KPMG's International Development Assistance Services in collaboration with researchers from the Overseas Development Institute (ODI)

2012 Change Readiness Index

Assessing countries' ability to manage change and cultivate opportunity

kpmg.com/changereadiness

KPMG INTERNATIONAL

Contents

Foreword 1

1. Introduction to the Change Readiness Index 4

1.1 Determining capability for managing change 5

1.2 Building the Index 6

1.3 Filling a gap 8

1.4 A valuable tool 9

2. 2012 Change Readiness Index Results 10

2.1 Case Study: Chile and Brazil 11

2.2 Case Study: Thailand and Malaysia 12

2.3 Case Study: Ghana and Zimbabwe 13

2.4 Other results of interest 14

3. Conclusions and Implications 15

Appendix 1: Measuring Change Readiness 16

Appendix 2: Methodology 19

Appendix 3: Weighting 20

© 2012 KPMG International Cooperative ("KPMG International"), a Swiss entity. Member firms of the KPMG network of independent firms are affiliated with KPMG International. KPMG International provides no client services. All rights reserved.

Foreword

Around the world, countries, businesses and institutions are undergoing unprecedented change with new challenges and opportunities every day.

Yet some countries are better able to manage and mitigate the risks associated with change and capitalize on new opportunities than others. This report is based on the hypothesis that the capability to manage change – or 'change readiness' as we have termed it – is likely to be a key determinant of a country's ability to achieve sustained growth over time.

Interestingly, there has been little focus on the concept of change readiness and few – if any – reliable and appropriate measures to assess it. Recognizing this, KPMG in collaboration with researchers from the Overseas Development Institute (ODI), evaluated the need and opportunity for creating a new, forward looking index to assess individual countries' change readiness.

The concept of a Change Readiness Index was first raised in a report released at the World Economic Forum in 2011, *Managing Change and Cultivating Opportunity*, where the idea was met with much enthusiasm by policy decision-makers, aid donors and investors in attendance.

Since then, KPMG and ODI have undertaken wide-spread consultation with key stakeholders from academics to industry leaders, to develop a framework for this new Index. Over the past few months, the Economist Intelligence Unit (EIU), on behalf of KPMG and ODI, surveyed a range of experts around the world to identify and capture previously unmeasured aspects of change management capability.

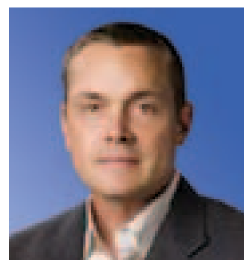
© 2012 KPMG International Cooperative ("KPMG International"), a Swiss entity. Member firms of the KPMG network of independent firms are affiliated with KPMG International. KPMG International provides no client services. All rights reserved.

This report is the product of that research. Within these pages, the approach, rationale and metrics to provide insight into the key factors that influence change readiness are articulated. This framework has been applied to study and assess the level of change readiness across 60 countries to create the first Change Readiness Index. The results are surprising and, when verified, are expected to provide important new insight for policy development and donor action aimed at strengthening government and national capability. The Index offers hypotheses for a new approach to assess the strategic support that countries may need in weaker areas so they can become resilient and proactive when managing change.

Over the coming years, KPMG and ODI expect to continue this research and report on the progress of countries to enhance and strengthen their change readiness capacity. The results from this year will provide a benchmark to test data from subsequent years to help determine if the new indicators are a valid measure of change readiness. It is also expected that this framework will be further developed as findings are applied to real-world situations.

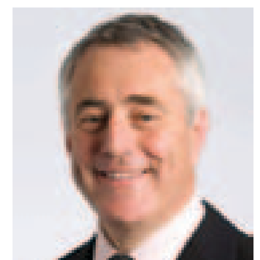
We hope that as we develop and refine this approach over time, the Index can provide a reliable, independent and robust assessment to support the work of governments, civil society, businesses and the international donor community. We encourage you – the reader – to share your feedback with us or to contact your local KPMG member firm or ODI to learn more about the Index and its implications for your country or program.

The results of the 2012 Change Readiness Index along with the scores for each sub-index are listed on the following page. Additional detail on the data and how the overall scores were determined, tools to compare and contrast the results and other materials, including last year's report, can be found at www.kpmg.com/changereadiness.



Timothy A. A. Stiles
Global Chair,
International
Development
Assistance Services
KPMG in the US

John Herhalt
Global Chair,
Government &
Infrastructure
KPMG in Canada



Simon Maxwell
Senior Research
Associate,
ODI
www.odi.org.uk

© 2012 KPMG International Cooperative ("KPMG International"), a Swiss entity. Member firms of the KPMG network of independent firms are affiliated with KPMG International. KPMG International provides no client services. All rights reserved.

Table 1: Country Rankings and Scores in the Change Readiness Index and Three Sub-Indices

