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Special Report: Emerging Markets: Adding Value Through a Disciplined Strategy

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According to a recent Bloomberg report, emerging markets are anticipated to heat up in a big way this year, building on the \$14 trillion they've made for investors over the past 10 years. The report was based on a survey of global investors, strategists, and traders, who conveyed their expectation that emerging markets will outperform developed markets, with Asia in particular looking promising. The total wealth in emerging-market stocks and bonds now exceeds \$27 trillion, bigger than the economies of the U.S. and Germany combined.

Emerging market equities are always on the radar of alpha seekers – but they represent a highly nuanced area for allocators, with countless variables including sometimes less than pristine data to inform decisions. Are quantitative strategies especially effective at tackling the challenge of emerging markets? That may very well be the case, as this report reveals.

1: How Quant Nails the EM Sweet Spot

Investing in emerging markets (EMs) is by definition a global endeavor, but as the old joke goes, it's a small world but you wouldn't want to have to paint it. In a fast-moving investment universe where opportunities ebb and flow on a daily basis, an optimized strategy for tapping into the potential of emerging markets can be elusive. But what if you could cover the world every day? If you could look at detailed analysis of EM equities every day – and seize the advantage when it's there and before it's too late? I spoke with Arup Datta, Head of Global Quantitative Equity at [Mackenzie Investments](#), about how quantitative strategies can help draw a bead on the elusive optimization of EM strategies.

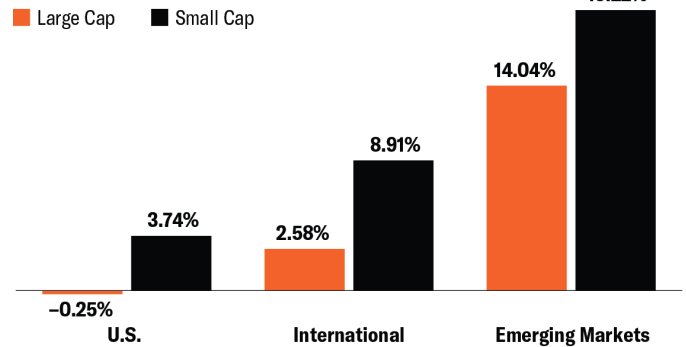
You like to say that emerging markets in particular are a sweet spot for quant strategies. Why is that?

Arup Datta: First, it's a less efficient market than the rest of the world, and there's also less competition than there is in U.S. large cap. Both of those facts should lead to more alpha for either fundamental investors or quants. However, we believe it's the breadth of names in emerging markets that plays into the strengths of quantitative strategies.

For example, in our investible emerging market universe we cover about 6,000 stocks that we rank on a daily basis. It's very hard for a fundamental manager to do that – I don't know of any fundamental manager that can. Breadth is your friend, and you can leverage computing power and your models to cover more stocks pretty easily. I believe that's why, historically speaking, quants have delivered good alpha in emerging markets.

Quantitative alpha efficacy

Annualized inter-quintile return spreads



Provided for illustrative purposes only. Returns shown represent past performance, are not a guarantee of future performance and are not indicative of any specific investment. Represents inter-quintile return spreads using 50/50 blend of Value and Momentum from September 2002 – December 2019.

Source: Mackenzie Global Quantitative Equity boutique proprietary research. Data source: Bloomberg

Do fundamental managers really struggle to match that breadth?

Datta: Even the most seasoned fundamental equity analyst can only cover 30 or 40 stocks. If you do the math, if you have to cover 6,000 emerging markets stocks regularly, and let's say that 40 stocks are the most one analyst can cover, you need 150 fundamental analysts to cover that many stocks. Does any firm have that many fundamental analysts covering emerging markets?

Is risk management part of that EMs sweet spot for quants, too?

Datta: Everyone knows that emerging markets are more volatile stocks than, say, U.S. large cap. Risk models are relevant everywhere, but become even more relevant in an area like EMs where the stocks you trade move around more than in other areas. A good quant manager builds its own proprietary risk model – we don't just rely on standard providers. We build our own risk model that is attuned to our process and can better determine the risk in our portfolios. It's much more finely honed in terms of how we position size a name. Once we like a name, we use our algorithm to determine how much we can buy of that name.

