

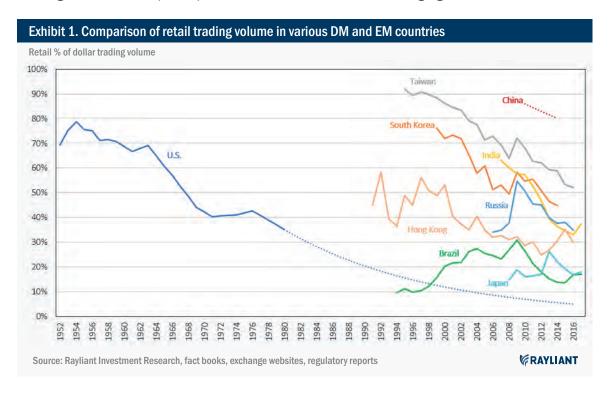
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Sourcing Alpha in Emerging Markets

Emerging markets equities have provided investors with strong, albeit sometimes volatile performance. Given that emerging and developed markets show only moderate correlation, they've also provided investors with welcome portfolio diversification. Because they are dominated by inefficient pricing and heavy retail trading, we argue that emerging markets present an opportunity to extract not only the return associated with market *beta*, but also substantial *alpha* through effectively directed portfolio management specific to the region.

Emerging markets participants: A high proportion of individual traders

Looking out across the emerging markets, we find they share an interesting feature when compared to developed markets in terms of the makeup of the average market participant: Emerging markets tend to have a much higher percentage of individual traders. In most developed markets, institutional investors dominate trading. But in China, for example, upward of 80% of daily trades are conducted by individual investors. As the figure below illustrates, this high level of retail participation is a common feature of emerging markets.



The story of alpha generation in emerging markets is, in part, a tale of heavy retail trading. The second critical piece in the puzzle is investor behavior.

Emerging markets alpha: Understanding retail investor behavior

Of course, one doesn't expect retail investors to spend as much time as professional investors delving into companies' accounting data, "kicking the tires" on visits to companies or to their customers and suppliers, nor engaging in the other research activities for which mutual funds, hedge funds, and investment banks pay big bucks to star analysts. Moreover, it's well known that retail investors exhibit a number of behavioral quirks that might affect their investing decisions.

From country to country, peeking into the portfolios of these individual "retail" traders, we find they do share some common traits. They pay too much for growth stories, piling into sexy, fashionable stocks regardless of valuations. They flock to buy small companies rather than big firms. They go for shares with low prices and high volatility—the stock market equivalent of a scratch-off lottery ticket, cheap to buy with a small chance of making a big payoff.

Stock characteristic	Effect on likelihood that retail investors hold the stock	
	China	South Korea
Firm size	-	-
Stock price	-	-
Profitability	-	-
Book-to-market	-	n/a
Beta	+	+
Volatility	+	+

Of course, these behaviors are as true of individual investors in developed markets as they are of emerging markets retail traders. The difference is simply that in emerging markets, retail trading volume is so much larger. When you trade in EM, chances are your counterparty is an individual investor rather than a knowledgeable institution.

Taken together, the heavy retail trading and predictable behaviors create persistent mispricings that thoughtful and disciplined investors can harvest. But as we'll see, the strategy one uses to extract this alpha can make a big difference.



Standardizing EM accounting data

To accurately apply factor strategies across regions using different accounting rules, financial reports must be carefully processed according to local reporting standards, then adjusted to make them comparable with reports from other regions. In China, for example, the seemingly straightforward accounting entry *Property, Plant, and Equipment* (PPE) actually excludes items that would fall into that category under U.S. GAAP—things like *Construction in Progress* (which could be important for rapidly expanding businesses) and *Oil & Gas Assets* (a major account for energy companies). Without the right inputs, even the best factor strategies won't lead to the best investing outcomes.

Multi-factor portfolio construction in EM

Even in developed markets, individual factors sometimes experience long periods of underperformance before delivering their historical premium. Using multiple factors—along dimensions like valuation, accounting quality, default risk, and momentum—it's possible to lessen the dependence of a portfolio on one or a few factors being in favor at any one point in time. This is particularly relevant in emerging markets, where investors can irrationally push stocks in the wrong direction for quite some time before the market corrects and intelligent factor exposures reap the benefits. Employing multiple factors in one portfolio allows an investor to harvest the alpha associated with inefficient retail trading, while offering a much smoother ride than a single-factor approach.

One size fits all? Not in emerging markets

Although emerging markets are often viewed as comprising a single group of stocks, much as we lump together U.S. small-caps when talking about asset allocation, EM countries differ in everything from regulations to state ownership, accounting standards to market structure, and many other features that affect investors. As a result, it's imperative to uncover those details that can lead to strong country-specific effects on investors' portfolios. Sometimes this results in region-specific adjustments to portfolio construction. In other cases, local insights aid in the development of novel investment factors tailored to application in specific markets.

Consider *share pledging*, for example, a loan arrangement rather common in East Asian countries. When executives offer to pledge their personal shareholdings as collateral for loans, our first reaction might be to assume they're effectively cashing out of an overpriced stock—a decidedly negative signal. In the U.S., where large share pledges are relatively rare, that could very well be the case. In China, on the other hand, where private listed firms have trouble accessing bank loans, a share pledge by company insiders indicates confidence on the part of the firm's managers and the bank, such that large share pledges by Chinese firms are actually a *positive* sign for future stock returns. Applying share pledging as an investment signal in China turns out to be a compelling way to distinguish between good companies and bad ones in a way that's highly specific to the country's unique lending practices. Rayliant takes a similar *localized* approach to factor investing across its allocation to EM stocks.

Emerging markets alpha: Some concluding thoughts

As we've seen, heavy retail trading and predictable behavioral bias creates an alpha opportunity in emerging markets stocks. But recognizing this bias is only the first step to building a robust EM portfolio. A critical first step is to identify cross-country differences in financial data and to prepare inputs to one's quantitative models with such differences in mind. In terms of portfolio construction, while there is a strong case to be made for general adoption of a multi-factor approach, the benefits are particularly strong in emerging markets, where inefficiencies abound, but mispricings related to any one factor might well persist over relatively protracted horizons. Finally, and perhaps most importantly, we believe it's important to recognize that the countries making up EM are an extremely diverse set, with features like accounting rules and market regulations that might lead to country-specific effects on factor performance—a risk when ignored, but an opportunity to those who recognize these differences and position themselves to capitalize on them.

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