EMERGING MARKETS UPDATE

FEBRUARY 12, 2016

Have Currencies Around the World Overshot Fair Value?

We think there's a case to be made that most emerging-market currencies, along with some developed-market currencies, have seriously overshot in their weakness against the U.S. dollar. A reversal of this trend would be very positive for emerging-market investors. Moreover, we believe such a reversal of the five-year trend may have already started or may be close at hand.

DOLLAR TOO HIGH, EMERGING-MARKET CURRENCIES TOO LOW

Many factors, including strong geopolitical forces, have led to the dollar being excessively valued relative to other currencies—especially emerging-market currencies. We also find it interesting that unlike central bankers in Europe and Japan, the U.S. Federal Reserve (Fed) has not forced short-term interest rates into negative territory. Such a situation—in which there's actually a fee to keep money on deposit at a bank—indicates an extreme effort to stimulate an economy, but also has a tendency to produce currency weakness.

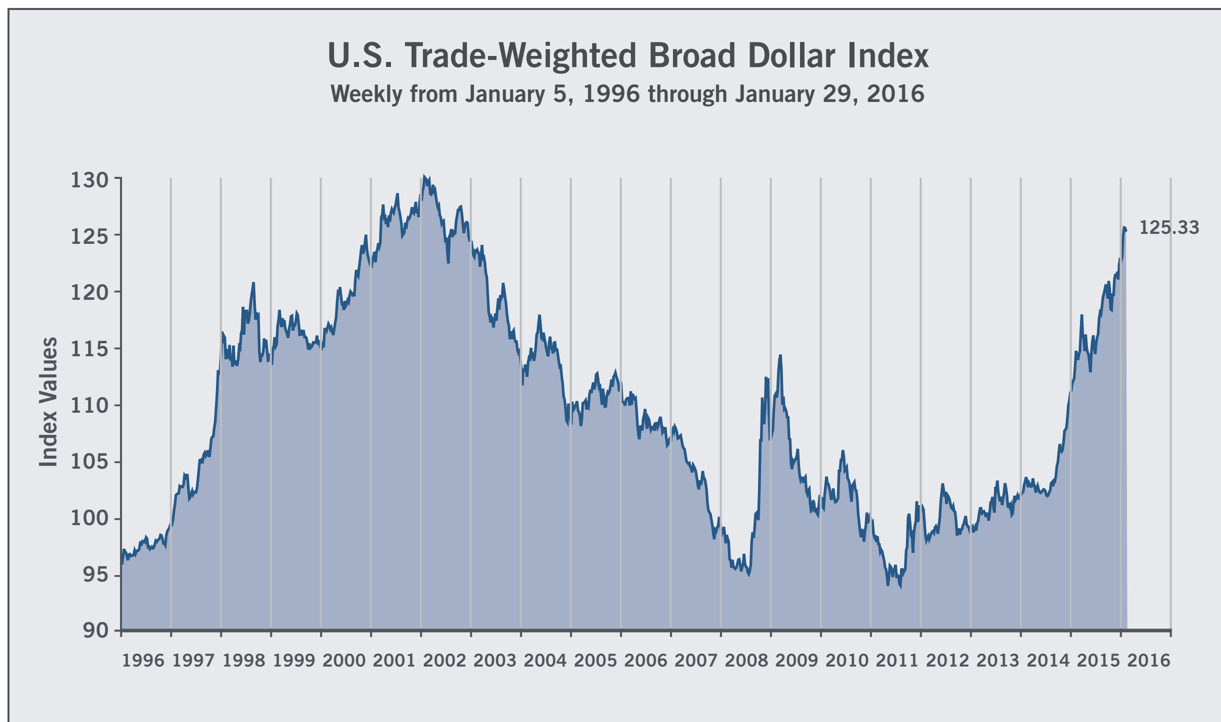
If emerging-market currencies reverse course and strengthen against the U.S. dollar, initially the changes could be very sharp until a new trend is established. Looking at the U.S. Trade-Weighted Broad Dollar Index chart on page 2 (where in January 1997 the Index equaled 100), we can see that the level on January 29, 2016 of around 125 for the greenback is at the upper end of the range since 1996, with the highest level having been at about 130 in 2002. The dollar has now surpassed the levels it held during the depths of the Global Financial Crisis in late 2008 and early 2009.

OUTLOOK BRIGHTENS FOR EMERGING MARKETS

During the end of 2015 and the beginning of 2016, the outlook for emerging markets had been clouded by investor fears and short-term volatility. Stocks globally were getting hit hard, and concerns regarding the Chinese economy and the country's jittery currency had become magnified. The Shanghai and Shenzhen stock markets had become so speculative that they resembled the casinos of Macau. In addition, the Shanghai-Hong Kong Stock Connect had shown a worrying "disconnect"—with valuations in Shanghai far exceeding those in Hong Kong. And even though stocks in Shanghai and Shenzhen are mostly owned by mainland investors, gyrations in these markets still hit global sentiment. But more recently, we're seeing signs of an appropriate decoupling of mainland Chinese stock markets from those in the rest of the world.

