Special brief

Through the looking glass: Global growth

"Where should I go?" - Alice ***"That depends on where you want to end up"*** – The Cheshire Cat

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- *Looking at the global economy feels like we have stepped through the looking glass. Negative interest rates, calls for helicopter money in a Eurozone which grows above potential, bitter resentment against the free movement of goods and people which has yielded rising global prosperity, cheaper energy seen as a threat to growth; a seemingly incurable pessimism even as global growth has held close to its historical norms. This paper takes a sober view of the global outlook, identifying key opportunities and risks. We take away two main lessons. (1) The global economy is resilient: the recovery has withstood a number of financial and economic shocks. (2) However, remaining weaknesses will take longer to be resolved, and risks from financial markets distortions and China's transformation are considerable, advanced economies need deep structural reforms, and emerging markets will regain a normal pace, not the glory days.*

- *The optimism of pessimists has dominated the last few years: Predictions of doom and gloom have accompanied over-optimistic forecasts, setting the stage for repeated disappointments, which fueled further pessimism. We feel that consensus forecasts and actual economic strength have now converged for advanced economies, but we see much more uncertainty on emerging markets. In our baseline scenario, the US maintains disappointingly moderate growth; China soft-lands towards 5%, but with heightened risks and uncertainty. Enough to keep the global economy on an even keel, but not to dispel the pervasive pessimism that can hold back growth and fuel financial volatility.*

- *Emerging markets are set to recover as commodity prices stabilize in the next two years, but there will be great differentiation across regions and individual countries. Emerging Asia, Sub-Saharan Africa (SSA) and the Middle-East & North Africa (MENA) offer the greatest opportunities, but SSA and MENA also have some of the higher risks. Overall, the global growth story of EM gradually catching up to advanced economies remains in place. The lines between emerging and advanced economies will become increasingly blurred as some EM power ahead and some advanced economies slide backwards. There is often a temptation, sitting in advanced economies, to look at the EM slowdown and think, "I knew it, they will never catch up." Such complacence is dangerously misguided.*

- *While our baseline is constructive, uncertainty and risks are significant: (1) Years of exceptional monetary easing across major advanced economies have created distortions in financial markets; we can identify some, but probably not all. There is less leverage in the global financial system, which makes a 2008-style crisis unlikely. But it would be foolhardy to think we fully understand the risks of monetary normalization; (2) China's transition is a complex, unprecedented experiment. The government has the right strategy and is executing it well, but the risk of accidents increases as liberalization proceeds; (3) Populism and protectionism are on the rise nearly everywhere, fueled by broad discontent with growth and income distribution, and concerns about technology's impact on jobs. We are concerned that the widespread recurrent pessimism seems incurable. There is a negative feedback loop between widespread pessimism, popular discontent, and weak policy leadership in many countries—breaking this vicious circle is key to securing stronger and more stable global growth.*

1. Introduction: the next five years: recalibrating expectations[1]

Looking at the global economy these days feels like we've stepped through the looking glass. Some interest rates are negative—you have to pay in order to lend money. The financial papers call for *helicopter money* in a Eurozone that is growing above potential.[2] Innovation is moving at its fastest pace but productivity at its slowest. The drivers of many years of rising global prosperity—free circulation of goods and people—are vilified as ruinous. The fact that a key production input—energy—has become a lot cheaper is seen as a threat to global growth. The gloomiest economists keep giving us optimistic forecasts. We could go on. Nothing is what it seems. And nothing feels right. This paper attempts to make some sense of this madness. It tries to steer a course among irrational fears and illusions to calibrate expectations of global growth in a way that can help business decisions.

> ***"But I don't want to go among mad people"-*** Alice ***"Oh you can't help that, we're all mad here. I'm mad. You're mad"*** –The Cheshire Cat

The world economy is in the midst of a unique transition with all major economies facing serious challenges ahead. The US Federal Reserve (Fed) has started to normalize monetary policy after many years of unprecedented stimulus. Security threats and the migration crisis have compounded Europe's economic and financial troubles; its decade-long integration process has stalled and threatens to reverse. China has entered a more difficult phase of a complex economic transformation on a massive scale. Technology, economics and geopolitics have disrupted commodity markets, and many raw materials exporters confront testing times.

World economic growth in the last few years has been running just a bit below the long-trend average—under half a percentage point—and decelerated again last year largely due to poor outturns in several key Emerging Markets (EM).[3] Two elements characterize the current global growth outlook:

- The first is **greater differentiation**. Immediately after the global financial crisis, all EM seemed golden, advanced economies crippled. Today, different fundamentals, vulnerabilities, and policy responses across countries have resulted in much greater variation in outcomes.
- The second is **greater uncertainty**. There is a pervasive weakness as many countries are simultaneously trying to adapt to a different global environment; the question is whether the more pronounced slowdown of the last couple of years is a normal cyclical swing or something more structural. Is there really a weaker "new normal" ahead for the global economy?

The resilience of the global economy has been underestimated, in our view. The global economy has been rattled by a number of shocks in the last few years. Since the peak of the Eurozone crisis, most originated from either the US or China. Both the slowdown of the Chinese economy and the prospect of tighter Fed monetary policy were key contributors to the dramatic realignment in commodity prices and exchange rates over the past two years. The same is true for the periodic spells of heightened risk aversion, such as the recent surges in volatility related to devaluations of the Chinese exchange rate and declines in the price of oil. Yet contrary to recurring, widespread fears, none of these shocks has boiled over into a systemic crisis or triggered a new global recession.

In this paper, we gauge both the fragility and the resilience that characterize the current environment and assess the prospects for global growth. Section 2 describes how thinking about global growth has evolved since the financial crisis. Although the perception of repeated disappointments has become entrenched, this process has probably run its course and most projections have now come down to more realistic levels. Excessive pessimism need not replace systematic over-optimism; persistent global headwinds will keep global economic performance somewhat subdued relative to the long-term trend, but a systemic financial crisis and/or a global recession is unlikely in our view.

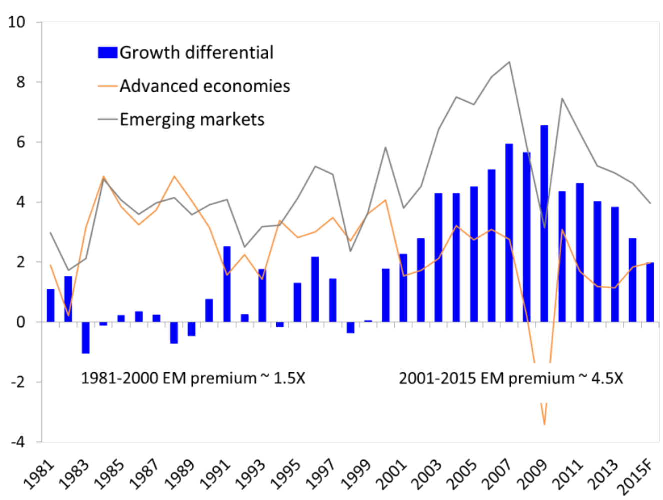
[1] We would like to thank our colleagues Kalpana Singh for outstanding research assistance, and Vijay Ravi, Joanna Jobson and Shafi Hussain of the GE GGO
[2] Helicopter money refers to Milton Friedman's 1969 idea that to boost growth and inflation in an economy running substantially below potential, a central bank should print money and give the money directly to the citizens. Friedman (1969), "The optimum quantity of money".
[3] Global growth in 2012-14 averaged 2.5% in market exchange rates, relative to a fairly stable annual average of around 2.7-2.9% over each of the last three decades. In PPP-weighted exchange rates, which give a higher share to emerging markets, the gap is even smaller. For example, the IMF expects growth to average 3.3% in 2012-15 relative to an average of 3.4% since 1980. This level is comparable to growth rates in the '80s (3.3%), slightly higher than in the '90s (3.1%), but lower than in the '00s (3.8%).

