QUANTIMENTAL INVESTING IN INTERNATIONAL EQUITY MARKETS

SUMMARY

I am often asked to describe whether Beyond Borders Investment Strategies, LLC (BBIS) invests using quantitative or fundamental investment styles. A fund-raising specialist with whom I had a pleasant conversation recently told me that it would be easier to raise capital if I explained to my potential investors that we invest using the fundamental style. My quantitative colleagues, obviously, thought that the diametrically opposite point of view was true. In reality, at BBIS we use elements of both styles that are blended in the "quantimental" style. The word quantimental is the combination of two words: quantitative and fundamental. In this report, we will explain reasons for using this style and demonstrate several examples of trades that we made using it.

FIRST EXPOSURE TO QUANTIMENTAL INVESTING

In the middle of the last decade, I worked at Fidelity Investments' famed equity research group. The company that became known to people in all walks of life through books written by its star portfolio manager, Peter Lynch, has been known as a fundamental investment shop or a firm that predominantly uses fundamental analysis. According to Investopedia, fundamental analysis is "a method of evaluating a security that entails attempting to measure its intrinsic value by examining related economic, financial, and other qualitative and quantitative factors."[1]

At Fidelity, I was responsible for writing reports on macroeconomic, industrywide, and business developments affecting the Global Technology Industry for the company's portfolio managers who invested more than $1 trillion. I analyzed all major developments affecting the industry, from

[1] Investopedia, Fundamental Analysis definition, http://www.investopedia.com/terms/f/fundamentalanalysis.asp, downloaded on July 31, 2015.

semiconductor production plants of Taiwan and Singapore, to technology assembly centers of China and Japan, to the final technology markets all over the world. While some trends could be analyzed without many numbers, most trends needed to be analyzed with the use of models that were based on the principles of quantitative analysis. According to Investopedia, quantitative analysis is "a business or financial analysis technique that seeks to understand behavior by using complex mathematical and statistical modeling, measurement, and research. By assigning a numerical value to variables, quantitative analysts try to replicate reality mathematically."[2]

Peter Lynch, the above-mentioned star portfolio manager of Magellan Fund, has said, "Everyone has the brainpower to follow the stock market. If you made it through fifth-grade math, you can do it." My job was to gather, analyze, and present the numbers in a way that any person with the fifth-grade math skills would be able to analyze them. In all fairness, all portfolio managers and analysts had much more than the fifth-grade math skills, as most of them held undergraduate and graduate degrees from the leading U.S. and world's universities. Still, I needed to present my quantitative analysis findings in a way that could be easily understood. At Fidelity, I started using the "quantimental" style on an everyday basis.

As ambidextrous warriors of the past could fight with a sword in each hand, the quantimental investors of today use quantitative and fundamental analysis techniques. Generally, they use quantitative techniques to filter out the most promising investments out of thousands of investments in their investment universes. In general, application of quantitative techniques gives "width" of analysis: one would not have been able to cover many stocks by just using fundamental analysis methods. After selecting a relatively small number of investments, these managers use fundamental techniques for analyzing them. These techniques add "depth" to the analysis of several selected potential investments.

QUANTIMENTAL ANALYSIS AT BEYOND BORDERS INVESTMENT STRATEGIES

At Beyond Borders Investment Strategies, we are quantimental investors as well. We use quantitative models to analyze single-country equity exchange traded funds (ETFs) for 46 developed, emerging, and frontier market countries around the world to identify ETFs that are trading at low and high valuations compared to their history. We then calculate expected returns for all ETFs. Often, ETFs that trade at low valuations offer high expected returns, while the expensive ETFs offer low expected returns.

[2] Investopedia, Quantitative Analysis definition, http://www.investopedia.com/terms/q/quantitativeanalysis.asp, downloaded on July 31, 2015.

Sometimes, the quantitative analysis is by far the most important factor in buying or selling an ETF. On other occasions, one needs to dig deeper to analyze fundamental factors and catalysts for buying or selling individual investments. The description of the following three transactions would allow us to exemplify how we use both analytical styles at BBIS.

