INVESTMENT LESSONS FROM FISHING: BUILDING PORTFOLIOS FROM SINGLE-COUNTRY EQUITY EXCHANGE TRADED FUNDS (ETFs)

This paper describes three major existing methods of investing in international equity markets. They include bottom-up stock picking, “hybrid” stock picking, and investing in funds or Exchange Traded Funds (ETFs) that closely follow broad-based international indices. The paper also describes the fourth, alternative, method of international equity investing, namely, construction of portfolios from single-country equity ETFs that was developed at Beyond Borders Investment Strategies, LLC. It explains the firm’s reasoning for developing this new method. The paper proceeds to compare selection of different ships for fishing with investment portfolios built using the four methods above. The paper describes groups of countries that each investment method is more appropriate for. Finally, it talks about competitive advantages of building portfolios from single-country ETFs versus the three major established methods in such areas as potential reduction of risk of capital loss, flexibility of investment selection, speed of entering & exiting investment positions, and investment management fees.

A LITTLE BIT OF HISTORY

Several years ago, I developed an investment strategy for managing portfolios built from single-country exchange traded funds (ETFs) of countries where stock markets traded at discounts to their long-term valuation averages. Often this happened when these countries were going through various crises (e.g. economic, banking, currency, political) or just difficult economic times (e.g. low demand for products or commodities produced by countries). This strategy is designed to turn profits when valuations of the stock markets revert to their long-term averages or levels above them. Sometimes, the strategy can turn profits even when we sell ETFs at levels below these historical averages if we purchased them at even lower valuations.

Since we invest in risky environments, this strategy incorporates four elements that I consider to be absolutely essential:

1. Reduction of risk of capital loss over the long term by diversifying investments and developing portfolio out of a number of single-country ETFs, or funds that are composed of dozens or hundreds ETFs, rather than individual stocks
2. Flexibility of having exposure only to countries that were attractive due to low stock market valuations and high expected returns of these markets
3. Speed of entry and exit from investment positions if circumstances in the countries change fast and dramatically
4. Ability to implement this strategy at low cost

THE BREAKTHROUGH ON CAPE COD

While I was developing the strategy, I struggled to find a good metaphor to explain this new strategy to my colleagues, clients and potential prospects. I learned the value of a good metaphor when I was a student in Moscow, Russia. When I was working on my first master's degree in Management Information Systems and Artificial Intelligence (AI), I was a member of one of the first groups of students who majored in AI in the former Soviet Union. One of the challenges of being the first in a field is that your colleagues from other fields are not familiar with the methodology and terms used in the field. My AI professors often repeated that we should use analogies and metaphors from other fields to explain AI concepts to our non-AI colleagues. Consequently, while I was working on the new country selection and rotation investment strategy at Beyond Borders Investment Strategies (BBIS), which large institutional investors called either unique or extremely rare, I felt that I needed to find a metaphor or analogy to describe it in a language that would be intuitive to smart people from other fields.

My breakthrough in explaining the strategy came during a conversation that was not related to my business at all. Last year during the July 4th weekend, I met my good friend Mikhail and his family for a dinner during my family's vacation on Cape Cod in Massachusetts. For those who are not familiar with the geography of Massachusetts, Cape Cod a hook-shaped peninsula that juts into the Atlantic Ocean just over 50 miles to the south of Boston. Cape Cod is an extremely popular vacation destination during summer and fall as it offers multitude of water related activities. In addition to the ocean beaches where water is warmed up by the Gulf Stream, the peninsula is covered with beautiful and clean lakes, ponds and rivers.

I have known Mikhail my whole life. Our families lived in the same apartment building just outside of Moscow in Russia since the time I was born. By our early 20s, Mikhail and I devised our individual immigration strategies to the West. Mikhail moved to Montreal first, while I moved to Boston several years later. Later, he also moved to Boston but has not stayed in Boston for long. His career took him to Pennsylvania, Indiana, Wisconsin, and now back to Pennsylvania.

While living in the proximity to the Great Lakes, Mikhail developed his love for fishing. His analytical skills that helped him get his medical degree and learn five languages also allowed him to become one of the more skilled fishermen I know. He would frequently catch multiple fish while sitting in a boat or standing just yards away from people who could not catch a fish for hours and hours.

During our dinner, Mikhail shared with me some highlights of how his analysis of fish biology and landscape in and out of water helped him find places where the fish were likely to congregate during different times. At the end of dinner that featured freshly caught bass, Mikhail showed to me his boat that he towed to Cape Cod on his truck from Pennsylvania. It was a 16-foot (4.9-meter) long boat with serious looking fishing equipment, at least to a fishing neophyte such as myself. Mikhail was happily explaining various features of his boat and the purpose of various pieces of the fishing equipment when I asked him a question, “So when are you planning to go to the ocean next time?” Mikhail abruptly stopped, gave me a long silent look, and then answered, “Never”. Thinking about the Chilean sea bass that I love to order on special occasions in restaurants, I asked him, “What do you mean never. What about that delicious bass that we just ate? I thought you said that you caught it…” “Vitaly,” Mikhail interjected, “we were not eating seabass. It was freshwater bass from a local lake.” And seeing my perplexed expression, he added, “Vitaly, I take this boat only to lakes and rivers and never into the ocean. It is simply not sturdy enough for the ocean.”

I was thinking about my conversation with my good friend during my trip back from Cape Cod. And even though the trip was three hours longer than it normally takes due to the post-holiday traffic, I was smiling for most of it. When my wife asked me about the reasons for my smiles, I told her that I was thinking about fishing from cruise ships. She was satisfied with my answer and smiled herself thinking about this unusual concept. After an hour or so, when she asked me what I was smiling about then, I answered that I was thinking about fishing from catamarans. She did not find anything funny about this concept and attributed my smiles to too much sun and too long of a commute. However, by the time we got back to Boston, I had an explanation for my firm's strategy in fishing terms. My wife became the first listener of my firm's investment strategy description in fishing terms. Now you can read it below. Some people may disagree with my opinions in this paper. It is absolutely fine. It is not a purview of BBIS to claim that we know the absolute and only truth on how to invest in international and emerging market equities. However, this paper includes my views and ideas on all topics that I discuss. This ideas were derived from my investment experiences, both good and bad, at some of the premier investment firms at which I had a chance to work. My thinking was also affected by my interactions with many colleagues and professors from all over the world whom I had a pleasure of meeting, and also by the ideas from many excellent books regardless of whether I had a chance to meet their authors.