The rebalancing of the Chinese economy and the normalization of monetary policy in the major developed markets, which began in the US in December, **will continue to play outsized roles in shaping the global economic outlook**. We discuss them briefly in Sections 3 and 4 respectively. Our views are broadly constructive; we don't expect a hard landing of the Chinese economy, and we think that the Fed will—eventually, slowly—raise interest rates without derailing the US recovery. Progress on these fronts should help restore confidence in the health of the world economy.

While our baseline is constructive, uncertainty and risks are significant. (1) **Years of exceptional monetary easing across major advanced economies have created distortions in financial markets**; we can identify some, but probably not all. There is less leverage in the global financial system, which makes a 2008-style crisis unlikely. But it would be foolhardy to think we fully understand the risks of monetary normalization—especially as Eurozone and Japan are still in full expansion mode; (2) **China's transition is a complex, unprecedented experiment.** The government has the right strategy and is executing it well, but the risk of accidents increases as liberalization proceeds; (3) **Populism and protectionism are on the rise nearly everywhere**, fueled by broad discontent with growth and income distribution, and concerns about technology's impact on jobs; in many countries, policies have already moved in a growth-unfriendly direction, and they could go a lot further.

We are concerned that the widespread recurrent pessimism seems incurable. Policymakers, analysts and the press all have a tendency to emphasize downside risks over any upside risks. This is understandable, given the 2008-09 experience. But it undermines business and consumer confidence, contributing to lackluster investment and elevated volatility in financial flows. Given that there is no shortage of risks ahead, persistent lack of confidence could prove to be a formidable headwind. **There is a negative feedback loop between widespread pessimism, popular discontent, and weak policy leadership in many countries—breaking this vicious circle is key to reaching stronger and more stable global growth.**

Figure 1: The emerging markets premium – real GDP growth (%)



Source: IMF, PPP exchange rates

The outlook for EM over the next five years is the most uncertain. Overall, we think that the EM downturn is bottoming out, but the recovery will be protracted with significant differentiation in outcomes. On aggregate, EM continue to outperform their developed peers, but the margin has narrowed to its lowest in fifteen years, as shown in Figure 1. We expect countries that are relatively insulated from global forces and with robust domestic demand and better policies to outshine their peers. There is no shortage of opportunities in EM and many countries will continue making significant headway toward meeting their growth and development goals.

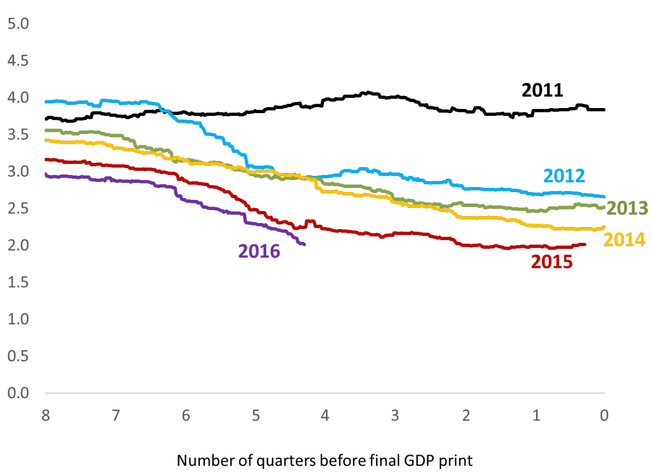
This is a key takeaway of our analysis: the global growth story of EM gradually catching up to advanced economies remains in place. The lines between emerging and advanced economies will become increasingly blurred as some EM power ahead and some advanced economies slide backwards. There is sometimes a temptation, sitting in advanced economies, to look at the EM slowdown and think, "*I knew it, they will never catch up*." Such complacence is dangerously misguided.

2. Forecasting global growth: the optimism of pessimists

"I give myself very good advice, but I very seldom follow it" - Alice

Over the last few years, growth expectations have been disappointed—this applies to major international institutions (International Monetary Fund (IMF), World Bank, OECD) as well as economists in private banks. Figure 2 shows how GDP growth consensus forecasts for the G20 economies have been revised down over time—G20 economies account for about three-quarters of world output. This trend, which began in 2012, is not driven by just a handful of countries but is common to the group, and seems to persist into 2016. **For four consecutive years, forecasters have been systematically surprised to the downside**. This pattern of over-optimism can be analyzed in a more systematic manner using data from the IMF's World Economic Outlook. As in the example of Figure 2, the extensive IMF dataset also exhibits consistent over-prediction, in line with most private-sector economic forecasters and many other policy-making institutions, including the Fed.

Figure 2: Consensus forecasts – average real GDP growth in the G20 countries (%, unweighted)



Source: Bloomberg

After the strong bounce back in 2010-11, following the global financial crisis, the IMF has over-predicted global economic growth by an average of 0.8 percentage point per year in 2012-14, almost three times their historical average forecasting error. The anemic recovery in advanced economies and especially the recession in the Eurozone was a large factor in 2012-13. Overestimation of growth in emerging markets was significant in 2012 and 2013, contributing to roughly half of the shortfall, before becoming the dominant factor in 2014 when it accounted for 75% of the gap.

Table 1: Forecast errors and forecast revisions – country impact ranking

Overestimation 2011-14 / downward revisions 2015										
Rank	Country	2011	Country	2012	Country	2013	Country	2014	Country	2015*
1	India	13.1	China	28.7	China	17.7	China	15.6	Russia	18.9
2	Japan	11.9	India	19.6	US	14.2	Brazil	11.7	Brazil	16.1
3	US	11.6	Iran	12.4	Russia	8.9	Russia	10.5	China	8.1
4	China	8.9	Brazil	9.7	Thailand	4.8	US	8.3	US	6.1
5	Thailand	5.2	US	9.0	Mexico	4.5	Japan	6.6	Venezuela	3.9
6	Brazil	4.3	Italy	7.9	Brazil	4.4	Iraq	5.1	Iraq	3.2
7	UK	3.4	Spain	5.0	Iran	3.9	Indonesia	3.4	Nigeria	3.0
8	Egypt	3.4	UK	4.9	Germany	3.7	Thailand	3.3	Indonesia	2.9
9	Korea	2.3	Germany	4.3	Iraq	3.5	Venezuela	3.1	Mexico	2.3
10	Greece	1.9	Russia	3.8	Italy	2.9	Argentina	2.6	Yemen	2.2
11	Italy	1.8	Taiwan	3.7	India	2.6	Mexico	2.5	Canada	1.9
12	Yemen	1.6	France	3.7	Indonesia	2.5	Italy	1.9	Iran	1.9
13	Spain	1.4	Argentina	3.3	Taiwan	2.4	France	1.7	Korea	1.9
14	Sudan	1.2	Turkey	3.3	Saudi Arabia	2.2	Peru	1.3	Kazakhstan	1.8
15	Romania	1.1	Korea	3.1	Spain	2.0	South Africa	1.2	Taiwan	1.6
16	Australia	1.1	Japan	2.8	Korea	1.7	Turkey	1.1	Japan	1.6
17	Canada	1.0	Holland	2.4	Australia	1.5	Chile	1.0	Greece	1.3
18	Mexico	1.0	Greece	2.3	Poland	1.3	Saudi Arabia	1.0	Thailand	1.3
19	Tunisia	0.8	Nigeria	2.1	Nigeria	1.1	Korea	1.0	Peru	1.2
20	Algeria	0.8	Egypt	1.6	Egypt	1.1	Egypt	1.0	Colombia	1.2
(Underestimation 2011-14 / upward revisions 2015)										
Rank	Country	2011	Country	2012	Country	2013	Country	2014	Country	2015*
172	Russia	-3.5	Kuwait	-0.9	Azerbaijan	-0.6	Spain	-0.9	Pakistan	-0.4
173	Argentina	-5.4	Philippines	-1.1	Sudan	-0.8	Poland	-1.1	Ireland	-0.5
174	Germany	-6.1	Thailand	-2.0	UAE	-0.8	UK	-3.4	Czech Rep.	-0.6
175	Saudi Arabia	-6.6	Venezuela	-2.2	Turkey	-1.4	Iran	-4.1	Spain	-3.0
176	Turkey	-7.5	Saudi Arabia	-4.2	Philippines	-1.4	India	-7.2	India	-6.4

Source: IMF and authors' calculations. The score is the product of the forecast error/revision and the country's GDP (PPP) share of world total. We ranked the countries according to these scores and presented the 20 largest deviations in the top portion of the table. The five lowest scores are presented at the bottom portion of the table and correspond to the largest underestimation errors/upward revisions.

