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Why structural reforms are EM's last stand

- In our annual update on indicators of structural performance, we find many EM economies displaying an unsurprising and yet disappointing slippage in structural strength. This is disappointing particularly in the current cycle, which is characterized by pervasive demand weakness. With limited fiscal and monetary policy room available, and the efficacy of demand supportive policies suspect, EM economies have little other than the pursuit of structural reforms as the way to counter the ongoing growth malaise.

- Looking at the overall scores, Asian stalwarts Hong Kong, Singapore, South Korea, and Taiwan take up the top of the table of the structural performance scorecard. It is striking how these economies score high almost in all categories, underscoring the point for economies aspiring to achieve high levels of prosperity that comprehensive, across-the-board reforms are needed as opposed to piecemeal efforts.

- At the other end of the spectrum, Argentina, Ukraine, and Venezuela remain the bottom ranked countries. These economies are characterized by very poor quality of institutions, weak financial and goods markets, and high level of state intervention in the economy.

- There have been some striking changes to structural rankings between 2007 and 2014. India has seen marked deterioration in its scores, ranging from education to financial and goods markets. This contrasts with its relatively high economic growth performance during that period, but is consistent with the view that the impetus for high quality growth had slipped considerably in recent years. We will watch with interest if matters improve under the aegis of the new government, which came to power in mid-2014.

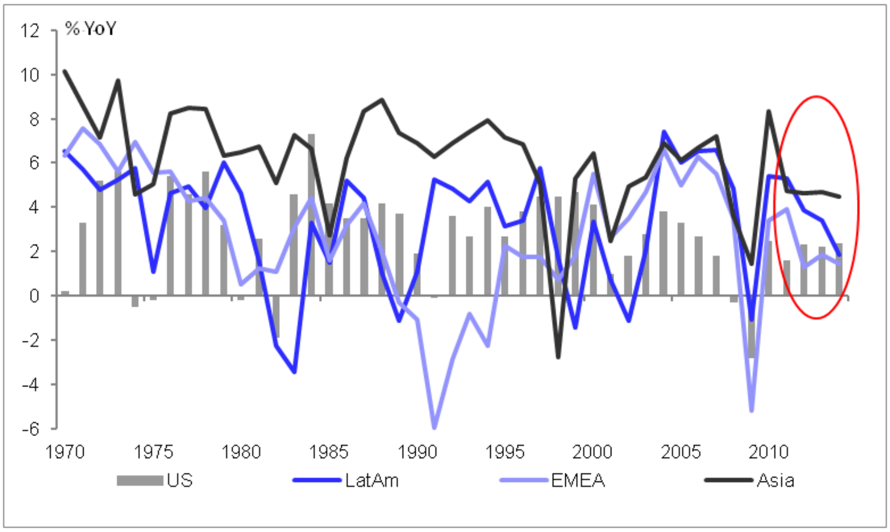
- While there is considerable worry about China’s slowing growth momentum and debt problems, we take heart from its steady improvement in structural strength. While much more needs to be done, there has been encouraging improvement in its institutional quality, infrastructure, financial market, as well as goods and labor markets. Some slippage in economic openness however is a source of concern.

- In terms of regions, Asia remains the most advanced on structural quality scores and Latin America the least advanced. EMEA is in the middle of the pack but there is divergence within EMEA: Czech Republic, Israel, and Poland rank much higher than Russia, Romania and South Africa.

Introduction

As terms of trade have worsened and China has slowed, there has been a marked slowdown among EM economies in recent years. With limited fiscal and monetary policy room available, and the efficacy of demand supportive policies suspect, EM economies have little other than the pursuit of structural reforms as the way to counter the ongoing growth malaise.

EM economies' growth rate has slowed during the course of this decade

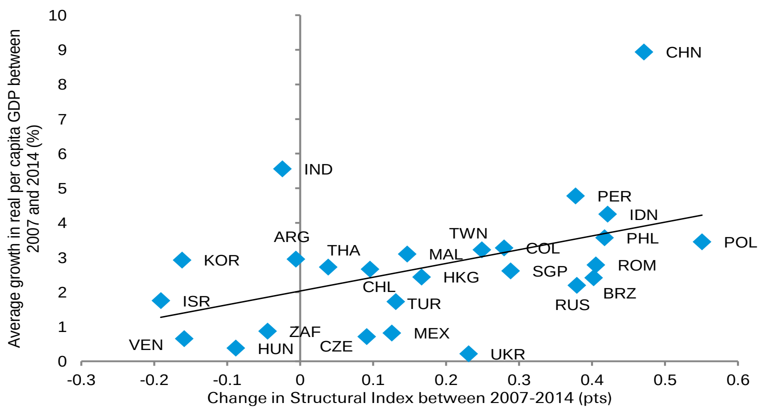


Source: Deutsche Bank

background, we have prepared our annual update on indicators of structural performance. We find many EM economies displaying an unsurprising and yet disappointing slippage in structural strength in recent years. This is disappointing particularly in the current cycle, which is characterized by pervasive demand weakness.

Empirical evidence from long term studies of economic growth show that most EM economies have grown on the back of strong accumulation and deployment of capital (by channeling high savings rates) and labor (taking advantage of favorable demographics), as opposed to improvements in total factor productivity (TFP). There is also clear cross-country evidence showing that structural reforms are crucial for boosting productivity growth. As the global drag persists, productivity-boosting measures are therefore more important than ever to maintain strong growth. The following chart shows clearly that improvement in structural scores tend to be closely associated with higher real per capita GDP growth.

GDP growth per capita vs. structural performance: a positive relationship



Source: Deutsche Bank

Analytical framework

While structural reform has become a popular catch-all term to encapsulate almost everything outside the spheres of monetary and fiscal policy, and has been used widely in this broad context, in our view more work needs to be done on systematically analyzing the progress of specific structural factors and identifying the most important reform priorities in different countries.

