RBC Global Asset Management

Economic Compass

Global Perspectives for Investors

ISSUE 34 • JANUARY 2015

ERIC LASCELLES
Chief Economist
RBC Global Asset Management Inc.

HIGHLIGHTS

- Emerging-market economies have recently suffered a bout of decelerating growth.
- As a silver lining, this slowdown provides the motivation and recent elections provide the opportunity to deliver a major new round of growth-enhancing structural reforms.
- Accordingly, we anticipate a broadly-based surge in reforms over the coming five years, with 14 of the 20 countries examined in this report set to accelerate their actions.
- India tops the charts, both as the country set to deliver the most reforms and as the one set to accelerate its reforms the most.
- Furthermore, we estimate the theoretical stock market benefit that each nation will enjoy through these reforms, with potential returns as high as 30%.

SEEKING NEW GROWTH

Emerging-market economies enjoyed rapid economic growth across the 2000s, but have since slowed. Naturally, this is undesirable. Emerging-market nations themselves don't like it, nor do the investors in their markets. The implications also ripple around the world, given the extent to which emerging-market economies are relied upon for a large and rising portion of global production.

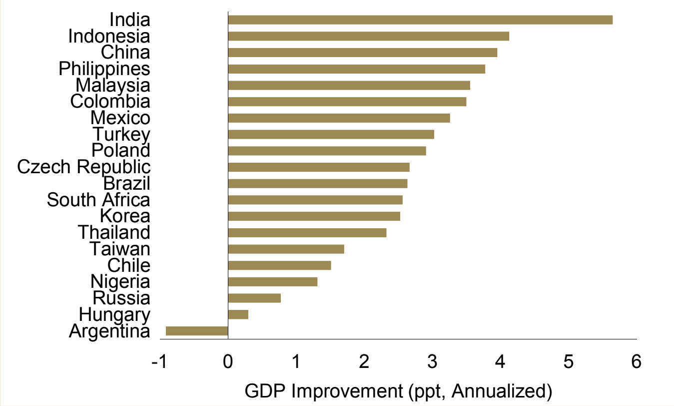
How to reverse the slide? The best and most enduring solution would be a new round of structural reforms designed to sustainably revive emerging-market growth. Examples of structural reforms include reducing red tape, removing trade barriers and improving infrastructure.

Structural reforms are rarely popular with voters – at least at first – but emerging nations are nevertheless in a better-than-usual position to deliver new reforms for a variety of reasons. In this report, we use several techniques to gauge which emerging economies are set to deliver the most economically beneficial structural reforms (Exhibit 1).

Our findings identify the obvious market darlings such as India and Mexico; other proficient reformers such as Indonesia and China; and a number of underappreciated actors such as the Philippines, Malaysia and Colombia. We also calculate the approximate stock market benefit that should result for each.

When the subject is framed slightly differently – in terms of which countries are set to accelerate the pace of their reforms by delivering more in the future than over the past several years – a very different set of countries bubbles to the surface. India retains its lead, but South Africa, Chile, the Czech Republic, Nigeria and Korea are suddenly in the running. This may well prove to be a useful secondary consideration for financial markets.

Exhibit 1: Estimated benefits from structural reforms



Note: Aggregate forecast reflects expected annualized GDP gain in percentage points from structural reforms over the next five years. Competitiveness forecasts are overlaid onto GDP using an econometric model of competitiveness versus GDP per capita. Source: EIU, WEF, Haver Analytics, RBC GAM

Overall, structural reforms may prove capable of eventually contributing as much as 1.2 additional percentage points annually to worldwide emerging-market economic growth over the next several years, and perhaps 0.5 percentage point to global GDP growth. These are substantial and much-needed additions.

Help wanted

Emerging-market economies matter enormously. Thanks to a decade of scintillating growth, they now constitute half of global economic output and an astonishing three-quarters of growth (Exhibit 2).

Superficially, there would seem to be plenty of room for further outsized growth given how far they remain behind pacesetting developed nations like the U.S. (Exhibit 3). China has merely reached the equivalent productivity that the U.S. possessed in 1940. India has not yet even reached 1901-equivalent levels. The tried-and-true strategy of replicating existing developed-world processes and technologies should remain a viable approach for some quite time yet.

However, running counter to this happy narrative, emerging-market economic growth has lately stumbled (Exhibit 4). Developing nations of almost all stripes – including behemoths such as China, Brazil and Russia – have strung together several years of decelerating growth.

There are myriad explanations for this, perhaps best sorted into four bins based on whether they are temporary or long-term problems, and whether they originate from outside or inside emerging-market countries (Exhibit 5).

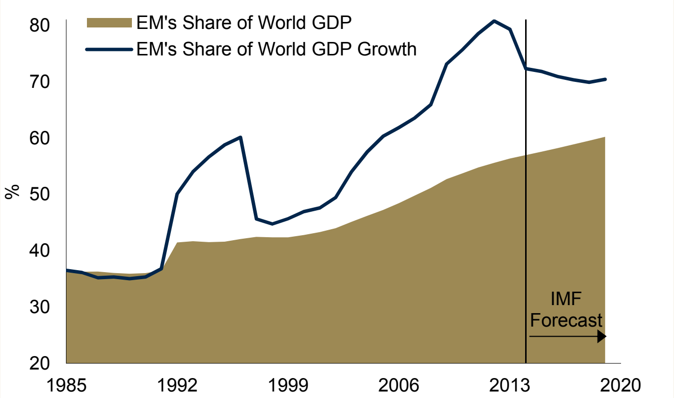
Short-term challenges

Many of the challenges are only temporary. The key internal one is that several emerging-market nations – most prominently, China – allowed credit excesses to build up in their economies, and are now beginning the difficult process of deleveraging, with concomitant economic consequences. Of course, this drag won't persist forever, and is arguably a useful development insofar as it prevents the formation of even larger financial bubbles.

Short-term external constraints span underwhelming foreign demand, precarious external debt, lower resource prices and geopolitical challenges. Fortunately, these also look to be temporary:

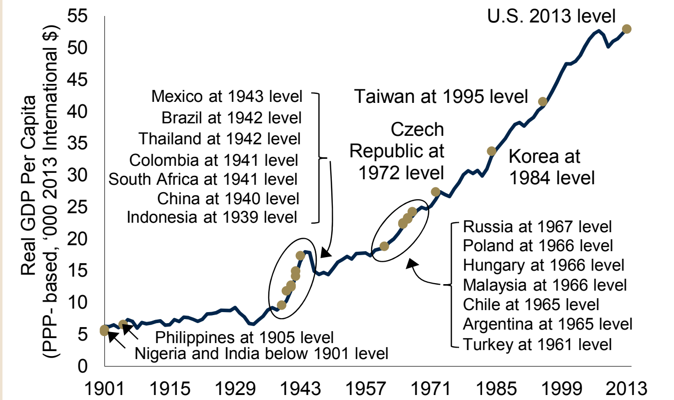
- We anticipate slightly improved foreign demand in 2015 as Europe and Japan recuperate.
- External debt problems are real, but mostly contained within a handful of Eastern European nations (most

Exhibit 2: Emerging markets matter for the world



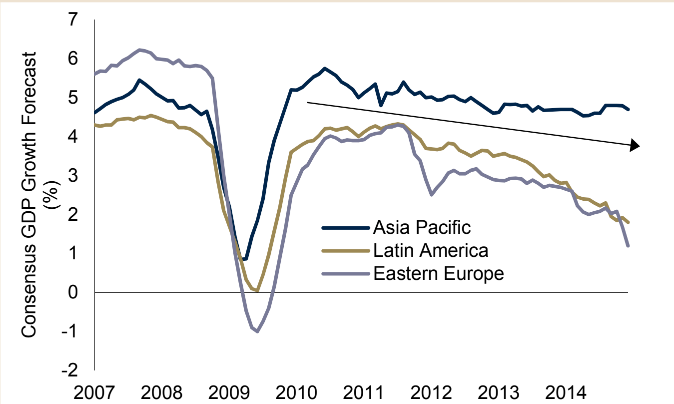
Note: Emerging markets (EM) PPP-based nominal GDP and 5-year average GDP growth used in calculations. Source: IMF, Haver Analytics, RBC GAM

Exhibit 3: Emerging markets have ample room for convergence



Source: Haver Analytics, RBC GAM

Exhibit 4: Emerging-market economies slow



Note: Rolling 1-year out consensus GDP growth forecasts.
Source: Consensus Forecasts, RBC GAM

Exhibit 5: Emerging-market challenges

	Internal	External
Short term	▪ Deleveraging	▪ Underwhelming foreign demand ▪ External debt ▪ Lower resource prices ▪ Geopolitical challenges
Long term	▪ Decelerating efficiency gains	▪ Decelerating globalization ▪ Demographics ▪ Environmental degradation ▪ Public indebtedness

Source: RBC GAM

problematically Russia) and should gradually ease once markets adjust to the stronger U.S. dollar and Fed rate hikes.