Over the last few weeks, we've had more anecdotal evidence that commodity currencies—the currencies of countries like Australia and Canada that depend heavily on the export of certain raw materials for their income—and emerging-market currencies have overshot and are "cheap" relative to the U.S. dollar.

There's nothing like having a restaurant meal in a foreign country to get a relative sense of currency value. In recent trips to Canada and Mexico, our research team noted how inexpensive the meals were. A meal in Canada



Source: Bloomberg. Weekly data for the U.S. Trade-Weighted Broad Dollar Index from January 5, 1996 through January 29, 2016.

is nominally the same price as one in the U.S. But since the Canadian dollar (CAD) is about $1.40 to the U.S. dollar (USD), a dinner in Canada at CAD$80 in fact cost USD$57.

More and more, Canadians have been choosing to bypass the U.S. and spend their vacations in Mexico. Similarly, tourists have been flocking to Japan and Australia, where the currencies are also cheap. Compared to the U.S. on a currency basis, these destinations seem attractively priced—especially if you're from Hong Kong or China, where the currencies had historically been pegged to the U.S. dollar.

Among emerging-market currencies, we find it perplexing that the Mexican peso and the Philippine peso have become so cheap. Mexico and the Philippines are not overly dependent on commodity exports. As a result, we would not have expected these currencies to experience such significant declines in the face of the commodities rout. But if sentiment toward emerging markets improves even modestly, the Mexican peso and the Philippine peso could experience significant rebounds.

EMERGING-MARKET CURRENCIES DECLINED FOR ALMOST FIVE YEARS

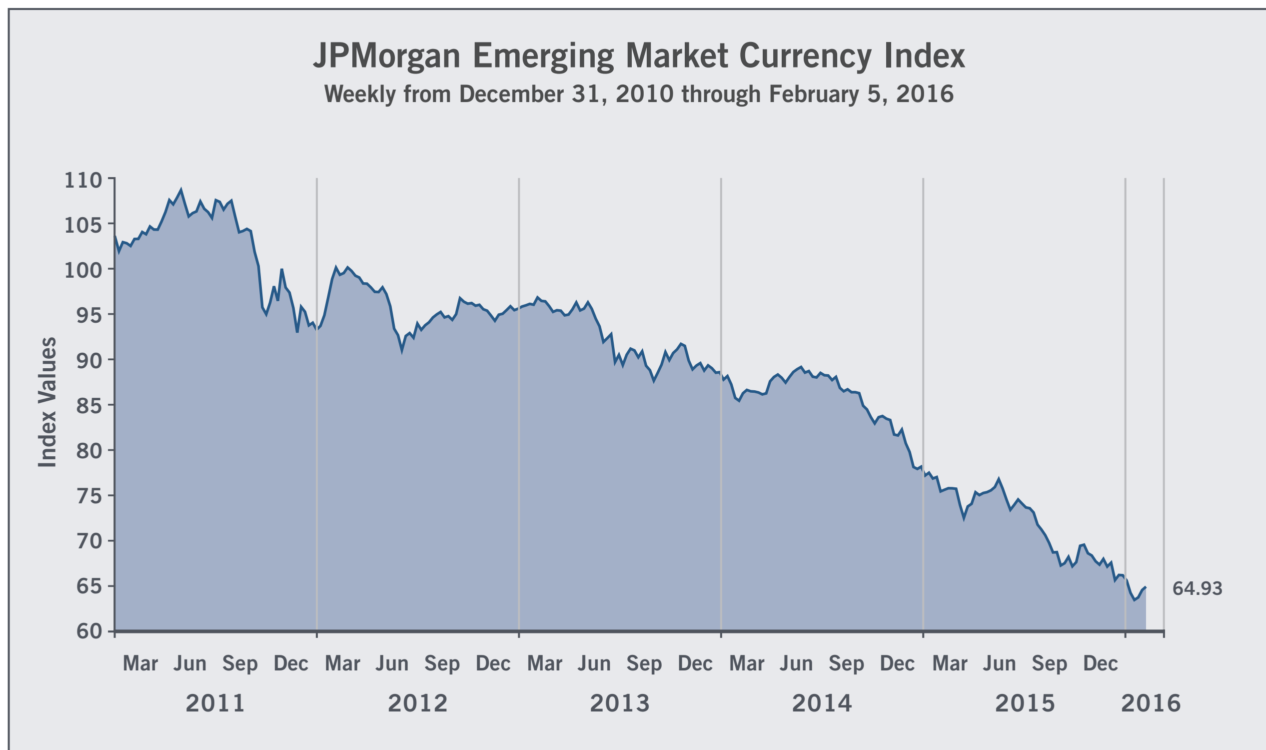
If we look at the JPMorgan Emerging Market Currency Index chart on page 3, we can see that a basket of emerging-market currencies started falling against the U.S. dollar in 2011—for a total decline of about -40%. So the bear market in emerging-market currencies had remained in force for almost five years.

