

### **MARKET INSIGHTS ALERT**

Arabian Nights: Mysteries on the Frontier

How the Frontier Markets Index Beat the World

#### **EXECUTIVE SUMMARY**

In the first half of 2014, the MSCI Frontier Markets Index substantially outperformed its actively managed peer group. The degree of this outperformance is deeply ahistorical for major equities classes and poses several implications for manager selection and evaluation. This paper examines the unique structure of this market rally in an effort to better understand the frontier markets environment, assess the complicated interplay between index structure and performance measurement, and discusses how allocators should evaluate and respond to these special circumstances.

Author
Adam Choppin
Manager Research

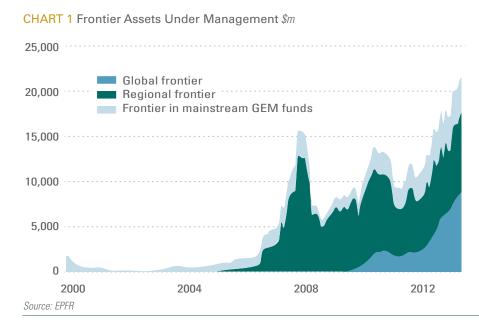
CIO & CEO
TINA BYLES WILLIAMS

On June 10, 2013, MSCI announced that it planned to upgrade the UAE and Qatar stock exchanges from frontier to emerging market status, effective June 1, 2014. During that year, UAE and Qatar respectively surged 99% and 54%, before immediately losing 24% and 22% of their respective value by the end of June. In the meantime, an estimated \$1 billion in funds from passive emerging markets (EM) investors entered the market at the peak and sold out mostly to local traders arbitraging the predictable rigidity of passive foreign investors.

The structure and timing of this market rally, coordinate with the upgrade of these markets from frontier to emerging status by MSCI, have several unique and historic implications for all global frontier markets (FM) managers and investors. First, these markets' outsized share of the MSCI FM Index (FM Index) drove the index to an historic level of outperformance relative to active managers. Second, within these markets, the rally was strongest in certain companies; three in particular, whose idiosyncratic features combined with their significant concentration within the FM Index accounted for 700 bps of the 800 bps performance advantage of the index vs. the top quartile of active frontier managers. Third, the upgrade of these markets synced with their historic peaks, such that the FM Index may be permanently and aberrantly distorted. For current or prospective investors in frontier markets, understanding this unique episode is imperative. But even for investors in developed or emerging markets, this episode can offer some helpful insights to better assess asset managers and understand the broader market environment.

#### FRONTIER MARKETS INDEX: TOO HOT TO HANDLE

Since January 2013, global frontier funds added almost \$6bn in assets, up from an estimated \$3bn (see CHART 1). The FM Index concomitantly soared, gaining 26% in 2013 and 20% in the first two quarters of 2014. Of course, the S&P 500 Index gained 32% in 2013 and the MSCI EAFE Index rose almost 23%, so the FM Index's 2013 returns are really only notable vis a vis the dismal 2013



in the MSCI EM Index (EM Index) (-2.3%). But the FM Index's 2014 Q1 and Q2 returns of 20% led all major global indices, by far.

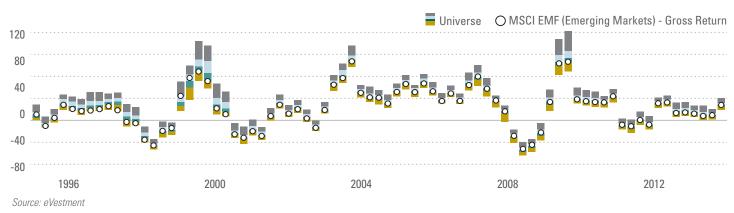
The interest in the frontier asset class is multi-faceted. The constant search for yield, attractive growth prospects buoyed by strong demographics in particular, comparatively favorable macro-economics, and historically low correlations to other markets and to themselves, are generally cited as the leading factors. Consequently, the rise of frontier markets is not so surprising, but instead it is the outsized outperformance of the FM Index versus the universe of actively managed frontier managers which is surprising. As shown in CHART 2, for the first two quarters of 2014, the FM Index beat all other active managers in the eVestments universe, which includes data on nearly two-thirds of the existing global frontier managers (23 managers) and at least 80% of total actively managed global frontier AUM. For the trailing year, the index is in the top decile of all frontier managers. The previous rolling 12-month peak occurred in late 2011 when the FM Index finished in the top third of all managers. Most astonishingly, the FM Index blew out the competition, finishing a full 900 bps ahead of the median and 800 bps ahead of the top quartile of all managers in the frontier universe during the first half of 2014. The #2 ranked manager in the database (an index hugging strategy) still finished 200 bps behind. The iShares MSCI Frontier 100 ETF, the predominant passive frontier fund meant to replicate the MSCI FM 100 Index, lagged 800 bps with a mere 12.3% return for the first six months of 2014.