Indicator	Overall Rank	Overall Score	Economic Sub-Index Rank	Economic Sub-Index Score	Governance Sub-Index Rank	Governance Sub-Index Score	Social Sub-Index Rank	Social Sub-Index Score
Chile	1	0.73	1	0.71	1	0.86	6	0.62
Tunisia	2	0.72	3	0.65	3	0.82	2	0.68
Taiwan	3	0.71	6	0.56	8	0.67	1	0.87
Jordan	4	0.70	4	0.65	2	0.82	4	0.63
Kazakhstan	5	0.67	2	0.65	4	0.73	7	0.62
Morocco	6	0.62	9	0.57	5	0.71	11	0.57
Malaysia	7	0.61	11	0.56	12	0.65	5	0.62
Uruguay	8	0.61	13	0.54	7	0.67	8	0.61
Turkey	9	0.58	10	0.57	9	0.67	21	0.51
Peru	10	0.58	8	0.58	14	0.63	17	0.53
Botswana	11	0.56	5	0.62	10	0.66	37	0.39
Costa Rica	12	0.54	24	0.47	22	0.50	3	0.65
China	13	0.54	14	0.54	17	0.57	19	0.51
Syrian Arab Republic	14	0.54	15	0.53	11	0.66	30	0.43
Namibia	15	0.53	20	0.50	6	0.68	35	0.41
Colombia	16	0.53	19	0.50	20	0.57	22	0.51
Algeria	17	0.52	18	0.51	13	0.64	34	0.42
Ghana	18	0.51	7	0.58	16	0.58	41	0.38
Lithuania	19	0.51	41	0.37	21	0.55	9	0.60
Zambia	20	0.49	12	0.56	19	0.57	47	0.35
Mexico	21	0.48	33	0.42	24	0.48	15	0.55
Sri Lanka	22	0.48	29	0.45	25	0.48	18	0.51
India	23	0.47	22	0.47	18	0.57	39	0.38
Nicaragua	24	0.47	25	0.47	15	0.58	43	0.37
Panama	25	0.47	27	0.45	29	0.46	20	0.51
South Africa	26	0.47	42	0.36	23	0.49	16	0.54
Jamaica	27	0.45	39	0.38	28	0.46	24	0.50
Kenya	28	0.45	17	0.51	40	0.41	36	0.41
Mongolia	29	0.44	35	0.41	33	0.43	27	0.48
Indonesia	30	0.44	26	0.46	36	0.42	28	0.43
Brazil	31	0.44	45	0.34	39	0.41	14	0.55
Thailand	32	0.43	38	0.39	46	0.35	13	0.56
Macedonia, FYR	33	0.43	34	0.42	31	0.45	32	0.43
Dominican Republic	34	0.43	37	0.39	26	0.47	29	0.43
Mali	35	0.42	21	0.48	27	0.47	49	0.32
Senegal	36	0.41	31	0.45	30	0.45	48	0.35
Ukraine	37	0.41	51	0.32	45	0.35	12	0.56
Philippines	38	0.41	43	0.35	42	0.38	23	0.50
Nigeria	39	0.40	28	0.45	43	0.37	38	0.39
Cameroon	40	0.40	23	0.47	34	0.43	50	0.31
Egypt, Arab Republic	41	0.38	40	0.37	44	0.35	31	0.43
Paraguay	42	0.38	47	0.34	32	0.43	42	0.37
Cambodia	43	0.38	32	0.42	37	0.42	54	0.29
Romania	44	0.37	48	0.33	49	0.30	26	0.48
Bangladesh	45	0.37	30	0.45	35	0.43	58	0.23
Uganda	46	0.36	16	0.53	50	0.28	55	0.28
Argentina	47	0.36	59	0.17	48	0.31	10	0.59
Ecuador	48	0.35	52	0.29	41	0.39	40	0.38
Vietnam	49	0.35	46	0.34	47	0.35	44	0.37
Nepal	50	0.33	50	0.32	38	0.41	57	0.25
Russian Federation	51	0.31	54	0.23	58	0.21	25	0.49
Guatemala	52	0.31	49	0.32	55	0.25	45	0.36
Tanzania	53	0.30	44	0.35	51	0.27	56	0.28
Pakistan	54	0.30	53	0.27	53	0.27	46	0.35
Ethiopia	55	0.28	36	0.40	54	0.26	59	0.18
Venezuela, R.B.	56	0.27	60	0.13	57	0.24	33	0.43
Honduras	57	0.26	55	0.22	56	0.25	52	0.30
Zimbabwe	58	0.24	57	0.21	59	0.21	51	0.30
Mozambique	59	0.22	56	0.22	52	0.27	60	0.18
Bolivia	60	0.20	58	0.18	60	0.13	53	0.30

© 2012 KPMG International Cooperative ("KPMG International"), a Swiss entity. Member firms of the KPMG network of independent firms are affiliated with KPMG International. KPMG International provides no client services. All rights reserved.

1. Introduction to the Change Readiness Index

For more information, visit www.kpmg.com/changereadiness

The need to manage and capitalize on change has never been clearer. One only need look at the impact of recent food, fuel and financial crises, as well as the impact of climate and political change on countries around the world to see the importance of achieving a greater understanding of the capability of a country to adapt to change. Moreover, as developing nations grow and mature, forces such as urbanization, population growth and rising demand for natural resources will generate both risk and opportunity around the world.

The hypothesis underlying this report is that the ability of countries to respond to these changes and take advantage of the resulting opportunities – their change readiness – will be a key factor in achieving sustained growth and improving the standard of living for citizens. This is particularly true as a result of globalization as countries and markets become more interdependent and therefore susceptible to the changes and economic shocks of their regional neighbors and global trading partners. Indeed, a central part of the global agenda following the financial crisis has been to develop better and more intelligent systems for managing change and, as a result, make economies and nations less vulnerable to the changes that challenge their existing sources of growth, which is why the Change Readiness Index was developed.

For governments, policy makers, NGOs, donors, investors and private sector enterprises, the need to develop greater capacity for managing change and promoting sustained growth is becoming ever more critical. While the specific policies and actions that will be required to manage change will depend on the nature of the change itself, the Index is based on the premise that the underlying capability of a country to manage change is dependent on certain fundamental characteristics. These characteristics are outlined in this report along with hypotheses for the expected meaning of the results. Over time, the Index will be tested and necessary adjustments will be made to verify that the correct factors are being used to determine a country's change readiness.

© 2012 KPMG International Cooperative ("KPMG International"), a Swiss entity. Member firms of the KPMG network of independent firms are affiliated with KPMG International. KPMG International provides no client services. All rights reserved.

1.1 Determining capability for managing change

The Change Readiness Index is designed to define and assess those characteristics that – based on our knowledge of economic and growth theory and past evidence – are likely to determine a country's change readiness. Rather than focus on a country's performance to date (as most indices do), the Change Readiness Index takes a forward-looking perspective by capturing the underlying factors that are likely to determine a country's capability for managing change that we hypothesize will support sustained growth in the long-term.

As a result, the Index captures not only government capability but the capability of the country as a whole, including the private sector and civil society, to cope with and respond effectively to change. Many of these factors relate to conditions which affect the ability of private markets and enterprises to adjust to change, particularly changing patterns of global demand and production. Thus, many of the indicators focus on policies and capacities that should facilitate healthy, dynamic, and responsive markets.

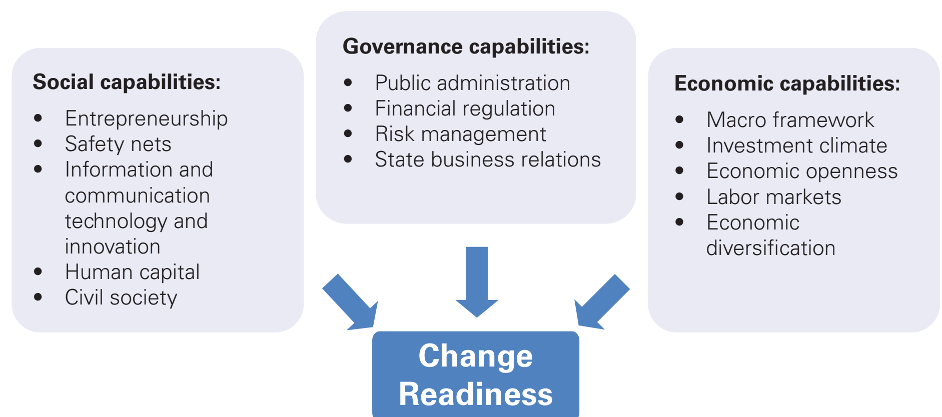
© 2012 KPMG International Cooperative ("KPMG International"), a Swiss entity. Member firms of the KPMG network of independent firms are affiliated with KPMG International. KPMG International provides no client services. All rights reserved.

