Introduction to Frontier Markets

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For many market participants frontier markets remain unexplored. These economies are generally in earlier stages of economic and capital markets development relative to the better-known emerging markets. However, frontier markets represent an attractive investment opportunity as their equity markets reach greater breadth and depth.

Frontier markets remain a less correlated, under-researched, and under-owned investment universe with lower levels of liquidity. These markets are less transparent and prone to inefficiencies, which creates a good opportunity for alpha generation via stock selection. Frontier markets also offer greater exposure to domestic demand, favorable economic growth, and attractive demographics. In this paper, we provide an overview of equity investing in frontier markets. We discuss the definition, investment themes, historical performance, and the key challenges for frontier markets investors.



What Are the Frontier Markets?

Frontier markets are a group of developing countries that exhibit characteristics similar to emerging markets but are in earlier stages of macroeconomic and capital markets development. These markets are excluded from the major emerging markets and global equity indices. For many global equity investors, the list of frontier countries can be simply one of the multiple frontier equity indices from well-known providers such as MSCI, or others. However, defining the universe of frontier markets is more nuanced. Benchmark providers use different selection criteria and construction methodologies, which leads to diverse constituents. For example, the FTSE Frontier Index includes 21 countries; whereas the Russell Frontier Index represents a broader opportunity set of 39 countries. In total, 44 countries are included in at least one of the frontier markets indices from MSCI, FTSE, S&P, or Russell, and 15 countries overlap across all four providers (see Appendix). Given the limitations in frontier markets benchmarks, many investors are benchmark agnostic.

It is important to note that there are countries unclassified by global indices but that nonetheless have stock exchanges. According to the World Bank's database, there are 109 countries with listed companies' market cap as of 2012 (latest available).¹ After filtering against countries contained in the International Monetary Fund (IMF) database and those included in the MSCI All Country World Index (ACWI)—a widely used global equity benchmark which includes developed plus emerging markets—we are left with 65 countries that belong to one of the frontier benchmarks or have market-cap data. We think this is a better representation of the frontier markets opportunity set. However for the remainder of this paper, we will mostly rely on data from the MSCI Frontier Markets Index, given that it is the most widely used. In our view, the conclusions illustrated by MSCI Frontier Markets Index data are applicable in the broader frontier markets universe.

Investment Themes

Strong Macro Fundamentals with Favorable Demographics

Many frontier countries have sizable populations with favorable demographics. Since 2007—the inception date for the MSCI Frontier Markets Index—real GDP growth has been much stronger than developed economies (Exhibit 1). Using MSCI country constituents, growth in frontier markets has outpaced emerging markets from 2007–2014. Forecasted growth is also expected to be healthy in frontier markets through 2020.

Frontier equity markets are small given the size of the population and their GDP. As a share of emerging markets, population and GDP in frontier countries represent 22% and 13% respectively. However, development of equity markets in frontier countries lags significantly where market cap is only 2.5% of the total emerging markets market cap.²

Using emerging markets as a parallel, we can illustrate the potential for the deepening of equity markets in the frontier universe. Over the last decade, market capitalization has grown in emerging markets and now represents 15% of their GDP; in frontier markets it stands at only 3% (Exhibit 2). Although the path of development in frontier equity markets can differ from that of emerging markets, we see encouraging trends as some countries are upgraded to emerging status and others become constituents of frontier benchmarks from previously unclassified status.

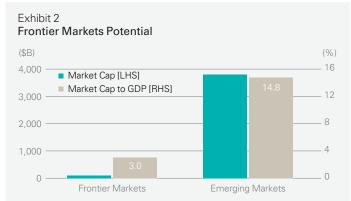
Strong macro fundamentals coupled with low penetration of basic goods and services represent a significant equity investing opportunity in frontier markets. Companies that are well managed and positioned for this domestic-oriented growth can be attractive prospects for investors. In addition, rapid urbanization coupled with low labor costs are making frontier countries attractive destinations for foreign direct investment and manufacturing hubs. China has been the de facto "global factory" for quite some time; however, increasing labor costs in recent years have led many companies to switch their manufacturing facilities to frontier countries such as Vietnam (Exhibit 3) and Bangladesh.