QUANTITATIVE FEATURES OF THE QUANTIMENTAL INVESTING

Let me start this section with a story that Aswath Damodaran, Professor of Finance at the Stern School of Business at New York University and one of the world's luminaries in the field of investment valuations, shared with his students at an investment seminar that I attended in New York in the fall of 2005. Even though I have heard this story years ago, I often think about it as I analyze stock valuations today. Professor Damodaran asked us to think about an imaginary situation when we bought a jacket at a very expensive store. We knew that we likely overpaid for the jacket, but we enjoyed our experience of buying it at a prestigious store. We brought the jacket home and saw that one of the buttons was missing. Since we paid a little fortune for the jacket, we are likely to rush back to the store to return this particular jacket. Now imagine that we have bought the same jacket at a discount store. We paid little for it. We came home and saw that a button was missing. We would be disappointed, but since we bought the jacket at a discount we would keep it and try to buy a button and sew it to the jacket.

I likely have remembered the story well because hours after I heard the imaginary story described above I became involved in the real-life story roughly based on the same scenario. After the first day of the seminar, Charlie, my Fidelity colleague who was also attending the seminar and I went to a concert of U2 rock band at Madison Square Garden in New York. There I bought three rather expensive T-shirts for my fiancé, her younger brother, and myself. You can imagine my disappointment when I brought the T-shirts to my hotel and realized that two of them - the ones that I bought for my fiancé and her brother - had small holes in them that I had not noticed when I purchased them. I immediately decided that I needed to exchange the T-shirts for two reasons. First, the T-shirts with holes in them were not quite the "winning" gifts that I envisioned. Second, as in Professor Damodaran's story, I thought that the T-shirts were expensive and, considering the money that I spent on them, they should not have any defects.

So, I convinced Charlie to take a "short" detour with me to exchange the T-shirts on a taxi cab ride on the way to LaGuardia airport for our return flight to Boston. The detour included a trip from New York's Downtown, where the seminar was held, to Madison Square Garden in the city's Midtown. When I was convincing him to go with me, I somewhat underestimated New York City's legendary rush-hour traffic jams. Our "short" taxi ride turned into an almost-two-hour adventure, after which we had to sprint through LaGuardia airport's terminal like two Olympic athletes. However, as I saw smiles on the faces of my fiancé and her brother when I presented the T-shirts, I felt that exchanging the defective T-shirts for the unflawed ones was worth every ounce of effort.

Professor Damodaran's theory and my own "T-shirt" experiment convinced me that investors would go to great lengths to sell stocks that they bought at high valuations, if they perceived that there were any problems with them. When investors buy the stocks at high valuations, any rumor or a negative story related, and sometimes not even related, to the stocks can cause their dramatic selloff. However, if investors bought these stocks at low prices, they are more likely to keep these stocks and not pay attention to problems. As I mentioned in the "Several Investment Positions in Our Portfolio" section of BBIS' second quarter letter in 2014, which was published in July 2014 and can still be found on our website, www.bbistrategies.com, we added to our position in iShares MSCI China ETF (Ticker: MCHI) in early June 2014.[3] We realized then that the Chinese economy was slowing at the time, but as we wrote, "the current valuation discounts (of around 38% to the long-term historical levels) are too steep and valuations are likely to increase. In our opinion, MCHI's expected returns are likely to exceed 20% per year over the next 8 years."

Since then, other investors realized that the Chinese stock market was trading at extremely attractive valuations and invested in it. The ETF's price started to rally. We enjoyed the appreciation of the Chinese market, as our position in MCHI was the largest one in our portfolio. However, the growth in the MCHI price became so fast and furious that we became concerned about the sustainability of the price levels. At the end of April 2015, for example, in our estimate the Chinese stock market was trading at a premium that was close to 29% of the country's long-term average levels. At that time, I thought about my story with the T-shirts and the fact that investors might rush to sell their MCHI shares if they thought the Chinese economy or stock market might face challenges. I felt that any new or existing problem, which was not important when the ETF was selling at the discount to its long-term levels, could derail the rally when the valuations became high.

[3] Beyond Borders Investment Strategies, "Quarterly Letter - Second Quarter 2014," July 24, 2014. http://www.bbistrategies.com/2/post/2014/07/1.html.

