EMPIRICAL
WEALTH MANAGEMENT®

Successful Investing

ISSUE
Q3
September
2010

Kenneth R. Smith, CFP®, MS | Steven Guichard, CFA | Ethan Broga, CFP®, MS

What's New At Empirical

- Tune into Empirical Investing Radio every Thursday at 2PM PST on the VoiceAmerica business channel: *business.voiceamerica.com*
- Our Seattle team has recently moved to a new downtown location: **1420 *Fifth Ave, Ste. 1740, Seattle, WA 98101***
- Empirical is conducting regular introductory seminars in our new Seattle office. Contact us for details
- Congratulations to Michael Van Sant and Ethan Broga for becoming principals of EWM.
- Empirical will be changing our email domain to empiricalfs.com as of 11/1/2010. We will be sending out a separate notification.
- CEO, Ken Smith is featured in the October, 2010 issue of the *Seattle Met* magazine. See him in the article "Get Rich Slow: 15 Smart Ways to Manage Your Money Right Now."

Emerging Markets

Empirical recently introduced several new equity portfolio options.* We refer to the different equity portfolios as Targeted Premium Model Portfolios 1 through 5. As shown in **Figure 1,** the five different models are differentiated by their varying exposures to aggressive asset classes (asset classes that carry more risk, yet offer the opportunity for higher expected returns). For example, Portfolio 5 has a large weighting to small cap, value and emerging markets equities relative to Portfolio 1.

In previous communications, we covered the research surrounding small and value ***return premiums***.± In this letter, we continue the discussion on targeted return premiums with a focus on emerging markets. Emerging markets performance data goes back to 1988. Since then, the MSCI Emerging Markets Index has generated a 13.19% annual return, beating the 6.54% return produced by the MSCI World Index, through July 2010, making this a return premium worth examining.

Return premiums: The compensation an investor expects to receive from taking on extra risk.

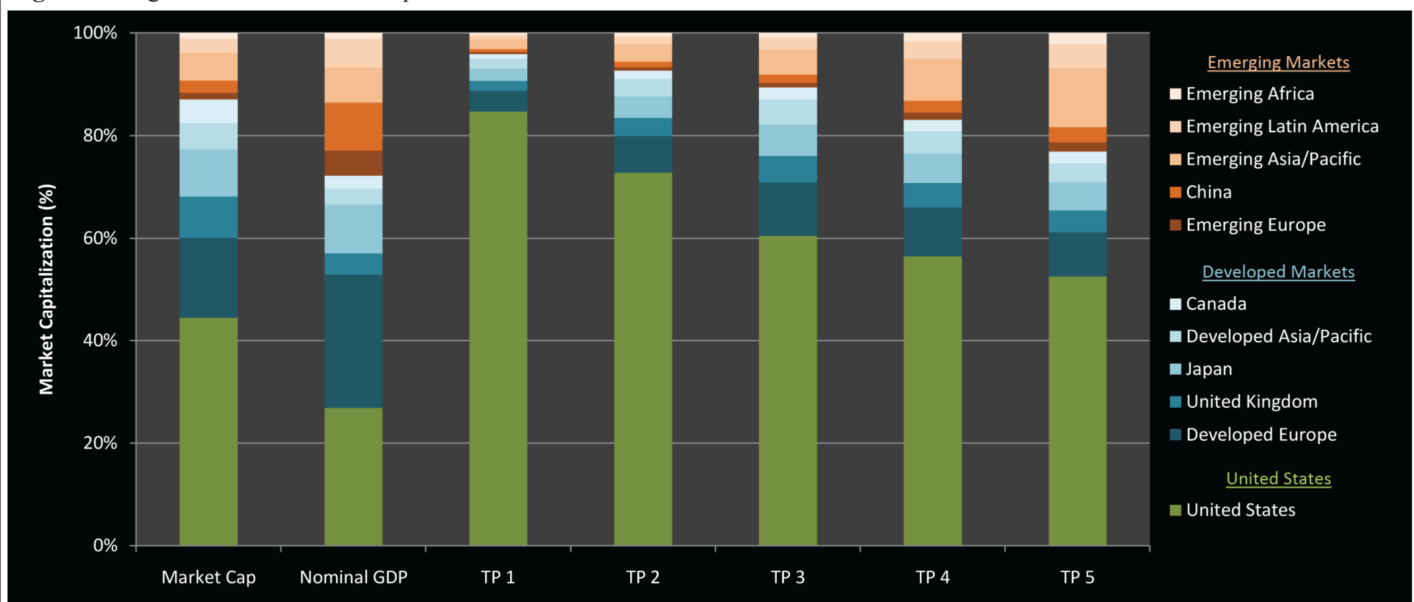
this issue

The Myth Behind High Growth Economies P.3
The Origin of Emerging Market Return Premiums P.4
Investing in Emerging Markets P.5
Appendix P.8

looking ahead

Discussion on Social Security ♦
Alternative Investments ♦
Modern Portfolio Theory♦

