portfolio construction forum
PortfolioConstruction.com.au

"I've been thinking about…issues related to implementing BRIC in a portfolio."

Dr Stephen Wood
Senior Portfolio Strategist
Russell Investment Group
23 August 2006

For a generation the search for higher returns (as well as the diversification of risk) has lead investors to invest beyond their domestic market. At the 2005 PortfolioConstruction Conference, Russell's Chief Strategist Randy Lert addressed global investments within the context of Russell constructed portfolios. Mr Lert presented the case for investing with a global perspective as opposed to artificially constraining investments to fit within a home country.

In this paper, I apply this investment approach to one of the more headline-grabbing investment areas of recent years: Emerging Markets investments and the countries of Brazil, Russia, India, and China (or BRIC).The question explored in this paper is, in the context of global investing, what role do Emerging Market investments play and, more specifically, should investors impose a BRIC-specific mandate in their portfolios?

At Russell we believe that a BRIC specific mandate would act only as an unnecessary limitation on portfolio construction and as a handicap upon competent investment managers. Consequently, excepting those investors with extreme investment needs (or those with idiosyncratic market knowledge) a BRIC-only mandate would act as an obstacle to generating risk adjusted return.

The better perspective is the contrary: Investors would be better served by adopting a global investment mandate that expands (not constrains) the opportunity set available to talented managers – managers who can demonstrate the ability to provide long term value through their stock selection process. Russell's global view for investing is part of our ongoing capital markets research. Even after a generation of international investing, for most investors global investing is not the norm. Home country biases still persist and are nearly universal. At Russell we are looking at minimizing the structural biases and risks associated with investing on a global or regional basis.

Succinctly, the imposition of an unnecessary constraint of a BRIC-specific mandate increases portfolio volatility, but there is no compelling evidence that it would increase performance. To that point, BRIC should not be seen as a separate asset class but rather as a leveraged Emerging Markets play.

Understandable investor interest – head-turning returns

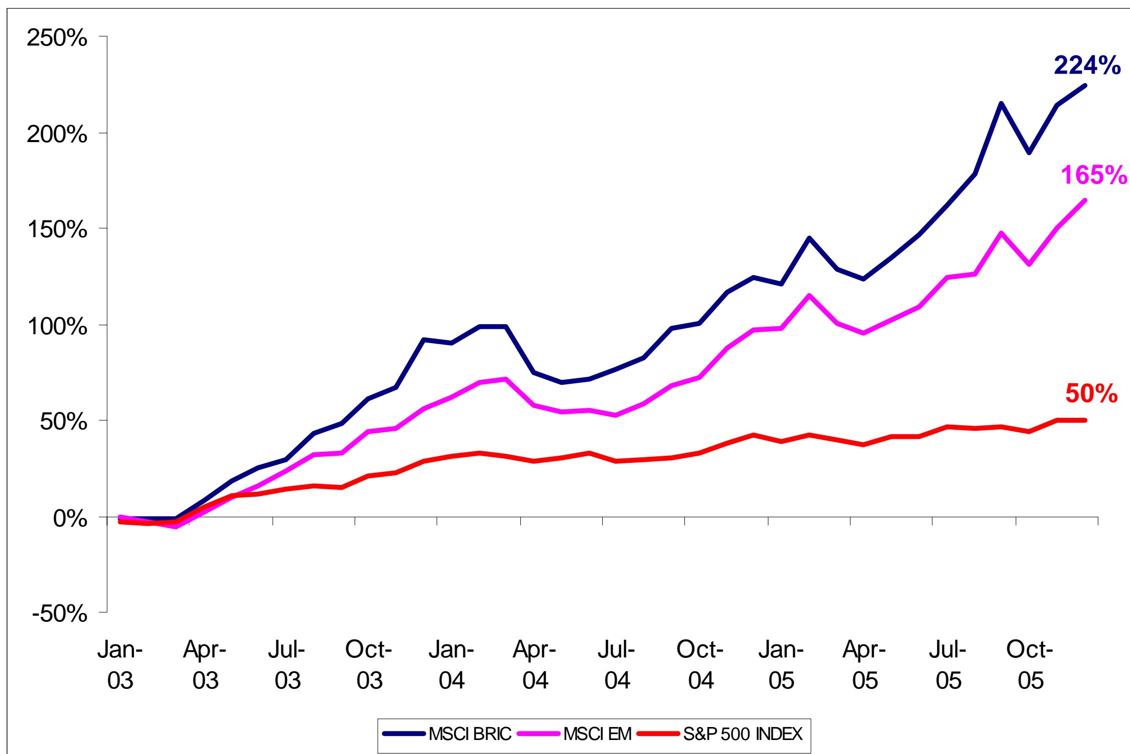
In recent years the returns for Emerging Markets (and more sensationally BRIC) have been stunning. This return-driven appeal was amplified by published research that projected superior growth prospects and the rising long term importance of these countries to the global economy. The "global economic" thesis states that the rapid and seemingly unstoppable industrialization of China and India will generate an insatiable demand for commodities, because India and China produce so few commodities themselves. In addition to Indian and Chinese expansion, the economies that

