

Emerging Market Opportunities

BY PATRICK O'SHAUGHNESSY, CFA AND ASHVIN VISWANATHAN, CFA: JUNE 2013

Emerging market equities present both unique opportunities and also unique risks. Unlike more mature economies, emerging markets' economies have the potential for impressive growth rates. But emerging markets also have the potential for damaging socio-economic and political instability. Equity returns in these countries are often impressive, but to earn these returns investors must deal with considerably higher volatility than in the developed equity markets.

Because emerging market equities are covered less frequently by analysts and because their financial statements face much less scrutiny than those of developed market equities, we believe there is an opportunity to significantly outperform market cap weighted emerging market benchmarks. Three factors in particular have proven to be predictive of future excess return in emerging markets: **valuation, dividend yield, and price momentum.** These factors are even more effective in the emerging markets than they are in developed countries—meaning that active management can lead to significant excess returns. This paper highlights why these three factors work so well in emerging market equities, at both the regional *and* country level, and why a systematic stock selection strategy using valuation, yield, and momentum as the principal stock selection criteria will likely outperform the market in the future.

¹ Measured using Purchase Power Parity.

² Emerging market countries as defined by MSCI.

Emerging Markets—Current Landscape and Opportunity

According to the IMF, emerging market and developing economies now account for 55 percent of global GDP.¹ This is an astounding increase from the 31 percent of global GDP these countries represented in 1990. Though GDP and stock market weightings never line up, emerging market equities still have an impact on the global equity market. As of May 2013, emerging market stocks represent 11.6 percent of the MSCI All Country World Index.

To be included in our current Emerging Market Equity Universe, a company must be domiciled in an emerging country² and must also have a market capitalization of at least \$200 million. These criteria leave us with roughly 1,500 companies, representing 56 different countries. The current universe is top heavy, with nearly 90 percent of total market capitalization represented by the top 15 countries (see Table 1). Also, roughly 80 percent of the total market capitalization is

OSAM RESEARCH TEAM

Jim O'Shaughnessy
Chris Meredith, CFA
Scott Bartone
Travis Fairchild, CFA
Patrick O'Shaughnessy, CFA
Ashvin Viswanathan, CFA

CONTENTS

Emerging Markets—Current Landscape and Opportunity
Historical Returns & Risk
The Power of Value & Momentum in Emerging Markets
Country-Specific Results
CONCLUSION

Table 1: Top 15 Emerging Market Countries by Market Cap

(As of May 2013)

Country:	% of Total Universe
SOUTH KOREA	15%
CHINA	13%
RUSSIA	10%
INDIA	10%
SOUTH AFRICA	7%
TAIWAN	7%
MEXICO	5%
SAUDI ARABIA	4%
BRAZIL	4%
MALAYSIA	3%
THAILAND	3%
CHILE	2%
TURKEY	2%
UKRAINE	2%
POLAND	2%
Top 15 total: 88%	

OSAM CONTACT INFORMATION:

Financial advisory firms & advisors please contact Ari Rosenbaum at 203.975.3340, or Ari.Rosenbaum@osam.com

Institutions please contact Chris Loveless at 203.975.3304, or Chris.Loveless@osam.com

O'Shaughnessy Asset Management, LLC ■ Six Suburban Avenue ■ Stamford, CT 06901 ■ 203.975.3333 Tel ■ 203.975.3310 Fax

represented in five key sectors: Financials, Information Technology, Materials, Consumer Stocks, and Energy.

Based on the popular Cyclically-Adjusted P/E ratio (CAPE), emerging market equities are considerably cheaper than stocks in the United States. According to Mebane Faber, an expert on applying the CAPE ratio to global markets, the emerging markets region is trading at a CAPE of 15.59—drastically lower than the 22.83 multiple for U.S. stocks.³ CAPE ratios have proven to be predictive of long-term future performance across global markets, including emerging markets.⁴ Taking advantage of this opportunity is difficult for U.S. investors, as they tend to significantly overweight U.S. equities in their portfolio because of *home bias*. Home bias is the tendency for investors around the world to own a disproportionate amount of stock in their home country. They do so because they view companies in their respective countries as more familiar, and therefore perceive them as less risky. For example, in 2010, U.S. investors had an allocation of 72 percent to U.S. stocks even though U.S. stocks represented just 43 percent of the global equity market.⁵

We believe that emerging market equities represent a timely opportunity for many U.S. investors because of the broad opportunity set (1,500+ companies), the chronic underallocation (home bias), and the attractive CAPE ratio. The remainder of the

paper will examine the historical returns and diversification benefits of several key emerging market countries and, more importantly, highlight stock selection strategies that work very well in the region, making emerging markets one of the best opportunities to outperform through active management.

