Russell Research

By: Pradeep Velvadapu, Senior Research Analyst
Mary Fjelstad, Senior Research Analyst

Emerging markets are in style

Russell Indexes, a leader in benchmark innovation, introduced style indexes, based on the U.S. equity markets, in 1987. The Russell 1000®, 2000® and 3000® Growth and Value Indexes have important functions as benchmarks for measuring the performance of growth and value managers, and as the basis for investable products. Style indexes have grown in popularity within the domestic U.S. and global developed markets.[1] Recent research has turned the spotlight on style performance in emerging markets worldwide.[2] This paper continues the discussion, focusing on important investment characteristics of style indexes within emerging markets during the period July 1996 through September 2010. It is organized as follows:

- We first describe the Russell global-relative methodology for style index construction and how it impacts style classification in both developed and emerging markets.

- We provide evidence that style matters in emerging markets: growth and value performance is divergent in emerging markets, as it is in developed markets; there has been a cyclical pattern to style returns in emerging markets, similar to what we have observed in developed markets; and emerging market style indexes have displayed attractive diversification and performance characteristics.

- We introduce the Russell Emerging Markets Mega Cap Core, Growth and Value Indexes, which are designed to capture the attractive qualities of emerging markets and their style properties while providing greater liquidity.

- We examine the performance characteristics of the Russell Emerging Markets Mega Cap Core, Growth and Value Indexes relative to their all-cap emerging market counterpart indexes.

---

[1] See Carino, 2008.

[2] See Connin and James, 2010.

The Russell global-relative index methodology and its effect on style classification

Style is an important differentiator of stock and equity markets performance and risk. A plethora of academic studies speak to the differences in performance patterns of growth and value stocks. As Agather and Collie note, "Style has become recognized as a factor (along with others such as size, industry, beta and so on) that contributes to stock performance. Periodic changes in style leadership have long been understood as a feature of stock markets around the world, and this style cycle has over time become an increasingly global phenomenon as markets have become more closely linked to one another."[3]

The Russell Global Style Indexes are constructed with the view that global equity markets are one large investment opportunity set, rather than looking at each country or region as an individual market. Thus, growth and value allocation of securities is done on a global (ex-U.S.)–relative basis.[4] Consequently, individual countries may have more weight allocated to one style over another; the global-relative approach allows for style allocations of countries to truly reflect their style characteristics.

Table 1 presents a select few countries from the Russell Global Index, their regional classifications and their style allocations. Some emerging countries (China, India and Brazil) as well as some developed countries (the U.K., Canada and Switzerland) are allocated more to growth than to value. Other developed countries (for example, Japan, France and Germany) are allocated more to value than to growth. Some emerging countries (for example, South Korea and Russia) are more allocated to value than to growth.

Table 1 / Russell growth and value allocations to selected countries[5] as of 6/30/2010

Country	Region	Growth %	Value %
Japan	Developed	28%	72%
United Kingdom	Developed	60%	40%
Canada	Developed	57%	43%
France	Developed	33%	67%
Switzerland	Developed	56%	44%
Germany	Developed	31%	69%
China	Emerging	77%	23%
Brazil	Emerging	71%	29%
South Korea	Emerging	44%	56%
Taiwan	Emerging	58%	42%
India	Emerging	92%	8%
Russia	Emerging	31%	69%

[3] Collie, R., and R. Agather (2008). "An Introduction to the Global Style Indexes." *Russell Research,* April.

[4] The indexes are not constructed on a global basis due to the large weight of the U.S. market in the global index and the unique properties specific to the U.S. equity market. See Carino 2008 for a more detailed explanation.

[5] Exposures will vary over time.

Style in emerging markets

A common perception is that emerging markets are growth markets, and thus that their style characteristics are not as distinguished as in developed markets. However, as Figure 1 below shows, there are periods during which the market capitalization of the Russell Emerging Markets Index has been allocated more to the value category than to growth, suggesting that there are growth and value cycles in emerging markets similar to those in developed markets.