1.2 Building the Index

In developing the Change Readiness Index, KPMG and ODI examined the available academic literature and existing indices and data to ascertain how the concept of 'change readiness' could be best measured. From this, a set of indicators were identified as influencers on a country's underlying capability to manage change. These factors can be categorized into three broad groups:

1. Economic capabilities – relating to economic policies and frameworks
2. Governance capabilities – relating to the capacity of government and the institutional arrangements that have been established
3. Social capabilities – relating to the characteristics of a society, such as literacy, social support networks and civil society

Figure 1: The dimensions of capability to manage change



Through the development stage, it was found that most indices available in the market focus on 'outputs' rather than 'inputs'. Historically there has been a focus on measuring outcomes instead of policies and actions that determine those outcomes. Input indicators are particularly useful in the measurement of change readiness, which is about the underlying capability to manage change. In addition, input indicators are often directly controlled by governments and other stakeholders whereas outcome indicators are heavily influenced by externally-determined factors.

The Change Readiness Index draws on the existing input indicators available in the marketplace, including the World Economic Forum (WEF) Global Competitiveness Index (GCI), The World Bank's Doing Business Index (DBI), The World Bank's Knowledge Economy Index (KEI), and the Legatum Prosperity Index. For each, the latest available data was used, depending on the source – either from the year 2011, 2010 or in a few cases, 2009. In addition, these indicators were augmented with new indicators designed to capture as yet unmeasured aspects of a country's capability to manage change. These new indicators were developed using the expert survey conducted by the EIU for the purposes of developing the Index. The next page shows the list of inputs for which experts were surveyed to develop the new indicators for the Change Readiness Index.

© 2012 KPMG International Cooperative ("KPMG International"), a Swiss entity. Member firms of the KPMG network of independent firms are affiliated with KPMG International. KPMG International provides no client services. All rights reserved.

New Expert Survey Indicators

1) To what extent does the government in your country have in place an appropriate policy framework for macroeconomic management (e.g. one that supports macroeconomic stability and sound public financial management)?
(1 = strongly agree; 5 = strongly disagree)

2) How effective are the mechanisms in place in your country for promoting access to credit when there is less private credit available during difficult economic times?
(1 = very effective; 5 = very ineffective)

3) How effective is the government in your country at making sound decisions on infrastructure development (e.g. ones that are within the budget constraints, facilitate economic growth and respond to the changing needs and opportunities facing the country)?
(1 = very effective; 5 = very ineffective)

4) How effective is the government in your country at taking the necessary action to promote an economy with a well-diversified economic structure (e.g. one in which a good range of different sectors and industries contribute to national income)?
(1 = very effective; 5 = very ineffective)

5) How effective is the government in your country at taking appropriate steps to understand the economic opportunities (e.g. potential new growth industries, new sources of finance through carbon markets) and threats posed by climate change (e.g. natural disasters affecting crops or increased fuel costs)?
(1 = very effective; 5 = very ineffective)

6) How effective is the financial regulatory framework in your country (e.g. does it successfully balance the need to promote financial stability with access to finance)?
(1 = very effective; 5 = very ineffective)

7) How effective is the government in your country at managing risks (e.g. taking appropriate and effective action to identify and address them)? By risks we mean national level risks to the economy (e.g. from natural disasters, financial crises, climate change, etc).
(1 = very effective; 5 = very ineffective)

8) To what extent does the relationship between government and business in your country promote a healthy and dynamic economy (e.g. one that enables the private sector to respond effectively to changing conditions and new opportunities)?
(1 = strongly agree; 5 = strongly disagree)

9) To what extent is entrepreneurship viewed positively in your country?
(1 = strongly agree; 5 = strongly disagree)

10) To what extent is there an effective social safety net in your country which supports people during difficult economic times (e.g. through cash transfers)?
(1 = strongly agree; 5 = strongly disagree)

11) To what extent do people in your country help each other out during difficult economic times?
(1 = strongly agree; 5 = strongly disagree)

12) To what extent do civil society organizations play an important role in solving humanitarian, environmental and development issues in your country?
(1 = strongly agree; 5 = strongly disagree)

13) To what extent does the government in your country engage in constructive dialogue with civil society organizations and encourage and support their activities?
(1 = strongly agree; 5 = strongly disagree)

© 2012 KPMG International Cooperative ("KPMG International"), a Swiss entity. Member firms of the KPMG network of independent firms are affiliated with KPMG International. KPMG International provides no client services. All rights reserved.

1.3 Filling a gap

There is an enormous volume of literature investigating factors that explain growth or measure determinants of outcome variables related to growth. For example, the WEF Global Competitiveness Index (GCI) focuses on factors that make countries more competitive in a global context; the Legatum Prosperity Index calculates the prosperity of countries; and the UN Human Development Index ranks countries by their level of 'human development' including life expectancy, literacy, education and standard of living.

Many other indicators focus on specific aspects of growth: the UNCTAD Innovation Capability Index measures countries' connectivity with global networks and ability to attract R&D; The World Bank International Development Association Resource Allocation Index (IRAI) assesses the quality of a country's policy and institutional frameworks; and the UNIDO Industrial Competitive Performance Index measures the capability and capacity of countries to compete globally.

The Change Readiness Index draws on a number of these existing indicators along with the new indicators to capture specific elements of change readiness not included in existing indices. The full list of the existing and new indicators can be found online at www.kpmg.com/changereadiness.

© 2012 KPMG International Cooperative ("KPMG International"), a Swiss entity. Member firms of the KPMG network of independent firms are affiliated with KPMG International. KPMG International provides no client services. All rights reserved.

1.4 A valuable tool

As it is refined and validated over time, it is hoped that the Change Readiness Index will signal which countries are better prepared to cope with change, and thus provide new and important information about the potential future economic prospects of a country. Clearly, when assessing growth prospects, this data must be viewed in combination with other information on issues that will affect economic prospects such as political stability, sovereign debt, sustainability or endowments of capital, labor and natural resources.

