

Equity Risk Premiums Like Those of March '09 and Emerging Market Currencies at '03 Valuations? Yes, If You Know Where to Look.

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U.S. EQUITIES HAVE ENJOYED A PERIOD OF STRONG RETURNS

The S&P 500's near decade-long run from the lows that occurred after the collapse of Lehman Brothers has passed the quadrupling stage, with total returns of 310.0% thus far.¹ In making a bullish case for equities over the last eight years, many investors have pointed to some variation of the Fed Model,² which compares yields in fixed income with the earnings yield³ of equities, the latter being the reciprocal of the price-to-earnings (P/E) ratio.⁴

EQUITY VS. BOND VALUATIONS: THE GLOBAL PICTURE

We've been doing plenty of work on this concept of late, with much of our research observing the interaction between each nation's earnings yield and its own sovereign debt⁵ yield.

That got us thinking about the risk⁶ hierarchy we place on all kinds of investments, from "safe" cash to "risky" equity and everything in between. In looking at this framework, opportunities arise when one level of risk is "mispriced" (that is, it is either too expensive or inexpensive) relative to the others.

Figure 1 is a visual representation of how investors logically tack on risk premiums⁷ when considering the appeal of various investments. For example, we demand some low yield for Treasury Bills (T-bills), with some incremental amount to justify choosing a local bank certificate of deposit (CD), tacking on more to our required rate of return to justify owning corporate bonds, more if we want U.S. stocks, and so on. The highest required return is on the top of the ladder, and that is probably the solo business venture—and its risk premium is the sum of all the risk premiums below it.

Bottom line: If the solo business venture did not provide a potential compensation for all the lower levels of risk, then the rational allocator would instead choose to invest time and resources differently, as the potential return wouldn't be seen to justify the risk.

¹ Source: Bloomberg, for the period 3/6/09–3/31/17.

² Fed Model: A theory of equity valuation that makes a comparison between equity earnings yields and government bond yields.

³ Earnings yield: The earnings per share for the most recent 12-month period divided by the current market price per share. The earnings yield (which is the inverse of the P/E ratio) shows the percentage of each dollar invested in the stock that was earned by the company.

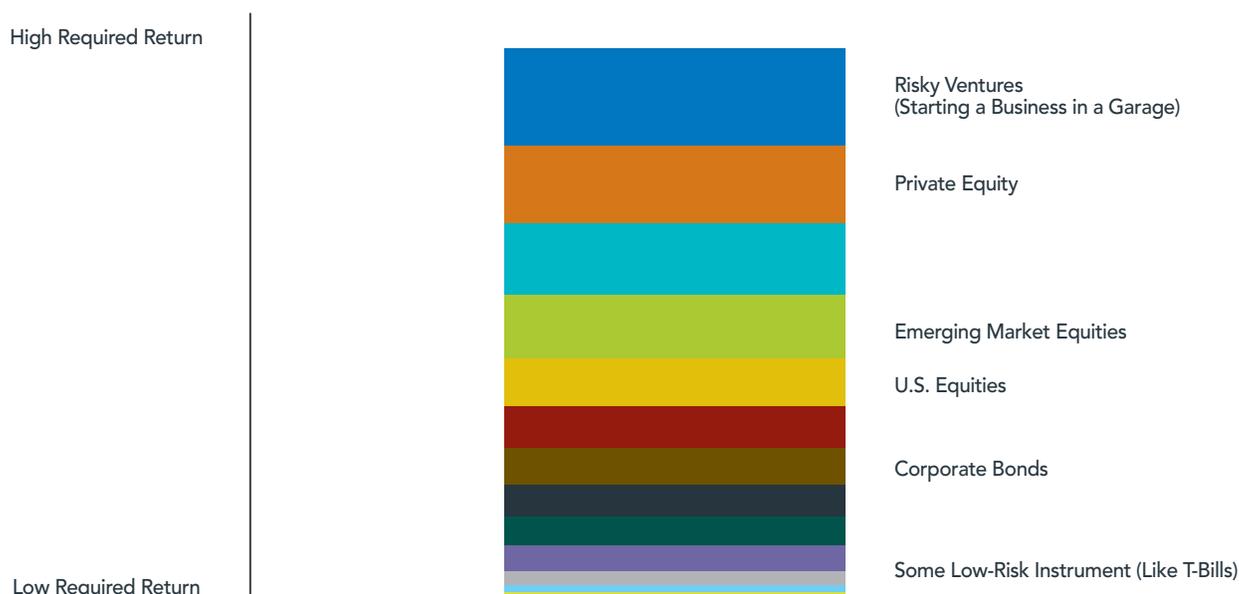
⁴ Price-to-earnings (P/E) ratio: Share price divided by earnings per share. Lower numbers indicate an ability to access greater amounts of earnings per dollar invested.