- The decline in resource prices is very painful for some emerging economies, but quite beneficial for many. For that matter, we believe oil prices at a mere $45 have overshot fair value.
- Geopolitical challenges are unusually numerous at present, but only a few have a significant economic effect, and most will fade with time.

Long-term challenges

Long-term challenges are problematic in their persistence, but most are outside of the direct purview of emerging- market nations and so cannot easily be remedied by policymakers there:

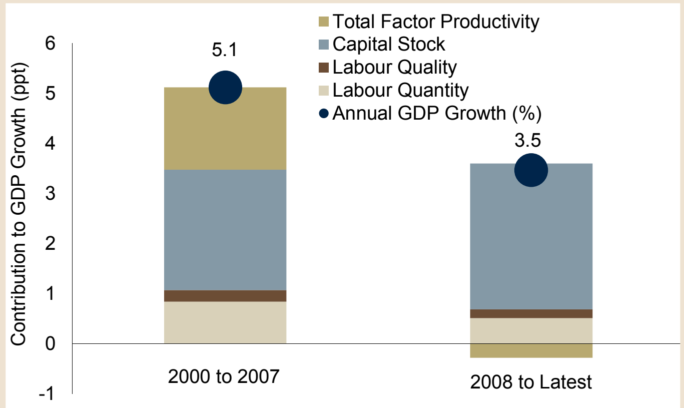
- Decelerating globalization is largely the result of greater competitive parity around the world and increasingly saturated foreign markets.
- Ebbing fertility rates exert a drag on growth, are almost universal and are unlikely to reverse.
- Environmental degradation is in large part a global issue requiring global coordination, and without a quick fix.
- The global vulnerability associated with high public indebtedness stems almost exclusively from developed nations, not emerging-market ones.

The one obvious long-term challenge of an internal nature is the decelerating efficiency gains experienced by emerging-market nations. When the recent economic slowdown is decomposed into labour quantity, labour quality, capital stock and economic efficiency (also known as total-factor productivity or TFP), the greatest decline is in the latter category (Exhibit 6). Explained simply, this means that countries are still adding workers, educating them and increasing their capital stock, more or less as they always have. What has changed is that the efficiency with which these inputs are being combined is improving less quickly than normal.

In fairness, some part of this efficiency deceleration is unavoidable – it becomes harder to secure ever more efficiencies as a country becomes more, well, efficient. Factory floors eventually achieve an optimal layout and supply chains buff out any last frictions. In turn, it is unavoidable that efficiency growth ebbs to some extent over time (Exhibit 7).

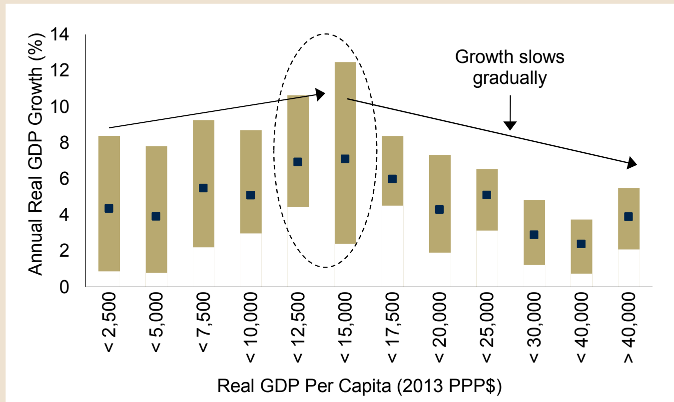
Nevertheless, we believe the recent deceleration in efficiency growth has been too abrupt and too broad to simply represent the easing of emerging-market economies into middle age.

Exhibit 6: Declining efficiency gains slowed EM growth



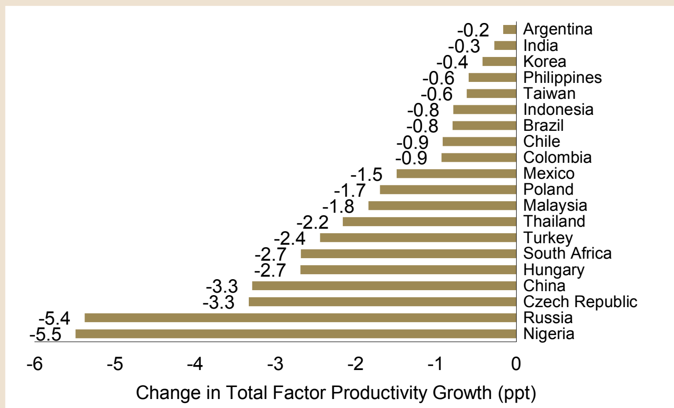
Note: Aggregate contributions to GDP growth (ppt) and annual GDP growth (%) for 20 EM countries calculated using equal weights. Average from 2000 to 2007 and average from 2008 to latest. Source: The Conference Board Total Economy Database™, January 2014, http://www.conference-board.org/data/economydatabase/; RBC GAM

Exhibit 7: Reforms key as slower growth looms



Note: Historical growth experience of seven representative countries. Square depicts average growth rate; bar encompasses 25th to 75th percentiles. Source: Bolt, J. and J. L. van Zanden (2013). The First Update of the Maddison Project; Re-Estimating Growth Before 1820. Maddison Project Working Paper 4, IMF, Haver Analytics, RBC GAM

Exhibit 8: Efficiency growth deceleration in EM countries



Note: Measured as difference of average annual total-factor productivity (TFP) growth from 2000 to 2007 and average from 2008 to latest. Source: The Conference Board Total Economy Database™, January 2014, http://www.conference-board.org/data/economydatabase/; RBC GAM

A call to action

When evaluating all of the various headwinds together, a clear conclusion emerges. The short-term headwinds don't much matter because they are only temporary. The external headwinds are outside of the control of emerging-market economies. The sole headwind within their power and of key importance is the stark deceleration in efficiency growth (Exhibit 8).

Mr. Fix-It: Structural reforms

A key reason for slower efficiency gains is that the positive impulse from prior rounds of structural reforms is fading.

Naturally, then, the best way to revive efficiency gains – and thus growth – would be to undertake a fresh new round of structural reforms. Other policy tools, such as monetary and fiscal stimulus, can be quite helpful in overcoming cyclical speed bumps, but ultimately do nothing over the long run: every rate cut must eventually be undone by a later rate hike, and every dollar of deficit spending must eventually be repaid. Not so with structural reforms. When done right, they can deliver a permanently increased standard of living (Exhibit 9).

In terms of the magnitude of the opportunity, most emerging economies appear to have significant room remaining for increased efficiency (Exhibit 10). For example, Mexico operates at 72% of the U.S. level of efficiency, India at 46% and China at just 37%.

Structural reforms also regularly trickle into other aspects of the economy, such as by increasing labour force participation (Exhibit 11), improving worker skills (Exhibit 12) and increasing the capital stock (Exhibit 13). Combined, the potential economic upside is substantial (Exhibit 14).