INTERNATIONAL EQUITY INVESTMENT METHODS

Just like fishermen who want to catch big fish, we investors like to find investments that bring us attractive returns. A fisherman's choice of ships is important in determining whether and where he will be successful in catching fish; similarly an investor's choice of building blocks for his/her portfolios and methods used to develop these portfolios in large part determine whether and where the investor will be successful in generating attractive returns.

Most investors invest in international (developed, emerging and frontier market) equities using one of three dominant methods to create portfolios out of two major building blocks: individual stocks or exchanges traded funds (ETFs). Investors who invest in individual stocks usually use one of the two methods: Bottom-up Individual Stock Picking (*see Method 1 in **Table 1** below*) or Hybrid Individual Stock Picking (*see Method 2 in **Table 1***). Investors also invest in international equities using broad-based indices (*see Method 3 in **Table 1***). At BBIS, we developed a new method of investing in international equities using single-country ETFs (*see Method 4 in **Table 1***). ***Table 1*** demonstrates our firm's thinking on how the investment strategies are characterized by four major factors: Potential Reduction of Capital Loss Risk, Flexibility of Investment Selection, Speed of Entering & Exiting Investment Positions, and

Investment Management Fees. I also added ranking of ships that helped me explain why we build portfolios out of single-country ETFs.

Table 1. Comparison of Characteristics of Equity Investment Strategies and Ships for Fishing

Investment Characteristics	Equivalent Ship Characteristics	Individual Stocks as Building Blocks		ETFs as Building Blocks	
		Method 1	Method 2	Method 3	Method 4
		Bottom-Up	Hybrid Top-Down / Bottom-Up	Broad Based Indices	Single Country ETFs
		Small Fishing Boat	Luxury Yacht with Sails & Engines	Cruise Ship	Catamaran with Sails & Diesel Engines
Potential Reduction of Capital Loss Risk	Safety	Low	Medium	Highest	Highest
Flexibility of Investment Selection	Maneuverability	Highest	High	Low	Medium
Speed of Entering & Exiting Investment Positions	Speed	Low	Low	Highest	High
Investment Management Fees	Fuel Cost per Person	High	Highest	Lowest	Low

Source: Beyond Borders Investment Strategies.

INVESTMENT METHOD 1

BOTTOM-UP STOCK PICKING:

SUCCESS IN "CORE" DEVELOPED MARKETS

In the purely defined bottom-up investing, the most common way of investing via individual stocks, investors focus on specific companies rather than on industries or country economies in which these companies operate.[1] This approach assumes that individual companies can do well even in industries or countries that are not performing well. For me, the bottom-up stock picking style of investing is similar to using small and maneuverable fishing boats, similar to the one that Mikhail demonstrated to me *(please see Method 1 in **Table 1** for this investment style characteristics).* I was fortunate to work with some of the successful bottom-up stock pickers who outperformed their benchmarks on a regular basis and read ideas shared by other successful investors whom I have not had a pleasure to meet. Just as many fishermen are excellent in catching certain types of fish in certain lakes, many successful portfolio managers have excelled when investing in certain types of companies within certain industries. For example, some were superb in investing in small-cap stocks, while some others were excellent in investing in the energy or technology stocks. Even when these portfolio managers ran portfolios diversified across multiple industries and included companies of different sizes, they often made most money in their specific niches where they had their strengths.

What was interesting is that these successful stock pickers focused on investing in mostly the “core” developed stock markets where the rule of law has been strong and financial disclosure standards have been high (e.g. US, Canada, UK, Germany, and Denmark). All of these managers realized that their strengths were in the fundamental analysis of companies and not in the macro analysis of country environments and risks. As a result, none of them tried to make major investments in riskier countries outside of the “core” developed ones. When they invested in these riskier markets, their investment results were not as spectacular as in the “core” developed countries.

- These managers realized that focusing just on stock fundamentals without paying attention to macro factors, such as the economic growth, inflation, and political risks in less transparent and/or more volatile stock markets of riskier developed countries (*for examples see next paragraph*), emerging and frontier markets most often does not work. For example, investors, who made investment decisions based solely on the financial statements of companies in these countries as they did in the “core” developed countries, were often surprised in a bad way as financial statements of companies in these countries may not be as transparent or reliable as in the “core” developed countries.

[1] Investopedia, Bottom-Up Investing. Retrieved on June 30, 2017.

Let's look just at the riskier developed countries, such as economically weaker peripheral Eurozone countries, Hong Kong, and Israel, without looking at even more risky emerging and frontier countries. We use Transparency International's Corruption Perceptions Index that measures corruption of the public sector as a proxy for corruption in the private sector, since corruption rarely affects one sector without corroding the other. According to the Corruption Perceptions Index 2016, the economically weaker Eurozone countries that faced devastating sovereign debt crises in the early 2010s are not the most transparent: Portugal is the 29th on the list, Spain is the 41st, Italy is the 60th, and Greece is the 69th.[2] While Hong Kong (15th), Ireland (19th) and Israel (28th) are higher on the list in terms of transparency, they face elevated political risks. China's unilateral decisions on Hong Kong's economy have a massive political and economic impact on the city's economy and stock market, the Irish economy and stock market are strongly affected by Brexit, and developments in the Middle East, the world's most volatile region, heavily influence the Israeli economy and stock market.

Investing in these riskier markets, especially around political or economic crises is more akin to fishing in oceans where storms, or country and regional crises, could be much stronger than in lakes or rivers of the "core" developed markets. Because of these ocean and sea storms, fishing remains the most dangerous job in the United States, and I am sure one of the most dangerous around the world.[3] Most fishermen die in the ocean and sea rather than in lakes or rivers.