With this in mind, and with the additional aim of creating a consistent framework to compare structural performance across a broad range of EM countries, we construct a synthetic index – comprising of various structural pillars – and use this to objectively assess structural performance across 26 EM economies between 2007 and 2014. Further, by analyzing the components of the index we are also able to pinpoint the most likely pressure points within EM.

While the precise choice of indicators used to capture the different facets of structural performance is constrained by data availability, we look for indicators that are readily available and comparable across countries, capturing a wide range of structural issues that impact potential growth.

To provide an objective assessment of structural performance, we choose 18 variables covering development over 8 key structural pillars. We normalize each variable at its 2007 level using the mean and standard deviation across our selection of countries. We then average across all the normalized variables within a pillar to obtain a country's sub-index value for that structural pillar. To create the composite index of overall structural performance for each country, we simply average across these sub-index values (corresponding to the 8 structural pillars). The index can therefore be interpreted as the relative structural performance compared to the average EM in 2007. The composite index values also enable us to rank countries from best to worst in terms of the structural setup. We also create an equivalent index using the 2014 values of the indicators, which would enable us to compare structural performance between 2007 and 2014.

Full details on the variables used and methodology are provided in the Appendix I.

Results summary

Looking at the overall scores, Asian stalwarts Hong Kong, Singapore, South Korea, and Taiwan take up the top of the table of the structural performance scorecard. It is striking how these economies score high almost in all categories, underscoring the point for economies aspiring to achieve high levels of prosperity that comprehensive, across-the-board reforms are needed as opposed to piecemeal efforts.

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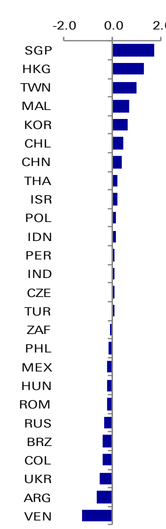
In terms of regions, Asia remains the most advanced on structural quality scores and Latin America the least advanced. EMEA is in the middle of the pack but there is divergence within EMEA: Czech Republic, Israel, and Poland rank much higher than Russia, Romania and South Africa.

EM structural performance 2014: Summary table (countries ranked by the value of the overall index, with the most structurally developed countries at the top)

	Institutional quality	Infrastructure	Education	Financial market	Economic openness	Goods market	State intervention	Labour market	Overall
SGP	1.69	2.75	2.90	1.67	1.80	1.91	0.82	0.56	1.76
HKG	1.61	2.90	1.61	1.78	-0.07	1.48	1.03	0.67	1.37
TWN	1.12	2.00	2.17	0.45	-0.31	1.35	0.89	0.55	1.03
MAL	0.42	1.62	1.25	1.36	-0.33	1.65	0.31	0.54	0.85
KOR	0.76	1.91	1.67	-1.02	0.04	0.50	0.57	0.55	0.62
CHN	-0.74	0.79	0.62	-0.38	0.81	0.08	0.11	2.72	0.50
CHL	1.25	0.68	0.62		0.00	0.71	0.30	0.00	0.50
THA	-0.55	0.70	0.43	0.04	-0.03	0.33	0.77	0.91	0.33
POL	0.90	0.35	1.22	0.03	0.79	0.38	-1.28	-0.02	0.29
IDN	-0.42	0.48	0.47	-0.17	0.31	0.35	0.77	0.54	0.29
ISR	0.63	1.13	0.95	0.38	-0.13	-0.13	-0.69	-0.09	0.26
CZE	0.95	0.88	1.21	-0.17	0.61	0.09	-2.09	0.17	0.21
PER	-0.44	-0.39	-0.65	-0.12	1.24	0.20	0.81	0.54	0.15
TUR	-0.33	0.67	0.40	-0.50	0.33	0.65	-0.87	-0.08	0.03
PHL	-0.39	-0.44	0.02	-0.28	-0.17	-0.32	1.13	0.37	-0.01
IND	-0.50	-0.35	-0.38	-0.32	0.39	-0.16	0.46	0.78	-0.01
ROM	0.04	-0.27	0.01	-0.62	0.73	-0.04	-0.61	0.36	-0.05
RUS	-0.99	0.96	1.07	-1.45	0.28	-0.32	-1.02	0.57	-0.11
ZAF	0.10	0.40	-1.23	1.05	-0.06	0.88	-0.06	-2.10	-0.13
HUN	0.47	0.68	0.45	-0.87	0.18	0.02	-1.95	-0.23	-0.16
MEX	-0.45	0.29	-0.35	-0.58	-0.22	-0.31	0.07	0.07	-0.19
BRZ	-0.22	0.07	0.52	-0.37	-0.60	-0.90	-0.75	0.11	-0.27
COL	-0.50	-0.27	-0.66	-0.75	0.02	-0.65	-0.06	-0.16	-0.38
UKR	-1.12	0.25	1.29	-1.39	0.22	-0.71	-1.74	0.06	-0.39
ARG	-0.60	-0.39	0.54	-2.05	-0.43	-2.03	-0.32	0.15	-0.64
VEN	-1.81	-1.33	-0.26	-2.23	-0.64	-2.51	-1.20	-0.18	-1.27
Asia average	0.30	1.24	1.07	0.31	0.24	0.71	0.68	0.82	0.67
EMEA average	0.07	0.56	0.60	-0.39	0.33	0.09	-1.14	-0.15	-0.01
LatAm average	-0.39	-0.19	-0.03	-0.82	-0.09	-0.78	-0.16	0.08	-0.30
EM average	0.03	0.62	0.61	-0.24	0.18	0.10	-0.18	0.28	0.18



