to turn this art into a skill.

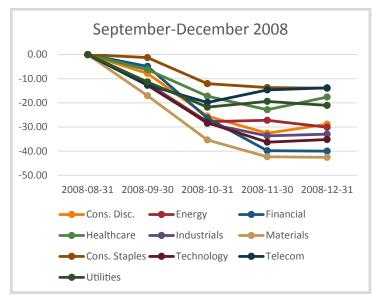
Here is a list of some of the main risk components, top down:

Market Risk -

At the top of the risks for the equity investor stands the market risk. As Warren Buffett vividly described it: "Only when the tide goes out do you discover who's been swimming naked". The market risk may stem from different reasons, but the result is a sharp decline in the large majority of sectors and equities. Any attempt to pick a winning sector or stock is likely to end with a large loss, and even the fact that the loss is slightly smaller than the market will provide little consolation to the investor.

The second half of 2008 is the obvious recent example that comes to mind. Between September-December 2008, all the leading sector indices yielded double digit loss (Table 1 and chart 1).





September-December 2008			
Cons. Disc.	-28.86		
Energy	-30.11		
Financial	-40.01		
Healthcare	-17.60		
Industrials	-32.96		
Materials	-42.57		
Cons. Staples	-13.95		
Technology	-35.18		
Telecom	-13.81		
Utilities	-21.08		

Chart 1 Table 1

(Source for all sector returns: S&P Total Return Sector Indices)

This type of behavior occurred to a lesser extent between May-September 2011 where all but four sectors suffered double digit losses and only the small Utilities sector yielded a positive return (table 2 and chart 2).

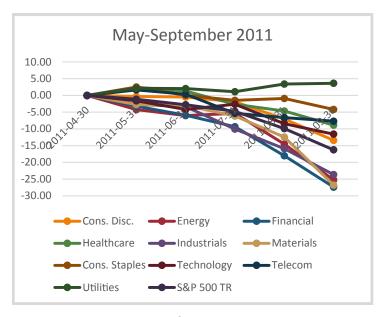


Chart 2

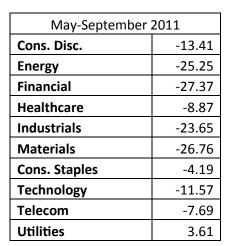


Table 2



Sector Risk -

The second risk component pertains to specific sectors. Driven by macro events, such as rapid oil price reduction or a sharp change of government policies, some sectors can yield sharp negative returns while other sectors not only outperform the benchmark but have a positive absolute return.

Between May-December 2015 the S&P Energy Total Return index dropped -24% while the S&P Consumer Discretionary and Consumer Staples Total Return indices rose 5% and 6% respectively (30% spread).

A similar event occurred between August-November 2016 where the Healthcare sector dropped -8% as the Financial sector rose 18% (26% spread).

These large spreads are in sharp contrast to periods such as June-October 2013 where the spread between the least yielding sector (Financials, 4.5%) and the top yielding sector (Consumer Discretionary, 14%) was merely 9%.

Table 3 summarizes the sector performance during these three periods.

	May-Dec 2015	Aug-Nov 2016	Jun-Oct 2013
Cons. Disc.	5.11	0.67	13.79
Energy	-23.86	9.74	7.37
Financial	0.36	17.73	4.48
Healthcare	1.70	-8.33	10.62
Industrials	-1.68	7.43	13.06
Materials	-11.99	3.20	10.06
Cons. Staples	6.36	-6.87	6.94
Technology	2.92	4.23	7.48
Telecom	-3.82	-9.43	5.75
Utilities	0.80	-9.59	5.01

Table 3



Geography Risk

The third risk component relates to global equity portfolios. Geographic allocation may have a great effect on the overall risk. The geography risk is affected by local markets behavior as well as by currency fluctuations.

Chart 3 and chart 4 show the three main components of the MSCI world index – US, Europe and Japan – during the second half of 2014. Chart 3 shows the index behavior as expressed by the local currencies (USD, Euro, Yen). There is a 15% spread in the market behavior between Japan Nikkei 225 (leading) and Europe Stoxx 600 (trailing). When translating the results to USD (chart 4), the US comes on top where the other two show negative returns.



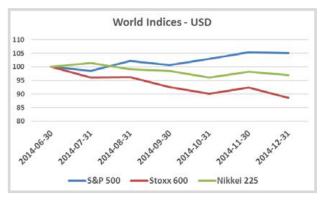


Chart 3

Chart 4

Stock Selection Risk

Trying to deviate from a general index and to select specific stocks carries a risk and consequently a potential return. Stock selection involves defining the selection universe and then picking the "best" stocks based on their fundamental and/or technical factors. The type of factors defines the risk level. Choosing value stocks with high dividend yield is traditionally less risky than growth stocks with high growth rate. Chart 5 and chart 6 shows the same stock selection strategy, an ROC/Dividend fundamental based strategy for the Consumer Discretionary sector, and its performance vs. the relevant index. One can see that the behavior can change drastically between adjacent periods.



Q1 2016

115
110
105
100
95
90
2015-12-31 2016-01-31 2016-02-29 2016-03-31
— Cons. Disc. Strategy — Cons. Disc. Index

Chart 5

Chart 6



CONTROLLING THE RISK

Risk can be ignored; Risk can be eliminated; And risk can be controlled.

For each of the risk components listed above, we can choose to ignore it (embrace the risk) and possibly achieve higher returns on our investment at the cost of high anxiety and potential loses. We can also choose to eliminate the risk, sleep better knowing our losses are limited, but accept the minimal to no return which results.

The smart approach is to control the risk. This requires:

- A smart dynamic indicator which assesses the risk for each component
- A variety of actions to be taken according to each indicator level

Table 4 shows the risk components described above and how they can be controlled.

Risk Component	Market Risk	Sector Risk	Geography Risk	Stock Selection Risk
Ignoring the Risk	All assets in equities. Long Only.	No barriers to sector exposure.	Exposure to foreign equities regardless of their geography	Select only individual stocks based on fundamental and technical factors.
Eliminating the Risk	All assets in cash. No Equities	Sector weights adjusted according to the benchmark	Use the same geographical allocation as the benchmark	Use all stocks and weights from the benchmark.
How the dynamic indicator works?	Analyzing the quality and value trends of a large universe of companies.	Compare the trends of the average quality for a large universe of different sectors' equities.	Use macro indicators to compare the status of different economies	Assess the factors to determine their relative relevance for the period.
Control Actions	 Variable Hedging Variable allocation of Stocks and Risk free assets (cash, short term bonds) 	 Increase/decrease the weight of specific sectors Invest only in the best sectors Eliminate the worst sectors 	Control the weight of each geography and perform Selective currency hedge based on the risk level.	 Switch between strategies based on the relevant factors. Variable blend of factor based strategies and ETFs

Table 4 – Controlling the Risk



SUMMARY

As shown above, the various risk factors and the large amount of possible actions provide almost infinite amount of combinations. The professional investor needs a system that can help him rapidly and accurately test the implications of choosing the right dynamic action, thus controlling the risk. For ETF issuers, such a system facilitates providing the right variety of ETF products to their customers at the lowest possible development cost.

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