BOTTOM-UP STOCK PICKING: PROBLEMS IN RISKIER MARKETS

Unfortunately, the bottom-up approach does not seem to work well in international and emerging markets as most active managers underperform their benchmarks.[4] According to the 2016 SPIVA U.S. Scorecard report published by S&P Dow Jones Indices, 67% and 84% of international equity investment managers (jn this case, investors in international developed countries' equities) underperformed their benchmarks over 5-year and 10-year periods respectively as of the end of 2016.[5] According to the same report, even

[2] Transparency International, Corruption Perceptions Index 2016.
https://www.transparency.org/news/feature/corruption_perceptions_index_2016#table
[3] CNN Money, America's Most Dangerous Jobs, September 20, 2012.
[4] The majority of active managers are bottom-up stock pickers, while a minority includes top-down investors. The top-down style is described later in the report.
[5] Aye Soe and Ryan Poirier, S&P Dow Jones Indices, SPIVA U.S. Scorecard, Year-End 2016.
https://us.spindices.com/documents/spiva/spiva-us-year-end-2016.pdf

more emerging market equity managers, 75% and 86%, respectively, underperformed their benchmarks over these time frames. Based on two decades of interactions with international and emerging market equity investment managers, I estimate that most of the US managers working in the space are bottom-up stock pickers. The findings from the *Institutional Perspectives: The Future of Emerging Markets Investing* report by Greenwich Associates confirm my estimate.[6] According to the 2017 Emerging Markets Thought Leadership Study performed by Greenwich Associates, 70% of the US emerging market equity managers assign higher relative performance to bottom-up investing and only 49% to the top-down investing.[7] [8]

I also estimate that support for bottom-up investing among the US managers investing in equities of developed countries is even higher because of the perception that they face lower country risks. While I agree that macro and political risks are generally lower in the developed markets, I think that it would be wise for investors to analyze macro and political risks on a country-by-country basis. Recent economic history includes a number of crises in the developed markets that had massive negative impact on stock market prices including multiple bankruptcies (e.g. Lehman Brothers) or company dissolutions by other means (e.g. Anglo Irish Bank's nationalization by the Irish government and its later merger with Irish Nationwide Building Society to form Irish Bank Resolution Corporation):[9] [10]

- Great Recession of 2007-2009 in the United States that later spread around the world was caused by the bursting of the housing bubble and subprime mortgage in the United States;
- European sovereign debt crisis of 2008-2012 in such developed countries as Greece, Ireland, Italy, Portugal, and Spain severely damaged their economies and pushed Greece out of the ranks of developed countries to the emerging market universe according to the MSCI country classification;[11]
- Austria's first failed presidential election in 2016 due to the potential impact of the voter fraud, voting by minors and non-citizens, and other irregularities negatively impacted this country's stock

[6] Andrew McCollum, Greenwich Associates, Institutional Perspectives: The Future of Emerging Markets Investing, April 20, 2017.
[7] Ibid.
[8] Top-down investors in individual stocks analyze countries, sectors, and stocks in that order.
[9] Wikipedia, List of Corporate Collapses and Scandals. https://en.wikipedia.org/wiki/List_of_corporate_collapses_and_scandals. Retrieved on June 30, 2017.
[10] Wikipedia, Anglo Irish Bank. Anglo Irish Bank. https://en.wikipedia.org/wiki/Anglo_Irish_Bank. Retrieved on June 30, 2017.
[11] MSCI, Market Classification, Past Markets Reclassification, November 2013. https://www.msci.com/market-classification

market. We wrote that the failed election and ensuing political uncertainty made iShares MSCI Austria Capped ETF (Ticker: EWO) the worst performer in BBIS portfolio in the second quarter of 2016.[12]

REASONS FOR THE BOTTOM-UP STOCK PICKERS UNDERPERFORMANCE IN RISKIER MARKETS

Below are four of major reasons for the bottom-up stock pickers underperformance in the riskier developed, emerging, and frontier markets.

1. Macro Factors Often Overwhelm Company Fundamentals
2. Lack of Transparency in Companies' Financial Disclosure Documents Leads to Higher Bankruptcy Risk
3. Inadequate Corporate Governance Does Not Protect Investors
4. Elevated Political Risk on Macro and Micro Levels

1. Macro Factors Often Overwhelm Company Fundamentals

One of the major reasons explaining why these managers underperform their benchmarks is because the negative macro factors that these managers choose to ignore often overwhelm the positive developments related to specific companies in their portfolios. When a country is going through a country-wide crisis, stocks of most companies, regardless of their own characteristics, are hit hard. Banking, currency, political, geopolitical or social crises, or difficult economic times caused by factors such as low demand for commodities or products exported by the country, often lead to significant decreases of stock prices of all companies regardless of their size and quality. Just think about stock markets of Austria, Brazil, Greece, and Russia. During the crises that these countries experienced over the last five years, the overwhelming majority of stock prices in these countries went down when these countries were going through crises.

[12] Beyond Borders Investment Strategies, Q2 2016: Another Strong Quarter.
http://bbistrategies.com/uploads/3/4/5/3/34534346/bbis_-_16-07-15_-_news_release_-_q2_2016_performance_-_fina

Investing in countries that go through difficult transitions and just after them is like fishing in the ocean during storms. One needs to have a ship that can survive monster waves caused by the stormy weather. Additionally, just as it is wise for a fisherman to be aware of the weather forecast, it is wise for an investor to be aware of the macro factors in the countries where he/she invests. It would not help a bottom-up stock-picker, if he/she picked the "winning" stock that appreciated 25% while the local currency depreciated against the investor's home currency by 50%. He/she would be looking at a loss of 37.5%.[13] Another very common example of the devastating damage that the local currency devaluation can cause is when local companies' revenues are in local currency but their debts are denominated in hard currency, such as the US Dollar. When the local currency rapidly depreciates against the US Dollar, these companies cannot service their debt, and they go bankrupt. As it would be dangerous for fishermen to go fishing in the ocean in boats designed for lakes and rivers, in my opinion, it is risky and outright dangerous for bottom-up stock pickers who do not consider macro factors to invest in risky markets, where crises are common, while the rule of law and transparency are lacking.