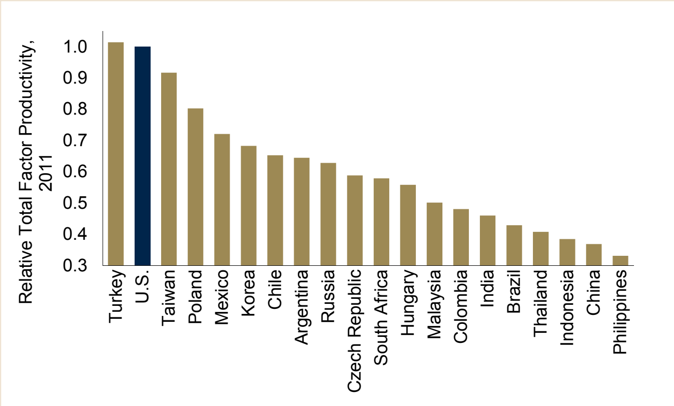
Just how effective are structural reforms? They are the central mechanism by which countries improve their competitiveness. And competitiveness in turn determines two-thirds of a country's per capita income (Exhibit 15). In short, there really aren't any other options.

Exhibit 9: Different stimulus yields different results

Policy tool	Short-term benefit	Long-term benefit
Monetary Policy	Moderate	None
Fiscal Policy	Moderate	None
Structural Reforms	None	Substantial

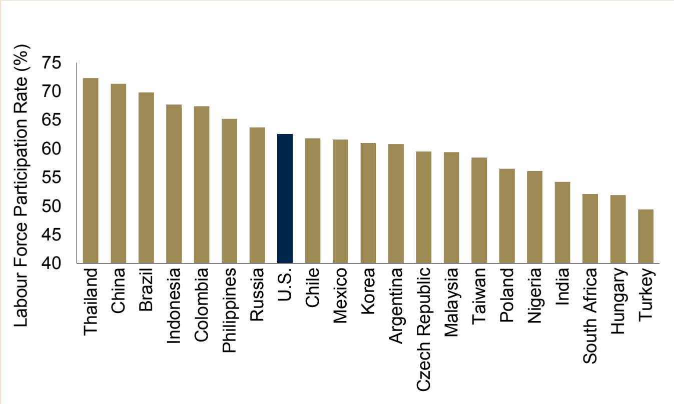
Source: RBC GAM

Exhibit 10: EM countries much less efficient than developed world



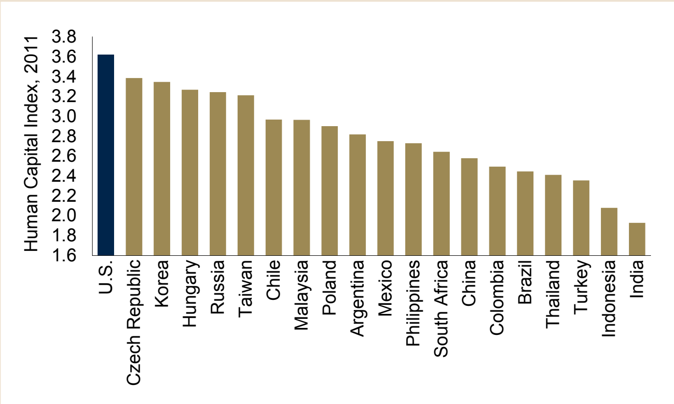
Note: Relative total factor productivity of U.S. equals 1. Source: Feenstra, Robert C., Robert Inklaar and Marcel P. Timmer (2013), "The Next Generation of the Penn World Table" available for download at www.ggdc.net/pwt; RBC GAM

Exhibit 11: Labour force participation rate varies by country



Note: Labour force participation rate for 2013. Source: Haver Analytics, RBC GAM

Exhibit 12: Labour quality in EM countries can improve



Note: Human capital per person measured as a function of average years of schooling and return to education. Source: Feenstra, Robert C., Robert Inklaar and Marcel P. Timmer (2013), "The Next Generation of the Penn World Table" available for download at www.ggdc.net/pwt; RBC GAM

Stars align

If structural reforms can so easily achieve faster economic growth, why haven't policymakers already delivered them?

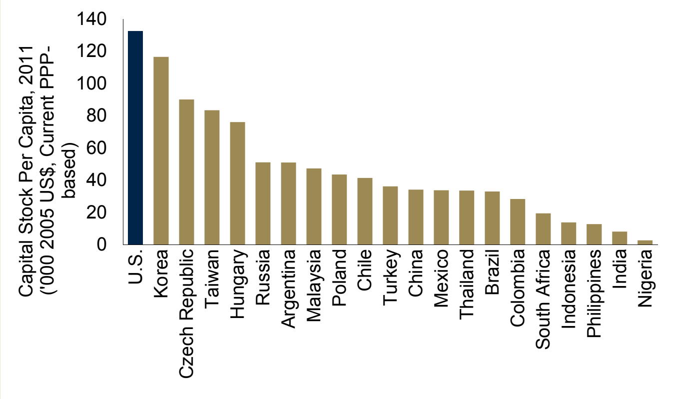
Politicians are for the most part aware of what needs to be done, but political considerations usually short-circuit any attempt at progress. The problem is that many structural reforms are unpopular with voters. Measures such as eliminating tariffs on imports, cutting corporate taxes and reducing restrictions around firing workers make for good economic policy, but don't win many votes.

This unpopularity has some justification. The initial impact of such reforms is often negative. Using the three examples just mentioned, foreign products surge into the country, outmuscling some domestic producers; government coffers are temporarily emptier; and unemployment ticks higher. For myopic politicians, these reforms are therefore dead on arrival.

Fortunately, those possessing greater vision recognize what happens next. The process of structural-reform delivery tends to follow a J-curve pattern. Useful reforms can indeed start by dimming an economy, but then more than compensate with additional growth later. Continuing with our prior three examples, a country's own exports eventually surge; government revenues exceed initial levels due to greater overall economic strength (if not higher corporate taxes paid); and the unemployment rate falls below its initial level since firms are more comfortable hiring workers with the knowledge that they aren't stuck with them forever. The Organization for Economic Cooperation and Development (OECD) finds that it often takes as long as two years for reform outcomes to begin tilting in a visibly positive direction (Exhibit 16).

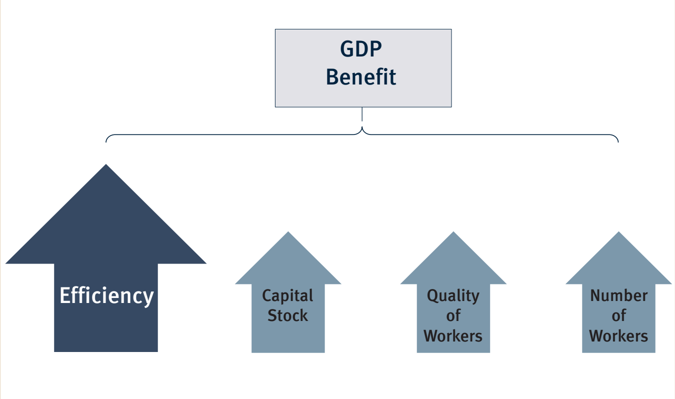
Even when they are willing to overlook the initial economic pain, politicians frequently bump into another problem. Very often, one group in society stands to benefit from a reform, while another would be hurt. Almost by definition, those set to

Exhibit 13: EM countries need to catch up on capital investment



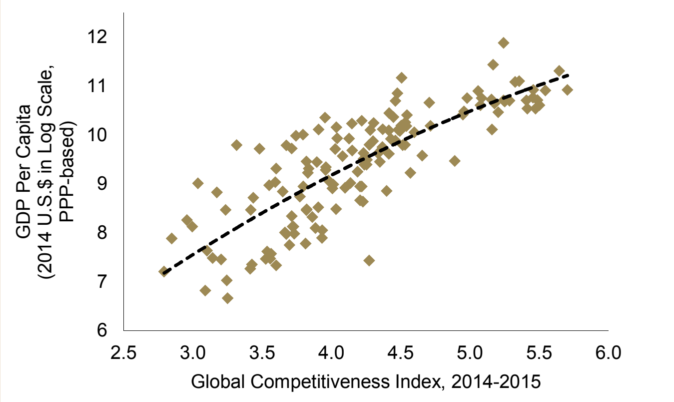
Source: Feenstra, Robert C., Robert Inklaar and Marcel P. Timmer (2013), "The Next Generation of the Penn World Table" available for download at www.ggdc.net/pwt; RBC GAM