CHART 2 Rolling 6-Month Multi-Horizon Chart: Annualized Return 7/31/2014 to 6/30/2014, Universe: eVestment (eA Universes) - eA Frontier Markets Equity



To put this performance in historical context, FIS researched the past twenty years of peer-relative returns for the EM Index vs the eVestments universe of EM managers (39 managers in 1995 which increased to 337 managers in 2014). In 1999, the EM Index briefly snuck into the top quartile of managers (then 95 in the database), and in early 2009, the EM Index rose again as high as the 42<sup>nd</sup> percentile (then 247 in the database); but has otherwise rarely outperformed the median manager and indeed averaged in the 63<sup>rd</sup> percentile of the universe of managers (see CHART 3).

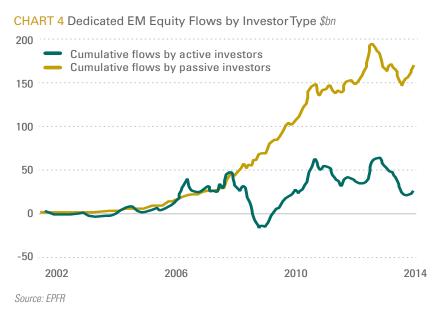
CHART 3 Rolling 12-Month Multi-Horizon Chart: Annualized Return 7/31/1994 to 6/30/2014, Universe: eVestment (eA Universes) - eA Ermerging Markets Equity - Unhedged



The outsized outperformance of the frontier markets index is greatly at variance with the performance of the EM Index relative to its actively managed peers despite a marked flow of assets into passive emerging market equity vehicles. According to EPFR fund flow data<sup>2</sup>, from 2008 until present, active investments in EM are down almost 70% while passive investments are up almost 400%. Moreover, those passive investments are highly concentrated with \$94 billion of that total (about 60%) in passive investments held in just two ETFs: the Vanguard FTSE EM ETF and the iShares MSCI EM Index Fund. First, it is important to remember that until 2012, both ETFs followed the FM Index. This reinforces that their aggregation of assets, which can be captured broadly through CHART 4, all occurred in largely the same names. One might have expected that with the index receiving over half of net inflows into EM over the past 6 years, it would outperform active managers merely from the price momentum

<sup>1</sup> The MSCI FM 100 Index will not remove UAE and Qatar until November 2014, so the difference between the two indices is largely driven by the sell-off in those two markets in June, see below.

<sup>2</sup> EPFR fund flow data notably excludes separately managed account data and is sourced exclusively from registered fund data, IMF data, and other publicly available sources.

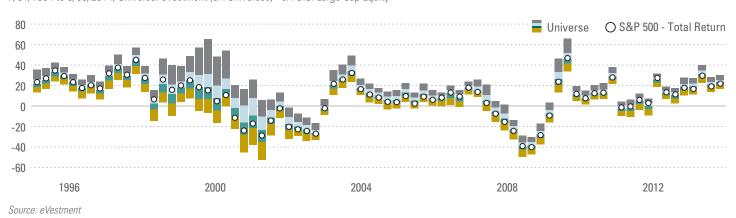


derived from buying its constituent securities in greater proportion than any other investors during the same time period. Yet despite such consistent aggregate inflows into passive EM funds, the index did not consistently outperform its universe of active managers, nor did it even do so more than on the rare occasion every few years.