Figure 1: Regional Breakdown of Empirical Model Portfolios



Source: World market capitalization data is provided by MSCI and Russell as of 5/31/2010.

*See the Empirical Letter from the 1st quarter of 2010
±Stocks are riskier than bonds, and thus an investor expects to earn a higher return. Small and value stocks have historically had a return premium, both because they are volatile, and investors tend to prefer large and growth stocks.

We start with the definition and history of this compelling investment category followed by important investment considerations. You may find that some of the research presented in this letter challenges conventional Wall Street wisdom. This should come as no surprise as much of the independent empirical research we find tends to do that. As always, the intent is that you use this research to foster discussion with your lead advisor.

Defining World Markets

The investment world is typically divided into three primary categories: developed markets, emerging markets and frontier markets. Of the nearly 200 countries that exist worldwide, 71 countries have capital markets developed enough to be included in the MSCI[∞] indices. Investors currently have the opportunity to diversify among 24 developed countries, 21 emerging countries and 26 frontier countries (see **Figure 2**).

Figure 2: Characteristics of MSCI Country Classification

Index Requirements	Developed	Emerging	Frontier
Number of Countries in Index	24	21	26
Income minimum	$12,000 GNI per capita	None	None
Minimum # of liquid stocks	5 mid cap stocks	3 small cap stocks	2 micro cap stocks
Openness to foreign ownership	Very high	Significant	At least some
Ease of currency inflows/outflows	Very high	Significant	At least partial
Stock Market Operational Efficiency	Very high	Good and tested	Modest
Rule of law and political stability	Very high	Modest	Modest
Richest Member Country (GNI)	Norway (86,440*)	South Korea (19,830*)	United Arab Emirates (56,821*)
Median Member Country (GNI)	Australia	Malaysia	Argentina
Poorest Member Country (GNI)	Portugal (20,940*)	India (1,170*)	Bangladesh (590*)

* Billion dollars
Source: Country income ranking determined using 2009 GNI **(Gross National Income)** per capita using Atlas Method from World Bank.

The term 'Emerging Markets' was coined in the early 1980s by Antoine van Agtmael, who at the time, was working for the World Bank (Authers, 2006). He defined emerging markets as countries with low-to-medium income per capita[¥]. Over time, emerging markets evolved into a distinct investment asset class. Frontier markets followed as a second category, tracking less developed countries than emerging markets.

MSCI's approach to categorizing a country between developed, emerging and frontier markets evolved beyond Antoine's original income-focused approach. Now, MSCI performs an annual review of eligible countries, and while a country's income remains a factor, it is only one of several reviewed in the categorization process. For example, The United Arab Emirates has a per capita income that is larger than most developed countries, yet MSCI classifies this country as a frontier market because of the legal limits placed on foreign ownership of stock there (MSCI, 2010). In 2010, MSCI looked at adding South Korea and Taiwan to the Developed Markets index however these two countries remain in the emerging markets index because of issues like currency trading restrictions.