value >= 0.15
value >-0.15 and <0.15
value <=-0.15

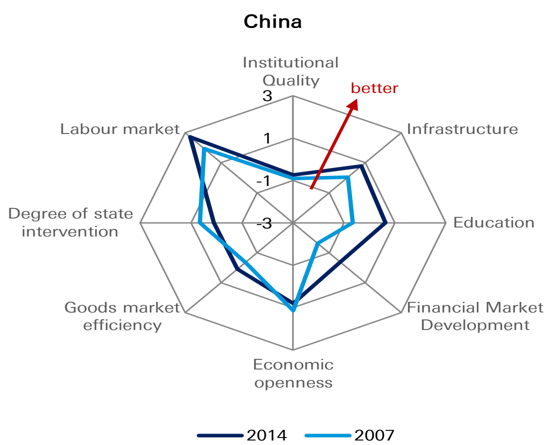
Source: Deutsche Bank

Selected country snapshots

China

The world's second largest economy has come a long way in recent decades, characterized by exceptionally strong growth and overall development. Much of China's growth came from large-scale mobilization of savings and labor toward construction, infrastructure, and manufacturing, but at the same time the economy has also delivered impressive productivity growth. While we have grave concerns about prevailing headwinds such as excess capacity and ballooning debt burden, we see continued signs of economic rebalancing and progress in moving up the value chain by Chinese manufacturers. In our composite scores, China has delivered impressive gains in education, infrastructure, labor market, and financial market liberalization. While much more can be accomplished in improving institutions and opening up the economy, as well as reducing state intervention, China's overall performance in delivering structural reforms is striking by its pace and broad-based nature. A spider chart usefully captures the economy's achievements along various structural pillars between 2007 and 2014.

China's macro troubles overshadow genuine structural improvements in recent years



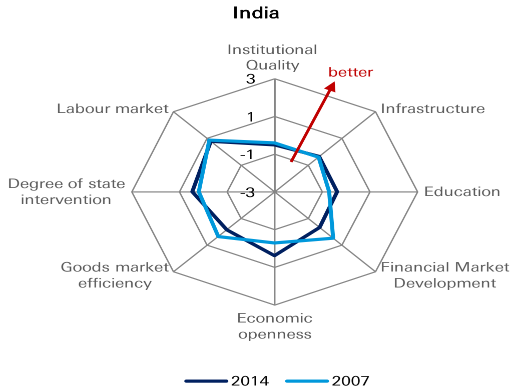
Source: Deutsche Bank

India

Despite its impressive growth record over the past decade and a half, India's structural deficiencies are well known, holding back its potential. Infrastructure is poor, goods market efficiency suffers from excessive regulation, labor market is inflexible, little is spent on health and education, and both the economy and financial markets have been hampered by heavy handed state intervention.

Our analyses show that not only is India in a mediocre cohort with respect to its structural strength, it has in fact slipped in recent years. While education attainment has improved marginally and the economy has undergone a few bouts of liberalization measures, there have been setbacks in areas such as goods market efficiency, labor and financial markets, along with no discernible improvement in institutional quality. India scores particularly poorly on infrastructure.

India has a long road of structural improvement ahead



Source: Deutsche Bank

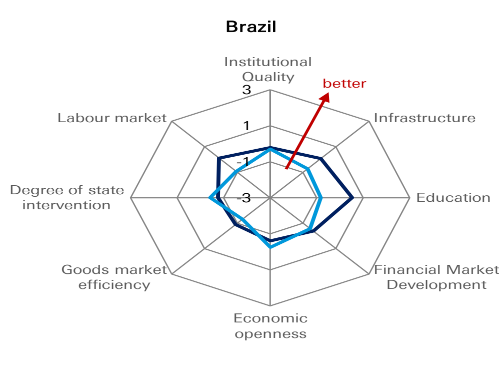
It is too early to tell if the new government that came to power in mid-2014 will be able to improve India's structural scores expeditiously. Efforts to maintain fiscal discipline, raise the efficiency of cash transfer to the poor, reduce wasteful subsidies, tackle corruption, improve health indicators, pass the much-belated Goods and Services Tax legislation, widen the scope of privatization, liberalize the labor market, break down goods market cartels, pass business friendly laws, etc are welcome, but clearly the to-do list is arduously long.

Furthermore, the structural scores would rise only when such measures are pushed through successfully, many of which would likely receive pushback from vested interests and face numerous other implementation risks, especially related to the political calendar. We appreciate the goal of the government to improve India's ranking in the cost of doing business surveys, but would need to see a broader range reform initiatives in order to anticipate decisive improvement in structural rankings.

Brazil

Just like China, Brazil is experiencing considerable macro stress (owing primarily to the commodity bust, lapses in governance, and fiscal profligacy), which is contrasted by fairly impressive structural improvement. We see sizeable gains in education, infrastructure, and labor markets in recent years, with additional improvements in goods market efficiency and financial markets.

Macro has deteriorated sharply, but the economy has gained structural strength in recent years



Source: Deutsche Bank

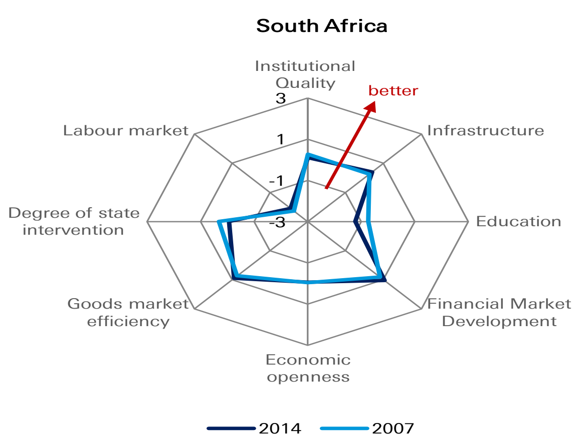
Brazil has targeted the education sector aggressively over the past decade, with some tangible gains. Thanks to Bolsa Familia (targeted support to households for healthcare and education) and other programs, not only has the education spending to GDP ratio increased from sub-5 to nearly 6% during the course of this decade, education related outcomes have improved as well (including in areas such as school participation rate and grade progression, especially for girls).

