

Emerging Markets: As the Tide Goes Out



“It’s only when the tide goes out that you learn who’s been swimming naked.”

Warren Buffett, 1992 Letter to Berkshire Hathaway Shareholders



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Overview

THE RECENT SWOON OF EMERGING MARKET ASSETS has led many investors to question whether this period of underperformance reflects a temporary cyclical downturn or the beginning of a long-lasting trend based on the significant structural issues facing emerging market countries. We have called attention to the shared and specific fault lines of emerging markets for the last four years when making the case that US preeminence is intact and sustainable. We have repeated our belief that these

well-entrenched issues—covering the gamut from poverty and pollution to government interference and woefully inadequate infrastructure—were largely being dismissed in the rush to proclaim the rising power and influence of emerging market economies.

So it should come as no surprise that we believe this recent bout of volatility and underperformance reflects a significant reassessment of emerging market countries and the lack of progress they have made in addressing their fault lines. If anything, the task before emerging market leaders is even more arduous than before the financial and economic crisis given that the macroeconomic tailwinds that boosted growth in the 2003–07 period have come to an end. Today, leaders in China cannot undertake needed reforms without running the risk of significant economic and

social disruptions. Combined with the prospect of increased capital outflows brought on by a reversal of monetary policy in the United States, this catch-22 situation will increase uncertainty around all other emerging market assets.

We therefore encourage investors across the globe to revisit their strategic asset allocation to emerging market assets and brace for the strong possibility of significant underperformance and heightened volatility over the next 5 to 10 years. While recognizing that some allocation to emerging market assets is warranted, we are lowering our allocation to emerging markets from a total of 9% to 6% for a moderate-risk client with a well-diversified portfolio. We also conclude that it is too early to overweight emerging market assets on a tactical basis, as they are not yet attractive enough from a valuation perspective.

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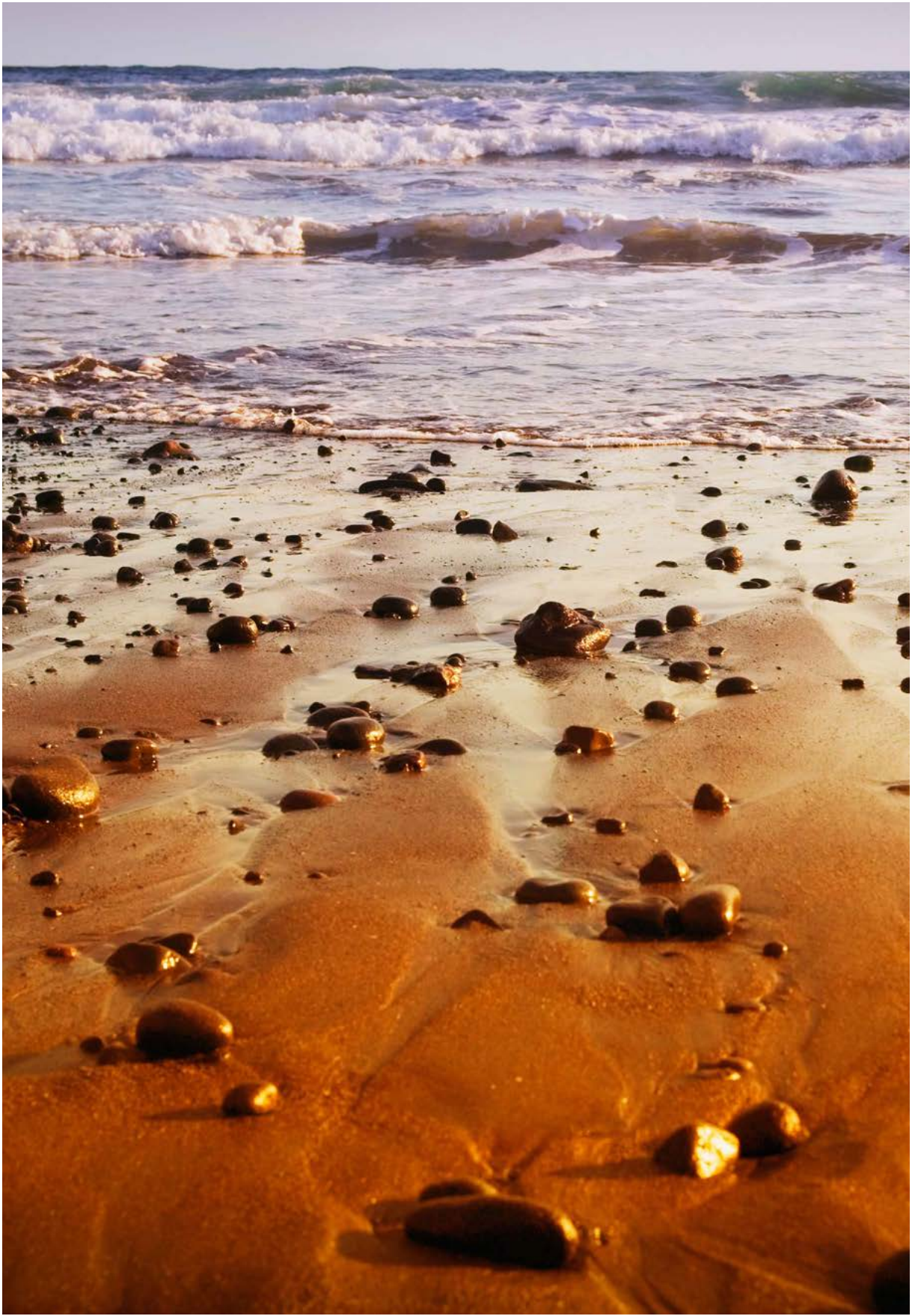
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Emerging Markets: As the Tide Goes Out

EMERGING MARKET EQUITIES, DEBT AND CURRENCIES have been among the worst-performing assets in 2013. Emerging market equities have lagged US equities by as much as 30%. Emerging market local debt has lagged US high yield assets by 15% and emerging market dollar debt has lagged by about 13%. Emerging market currencies also underperformed the US dollar across the board, with some currencies, such as the Indian rupee and Brazilian real, dropping over 20% and others, such as the Russian ruble and Mexican peso, dropping over 10% at various times during the year.

In line with these downdrafts, realized volatility in emerging market assets doubled. In equities, rolling three-month volatility more than doubled from a trough of 8% early this year to 19% by September. Local debt volatility tripled from a trough of 4% to 13%. And the volatility of emerging market currencies increased with realized volatility tripling and implied volatility nearly doubling.

Such poor performance across emerging market assets has raised a critical question for all investors: Is this a cyclical downturn that presents an investment opportunity for a tactical allocation or is this the beginning of an important reassessment of emerging market countries that will, in turn, lead to a revaluation of all emerging market assets and a recalibration of risk and return expectations?



We believe that this bout of volatility and underperformance reflects a significant reassessment of emerging market countries. As such, we encourage investors across the globe to revisit their strategic asset allocation to emerging market assets and ensure that they are positioned appropriately for periods of underperformance and heightened volatility over the next 5 to 10 years.

We will begin with a brief review of the arguments that attribute this bout of underperformance to cyclical factors. We will then present our views regarding the major structural fault lines in key emerging markets and demonstrate how the lack of progress in addressing—and, in some cases, even deterioration of—these structural fault lines have left many emerging market countries in weaker positions than they were before the financial and economic crisis of 2008–09. We will show the difficulties of addressing these fault lines and make the case that such herculean tasks cannot be undertaken without the risk of significant economic and social disruptions. We will also show how the emerging market countries benefited from significant tail winds during the 2003–07 period that are unlikely to be repeated in the next decade. As such, we have altered our risk and return expectations across these asset classes, resulting in changes to our recommended asset allocation. We will also discuss how the downward reassessment of emerging market countries is coinciding with an upward reassessment of the United States and US assets, which further supports the reallocation of assets away from emerging markets to the US.

We encourage investors across the globe to revisit their strategic asset allocation to emerging market assets.

Cyclical Factors Do Not Hold the Key

Over the last several months, there has been a deluge of analysis blaming recent emerging market weakness on cyclical factors. Specifically, three core arguments have been put forth.

First, some have argued that the upcoming tapering of bond and mortgage-backed securities purchases by the Federal Reserve and the eventual end of quantitative easing will reverse the easy flow of capital to emerging markets. They point out that less liquidity in the US will affect emerging market assets by pulling funds away from these markets, leaving them to compete for scarce resources by offering higher rates, cheaper currencies and more attractive equity valuations. As a reference point for this argument, rising US interest rates and/or an appreciating dollar have been associated with past crises in emerging markets: the Mexican “tequila crisis” of 1994 and the Asian crisis of 1998. Furthermore, in the week following the Federal Reserve’s announcement that it would not taper the level of its asset purchases in September, emerging market equities outperformed US equities by 3%, and emerging market local debt and dollar debt both outperformed US high yield by just over 1%.

Second, some have argued that the risks of a cyclical slowdown in China have increased and that emerging market assets have to reflect this heightened risk as a result. A slowdown in Chinese demand growth would impact commodity producers. Similarly, exporters to China—be they direct exporters or indirect exporters of intermediate goods that are eventually destined for China—would face reduced demand. There is merit to this argument as well. In fact, China’s late-July announcement of a “mini-stimulus” that focused on railway expansion, lower taxes for small businesses, and measures to increase exports has been followed by a string of stronger economic data that

has given a boost to a partial recovery in emerging market assets. Chinese equities rallied about 10% over an eight-week window between China's mini-stimulus announcement and the Federal Reserve's postponement of tapering; emerging market equities increased about 5%.

Finally, some have pinned emerging market woes on a confluence of other cyclical factors. They argue that the impact of a Federal Reserve tapering and a slowdown in China are being compounded by concerns about too much credit growth in many of the emerging market countries and a deteriorating balance of payments in select countries. Headlines concerning mortgage defaults by Chinese homeowners,¹ the questionable viability of loans to the US-based arms of Chinese companies,² corporate defaults or debt restructurings such as the recent default and bankruptcy of Brazil's OGX and OSX, and the increase in non-performing and restructured loans in India have only strengthened these concerns.

While these three arguments have some merit, we do not believe that cyclical factors fully explain the underperformance of emerging market assets. On the contrary, we believe these arguments have shed more light on the deep structural fault lines of emerging market countries.

A Downward Reassessment Is Underway

There are two indications that investors are undertaking a more fundamental reassessment of emerging markets.

First, while the mid-year swoon of emerging market assets has garnered considerable attention, these assets have, in fact, been lagging for a number of years, some as far back as late 2008. We believe that the magnitude and duration of underperformance relative to US assets has begun to temper the unbridled enthusiasm for emerging market assets.

Second, there has been a notable shift in sentiment about emerging markets, from market observers to the media, from research analysts to the International Monetary Fund (IMF). This shift has gained considerable momentum in the

last several months and has led to more frequent discussions about the intransigence of the structural fault lines of emerging market countries. The concern is that these countries showed little appetite for implementing reform during the boom times, and they are far less likely to encourage such transformation now that they face slower growth and more deep-seated structural problems.

Let's examine these two indications in greater detail.

Performance Has Been Lagging for a While

Emerging market assets have been lagging the US on an annualized basis since the depths of the financial crisis. Between March 2009, when the S&P 500 hit an intra-day trough of 666, and November of 2013, US equities have produced a total return of 195%. Over the same period, emerging market equities have returned 117%. Said differently, emerging market equities have lagged US equities by 8% on an annualized basis over the last 4.5 years. In dollar terms, emerging market equities have fared better with a total return of 139% because the currencies of these emerging markets appreciated about 10% during this time period. Nevertheless, even from a dollar perspective, emerging market equities lagged US equities by 5% on an annualized basis.

While the most acute phase of this underperformance began in late 2010 as Chinese GDP growth peaked, two considerations prompted us to measure returns from the nadir of the financial crisis. First, at the nadir investors were extremely optimistic about emerging market assets, while becoming pessimistic about those of the US, based on the more resilient economic performance of emerging markets during the crisis. Second, and as a result of the first point, the bulk of assets invested in emerging market equities were allocated in 2009 and 2010. Indeed, based on data from EPFR Global, an aggregator of fund flows, 72% of the \$248 billion of assets allocated to emerging market equity mutual funds and exchange traded funds (ETFs) between 2004 and 2013 were invested between 2009 and 2010. In fact, the share of emerging market equity ETFs as a percentage of total equity ETFs reached peak levels in late 2010.

Most of those investors have seen their assets lag the returns of US equities.

Among bonds, US high yield has provided a total return of 163% since its trough in December 2008 through November of this year, while emerging market local debt has returned 55% and emerging market dollar debt has returned 82%. So, emerging market local debt and dollar debt have lagged their US counterpart by 12% and 9%, respectively, on an annualized basis for five years. During this period, emerging market currencies were a slight drag on the returns of emerging market local debt.

We believe that this multi-year window of underperformance, exacerbated by great downward momentum in 2013, is leading to a reassessment of the risk and return characteristics of emerging market assets. Investors who were enticed by strong emerging market returns between late 2002 and late 2007, when emerging market equities outperformed US equities by 25% a year for five years, are now realizing that emerging market equities are not only highly volatile but that they can lag US equities for prolonged periods. They are also coming to grips with the fact that the much-touted faster economic growth in some of these countries has not always translated into higher equity returns.

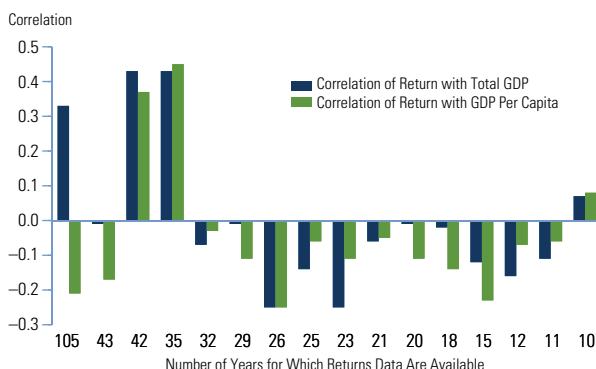
Faster Economic Growth Does Not Equate to Higher Equity Market Returns

One of the biggest misconceptions about investing in emerging market assets has been the view that faster economic growth will result in higher equity returns compared with developed markets. There is an implicit assumption that faster economic growth will result in faster growth in corporate profits and dividends, which in turn will lead to higher equity returns. The facts do not support such a linkage. In reality, all the studies and data we have examined show that faster economic growth does not result in higher equity returns, and, in many cases, the data actually point to a negative correlation between economic growth and equity returns.

Building off research conducted by Elroy Dimson, Paul Marsh and Mike Staunton of the London Business School,³ and Jay Ritter of the

Exhibit 1: A Disconnect Between GDP Growth and Equity Returns

The relationship between economic growth and equity returns is not stable.



Data as of 2004.

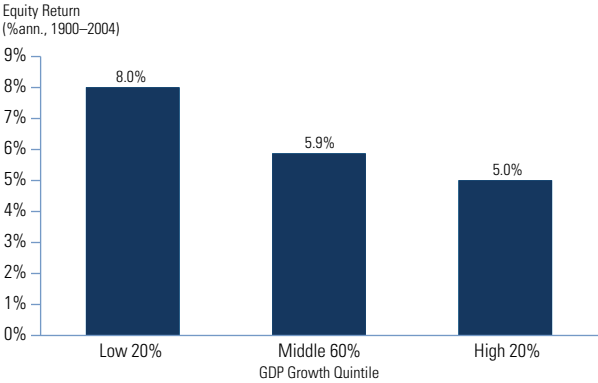
Source: Investment Strategy Group, Elroy Dimson, Paul Marsh and Mike Staunton, "Global Investment Returns Yearbook 2005," ABN AMRO, February 2005.

University of Florida,⁴ we found that there is no stable relationship between economic growth and equity returns, as shown in Exhibit 1. Looking at overall economic growth, the correlations range from 0.07 to -0.07 over the last 32 years. If we look at the data over a 42-year span, the correlation rises to 0.43, but it subsequently drops to zero when we extend the analysis by one more year. We use these idiosyncratic 42- and 43-year periods to illustrate that any correlation that swings from 0.43 to zero, simply by virtue of adding one additional year of data and having fewer countries in the data set, is clearly not stable and reliable. Therefore, we should dispel the notion that economic growth and equity returns are correlated.

Dimson, et al. in fact devised an investment strategy whereby the countries were assigned to five quintiles based on their GDP growth rates over the preceding five years. They show that the total return of stocks in the countries of the slowest growth quintile exceeded the total return of stocks in the fastest growth quintile, whether one looked at 17 countries with data going back to 1900 or 53 countries going back over several decades. As shown in Exhibit 2, the slower growth countries actually outperformed the faster growth countries by 3% a year over the 105-year period.

Exhibit 2: Equities in Slow-Growth Economies Have Posted Better Returns

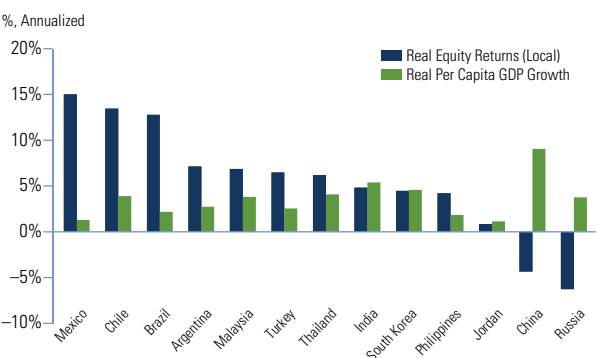
Over the 105 years studied, equities in bottom fifth of countries grouped by growth performed best.



Data as of 2004.
Source: Investment Strategy Group, Elroy Dimson, Paul Marsh and Mike Staunton, "Global Investment Returns Yearbook 2005," ABN AMRO, February 2005.

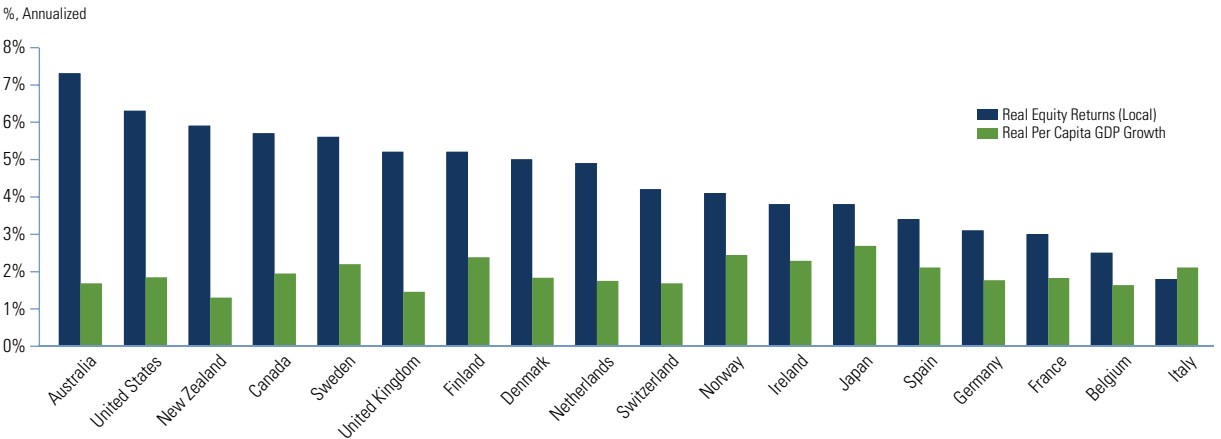
Exhibit 3: Equities and GDP Growth Diverge in Emerging Markets

Stock performance and economic growth don't always go hand-in-hand.



Data as of 2012.
Note: Data since 1988 except for Brazil, China, India (1993) and Russia (1995).
Source: Investment Strategy Group, Datastream, IMF, Jay R. Ritter, "Is Economic Growth Good for Investors?" *Journal of Applied Corporate Finance*, Vol. 24, No. 3, Summer 2012.

Exhibit 4: Equities and GDP Growth Diverge in Developed Markets
Equity returns and GDP exhibit a negative correlation.



Data as of 2012.
Note: Data since 1900.
Source: Investment Strategy Group, IMF, Jay R. Ritter, "Is Economic Growth Good for Investors?" *Journal of Applied Corporate Finance*, Vol. 24, No. 3, Summer 2012.

Building on Ritter's earlier research, the Investment Strategy Group updated the analysis from 1988 to 2012 for emerging market countries and from 1900 to 2012 for developed markets, as shown in Exhibits 3 and 4. We found that the correlation between equity returns and the growth

rate of GDP per capita is -0.48 for emerging markets and -0.25 for developed markets.

We believe that the starkest example of this divergence between growth and equity returns can be seen in a comparison of the two largest economies in the world: the United States and

Since the beginning of 1993, the 0.4% annualized total return of China's equity market has lagged that of the US by 8.8%, while China's annualized GDP growth has outpaced that of the US by 7.4%.

equities rose at less than half the rate of the per-share earnings of US stocks. As pointed out by Ritter, countries and companies can grow but they can inflict "losses on shareholders" at the same time when growth is the paramount objective of national policy, as has been the case in some emerging market countries. This is particularly true when the government is a major shareholder in some of the

China. Since the beginning of 1993, China's real GDP has grown at 10% a year, far outpacing the US's 2.6% growth rate, as shown in Exhibit 5. Yet the 0.4% annualized total return of China's equity market has lagged that of the US by 8.8% over the same period. Investors not only did not benefit from rapid economic growth in China, but their unattractive returns were exacerbated by high volatility over this period. Chinese equities experienced more than double the volatility of US equities.