⁵ Sovereign debt: Bonds issued by a national government in a foreign currency, in order to finance the issuing country's growth.

⁶ Risk: Also standard deviation, which measures the spread of actual returns around an average return during a specific period. Higher risk indicates greater potential for returns to be farther away from this average.

⁷ Risk premium: Equity investments are not risk free, but it is thought that investors buy stocks because the returns they expect are high enough to allow them to take the risk.

FIGURE 1: UNDERSTANDING THE RISK PREMIUM HIERARCHY



Source: WisdomTree. Exhibit is for illustration purposes only; not to scale.

PUTTING THE RISK HIERARCHY INTO ACTION

As we monitor this concept to generate tangible views on global equity markets, it ultimately leads to the conclusion that investors are asking for sizable risk premiums for high-yielding emerging markets (EM) equities. In fact, we see it as quite possible that years of relative underperformance have contributed to the high level of this premium.

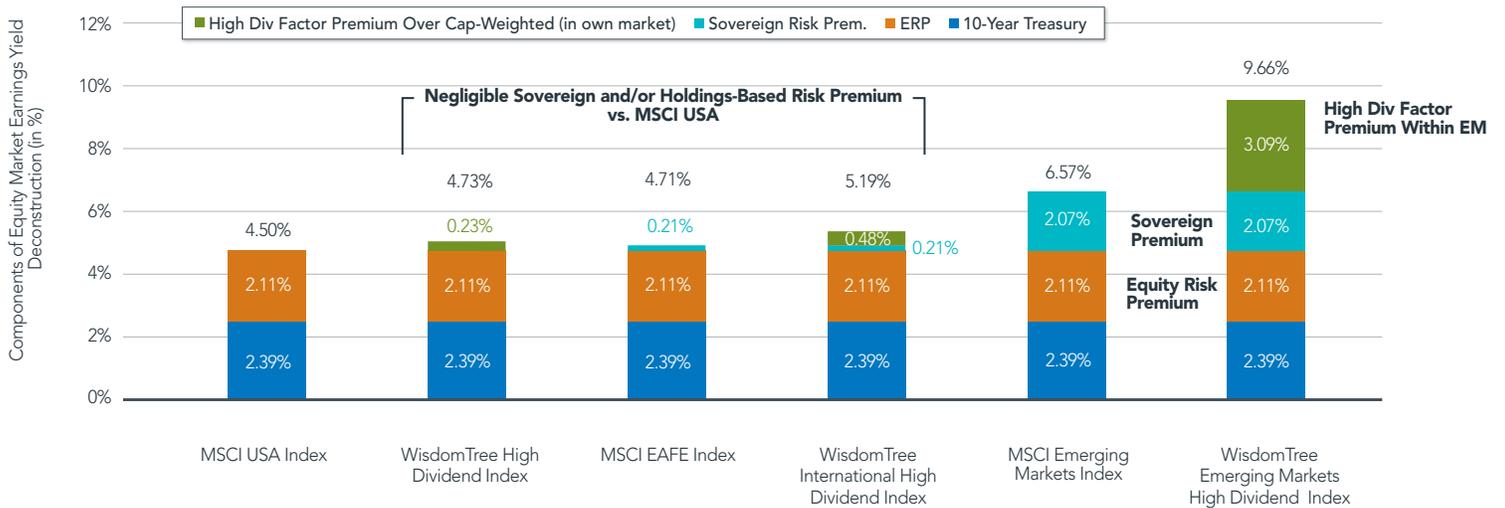
Starting on the left side of figure 2, the reciprocal of the 22.3 trailing P/E on the MSCI USA Index⁸ is 4.50%, meaning that the premium the market demands for U.S. equity risk is 211 basis points (bps)⁹ over and above the 2.39% yield on 10-Year Treasury notes. This should look familiar to anyone who has been using variations of the Fed Model in recent years.