Skeptics would argue that such gains have been offset by concurrent fiscal slippage and lapses in governance. Also, some of the labor market improvement may also have been a function of fiscal profligacy that boosted employment artificially. Deeper labor market reforms and a focus on test scores for students (as opposed to spending per student) are warranted to take Brazil on a higher plane of structural strength. But just like the “middle income trap” phenomenon, making it to the next level of structural strength will be challenging. Ongoing economic and political stress will most likely slow down progress, in our view.

South Africa

There has been no discernible progress during the period of analysis for South Africa, with glaring deficiencies in education and labor markets continuing to fester. At the same time, growth has weakened. An uncertain policy environment, focus on (inefficient) redistributive policies and nationalization have held back South Africa in recent years, in our view. If anything, legislation has become more restrictive, increasing the cost of doing business. Multiple centers of policy making have made the system of governance inefficient and confusing. The quality of public spending has deteriorated, given reduced share of capital spending by the public sector. The ongoing economic and political headwinds may lead to further worsening of a range of structural scores and rankings.

Stagnant South Africa

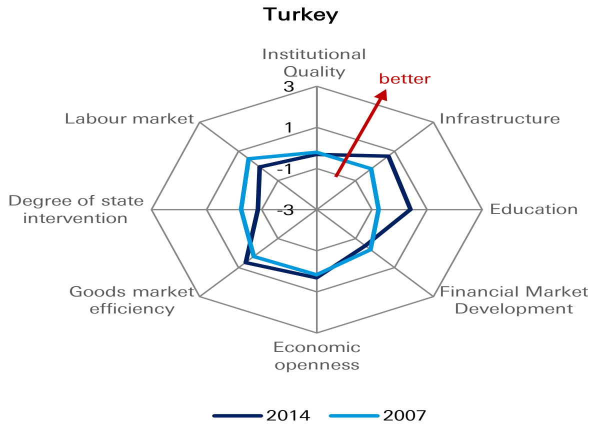


Source: Deutsche Bank

Turkey

On a net basis, Turkey, like South Africa, has been stagnant in our rankings. There has been some progress in education and infrastructure, but the labor market has weakened, while state intervention has increased. We would expect the institutional quality markers, having remained mostly stagnant during 2007-14, to worsen as more data are released, reflecting recent developments.

Turkey's mixed track record

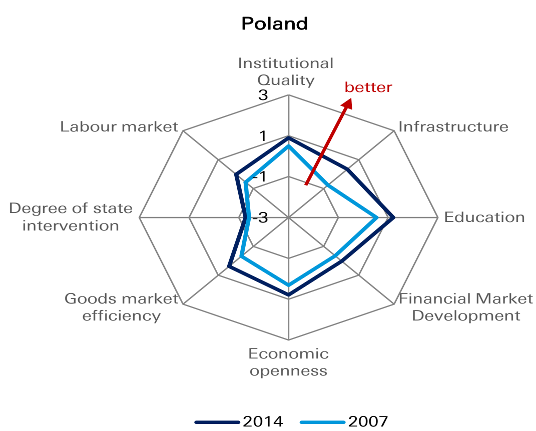


Source: Deutsche Bank

Poland

Poland saw significant improvement in its overall structural index between 2007 and 2014, driven by growth across almost all structural pillars; it is now one of the more structurally developed countries in EM. In particular, Poland has in recent years been able to improve infrastructure, enact education reform, open its markets and further its integration in the German supply chain. This structural improvement has been largely due to Poland's good performance in absorbing sizable EU structural funds, of which it is the biggest beneficiary (for the coming 7-year budgeting period, Poland has been allocated nearly EUR 80bn in EU structural funds). However, the policies of the new PiS government (not captured in this update) pose a risk, and it will be important to observe if there is any deterioration in institutional quality and degree of state intervention in the coming years.

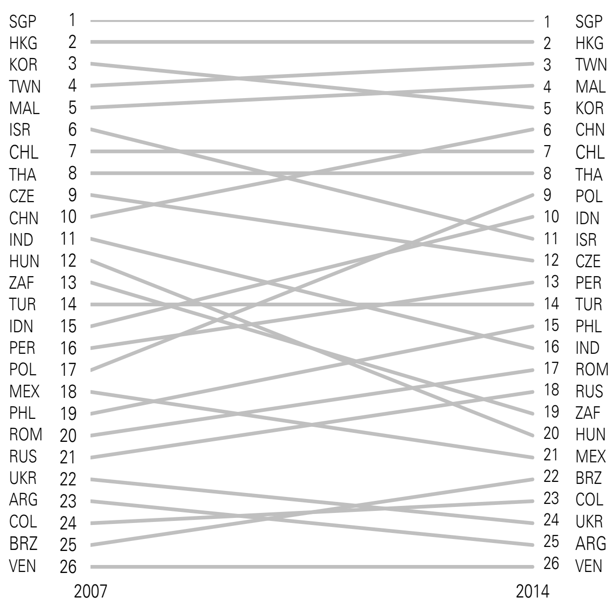
Poland: broad-based structural improvement



Source: Deutsche Bank

Among other economies, Latin America (and Ukraine) look vulnerable, while Thailand, Korea and Taiwan look reasonably sound. Hungary and Romania are characterized by sound macro narratives (among the best), but still there are many structural issues that need to be sorted out. ('Spider' charts for all countries are presented in Appendix II).