Historical Returns & Risk

While average volatility in emerging market countries has been considerably higher than in the U.S. since 1988 (when the MSCI country return data series begins), the returns of many country indices have outpaced the U.S. stock market. Table 2 summarizes the annualized country return and volatility in U.S. dollar

terms for several key emerging market countries—with the S&P 500 falling in the middle of the pack.⁶ If a U.S. investor had allocated 20 percent of their portfolio to emerging markets over this period,⁷ their absolute return would have improved from 10.04 percent to 11.94 percent and their risk-adjusted return (Sharpe Ratio) would have improved from 0.48 to 0.58. Adding emerging markets to the portfolio increased risk-adjusted return despite volatility in the emerging markets portion of the portfolio that was 10 percent higher per year than the S&P 500.⁸ We believe there are opportunities for enhanced returns through a portfolio that is diversified with emerging market stocks.

Table 2: Performance by Country (USD)

Country:	Period	Annual		Risk Adjusted Return
		Return (%)	Volatility (%)	
MSCI Mexico	Jan-1988–Apr-2013	20.91	31.21	0.67
MSCI Brazil	Jan-1988–Apr-2013	18.38	50.82	0.36
MSCI Chile	Jan-1988–Apr-2013	18.13	24.61	0.74
MSCI Russia	Jan-1995–Apr-2013	13.74	54.37	0.25
MSCI Poland	Jan-1993–Apr-2013	13.48	48.58	0.28
MSCI Turkey	Jan-1988–Apr-2013	12.03	56.68	0.21
MSCI South Africa	Jan-1993–Apr-2013	11.86	27.37	0.43
S&P 500	Jan-1988–Apr-2013	10.04	14.72	0.68
MSCI Thailand	Jan-1988–Apr-2013	9.52	37.71	0.25
MSCI India	Jan-1993–Apr-2013	9.01	31.01	0.29
MSCI Malaysia	Jan-1988–Apr-2013	9.01	28.45	0.32
MSCI Korea	Jan-1988–Apr-2013	7.47	37.71	0.20
MSCI Taiwan	Jan-1988–Apr-2013	6.13	36.08	0.17
MSCI China	Jan-1993–Apr-2013	-0.23	35.81	-0.01

Source: EnCorr, MSCI, S&P

³ As of 5/8/2013.

⁴ Joachim Klement, "Does the Shiller-PE Work in Emerging Markets?" (June 12, 2012) http://papers.ssrn.com/sol3/papers.cfm?abstract_id=2088140

⁵ Philips, Kinniry, Donaldson; "The Role of Home Bias in Global Asset Allocation Decisions" Vanguard (June 2012) https://pressroom.vanguard.com/nonindexed/6.26.2012_The_Role_of_Home_Bias.pdf

⁶ EnCorr, MSCI, S&P.

⁷ EnCorr, MSCI, equally weighted average of country returns for South Africa, China, Korea, Thailand, Taiwan, Russia, India, Mexico, Brazil, Malaysia, Turkey, Chile, and Poland.

⁸ There have been barriers to investing in some emerging market equities and countries during this sample period, so these numbers should be taken with a grain of salt. Of special note is the return for Chinese equities, many of which have traded as a share class that is only available to domestic investors and not to foreigners. But China was the only country with negative returns during this period.

The Power of Value & Momentum in Emerging Markets

The advantages of the return and risk-adjusted return shown in Table 2 assume investors simply bought country indices without trying to select stocks that may outperform the market. We know from extensive research on North American and developed-country international markets that there are several stock selection criteria that can help investors outperform the market. Valuation, dividend yield, and momentum are great methods for global stock selection. We define value and momentum using our O'Shaughnessy Value Composite⁹ and O'Shaughnessy Momentum Composite,¹⁰ both of which combine several characteristics to form two unique views on each company's attractiveness.

These three factors have been predictive of future performance in regions and countries around the world, but they offer the most impressive advantage in the emerging markets. Table 3 illustrates the excess return earned by investing in the best 10 percent of stocks by the O'Shaughnessy Value Composite, the O'Shaughnessy Momentum Composite, and dividend

yield in three major global regions: U.S., developed international markets, and emerging markets. All returns are in U.S. dollar terms and the benchmark for each region is an equal-weighted universe of the investable stocks from each respective region.¹¹

Since 1995 (the earliest period of strong data coverage for emerging market stocks), all three factors have led to excess return in each region. Valuation, for example, has been a tremendous indicator of future returns, with the cheapest emerging market stocks outperforming the Emerging Market All Stocks Universe by 11.85 percent *annualized*. This is a huge increase from the 4.67 percent excess return earned by buying the cheapest U.S. stocks. Momentum works slightly better in the developed international region than in the emerging region, but both outperform the U.S. by a wide margin.

The important point is that while these factors work everywhere, they work best in what we would argue are the least efficient markets. With less extensive coverage and scrutiny, these stocks are often mispriced to a degree that makes active management more compelling in emerging markets than in other global markets.