We sold MCHI in early May 2015, realizing a profit of more than 28% in the process. It was a good time to sell because the price of MCHI slid by more than 20% over the next two months before bottoming in early July. It has rebounded by several percent since then.[4] Some of the common reasons that investment observers quoted for the sharp decline of the Chinese stock market prices were the slowing growth of China's economy, problems with its real estate sector, investors borrowing money at high rates to invest in the stock market, and multitude of Initial Public Offerings (IPOs) of Chinese companies going public and, thus, diverting funds from the secondary companies.[5] [6] [7] However, all these factors were present in 2013 and early 2014, when the Chinese stock market valuations were low. Investors started paying them significantly more attention as to potential reasons that could end the bull market in the second half of 2014 and early 2015, when China's stock market was booming and its valuation levels increased significantly. Our firm's quantitative models were essential to our determination of when the prices were attractive and when they became too high.

FUNDAMENTAL FEATURES OF QUANTIMENTAL INVESTING

However, not all factors, which are likely to affect ETF prices in the future, can be analyzed by the quantitative models that are extremely helpful in identifying deviations from long-term historical trends. These models could be insensitive to less quantifiable factors. In our opinion, fundamental analysis techniques are better suited for analyzing factors that did not exist in the past, have not been happening on a periodic basis, are not likely to repeat in the future, or are specific to one country and, therefore, are too time-consuming to implement across all country models in our investment universe. These factors also include the ones in the more qualitative areas of the political risk and legislation. Sometimes, we trade stocks based on our understanding of whether a certain phenomenon or trend is likely to affect an ETF's intrinsic value in a positive or negative way, without quantifying their exact impact. For example, if a firebrand presidential candidate, who rallied against "big bad banks and businesses," is elected, the impact of this election would not be easily quantifiable but is very likely to be negative for this country's stock market.

[4] Overall, MCHI's price slipped by 16% since we sold the ETF in early May 2015 through the end of July 2015.
[5] Jason Abbruzzese, Mashable, "The 7 Most Important Things to Know about the Chinese Stock Market Crash," July 27, 2015.
[6] Bloomberg, "Some Chinese Are Taking 22% Margin Loans to Finance Stock Purchases," June 30, 2015.
[7] Reuters, "China Approves 30 New IPOs to Cool Red-Hot Stock Market," April 2, 2015.

Our trades of Market Vectors Egypt ETF (Ticker: EGPT) can exemplify our analysis of the impact of two newly introduced taxes using fundamental analysis. We bought EGPT in the first quarter of 2014 at a discount of more than 50% to its long-term valuation. At that time, Egypt's economy was still reeling from public protests and counter-protests surrounding three power transitions in less than three years. Let us briefly remind you of the events in Egypt since the "Arab Spring" spread to the world's most populous Arab country. President Hosni Mubarak was overthrown after his 30-year rule and power was transferred to the Supreme Council of the Armed Forces (SCAF) under the Field Marshal Mohamed Hussein Tantawi in January 2011.[8] In June 2012, the Muslim Brotherhood's candidate Mohammed Morsi was elected as the President in the presidential elections. While the election of Mohamed Morsi was a highly divisive one, when only 51.7% voted for him, Mr. Morsi decided to consolidate his political power.[9] In November 2012, Mr. Morsi issued a temporary constitutional declaration that "in effect granted him unlimited powers and the power to legislate without judicial oversight or review of his acts."[10] He stated that such a move was necessary in order for him "to protect the nation from the Mubarak-era power structure, which he called "remnants of the old regime.'"[11]

However, many Egyptians fed up by the 30-year authoritarian rule of President Mubarak and not willing to live under yet another dictator, considered this power grab as a coup. Others were unhappy with President Morsi's neglect of the economic affairs and the fact that the country slid into a severe economic crisis soon after he came to power.[12] For example, due to the lack of fuel and funds, water and electricity, two basic commodities needed for survival in the country with a hot desert climate, were cut for parts of the day in many places.[13] [14] The government could not buy enough fuel as the Egyptian Pound depreciated significantly.[15] Overall, the Egyptian currency dropped by 13.8% during the year of President Morsi being at the helm, in large part due to foreign business people's lack of confidence in his economic policies and political power consolidation ambitions.[16] A new round of demonstrations and protests resulted in the removal of President Morsi from power in a coup d'état led by the Minister of Defense Abdel Fattah Al-Sisi in July 2013.[17]

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[8] Wikipedia, Egyptian Crisis (2011-14), downloaded on July 28, 2015.
[9] Ibid.
[10] Wikipedia, Mohamed Morsi, downloaded on July 28, 2015.
[11] Ibid.
[12] Oren Dorrell, USA Today, Egypt's Ailing Economy is at the Heart of the Unrest," July 2, 2013.
[13] Ibid.
[14] Wikipedia, Climate of Egypt, downloaded on July 28, 2015.
[15] Emerging Markets, "Egyptian Pound Devaluation Getting Closer," September 1, 2013.
[16] Source: Datastream. On June, 29 2012, one U.S. Dollar was worth 6.06 Egyptian Pounds, while on July 3, 2013 one U.S. Dollar was worth 7.03 Egyptian Pounds.
[17] Wikipedia, Mohamed Morsi, downloaded on July 28, 2015.