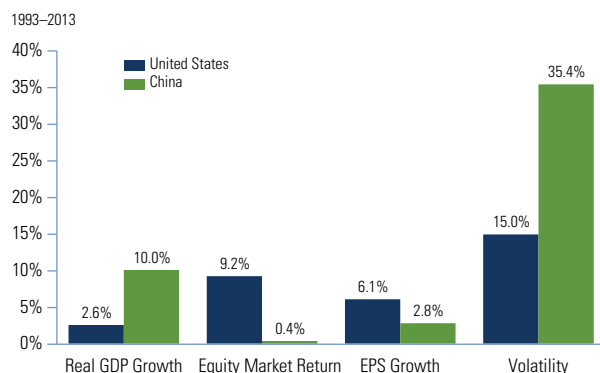
Lower growth in earnings per share helps explain part of this underperformance. As seen in Exhibit 5, the per-share earnings of Chinese

largest companies and uses the company to pursue broader national objectives.

Government ownership of listed companies in emerging market countries is quite significant relative to that of developed economies, ranging from a high of 59% in China to a low of 17% in Brazil, as shown in Exhibit 6. These figures may understate governments' actual participation in the private sector. For example, China's ownership interest in the country's largest banks ranges from a high of 83% in the Agricultural Bank of China to 67% for Bank of China. The government also owns 87% of PetroChina. We estimate that government ownership in China may well be higher than the

Exhibit 5: China's Faster GDP Growth Hasn't Produced Higher Returns than the US

Despite slower growth, the US did better than China on equity returns, earnings growth and low volatility.



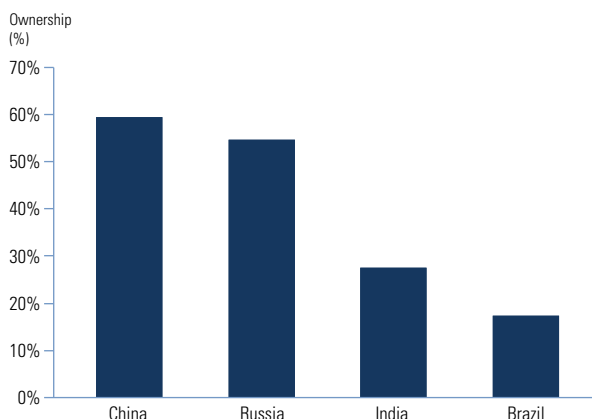
Equity returns as of November 2013. GDP data as of Q3 2013.

Note: Based on S&P 500 and MSCI China Local total returns.

Source: Investment Strategy Group, Datastream.

Exhibit 6: EM Governments Are Big Shareholders of Domestic Companies

China tops list of BRIC countries' ownership of local listed companies.



Data as of November 29, 2013.

Source: Investment Strategy Group, Bloomberg, Datastream.

stated 59%—closer to 65% through incremental indirect ownership and other government linkages.

The recent history of Petrobras, the Brazilian oil company that is 48%-owned by the government, illustrates the extent to which national interests take priority over shareholder interests in companies with significant government stakes. The evidence is compelling, starting with the 2010 offering to finance the exploration and production (E&P) rights for the Libra field, to the requirement to use local service companies for the upstream operations, to the cap on prices at which Petrobras can sell refined products—locking in a loss on some of their sales. Furthermore, Petrobras by law has to be the sole operator “with a minimum stake of 30% in all new E&P blocks in the pre-salt layer.”⁵

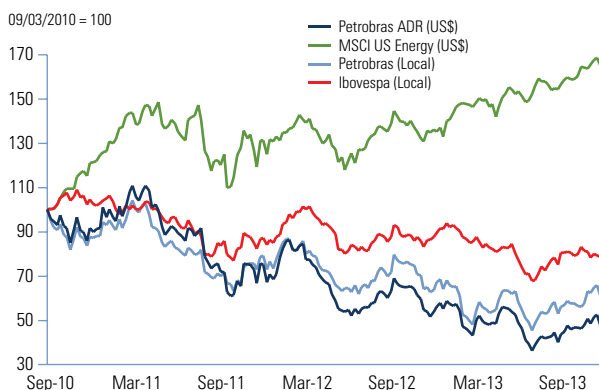
The heavy hand of the state partly explains the limited interest in the October 21, 2013, auction of the production rights to the Libra field. The government had expected about 40 potential bidders but only 11 registered. On the day of the auction, there was only one bid, comprised of a consortium of Royal Dutch Shell, Total, China National Petroleum and CNOOC. Several major oil companies with technological expertise in deep water—including Exxon Mobil Corp., Chevron Corp., and BP PLC—did not even bid.⁶



“We may engage in activities that give preference to the objectives of the Brazilian federal government rather than to our own economic and business objectives.” — Petrobras, 2010

Exhibit 7: Petrobras Has Underperformed Since Rights Offering

The company's shares have significantly underperformed US energy equities.



Data through November 29, 2013.

Source: Investment Strategy Group, Bloomberg, Datastream.

The potential for prioritizing national interests over shareholder interests was explicitly stated in Petrobras's registration for new equity issuance with the SEC in 2010: “We may engage in activities that give preference to the objectives of the Brazilian federal government rather than to our own economic and business objectives.”⁷ Investors have taken note. Since the announcement of the rights offering, Petrobras has lagged US energy equities by 32% on an annualized basis and over 100% cumulatively in dollar terms, as shown in Exhibit 7. In local terms, Petrobras has also lagged the broader Brazilian stock market by 18% even though it constitutes about 10% of that market.

In a 2012 National Bureau of Economic Research (NBER) report, *Management Practices Across Firms and Countries*, Nicholas Bloom and his co-authors find that government-owned organizations have weak management practices relative to most other ownership structures. They also show that companies in emerging market economies are “typically less well managed,” with Brazil, China and India scoring the weakest for management practices, in that order.⁸ Russia was not part of the original research but a separate study led by Bloom showed that Russia scores just above India with respect to management practices.⁹

The combination of government ownership and weaker management practices in emerging market countries seems to explain part of the lagging performance of equities relative to economic growth in such countries. While the absence of any linkage between growth and equity returns is not a new topic, it appears that the broader investing public has taken greater note of this lack of correlation.

Seismic Shift in Sentiment

The shift in sentiment regarding emerging market countries and their respective trajectories has been seismic. In the mid-to-late 2000s, the public seemed enraptured by emerging market countries. Books and articles extolled the rising power and influence of emerging market countries, and investors were encouraged to allocate significant assets to emerging market equities. Captivating newspaper headlines about China, such as *The Decade the World Tilted East*¹⁰ or *Wheel of Fortune Turns as China Outdoes West*,¹¹ stood in sharp contrast to those about the US: *The Dollar Adrift*¹² and *The Message of Dollar Disdain*.¹³ The prevailing mantra at the time was best captured by a book titled *When Giants Fall: An Economic Roadmap for the End of the American Era*.¹⁴

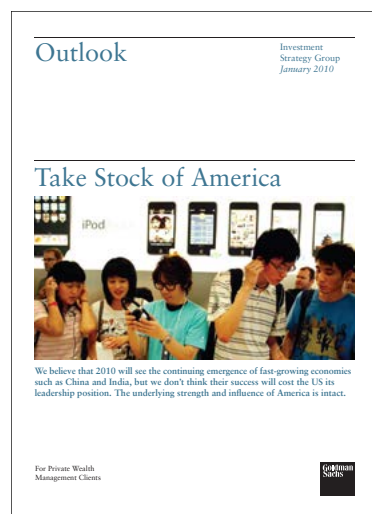
As some of our clients may know, we did not join the crowd. In our 2010 *Outlook: Take Stock*

of America, and our 2011 *Outlook: Stay the Course*, we challenged that view and stated that the US's position as the preeminent economic and geopolitical power was intact and sustainable.

Today, this favorable sentiment toward emerging markets has greatly diminished, as is evidenced by a dramatic reversal in works on India and China. In 2005, India was a rising power with great potential according to several India experts who authored *India Rising: Emergence of a New World Power*.¹⁵ Now, less than a decade later, that positive sentiment has been replaced with great concern: *How India Stumbled, Can New Delhi Get Its Groove Back?*¹⁶ and *India's Broken Promise, How a Would-Be Great Power Hobbles Itself*.¹⁷

The sentiment towards China has also shifted significantly. In 2009, a book titled *When China Rules the World: The End of the Western World and the Birth of a New Global Order*,¹⁸ focused on how China's rise as a superpower was going to unseat the West and establish an entirely new global order. Four years later, a book titled *China Goes Global: The Partial Power*,¹⁹ describes how "contrary to conventional wisdom, China is a partial power, with nowhere near the clout of the US and not yet a strategic rival to the US." Another book published in 2013, *Stumbling Giant: The Threats to China's Future*, highlights the difficulties China will face in implementing policies to address its significant fault lines.

One of the most notable reversals on the promise of such countries comes from Antoine van Agtmael, who coined the term "emerging markets" as an investment officer at the International Finance Corporation in 1981 and has been an emerging market investor for over 30 years. In a 2007 book titled *The Emerging Markets Century: How a New Breed of World-Class Companies Is Overtaking the World*, van Agtmael stated that some emerging market companies



would leap ahead of western multinationals not by way of cost advantages but through “man-made factors” such as “an obsessive focus on quality and design.”²⁰ Five years later, in a *Foreign Policy* article titled *The End of the Asian Miracle*, he wrote that “the United States may be doing better than we thought, and China and other rising powers may not be doing quite as well as believed.”²¹ Most recently, he co-authored another *Foreign Policy* article called *BRIC Wall*, in which he addressed the question of whether the “golden age of emerging markets” is over.²² Van Agtmael also reviewed “several deeper causes around which the fog is lifting only now.” We agree with his view that this lifting of “the fog” is allowing more light to fall on the key issues facing emerging market countries.

Van Agtmael is not alone in his change in sentiment. In a late November 2010 article for *The Wall Street Journal* titled *In China’s Orbit*, Niall Ferguson, a professor of history at Harvard University, wrote about the shift of global economic power from West to East and the arrival of the Asian century with China at the center.²³ As shown in Exhibit 8, the image chosen for the article was particularly telling: China is a major planet and the United States is one of many smaller moons revolving around it. Just a year and a half later, he stated that what made him now “optimistic about the United States is technology and the ability of the United States still to be at the cutting edge... That is a Silicon Valley story.”²⁴

Even the IMF has changed its view of relative growth in emerging markets. The organization now projects an annual growth rate of 5.4%

Exhibit 8: In 2010, a Niall Ferguson Article Implied that the US Was “In China’s Orbit.”



for emerging markets over the next five years, compared with a previous five-year growth projection of 6.9% back in 2008. This 1.5% reduction is substantially greater than the 0.2% reduction the IMF shaved from growth projections for developed economies. The *Financial Times* called the IMF shift an “about-turn” in which the Fund now sees advanced economies taking the claim of being the global economy’s dynamic engines of growth away from emerging markets.²⁵

“The United States may be doing better than we thought, and China and other rising powers may not be doing quite as well as believed.”

– Antoine van Agtmael

Revisiting the Structural Fault Lines of Key Emerging Markets

We believe that emerging markets' recent poor performance and the resulting change in sentiment is drawing attention anew to significant structural issues that continue to hinder these countries' growth prospects. While we have covered these fault lines extensively in recent years, we review them now for three reasons.

First, we think our clients should be aware of the deep structural problems that exist in these countries, and that, in some cases, have since worsened. These fault lines have been and will continue to be a source of market volatility and our clients will be better served if they understand and are prepared for such volatility.

Second, we need to examine whether key emerging market countries have made any significant progress in addressing their fault lines given the relatively strong growth rates over the past decade. We have to ascertain whether they are in a stronger economic and institutional position today than 10 years ago. Our resounding conclusion is that while they have improved in some areas, they have not made enough progress to avert major disruptions.

Furthermore, the macroeconomic tailwinds that boosted growth in the 2003–07 period have come to an end, making structural reform all the more difficult to achieve. These tailwinds, discussed at length in a report titled *Not Your Older Brother's Emerging Markets*²⁶ by Dominic Wilson, our

colleague in Goldman Sachs Global Economics, Commodities and Strategy Research, include the impact of China joining the World Trade Organization (WTO) in 2001, the commodity “supercycle” of rising prices and higher commodity investments, more stable balance of payments and the rebuilding of sovereign balance sheets following the 1998 Asian crisis, and significant capital flows to emerging markets fueled by declining interest rates in the developed world.

Finally, some of these fault lines point to truly unsustainable conditions. In China, the imbalance between investment and consumption as a share of GDP or the increase in levels of pollution are a case in point. However, it is also true that these fault lines cannot be readily ameliorated. As such, they are a source of considerable uncertainty regarding growth rates over the next decade.

The Basic Facts About Key Emerging Market Countries

Before we delve into the structural fault lines of specific emerging countries, we think it is important to present some of the basic facts that provide a backdrop for emerging market countries and inform any strategic or tactical allocation to emerging market assets.

First and most importantly, relative to the US, the Eurozone and Japan, the key emerging market countries are largely underdeveloped, undereducated, and, to a certain degree, undernourished countries with inadequate infrastructure. This fact remains in spite of a decade of 6.4% annualized growth in emerging markets in aggregate, and 8% growth in the

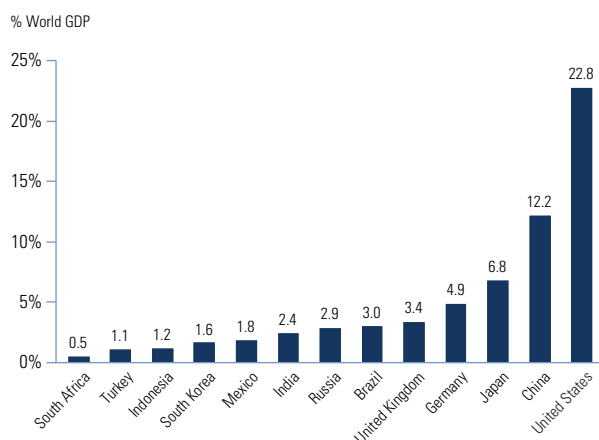
four largest emerging market countries commonly referred to as BRICs—Brazil, Russia, India, and China—as coined by Goldman Sachs Global Investment Research in 2001. Emerging market countries now account for 38% of global GDP, up from 20% in 2003.

To give a prominent example, China is the second-largest economy in the world and has

The macroeconomic tailwinds that boosted growth in emerging market countries in the 2003–07 period have come to an end.

Exhibit 9: Nominal GDP as a Percentage of World GDP

The US and China are by far the world's biggest economies...

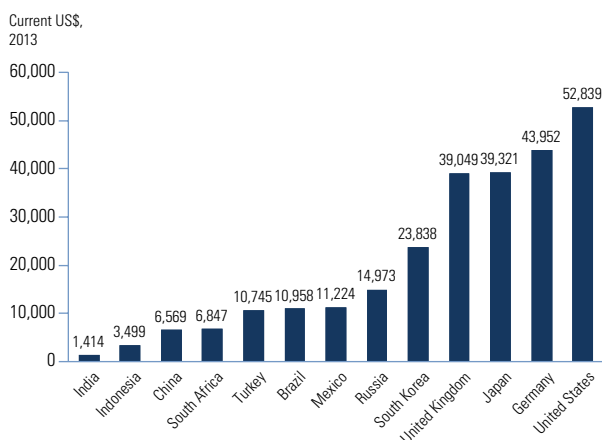


Data as of 2013.

Source: Investment Strategy Group, Datastream, IMF.

Exhibit 10: Nominal GDP per Capita (US\$)

...But China slips significantly once its large population is factored in.



Data as of 2013.

Source: Investment Strategy Group, Datastream, IMF.

lifted more than 500 million people out of poverty over the last 20 years. At the same time, China's estimated 2013 GDP per capita is only \$6,569 on a nominal basis, and \$9,828 on a Purchasing Power Parity (PPP) basis, below the US poverty threshold of \$11,720 (see Exhibits 9 and 10). Twelve percent of the population earns less than the international poverty line of \$1.25 per day (PPP) and 11% are undernourished based on the latest data available. Even with a plausible range of assumptions for both US and Chinese growth through the end of this century, China's GDP per capita will still be below that of the US.

In India, GDP per capita is a meager \$1,414, which is about 3% that of the US, and 4% that of the Eurozone and Japan. A full 33% of the population earns below \$1.25 per day and 18% are undernourished. To put things in perspective, China and India combined have 370 million undernourished people—more people than the entire population of the US.

Brazil, as a commodity-rich country, fares somewhat better with a GDP per capita of \$10,958, 6% of the population earning below \$1.25 per day and 7% undernourished. Russia, with its vast energy resources, has the highest GDP per capita among the BRICs at \$14,973, yet 5% of

its population is undernourished.

In addition to being impoverished, these countries fare quite poorly on institutional metrics as well. As discussed in our 2013 *Outlook: Over the Horizon*, strong institutions are essential to the long-term prosperity of any country. James Robinson, a Harvard University professor and co-author of *Why Nations Fail*, has pointed out that strong “inclusive” political and economic institutions contribute to a country's economic success. “Inclusive institutions nurture a strong education framework, property rights, strict patent laws, depth in financial markets, and creative destruction...” and have “provided incentives and opportunities to harness society's potential.”²⁷ In contrast, countries with “extractive institutions” do not sustain growth; political power is concentrated in the hands of a narrow elite who, in turn, structure their economic institutions in a way that extracts resources from the rest of society.²⁸ Inevitably, these institutions resist change and “do not allow innovation” due to their vested interests.²⁹ He further points out that these institutional biases persist through “lots of feedback loops.”

Therefore, as investors evaluate the long-term prospects for reforms that would address the structural fault lines of emerging market countries,

it is imperative to keep in mind how each country fares with respect to its institutional strengths. The countries with inclusive institutions are more likely to reform. Those with primarily extractive institutions will resist change and face enormous hurdles in maintaining sustainable growth.

In his article referenced earlier, Antoine van Agtmael also highlights the importance of institutions. He attributes the slowdown in emerging markets to “four deeper causes,” two of which are political uncertainty and weak institutions.

Our review of the institutional metrics for key emerging market countries focuses on three indexes: the Index of Economic Freedom, the Ease of Doing Business Index and the Governance Index. These three indexes measure the extent to which a country’s institutions enable and contribute to economic prosperity.

The Index of Economic Freedom, for instance, ranks 185 countries and focuses on 10 factors grouped into four broad categories:

- **Rule of Law** (property rights, freedom from corruption);
- **Limited Government** (fiscal freedom, government spending);

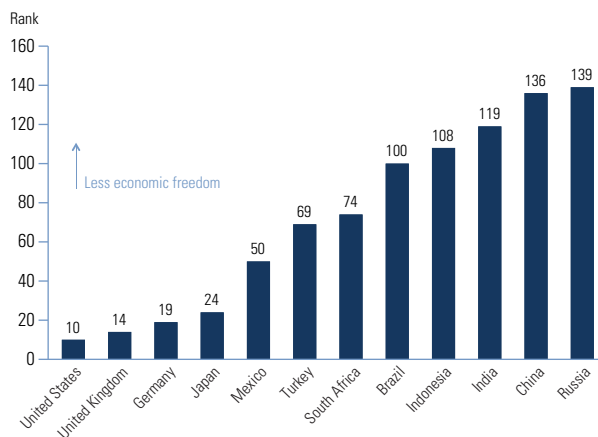
- **Regulatory Efficiency** (business freedom, labor freedom, monetary freedom); and
- **Open Markets** (trade freedom, investment freedom, financial freedom).

The World Bank’s Ease of Doing Business Index captures the ability of the private sector to start and manage a business in any country, and helps partly explain the US’s recent manufacturing resurgence. The World Bank ranks 189 countries and focuses on 10 factors, including protecting investors, enforcing contracts and starting a business.

As shown in Exhibits 11 and 12, emerging market countries rank very poorly on these two indexes. The four largest countries—China, Brazil, Russia and India—fare poorly with respect to freedom from corruption, with Russia ranked lowest among the four. China and Russia rank poorly on property rights and investment freedom. India scores low on business freedom. As mentioned earlier, all four countries have significant government involvement in many aspects of the economy, from ownership of banks and natural resource companies to directing investments in different parts of the economy. With respect to ease of doing business, India ranks lowest among the larger emerging market countries and 134 out of 189 countries.

Exhibit 11: Index of Economic Freedom Ranking

Emerging market countries fare poorly in establishing basic economic freedoms...

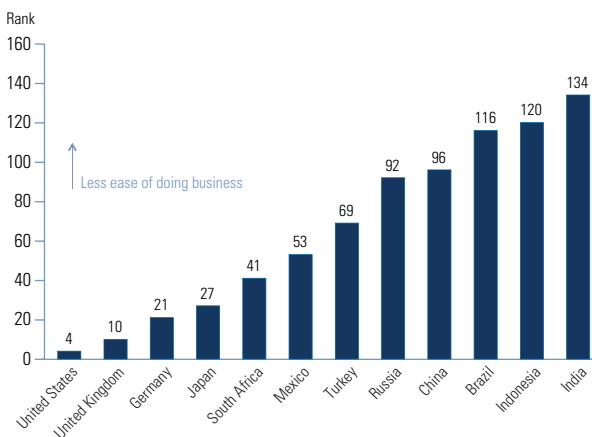


Data as of 2013.

Source: Investment Strategy Group, The Heritage Foundation.

Exhibit 12: Ease of Doing Business Ranking

...And they lag behind in allowing businesses to start and prosper.