Exhibit 14: Structural reform transmission channels



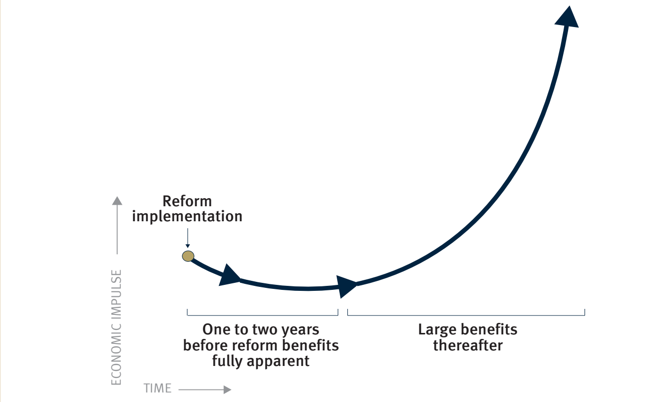
Source: RBC GAM

Exhibit 15: Better economic structure = richer economy



Source: IMF, WEF, Haver Analytics, RBC GAM

Exhibit 16: Delayed gratification via J-Curve



Source: OECD, RBC GAM

suffer are established industries and/or groups of workers with strong political connections, whereas the beneficiaries are more diffuse (or do not even yet exist in the case of a new industry that will be formed by reforms) and are thus less vocal. It can be hard for politicians to make the "right" economy-maximizing decision in this context.

A window of opportunity

Despite this natural political impediment, a window of opportunity is now opening, supporting a fresh round of structural reforms. This is happening thanks to the intersection of economic need, political willingness and low-hanging economic inefficiencies (Exhibit 17).

The last major round of emerging-market reforms, spanning the 1990s through the early 2000s, was motivated by one big opportunity – the fall of the Berlin Wall – and a string of economic crises (Latin American debt problems in the 1980s, the 1995 Tequila Crisis, 1997 Asian Financial Crisis, 1998 Russian Crisis and 2001 Brazilian crisis). Since that flurry, very little has been done. The emerging-market public and politicians grew fat (and complacent) on a diet of rich economic growth thanks to earlier reforms, surging globalization, easy money and, in some cases, rising commodity prices.

The emerging-market growth challenges of today are not nearly on the scale of those prior episodes, but politicians nevertheless recognize they need to generate additional growth if they are to avoid the wrath of their electorates.

Politicians may also be more willing than usual to deliver reforms since many have been recently elected, meaning they have enough time before their next election for the beneficial reform effects to kick in, and because the public and media are more likely to give them leeway in the post-election honeymoon period. What is more, several of the recently elected leaders (including India's Modi and Indonesia's Widodo) campaigned and were elected on a platform of reforms.

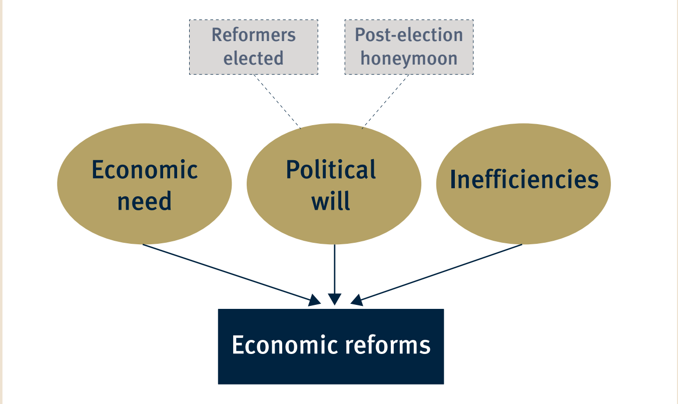
Finally, there are no shortage of reforms crying out for implementation. We discuss these in the following sections.

What reforms?

For all of the talk about the importance of structural reforms, we have yet to provide a clear overview of their intent or breadth.

Reforms operate through many different economic channels, but the ultimate intent is always the same: to improve the competitiveness of a country, thereby increasing its economic well-being.[1] It is also worth acknowledging that the term "structural reform" is a bit loose, as building infrastructure

Exhibit 17: Stars align for reforms



Source: RBC GAM

Exhibit 18: Pillars of competitiveness

	Pillars	Elements	
1)	Institutions	■ Rule of law ■ Corruption ■ Transparency	■ Red tape ■ Corporate governance ■ Property rights
2)	Infrastructure	■ Transportation ■ Electricity	■ Telecommunication
3)	Macroeconomic environment	■ Fiscal position ■ Credit rating	■ Inflation environment ■ Savings rate
4)	Health and primary education	■ Disease ■ Life expectancy	■ Primary educ. quality ■ Primary educ. enroll.
5)	Higher education & training	■ Secondary enrollment ■ Tertiary enrollment	■ Training ■ Quality of education
6)	Goods market efficiency	■ Tax rates ■ Trade barriers	■ Local competition ■ Startup costs/burden
7)	Labour market efficiency	■ Hiring and firing rules ■ Wage setting	■ Women in workforce ■ Efficient use of workers
8)	Financial market development	■ Avail. of fin. services ■ Afford. of fin. services ■ Access to loans ■ Equity financing	■ Venture capital ■ Bank soundness ■ Securities regulation
9)	Technological readiness	■ Technology transfer ■ Technology absorption	■ Technology usage ■ Internet and mobile
10)	Market size	■ GDP ■ Exports	■ Domestic market size ■ Foreign market size
11)	Business sophistication	■ Business clusters ■ Value chain breadth ■ Local suppliers	■ Production process ■ Distribution ■ Marketing
12)	Innovation	■ R&D ■ Patents ■ Uni-indust. teamwork	■ Scientific research ■ Scientists ■ Engineers

Source: WEF, RBC GAM

[1] Some structural reforms may be focused on matters that (also) have relevance outside of the economic sphere, such as inequality and the environment.

certainly fits the definition, and yet isn't so much a reform as an economic improvement.

As to the remarkable breadth of reform options, Exhibit 18 provides a useful overview via a 12-pillar classification scheme constructed by the World Economic Forum (WEF).

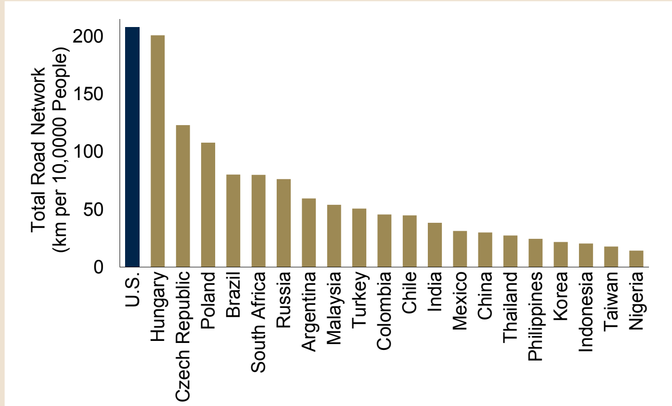
Reforms come in all shapes and sizes, often with little in the way of a common bond other than the economic benefit they eventually generate:

- Some reforms are government directed from start to finish, enormously costly and require years to deliver, such as enhancing a nation's transportation infrastructure (Exhibit 19).
- Others are clearly under the government's jurisdiction, but cost nothing and yield immediate results, such as changing a law to reduce the time and effort necessary to start a new business (Exhibit 20).
- Many reforms involve government taking a larger role in society, such as by improving economic institutions, creating and enforcing a just legal framework (Exhibit 21), and providing education and health care.
- On the other hand, another large type of reforms involves government getting out of the way of industry to allow free-market forces to flourish. Examples include opening up trade, diminishing red tape and minimizing labour and product market distortions.
- Some reforms target changes that are outside of the direct purview of government, and so must be implemented by subtly nudging economic actors in a particular direction (often via tax incentives), such as incenting the formation of business clusters in sectors where a country possesses a clear comparative advantage, or by encouraging more private-sector research and development (Exhibit 22).
- While most reforms can be enacted via a clear sequence of steps, others – such as seeking to eliminate a culture of corruption – are much more complicated.
- Finally, some reforms, rather than simply enabling a country to more effectively do what it is already doing, provide a spark for an entirely new economic orientation, such as shifting from an agrarian to manufacturing model, or from manufacturing toward a more consumer- or service-driven economy.