Similar evidence is presented in Table 1 at the country level, which ranks the twenty largest forecast overestimation errors each year in terms of their impact on global growth based on PPP shares. We also rank the changes in the forecasts for 2015; these revisions were published in October after the financial turmoil episode associated with the mini-devaluation of the renminbi, which was influential in the reassessment of global growth. The table demonstrates the shift over time in the weight of growth overestimation toward emerging markets, as many advanced economies (highlighted in blue) progressively fall down the list or disappear altogether.

The substantial contribution of the BRICs to the shortfall in forecasted global growth—accounting for roughly 30-40% of overestimation errors in 2011-14—is another pattern that comes out clearly in the table.[4] China, Brazil, and Russia topped the list in 2014 and 2015, and at least three BRICs appeared in the top ten in the earlier years. The BRICs and a few major advanced economies have driven the global forecast error since they account for a large share of the global economy, but overestimation errors have been spread fairly evenly across a large number of countries.[5] In the broader dataset for all countries, overestimation outnumbered underestimation by a factor of 2 to a factor of 3 in most years, though in 2011 the ratio was just above 1:1. Additionally, cases of sizeable underestimations were significantly fewer and smaller in magnitude, especially since 2012 (this bias can be seen at the bottom portion of the table, which lists the last five countries in the ranking in each year corresponding to the largest underestimation cases).[6]

Why has there been such a systematic over-optimism?

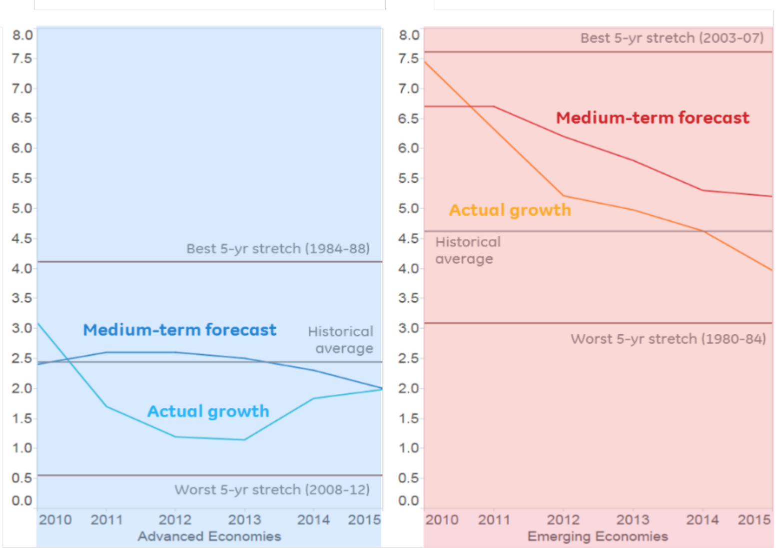
[4] The BRICs economies make up approximately 30% of world GDP in PPP exchange rates. In current US dollars their combined share has been around 20% over the past five years. The IMF's forecast errors would have come out slightly smaller with a weighing scheme based on market exchange rates.
[5] The US also consistently ranks in the top five thanks to its size and an average forecast error of 0.6 ppt.
[6] For example, there were only seven cases of underestimation comparable to a score of 5 or higher against 25 cases of overestimation errors at the top portion of the table.

- First, a baseline describes the most likely outcome and leaves low-risk and high-impact events to a discussion on risk scenarios. After 2010, advanced economies were still reeling from the financial crisis, and EM had just exhausted a major simultaneous fiscal and monetary policy expansion; global risks were skewed to the downside. The IMF's experience highlights the difficulty of building risks into baseline forecasts: over the last five years the IMF has consistently voiced gloom and pessimism, yet its tone has never been reflected in its forecasts.
- Second, when a shock materializes it takes time to determine if the economic impact will be transient or more permanent in nature. A sensible reaction is to adjust expectations moderately, which can lead to a bias when the most recent experience is out of line with the historical norm. If structural weaknesses are misdiagnosed as temporary, future growth gets overestimated. This pattern reflects the recent experience as most economic forecasters have called the bottom for growth in emerging markets in each of the past five years.

Analyzing changes in the IMF's forecasts can also shed light on how thinking about potential growth has evolved in the years since the global financial crisis. Figure 3 plots medium-term projections against actual GDP growth for advanced and emerging economies in 2010-15.[7] The figure also displays in dark horizontal lines a plausible range for a five-year average growth rate based on the historical experience since 1980 for each group of countries—the top of the range is given by the best 5-year growth stretch experienced since 1980, the bottom of the range by the worst 5-year stretch.

The first thing to notice is the gap between medium-term growth forecasts and actual growth. **For advanced economies, expectations for medium-term growth have initially remained anchored around the historical average even as actual growth fell substantially short of it**. Expectations have more recently been adjusted downwards just as actual performance strengthened in 2014-15, and the two have converged at 2% real growth, roughly half a percentage point below the historical average.

Figure 3: Actual and potential growth



Source: IMF and authors' calculations

Expectations for emerging markets started close to their historical best performance, and then declined in tandem with actual growth. In contrast to advanced economies, there is still a sizeable gap between expectations and performance for emerging economies; this suggests that the process of recalibrating expectations could still have some distance to go. The question is whether the two will converge above the historical average—as still indicated by expectations—or below.

[7] See the IMF's Spring 2015 World Economic Outlook for a global perspective on the concept of potential output.

With hindsight it is clear that the medium-term projections for EM growth from 2010-11 were set at an unrealistically high level, within one percentage point from the best historical performance over any five-year stretch since 1980, as shown in Figure 3. These forecasts assumed large productivity gains, influenced by the strong growth of emerging markets in the years leading to the financial crisis and by their rapid recovery in 2010-11.

Although estimates of EM potential growth have come down, the uncertainty regarding those projections remains substantial, more so than in the case of advanced economies. In general, growth in emerging markets is more volatile, and some of the same factors that allow them to grow at a multiple of the rate of their advanced counterparts also make them more vulnerable to changing external conditions. An example is the dependence of commodity producers on high prices for their exports to drive investment and attract foreign expertise, which enhance a country's future productive capacity.

To the same effect, the historical growth trend in emerging markets is a less reliable yardstick to anchor expectations. The heterogeneity of this set of countries and the rapid transformation of their economies makes the experience of the past few decades less amenable to extrapolation. This situation stands in stark contrast to advanced economies, a grouping of countries dominated by the relatively stable and fairly homogeneous G7.[8] **The fact that both actual and potential GDP estimates for advanced economies have converged at a somewhat lower level than the historical trend reflects the view that structural factors are becoming more dominant** in explaining the moderate decline in growth. In particular, both the decline in the rate of productivity advances—a trend that already began in the mid-2000s—and population aging imply lower potential growth than in recent decades.[9] [10]

It is harder to make a similar call about the potential growth of most emerging markets with the same degree of confidence. Over the long term, the potential for economic convergence through the adoption of existing technologies and organizational structures is compelling—in those countries that adopt supportive macroeconomic and structural policies. But over the next few years, transitional factors, such as low commodity prices, elevated volatility in capital flows, and limited scope for policy stimulus—most of which are beyond the control of policymakers—will matter more in determining actual growth outcomes.

Overall, we feel that the debate on global growth over the last few years has been somewhat schizophrenic. The public discourse has been characterized by deep pessimism, with recurrent warnings of new impending crises and recessions. At the same time, growth forecasts have been over-optimistic, assuming that EM would maintain their best-ever performance and underestimating the impact of the great financial crisis on advanced economies. And actual growth has been very close to historical norms, as we noted at the beginning. **The optimism of the pessimists has in turn set the stage for repeated disappointments, feeding further pessimism**.