Country-Specific Results

Stock selection using value, momentum, and yield works very well in the emerging region as a whole, but what about selecting stocks in individual countries? One concern was that these factors may not work in certain markets for socio-economic, cultural, or political reasons—and investors would be better off avoiding any countries where these factors did not provide an edge. For example, if Chinese equities with great valuations, momentum, and yields did not outperform the overall Chinese equity market then investors should focus instead on those countries where value, yield, and momentum have offered an advantage historically.

Table 4 (see next page) highlights eight emerging countries whose markets have sufficient breadth to build portfolios based on our three key factors. In the broader emerging market region analysis on the next page, equities from every emerging market country are included. But to evaluate factors for individual countries, each country must have a large enough number of stocks in order to draw meaningful conclusions.¹² Our analysis starts in 1995 for all

Table 3: Backtested Factor-Based Performance by Region (1995–2012)

Region:	Excess Return vs. Each Region's Respective All Stocks Universe:		
	Momentum Composite (Strongest Decile)	Dividend Yield (Best Decile)	Value Composite (Cheapest Decile)
U.S.	3.3%	1.3%	4.7%
International Developed Markets	6.8%	8.7%	9.2%
Emerging Markets	6.6%	10.6%	11.9%

Source: Worldscope, MSCI, OSAM calculations

⁹ **Value Composite** = Earnings/P, Sales/P, EBITDA/EV, Free Cash Flow/EV, Shareholder Yield

¹⁰ **Momentum Composite** = 3-, 6-, and 9-month total return and return volatility

¹¹ Must have a minimum market cap of \$200 million.

¹² Each country had at least 60 stocks at the beginning of that country's sample (the average number of stocks per country across the test was 242).

Table 4: Factor-Based Performance by Country (1995–2012)

Region:	Excess Return vs. Each Country's Respective All Stocks Universe:		
	Momentum Composite (Strongest Decile)	Dividend Yield (Best Decile)	Value Composite (Cheapest Decile)
South Korea	6.4%	7.4%	12.2%
South Africa	7.8%	7.7%	1.7%
India	13.2%	2.0%	2.0%
China*	1.7%	3.1%	1.0%
Malaysia	5.0%	8.4%	8.3%
Taiwan	2.9%	4.1%	5.7%
Mexico	2.9%	7.5%	3.4%

Source: Worldscope, MSCI, OSAM calculations * China begins 1997.

countries except for China, which begins in 1997. For each country, we build portfolios based on the three factors and the benchmark is an equal weighted universe of the investable stocks from each country. Each of these countries has faced unique challenges and experienced unique successes during this time period, but in every country the factors have performed well. In fact, there is not one instance where the country-specific factor portfolios underperformed the overall country.

We believe these factors are immune to socio-economic and political idiosyncrasies because they are driven by human nature. In every country, unloved stocks have been left priced too cheaply, allowing a valuation-based strategy to thrive. Price trends have persisted to such a degree that momentum is a great way of identifying growth investments.

Dividend-paying stocks with depressed prices (and therefore high yields) have also done well in every country examined. There are several unique concerns when investing in emerging market countries—such as the potential for unfair use of insider information or restrictions on who can invest—but these concerns have clearly not diminished the power of investing based on value, yield, and momentum.

CONCLUSION

U.S. investors, and other investors around the world, tend to overweight their home country in their equity portfolio. By doing so, they miss out on considerable investment opportunities abroad. We believe that emerging markets are compelling right now for three key reasons. First, because of home bias, many U.S. investors have little to no direct allocation to emerging market

equities. Second, the emerging region is trading at a substantial 31 percent discount to U.S. stocks as measured by the CAPE ratio, which has proven to be a strong predictor of long-term future returns. And finally, we believe that emerging markets are the most fertile ground for active management because huge mispricings—identified by valuation, momentum, and dividend yield—have led to large excess returns for our factors.

Our emerging markets strategy—using valuation, yield, and momentum as the final stock selection criteria—has been live since June 2012, and its return since inception of 17.97 percent compares favorably to the 13.50 percent return for the MSCI Emerging Markets benchmark. We do not place much significance on such short-term performance, but given the historical success of the factors—and the attractive valuation for the emerging

region as a whole—we believe that the strategy will offer strong absolute returns and strong relative returns in the coming decade. Because we focus on these factors, the portfolio has a current price-to-earnings ratio of 10.5—a discount from the MSCI Emerging Markets benchmark and a huge discount to the S&P 500. These benchmarks trade at price-to-earnings

ratios of 11.7 and 16.0, respectively.* The portfolio also has a current dividend yield of 4.7 percent, which is two percent higher than either benchmark.*

The region that will be the engine of growth for the global economy can also be an engine of growth for investors' portfolios. Because of its attractive valuation and because of

the impressive track record of the proven stock selection criteria discussed above, we believe investors can benefit from adding an actively managed emerging markets strategy to their portfolios.