2. Lack of Transparency in Companies' Financial Disclosure Documents Leads to Higher Risk of Capital Loss

As ocean storms can easily damage small ships or even completely destroy them, the dangers of some international markets can easily lead to investors' partial or total loss of capital. In the riskier developed, and especially emerging and frontier markets, investors cannot always assume that the information in company reports and books is reliable. The system of accounting audits is often not as developed as that in the "core" developed markets. Almost always, these mistakes and omissions present companies in a better light than they are in reality. Investment decisions made on this skewed information result in higher risk of partial or total loss of capital due to companies' problems or even bankruptcies.

3. Inadequate Corporate Governance Does Not Protect Investors

In some developed, and, especially, emerging and frontier markets, companies' corporate governance structures are not as robust as in the "core" developed markets. This often leads to divergences in interests between majority owners, most often local influential people, and minority

[13] Total Stock Return in US Dollars = (1+Stock Return in Local Currency)*(1+Local Currency Return vs. US Dollar) - 1 = (1.25 * 0.5) – 1 = -0.375 = -37.5%

owners that include both local and foreign investors. For example, while minority owners may want to make companies more efficient by shutting down some inefficient divisions and laying off some employees, the majority owners may feel that it does not serve their purposes of maintaining their influence in the society.

4. Elevated Political Risk on Macro and Micro Levels

Political risk used to be important only to investors in emerging and frontier markets. However, the sovereign crises in the economically weaker peripheral Eurozone countries, Brexit, high support for the Euro sceptic parties across the continent, and increased polarization of the political discourse in the United States brought the need for political risk analysis to investors in developed market equities. However, while it is important for investors to analyze political risks in developed markets, it is absolutely essential to know them in emerging and frontier markets. To be successful in emerging markets, investors need to analyze political risks not only on the macro level but also on the micro level.

- **Macro Level:** Investors need to evaluate such political risks as possibilities of tax increases, adoption of new laws that would prevent companies from freely selling their products on domestic or global markets, nationalization of companies' assets, and military actions that could affect the country where the company has operations, among other factors.
- **Micro Level:** Investors need to know about potential conflicts between the company owners and local political authorities. By not analyzing political risks, the bottom-up investors put their investments at risk. This risk could be the deciding factor of whether the company prospers or gets shut down. (*Please see the cautionary story of Yukos Oil Company later in the report as an example of how political risk on the micro level may impact investments in a devastating manner*).

Once again, by not paying attention to these systemic or macro risks, bottom-up stock pickers take unnecessary risks with the capital with which they have been entrusted.

INVESTMENT METHOD 2

"HYBRID" INVESTORS IN INDIVIDUAL STOCKS: INVESTMENT PROCESS COMPLEXITY

There are some managers who use "hybrid" approaches that combine both bottom-up and top-down processes. Top-down investors in individual stocks analyze countries, sectors, and stocks in that order. After selecting countries and sectors in the global markets, these investors try to find the best companies there by using bottom-up techniques. If investors are good at both bottom-up and top-down analyses, and can incorporate inputs from both analyses into their investment processes, this approach can and does work. However, by definition it is a much more complex process: investors need to be good in both bottom-up and top-down analyses, which is not easy as companies' research efforts are often dominated by one of the analysis styles. But even though the statistics for the 2016 SPIVA U.S. Scorecard are not provided to this level of detail, I think that a sizable percent of managers who outperformed the index over the 5- and 10-year periods in international and emerging markets are these "hybrid" investors.

The complexity of the "hybrid" method lies in its implementation. It is simple to describe this process but not easy to implement it successfully. Any engineer would tell you that a mechanism that has more moving parts is more likely to break or malfunction than one with fewer moving parts. The same is true for investment management. The more decisions one has to make, especially under pressure, the more likely one can make mistakes. For example, the most common complexity of the "hybrid" approach is when the bottom-up and top-down analyses point in different directions. Should an investor invest in a great company in a country prone to financial crises or where owners could lose their ownership claims? Or what an investor should do if he/she does not see any good companies in a country where economic growth accelerates while inflation abates? Should the investor pick several companies at random to get exposure to the country? These questions are often a source of tension for research teams. If the macro people say that they like one set of countries, while the bottom-up stock pickers like companies in other countries, the tension within this team could lead to conflicts. This tension could be especially strong, if either macro analysts or bottom-up stock pickers consistently dominate decision making on where investments are made. While some firms state that they use "hybrid" approach in their presentations, in reality they prefer one style over the other.

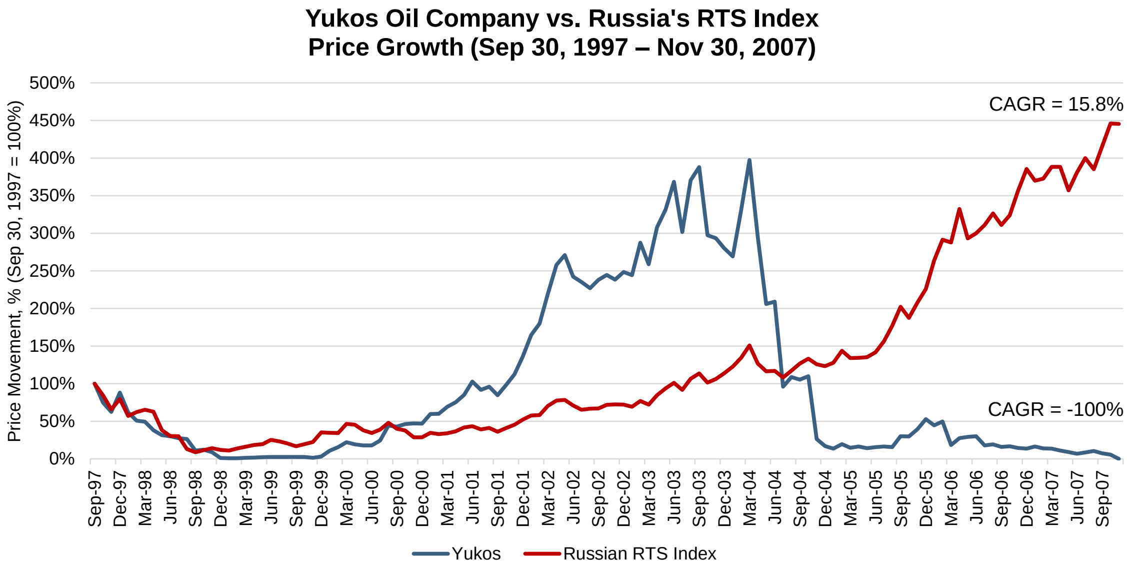
Also, the “hybrid” investment process does not alleviate any company specific risks since investors invest in stocks of individual companies. As any bottom-up investor, the “hybrid” investor faces company specific risks of lack of transparency, poor accounting information, and potential political impact on the company from the local authorities. These investors remind me of luxury sophisticated yachts with sails and diesel engines. While they are appropriate for traveling in the ocean and seas, they are difficult to operate and not as sturdy as, say, catamarans (*see Method 2 in* ***Table 1*** *for this investment style description*). In order to succeed, these “hybrid” teams require very well-trained personnel who have also had years of experience working together.

