

Adapt and Thrive: Evolution and Innovation in Emerging Markets

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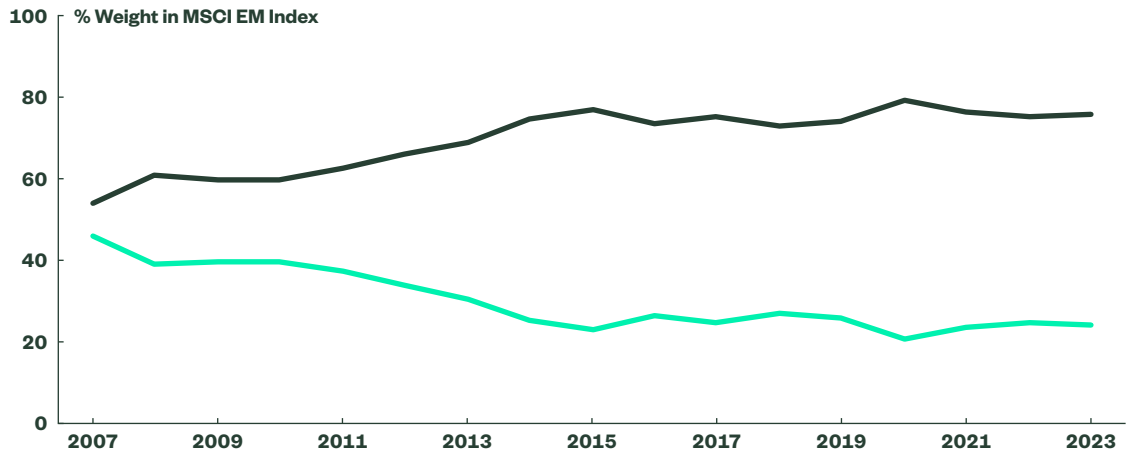
The ongoing evolution of emerging markets, underpinned by exciting technological change, continues to create opportunity. We believe that careful innovation can unlock opportunities, particularly in the small-cap space. In this article, we look at the themes driving growth in emerging markets, and share how adapting our models accordingly has led to positive outcomes for investors.

When it comes to the emerging market (EM) asset class, are perceptions failing to keep pace with reality? Many of the preconceived notions towards EM are rooted in the same traditional drivers that dominate developed markets (eg., the Federal Reserve, the US dollar, commodities, and global economic cycles). While these are all important factors for emerging markets, there's much more to the EM story.

In Figure 1, we can see just how far emerging markets have moved from their early days in terms of sectors. This is just one example of the foundational shifts that have taken place: the asset class has also evolved significantly by region, market-cap, access, and liquidity, as economic growth has translated into increased breadth, depth, and maturity in the EM capital markets.

Figure 1
**Not Your Parent's
 Asset Class**

■ Consumption Sectors
 ■ Production Sectors



Source: MSCI, SSGA ISR team, annual data, as of 12/31/2023.

We believe this reshaping of the EM world is still in its early stages and represents a potential period of high growth for the asset class, primarily through a few representative themes — Advancements in Health Care and Green Energy. (Artificial intelligence may well become the third one, but this is still a secondary play within emerging markets as of yet.) In this article, we make our case for why investors should adapt their perceptions — or risk missing out on the growth potential to be found in the most innovative areas of this asset class.

Let's take a look at what is driving these themes and how we are adapting our models accordingly.

Health Care Advancements

Until recently, equity investments in the EM health care sector were limited to basic medical supplies and generic pharmaceuticals that simply capitalized on expiring patents in developed markets. The devastating impact of COVID-19 across the developing countries clarified in stark terms the shortcomings of the health care infrastructure in these markets, and forced governments to reexamine how to ensure basic care for their citizens. While this has taken various forms across the globe, one notable impact on the EM universe has been a rapid rise in advanced medical services, biotechnology and life science tools, and private sector hospitals.

South Korea serves as a natural epicenter for biotechnology advancement in the emerging world. Coming into the COVID-19 crisis the country was equipped with competitive manufacturing abilities that allowed it to respond to the pandemic swiftly with effective test-kit and vaccine distribution. The Korean government intends to capitalize on this success by prioritizing a plan with the stated goal of becoming the sixth largest biotech hub in the world, focused on job creation, development of blockbuster medicine advancements for export, and increasing clinical trial capacity. With this level of governmental support, the Korean biotech industry has outperformed the broader Korean index by over 30% in the 2-year period ending June 30, 2024, and the number of biotech stocks in the MSCI Korea small cap index has increased by 23%. (Source: FactSet; MSCI)

The Saudi Arabian equity market, on the other hand, is not one that has traditionally been associated with advancements in health care, as it has been anchored by financials and consumer stocks. As part of its Vision 2030 initiative, however, the government has committed significant resources to health care reform through the establishment of high-quality medical institutions that provide modern technology and cutting-edge medical services. These medical cities are a cornerstone to diversifying the Saudi economy away from its reliance on oil, and becoming a key player in the growing medical tourism business across the Middle East. Looking ahead, investors will need to adapt to the shifting tides within the Saudi equity market and increased importance of diversified, new-economy listings.