Figure 1 / Percent of market capitalization characterized as growth
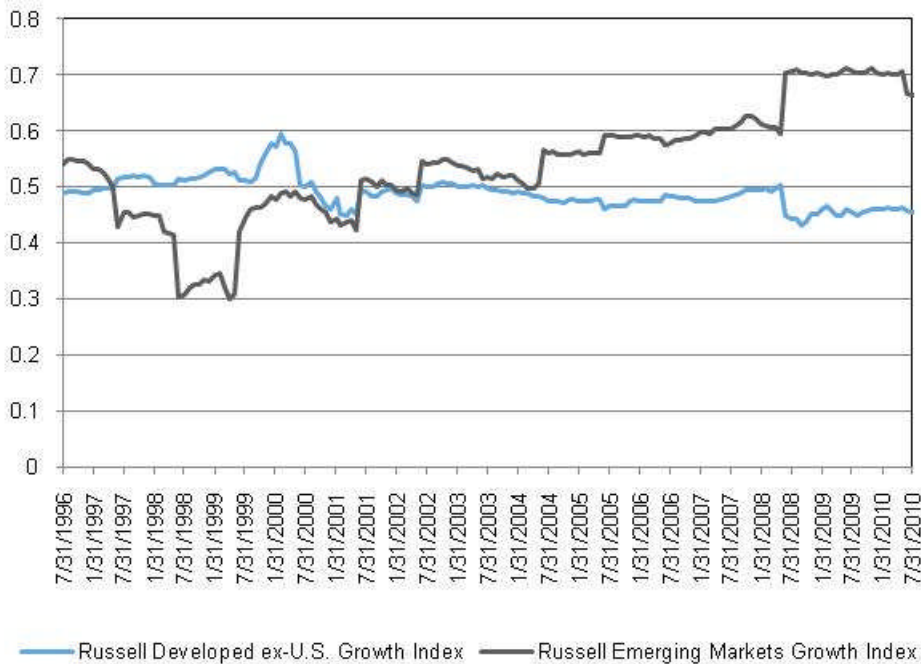
To test whether growth/value cycles exist within emerging markets, we look at two-year rolling monthly excess returns of the Russell Emerging Markets Value Index over the Growth Index and compare the same with U.S. and developed ex-U.S. indexes (see Figure 2). Time periods where value and growth outperformance is observed are fairly similar across these three markets.