Data as of 2013.

Source: Investment Strategy Group, World Bank.

Political instability and violence have become a growing concern for emerging market countries.

somewhat better and have shown some improvement over the last decade. South Africa ranks higher than the BRICs but has shown some notable deterioration, driven by erosion in freedom from corruption, investment freedom, and government spending. Indonesia, among the lowest-ranked countries, showed some improvement, driven by gains in financial freedom.

What is even more striking is that, by these measures, the larger countries have not all improved in spite of a decade of 8% annual growth. With respect to the Index of Economic Freedom, China and Brazil have overall scores that are lower than their 2002 scores, with Brazil showing the greatest deterioration among the largest eight emerging market countries. Russia is marginally better because of an improvement in monetary and trade freedom. India's overall score has improved because of the improvement in trade freedom, but from an extremely low base.

Among the next largest group of key emerging market countries, Mexico and Turkey rank

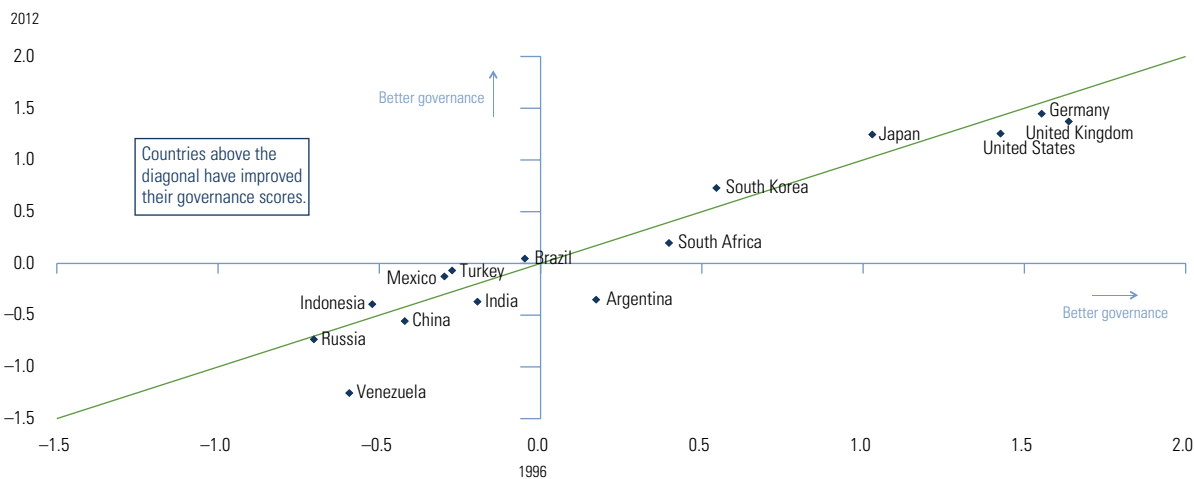
Emerging market countries also have relatively poor governance. They not only lag the developed markets, but some of the largest countries have actually lost ground as measured by the World Bank governance indicators. The indicators are:

- Voice and accountability
- Political stability and absence of violence
- Government effectiveness
- Regulatory quality
- Rule of law
- Control of corruption

As shown in Exhibit 13, several countries—

Exhibit 13: Governance Standards Slipping Among EM Heavyweights

China, Russia and India are losing ground on key World Bank governance index.



Source: Investment Strategy Group, World Bank.



Brazilians took to the streets in June 2013 to protest corruption and poor-quality public services.

Gezi Park but also morphed into broader concerns about democracy and secularism. In Mexico, demonstrators protested changes to public education and the energy sector. In China, protest activity has picked up over the years on concerns ranging from pollution to land reform.

The risk of social unrest in emerging market countries was best summarized in an analysis by Francis Fukuyama, senior fellow at Stanford University, in response to the rise in such

notably China, Russia and India—experienced a moderate worsening of their governance standards between 1996 and 2012. Countries such as Argentina and Venezuela showed substantial deterioration. Turkey and Mexico showed some notable improvement.

One of the important governance indicators focuses on political instability and violence, which have become a growing concern for emerging market countries. An increase in bus fares in Brazil this past summer sparked demonstrations that were soon fanned by concerns about education, crime, healthcare and corruption. These assemblies coincided with demonstrations in Turkey that were triggered by development plans for Istanbul's

demonstrations. In an article in *The Wall Street Journal* titled *The Middle-Class Revolution*, Fukuyama suggested that the growing middle class in emerging market countries is “mad, middling and mobilized” and is more likely to engage in political activism to advance their economic and social interests.³⁰ Members of the middle class in these countries have “higher-than-average levels of education and income, they are technology-savvy and use social media to broadcast information and organize demonstrations,” Fukuyama wrote.

To get a snapshot of countries where the risk of social unrest is greatest, we have examined an exhibit prepared by the Eurasia Group, a leading political risk research and consulting firm. Exhibit

14 shows the overall size of the middle class, the size of the middle class as a percentage of the population and the change since 2000. The risks of social unrest in individual countries can be assessed by comparing the increase in the size of the middle class as a percentage of the population and the increase in the average annual consumption of middle class

The growing middle class in emerging market countries is “mad, middling and mobilized.”

– Francis Fukuyama, senior fellow at Stanford University



Demonstrations against development plans quickly escalated this past summer in Istanbul.

growth and affect the long-term risk and return profile of emerging market assets.

We first highlighted some of these structural fault lines in our 2010 *Outlook: Take Stock of America*. In our 2011 *Outlook: Stay the Course*, we delved deeper into the structural fault lines of key emerging market countries and contrasted them with the structural advantages of the US. In our August 2012 *Sunday Night Insight: Lights Out on the BRICs*, we focused on the structural fault lines of China,

citizens. Obviously, these risks will increase if slower economic growth disappoints the rising expectations of the middle class.

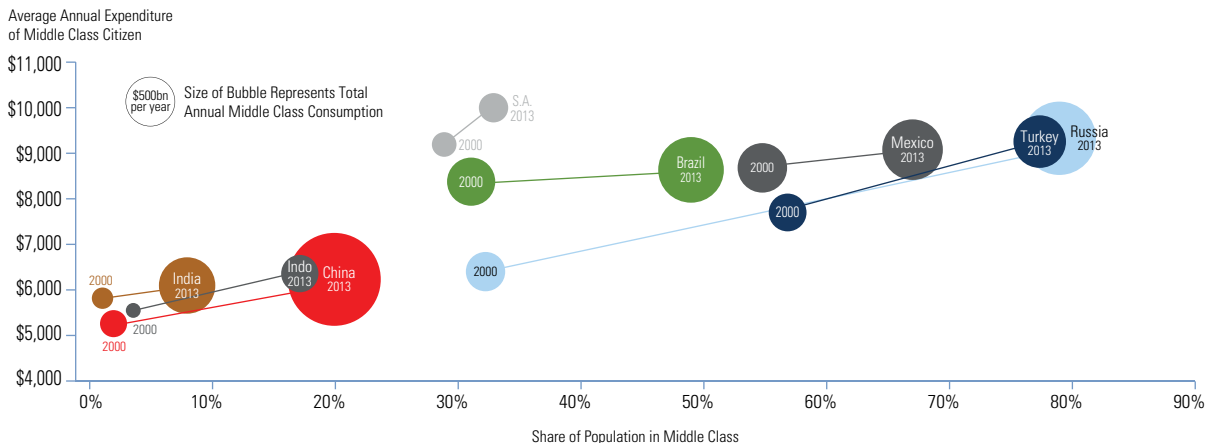
The Structural Fault Lines of Specific Countries and Their Prospects for Reform

In addition to the fault lines discussed above that are common across the key emerging markets, individual countries have structural problems that are specific to them. We believe that these country-specific issues will hinder long-term sustainable

Brazil, Russia and India. Finally, in our most recent 2013 *Outlook: Over the Horizon*, we provided a comprehensive review of the lack of progress in dealing with these structural issues across key emerging market countries. In this report, we will provide an update on those structural fault lines for the BRICS, as well as review those of Mexico, Indonesia, Turkey and South Africa. More importantly, we will show how some of these fault lines have actually deepened over the years and have pushed reform further out on the horizon.

Exhibit 14: The Rise of the EM Middle Class

Demands on governments rise as middle classes grow.



Data as of 2013.

Source: Investment Strategy Group, Eurasia Group.



We begin with a review of China given its size, its importance to global trade, and its impact on developed and emerging market economies. As articulated by our colleagues in Goldman Sachs Equity Research, “China has provided several shocks to the world: cheap labor and hence cheap goods, cheap capital via export of excess savings, and lastly, a massive demand shock for commodities, particularly basic commodities.”³¹ China’s influence on global economic activity means that slower growth and the impact of any

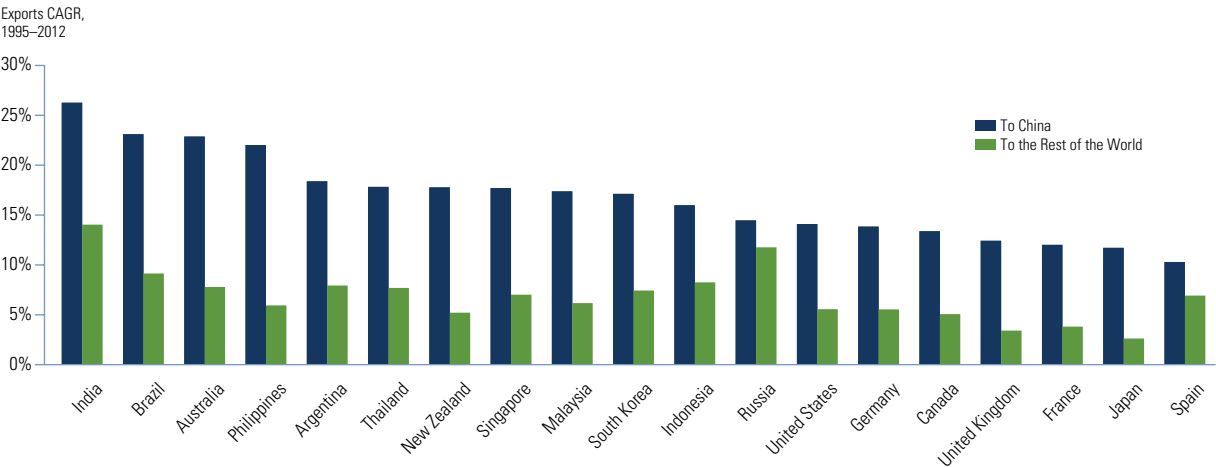
reform measures it takes to address its structural fault lines will reverberate across emerging and developed economies.

At \$8.9 trillion in GDP, China is the second-largest economy in the world. With 1.354 billion people, it is the most populous country in the world. China accounts for the largest equity market capitalization of any emerging market country at 2.2% of the MSCI All Country World Index, and the largest equity market capitalization of the MSCI Emerging Market Index at 20%. Its rolling five-year growth rates were faster than that of any other emerging market country when they reached peak levels of 12% during the 2003–07 period. China accounts for about 11% of global exports and about 10% of global imports. It absorbs about 60% of iron ore and soybean world imports, and well over 30% of copper ore, copper, oil seeds and cotton imports.

China not only accounts for a significant share of world commodity imports, it has been a major driver of export growth in a broad range of countries. As shown in Exhibit 15, China represents a disproportionately large share of export growth over the last 17 years when compared with the rest of the world. Exports to China from countries like Australia, Brazil and India have grown by nearly

Exhibit 15: Exports to China Have Grown Faster than Exports to the Rest of the World

China has been the main destination of many of the world’s exports.



Data as of 2012.
Source: Investment Strategy Group, IMF.

According to the IMF, China is now the first- or second-largest trading partner of 78 countries which, in total, account for 55% of global GDP.

25% a year; in countries such as South Korea, Malaysia, Thailand, Indonesia, Singapore and Argentina, the growth rates have been in the high teens. Even the US has seen a notable increase in exports to China. According to the IMF, China is now the first- or second-largest trading partner of 78 countries which, in total, account for 55% of global GDP.³² A recent report based on an OECD study shows that even adjusting for re-exports (where imports into China are processed and then re-exported), China plays a large role in the GDP of several countries: as much as 9% in South Korea and over 4% in Australia.³³

So clearly what happens in China affects emerging market countries and developed economies alike. As stated by the IMF, “China can transmit real shocks widely, whether these originate domestically or elsewhere.”³⁴ Hence our more extensive focus on China’s structural fault lines.

China faces five key fault lines: severely imbalanced growth, a weakening demographic profile, financial repression that has distorted allocation of capital, growing pollution that has endangered the health of its population, and an antiquated household registration system known as “hukou” that has hampered access to education and social services. We will examine each of these fault lines and demonstrate the enormous hurdles China faces as it attempts to address them.

Imbalanced Growth

When it comes to the imbalanced nature of China’s growth, the country’s leaders have summarized it best: in 2007, Premier Wen

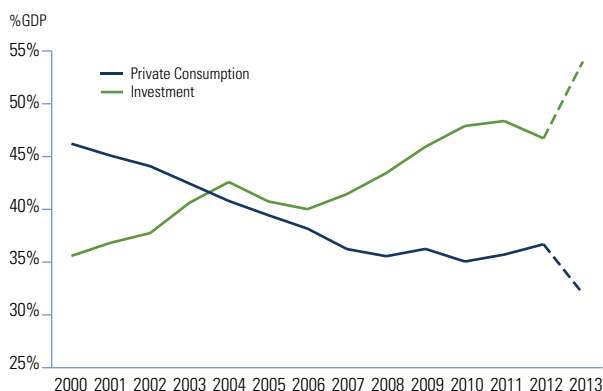
Jiabao stated that China’s economic growth is “unsteady, imbalanced, uncoordinated and unsustainable.”³⁵ In 2011, President Hu Jintao stated that “imbalanced, uncoordinated and unsustainable problems” with China’s development have emerged.³⁶ In 2012, Premier Li Keqiang, who was First Vice-Premier at the time, stated that “the problem of imbalanced, uncoordinated and unsustainable

development is still serious.”³⁷ Late last year, President Xi Jinping expressed the view that “growth... should be efficient, of good quality, and sustainable.”³⁸

While China’s leadership has acknowledged the issues, these imbalances have actually worsened—not just over the past decade but also over the past 12 months. As shown in Exhibit 16, investment as a share of GDP increased from 36% in 2000 to above 50% in the third quarter of 2013 (our best estimate is 54% based on quarterly data), while private consumption steadily declined from 46% of GDP to more than 30% over the same period. China’s investment is unsustainably high and its

Exhibit 16: China’s Growing Imbalance Between Investment and Consumption

The level and the trajectory of China’s investment are unsustainable.



Data through Q3 2013.

Source: Investment Strategy Group, Datastream.

"The profit on two tons of steel was just about enough to buy a lollipop."

– Yu Yongding, President of the China Society of World Economics

consumption is unsustainably low. At over 50% of GDP, its investment compares to 32% in emerging markets and 20% for developed markets. At over 30% of GDP, its consumption is about half the consumption rate of 60% in emerging markets and developed markets and compares to about 70% in the United States.

This trajectory of investment as a share of GDP is also not sustainable. First, the GDP impact of every marginal dollar of investment—the inverse of the Incremental Capital Output Ratio (also known as ICOR)—has been declining since 2007. In other words, the return to every incremental dollar—or renminbi—that China spends on investments is

falling, meaning China will need to spend at an even faster rate just to maintain its current growth rate.

Second, such high levels of investment have led to overcapacity in many sectors of the economy, including steel, cement, solar panels, shipping and real estate. Yu Yongding, President of the China Society of World Economics, a former member of the Monetary Policy

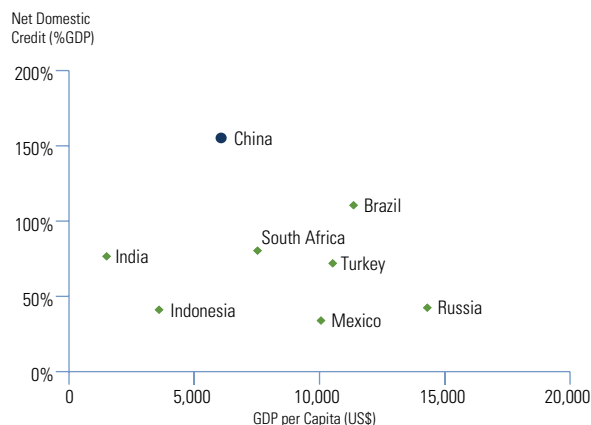
Committee of the People's Bank of China, and former member of the Advisory Committee of National Planning of the National Development and Reform Commission of China, believes that such overcapacity is China's "most severe problem." Using China's steel industry as an example, he highlights that its 72% utilization rate is very low and that "the profit on two tons of steel was just about enough to buy a lollipop."³⁹

Yu Yongding also asserts that "China's economy is being held hostage by real-estate investment."⁴⁰ The deputy director of the China Center for Urban Development, Qiao Runling, confirms that there has been too much residential investment, resulting in an oversupply of housing in small and medium-sized cities.⁴¹ While demand is robust in tier-one cities such as Beijing, Shanghai, Guangzhou and Shenzhen, "ghost towns" remain unoccupied across the central and western parts of the country. Images of Ordos and Tianducheng—also known as the "Paris of China"—are stark reminders of the perils of overbuilding.

Third, the pace of investments has relied heavily on rapid credit expansion. As shown in Exhibit 17, China's net domestic credit—defined as net bank credit to the non-financial public sector and to the private sector—as a share of GDP is well above its emerging market peers with low GDP per capita. Since the 2008–09 crisis, the pace of credit expansion, including off-balance sheet and non-bank lending, has led many market observers to warn of a credit bubble. Our colleagues in Goldman Sachs Global Portfolio Strategy in Asia point out that China's total debt-to-GDP has

Exhibit 17: China's Bank Credit is High Among Its EM Peers

China's pace of investment has relied heavily on expanding credit.



Data as of 2012.
Source: Investment Strategy Group, World Bank.



Overbuilding in China has resulted in “ghost towns” such as Ordos.

Fitch Ratings predicts that, at worst, a credit crisis is brewing and that, at best, China is at risk of a long, debt-laden economic slowdown.⁴⁴ Others such as Jonathan Anderson of Emerging Advisors Group are more sanguine, arguing that China is not at risk of such a debt-triggered slowdown due to its strong reserves, favorable external trade and low public sector debt.⁴⁵

We agree that China certainly does have the reserves to minimize the impact of non-performing loans on banks.

increased from 153% in 2007 to 209% in 2012.⁴² This 56% increase is second only to Japan’s 63% rise and compares to a 22% increase in the US. This boom in credit has been exacerbated by the expansion of the “shadow banking” sector—lenders that operate outside the formal banking system. In recent years, the extended credit has included corporate bonds, trust loans, micro lending and pawn shops, and informal lending.⁴³ This segment of the financial services industry is by nature less transparent and not as regulated and controlled as the formal banking sector.

Some point out that such a rapid expansion of credit will almost inevitably be followed by an increase in credit defaults. Charlene Chu of

However, that is not the same as saying all creditors will be supported by the full faith and credit of China. Here we are reminded of Guangdong International Trust and Investment Corporation’s default in October 1998, which was followed by subsequent defaults by Guangdong Enterprise Holdings and Guangzhou International Trust and Investment Corporation. It was the first time in half a century that a Chinese company defaulted on a foreign bond. At the time, China had the reserves on hand to service the debt payments of these entities.

More recently, the default on over \$500 million of convertible bonds issued by Suntech Power Holdings illustrates the two-tiered treatment of

local creditors versus foreign creditors. Until recently, Suntech was one of the world’s largest producers of solar panels by sales. However, lower sales led to a default and the bankruptcy of its main Chinese subsidiary. Subsequently, Shunfeng Photovoltaic International Ltd., a smaller manufacturer of solar panels, received approval to purchase Suntech’s main assets.

Charlene Chu of Fitch Ratings predicts that, at worst, a credit crisis is brewing and that, at best, China is at risk of a long, debt-laden economic slowdown.

As part of the negotiations, Shunfeng agreed to make some payments to the Chinese creditors and to the local Wuxi government for back taxes. Foreign creditors, on the other hand, are not expected to receive any payments.⁴⁶ Investors should take heed that ability to pay has not been the same as willingness to pay in China, and that bonds issued in the offshore market have been subordinated to onshore obligations in the past.

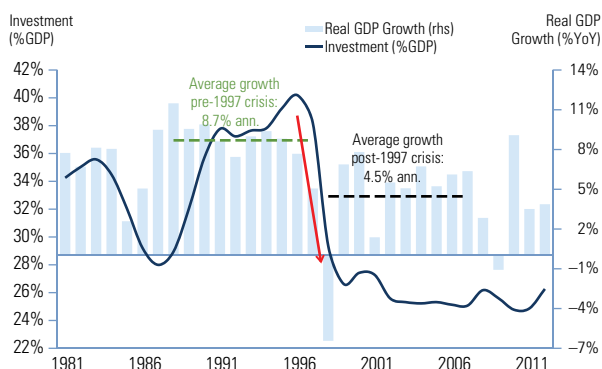
Leaving specific credit concerns aside, we do not believe that a major credit crisis is imminent. Our point is that China cannot continue to fuel its economic growth with further increases in credit-funded investments without serious long-term consequences.