Many active managers often deride the biases of MSCI index methodology as being a poor fit for index construction in emerging and frontier markets, a sentiment with which FIS Group (FIS) generally agrees. So we ran the same study against an index regarded as so efficient that even the "Sage of Omaha" has suggested the prudent investment option may be to just buy its cheap replication ETF: the S&P 500 Index. FIS analyzed the rolling 12-month peer group returns for the S&P 500 Index vs the eVestments universe of US Large Cap Equity managers (477 managers in 1995,

increasing to 1,109 managers in 2014)<sup>3</sup>. Over the period, the index's peak peer-relative performance was in the 25<sup>th</sup> percentile in mid-2012, with an overall average rank in the 53<sup>rd</sup> percentile (see CHART 5).

CHART 5 Rolling 12-Month Multi-Horizon Chart: Annualized Return 7/31/1994 to 6/30/2014, Universe: eVestment (eA Universes) - eA U.S. Large Cap Equity



These results reinforce something that FIS has long maintained: that active management can pay for itself, even in efficient markets, but manager selection must be unfettered from frequently utilized selection criterion (such as scale-based criteria) that research demonstrates an insignificant or negative relationship with alpha generation for many equity strategies.<sup>4</sup> Second, such comparisons underline the astonishingly aberrative outperformance of the FM Index versus the universe of frontier markets managers over the past 12 months, particularly in the first half of 2014. To understand how this happened, we must dig deeper into the FM Index.

<sup>3</sup> The often quoted statistics about most active managers underperforming the index used Morningstar rated funds, which tend to be dominated by funds offered by larger asset managers. On the other hand, eVestments data used for this analysis includes substantially more boutique, entrepreneurial, and emerging firms. In a separate research paper, entitled "Is Active Management Alpha on Permanent or Temporary Disability" (April 2013), FIS examined the headwinds that challenged Large Cap managers during this period.

<sup>4</sup> For further research on the value proposition of entrepreneurial managers see: Byles Williams (2011), "Survival of the Nimble"; Byles Williams, Yang (2007), "Performance Drivers for Emerging Managers".

#### **ARAB IDIOSYNCRACIES**

The most obvious answer to what fueled the relative outperformance of the the FM Index over its active frontier markets peers would be if passive flows into a fund tracking index, such as the ever popular passive ETFs, received the bulk of inflows into the overall asset class. The largest global frontier ETF, the iShares MSCI Frontier 100, has \$800m of the estimated \$1.2bn in total global frontier ETF assets (out of a total of about \$2.7bn total frontier ETFs including country and region-targeted funds). This ETF itself was launched only at the end of 2012; thus its rise paralleled the overall rise of global frontier assets. However, its assets under management only account for less than 15% of the total assets in frontier markets equities<sup>5</sup>. Moreover, as we already illustrated in the historical example in emerging markets, disproportionately passive inflows into the asset class need not necessarily lead to the outperformance of the index over the peer universe.

Instead of being a story about the structure of global asset flows, this is a story about idiosyncratic returns from local markets. Looking at the contribution of returns to the FM Index, we see immediately that the bulk of the story emanates from the Middle East. Specifically when the FM Index rose 20%, the MSCI FM x GCC<sup>6</sup> Index gained a mere 8.9%, almost on par with the S&P 500 Index's 8% gain for Q1 and Q2 2014. Within the GCC, this performance is further concentrated in Qatar and UAE. These two booming markets contributed 89% of the returns from the Middle East to the FM Index and 72.5% of the total index's returns, despite accounting for a mere 28% of the index itself (see TABLE 1).

TABLE 1 Performance Contribution: MSCI FM Index 12/31/2013 to 6/30/2014

	Average Weight (%)	Total Return (%)	Contribution to Return (%)
Africa	23.52	3.22	0.33
Central Asia	7.11	15.28	1.06
Europe Periphery	8.59	8.58	0.74
LatAm	4.72	25.53	1.29
Middle East	53.41	26.64	16.52
Bahrain	0.73	-8.87	-0.06
Jordan	0.60	10.58	0.06
Kuwait	19.47	7.79	1.27
Lebanon	1.85	16.89	0.31
Oman	3.13	8.69	0.30
Qatar	13.33	39.12	5.95
United Arab Emirates	14.30	55.42	8.70
Pacific Rim	2.64	10.18	0.28
Total	100.00	20.21	20.21