First presented at PortfolioConstruction Conference 2006. © 2006 PortfolioConstruction Forum. All rights reserved.

produce these commodities (the thesis argues) are going to disproportionately benefit. And since no one would forecast an end to this virtuous cycle - before May 10th 2006, that is - there appeared to be near limitless upside to investing in commodity-levered Emerging Markets and BRIC.

The 3-years returns on Emerging Markets were indeed impressive, as Figure 1 shows.

Figure 1: Cumulative performance of global markets (three years ending 31 December 2005)



Great recent performance, attractive long term outlook, exposure to an apparently global expansion story, and the prospect of new product rollouts left many investors asking why they didn't have larger allocations to Emerging Markets and BRIC and how they could "get in?"

Well, ask and you shall receive. The attractiveness of Emerging Markets (and BRIC) generated massive asset inflows to global emerging market investments in recent quarters. Not at all surprisingly, such headline-driven demand lead to a slue of BRIC-focused products from many leading investment firms. The result? Nearly $5.5 billion being invested into these types of products[1] Inflows into Emerging Markets overall approached $30 billion in the first Quarter of 2006 – a sum that eclipsed the total of all 2005 flows.

Unfortunately, breathing down the neck of these massive asset inflows was the recent market correction that rolled though commodities and commodity-leveraged economies of the Emerging Markets and BRIC specifically.

First presented at PortfolioConstruction Conference 2006. © 2006 PortfolioConstruction Forum. All rights reserved.

Figure 2: Recent Market Decline of 5/10/06 – 6/15/06

Index	Return
MSCI Brazil	-29.9%
MSCI Russia	-21.3%
MSCI India	-27.0%
MSCI China	-16.8%
MSCI Emerging Markets	-21.4%
S&P 500	-5.0%

Source: FactSet

Commodity	Return
WTI Crude Oil	-3.7%
Gold	-18.5%
Silver	-29.6%
Copper	-11.7%
Aluminum	-19.5%
CRB Commodities	-6.3%