History of Countries in Emerging Markets

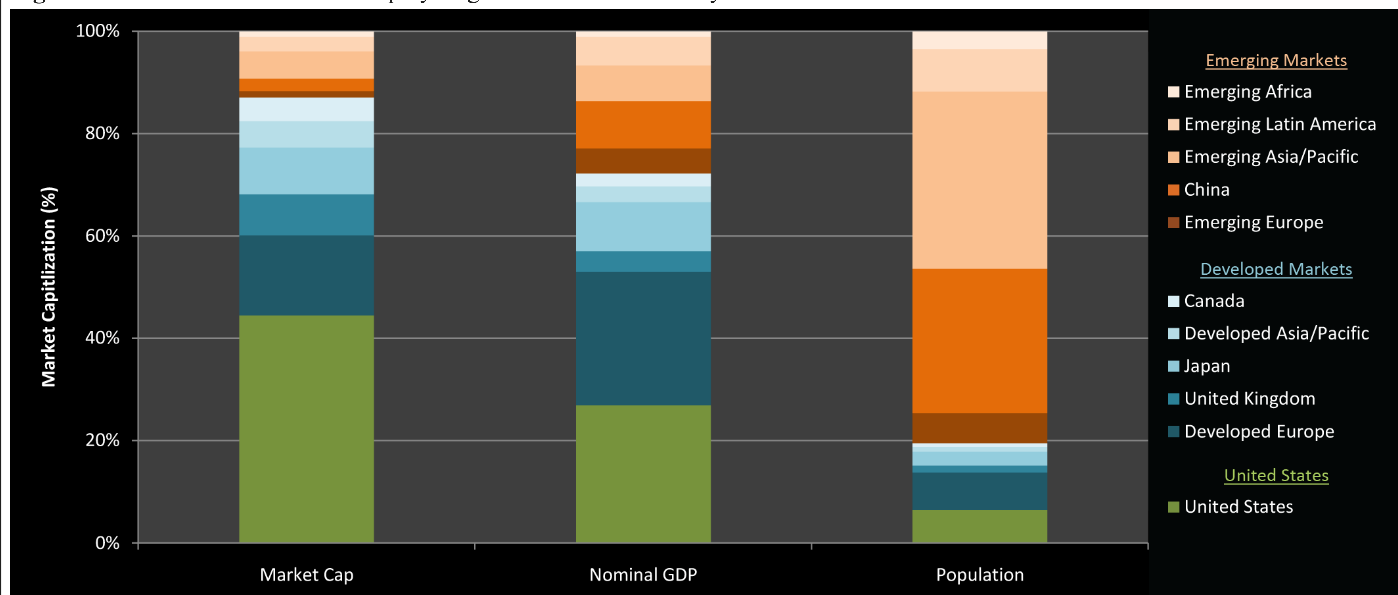
The MSCI Emerging Markets index started with only 10 countries. To date, 19 countries have been added, and eight removed, leaving the index with a current number of 21 countries. Generally, countries are added to the index once their stock market becomes mature enough to sustain sufficient liquidity, transparency and regulatory oversight. Countries are removed from the index when either the country or capital markets progress enough to enter the Developed Markets Index (i.e. Portugal, Greece & Israel), or their capital markets regress to the point where they are no longer eligible (i.e. Sri Lanka, Venezuela, Jordan, Pakistan, Argentina & Malaysia). **Figure 1** in the appendix displays the history of country additions and subtractions made to the Emerging Markets index from inception to the present.

Composition of Emerging Markets indexes

Figure 3 shows the relative market capitalization of the US, developed markets and emerging markets. Emerging markets stocks make up only 13% of investable stocks worldwide, yet their economies make up close to 28% of the world economy. This disparity occurs because less developed countries tend to have smaller stock markets relative to the size of their economies. As emerging markets grow, their stock markets tend

[∞]MSCI (Morgan Stanley Capital International) is a creator of investment benchmarks, like S&P or Dow Jones. MSCI was a division of Morgan Stanley until it was spun off completely in 2009.
[¥]"Income" specifically refers to gross national income, and represents a nation's economic output. It differs from gross domestic product (GDP) in that it includes income earned abroad by domestic citizens and corporations, and excludes income earned in the country by foreign corporations and workers. It also excludes indirect business taxes, such as sales tax.

Figure 3: World Statistics Broken Up by Regions and MSCI Country Classification



Source: World stock market capitalization from MSCI and Russell as of 5/31/10. Nominal GDP is for 2009 and from the World Bank. Population is as of 2008 and from the World Bank.

to expand to be more proportional to their economies. Over time, today's emerging countries will make up a larger percentage of the world stock market. This is one reason some investment managers suggest a larger allocation to emerging markets than the 13% stock market weighting they hold. Further, 81% of the world population resides in emerging markets. So, as the standard of living increases in emerging countries, we should expect their share of the world economy and stock markets to become much larger.