Moving one bar to the right in this figure, we see that the earnings yield on the WisdomTree High Dividend Index is 4.73%,¹⁰ or 23 bps more than the market capitalization-weighted¹¹ MSCI USA Index. That incremental risk premium stems from a combination of influences, the largest likely being any incremental market risk (beta¹²) stemming predominantly from the dividend-focused Index's value factor¹³ loading.

⁸ MSCI indexes sourced from Bloomberg. The MSCI USA Index is designed to measure the performance of large- and mid-cap segments of the U.S. market.
⁹ Basis points: 1/100th of 1 percentage point.
¹⁰ WisdomTree Index fundamental data compiled by WisdomTree Research.
¹¹ Market capitalization-weighting: Market cap = share prices x number of shares outstanding. Firms with the highest values receive the highest weights in approaches designed to weight firms by market cap.
¹² Beta: Measure of the volatility of an index or investment relative to a benchmark. A reading of 1.00 indicates that the investment has moved in lockstep with the benchmark; a reading of -1.00 indicates that the investment has moved in the exact opposite direction of the benchmark.
¹³ Value factor: the average return of value portfolios minus the average returns of growth portfolios after adjusting for size.

Moving along, we come to non-U.S. developed economy equities (MSCI EAFE Index), which appear to be offering a sovereign risk premium of only 21 bps, with another 48 bps of compensation for owning the WisdomTree Index of high-dividend stocks (WisdomTree International High Dividend Index) instead of the cap-weighted index in question.

FIGURE 2: DECONSTRUCTION OF GLOBAL EARNINGS YIELDS



Sources: WisdomTree, Bloomberg. Past performance is not indicative of future results. You cannot invest directly in an index. Example: MSCI USA trailing earnings yield = 4.50%, 10-Year Treasury Yield = 2.39%. Equity risk premium = 2.11%. MSCI Emerging Markets Index earnings yield = 6.57%, or 2.07% more than MSCI USA earnings yield; differential = Sovereign Risk Premium. WisdomTree Emerging Markets High Dividend Index earnings yield = 9.66%, or 3.09% more than MSCI Emerging Markets; differential = risk premium of high-dividend emerging markets over market capitalization-weighted emerging markets. Sovereign risk premium refers to the incremental amount of additional, higher yield that is needed for U.S. investors to take the risk of investing in the government debt of other countries since these countries are perceived to be of higher risk than the U.S. Data as of 2/28/17.

On the next portion of the graph, we can clearly see that the risk premiums being accorded emerging markets—and high-dividend yield-oriented EM in particular—are considerably out of alignment with the much smaller risk premiums in the developed world.

That is, the capitalization-weighted MSCI Emerging Markets Index offers an earnings yield of 6.57%, or 207 bps over and above that of the MSCI USA Index. This is interesting because in the 20 years to February 2017, the U.S. index returned 7.61% annually, over 2 percentage points more than the 5.45% gain for emerging markets. The contrast was even sharper over the 10-year horizon, with the MSCI USA Index returning 7.60% per year while the MSCI Emerging Markets Index was up just 3.17%.¹⁴

¹⁴ Source: Bloomberg. Twenty years and 10 years to 2/28/17, respectively.

CALLING THE CONTRARIANS: EMERGING MARKETS DOOR OF OPPORTUNITY REMAINS OPEN

Because emerging markets offer a sovereign risk premium relative to U.S. equities, it would be reasonable to infer that the past may have been characterized by some form of long-term excess returns by the asset class relative to stocks in the U.S. However, the fact that emerging markets have performed so woefully over the last 10 to 20 years means there is that much more catching up to do. Critically, the result of the multidecade bout of relative trouble for EM is a depression of valuations when placed in the context of some other asset classes like U.S. stocks and bonds, which is a key reason for the sizable risk premium accorded the group in present conditions.