RISKS OF INDIVIDUAL COMPANY INVESTING

Let me share with you a story that made me think about investing in emerging market equities via single-country ETFs rather than individual stocks. It is a story about Yukos Oil Company, a Russian energy giant, which many excellent investors invested in the early 2000s. Yukos Oil Company was one of the best run and most profitable companies in the emerging market universe. It was also one of the companies that hired many people with degrees from western universities. What was especially good about Yukos was the fact that the company hired western firms to audit its financial statements, which was a huge advantage in the Russian stock market, which was often described as opaque. Investors loved Yukos, and it was reflected in its rapidly appreciating stock price. The stock price appreciated by 288% from the end of September 1997 to the end of September 2003, significantly outperforming appreciation of the Russian RTS index that increased by just 14% over the same 6-year period *(see* ***Chart 1*** *below for the price growth comparison of Yukos Oil Company vs. RTS Index).*[14]

[14] Source: Thomson Reuters.

Chart 1. Yukos Oil Company vs. Russia's RTS Index Price Growth, September 30, 1997 – November 30, 2007.



Sources: Thomson Reuters and Beyond Borders Investment Strategies. "CAGR" on the chart stands for "Compounded Annual Growth Rate."

However, like many Russian stories, the story of Yukos does not have a happy ending. The founder of the company, Mikhail Khodorkovsky, was unexpectedly arrested in October 2003 and the company was forced into bankruptcy in 2006. While the official charges against Mr. Khodorkovsky included fraud, tax evasion, and other economic crimes, many observers claimed that his main crime was criticism of the Russian government.[15] [16] The arrest was seen by the Kremlin critics as a stark message to oligarchs to stay out of politics.[17] Russian authorities proceeded to strip Yukos of all its assets and sold most of them to Rosneft, a Russian state-owned energy company, to recover $30 billion that the authorities claimed Yukos owed in unpaid back taxes.[18] Investors, no matter how diligent and knowledgeable about the company at the time, could not have forecasted this series of developments that ultimately ended in the company's bankruptcy and liquidation. Unless one was at the very pinnacle of the Russian Federation's political and economic power, nobody could have forecasted the Russian government's decisions to

[15] Wikipedia, Mikhail Khodorkovsky, 2003 Arrest section. Retrieved on June 28, 2017.
[16] Masha Gessen, Vanity Fair, The Wrath of Putin, March 2, 2012.
[17] Reuters, Court Orders Russia to Pay $50 Billion for Seizing Yukos Assets, July 28, 2014.
[18] The New York Times, Russian state oil company wins another Yukos auction, August 8, 2007

arrest Mikhail Khodorkovsky and sell assets of Yukos, arguably Russia's best company, to a Russian state-owned company.

While the Russian market took a hit during and after the Yukos affair, it later recovered to much higher levels and its RTS Index's price grew by 15.8% on the annualized basis over ten years and two months from the end of September 1997 to the end of November 2007.[19] However, all investors who held Yukos' shares in hopes that their value would recover were disappointed as the company's share prices went to zero by the end of November 2007. During and after the affair, I realized that some risks cannot be forecasted even by people who know individual companies extremely well. These risks were what Donald Rumsfeld, the US Secretary of Defense in George W. Bush's administration, popularized just months before Mr. Khodorkovsky arrest as "unknown unknowns." [20] "Unknown unknowns are phenomena which cannot be expected because there has been no prior experience or theoretical basis for expecting the phenomena." [21] I do not think that many investors were aware of other cases in the recent history when country governments bankrupted their best companies to send a message. In large part due to the existence of unexpected one-off events and "unknown unknowns," BBIS uses an investment process that is part fundamental, part quantitative, or "quantimental," rather than a purely quantitative one. I described BBIS' quantimental investment process in the report titled *Quantimental Investing in International Equity Markets.*[22]

I started thinking about alternatives to building portfolios from individual stocks since the Yukos affair followed several other high-profile frauds in the United States. These frauds led to bankruptcies of Enron Corporation in 2001, WorldCom and Global Crossing in 2002. I still keep an uncashed check for $10 that I received after I invested more than $8,000 in Global Crossing's shares as a reminder to be always vigilant and skeptical about what I read or hear about stocks from company managers or sell-side analysts. I bought stocks of Global Crossing before I entered the investment management after reading a recommendation by a later disgraced sell-side analyst who kept his "Buy" recommendation for the

[19] Thomson Reuters.
[20] Wikipedia, There are Known Knowns. Retrieved on June 28, 2017.
[21] Statement of Evidence of E. D'Appolonia, D'Appolonia Consulting Engineers, Pittsburgh, Pennsylvania, Phase V: Waste Disposal. Proceedings of the British Columbia Royal Commission of Inquiry into Uranium Mining. September 1979. Retrieved via Wikipedia, "There are Known Knowns" on June 28, 2017.
[22] Vitaly Veksler, Beyond Borders Investment Strategies, Quantimental Investing in International Markets, August 14, 2015.
http://www.bbistrategies.com/uploads/3/4/5/3/34534346/bbis_-_quantimental_style__-_08-14-15_-_final.pdf

company until it filed for bankruptcy.[23] Later, it was publicized that Global Crossing paid millions of dollars to his firm for investment banking services.[24]

These scandals and losses associated with them motivated me to rethink ways of investing that would help me avoid individual company idiosyncratic risks. I was ready to start investing via single-country ETFs in 2004, but ETFs for some developed, and many emerging and frontier markets simply did not exist at that time. The number of single-country ETFs increased dramatically over the next 10 years by 2014, when I started running money at BBIS.