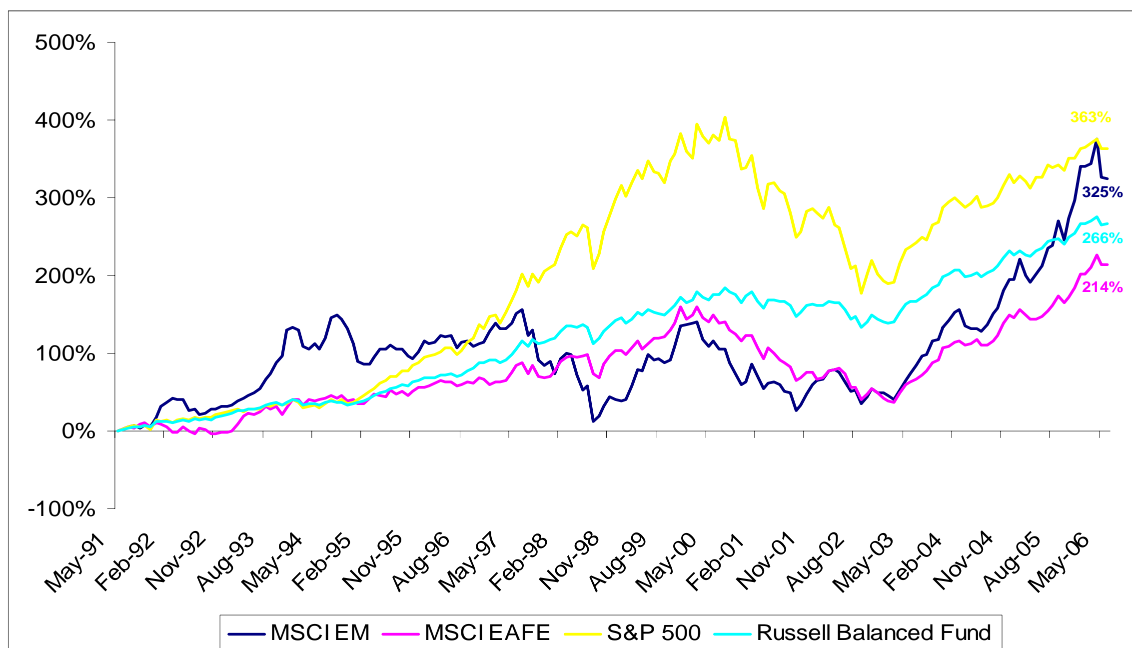
Source: Bloomberg

Though the May to June performance numbers are uniformly bleak, they have the potential to be worse than they appear: When placed in the context of the all too recent overinvestment in Emerging Markets (some positions that were barely months or even weeks old) this recent sell off underscores the sin that investors commit all too often: Catch the tail end of an investment - just as it is poised to roll over.

Long term: emerging markets as an important portfolio component

While such volatility is discouraging to short term traders, for long-term investors, Russell has long held that a diversified portfolio ought to incorporate global securities (and by inclusion Emerging Market and even BRIC) allocations. The most visible argument is that the long term performance of Emerging Markets (including the recent sell off) continues to be attractive. Past performance illustrates how emerging markets higher return premium has been evident over the long term. Since the start of 1988 the MSCI Emerging Market Index's 14.4% annualized return outperformed most major markets. This as compared to a more modest 7.0% for the MCSI EAFE Index, 11.4% for the S&P 500 Index, and 7.5% for the Lehman Brothers Aggregate Bond Index[2].

Figure 3: Cumulative performance over 15 Years ending 30 June 2006



First presented at PortfolioConstruction Conference 2006. © 2006 PortfolioConstruction Forum. All rights reserved.

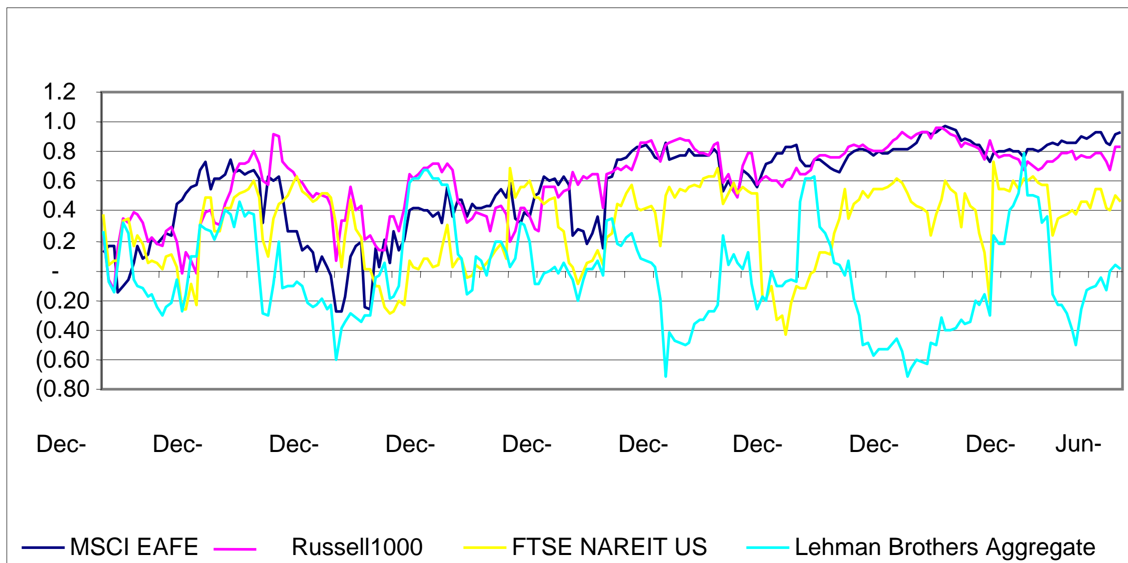
Long term performance, it needs to be noted, is not the only, and not necessarily the most compelling, basis for a global portfolio. Just as important are the companion portfolio characteristics discussed in the next section

Long Term: The Argument for Global Investing

International securities have been a part of Russell's globally diversified portfolio strategy for some time. In the 1970s George Russell himself addressed the issue of implementing this low-correlated asset class as a risk diversifier. Russell believes that a diversified global portfolio is consistent with optimal portfolio construction theory and can help diversify risk and expand return opportunities. Since the 1970s, the incorporation of non-US securities (and Emerging Markets) has become a standard part for most of Russell's global asset allocation models.