FINDING THE FACTOR PREMIUM: DIVIDENDS IN EMERGING MARKETS

There is still one more bar in figure 2, and it shows the 9.66% earnings yield on the WisdomTree Emerging Markets High Dividend Index, which tacks on another 309bps to the 6.57% earnings yield of cap-weighted emerging markets.

Going back to our original concept, we can view EM high-dividend yielders in the context of any of the other investable asset classes to get a feel for appropriate risk premiums.

PUTTING 721BPS OF COMPENSATION ABOVE THE U.S. RISK-FREE RATE IN CONTEXT

In monthly data back to 2007:¹⁵

- + **The MSCI USA Index's highest equity risk premium over Treasury notes was 5.40% in February 2009.**
- + **MSCI EAFE Index's earnings yield touched a level 870 bps over U.S. Treasuries in November 2008 but was 702 bps higher in the prior month.**
- + **At the apex of fear in the MSCI Emerging Markets Index, its earnings yield was 1,220 bps north of U.S. Treasuries (in the fourth quarter of 2008). Nevertheless, EM equities stopped plunging in the early days of 2009, so in March 2009 the risk premium was "only" 6.20%.**
- + **Then, a few years later—in December 2011, to be exact—capitalization-weighted emerging markets reached an equity risk premium over and above 10-Year Treasury notes of 7.94% amid Greek "Grexit" fears.**
- + **As for the WisdomTree Emerging Markets High Dividend Index itself, its risk premium reached a level 11.75 percentage points above the Treasury benchmark in December 2008, although by February 2009 the risk premium was akin to today's levels, at 7.21%.**

In 2008 and 2009, it was unclear if investors could trust even the U.S. money markets, let alone the global equity markets, yet we are seeing risk premiums in mid-2017 for EM equities that in many respects are akin to what was observed during the credit crisis. The WisdomTree Emerging Markets High Dividend Index offers an earnings yield spread over the 10-Year U.S. Treasury note that is higher than what was on offer in cap-weighted U.S. equities in February 2009, non-U.S. developed equities in October 2008, cap-weighted emerging equities in March 2009 and its own premium in February 2009.

¹⁵ The WisdomTree Emerging Markets High Dividend Index began its live calculation history on 6/1/07

DON'T FORGET CURRENCY VALUATIONS

In considering EM equities, the equity valuation question is only half the equation; the rest of the battle lies in foreign currency movements. Unlike in developed economies, where central banks have raced to rock-bottom interest rate levels (even negative levels in some markets), short-term interest rates in many emerging markets tend to be higher. In turn, this leads to currency hedging foreign exchange risk in emerging markets a more expensive prospect at the moment. Because of this, most investors are making two investments with every dollar that they decide to allocate to EM equities on an unhedged basis:

1. **The equities**, frequently the focus of valuation studies and opportunities, some of which we define earlier in this piece.
2. **The currencies**, some of which can move almost as sharply as equities against the U.S. dollar, and offer yet another source of volatility that can respond to global macroeconomic developments.

A RISK GAUGE FOR EMERGING MARKET CURRENCIES

With so many disparate countries having their own geographic, cultural and economic dynamics, it is critical to obtain a gauge of the valuation of EM currencies as a group. To do so, we can analyze purchasing power parity (PPP),¹⁶ which compares price levels from country to country. PPP basically says that if the same hamburger or pint of beer costs more in one country than another, a disparity exists, and exchange rates should theoretically change in order to correct it.

For many EM currencies, the Organization for Economic Cooperation and Development (OECD) has data that captures several decades for the measure of "PPP for GDP," which it describes as that which "covers both final consumption expenditure (household and government) and gross capital formation." The organization itself is considered one of the foremost authorities for PPP data.