INVESTORS IN INDIVIDUAL STOCKS CHARGE HIGHER FEES

Another problem that I see with investing in individual stocks is that investment firms, both bottom-up and hybrid stock pickers, charge higher fees than their counterparts in the ETF world. Since investors in individual stocks have to consider more investment opportunities than their low-cost ETF counterparts, they have been charging higher investment fees. While the individual stock pickers' fees have been definitely higher, their ability to select winning stocks and outperform indices was not as certain. As we discussed earlier in the *Bottom-Up Stock Picking: Problems in Riskier Markets* section of this paper, while some stock pickers investing in international and emerging market equities were able to outperform, the majority of them were not able to do it. These higher fees of stock pickers add up, or in financial language, compound. And as Albert Einstein famously said, "Compound interest is the eighth wonder of the world. He who understands it, earns it ... he who doesn't ... pays it." [25]

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[23] Mark Sherman, The Associated Press, House Questions Global Crossing: Salomon Analyst Touted Failing Firm; Sale Also Under Scrutiny, August 23, 2002.
[24] Ibid.
[25] Goodreads, Albert Einstein, https://www.goodreads.com/quotes/76863-compound-interest-is-the-eighth-wonder-of-the-world-he. Retrieved on June 30, 2017.

INVESTMENT METHOD 3

BROAD-BASED INTERNATIONAL INDICES: STURDY BUT INFLEXIBLE INVESTMENTS

Another common way that people invest in international stock markets of developed, emerging and frontier markets is with ETFs or funds that closely follow broad-based international indices. It is a safer way to invest in risky markets around the world compared to bottom-up stock picking. I would compare it to fishing from large ocean-faring cruise ships *(please see Method 3 in **Table 1** for the investment style's characteristics)*. These cruise ships are very steady and designed to survive storms.

The major problem with fishing from cruise ships is that these ships are moving on schedule and do not have flexibility to stop and allow fishermen to fish where the fish is. If there are a lot of fish in Aruba, but the cruise ship is scheduled to depart for Curacao, it will do this to stay on schedule. And if there are no fish in Curacao, it is the fishermen's problems. Furthermore, if there are a lot of fish near Barbados, but the island is not on the pre-set route, the cruise ship will not go there.

The broad-based indices have high weights in several of the countries with the highest market capitalization. For example, the weight of the four largest countries in the MSCI All Country World (ACWI) ex US Value Weighted Index, against which BBIS' International Country Value Equity strategy competes, was 45.9% as of the end of June 2017.[26] If stock markets in these four countries are trading at low valuations and have high expected returns, it is great for the investors. If, however, markets in one or several of these largest countries have high valuations and low expected returns (similar to no fish situation), investors cannot do much, apart from selling the whole fund, since the country weights in the indices are adjusted only on the semi-annual or annual schedule. Also, if an investor would like to invest in smaller markets that are not well-represented in the index, he/she would not benefit much from these countries. For example, the weight of the remaining 42 countries in MSCI ACWI ex US Value Weighted index was 54.1%, or slightly less than 1.3% per country as of the end of June.[27] Even if one percent of your portfolio grows in value a lot, it is not enough to increase the value of the whole index much. In most cases, these contributions are dominated by those of countries with the largest weights.

[26] MSCI ACWI Value Weighted Index Fact Sheet, June 30, 2017. These countries weights were as follows: Japan (20.6% of the total index's weight), UK (11.4%), France (7.1%), and China (6.8%).
[27] Ibid.

INVESTMENT METHOD 4:
INVESTING VIA SINGLE-COUNTRY ETFs:
ALTERNATIVE TO THE THREE EXISTING INVESTMENT APPROACHES

For me, investing via single-country ETFs represents an alternative to three dominant approaches to international investing. Investing using single-country ETFs incorporates two extremely important features: it is less risky than bottom-up stock picking and more flexible than funds or ETFs that closely follow the broad-based international indices. To me this approach is akin to fishing from a large sea-faring catamaran *(please see Method 4 in **Table 1** for the investment style's characteristics)*. The catamaran is steadier than the yachts of "hybrid" stock pickers and definitely so compared to the small fishing boats of the bottom-up stock pickers. The catamaran is designed to survive strong storms by investing in country-wide funds rather than individual securities in each country. If in a portfolio built out of 20 ETFs, the price of one stock out of one hundred in a single ETF drops to zero, the portfolio will survive the loss without much impact. However, if the same happens in a 20-individual stock portfolio, the loss would be much more painful. And if the prices of five stocks go to zero in the 20-ETF portfolio, the impact may still range from negligible to slightly painful. However, if prices of five stocks in the 20-stock portfolio go down to zero, the loss could be extremely painful or even lethal for the portfolio, if investors decide to take money out of it.

The single-country ETF portfolio is also easier to operate than the "hybrid" yachts as we only use the top-down approach to select countries and do not spend majority of our time selecting individual securities in each of the countries. We also do not need to hire a large crew to cover individual stocks. This approach makes operating catamarans less expensive and less prone to human mistakes. Indeed, in order to individually cover more than 1800 stocks in MSCI ACWI ex US Value Weighted Index at a rate of 40 stocks per person, a stock-picking company would need more than 40 analysts. As all people, they have different biases, sometimes unconsciously. One person's definition of "risky" could be the other person's definition of "almost risk-free." The decision-making in the "hybrid" investing is strongly affected by the biases of all analysts. Additionally, often the loudest and more sociable analysts have a disproportionately high weight on the stock choices in their firms' portfolios. At BBIS, this problem does not exist because we have a small investment team who apply the same disciplined process to investing in countries varying from the Netherlands to Colombia to Vietnam to Australia.