Figure 4 illustrates one of the principal traditional arguments for an allocation to Non-US securities and Emerging Markets. A balanced strategy finds Emerging Markets attractive because, in addition to its higher anticipated return premium, Emerging Markets exhibit a low correlation to other asset classes.

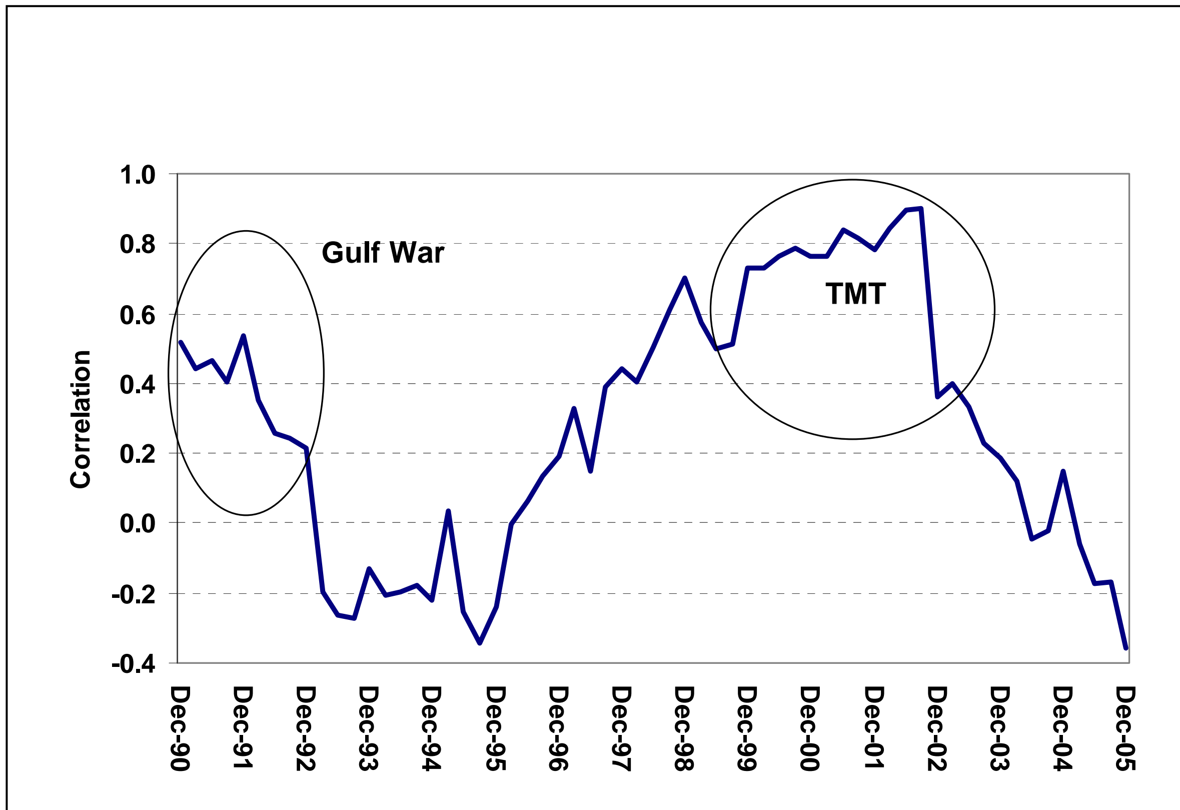
Figure 4: MSCI Emerging Markets – rolling one-year correlations with global markets (December 1995 – June 2006)



Note that, although Emerging Markets' return correlations with other markets can rise over shorter time periods – such as during global market sell offs - it is the low correlation that persists over the long term that make it an attractive strategic allocation in a balanced strategy from a risk and return perspective[3].

First presented at PortfolioConstruction Conference 2006. © 2006 PortfolioConstruction Forum. All rights reserved.