There is no question that any attempt to correct the imbalance between investment and consumption will result in slower growth. The only question is: How much slower? For example, if China attempts to lower its investment-to-GDP ratio to 40%, which is still extremely high by global standards, it will have to slow the pace of investment growth. A simple iterative mathematical exercise shows that investment growth has to slow to less than 1% to reach a target of 40% of GDP by 2022—the 10-year window of the current leadership. This required slowdown will, in turn, sap GDP growth rates. We estimate that in such a scenario, GDP growth will reach 4.1% by 2022, implying an average growth rate of 5.1% over this 10-year period.

A slowdown driven by a reduction in the pace of investment is not unprecedented among the so-called Asian Tigers. China has followed the export-led growth model of other Asian

Exhibit 18: History Suggests Chinese GDP Growth Will Slow

Unsustainable investment has been followed by slowing growth in Asia.



Data as of 2012.

Note: Based on data for Malaysia, Singapore, South Korea and Thailand.

Source: Investment Strategy Group, Datastream.

economies—namely Japan and Taiwan starting in the 1950s and Hong Kong, South Korea and Singapore in the 1960s—while relying on cheap labor and generally a cheap currency. After decades of above-average growth, these countries slowed down due to a number of factors, including higher wages and more expensive currencies. In some cases, investment reached unsustainable levels. For example, in South Korea, Malaysia, Singapore and Thailand, investment as a share of GDP peaked at 40% in 1996. As investment growth rates decreased, GDP was lowered from an annualized average of 8.7% for the prior 10 years to 4.5% in the subsequent 10 years, as shown in Exhibit 18. We expect something similar in China should

it decide to reform. If it does not reform in any meaningful way—a definite possibility—the imbalances will only worsen and the day of reckoning will merely be pushed back.

We should note that when China's investment stood at 47% of GDP, the IMF estimated that this overinvestment had raised the probability of a crisis from 8% to as high as 20%. Given

China cannot continue to fuel its economic growth with further increases in credit-funded investments without serious long-term consequences.

“China is at the dawn of a demographic shift as the economy will soon start to be weighed down by a shrinking workforce and aging population.”

– International Monetary Fund

that investment has now risen to over 50% of GDP, the probability of a crisis has only increased.

Unfavorable Demographics

Unfavorable demographics will also lower China's growth trajectory. As articulated by the IMF, “China is at the dawn of a demographic shift as the economy will soon start to be weighed down by a shrinking workforce and aging population.”⁴⁷ The United Nations Population Division estimates that China's working-age population will peak around 2015 (see Exhibit 19).⁴⁸ Furthermore, the cohort of 25- to 39-year-olds who comprise the core industrial workers will shrink even faster. The

IMF estimates that the supply of cheap labor will be exhausted by the end of the decade.

The median age of the working population is equally important. China will have one of the oldest working-age populations in the world by 2050, with a median age of 46. Hence the oft-quoted expression, first used by Goldman Sachs Global Investment Research in 2006, that “China will get old

before it gets rich.”⁴⁹ This phenomenon goes back to China's one-child policy, and stands in sharp contrast to the US, which enjoys much higher fertility rates and remains the destination of choice for most migrants.

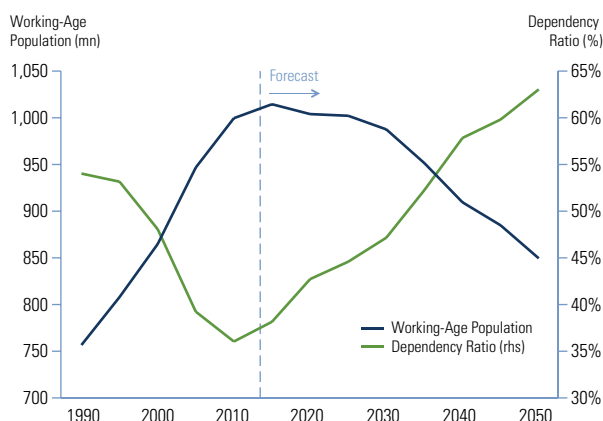
China will also be burdened by a deteriorating dependency ratio, in which the population younger than 15 and older than 64 depends on the working-age population. That number is expected to increase from 36% in 2010 to about 50% by 2035.⁵⁰ In his article, *The End of the Asian Miracle*, Antoine van Agtmael estimates that China will have 360 million retirees within the next 20 years, and highlights “the burden of these



The sparsely populated Tianducheng development in Hangzhou is another example of China's overbuilding.

Exhibit 19: The Impact of China's One-Child Policy

An aging population will mean fewer workers will have to support the country's growth.



Data as of 2013.

Source: Investment Strategy Group, United Nations Population Division.

unfunded liabilities.”⁵¹ Changes to the one-child policy as a result of the Third Plenum (discussed in greater detail below) will not have any material impact on the poor demographics for the next 20 years—in fact, the dependency ratio will deteriorate further until the newborns reach 15 years of age. Nicholas Eberstadt, a political economist and demographer, has stated that “the changes were inconsequential.”⁵² This loosening of the one-child policy may well turn out to be a prime example of incremental reform that is too little, too late.

A shortage of labor implies higher wages, which, in turn, imply less competitive exports. China has experienced a nearly fourfold increase in wages since 2001, when it joined the WTO, and not all of this gain has been offset by higher productivity. At the same time, it has seen a cumulative 26% appreciation in its currency. As a result of these factors, China’s manufacturing costs are not as attractive as Bangladesh, Vietnam, Thailand, the Philippines and Mexico. In fact, the Boston Consulting Group’s publication series *Made in America* cites unit labor costs and a higher currency as one of many reasons why some American manufacturing is moving from China back to the United States.⁵³

China’s demographic problem is exacerbated by a shortage of skilled and experienced white collar labor. According to Gordon Orr, chairman of McKinsey Asia, talent in Shanghai and Beijing is “more expensive than Germany, while productivity is materially lower.”⁵⁴ Similarly, according to Intel Corp., the cost of hiring a first- or second-line manager with four to six years experience in China exceeds that of the US.⁵⁵

Tight Financial Controls

Some of the economic imbalances weighing on China have been facilitated by tight financial controls. Specifically, a combination of artificially low interest rates and capital controls have forced savers to either accumulate large deposits at banks because of limited investment opportunities, turn to riskier wealth management products or invest in real estate. According to Nicholas Lardy of the Peterson Institute for International Economics, households have earned an average annual real

return of –0.3% since 2004 from artificially low rates. Yet, despite such meager returns, deposits in the banking system are 1.7 times those of the US for an economy that is half the size.

These disproportionately large, low-interest-rate deposits have provided corporate borrowers such as property developers, commercial banks, exporters and state-owned enterprises with sizable cheap capital. As discussed earlier, credit provided by Chinese banks as a share of GDP is the highest among key emerging markets and higher than most developed markets. The availability of low-cost capital has led to overinvestment and misallocation of investment. The IMF estimates that this effective transfer of resources from households to the corporate sector amounts to 4% of GDP per year, thereby hampering Chinese consumption.⁵⁶

This type of “financial repression” has also contributed to the rapid growth of the shadow banking system, which offers higher interest rates on savings products than traditional commercial banking products. While the emergence of new financial products with more market-based returns is welcome, it potentially introduces new risks as financial regulators scramble to keep up with the growth in new products. The viability of these new wealth management products is untested and there is considerable uncertainty with respect to how the government will respond if savers lose their money due to the failure of these products.

While many had expected the Third Plenary Session of the Chinese Communist Party’s 18th Central Committee to provide further clarity on the reform agenda for financial liberalization, there was surprisingly little in the first communiqué after the meeting. *The Wall Street Journal* pointed out that “Chinese characters for banks and interest rates don’t even appear” in the document.⁵⁷ The *Financial Times* reported that the word “renminbi” wasn’t mentioned either.⁵⁸ However, the more detailed document, referred to as the “Decision” (short for “Decision on Major Issues Concerning Comprehensively Deepening Reforms”), which was released soon after the session concluded, does mention interest rates and capital account liberalization as well as reforming the process for determining the exchange rate. Still, financial

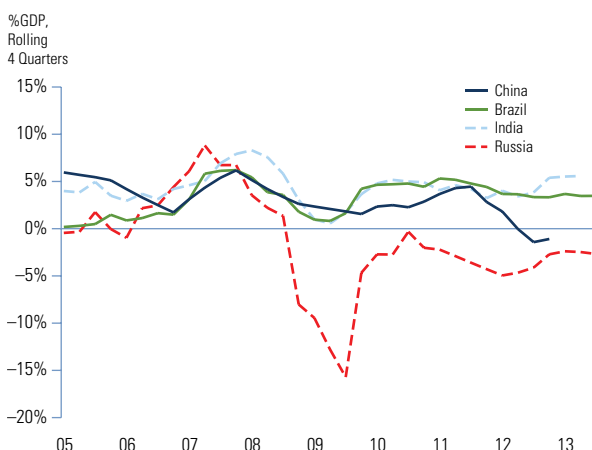
liberalization did not receive the prominence afforded to some of the other covered reforms. Some market observers attribute this lower prominence to the fact that the outlines of financial market liberalization have previously been discussed or to the government not wanting to risk a crisis.

It is certainly understandable that the Chinese leadership would proceed cautiously with respect to financial liberalization. Several IMF working papers have discussed the high likelihood of a banking crisis—be it in an emerging market country or a developed market country—following interest rate liberalization. Examples of such countries include the Nordic countries, the United States, Turkey and South Korea.⁵⁹ So it is more likely that China will continue liberalization at an incremental pace. We believe its deliberate approach will be similar to the stance it has adopted since 2002, when it first allowed foreign investors to trade in China's capital markets on a limited basis, and culminating in the more recent measures introduced in September 2013 in the China (Shanghai) Pilot Free Trade Zone (discussed in further detail below).

In addition to a banking crisis, China will inevitably factor in the risk of domestic capital outflows. Generally, emerging market countries with poor governance have greater risk of capital flight. There is no reason to think China will be an exception. In fact, the decrease in net capital flows in 2012 (as shown in Exhibit 20) has probably

Exhibit 20: Flows into China Have Declined

Private capital flows into China turned negative in 2012.



Data as of Q3 2013.

Source: Investment Strategy Group, CEIC, Datastream, national sources.

heightened the sensitivity of the current leadership to the risk of further financial liberalization.

Pollution

For those who suggest that China is not in urgent need of reform, we think a picture—or two in this case—is worth a thousand words (see images below). China's economic growth has resulted in a significant deterioration in the environment, with health, social and economic implications for



Chinese city residents have questions about “the safety of the air they breathe, the water they drink, and the food they eat.”

China is now the largest emitter of greenhouse gases and produces about 25% of the world's industrial solid waste.

its citizens and the rest of the world for decades to come. China is now the largest emitter of greenhouse gases and produces about 25% of the world's industrial solid waste—well in excess of its 12% of world GDP. Terrible air pollution in Beijing earlier this year led to a first-ever “orange fog warning” to alert residents to extremely high levels of PM_{2.5}, a measure of tiny particulates that are extremely hazardous to one's health.⁶⁰ According to data released by the Ministry of Environmental Protection in August, air quality in Beijing was deemed unsafe for more than 60% of the days in the first half of 2013.⁶¹ There are other Chinese cities that fare far worse than Beijing; the city is ranked only ninth on the list of the most polluted cities in the country.⁶² For example, in October of this year, heavy smog in the northeastern Heilongjiang Province forced the closure of roads, schools and a major airport for at least two days.

Such heavy pollution is not without its costs. Life expectancy is the first casualty. According to a 2013 paper published in the *Proceedings of the National Academy of Sciences*, “life expectancies are about 5.5 years lower in the North [of the *Huai River relative to the south*] almost entirely due to an increased incidence of cardio-respiratory mortality” from the use of coal to heat homes and offices.⁶³ The Health Effects Institute estimates that PM_{2.5}, mentioned above, contributed to 1.2 million deaths in China in 2010.⁶⁴

China's “cancer villages”⁶⁵ are a second byproduct of widespread pollution. According to Thomas Thompson, polluted water “has led to a sharp rise in diseases like stomach cancer.”⁶⁶

The IMF states that one-third of China's major river systems, 85% of lakes and 57% of underground water in monitored sites are polluted. Polluted water has also been used for irrigation, thereby tainting agricultural commodities. The recent scare about cadmium levels in rice in Guangzhou brought the issue of polluted land to the fore as cadmium is a carcinogenic metal. Nanjing Agricultural University

research shows that 10% of all rice sold in China is tainted by cadmium.⁶⁷ Even before the recent rapid pace of growth, pollution was estimated to have reduced crop yields by 4.3%.⁶⁸

China's pollution has also damaged the nation's infrastructure. Acid rain (sulfuric acid and nitric acid formed when emissions react with atmospheric water and oxygen) resulting from air pollution damages buildings, highways, vehicles and bridges. While China has overinvested in some areas, the rate of depreciation of its structures will likely be higher as a result of its own pollution.

The World Bank has estimated that the annual cost of China's pollution totals 9.7% of its GDP due to premature deaths, poor health, land degradation and damage to structures.⁶⁹ We believe this number understates the total costs to China. For example, it does not capture lost tourism, forgone investment and emigration due to pollution. A US correspondent based in Beijing said it best when he highlighted a typical city resident's questions about “the safety of the air they breathe, the water they drink, and the food they eat.”⁷⁰ The World Bank estimates it would cost China about 2% of GDP annually to address its pollution problem.

“Hukou” Registration System

Under the “hukou” system, Chinese households have to register with their local authorities and may not move their residency without permission. If they migrate to a city without the appropriate registration, residents are not entitled to education, healthcare and other social services provided by the

local government of a particular city.

Currently, about 260 million migrant workers live in cities without such registration and, therefore, do not have access to basic benefits such as education and healthcare. In a country with a looming demographic shift, it seems that educating the population would be a major goal. Similarly, if increasing consumption is also another goal, providing basic healthcare and welfare to the migrant workers could increase their ability to consume. Liberalizing labor mobility from the rural areas to the major cities where migrant workers can find jobs would certainly help China attain these two objectives. However, wealthier cities do not want to bear the burden of supporting migrant workers.

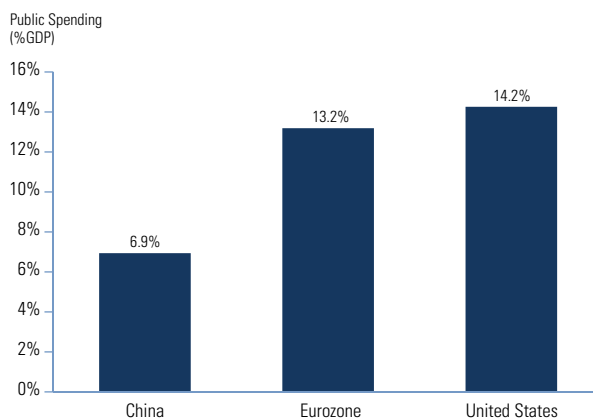
A National Development and Reform Commission official estimated that infrastructure and social programs (education, healthcare, pension benefits, etc.) cost the country Rmb 100,000 per person.⁷¹ Therefore, reforming the hukou system and providing basic benefits to current migrant workers would cost about 50% of 2012 GDP. Furthermore, urbanization would add additional migrant workers to the roster of those in need of these basic benefits.

Hukou reform and urbanization are clearly expensive undertakings, a point not lost on the current leadership. While hukou reform was a component of the Third Plenary's "Decision" document, it limited the changes to small cities. As these locales are not as attractive a destination for migrant workers in search of a better livelihood, it is questionable how much of an impact this will have on urbanization and the economy. Migrant workers

Currently, about 260 million migrant workers live in cities without access to basic benefits such as education and healthcare.

Exhibit 21: China's Smaller Social Safety Net

China spends far less than other large economies on education and healthcare.



Data as of 2012.

Source: Investment Strategy Group, World Bank.

in China's midsize and big cities will likely not see any benefit from hukou reform anytime soon. As shown in Exhibit 21, the Chinese government spends 6.9% of its GDP on education and healthcare, compared with 13.2% in the Eurozone and 14.2% in the US. With a barebones social welfare system, access to education, healthcare and other social services will likely remain limited.

Implementing Structural Reforms: A Catch-22

When the new Chinese leadership came to power in November of 2012, optimism regarding prospects for reform was high. Comparisons were made to how Premier Zhu Rongji implemented extensive reforms during his tenure (1998–2003), including restructuring state-owned enterprises at the expense of 40 million jobs and paving the way for China's 2001 entry into the WTO by opening up the economy to foreign investment and international trade.

However, the task at hand is much harder today. Reform will necessarily come at the expense of growth, and since no one knows what level of growth is

Implementing reform in China will be a high-wire act without a net.

seasonal factors, a slowdown in the external inflow of funds and reports of payment difficulties from a smaller bank. What we do know for certain is that the People's Bank of China (PBoC) did not initially respond as liquidity tightened. However, as interest rates spiked and equity and bond prices declined, the PBoC intervened by providing ample liquidity and encouraging the larger banks to help stabilize

needed to maintain social and political stability in China, no leader can know exactly how fast or slow the road to reform should be. It is clearly a catch-22 situation. If structural reform is too incremental, the structural fault lines will deepen and the risks of a bigger crisis somewhere down the line will rise. If structural reform is too rapid, there will be greater risk of an immediate crisis.

In comparison to other emerging markets, the scope of needed change is very broad, the issues are complex, and there is no clear roadmap on how to sequence each step. For example, Chinese leaders will be hard-pressed to implement hukou reform if local government finances are not in order. Similarly, opening more markets to foreign competition and market-driven pricing will be tough in an environment where the state-owned enterprises will continue to serve as the “main body” of China's economy.⁷²

We are likely to see China take one step back for every two steps forward as the leadership attempts to implement reform in an incremental fashion while seeking to avoid economic, financial market and social dislocations.

China's brief liquidity crunch in June 2013 may be an example of what lies ahead. On June 20, seven-day Shibor rates—or the Shanghai Interbank Offered Rate—reached 11% and overnight rates reached an intraday high of 30%. The increase was particularly notable since it was higher than levels reached at any point during, as well as since, the financial crisis. We cannot be certain of the exact trigger, but it was due at least in part to

the market.

The question we face is whether this episode can be used as a template for understanding China's approach to implementing reform. There are three possible explanations. First, the squeeze may have been engineered to slow down credit growth—a growing concern as discussed above. In such a case, the episode was a success in that it provided a warning against reckless lending and asset-liability mismatches. The second explanation could be that financial liberalization clearly took a backseat to stability and the oft-stated goal of social harmony. Third, it is also possible that this liquidity crunch was simply a policy mistake by the PBoC, which implies that any reform is bound to risk a policy mistake. While we cannot know for certain, we think all of these factors played a role.

The late September launch of the China (Shanghai) Pilot Free Trade Zone (SFTZ) provides another hint at the fits and starts that are likely to accompany meaningful reform. Comparisons to the Shenzhen special economic zone established by Deng Xiaoping in the 1980s as a precursor to extensive reform were quickly dashed when Chinese authorities issued a long list of over 1,000 prohibited areas where investments by foreign firms were banned. In fact, officials outlined only six areas where industries will be opened during the next three years. The launch of the SFTZ was also undermined by the absence of key government officials. *The Wall Street Journal* highlighted the absence of Premier Li Keqiang, the main sponsor of the zone, and questioned the seriousness of the country's reform

agenda in an article titled *China Signals Hesitation over Change*.⁷³ *The Economist* called the launch “a let-down.”⁷⁴ However, we have to balance such pessimism with the fact that the Third Plenary’s “Decision” document included a goal of establishing more free trade zones like the SFTZ.

While we know that the leadership is cautious about the pace of reform and the consequent economic slowdown that will surely ensue, we don’t know what reduced level of growth will be acceptable. In July, the government announced a mini-stimulus after growth slowed more than anticipated in the second quarter and the HSBC Purchasing Managers Index fell to an 11-month low. The program comprises three measures:

- All value-added and business taxes on small businesses with monthly sales of less than Rmb 20,000 (\$3,275) were temporarily eliminated.
- Approval procedures for export companies were simplified, administrative costs were reduced, and banks were encouraged to lend to exporting companies.
- More financing channels to support railway development plans were created, aimed especially at the poorer provinces and western regions.

It should be pointed out that the mini-stimulus was designed to support more exports at a time when many are calling on China to move away from an export-driven economy, to increase bank lending when there are real concerns about the expansion of credit, and to boost infrastructure spending when the economy needs to be less

dependent on investment.

As we can observe from the recent actions, it is extremely difficult to change the mindset of a country that has operated within a pro-growth environment for several decades. While some of China’s leaders recognize the urgent need for reform, they have to overcome the resistance of people—at all levels of the government and in the private sector—who have a vested interest in the status quo in order to maintain their wealth and power.

Pollution is a case in point. Every Chinese person would benefit from lower emissions and a cleaner environment. Then-President Jiang Zemin highlighted the importance of environmental protection over a decade ago in 2002.⁷⁵ Yet investment in environmental improvement has languished, dropping from a peak of 25.4% of total urban infrastructure investment in 2000 to a trough of 19.1% in 2006 and 21.3% by 2009, according to an NBER report.⁷⁶

A political system that rewards bureaucrats for prioritizing growth over environmental stewardship is a major contributing factor to China’s current pollution crisis. The same NBER report also noted that over this 10-year period, a city government’s spending on environmental improvements showed a significant negative correlation with Chinese Communist Party secretarial and mayoral promotions. Conversely, higher city-level GDP growth was highly correlated with these career advances. Changing this well-entrenched dynamic will not be easy and may take decades. In the meantime, pollution will continue to take its toll on China and the rest of the world.