The catamaran is more flexible than large cruise ships and can go to places where the fish are in abundance rather than move on a pre-set schedule. Also, investing via single-country ETFs allows us to get in and out of our investments in country ETFs faster than stock pickers can get in and out of their stock positions in often not very efficient markets. I am so comfortable with this approach that I invested most of my own money to launch this strategy.

Please make no mistake. As with any equity investment strategy it is possible to lose money with our strategy. Only Bernie Madoff could guarantee a consistent 12-percent per year return to his clients. For example, if a person decides to cut his/her investment position in a portfolio that consists of single-country ETFs after it experienced a loss during a regional or country crisis, this person makes his/her loss a reality. This sale would be similar to jumping the catamaran during the raging storm in order to swim to safety. However, as fishing in the ocean is recommended for people who have certain tolerance to sea turbulence, investing in international markets, in our opinion, is recommended for people who have some tolerance for temporary losses and have long-term investment horizon (3+ years). Unfortunately, country crises do not get resolved overnight. But when they are resolved, investors who held the nerve are often well compensated for their time.

USING SINGLE-COUNTRY ETFs WORKS: SURVIVING A "PERFECT" STORM IN BRAZIL

While I devised the investment via single-country ETF strategy in theory, it was important to test the strategy in real life by investing the funds in countries that were going through "perfect" storms and, therefore, were extremely cheap. Brazil was one of these countries. We invested in iShares MSCI Brazil Capped ETF (Ticker: EWZ) on the first day we started trading, January 2, 2014, and added to the position in 2015 and 2016. In 2014 and 2015, Brazil was in the middle of a "perfect storm" as the corruption scandal was moving higher and higher in both political and business sectors until it finally claimed its highest ranking victim, President Dilma Rousseff in 2016. In addition to slowing progress in the political and business sectors, Brazil was also in the middle of a Zika outbreak. It scared the locals and prevented many potential tourists from entering the country.

Increased construction due to the country's preparation for the World Cup in 2014 and the Olympics in 2016 did not seem to help increase the economic growth, as it happened, when China was preparing for the Olympics in Beijing in 2008. The Brazilian index, BOVESPA, was among the ten worst performing markets in 2014 and 2015. iShares MSCI Brazil Capped ETF (Ticker: EWZ) fell by 15.5% and 41.7% during these years. Valuations moved from cheap to dirt cheap. In my experience when this sort of drastic decline happens, markets are ready for a rally. President Rousseff's impeachment and the appointment of the Vice President, Michel Temer, to the position of Brazil's President became a trigger for such a rally after Mr. Temer promised business-friendly reforms. The stock market rally was not stymied by persistent rumors that Mr. Temer was corrupt himself. In 2016, BOVESPA became the best performing market in the world returning 64.5%. By holding our nerve during the "perfect" storm we survived it and made money due to the design of our investment process that is as sturdy as that of the catamaran.

However, not all investors who invested in individual companies in Brazil at roughly the same time can say the same. Some of them suffered total loss of capital despite having an excellent knowledge of companies in which they invested. Below is an example from Brazil that demonstrates how investors were hit by corruption allegedly committed outside of the company in which they invested. A group of Japanese shipbuilders led by Mitsubishi Heavy Industries Ltd (MHI) exited its 30 percent stake in Brazilian shipbuilder Ecovix and declared its $300-million investment as a loss in 2016.[28] [29] The group led by MHI sold its stake in Ecovix, which it bought at the end of October 2013 for about $300 million, for a "symbolic amount".[30] [31] The sale happened when Ecovix's contract to build eight hulls for floating production ships for Brazil's state-run oil company Petroleo Brasileiro SA, or Petrobras as the company is commonly known, was jeopardized.[32] Petrobras' need for these ships evaporated as the company was caught up in a giant price-fixing, bribery and political kickback scheme with the members of President Dilma Rousseff's party.[33] This example is especially compelling to me because managers of the investment group knew Ecovix from within. They had significantly better information than the overwhelming majority of outside investors do when typically investing in a company. The MHI-led group was brought in by Ecovix to provide technology and management expertise and help the shipyard overcome quality problems, cost

[28] Reuters, Mitsubishi-Led Group Exiting Stake in Brazil Shipyard, January 5, 2016.
[29] Valor International, Ecovix Wants to Convert Debt into Perpetual Bonds, April 18, 2016.
[30] Reuters, Mitsubishi-Led Group Exiting Stake in Brazil Shipyard, January 5, 2016.
[31] World Maritime News, Japanese Consortium Acquires Stake in Ecovix, October 22, 2013.
[32] Reuters, Mitsubishi-Led Group Exiting Stake in Brazil Shipyard, January 5, 2016.
[33] Ibid.

overruns and delays.[34] The MHI-led group leaders probably knew most problems of Ecovix, but it was not enough to protect their investment from the macro "unknown unknowns."

SINGLE-COUNTRY ETF INVESTING ADVANTAGES OVER STOCK PICKING: BOTH BOTTOM-UP AND "HYBRID"

Potential Reduction of Risk of Capital Loss: BBIS' strategy provides wider diversification compared to the majority of bottom-up stock picking companies that run relatively concentrated portfolios.[35] BBIS' portfolios consist of 15-20 single-country ETFs that are in turn built from hundreds of stocks, while the concentrated portfolios of the bottom-up stock pickers consist of fewer stocks. BBIS' use of ETFs, or funds that have at least 20 equities in them, as portfolio building blocks can give BBIS' investors better protection against loses caused by one or several companies going bankrupt. Each of the ETFs is designed to be safer than an individual stock. In the extreme negative case, if a bottom-up investor is wrong about his/her individual stock selection, this investor can lose 100% of the capital if the company goes bankrupt. If we are wrong about our investment and the price of the ETF goes down, it does not drop all the way to zero because each ETF includes dozens or even hundreds of companies. The price of a single-country ETF can drop to zero in such extremely rare cases when all companies in the ETF portfolio are nationalized by the country's government or the ETF is delisted from the stock market.