* As of 4/30/2013.

Past performance is no guarantee of future results. Please see important information below.

General Legal Disclosure/Disclaimer

The material contained herein is intended as a general market commentary. Opinions expressed herein are solely those of O'Shaughnessy Asset Management, LLC and may differ from those of your broker or investment firm.

Please remember that past performance is no guarantee of future results. Different types of investments involve varying degrees of risk, and there can be no assurance that the future performance of any specific investment, investment strategy, or product made reference to directly or indirectly in this presentation, will be profitable, equal any corresponding indicated historical performance level(s), or be suitable for any portfolio. Gross of fee performance computations are reflected prior to OSAM's investment advisory fee (as described in OSAM's written disclosure statement), the application of which will have the effect of decreasing the composite performance results (for example: an advisory fee of 1% compounded over a 10-year period would reduce a 10% return to an 8.9% annual return). Due to various factors, including changing market conditions, the content may no longer be reflective of current opinions or positions. Moreover, you should not assume that any discussion or information contained in this presentation serves as the receipt of, or as a substitute for, individualized investment advice from OSAM. Historical performance results for investment indices and/or categories have been provided for general comparison purposes only, and generally do not reflect the deduction of transaction and/or custodial charges, the deduction of an investment management fee, nor the impact of taxes, the incurrence of which would have the effect of decreasing historical performance results. It should not be assumed that any account holdings would correspond directly to any comparative indices. Account information has been compiled solely by OSAM, has not been independently verified, and does not reflect the impact of taxes on non-qualified accounts. In preparing this presentation, OSAM has relied upon information provided by the account custodian and/or other third party service providers. OSAM is a Registered Investment Adviser with the SEC and a copy of our current written disclosure statement discussing our advisory services and fees remains available for your review upon request. For a copy of the compliant presentation for the O'Shaughnessy Emerging Market Equity strategy or any other OSAM strategy please contact us at info@osam.com or (203)975-3333.

Backtested Results

Hypothetical performance results shown on the preceding pages are backtested and do not represent the performance of any account managed by OSAM, but were achieved by means of the retroactive application of each of the previously referenced models, certain aspects of which may have been designed with the benefit of hindsight.

The hypothetical backtested performance does not represent the results of actual trading using client assets nor decision-making during the period and does not and is not intended to indicate the past performance or future performance of any account or investment strategy managed by OSAM. If actual accounts had been managed throughout the period, ongoing research might have resulted in changes to the strategy which might have altered returns. The performance of any account or investment strategy managed by OSAM will differ from the hypothetical backtested performance results for each factor shown herein for a number of reasons, including without limitation the following:

- Although OSAM may consider from time to time one or more of the factors noted herein in managing any account, it may not consider all or any of such factors. OSAM may (and will) from time to time consider factors in addition to those noted herein in managing any account.
- OSAM may rebalance an account more frequently or less frequently than annually and at times other than presented herein.
- OSAM may from time to time manage an account by using non-quantitative, subjective investment management methodologies in conjunction with the application of factors.
- The hypothetical backtested performance results assume full investment, whereas an account managed by OSAM may have a positive cash position upon rebalance. Had the hypothetical backtested performance results included a positive cash position, the results would have been different and generally would have been lower.
- The hypothetical backtested performance results for each factor do not reflect any transaction costs of buying and selling securities, investment management fees (including without limitation management fees and performance fees), custody and other costs, or taxes – all of which would be incurred by an investor in any account managed by OSAM. If such costs and fees were reflected, the hypothetical backtested performance results would be lower.
- The hypothetical performance does not reflect the reinvestment of dividends and distributions therefrom, interest, capital gains and withholding taxes.
- Accounts managed by OSAM are subject to additions and redemptions of assets under management, which may positively or negatively affect performance depending generally upon the timing of such events in relation to the market's direction.
- Simulated returns may be dependent on the market and economic conditions that existed during the period. Future market or economic conditions can adversely affect the returns.

Notes: All factor portfolios cited in this are calculated using a compositing methodology. Monthly portfolios are created with a 12-month holding period based on a single characteristic within a universe of stocks. The 12 monthly portfolios are then combined together to create the composite portfolio.

Universes: The All Stocks Universe includes all stocks included in the Worldscope Database with a market value greater than \$200mm and a price per share greater than \$1. The MSCI Emerging Markets Index Net is a free float-adjusted market capitalization index that is designed to measure the equity market performance of 21 markets that are currently classified as Emerging Market countries. This index is net of withholding taxes.

Characteristics The dividend yield is a gross indicated yield. There is no guarantee that the rate of dividend payment will continue and the income derived is subject to taxes and expenses which will impact the actual yield experience of each investor.