Source: FactSet

One can understand how a major boom in two markets of this relative weight can bolster an entire index, but why should it carry the entire index well past active managers? First, many global frontier managers have long been explicitly or implicitly biased against these markets, and indeed most GCC economies. The GCC markets are very different from their global frontier market peers. These are very wealthy countries with high incomes (Qatar has the highest per capita income in the world), but without the same demographic and macro-economic drivers of most other frontier economies. Specifically, both countries are characterized by low population growth, net importation of labor, stagnant middle class, etc. Furthermore, the bulk of the capitalization of these markets are in local and regional banks and not consumer or industrial companies that benefit from the same long-term secular themes emanating from rising middle classes and stable growth, which continues to drive much of the interest in developing markets worldwide. The GCC markets are quite liquid, with substantial local trading, thus prone to greater volatility and more accessible (to global investors) idiosyncratic risk than some of the thinner markets of frontier Europe, Asia, or Africa. These markets are also more expensive on average than many other frontier opportunities, especially UAE (26x P/E), Kuwait (22x P/E), and Qatar (18x P/E).

Second, within these markets, the best performing stocks during this boom have not been popular among many, or any, global

<sup>5</sup> The iShares MSCI Frontier 100ETF added \$350m in the first half of 2014.

<sup>6</sup> The Gulf Cooperation Council (GCC) is comprised of the Persian Gulf countries of Bahrain, Kuwait, Oman, Qatar, Saudi Arabia, and the UAE. Saudi Arabia remains closed to direct foreign portfolio investment (at least until November 2014) and is thus excluded from all the major global indices.

TABLE 2 Performance Contribution: MSCI FM Index 12/31/2013 to 6/30/2014

			Average Weight (%)	Total Return (%)	Contribution to Return (%)
Africa		23.52	3.22	0.33	
Central Asia		7.11	15.28	1.06	
Europe Periphery		8.59	8.58	0.74	
LatAm		4.72	25.53	1.29	
Middle East		53.41	26.64	16.52	
	Bahrain		0.73	-8.87	-0.06
Jord Kuw		an	0.60	10.58	0.06
		ait	19.47	7.79	1.27
	Leba	non	1.85	16.89	0.31
	Oma	n	3.13	8.69	0.30
	Qatar		13.33	39.12	5.95
		Qatar National Bank SAQ	2.43	9.98	0.37
		Qatar Navigation QSC	0.40	13.19	0.08
		Commercial Bank Of Qatar	0.58	25.07	0.18
		Ooredoo QSC	1.80	16.30	0.36
		Doha Bank	0.64	16.29	0.14
		Oatar Electricity & Water Co.	0.74	25.74	0.22
		Industries of Qatar Co.	2.06	18.59	0.49
		Qatar Islamic Bank	0.59	67.73	0.43
		Qatar Gas Transport Co.	0.44	18.88	0.10
		Masraf Al-Rayan QSC	2.20	118.10	2.55
		Barwa Real Estate Co.	0.51	52.72	0.30
		Al Khalij Commercial Bank	0.30	23.87	0.09
		Vodafone Qatar QSC	0.66	94.10	0.65
	Unite	ed Arab Emirates	14.30	55.42	8.70
		First Gulf Bank	1.07	29.81	0.38
		Dubai Islamic Bank PJSC	0.57	50.71	0.32
		Abu Dhabi Commercial Bank	1.22	50.42	0.68
		National Bank of Abu Dhabi	1.28	40.15	0.58
		Emaar Properties PJSC	4.18	52.55	2.44
		Arabtec Holding PJSC	1.26	226.83	2.06
		Aldar Properties PJSC	1.64	62.58	1.10
	Dana Gas Co. PJS		0.44	-7.69	-0.05
		Dubai Financial Market	0.94	75.14	0.74
		DP World Limited	1.71	23.93	0.47
Pacific Rim		2.64	10.18	0.28	
Total	l		100.00	20.21	20.21

Source: FactSet

frontier managers. As shown in TABLE 2 on the next page, the top two performing stocks in the FM Index in the first half of 2014 were Qatari bank Masraf al Rayan and Dubai construction contractor Arabtec Holding, which each returned 118% and 226%, respectively. Indeed, together with Emirati developer Emaar Properties (+52%), these three stocks alone contributed a whopping 700 bps of the 800 bps spread between the FM Index and the top quartile of the frontier peer group for the first half of 2014. Several other top performing stocks in UAE and Qatar were also thinly held by foreigners, which would explain most of the rest of the ahistorical performance of the FM Index. Below, we briefly discuss the principal dynamics that drove the performance of the three stocks referenced herein.