Exhibit 1 Growth in Frontier Markets Is Expected to Continue at a Relatively Fast Pace

Real GDP CAGR, 2007–2020



Real GDP data up to 2014 are from the World Bank (WDI, July 2015), the base year is 2005 and in US dollars. We used real GDP growth rates from the IMF for the 2015–2020 period, and we applied these growth rates to fill missing World Bank data prior to 2014 (only done for 9 out of 109 countries). Taiwan data are all sourced from the IMF since this country is not covered by the World Bank. CAGRs were computed for the sum of MSCI index constituents as of December of each year and for "FM Extended" we used the full list of frontier countries in the Appendix (excluding Egypt, as it is a member of the MSCI EM Index). For the period 2015–2020 we used the constituents as of 30 June 2015. Estimated or forecasted data are not a promise or guarantee of future results and are subject to change. Source: IMF, MSCI, World Bank, Haver Analytics



As of December 2014; GDP data per IMF WEO April 2015

Market cap data are based on the free-float market cap of the MSCI Frontier Markets and MSCI Emerging Markets indices. GDP is the sum of nominal GDP for the countries in each index as of 31 December 2014. Source: IMF, MSCI

Exhibit 3

Wages in China Have Become Less Competitive

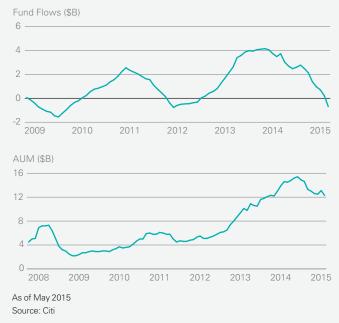


As of May 2015

a 2014 data are preliminary estimates

Source: CEIC, Federal Reserve Board, Haver Analytics, HSBC, International Labour Organization, IMF





So-called "technological leaps" are a very interesting phenomenon in frontier economies. This means that a country can skip expensive infrastructure build-out and simply adopt new technologies. A prime example is fixed-line versus mobile phones: the need for expensive fixed-line wiring investments can be forgone in favor of mobile phone adoption (Kenya is a good example of this). This dynamic can have a positive impact on future economic growth.

Inefficient and Under-Owned Universe with Diversification Benefits

Frontier markets equities remain under-owned and have very limited (or no) analyst coverage. This presents a compelling opportunity for uncovering market inefficiencies. However, equity investing in these markets is not without challenges as we will address in a later section.

Exhibit 5

Frontier, Emerging, and Developed Markets Performance, 2002–2015



| Returns (%) | Annualized | | | |
|-------------|------------|--------|---------|----------------|
| | 3 Year | 5 Year | 10 Year | Since May 2002 |
| EMSC | 7.98 | 5.04 | 9.96 | 12.62 |
| EM | 3.71 | 3.68 | 8.11 | 10.85 |
| FM ex-GCC | 11.66 | 3.08 | 5.25 | 9.53 |
| FM | 12.96 | 7.29 | 0.32 | 9.27 |
| DM | 14.27 | 13.09 | 6.38 | 6.65 |

| etandara Bern | | Ann | | |
|---------------|--------|--------|---------|----------------|
| | 3 Year | 5 Year | 10 Year | Since May 2002 |
| EMSC | 11.62 | 17.81 | 25.24 | 23.70 |
| EM | 12.29 | 17.90 | 23.53 | 22.46 |
| FM ex-GCC | 12.65 | 13.55 | 20.41 | 19.06 |
| FM | 11.23 | 12.01 | 19.48 | 19.17 |
| DM | 8.59 | 13.20 | 15.98 | 15.62 |

As of 30 June 2015

All data are in USD based on monthly returns of MSCI total return net indices. The performance quoted represents past performance. Past performance is not a reliable indicator of future results. The indices above are unmanaged and have no fees. One cannot invest directly in an index. This information is not intended to represent any product or strategy managed by Lazard. Source: MSCI

In a portfolio context, exposure to frontier equities can serve diversification purposes when paired with other asset classes. Correlations to other asset classes are generally low and volatility is not as high as some observers may initially perceive. However, these statistics need to be interpreted with care as the low liquidity of these markets may introduce some bias.