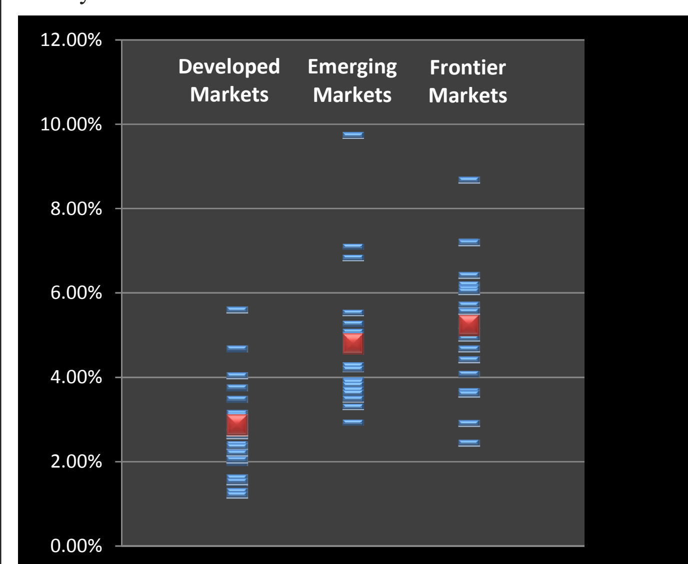
High Growth Economies Don't Equal Better Returns

In 2001, the acronym BRICs (Brazil, Russia, India and China) was coined by Goldman Sachs Chief Economist, Jim O'Neill (Kowitt, 2009). The term eventually entered the national lexicon after Goldman Sachs made a bold prediction that by 2039, the BRICs economies would surpass the combined economies of US, Japan, Germany, UK France and Italy (Wilson & Purushothaman, 2003). This idea of a few heavily populated developing nations becoming the economic giants of tomorrow fueled a desire by many to participate. The general idea among the Wall Street crowd is that countries with higher economic growth rates should generate higher rates of return in the future. With this idea, new exchange traded mutual funds appeared, attempting to help investors target specific countries and country groups.

The problem with this approach is that it ignores the financial research done on this topic. There are several factors that explain why the ranking of countries by economic growth rates has not produced superior portfolio returns. It is our proposition that based on the research currently available, the best approach to investing in emerging markets is to diversify among all countries available through broadly diversified mutual funds, and include funds that target small and value stocks in emerging markets for further diversification and return opportunity. Coming back to the BRICs prediction by Goldman Sachs, it is worth noting that at least three of the BRIC countries did not get added to the Emerging Markets Index until February 1994 and later. While emerging markets have outperformed the US market significantly from their inception in 1988 to July 2010, emerging markets have underperformed the US from February 1994 to July 2010.

This illustrates two lessons. First, large, high growth countries are not responsible for the historical return premium in emerging markets. Historically, the premium is from a time period before the BRICs were a significant portion of the index. Second, emerging markets may underperform developed markets for long periods of time. In this case, there is a 16 year time frame where emerging markets have underperformed US stocks. Like small and value premiums, investors trying to capture the emerging premium need to have a high degree of patience. Although, combining small and value weightings to emerging markets seems to enhance the premiums. Since February 1994, while the

Figure 4: Ten Year Economic Growth Rates of Countries by MSCI Country Classification 1998-2008



Source: Growth rate of real GDP provided by World Bank

MSCI emerging markets index underperformed US stocks, emerging small cap and emerging value stocks outperformed by 2.5% and 4.8%, respectively.

In **Figure 4**, over the past ten years, the developed markets have grown slower than the emerging markets, and even slower still than the frontier markets. Many people speculate that high economic growth rates make emerging markets a more attractive investment. It is true that economic growth is necessary to have positive stock market returns, however, it is also true that countries with higher rates of economic growth (such as those in earlier developmental stages) tend to issue more stock, thus diluting the returns to investors. Stock market returns can be broken up into the components below using a *simplified* variation of the Grinold-Kroner model (Grinold & Kroner, 2002), of which GDP growth is a key component:

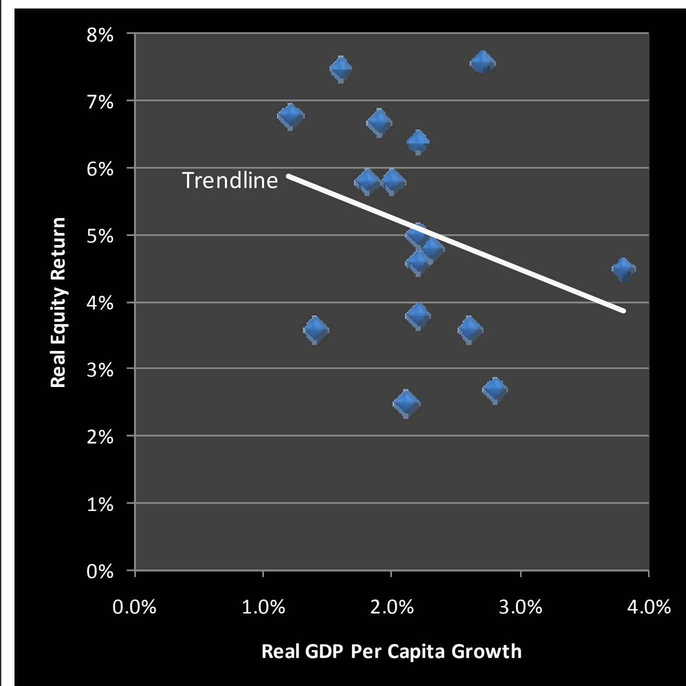
Inflation + Real GDP Growth Rate – Net Equity Issuance + Dividend Yield