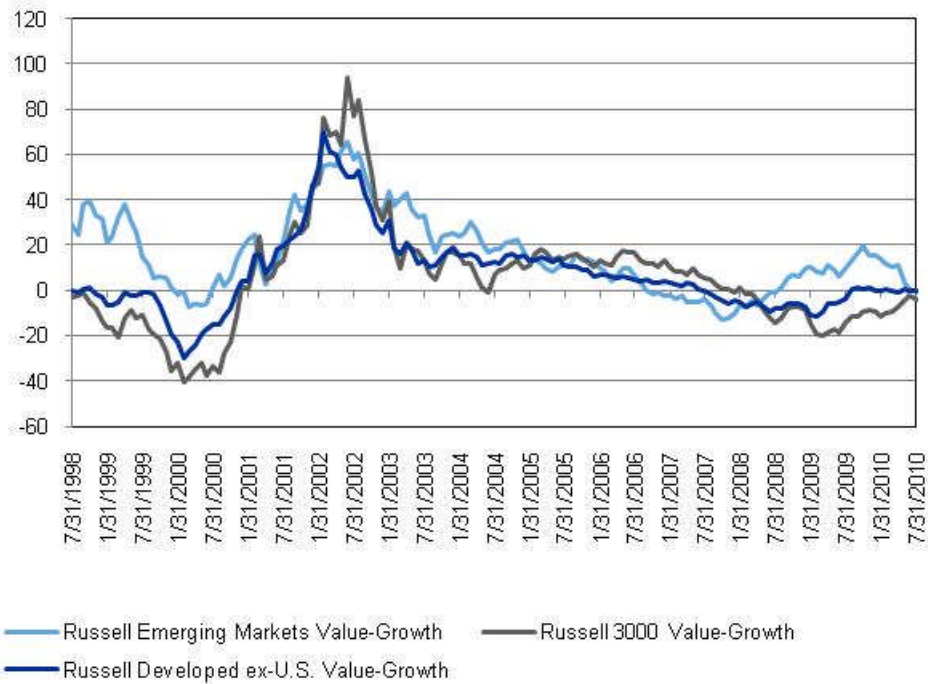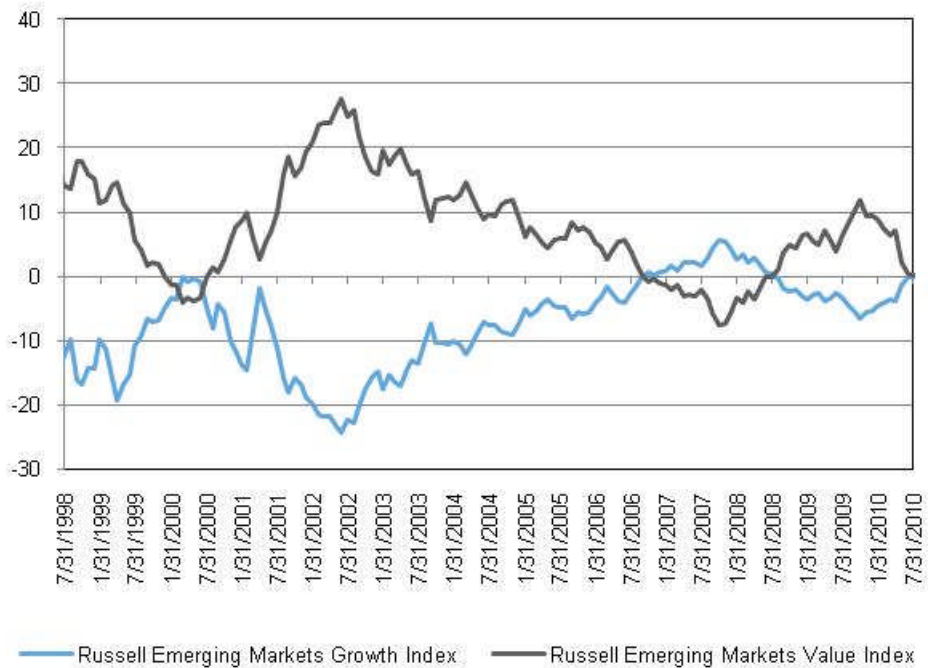**Figure 2 / Rolling 2-year monthly excess returns of value – growth indexes**
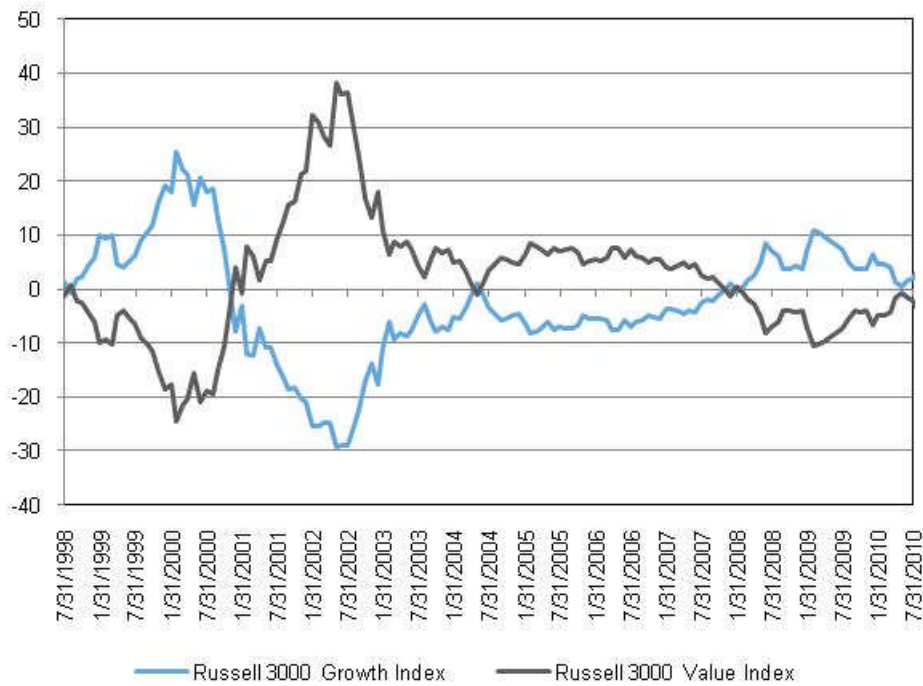
Figure 3, below, shows two-year rolling monthly excess returns of the Russell Emerging Markets Growth and Value Indexes over the Russell Emerging Markets Index. The return patterns are divergent over the sample time period, with a correlation of –0.95. This