Investor interest in frontier markets has fluctuated meaningfully since 2009, as measured by fund flows. Assets under management have grown but do not represent a meaningful allocation in most global portfolios (Exhibit 4). These results suggest that investors are still wary of committing adequate capital to frontier allocations. However, even emerging markets equity allocations remain low for global investors in spite of the frequency and prominence of discussions of this strategic asset class.³

Performance Characteristics and Valuation

Exhibit 5 (page 3) compares the performance track record of frontier markets versus emerging and developed markets. Notably, we included emerging markets small caps, as these stocks may hold some similarities to frontier equities since most frontier equities are small caps. We also measured the performance of frontier markets exclud-

Exhibit 6

Frontier Markets Are Less Correlated to Other Equity Markets

Correlation of Frontier Markets and Other Equity Universes

| | MSCI EMSC | MSCI EM | MSCI FM | MSCI FM ex-GCC | MSCI World |
|----------------|--------------|------------|------------|-------------------|---------------|
| MSCI EMSC | 1.00 | | | | |
| MSCI EM | 0.96 | 1.00 | | | |
| MSCI FM | 0.60 | 0.59 | 1.00 | | |
| MSCI FM ex-GCC | 0.68 | 0.66 | 0.75 | 1.00 | |
| MSCI World | 0.84 | 0.87 | 0.60 | 0.65 | 1.00 |

For the period May 2002 to June 2015

All data are in USD based on monthly returns of MSCI total return net indices. The performance quoted represents past performance. Past performance is not a reliable indicator of future results. The indices above are unmanaged and have no fees. One cannot invest directly in an index. This information is not intended to represent any product or strategy managed by Lazard.

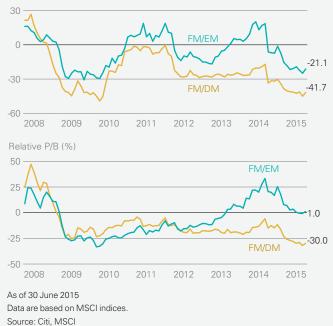
Source: MSCI

Exhibit 7

Frontier Equities Are Relatively Inexpensive Compared to Developed and Emerging Equities

Frontier Valuation Relative to Emerging and Developed Markets

Relative P/E (%)



ing the Gulf Cooperation Council (GCC), given that GCC nations have historically represented a large proportion of the MSCI Frontier Markets Index.

The time period under review spans thirteen years (May 2002 to June 2015). Despite the inception of the MSCI Frontier Markets Index in 2007, backfilled performance data is available to 2002. Over this period, frontier markets lagged emerging markets, but outperformed developed markets. Prior to the global financial crisis, frontier stocks were outpacing their emerging markets peers, but once the crisis hit, the rebound in frontier markets was not as strong. More recently, frontier markets significantly outperformed emerging markets in calendar years 2013 and 2014, but have again lagged since the collapse in the price of oil. Emerging markets small caps were the best performers in our sample, since May 2002. Despite being small companies, the performance pattern of frontier equities was not similar to emerging markets small caps.

It is interesting to note that volatility in frontier markets has been more muted than in emerging markets over the period under review as well as in sub-periods (table in Exhibit 5). In terms of correlation, frontier markets are less correlated to other equity markets and also weakly correlated within their own universe, as noted by the correlation between frontier markets and the ex-GCC subset (Exhibit 6).

The standard deviation and correlation statistics must be interpreted with care. Low liquidity in frontier stocks means that there is less frequent trading (i.e., slower price discovery), which can lead to unchanged pricing for extended periods. This issue can bias risk and correlation statistics downward. But, despite this bias, an economic rationale supports the diversification benefits. Frontier markets remain less integrated to global markets. Therefore, the low level of integration limits capital flows, liquidity, and correlation.

