GMO

TOP-DOWN INVESTING IN EMERGING MARKET EQUITIES

Sandeep Gandhi | April 21, 2020

EXECUTIVE SUMMARY

We believe that getting the country call right is the most important decision when investing in Emerging Market equities. Over the last 10 years, top-down (i.e., country and sector) Value has outperformed in these markets, even as bottom-up Value faced headwinds. Top-down modelling is more intricate than one would think. Over the past 25+ years we have studied many of the nuances inherent in building top-down models and honed our top-down process to bring it to today's level of robustness.

In October 2019, just before the onset of the Covid-19 crisis, Rick Friedman, our Asset Allocation team colleague, published a paper that argued that long-horizon investors are being paid to bear the risks embedded in Emerging Market (EM) equities, especially EM Value equities.[1] Since then, as the virus first appeared and then spread, global equity markets have taken a beating. As was true in October, however, EM equities – particularly those categorized as Value stocks – remain the most attractive asset class based on our current 7-Year Asset Class forecasts.

We have long maintained that getting the country calls right is the most important decision when investing in EM equities. That is just as true today as it was when we first launched the GMO Emerging Markets Strategy in 1993. In order to better capture this current opportunity in EM Value, we believe an investor must be willing to make top-down bets. In our opinion, using a traditional bottom-up-only process in EM leaves money on the table. A timely case in point is the wide dispersion in performance across countries within EM since the start of the Covid-19 crisis. For example, the difference in 2020 Q1 performance of the MSCI EM Value and Growth Indices was under 9%. Over the same period, the return spread between Brazil and China equity markets was about 40%, underscoring the opportunity that lies in making top-down bets within EM.

When we talk about "top-down" investing in EM, we are referring to making active country and sector allocation decisions within these markets. We do this using a systematic top-down process that, as with our bottom-up process, has valuation at its core.

We know that the performance of the MSCI EM Value Index over the past decade has been anything but inspiring. However, if we juxtapose the performance of GMO "top-down Value" in EM over the same period, it paints a very different picture as shown in Exhibit 1. Clearly, top-down Value outperformed in EM, even as bottom-up Value faced strong headwinds.

1

Rick Friedman, "Emerging Market Stocks: Getting Comfortable with the Uncomfortable," GMO Insights, October 2019.

EXHIBIT 1: EM BOTTOM-UP AND TOP-DOWN VALUE PERFORMANCE VS. MSCI EM INDEX
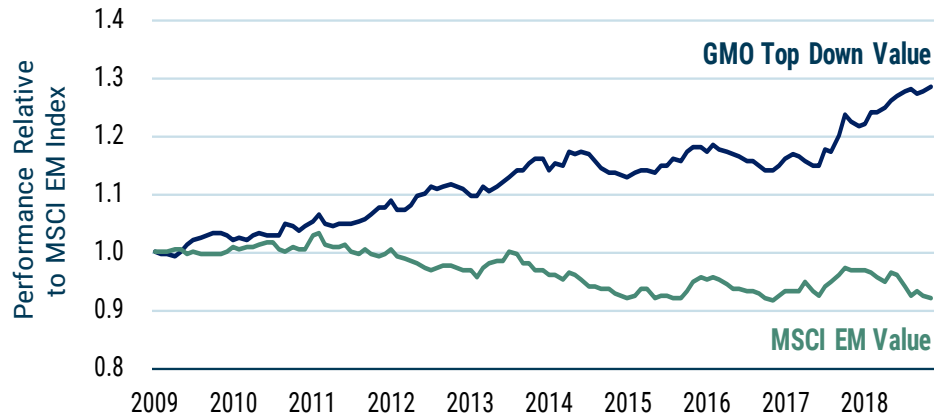
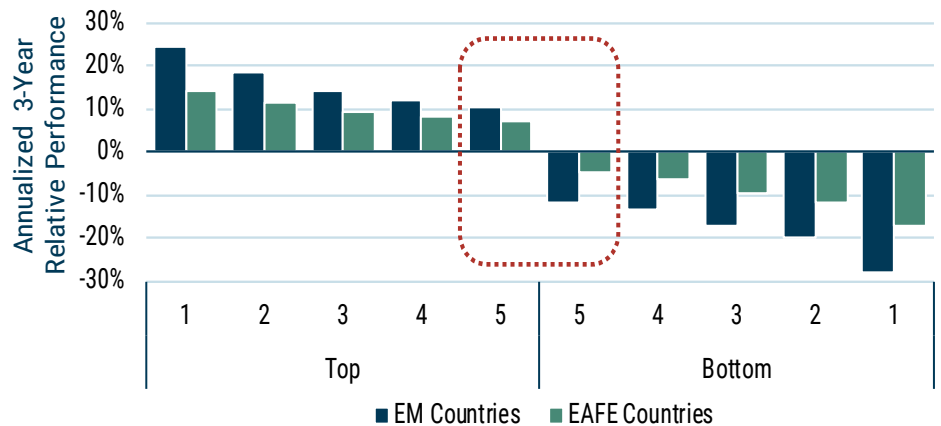As of 12/31/19 | Source: GMO, MSCI