divergence in the return patterns suggests that the Russell Emerging Markets Growth and Value Indexes are complementary and can offer diversification benefits for the investor considering an allocation to emerging markets. A similar pattern of returns was observed in the U.S. (Figure 4) and developed markets (Figure 5).
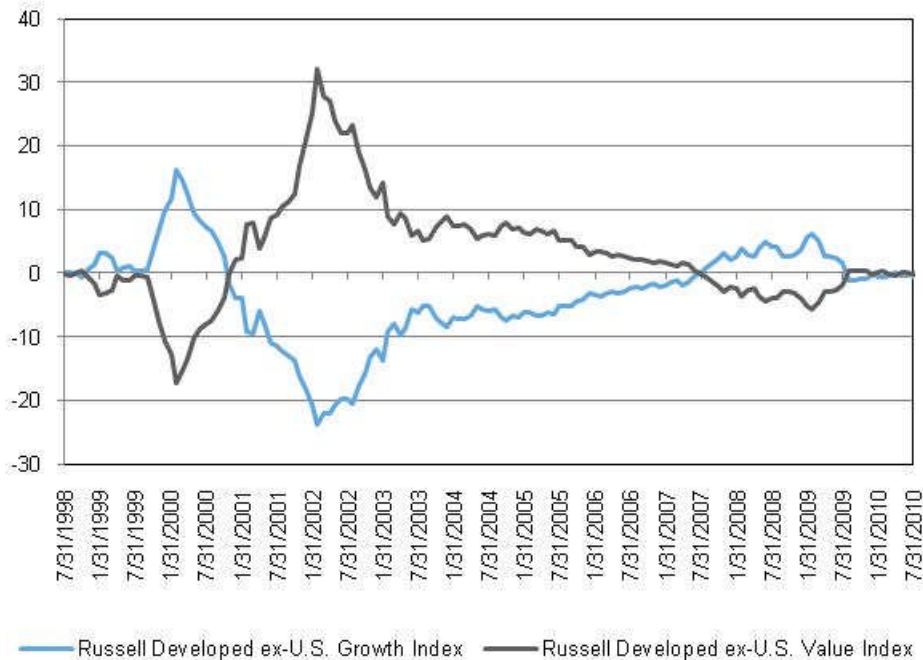
Figure 3 / Rolling 2-year monthly excess returns over the Russell Emerging Markets Index