With forecasts trending downwards and pessimism unabated—witness recent concerns about a new US recession—is there a risk that growth projections could now swing to the opposite extreme and underestimate future growth? As we mentioned, there are significant risks to the outlook. Low oil prices still pose a challenge to the oil and gas industry as well as to oil exporting countries; China's economic transformation has entered a more difficult phase; other EM face the self-inflicted wounds of sub-optimal policies, as in the cases of Brazil and Turkey; and the US faces a gradual normalization of economic policies. On the other hand, low oil prices are a boon to energy importers; some EM like India and Mexico enjoy better policies and performance; and the US recovery is well entrenched.

On balance, we believe risks of a global recession are small. Our view on the global outlook is driven by three considerations:

- **Europe and Japan** suffer from low potential growth. This is a long-standing issue that has deep-rooted and well-understood structural causes. The only question is if and when the political will to address them will materialize.
- **US** growth has dropped by one percentage point from the pre-crisis average, reflecting weaker demographics and lower productivity growth. Innovation however is still strong, and therefore there is greater uncertainty on the future growth outlook—we will address this in detail in a forthcoming paper, and summarize the key issues in Section 4 of this study.

[8] The share of the economic output of the G7 out of total GDP of all the advanced economies has hardly changed in the past several decades. Whereas China's share of the GDP of emerging markets has increased from around 10% in 1990 to roughly 30% in 2015 (or to as much as 40% of the total in current dollars).

[9] It is likely that there are still notable headwinds to growth associated with the global financial crisis such as the negative effect on private fixed investment and persistent unemployment, especially in Southern Europe.

[10] There is an open debate on whether the decline in productivity growth in the US and other advanced economies is temporary or structural. Some studies indicate that it is largely due to the decline in investment during the recession and recovery, and will reverse as investment picks up. Others point to diminishing returns from past innovations, implying a more permanent loss of momentum.

- **EM** are a much more differentiated universe, and the key question here is which countries will offer the best growth opportunities in the coming years. This is the issue that we address in the remainder of the paper. We begin with an assessment of China, the largest EM and the one with the strongest global implications.

3. China's high-stakes transition

> ***"I know who I was when I got up this morning, but I think I must have been changed several times since then"***- Alice

Recent shockwaves from China's financial markets have heightened concerns on the health of the world's second largest economy. As the country's leadership strives to steer the economy to a sustainable path to prosperity, the rest of the world watches with apprehension. Perhaps no other set of challenges weighs as much on the prospects of the global economy. **Here we focus on two questions: first, could China generate an economic shock for the rest of the world on a comparable scale to the financial crisis of 2008-09 or the Eurozone crisis of 2011-12? And second, what rate of growth for the Chinese economy would be a plausible working assumption over the next 5-10 years?**

China has played a key role in global developments since 2008. (i) China acted as the primary engine of the global recovery, enacting a massive fiscal and credit stimulus in response to the global financial crisis; this helped save the global economy from a depression, but at the cost of substantial overcapacity in its heavy industry and in global commodity markets; (ii) China then aided global rebalancing by reducing its dependence on exports; and (iii) it has started to rebalance its economy away from investment and towards consumption, services, and higher-tech industries; this is a more sustainable strategy, but the transition has contributed to the rout in commodity prices. (iv) China also continues to gradually liberalize its economy and financial system; this will make its economy stronger in the long term, but is contributing to short-term uncertainty and volatility, as we discuss below.

China's growth has slowed from an average of 10% over 1980-2011 to about 7.7% in 2012-13, 7.3% in 2014 and an estimated 6.9% in 2015. A deceleration to a more sustainable pace of growth is natural as the economy gets larger and more developed; it is also part of the government's strategy. However, over the last twelve months the deceleration has been sharper than expected, and probably sharper than policymakers intended, because of the anti-corruption campaign and the weaker external environment.

China's economic transformation is a delicate balancing act. The country needs to reabsorb excess capacity in traditional industry and construction, reduce the role of state-owned enterprises, spur the development of private sector companies and encourage a shift towards higher tech, to boost productivity and allow for the stronger wage growth that should propel consumption to become the main growth engine; at the same time, it needs to pursue liberalization reforms, including in the financial sector. The policy strategy, in our view, is the right one, and so far has been well executed. The risks are significant, however, and there is no historical precedent of such a major economic transformation undertaken on such a scale.

As China's growth decelerated, financial investors have become increasingly concerned that policymakers might have lost control of the economy. When China allowed a modest depreciation of the renminbi against the US$ in August 2015, investor panicked, fearing China intended to spur growth through a massive exchange rate depreciation. These fears came back last January, when China changed its exchange rate anchor to a basket of currencies and again allowed a small move against the US$.

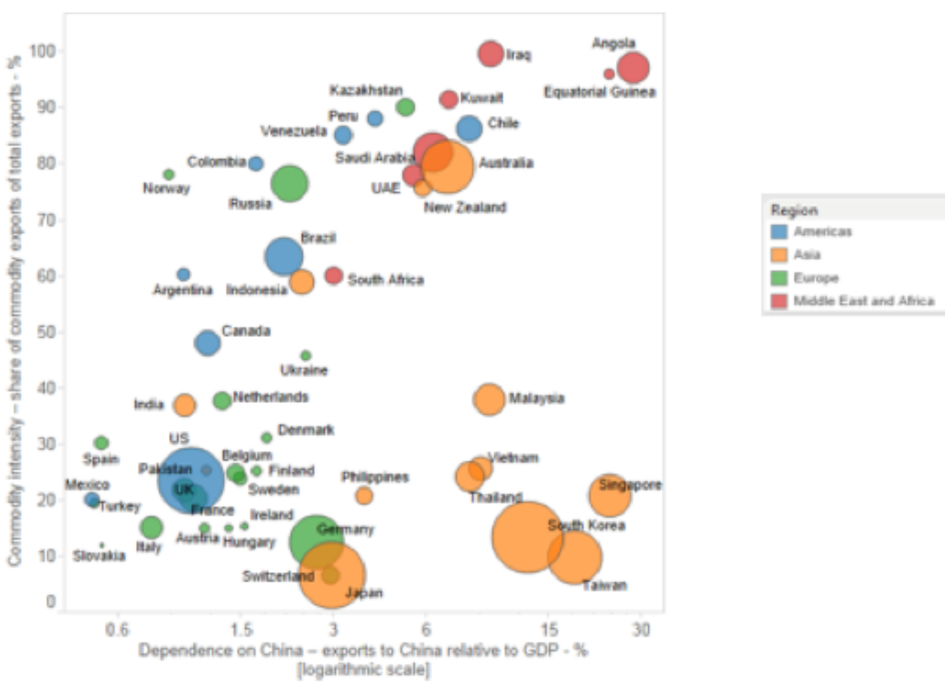
Capital outflows accelerated, and China lost over $500B of FX reserves since the end of May 2015, an unsustainable pace even for a country that had started last year with $3.8 trillion in reserves. Some of the outflows reflected the pragmatic decision by Chinese corporates to reduce dollar-denominated debt. In part, however, the outflows reflected a loss of confidence driving businesses and individuals to safeguard their wealth by transferring assets abroad.

What are the odds of a major depreciation? To move the needle on growth, China would need to depreciate its currency by at least 30%. Over a short period of time, such a move would be destabilizing for China's trade partners and competitors, including Japan, Germany and Korea (see Figure 4). **China's policymakers have explicitly stated that they see no fundamental basis for a major depreciation; they have also underscored that they fully realize that their policy actions have global consequences**. Assuming the

G20 rotating presidency in February, China has essentially pledged to behave as a responsible global player. **Ultimately, a weak exchange rate doesn't serve the broader development objective of rebalancing the economy toward private consumption as the primary driver of growth**. [11]

We do believe that China's policymakers do not wish to engineer a major depreciation; but could they be forced to? Sustained heavy capital outflows could be a trigger; China however has begun to tighten administrative controls, and the pace of outflows has slowed somewhat. A sharp further downturn in growth, with heavy job losses and rising risks of social instability could make a depreciation look more attractive; but we see such a hard landing as unlikely. Moreover, we believe that even in that case, a substantial fiscal expansion would be a more likely response, as it would have a greater and more direct effect on growth. Our baseline scenario is one in which a financial crisis is avoided, with only limited renminbi depreciation, and continued gradual and controlled deceleration of growth.