At our Client Conference in November 2019, we delved into some of the nuances of top-down investing and questions investors need to think about when attempting to capture this opportunity in EM equities. This paper captures some of the key points addressed at the conference.

The Opportunity with Top-Down Investing in EM

The fact that investing in the best-performing countries and sectors *ex ante* can add a lot of value to a portfolio's performance should come as no surprise. Perhaps even the fact that this opportunity is larger in EM than in Developed Markets (DM) may not be that hard to wrap one's head around, given EM are understood to be more inefficient than their DM counterparts.

Certainly, the historical performance strongly supports this: Exhibit 2 shows the average annualized 3-year rolling relative performance for the top- and bottom-performing countries in EM and DM.

EXHIBIT 2: ROLLING 3-YEAR RELATIVE PERFORMANCE: TOP, BOTTOM 5 COUNTRIES IN EM, DM

Data from 1/20/00 - 12/20/19 | Source: GMO, MSCI

What is notable is just how big the spread between the top- and bottom-performing countries in EM is relative to those in DM. Of course, being able to pick the top- and bottom-performing countries with any respectable consistency would require a crystal ball of sorts – not something, unfortunately, we can claim to have at our disposal. But, if we believe the chart above, it tells us that even if an investor can, on average, call the *fifth* top- and bottom-performing countries with some consistency, the opportunity is sizable (and notably bigger in EM).

However, Top-Down Modelling Is Nuanced

Top-down modelling is more intricate than one would think, particularly in EM. Over the past 25+ years of building top-down EM models and implementing them in the real world, we believe we have learned a few things that may be of interest to investors. In the following pages, we highlight a few of the many nuances that apply to building top-down models.

Particularly for bottom-up-only investors, some of these top-down modeling decisions might seem rather simple at first glance. However, some of these seemingly simple decisions can lead to very different portfolios and outcomes. These decisions are therefore not as trivial as they might first appear.

WHAT ARE THE IMPLICATIONS OF THE DIFFERENT WAYS OF CALCULATING AGGREGATE VALUATIONS?

A simple exercise of calculating aggregate valuations for a group of companies using a handful of different aggregation methodologies will make it obvious that the choice of aggregation methodology used can really change the top-down valuation estimate and, therefore, one's view on a particular top-down group.

For example, as of September 2019, the aggregate Price-to-Earnings (P/E) multiple for South Korea was 11.2x using a market-capitalization-weighted aggregation, or 14.3x using a median aggregation. At the time, the average P/E for the MSCI EM Index fell between these two valuations at 13.2x. The aggregation methodology used made South Korea's valuation look either cheap or expensive relative to EM overall (see Exhibit 3).

EXHIBIT 3: AGGREGATE P/E − SOUTH KOREA
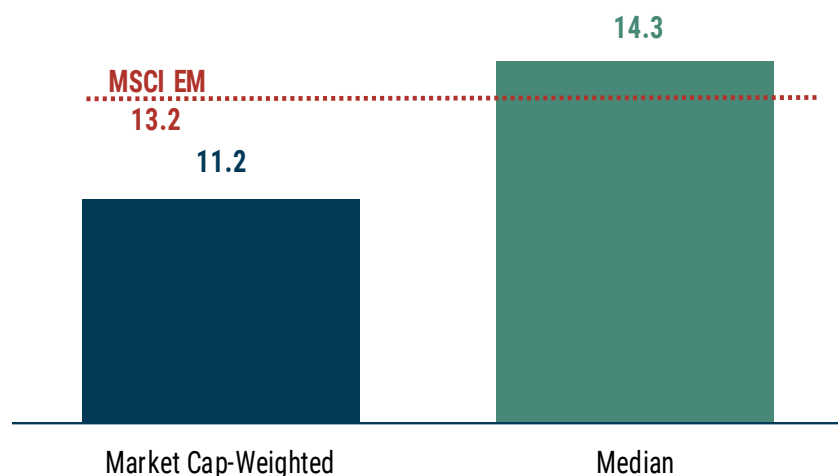
As of 9/1/19 | Source: GMO, MSCI

> *Our highest-conviction bets come about when a country or sector is attractive based on a variety of lenses.*

What makes this even more interesting is that a single company – Samsung Electronics – made up about 34% of the market capitalization of South Korea as of September 2019.

