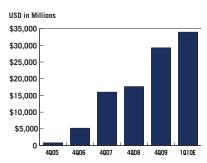
fundamentals



John West

RAFI® Managed Assets*



*Includes RAFI assets managed or sub-advised by Research Affiliates® or RAFI licensees.



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AN EMERGING CONUNDRUM

Last November, we wrote about why the 3-D's-deficit, debt, demographics—are leading to structural headwinds for most developed markets. including the United States. In that issue of Fundamentals we suggested that U.S. investors should move from a U.S.centric worldview and consider a larger allocation to emerging market economies because they don't face a 3-D Hurricane: with few exceptions, they have modest deficits, manageable net debts, and they're not about to hit a wall of prospective retirees (apart from China, which hits the retiree wall a few years after we do). But any old salt can tell you that there's still work to do even when sailing with the wind at your back.

Many investors may not have invested more in emerging markets in part because of the relatively poor long-term performance of emerging markets as measured by the traditional emerging market indexes. It is true that capitalization-weighted emerging market equity investors have been poorly compensated for bearing extraordinary risks. They've enjoyed no risk premium and no reward for helping these economies to emerge!

The Fundamental Index® strategy, however, has historically delivered an excess return fully consistent with the spectacular economic and likely future economic success of the emerging markets. In this issue we delve deeper into why economic performance did not (seem to) translate

into returns for emerging market equity investors. We also show how changing your frame of reference from capitalization weighting to economic size weighting changes the picture.

Say What? The Emerging Growth Miracle and an Excess Return of Negative 2%?!\frac{1}{2} Unquestionably, emerging markets have undergone a tremendous transformation since the mid-1990s. Despite some fits and starts, these economies have nearly doubled relative to the developed world, going from 18% of the world's GDP in 1994 to 31% by 2009 according to the International Monetary Fund, even as developed economies' anemic growth drove them from 82% to 69% of world GDP.

But if you are talking about the stock market, sorry. Emerging market equities were far from impressive, posting a per annum gain of 6.4% from 1994 through 2009. This ranks 10th among the oft-cited 16 asset classes that form the core of our GTAA work and even trailed the S&P 500 Index (whose Lost Decade weighed heavily on this measurement period).² Relative to the applicable short-term debt available in these countries, the story is even bleaker. The J.P. Morgan Emerging Local Markets Index, which measures the results of money market sovereign debt in the local currencies, returned 8.3% per annum. U.S.-based emerging markets cash investors got a whopping 200 bps of excess return above their stock markets, even as their economies soared!

Where's the reward for funding the enterprises at the heart of the emerging markets growth miracle? For that matter, where's the reward for enduring 27% annual volatility and 11 drawdowns of 15% or more in just 15 years?

How Did This Happen?

We believe the gap between emerging market economic and stock market performance is a direct result of the return drag from capitalization weighting. How so? Consider the composition of these stock markets. Often, one, two, or at most a handful of stocks dominate the local individual emerging markets. These stocks get much of the flows from foreign investors seeking a liquid manner to access the local market, usually with some degree of name brand recognition.3 These top dogs are the most beloved, the most liquid, the best connected, the best respected, and the most recognizableparticularly for global equity investors seeking a toein-the-water investment in emerging markets. They are also the most expensive. Their popularity translates into a very large market capitalization that often dominates their local exchange as seen in Figure 1.

If emerging markets are efficient (okay, quit laughing!), these large concentrated positions wouldn't be much to worry about. Some may be overpriced and some may be underpriced but no more than the average stock, so performance would not be negatively impacted. To test this, we look at the subsequent

performance of the top 10 holdings across the entire emerging markets universe by market capitalization. As **Table 1** shows, the data confirm these popularity contest winners don't grow to the sky—not once did they collectively outperform the rest of the market over a subsequent five-year period. Yet, that's where the cap-weighted index puts most of your money! Talk about a stacked deck, those odds would make even the most greedy of casino pit bosses blush.

Table 1. How Often Does the Top 10 Win?

	Percent of Time the Top 10 Stocks Outperform the Index				
	1-Year	3-Year	5-Year		
1996-2009	36%	17%	0%		

Note: The results reflect the equally weighted return of the top 10 stocks selected by market capitalization in the FTSE All World Emerging Markets Index versus the actual index in the subsequent periods.

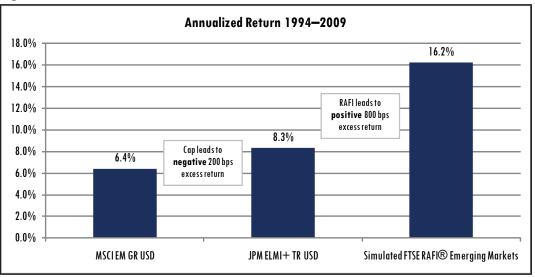
Source: Research Affiliates based on data from FTSE and Wilshire Atlas.