For example, we have simple rules such as if you're a biotech name, we target half the weight of any single name as elsewhere because biotechs are much more volatile, and it's an all-or-nothing story when it comes to trial phases. So, in an area like that we diversify our bets by buying more names.

Similarly, on riskier names – typically small cap names – and high beta or more volatile names, we take smaller positions than we do on Alibaba or Tencent, for example, because for various reasons there's less liquidity in those names. So, the focus in our risk model is essentially that for every name our position-sizing algorithm determines how much we should buy. That's critical in emerging markets, where names are riskier than in developed markets.



“Fundamental analysts can sometimes struggle with when to sell, because they don’t have a disciplined number telling them when to sell. Now, selling a winner is often easier – they’ve made the money, they sell it. But fundamental analysts and portfolio managers can struggle on when to sell losers – and sometimes that is because they are biased toward management.”

– Arup Datta, Head of Global Quantitative Equity at Mackenzie Investments

You don’t meet with company management as part of your strategy. Is that a strength compared to a fundamental manager?

Datta: It’s just a different approach and philosophy. Quants are disciplined, and we try to quantify everything. To us, you can tell the quality of management story by looking at financial statements – is return on equity improving? Is return on invested capital improving? We’re not interested in a judgmental, subjective lens.

The quantitative process is about ranking everything from highest to lowest in every sector, and then trying to buy the highest names and sell names that are going down in our rankings. It’s a very disciplined process that we do every day. Fundamental analysts can sometimes struggle with when to sell, because they don’t have a disciplined number telling them when to sell. Now, selling a winner is often easier – they’ve made the money, they sell it. But fundamental analysts and portfolio managers can struggle on when to sell losers – and sometimes that is because they are biased toward management. In that sense, not meeting management can make you more objective in your decisionmaking.

In many ways it sounds as if your strategy is optimized to seize the moment when it presents itself.

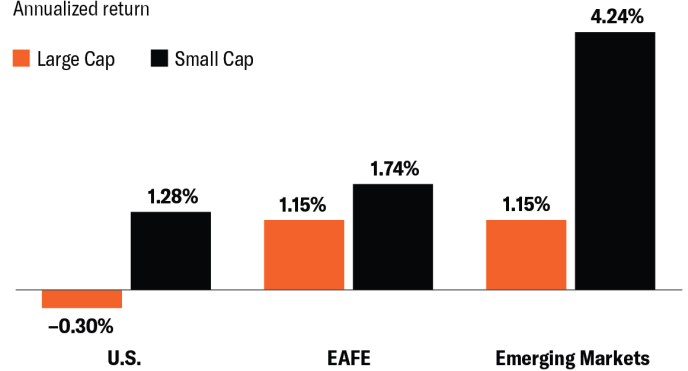
Datta: That goes back to breadth and speed. We can cover the whole globe on a daily basis, and because we look at 10 to 20 criteria per stock, such as how are you ranked on price to cash flow versus your peers, for example, we can act and trade on a daily basis. Not many active managers do that – either fundamental or quant. Our strategies are capacity constrained – we don’t want to be too greedy about assets under management – so that we are able to get in and out of names faster than other managers, and our robust infrastructure enables us to do that. That’s an advantage for us, especially in liquidity challenged areas with high transaction costs. If you can get into a name early on the upside, you can ride it up more compared to a manager getting in on a weekly rebalancing cycle or a monthly rebalancing cycle. That’s the advantage of speed we gain from daily analysis and trading.

Learn more about quantitative equity strategies focused on emerging markets and international offerings, and that use a core style of investing which employs fundamental ideas in a disciplined, risk-aware manner while seeking to generate alpha.

Mean Benchmark-Relative Excess Return for Active Managers 2010 – 2019

Annualized return

■ Large Cap ■ Small Cap



Source: eVestment Universes. Returns shown are in USD and represent past performance, are not a guarantee of future performance and are not indicative of any specific investment. Please note that the benchmark for the strategies within each universe vary, excess performance is based on managers preferred benchmark.