By providing governments, policy makers, NGOs, donors, investors and private sector enterprises with a clear index that offers insights into future economic prospects and ability to manage change, this Index should enable a number of important activities such as:

- Stimulating debate and focusing attention on the importance and determinants of change readiness;
- Helping to inform government policy by highlighting particular areas of strengths and weaknesses domestically and, as a result, identifying potential reforms or institutional mechanisms that might help to build change readiness;
- Facilitating the benchmarking of individual countries' change readiness over time to enable the monitoring of both improving and worsening situations;
- Informing donors, funders and development agencies about the potential for sustainable growth in partner/recipient countries, thereby raising awareness of the risks associated with change and helping to prioritize support of reforms that might help build stronger change readiness capability;
- Helping to inform private investors seeking growth opportunities and minimizing their risk; and
- Providing a new cross-country dataset to strengthen the overall understanding of the determinants of change readiness in different situations.

© 2012 KPMG International Cooperative ("KPMG International"), a Swiss entity. Member firms of the KPMG network of independent firms are affiliated with KPMG International. KPMG International provides no client services. All rights reserved.

2. 2012 Change Readiness Index Results

The results of this first Change Readiness Index suggest some surprising findings. These will need to be tested and validated over time, but suggest that the Index could provide some important new insights. (For Index results, see page 3).

In addition, the Index demonstrates that many countries exhibit significant differences in their rankings on economic, governance and social dimensions.

The following case studies compare the performance of countries in this Index with their relative performance in other databases and indices (e.g. WEF's GCI). This illustrates how the Change Readiness Index potentially captures a new dimension of performance that the other indices do not.

While there is some correlation between countries' scores on the economic and governance sub-indices, there is a relatively weak correlation between countries' scores on the social sub-index and the other two sub-indices. However, the top 10 performing countries in the Index have a much lower variation in scores across the economic, governance and social sub-indices than the bottom 10 countries. In addition, there are countries that ranked in the middle range of the Index that perform well in two out of three sub-indices. This could signal areas for improvement to help the country become more change ready.

© 2012 KPMG International Cooperative ("KPMG International"), a Swiss entity. Member firms of the KPMG network of independent firms are affiliated with KPMG International. KPMG International provides no client services. All rights reserved.

2.1 Case Study: Chile and Brazil

Looking at the WEF's Global Competitiveness Report, Chile and Brazil would seem to be the two most competitive economies in South America.[1] However, in the Change Readiness Index, Chile leads the ranking while Brazil sits in the lower half (31st).

By examining purely output measures, one would expect Brazil to fare much better. The country's competitive position is enhanced by their population and area size. They have one of the world's largest domestic markets, possess abundant natural resources and have a diversified production and exporting structure. Chile's statistics tell a different story: its population is less than 1/10th of Brazil's and it has less diversified and abundant natural resources, and has a higher reliance on copper. However, Chile has made considerable efforts in recent decades to diversify their export structure with noticeable impacts on economic growth.[2]

Chile's competitive position is also supported by high levels of domestic and foreign competition and by an efficient financial market.

One significant area of difference is in macroeconomic management, with Brazil demonstrating poorer performance with regard to variables such as the inflation rate and government debt. This is confirmed by the survey of country experts conducted by the EIU, which shows that the Chilean government is perceived to have a considerably higher capability to implement an appropriate policy framework for macroeconomic management.

Although Brazil reached a record of US$66 billion in foreign investment last year, the country faces challenges regarding the availability of funding and the role of political and regulatory factors in the government's ability to attract investment.[3, 4] This situation contrasts with the case of Chile, where the institutional and public-private partnerships frameworks are well-established. Despite a modest level of investment, Chile is higher than Brazil in rankings of the attractiveness of the country to foreign investment in the transport sector.[5]

Another important factor is the capacity to fight corruption. Transparency International's Corruption Perceptions Index places Chile in the 22nd position out of 95 countries while Brazil is in the 73rd position.[6] Despite legislation and anti-corruption measures, corruption is more widespread in Brazil's public administration. This impacts the political and economic institutional framework, and, in turn, the country's capability to manage economic changes effectively.

Despite sharing a good economic track record in recent years, Chile and Brazil exhibit significant differences in terms of the underlying capabilities needed to sustain growth and face future challenges.

1 Global Competitiveness Report 2011-2012, p.15, http://www3.weforum.org/docs/WEF_GCR_Report_2011-12.pdf
2 Export diversification, externalities and growth: Evidence for Chile, http://ideas.repec.org/p/zbw/gdec06/4735.html
3 Transport infrastructure in Brazil and the consequences of development failure, http://www.nexusinfrastructure.com/files/NexusWP_Brazil.pdf
4 http://www.mdic.gov.br/sistemas_web/renai/noticia/conteudo/sq_noticia/147
5 Chile identified as surprise transport investment "hot-spot"
6 Corruptions Perception Index 2011, "http://www.transparency.org/content/download/64426/1030807"Corruptions Perception Index 2011

© 2012 KPMG International Cooperative ("KPMG International"), a Swiss entity. Member firms of the KPMG network of independent firms are affiliated with KPMG International. KPMG International provides no client services. All rights reserved.

2.2 Case Study: Thailand and Malaysia

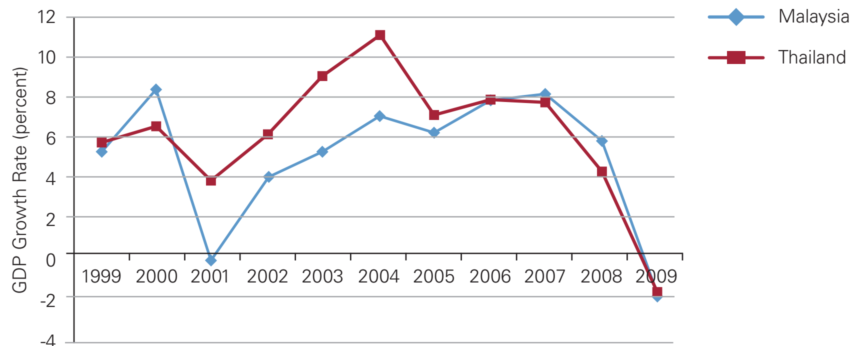
In the last 10 years, Thailand and Malaysia showed similar patterns in growth rates of GDP per capita, and both have suffered similarly from the global economic downturn of the last few years. But in the Change Readiness Index, Malaysia scores higher (seventh) than Thailand (32nd).