We believe that investors should be accounting for these implementation

challenges, as well as the real risk of policy mistakes. There are no manuals for achieving this scale of reform anywhere in the world.

Michael Pettis, a long-term China observer at Peking University, has often highlighted the risks of investing in China. About a year ago, he and Nick Lardy of the Peterson Institute

While we know that the leadership is cautious about the pace of reform and the consequent economic slowdown that will surely ensue, we don’t know what reduced level of growth will be acceptable.

“We are asking China to adjust from greater imbalances and under worse external conditions, and to do so much more successfully than has ever been done before.”

– Michael Pettis, long-term China observer
and professor at Peking University

had an interesting exchange while debating China’s economic future for *The Wall Street Journal*. While Lardy argued that China can maintain 7.5–8% growth rates in the medium term along with moderate reform, Pettis suggested otherwise. He reminded us that “we are not just asking China to make an adjustment that very few countries in history have been able to make successfully. We are asking China to adjust from greater imbalances and under worse external conditions, and to do so much more successfully than has ever been done before. This, of course, is not impossible, but it is not clear...why we would not find it improbable.”⁷⁷

In our view, the only clear message from the “Decision” of the Third Plenary Session in November was that the Chinese leadership realizes the importance and urgency of reform and would like markets to play a more “decisive” role in the economy, but it also recognizes that the path to reform is fraught with danger.

The decision to establish a leadership group to oversee and implement reforms should be a step in the right direction. The optimistic view is that this group will enable the leadership to overcome the resistance of entities—such as state-owned enterprises or provincial governments—whose role may be diminished by such reforms, as well as

provide a centralized mechanism to ensure that reform is carried out throughout the country. But we must also consider the contrary view, which is that the reform blueprint provided by the “Decision” document reflects the resistance of vested interests with respect to extensive structural reforms.

An example of this type of resistance came from the immediate response of the deputy director of the National Health

and Family Planning Commission, Wang Pei’an, to the “Decision” to loosen the one-child policy so that couples could have two children if either spouse is an only child. The Xinhua news agency reported that Wang Pei’an stated that each province would have to revise its local family planning rules, subject to the review and approval of their People’s Congress.⁷⁸ He reportedly added that no timetable had been established for the revision of local rules. According to *The Wall Street Journal*, the family planning bureaucracy employs 500,000 full-time workers and 6 million part-time workers; over the years, they have collected billions of dollars in fines and fought fervently against proposed policy changes that would threaten their jobs.⁷⁹

We conclude that it is unknowable for any investor to determine how long it will take for a robust reform agenda to be implemented in China. We also don’t know how much time China has before it is too late to avoid a major crisis in its economy, in the health of its people and in the stability of the country. Finally, we also don’t know the probability of disruptions along the path of reform. Here we are reminded of Chinese Premier Zhou En-Lai’s remark to Henry Kissinger in 1976 when asked for his opinion of the French Revolution: “It is too soon to tell.”

Brazil’s Specific Fault Lines



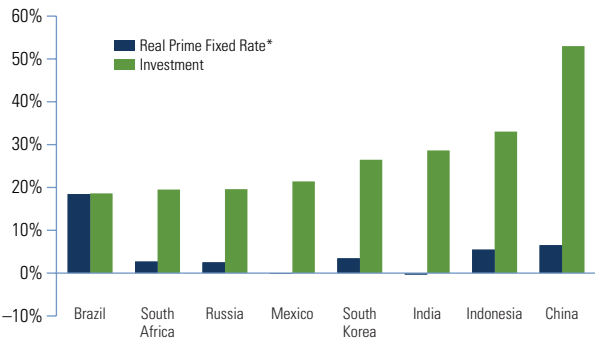
Brazil’s most problematic fault line is the outsized role of government in the economy. Brazil’s government spends the equivalent of 40% of its GDP, the highest among the BRICs and also high in the context of emerging market countries. Typically, such large government involvement crowds out private sector investment since companies have to compete with the government for the same pool of capital, resulting in very high real interest rates. As shown in Exhibit 22, Brazil’s high government expenditure has contributed to a low investment-to-GDP ratio along with exceptionally high—maybe even prohibitively high—interest rates. The government also exerts direct influence on businesses, such as the energy and non-energy commodity sectors, utilities and banks. For example, the government provides cheap financing in the form of subsidized loans from the Brazilian Development Bank (BNDES). Currently, when the stated policy rate is 10% and corporations borrow at 21%, BNDES has provided rates as low as 2.5%. These subsidized loans go primarily to major companies such as Petrobras, Banco do Brasil and Vale. In total, loans from BNDES account for about 35% of corporate loans outstanding.⁸⁰ This is a high percentage and a very good example of the pervasive role of the government in Brazilian industry.

In addition, the government has significant ownership of some of these businesses. The government owns 48% of Petrobras, nearly 70% of Banco do Brasil and 25% of Vale. Direct ownership and subsidized lending enables the government to dictate business strategy to these companies. As discussed earlier, Petrobras has to meet “local content” requirements in exploration and production of its offshore fields, irrespective of cost, quality or impact on the company’s profit margins. Similarly, Petrobras has to support the planned refinery business in the north of the country, regardless of expected profitability. And finally, by law, Petrobras has to be the sole operator with a minimum stake of 30% in all pre-salt layer production ventures. The impact of the government’s heavy hand in Petrobras was best observed in the late October auction results, which suffered from very limited participation by major oil companies and led to pricing at the lowest end possible. Furthermore, the government’s intervention is not limited to Petrobras; it recently urged Banco do Brasil to increase its lending as a means of offsetting the slowdown in the economy during the summer.⁸¹

The Brazilian government’s participation in the country’s economy imposes a high tax burden on

Exhibit 22: High Interest Rates Curb Brazil’s Growth Potential

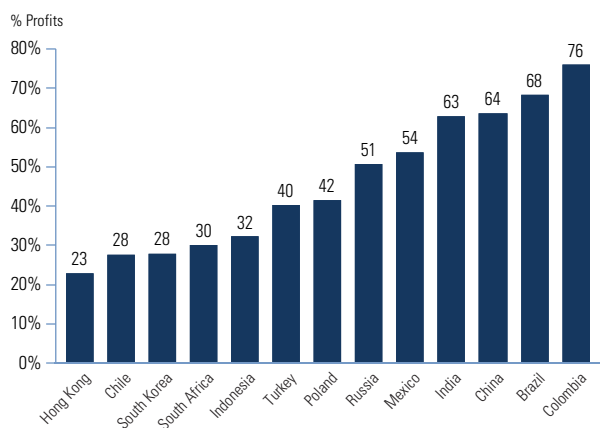
Brazil is burdened by a relatively low investment-to-GDP ratio and high interest rates.



Data as of Q2 2013.
*Weighted average of the rates charged by banks on loans with fixed interest rates and with own funds to individuals and corporations.
Source: Investment Strategy Group, Datastream, IMF.

Exhibit 23: Total Tax Rate for Mid-sized Companies

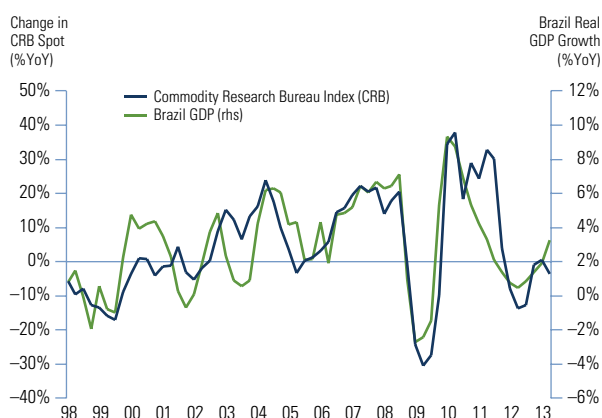
A medium-sized company in Brazil faces the second-highest tax burden among key EM countries.



Data as of 2013.
Source: Investment Strategy Group, World Bank.

Exhibit 24: Commodities and Brazil's GDP Growth

Brazil's economy is particularly vulnerable to a drop in commodity prices.



Data as of Q2 2013.
Source: Investment Strategy Group, Datastream, A.C. Pastore & Associados.

its citizens and businesses. As shown in Exhibit 23, the tax burden of a medium-sized company in Brazil is the second highest among such businesses in key emerging market countries.

Another key fault line is Brazil's dependence on the commodity markets. Commodity companies represent over 38% of the Brazilian equity market; commodities and minimally processed commodities like plywood also account for over 60% of total goods exported. The role of commodities in the Brazilian economy can also be seen in Exhibit 24, which shows that changes in Brazil's GDP have closely mirrored fluctuations in commodity prices. Clearly, Brazil is particularly vulnerable to a decrease in commodity prices or a slowdown in the

demand for commodities.

Finally, Brazil has underinvested in fixed capital, particularly in its infrastructure. This is quite problematic for any emerging market country that wants to improve its productivity, let alone one that depends on commodity exports. As shown in Exhibit 22, Brazil has the lowest fixed capital formation of key emerging market countries. With respect to infrastructure, it is ranked 114 out of 148 countries, below such countries as Vietnam, Ethiopia and Nicaragua by the World Economic Forum (WEF). Inadequate infrastructure was cited in a WEF survey of Brazilian businesses as the greatest hindrance to doing business in the country.⁸² That assessment accounts for everything

Two-thirds of all cargo transportation in Brazil is conducted on roads, but only 13.5% of Brazilian roads are paved.

from poor quality roads to limited rail transportation to inefficient ports. Two-thirds of all cargo transportation in Brazil is conducted on roads, but only 13.5% of Brazilian roads are paved, compared with 89% in Turkey or 57% in Indonesia.⁸³ This inadequate infrastructure



A key fault line is Brazil's dependence on the commodity markets.

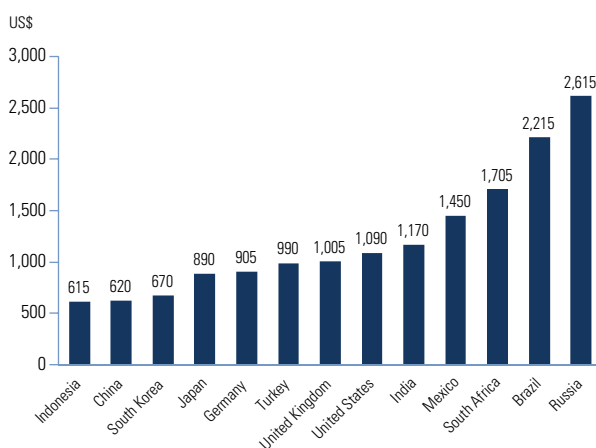
drives up the cost of exports. One container of goods costs 2.2 times more to export than in Turkey, and 3.6 times more than in Indonesia (see Exhibit 25).

In spite of 3.6% GDP growth over the past decade, such underinvestment has also hindered labor productivity gains. While countries like China experienced labor productivity growth rates of nearly 10% per year, with India and Russia at about 5% per year, Brazil produced one of the lowest productivity growth rates at less than 1% (see Exhibit 26).

The capital markets have begun to recognize the severity of these fault lines. Brazilian equities have been one of the worst-performing equity markets through the end of November, with a total return in dollars of -12% as measured by the MSCI Brazil Index, and -24% as measured by the local index (Ibovespa). Similarly, its currency's 12% decline relative to the dollar was one of the worst performances relative to other emerging market currencies. Brazilian local debt also performed poorly, with a 13% drop.

Exhibit 25: The Cost to Export a Container of Goods

Brazil's export costs exceed those of other countries.

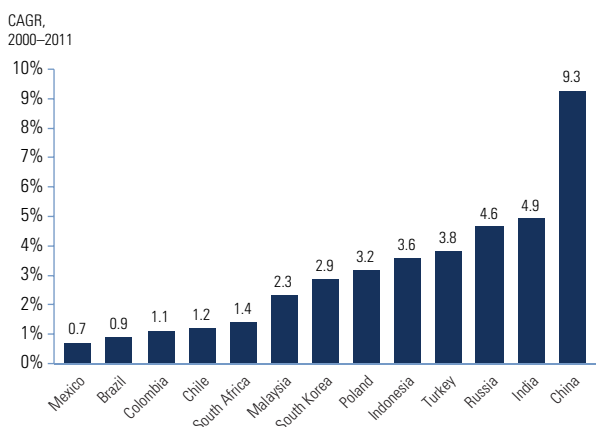


Data as of 2013.

Source: Investment Strategy Group, World Bank.

Exhibit 26: Growth in EM Labor Productivity

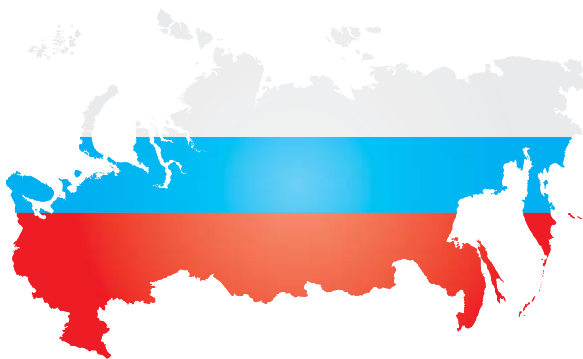
Brazil has had one of the lowest productivity gains among emerging markets.



Data from 2000 through 2011.

Source: Investment Strategy Group, Penn World Table.

Russia's Specific Fault Lines



Russia is even more dependent on commodities than Brazil. Energy alone represents just under 57% of the Russian equity market, and other commodities account for another 7%. The energy sector contributes 20–25% of Russia’s GDP, 60% of total exports and 33% of total government revenues. In fact, Russia is becoming increasingly dependent on oil and gas to manage its budget, fund its non-oil trade deficit and maintain its growth rate. Since 2000, we estimate that Russia’s oil and gas revenues increased by about 15% per year, providing a strong tailwind to Russia’s economic growth rate of 4.7%. During this period, oil and natural gas production increased annually by about 4% and

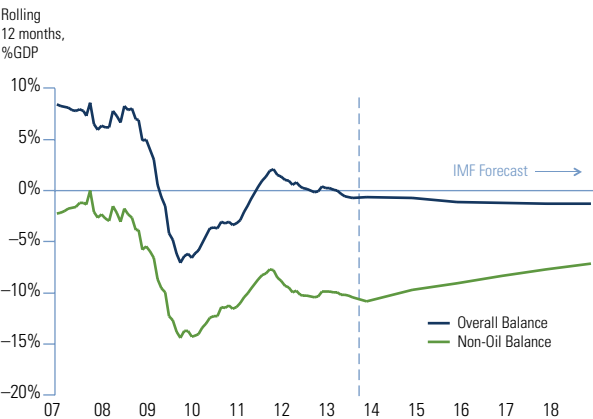
1%, respectively, while oil and natural gas prices increased annually by about 12% and 11%. Most energy market observers do not expect this pace to continue, either in Russian production or global energy prices.⁸⁴ The IMF has stated that Russia’s rapid rise in fiscal expenditures requires oil prices of \$110–\$115 per barrel of Urals (Russia’s equivalent of Brent and WTI) for Russia to balance its budget. Russia’s budget with and without oil revenues is not expected to improve much over the next five years, as shown in Exhibit 27.⁸⁵

Russia will also be hampered by poor demographics. As seen in Exhibit 28, Russia is facing the most rapid decline in its working-age population relative to the US, the Eurozone and other key emerging market countries. To provide some perspective on this decline, we compare Russia’s population trend to that of Japan, considered among developed countries as having the worst demographic outlook. Japan’s working-age population is expected to decline by 11% over a 20-year window between 1995 and 2015.⁸⁶ By comparison, Russia’s working-age population is expected to drop by 15% over a 20-year window between 2010 and 2030. Such a decline, as in the case with Japan, will serve as a drag on growth.

The aging population is not only a hindrance to growth, but it also creates a pension funding

Exhibit 27: Russia’s Budget Balance

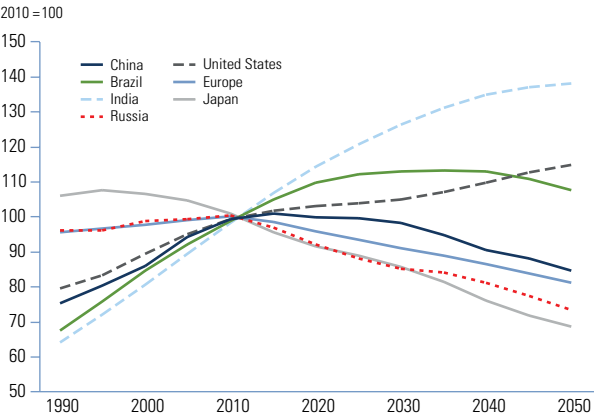
Russia depends on oil and gas to manage its budget and support growth.



Data through Q3 2013.
Source: Investment Strategy Group, Datastream, IMF.

Exhibit 28: Demographics Weigh on Russia’s GDP Growth

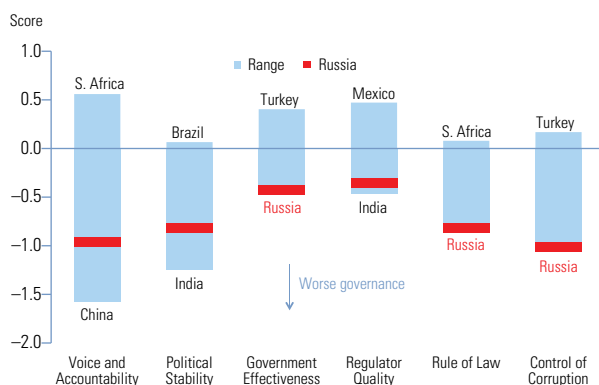
Russia’s working-age population is projected to decline.



Data as of 2013.
Source: Investment Strategy Group, United Nations Population Division.

Exhibit 29: World Bank Governance Indicator Scores

Russia ranks at or near the bottom among its peers across a range of indicators.



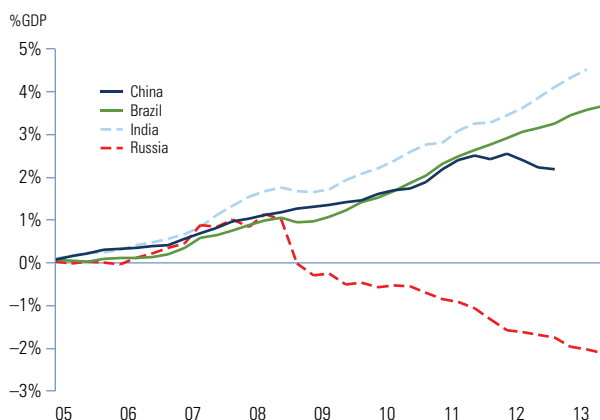
Data as of 2013.

Note: Range is based on data for Brazil, China, India, Indonesia, Mexico, Russia, South Africa and Turkey.

Source: Investment Strategy Group, IMF, World Bank.

Exhibit 30: Russia's Capital Outflows Stand Out Among the BRICs

Russia's cumulative flows since 2005 are negative.



Data as of Q3 2013.

Source: Investment Strategy Group, CEIC, Datastream, national sources.

problem. Russia's pension spending, at 9% of GDP, is nearly triple that of non-former Soviet bloc emerging market countries. By 2050, it is expected to rise to 16.3% of GDP, compared with 11% in developed economies and 6% in non-former Soviet bloc emerging market countries.⁸⁷ The relatively early statutory retirement age—60 years for men and 55 for women—explains part of this unsustainable pension problem. Furthermore, Russians tend to retire a few years earlier than the statutory retirement age.

Like Brazil, Russia is also hampered by too much government involvement in key sectors such as energy and banking. Government ownership

of crude oil production now stands at about 50%, compared with 13% in 2000. Similarly, government control of the publicly-traded banking sector has increased from 35% in 2000 to 58% in 2012. Such an extensive government presence dampens private investment and competition, and hinders sustainable growth in the long run.

Finally, Russia also faces challenges caused by poor governance and minimal rule of law. In the Index of Economic Freedom, the rule of law category comprises property rights and freedom from corruption. On both these measures, Russia ranks very poorly at 141 and 148, respectively, out of 185 countries. Russia ranks in the 20th percentile

of corruption, and is lower than countries such as Tanzania, Syria, Sierra Leone and Pakistan. Anecdotally, the Yukos takeover and TNK-BP separation have been cited as examples of the difficulty of doing business in Russia. Among key emerging market countries, Russia ranks the lowest across a range of governance indicators, as shown in Exhibit 29.

These deep fault lines and the extreme rankings with

Russia is heavily dependent on oil and gas production.



respect to governance partly explain the large-scale private capital outflows from Russia—\$406 billion since the first quarter of 2008. This exodus of capital stands in sharp contrast to the consistent inflows experienced by other key emerging market countries, as shown in Exhibit 30.