What's it worth if we eliminate this return drag? Plenty! An emerging markets portfolio using the Fundamental Index methodology would have returned 16.2% per annum from 1994 through 2009, a nearly 1,000 bps premium to capitalization weighting. This simple switch in frame of reference shows the average company benefited handsomely during the rise of the emerging economies over the past 17 years. The average company outperformed local currency denominated money market securities by 7.9 percentage points, an excess return much more consistent with the stunning rise in emerging markets economies as seen in **Figure 2**.

Figure 1. Largest Stocks Dominate Individual Emerging Markets 90 82 80 71 70 58 Percent (%) 50 50 43 40 28 30 22 22 21 19 20 16 13 13 10 10 10 China Mobile MTN Group Teva Pharma Gazprom **Empresas** America PT Astro PTT Public Petrobras Taiwar Reliance Movil Semicond Industries South Africa | South Korea Israel Russia Chile Mexico Indonesia Thailand Brazil Taiwar India ■ Biggest Stock by Market Cap (%) in FTSE Country Index ■ Total % of Top 10 in FTSE Country Index

Source: Research Affiliates based on data from FTSE and Wilshire Atlas

Figure 2. Now That's an Excess Return!



Source: Research Affiliates based on data from Ibbotson Associates.

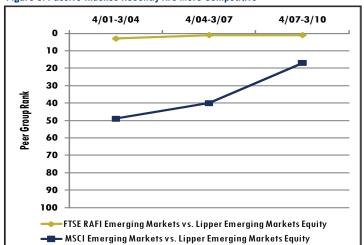
An index built using economic weights performed brilliantly in a major economic growth period? Imagine that! It was capitalization weighting that produced the negative excess return for emerging markets investors.

What About Active Management?

The old efficiency argument—active managers can add more value in inefficient markets that suffer wider degrees of mispricings—has largely been the rule in emerging markets. Consequently, retail and institutional investors have typically filled emerging market mandates with active managers. The superiority of active management in this space seems to be on the wane now, however.

As **Figure 3** illustrates, the use of the cap-weighted MSCI Emerging Markets Index has a clear upward trend versus active managers (measured using the Lipper Emerging Markets Mutual Fund peer group), migrating from roughly median to the top quintile.

Figure 3. Passive Indexes Recently Are More Competitive



Note: The peer group is the Lipper Emerging Markets Equity Mutual Fund universe.
Source: Research Affiliates based on data from eVestment Alliance and Lipper.

The Fundamental Index approach has performed even better, consistently ranking in the top 5% of the peer group over each three-year stretch. It doesn't appear that active management is the mechanism to recoup the lost excess return in emerging markets!

Conclusion

When sailing the downwind leg of a race, experienced helmsmen will not sail in a straight line. They know their boats will be significantly faster by sailing at an angle, known as a broad reach. Of course, this point of sail requires zigzagging one's way to the far marker. Counterintuitively, this back and forth is more efficient than a "set it and forget it" course straight downwind.

The S.S. G-7 is limping along into a stiff breeze and gathering seas. The headwinds are only increasing with the recent \$1 trillion European bailout package this May. Untroubled by a 3-D Hurricane, the emerging market economies are headed in the opposite direction. But as we have shown, stunning economic success doesn't necessarily translate into outsized market returns.

The sails still need to be tuned and the tiller still needs a steady hand. An economic super-trend deserves an economically weighted index, periodically rebalanced to stay on course. In so doing, we maximize our chances of rounding the buoy of investment success.

Endnotes

We use the label "excess returns" to observe historical return differences. Some use the term risk premium, but we prefer the label "risk premium" to be used only in expressing expected future return difference.

^{2.} The 16 asset classes are represented by the following benchmarks: ML US Corporate & Government 1—3 Year; LB US Aggregate Bond TR; LB US Treasury Long TR; LB US Long Credit TR; LB US Corporate High Yield TR; Credit Suisse Leveraged Loan; JPM EMBI + Composite TR; JPM ELMI + Composite; ML Convertible Bonds All Qualities; LB Global Inflation Linked US TIPS TR; FTSE NESTEIT All REITS TR; DJ AlG Commodity TR; S&P 500 TR; MSCI Emerging Markets TR; MSCI EAFE TR; Russell 2000 TR. All indexes extend back to January 1994 except the LB TIPS.