The performance dynamics of recent years have caused frontier equities to look cheap relative to other equity universes. The price-toearnings (P/E) ratio of frontier markets is close to its largest discount relative to emerging and developed markets that has been observed since January 2008. In terms of price-to-book (P/B) ratio, frontier markets appear very cheap in contrast to developed equities and are in line with emerging markets (Exhibit 7). However, if we look at earnings momentum, frontier markets' forward earnings per share (EPS) are much better than emerging markets and resemble those of developed markets, partially explaining the widening of the valuation gap versus emerging markets (Exhibit 8, page 5).

Evolution of Countries and Sectors

The group of frontier markets included in benchmarks changes over time. Countries are upgraded to emerging indices or in other instances off-benchmark markets become part of frontier indices. To illustrate this using the MSCI Frontier Markets Index, of the 19 original constituents in 2007, 17 are still part of the index as of June 2015. The current index is composed of 24 countries and 124 companies, and if one considers the broader Investable Markets Index (IMI), the company universe almost doubles. Since 2007, Argentina, Jordan, Pakistan, and Morocco have been downgraded from emerging to frontier. Qatar and United Arab Emirates have been recently upgraded to emerging markets and Pakistan could go "full circle" pending a

Exhibit 8 Earnings Momentum in Frontier Markets Is Favorable



possible upgrade to emerging markets in 2016. Exhibit 9 details the largest five countries at the index's inception and as of June 2015. This highlights a high degree of concentration (especially in GCC markets), as in 2007 the largest five countries represented 78% of the index which came down to 63% in 2015.

If Pakistan follows the recent upgrade of the United Arab Emirates and Qatar into emerging markets, liquidity of the MSCI Frontier Markets Index could get further reduced. However, more countries and companies would most likely get added to the index, as the other frontier countries deepen their equity markets. A notable expectation for the growth in the investable country universe is the inclusion of Saudi Arabia. Prior to 15 June 2015 the Saudi Arabian stock exchange was not open to foreign investors. The Saudi Arabian market is now being considered for inclusion in global benchmarks. However, given the size and characteristics of the market, Saudi Arabia may bypass any frontier indices and get directly included as part of emerging markets.

Exhibit 9 There Is a High Degree of Concentration in the MSCI Frontier Markets Index

Largest Five Country Weights in the MSCI Frontier Markets Index

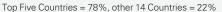


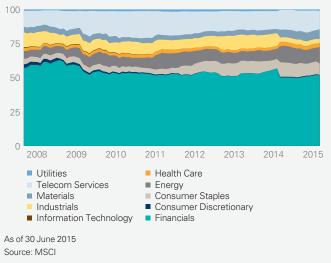






Exhibit 10 The Financials Sector Dominates the MSCI Frontier Markets Index

Historical Sector Weights (%)



In terms of sectors, the MSCI Frontier Markets Index has been and is still dominated by the financials sector (Exhibit 10). This is to be expected given that the financial industry is typically the first to develop in an economy. A functioning financial infrastructure is required for adequate development of other industries.

Challenges in Frontier Markets Investing

Many of the challenges in frontier markets investing—quality/flow of information, governance, and geopolitics—are also common in emerging markets investing. These issues are not necessarily amplified in all frontier markets. For example, companies in Pakistan and Lebanon have very strong financial disclosure compared to some emerging markets companies. Overall, we believe the riskiness of frontier markets is, in many aspects, reasonably comparable to the more popular emerging markets.

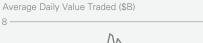
The key challenges of frontier markets investing are high macroeconomic risk profiles and low liquidity. Macroeconomic risks may arise from a less sophisticated policy framework. In terms of liquidity, average daily value traded (ADVT) is generally very low throughout frontier markets. Exhibit 11 compares ADVT with a sample of emerging markets to illustrate this point. This remains a key roadblock for further flows from global investors and is a "chicken and egg" problem in that low valuations are often coupled with low liquidity.