Figure 5: 3-year rolling excess returns correlations between emerging markets managers and EAFE managers (March 1990 – December 2005)



Source: Refer Endnote 6

What Figure 5 above illustrates is that during times of global stress, correlations tend to rise as global markets retract in response to an external shock. With the passage of time, however, investors have the potential to realize the benefits of low correlations.

Investment professionals have also understood that Emerging Market securities (and BRIC in particular) are to be considered in the more aggressive end of the risk spectrum. For example, just from a securities level perspective alone, there is less sector and industry diversity and liquidity in Emerging Markets than what one would expect in more developed markets.

While the long term performance and negative correlation benefits of Emerging Market are attractive, investors will need to brace themselves for potentially extended periods of lagging performance that can test investor patience and discipline. The portfolio benefits mentioned above can be expected to come at the cost of increased market risk. Since the beginning of 1995, for example, the standard deviation of the MSCI Emerging Market Index has been approximately 23% versus 15% for the S&P 500 Index. BRIC equities have been far more volatile during this period, experiencing a standard deviation of approximately 29%[4].

While such volatility can often be overlooked during up markets, the downside of market volatility can be sobering for return hungry investors. Over the last ten years investors in BRIC and Emerging

First presented at PortfolioConstruction Conference 2006. © 2006 PortfolioConstruction Forum. All rights reserved.

Markets enjoyed one-year returns as high as 88% and 63%, respectively, it is worthwhile to note that those same investors saw returns as lows as (38%) and (30%).

Long term: expanding opportunities through active management

An additional consideration is that a strategic allocation to emerging markets can broaden the investment opportunity set for active management. This is because EAFE portfolios can often have a small tactical exposure to emerging markets companies. As a result, these two sources of exposure can be complimentary since EAFE portfolios do not typically get exposure to less well known securities that are found in Emerging Market-only mandates.[5].Russell research shows that EAFE managers have increased their tactical allocations to emerging markets over the last 16 years. In 1990, EAFE generalist portfolios had a median emerging market weighting of less than 1%[6]. By March 2005, EAFE managers had increased their weighting to a median value of 4%[6].

At Russell we also found that EAFE managers were able to generate similar returns to emerging markets specialists, although the portfolio composition and return pattern was distinct: EAFE managers held a much less diversified mix of emerging markets stocks and consequently, a larger tracking error versus the MSCI Emerging Markets index.[6] Almost half the managers under review were able to show evidence of timing skill[7].

Separately, active managers have found emerging markets equity as an exploitable source of excess return. Emerging markets specialists are able to capitalize upon inefficiencies arising from less sell-side analyst coverage, more insiders, short-selling constraints, and currency and sovereign risk[4]. From 1996 to 2005, the 10-year average of excess returns of the representative manager in the Mellon Analytical Services universe was 261 basis points. Average excess returns of emerging markets managers is more appealing than Global Ex US (243 bps) and US managers (58 bps)[4].

And, in addition to the relatively low correlations of passive emerging markets exposure to other traditional investments, an allocation to emerging markets has also been shown to improve the efficiency of excess returns within a portfolio allocated to Non-US and US Equity managers[4].

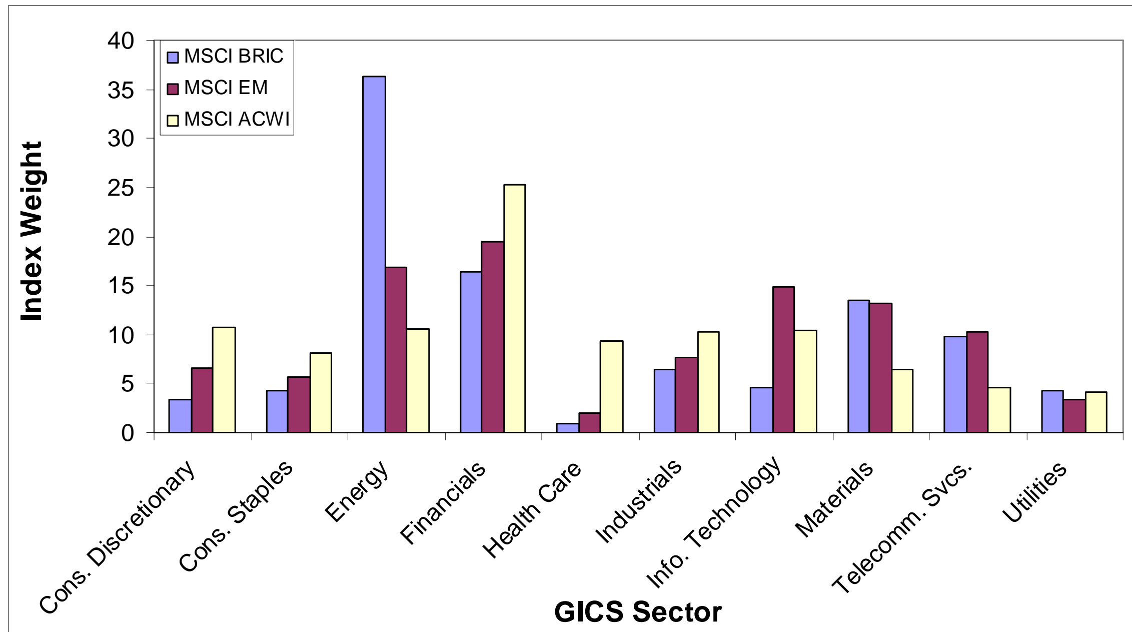
BRIC mandate – a four-country straight jacket