Areas where Malaysia scores particularly well in the Index as compared with Thailand include its investment climate and diversification policies. While both countries are often cited as having been successful in diversification, only around 15 percent of Malaysians are currently employed in agriculture versus about 40 percent of the total workforce in Thailand.[7]

Moreover, the Malaysian Government has been working to improve the business environment, fight crime and corruption and enhance infrastructure and transport.[8] In studying Thailand, analysts identify institutions as one of the most important weaknesses of the country's economy, with recent political instability further undermining the perceived capability of the country to achieve sustained growth.[9]

While Thailand still has competitive strengths such as a large domestic market and good quality infrastructure, it appears slower in facing the new challenges of the world economy and demonstrates a more limited capability to build on its strengths and create new opportunities. In contrast, Malaysia seems to be planning for a transition towards a high income, innovation-led economy going forward.[10]

Figure 2: GDP Growth Thailand and Malaysia



Source: International Monetary Fund

7 World Development Indicators.
8 http://english.people.com.cn/90001/90777/90851/6881920.html
9 Hoontrakuk (2008, http://papers.ssrn.com/sol3/papers.cfm?abstract_id=1313027)
10 Government of Malaysia http://www.pemudah.gov.my/c/document_library/get_file?p_l_id=18845&folderId=178798&name=DLFE-5102.pdf

© 2012 KPMG International Cooperative ("KPMG International"), a Swiss entity. Member firms of the KPMG network of independent firms are affiliated with KPMG International. KPMG International provides no client services. All rights reserved.

2.3 Case Study: Ghana and Zimbabwe

Both Ghana and Zimbabwe are ranked fairly low on conventional performance measures (for example, in the 2011 Global Competitiveness Index they were ranked 114th and 132nd respectively), but Ghana scores much higher in the Change Readiness Index, ranked 18th while Zimbabwe is ranked 58th.

Ghana's strong growth has been achieved within a sound macroeconomic environment. Prudence in fiscal and monetary management has contributed to the easing of inflationary pressures. The private sector has responded positively to the government's development programs and the improved business environment. The rise in bank lending and capital inflows suggests increasing investor confidence.

In contrast, Zimbabwe's economy saw a dramatic reduction in growth after 2000 with a negative growth of -16.5 percent in 2008, followed by a recovery since 2009 after the establishment of the 'Government of National Unity.' The 2011 African Economic Outlook points out that the Zimbabwe economy is beginning to rebound after a decade of economic decline during which, real gross domestic product (GDP) fell by more than a third and per capita income fell by 40 percent, combined with prolonged or chronic inflation and hyperinflation.[11]

Ghana shows a strong performance in both the economic and governance sub-indices (seventh and 16th respectively), but scored relatively poorly on the social sub-index (41st), largely due to weaknesses in technology development and education. At the same time, investment in technology remains low, with R&D expenditure at just 0.4 percent of GDP and limited ICT development.[12] Nonetheless Ghana seems to be set on a positive future growth path.

The International Monetary Fund warns about the existence of many obstacles which could dampen the recovery process in Zimbabwe. A sizeable fiscal financing gap, an inefficient composition of public expenditure, persistent financial sector vulnerabilities and weaknesses in the business climate represent serious factors affecting sustained economic growth.[13] Social conditions also remain tough: the poverty rate has increased from 42 percent in 1995 to 63 percent in 2003 and is currently estimated to be over 70 percent; unemployment remains high, with some estimates putting the number at around 80 percent. As a result, Zimbabwe is currently ranked in the bottom 10 in the Change Readiness Index, scoring poorly on all three sub-indices (57th in terms of economic capability, 59th in terms of governance capability, and 51st in terms of social capability).

[11] http://www.africaneconomicoutlook.org/en/countries/west-africa/ghana/
[12] http://www.prosperity.com/country.aspx?id=GH
[13] http://reliefweb.int/sites/reliefweb.int/files/reliefweb_pdf/node-420121.pdf

© 2012 KPMG International Cooperative ("KPMG International"), a Swiss entity. Member firms of the KPMG network of independent firms are affiliated with KPMG International. KPMG International provides no client services. All rights reserved.

2.4 Other results of interest

In addition to the countries highlighted in these case studies, there are many results that will spark debate and discussion. For example:

- **Tunisia's** second place ranking, as a country that has been through civil struggle and recent political changes, arguably supports the notion that the indicators included in the Index should help inform a country's ability to leverage and manage change.
- **Syria's** ranking of 14th is unexpected, given the country's current state. A possible explanation is that the underlying quality of policies and institutions in Syria could mean it is well equipped to move to a position of sustained development once peace is restored – depending on the amount of damage to the country during the transition.
- **Mozambique's** ranking (59th) behind Zimbabwe (58th) is apparently inconsistent with generally positive perceptions about the relative performance of Mozambique versus Zimbabwe. Mozambique's recent rapid growth and significant social development is reflected in higher rankings on other indices (e.g. The World Bank IDA Resource Allocation Index).

There are many other comparisons that can be made between different countries. For instance, although Zambia (20th) and the Russian Federation (51st) are vastly different on many levels, including size of country, size of economy, continental location and stage of development, it is surprising that Zambia ranks higher in the Index. Other performance measures, for example the Global Competitive Index, rank the Russian Federation (66th) significantly higher than Zambia (113th). The difference in rankings between these indices could illustrate the difference between assessing a country's past performance, as opposed to its capability to manage change going forward.

These are just a few of the results that will likely be part of the debate and discussion. The results from this first year of the Index will be tested over time to determine if they are, in fact, capturing new and useful information in terms of explaining a country's growth. At this point, hypotheses as to what these results mean are all that can be provided. Over time, it is hoped that more empirically verified conclusions can be drawn from the results, such as determining if the Index provides reliable information about how countries are able to improve their capability to manage change for future sustained economic growth, political change, and social development.

© 2012 KPMG International Cooperative ("KPMG International"), a Swiss entity. Member firms of the KPMG network of independent firms are affiliated with KPMG International. KPMG International provides no client services. All rights reserved.

3. Conclusions and Implications

In today's globalized and dynamic economy, managing change more effectively is key to achieving sustained growth. Indeed, a new forward looking focus on understanding and promoting change readiness is needed to help countries cope with future global developments.

The measures we have used to try to capture change readiness suggest that countries vary a great deal in terms of their capability to manage change, exhibiting markedly different patterns of strength and weakness. Even countries which have demonstrated reasonably similar performance to date have, in some cases, shown remarkably different levels of change readiness.