With global growth slowing and geopolitical risks rising, the attraction of the greenback as a safe-haven currency went up in the last several years. More recently, that safe-haven position was enhanced by the U.S. Fed signaling continued interest-rate increases and the Chinese government threatening to devalue the yuan. Conversely, commodity-oriented currencies such as the Australian dollar and the Canadian dollar lost their safe-haven status—along with declines in emerging-market currencies, many (although not all) of which are commodity-dependent. So we conclude that weak commodity prices further encouraged the movement of capital to U.S. dollar-denominated assets.

All in all, the U.S. dollar was in a powerful upward trend for the last several years, backed by some significant convergent forces. Likewise, the perennially steadfast Swiss franc was especially strong—to the point that market forces (rather than central bankers) even drove *longer-term* interest rates to negative levels, a situation we hope does not occur in the United States.

CAPITAL OUTFLOWS MADE THE SITUATION WORSE

In the case of emerging-market currencies, it's likely that the recent undervaluation was magnified by significant outflows from emerging-market bonds and stocks. So



Source: Bloomberg. Weekly data for the JPMorgan Emerging Market Currency Index from December 31, 2010 through February 5, 2016.

what was the scope of asset outflows from emerging markets in 2015? According to an article in the January 27th issue of the *Financial Times*, "The Institute of International Finance, an industry group, estimates that total net capital outflows from EMs amounted to $735bn last year, the first year of net outflows since 1988." These outflows were so strong that the International Monetary Fund's orthodoxy of open capital accounts is being reconsidered.

On the bond side, according to the *Financial Times*, "Investors are deserting emerging market bonds at the fastest rate on record, withdrawing more money than they did at the height of the global financial crisis." Stock outflows from emerging markets in 2015 were also huge, compounded by a number of factors. For example, we estimate that tens of billions of dollars were withdrawn from emerging markets by sovereign wealth funds in the second half of 2015. But we now believe most of the selling by these funds has already taken place.

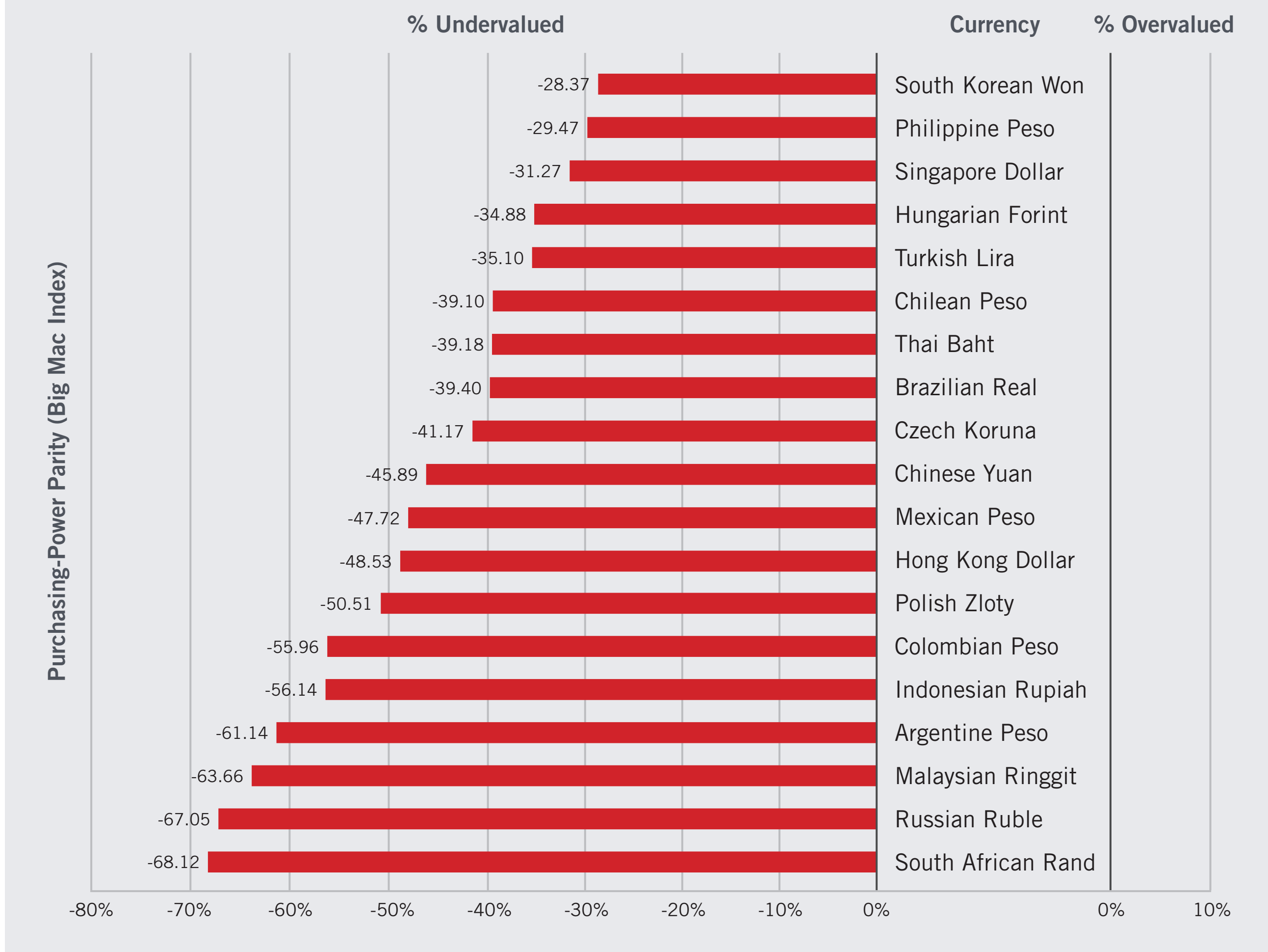
There's an important point about asset outflows from emerging markets: In general, investors taking assets out of emerging markets haven't discriminated among countries. Asset allocation for both emerging-market bonds and stocks has been largely indexed, unlike for developed markets. For example, developed-market investors have tended to proactively decide on their German allocation or their Japanese allocation—rather than invest in countries as a group.