The preceding section sketched the (empirically substantiated) argument for Emerging Markets as a diversification tool and as a tool to enhance performance. In this section, I address how a BRIC mandate decreases investor opportunity and increases risk.

Perhaps most obviously, a BRIC mandate overlaps and concentrates many of the same kinds of risk within a portfolio. Dissecting the MSCI BRIC, MSCI Emerging Markets and MSCI All Country World (ACWI) indices by sector allocation, we can see the variance among the weights within each respective sector. This also helps us partially understand why the MSCI BRIC and Emerging Markets indices have more volatility when compared to a global index such as the ACWI. Highlighting some of these imbalances, we can see that energy, materials, and telecom are disproportionately weighted in *both* the BRIC and Emerging Market indices. Alternatively, there is also a disproportionately low weight in consumables, health care, and industrials. Such a divergence can lead to returns which do not conform to returns of traditional allocations. Succinctly, a BRIC mandate "double dips" on an exposure to energy, commodities, and the global growth cycle.

First presented at PortfolioConstruction Conference 2006. © 2006 PortfolioConstruction Forum. All rights reserved.

Figure 6: GICS sector weights (17 July 2006)



As illustrated in Figure 6, excluding energy and information technology sectors, allocations of MSCI BRIC and MSCI Emerging Markets indices have greater similarities than the MSCI All Country World Index. To a degree this explains why there is a high correlation in return profiles between Emerging Markets and BRIC. BRIC should not be seen as a separate asset class, but rather as a more leveraged Emerging Markets play.

Political risk is always an issue in Emerging Markets, and BRIC is no exception. Investors need to take into account that the Russian economy is highly dependent on oil prices and capital flight continues to be a problem. Also, China has the potential to be an area of volatility for investors as it lacks social stability, corporate governance and efficient debt markets. Limiting your emerging markets exposure to only four countries magnifies these associated risks.

Additionally, as outlined below, limiting exposure to a four country portfolio significantly reduces the opportunity set for active management (Figure 7).

Figure 7: MSCI Emerging Markets vs MSCI BRIC indices (30 June 2006)

Index	Countries	# of stocks
MSCI Emerging Markets	25	849
MSCI BRIC	4	225

Source: Factset

A BRIC mandate is also undermined from a performance perspective. While BRIC has recently performed well versus other areas of the market, evidence of a long term return premium should be questioned. During the 10 years ending in June 2006, the number of quarters MSCI BRIC

First presented at PortfolioConstruction Conference 2006. © 2006 PortfolioConstruction Forum. All rights reserved.

outperformed the MSCI Emerging Markets Index was slightly over 50% (22 out of 40 possible quarters). [9] This further suggests that a BRIC only mandate does not consistently offer out-performance versus an emerging markets assignment. The true real high probability expectation for an investor is that a BRIC-only mandate will introduce increased volatility.

A BRIC-only mandate can guarantee higher volatility but not necessarily higher returns.

Long term: expand global opportunities

None of this is to say that long-term investors should eschew the many positive aspects to a global emerging markets assignment. Russell strategists believe that a truly global and Emerging Markets mandate can significantly increase the set of investment opportunities. Although they have rarely grabbed headlines, Eastern Europe, Asia and South America domicile attractive developing companies and industries.