We believe an aging population, rising incomes, urbanization, and other demographic trends across EM portend further growth and technological evolution for the sector.

Green Energy

Emerging markets have received criticism as carbon dioxide emitters — rightfully so, as China, India, Brazil, and Indonesia are all among the top 10 emitters worldwide. By virtue of their geographic locations and limited economic resources, however, the emerging world is particularly vulnerable to the effects of climate change. Devastating typhoons, flooding, droughts, and other climate-related hazards have forced the governments of emerging countries to accelerate the urgency with which they pass green energy reforms to address environmental challenges. In doing so, many of these countries have discovered that they possess some unique advantages that have enabled them to position themselves at the forefront of green energy initiatives.

Some of the most notable implications across the equity space are:

China

With the Chinese economy stumbling, Chinese authorities have announced that they are pivoting away from old-economy drivers (think clothing, appliances, etc.) to a new trio of emerging technologies — solar panels, electric cars, and lithium batteries. The Chinese have significant advantages in producing solar panels relative to US and European competitors, including lower costs for electricity, land acquisition, and wages, as well as lower interest rates from Chinese state-owned enterprises. China is now the world's largest producer of solar panels by a wide margin, and within the EM small-cap universe we are seeing an influx of manufacturers of both solar panels and polysilicon — the primary raw material used for panels.

China is also now responsible for more than 50% of the electric vehicles produced in the world, and Chinese manufacturers have been much more successful than US and European competitors in growing the EV concept culturally. EV manufacturers in China have successfully capitalized on lower costs, increased scale, generous government subsidies, and perhaps most importantly, preferential access to EV batteries. Interestingly, whereas western competitors have emphasized 'performance' metrics such as handling and drive, Chinese EV manufacturers see their advantage on curb appeal — sleek styling, technology, and safety being some examples. While we are still in the early days of the EV revolution, China does appear poised to expand upon their leadership in the sector. They have been far more successful in aggressively and efficiently addressing the overhanging concerns regarding EVs (cost, charging infrastructure, etc.) than their US peers. Within the EM Small cap universe, the EV theme has been persistent with increased direct exposure via manufacturers, but also indirectly through the inclusion of lithium battery producers..

India

India's green reform agenda is a bit more broad-based in that the government has set specific targets for reduction of emissions intensity and fossil fuel usage by 2030. From an equity investment perspective, there have been trickle-down impacts from this mandate across a number of sectors. Within the utility sector, where the country seeks to achieve 40% of electrical power from non-fossil fuel sources by 2030, we have seen growth in companies that generate power from wind turbines and solar power. While more traditional utility providers remain a large part of the Indian equity market index, they too will be forced to adapt in the coming years in order for the country to achieve its targets.

One interesting offshoot of India's aggressive campaign is the introduction of specialized finance companies that focus on extending financial assistance for energy conservation projects. India is the third-largest producer and second-largest consumer of energy globally. With the government focused on increasing renewable capacity, lenders of capital to fund projects will be necessary and we see this as a potential source of future growth across the Indian equity landscape. Simply put, the objectives of the Indian reform agenda are so wide-ranging that investors need to incorporate these factors into their decision-making process.

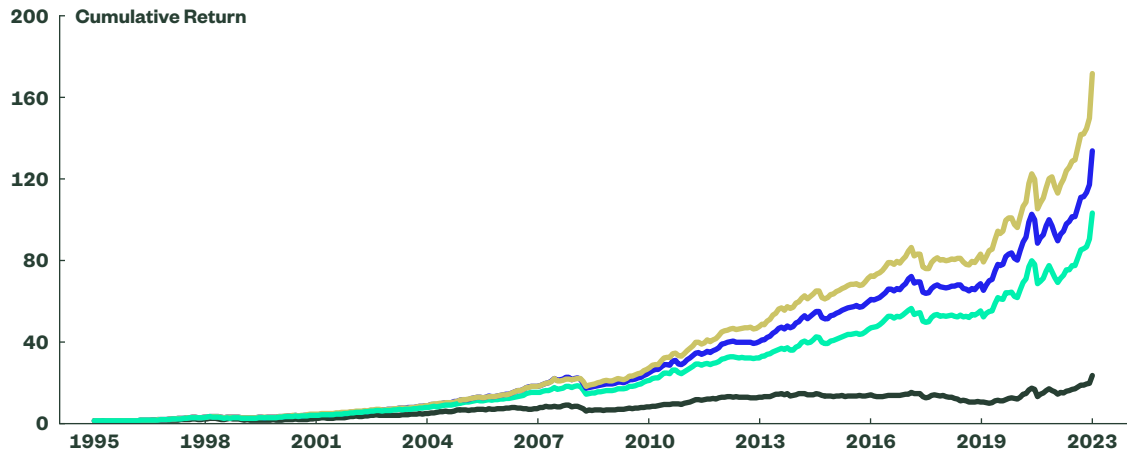
Innovation: Easy to Say, Hard to Do, Hardest to Prove

Innovation is critical in most industries, but it's paramount in faster-growing, less-mature segments of the economy where market share is up for grabs. Valuing or assessing a firm's innovation intensity can be challenging; a common method is analyzing R&D expenditures relative to earnings or cash flow metrics. Although this is a great way to contextualize R&D spend, it does have limitations, and in many cases, is most likely already priced in. One of the key advantages of a systematic investment process is our ability to capture and extract complex data elements that would otherwise be too cumbersome. A great example of this is our use of patent data to get unique insights into a firm's innovation intensity. By analyzing not only the quantity of patents but also the citations' strength — the number of times other patents cite the reference patent — we are able to generate a momentum signal that has exhibited positive predictability of equity prices and demonstrated lower correlation to traditional momentum signals.