India’s Specific Fault Lines



India, the second most populous country in the world, is also one of the poorest. It is certainly the poorest of key emerging markets, with a GDP per capita of only \$1,414. India has the largest population of undernourished people at over 200 million people. It is also home to “history’s largest power failure” after a massive power outage in the summer of 2012 left 600–700 million people without electricity.⁸⁸

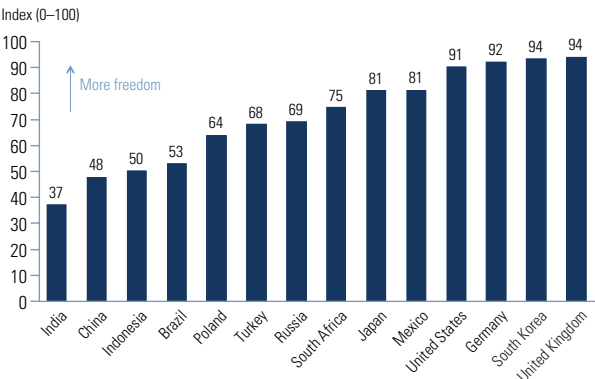
In addition, India lays claim to the largest democracy in the world, but it has a particularly ineffective political system that has led to a burgeoning bureaucracy, a lack of strong leadership at the state level and a decentralized government. According to policy expert Pratap Bhanu Mehta, “policy has ground to a halt... and politics are getting in the way.”⁸⁹ He states that politics in India “are deeply fragmented, which makes consensus hard to come by,” while, at the same time, the “authority of politicians has eroded considerably.” A recent report in *The Wall Street Journal* from New

Delhi points out that the current lower house “has passed fewer bills and spent less time discussing legislation than any of the 14 others that have served since India’s independence in 1947.”⁹⁰ The lower house, known as the Lok Sabha, saw an increase of 31% between 2004 and 2009 in the number of its members with pending serious criminal cases against them. About one-third of its members had pending criminal cases as of 2009.⁹¹

India’s political system has hindered much-needed structural reforms and deepened the country’s critical fault lines. Specifically, three key fault lines hamper its growth potential and increase its vulnerability to internal and external shocks.

First is a burdensome bureaucracy and regulatory environment. India is ranked as one of the weakest countries with respect to the burden that government regulation places on its society. On the Business Freedom Index, it scores below all other key emerging market countries (see Exhibit 31). The new governor of the Reserve Bank of India, Raghuram Rajan, highlighted the burden of “political intervention and bureaucratic constraints” in a 2008 report prepared by the Committee on Financial Sector Reform, which he chaired.⁹² Governor Rajan’s observations are particularly noteworthy given that he formerly served as chief

Exhibit 31: Business Freedom Index Ranking
India ranks lowest in creating the conditions businesses need to thrive.



Data as of 2013.
Note: The Business Freedom Index measures an individual’s right to establish and run an enterprise without undue interference from the state. Burdensome and redundant regulations are the most common barriers to the free conduct of entrepreneurial activity.
Source: Investment Strategy Group, The Heritage Foundation.

economist at the IMF, a tenured professor at the University of Chicago and an economic advisor to Prime Minister Manmohan Singh.

Poor regulation and rigid laws lead to considerable inefficiencies. For example, about 21% of India’s power output is lost during transmission and distribution, compared with 6% in China and the US.⁹³ This is primarily due to the difficulty of integrating a state- and region-wide system into a national grid.⁹⁴ Inefficiencies in the food supply chain are even worse. The government estimates that 40% of the fruit and vegetable production in India is wasted due to lack of storage, cold chain and transport infrastructure.⁹⁵ And what food does make it to market is priced up to 50% higher than what the farmer earns because of the Agriculture Produce Marketing Committee Act, which forces farmers to use licensed middlemen.⁹⁶

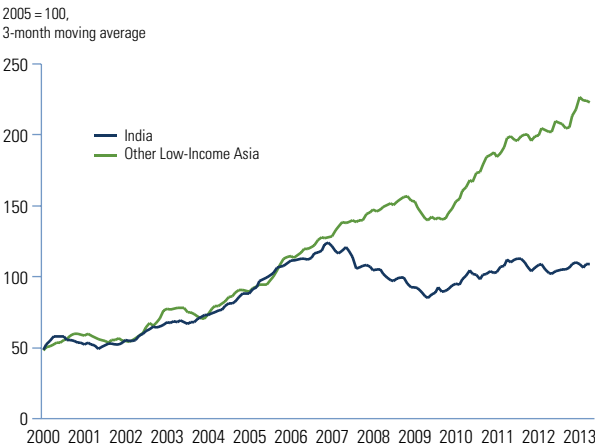
Inefficiencies of this magnitude are even more striking when one considers that over 200 million Indians are undernourished. Yet they persist because the politically powerful agricultural middlemen resist attempts at reform. The country’s complex rules governing foreign ownership and management of stores recently quashed Wal-Mart Stores Inc.’s efforts to open retail stores in India. A *Forbes* headline put the blame squarely on the political system: *India’s*

*Bureaucratic Nightmare Kills Wal-Mart Retail That Could Benefit Millions in Poverty.*⁹⁷

A second structural fault line is India’s current mix of exports. India has shied away from expanding exports of light manufactured goods that would leverage its massive pool of unskilled labor. Instead, it has chosen to focus on exports such as prescription drugs, software services and machine tools, which all rely on relatively scarce skilled labor. Jonathan Anderson of Emerging Advisors compares India’s exports of light manufacturing goods to those of India’s low-income Asian competitors—Bangladesh, Cambodia, Indonesia, and Vietnam—and concludes that India will need to adjust its export model very soon in order to achieve high growth rates (see Exhibit 32).⁹⁸ Given rigid labor laws and low labor participation, a quick shift in its mix of exports will be difficult if not impossible.

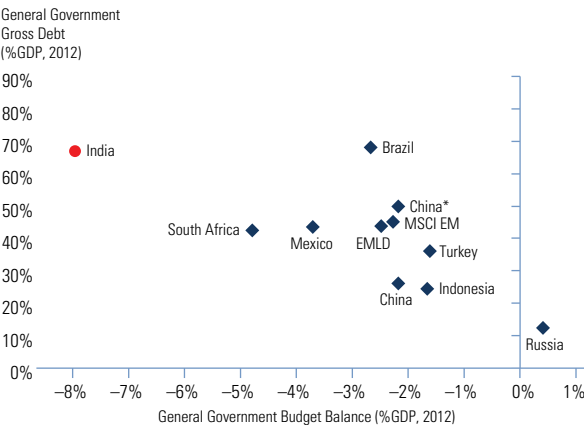
Third, India has a particularly unfavorable fiscal profile. Its government debt-to-GDP ratio stands at a high 67%, well above the IMF’s suggested 40% target for sustainable growth in emerging market countries. Moreover, India’s high budget deficit—at more than 8% of GDP—ranks worst among the key emerging market countries (see Exhibit 33). Furthermore, it has a current account deficit of

Exhibit 32: Light Manufacturing Exports to the US
India has not tapped into its large pool of relatively unskilled labor.



Data as of 2013.
Source: Investment Strategy Group, Emerging Advisors Group.

Exhibit 33: India’s Fiscal Fault Line
High government debt and budget deficit burden India.



Data as of 2012.
*Using ISG’s estimate for Chinese government debt in 2012.
Source: Investment Strategy Group, Datastream, IMF.

India has shied away from expanding exports of light manufactured goods that would leverage its massive pool of unskilled labor and has focused instead on software services.

4.4% of GDP, illustrating how much it relies on foreign flows to support its economy.

The IMF believes India's debt-to-GDP level will be stable at 67% as long as GDP grows at 6.3% over the medium term; but should growth slow to somewhere between 4% and 5%, we project its debt ratio will increase to a high of 74% in the next five years. Fiscal and current account deficit concerns were reflected in the big drop in the Indian rupee during the downdraft in emerging market assets earlier this year. It was the worst-performing currency between early May and early September, declining 20% relative to the US dollar.

We should note that while much has been written about high levels of corporate debt in India, we do not think the picture is as dire as many suggest. It is true that in absolute terms India's

corporate sector has significant debt, and that corporations are vulnerable to increasing amounts of leverage. However, corporate leverage as measured by debt-to-equity ratios is in line with that of many Asian countries and remains less than in China, the Philippines and Vietnam. That is not to say that incidents such as Essar Steel's and Kingfisher Airlines' recent missed payments will not continue. And the

government may in fact have to recapitalize public sector banks, which account for about 75% of the country's banking sector. But, in comparison to other troubled emerging countries, India's corporate debt issues are not particularly troubling.

India has been slow to embrace and implement many structural reforms that would address its fault lines, including those targeting taxes, social security, the cost of doing business, foreign direct investment and education. This last issue, in particular, demands attention. India is plagued by one of the lowest levels of educational achievement in the world, ranking below Indonesia (see Exhibit 34). Only 23% of Indians have received secondary education, and primary education is inadequate. A 2011 survey of government schools revealed that half of the country's fifth graders, who are typically



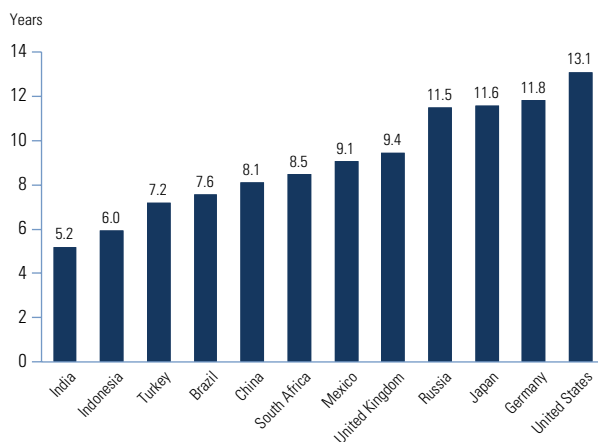
India, the second most populous country in the world, is also one of the poorest.



India relies on relatively scarce skilled labor.

Exhibit 34: Average Years of Schooling

India is plagued by one of the lowest levels of educational attainment in the world.



Data as of 2010.

Source: Investment Strategy Group, Barro & Lee (2013).

10 years old, could not read text that was suitable for children three years younger.⁹⁹

To reduce the burden of bureaucracy, the government created a Cabinet Committee on Investment (CCI) earlier in 2013, chaired by the Prime Minister and comprising 15 of India's 35 cabinet members. According to the Eurasia Group, the CCI has reportedly issued more than 125 different approvals that were delaying 92 large projects. In spite of these efforts, various ministries continue to hold up some of these projects and state-level challenges remain.

Changing bureaucracies is a herculean task for any country, let alone a poor and populous one such as India. With general elections coming up next year, the odds of any major reform occurring soon appear slim. The deepening of India's fault lines has left the country more vulnerable to external and internal shocks, particularly because the 9% annualized rate of growth it realized in the 2003–07 period will be difficult to replicate given the current economic backdrop. As a result, we believe that Indian equity, debt and currency will be more volatile than before the 2008–09 financial crisis.

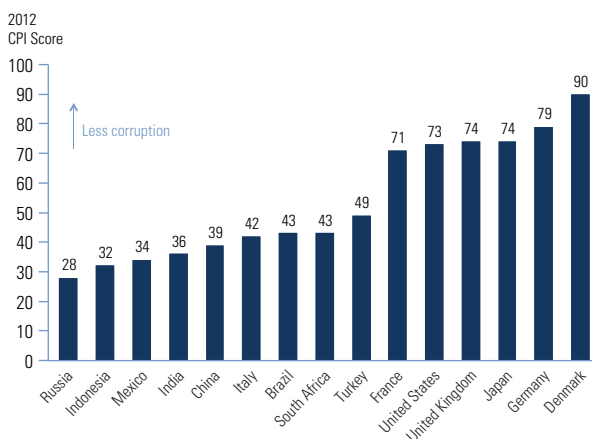
Other Key Emerging Market Countries

We now turn to the next four key emerging market countries: Mexico, Indonesia, Turkey and South Africa. These economies are larger components of the MSCI Emerging Market Equity Index, and of emerging market debt indexes, than other countries outside the BRICs. As shown earlier (pages 16–21), they share the same general characteristics as the largest four countries. They are generally poor economies with low GDP per capita, ranging from a high of \$11,224 in Mexico (just below the poverty threshold in the United States) to a low of \$3,499 in Indonesia. These countries also rank relatively low with respect to institutional metrics such as economic freedom, ease of doing business and governance. Mexico and Indonesia rank particularly poorly with respect to corruption, ranking third and fourth from the bottom among key emerging market countries based on a 2012 Corruption Perceptions Index from Transparency International (see Exhibit 35). We have excluded South Korea from this discussion since its GDP per capita of \$23,838 puts it in the IMF's definition of an advanced economy.

Of these four countries, we believe *Mexico* has fewer fault lines than most of the large emerging market

Exhibit 35: Corruption Perceptions Index

Indonesia and Mexico rank poorly with respect to perceived corruption.



Data as of 2012.

Source: Investment Strategy Group, Transparency International.

In a 2013 national survey, Mexicans ranked security as one of their top concerns.

countries. Nevertheless, two specific fault lines—security and reliance on oil revenues—warrant our attention.

Mexico has one of the highest rates of homicides and drug-related crimes among major emerging market countries. Homicide rates have more than doubled since 2000, and are only exceeded by those of South Africa and Colombia. In a 2013 national survey, Mexicans ranked security as one of their top concerns.¹⁰⁰

While security concerns clearly impact business and consumer confidence, such concerns have not prevented some US and European companies—e.g., Emerson, Siemens AG, Jabil Circuit Inc., Meco Corp. and Viasystems Group Inc.—from moving their manufacturing from China and other parts of Asia to Mexico. The IMF has pointed out that Mexico's strong commitment to intellectual property rights accounts for the relocation of foreign direct investment from China to Mexico, calling it “especially important in high technology sectors as well as sectors with technologies that can be used in military applications.”¹⁰¹

Mexico, like Russia, is also very dependent on oil revenues for its budget. In the first half of 2013, oil revenues accounted for 33% of total government revenues. Given the steady decline of oil production in Mexico over the last eight years, this dependence must be reduced. In fact, President Peña Nieto's administration hopes to implement tax reform to shift its tax revenues away from the energy sector. In addition, his administration hopes to partially open the Mexican energy sector to private and foreign investors. We believe that Mexico is likely

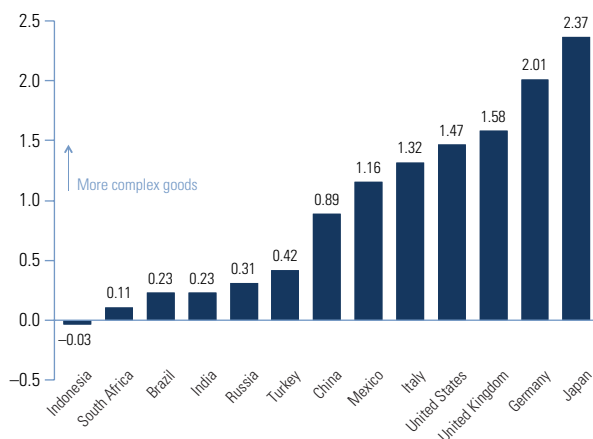
to implement these two structural reforms over the next couple of years.

One important strength that partially offsets Mexico's dependence on oil revenues is its so-called economic complexity. In our 2012 *Outlook*, we discussed the Economic Complexity Index put forth in *The Atlas of Economic Complexity: Mapping Paths to Prosperity*, by Ricardo Hausmann and Cesar Hidalgo of

Harvard University and the Massachusetts Institute of Technology, respectively.¹⁰² Their approach examines the number of products exported by a country in relation to the number of other countries that also export the same products. The broader the range of a country's exports, they argue, the more complex its economy is. This economic complexity is predictive of intermediate- to long-term growth, as a country's economic complexity correlates highly with its income per capita. While Japan and Germany rank first and second by economic complexity, Mexico has the highest rank among the key emerging market countries and is more on par with Italy than the typical emerging market

Exhibit 36: Economic Complexity Index

Mexico's diverse array of exports bodes well for its long-term prospects.



Data as of 2008.

Source: Investment Strategy Group, The Observatory of Economic Complexity.

country, as shown in Exhibit 36. This bodes well for Mexico's long-term prospects.

Indonesia, like Brazil, is also heavily dependent on commodity exports. Commodities account for 62% of its exports and exports account for 23% of GDP. Furthermore, mining accounts for about 16% of total investment. While overall investment is high at 35% of GDP, not enough investment has been allocated to infrastructure, which ranks just above India.

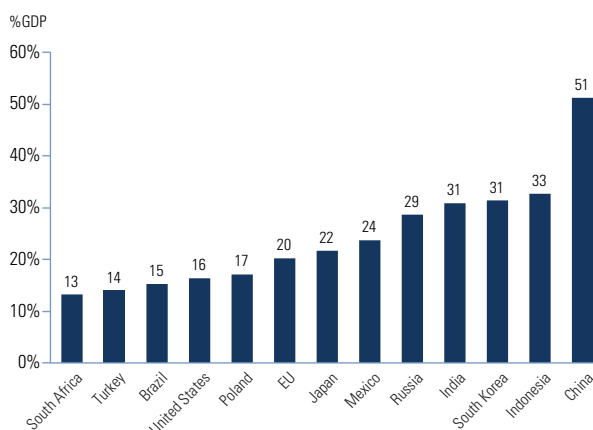
Indonesia also suffers from a relatively uneducated population. As shown earlier in Exhibit 34, average years of schooling stands at six years, which is also just above India. It is hard to imagine this profile will change any time soon given that Indonesia spends only 2.8% of its GDP on education, yet it has the fourth-largest population in the world after China, India and the United States. The *Financial Times* summarized it best earlier this year: "Indonesia badly needs judicial, tax, and labor reform, a big reduction in red tape, infrastructure development, an overhaul of ailing health and education systems, and more systemic efforts to reduce the most egregious forms of corruption."¹⁰³

Turkey is one of the economies most vulnerable to a shift in sentiment away from emerging markets and a possible reallocation of capital due to a less accommodative monetary policy by the Federal Reserve. This vulnerability is tied to its low savings rate of 14% of GDP in 2012, the second-lowest among emerging market countries, as shown in Exhibit 37. This rate has been declining steadily

Turkey is one of the economies most vulnerable to a shift in sentiment away from emerging markets.

Exhibit 37: Gross National Savings Rates

Low savings and high foreign debt leave Turkey vulnerable to a global liquidity crisis.



Data as of 2012.

Source: Investment Strategy Group, Datastream, IMF.

from a peak of 23% in 1998, and has been paired with an investment rate of 20% of GDP, resulting in a current account deficit that has been funded with foreign capital. Turkey's external debt stands at about 45% of GDP, and more than a third of it is maturing within a year. Combined with its current account deficit and net foreign direct investment, Turkey's short-term foreign liabilities are about 127% of reserves, leaving it quite exposed to a global liquidity crisis as it would have to roll over its debt at very high levels. The markets clearly recognize this ongoing vulnerability: during the 2013 drawdown of emerging market assets, Turkish local debt was one of the worst performers, with a total return of -23% and a currency decline of 13%.

Turkey also faces significant geopolitical concerns, both internally and in the region. Domestically, the persistent tension between the secularists, Islamic traditionalists and the military ebbs and flows. The demonstrations in Taksim Square, discussed earlier, were just one example of how these tensions can spill over and hurt

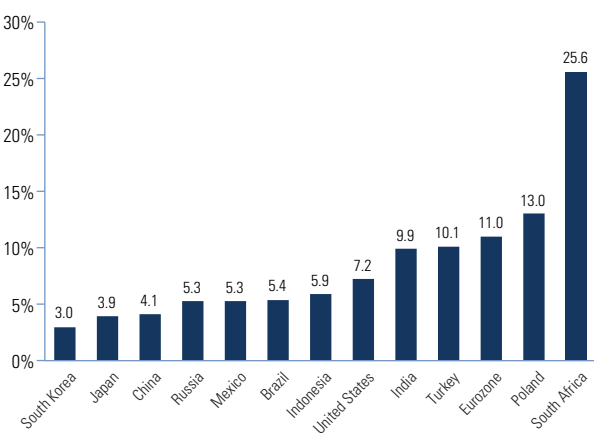
South Africa has the unfortunate distinction of having the highest rate of joblessness and highest level of inequality.

international perceptions of Turkey’s political stability. Nearby, Syria and Iraq have their own domestic civil strife to contend with, resulting in uncertainty at Turkey’s borders.

South Africa is another commodity-reliant economy. Commodities account for 60% of its exports, and exports account for 23% of its GDP. Mining output including gold has been on a steady decline over the last decade or so. With the end of the commodity supercycle, South Africa will face considerable budget headwinds. It already has one of the highest budget deficits as a share of GDP at -4.9%, and is only exceeded in this regard by

Exhibit 38: Unemployment Rates

South Africa’s joblessness rate is more than double that of other emerging market countries.



Data as of September 2013.
Source: Investment Strategy Group, Datastream, national sources.

India among the large countries. Its debt-to-GDP is in line with the average of emerging market countries (see Exhibit 33 on page 41).

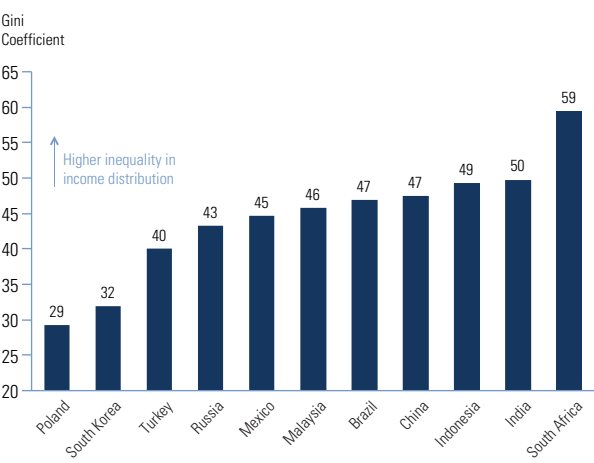
South Africa faces a particularly difficult fault line with structural unemployment. It has the unfortunate distinction of having the highest rate of joblessness and highest level of inequality as measured by the Gini coefficient—a commonly

accepted measure of income inequality. At about 26%, its unemployment rate is more than double the rate of other key emerging market countries including Turkey, Indonesia and India (see Exhibit 38). At 59, its Gini coefficient is the highest of any emerging market country and substantially higher than the emerging market average of 42 (see Exhibit 39).