2: The Small Cap Opportunity

Most investors agree that there is more inefficiency in small caps — no matter where in the world you find them — and thus more potential for alpha. In EMs, however, where small caps may be especially inefficient, there’s an opportunity that is often overlooked, and not typically part of an allocation plan by any but the largest funds.

A fairly common asset allocation plan for a U.S.-based fund would incorporate a U.S. allocation, an international allocation, and an emerging markets allocation. Historically, a reach for increased alpha in U.S. or international small caps has been more difficult because they don’t move hand-in-hand together with their large cap brethren. In both U.S. and international equities, large and small caps tend to have more independent and less correlated performance relative to large and small caps in EMs. In other words, when large caps are on an extended roll as they have been for many years now, the small caps aren’t necessarily along for the ride. In emerging markets, large caps and small caps have moved much more closely together. Further, the annualized volatility of EM large and small caps has been more similar relative to large and small caps in both U.S. and global equities.

So why does this matter? If allocations to large caps are all about beta, and allocations to small caps are about alpha, then in EMs Mackenzie Investments believes you have a better chance of getting both at the same time, rather than one or the other.

“Yes, there’s more alpha in small caps everywhere,” says Arup Datta, Head of Global Quantitative Equity at the firm. “But in emerging markets, small caps tend to move similar to large caps — much more in lockstep than in the U.S. or world indexes. In short, there’s typically more alpha in emerging markets, and historically there’s even more alpha yet in emerging markets small caps. In our EM strategies we can go for more alpha, but without taking on much added risk, such as more tracking error or more volatility, in an investor’s return stream.”

[Learn more about the small cap opportunity in EMs.](#)

Large & Small Cap indices have moved more closely together in EM relative to the U.S. & World


Index Correlations	20 year	10 year	5 year
MSCI EM vs. MSCI EM Small Cap	94%	95%	94%
S&P 500 vs. Russell 2000	83%	89%	86%
MSCI World vs. MSCI World Small Cap	91%	95%	94%

Annualized Volatility	20 year	10 year	5 year
MSCI EM	21%	17%	16%
MSCI EM Small Cap	22%	17%	15%
S&P 500	15%	12%	12%
Russell 2000	19%	17%	16%
MSCI World	15%	13%	12%
MSCI World Small Cap	17%	15%	13%

Source: Mackenzie, eVestment. As of December 31, 2019

3: Integrating the EM Investment Process

Investing in emerging market equities comes with its share of complexity. For example, if you're canvassing the world for data, relevant financial statements for investable companies come in a multitude of languages. The challenges, however, are not insurmountable, and the opportunities certainly merit the work involved.

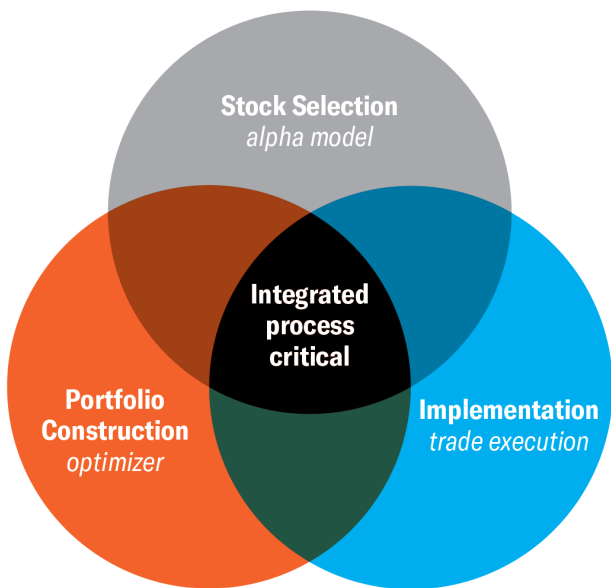


"Our team's edge is a steadfast belief in the adherence to a core focus which aims to produce a more consistent alpha profile through multiple market environments. They place great importance on daily stock analysis, proprietary transaction cost estimation, and capacity management. A quantitative lens — aided by computing power, sophisticated algorithms, and adaptive models — provides the team with a measurable process to value securities."