Figure 4 / Rolling 2-year monthly excess returns of the Russell 3000® Style Indexes over the Russell 3000 Index

Figure 5 / Rolling 2-year monthly excess returns of the Russell Developed ex-U.S. Style Indexes over the Russell Developed ex-U.S. Index

In addition to attractive diversification properties, the Russell Emerging Markets Growth and Value Indexes have displayed desirable performance properties. Table 2 reports key performance and risk measurements for style indexes in developed ex-U.S., emerging and U.S. (Russell 3000) equity markets over a 10-year period. Growth and value in emerging markets have more frequent gain periods, higher average gains and less-frequent loss periods, although higher average losses when compared to their developed ex-U.S. and U.S. counterparts. Russell Emerging Markets Growth and Value Indexes have higher returns and higher Sharpe ratios relative to style indexes in developed ex-U.S. and U.S. markets, despite higher volatility.

Table 2 / Risk and return measures*

Oct 31, 2000 – Sep 30, 2010	Developed ex-U.S. Growth	Developed ex-U.S. Value	Emerging Markets Growth	Emerging Markets Value	Russell 3000 Growth	Russell 3000 Value
Average Gain, %[6]	3.95	3.96	6.01	5.72	3.84	3.20
Gain Frequency, %[7]	57.50	59.17	58.33	64.17	52.50	61.67
Average Loss, %	−4.84	−4.32	−6.30	−6.23	−4.62	−4.33
Loss Frequency, %	42.50	40.83	41.67	35.83	47.50	38.33
Skewness	−0.80	−0.76	−0.59	−0.69	−0.65	−0.84
Kurtosis	1.67	2.33	1.11	1.32	0.91	1.58
Annualized Return, %	1.44	6.12	8.70	16.41	−3.19	2.96
Annualized Standard Deviation, %	19.49	18.86	26.80	25.14	19.09	16.45
Sharpe Ratio	0.04	0.28	0.35	0.63	−0.20	0.11

Source: Russell Investments; MPI Stylus.

* Indexes shown here and throughout this paper are unmanaged and cannot be invested in directly. Returns represent past performance, are not guarantee of future performance, and are not indicative of any specific investments.

[6] The average gain/loss is the geometric mean of those periods with a positive/negative return. It is calculated by compounding the returns for the gain/loss periods (where the returns are greater/less than 0) and geometrically averaging the compounded number, using only the number of periods which had a positive/negative return.

[7] Gain/Loss frequency is the percentage of periods (months) over the sample during which an index posted positive/negative returns.

The Russell Emerging Markets Mega Cap Core, Value and Growth Indexes

While the Russell Emerging Markets Index (EM) as a whole displayed distinct style properties, we examine whether these properties are displayed by the Russell Emerging Markets Mega Cap (EMMC) Core, Value and Growth Indexes as well.[8] By definition, mega cap indexes contain the largest and by inference the most liquid of the securities within emerging markets. Figure 6 displays 2-year monthly rolling correlations between EMMC and EM core, growth and value indexes. Correlations in the very early part of this sample period for core and growth index pairs were very high, ranging from the low 0.80s to close to 1.0. During the early period correlations for value indexes were lower, dipping below 0.80 during the early 2000s. It is clear from the chart, however, that the more recent period beginning in 2005 has seen higher correlations for all three index pairs — including value — and that during the very recent period (in the subprime crisis and subsequent global economic downturn), correlations have been close to 1 for all pairs. Certainly over the last 5 years, EMMC indexes have been very closely correlated to their EM counterparts.

Figure 6 / Rolling 2-year monthly correlations between EMMC and EM indexes

---
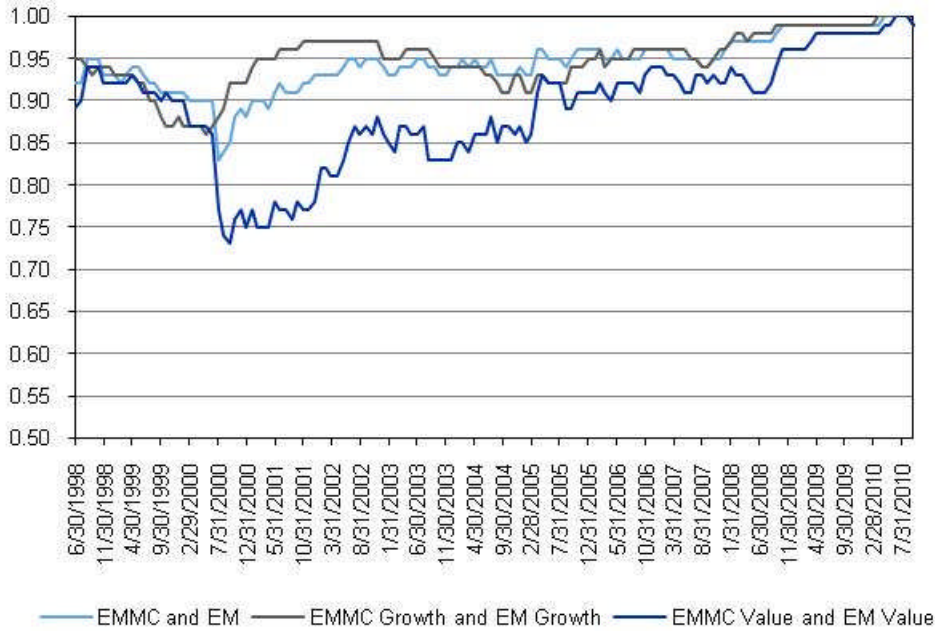
[8] See "Russell Global Indexes Construction and Methodology" (October 2010, Russell Indexes) for a description of the Russell Emerging Markets Mega Cap Indexes.