Change in structural performance rank between 2007 and 2014: Poland one of the big winners

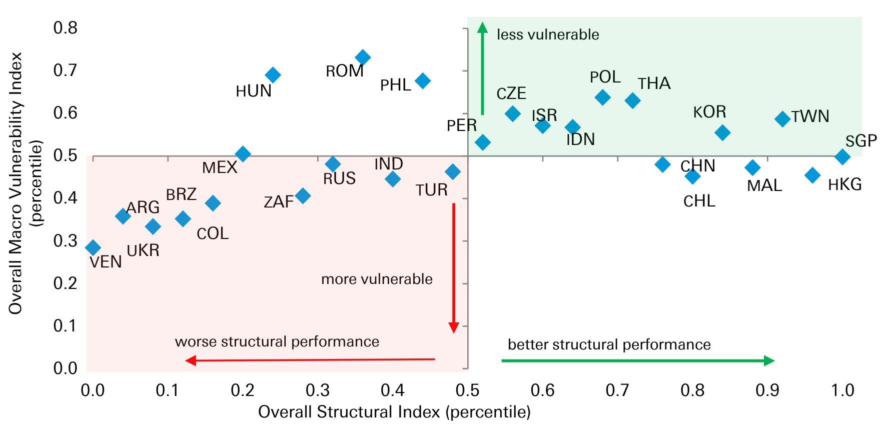


Source: Deutsche Bank

Structural vs. macro vulnerability

We have already made the point that structural progress is associated with higher income growth. Below we also show that good structural performance tends to go hand in hand with lower macro vulnerability scores (derived from our Emerging Market Vulnerability Monitor). This chart establishes a useful link between structural factors (that are seen as drivers of long term performance) and macro risk parameters (short-term oriented). We believe that structural scores should play a role in asset allocation and investment strategy not just for the long term, but also in near term considerations.

Structural vs. macro vulnerability



Source: Deutsche Bank

Change in the Structural score, 2014 vs. 2007 (ranked from most improved at the top to least improved at the bottom)

	Institutional quality	Infrastructure	Education	Financial market	Economic openness	Goods market	State intervention	Labour market	Overall
RUS	0.40	1.11	0.68	0.37	0.47	0.70	0.14	0.55	0.55
ROM	0.16	0.74	1.28	1.27	-0.32	0.42	-0.55	0.78	0.47
CZE	0.40	1.49	1.01	-0.26	0.37	-0.45	-0.11	0.92	0.42
MAL	0.38	0.61	0.73	0.41	0.29	0.32	0.01	0.59	0.42
POL	0.08	0.88	0.21	0.09	1.56	0.26	0.01	0.15	0.41
IDN	0.08	0.80	1.35	0.21	-0.35	0.40	-0.32	1.05	0.40
UKR	0.11	1.33	1.17	-0.14	0.45	0.49	-0.40	0.02	0.38
PHL	0.14	0.78	0.73	-0.26	0.23	0.74	-0.10	0.76	0.38
THA	0.08	0.64	1.38	-0.24	0.49	0.26	-0.41	0.11	0.29
BRZ	0.17	0.63	0.06	-0.27	0.72	0.43	0.10	0.40	0.28
CHN	0.34	0.73	-0.01	0.63	-0.22	0.31	-0.06	0.27	0.25
ISR	-0.44	0.97	1.72	-0.56	0.47	0.53	-0.20	-0.65	0.23
HKG	-0.02	0.89	0.77	-0.42	0.06	-0.11	-0.02	0.19	0.17
CHL	0.18	0.43	0.16	0.15	-0.06	0.37	-0.25	0.20	0.15
SGP	-0.11	0.88	1.15	-0.26	0.17	0.42	-0.61	-0.58	0.13
HUN	-0.09	0.61	0.22	-0.18	0.36	0.08	-0.23	0.23	0.13
PER	0.01	0.12	1.19	-0.38	-0.22	-0.14	-0.17	0.35	0.10
TUR	0.08	0.61	0.39	-0.20	0.46	-0.20	-0.27	-0.13	0.09
TWN	-0.01	-0.10	0.58	-0.03	-0.30	-0.06	-0.13	0.36	0.04
MEX	-0.18	0.37	0.84	-0.60	0.00	-0.37	-0.68	0.57	-0.01
COL	-0.10	0.05	0.32	-0.79	0.67	-0.51	0.28	-0.11	-0.02
ARG	-0.16	0.13	-0.49	0.23	-0.03	0.15	-0.37	0.17	-0.04
KOR	-0.44	0.67	0.02	-0.95	-0.25	0.22	0.01	0.01	-0.09
ZAF	-0.16	-0.13	0.98	-1.00	-0.30	-0.44	-0.27	0.06	-0.16
VEN	-0.08	0.50	0.09	-1.77	0.14	-0.39	-0.07	0.30	-0.16
IND	0.06	0.35	-0.65	-1.14	-0.07	-0.95	0.09	0.78	-0.19
Asia average	0.13	0.60	0.63	-0.11	0.11	0.02	-0.13	0.36	0.20
EMEA average	-0.05	0.77	0.47	-0.28	0.36	0.18	-0.18	0.04	0.16
LatAm average	-0.01	0.45	0.77	-0.36	0.06	0.10	-0.24	0.49	0.16
EM average	0.03	0.62	0.61	-0.24	0.18	0.10	-0.18	0.28	0.18

difference >=0.25
difference >0 and <0.25
difference < 0

Source: Deutsche Bank

APPENDIX I

Listed are the variables that are included in this study:

Institutional quality: To assess institutional quality we use the six Worldwide Governance Indicators (WGI) published by the World Bank. These include control of corruption, government effectiveness, regulatory quality, rule of law, voice and accountability, and political stability. The variables capture a nation's legal, bureaucratic and administrative setup – and the extent of property rights protection – which are all important determinants of potential growth through their impact on investment decisions and the operation of businesses. Excessive regulation and corruption are deterrents for investment and also discourage inflows of foreign funds, while an efficient and stable government can promote economic development.