QATARI BANK, MASRAF AL-RAYAN is an \$11bn company, but who only had 0.16% of their shares held by 6 different foreign active managers at the start of 2014 (see TABLE 3 on next page). Almost 90% of their free float was held by local individuals, who were the ultimate winners as index funds and other foreign investors moved into the stock early this summer. Of the listed Qatari stocks also in the FM Index, Masraf al-Rayan has the highest exposure to real estate. Since the Qatari market has limited exposure to listed builders or property developers (unlike the UAE, which has several), Masraf al-Rayan may be the closest to a cyclical play on recovering property prices that the market can offer to local traders.

UAE BUILDER, ARABTEC was also very thinly held by foreigners at the start of 2014. Arabtec, the contractor behind the Burj Khalifa (the tallest man-made structure on earth), was only 0.24% held by 10 different foreign active managers<sup>7</sup> (see TABLE 4 on next page) at the end of 2013. But Arabtec had other activities surrounding its meteoric rise. Arabtec was a very popular stock before the financial crisis and the bust in the Dubai building market in 2008, after which the stock lost 92% of its previous value. Like the Dubai market in general, Arabtec never recovered to its previous heights. In early 2013, Arabtec appointed a new CEO with a strong track record of securing high profile construction contracts who promptly set about raising expectations. In early 2014, the CEO began to very aggressively purchase Arabtec shares, which set off a frenzy in the local market where mostly locals, often buying on margin, drove the price from 15-20x P/E to 60x next year's estimated earnings. This peak valuation happened to coincide with the upgrade of the UAE from frontier to emerging status, which also brought passive and some active managers into the company who collectively purchased an additional 1% of the company, mostly at peak valuation. In mid-June, just after the MSCI upgrade was effected, the CEO had a falling out with the largest shareholder and he was fired, setting off a panic and a 61% fall in price during the month.

In contrast to Masraf al-Rayan and Arabtec, EMAAR, the

<sup>7</sup> Note that Vanguard's emerging market ETF uses the FTSE index, which included the UAE, but not Qatar, prior to the MSCI's upgrade of both markets.

TABLE 3 Institutional & Insider Ownership: Masraf al-Rayan As of 12/31/2013

Investor Percent Ownership Type Qatar Holding LLC Qatari Subsidiary 11.8933 Government of Qatar Qatari Government 10.0000 **Qatar Foundation** Qatari Government 3.5733 AlThani Hamad Bin Qatari Royal Family 1.3067 Abdulla Bin Khalifa Ezdan Holding Group Qatari Public Company 1.6498 Qatar Investment & Qatari Private Company 2.2672 **Projects Development** Holding Co. WLL Brooq Trading Co. Qatari Private Company 1.8600 Qatar National Fund 8 Qatari Private Company 1.4333 Qatari Investors General Retirement & Qatari Pension Fund 2.2153 (36.9% share) Pension Authority of Qatar Al Abdulla Hussain Ali Qatari Individual 0.2533 Abdulrahman Taher Abdullah Ahmed Qatari Individual 0.0533 Mohamed Al Malki Abdullah Ahmed Oatari Individual 0.0268 Al Sulaiti Jassim Saif Qatari Individual 0.0133 Ahmad Al Hamadi Faisal Qatari Individual 0.0067 Abdulwahed Qatari Individual Al KhaterTurki Bin 0.0052 Mohamed Khalid Qatar Insurance Co. SAQ Qatari Asset Manager 0.3322 (Investment Management) Qatar Insurance Co. SAQ Qatari Asset Manager 0.3322 (Investment Management) Parametric Portfolio 0.2638 Index Associates LLC Index Providers (36.9% share) BlackRock Fund Advisors Index 0.1701 **Eurizon Capital SA** Index 0.0169 Van Eck Associates Corp. Index 0.0083 BlackRock Advisors (UK) Index 0.0070 Ltd. JPMorgan Asset Foreign Asset Manager 0.1126 Management (UK) Ltd. Foreign Asset Managers Robeco Institutional Asset Foreign Asset Manager 0.0290 Management BV (0.16% share) Deka Investment GmbH Foreign Asset Manager 0.0096 Seven Investment Foreign Asset Manager 0.0077 Management LLP Mellon Capital Foreign Asset Manager 0.0048 Management Corp. LSV Asset Management Foreign Asset Manager 0.0024 Eurobank Asset Foreign Asset Manager 0.0003 Management M.F.M.C. SA