"Net Equity Issuance" reflects the fact that the number of shares in the market changes over time: when corporations sell new shares on the market, and when they buy them back. Historically, in the US, corporations have sold more shares than they bought back, at rate of 2% over the last 80 years (Bernstein & Arnott, 2003).

Stock investors should receive lower real earnings growth than the economy as a whole. This is because some of the earnings growth flows to those who start new companies (entrepreneurs) and venture capitalists. So, if corporate earnings in an economy are growing by 10% per year, not all of that future growth will be equally earned by current stockholders. Some of that growth will come from privately held companies, so that the benefits do not accrue to the owners of pre-existing corporations. When a private company grows large enough to be sold to the public, it is at that point when future growth will accrue to stockholders. The growth in earnings from the startup phase to the initial public offering is earned by the entrepreneurs and venture capitalists.

Multiple studies have shown that there is a low to negative correlation between stock market returns and real GDP growth. One study of 16 countries shows that over the last 100 years there has actually been a negative correlation between stock market returns and real GDP growth (see **Figure 5**). A study on 25 emerging markets countries over more recent time frames gives the same result (Siegel, 2008). Further, a recent study of 83 different countries concluded that there was no correlation between stock market returns and economic growth (Kersley & O'Sullivan, 2010). Currently available empirical evidence strongly suggests that countries with high amounts of economic growth do not necessarily have better than average stock market returns. Lastly, research conducted by James Davis demonstrated that knowing a country's annual GDP growth in advance would not have helped you predict stock market returns for that year (Davis, 2006). Aside from the issues of private companies keeping returns and public companies diluting returns through new share issuance, another factor to consider is that stock market returns tend to lead economic growth not the other way around. If the world believes that a particular country will have superior economic growth, the stock market prices of that country quickly reflect that future growth. Thus, even if you could predict which economy will grow the fastest (something which is notoriously difficult), that information is already factored into a country's stock prices, and therefore will not provide you with increased returns.

Figure 5: Economic Growth and Stock Market Returns for 16 Countries 1900-2000



Source: Dimson, Marsh, & Staunton, 2002

So Where Does the Emerging Markets Premium Come From?

This begs the question: why would you expect emerging markets to have higher returns? The reason is this: like in all areas of investing, you expect higher returns because you take on higher risks. **Figure 6** shows the historical risk and return trend of emerging markets. They have higher volatility (measured by standard deviation), longer periods of negative returns and a worse drawdown than the developed markets as a whole.

Another form of risk is that emerging markets may experience severe downturns while the developed markets are doing relatively well. In one sense, this is a good thing, because it's preferable to have asset classes that perform differently than the rest of your portfolio (i.e. have low correlation). However, adding volatile assets with low correlation creates another risk factor: portfolio divergence (a situation where your portfolio behaves differently than some standard benchmark). For example, it would have been painful in the late 1990s to be heavily invested in emerging markets (see **Figure 7**). Your portfolio would have been dramatically affected by the 1997-1998 emerging markets crash while the US stock market was rallying, and international developed markets were hardly scathed.