3. Emerging markets tand to be a facet or famine flow asset class. Witness 2009 where emerging

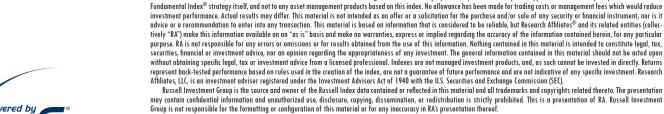
^{3.} Emerging markets tend to be a feast or famine flow asset class. Witness 2009 where emerging markets equity flows were +\$75 billion, while developed market equity fund flows were a negative -\$61 billion! (Source: EPFR Global.)

Performance Update

TOTAL RETURN AS OF 4/30/10	BLOOMBERG TICKER	YTD	12 MONTH	ANNUALIZED 3 YEAR	ANNUALIZED 5 YEAR	ANNUALIZED 10 YEAR	ANNUALIZED 10 YEAR VOLATILITY
FTSE RAFI® 1000 Index ^A	FRIOXTR	11.79%	55.05%	-2.48%	5.25%	5.85%	17.56%
S&P 500 ^B	SPTR	7.05%	38.84%	-5.05%	2.63%	-0.19%	15.90%
Russell 1000 ^c	RU10INTR	7.65%	40.21%	-4.71%	3.07%	0.16%	16.22%
FTSE RAFI® US 1500 Index ^D	FR15USTR	19.05%	72.14%	2.57%	10.09%	12.30%	22.45%
Russell 2000 ^E	RU20INTR	15.01%	48.95%	-2.79%	5.74%	4.91%	20.99%
FTSE RAFI® Developed ex US 1000 Index ^F	FRX1XTR	-0.56%	38.98%	-5.70%	6.95%	6.45%	19.01%
MSCI EAFE ^G	GDDUEAFE	-0.80%	35.02%	-8.45%	4.34%	2.05%	17.77%
FTSE All World Series Developed ex US ^H	FTS5DXUS	0.19%	37.58%	-6.99%	5.52%	3.00%	18.03%
FTSE RAFI® Developed ex US Mid Small ¹	FRSDXUS	5.11%	52.27%	-4.29%	6.56%	10.18%	17.95%
MSCI EAFE Small ¹	MCUDEAFE	5.70%	46.70%	-10.95%	2.31%	5.19%	19.67%
FTSE RAFI® Emerging Markets ^K	TFREMU	3.29%	56.05%	8.93%	22.03%	20.58%	25.24%
MSCI Emerging Markets ^L	GDUEEGF	3.72%	57.55%	4.30%	16.92%	11.32%	24.85%
FTSE RAFI® Canada ^M	FRCANTR	5.72%	40.41%	2.62%	9.86%	10.67%	14.26%
S&P/TSX 60 ^N	TX60AR	4.15%	30.08%	0.46%	9.07%	4.67%	16.74%
FTSE RAFI® Australia ⁰	FRAUSTR	-1.64%	30.82%	-2.22%	9.02%	10.51%	12.74%
S&P/ASX 200 Index ^P	ASA51	-0.04%	32.38%	-3.81%	8.43%	8.80%	13.39%
FTSE RAFI® Japan ^a	FRJPNTR	11.18%	21.53%	-12.85%	1.45%	1.15%	18.24%
MSCI Japan ^R	GDDLJN	9.15%	20.13%	-15.41%	-0.34%	-3.49%	18.17%
FTSE RAFI® UK ^s	FRGBRTR	5.48%	32.16%	-1.85%	5.44%	5.16%	16.85%
MSCI UK ^t	GDDUUK	3.70%	35.64%	-1.40%	6.62%	2.43%	14.77%
RAFI Investment Grade ^u		4.44%	21.62%	7.41%	5.98%	7.04%	5.62%
Merrill Lynch US Corporate Master ^v	COAO	4.55%	23.23%	6.07%	5.28%	7.01%	6.21%
RAFI High Yield ^w		7.15%	29.24%	10.75%	10.47%	10.37%	9.43%
Merrill Lynch US High Yield BB-B Rated ^x	HOA4	6.27%	33.85%	5.50%	7.24%	6.73%	10.13%