TABLE 4 Institutional & Insider Ownership: Arabtec As of 12/31/2013

		Investor Type	Percent Ownership
<b>estors</b> share)	Aabar Investments PJSC	UAE PE Investor	21.570
	Ismaik Hasan Abdulla Mohamed	UAE CEO/Insider	8.030
AE Inv 29.7%	Invest AD Asset Management PJSC	UAE SWF Manager	0.087
ם יי	National Bank of Abu Dhabi-Asset Management Group	UAE Asset Manager	0.032
	The Vanguard Group, Inc.	Index	1.477
	Parametric Portfolio Associates LLC	Index	0.753
ers (	BlackRock Fund Advisors	Index	0.167
vide nare	Eurizon Capital SA	Index	0.015
Index Providers (2.4% share)	Van Eck Associates Corp.	Index	0.010
Inde (2	Legal & General Investment Management Ltd.	Index	0.009
	BlackRock Advisors (UK) Ltd.	Index	0.008
	Geode Capital Management LLC	Index	0.003
	FIM Asset Management Ltd.	Foreign Asset Manager	0.117
	Amundi SA (Investment Management)	Foreign Asset Manager	0.033
	Nomura Asset Management U.K. Ltd.	Foreign Asset Manager	0.022
ers	Deka Investment GmbH	Foreign Asset Manager	0.019
<b>Manag</b> nare)	GAM International Management Ltd.	Foreign Asset Manager	0.018
<b>jn Asset Mar</b> 0.24% share	Federal Bank of Lebanon SAL	Foreign Asset Manager	0.015
oreign Asset Mana; (0.24% share)	Seven Investment Management LLP	Foreign Asset Manager	0.007
	LSV Asset Management	Foreign Asset Manager	0.006
	Charles Schwab Investment Management, Inc.	Foreign Asset Manager	0.003
	Capital Asset Management Co., Ltd.	Foreign Asset Manager	0.001

Source: FactSet

# MARKET INSIGHTS ALERT Arabian Nights: Mysteries on the Frontier

second largest contributor during 2014 was more widely held by foreign active managers. At the end of 2013, almost 6% of the firm was held by 64 different foreign active managers. Yet many of these managers do not even run dedicated frontier strategies, but instead held the security in their global or emerging markets portfolios. Furthermore, Emaar is a 4% weight in the FM Index (see TABLE 2 on page 5). As a result of typical portfolio construction guidelines, only a few of the more concentrated frontier managers could hold an even weight or overweight to this position. Thus, even where a foreign manager might have held the position in their portfolio, they probably did not hold it at a weight greater than or equal to the index.

#### **NEXT FRONTIERS**

The market rallies in UAE and Qatar began in late 2012, triggered by rebounding financial outlooks and recovering real estate markets, long before the MSCI announcement. Indeed, in the immediate weeks following the June 11, 2013 announcement by MSCI, both markets were down. So it cannot be said that this rally was triggered by the MSCI upgrade. Instead, the upgrade happened to coincide with a major rebound in these markets driven mostly by local demand. Together, however, the timing of the rally and the upgrade mean that the historic boom in these two markets is cemented into the FM Index. Generally when there are major market booms such as this, as has happened previously in the UAE while a part of the FM Index, there is either a long period of flat or range bound markets or a subsequent bust. But this time, because the upgrade occurred at what appears to be the market peak, the index will reap all the upside and none of the downside of this volatility.

For the indexers and closet indexers in frontier markets equities during this year, such asymmetric gains by the index are extremely fortuitous (but only if they followed the FM Index and not the "investable" MSCI FM 100 Index followed by the main ETF in the market). Prior to the UAE/Qatar upgrade, several other recent upgrades by MSCI had mixed results for the affected local markets. For example, when Israel was upgraded from emerging to developed market status in 2010, its market actually underperformed the EM Index by almost 500bps from the time of the announcement in June 2009 to the upgrade the following year. In 2009, when Pakistan was added back into the FM Index from stand-alone status, the local market underperformed the FM Index by over 1,000bps from announcement to upgrade. So it cannot be said that such reclassifications necessarily result in outperformance. Instead, what we have witnessed this year in frontier markets is unparalleled in the history of major index/peer-relative returns.