There is another dimension of risk that may help explain the emerging markets premium: countries with unstable political and economic structures are more likely to fail, making investors less inclined to hold emerging markets stocks. This makes the emerging markets premium analogous to the historical premiums for small cap and value stocks. Riskier companies (either because they are small, financially distressed, or companies based in an unstable economy), should be expected to earn higher returns

Figure 6: Risks of Emerging Markets

January 1988 - June 2010	Annualized Return	Growth of $1	Annualized Standard Deviation	Longest Period of Negative Returns	Worst Drawdown
MSCI Emerging Markets Index	13.19%	$16.25	24.24	6 years, 8 Months *(8/97 - 3/04)*	-61.44% *(11/07 - 2/09)*
MSCI World Index	6.54%	$4.16	15.26	5 Years, 10 Months *(4/00 - 1/06)*	-53.64% *(11/07 - 2/09)*

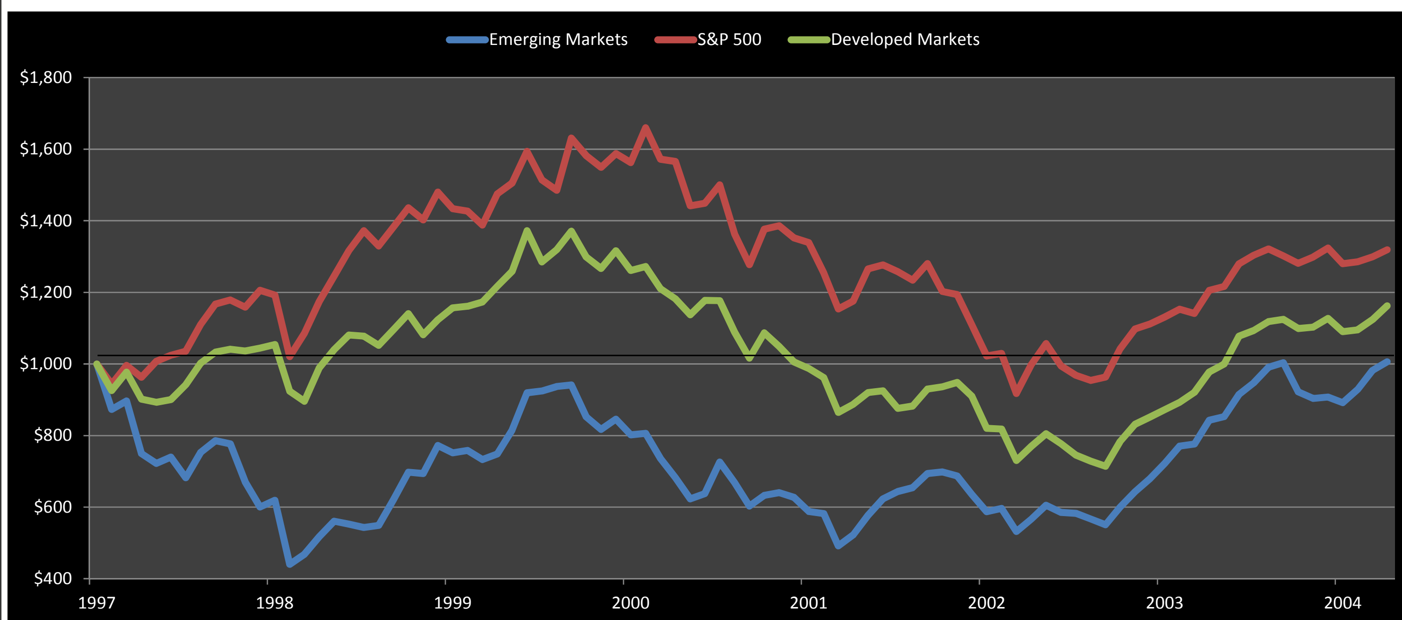
Source: MSCI. Returns are gross of dividend and with taxes withheld.

than large, safe companies in stable economies. This explanation complements the observation that historically, high growth countries have experienced lower stock market returns than low growth countries. High growth countries are less risky, and therefore investors require a lower return from these stocks. This 'political risk' premium has much less empirical support than the small cap and value premiums, but it fits well with all of the available data and makes intuitive sense.

There is also the issue of currency risk when investing in emerging markets. Oftentimes, at the same time the stock market is falling, the currency will collapse as investors lose faith in the local economy. This creates a double jeopardy situation for stock market investors, as the stocks are valued in the local currency.

As emerging countries become richer, more politically stable and develop more sophisticated capital markets, they become less risky, and thus will have lower expected returns. As a result, index providers such as MSCI will move them up to the Developed Markets index, as they have recently done with Israel, and are considering doing with Taiwan and South Korea. As this process continues, it will be the frontier markets that will have the future high risk/high return potential. By maintaining an allocation to riskier countries as part of a portfolio, investors with a long time horizon should be rewarded an expected return premium.

Figure 7: Illustration of Emerging Markets Portfolio Divergence



Source: Emerging markets represented by MSCI Emerging Markets Index (gross). Developed Markets represented by MSCI EAFE Index (net).