Definition of Indices: (A) The FTSE RAFI® 1000 comprises the 1000 largest companies selected and weighted using our Fundamental Index methodology; (B) The S&P 500 Index is an unmanaged market index that focuses on the large-cap segment of the U.S. equities market; (C) The Russell 1000 Index is a market-capitalization-weighted benchmark index made up of the 1,000 highest-ranking U.S. stocks in the Russell 3000; (D) The FTSE RAFI® 1500 comprises the 1001st to 1500th largest companies selected and weighted using our Fundamental Index methodology; (E) The Russell 2000 is a market-capitalization weighted benchmark index made up of the 2,000 smallest U.S. companies in the Russell 3000; (F) The FTSE RAFI® Developed ex US 1000 Index comprises the largest 1000 non US-listed companies by fundamental value, selected from the constituents of the FTSE Developed ex US Index; (G) MSCI EAFE (Morgan Stanley Capital International Europe, Australasia, Far East) is an unmanaged index of issuers in countries of Europe, Australia, and the Far East represented in U.S. dollars, and (H) The FTSE All World ex-US Index comprises Large and Mid-Cap stocks providing coverage of Developed and Emerging Markets excluding the United States. It is not possible to invest directly in any of the indexes above; (1) The FTSE RAFI® Developed ex US Mid Small Index tracks the performance of small- and mid-cap equities of companies domiciled in developed international markets (excluding the United States), selected based on the following four fundamental measures of firm size: book value, cash flow, sales, and dividends. The equities with the highest fundamental strength are weighted according to their fundamental scores. The Fundamentals Weighted® portfolio is rebalanced and reconstituted annually. Performance represents price return only; (1) The MSCI EAFE Small Cap Index targets 40% of the eligible small-cap universe (companies with market capitalization ranging from US\$200 to US\$1,500 million) in each industry group of each country in the MSCI EAFI Index; (K) The FTSE RAFI® Emerging Markets Index comprises the largest 350 companies selected and weighted using the Fundamental Index® methodology; (L) The MSCI Emerging Markets Index is an unmanaged, free-float-adjusted cap-weighted index designed to measure equity market performance of emerging markets; (M) The FTSE RAFI® Canada Index comprises the Canadian stocks represented among the constituents of the FTSE RAFI® Global ex US 1000 Index, which in turn comprises the 1,000 non-U.S.-listed companies with the largest fundamental value, selected from the constituents of the FTSE Developed ex US Index; (N) The S&P/Toronto Stock Exchange (TSX) 60 is a cap-weighted index consisting of 60 of the largest and most liquid (heavily traded) stocks listed on the TSX, usually domestic or multinational industry leaders; (0) The FTSE R&FI® Australia Index comprises the Australian stocks represented among the constituents of the FTSE RAFI® Global ex US 1000 Index, which in turn comprises the 1,000 non-U.S.-listed companies with the largest fundamental value, selected from the constituents of the FTSE Developed ex US Index; (P) The S&P/ASX 200 Index, representing approximately 78% of the Australian equity market, is a free-float-adjusted, cap-weighted index; (Q) The FTSE RAFI® Japan Index comprises the Japanese stocks represented among the constituents of the FTSE RAFI® Global ex US 1000 Index, which in turn comprises the 1,000 non-U.S.-listed companies with the largest fundamental value, selected from the constituents of the FTSE Developed ex US Index; (R) The MSCI Japan Index is an unmanaged, free-float-adjusted cap-weighted index that aims to capture 85% of the publicly available total market capitalization of the Japanese equity market; (S) The FTSE RAFI® UK Index comprises the U.K. stocks represented among the constituents of the FTSE RAFI® Global ex US 1000 Index, which in turn comprises the 1,000 non-U.S.-listed companies with the largest fundamental value, selected from the constituents of the FTSE Developed ex US Index; (1) The MSCI UK Index is an unmanaged, free-float-adjusted cap-weighted index that aims to capture 85% of the publicly available total market capitalization of the British equity market; (U) The RAFI® Investment Grade Master Index is a U.S. investment-grade corporate bond index comprised of non-zero fixed coupon debt with maturities ranging from 1 to 30 years issued by publicly traded companies. The issuers held in the index are weighted by a combination of four measures of their fundamental size—sales, cash flow, dividends, and book value of assets; (Y) The Merrill Lynch U.S. Corporate Master Index is representative of the entire U.S. corporate bond market. The index includes dollar-denominated investment-grade corporate public debt issued in the U.S. bond market; (W) The RAFI®High Yield Master is a U.S. high-yield corporate bond index comprised of non-zero fixed coupon debt with maturities ranging from 1 to 30 years issued by publicly traded companies. The issuers held in the index are weighted by a combination of four measures of their fundamental size—sales, cash flow, dividends, and book value of assets; (X) The Merrill Lynch U.S. High Yield Master II Index is representative of the U.S. high vield bond market. The index includes domestic high-yield bonds, including deferred interest bonds and payment-in-kind securities. Issues included in the index have maturities of one year or more and have a credit rating lower than BBB-/Baa3, but are not in default.

Source: All index returns are calculated using Total Return data from Bloomberg except for the FTSE RAFI Developed ex US Mid Small (FRSDXUS) and the MSCI EAFE Small (MCUDEAFE) which uses price return data.



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