Emerging markets, on the other hand, have often constituted a "basket trade" for investors. So if the basket was sold because China's prospects looked weak, then all the emerging-market countries in that basket would be sold—including those with better prospects. This tendency partly explains why emerging-market stocks and countries have sold off for reasons that are not specific to them.

There have also been reflexive effects, however. For example, if Mexico was sold because it was in the basket, then the Mexican central bank might end up raising interest rates to defend the country's currency, which of course would have knock-on macro implications. This scenario illustrates the slower-burn contagion that has been brought about by the indexing-induced linkages mentioned above.

PURCHASING-POWER PARITY

Resulting from the conditions described in this commentary, many emerging-market bonds, stocks and currencies are now undervalued in our view. Regarding currencies, the "Big Mac Index" is a measure popularized by the *The Economist* to show the relative overvaluation or undervaluation of various currencies based on the concept of purchasing-power parity. The Index uses a consistent mix of goods and services (in this case, those involved in producing a McDonald's hamburger) and



Source: Bloomberg as of February 5, 2016. The Big Mac Index is published by *The Economist* as an informal way of measuring the purchasing-power parity between two currencies and provides a test of the extent to which market exchange rates result in goods costing the same in different countries.

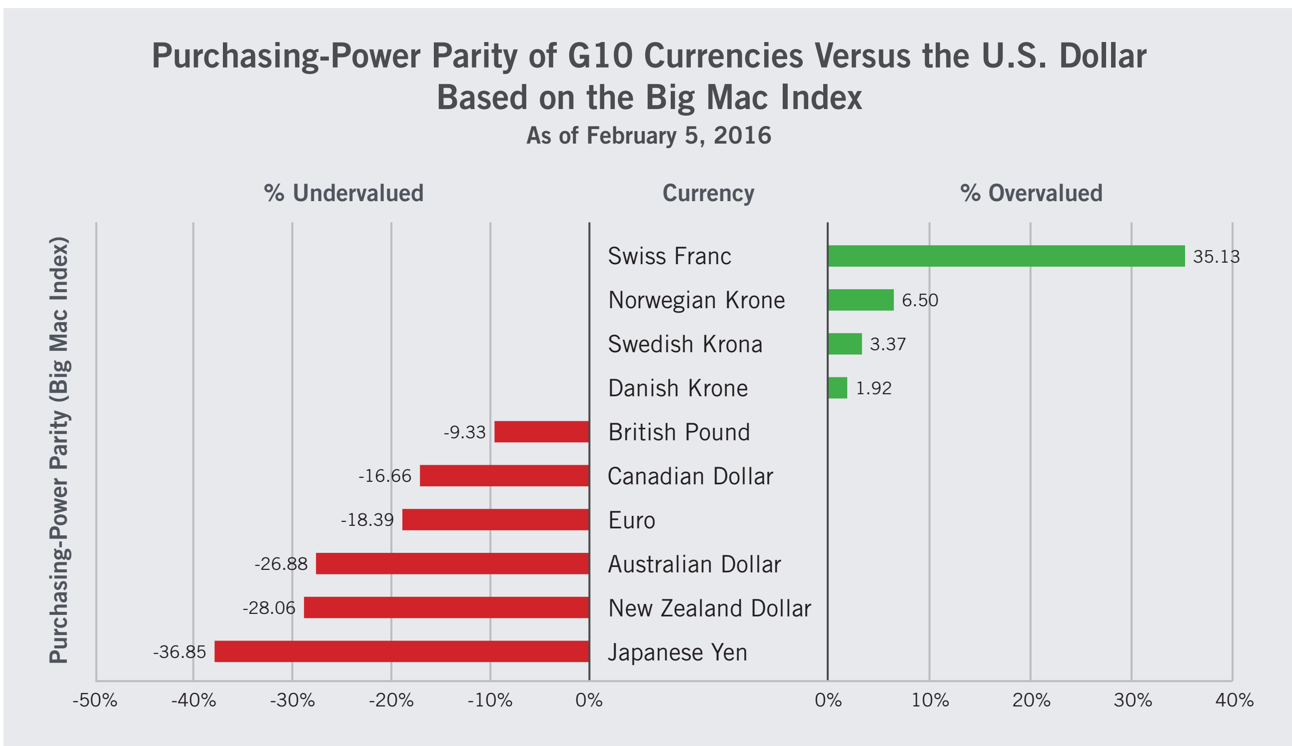
current currency exchange rates to determine the "correct" level. By this measure, the chart above shows the extent to which emerging-market currencies are "undervalued" relative to the U.S. dollar.