Figure 4: Exposure to China - commodity intensity and exports dependence



Source: World Bank, WTO

The Chinese government has substantial resources and still enjoys a strong degree of control over the economy. It can manage financial vulnerabilities, including with administrative controls. It can use expansionary fiscal policy and some credit easing to support growth as it unwinds over-capacity in the manufacturing and construction sectors. The fact that high levels of investment have been more than matched by domestic savings means that China's financial system is not vulnerable to an external debt crisis. **A gradual adjustment should not lead to large external spillovers, and its impact is likely to work its way through the global economic system primarily along the trade channel, as it has since 2012.**

Pulling it off, however, will not be easy. The challenge of unwinding overcapacity on a large scale will weigh on growth. The labor market has weakened, and restructuring of State Owned Enterprises will lead to more layoffs; so far the growth of the services sector is

[11] The need to address macroeconomic imbalances became urgent during the global financial crisis. Several of these imbalances have reversed since then: large current-account surpluses shrunk to reasonable levels, the then undervalued exchange rate has steadily appreciated against the dollar until early 2014, and wage growth has picked up after years of lagging productivity gains. But probably the biggest and most persistent macro distortion is the mismatch between extremely low consumption and abnormally high investment, which is a direct consequence of the country's previous growth model.

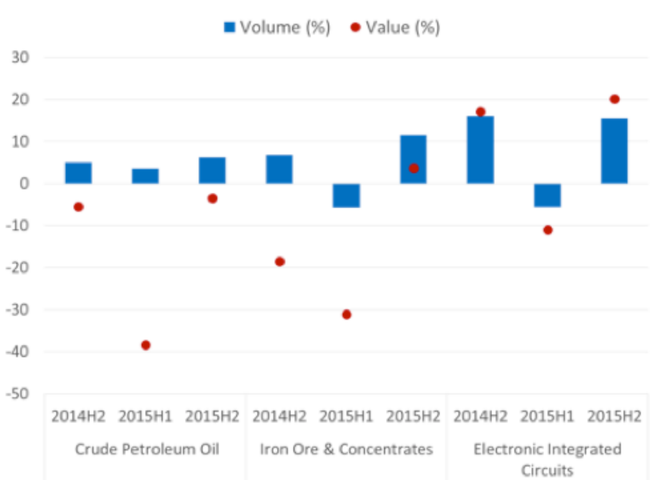
keeping pace, but this is a very delicate balance. **A meaningful rise in unemployment could quickly spark discontent and potentially unrest in a population where the latest generations have known nothing but very robust growth in GDP and in salaries**. Debt levels in the corporate and local government sector are high; the country has more than enough resources to cover it, but bouts of instability could impair credit and hurt growth.

Most importantly, as liberalization proceeds, policymakers will have less control of the economy—by definition. As it evolves into a market economy, China will eventually experience the business cycles typical of every market economy. The danger is that early episodes of volatility could slow—if not derail—the ongoing reforms. China has entered a more difficult phase of its complex economic transformation; the uncertainty and risks are correspondingly higher than in the past.

If it remains on track, however, China will continue to offer tremendous business opportunities, and to provide strong support to global growth. China still needs major additional infrastructure capacity as it continues to converge to advanced economy status. The country still lags most developed countries in the quality of infrastructure and measures of logistics competence, though it generally outperforms other middle-income countries.[12] Similarly, numerous initiatives, such as extending infrastructure networks to rural and underdeveloped areas, improving regional and international connectivity through overland and maritime routes, and tackling pollution and environmental degradation, will require substantial investment and generate positive externalities. Additionally, these projects will facilitate technological learning for Chinese firms and create potential business opportunities abroad. China's private sector is growing rapidly, and already demonstrating a robust innovation potential. Sustaining relatively high growth rates is primarily a question of productivity, and productivity is driven by innovation.[13]

Growth-miracle economies, such as South Korea and Taiwan, among the few to have successfully escaped from the "middle-income trap", enjoyed a much more favorable global environment to pursue export-led growth.[14] China has the added challenge of its population size, huge landmass, and aging demographic profile. Continuing on the path of technological learning and skills development will be key to enable the country to grow toward a high-income status over the next generation.

Figure 5: Chinese imports – volume and $ value of selected inputs



Source: Macrobond

[12] For example, according to the World Economic Forum's Global Competitiveness Report 2015-2016, China ranks in the 51st place out of 140 countries in terms of the overall quality of its infrastructure. The country ranked relatively higher according to the World Bank's 2014 Logistics Performance Index at 28 out of 160.
[13] According to an empirical study of 55 economic slowdown episodes among 41 middle- and high-income countries by Eichengreen, Park, and Shin (2011) about 80-85% of the slowdown was attributed to declines in total factor productivity.
[14] The South Korean economy, for example, grew at an average real rate of 6.7% in the two decades leading to the global financial crisis. In the late '80s Korea's level of development (measured relative to PPP-adjusted per-capita GDP in the US) was only slightly higher than China's current level. Over this period Korea's exports relative to GDP increased from 30% to 50%, currently they are around 45%. China's exports relative to GDP peaked in 2006 at 36% and have gradually declined to 22% last year.

Overall, we expect real GDP growth in China to average around 5% per year through 2030, with stronger growth in the next five years. At this point in China's transition it's probably useful to observe the country's trade position—rather than headline GDP figures—to get a sense of the progress being made. For instance, although imports of key raw materials in dollar terms have declined, those of electronic inputs have generally increased, while volume measures have broadly continued to rise as the examples in Figure 5 illustrate for China's three largest import categories. If growth is artificial and the exchange rate overvalued, then imports would eventually overwhelm exports due to a deterioration in competitiveness. This hasn't happened so far—China's net exports have in fact surged since 2014. Over the next five years, the ability of Chinese firms to compete globally at increasingly more sophisticated industries will be a good gauge of the success of the country's economic transformation.

4. US: back to normal, but what normal?

> ***"You're not the same as you were before. You were much more…muchier…you've lost your muchness"-*** The Mad Hatter

The US recovery is entrenched, and we believe concerns of an impending recession are unjustified. The labor market is close to full employment and job creation continues at a robust pace. Household consumption remains a reliable growth engine. Headline inflation (both CPI and PCE) has begun to rebound towards the 2% level now that energy prices have stabilized (core inflation had always remained well anchored, and is now also rising).

The pace of growth, however, is lower than before the crisis by about 1 percentage point. This is partly due to population aging, which has slowed the pace of growth of the labor force. But productivity growth has also decelerated: over the last two years it has been running at about ½ % annualized, a sharp fall from its 3% pace of 1995-2004 and its long term average of over 2%.

There are divergent views on whether the US economy has settled onto a permanently lower path. Pessimistic views, unsurprisingly, tend to be more popular. The "Secular Stagnation" hypothesis, recently revived by Harvard economist Larry Summers, holds that the economy is held back by a lack of aggregate demand, and that only substantial fiscal stimulus, concentrated in growth-enhancing infrastructure investment, can revive it. In this view, the Fed will fail in its attempt to normalize interest rates because the economy will prove too weak and financial markets too fragile, leading growth in the US to falter.[15] A similarly pessimistic view, best represented by Northwestern's Robert Gordon, argues that the age of growth-boosting innovations is over. [16]

We side with the more (cautiously) optimistic minority. A number or recent studies suggest that the latest slowdown in productivity growth is due to the collapse in investment since the great recession. We believe this has in turn reflected uncertainty on global demand prospects and a deterioration in the business environment. The former should hopefully dissipate as the global economy demonstrates its resilience. The latter could be reversed with better policies.

We believe very strongly that the digital revolution which is beginning to sweep industry holds the potential to deliver major productivity gains. We have documented the micro-level evidence of these efficiency gains in a series of papers over the last three years. An acceleration in investment would allow these benefits to scale across industries, boosting productivity economy-wide. [17]

We don't take this for granted, however, as we see two significant risks.