Russell research[8] shows that some of the most important emerging market opportunities lie outside of the BRIC countries and within the European convergence economies of Poland and Turkey. Both of these countries' capital markets are highly liquid and offer a broad range of investment opportunities. Both have relatively well established legal and regulatory systems and welcome foreign investment.

Outside of Eastern Europe, Russell research also sees opportunities in emerging markets such as South Korea and Mexico. Traditionally known for its liquid stock markets and its electronics industry, South Korea also has a burgeoning fashion industry whose products are immensely popular with consumers in Japan and China. Mexico, alternatively, continues to benefit from its exposure to strong U.S. economic growth as well as the strengthening of its own credit fundamentals.

Portfolio Construction

Starting from a US investor's perspective, how does an investor go about implementing emerging markets within a globally balanced allocation? Russell recommends a two-stage asset allocation decision making process.

The first stage of the decision-making process involves the determination of the weighting of the major asset classes. In this stage of the process, emerging markets is considered within the Global Ex-US framework. Once the first stage allocation decision is determined, weightings between emerging markets and developed non-domestic equity are examined in further detail versus investor risk and return preferences. A market cap weighted allocation should be the starting point to this decision[4]. For the more risk-averse investor, they might want to invest between 5 and 10 percent of the Non-US portfolio. For the more risk-seeking investor, they may consider investing between 10 and 20 percent of their Non-US portfolio - depending upon overall fund objectives[7]. As noted earlier, investors should be careful to consider the potential exposure to emerging markets equity achieved via their Global and EAFE-mandated equity portfolios to avoid overlap.

Russell research has also shown the risk diversification benefits of constructing multi-manager portfolios for emerging market equity mandates. A diversified mix of managers with similar excess

First presented at PortfolioConstruction Conference 2006. © 2006 PortfolioConstruction Forum. All rights reserved.

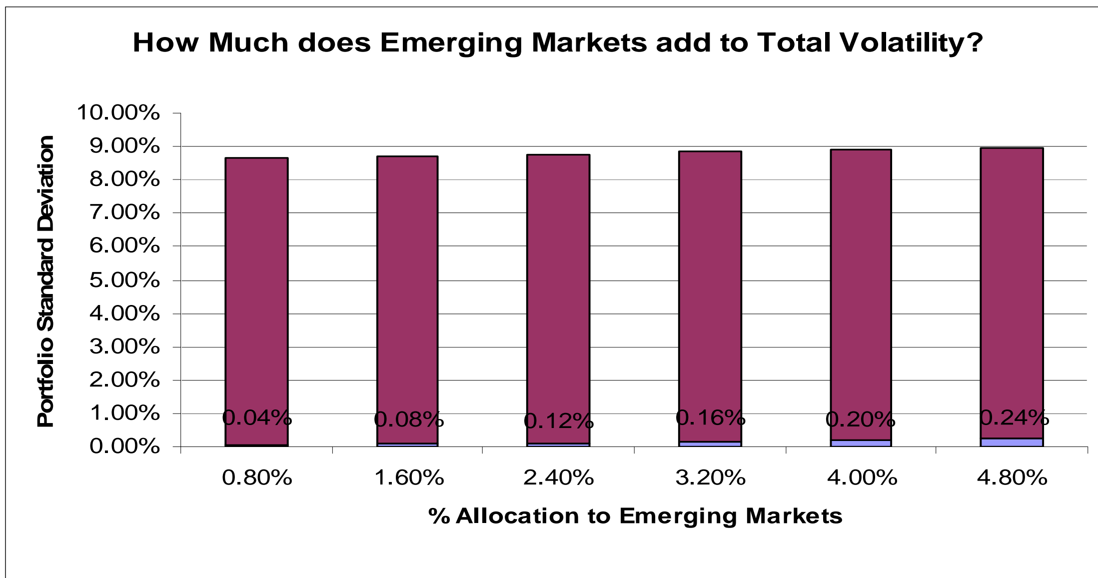
return targets and diversified investment processes can reduce the benchmark-relative risk without substantially sacrificing the excess return potential. A Monte-Carlo simulation of 1, 3, and 6 manager structures showed a measurable reduction in tracking error as the manager lineup increased. [4]

A balanced portfolio is, in most cases, an optimized framework for employing an allocation to volatile areas of the market, including emerging market equity. Russell portfolios obtain exposure to global emerging markets equity both strategically, as a long-term allocation within a Balanced Portfolio, and tactically, as an acceptable part of an EAFE-benchmarked portfolio. A balanced portfolio will benefit from the higher equity risk premium and active management potential of an allocation to emerging markets equity, while minimizing the effects of the volatility.