Infrastructure is crucial for the efficient functioning of an economy, for promoting trade and connectivity, and for the overall development of emerging economies. For this pillar, we use the infrastructure component from the World Economic Forum's Global Competitiveness Index (GCI). This infrastructure sub-index captures the quality and availability of a country's transport, electricity and communication systems.

Education is an important determinant of labor productivity, which in turn impacts long-term growth potential; lack of proper education provision could form a deterrent to moving up the value chain and producing greater value-added products. To measure developments in the educational sphere we use the GCI sub-indices capturing both primary and higher education (including vocational training, important for updating workers' skills); these encompass the reach (enrollment) and the quality of education.

A sound and well developed **financial sector** which provides sufficient access to credit and other financial services is another vital factor in the efficient allocation of capital (both local and foreign), and can have an impact on potential growth. To measure this, we use the sub-index from the GCI, which covers the availability and affordability of financial services, ease of access to loans and venture capital, soundness of banks and regulation of security exchanges.

Economic openness: To capture the degree of economic openness, we use data on a country's openness to investment (FDI as a % of GDP), the extent of trade openness (measured by 100 minus the trade-weighted average tariff percentage), and the improvement in the country's export market share since 2002. Open goods markets and free capital flows are widely believed to have a positive impact on developing nations, while distortionary taxes and restrictive government policies limit trade, impede business activity and reduce competitiveness of firms.

A properly functioning **goods market** promotes competition between firms, increases productivity and enables countries to generate the correct mix of products; goods market efficiency is important for allowing countries to respond to changing market conditions and will be a factor in determining the ability to capitalize on the eventual pickup in global demand. To measure the various facets of this pillar we use another GCI sub-index which includes the intensity of local competition, the effectiveness of antitrust policy, the level of tax rates and the ease of starting a business.

While **state intervention** has a role to play in any emerging country, excessive government involvement in the economy is generally accompanied by excessive regulation, bureaucracy, corruption and a distortion of incentives. To capture the degree of state intervention in the economy, we use two variables: the size of government transfers and subsidies as a proportion of GDP (published by the Fraser Institute as part of its Economic Freedom of the World index), and government expenditure as a percentage of GDP (published by the IMF). These two variables capture the extent to which economies rely on the state, and the related political processes, rather than the private sphere to allocate resources.

Labor market: To assess efficiency of the labor market – another central factor in the determination of potential GDP – and the productivity improvements of the labor force, we use the employment rate and the percentage change in output per employed person since 2002.

Construction of the structural performance index

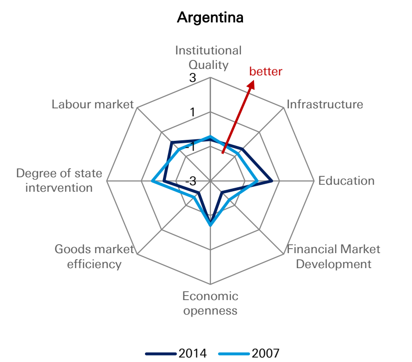
Each of the variables listed within the 8 pillars noted above is set up such that larger values imply better structural performance. We use these variables to first construct the overall structural performance index for 2007, our base year. We normalize each variable at its 2007 level using the mean and standard deviation across our selection of 26 EM countries. We then average across all the normalized variables within a pillar to obtain a country's sub-index value for that structural pillar. To create the composite index of overall structural performance for each country, we simply average across these sub-index values (corresponding to the 8 structural pillars). The index can therefore be interpreted as the relative structural performance compared to the average EM in 2007. The composite index values also enable us to rank countries from best to worst in terms of the structural setup.

We also create an equivalent index using the 2014 values of the indicators, which would enable us to compare structural performance between 2007 and 2014. It is important to note here that in the normalization process for the indicators in the 2014 index we still use the 2007 average across countries. Therefore, the index can still be interpreted as the performance relative to the average EM in 2007, and we have a fixed benchmark to measure structural progress, compare progress across countries and also to evaluate the aggregate structural improvement across EM over the six years.

We do acknowledge that there are facets of structural reform that our index does not cover. We do not include demographics, for example, as we aim to capture those spheres of structural performance that can generally be impacted significantly by policy. The index also does not address other vulnerabilities such as external imbalances, which we consider in the analysis of our complementary EM Vulnerability Monitor. Further, we do not attempt to measure the impact of the different structural components on potential GDP nor do we accordingly weight the different structural pillars in the construction of the overall index. This can be analyzed in future updates, but our aim here is to provide a basic objective framework to track and compare structural reform impetus across countries, and to provide an initial assessment of structural performance within EM.

APPENDIX II

Argentina



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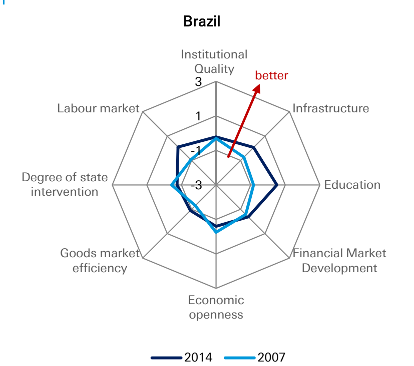
Brazil



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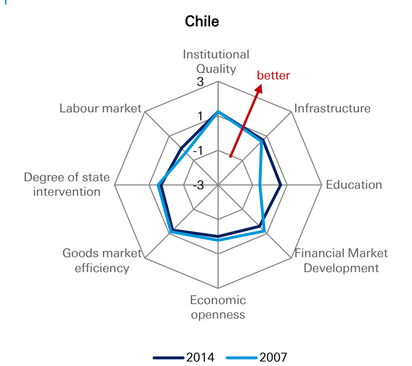