- **The first is that persistent uncertainty or continued growth-unfriendly policies will hold investment back.** We have noted above the risk that pessimism might prove a lot harder to dispel.
- **The second is that the normalization of US monetary policies could result in greater instability in financial markets with a sharp impact on economic activity**. The long period of extraordinary monetary stimulus has created important distortions in financial markets. The extremely low interest rates even on long-term government bonds are the most visible manifestation;

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15 See for example the lead article by Lawrence Summers in the March/April 2016 issue of Foreign Affairs.

16 Gordon (2012), "Is U.S. economic growth over?"; also Gordon (2016), "The rise and fall of American Growth", Princeton Economic History of the Western World

17 Our papers can be found online here.

the high volatility in equity markets is perhaps the most worrying. There is a lot less leverage in the financial system than in 2006-07, and the risk of a major financial crisis is correspondingly lower. But new regulations have hampered the market-making role of major banks, adding to volatility; and the experience of 2008-09 suggests we might not be able to discern the full extent of the outstanding financial vulnerabilities.

The fragility of the global financial system is underscored by the fact that while the Fed has embarked on normalization, the ECB and the Bank of Japan are still carrying out quantitative easing, and have recently taken the unprecedented step of pushing official deposit rates in negative territory, charging banks on the reserves they hold with the central bank. This measure, aimed at spurring lending, can erode the profitability of already beleaguered banks, and its overall impact is subject to high uncertainty. Financial turmoil would have significant global consequences, probably greater than the domestic ones, and emerging markets, especially those reliant on short-term financial inflows, would be highly vulnerable.

Our baseline, though, is that the financial system will prove resilient to the Fed's gradual normalization efforts; this will leave US growth on track at its 2% + pace. We strongly believe innovation holds the potential for a major acceleration in productivity, but we need evidence of better policies before we feel comfortable building it into our baseline forecasts.

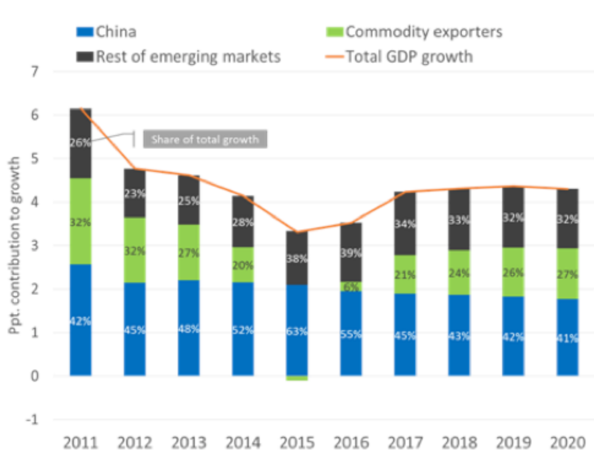
5. Emerging markets: a roadmap for opportunities and risks

> ***"Where should I go?"***- Alice ***"That depends on where you want to end up"* –** The Cheshire Cat

On our baseline outlook for the US and China, fears of a global recession should subside, allowing for a gradual normalization of interest rates, exchange rates, and commodity prices, and stabilizing expectations about global growth and inflation. Yet global trade and real investment will remain somewhat subdued over the next five years while this unique period of adjustment continues to play out in all the major economies. Against this background, what can we expect for the performance of emerging markets? Where should we expect to find the best growth opportunities?

The collapse in commodity prices has been a major cause for the disappointing performance of EM in 2015. **Figure 6 shows the contribution of commodity exporters to total economic growth in emerging markets**, along with China and another subgroup comprising all other emerging markets. It is clear that the deceleration in 2015 was driven by commodity exporters—especially oil exporters, though Brazil was the largest single (negative) contributor—with practically no change in the absolute contribution to total growth of the rest of emerging markets. Commodity prices remain weak this year, as the oil market finds a new equilibrium, and China demonstrates it can achieve a soft landing to lower growth. But **we do expect 2015-16 to mark the bottom for commodity prices. This in turn implies that economic activity in most commodity-exporting countries should recover by 2017,** particularly as a number of commodity exporters have begun to adjust through policy corrections and—largely—currency depreciation.

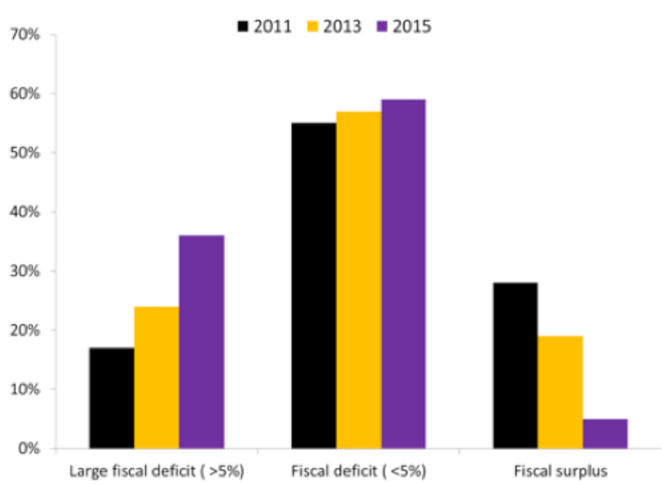
Figure 6: Contribution to real GDP growth – 100 largest developing countries (constant 2010 $)



Is there something that EM governments can do to accelerate the pace of growth? In the near term, the ability of most governments to use aggregate demand policies to support their economies will face increasing difficulties. Monetary policies will be constrained on several fronts. As the impact of the commodity price collapse fades, headline inflation will bottom in most countries over the next several quarters where it hasn't already. As the Fed delivers further rate hikes, financial investors' attention to interest rate spreads will also point to tighter monetary policy. Although we expect the period of extreme currency pressure to dissipate, a general turn toward tighter monetary policy in emerging markets seems unavoidable.

Similarly, the scope for fiscal stimulus has dramatically narrowed since 2011, with resource-rich countries especially hurt over the past two years. This trend can be seen in Figure 7 where **the number of EM countries with fiscal deficits greater than 5% of GDP doubled from 2011 to 36 countries out of the largest 100 countries in 2015, while at the same time the share of commodity exporters with large fiscal deficits increased from around 1/3 in the earlier years to roughly 2/3 last year**. Fiscal finances in the Middle East and North Africa, in particular, have been hard hit as oil revenues dropped by $360 billion in 2015, according to the IMF. MENA oil exporters have seen their aggregate fiscal balance turn from -2% of GDP in 2013 to -13% in 2015, whereas cheaper oil reduced the aggregate fiscal deficit among oil importers from almost -10% in 2013 to a still dangerously high -7% of GDP last year.

Figure 7: Fiscal balances – 100 largest emerging markets (share of GDP)



Source: IMF

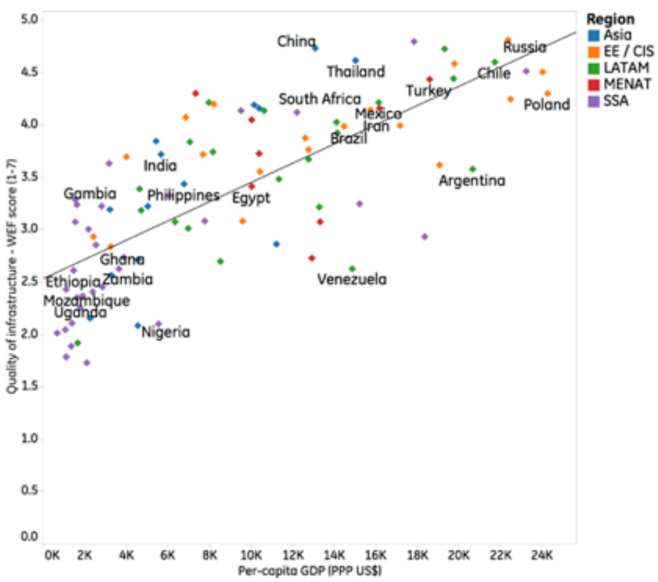
Outside of traditional macro stimulus policies, measures that can most effectively strengthen a country's growth prospects and make it attractive to foreign investment include:

- **Infrastructure investment** in transport, energy, health care and communication can greatly increase productivity and make the environment more attractive to investment. A decisive push on infrastructure has been key to China's early success. Securing funding, though, can be a challenge in the current environment of heightened risk aversion.
- **A better business environment**. Simple and business-friendly regulations, simple and relatively low taxes can play a major role in attracting investment. The keywords here are simplicity and predictability.
- **Sustainable macro policies, low indebtedness and low vulnerability to international capital flows**. One of the old jokes about banks is that they would only lend to those who did not need money—though clearly this does not apply to bubbles or credit booms… The same is true for international capital flows in periods of higher risk aversion. Countries with large external financing needs, because of a sizable external current account deficit or a large stock of external debt, are perceived as riskier and will find it harder to secure funding. High levels of domestic savings relative to investment are helpful in this respect.