It's important to note, however, that this chart does not describe how currency values have *changed* recently and how various currencies match up relative to a benchmark other than the U.S. dollar. For example, we believe the Chinese yuan is significantly *overvalued* on the world stage despite the yuan's implied undervaluation based on the Big Mac Index.

FIVE-FACTOR MODEL: EMERGING MARKETS ARE NOT CREATED EQUAL

We can classify countries based on a simplistic five-factor model in which they get "dinged" on "yes" answers to the following questions: (1) Is the country an emerging market? (2) Does the country have a commodity-oriented currency? (3) Is the country being impacted by difficult geopolitics? (4) Is the country being impacted by difficult domestic politics? (5) Is the country contending with a weak macro environment? Of course, each of these factors can impact the others.

Based on this model, we give Russia four dings (emerging market, commodity currency, impacted by difficult geopolitics and a weak macro environment). But Russia's domestic politics are autocratically stable. We also give Brazil four dings. In a geopolitical sense, Brazil appears to be alright. But the country's domestic political situation is unstable. And the country's three other dings are obvious. Russia and Brazil are the extreme cases. Both countries have political problems. Both are emerging markets. Both



Source: Bloomberg as of February 5, 2016. The Big Mac Index is published by *The Economist* as an informal way of measuring the purchasing-power parity between two currencies and provides a test of the extent to which market exchange rates result in goods costing the same in different countries.

have commodity currencies. And both are contending with weak macro environments.

The Philippines, on the other hand, gets only one ding from us. Although the Philippine peso has weakened along with other emerging-market currencies, forecasts are for the Philippines to produce 6% gross domestic product (GDP) growth in 2016. In addition, the country has a current account surplus of 3.4%, a fiscal budget deficit of only -0.8% and consumer price inflation of a mere 2.7%. So we believe the Philippines was simply subject to the contagion risks driven by persistent outflows of assets from emerging markets overall. Unfortunately, those outflows failed to distinguish among the "good," the "bad" and the truly "ugly" emerging-market countries.

DOLLAR STRENGTH MAY HAVE PEAKED

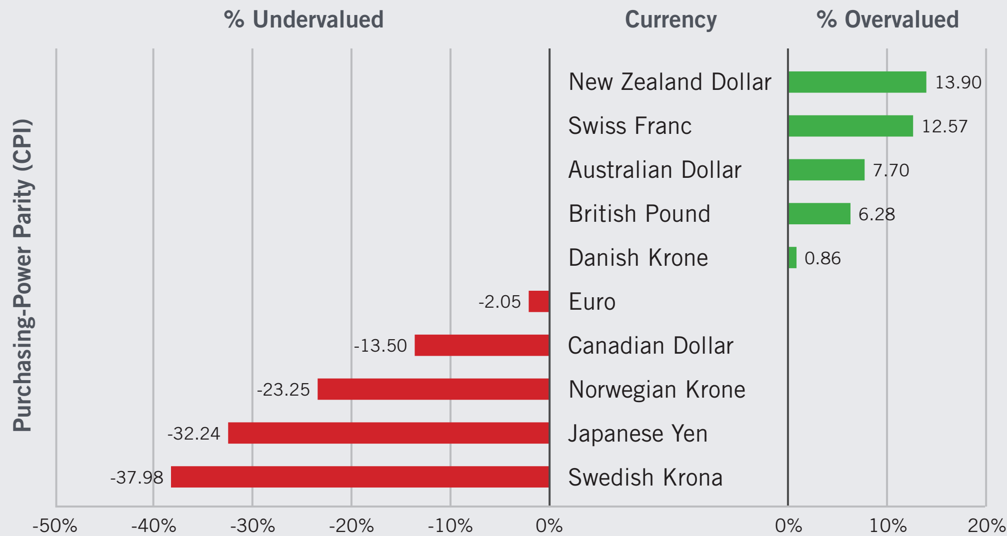
Part of what we've been talking about had to do with the strength of the U.S. dollar, not just the weakness of emerging-market currencies (i.e., the currency-valuation mismatch was largely influenced by too much global capital flowing into U.S. dollar-denominated assets). We can find evidence of this by comparing the greenback to other G10 currencies using the Big Mac Index. Note that in the chart above, most of the commodity-oriented currencies look undervalued.

Another way to evaluate currencies is based on the purchasing-power parity of the consumer price index (CPI), which is illustrated in the chart on page 6. While there are significant differences between the Big Mac and CPI methodologies, the Japanese yen looks very undervalued based on both methodologies.