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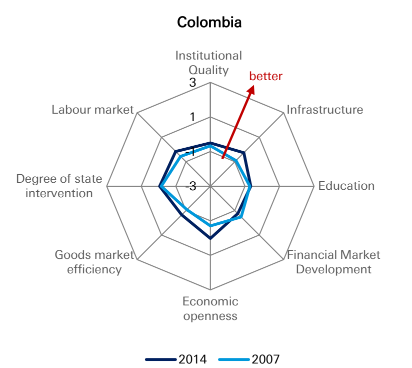

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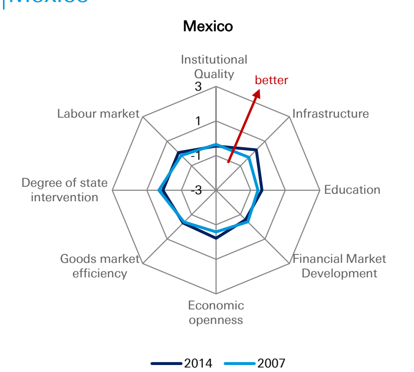

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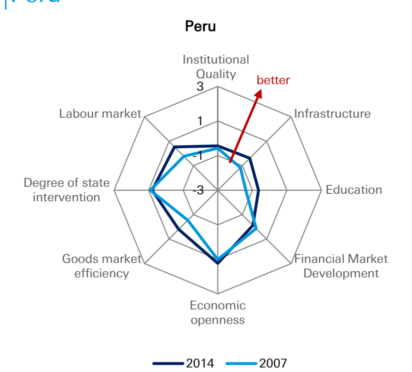

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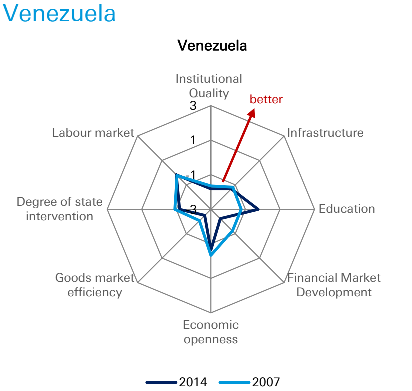
Venezuela



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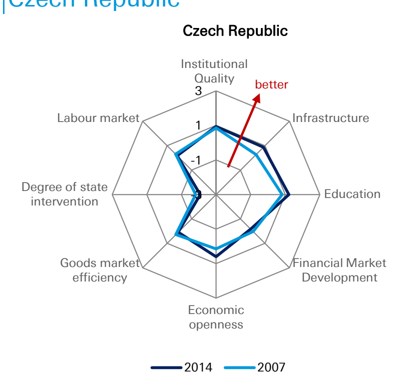

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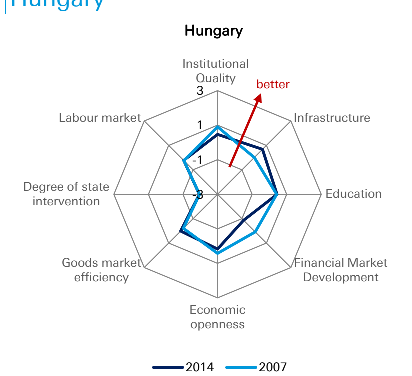
Hungary



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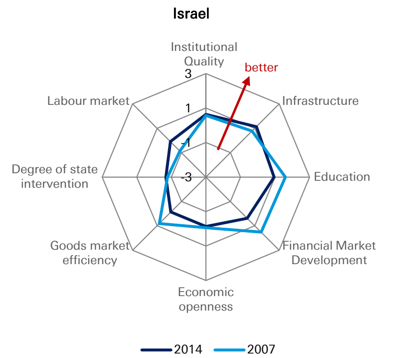
Israel



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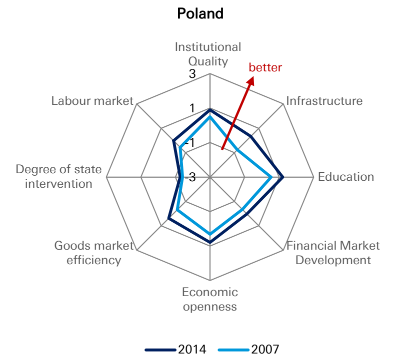

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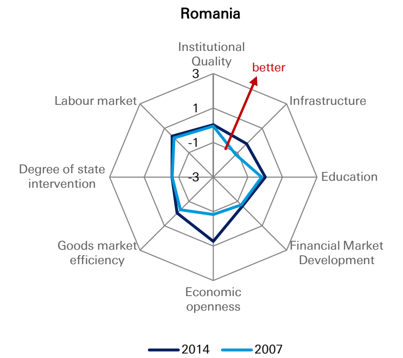
Romania



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Russia

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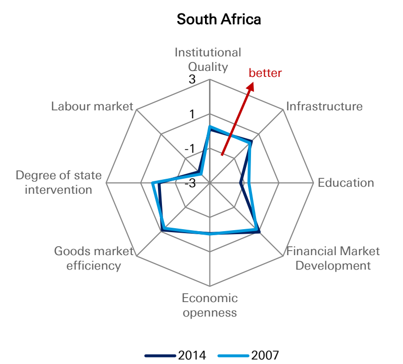
South Africa



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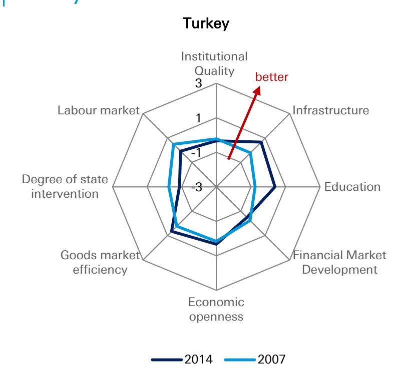