With its low labor force participation rate and high unemployment rate, a large swath of its population is structurally unemployed with little chance of participating in any meaningful job opportunities. The government has responded with higher welfare benefits; over 30% of the population

Exhibit 39: Income Inequality

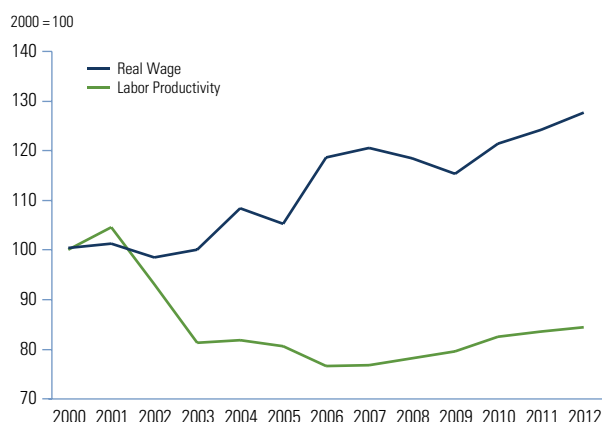
Highly uneven income distribution is one of South Africa’s fault lines.



Data as of 2012.
Source: Investment Strategy Group, Standardized World Income Inequality Database.

Exhibit 40: South Africa's Rising Unit Labor Costs

Real wages are steadily rising as labor productivity remains stagnant.



Data as of 2012.

Source: Investment Strategy Group, Datastream, IMF.

now receives government benefits. Furthermore, all the net new jobs created since 2009 are in its government. As a result, South Africa has one of the highest wage expenditures as a share of total government expenditures at 36%, compared with an average of 22% among its emerging market peers.¹⁰⁴ That does not bode well for reducing a structural deficit that accounts for the lion's share of the country's total budget deficit.

South Africa has the difficult task of balancing the needs of its poor, unemployed, uneducated and crime-weary population with the need for fiscal consolidation. Going forward, this will be much more difficult. Real wages have steadily increased since 2000 as labor productivity has declined

quite significantly (see Exhibit 40). The collective bargaining power of its unions will likely keep wages rising for the foreseeable future. At the same time, labor relations have deteriorated, as witnessed by the 74% increase in the number of strikes since 2008. According to the South African Department of Labor, more than half of the strikes in 2012 were in the mining sector, some with devastating consequences, including the August 2012 strike in the Marikana mine that resulted in 40 deaths. Finally, crime in South Africa is now the second-highest of any emerging market country at 30.9 homicides per 100,000 inhabitants, second only to Colombia.

The shared theme across all of these next-tier emerging market countries is that of low-income societies with weak institutions that cannot readily address their structural fault lines. They did not address them when the backdrop was particularly favorable, characterized by a prolonged commodity supercycle, China's double-digit growth rates since 2003, and capital inflows of over \$1 trillion per year into emerging markets over the last four years.¹⁰⁵ Now, the headwinds will be that much greater going forward as commodity prices stabilize, growth slows in China, and the Federal Reserve eventually drains global liquidity by tapering and increasing interest rates.

South Africa has the difficult task of balancing the needs of its poor, unemployed, uneducated and crime-weary population with the need for fiscal consolidation.

Implications for the Strategic Allocation to Emerging Markets

When considering the strategic asset allocation implications of our views on emerging markets, the relevant questions are: What asset classes should be considered and what is the appropriate allocation for different levels of portfolio risk? And most relevant to this *Insight*: Should that allocation change in light of the intransigence of the structural fault lines discussed above?

Leveraging the new strategic asset allocation models we introduced in 2012,¹⁰⁶ we have re-evaluated four asset classes in emerging markets: public equities, private equity, emerging market dollar-denominated debt and emerging market local currency debt. As a result of our models, our view of the intransigence of emerging market fault lines and the heightened uncertainty in China, we have reduced our overall strategic asset allocation to emerging markets across all of our model portfolios. For example, the allocation to emerging markets for a moderate-risk client with a well-diversified portfolio decreased from a total of 9% to 6%. This compares with a total market value of 8% in the combined MSCI All Country World Index and the Barclays Global Aggregate Bond Index.

In this section we will begin with a brief discussion of why some allocation to emerging markets is warranted. We will then review the role of each emerging market asset class given our best estimate of each asset class' risk and return characteristics. We will also highlight the increasing correlations among developed and emerging market assets.

Shortcomings of Emerging Market Data

Before we dive into that discussion, though, we must address the shortcomings of emerging market data.

As shown in Exhibit 41, the start date for each benchmark varies significantly, which makes it harder to compare emerging market assets across time. We also have very limited history, particularly in the case of local currency debt. The equity and debt benchmarks are also composed of different countries.

Furthermore, these asset classes are evolving in a number of ways. For example, emerging market dollar debt was the only relevant outstanding debt in the 1990s, and the emerging market local debt index was nonexistent. Yet, since the end of 2002, local debt outstanding has grown at double the pace of dollar debt. Investable emerging market local debt now stands at \$970 billion compared with \$580 billion for external debt.

Another example of this evolution is the major regime shift that began at the end of 2002 in emerging market dollar debt. Prior to that year, the incremental yield of emerging market dollar debt over US Treasuries was 7.6%, with two big spikes caused by the Mexican "tequila crisis" in 1994 and the Russian default and Asian crisis in 1998. After

Exhibit 41: Current Composition of EM Indexes

	Equities	Dollar Debt	Local Debt
	MSCI EM	JPM EMBI Global Diversified	JPM GBI-EM Global Diversified
Inception date	1/1/1988	1/1/1994	1/1/2003
Current constituents:			
Brazil	✓	✓	✓
China	✓	✓	
Colombia	✓	✓	✓
Hungary	✓	✓	✓
India	✓	✓	
Indonesia	✓	✓	✓
Kazakhstan		✓	
Malaysia	✓	✓	✓
Mexico	✓	✓	✓
Philippines	✓	✓	✓
Poland	✓	✓	✓
Russia	✓	✓	✓
South Africa	✓	✓	✓
South Korea	✓		
Taiwan	✓		
Thailand	✓		✓
Turkey	✓	✓	✓
Venezuela		✓	

Data as of November 2013.

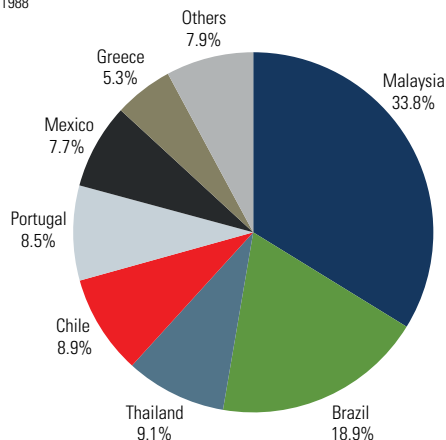
Note: Only includes top 10 countries by current constituent weight in each index. Using the inception date for the JPM EMBI Index for dollar debt.

Source: Investment Strategy Group, Datastream, JP Morgan, MSCI.

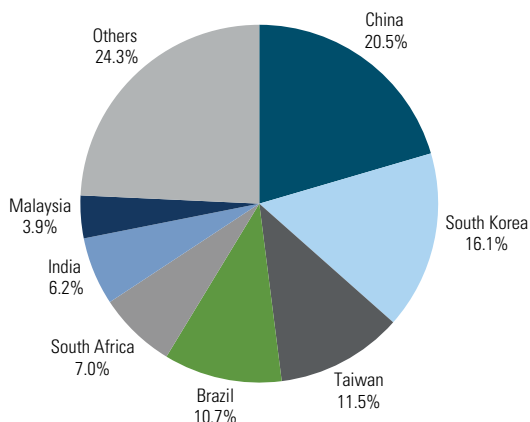
Exhibit 42: MSCI EM Country Composition

Country constituents of the emerging market equity index have changed significantly over the years.

As of 1/1/1988



As of 11/29/2013



Source: Investment Strategy Group, Datastream, MSCI.

2002, the average spread between these assets has been 3.5%. Since we believe that the experience of the last decade is more representative of this more mature debt market, we have estimated the risk premium based on data after 2002. This decision is supported by the need to compare it with local debt with an inception date of January 2003.

Finally, the constituents of the emerging market equity index have changed considerably over the past 25 years. In 1988, the inception date of the MSCI Emerging Markets Index, Malaysia was the largest constituent at a weight of 33.8%, and Brazil was the only member of the BRICs in the index. Today, China and South Korea are the two largest weights, while Malaysia stands at only 3.9% of the

index (see Exhibit 42).

Clearly, there are a lot of issues to consider in determining the appropriate risk and return characteristics of emerging market assets. In addition to limited data and a probable regime shift in emerging market dollar debt, we have to factor in the persistent fault lines in most countries, heightened uncertainty in China, and the likely end of the “Goldilocks era” of 2003–07 that favored emerging market countries.

While we primarily rely on our new asset allocation models to guide us toward the optimal allocation to emerging market assets, we have to introduce a greater element of uncertainty based on our qualitative judgment.

We have to factor in the persistent fault lines in most countries, heightened uncertainty in China, and the likely end of the “Goldilocks era” of 2003–07 that favored emerging market countries.

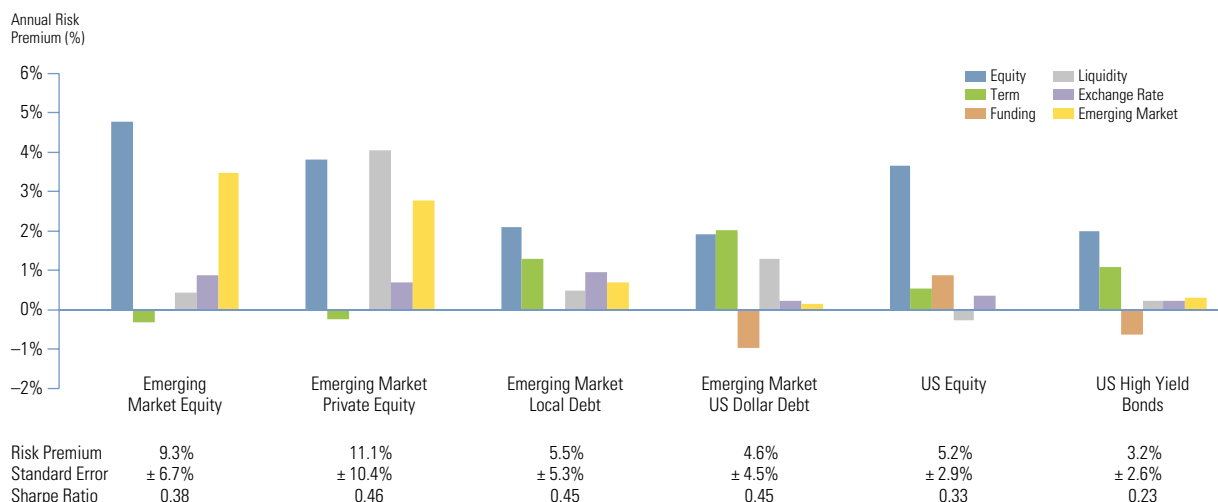
The Rationale for Some Strategic Allocation

We believe that our clients should invest in emerging markets based on both our quantitative and fundamental analysis.

From a purely quantitative perspective, the risk premium of emerging market assets—both absolutely and adjusted for their volatility—is attractive.

As shown in Exhibit 43, the

Exhibit 43: Factor Decomposition of Asset Class Expected Returns



Source: Investment Strategy Group.

risk premium above the risk-free rate that is derived from each asset class' exposure to our six return factors is high and above that of US assets. The Sharpe ratios (a measure of excess return per unit of risk) estimated by our asset allocation models are also higher than that of US assets. Emerging market local debt, for example, has an expected Sharpe ratio that is nearly double that of US high yield. Similarly, emerging market private equity, where the uncertainty with respect to our parameters is greatest, has a Sharpe ratio that is over 40% higher than that of US buyout private equity; public equity has a Sharpe ratio that is about 15% higher. As we will discuss later, there is tremendous uncertainty around these estimates, though.

From a more fundamental perspective, we also believe that an allocation to emerging market assets is warranted.

First, the publicly traded investable universe of emerging markets stands at \$6.3 trillion, which represents 8% of the global investable market capitalization of stocks and bonds. Such a large universe of assets across 58 countries provides a broad range of investment opportunities. This is particularly true in economies that are evolving rapidly where new industries and services are introduced all the time.

Second, while certain risks have increased, others have decreased. For example, inflation has been lowered substantially from the double- and even triple-digit levels of the 1990s, partly due to the establishment of more independent central banks relative to two decades ago. Lower and more stable inflation has allowed most countries to abandon fixed exchange rates, issue more local currency-denominated debt and lengthen the maturity

of their sovereign debt. In aggregate, emerging market countries have also increased their foreign exchange reserves. These reserves currently stand at \$7.4 trillion, which is equivalent to over 28% of aggregate GDP, an almost fourfold increase relative to 1994. Even excluding the reserves of China and the oil-rich Arab countries in the Persian Gulf, emerging market reserves rose from 8% to 21% of GDP during this period. These changes reduce the exposure of many countries to external debt and

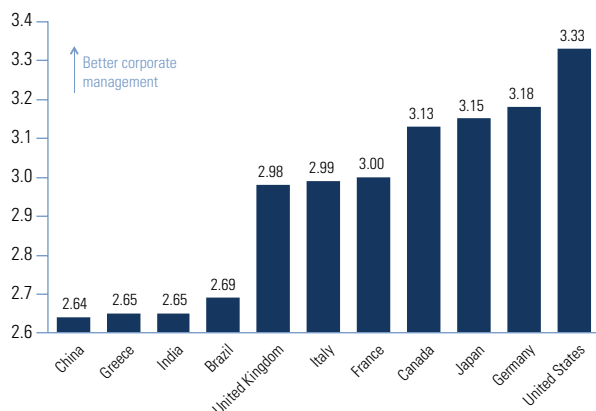
DEFINITIONS OF TWO TECHNICAL TERMS

Return Factors: The long-term investment returns in asset classes derive from multiple distinct sources called "return-generating factors" or return factors.

Robust Optimization: The process we use to generate optimal asset allocations that seek to maximize the expected portfolio return while trying to minimize risk and uncertainty in the portfolio.

Exhibit 44: Corporate Management Rankings

Emerging market countries rank the lowest.



Data as of 2010.

Note: Diffusion index (1–5) based on the average scores for 18 management practices.

Source: Investment Strategy Group, Nicholas Bloom and John Van Reenen, "Why do Management Practices Differ Across Firms and Countries?" *Journal of Economic Perspectives*, Winter 2010.

currency crises like the ones seen in the 1990s that created significant downdrafts across emerging market assets. As such, emerging markets today offer attractive risk premiums while having lower external debt and currency risks relative to two decades ago.

Therefore, we believe that some allocation to emerging market assets is warranted. The question is which assets should be included in that allocation and how large it should be.

Our first decision was to not recommend an allocation to emerging market dollar debt after considering four facts. As can be seen from Exhibit 43, this asset class has more exposure to global interest rates than US high yield or emerging market local debt (as shown by the height of the green term premium bar). Such exposure to term premium can be obtained more efficiently and more cheaply with US Treasury securities. Surprisingly, emerging market dollar debt also provides negligible exposure to emerging markets; this exposure can be obtained through emerging market local debt. Furthermore, dollar debt provides less diversified exposure to all the factors than local debt does. Finally, the factor exposures of dollar debt are very similar to those of high yield.

Our second decision was to include an

allocation to emerging market private equity. Our rationale for this decision is twofold. Private equity in emerging market countries enables investors to gain exposure to sectors with stronger historical and potential earnings growth, such as the consumer discretionary and healthcare sectors, and reduce exposure to sectors with slower growth or a significant government stake, such as materials, energy and large financials. It also enables investors to reduce some of the risks of emerging markets by allowing greater due diligence, obtaining some controlling rights, and partnering with founders and families who want to leverage the better corporate management capabilities found in developed economies. As shown in Exhibit 44, emerging market countries have some of the lowest corporate management rankings. This suggests plenty of room for emerging market companies to improve their productivity.

However, we limit the overall allocation to emerging market private equity for a number of reasons. The uncertainty around the risk and return parameters, as in the case of the illiquidity premium in emerging markets, is one such consideration. Another reason is the low ranking of emerging market countries in the Global Venture Capital and Private Equity Attractiveness Index. By this measure, emerging market countries rank substantially below developed markets. Furthermore, we have not found any evidence that emerging market private equity managers provide higher value-add relative to private equity managers in developed markets. The private equity industry in emerging market countries is in its nascence, so we need to be duly cautious in our allocation.

Finally, we decided to widen the confidence interval around our expected return estimates by about one-third across emerging market assets. We did this to incorporate the greater uncertainty tied to the structural fault lines of emerging market countries discussed earlier, as well as factor in our concerns with respect to the catch-22 problem of Chinese reform and the prospect of reversing monetary policy over the next three to five years in the US.

In any statistical estimation, there is a confidence interval around the number that is being estimated.

For example, while we estimate a risk premium of 5.5% for emerging market local debt, the confidence interval—technically called the “standard error”—around that estimate is plus or minus 5.3%. That means that we have about 66% confidence that the “true” risk premium lies between 0.2% and 10.8%. By increasing the confidence interval around the risk premium, our robust optimization process lowers the optimal asset allocation.

When we combined the results of robust optimization and our judgment of a prudent strategic allocation, our allocation to emerging markets for a moderate-risk client with a well-diversified portfolio decreased from a total of 9% to 6%.

We are even more comfortable with a lower allocation when we examine the lower diversification benefits of emerging market assets.

One of the key pillars of the Investment Strategy Group’s investment philosophy is the “appropriate level of diversification” (see Exhibit 45). We know that diversification enables our clients to target either higher returns for a given level of volatility or lower volatility for a given level of returns. We believe in diversification across asset classes, diversification within asset classes, diversification among investment managers and diversification of entries and exits from tactical tilts.

But the diversification benefits of emerging market assets have diminished over the last decade or so due to increased globalization and greater capital flows across countries. As a result, economies have become more intertwined, financial

linkages have increased and capital markets have become more correlated.

From an economic perspective, we can see the impact of globalization by looking at the increasing correlations in GDP growth rates. As shown in Exhibit 46, correlations have increased across the board over the last 20 years. For example, the 10-year rolling correlation between GDP growth rates in the US and that of the rest of the world rose from 0.35 during 1990–99 to 0.82 in 2000–09. It stands at 0.84 over the last decade. Moreover, trade as a share of world GDP has grown from 20% in 1990 to over 30% today, in another sign of increased ties, as shown in Exhibit 47.

Financial linkages have also increased as foreign ownership of the debt and equity in many developed and emerging market countries has risen. In 2012, for example, foreign ownership of US equities and bonds amounted to 55% of US GDP, a significant increase over 2001, when it amounted to only 29%. In Brazil, foreign ownership has increased to 25% from 10%, and in India it has risen to 17% from 3%.¹⁰⁷

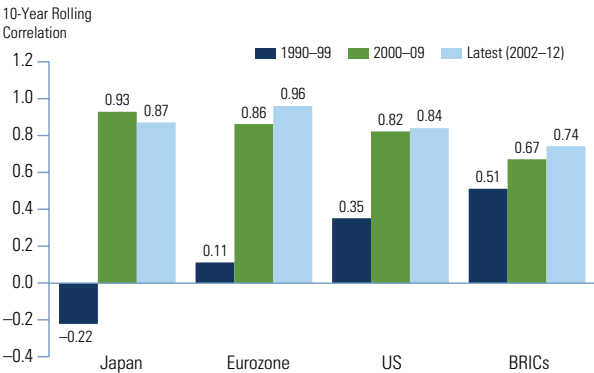
Finally, globalization and greater financial linkages have also led to higher correlations among capital markets. Rolling three-year correlations between emerging market assets and developed markets have nearly doubled, going from 0.45 at the onset of the emerging market equity index to 0.86 today, and from 0.34 at the onset of the emerging market local debt index to 0.75 today (see Exhibits 48 and 49). At the same time, the

Exhibit 45: Pillars of the Investment Strategy Group’s Investment Philosophy



Exhibit 46: A More Synchronized Global Economy

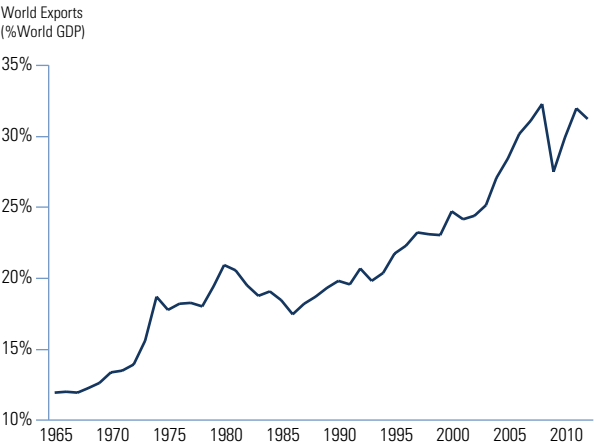
Correlations are rising due to globalization and greater financial linkages.



Data as of 2012.
Note: Correlation between annual growth of country/regional GDP and growth of world GDP excluding that country/region. Measured in purchasing power terms (2005 international USD).
Source: Investment Strategy Group, Datastream, World Bank.