In Table 3 we report key return and risk performance measurements over a 10-year period for EM and EMMC core, growth and value indexes. From this table we can see that EMMC indexes have larger average gains but lower gain frequency than their EM counterparts. We also see that loss frequency is higher for EMMC indexes, and that losses are lower for core and value in EMMC but larger in EMMC growth than in the EM matching index. EMMC indexes have displayed lower negative skewness and lower kurtosis, indicating that EM index return distributions have fatter tails. Annualized returns are slightly lower and standard deviations have been slightly higher in EMMC indexes than in EM, leading to slightly reduced Sharpe ratios over this period for EMMC. Nevertheless, the statistics presented in Table 3 show that EMMC value and growth indexes have exhibited performance that is very similar to their all-cap counterparts. Like the all-cap emerging markets indexes, the Russell Mega Cap Value and Growth Indexes have had attractive returns and Sharpe ratios over this sample period relative to those reported for developed and U.S. indexes in Table 2.[9]

Table 3 / Risk and return measures for Emerging Markets and Emerging Markets Mega Cap indexes

Oct 31, 2000 – Sep 30, 2010	Russell Emerging Markets Growth	Russell Emerging Markets	Russell Emerging Markets Value	Emerging Markets Mega Cap Growth	Emerging Markets Mega Cap Core	Emerging Markets Mega Cap Value
Average Gain, %[10]	6.01	5.66	5.72	7.15	7.14	6.67
Gain Frequency, %	58.33	62.50	64.17	55.83	55.00	59.17
Average Loss, %[11]	−6.30	−6.35	−6.23	−6.81	−6.13	−6.08
Loss Frequency, %	41.67	37.50	35.83	44.17	45.00	40.83
Skewness	−0.59	−0.66	−0.69	−0.27	−0.35	−0.45
Kurtosis	1.11	1.34	1.32	0.45	0.54	0.54
Annualized Return, %	8.70	12.51	16.41	9.29	12.00	16.33
Annualized Standard Deviation, %	26.80	25.76	25.14	29.99	28.37	27.20
Sharpe Ratio	0.35	0.49	0.63	0.36	0.45	0.60

Source: Russell Investments; MPI Stylus

Conclusion

Since Russell Indexes launched the growth and value indexes for U.S. equity markets in the late 1980s, style has been an important dimension used by investors and investment managers to distinguish distinct characteristics of individual stocks and markets. Russell's style indexes are widely used in asset allocation and performance measurement; as market measures; and as the basis for investable products. In this paper we have demonstrated that style is also a meaningful measure in emerging markets. Using Russell Emerging Markets Indexes, we have shown that style indexes in emerging markets have exhibited attractive performance characteristics and diversification potential similar to U.S. and developed-markets indexes. The Russell Emerging Markets Mega Cap Growth and Value Indexes capture the essential attractive features of all-cap emerging markets indexes.

---

[9] In the Appendix we report differences in country and sector weights between Emerging Markets and Emerging Markets Mega Cap indexes as of the end of June 2010.

[10] See footnote 5, above.

[11] See footnote 6, above.