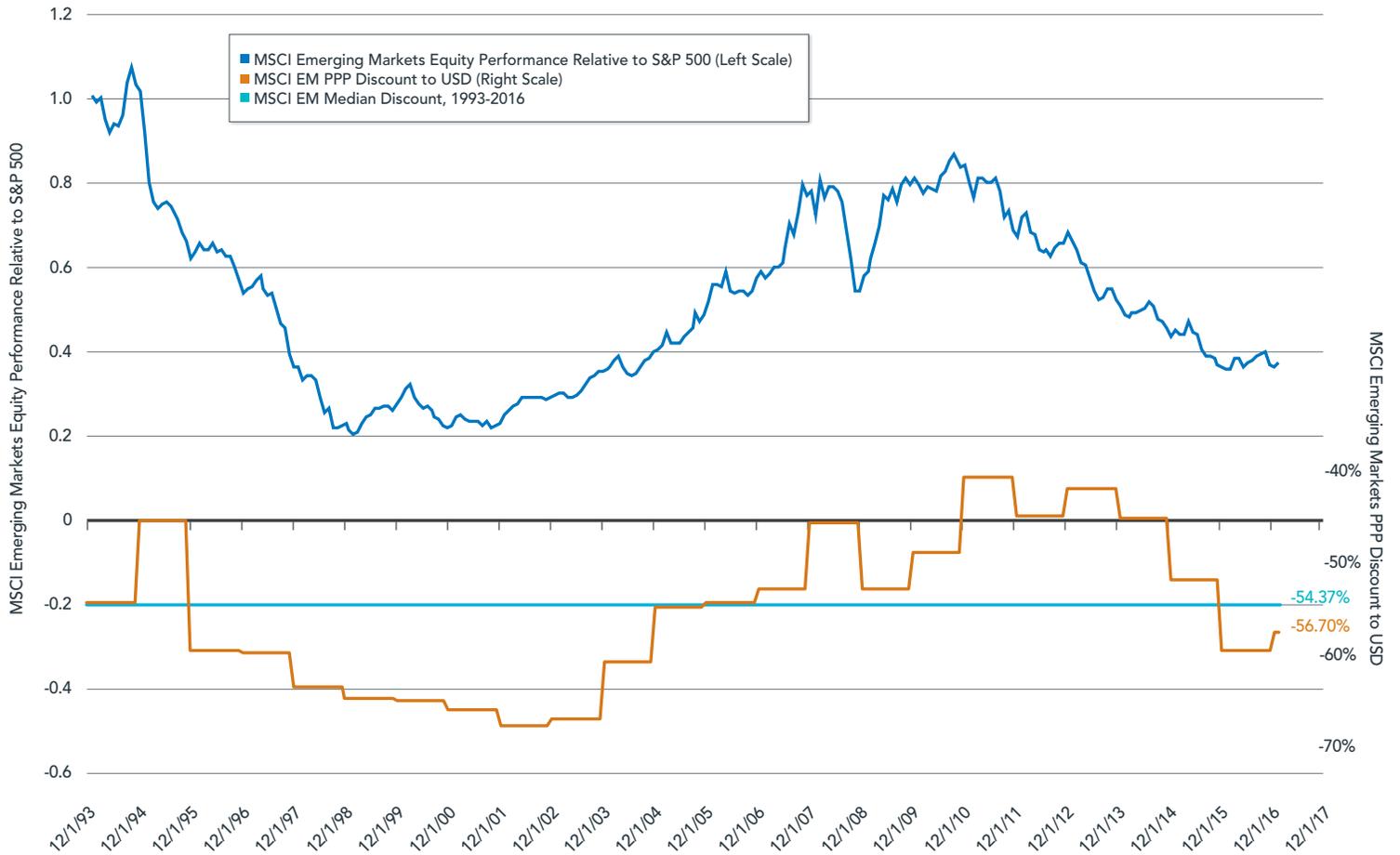
Because the OECD has long-term PPP data for GDP for most (but not all) major components of the MSCI Emerging Markets Index, we were able to calculate a composite that captures the currencies of countries that account for over 77% of the MSCI index's current market capitalization. Our amalgamation consists of 15 EM nations that have OECD PPP data to 1993, with Russia included in this data from 1995 onward.¹⁷

Because the emerging world has historically been characterized by lower living standards, it has typically been cheaper to purchase goods or services in Chengdu or Mexico City than in Frankfurt or Los Angeles. As we see in figure 3, the historic median PPP discount to the U.S. dollar for the EM basket we created has been 54.37%.

¹⁶ Purchasing power parity: Academic concept stating that exchange rates should adjust so that equivalent goods and services cost the same across countries, after accounting for exchange-rate differences.