Forecasting theory

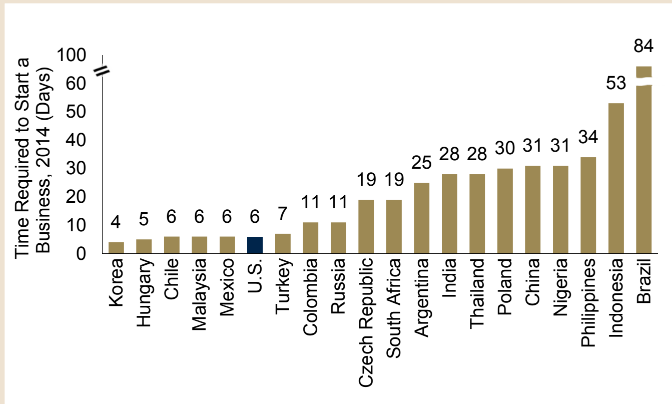
Reform forecasting is an involved process. Not only does it require a nose for which reforms are likely to be tabled and which of those will survive legislatures, but also a sense for how

Exhibit 19: Transportation infrastructure varies hugely



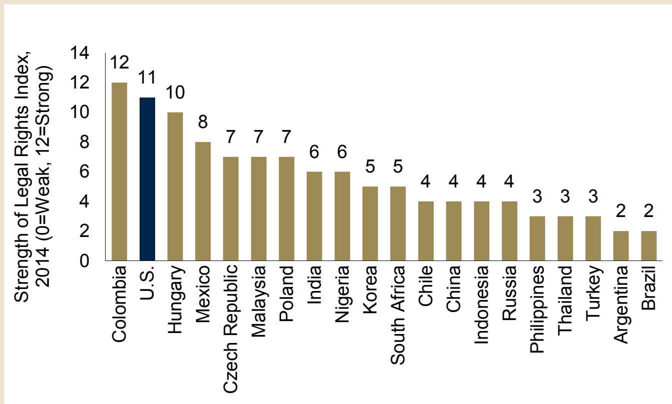
Note: 2012 data except for Colombia, the Philippines and Nigeria.
Source: CIA Factbook, World Bank, Haver Analytics, RBC GAM

Exhibit 20: Starting a business is complicated in some countries



Source: World Development Indicators, Haver Analytics, RBC GAM

Exhibit 21: Better legal rights grease economic engine



Source: World Development Indicators, Haver Analytics, RBC GAM effective each reform will be. This last aspect is especially hard for four reasons.

Apples and oranges

First, how does one compare the economic benefit of cutting the corporate tax rate to cracking down on corruption to reducing red tape? Each is completely different than the next, making the task both difficult[2] and imprecise.

Reform sequence

Second, the sequence of reforms matters. Rail, road and electricity infrastructure must first be built before there is any value in constructing a new port. Alternately, it is unproductive to invest large sums of money to increase the number of university graduates when there is no industry capable of absorbing them. The binding constraint must be addressed first or the reforms are wasted.

Sometimes a reform is worse than squandered. It can actually damage an economy. Opening up an economy to foreign competition before ensuring that key internal industries are ready to compete on the international stage can be disastrous.

The International Monetary Fund (IMF)[3] provides a useful overview of what sorts of reforms countries typically need at different stages of development (Exhibit 23).

Reform context

Third, many reforms are context-dependent. New ports are useful in theory, but not if there is already a sparkling new port sitting idle in the adjacent harbour, or if an economy's service sector instead looks set to be the prime growth engine.

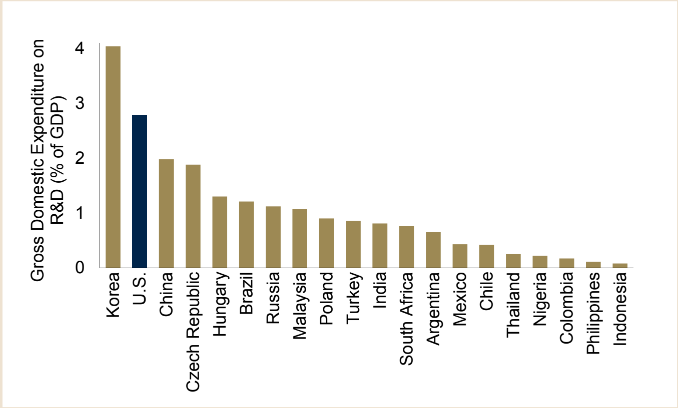
Occasionally, two countries even need the diametrically opposite reform to unleash their respective potential. One country might need more generous maternity leave to attract women into the workforce, while another might need less generous unemployment insurance to encourage people to re-enter the workforce promptly.[4]

Mimicking China's capital-intensive manufacturing sector might seem like a smart idea for a poor nation with big ambitions, but could prove disastrous if the country is poorly endowed in the capital needed to make such an undertaking a success (refer back to Exhibit 13).

Reform speed

Fourth, while it is tempting to engage in a "big bang" of reforms all at once, this rarely succeeds. Structural reforms interact with each other in complicated and sometimes unanticipated ways.

Exhibit 22: R&D investment in EM countries is relatively low



Note: Based on latest data available. Source: UNESCO Institute for Statistics, RBC GAM

Exhibit 23: Optimal structural reforms by country income level

Low Income	Lower-Middle Income	Upper-Middle Income
Improve economic institutions		Invest in R&D and new technologies
Reduce trade barriers	Reduce barriers to foreign direct investment (FDI)	
Reform agricultural sector	Reform agricultural sector	
Reform banking sector	Reform banking sector	Deepen capital markets
Improve infrastructure	Alleviate infrastructure bottlenecks	
Improve primary education	Improve higher education	More skilled labour force
	Increase service sector competition	More competitive and flexible product markets
		More competitive and flexible labour market
	(Indonesia, India, Nigeria, Philippines, Vietnam)	*(Argentina, Brazil, China, Colombia, Hungary, Malaysia, Mexico, South Africa, Thailand, Turkey)*

Note: Classifications as defined by World Bank. Unlisted nations are considered "High-Income" due to gross national incomes per capita higher than $12,746 per year. Source: IMF, RBC GAM

Each step must be carefully planned, implemented and allowed to bear fruit before proceeding further.

As an illustration, the removal of capital controls is a particularly delicate process, with great danger in moving too quickly because of the disruption or damage it might inflict upon a country's existing financial market. Using China as an example, it is important to first build properly functioning domestic markets – meaning ceasing the repression of interest rates, introducing the concept of risk into the bond market, improving

[2] Requiring a great deal of country-specific knowledge and a granular approach.

[3] IMF Staff Discussion Note "Anchoring Growth: The Importance of Productivity-Enhancing Reforms in Emerging Market and Developing Economies", by Dabla-Norris, Ho, Kochhar, Kyobe and Tchaidze, December 2013.

[4] And perhaps to avoid subsidizing inefficient seasonal industries.

financial market transparency and enhancing corporate governance – and allow this foundation to settle before throwing open the doors to the rest of the world.

The reform outlook by country

Let us now shift from the theory of reforms to the immediate outlook for them.

We examine 20 emerging-market countries – 18 of the 23 countries contained within the MSCI Emerging Markets Index,[5] plus Argentina and Nigeria.[6] A five-year outlook is used given that it often takes one to two years before the benefits of reforms become apparent, and several further years for the benefits to fully bloom.