Investing in Emerging Markets

It is often assumed that because emerging markets are less liquid, less transparent and less followed by stock analysts, it is ripe territory for traditional active investment managers to add value. Once again, the empirical evidence does not support this Wall Street proposition. Over the five year period from 2005 to 2009, 89.6% of active emerging markets funds underperformed their benchmark. On average, their performance was 13.59% per year compared to 16.50% per year by the benchmark. By comparison, 60.6% of US active equity funds underperformed their benchmark (Dash & Guarino, 2010).

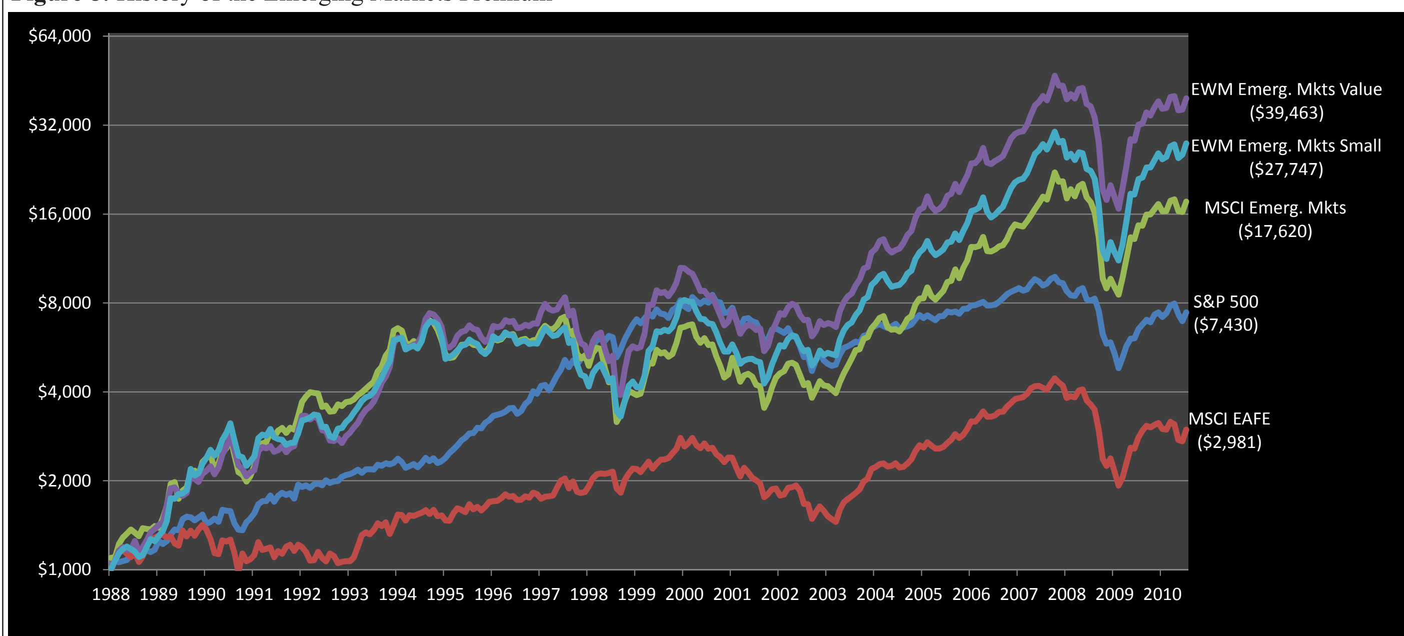
A common counterargument to the fact that active managers underperform their benchmark index on average is that while the average manager is bad, there are a few good active managers. The theory implies that a smart investor need only pick one of the good ones to benefit from active management. However, a study on the returns of active emerging markets mutual funds shows that funds that outperform in one time period are not any more likely than average to outperform in the following period (Rodriguez, 2007). This supports the point that there are no

superstar mutual fund managers, even in the emerging markets. Any active funds that do well in a given period are probably just benefiting from lucky guessing. Placing money with a manager that recently did well through stock picking or market timing is like running out to buy lottery tickets from the location the last winning ticket was sold.

Empirical invests only in adequately diversified funds and steers clear of traditional Wall Street-type, high expense, guess work. We select investment strategies which, in our view, are structurally superior. Investment funds are screened based on several critical factors, such as: investment structure, diversification, cost, tax efficiency and ability to effectively capture return premiums. As you can see in **Figure 8**, within the emerging markets asset class, small and value stocks have outperformed the overall emerging markets stock index, and have had lower correlations with US stocks (offering better diversification). We have been able to provide our clients with exposure to these unique areas of emerging markets through the institutional investments we utilize.