¹⁷ The sum of 16 nations = 77.27% of the weight in MSCI Emerging Markets Index as of 4/3/17. Current country proportions are used for the entire data set. Calculation includes Chile, Czech Republic, Hungary, South Korea, Mexico, Poland, Turkey, Argentina, Brazil, China, Colombia, India, Indonesia, Russia, Saudi Arabia and South Africa. Excluded countries are Costa Rica and emerging countries inside the eurozone.

FIGURE 3: EM PPP DISCOUNTS TO THE U.S. DOLLAR



Sources: WisdomTree, Zephyr StyleADVISOR, Bloomberg, OECD. All non-eurozone nations currently in MSCI Emerging Markets Index with reliable exchange rates to 12/31/93 included, with Russia added as of 12/31/95. Time series of EM PPP discounts to U.S. dollar calculated current weighted average proportions in constant manner to 1993.

Interestingly, the discount at the end of 2016 was not materially distinct from the historical median,¹⁸ indicating that EM currency valuations may be priced neutrally relative to the 23-year norm.

¹⁸ Median: The median is the value within a dataset at which 50% of all observations occur above and 50% occur below.

Critically, though, we know with the benefit of hindsight that “the norm” has spanned a period that captures episodes such as the 1994 Mexican “Tequila Crisis,” the 1998 Asian Contagion, a multiyear commodities bull market and its attendant bid in EM equities, the Lehman collapse and stimulus-led recovery thereafter, and so forth.

Intriguingly, current aggregate EM currency PPP discounts to the U.S. dollar are at levels not seen since 2003–2004. For example, at the end of 2003 the aggregate EM currency PPP discount to the U.S. dollar was 59.19%, close to the 56.70% discount observed at the end of 2016.

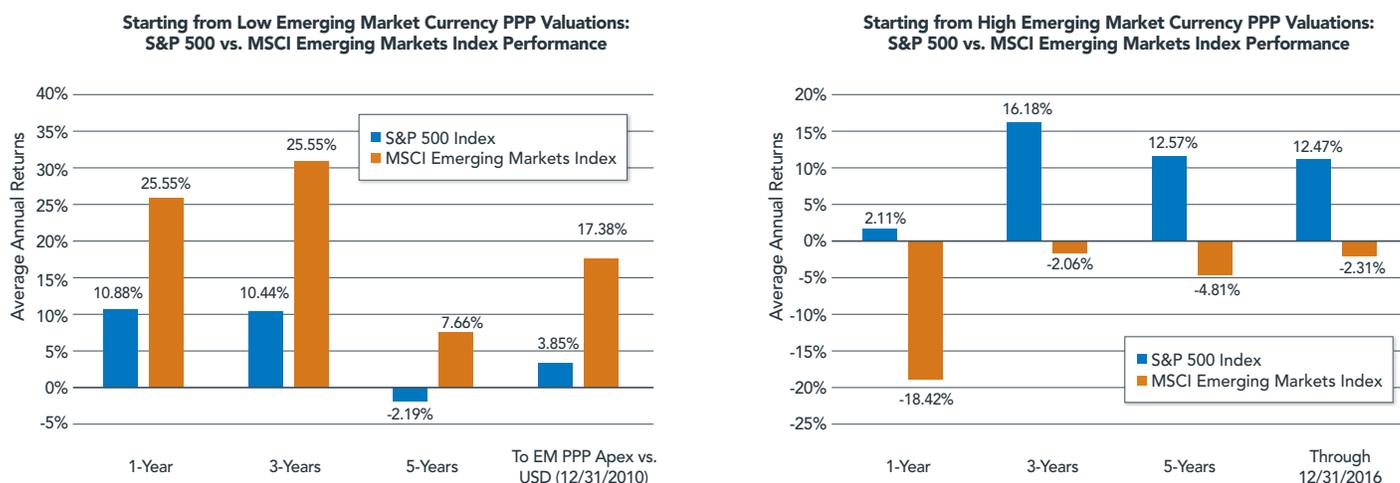
A ROAD MAP FOR THE EMERGING MARKET EQUITY ASSET ALLOCATION DECISION

The key to unlocking the power that we believe to be in figure 3 comes from the connection to the asset allocation decision. Many investors today (April 2017) are telling us that one of their biggest challenges is the allocation of new assets that they are managing. U.S. equities have performed well for several years, contributing further to the already prevalent allocation biases that existed in many circles.