Conclusion

Roughly twenty years ago, emerging markets were undergoing similar developments that frontier markets are undergoing today. Frontier markets are generally under-owned and less researched than their emerging markets peers. However, many companies in frontier economies are well positioned to benefit from the next wave of economic development and these countries continue to deepen their capital markets. Frontier markets also offer greater exposure to domestic demand and some of the fastest growing economies with attractive demographics. For investors, global benchmarks represent the starting point for understanding the frontier world. However, we have noted the limitation arising from differences among benchmark providers as to what is the definitive list of frontier markets. As such, it may be sensible to pursue an index-agnostic approach. In addition, many unclassified countries represent a source for future investment opportunities.

Liquidity remains a key challenge for investors in frontier stocks. The low liquidity of frontier stock exchanges remains an impediment for larger global flows. On the other hand, many other risks in frontier market equity investments are reasonably similar to those of emerging markets. In the frontier markets universe, indices lend themselves to significant country and sector concentration—given the large weight in few countries and sectors—highlighting better opportunities for active management. In addition, most of the equity ownership of frontier markets is controlled by local investors, which is likely what leads to low correlation to emerging and developed markets. In our view, frontier markets may offer an attractive opportunity for investors looking for an asset class with substantial growth potential, as well as one that is less correlated and less efficient compared to traditional emerging and developed markets.

Exhibit 11 Low Liquidity in Frontier Markets





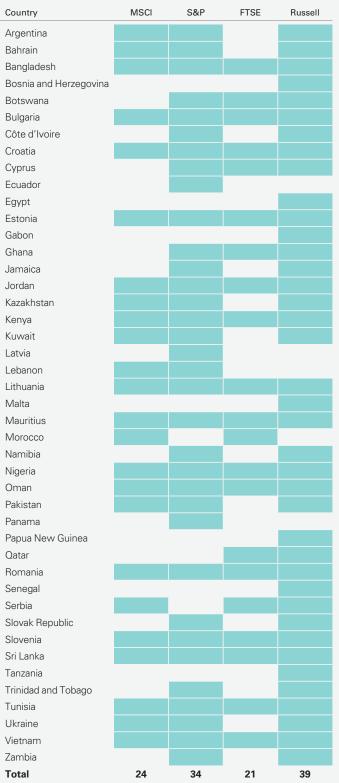
2008 2009 2010 2011 2012 2013 2014 2015

As of 30 June 2015

Big frontier/Big GCC = Kuwait, Qatar, Abu Dhabi, Dubai, Vietnam, Pakistan; Small frontier = Nigeria, Oman, Bahrain, Jordan, Morocco, Tunisia, Sri Lanka, Argentina, Romania, Bulgaria, Croatia, Estonia, Lithuania. Source: Bloomberg, Citi

Appendix

Classification of Frontier Countries



Unclassified or Off-Benchmark Countries but with Market Cap from the World Bank

| Armenia | Georgia | Nepal |
|---------------|-----------------|--------------|
| Barbados | Guyana | Paraguay |
| Bolivia | Iran | Saudi Arabia |
| Costa Rica | Kyrgyz Republic | Uganda |
| El Salvador | Malawi | Uruguay |
| Fiji | Mongolia | Venezuela |
| FYR Macedonia | Montenegro | Zimbabwe |
| Summary | | |
| Frontier | 44 | |
| Off Benchmark | 21 | |

65

As of 30 June 2015 (Russell data as of March 2015)

Total

Source: FTSE, IMF, MSCI, Russell, Standard & Poor's, World Bank

- 1 The idea to use this data point was described in: Speidell, Lawrence. "Frontier Market Equity Investing: Finding the Winners of the Future." CFA Institute Research Foundation, 2011.
- 2 As of December 2014. Source: IMF, MSCI
- 3 As of December 2014 and based on Morningstar mutual fund data, emerging markets equity mutual fund assets were only 4% of the total equity mutual fund assets. To calculate this, we used Diversified Emerging Markets and Latin American Equity as share of US and International equity categories as defined by Morningstar.

Important Information

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