While official CPI figures are often criticized for being politically influenced and for underreporting inflation, it's interesting to compare the data from four years ago for the same countries. The second chart on page 6 shows the data from January 31, 2012. Back then, almost all of the G10 currencies appeared overvalued relative to the U.S. dollar, a much different picture from what we see today.

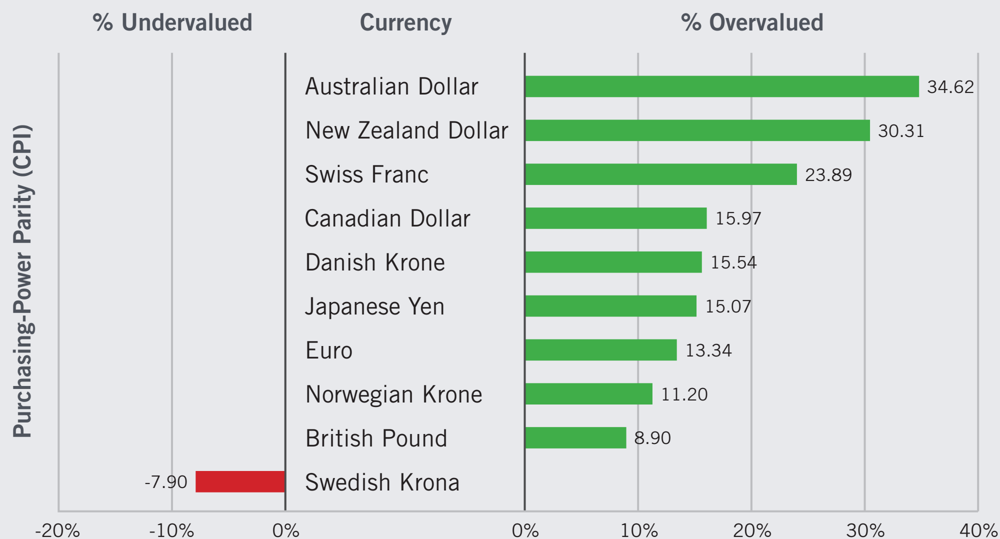
DRAWING CONCLUSIONS

What does all this mean? Asset prices and currency values can show momentum (positive or negative) for longer than expected. It's possible that influences such as geopolitics, for example, can extend the strength of the U.S. dollar for longer than a purchasing-power-parity model or economic data would justify. But we believe macro forces have pushed the dollar up too far even at today's interest-rate levels. And if the U.S. joins Europe and Japan with negative rates, the dollar is even more likely to lose some of its recent strength.



Source: Bloomberg as of February 5, 2016.

Now



Source: Bloomberg as of January 31, 2012.

Four Years Ago

Regardless of slight movements in U.S. interest rates, many emerging-market companies appear reasonably valued. Emerging markets have different demographics and the need for capital in these countries (even with their reduced GDP growth) may offer higher yields compared to what's available in developed markets. Moreover, central banks in emerging markets have more scope to bring down interest rates with disinflation. If we see some

strength in currency values and some stabilization in commodity prices, the emerging-market universe should look more attractive again.

Part of that attraction could come from investors getting used to a "new normal" of slower economic growth in China—but also from higher-quality, more-sustainable growth. Another part could come from a further decoupling of world stock markets from those in Shanghai and Shenzhen on China's mainland. Finally, emerging-market equities may get a boost from the recognition that economic growth is weaker in the United States than in many emerging markets and that the U.S. Fed may delay any previously proposed rate increases.

Our view is that many emerging-market currencies are poised to appreciate 10% to 15%, and at that point they would still be undervalued. We also believe that currency appreciation is likely to be accompanied by rising stock prices in emerging markets and reversal of the capital outflows. Such a scenario can happen fast. And while no one knows if 2016 will be the year that emerging markets reverse course, we think it's a real possibility.

CHINA MAY GO ITS OWN WAY

What about China? How can the emerging-market indices do well if Chinese stocks—which comprise the largest country component of the MSCI Emerging Markets Index—are still excessively valued and are not poised to rise? We have two observations in this regard. First, Chinese stocks seem to have recently decoupled somewhat from other emerging-market equities (and from developed-market equities for that matter). Second, the practice of indexing emerging markets going forward may be a greater disadvantage if China is fundamentally unattractive, as we believe it is—somewhat akin to Japan in the 1990s when many global portfolio managers had secular underweights in Japanese stocks.

Another currency-related point is that we believe the evidence suggests the possibility of devaluation of the Chinese yuan and the Hong Kong dollar, both of which had been pegged to the U.S. dollar. While most emerging-market currencies are arguably poised to rise, we think the yuan and the Hong Kong dollar have room to fall.

PUTTING IT ALL TOGETHER: CURRENCY AND STOCK-PRICE ADJUSTMENTS

While determining "correct" prices for stocks is difficult enough, getting one's arms around the "intrinsic" values of currencies is even more challenging. Measures like purchasing-power parity are relative to other currencies. Another way to understand a currency is to assess how much that currency has deviated from its mean value relative to another currency or basket of currencies over a given time period. For example, over the last 12 years (which includes the period before the Global Financial Crisis), the Indian rupee has periodically been above and below its mean value relative to the U.S. dollar. Currently, the rupee is about 2.3 standard deviations below its mean value, which is the largest deviation (positive or negative) that the rupee has had in 12 years. And deviations typically move back toward the mean over time.