On the other hand, EM equities are often an “under-weight” allocation.

We believe the data in figure 4 encourages potential allocations to EM equities; if EM PPP relative valuations are near a bottom, future performance may improve.

FIGURE 4: HOW EMERGING MARKET CURRENCY VALUATIONS HAVE SIGNALLED TRENDS OF OUTPERFORMANCE AND UNDERPERFORMANCE IN EM EQUITIES



Sources: Bloomberg, WisdomTree. “Low” Emerging Market Currency PPP Valuations data is from 12/31/03; “High” data is from 12/31/10.

- + For 2003–2010, the MSCI Emerging Markets Index handily outperformed the S&P 500 across all measured periods. The annual return differential over the seven-year horizon was 1,353 bps.
- + That was also a period in which the MSCI Emerging Markets Index delivered more than a 200% return, even though the S&P 500 was able to register a return of only 30.27%. The cumulative difference between the two for that seven-year horizon was 17,667 bps (or ~177 percentage points).
- + In contrast, the situation since 2010 has been fundamentally different from the 2003–2010 era. The OECD PPP data for that year marked what we know in retrospect to be the most expensive EM currency environment on record, based on our amalgamation of the OECD's PPP calculations.
- + During the six years since the point of peak EM currency valuations, the MSCI Emerging Markets Index had a painful bout of cumulatively negative performance, despite the S&P 500 returning 12.47% annually. In fact, while the S&P 500 was in the process of doubling, emerging markets actually experienced a cumulative loss of 13.08%. The cumulative differential between U.S. and EM equities was 11,545 bps (or ~115 percentage points) from 2010 to 2016.

WILL EMERGING MARKETS OR U.S. EQUITIES LEAD THE WAY IN COMING YEARS?

The MSCI Emerging Markets Index and the S&P 500 returned 11.5% and 11.9% in 2016, respectively, a rare occasion of neck-and-neck performance between the two indexes. In the first quarter of 2017, the S&P 500 was up a sharp 6.1% but the MSCI Emerging Markets Index clocked in with an 11.5% return. Time will tell if this phase of newfound life in EM equities has the staying power of prior multiyear runs. However, we have determined in this report that...

In terms of currency valuations:

- + Using our equity risk premium methodology, emerging markets are offering a sovereign risk premium of 207bps over and above the MSCI USA Index.
- + The WisdomTree Emerging Markets High Dividend Index is offering another 309bps of additional risk premium over and above the MSCI Emerging Markets Index.
- + This amounts to an earnings yield of 9.66% for the WisdomTree Emerging Markets High Dividend Index, more than double that of the MSCI USA Index.
- + Such equity valuations relative to U.S. Treasury notes are consistent with observations last made during the fearful late 2008/early 2009 period—and they are being found in emerging markets, not in the U.S.

In terms of currency valuations:

- + **Our work on OECD currency PPPs indicates that EM currencies in aggregate are at valuations relative to the U.S. dollar that are close to those observed in 2003.**
- + **The MSCI Emerging Markets Index outperformed the S&P 500 by a cumulative 17,667 bps from December 31, 2003, until the point that we calculate to be the peak EM PPP relative valuation in 2010.**
- + **From the point of peak EM PPP relative valuation (December 31, 2010) through 2016, a diametrically opposite situation occurred, with the S&P 500 outperforming MSCI Emerging Markets by 11,545 bps**

We believe the current environment is setting up an interesting opportunity for the astute investor to capitalize on cheap equity valuations in high-dividend-paying EM equities. At the same time, those same markets are priced in currencies that in aggregate are at valuations akin to those seen near the beginning of EM's large multiyear outperformance run that commenced at the beginning of this century.

This dynamic duo—robust risk premiums plus cheap currencies—may be of interest to investors that are intrigued by compellingly priced investments in this environment.

For information about the WisdomTree Emerging Markets High Dividend Index, please visit WisdomTree.com.

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