Frontier Markets represent a much smaller and less liquid portion of the world stock market than Emerging Markets. As a result, there are fewer available investment options in frontier markets. While there are multiple active mutual funds that invest in Frontier Markets none of them meet our strict criteria. The risk and cost of investing with these providers outweighs the benefits for now, however, it is very likely that an acceptable investment strategy will be created in the near future. As better investment vehicles come to the market place, we will examine them closely and be ready to incorporate this unique asset class into your portfolio.

Figure 8: History of the Emerging Markets Premium



Source: Performance data from S&P, MSCI and DFA.

Conclusion

At Empirical, we believe that emerging markets make a great contribution toward building a diversified portfolio. They offer diversification value away from developed markets, and have historically provided higher returns than developed markets. In this letter, we also discussed that higher expected returns in emerging markets go beyond higher economic growth rates, and are instead a function of risk. It is the risk inherent in emerging markets that best explains our expectation for a future return premium. The risk is illustrated by the extended periods of time that emerging markets have underperformed developed markets, and the large declines they experience. Because of this, it is critical to have a long time horizon when overweighting emerging markets in your portfolio. It is also imperative to understand that within investment markets, taking risk means you invest in the opportunity to receive higher returns, not the guarantee. There are no guarantees in stocks.

Further, we illustrated the best way to capture the expected return premiums in emerging markets by investing in diversified funds and adding an emphasis on small company and value oriented stocks. The funds utilized by Empirical have achieved long term performance in the top half of their peer group as a result of lower costs and superior structure relative to the many managed funds available in this category.

Empirical offers multiple equity portfolios, with each portfolio having a distinct level of exposure to emerging markets. Please speak to your advisor if you have any question about the role emerging markets play in your specific investment strategy.

Sincerely,

Kenneth R. Smith, CFP®, MS
Chief Executive Officer

Steven Guichard, CFA
Portfolio Manager | Financial Analyst

Works Cited

Authers, J. (2006, October 20). The Long View: How adventurous are emerging markets? *Financial Times* .

Bekaert, G., Harvey, C. R., & Lundblad, C. (2007). Liquidity and Expected Returns: Lessons from Emerging Markets. *The Review of Financial Studies* , 1783-1831.

Bernstein, W. J., & Arnott, R. D. (2003). Earnings Growth: The Two Percent Dilution. *Financial Analysts Journal* , 47-55.

Brown, S. J., Goetzmann, W. N., & Ross, S. A. (1995). Survival. *Journal of Finance* , 853-873.

Dash, S., & Guarino, D. (2010, March). Standard & Poor's Indices Versus Active Funds (SPIVA) Scorecard, Year-End 2009. S&P Indices Research Insights.

Davis, J. L. (2006, August). Economic Growth and Emerging Market Returns. Dimensional Fund Advisors.

Grinold, R., & Kroner, K. (2002). The Equity Risk Premium. *InvestmentInsights* , 30.

Kersley, R., & O'Sullivan, M. (2010). *Global Investment Returns Yearbook.* Credit Suisse Research Institute.

Kowitt, B. (2009, June 17). For Mr. BRIC, nations meeting a milestone. *Fortune* .

MSCI. (2010, June 21). MSCI Announces the Results of the 2010 Annual Market Classification Review. *Press Release* . Geneva.

Ritter, J. R. (2005). Economic growth and equity returns. *Pacific-Basin Finance Journal* , 489-503.

Rodriguez, J. L. (2007, October). Search for El Dorado in Emerging Markets. Dimensional Fund Advisors.

Siegel, J. J. (2008). *Stocks for the Long Run, Fourth Edition.* New York: McGraw-Hill.

Wilson, D., & Purushothaman, R. (2003, October 1). Dreaming With BRICs: The Path to 2050. *Global Economics Paper No: 99* . Goldman Sachs.

Performance Disclosure
Past performance is not a guarantee of future results. Even a long -term investment approach cannot guarantee a profit. Economic, political, and issuer-specific events will cause the value of securities, and the portfolios that own them, to rise or fall. Portfolios are assumed to be rebalanced annually. Model portfolios do not include an allocation to cash. Taxes and trading costs are not included.

Appendix

Figure 1: Additions and Removals in the MSCI Emerging Markets Index