We evaluate the extent of the coming structural reforms and their potential economic benefit via three sources: our own scorecard-style forecasts, Economist Intelligence Unit (EIU) forecasts and by estimating the fraction of earlier reforms that have yet to be fully absorbed into the economy. In each case, the findings are converted into GDP terms, providing a sense for how much of a boost structural reforms should deliver to each country's economic growth of the coming five years.

1) RBC GAM forecasts

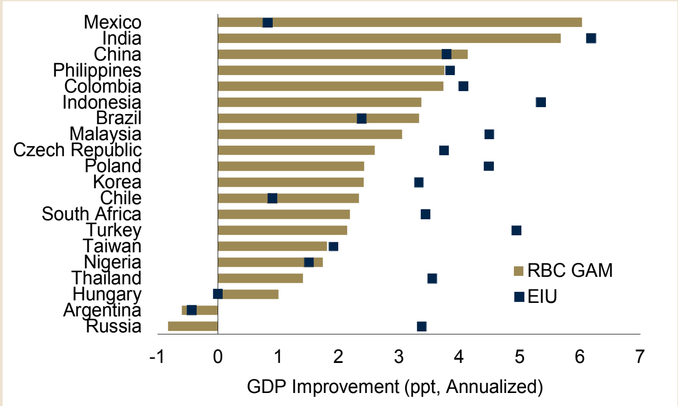
Our own reform forecasts are shown in Exhibit 24 as horizontal bars. The methodology and additional background on these forecasts are discussed in Appendix A.

This approach puts Mexico in the lead with a theoretical 6.0 percentage points of reform-driven growth per year over the coming half decade. India is a close second with 5.7 percentage points. These two have been reform darlings for some time, and so their ranking comes as no surprise even if the size of the accompanying figures do raise eyebrows.

Mexico is in the midst of major energy sector reforms under new President Nieto, and the country's reforms will likely be spurred further by the recent commodity price decline. A fair swath of Mexico's service sector is also set to undergo profound reforms that will open them up to more competition. We also expect further labour market and education-oriented efforts.

India's 2013 election has yielded a rare majority government and thus the promise of policy coherence under reform-minded Prime Minister Modi and central banker Rajan. Combined, they are set to improve governance, significantly trim red tape, elevate product market competitiveness, improve the labour

Exhibit 24: Structural reform expectations



Note: RBC GAM estimates of GDP improvement for next 5 years; EIU estimates for 2013 to 2018. Source: EIU, IMF, WEF, Haver Analytics, RBC GAM

market, expand infrastructure and R&D spending, and tame inflation.

In distant third place is China with a theoretical 4.1 percentage points of reform-based growth per year over the coming half decade, due to its bold Third Plenum reforms announced in late 2012 that are set to shake up virtually every corner of the Chinese economy, from interprovincial migration to capital controls to corruption. However, the pace of these reforms may unfold more slowly than in some of the other countries.

The forecasts also point to significant promise in the Philippines, Colombia, Indonesia, Brazil and Malaysia.

At the opposite extreme are Russia and Argentina, whose "reforms" are expected to actively subtract from growth.

2) EIU forecasts

The EIU maintains its own competitiveness indicator and generates forecasts for expected improvement in the index between 2013 and 2018. By definition, this is the equivalent of a structural reform forecast, which we then convert into GDP terms. The EIU forecasts can also be found in Exhibit 24, depicted as small blue squares.

It is heartening that the RBC GAM and EIU forecasts have many similarities (most notably, optimism about India), increasing our confidence in the coherence of these reform outlooks.

Nevertheless, there are some notable differences:

- The EIU puts Mexico in third-to-last place, instead of first. We do not have an easy explanation for this disconnect, as in our eyes Mexico is on track for significant reforms.
- The EIU ranks Indonesia slightly higher than we do. While Indonesia is delivering some useful reforms, such as reduced fuel subsidies, we believe that President Widodo

[5] Brazil, Chile, China, Colombia, Czech Republic, Hungary, India, Indonesia, Korea, Malaysia, Mexico, the Philippines, Poland, Russia, South Africa, Taiwan, Thailand and Turkey.

[6] In principle, there is no reason why this analysis could not be applied to developed economies as well. Most are not in an active state of structural renewal, but a significant minority are, including Japan and much of peripheral Europe.

is in a weak position given the minority government that surrounds him. In addition, there have been a number of negative policy developments in Indonesia, such as the banning of raw mineral exports.

- Tilting in the opposite direction, the EIU is much more optimistic on Turkey. We acknowledge prior reform successes, but worry about recent political developments and see signs of a government that may have been in power for too long to reliably deliver further reforms.
- Russia is also viewed in an optimistic light by the EIU, though this forecast would have been generated before recent military manoeuvers and the resulting sanctions that, in our opinion, render the Russian reform outlook much less favourable.

3) Latent competitiveness

The final forecasting strategy takes a passive approach. Instead of contemplating coming structural reforms, it considers the reforms that have already been delivered, but that have not yet fully filtered into the economy.

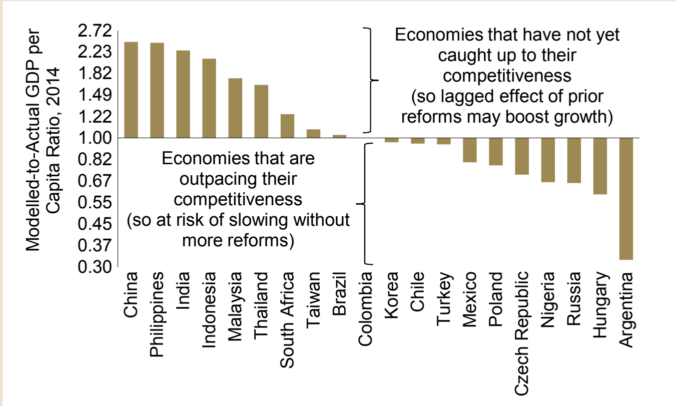
We gauge this by comparing the level of competitiveness of each country to its per capita economic output (Exhibit 25). It is assumed that those countries whose economies lag behind their competitiveness will continue to benefit from the delayed effect of the prior reforms.[7] Given some of the magnitudes involved, we imagine that any such mismatch will gradually fade over a 25-year span, meaning that one-fifth of the mismatch is to be eliminated via faster/slower economic growth during our five-year forecast horizon.

The countries whose level of competitiveness most exceeds their economic output (and thus have the most latent reforms set to benefit their economies) are China, the Philippines, India and Indonesia. At the opposite extreme, Argentina may be living on borrowed time, and Hungary, Russia, Nigeria and Chile also appear to be living beyond their competitive means.[8]

Aggregate forecast

Finally, we combine these three estimation techniques into a single aggregate forecast, providing a final coherent message as to which countries are set to benefit most from structural reforms. The merger is accomplished by assigning a 50% weight to the RBC GAM forecasts, 40% to the EIU forecasts and 10% to the latent competitiveness measure[9] (Exhibit 26).

Exhibit 25: Some economies can grow as prior reforms filter through



Note: Chart shown in log scale. Model estimated based on relationship between Global Competitiveness Index and GDP per capita. Source: IMF, WEF, Haver Analytics, RBC GAM

This aggregate forecast places India in the clear reform lead (at 5.6 percentage points of reform-induced economic growth per year), followed by a chase pack of Indonesia, China, the Philippines, Malaysia, Colombia and Mexico (all clustered between 4.1 and 3.3 percentage points). At the other extreme, Argentina is the only country with a negative reading.

Reform acceleration

There is an important distinction between a country set to continue delivering reforms at a familiar clip – however impressive – and a country upping the pace at which it implements reforms. The former can merely hope to sustain its recent GDP growth rate, while the latter can expect to improve it. A natural extension of our analysis, then, is to evaluate which countries are managing the greatest acceleration of reforms, and thus which are best positioned for accelerating economic growth (or, more conservatively, to buffer their deceleration best).

We do this by comparing the aggregate reform forecasts to the rate of reform delivered over the past several years according to the WEF (Exhibit 27).