Looking forward, investors seeking to evaluate the recent performance of frontier markets managers, must discount the underperformance of these managers during the first half of 2014 and effectively rebase the performance evaluation standard. For now, the MSCI FM 100 Index, which will not rebalance until November 2014, and thus did not get the benefit of selling at peak valuation, is a viable option. Similarly, an investable benchmark such as the iShares Frontier 100 ETF, could be used instead (which has the added benefit of a more direct fee and implementation cost comparison vis a vis active managers).

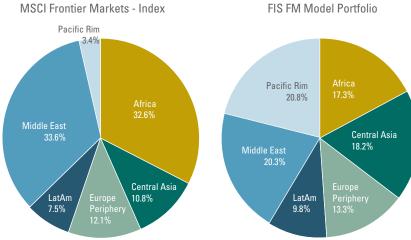
Investors should also be aware of several significant changes in the structures of the emerging and frontier market indices which are likely to occur over the next several years. The most significant is the eventual inclusion of the local China market (A-shares) into the main EM indices. While no fixed timetable has been established, the main index providers have already written extensively on this issue in an attempt to articulate clear plans and set transparent expectations for the broader market. On August 21, the Saudi Capital Market Authority, published the long anticipated draft regulations for the first step in allowing direct foreign participation in that large market. If admitted to the FM Index, the Saudi market would be nearly 60% of the market capitalization of the index, so it is anticipated that it might vault directly to emerging market status. Iran is also a potential player. Though currently prohibited by broad international sanctions, current negotiations are expected to lead to an easing of these prohibitions. Some managers are already developing ties with local brokers to gain an early mover advantage. If Iran were admitted directly to the FM Index, it might constitute as much as 24% of the market capitalization of the index, on par with current leading constituents Kuwait and Nigeria, with concomitant liquidity (and a P/E of approximately 6x). Beyond these three currently excluded markets, other reclassifications may occur at some point. These might include the upgrade of Korea to developed markets by MSCI (FTSE already classifies Korea as a developed market), or the upgrade of Kuwait, Nigeria, or Pakistan to emerging markets.

At FIS, we believe the best approach to such perpetual bureaucratic alterations and idiosyncratic risk is an actively managed multi-manager approach. For full disclosure, our frontier markets model portfolio also did not keep up with the aberratively strong benchmark during the first half of 2014.8 As with most managers, none of our frontier managers held Arabtec or Emaar

<sup>8</sup> FIS Group, Inc. is an independent registered investment adviser. As of January 1, 2005, FIS Group, Inc. became the successor registrant to FIS Funds Management, Inc., its wholly-owned subsidiary. The firm maintains a complete list and description of composites, which is available upon request.

The referenced frontier markets model portfolio does not reflect the performance of any actual account managed by FIS Group and because it is not an actual account, there can be no assurance that an actual client account would have achieved similar rates of return over the same time frame. FIS Group's frontier markets strategy is based on the premise that skillfully selected and constructed emerging manager portfolios can enhance the diversification and alpha of large multiple manager funds. The model portfolio assumes the following strategic allocations in a manager of managers portfolio: 4 underlying managers having weightings of 30%, 20%, 30%, and 20% respectively. Allocations made to an actual account may differ, partially or completely, from the strategies employed in the model portfolio. Returns for the 4 managers included in the model portfolio are actual composite returns as reported in the eVestment Alliance database or as otherwise reported by the managers to FIS Group. The model portfolio assumes a single fully-discretionary account and for comparison purposes is measured against the MSCI Frontier Markets Index.

## CHART 6 Percent of Total Holdings USD, As of 6/30/14



Source: MSCI, FIS Group

and only one manager held Masraf al-Rayan, albeit at a low weight. But our portfolio did handily outperform both the MSCI FM 100 Index and the investable iShares Frontier 100 ETF during the first half of 2014, and would have further finished in the top quintile of its peer group of frontier managers, while providing more geographic diversification vis a vis the FM Index (see CHART 6). We believe that our careful combination of styles, including bottom-up/benchmark agnostic strategies, value and yield biased strategies, and a multifactor quantitative model with a momentum overlay, is an attractive cost-adjusted solution9 in the marketplace to long-term investing in frontier markets equities.

All performance is historical for the specific period(s) stated. Past performance is not indicative of future results.