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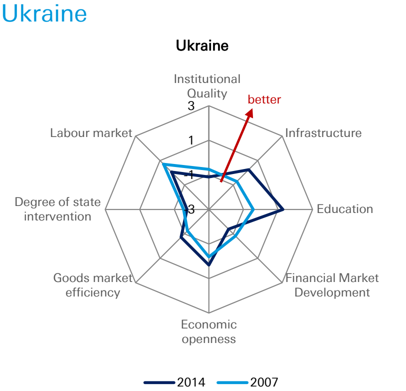
Ukraine



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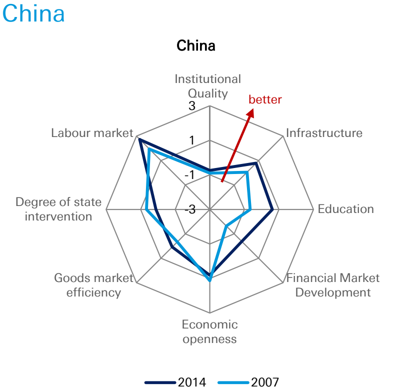

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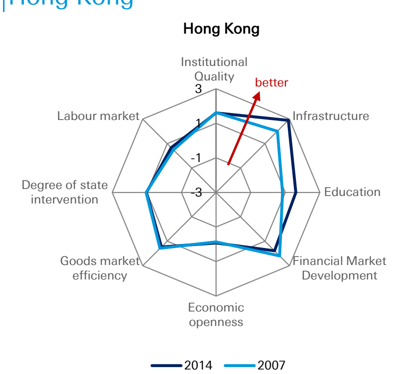

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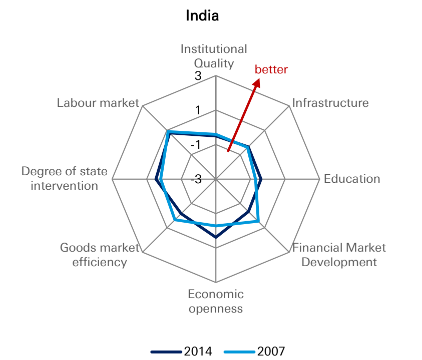

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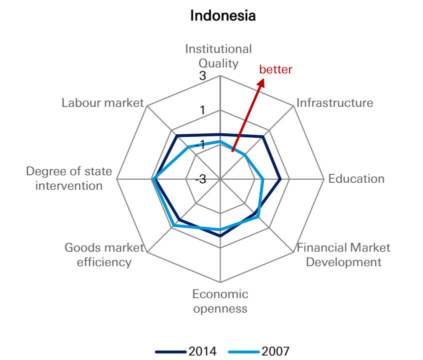
Indonesia



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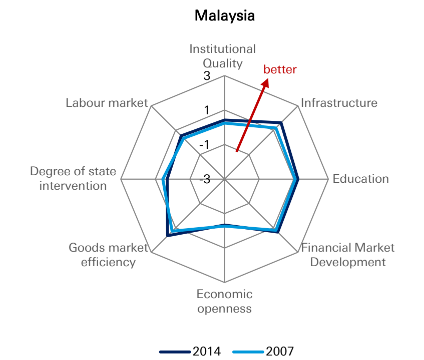
Malaysia



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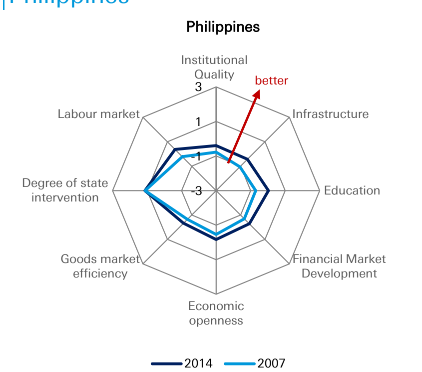
Philippines



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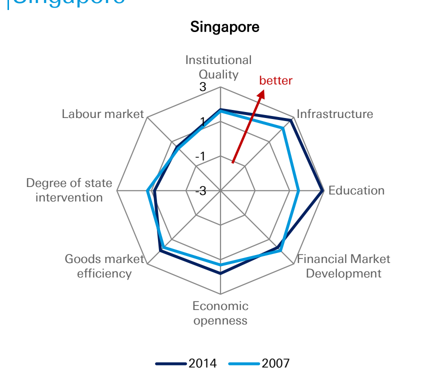

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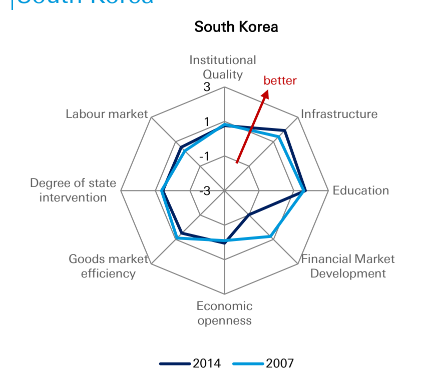
South Korea



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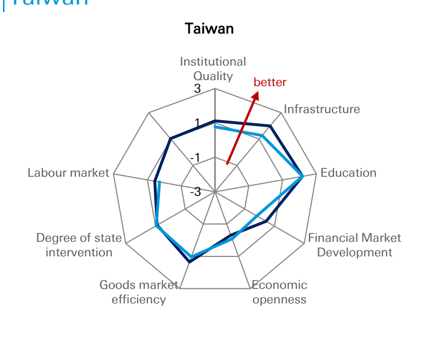

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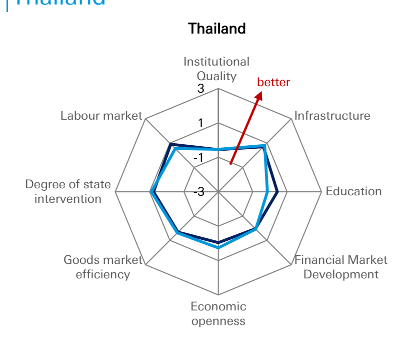
Thailand



Source: Deutsche Bank

Appendix 1

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