— Sean Furey, Investment Director, Mackenzie Global Quantitative Equity Team

"It's commonly asked if we get ripped up doing emerging markets trading every day," says Arup Datta, Head of Global Quantitative Equity at Mackenzie Investments. His response, based on nearly 28 years of quantitative investing experience, is "Absolutely not. It's to our advantage that we're built to trade every day."

In that context, Datta is referencing the holistic integration of stock selection, portfolio construction, and trade execution at the firm.



Bottom-up stock selection plays to the strength of quantitative strategies, and for Datta and his colleagues that means a focus on a core approach.

"Our team's edge is a steadfast belief in the adherence to a core focus which aims to produce a more consistent alpha profile through multiple market environments," says Sean Furey, Investment Director, Mackenzie Global Quantitative Equity Team. "They place great importance on daily stock analysis, proprietary transaction cost estimation, and capacity management. A quantitative lens — aided by computing power, sophisticated algorithms, and adaptive models — provides the team with a measurable process to value securities."

Focus has helped in challenging times

The focus on core strategy has helped the team at Mackenzie Investments weather what has been a bit of a bumpy ride for quants over a several year period. Each stock is adjudicated against 15-20 factors which are broadly grouped into four "super factors": Value, Quality, Revisions, and Informed Investor. A balanced weight is assigned to the super factors at the portfolio level. Weights vary by individual stock. For example, within Value, the team divides the weight between what it calls Quality Value, such as cash flow-based valuations, and Pure Value, which includes earnings-based valuations. The Quality factor balances management actions, such as capital allocation and operating efficiency. The Revisions factor mainly refers to analyst revisions to forecasts, while the Informed Investor factor analyzes investor activity, such as short interest and option pricing.

EM Factor Overview

Value	Revisions	Quality	Informed Investor
Pure	Earning	Management	Short Interest
	Sales	Capital Alloc.	
Quality	Momentum	Op Efficiency	Options
		Accounting	
Contextual <i>Beta, Growth, Size and Volatility</i>			

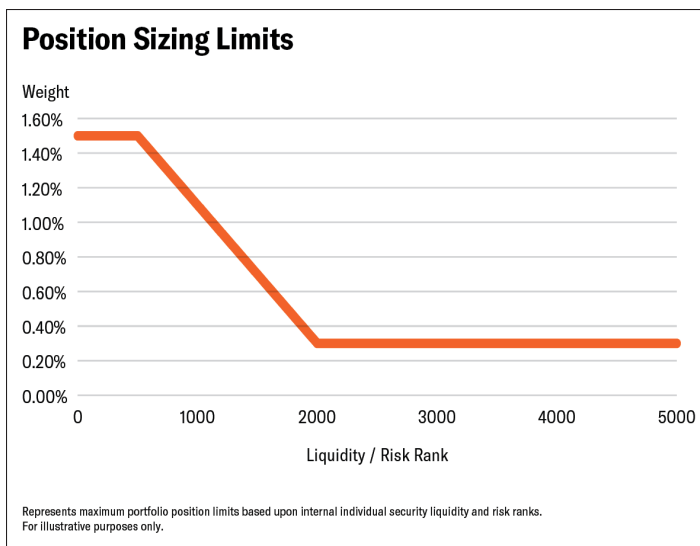
The investment process described herein may change over time. The description set forth above is intended as a general illustration of some of the criteria considered in selecting investments.

“We’ve observed that active quant managers have generally struggled for a few years, but in 2019 we ended up with encouraging performance across our strategies,” says Datta. “When you have enough of value, growth, and quality in your process — and most market environments belong to one of those three categories — you’re not as exposed as the investment environment shifts,” Datta says.

An ongoing debate among quantitative investment professionals is the use of “new” factors versus “old” factors. It’s not a question Datta ignores, but he does think it’s readily addressed by keeping an open mind. “We have a good balance between value, growth, and quality, but we are always looking at how to improve. For example, lately we have focused effort on what is referred to as vague or alternative data — transcripts, financial statements, text parsing, natural language processing, and the like. That’s a way we’ve been successfully blending the new and the old. We will always have things like cashflow-based valuation, i.e. if a name is looking cheap relative to its peers, and other traditional factors. At the same time, we have quite a few new/alternative factors being added to the mix, including in emerging markets. The goal is always to hopefully add value in a variety of environments.”