Only time will tell whether these measures are appropriate and whether those underlying capabilities will be maintained. If this is the case, they should help a country withstand and take advantage of different types of change and shock that will come their way in future years.

This would suggest that countries should place more focus on developing their change readiness. There are many different ways they can do that, depending on their strengths and weaknesses. For example, by focusing on public financial management, attractiveness to foreign investment and transparent governance. Thus, the Index can provide specific policy recommendations to guide governments and donors.

This Index is useful because it focuses on the underlying capabilities of a country to manage change going forward. Even countries that have poor economic resources (e.g. a limited natural resource base or poor geography) or have performed poorly to date, can potentially score well if they now have in place a more promising economic, governance and social foundation for future, sustained growth.

For governments and donors, the Index can potentially also provide information to help build policy recommendations to guide improvements in change readiness. It can also be used to help inform investment decisions by the private sector and assist in identifying and managing risks associated with engagement in particular countries. The Change Readiness Index is intended to help countries achieve sustained growth and cope with future global developments. We hope it will stimulate further study, debate and action.

For more information on this research and its findings please go to www.kpmg.com/changereadiness.

© 2012 KPMG International Cooperative ("KPMG International"), a Swiss entity. Member firms of the KPMG network of independent firms are affiliated with KPMG International. KPMG International provides no client services. All rights reserved.

Appendix 1: Measuring Change Readiness

The factors determining capability to manage change have been categorized into three broad groups around which we have built three sub-indices, each based on a different set of indicators.

Economic Capability

Economic capabilities refer largely to the capability of the private sector – including private enterprise and private financial institutions – to respond to change and generate dynamic growth. It also measures the extent to which public investment can contribute to the achievement of these goals. Government policy creates the framework within which the private sector operates and can make an important contribution to the change readiness of the private sector.

- **Macroeconomic Framework:**[14] Good macroeconomic management and stability gives a country the fiscal space to respond to change and to invest in public services that support transformation and growth such as education and infrastructure.
- **Investment Climate:**[15] A good investment climate enables the private sector to bounce back quickly from negative economic shocks by making reinvestment more profitable. It also makes investment in new ventures easier, strengthening the private sector's ability to respond to structural changes, and enabling dynamic growth processes to take place in response to changing market conditions.
- **Economic Openness:**[16] By opening up their economy, countries are better able to improve the quality and competitiveness of domestically produced goods and services, and keep up with technological development and innovation. This, in turn, contributes to structural transformation, which spurs innovation and the development of new industries.
- **Labor Markets:**[17] Flexibility of labor markets affects the rate at which structural change and industrial modernization take place. Businesses are more inclined to scale up employment to respond to new opportunities and transition workers into modern economic activities when labor markets are more flexible. This is because they know that employees can exit the market or staff can be downscaled without costly labor regulations in the event the venture is unsuccessful.
- **Economic Diversification:**[18] Economic diversification means a country is less badly affected by sector-specific shocks and structural changes because it has a range of income sources. As diversification involves the development of new industries, it tends to go hand-in-hand with structural transformation, stimulation of private sector development, and increased capabilities of private markets and labor to innovate and adapt to new opportunities. A more diversified economy offers greater opportunity to expand existing industries to respond to changing global demand patterns.

---

[14] Commission on growth and development 2008, "The growth report: strategies for sustained growth and inclusive development" (p. 53) Bleaney M. 1997, "Is macroeconomic management important for growth?", Journal of macroeconomics 19, 523 – 537.

[15] Commission on growth and development 2008, "The growth report: strategies for sustained growth and inclusive development" (p. 34) Bastos and Nasir 2004, World Bank Policy Research working paper 3335.

[16] Commission on growth and development 2008, "The growth report: strategies for sustained growth and inclusive development" (p. 21) Grossman G., Helpman E 1991, "Trade, knowledge spillovers and growth", European Economic Review, 35, 517 – 526.

[17] Ciccone and Papaioannou (2008) Duval et al. (2007), OECD working paper 567. Mc Millan M., Rodrik D. 2011, "Globalisation, structural change and productivity growth", NBER working paper 17143.

[18] Shediac, Abouchakra, Moujaes, & Najjar; "Economic Diversification: The Road to Sustainable Development", Booz & Company, 2008. Wacziarg and Imbs 2003, "Stages of diversification", American Economic Review, 93, 63 – 86.(Briguglio et al.) "Conceptualizing and measuring economic resilience"

© 2012 KPMG International Cooperative ("KPMG International"), a Swiss entity. Member firms of the KPMG network of independent firms are affiliated with KPMG International. KPMG International provides no client services. All rights reserved.

Governance Capability

Governance capability relates mainly to the capability of governmental and regulatory institutions to manage change effectively, as well as private sector governance mechanisms.

- **Public Administration:**[19] An effective bureaucracy is better able to plan for and manage changes, through intelligent risk assessment and appropriate policy responses such as regulation, education and raised awareness. Administration needs to be embedded in government with a degree of autonomy to reduce the impact of political interference. The quality of public administration is determined through its ability to effectively implement policy.
- **Financial Regulation:**[20] Well regulated financial markets provide breathing space for both the private and public sectors to manage change over time. Sound financial regulation promotes financial sector development which, in turn, helps economies grow by mobilizing savings, facilitating risk management and allocating funds to investment. Access to international capital markets can help reduce the cost of finance, but financial liberalization must be accompanied by a good regulatory environment to help ensure ongoing financial stability.
- **Risk Management:**[21] The extent to which a government has developed processes or mechanisms for monitoring and managing risks is likely to determine how well policy responds to those risks. Sound risk management strategy is key to improving resilience in both the private and public sectors.
- **State Business Relations (SBRs):**[22] SBRs determine the extent to which government action is coordinated with, and sensitive to, private sector responses to shocks and are crucial to the success of structural transformation strategies. Strong SBRs foster investment and lead to increases in productivity and thus play a decisive role in facilitating transformative economic growth.

Social Capability

Social capability relates to the societal and cultural determinants of capability to manage change.

- **Entrepreneurship:**[23] The extent to which a society will identify and respond opportunistically to economic shocks or structural changes contributes to a country's adaptability and initiative-taking in the face of change.

---

[19] Olson M., Sarna N., Swamy A. 2000, "Governance and growth: a simple hypothesis explaining cross country differences in productivity growth", Public Choice, 102, 341 – 364. Evans, P. (1995) Embedded Autonomy: States and Industrial Transformation. Princeton, NJ: Princeton University Press. 24 Altenburg T. 2011, "Industrial policy in developing countries", German Development Institute discussion paper 4/2011.
http://www.die-gdi.de/CMS-Homepage/openwebcms3.nsf/(ynDK_contentByKey)/ANES-8EAHQ3/$FILE/DP%204.2011.pdf
Commission on growth and development 2008, "The growth report: strategies for sustained growth and inclusive development" (p. 66).