In the context of "acceleration," India actually extends its lead, with an astonishing prediction of a 10.0 percentage point acceleration in growth due to prior regressive practices. The other leading nations are dark horses, as they claim their lead less because of the assertiveness of their coming reforms, and more because of how badly they were stumbling backwards before. Second through sixth place are the unlikely group of South Africa, Chile, the Czech Republic, Nigeria and Korea.

[7] To be sure, there are several alternate interpretations. One is that underperforming countries have simply enacted the wrong reforms, and have not yet addressed their binding constraint. Another is that outperforming economies might be viewed as most receptive to future economic reforms since they lag so far behind on this front. A final interpretation is that other factors unrelated to an economy's structural orientation are driving the wedge between GDP per capita and competitiveness, such as proximity to wealthy or poor nations, or as a consequence of resource wealth.

[8] However, most of the countries on this list are commodity exporters, and so can probably sustainably generate output beyond what their competitiveness constraints would otherwise dictate.

[9] The small weight on the latent competitiveness approach is to acknowledge multiple competing interpretations and our lack of confidence that competitiveness and GDP per capita will perfectly converge.

Other notable developments are that China, Indonesia and the Philippines tumble especially far down the “acceleration” rankings, as their new reforms, though impressive, are apparently not as aggressive as previous efforts.

With such large numbers flying about, we should confess to a bit of skepticism. Common sense tells us that it is unlikely that India’s economy will actually grow 10.0 percentage points more quickly per year than in the past, as this would be virtually unprecedented in modern history.[10] It is safer and likely more accurate simply to acknowledge that India’s reform prospects appear to be the best of the bunch and that they should provide a material boost to growth.

Stepping back to a global perspective, it is heartening that 14 out of the 20 examined nations appear set to increase their pace of structural reforms. A new era of reforms does indeed appear to be upon us.

[10] Are these large numbers resulting from a flaw in our methodology? Possibly, but it is not an obvious one. Perhaps India’s previous competitiveness erosion was not in truth as bad as the WEF has calculated, or perhaps it is naïve to assume that the full extent of the coming reforms will manifest in GDP over a mere five years. Alternately, perhaps whatever has kept India’s economy from catching up to its competitiveness in the past will also act as a constraint on this new round of competitiveness reforms.

Financial market implications

How should financial markets respond to all of this? There are two key challenges. The first is that investors are forward-looking, so the market likely already had certain assumptions about the pace of reform delivery in each country. The second challenge is in determining how valuable reforms should theoretically be to financial markets.

Equity response

For the stock market, we imagine there are three types of investors in the market. The first type assumes no reforms are coming. The second type assumes that reforms will come at the global average pace of the past several years. The third type assumes that each country will continue delivering reforms at the pace it delivered them over the past several years. We assign an equal weight to each perspective and calculate what fraction of the reforms for each country is therefore a “surprise” to the market.

As to how stocks should respond, we mechanically assess the appropriate stock market response via the simplifying assumption that an extra percentage point of economic output delivered by reforms is worth an extra percentage point of

Exhibit 26: Aggregate reform forecast

	Aggregate forecast	RBC GAM forecast (50% weight)	EIU forecast (40% weight)	Latent reforms (10% weight)
India	5.6	5.7	6.2	3.3
Indonesia	4.1	3.4	5.4	3.0
China	4.0	4.1	3.8	3.6
Philippines	3.8	3.8	3.8	3.6
Malaysia	3.6	3.1	4.5	2.3
Colombia	3.5	3.7	4.1	0.0
Mexico	3.3	6.0	0.8	-0.9
Turkey	3.0	2.1	4.9	-0.2
Poland	2.9	2.4	4.5	-1.0
Czech Republic	2.7	2.6	3.7	-1.4
Brazil	2.6	3.3	2.4	0.1
South Africa	2.6	2.2	3.4	0.9
Korea	2.5	2.4	3.3	-0.2
Thailand	2.3	1.4	3.5	2.0
Taiwan	1.7	1.8	1.9	0.3
Chile	1.5	2.3	0.9	-0.2
Nigeria	1.3	1.7	1.5	-1.6
Russia	0.8	-0.8	3.4	-1.7
Hungary	0.3	1.0	0.0	-2.1
Argentina	-0.9	-0.6	-0.4	-4.4

Note: Aggregate forecast reflects expected annualized GDP gain in percentage points from structural reforms over the next five years. Source: EIU, WEF, Haver Analytics, RBC GAM

Exhibit 27: Reform accelerators

	Increased pace	Future reforms	WEF past reforms
India	10.0	5.6	-4.4
South Africa	5.7	2.6	-3.1
Chile	4.9	1.5	-3.4
Czech Republic	4.8	2.7	-2.1
Nigeria	4.3	1.3	-3.0
Korea	4.1	2.5	-1.6
Thailand	3.9	2.3	-1.5
Hungary	3.8	0.3	-3.5
Malaysia	3.5	3.6	0.1
Argentina	3.2	-0.9	-4.1
Taiwan	2.9	1.7	-1.2
Mexico	2.5	3.3	0.7
Poland	1.3	2.9	1.6
Colombia	1.1	3.5	2.4
China	-1.4	4.0	5.4
Brazil	-2.1	2.6	4.7
Indonesia	-2.6	4.1	6.8
Turkey	-2.7	3.0	5.7
Russia	-3.4	0.8	4.2
Philippines	-3.9	3.8	7.7

Note: Expected change (ppt) in annualized GDP per capita growth calculated as the acceleration of future structural reforms over the next five years relative to the pace of prior reform delivery estimated by WEF. Source: EIU, WEF, Haver Analytics, RBC GAM earnings. In turn, this can be mapped onto the stock market via the theory that a fairly valued stock market is equal to the present value of all its future earnings.

Using this information, we then calculate the theoretical value to the stock market of each country's reform agenda (Exhibit 28). To summarize the best results, the Indian stock market should receive a cumulative 30% boost from its coming reform agenda, the fair value for the Mexican market increases by around 15%, while Malaysia, South Africa, the Czech Republic, Chile and Korea all get low double-digit benefits.

Of course, some financial markets have already substantially priced in these prospects. As a case in point, the Indian stock market has increased since the beginning of 2014 by almost exactly the amount warranted by India's reforms. Does this mean that it is too late to take advantage of reform-oriented investment opportunities? Not necessarily, as the Indian stock market should have increased by something like 15% last year even without reforms, simply to keep pace with nominal GDP growth. Given this, it is conceivable that half of India's reform windfall remains to be claimed by equity investors.

Structural reforms are an important determinant of stock market gains, but hardly the only one. For resource-exporting countries, the recent decline in global commodity prices arguably overshadows – at least for now – the benefits of structural reforms.

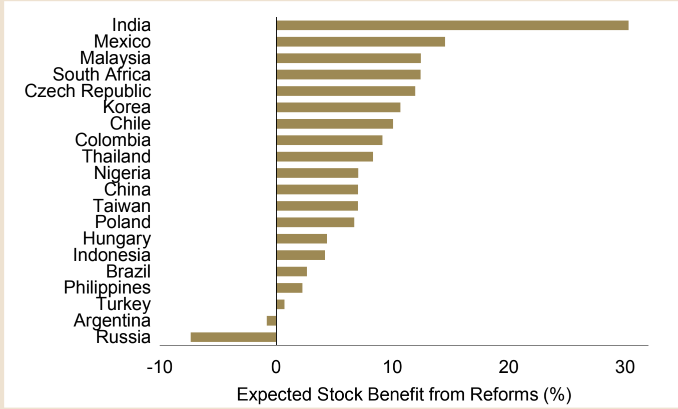
On the other hand, emerging-market equities as a collective are attractively valued even without out reform outlook (Exhibit 29).