Human intelligence overlay

The emerging markets investment capacity at Mackenzie is, at a high level, constrained, so that the team can be in and out of stock ahead of managers encumbered by much larger AUM. Leveraging its computing power, the team is as nimble as they come, ranking and trading stocks daily, tapping into highly ranked names it doesn’t currently own and getting out of names that have fallen down the ranking.



Daily trading and daily rebalancing require a strong infrastructure, especially with a 24/6 clock (Middle East markets are open on Sunday). Mackenzie’s EM team spends a lot of time making sure that its models can run several times over the course of a day — as Asiaopens and closes, then Europe, and finally the U.S.

“The world never stops for anyone in terms of the rebalancing cycle, so when other managers say they rebalance monthly or weekly, that’s a lot of missed opportunity, and it’s why we scrape data daily and rank stocks daily. There is always new information out there, and a name might still look cheap in a week or two, but I’d rather buy today than five days later when the stock has run up a lot already,” says Datta.

A common knock against quant strategies is that they are “black box,” meaning they lack transparency and turn over all decisions to computers. Embedded in the process at [Mackenzie Investments](#), however, is a feature that not many other quantitative shops offer — serious and detailed human review. If there is one thing Datta makes clear he abhors it’s the “garbage in, garbage out” results of unchecked data dumping.

“It’s even more an issue in emerging markets because the data is dirtier there,” says Datta. “Most quants claim they do some statistical checks, but every trade we do is vetted or checked by either myself or my colleagues in the portfolio management and research teams at Mackenzie. And we do find names that we pull on an almost daily basis. We don’t trade them because we found that some variable the model was looking at was not correct, or that various data sources didn’t agree. Why are we selling a name? Why did we buy this for the first time? We dig deeper. If the data is bad you’re making a wrong investment decision, so we do spend time making sure the data is clean on a name-byname basis in our buys and sells. Pulling trades is something we do almost every day, and certainly more prevalent in our [emerging markets strategies](#) than it is in our developed market strategies.”

All of this requires top-level talent, and Datta builds his team based on their programming excellence, and with an eye consistently on the future. “One trait of our quant business is that we mix the experienced people like me with the tech-savvy youth, not all of whom need to be PhDs. There are plenty of smart people with undergrad and masters’ degrees out there. The importance of mixing experience and bright, new thinking is that technology changes at a very fast pace, and it will change even faster going forward. Today, everyone uses [the programming language] Python. That was not the case five years ago, and I don’t know what the new Python will be five years from now, but I can tell you it won’t be Python. It will be something else.”

The human factor extends to EM trade execution as well, where varied exchanges, trade settlement processes, and so forth come into play.

“We have as much sophistication and discipline in our execution as we do in our stock picking and risk management — it’s all integrated into a single process,” says Datta.

The firm has proprietary market impact/trade cost models for every trade, with key drivers such as the level of liquidity demanded and stock volatility. According to Datta, its actual EM transaction costs have always come in slightly below what has been anticipated — a clear sign that trade execution is solid. “We deal with many brokers, and we are upfront in telling them that we trade a lot of names every day and we try to get the lowest commission possible because of the volume business we do,” says Datta. “And we let them know they’ll be measured versus yesterday’s closing price and VWAP [volume-weighted average price]. We monitor them closely, and if a broker is not doing well, we cut them off or lower the trading with them. It’s a very efficient process.”

Strong execution is particularly relevant when shorting an emerging markets’ stock, which is something that sophisticated investors sometimes avoid. It can be done through swaps, but execution is crucial when shorting in different regions of the world. “For example, there are plenty of hedge funds out there that appear to be shorting in Asia and China, but if you dig deep most of them have a long bias and all they’re shorting is the benchmark,” says Datta. “With the market-neutral type product such as we have in emerging markets, we actually short single stocks in almost all emerging markets.”

[Learn more about how quant strategies can unlock potential in emerging markets.](#)

[Learn more about the customized solutions and built-for-purpose strategies and approaches at Mackenzie Investments.](#)