The best time to put in place these policies of course was yesterday…as some of them need time to take effect; moreover, a reputation for stable and predictable policies cannot be built overnight. Countries that have already improved policies and fundamentals will have a major advantage over the next few years. It is not too late to act, though. Markets can respond very quickly to a credible change in policies, as we saw most recently in the case of India. Besides having the right policies in place, a stronger reliance on domestic-driven growth will be an advantage while global trade remains weak.

The importance of good infrastructure cannot be underestimated. Figure 8 shows the **strong positive correlation between the quality of infrastructure and per capita GDP.** The link of course works both ways: richer countries can afford better infrastructure; but a strong infrastructure is a key condition for faster economic growth, and an enabler for rising living standards. [18] The Figure also confirms that Sub-Saharan Africa has a long way to go in bolstering infrastructure, one of the preconditions for creating a more broad-based manufacturing sector.

Figure 8: Quality of infrastructure and Per Capita GDP –emerging markets



In the remainder of this section we touch briefly on the key issues in each of the major EM regions.

Asia

The best prospects for continued outperformance remain in developing Asia; the region has the highest concentration of countries with strong institutions, a good track record of competent economic management and relatively high levels of investment, largely backed by domestic savings. **India**, in particular, is well placed to excel in this environment, thanks to healthy domestic demand, a strong service sector, and a balanced mix of trading partners, while cheaper energy imports also help, and the business-friendly stance of the government adds to the upside potential.

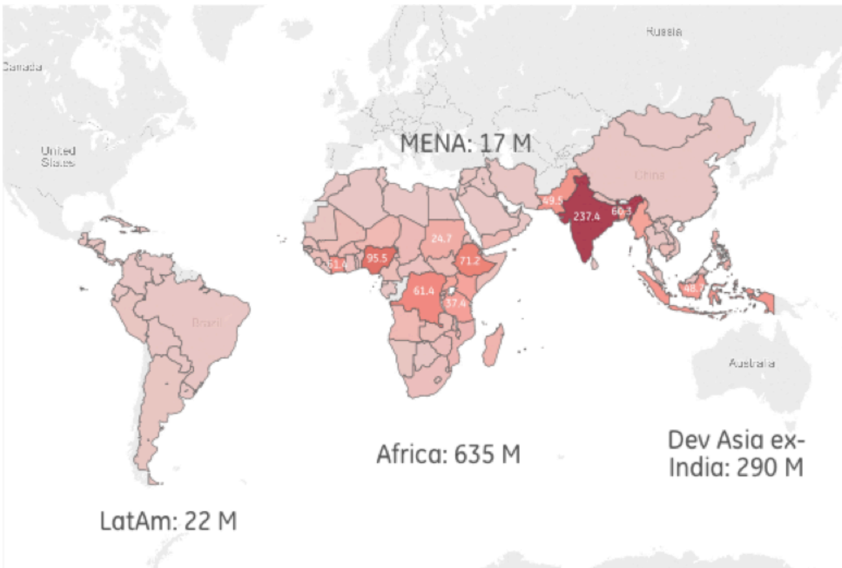
China's economic slowdown and rebalancing present challenges to its neighbors and other trade partners that in many cases will see their industries reconfigure in response to changing patterns in regional trade and production. But this transformation also expands the opportunities for the next generation of wage-competitive producers to attract investment and advance export capabilities in manufacturing and other labor-intensive sectors. Low-income countries with large populations including **Indonesia, Philippines, Vietnam, and Myanmar** (further down the road) should be well positioned to capitalize on this shift. Indeed, we forecast strong economic growth in Vietnam and the Philippines, with Indonesia and **Malaysia** also expanding at a robust pace.

[18] The quality of infrastructure is measured by the score given by the World Economic Forum's Global Competitiveness Report 2015-16.

We expect emerging Asia to grow at a bit under 6% this year and next, with a gradual deceleration later in the horizon reflecting the ongoing slowdown in China.

In emerging Asia, the power sector still offers one of the greatest opportunities—and challenges. In a world where 1.2 billion people still have no access to electricity, Asia accounts for almost half this global power gap, with close to 250 million people in India and 290 million in the rest of Asia. Moreover, the fast pace of economic growth ahead will drive additional electricity demand.

Figure 9: Lack of access to electricity



Sub-Saharan Africa

Outside developing Asia, the best opportunities for strong and sustainable growth are in Sub-Saharan Africa, though predominantly in some of the smaller economies. Most of the region is highly exposed to the collapse in commodity prices, and in some countries the impact on economic growth has been severe: **Nigeria and Angola** are two prominent examples; growth has slowed significantly and will take some time to return to what we see as a 4 ½ % potential pace. In Nigeria, the recently launched restructuring of the Nigerian National Petroleum Corporation should improve efficiency, but the announced changes will take some time to pay off.

SSA as a whole, however, had been making progress towards stronger institutions and sounder macro policies, and this is now paying off: while growth has weakened, the collapse in commodity prices has not brought the dramatic financial instability that the region had experienced in past periods of stress. Some countries already enjoy a more diversified export base, relative political stability, and strong public investment programs, most notably in east Africa. **Côte d'Ivoire, Ethiopia and Rwanda** are some of the best positioned, followed by **Ghana and Uganda**. We expect the region to grow at around 3 ½ % over the next three years, accelerating to above 4% towards the end of the decade.

Notwithstanding the improvements of recent years, SSA has a long way to go to create more broad-based and balanced economic growth, with a diversified manufacturing sector able to fuel the development of a large middle-income class. Moreover, while institutions have been strengthened in several countries in the region, they are still more fragile than in many other emerging regions, implying a relatively more elevated political risks.

Overall, we expect that this year SSA will grow at a somewhat faster pace than in 2015, about 4%, with a slow acceleration to about 4 ½% % towards the end of the decade.

MENAT

In the Middle East and North Africa, oil exporters are struggling to adjust to lower oil prices. The challenge has been compounded by the higher degree of political volatility affecting the region. While MENA oil exporters generally enjoy fairly low oil production costs, many had come to rely on high oil prices and abundant revenues to cover increasingly generous budget payments in the form of wages, subsidies or other social programs. They are now reducing expenditures to prevent an excessive widening in their budget deficits—Saudi Arabia for example has moved to reduce its fiscal oil breakeven price in its 2016 budget.

This poses a difficult trade-off: if expenditure cuts fall on investment, they might adversely affect future growth; if they fall on subsidies, they might increase the risk of social instability. To square the circle, governments in the region are also striving to improve efficiency in key sectors and to broaden the growth base of their economies beyond the oil and gas sector. Overall, the region continues to offer important investment opportunities, though with very marked differences across countries in both opportunities and risks. Geopolitical risk is also especially high across the region.

We expect GDP growth in Saudi Arabia to bottom this year at just over 1%, as fiscal policy tightens to adjust to lower oil revenues, recovering to a 2-2 ½% pace over the next 2-3 years, and returning to 3%+ only by the end of the decade. For the MENA region as a whole, we expect a somewhat better tone this year than in 2015, but only a very gradual improvement to about 3% growth in the next few years. Aside from the geopolitical tensions, the higher-stakes game in the region is probably the extent to which oil exporters can turn the challenge of lower oil prices into an opportunity to create a broader and more dynamic growth base.