Depending on whether the P/E of Samsung were 5x or 20x (it was 10x as of September 2019), the corresponding market-capitalization-weighted aggregate P/E for South Korea would vary from 8x (i.e., very cheap) to about 14x (i.e., mildly expensive).

By contrast, the impact of Samsung's P/E on the median aggregate P/E of South Korea would have been relatively muted.

There are other aggregation methodologies one can consider, of course: equal-weighted averages, square-root-market-capitalization-weighted averages, capped-weight-aggregates, capped-contribution-aggregates…the list goes on.

So, which is the "best" aggregation methodology to use? After extensively studying several such aggregation methodologies, our view is that every methodology has its merits and its biases. No one methodology is, therefore, the "best" in our opinion.

Philosophically, to use a real estate analogy, we are hoping to capture the valuation multiple that is representative of the "neighborhood" (i.e., country or sector) within which we are looking to buy a "house" (i.e., company). Given that motivation, we prefer models that are not driven heavily by the valuation of a single house in the neighborhood.

Practically speaking, we have found having a few different lenses into the valuation of a group to be most promising. Our highest-conviction bets come about when a country or sector is attractive based on a variety of lenses.

HOW DO DIFFERENT WAYS OF ESTIMATING TERMINAL LEVELS AFFECT VALUATION ESTIMATES?

All value models – either implicitly or explicitly – have a built-in mean reversion assumption, and there are numerous ways to estimate the terminal valuation.

The most basic approach, perhaps, is to assume all groups within a universe will revert to the same terminal level. Underlying such an approach is the assumption that all countries and sectors should eventually trade at the same multiple. Depending on an investor's horizon, we see arguments, both for and against, such an approach.

An alternative viewpoint is one where we assume each country has a different cost of capital and therefore commands a different valuation multiple. Certainly, if we are to study the historical data, there are very clear examples of countries (and sectors) trading at persistent premiums or discounts to the rest of the EM universe.

One way to model this is by attempting to estimate the cost of capital for each country using fundamental and macroeconomic inputs. This is by no means a trivial exercise, particularly considering the data challenges (e.g., frequency, availability, revisions, comparability) associated with macroeconomic data in EM.

Another approach could be to empirically estimate the valuation premium or discount for a country or sector over some long-term history. There are several subtleties to be mindful of here. For example, how does one adjust for changes in the composition of a group over time? China was below 8% of the MSCI EM Index in 2005, and it is about 40% of the index today. Moreover, the composition of companies and sectors within China have changed materially over this period. Given this, can we say with confidence that China today will revert to the same valuation premium or discount that we can observe empirically over the past 10-15 years?

There are ways to systematically correct for such biases (e.g., by building buy-and-hold portfolios and studying how the valuation levels for these change over time); such approaches are modelling-intensive and come with their own nuances. In addition, any adjustments that one were to make would usually have some significant implicit assumptions that would need to be thought through.

A related issue is that two EM countries can have very different sectoral compositions. For instance, almost 60% of the weight within Russia is concentrated within the Energy sector, while Taiwan has a large weight in the Hardware and Semiconductor sectors. Owing to the drastically different business models of companies across different sectors, they often trade at different valuation levels. Energy companies, for example, typically trade at a discount to the rest of the universe on a P/E basis. Technology companies, on the other hand, tend to trade at a persistent premium.

How much of the observed 50% discount that Russia trades at relative to EM is driven by Energy? Similarly, how much of the premium that Taiwan trades at is driven by the Hardware and Semiconductor sectors being a big part of the Taiwanese universe? How can we systematically mitigate this?

As you can hopefully appreciate by now, there are several nuances to think about when building top-down models in EM, and each can be tackled using one of many approaches. In our opinion, there is no one way to tackle a given nuance that is foolproof. Each approach has its own strengths and weaknesses.

Exhibit 4 provides a very basic example of how a time-series-based terminal valuation assumption can correct for some of the persistent biases inherent in a simple cross-sectional model.