We also see that the Mexican peso relative to the U.S. dollar is about 1.6 standard deviations below its 12-year mean value. For other emerging-market currencies, we see similar standard-deviation figures. As a result, we think the excessive valuation of the U.S. dollar compared to other currencies has moved to an extreme and may be showing signs of a possible reversion. Any reversion would be good for emerging markets' purchasing power and for asset flows into these countries.

Regarding valuations, emerging-market stocks on average are trading at a ratio of about 1.3 times book value, which is close to the bargain level reached in 2008 during the Global Financial Crisis. So when we combine possible changes on the currency front with attractive valuations for emerging-market stocks, and then we also see signs of a bottoming process after five years of lackluster returns, we believe the upside potential for emerging-market investors is strong.

ABOUT THE PORTFOLIO MANAGERS

Roger Edgley, CFA
Director of International Research, Lead Portfolio Manager

Roger Edgley is Director of International Research and the Lead Portfolio Manager for the Wasatch International Growth Fund and the Wasatch Emerging Markets Small Cap Fund. He is also a Portfolio Manager for the Wasatch Emerging Markets Select Fund. In addition, he was the Lead Portfolio Manager for the Wasatch International Opportunities Fund from 2005 to 2015. He joined Wasatch Advisors in 2002 and is a member of the Board of Directors. A native of the United Kingdom, he also holds U.S. citizenship and has many years of international investing experience.

Prior to joining Wasatch Advisors, Mr. Edgley was a principal, director of international research and portfolio manager for Chicago-based Liberty Wanger Asset Management, which managed the Acorn Funds. He was also a co-manager for the Acorn Foreign Forty Fund. Earlier, he worked in Hong Kong as a financial-services analyst for

Societe Generale Asia/Crosby Securities and as an analyst for Strategic Asset Management.

Mr. Edgley has a Master of Arts in Philosophy from the University of Sussex and a Master of Science in Social Psychology with Statistics from the London School of Economics, where he was awarded a Social Science Research Scholarship. He earned a Bachelor of Science with honors in Psychology from the University of Hertfordshire. He is also a CFA charterholder.

Ajay Krishnan, CFA
Lead Portfolio
Manager

Ajay Krishnan is the Lead Portfolio Manager for the Wasatch Emerging Markets Select and Emerging India Funds. He is also a Portfolio Manager for the Wasatch Global Opportunities Fund. He was a Portfolio Manager for the Ultra Growth Fund from 2000 to 2013. In addition, he was a Portfolio Manager for the World Innovators Fund from 2000 to 2007. He joined Wasatch Advisors as a Research Analyst in 1994. He was a Research Analyst on the Ultra Growth Fund prior to becoming a Portfolio Manager.

Mr. Krishnan earned a Master of Business Administration from Utah State University, where he also worked as a graduate assistant. He completed his undergraduate degree at Bombay University, earning a Bachelor of Science in Physics with a Minor in Mathematics.

Mr. Krishnan is a CFA charterholder and a member of the Salt Lake City Society of Financial Analysts. He specializes in analyzing the investment potential of fast-growing companies.

Ajay is a native of Mumbai, India and speaks Hindi and Malayalam. He enjoys traveling, reading, playing squash and road biking.

Andrey Kutuzov, CFA
Associate Portfolio
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Andrey Kutuzov has been an Associate Portfolio Manager for the Wasatch Emerging Markets Small Cap Fund since 2014. He joined Wasatch Advisors in 2008 as a Senior Equities Analyst on the international research team. He also interned at Wasatch in 2007, while studying at the University of Wisconsin-Madison.

Prior to joining Wasatch Advisors, Mr. Kutuzov earned a Master of Business Administration from the University of Wisconsin's Applied Security Analysis Program. While earning his degree, he was on a team that managed a student-run long/short equity portfolio. Prior to graduate school, he was a senior auditor at Deloitte, where his work included designing, performing, and supervising financial and internal control audits of commercial banks and investment companies under the U.S. GAAP as well as various international accounting standards.

Mr. Kutuzov also obtained a Bachelor's and a Master's of Accounting at the University of Wisconsin-Madison. While pursuing his Master's, he taught an undergraduate course in Managerial Accounting. He is a Certified Public Accountant. He is also a CFA charterholder.

Andrey is a native Russian speaker. He enjoys traveling, sports and reading.

Scott Thomas, CFA
Associate Portfolio
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Scott Thomas has been an Associate Portfolio Manager for the Wasatch Emerging Markets Small Cap Fund since 2015 and for the Wasatch Emerging Markets Select Fund since 2016. He joined Wasatch Advisors in 2012 as a Senior Equities Analyst on the international research team.

Prior to joining Wasatch Advisors, Mr. Thomas was a vice president at Morgan Stanley & Co. in New York City and worked in equity research for six years. He also worked in the M&A consulting group at KPMG LLP in San Francisco and New York.