Latin America

Latin America has also been hit by the downturn in commodity prices. The region however is a perfect case study in how policies can mark big difference in the outlooks of countries hit by the same external shock. In **Brazil**, the adverse impact of lower commodity prices has been compounded by poor economic policies over the last few years, when a series of micro-managing government interventions have distorted prices and competitiveness across a range of sectors; this has come on top of the notoriously high cost of doing business in Brazil, due to extremely cumbersome regulations and taxes. To make matters worse, Brazil has found itself in the midst of a political scandal that has undermined the popularity of the current administration and increased uncertainty over the political outlook. Brazil's recession continues, and we expect it to be as deep this year as in 2015, with stabilization in 2017 and a return to positive growth only in 2018.

Mexico was much better prepared, having implemented a number of important economic reforms over the past couple of years. Economic growth has still disappointed, but is running at around 2% with the potential for a significant acceleration, to 3% and possibly above, once the energy outlook stabilizes.

Venezuela and Argentina, two of the most vulnerable countries in the region, have been moving in opposite directions. In Venezuela, policies remain weak and the political situation fragile; the sharp fall in oil prices has placed the country in a parlous financial position with the economy already in free-fall. In Argentina, the recently elected Macri government started its mandate with a major reform effort, floating the exchange rate, liberalizing a number of exports, pushing greater transparency and credibility in government statistics, and accelerating negotiations with holdout creditors from its previous debt restructuring. While the road ahead is still long, the government has earned goodwill and credibility, and a resolution of the holdout creditors issue could open the way for important investment inflows.

We expect the region as a whole to contract again this year, pulled down by its heavyweight Brazil. For next year we forecast growth of just over 2%, with a gradual acceleration in the following years. A number of Latin American countries have moved towards better macroeconomic policies over the last few years, so that the region is on a stronger footing and certainly less exposed to financial crises risks relative to the 1990s and early 2000s. The current economic policy landscape, however, appears more differentiated and uncertain than perhaps in most other regions, which creates a wide margin of uncertainty on the longer-term outlook.

Russia, CIS and CEE

As in most of Asia, consumers and governments in central Europe have also benefited from cheaper oil prices. These economies will be supported by the sustained—albeit modest—recovery in the Eurozone and continue growing at moderate levels. For countries like **Poland, Hungary and the Czech Republic**, economic growth shows a very high correlation with Germany's industrial production cycle, so their economic destiny is closely linked to that of Germany and the Eurozone at large. Given their integration into the EU institutional context, these countries will continue to display less volatility than most other EM, implying less risk but also a smaller potential for major upside surprises.

In Eastern Europe, energy exporters like **Russia** and **Kazakhstan** confront the same challenges as their peers in MENA and LatAm. Russia's situation has improved somewhat, and the country is poised to gradually pull out of recession—we expect a return to positive growth next year. For emerging Europe overall, including Russia, CIS and CEE, we see only a marginal economic expansion this year, with a recovery to about 2% + growth next year and an acceleration to closer to 3% by the end of the decade.

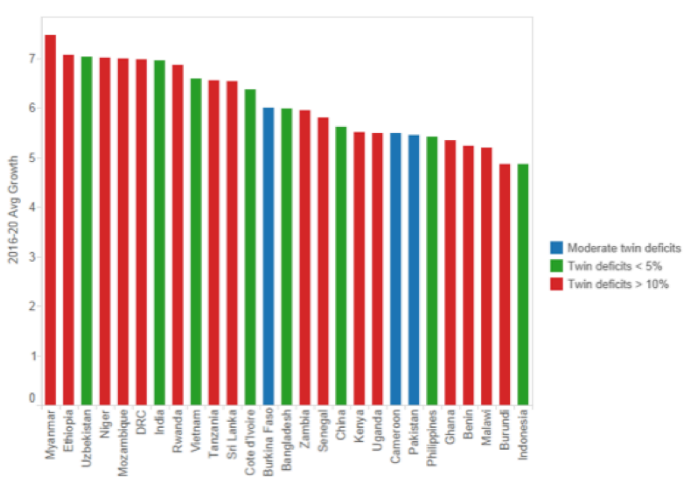
Differentiation and Risks

Differentiation is the key theme in emerging markets—as the discussion in this section has showed. **Variation in economic performance across commodity exporters will also be amplified in this environment.** Countries with underdeveloped natural resources, whose governments are able to provide a reasonable operating environment should see a faster recovery in FDI inflows. The ongoing downturn in the extraction industries offers important opportunities to apply new technologies to automate processes and improve efficiency. Similarly, efforts to enhance economic diversification will depend on credible development programs, competent financial management, and the ability to attract technical know-how. Improving the business environment, upgrading the quality of the workforce, and investing in infrastructure will be crucial, and in many instances emerging markets will be able to integrate new technologies better suited to meet their development goals.

As previously discussed, the main risk to our outlook stems from a sharp economic slowdown in China with implications to trade, commodity prices, and global financial markets more broadly. Alternatively, a more turbulent interest rate environment could lead to destabilizing capital flows and add further pressure on emerging-market currencies. Emerging-market corporates that have borrowed in US dollars could also become vulnerable in such a scenario, or even in the somewhat more benign monetary tightening cycle that we envision in our baseline. A few countries with large dependence on short-term external financing and high corporate debt levels would naturally be vulnerable in such a scenario, but the threat of a full-blown emerging-markets financial crisis sweeping its way through Asia and Latin America seems more distant.

Figure 10 offers a sober reminder of the fact that a number of fast growing countries suffer from substantial twin deficits (fiscal deficit plus current account deficit) in excess of 10% of GDP, a serious potential risk to financial stability and future growth performance. The Figure also confirms that Asia is the region with the most solid macro fundamentals in this respect, whereas Sub-Saharan Africa appears especially vulnerable.

Figure 10: Macro vulnerabilities: Twin deficits



Other types of potential threats lurk in the geopolitical realm. Besides China, other potential sources of systemic risk are Russia and Saudi Arabia, with a disruption to energy markets being the obvious channel. These are low probability events but the risks are not marginal, more so in the case of Saudi Arabia.

Turning to upside risks, we think that for the US an upside "rejuvenation" scenario with a surge in productivity is at least as likely as the Secular Stagnation view, with clear beneficial implications to the rest of the world. This positive scenario though is more likely to materialize closer to the end of this decade, as it hinges on an investment acceleration that can only be expected after the Presidential elections uncertainty has dissipated. Alternatively, the headwinds that we see holding back growth in emerging markets could unwind faster than we anticipate. In particular, growth in developing Asia (excluding China) could accelerate toward the end of the decade, instead of staying roughly constant as represented by the black bars in Figure 5, which in turn could start another strong investment cycle, sooner than we currently expect.

Risks aside, our baseline outlook sees very moderate growth ahead across much of the global economy, with a few bright spots, as shown in Figure 11:

Figure 11: Forecasted GDP growth, 2016-18

Source: GE Global Market Intelligence

6. Conclusions

> *"No, no! The adventures first, explanations take such a dreadful time"* – The Gryphon

This paper has one key central message: today more than ever there is great value in a balanced assessment of the global economic outlook, based on conservative assumptions and focused on country-specific opportunities and risks.

Uncertainty and risks are significant. Years of exceptional monetary easing have created distortions in financial markets. And populism and protectionism are on the rise nearly everywhere, fueled by broad discontent with growth and income distribution, and concerns about technology's impact on jobs. We are concerned that the widespread recurrent pessimism seems incurable. There is a negative feedback loop between widespread pessimism, popular discontent, and weak policy leadership in many countries. Breaking this vicious circle will be key to securing stronger and more stable global growth. Still, the global economy is resilient and offers plenty of growth and business opportunities. We need to calibrate expectations—we are not going back to the bubbly pre-crisis growth—but neither have we entered a global terminal slump. **We need to be aware of the real dangers, ignore the many imaginary ones, and focus on taking smarter risks**.

21 March 2016