References

Carino, David. "Global Style Indexes: Validating the Russell Methodology." Russell Research, July 2008. Available at http://www.russell.com/indexes/QuarterlyResearch/Articles/November2009/Global_Style_Indexes-Validating_Russell_Methodology.pdf

Collie, Robert, and Rolf Agather. "An Introduction to the Global Style Indexes." Russell Research, April 2008. Available at http://www.russell.com/institutional/research_commentary/PDF/Introduction_Russell_Global_Style_Indexes.pdf

Connin, Robert and James Donald. "Does Style Matter in Emerging Markets?" Lazard Investment Research, April 2010. Available at http://uk.lazardnet.com/Literature/Investment-Insight/Does-Style-Matter-in-Emerging-Markets/

Appendix: Country and sector exposures of the Russell Emerging Markets Mega Cap Indexes as of June 2010

Emerging Markets Mega Cap indexes: country exposures

Index weights: Table A1, below, reports the country exposure profile of the Russell Emerging Markets (EM) and Emerging Markets Mega Cap Core, Value and Growth Indexes as of Recon 2010 (June 28, 2010). Highlighted in orange are the countries which have representation in EM but no allocation in the EMMC indexes. Note that these countries on average have very small weights in the EM indexes.

Table A1 / Country weights in EM and EMMC indexes, June 28, 2010[12]

Country Name	EM Core	EM Value	EM Growth	EMMC Core	EMMC Value	EMMC Growth
United Arab Emirates	0.4	0.1	1.1	0.0	0.0	0.0
Brazil	14.2	15.1	12.4	19.0	18.1	19.4
Chile	1.8	1.8	1.8	1.1	0.9	1.2
China	17.4	20.2	12.0	21.3	18.5	22.5
Colombia	1.0	0.9	1.2	0.3	0.0	0.4
Czech Republic	0.3	0.2	0.6	0.3	0.7	0.2
Egypt	0.7	0.7	0.6	0.0	0.0	0.0
Hungary	0.4	0.1	0.8	0.0	0.0	0.0
Indonesia	2.3	3.1	0.9	1.5	0.0	2.2
India	10.2	14.1	2.5	9.8	0.9	13.5
Korea	12.5	8.4	20.7	12.4	24.9	7.2
Morocco	0.5	0.6	0.2	0.1	0.0	0.2
Mexico	4.1	5.1	2.1	4.4	0.6	6.0
Malaysia	2.8	2.8	2.9	1.5	0.1	2.0
Peru	0.6	0.7	0.3	0.0	0.0	0.0
Philippines	0.7	0.7	0.8	0.0	0.0	0.0
Poland	1.2	0.9	1.8	0.7	0.3	0.8
Russia	6.8	3.1	13.9	10.3	26.2	3.7
Thailand	1.6	1.3	2.1	0.6	0.2	0.8
Turkey	1.8	1.9	1.5	1.2	0.6	1.5
Taiwan	12.0	10.5	14.9	8.6	6.7	9.5
South Africa	6.8	7.9	4.8	6.8	1.4	9.0

---

[12] Exposures will vary over time.

Table A2 reports the difference between EMMC and EM exposures for all countries as of the same date, June 28, 2010 (major differences in country weights are in orange). For the broad or Core EMMC index, the biggest differences are bigger allocations to three of the four BRIC countries — Brazil, China and Russia. The weight difference in Taiwan is also notable. For the EMMC Growth and Value indexes, the most striking differences are in the aforementioned countries, with an additional greater weighting in Korea and lower weight in South Africa for EMMC Growth.

Table A2 / Differences in country weights: EM–EMMC exposures for Core, Value and Growth indexes as of June 28, 2010[13]

Country Name	Core	Value	Growth
United Arab Emirates	−0.4	−1.1	−0.1
Brazil	4.8	5.6	4.3
Chile	−0.7	−0.9	−0.6
China	3.9	6.5	2.4
Colombia	−0.7	−1.2	−0.5
Czech Republic	0.0	0.2	0.0
Egypt	−0.7	−0.6	−0.7
Hungary	−0.4	−0.8	−0.1
Indonesia	−0.8	−0.9	−0.9
India	−0.4	−1.6	−0.6
Korea	−0.2	4.2	−1.2
Morocco	−0.3	−0.2	−0.4
Mexico	0.3	−1.5	0.9
Malaysia	−1.4	−2.7	−0.8
Peru	−0.6	−0.3	−0.7
Philippines	−0.7	−0.8	−0.7
Poland	−0.6	−1.4	−0.1
Russia	3.5	12.3	0.6
Thailand	−1.0	−2.0	−0.5
Turkey	−0.5	−1.0	−0.4
Taiwan	−3.4	−8.3	−1.1
South Africa	−0.1	−3.4	1.1

Emerging Markets Mega Cap indexes: sector exposures

Table A3 reports the sector exposures of Emerging Markets (EM) and Emerging Markets Mega Cap Core, Value and Growth indexes as of June 28, 2010.