For example, an examination of Russell's US Global Balanced Fund, a multi-manager approach with 60/40 equity to fixed income strategy demonstrates the benefits of a global balanced method. The 60% dedicated to non-fixed assets can be further broken down to 36% US Equity, 16% International (Developed Ex-US), 3% Emerging Markets and 5% Public Real Estate. From a US investor's point of view, the fund is 19% allocated to foreign assets or 32% of total equity. Although a 60/40 mix does not necessarily qualify the fund as aggressive, the risk/ return trade-off is compelling. Over 10 years ending in June of 2006, the fund had averaged an annualized return of 7.7% with a standard deviation of 8.6. This trailed the S&P 500 Index's annualized return of 8.4% but was well ahead of both the MSCI EAFE and EM indices with returns of 6.8% and 6.7% respectively. What is more impressive is this was achieved with nearly half of the volatility of the MSCI EAFE index and approximately a third of the volatility exhibited by the MSCI EM index[9].

So how much does emerging markets add to total volatility?

Figure 8: How much does emerging markets add to total portfolio volatility?



As illustrated in Figure 8, while the portfolio benefits from the additional active management excess return potential and long term equity premium, the addition of risk is largely diversified away. For

First presented at PortfolioConstruction Conference 2006. © 2006 PortfolioConstruction Forum. All rights reserved.

example, using long term capital markets assumptions, a 4% total portfolio allocation to emerging markets contributes a mere 20 basis points to total standard deviation. What this exemplifies is that volatility is not always the adversary if the overall portfolio allocation is within moderation. A slice allocated to emerging markets in the long run can pay off. Over the past 18 plus years the MSCI Emerging Markets Index has out performed both the MSCI EAFE and the S&P 500 indices by 7.4% and 2.6%, respectively.[2] Such returns are compelling and can justify a place in a balanced portfolio.

Conclusion

Hopefully, the January to June 2006 run-up and sell-off within commodities, Emerging Markets and BRIC has reminded investors of the perils of return chasing and the importance of long term strategic planning. Headline-Driven investing usually sacrifices long term goals in exchange for short term gains, gains that often fail to materialize.

Russell is an advocate for expanded opportunities for active management and for globally diversified portfolios. However, for all but the most unique investors, the imposition of a BRIC-specific mandate upon their portfolio would constitute an unnecessary and unhelpful constraint: It would serve to increase portfolio volatility while there is little compelling evidence that such a 4-country constraint will either increase performance or serve to diversify risk within the portfolio.

A BRIC only mandate should be considered for more aggressive investors, and then as part of a strategic global emerging markets equity allocation. Even then, investors need to be apprised of the higher volatility and unstable potential equity risk premium. BRIC should not be seen as a separate asset class (nor as a diversifier) but rather as leveraged Emerging Markets and commodities play.

With the May to June market sell off as yet another painful and expensive reminder, investors need to be cautioned that pockets of significant, excess performance have never been sustainable. The highest confidence method for managing investment goals continues to be through a long term and disciplined investment approach. This is why Russell advocates a long term global portfolio allocation that is managed for risk.

(Special acknowledgement to Lee Kayser, Shailesh Kshatriya, and Doug Porter)

End Notes:

---

[1] ICI data
[2] Mellon Analytical Services: Returns of Russell 1000, Russell 3000, MSCI EAFE, and MSCI Emerging Markets for 10, 12, 14, 16, and 18 years as of May 31, 2006
[3] Mellon Analytical Services: Returns of Russell 1000, Russell 3000, MSCI EAFE, LB Aggregate Bond Index and MSCI Emerging Markets Index since inception
[4] FactSet
[5] Lin, Wenling, and Briand, Francois. 2005. "Why Invest in Emerging Markets and How?" Russell Investment Group
[6] Implementing an Actively-Managed Allocation to Emerging Markets Equity
[7] How Should Investors Obtain Exposure to Emerging Market Equities?
[8] Thanks to Russell Strategist Jolanta Wysocka
[9] Mellon Analytical Services

First presented at PortfolioConstruction Conference 2006. © 2006 PortfolioConstruction Forum. All rights reserved.