Mr. Al-Sisi's ascent to power brought stability as millions of Egyptians, exhausted by the economic crisis and political instability of the previous months, supported him. The ETF's value started to increase. However, before it reached our price target goals, we had to sell it. On May 29, 2014, Egypt's Finance Minister Hany Dimian announced that the country's council of ministers had agreed to impose two new 10% taxes on investors' capital gains on profits made in the stock market and on dividends distributed to investors.[18] These taxes became a part of the first phase of Egypt's income tax reforms expected to bring in 10 billion Egyptian Pounds ($1.40 billion).[19] While we completely understood the goals that the Egyptian Finance Ministry was trying to achieve, these new taxation rules were clearly negative for equity investors. The attractiveness of Egyptian equity shares, and the ETF holding them, dropped by at least 10%, which their holders would have to pay in capital gain taxes. The attractiveness of shares paying high dividends dropped even more because their holders had to pay taxes on dividends in addition to the taxes on capital gains. At that time, EGPT had the highest dividend yield of 5.5% out of all ETFs for the 46 countries that we followed.[20] We sold our ETF shares at a profit of almost 18%, realizing that the impact of the two laws on the ETF value would be negative. Since then, EGPT's price slid by 29% (by the end of July 2015) as the country's government and business leaders started working on the difficult task of restarting growth in the economy badly damaged by the political and economic instability.

Our sale of iShares MSCI Russia Capped ETF (Ticker: ERUS) could be another example of our application of the fundamental analysis. This sale also demonstrates that not all stock trades that we make are profitable. Sometimes, we choose to sell an investment at a relatively small loss in order not to incur a much bigger one. It is better to lose several percent than your whole investment. We treat risk of each investment primarily as the possibility of a permanent loss of capital rather than the volatility of this investment's price. Our definition is in line with the risk definition described by Howard Marks, Chairman and Cofounder of Oaktree Capital Management, in his influential book "The Most Important Thing Illuminated: Uncommon Sense for the Thoughtful Investor."[21] We chose to sell ERUS at a loss of 4.1% at the end of July 2014 when the world was focused on the crisis in Ukraine. After President Obama's press conference on new economic sanctions against Russia, when he announced that "the United States is imposing new sanctions in key sectors of the Russian economy: energy, arms, and finance,"[22] we were concerned that the ETF would be delisted and we might lose 100% of our capital.

[18] Ehab Farouk, Reuters, "Egypt Approves New 10 Pct Capital Gains Tax on Stock Market Profits," May 29, 2014.
[19] Ibid.
[20] Source: Datasource. The dividend yield value for EGPT is as of May 29, 2014.
[21] Howard Marks, "The Most Important Thing Illuminated: Uncommon Sense for Thoughtful Investor," Page 45, Columbia Business School Publishing, 2013.
[22] President Obama: Speech on the Ukraine Crisis: July 29, 2014, http://www.shallownation.com/2014/07/29/video-president-obama-speech-ukraine-july-29-2014/#sthash.6ttqQQtf.dpuf

Ultimately, the ETF was not delisted and we started a new position in it, but we felt that the decision to sell it in July 2014 was justified from the risk management perspective.

CONCLUSION

In this report, we described the quantimental style of investing that we use at Beyond Borders Investment Strategies to develop and manage portfolios that consist of equity ETFs of countries in all corners of the world. We strongly believe that the quantimental style of investing enables investors to cover wide universes of investments and conduct in-depth research on select investments in a timely manner. In our opinion, this style offers investors an ability to earn attractive returns and manage risks in international value investing.

As always, please do not hesitate to contact us if you have any questions about our services, investment thinking or reports.

Sincerely,
Vitaly Veksler, CFA
CEO and Portfolio Manager