[20] Commission on growth and development 2008, "The growth report: strategies for sustained growth and inclusive development" (p. 56) Kunt A., Levine R. 2008, "Finance, financial sector policies and long run growth", Policy Research Working Paper 4469. Stiglitz J. 2000, "Capital market stabilization, economic growth and instability", World Development, 28, 1075 – 1086.

[21] Smith D., Fischbacher M. 2009, "The changing nature of risk and risk management: The challenge of borders, uncertainty and resilience", Risk Management 11, 1 – 12.

[22] Cali` M., Sen K. 2011, "Do effective state business relations matter for economic growth? Evidence from Indian States", World Development, 39, 1542 – 1557. Ocampo J. 2001, "Rethinking the development agenda", Cambridge Journal of Economics, 26, 393 – 407. Sen, K. and Te Velde, D.W. (2009) 'State–Business Relations and Economic Growth in Sub-Saharan Africa.' Journal of Development Studies 45(8):1-17.

[23] Audretsch D. 2009, "Entrepreneurship capital and economic growth", Oxford Review of Economic Policy.

© 2012 KPMG International Cooperative ("KPMG International"), a Swiss entity. Member firms of the KPMG network of independent firms are affiliated with KPMG International. KPMG International provides no client services. All rights reserved.

- **Safety Nets:**[24] When designed well, safety nets can reduce the cost of shocks and help people cope with them, which can lead to an increase in investment resulting in long-term growth. They can also reduce labor market volatility caused by shocks, which can have long run impacts on growth. Social safety nets also reduce crime, demonstrations, strikes and other forms of social disruption, which can cause instability and undermine growth. Having sound safety nets in place prior to a crisis, instead of being in a reactive situation, improves the effectiveness and impact of incentives.
- **Information and Communication Technology (ICT) and Innovation:**[25] In today's 'Information Age' access to ICT plays an important role in disseminating information, raising awareness and enabling people to respond quickly. In addition, it improves a country's ability to innovate and adapt to change by encouraging more transparent decision-making, thereby increasing accountability and improving governance. ICT has the potential to generate structural change in the world economy by facilitating more advanced labor in different activities and new forms of production. The development of ICT is increasingly crucial for growth as it relates to improved innovation, productivity, competitiveness and has the ability to reduce costs. A country's ability to adopt innovative, new technologies from abroad is a strong determinant of its ability to maintain a competitive advantage in the face of global change.
- **Human Capital:** [26] Education and literacy enable people to understand the nature of structural changes, while skills training supports workforces in obtaining the necessary capabilities to take advantage of new opportunities in response to change. Human capital and education are therefore key for sustained growth in the face of global change.
- **Civil Society:**[27] Domestic institutions that facilitate conflict management and build social cohesion can help countries manage shocks and change. Civil society-based market institutions, such as NGOs and professional associations, can also play an important role in promoting sustained growth through private sector development and better state business relations.

A full listing of the specific questions and data leveraged to develop these indices can be found online at www.kpmg.com/changereadiness.

---

[24] Deaton; 1991, "Household Savings in LDCs: Credit Markets, Insurance and Welfare", Woodrow Wilson School of Public and International Affairs, Research Program in Development Studies, Discussion Paper no. 153, 1991. Also published in Scandinavian Journal of Economics, 94(2), 1992, pp.253-273 Paci P., Revenga A., Rijkers B. 2011, "Copying with crises: policies to protect employment and earnings", The World Bank Research Observer, 27, 106 - 141 Sala – i – Martin X. 1996 "Transfers, social safety nets and economic growth", IMF working paper 96/40

[25] Andrianaivo M., Kpodar K. 2011, "ICT, Financial Inclusion, and Growth: Evidence from African Countries", IMF working paper 73. Karlsson et al. 2010, "ICT and regional economic dynamics: a literature review", JRC technical and scientific technical paper. http://ftp.jrc.es/EURdoc/JRC59920.pdf Lall, S. (2001) Competitiveness, Technology, and Skills. Cheltenham: Edward Elgar.

[26] Gauci and Temah 2009, "Resilient human capital: a pre-condition for structural transformation", UNECA working paper, http://www.uneca.org/aec/2011/Documents/presentations/Gauci%20and%20Tsafack_Resilient%20Human%20Capital.pdf Lall, S. (2001) Competitiveness, Technology, and Skills. Cheltenham: Edward Elgar.

[27] Rodrik D. 2000, "Institutions for high – quality growth: what they are and how to acquire them", Studies in Comparative International Development, 35, 3 – 31. Tripp R., te Velde D. 2006, "Civil society and economic growth", International journal of Technology and Globalisation, 2, 300 - 310

© 2012 KPMG International Cooperative ("KPMG International"), a Swiss entity. Member firms of the KPMG network of independent firms are affiliated with KPMG International. KPMG International provides no client services. All rights reserved.

Appendix 2: Methodology

Country selection

The Change Readiness Index covers 60 countries and focuses largely on developing and emerging markets, most of which have a desire to achieve significant economic development and transformational change going forward. Almost half (46 percent) of the countries fall into the 'upper middle income' category, a third (35 percent) into the 'lower middle income' bracket, 17 percent are designated as 'low income countries' and there is a single 'high income' country (Taiwan). Countries included in this Index were selected based on our ability to obtain a sufficient number of responses to the survey for the new indicators.

Scoring methodology

The Index is constructed by aggregating each country's scores on the three sub-indices of the Index which, in turn, are an average across a number of indicators of capability in that category. It is worth noting that these indicators are, themselves, based on the value of various sub-indicators which are also averaged to deliver an overall score for that indicator.

In addition to the data from existing indices, the EIU conducted a survey of country experts between November 2011 and January 2012 on behalf of KPMG and ODI for the sole purpose of developing the new indicators. There was an average of 15 expert respondents per country (and a minimum of 5 respondents in all cases). One in five experts work in academic institutions and 35 percent currently hold the position of CEO/President/Managing Director/Head of Agency within the private sector. Eighty-seven percent of respondents have lived in the survey country for more than 20 years.

The variables were standardized through transformation to a common scale to facilitate comparability, as is standard practice in the construction of indices.[28]
All variables are weighted equally.