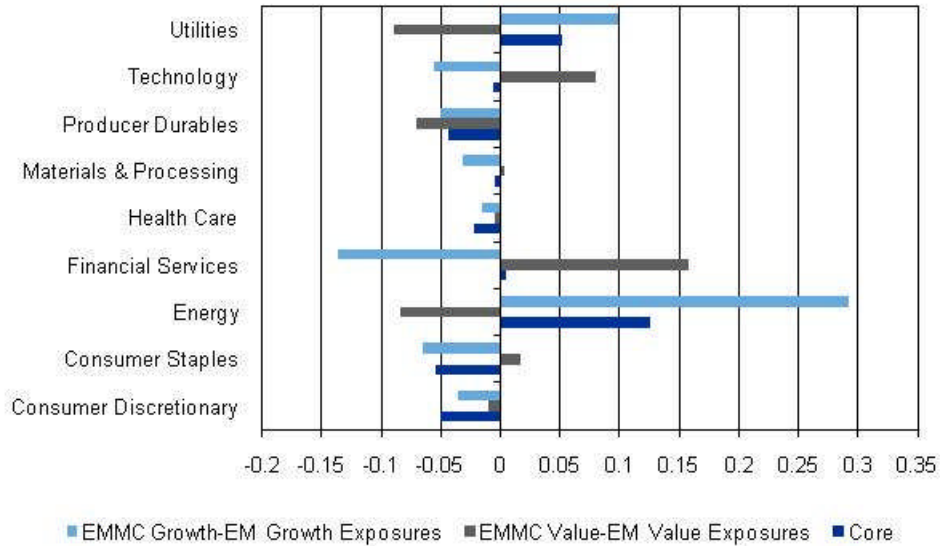**Table A3 / Sector Weights in EM and EMMC indexes, June 28, 2010[14]**

Recon 2010	% Weight in Index					
Sector (% in index)	EM Core	EM Value	EM Growth	EMMC Core	EMMC Value	EMMC Growth
Consumer Discretionary	9.6%	5.6%	8.3%	4.6%	4.7%	4.6%
Consumer Staples	8.4%	2.7%	6.5%	3.1%	0.0%	4.4%
Energy	9.1%	21.4%	13.3%	21.7%	42.5%	13.0%
Financial Services	27.5%	19.2%	24.7%	28.0%	11.1%	35.0%
Health Care	2.2%	0.4%	1.6%	0.0%	0.0%	0.0%
Materials & Processing	14.9%	15.2%	15.0%	14.4%	11.8%	15.4%
Producer Durables	6.2%	8.7%	7.1%	1.8%	2.0%	1.7%
Technology	14.4%	8.7%	12.5%	13.8%	7.0%	16.7%
Utilities	7.5%	18.0%	11.1%	12.6%	20.9%	9.2%

---

[13] Exposures will vary over time.

[14] Exposures will vary over time.

Mega Cap indexes as of June 2010 had no exposure to Health Care, while in the total cap EM indexes, Health Care carried the smallest weight of any sector. Figure A1, below, depicts the differences between EM and EMMC indexes in all sectors for value and growth styles. For EMMC Growth, the greatest difference is in the greater weight to the Energy sector and to Utilities, and the lower weight to Financial Services. For EMMC Value, we note a greater weight to Financials and Technology, and lower weights to Utilities, Energy and Producer Durables.

Figure A1 / Differences in sector weights: EMMC–EM indexes, as of June 28, 2010[15]

Disclosures