In addition to the CFA and CPA certifications, Mr. Thomas holds a Bachelor of Science in Accounting from Brigham Young University.

Prior to returning to Utah, Scott lived in Madagascar and La Reunion, France. He speaks fluent French and has conversational knowledge of Malagasy and Reunion Creole.

Matthew Dreith, CFA
Associate Portfolio
Manager

Matthew Dreith has been an Associate Portfolio Manager for the Wasatch Emerging India Fund since 2016. He joined Wasatch as a Research Analyst in 2011.

Prior to joining Wasatch, Mr. Dreith worked as an Investment Analyst for the Time Value of Money L.P. in Austin, Texas as well as American Century Investments in Kansas City, Missouri. He also completed an investment analyst internship with Alchemy Capital Management in Mumbai, India.

Mr. Dreith earned a Master of Business Administration from McCombs School of Business at the University of Texas. He is also a CFA charterholder.

Matt is a native of Colorado and has lived in Denmark and India. He enjoys traveling, reading and spicy food.

ABOUT WASATCH ADVISORS®

Wasatch Advisors is the investment manager to Wasatch Funds,® a family of no-load mutual funds, as well as to separately managed institutional and individual portfolios. Wasatch Advisors pursues a disciplined approach to investing, focused on bottom-up, fundamental analysis to develop a deep understanding of the investment potential of individual companies. In making investment decisions, the portfolio managers employ a uniquely collaborative process to leverage the knowledge and skill of the entire Wasatch Advisors research team.

Wasatch Advisors is an employee-owned investment advisor founded in 1975 and headquartered in Salt Lake City, Utah. The firm had $15 billion in assets under management as of January 31, 2016. Wasatch Advisors, Inc. is registered with the Securities and Exchange Commission under the Investment Advisers Act of 1940.

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Investing in small cap funds will be more volatile and loss of principal could be greater than investing in large cap or more diversified funds.

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DEFINITIONS

The **Trade-Weighted U.S. Dollar Index***, also known as the Broad Index, is a measure of the value of the United States dollar relative to other world currencies. The Index was introduced by the U.S. Federal Reserve Board in 1998 in response to the implementation of the euro. The Federal Reserve selected 26 currencies to use in the Broad Index. When the Index was introduced, U.S. trade with the 26 represented economies accounted for over 90% of total U.S. imports and exports.*

The financial crisis of 2007-09, also known as the **Global Financial Crisis** *and 2008 financial crisis, is considered by many economists to have been the worst financial crisis since the Great Depression of the 1930s.*

The **Shanghai-Hong Kong Stock Connect** *is a mutual market access program, through which investors in Hong Kong and mainland China can trade and settle shares listed on the other market, respectively, via the exchange and clearing house in their local market.*

Valuation *is the process of determining the current worth of an asset, company or currency.*

The **JPMorgan Emerging Market Currency Index** *measures the strength of the most traded developing country currencies against the U.S. dollar.*

A **bear market** *is generally defined as a drop of 20% or more in asset prices over at least a two-month period.*

The **International Monetary Fund (IMF)** *is an international organization established in 1945 that aims to promote international trade and monetary cooperation, and stabilization of the world's currencies. The IMF maintains a monetary pool from which member nations can draw in order to correct a deficit in their balance of payments. It is a specialized agency of the United Nations.*

A **sovereign wealth fund (SWF)** *is a state-owned investment fund investing in real and financial assets such as stocks, bonds, real estate, precious metals, or in alternative investments such as private equity funds or hedge funds. Sovereign wealth funds invest globally.*

The **Big Mac Index** *is published by* The Economist *as an informal way of measuring the purchasing-power parity between two currencies and provides a test of the extent to which market exchange rates result in goods costing the same in different countries. It "seeks to make exchange-rate theory a bit more digestible." The Index takes its name from the Big Mac, a hamburger sold at McDonald's restaurants.*

Purchasing-power parity (PPP) *is an economic theory that estimates the amount of adjustment needed on the exchange rate between countries in order for the exchange to be equivalent to each currency's purchasing power. Two currencies are in PPP when a market basket of goods (taking into account the exchange rate) is priced the same in both countries.*

Gross domestic product (GDP) *is a basic measure of a country's economic performance and is the market value of all final goods and services made within the borders of a country in a year.*

G10 currencies *are 10 of the world's most heavily traded currencies. The G10 currencies are also the world's most liquid currencies. Traders buy and sell them in an open market regularly with minimal impact on their own international exchange rates. In certain banking circles, reference is made to the G11 currencies, which are the G10 currencies plus Danish Krone.*

A **Consumer Price Index (CPI)** *is a measure that examines the weighted average of prices of a basket of consumer goods and services, such as transportation, food and medical care. The CPI is calculated by taking price changes for each item in the predetermined basket of goods and averaging them. The goods are weighted according to their importance.*

The **MSCI Emerging Markets Index** *is a free float-adjusted market capitalization index designed to measure the equity market performance of emerging markets. You cannot invest in this or any index.*

Book value *is the value of a security or asset as entered in a company's books.*

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