A full listing of the specific questions, secondary sources and data leveraged to develop these indices can be found online at www.kpmg.com/changereadiness.

[28] We adopted the max/min standardization procedure. For each variable, we identified the minimum and the maximum value in the sample of 60 countries to which we assigned respectively the values of 0 and 1. Then we calculated the value for all the other countries according to the 0 -1 proportion. The final value of the index for each country lies in the same range (0-1).

© 2012 KPMG International Cooperative ("KPMG International"), a Swiss entity. Member firms of the KPMG network of independent firms are affiliated with KPMG International. KPMG International provides no client services. All rights reserved.

Appendix 3: Weighting

There are different techniques for weighting variables in the construction of indices. This Index uses an equal weighting approach because the explanatory power of variables, with regard to the capability of countries to manage change, cannot be calculated as there is no single measure of this capability that can be used as a comparison.

This approach does have some limitations because it implies all the variables are equally important. However, this strong assumption does not prove to dramatically change the results of the Index. To test this, the Index was recalculated with a weight of 10 assigned to the economic sub-index, while a weight of 1 was assigned to the governance and social sub-indices and vice versa.

This had a limited impact on the ranking of countries, with the average change of ranking varying from 4.5 places (when the weight of 10 was assigned to the economic sub-index) to 7.5 places (when the weight of 10 was assigned to the social sub-index). This test mirrors the UNDP's sensitivity analysis for the Human Development Index (HDI), which also used the value of 10. Keeping in mind that the HDI sample is larger (187 countries), the results of this test for the Change Readiness Index seem to be within an acceptable range, as sensitivity is lower than for HDI, which had a change in ranking from 10 – 14 places.

Moreover, as in the UNDP robustness analysis, the Index calculated the correlation across pillars. A strong correlation across pillars is a signal that if the importance of a single pillar is altered, the large rankings variations are not obtained. If countries performed well with a specific pillar but poorly with another one, a larger ranking variation is obtained. When compared to the HDI, correlation is higher for one combination of pillars (economic and governance) and less for the other combinations (governance and social, and economic and social).

© 2012 KPMG International Cooperative ("KPMG International"), a Swiss entity. Member firms of the KPMG network of independent firms are affiliated with KPMG International. KPMG International provides no client services. All rights reserved.

Table 2: Robustness test of correlation across sub-indices

Change Readiness Index	Economic	Governance	Social
Governance	0.85		
Social	0.43	0.56	
HDI	**Life expectancy**	**Education**	**GDP**
Life expectancy		0.74	0.78
Education			0.75

It may be argued that a high correlation means that different sub-indices are duplicating information, which results in a degree of collinearity – a criticism commonly applied to the HDI. However, the economic and governance sub-indices of the Change Readiness Index show there are still significant differences in countries performance against them. For example, Uganda is ranked 12th in the economic sub-index, but 53rd in the governance sub-index. Thus collinearity between the sub-indices in the Change Readiness Index does not appear to be a problem.

This methodology is based on standard practices and was tested to the extent possible. The weighting can be revisited and revised in the future if it is determined through continued testing that there is a better weighting that should be applied to the indicators.

© 2012 KPMG International Cooperative ("KPMG International"), a Swiss entity. Member firms of the KPMG network of independent firms are affiliated with KPMG International. KPMG International provides no client services. All rights reserved.

Contacts

Global Chair, Government & Infrastructure
John Herhalt
KPMG in Canada
T: +1 416 777 8778
E: jherhalt@kpmg.ca

Global Chair, International Development Assistance Services
Timothy A. A. Stiles
KPMG in the US
T: +1 212 872 5955
E: taastiles@kpmg.com

Global Executive, International Development Assistance Services
Eddy Jerez
KPMG in the US
T: +1 703 286 2928
E: ejerez@kpmg.com

Western Europe and United Nations Desk
Trevor Davies
KPMG in the UK
T: +44 (0)20 76945296
E: trevor.davies@kpmg.co.uk

Central America
Alfredo Artiles
KPMG in Nicaragua
T: +505 2274 4265
E: aartiles@kpmg.com

East Asia and Pacific Islands
Mark Jerome
KPMG in Lao
T: +856 (21) 454 240
E: mjerome@kpmg.com

Eastern Europe
Peter Kay
KPMG in Poland
T: +482 2 5281 150
E: pkay@kpmg.pl

European Union Desk
Mercedes Sanchez-Varela
KPMG in Belgium
T: +32 270 84349
E: msanchezvarela@kpmg.com

Francophone Africa
Thierry Colatrella
KPMG in France
T: +33 1 55686099
E: tcolatrella@kpmg.fr

North America
Mark Fitzgerald
KPMG in the US
T: +1 703 286 6577
E: markfitzgerald@kpmg.com

Northern Europe
Torben Kristensen
KPMG in Denmark
T: +45 381 83537
E: tkristensen@kpmg.dk

South America
Ieda Novais
KPMG in Brazil
T: +55 112 1833 185
E: inovais@kpmg.com.br

South Asia
Sudhir Singh Dungarpur
KPMG in India
T: +91 (124) 307 4171
E: sdungarpur@kpmg.com

Sub-Saharan Africa
Charles Appleton
KPMG in Kenya
T: +254 (20) 2806000
E: charlesappleton@kpmg.co.ke

Overseas Development Institute Report Authors and Contacts
Nicola Cantore
Karen Ellis
Isabella Massa
Luigi Sorvillo
Dirk Willem te Velde
111 Westminster Bridge Road
London SE1 7JD UK
T: +44 (0)20 7922 0300
Fax: +44 (0)20 7922 0399
E: k.ellis@odi.org.uk
www.odi.org.uk

kpmg.com

kpmg.com/idas

The information contained herein is of a general nature and is not intended to address the circumstances of any particular individual or entity. Although we endeavor to provide accurate and timely information, there can be no guarantee that such information is accurate as of the date it is received or that it will continue to be accurate in the future. No one should act on such information without appropriate professional advice after a thorough examination of the particular situation.

© 2012 KPMG International Cooperative ("KPMG International"), a Swiss entity. Member firms of the KPMG network of independent firms are affiliated with KPMG International. KPMG International provides no client services. No member firm has any authority to obligate or bind KPMG International or any other member firm vis-à-vis third parties, nor does KPMG International have any such authority to obligate or bind any member firm. All rights reserved.

The KPMG name, logo and "cutting through complexity" are registered trademarks or trademarks of KPMG International.

Designed by Evalueserve.

Publication name: 2012 Change Readiness Index

Publication number: 120387

Publication date: April 2012