Flexibility of Investment Selection: In theory, investing in individual stocks gives an investor more flexibility since he/she can select only "winners". While this is possible, it is extremely difficult to consistently find the best performing individual equities even in one country, let alone in almost fifty countries. The stock pickers often invest in just several companies per country, which in our view, does not provide investors with adequate exposure to improving economies of these countries, nor does it protect against the risk of stock prices of one or several companies falling dramatically, or even going all the way to zero if these companies go bankrupt.

[34] Ibid.
[35] We do not talk about "closet indexers", or investors who invest in hundreds and thousands of individual stocks that often belong to indices that they compete against. Unsurprisingly, performance of these investors is very close to the performance of the indices that they follow, while these investors collect much higher fees than those of ETFs following these indices.

By investing in single-country ETFs, or fund investment vehicles, we get exposure not just to one or two stocks per country, but to a basket of companies that represent the whole economy. Importantly, our strategy can give our investors targeted exposure to countries where stock markets trade at significant discounts to their long-term averages and, therefore, have high expected returns. Even if countries' markets do not return to their historical valuation averages, we often can make money because we buy these countries' ETFs at such low valuations. BBIS' purchases of ETFs at deep discounts to the long-term historical averages can provide our portfolios not only with the ability to make money but also with the downside risk reduction similar to the one that is provided by the "margin of safety" investing. The "margin of safety" concept, which is designed to reduce downside risk of investments, was developed by Benjamin Graham and David L. Dodd in their *Security Analysis* book and popularized by Seth Klarman in his *Margin of Safety* book, two of the most widely read books on value investing.[36] [37]

Speed of Entering & Exiting Investment Positions: We trade ETFs in the US equity market, one of the most liquid and transparent markets in the world. If we need to buy an ETF, or more importantly, get out of the ETF when we think that a new negative development is likely to materialize (e.g. a new tax on capital gains is likely to be adopted), we can, and we did, sell our positions very quickly. It could be much more difficult to quickly get out of a position in an individual stock trading on a less liquid and less efficient stock exchange.

Investment Management Fees: It is more expensive to build a similar size portfolio out of individual stocks compared to single-country ETFs as it requires more people, research, technology, and other resources. ETF portfolio managers can pass the savings on to their clients.

SINGLE-COUNTRY ETF INVESTING ADVANTAGES OVER BROAD-BASED INDEXING

Potential Reduction of Capital Loss Risk: While the broad-based indices provide investors with the highest diversification and therefore, lowest risks of total loss of capital, sometimes this diversification comes at the expense of higher expected returns. As market capitalization of a country market increases,

[36] Benjamin Graham and David L. Dodd, Security Analysis, 1934.
[37] Seth A. Klarman, Margin of Safety: Risk-Averse Value Investing Strategies for the Thoughtful Investor, 1991.

often due to the increase of its valuations, the weight of this country in the index also increases. It leads to index investors having exposure to companies and countries where valuations are high and expected returns are low.

A portfolio built from single-country equity ETFs allows BBIS to decrease weights of overvalued countries, while providing investors with high protection against risks of individual companies going bankrupt. Additionally, the impact of increased diversification of MSCI ACWI ex US Value Weighted index due to the fact that it has investments in 46 countries versus BBIS' portfolio investments in 15 to 20 country ETFs is not large. In my experience, after a portfolio includes more than a hundred individual equities, adding more equities does not bring much in terms of diversification benefits. An ETF portfolio that consists of 15 to 20 single-country ETFs has exposure to hundreds of individual equities. In fact, the positive impact of the higher index's diversification versus BBIS could be overwhelmed by other factors. For example, I attribute to the index's higher exposure to expensive, and therefore, more volatile markets the index's higher volatility (riskiness) of its returns versus BBIS' returns. The volatility of BBIS's International Country Value Equity strategy measured by the annualized standard deviation during the three-and-a-half-year period since inception on January 2, 2014 to the end of June 2017 was 13.04%, while the standard deviation of MSCI ACWI ex US Value Weighted index during the same period was higher (13.43%) despite the index's wider diversification.[38]

Flexibility of Investment Selection: As we discussed before, in the broad-based indices, country weights are pre-set and weights of only a few large countries dominate the performance of the indices. At BBIS, we can allocate much higher weights (up to 10% of our portfolio) to any country ETF depending on factors such as the country markets' expected returns, investment valuations, catalysts to the country crisis alleviation, risks to these catalysts, stock momentum, earnings growth, and the ETF's liquidity. We are flexible in our country selection and can shift our investments from countries with lower expected returns to the ones that offer higher expected returns. We can get exposure to stock markets of riskier large and, especially, smaller countries that many other managers do not invest in. As small-cap stocks, stock markets of these countries can increase in value dramatically. For example, in 2016 our second largest position was iShares MSCI All Peru Capped ETF (Ticker: EPU) representing the second best performing market of the year after iShares MSCI Brazil Capped ETF (Ticker: EWZ). EPU's total

[38] Thomson Reuters and Beyond Borders Investment Strategies.

returns (price appreciation plus dividend payments) were 64% during the year, while EWZ surpassed EPU by mere 0.5% registering 64.5% return. While a number of our competitors invested in Brazil (as we also did), significantly fewer of them had investment positions in Peru.

Speed of Entering & Exiting Investment Positions: It is faster to buy or sell funds or ETFs that follow broad-based index positions versus developing portfolios from single-country ETFs. The country weights in these indices are pre-set and fluctuate around these weight levels driven by the performance of the portfolio companies' performance. However, if an investor buys an index in hopes of getting higher exposure to a country due to it being included in the index or its weight significantly increased, he/she may have to wait since the composition of those indices is changed on the semi-annual or annual basis. It takes this much time for an investor to incrementally increase or decrease his/her exposure to individual countries.

Investment Management Fees: While management fees of the single-country equity ETF strategy are slightly higher than those of the broad-based indices, BBIS aspires to earn higher returns due to its active country rotation over a stock market cycle. This provides investors with a better combination of fees per unit of return. Also, providers of the single-country ETFs often decrease their management fees for these investment vehicles, thus benefitting investors in BBIS' strategies.

Thank you for your time. We would be happy to answer your questions about this report and our firm.

Very best regards,

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