EXHIBIT 4: BRAZIL – TOP-DOWN VALUATION – RELATIVE MULTIPLE
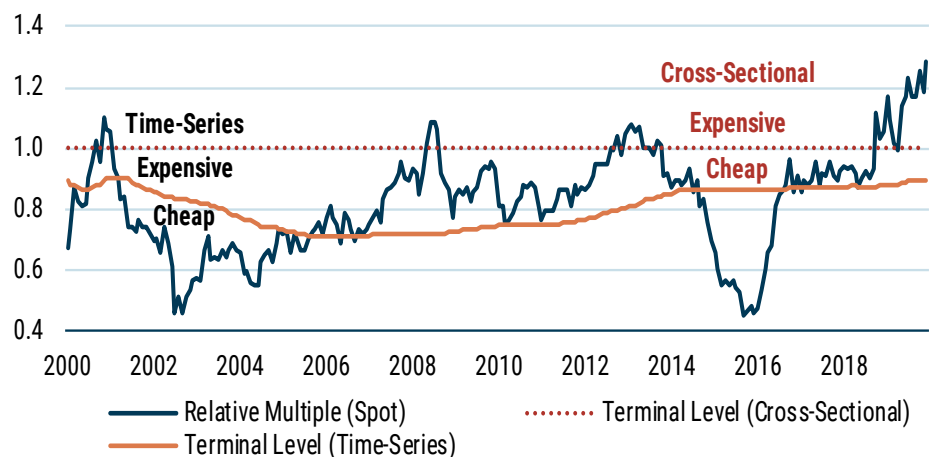
Data from 1/20/00 - 12/20/19 | Source: GMO, MSCI, Worldscope

The blue line captures the relative valuation multiple of Brazil over time. The dotted red (cross-sectional model) and orange (time-series model) lines represent the terminal multiple we expect Brazil's valuation to revert to. Barring a few short periods, the cross-sectional approach would find Brazil almost constantly cheap (blue line

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below the dotted-red). Using the time-series approach instead, however, the view on Brazil is perhaps more balanced (roughly equal amount of time when the blue line is above or below the orange line).
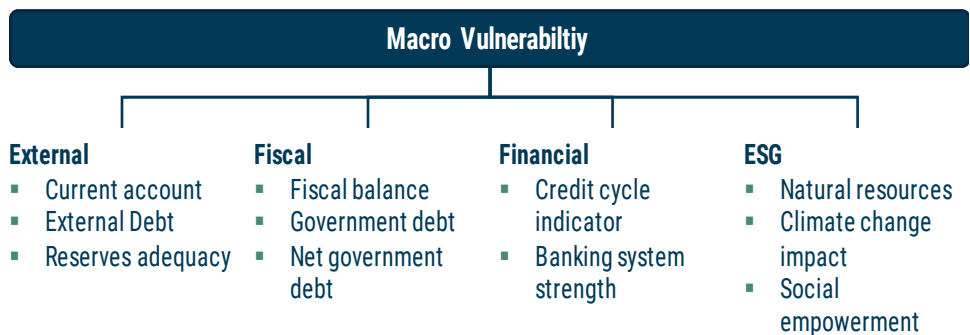
Another aspect of top-down investing that is particularly applicable to the EM world is the varying level of risk associated with investing in EM countries. Country valuations need to be adjusted for these different levels of risk. We do this by adding a top-down quality pillar to refine our top-down valuation estimates.

WHAT CONSTITUTES QUALITY AT THE TOP-DOWN LEVEL?

At the bottom-up level, our quality models capture company-level profitability, predictability, earnings quality, and balance sheet strength. But we think of quality quite differently at the top-down level: our top-down quality model is designed to identify macroeconomic vulnerability at the country level.

The figure below outlines the four main pillars that comprise our top-down quality model. The first three pillars are aimed at capturing the vulnerability of a country from the external, fiscal, and financial dimensions. These incorporate the more familiar macroeconomic measures like current account balance, government debt, and strength of the banking system.

The fourth pillar is dedicated to identifying vulnerability of a country from an Environmental, Social, and Governance (ESG) perspective. This pillar includes data related to national climate policy and targets, carbon emissions, poverty, income inequality, judicial independence, and ease of doing business.

Macro Vulnerabiltiy

External	Fiscal	Financial	ESG
▪ Current account	▪ Fiscal balance	▪ Credit cycle indicator	▪ Natural resources
▪ External Debt	▪ Government debt	▪ Banking system strength	▪ Climate change impact
▪ Reserves adequacy	▪ Net government debt		▪ Social empowerment

As one might expect from a quality model, our macroeconomic vulnerability model tilts our alphas away from countries that are more vulnerable to the risks captured by the four pillars. Empirically, this model has helped cushion the performance of the top-down value model, particularly during periods of market distress.

WHAT DOES ALL THIS WORK ADD UP TO?

Over the past 10 years – a period when traditional value investing has faced substantial headwinds and the MSCI EM Value Index has underperformed the MSCI EM Index by -2.1% on an annualized basis – our country bets have added +1.3% of live alpha to the GMO Emerging Markets Strategy over the MSCI EM Index (see Exhibit 5).