Innovation is not only incorporated in our assessment of companies, but is also an integral part of our team's DNA. We understand that in order for our model and process to continue to deliver desired outcomes for our clients we must constantly innovate, improve and adapt. The clearest example of the power of being adaptable can be seen in Figure 2 below. The line at the bottom represents the return associated with the set of generic alpha factors (referred to as academic factors). These worked reasonably well until the Global Financial Crisis, but never adapted to the new world that grew out of that time. Our alpha model certainly evolved through the years prior to 2017, performing well over this period and subsequently, but the changes we have introduced post-2017 have added significantly to cumulative returns. Portfolio managers and researchers working together to drive careful and intentional innovation - this is what our Systematic Equity team does.

Figure 2
Our Innovation Has Helped Returns: The Proof Statement

- Traditional Academic Factors
- SEA Alpha, Pre-2017
- SEA Core Factors
- SEA Total Alpha



Source: State Street Global Advisors Systematic Equity-Active research, as of 08-08-2024. Shows the cumulative performance of the stock universe, broken into quintiles (top quintile minus bottom quintile — equal weighted).

Market Thoughts and Current Positioning

There is a pickup in optimism surrounding emerging markets. The global rate cycle appears to be shifting, with several central banks poised to cut rates. The dollar started to lose just a bit of its luster over the end of the summer, and earnings expectations for 2024 have been holding up well. The asset class appears to be steadying and, from what we can see, investors are starting to have another look at EM. India remains one of the most consensus overweights, but investors will have to deal with some of the new tax changes on capital gains. This is important as India has now eclipsed China as the largest market (as defined by the full MSCI EM IMI index — which encompasses both large and small caps). Index clients may see some higher levels of negative performance associated with this change. Our preferred trades are listed below.

Country	Sector/Industry	Factor
Emerging Markets Large Cap		
China	Communication Services/Interactive Media	Pockets of Quality, some names extremely attractive on Sentiment, others on Value
	Industrials/Machinery/Electrical Components	Good Value, attractive Sentiment, selective on Quality
	Materials/Copper/Chemicals	Copper strong across the board, Chemicals have great Value
India	Energy	Excellent Value, Sentiment, and Quality across all sub industries
	Utilities/Power Producers/Gas	Strong Sentiment and Quality, attractively priced
	Health Care/Pharmaceuticals	Good Value, attractive Sentiment, focus on Quality
Taiwan	Consumer Discretionary	Attractive finds, if selective
	Real Estate	Positive relative scores across all dimensions
	IT/Semiconductors	Excellent Value, great Sentiment, and strong Quality
Emerging Markets Small Cap		
Korea	Financials	Great Value, good Sentiment, vigilant on Quality
	Industrials/Electrical Components	Remain selective, factor scores mixed, Sentiment typically positive, careful of trade off between Value and Quality
	Consumer Discretionary	Excellent Value, focus on Quality and Sentiment
India	Materials/Fertilizer	Strong Sentiment, good Quality, becoming more expensive
	Energy	Good Value, excellent Sentiment, attention on Quality
	Health Care/Pharmaceuticals	Excellent Sentiment, average Value, focus on Quality
Taiwan	Real Estate	Some great bargains with high Quality and average Sentiment
	IT/Semiconductors	Exceptional Value, great Sentiment and strong Quality
	Financials	Great Value, positive Sentiment, key is Quality

The Bottom Line

Within emerging markets, the traditional drivers are still valid — but they don't tell the whole story.

The evolution of emerging markets has created some of the most dynamic innovation anywhere in the world. Adapting to this new reality can help alpha stay robust and returns consistently repeatable. For the Systematic Equity — Active team, investing in innovation is part of our DNA.

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* Pensions & Investments Research Center, as of December 31, 2023.

[†] This figure is presented as of June 30, 2024 and includes ETF AUM of \$1,393.92 billion USD of which approximately \$69.35 billion USD is in gold assets with respect to SPDR products for which State Street Global Advisors Funds Distributors, LLC (SSGA FD) acts solely as the marketing agent. SSGA FD and State Street Global Advisors are affiliated. Please note all AUM is unaudited.

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Marketing communication

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This document provides summary information regarding the Strategy. This document should be read in conjunction with the Strategy's Disclosure Document, which is available from SSGA. The Strategy Disclosure Document contains important information about the Strategy, including a description of a number of risks.

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