Fixed income response

Without question, emerging-market bond prices also rise (and yields drop) in response to growth-enhancing reforms for several reasons:

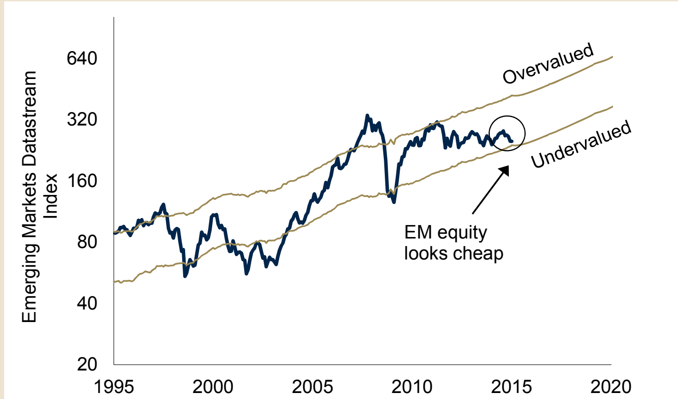
- Better economic growth reduces the debt-to-GDP ratio by increasing the denominator and also improving the fiscal capacity to pay off debt.
- Many reforms directly address fiscal excesses and a country's vulnerability to financial crises, reducing the risk of default and thus the risk premium.
- Reforms that increase a country's financial market depth improve the liquidity of the bond market and so reduce any liquidity premium.
- Reconfiguring a country's central bank to have a stronger mandate to control inflation can reduce the inflation expectation or inflation risk premium built into a bond yield.

Exhibit 28: Theoretical stock market benefit from reforms



Source: EIU, WEF, Haver Analytics, RBC GAM

Exhibit 29: EM equity valuations best since 2009



Note: Upper and lower bands represent 1 standard deviation from EM fair value.
Source: Datastream, RBC GAM

However, it is harder to quantify the precise fixed income benefits, and we leave that effort for another time.[11]

Conclusion

The pendulum is swinging and structural reforms are returning to fashion with emerging-market policymakers. Our work predicts that the majority of the 20 countries examined in this report will manage an acceleration in the pace of their reforms over the coming few years. This is a promising finding, as it will provide a much-needed tailwind for emerging-market growth, potentially with global consequences. Very loosely,[12] we figure this reform acceleration should add 1.2 percentage points annually to emerging-market growth while it lasts, and

[11] One could go some distance by acknowledging that the extra economic output would directly reduce the debt-to-GDP ratio by a certain amount, and then calculate the benefit to yields of a lower debt-to-GDP ratio.

[12] Pretending that our basket of 20 emerging-market economies is representative of the entire emerging-market space.

around half a percentage point to global growth. This is material for a global economy currently growing at between 3% and 4% per year.

Despite significant awareness of the reform trend, we believe the market may nevertheless be surprised by the geographic breadth and extent of the coming reforms, particularly as policymakers are spurred on by the recent loss of economic momentum.

Caveats

A few final caveats are appropriate after this breathless endorsement of emerging-market reform prospects.

First, structural reforms are imprecise instruments, and it is difficult to predict their exact consequences. Some of the loftier forecasts are aggressive for our tastes, despite a seemingly reasonable methodology. In other words, we doubt India and the other leaders will manage quite as much additional growth as the forecasts claim, though we do not doubt the ordinal rankings generated by the forecasts.

Second, structural reforms do not immediately yield additional economic growth. They may in fact do very little over the coming year, conceivably sowing doubt in the minds of pundits and financial markets. Do not lose hope: traction should build in subsequent years.

Third, structural reforms do not operate in a vacuum. Many different variables with implications for emerging-market growth are whizzing to and fro. Some of these affect all emerging economies (ebbing globalization, less robust developed-world demand, the natural deceleration of growth as economies become richer), while some are more idiosyncratic (Exhibit 30). It is not certain that reforms will outright increase economic growth in the emerging-market world, but it is clear that without reforms, emerging-market economies would slow to an even greater extent.

Exhibit 30: Emerging-market economic scorecard

		Reforms	Credit	Resource	Geopolitics
Better prospects	India	✓	–	✓	✓
	South Korea	–	✓	✓	✓
	Poland	–	✓	✓	–
	Mexico	✓	✓	X	–
	China	✓	X	✓	✓
	Indonesia	✓	–	X	✓
	Turkey	✓	X	✓	–
	Brazil	–	–	X	✓
	Nigeria	–	✓	X	–
	South Africa	–	–	X	–
	Ukraine	–	X	–	X
Worse prospects	Russia	X	X	X	X

Note: Credit "X" means credit curtailment. Resource "X" means commodity exporter. Source: RBC GAM

APPENDIX A: FORECASTING METHODOLOGY AND DETAILS

The RBC GAM structural reform forecasts are generated based on a framework of 12 WEF competitiveness pillars (as previously detailed in Exhibit 18).

For each country, we assign a score of +2 to -2 for each competitiveness pillar, indicating whether we expect a country's competitive standing in that pillar to substantially outpace the recent global trend rate of improvement, moderately outpace it, proceed in line with the prior global trend, moderately underperform it or substantially underperform it.

A substantial outperformance is assumed to represent a competitiveness improvement in line with the 90th percentile of competitiveness improvements for that pillar over the prior several years. A moderate outperformance is placed in the 70th percentile, proceeding in line receives the 50th percentile change, a moderate underperformance receives the 30th percentile change and a substantial underperformance receives the 10th percentile change.

We then add these pillars up (with the appropriate WEF weighting) to achieve a competitiveness forecast for each country.

Finally, we convert these forecasts of changing competitiveness into forecasts of changing GDP via an econometric regression that assesses the usual relationship between competitiveness and GDP per capita across the world's countries.

Our forecasts for every pillar in each country are shown in Exhibit A. The pillar forecasts themselves are informed by a diverse set of sources:

- The campaign platforms of recently elected politicians
- Other political pledges
- Recent budgets
- Political precedent (such as the bold reforms of new Indian Prime Minister Modi when he was previously Governor of Gujarat)
- Third-party analysis from research firms and investment dealers
- IMF and OECD reform recommendations
- Our assessment of obvious structural constraints that a rational politician would seek to address

Exhibit A: Structural reforms disaggregation

	1 Institut.	2 Infra-structure	3 Macro	4 Health & educ.	5 Higher educ.	6 Product market	7 Labor market	8 Fin. market	9 Tech.	10 Market size	11 Business sophist.	12 Innov.
Mexico	↑	↑	↑	↑	↑	⬆	↑	↑	–	↑	↑	↑
India	⬆	⬆	–	–	–	⬆	⬆	↑	–	–	↑	↑
China	⬆	↑	↓	–	–	⬆	↑	⬆	–	–	↑	↑
Philippines	↑	⬆	–	–	–	⬆	–	–	–	–	–	–
Colombia	⬆	↑	–	–	–	↑	–	↑	–	–	–	–
Indonesia	↑	⬆	–	↑	↑	↓	–	–	–	–	–	↑
Brazil	↑	↑	–	↓	–	↑	↑	↑	–	–	–	–
Malaysia	↑	↑	–	–	–	⬆	–	↑	–	–	–	–
Czech	↑	–	–	↑	–	–	↑	–	–	–	–	–
Poland	–	–	–	–	–	↑	↑	–	–	–	–	–
Korea	⬆	–	–	–	–	↑	–	–	–	–	–	–
Chile	↑	–	–	↑	↑	↓	↓	–	–	–	–	↑
S. Africa	↓	–	–	–	–	–	↑	–	–	–	–	↑
Turkey	↓	–	↓	↑	–	↑	↑	–	–	–	–	↑
Taiwan	–	–	–	–	–	↑	–	–	–	–	–	–
Nigeria	⬇	↑	↓	–	–	↑	–	–	–	–	–	–
Thailand	⬇	–	–	–	–	↑	–	–	–	–	–	–
Hungary	⬇	–	–	–	–	–	↑	↓	–	–	–	–
Argentina	↓	↓	⬇	–	–	–	–	↓	–	–	–	–
Russia	↓	–	⬇	–	–	⬇	–	↓	–	–	–	–

Note: RBC GAM forecasts only, without momentum effect. Source: RBC GAM or EIU forecast

RBC Global
Asset Management