Sandeep Gandhi

Mr. Gandhi is engaged in quantitative research for GMO's Emerging Markets Equity team. Prior to joining GMO full-time in 2009, he worked as a researcher for GMO Singapore. Previously, he worked as a quantitative analyst with the equity research team at Macquarie Securities in Hong Kong and has also worked as consultant with Accenture in Singapore. Mr. Gandhi earned his B.E. in Electrical Engineering from the National University of Singapore. He is a CFA charterholder.

Disclaimer

Exhibit 1. Information regarding factor performance is solely for informational purposes and is intended to illustrate certain analytical factors GMO considers relevant when making investment decisions. Factor performance is not representative of the performance of any GMO strategy. No client or investor actually attained the performance represented by any factor, and GMO makes no representation that the performance of any GMO strategy is represented by factor performance. Actual performance may differ substantially from the performance presented. Any changes to the assumptions regarding each factor may have a material impact on the factor performance presented. There can be no assurance that GMO will achieve profits or avoid incurring substantial losses.

Exhibit 5. The information in this exhibit is based on a representative account in the Strategy selected because it has the fewest restrictions and best represents the implementation of the Strategy.

The views expressed are the views of Sandeep Gandhi through the period ending April 21, 2020, and are subject to change at any time based on market and other conditions. This is not an offer or solicitation for the purchase or sale of any security and should not be construed as such. References to specific securities and issuers are for illustrative purposes only and are not intended to be, and should not be interpreted as, recommendations to purchase or sell such securities.

EXHIBIT 5: ANNUALIZED COUNTRY IMPACT TO GMO EMERGING MARKETS STRATEGY
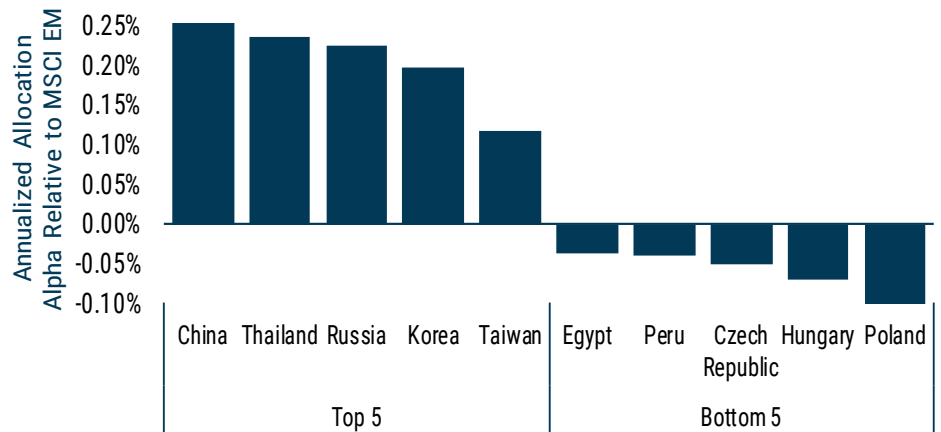
10-year period as of 3/31/20 | Source: GMO, MSCI, FactSet
Past performance is no guarantee of future results.

By no means do we expect this to be the case every year, but we do strongly believe that:

1. **The top-down opportunity in EM is considerable** and given the dearth of other managers that make top-down bets, we do not expect this opportunity to go away anytime soon.

2. Based on the years of work and deep thought that we at GMO have put into building our top-down models, **we are confident in our ability to continue to capture some of this opportunity.**

Through the Covid-19 crisis, our country allocation has added over +2.7% of alpha relative to MSCI EM in Q1 2020 (while the MSCI EM Value Index has underperformed MSCI EM by -4.4%).

We aim to maintain a prudent balance of valuation and quality in the portfolio. The GMO Emerging Markets Strategy currently trades at a 40-50% discount to MSCI EM in P/E terms, while possessing a 35% higher ROE.

Conclusion

The top-down opportunity in EM is considerable. We believe that systematic top-down investing can be a very powerful way to add alpha in EM. However, systematic top-down investing is nuanced. In this paper, we shared a small sample of some of the questions we have spent a lot of time thinking about, bringing our top-down investing process to what we believe is a high level of robustness today.

Years of study and the diligent honing of our models and approach have enabled us to strengthen our portfolios and deliver alpha to our clients. True to our conviction, GMO's flagship Emerging Markets Strategy has well over half of its risk budget allocated to making top-down (i.e., country and sector) allocation bets.