Exhibit 47: Trade’s Role in Global GDP

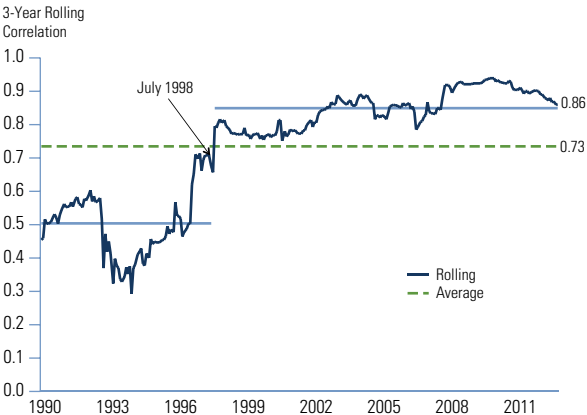
Exports’ share of world GDP has more than doubled since 1965.



Data as of 2012.
Source: Investment Strategy Group, Datastream.

Exhibit 48: A Tighter Relationship Between Emerging and Developed Market Equities...

The correlation between these assets has more than doubled.



Data as of November 2013.
Source: Investment Strategy Group, Datastream.

Exhibit 49: ...And Between EM and US Fixed Income Markets

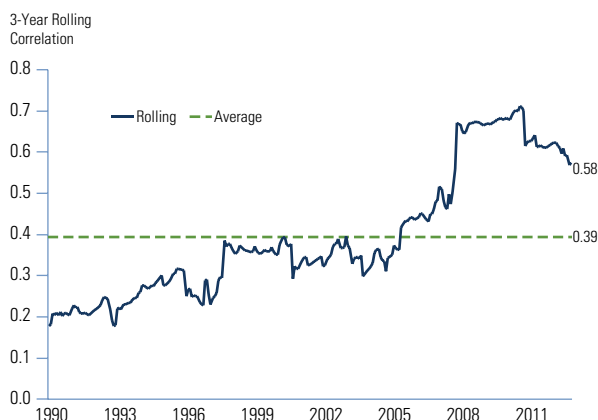
The correlation between EM local debt and US high yield has also increased significantly.



Data as of November 2013.
Source: Investment Strategy Group, Datastream.

Exhibit 50: EM Equity Markets Are Moving More in Tandem

The cross-correlation is stronger among emerging market countries.



Data as of November 2013.
Source: Investment Strategy Group, Datastream.

returns of emerging market countries have become more correlated with each other. Again, looking at three-year rolling cross-correlations, we note that correlations have risen from 0.18 to 0.58 today (see Exhibit 50).

This greater correlation is due to the impact of globalization not only at the macro level but also at the micro level. David Kostin, our colleague in Goldman Sachs Global Investment Research, estimates that 5% of S&P revenues and 6% of profits are sourced from emerging markets. Examples of companies with high revenue exposure to emerging markets are Wynn Resorts Ltd. at about 71%, YUM Brands Inc. at about 51%, Caterpillar Inc. at about 40%, Nike Inc. at about 30% and

Colgate-Palmolive Co. at about 29%. In Europe, emerging market countries account for 15% of revenues of the Euro Stoxx 50. Examples there include Banco Santander, S.A. with about 55% of revenues from emerging markets, Anheuser-Busch InBev at about 47%, LVMH Moët Hennessy-Louis Vuitton S.A. at about 28%, and BMW AG at about 19%. Hence the higher correlations.

We recognize that the Investment Strategy Group's strategic allocation to emerging market assets is lower than their market capitalization. We believe that the lack of progress on behalf of emerging market policy makers in addressing their countries' structural fault lines is a major detractor from the long-term risk and return profile of emerging market assets. Furthermore, we note again that emerging market assets provide less diversification benefits than they did a decade or two ago. In addition, clients already have some emerging market exposure in their developed market equity holdings and hedge fund assets.

We also believe that China's stated goal of implementing reform—be it sooner or later and expeditiously or incrementally—has elevated uncertainty that, in turn, has decreased our confidence in estimating the expected returns for emerging market assets.

Since we do not think that anyone can tactically avoid probable downdrafts in emerging market assets on a consistent basis over the next decade, we recommend a lower strategic allocation. To quote Antoine van Agtmael again: "Economic history teaches us that the next crisis usually comes from the region where the applause and self-satisfaction were loudest the previous time around. If that holds true, the next economic shock will more likely than not come from the BRICS."¹⁰⁸

A reduced strategic allocation, however, does not mean that the total allocation to emerging market assets cannot be higher from a tactical standpoint; when these assets become particularly attractive and the margin of safety increases due to cheap valuations, we can increase our allocation opportunistically.

"Economic history teaches us that the next crisis usually comes from the region where the applause and self-satisfaction were loudest the previous time around. If that holds true, the next economic shock will more likely than not come from the BRICS."

– Antoine van Agtmael

An Opportune Time for a Tactical Tilt?

At this point, the inevitable question is whether the current environment warrants a tactical allocation to emerging market debt or equity. We do not think so.

On a tactical basis, when assets become particularly attractive and the margin of safety therefore increases due to cheap valuations, one could argue for a move to an overweight recommendation. Indeed, as suggested by the key pillars of our investment philosophy, we believe that attractive valuations should underpin a tactical tilt toward any asset class or sector. However, given the additional uncertainties that now cloud the medium- and long-term outlook for growth in key emerging market countries, valuations would have to be particularly compelling to make such a move.

This is clearly not the case at present. Currently, emerging market equities and emerging market local currency debt are only slightly cheaper than their long-term averages, and emerging market dollar debt is either at or below its long-term average, depending on whether we look at data since 1994 or over the last 10 years.

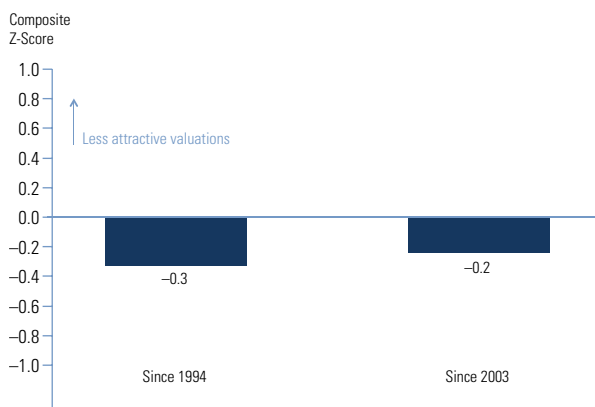
Emerging Market Equities

Determining the right valuation metrics for any asset class is difficult. Even for an asset class like US equities that has decades of extensive data, more than a century of pricing data and more consistent benchmarks, we rely on a basket of five earnings measures and an additional three cash flow and book value measures to determine whether US equities are cheap, fairly valued or expensive.

In emerging market equities, the task is much harder. As noted earlier, the data set is shorter and more limited: price data only go back as far as 1988, some valuation data begin in 1994, and other metrics are only available since 2004. Such limited history also means that the data do not cover many market cycles within emerging markets, and the data may be distorted by particularly favorable or unfavorable cycles such as the aforementioned Goldilocks era from 2003–07. Therefore, we have less confidence that the long-

Exhibit 51: Normalized EM Equity Valuations

Current valuations are not compelling.



Data as of November 29, 2013.

Note: Based on monthly data for Price/Forward Earnings, Price/Book Value, Price/Cash Flow, Price/Sales, Price/Earnings-to-Growth Ratio, Dividend Yield and Return on Equity.

Source: Investment Strategy Group, Datastream, I/B/E/S, MSCI.

term averages of various valuations measures are close to the “true averages.” In addition, the quality of company level data across 21 emerging market countries is lower than that of developed markets. Finally, as discussed earlier, the country constituents in the benchmark today are very different from the constituents 25 years ago.

These limitations notwithstanding, we begin our analysis by comparing current valuations with the average since 1994 and the average since 2003. We include the average since 2003 to address the concerns of those who believe that the emerging markets of the 1994–2002 period are very different from the emerging markets of the post-2002 era and thus deserve isolated analysis. We disagree and think that we should look at the longest period for which there is data available, but instead factor in any special circumstances into our analysis.

Exhibit 51 shows the normalized valuation of emerging market equities based on seven valuation metrics: price/forward earnings, price/book value, price/cash flow, price/sales, price/earnings-to-growth ratio, dividend yield and return on equity. The asset class is considered cheap, expensive or fairly valued based on the deviation from the long-term average; in this case, we have looked at the deviation from the long-term average since 1994

Exhibit 52: EM Equities' Discount to US Equities

The current discount does not offer a sufficient margin of safety.



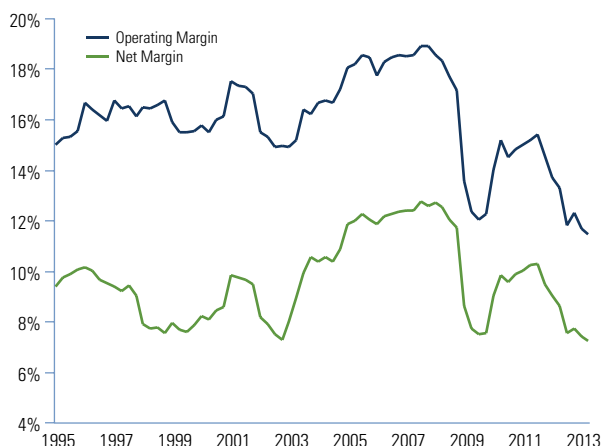
Data as of November 29, 2013.

Note: Based on monthly data for MSCI EM, using Price/Earnings, Price/Book Value and Price/Cash Flow.

Source: Investment Strategy Group, Datastream, I/B/E/S, MSCI.

Exhibit 53: EM Non-Financial Corporate Margins

Both operating and net margins are declining.



Data as of Q2 2013.

Source: Investment Strategy Group, Datastream.

and the deviation from the average since 2003.

Based on both periods, emerging market equities are slightly cheap. From a historical perspective, these assets have been cheaper 40% of the time. For the more statistically inclined investors, these assets are slightly cheap by a 0.3 standard deviation, or -0.3 z-score. To provide some sense of the downside, if the z-score drops from -0.3 to -1.0 , emerging market equities would decline by about 25–30% depending on whether we look at data since 1994 or 2003.

Alternatively, emerging market equities are also not particularly cheap relative to US equities. We found that emerging market equities have traded at an average discount of about 30% to US

equities based on data since 1994 and 22% based on data since 2003. As shown in Exhibit 52, the current discount is about 37%. This 7% additional discount above the long-term average does not justify an overweight recommendation to emerging markets at this time. By way of comparison, we introduced a tactical overweight to European equities when the discount to US equities was about 52% compared with a long-term average of 34%.

While valuation is a key factor in our investment framework, underlying fundamentals are equally important. One of the reasons emerging market equities have lagged developed market equities is the notable decline in their return on

equity, which has been driven by falling margins. As shown in Exhibit 53, both operating and net margins have exhibited a declining trend since late 2007, even adjusting for the 2008–09 crisis. This drop is attributable to rising wages across the large emerging market countries, higher input prices relative to the early 2000s, government-controlled sale prices and excess

On average, emerging market equities have traded at a discount of about 30% to US equities based on data since 1994.

We do not believe there is sufficient margin of safety for us to recommend an overweight to emerging market equities at this time.

capacity in many industries that have resulted in lower output prices. We do not anticipate any meaningful change in this backdrop in the near future, hence another reason to maintain a neutral view at this time.

Finally, we also look across countries and sectors to ascertain the major drivers of the moderate discount in emerging market equities. One of the countries exhibiting the steepest valuation discount is China. At about 20% of the MSCI Emerging Markets Index, China has the largest weighting of any country. Given our views of the risks in China, we think that this discount will not correct itself any time soon, at least not on a meaningful and sustainable basis.

The three cheapest sectors in emerging markets are banks, real estate and energy. Banks and energy account for 31% of the index. We do not expect greater clarity and transparency on bank balance sheets in key emerging market countries. Hence we do not expect a revaluation of this sector in the near term on a sustainable basis. We also expect oil prices to stay in the \$85 to \$105 range for the next several years; as such, energy companies in these countries will not be supported by a tailwind of higher crude oil and natural gas prices.

In conclusion, looking at the combination of slightly cheap valuations, a deteriorating profit margin picture and specific concerns about China, banks and the energy sector, we view the valuation signal for emerging market equities as very weak. With high single-digit return expectations and volatility of about 20%, we do not believe there is sufficient margin of safety for us to recommend a

tactical overweight to emerging market equities at this time.

Emerging Market Local Currency and Dollar Debt

Our outlook on emerging market equities is mirrored by our views of emerging market local currency and dollar debt.

Unfortunately, local currency debt has the shortest history of any of the publicly traded emerging market asset classes.

The index starts in 2003, so it is marked by five Goldilocks years and six years following the financial crisis. As such, the long-term average incremental yield relative to Treasuries cannot be estimated with any degree of certainty. As shown in Exhibit 54, the average incremental yield since inception of the index is 4.1%. The average in the post-Goldilocks era is 5.1%. So if we compare current levels to the long-term average, they appear moderately attractive. If we compare levels to the post-Goldilocks era, they are not attractive.

There are six reasons we do not recommend a tactical tilt toward local currency debt at the present time:

Exhibit 54: EM Local Debt's Incremental Yield

The spread over five-year US Treasuries is only moderately attractive.



Data as of November 29, 2013.

Source: Investment Strategy Group, Datastream.

Exhibit 55: Average Deviation of EM Currencies from Fair Value

Aggregate valuations for emerging market currencies suggest they are just slightly cheap.



Data as of November 29, 2013.

Note: Weighted average deviation of the constituent currencies of the Emerging Market Local Debt index from the fair values implied by their 5-Year Moving Averages (vs. USD), Goldman Sachs Dynamic Equilibrium Exchange Rates (vs. USD) and Real Effective Exchange Rates (vs. trade-weighted basket).

Source: Investment Strategy Group, Bloomberg, GS Global ECS Research.

Exhibit 56: US Treasuries Have Weighed on EM Local Debt Returns in 2013

The tight correlation of these assets suggests shared vulnerability to future US monetary policy shifts.



Data as of November 29, 2013.

Source: Investment Strategy Group, Datastream.

- Even at about 5–5.5%, incremental yields over Treasury securities are not high enough to provide a cushion against greater risk. They are about 1.3% above the long-term average and only 0.3% above the post-Goldilocks era average.
- Using an average of three valuation measures, emerging market currencies are only slightly cheap (see Exhibit 55) and do not offer a compelling tailwind to local currency debt.
- Eventual tapering of quantitative easing poses a significant risk. When Fed Chairman Ben Bernanke suggested reducing the pace of Treasury and mortgage-backed securities

purchases, all fixed income markets suffered, but emerging market local debt was the worst performing. Its 9% drop compared with US high yield at –2%, bank loans at +0.4% and emerging market dollar debt, which has a longer duration, at –7% (see Exhibit 56 for the tight correlation between rising Treasury rates and falling emerging market local debt). Should the share of foreign ownership drop, emerging market local debt would be particularly vulnerable since foreign ownership now accounts for over 30% of local government debt, up from about 11% in 2007 (see Exhibit 57).

- The current account balances of many emerging market countries have been deteriorating for a number of years. Four countries stand out: Turkey, South Africa, India and Indonesia. They have had, in aggregate, negative current account balances since 2004, accumulating debt and thereby becoming significantly more vulnerable to a shift in sentiment

Eventual tightening of monetary policy poses a significant risk.

Exhibit 57: Foreign Ownership Share of EM Local Currency Government Bonds

Foreign share has nearly tripled.



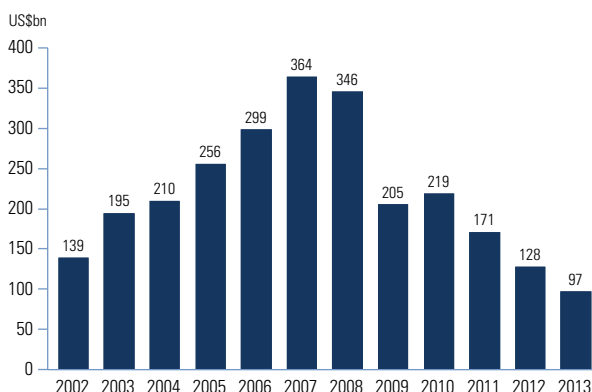
Data as of September 2013.

Note: Weighted average of Brazil, Hungary, Indonesia, Malaysia, Mexico, Peru, Poland, Russia, South Africa, Thailand and Turkey.

Source: Investment Strategy Group, national sources.

Exhibit 58: The Steady Decline of Nongovernment Bond Inventories

Broker-dealers are providing less balance sheet and liquidity support to the investor community.



Data as of 2013.

Source: Investment Strategy Group, IMF.

in emerging markets or in global liquidity conditions. Brazil is also among the more vulnerable countries due to a rapid deterioration in its current account balance and uncertainty over the future of its massive currency intervention program. All five countries, referred to by some as the “Fragile Five,”¹⁰⁹ are facing elections in 2014, which introduces greater uncertainty and generally higher volatility.

- We also expect interest rates to rise over the next several years—albeit slowly. In such an environment, all bonds will be affected. While the duration of emerging market local debt is shorter than emerging market dollar debt, it is

still a notable 4.6 years. When we incorporate the negative impact of rising rates, separately from the impact of tapering, emerging market local debt is even less compelling.

- Finally, we are concerned about the lower balance sheet flexibility of the broker-dealer community. The liquidity that it provided to investors in 2007 is simply not available today as a result of greater regulation and higher capital requirements (see Exhibit 58).

After considering all of these factors, we expect a low single-digit return for emerging market local debt over the course of 2014, with a volatility of about 10%. From a tactical perspective, we do not consider this a particularly attractive risk and return profile.

We expect a low single-digit return for emerging market local debt over the course of 2014, with a volatility of about 10%.

Emerging market dollar debt also does not warrant a tactical tilt at this time. First and foremost, the duration is quite long at 6.7 years, so its price drop will be steeper than

We also expect a low single-digit return for emerging market dollar debt in 2014, with a volatility of about 8%.

emerging market local debt in terms of its interest exposure. Second, as shown in Exhibit 59, its incremental yield is close to its 10-year average and well below its long-term average. Emerging market spreads also belie great dispersion among countries. Some countries like Mexico, Poland and Chile have incremental yields near or well below the average market spread, while much riskier countries like

Venezuela, Argentina and Ukraine have incremental yields above the 8% mark. The presence of such risky countries makes emerging market dollar debt even less attractive from a tactical perspective.

We also expect a low single-digit return for emerging market dollar debt in 2014, with a volatility of about 8%, making it unattractive for a tactical allocation.

Therefore, while the three main liquid asset classes in emerging markets have lagged US assets by a considerable amount over the last several years, we do not believe that this is an opportune time to overweight them. However, we will remain vigilant should they cheapen to attractive levels or should the macroeconomic picture in the US and Europe improve beyond our current expectations, thereby providing a boost to emerging market countries.

Exhibit 59: EM Dollar Debt Incremental Yields

The incremental yield is near its 10-year average and below its long-term average.



Data as of November 29, 2013.

Note: Using data for the EMBI Index before 1/1/1998 and data for the EMBI Global Diversified Index thereafter.

Source: Investment Strategy Group, Datastream, JP Morgan.

Conclusion

EMERGING MARKET COUNTRIES BENEFITED FROM a unique confluence of tailwinds that resulted in unusually high economic growth rates during the 2003–07 window. They also weathered the financial crisis better than the US and the Eurozone, partly as

the result of cleaner balance sheets and China's Rmb 4 trillion stimulus (\$590 billion, or 13% of China's 2008 GDP) that kept its growth engine going. Investors concluded that many emerging market countries, especially China, had a better economic model built on long-term planning: the world was tilting East toward China and away from the US. Capital flew into emerging markets, and foreign companies could not establish beachheads in the BRICs and other emerging market countries quickly enough.

Today, slightly more than five years later, investors have started to reassess that view. The returns were not as attractive as expected, the economic growth rates were not as sustainable as imagined, and the countries were not as stable as believed. Investors have also become more aware of the intransigence of the deep structural fault lines in most of these countries. Moreover, with the benefit of hindsight and the phenomenal returns of US assets, they have realized that the preeminence of the US is intact and sustainable, a view we in the Investment Strategy Group are proud to have held since the crisis.

We believe that investors should reassess their view of emerging market countries and reevaluate their strategic allocation to such countries. The risks to some of these countries have increased substantially relative to the 2003–07 Goldilocks

period, and the uncertainty is much higher. China's road to reform will inevitably be bumpy and lead to market volatility. In fact, in its latest *World Economic Outlook*, the IMF has suggested that some emerging market countries, including China, may well face lower potential growth rates due to "serious structural impediments."¹¹⁰ As for China and Russia specifically, the Fund believes that "time is running out on their current growth model." Given these risks, we believe a limited reduction in the long-term strategic allocation to emerging market assets is warranted.

With respect to a tactical allocation, we believe it is too early to overweight emerging markets, as they are not yet attractive enough from a valuation perspective. We are also concerned that eventual tapering by the Federal Reserve will accelerate capital outflows. This view is supported by Robert Zoellick, former President of the World Bank, former Deputy Secretary of State and current Chairman of the International Advisors of Goldman Sachs, who believes that the cycle of capital flowing out of emerging markets "has not yet run its course."¹¹¹ While we do not know whether tapering will have the same market impact as it did from last May through September, we do not think it will be positive. As such, we will wait for greater clarity and cheaper valuations to initiate a tactical tilt toward emerging market assets.

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